Epson ePOS SDK for JavaScript User's Manual

Functionality

How to Use

API Reference

Device Specifications

Sample Programs

Application Guide

Appendix

M00099818

Rev.S

Precautions

- Unauthorized duplication, copying, reproduction, or modification of any part or all of this document is strictly prohibited.
- Contents of this manual are subject to change without prior notice. Contact us directly for the most recent information.
- Every effort is made to ensure that the contents of this manual are without error. Please contact us if any errors or other issues are found.
- The previous statement notwithstanding, we will not be liable for any negative impact as a result of use.
- Epson shall not be liable for any damages caused as a result of using this product incorrectly, failing to comply with the content of this document, or having repair or modifications performed by third parties other than Epson or those specified by Epson.
- Epson shall not be liable for any issues as a result of installing optional parts or consumables that are not genuine Epson parts or parts certified by Epson.

Trademarks

EPSON, EXCEED YOUR VISION, and ESC/POS are registered trademarks of Seiko Epson Corporation.

Windows® and Internet Explorer® are trademarks or registered trademarks of Microsoft Corporation in the US and other countries.

Safari™ is a registered trademark of Apple Inc. in the US and other countries.

Android™ and Google Chrome™ are trademarks of Google LLC.

Mozilla® and Firefox® are trademarks or registered trademarks of the Mozilla Foundation in the US and other countries.

IOS® is a trademark or registered trademark of Cisco in the US and other countries.

QR Code is a registered trademark of Denso Wave Incorporated.

All other trademarks are the property of their respective owners and used for identification purpose only.

ESC/POS® Command System

Epson has embarked on a global initiative to develop ESC/POS, a unique POS printer command system. ESC/POS contains a wealth of unique commands, many of which are patent-protected. Our system enables the configuration of versatile POS systems with a high level of scalability. In addition to being compatible with most Epson POS printers and displays, the flexibility provided by this unique control system facilitates ease of future upgrades. This functionality and convenience of use are appreciated around the world.

© Seiko Epson Corporation 2016-2021.

Safety Precautions

Meaning of Symbols

The following symbols are used in this manual. Make sure to understand the meaning of these symbols before using the product.

⚠	Describes usage precautions that must be observed. Incorrect handling due to the disregard of this information may result in product failure or incorrect operation.
✎	Describes additional explanation or other useful information.

Usage Limitations

Please use our products in environments and systems designed with consideration to safety and disaster recovery such as fail-safe configurations and redundant designs, for example, if this product is used in applications in which a high level of reliability and safety in functionality and precision is required such as in aircraft, trains, ships, automobiles and other transportation-related applications or in crime prevention equipment and safety equipment.
This product is not intended for use in applications that require extremely high levels of reliability and safety such as in aerospace equipment, trunk-line communications equipment, nuclear power control equipment, and medical equipment. Consider your usage environment and requirements carefully before using this product in such applications.

About this Manual

Purpose of this Manual

This manual provides the information necessary to develop applications using Epson ePOS SDK for JavaScript.

Organization of this Manual

This manual is organized into the following chapters.

Chapter 1 Functionality

Chapter 2 How to Use

Chapter 3 API Reference

Chapter 4 Device Specifications

Chapter 5 Sample Programs

Chapter 6 Application Guide

Appendix Open Source Software Licensing

Contents

■ **Safety Precautions** 3
Meaning of Symbols 3
■ **Usage Limitations** 3
■ **About this Manual** 3
Purpose of this Manual 3
Organization of this Manual 3
■ **Contents** 4

Functionality 11

■ **Application Development in Epson ePOS SDK for JavaScript** 11
TM Printer Models 12
Customer Display model 13
TM Printer + DM-D + barcode scanner model 14
POS Terminal model 15
■ **Application Operating Environment** 16
Supported printers 16
Functions provided in each printer 18
Controllable Peripheral Devices 20
ePOS-Print Settings 22
■ **Downloadable Content** 24
■ **Web Content** 24
■ **Limitations** 25

How to Use 26

■ **Printer Connections** 26
■ **Creating an Epson ePOS SDK for JavaScript Project** 26
■ **Programming Guide** 26
Programming Flow 26
Effective range of command buffers for setting 33
Error Codes 33

API Reference 34

■ **List of ePOS SDK API** 34
ePOSDevice object 34
Common to device objects 35
OtherPeripheral object 35
Display object 35
Keyboard object 38
POSKeyboard object 38

MSR object 38
Printer object 39
HybridPrinter2 object 43
Scanner object 47
SimpleSerial object 47
GermanyFiscalElement object 47
DeviceHubTerminal object 47
CommBoxManager object 47
CommBox object 48
ePOSDeviceConfiguration object 48

■ **ePOSDevice object 49**

Constructor 49
connect method 50
disconnect method 52
isConnected method 53
createDevice method 54
deleteDevice method 57
getAdmin method 58
getLocation method 59
sendOfscXml method 60
getCommBoxManager method 61
onreconnecting event 62
onreconnect event 63
ondisconnect event 64

■ **Common to device objects 65**

callEvent method 65

■ **OtherPeripheral object 66**

send method 66
onreceive event 67

■ **Display object 68**

createWindow method 68
destroyWindow method 70
setCurrentWindow method 71
clearWindow method 72
addCreateScreen method 73
addCreateScreenCustom method 75
createTextArea method 78
destroyTextArea method 80
setCurrentTextArea method 81
clearTextArea method 82
setCursorPosition method 83
moveCursorPosition method 84
setCursorType method 85
addText method 86
addReverseText method 89
addMarquee method 90
setBlink method 92
setBrightness method 93
addBackgroundColor method 94
addStartSlideShow method 96
addStopSlideShow method 97
addDownloadImage method 98
addRegisterDownloadImage method 100
addNVImage method 102

addClearImage method 104
addSymbol method 105
addClearSymbol method 108
showClock method 109
addCommand method 110
send method 111
reset method 112
onreceive event 113

■ **Keyboard object 115**

setPrefix method 115
onkeypress event 116
onstring event 117
setMSRPrefix method 118
ondata event 119

■ **POSKeyboard object 120**

onkeypress event 120

■ **MSR object 121**

ondata event 121

■ **Printer object 122**

addTextAlign method 122
addTextLineSpace method 123
addTextRotate method 124
addText method 125
addTextLang method 126
addTextFont method 128
addTextSmooth method 129
addTextDouble method 130
addTextSize method 131
addTextStyle method 132
addTextPosition method 134
addTextVPosition method 135
addFeedUnit method 136
addFeedLine method 137
addFeedPosition method 138
addFeed method 139
addImage method 140
addLogo method 142
addBarcode method 143
addSymbol method 147
addHLine method 152
addVLineBegin method 154
addVLineEnd method 155
addPageBegin method 156
addPageEnd method 157
addPageArea method 158
addPageDirection method 160
addPagePosition method 161
addPageLine method 163
addPageRectangle method 165
addRotateBegin method 167
addRotateEnd method 169
addCut method 170
addPulse method 171
addSound method 172

addLayout method 174
recover method 177
addRecovery method 178
reset method 179
addReset method 180
addCommand method 181
send method 182
print method 183
getPrintJobStatus method 185
startMonitor method 186
stopMonitor method 187
halftone property 188
brightness property 189
force property 190
timeout property 191
interval property 192
drawerOpenLevel property 193
message property 194
onreceive event 195
onstatuschange event 198
onbatterystatuschange event 199
ononline event 200
onoffline event 201
onpoweroff event 202
oncoverok event 203
oncoveropen event 204
onpaperok event 205
onpapernearend event 206
onpaperend event 207
ondrawerclosed event 208
ondraweropen event 209
onbatteryok event 210
onbatterylow event 211

■ **HybridPrinter2 object 212**

lock method 212
unlock method 213
selectPaperType method 214
waitInsertion method 215
cancelInsertion method 216
ejectPaper method 217
sendData method 218
print method 219
readMicrData method 221
cleanMicrReader method 222
recover method 223
reset method 224
startMonitor method 225
stopMonitor method 226
setMessage method 227
getMessage method 228
halftone property 229
brightness property 230
force property 231
paperType property 232
interval property 233
waitTime property 234
enable40cplMode property 235

onreceive event 236

■ **Scanner object 240**

ondata event 240

■ **SimpleSerial object 241**

sendCommand 241
oncommandreply event 242

■ **GermanyFiscalElement objects 243**

operate method 243
ongfereceive event 244

■ **DeviceHubTerminal object 245**

shutdown method 245
restart method 247

■ **CommBoxManager object 249**

openCommBox method 249
closeCommBox method 251

■ **CommBox object 252**

getCommHistory method 252
send method 253
onreceive event 254

■ **ePOSDeviceConfiguration object 255**

Constructor 255
getRegisterdDevices method 256

■ **Error code list 258**

Error Codes acquired in the Callback Parameter and Counteractions 258
Error Codes acquired in the Onreceive Event and Countermeasure 260

■ **Key code list 265**

Device Specifications 267

■ **List of Supported Objects 267**

■ **List of Supported APIs 270**

ePOSDevice object 270
Display object 273
Printer object 279

■ **Printer-specific Support Information 289**

TM-m10 289
TM-m30 294
TM-m30II 299
TM-m30II-H 304
TM-m30II-NT 309
TM-m30II-S 314
TM-m30II-SL 319
TM-m50 324
TM-T20II 329
TM-T20III 333
TM-T82III 337
TM-T88VI 342

TM-T88VII 347
TM-L100 352
TM-T70 357
TM-T70II 360
TM-T88IV 365
TM-T88V 368
TM-U220 372
TM-U330 374
TM-P20 376
TM-P60II (Receipt) 382
TM-P60II (Peeler) 387
TM-P80 392
TM-H6000V 397
TM-T20II-i 402
TM-T70-i 407
TM-T82II-i 411
TM-T83II-i 416
TM-T88V-i 421
TM-T88VI-iHUB 425
TM-U220-i 430
TM-T70II-DT 432
TM-T70II-DT2 436
TM-T88V-DT 440
TM-T88VI-DT2 444
TM-H6000IV-DT 449
TM-T20 453
TM-T82II 457
TM-T83II 461
TM-T90 465
TM-L90 468
TM-H6000IV 472

■ **Usage restriction by firmware version 475**

TM-i Series/TM-DT Series 475
TM-m30 478
TM-m30II-H/TM-m30II-NT/TM-m30II-S/TM-m30II-SL 478
TM-T88VI 479
TM-T88VI-iHUB 479

■ **ePOS-Print Settings 480**

Sample Programs 481

■ **Functionality 481**

POS Terminal 481
Entry Terminal 482
Receipt Designer 482
Printer Sample 483
Hybrid Printer2 Sample 483
OtherPeripheral Sample 484
Customer Display Sample 484
Keyboard Sample 485
POSKeyboard Sample 485
MSR Sample 486
Barcode Scanner Sample 486
GermanyFiscalElement sample 487

■ **Use Environment** **488**

■ **Procedure to Start Sample Programs** **488**

Configure the printer environment 488
Starting Sample Programs 493

■ **Using Sample Programs** **494**

POS Terminal Sample 494
Entry Terminal 500
Receipt Designer 503
Printer Sample 509
Hybrid Printer 2 Sample 510
Customer Display Sample 516
Keyboard Sample 518
MSR Sample 520
Barcode Scanner Sample 521
POSKeyboard Sample 522
OtherPeripheral Sample 523

Application Guide 524

■ **To monitor continuously** **524**

■ **To reconnect to the network automatically** **525**

■ **To transmit and receive the data between applications** **527**

■ **To perform forward printing** **529**

■ **Developing Applications that Frequently Update or Transition Web Pages** **531**

Enabling ePOS-Print options 531
Limitations 531

■ **To perform check process** **532**

Appendix 534

■ **Open Source Software Licensing** **534**

Functionality

Epson ePOS SDK for JavaScript is the SDK for developing Web applications. Using Epson ePOS SDK for JavaScript enables simple coding to be used to control printers. Also, in some TM printers, peripheral devices such as the customer display and barcode scanner that are connected to the printer, and slave printers that are connected over a network can be controlled. In addition, application software using unique functions such as the spooler function and Communication Box, etc. can also be developed.

In this manual, printers are classified as follows.

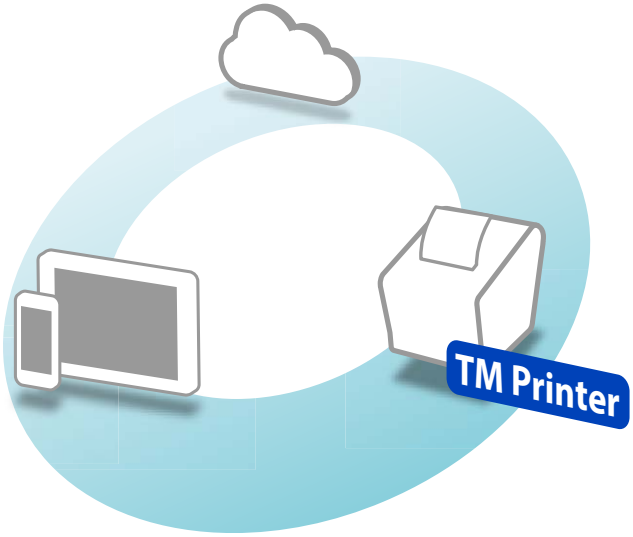
Type	Description
TM Printers	Refers to the following receipt printers. • Single-function models • Mobile models • Hybrid models • TM-i Series • TM-DT Series
Slave Printers	A collective name for TM printers connected over a network that are controlled from a smart device via the master TM printer.

Application Development in Epson ePOS SDK for JavaScript

The following section describes the system configurations of applications developed in Epson ePOS SDK for JavaScript. Refer to the detailed manual for each printer for information on system configuration methods and usage limitations.

TM Printer Models

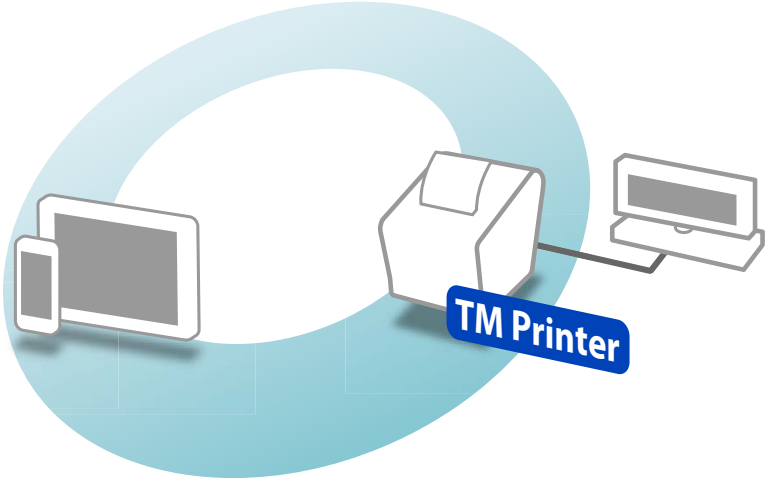
With this system, smart devices and TM printers connect over the network (wired and wireless LAN). TM printers can be controlled from smartphone Web browsers compatible with HTML5.



- You need to enable the ePOS-Print settings by using EpsonNet Config. Refer to ePOS-Print Settings for more information.
- When the connect method is running, enable the options parameter eposprint property.

Customer Display model

This is a system in which the TM printer and customer display are controlled from a smart device.
The customer display is connected to the TM printer, and the smart device and TM printer are connected through wired LAN/wireless LAN network communication.

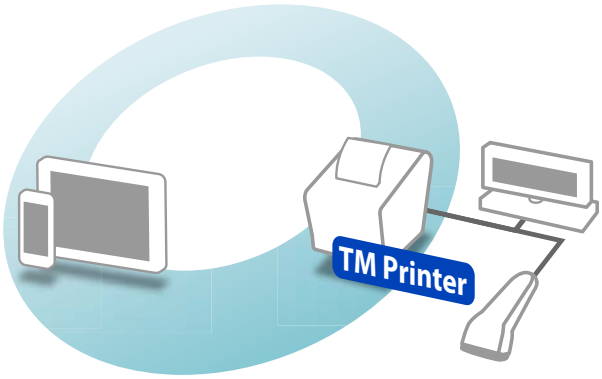


- When the connect method is running, enable the options parameter eposprint property.
- When the DM-D30 is replaced with the DM-D70, the ePOS-Device settings of the DM-D70 must be changed to "DM-D30".
  To change the ePOS-Device settings of the DM-D70, use the DM-D70 Utility.

TM Printer + DM-D + barcode scanner model

This is a system in which the TM Printer and DM-D (customer display), as well as the barcode scanner are controlled from a smart device. The DM-D and the barcode scanner are connected to the TM Printer and the smart device and TM Printer are connected through wired LAN/wireless LAN network communication.
TM Printer + DM-D + barcode scanner model can be configured by combining together the following TM printers and DM-D.

	DM-D30	DM-D70
TM-m30	✔	-
TM-m30II	✔	-
TM-m30II-H	✔	✔
TM-m30II-NT	✔	✔
TM-m30II-S	✔	✔
TM-m30II-SL	✔	✔
TM-m50	✔	-
TM-T88VI	✔	-
TM-T88VII	✔	✔
TM-L100	✔	✔



- If you use the DM-D30, you can connect the barcode scanner to the DM-D30 and use.
- For details on how to connect the DM-D and barcode scanner, refer to the Technical Reference Guide of each TM printer.
- You can also connect only the barcode scanner for use, without connecting the DM-D to the TM printer.
- When the connect method is running, disable the options parameter eposprint property.

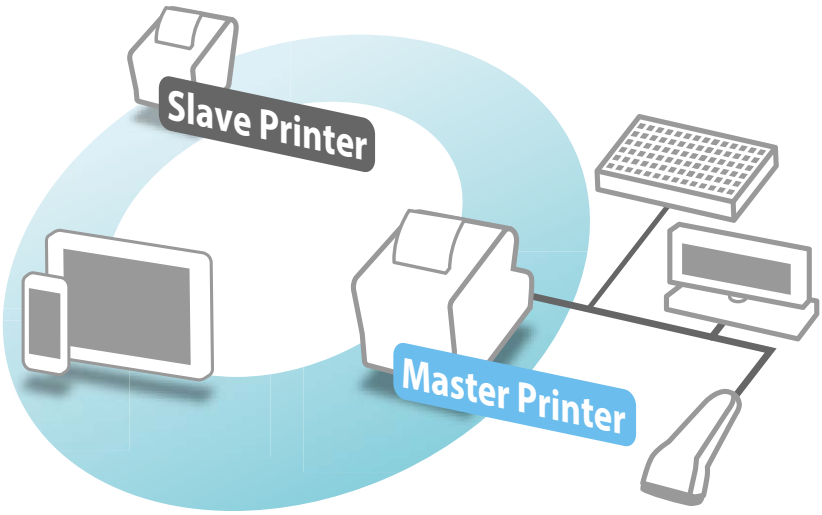
The ePOS-Device settings of the TM printer must be set to "Enable", and settings can be made from the Utility Software exclusive to each model.

TM Printer	Software
TM-m30	EpsonNet Config (Web version)
TM-T88VI	TM-T88VI Utility
TM-T88VII	TM-T88VII Utility
TM-L100	TM-L100 Utility

- In the following TM printers, the ePOS-Device settings are enabled with the default settings.
  TM-m30II-S / TM-m30II-SL
- In the following TM printers, the default settings for the ePOS-Device settings vary according to the destination. Check the settings in EpsonNet Config (Web version) or the Utility Software exclusive to each model.
  TM-m30II / TM-m30II-H / TM-m30II-NT / TM-m50

POS Terminal model

This is a system in which a smart device and the TM printer (master) that acts as the POS terminal are connected through wired LAN/wireless LAN network communication, and operation is performed by connecting multiple peripheral devices such as slave printers and customer display, etc. to the master printer.



In addition to Epson's peripheral devices, the POS terminal model can control various peripheral devices from the device control program and device control script originally developed by Epson.
Since the software to be loaded and the version of the software differ depending on the TM printer that acts as the POS terminal, the peripheral devices that can be controlled are also different.
peripheral devices also differ. For details on controllable peripheral devices, refer to the Technical Reference Guide of the printer.
The device control programs are implemented in TM-DT series (TM-DT software version 4.0 or later).
Refer to TM-DT Series Peripheral Device Control Guide for information on the device control programs and device control scripts.

To use an application developed in Epson ePOS SDK for JavaScript in a POS terminal model, the ePOS-Device Service of the TM printer that acts as the POS terminal must be set to "Enable."

> The ePOS-Device Service of the TM-i series and TM-DT series is set to "Enable" in the default settings.

Application Operating Environment

This section describes the operating environment for applications developed using the Epson ePOS SDK for JavaScript.
Refer to the README.en.txt file in the Epson ePOS SDK for JavaScript package for the most recent information on applicable Web browsers.

Supported printers

The following list of printers can be controlled from the applications.

> You need to enable the ePOS-Print settings of the single-function and mobile models.
> Refer to ePOS-Print Settings for more information.

Single-function models

❏ Wi-Fi/Ethernet enabled models

- TM-m10
- TM-m30
- TM-m30II
- TM-m30II-H
- TM-m30II-NT
- TM-m30II-S
- TM-m30II-SL
- TM-m50
- TM-T20II
- TM-T20III
- TM-T82III
- TM-T88VI
- TM-T88VII
- TM-L100

❏ Printers that are equipped with UB-E04 or UB-R04

> You can check the interfaces equipped with the printer by printing a status sheet.
> For more information, refer to the Technical Reference Guide of the printer.

- TM-T70
- TM-T70II
- TM-T88IV
- TM-T88V
- TM-U220
- TM-U330

Mobile models

❏ Wi-Fi/Ethernet enabled models

- TM-P20
- TM-P60II
- TM-P80

Hybrid models

❏ TM-H6000V

> You need to enable the ePOS-Device settings.
> Refer to TM-H6000V Utility User's Manual for details.

TM-i series

- ❏ TM-T20II-i
- ❏ TM-T70-i (TM-i firmware Ver. 4.0 or later)
- ❏ TM-T82II-i
- ❏ TM-T83II-i
- ❏ TM-T88V-i (TM-i firmware Ver. 4.0 or later)
- ❏ TM-T88VI-iHUB
- ❏ TM-U220-i

TM-DT series

- ❏ TM-T70II-DT
- ❏ TM-T70II-DT2
- ❏ TM-T88V-DT
- ❏ TM-T88VI-DT2
- ❏ TM-H6000IV-DT

Functions provided in each printer

Among the functions provided by Epson ePOS SDK for JavaScript, those that can be used differ according to the printer.
Refer to the list below.

	SSL/TLS communication*1	Ringing control of built-in buzzer	Ringing control of optional external buzzer	Control of slave printers	Spooler/Print Forwarding	Communication Box	Control of peripheral devices*2
TM-m10	✔	-	✔	-	-	-	-
TM-m30	✔	-	✔	-	-	-	✔
TM-m30II	✔	-	✔	-	-	-	✔
TM-m30II-H	✔	-	✔	-	-	-	✔
TM-m30II-NT	✔	-	✔	-	-	-	✔
TM-m30II-S	✔	-	✔	-	-	-	✔
TM-m30II-SL	✔	-	✔	-	-	-	✔
TM-m50	✔	-	✔	-	-	-	✔
TM-T20II	✔	-	✔	-	-	-	-
TM-T20III	✔	-	✔	-	-	-	-
TM-T82III	-	✔*4	✔	-	-	-	-
TM-T88VI	✔*3	✔*4	✔	✔	✔	-	✔
TM-T88VII	✔*3	✔*4	✔	✔	✔	-	✔
TM-L100	✔	✔*4	✔	-	-	-	✔
TM-T70	-	-	✔	-	-	-	-
TM-T70II	-	✔*4	✔	-	-	-	-
TM-T88IV	-	-	-	-	-	-	-
TM-T88V	-	✔*4	✔	-	-	-	-
TM-U220	-	-	-	-	-	-	-
TM-U330	-	-	-	-	-	-	-
TM-P20	-	✔	-	-	-	-	-

	SSL/TLS communication*1	Ringing control of built-in buzzer	Ringing control of optional external buzzer	Control of slave printers	Spooler/Print Forwarding	Communication Box	Control of peripheral devices*2
TM-P60II	-	✔	-	-	-	-	-
TM-P80	-	✔	-	-	-	-	-
TM-H6000V	✔	-	-	-	-	-	✔
TM-T20II-i	✔	-	✔	✔	✔	✔	✔
TM-T70-i	✔	-	-	✔	✔	✔	✔
TM-T82II-i	✔	✔*4	✔	✔	✔	✔	✔
TM-T83II-i	✔	✔*4	✔	✔	✔	✔	✔
TM-T88V-i	✔	-	✔	✔	✔	✔	✔
TM-T88VI-iHUB	✔	✔*4	✔	✔	✔	✔	✔
TM-U220-i	✔	-	-	✔	✔	✔	✔
TM-T70II-DT	✔	-	✔	✔	✔	✔	✔
TM-T70II-DT2	✔	-	✔	✔	✔	✔	✔
TM-T88V-DT	✔	-	✔	✔	✔	✔	✔
TM-T88VI-DT2	✔	-	✔	✔	✔	✔	✔
TM-H6000IV-DT	✔	-	-	✔	✔	✔	✔

*1: To communicate with the printer using SSL/TLS, select "8043" as the port in the connect method.

*2: The peripheral devices that can be used differ according to the printer. Refer to the Technical Reference Guide of each printer.

*3: Cannot be used in the system configuration of the TM Printer + DM-D + barcode scanner model.

*4 Supports ringing control by the drawer kick command.

Controllable Peripheral Devices

Control of the following peripheral devices is supported in Epson ePOS SDK for JavaScript.

- Controllable devices vary by model of printer.
  Refer to Functions provided in each printer or the Technical Reference Guide of each printer.
- By developing a device control program, a TM-DT series printer can control peripheral devices other than those introduced here.
  Refer to TM-DT Series Peripheral Device Control Guide for information on the development.

Slave printer

Wi-Fi enabled models of the following TM printers

- ❏ TM-P20
- ❏ TM-P80
- ❏ TM-P60II (Peeler)

The following TM printers that are equipped with a Wi-Fi/Ethernet interface

- ❏ TM-T20
- ❏ TM-T20II
- ❏ TM-T20III
- ❏ TM-T20IIIL
- ❏ TM-T20X
- ❏ TM-T70
- ❏ TM-T70II
- ❏ TM-T81III
- ❏ TM-T82II
- ❏ TM-T82III
- ❏ TM-T82IIIL
- ❏ TM-T82X
- ❏ TM-T83II
- ❏ TM-T83III
- ❏ TM-T88IV
- ❏ TM-T88V
- ❏ TM-T88VI
- ❏ TM-T90
- ❏ TM-T100
- ❏ TM-L90
- ❏ TM-U220
- ❏ TM-H6000IV

The following TM-i Series/TM-DT Series

- ❏ TM-T20II-i
- ❏ TM-T70-i (TM-i firmware Ver. 4.0 or later)
- ❏ TM-T70II-DT (TM-DT software Ver. 4.0 or later)
- ❏ TM-T82II-i
- ❏ TM-T83II-i
- ❏ TM-T88V-i (TM-i firmware Ver. 4.0 or later)
- ❏ TM-T88V-DT (TM-DT software Ver. 4.0 or later)
- ❏ TM-U220-i
- ❏ TM-H6000IV-DT (TM-DT software Ver. 4.0 or later)

Customer display

- ❏ DM-D30
- ❏ DM-D70
- ❏ DM-D110
- ❏ DM-D210

- When using DM-D70, available display mode (Standard mode or Fixed column and row mode) varies by connected printer.
  For more details, see DM-D70 Technical Reference Guide.
- When replacing the DM-D30 with the DM-D70 in the following system configurations, use the DM-D70 in the column/row fixed mode.
  - ∗ Customer Display Models (SSL/TLS communication)
  - ∗ TM Printer+DM-D+barcode scanner model
  - ∗ POS Terminal Model

Peripheral Devices that can be Controlled by Device Control Programs

Peripheral devices conforming to the OPOS specifications can be controlled using the device control programs that are supported by TM-DT series (TM-DT software version 4.0 or later).
In the categories described below, peripheral devices having a driver that runs in combination with OPOS Common Control Object (OPOS CCO) 1.14.001 can be controlled.

❏ MSR

❏ POS keyboard

❏ Barcode scanner

Peripheral Devices that can be Controlled by Device Control Scripts

The peripheral devices listed below can be controlled from the device control scripts of the TM-i series/TM-DT series.

❏ Key input device

- MSR (Hitachi-Omron Terminal Solutions, Corp.)
- Keyboard (Standard HID device)
- Barcode scanner (Standard HID device)

❏ Serial communication device

- Serial communication device
- USB device that can provide a control level equivalent to serial communication devices

> Install a dedicated driver for using a USB device that can be controlled in a similar manner as a serial communication device.
> You may not be able to use some drivers depending on their specifications.

ePOS-Print Settings

To control single-function models and mobile models of TM printers with the application software developed by using Epson ePOS SDK for JavaScript, the ePOS-Print settings of the TM printer must be enabled. The setting method varies depending on the printer model.

> ePOS-Print Settings are enabled by default in the following TM printers.
> TM-m10 / TM-m30 / TM-m30II-S / TM-m30II-SL / TM-T88VII

TM-m30II/TM-m30II-H/TM-m30II-NT/TM-m50/TM-T20III/TM-T82III/TM-T88VI

Use the Utility Software exclusive to each model.

Models	Software Name
TM-m30II	EpsonNet Config (Web version), TM-m30II Utility
TM-m30II-H	EpsonNet Config (Web version), TM-m30II Utility
TM-m30II-NT	EpsonNet Config (Web version), TM-m30II Utility
TM-m50	EpsonNet Config (Web version), TM-m50 Utility
TM-T20III	TM-T20III Utility
TM-T82III	TM-T82III Utility
TM-T88VI	TM-T88VI Utility
TM-L100	TM-L100 Utility

Refer to the User's Manual of each Utility Software for more information.

Single-function models/Mobile models

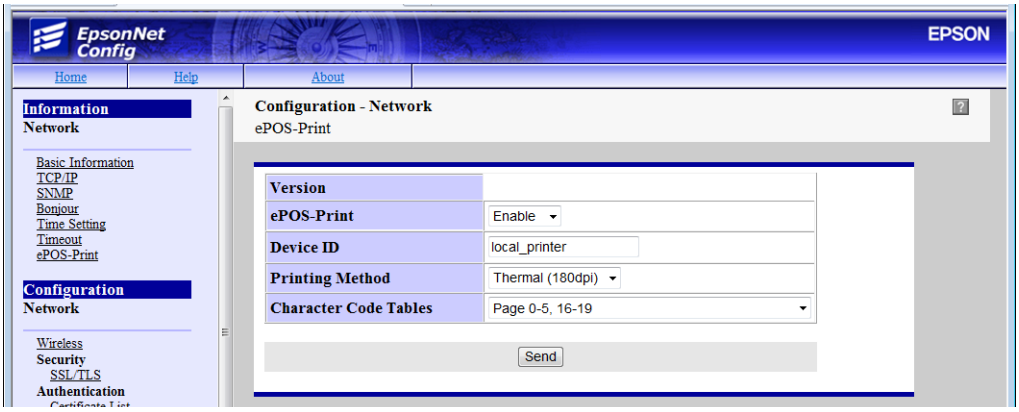
Change the setting using EpsonNet Config (Web version).

> Configure the settings via the network. USB connection cannot be used for setting.

1. Connect the TM printer to the network.
2. Start a Web browser and access the following URL.
   http://[Printer IP address]/

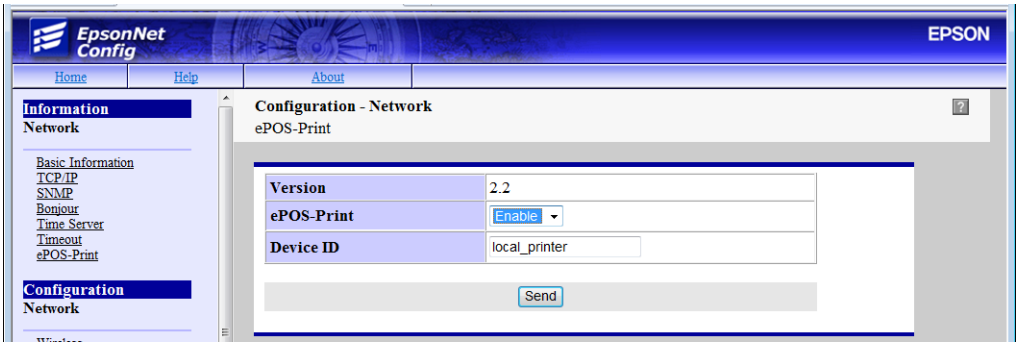
3 Click **ePOS-Print**, then make the settings as described below.

❏ Single-function models



Item	Settings
ePOS-Print	Select **Enable**. (Default value: Disabled)
Device ID	Configure in accordance with system settings. (Default value: local_printer)
Printing Method	Configure in accordance with the connected TM printer. (Refer to ePOS-Print Settings)
Character Code Table	Configure in accordance with the connected TM printer. (Refer to ePOS-Print Settings)

❏ Mobile models



Item	Settings
ePOS-Print	Select **Enable**. (Default value: Disabled)
Device ID	Configure in accordance with system settings. (Default value: local_printer)

4 Click **Send**.

5 Restart the TM printer.

Downloadable Content

Epson ePOS SDK for JavaScript packages include the following files.

Filename	Description
epos-x.x.x.js	Libraries used for execution of functions.
OPOS_CCOs_1.14.001.msi	This is the OPOS CCO installer package.
ePOS_SDK_Sample_JavaScript.zip	This file contains sample programs.
DeviceControlScript_Sample.zip	This file contains sample device control script programs.
DeviceControlProgram_Sample.zip	This file contains sample device control programs.
README.jp.txt	This is the Japanese README file.
README.en.txt	This is the English README file.
EULA.jp.txt	This is the Japanese SOFTWARE LICENSE AGREEMENT.
EULA.en.txt	This is the English SOFTWARE LICENSE AGREEMENT.
ePOS_SDK_JavaScript_um_ja_revx.pdf	This is the Japanese user manual.
ePOS_SDK_JavaScript_um_en_revx.pdf	This is the English user manual.
TM-DT_Peripherals_ja_revx.pdf	This is the Japanese TM-DT Series Peripheral Device Control Guide. This guide describes how to control peripheral devices with TM-DT series.
TM-DT_Peripherals_en_revx.pdf	This is the English TM-DT Series Peripheral Device Control Guide.
JSON_Specification.pdf	This is the JSON specifications. This describes the JSON specifications that are used for GermanyFiscalElement class.
ePOS_SDK_JavaScript_Migration_Guide_ja_revx.pdf	This is the Japanese migration guide. This guide describes the procedure to migrate from the ePOS-Print SDK or ePOS-Device SDK.
ePOS_SDK_JavaScript_Migration_Guide_en_revx.pdf	This is the English migration guide.

Web Content

Online reference is publicly available from the following website.
www.epson-biz.com/pos/reference/

Limitations

- ❏ Set the barcode scanner suffix to CR (carriage return code). Data cannot be obtained using any other settings.
- ❏ When using 2D barcode scanners, Japanese and other multi-byte characters cannot be read correctly. However, when the following printer and 2D barcode scanner are used in combination to read QR codes, multi-byte characters in UTF-8 encoding can be acquired correctly.
  - TM-m30
  - TM-m30II
  - TM-m30II-H
  - TM-m30II-NT
  - TM-m30II-S
  - TM-m30II-SL
  - TM-m50
  - TM-T88VI
  - TM-T88VII
  - TM-L100
- ❏ Control codes cannot be read from 2D barcode data if it contains ASCII control codes (0x00 through 0x1F).
- ❏ The prototype.js JavaScript library conflicts with the Epson ePOS SDK for JavaScript library (epos-x.x.x.js), and so these libraries cannot be used together.

How to Use

This section describes how to create Epson ePOS SDK for JavaScript projects and some basic programming methods used in the Epson ePOS SDK for JavaScript.

Printer Connections

Connect smart devices and printers using a connection method that matches the system you want to create. Refer to the Technical Reference Guide of each printer for more information.

Creating an Epson ePOS SDK for JavaScript Project

1. Place the epos-x.x.x.js on the Web server.
2. Scripts are embedded into Web pages using HTML <script> tags.

   Embedding Example

```
<script type="text/javascript" src="epos-2.0.0.js"></script>
```

Programming Guide

This section describes some of the basic programming methods used in the Epson ePOS SDK for JavaScript.

Programming Flow

This section describes a flow to create a program for controlling printers or peripheral devices respectively.

- Controlling Printers
- Controlling Customer Displays
- Controlling Keyboards and Barcode Scanners

Controlling Printers

The method of controlling the TM printer and slave printer, and programming receipt printing is described below.

1. Creating ePOSDevice objects (device connection and communication)

2. Retrieving Printer objects (printer selection)

3. Creating print data (data buffering)

4. Sending print data (printing and disconnection)

Creating ePOSDevice objects (device connection and communication)

Create and initialize the ePOSDevice object.

```
var ePosDev = new epson.ePOSDevice();

function connect() {
   var ipAddress = '192.168.192.168';
   var port = '8008';

   ePosDev.connect(ipAddress, port, callback_connect);
}
```

Retrieving Printer objects (printer selection)

Retrieve the Printer object and select the printer to control.

```
function callback_connect(resultConnect){
   var deviceId = 'local_printer';
   var options = {'crypto' : false, 'buffer' : false};

   if ((resultConnect == 'OK') || (resultConnect == 'SSL_CONNECT_OK')) {
      //Retrieves the Printer object
      ePosDev.createDevice(deviceId, ePosDev.DEVICE_TYPE_PRINTER, options,
callback_createDevice);
   }
   else {
      //Displays error messages
   }
}
```

```
var printer = null;

function callback_createDevice(deviceObj, errorCode){
   if (deviceObj === null) {
      //Displays an error message if the system fails to retrieve the Printer object
      return;
   }
   printer = deviceObj;

   //Registers the print complete event
   printer.onreceive = function(response){
      if (response.success) {
         //Displays the successful print message
      }
      else {
         //Displays error messages
      }
   };
}
```

Creating print data (data buffering)

Use the Printer object add*-system API to create print data.

In the following example, data is created to print "Hello World" aligned in the center.

```
function createData(){
   printer.addTextAlign(printer.ALIGN_CENTER);
   printer.addText('Hello World\n');
}
```

Sending print data (printing and disconnection)

Run the print process and retrieve the print result.

```
function send(){
   if (ePosDev.isConnected) {
      printer.send();
   }
}
```

When an error occurs, the print data that has been created is not erased until the command buffer is cleared. The print data can be used for re-printing in cases such as when the error processing ends.

Discard the Printer object and terminate the connection with the printer.

```
//Discards the Printer object
ePosDev.deleteDevice(printer, callback_deleteDevice);

function callback_deleteDevice(errorCode){
   //Terminates connection with device
   ePosDev.disconnect();
}
```

Controlling Customer Displays

This section describes the programming methods for controlling customer displays and displaying text on displays.

1. Creating ePOSDevice objects (device connection and communication)

2. Retrieving Display object (device selection)

3. Creating display data (data buffering)

4. Sending display data (printing and disconnection)

Creating ePOSDevice objects (device connection and communication)

Create and initialize the ePOSDevice object.

```
var ePosDev = new epson.ePOSDevice();

function connect() {
   var ipAddress = '192.168.192.168';
   var port = '8008';

   ePosDev.connect(ipAddress, port, callback_connect);
}
```

Retrieving Display object (device selection)

Retrieve the Display object and select the customer display to control.

```
function callback_connect(resultConnect){
   var deviceId = 'local_display';
   var options = {'crypto' : false, 'buffer' : false};

   if ((resultConnect == 'OK') || (resultConnect == 'SSL_CONNECT_OK')) {
      //Retrieves the Display object
      ePosDev.createDevice(deviceId, ePosDev.DEVICE_TYPE_DISPLAY, options,
callback_createDevice);
   }
   else {
      //Displays error messages
   }
}
```

```
var display = null;

function callback_createDevice(deviceObj, errorCode){
   if (deviceObj === null) {
      //Displays an error message if the system fails to retrieve the Display object
      return;
   }
   display = deviceObj;

   //Registers the display complete event
   display.onreceive = function(response){
      if (response.success) {
         //Displays the successful display message
      }
      else {
         //Displays error messages
      }
   };
}
```

Creating display data (data buffering)

Use the Display object add*-system API to create display data.

In the following example, data is created to display "Hello World".

```
function createData(){
   diaplay.addText('Hello World\n');
}
```

Sending display data (printing and disconnection)

Run the display process and retrieve the display result.

```
function send(){
   if (ePosDev.isConnected) {
      display.send();
   }
}
```

Discard the Display object and terminate the connection with the customer display.

```
//Discards the Display object
ePosDev.deleteDevice(display, callback_deleteDevice);

function callback_deleteDevice(errorCode){
   //Terminates connection with device
   ePosDev.disconnect();
}
```

Controlling Keyboards and Barcode Scanners

This section describes how to create a program that enables receiving data input from keyboards and barcode scanners.

The following section describes the programming flow for controlling keyboards.

1. Creating ePOSDevice objects (device connection and communication)

↓

2. Retrieving Keyboard objects (device selection)

↓

3. Disconnecting from the device

Creating ePOSDevice objects (device connection and communication)

Create and initialize the ePOSDevice object.

```
var ePosDev = new epson.ePOSDevice();

function connect() {
   var ipAddress = '192.168.192.168';
   var port = '8008';

   ePosDev.connect(ipAddress, port, callback_connect);
}
```

Retrieving Keyboard objects (device selection)

Retrieve the Keyboard object, connect the keyboard, and then register the event that will receive input data.

```
function callback_connect(resultConnect){
   var deviceId = 'local_keyboard';
   var options = {'crypto' : false, 'buffer' : false};

   if ((resultConnect == 'OK') || (resultConnect == 'SSL_CONNECT_OK')) {
      //Retrieves the Keyboard object
      ePosDev.createDevice(deviceId, ePosDev.DEVICE_TYPE_KEYBOARD, options,
callback_createDevice);
   }
   else {
      //Displays error messages
   }
}

var keyboard = null;

function callback_createDevice(deviceObj, errorCode){
   if (deviceObj === null) {
      //Displays an error message if the system fails to retrieve the Keyboard object
      return;
   }
   keyboard = deviceObj;
```

```
    //Registers the key press event
    keyboard.onkeypress = function(response){
        if (response.keycode !== 0) {
            //Displays received messages
        }
    };
}
```

Disconnecting from the device

Upon completion of the input process, discard the Keyboard object to terminate the connection and stop receiving data from the keyboard.

```
//Discards the Keyboard object
ePosDev.deleteDevice(keyboard, callback_deleteDevice);

function callback_deleteDevice(errorCode){
    //Terminates connection with device
    ePosDev.disconnect();
}
```

Effective range of command buffers for setting

The valid range of add* of the Printer object used for setting depends on the print method.

Receipt

The add* of the Printer object used for settings is valid until send method is executed after add* settings have been configured.
The configured values are initialized every time send method is executed. Refer to the following example code.

```
printer.addText('Hello World\n');
printer.addTextFont(Printer.FONT_B);
printer.addText('Hello World\n');
printer.addText('Hello World\n');
printer.send();
printer.addText('Hello World\n');
printer.send();
```

Red letters:Font A

Green letters:Font B

Slip, Endorsement, Validation

The add* of the Printer object used for settings is valid until the paper is ejected after add* settings have been configured.
The configured values are initialized every time the following API is executed.

- waitInsertion method
- readMicrData method
- sendData method (receipt printing)

Refer to the following example code.

```
HybridPrinter2.selectPaperType(PAPERTYPE_SLIP);
HybridPrinter2.waitInsertion(undefined);
Hybridprinter2.addText('Hello World\n');
Hybridprinter2.addTextFont(Printer.FONT_B);
Hybridprinter2.addText('Hello World\n');
Hybridprinter2.addText('Hello World\n');
Hybridprinter2.sendData();
Hybridprinter2.addText('Hello World\n');
Hybridprinter2.sendData();
Hybridprinter2.ejectPaper();
HybridPrinter2.selectPaperType(PAPERTYPE_RECEIPT);
Hybridprinter2.addText('Hello World!\n');
Hybridprinter2.sendData();
```

Red letters:Font A

Green letters:Font B

Error Codes

Epson ePOS SDK for JavaScript uses error codes retrieved by callback parameters and error codes retrieved by onreceive events. Refer to the following sections for more information on causes of each error code and the corresponding troubleshooting procedures.

- Error Codes acquired in the Callback Parameter and Counteractions
- Error Codes acquired in the Onreceive Event and Countermeasure

API Reference

This chapter describes the APIs provided by ePOS SDK for JavaScript.

List of ePOS SDK API

ePOS SDK for JavaScript provides the following objects:

- Available APIs and parameters vary by printer model and peripheral device. Refer to List of Supported Objects.
- For the list of APIs of each object, and the APIs supported by each printer, refer to List of Supported APIs.

❏ ePOSDevice object (window.epson.ePOSDevice)

❏ Common to device objects

❏ OtherPeripheral object

❏ Display object

❏ Keyboard object

❏ POSKeyboard object

❏ MSR object

❏ Printer object

❏ HybridPrinter2 object

❏ Scanner object

❏ SimpleSerial object

❏ GermanyFiscalElement object

❏ DeviceHubTerminal object

❏ CommBoxManager object

❏ CommBox object

❏ ePOSDeviceConfiguration object

ePOSDevice object

Connects the application and printer.

API		Description
Initialization	Constructor	Initializes the ePOSDevice object.
Communication path	connect method	Establishes the communication path.
	disconnect method	Disconnects the communication path.
	isConnected method	Acquires the establishment state of the communication path.
Device	createDevice method	Acquires a device objects.
	deleteDevice method	Discards a device objects.

API		Description
Administration information	getAdmin method	Acquires the administration information.
	getLocation method	Acquires the installation location information.
OFSC	sendOfscXml method	Sends XML data for OFSC-Print.
Inter-application communication	getCommBoxManager method	Acquires the CommBoxManager object.
Starts reconnection.	onreconnecting event	Reconnection process start event
Completes reconnection.	onreconnect event	Reconnection completion event
Disconnection	ondisconnect event	Network disconnection event

Common to device objects

Controls peripheral devices using the device control scripts that you create.

API		Description
Event call	callEvent method	Calls an event from the corresponding device control script (the SimpleSerial object is not supported).

OtherPeripheral object

Controls peripheral devices using the device control programs that you create.

API		Description
Send	send method	Sends a control command.
Reception of result	onreceive event	Control result reception event

Display object

Controls character display on the customer display.

API		Description
Window	createWindow method	Defines the display area.
	destroyWindow method	Deletes the display area setting.
	setCurrentWindow method	Switches between display areas.
	clearWindow method	Deletes the current display area.
	addCreateScreen method	Defines the base window.
	addCreateScreenCustom method	Defines the base window.
	createTextArea method	Defines the display area.
	destroyTextArea method	Deletes the display area setting.
	setCurrentTextArea method	Switches between display areas.

API		Description
Window	clearTextArea method	Deletes the current display area.
Cursor	setCursorPosition method	Moves the cursor.
	moveCursorPosition method	Moves the cursor within the display area.
	setCursorType method	Changes the cursor display.
Text display	addText method	Displays text.
	addReverseText method	Displays inverted text.
	addMarquee method	Displays a marquee.
Display attributes	setBlink method	Blinks display.
	setBrightness method	Changes the display brightness.
	addBackgroundColor method	Sets the background color.
Graphics	addStartSlideShow method	Starts a slide show.
	addStopSlideShow method	Ends a slide show.
	addDownloadImage method	Displays an image.
	addRegisterDownloadImage method	Registers an image.
	addNVImage method	Displays an NV image.
	addClearImage method	Deletes an image.
Barcode	addSymbol method	Displays a two-dimensional symbol.
	addClearSymbol method	Deletes a two-dimensional symbol.
Clock	showClock method	Displays the clock.
Command transfer	addCommand method	Runs an optional command.
Transmission	send method	Sends a control command.
Initialization	reset method	Reset
Reception of result	onreceive event	Control result reception event

The APIs and parameters that can be used vary depending on the customer display used and its display modes. The table below shows the API that can be used in each customer display and display mode.

API	Parameter	DM-D30	DM-D70 (Standard mode)	DM-D70 (Column/row fixed mode)	DM-D110/ DM-D210
createWindow method		✔	-	✔	✔
destroyWindow method		✔	-	✔	✔
setCurrentWindow method		✔	-	✔	✔
clearWindow method		✔	-	✔	✔
addCreateScreen method		-	✔	✔	-
addCreateScreenCustom method		-	✔	✔	-
createTextArea method		-	✔	-	-

API	Parameter	DM-D30	DM-D70 (Standard mode)	DM-D70 (Column/row fixed mode)	DM-D110/ DM-D210
destroyTextArea method		-	✔	-	-
setCurrentTextArea method		-	✔	-	-
clearTextArea method		-	✔	-	-
setCursorPosition method		✔	✔	✔	✔
moveCursorPosition method		✔	✔	✔	✔
setCursorType method		✔	-	-	✔
addText method	data	✔	✔	✔	✔
	lang	✔*	✔	✔	✔*
	x	✔	✔	✔	✔
	y	✔	✔	✔	✔
	r	-	✔	-	-
	g	-	✔	-	-
	b	-	✔	-	-
addReverseText method		✔	-	-	✔
addMarquee method		✔	✔	✔	✔
setBlink method		✔	-	-	✔
setBrightness method		✔	✔	✔	✔
addBackgroundColor method		-	✔	-	-
addStartSlideShow method		-	✔	-	-
addStopSlideShow method		-	✔	-	-
addDownloadImage method		-	✔	-	-
addRegisterDownloadImage method		-	✔	-	-
addNVImage method		-	✔	-	-
addClearImage method		-	✔	-	-
addSymbol method		-	✔	-	-
addClearSymbol method		-	✔	-	-
showClock method		-	-	-	✔
addCommand method		✔	✔	✔	✔
send method		✔	✔	✔	✔
reset method		✔	✔	✔	✔
onreceive event		✔	✔	✔	✔

*: The setting value "mul" cannot be used.

Keyboard object

Controls character entry from the keyboard.

API		Description
String setting	setPrefix method	Sets the condition to handle as a continuous string.
Key detection	onkeypress event	Key press detection event
String detection	onstring event	String detection event
Key code setting	setMSRPrefix method	Sets the condition to control such as MSR data.
Data detection	ondata event	Card information reception event

POSKeyboard object

Controls character entry from POS keyboards.

API		Description
Key detection	onkeypress event	Key press detection event

MSR object

Controls card reading by MSR.

API		Description
Data detection	ondata event	Card data detection event

Printer object

Controls printing by the printer.

API		Description
Text	addTextAlign method	Adds text alignment setting to the command buffer.
	addTextLineSpace method	Adds line spacing setting to the command buffer.
	addTextRotate method	Adds text rotation setting to the command buffer.
	addText method	Adds text to print to the command buffer.
	addTextLang method	Adds language setting to the command buffer.
	addTextFont method	Adds character font setting to the command buffer.
	addTextSmooth method	Adds character smoothing setting to the command buffer.
	addTextDouble method	Adds character doubling setting to the command buffer.
	addTextSize method	Adds character scaling factor setting to the command buffer.
	addTextStyle method	Adds character style setting to the command buffer.
	addTextPosition method	Adds character print position setting to the command buffer.
	addTextVPosition method	Adds vertical character print start position setting to the command buffer.
Paper feed	addFeedUnit method	Adds paper-feed setting in dots to the command buffer.
	addFeedLine method	Adds paper-feed setting in lines to the command buffer.
	addFeedPosition method	Adds receipt and label sheet control setting to the command buffer.
	addFeed method	Adds line spacing to the command buffer.
Graphics	addImage method	Adds a raster image print command to the command buffer.
	addLogo method	Adds a NV logo print command to the command buffer.
Barcode	addBarcode method	Adds a barcode print command to the command buffer.
	addSymbol method	Adds a 2D symbol print command to the command buffer.

API		Description
Ruled line	addHLine method	Adds a horizontal ruled line print command to the command buffer.
	addVLineBegin method	Adds a vertical ruled line start command to the command buffer.
	addVLineEnd method	Adds a vertical ruled line end command to the command buffer.
Page mode	addPageBegin method	Adds a page mode start command to the command buffer.
	addPageEnd method	Adds a page mode end command to the command buffer.
	addPageArea method	Adds page mode print area setting to the command buffer.
	addPageDirection method	Adds page mode print direction setting to the command buffer.
	addPagePosition method	Adds page mode print position setting to the command buffer.
	addPageLine method	Adds a page mode line draw command to the command buffer.
	addPageRectangle method	Adds a page mode rectangle draw command to the command buffer.
Batch rotate print	addRotateBegin method	Adds the start batch rotate print mode to the command buffer.
	addRotateEnd method	Adds the end batch rotate print mode to the command buffer.
Cut	addCut method	Adds a sheet cut command to the command buffer.
Drawer	addPulse method	Adds a drawer kick command to the command buffer.
Buzzer	addSound method	Adds a buzzer sound command to the command buffer.
Layout	addLayout method	Adds sheet layout setting to the command buffer.
Recovery	recover method	Recovers from a recoverable error.
	addRecovery method	Adds an error recovery tag.
Reset	reset method	Resets the printer.
	addReset method	Adds a printer reset tag.
Command transfer	addCommand method	Adds a command to the command buffer.
Transmission	send method	• Sends a print document. • Send data by specifying the job ID.
	print method	• Prints the HTML5 Canvas. • Prints data by specifying the job ID.
Print job	getPrintJobStatus method	Acquires the print job status.

API		Description
Status monitor	startMonitor method	Enables the status event.
	stopMonitor method	Disables the status event.
Image	halftone property	Halftone processing method for raster images.
	brightness property	Brightness compensation value for raster images.
Forced transmission	force property	Forced transmission mode
Timeout	timeout property	Transmission timeout period
Monitor interval	interval property	Printer status update interval
Drawer open	drawerOpenLevel property	Drawer signal line status
Command buffer	message property	Direct manipulation of command buffer
Reception of result	onreceive event	• Response document reception event • Job ID specification reception event
	onstatuschange event	Status change event
	onbatterystatuschange event	Battery status change event
	ononline event	Online event
	onoffline event	Offline event
	onpoweroff event	No response event
	oncoverok event	Cover close event
	oncoveropen event	Cover open event
	onpaperok event	Paper remaining event
	onpaperend event	Paper end event
	onpapernearend event	Paper almost running out event
	ondrawerclosed event	Drawer close event
	ondraweropen event	Drawer open event
	onbatteryok event	Battery remaining event
	onbatterylow event	Battery running out event

The print mode includes the standard mode, page mode, and the batch rotate print mode.

- Standard mode

  Prints line by line. Line spacing is automatically adjusted according to character size, image size, and barcode height. Suitable for printing receipts whose print length varies by print content.

- Page mode

  Prints page by page. Prints characters, images, and/or barcodes on a single page that is defined as a print area.

  When processing in the page mode, use addPageBegin method to start and addPageEnd method to end the page mode process, respectively.

- Batch rotate print mode

  This is a print mode in which the range of the print data (such as characters, images, barcodes, etc.) is set, the print data in the set range is compiled, inverted, and then printed.

  When performing the processing in the batch rotate print mode, start the batch rotate print processing with addRotateBegin method, and end the batch rotate print processing with addRotateEnd method.

The APIs that can be used in each mode are described in the table below.

API	Standard mode	Page mode	Batch rotate print mode
addTextAlign method	✔	-	✔
addTextLineSpace method	✔	✔	✔
addTextRotate method	✔	-	✔
addText method	✔	✔	✔
addTextLang method	✔	✔	✔
addTextFont method	✔	✔	✔
addTextSmooth method	✔	✔	✔
addTextDouble method	✔	✔	✔
addTextSize method	✔	✔	✔
addTextStyle method	✔	✔	✔
addTextPosition method	✔	✔	✔
addTextVPosition method	-	✔	✔
addFeedUnit method	✔	✔	✔
addFeedLine method	✔	✔	✔
addFeedPosition method	✔	-	✔
addFeed method	✔	✔	✔
addImage method	✔	✔	✔
addLogo method	✔	✔	✔
addBarcode method	✔	✔	✔
addSymbol method	✔	✔	✔
addHLine method	✔	-	✔

API	Standard mode	Page mode	Batch rotate print mode
addVLineBegin method	✔	-	✔
addVLineEnd method	✔	-	✔
addPageBegin method	✔	-	-
addPageEnd method	-	✔	-
addPageArea method	-	✔	-
addPageDirection method	-	✔	-
addPagePosition method	-	✔	-
addPageLine method	-	✔	-
addPageRectangle method	-	✔	-
addRotateBegin method	✔	-	-
addRotateEnd method	-	-	✔
addCut method	✔	-	-
addPulse method	✔	-	-
addSound method	✔	-	-
addLayout method	✔	-	✔
recover method	✔	-	-
addRecovery method	✔	-	-
reset method	✔	-	-
addReset method	✔	-	-
addCommand method	✔	✔	✔
send method	✔	✔	-
print method	✔	✔	-
getPrintJobStatus method	✔	✔	✔
startMonitor method	✔	✔	✔
stopMonitor method	✔	✔	✔

HybridPrinter2 object

Controls the hybrid printers.

API		Description
Device lock	lock method	Locks the device port.
	unlock method	Unlocks the device port.
Print method	selectPaperType method	Sets the print method.

API		Description
Paper feed	waitInsertion method	Waits for paper insertion.
	cancelInsertion method	Cancels the paper insertion wait status.
Paper eject	ejectPaper method	Ejects the paper.
Data transmission	sendData method	Sends a print command.
Print	print method	Prints the HTML5 Canvas.
MICR	readMicrData method	Reads by MICR.
	cleanMicrReader method	Cleans the MICR mechanism.
Recovery	recover method	Recovers from a recoverable error.
Reset	reset method	Resets the printer.
Status monitor	startMonitor method	Enables the status event.
	stopMonitor method	Disables the status event.
Command buffer	setMessage method	Direct manipulation of command buffer
	getMessage method	Direct acquisition of command buffer
Image	halftone property	Halftone processing method for raster images
	brightness property	Brightness compensation value for raster images
Forced transmission	force property	Forced transmission mode
Print method acquisition	paperType property	Acquires the print method setting.
Monitor interval	interval property	Printer status update interval
Wait time	waitTime property	Time from insertion of a paper to start of operation
40cpl mode	enable40cplMode property	Enables the 40cpl mode.
Drawer open	drawerOpenLevel property *	Drawer open level
Reception of result	onreceive event	Response document reception event
	onstatuschange event *	Status change event
	ononline event *	Online event
	onoffline event *	Offline event
	onpoweroff event *	No response event
	oncoverok event *	Cover close event
	oncoveropen event *	Cover open event
	onpaperok event *	Paper remaining event
	onpaperend event *	Paper end event
	onpapernearend event *	Paper almost running out event
	ondrawerclosed event *	Drawer close event
	ondraweropen event *	Drawer open event

* Event common to Printer object.

List of control operations supported for HybridPrinter2 object

APIs available for the HybridPrinter2 object depend on the type of control operation.
The following lists control operation types and available APIs.

API	Control operation				
	Receipt	Slip	Endorse-ment	Validation	MICR
lock method	✔	✔	✔	✔	✔
unlock method	✔	✔	✔	✔	✔
selectPaperType method	✔	✔	✔	✔	-
waitInsertion method	-	✔	✔	✔	-
cancelInsertion method	-	✔	✔	✔	✔
ejectPaper method	-	✔	✔	✔	✔
sendData method	✔	✔	✔	✔	-
print method	✔	✔	✔	✔	-
readMicrData method	-	-	-	-	✔
cleanMicrReader method	-	-	-	-	✔
recover method	✔	✔	✔	✔	✔
reset method	✔	✔	✔	✔	✔
startMonitor method	✔	✔	✔	✔	✔
stopMonitor method	✔	✔	✔	✔	✔
setMessage method	✔	✔	✔	✔	-
getMessage method	✔	✔	✔	✔	-
halftone property	✔	✔	✔	✔	-
brightness property	✔	✔	✔	✔	-
force property	✔	✔	✔	✔	-
paperType property	✔	✔	✔	✔	-
interval property	✔	✔	✔	✔	✔
waitTime property	-	✔	✔	✔	✔
enable40cplMode property	-	-	✔	-	-
onreceive event	✔	✔	✔	✔	✔

Creating print document by the HybridPrinter2 object

The HybridPrinter2 object creates a print document using the same APIs as Printer object.

The APIs and corresponding print methods are listed below.

API		Print method				
		Receipt	Slip	Endorse-ment	Endorse-ment (40cpl)	Validation
Text	addTextAlign method	✔	✔	✔	-	✔
	addTextLineSpace method	✔	✔	✔	-	✔
	addTextRotate method	✔	✔	✔	✔	✔
	addText method	✔	✔	✔	✔	✔
	addTextLang method	✔	✔	-	-	✔
	addTextFont method	✔	✔	✔	-	✔
	addTextSmooth method	✔	-	-	-	-
	addTextDouble method	✔	✔	✔	-	✔
	addTextSize method	✔	✔	✔	-	✔
	addTextStyle method	✔	✔*	✔*	-	✔*
	addTextPosition method	✔	✔	✔	✔	✔
	addTextVPosition method	✔	✔	-	-	-
Paper feed	addFeedUnit method	✔	✔	✔	✔	✔
	addFeedLine method	✔	✔	✔	✔	✔
	addFeed method	✔	✔	✔	✔	✔
Graphics	addImage method	✔	-	-	-	-
	addLogo method	✔	-	-	-	-
Barcode	addBarcode method	✔	-	-	-	-
	addSymbol method	✔	-	-	-	-
Page mode	addPageBegin method	✔	✔	-	-	✔
	addPageEnd method	✔	✔	-	-	✔
	addPageArea method	✔	✔	-	-	✔
	addPageDirection method	✔	✔	-	-	✔
	addPagePosition method	✔	✔	-	-	✔
	addPageLine method	✔	✔	-	-	-
	addPageRectangle method	✔	✔	-	-	-
Cut	addCut method	✔	-	-	-	-
Drawer	addPulse method	✔	✔	✔	✔	✔
Command	addCommand method	✔	✔	✔	✔	✔

* The reverse parameter is not supported.

Scanner object

Controls barcode reading by barcode scanner.

API		Description
Data detection	ondata event	Barcode data detection event

SimpleSerial object

Controls printer and serial communication of the device.

API		Description
String setting	sendCommand	Transfers a optional command.
Detects acknowledg-ment.	oncommandreply event	Optional command transfer result notification event

GermanyFiscalElement object

Connects to the German fiscal element (TSE), and controls data read/write operations.

API		Description
Operation	operate method	Send the JSONString to the German fiscal element (TSE).
Reception of result	ongfereceive event	Control result reception event.

DeviceHubTerminal object

Controls the TM-DT series.

API		Description
Shutdown	shutdown method	Shuts down the printer.
Restart	restart method	Restarts the printer.

CommBoxManager object

Controls opening/closing of the communication box.

API		Description
Inter-application commu-nication	openCommBox method	Opens the communication box.
	closeCommBox method	Closes the communication box.

CommBox object

Controls data transmission and reception between the communication box and an application.

API		Description
Transmission history	getCommHistory method	Acquires the data transmission history.
Transmission	send method	Sends data to the communication box.
Reception	onreceive event	Notifies of data reception in the communication box.

ePOSDeviceConfiguration object

Acquires the device information registered to the printer.

API		Description
Constructor	Constructor	Creates an ePOSDeviceConfiguration object.
Status acquisition	getRegisterdDevices method	Acquires device availability status.

ePOSDevice object

Constructor

Creates and initializes the ePOSDevice object.

Syntax

```
ePOSDevice();
```

Return value

Return value	Object type
ePOSDevice object	ePOSDevice

connect method

Starts communication with the printer.

Syntax

- ❏ connect(ipAddress, port, callback);
- ❏ connect(ipAddress, port, callback, options);

Parameter

ipAddress

Value	Description
ipAddress	Specifies the IP address of the printer.

port

Specifies the communication method.

Value	Description
8008	HTTP communication
8043	SSL/TLS communication

callback

Specifies a callback function to receive the execution result. One of the following strings is passed to the first parameter to indicate the result.

String	Description
"OK"	Connection via HTTP communication has been successful when the ePOS-Print option is enabled or not enabled.
"SSL_CONNECT_OK"	Connection via SSL/TLS communication has been successful when the ePOS-Print option is not enabled.
"ERROR_TIMEOUT"	Timeout occurred.
"ERROR_PARAMETER"	A parameter error occurred.

options

Specifies properties using object literals.

Property	Description	true/false
eposprint	Specifies whether or not to enable the ePOS-Print option.	true: Enables the option. false: Disables the option.

Enable the ePOS-Print option in the system configuration of the TM printer model and customer display model.

Disable the ePOS-Print option in the system configuration of TM Printer + DM-D + barcode scanner model and POS terminal model. When the ePOS-Print option is enabled, the peripheral devices other than the slave printers and customer display can no longer be controlled.

Example

```
connect("192.168.192.168", "8008", callback, {"eposprint" : true});
```

Supplementary explanation

- ❏ For the syntax to specify the options, refer to Chapter 6 "Developing Applications that Frequently Update or Transition Web Pages".
- ❏ This API will succeed regardless of the connection status of the TM printer (master) and peripheral devices.
- ❏ For continuous processing, or for controlling the printer from a single terminal, it is recommended to keep the application connected with the devices.
- ❏ If the options parameter is omitted, "false: disabled" will be specified.
- ❏ When connection has failed while the ePOS-Print option is not enabled, enable the ePOS-Print option and make the connection.
  When this connection is successful, "OK" is passed to the callback parameter regardless of the communication method specified in the port parameter.
- ❏ When the eposprint option is enabled by specifying 8043 in the port parameter and true in the options parameter, "OK" is returned to the callback parameter.
- ❏ When the eposprint option is enabled by specifying true in the options parameter, the methods that can be used in the ePOSDevice object are as follows.

Method	Availability
Constructor	✔
connect method	✔
disconnect method	✔
isConnected method	✔
createDevice method	✔
deleteDevice method	✔
getAdmin method	-
getLocation method	-
sendOfscXml method	-
getCommBoxManager method	-
onreconnecting event	-
onreconnect event	-
ondisconnect event	✔

disconnect method

Ends communication with the printer.

Syntax

```
disconnect();
```

Supplementary explanation

- When this API is executed when the communication status is "connected," ondisconnect event occurs.
- For continuous processing, or for controlling the printer from a single terminal, it is recommended to keep the application connected with the devices.

isConnected method

Acquires communication status by connect method.

Syntax

```
isConnected();
```

Return value

Return value	Description
true	Connected
false	Not connected

Supplementary explanation

- When the device is in the sleep mode, the returned value may be incorrect.
- When ondisconnect event occurs, this will also be set to false (unconnected).

createDevice method

Acquires the device object acting as the device interface. The device object is passed to the callback function.

Syntax

- ❑ `createDevice(deviceId, deviceType, options, callback);`
- ❑ `createDevice(deviceId, deviceType, crypto, callback);`

Parameter

deviceId

Value	Description
deviceId	Specifies the device ID as a string.

deviceType

Value	Device type
DEVICE_TYPE_DISPLAY	Customer display
DEVICE_TYPE_KEYBOARD	Keyboard
DEVICE_TYPE_MSR	MSR
DEVICE_TYPE_PRINTER	Printer
DEVICE_TYPE_SCANNER	Barcode scanner
DEVICE_TYPE_SIMPLE_SERIAL	Serial communication device
DEVICE_TYPE_HYBRIDPRINTER2	Hybrid printers
DEVICE_TYPE_DT	TM-DT series
DEVICE_TYPE_POSKEYBOARD	POS keyboard
DEVICE_TYPE_GFE	German fiscal element (TSE)
DEVICE_TYPE_OTHER_PERIPHERAL	Other peripheral devices

options

Specifies properties using object literals.

Property	Description	true/false
crypto (Boolean)	Specifies whether or not to encrypt the communication data.	true: Encrypts data. false: Does not encrypt data.
buffer (Boolean)	Specifies whether or not to send data which occurs while reconnection with the device is in progress after reconnection.	true: Sends data. false: Does not send data.

crypto

Property	Description	true/false
crypto (Boolean)	Specifies whether or not to encrypt the communication data.	true: Encrypts data. false: Does not encrypt data.

callback

Specifies a callback function to receive the execution result.

The device object is passed to the first parameter and one of the following strings is returned in the second parameter to indicate the result.

String	Description
"OK"	Acquisition of the device object succeeded.
"DEVICE_NOT_FOUND"	The device was not found.
"DEVICE_IN_USE"	The device was in use.
"DEVICE_OPEN_ERROR"	Failed to open the device.
"DEVICE_TYPE_INVALID"	The device type is different.
"PARAM_ERROR"	A parameter error occurred.
"SYSTEM_ERROR"	An unknown error occurred.

Supplementary explanation

- ❏ When the createDevice method is successfully run, devices except for the printer will be exclusively locked.
- ❏ When DEVICE_TYPE_DISPLAY is specified in deviceType, specify local_display in deviceId.
- ❏ When DEVICE_TYPE_DT is specified in deviceType, specify local_dt in deviceId.
- ❏ When the device object cannot be acquired, null instead of the device object will be passed to the first parameter.
- ❏ When the createDevice method is called by specifying an exclusively locked device, DEVICE_IN_USE will be returned.
- ❏ While returning from occurrence of ondisconnect event, calling the createDevice method may return DEVICE_IN_USE depending on the call timing. In this case, call the createDevice method repeatedly until a string other than DEVICE_IN_USE is returned.
- ❏ If the createDevice method is executed to the same device again after the createDevice method is executed, DEVICE_OPEN_ERROR may occur depending on the processing timing and the connection with the device may be terminated.
- ❏ This API will succeed regardless of the connection status of the TM printer (master) and peripheral devices.
- ❏ When controlling DM-D30 or DM-D70 from TM-m30 printer, and when controlling DM-D110 or DM-D30 or DM-D70 from TM-T88VI printer, DM-D110 or DM-D30 or DM-D70 is not exclusively locked. Even if the createDevice method is called from the other device specifying the DM-D110 or DM-D30 or DM-D70, “DEVICE_IN_USE” is not returned.

- ❏ The encryption function of communication data can be used in the TM-i series and TM-DT series.
- ❏ When the connect method is running in the system configuration of TM Printer + DM-D + barcode scanner model, do not enable the options parameter eposprint property.
- ❏ In the system configuration of TM Printer + DM-D + barcode scanner model, specify the following deviceId for the deviceType.

deviceType	deviceId
DEVICE_TYPE_PRINTER	local_printer
DEVICE_TYPE_DISPLAY	local_display
DEVICE_TYPE_SCANNER	local_scanner
DEVICE_TYPE_GFE	local_TSE

deleteDevice method

Discards the device object acquired by createDevice method. The device controlled by the discarded device object will be released and made available for other applications.

Syntax

```
deleteDevice(deviceObject, callback);
```

Parameter

deviceObject

Value	Description
deviceObject	Specifies the device object to discard.

callback

Specifies a callback function to receive the execution result.

One of the following strings is passed to the first parameter to indicate the result.

String	Description
"OK"	Closed the device successfully.
"DEVICE_NOT_OPEN"	Device is not open.
"DEVICE_CLOSE_ERROR"	Failed to close the device.
"SYSTEM_ERROR"	An unknown error occurred.

getAdmin method

Acquires the administrator name set with TM-DT software or TM-i firmware.

Syntax

```
getAdmin();
```

Return value

Return value	Object type
A string for the administrator name.	String

Supplementary explanation

The administrator name is set by EPSON TMNet WebConfig.

getLocation method

Acquires the installation location information set with TM-DT software or TM-i firmware.

Syntax

```
getLocation();
```

Return value

Return value	Object type
A string for the installation location information.	String

Supplementary explanation

The installation location information is set by EPSON TMNet WebConfig.

sendOfscXml method

Sends print data (XML data) to the OFSC-Print service.

Syntax

```
sendOfscXml(xml, timeout, crypto, callback);
```

Parameter

xml

Value	Description
xml	Specifies XML data for OFSC-Print.

timeout

Value	Description
timeout	Specifies the timeout period for printing in milliseconds.

crypto

Value	Description
true	Encrypts communication data.
false	Does not encrypt communication data.

callback

Specifies a callback function to receive the execution result.

Value	Description
callback	Execution result XML data

Supplementary explanation

Refer to the OFSC-Print User's Manual for the details of print data (XML data).

getCommBoxManager method

Acquires CommBoxManager object for inter-application communication.

Syntax

```
getCommBoxManager();
```

Return value

Return value	Object type
CommBoxManager object	CommBoxManager

onreconnecting event

Receives an event to notify that a reconnection process to the network started. Be sure to perform a process (e.g., display a message to indicate that reconnection has been started) when the onreconnecting event occurs.

Syntax

```
Function()
```

Supplementary explanation

Do not make any call operation when the onreconnecting event has occurred.
Wait until the onreconnect event or ondisconnect event occurs.

onreconnect event

Receives an event to notify that the reconnection process succeeded. Be sure to perform a process (e.g., erase the message displayed during the reconnection process) when the onreconnect event occurs.

Syntax

```
Function()
```

ondisconnect event

Receives an event to notify that the reconnection process failed. The ondisconnect event occurs in the following cases:

❏ When disconnect method is run

❏ When the reconnection process after occurrence of onreconnecting event fails

Be sure to take an action against network disconnection (e.g., try reconnection again) when the ondisconnect event occurs.

Syntax

```
Function()
```

Common to device objects

callEvent method

Specifies an event in the device control script and passes JSON data which is a combination of a property name and its value.
Refer to TM-DT Series Peripheral Devices Control Guide for details.

Syntax

```
callEvent(eventName, data);
```

Parameter

eventName

Value	Description
String	Specifies an event name in the device control script.

data

Value	Description
Object	Specifies data to pass to the event.

OtherPeripheral object

send method

Sends data to peripheral devices. Specifies a function in the device control program and passes JSON data which is a combination of a property name and its value.
Refer to TM-DT Series Peripheral Device Control Guide for details.

Syntax

```
send(methodName, data)
```

Parameter

methodName

Value	Description
String	Specifies the name of the function to be executed.

data

Value	Description
JSON object	Specifies the parameter to be passed to the function.

Properties of data object

Property	Description	Valid value	Object type
'Parameter name'	Specifies data to be passed to the parameter.	a to z, A to Z, 0 to 9	String

onreceive event

Notifies an application of the data received from peripheral devices. Receives the parameter value by specifying a callback function for the properties of an event name specified in the device control program.

Syntax

```
Function(eventName, data);
```

Parameter

eventName

Value	Description
String	Specifies an event name.

data

Value	Description
JSON object	Received parameter

Properties of data object

Property	Description	Valid value	Object type
'Parameter name'	Specifies data to be passed to the parameter.	a to z, A to Z, 0 to 9	String

Display object

createWindow method

Adds window configuration to the command buffer.
Up to four windows can be configured.

Syntax

```
createWindow(number, x, y, width, height, scrollMode);
```

Parameter

number

Value	Description
1 to 4	Specifies the window number.

x

Value	Description
1 to 44	Specifies the origin of the X coordinate.

y

Value	Description
1 to 19	Specifies the origin of the Y coordinate.

width

Value	Description
1 to 44	Specifies the window width.

height

Value	Description
1 to 19	Specifies the window height.

scrollMode

Value	Description
SCROLL_OVERWRITE	• When the current display position is at the rightmost position of the upper line, move the display position to the leftmost position of the lower line. • When the current display position is at the rightmost position of the lower line, move the display position to the leftmost position of the upper line. • The character currently displayed at the target position will be overwritten.

Value	Description
SCROLL_VERTICAL	• When the current display position is at the rightmost position of the upper line, move the display position to the leftmost position of the lower line. • When the current display position is at the rightmost position of the lower line, moves the characters currently on the lower line to the upper line, erases the contents of the lower line, and then moves the display position to the leftmost position of the upper line.
SCROLL_HORIZONTAL	• When a new character is displayed while the current display position is at the rightmost position, shifts the entire line by one character to the left and displays the new character at the rightmost position. • Does not feed the line.

Return value

Return value	Object type
Display object	Display

Supplementary explanation

To add a window, be careful so that the existing window(s) should not be overlapped by the new window on the customer display.

destroyWindow method

Specifies a window number set by createWindow method and adds a command to destroy the specified window to the command buffer.

Syntax

```
destroyWindow(number);
```

Parameter

number

Value	Description
1 to 4	Specifies the window number.

Return value

Return value	Object type
Display object	Display

setCurrentWindow method

Adds a command to move to another window to the command buffer.
Makes the specified window current and moves the cursor to the origin of the new current window.

Syntax

```
setCurrentWindow(number);
```

Parameter

number

Value	Description
1 to 4	Specifies the window number.

Return value

Return value	Object type
Display object	Display

clearWindow method

Adds a window clear command for the current window to the command buffer.

Syntax

```
clearWindow();
```

Return value

Return value	Object type
Display object	Display

addCreateScreen method

Adds the setting of the base window to the command buffer.
This API is used to call the layout setting of the base window having customer display.

Syntax

```
addCreateScreen(mode);
```

Parameter

mode

Specifies the combination of the display area of the base window and the screen configuration (text/image).

Value	Installation method	Area (columns × rows)	Screen configuration
LAYOUT_MODE_1	Landscape orientation	20 x 2	"Horizontal split" Divided equally into top and bottom portions. Top: Text, Bottom: Image
LAYOUT_MODE_2	Landscape orientation	20 x 2	"Horizontal split" Divided equally into top and bottom portions. Top: Image, Bottom: Text
LAYOUT_MODE_3	Landscape orientation	20 x 2	"Display in center" Only text is displayed at the center. No division.
LAYOUT_MODE_4	Landscape orientation	32 x 4	"Horizontal split" Divided equally into top and bottom portions. Top: Text, Bottom: Image
LAYOUT_MODE_5	Landscape orientation	32 x 4	"Horizontal split" Divided equally into top and bottom portions. Top: Image, Bottom: Text
LAYOUT_MODE_6	Landscape orientation	32 x 4	"Display in center" Only text is displayed at the center. No division.
LAYOUT_MODE_7	Landscape orientation	42 x 8	"Horizontal split" Divided equally into top and bottom portions. Top: Text, Bottom: Image
LAYOUT_MODE_8	Landscape orientation	42 x 8	"Horizontal split" Divided equally into top and bottom portions. Top: Image, Bottom: Text
LAYOUT_MODE_9	Landscape orientation	42 x 8	"Display in center" Only text is displayed at the center. No division.

Value	Installation method	Area (columns × rows)	Screen configuration
LAYOUT_MODE_10	Landscape orientation	32 x 3	"Horizontal split" Divided equally into top and bottom portions. Top: Text, Bottom: Image
LAYOUT_MODE_11	Landscape orientation	32 x 3	"Horizontal split" Divided equally into top and bottom portions. Top: Image, Bottom: Text
LAYOUT_MODE_12	Landscape orientation	32 x 3	"Display in center" Only text is displayed at the center. No division.
LAYOUT_MODE_13	Landscape orientation	32 x 2	"Horizontal split" Divided equally into top and bottom portions. Top: Text, Bottom: Image
LAYOUT_MODE_14	Landscape orientation	32 x 2	"Horizontal split" Divided equally into top and bottom portions. Top: Image, Bottom: Text
LAYOUT_MODE_15	Landscape orientation	32 x 2	"Display in center" Only text is displayed at the center. No division.

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

If this API is executed, all items displayed in customer display are erased.

addCreateScreenCustom method

Adds the setting of the display mode to the command buffer.
This API enables the specification of width and height in the screen configuration of the base window having customer display.

Syntax

```
addCreateScreenCustom(mode, column, row);
```

Parameter

mode

Specifies the screen configuration of base window (text/image).

Value	Installation method	Screen configuration
LANDSCAPE_LAYOUT_MODE_1	Landscape orientation	"Full screen" The text/image is displayed on the entire page. No division.
LANDSCAPE_LAYOUT_MODE_2	Landscape orientation	"Vertical split" Divided equally into left and right portions. Left: Image, Right: Text
LANDSCAPE_LAYOUT_MODE_3	Landscape orientation	"Vertical split" Divided equally into left and right portions. Left: Text, Right: Image
LANDSCAPE_LAYOUT_MODE_4	Landscape orientation	"Horizontal split" Divided equally into top and bottom portions. Top: Text, Bottom: Image
LANDSCAPE_LAYOUT_MODE_5	Landscape orientation	"Horizontal split" Divided equally into top and bottom portions. Top: Image, Bottom: Text
PORTRAIT_LAYOUT_MODE_1	Portrait orientation	"Full screen" The text/image is displayed on the entire page. No division.
PORTRAIT_LAYOUT_MODE_2	Portrait orientation	"Horizontal split" Divided equally into top and bottom portions. Top: Text, Bottom: Image
PORTRAIT_LAYOUT_MODE_3	Portrait orientation	"Horizontal split" Divided equally into top and bottom portions. Top: Image, Bottom: Text
PORTRAIT_LAYOUT_MODE_4	Portrait orientation	"Horizontal split 1:2" Divided into top and bottom portions in the ratio of 1:2. Top: Text, Bottom: Image

Value	Installation method	Screen configuration
PORTRAIT_LAYOUT_MODE_5	Portrait orientation	"Horizontal split 2:1" Divided into top and bottom portions in the ratio of 2:1. Top: Image, Bottom: Text
PORTRAIT_LAYOUT_MODE_6	Portrait orientation	"Horizontal split 2:1" Divided into top and bottom portions in the ratio of 2:1. Top: Text, Bottom: Image
PORTRAIT_LAYOUT_MODE_7	Portrait orientation	"Horizontal split 1:2" Divided into top and bottom portions in the ratio of 1:2. Top: Image, Bottom: Text

column

Specifies the width (number of columns) of the base window display area.

Value	Description
Integer value from 1 to 44	Effective specification range during landscape orientation
Integer value from 1 to 22	Effective specification range during portrait orientation

row

Specifies the height (number of rows) of the base window display area.

Value	Description
Integer value from 1 to 13	Effective specification range during landscape orientation
Integer value from 1 to 19	Effective specification range during portrait orientation

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ If this API is executed, all items displayed in customer display are erased.
- ❏ An exception occurs if 14 to 19 is specified in row when LANDSCAPE_LAYOUT_MODE is specified in mode.

- An exception occurs if 23 to 44 is specified in column when PORTRAIT_LAYOUT_MODE is specified in mode.
- Ignored when 45 or more is specified in column and 20 or more is specified in row.

createTextArea method

Adds the window setting to the command buffer.
A maximum of up to four windows can be set.

Syntax

```
createTextArea(number, x, y, width, height, scrollMode);
```

Parameter

number

Value	Description
Integer value from 1 to 4	Specifies the window number.

x

Value	Description
Integer value from 1 to 44	Specifies the x-coordinate on the customer display of window origin.

y

Value	Description
Integer value from 1 to 19	Specifies the y-coordinate on the customer display of window origin.

width

Value	Description
Integer value from 1 to 44	Specifies the window width.

height

Value	Description
Integer value from 1 to 19	Specifies the window height.

scrollMode

Value	Description
SCROLL_OVERWRITE	• When the current display position is at the rightmost position of the upper line, move the display position to the leftmost position of the lower line. • When the current display position is at the rightmost position of the lower line, move the display position to the leftmost position of the upper line. • The character currently displayed at the target position will be overwritten.

Value	Description
SCROLL_VERTICAL	• When the current display position is at the rightmost position of the upper line, move the display position to the leftmost position of the lower line. • When the current display position is at the rightmost position of the lower line, moves the characters currently on the lower line to the upper line, erases the contents of the lower line, and then moves the display position to the leftmost position of the upper line.
SCROLL_HORIZONTAL	• When a new character is displayed while the current display position is at the rightmost position, shifts the entire line by one character to the left and displays the new character at the rightmost position. • Does not feed the line.

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

When setting an additional window, take care that the already-set window and the setting range on the customer display do not overlap.

destroyTextArea method

Adds the deletion setting of an already-defined window to the command buffer.

Syntax

```
destroyTextArea(number);
```

Parameter

number

Value	Description
Integer value from 1 to 4	Specifies the window number to be deleted.

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

setCurrentTextArea method

Adds the changes in the current window to the command buffer.
Sets the specified window as the current window, and moves the cursor to the origin position of the current window.

Syntax

```
setCurrentTextArea(number);
```

Parameter

number

Value	Description
Integer value from 1 to 4	Specifies the destination window number.

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

clearTextArea method

Adds the display deletion of the current window to the command buffer.

Syntax

```
clearTextArea;
```

Return value

Return value	Object type
Display object	Display

setCursorPosition method

Specifies the coordinates and adds cursor position setting to the command buffer.

Syntax

```
setCursorPosition(x, y);
```

Parameter

x

Value	Description
1 to 44	Specifies the X coordinate.

y

Value	Description
1 to 19	Specifies the Y coordinate.

Return value

Return value	Object type
Display object	Display

Supplementary explanation

- In DM-D70 (Standard mode), the cursor position is set in the current window specified in setCurrentTextArea method, with the top left as the origin.
  If the window is not specified in setCurrentTextArea method, set the cursor position in the base window, with the top left as the origin.
- In DM-D70 (Column/row fixed mode), the cursor position is set in the base window, with the top left as the origin.
- The value that can be specified in the x, y parameters varies depending on the customer display used and its display modes, as well as the installation method.

	x	y
DM-D30	1 to 20	1 to 2
DM-D110		
DM-D210		
DM-D70 (Column/row fixed mode)		
DM-D70 (Standard mode: Landscape orientation)	1 to 44	1 to 13
DM-D70 (Standard mode: Portrait orientation)	1 to 22	1 to 19

moveCursorPosition method

Specifies a new cursor position within the current window and adds cursor position setting to the command buffer.

Syntax

```
moveCursorPosition(position);
```

Parameter

position

Value	Description
MOVE_TOP_LEFT	Moves to the leftmost position on the top line.
MOVE_TOP_RIGHT	Moves to the rightmost position on the top line.
MOVE_BOTTOM_LEFT	Moves to the leftmost position on the bottom line.
MOVE_BOTTOM_RIGHT	Moves to the rightmost position on the bottom line.

Return value

Return value	Object type
Display object	Display

Supplementary explanation

- In DM-D70 (Standard mode), move the cursor to the specified position from the origin of the window specified in setCurrentTextArea method.
  If the window is not specified in the setCurrentTextArea method, move the cursor from the origin of the base window.
- In DM-D70 (Column/row fixed mode), move the cursor to the specified position from the origin of the base window.

setCursorType method

Adds cursor display setting to the command buffer.

Syntax

```
setCursorType(type);
```

Parameter

type

Value	Description
CURSOR_NONE	No cursor display
CURSOR_UNDERLINE	Underscore

Return value

Return value	Object type
Display object	Display

addText method

Adds display setting of a character in the customer display to the command buffer.

Syntax

- ❏ addText(data);
- ❏ addText(data, lang);
- ❏ addText(data, x, y);
- ❏ addText(data, x, y, lang);
- ❏ addText(data, x, y, lang, r, g, b);

Parameter

data

Value	Description
data	Specifies the character to display as a string.

lang

Value	Description
"en" (default)	English
"ja"	Japanese (Kana)
"mul"	Multiple languages (UTF-8)
"undefined"	Not used.

x

Value	Description
1 to 44	Specifies the X coordinate of the display position.
"undefined"	Not used.

y

Value	Description
1 to 19	Specifies the Y coordinate of the display position.
"undefined"	Not used.

r

Value	Description
Integer value from 0 to 255	Specifies the red color value of the string to be displayed.
"undefined"	Not used.

g

Value	Description
Integer value from 0 to 255	Specifies the green color value of the string to be displayed.
"undefined"	Not used.

b

Value	Description
Integer value from 0 to 255	Specifies the blue color value of the string to be displayed.
"undefined"	Not used.

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- If the coordinates of the display position are omitted, the coordinates of the cursor position upon execution of addText method are used.
- The value that can be specified in the x, y parameters varies depending on the customer display used and its display modes, as well as the installation method.

	x	y
DM-D30	1 to 20	1 to 2
DM-D110		
DM-D210		
DM-D70 (Column/row fixed mode)		

	x	y
DM-D70 (Standard mode: Landscape orientation)	1 to 44	1 to 13
DM-D70 (Standard mode: Portrait orientation)	1 to 22	1 to 19

❏ Specify the setting value in both x and y parameters.
If only a single parameter is specified, an exception does not occur, but nothing is displayed.

❏ Specify the r, g, b parameters in the RGB565 format.

❏ When changing the color of the string to be displayed, specify the setting value in all of the r, g, and b parameters.

❏ If the setting value is specified in all of the r, g, and b parameters, the font color changes from the position coordinates specified in the x, y parameters.

❏ If "mul" is specified in the lang parameter, the font color returns to the default setting of the customer display.
If the r, g, b parameters are specified after specifying "mul" in the lang parameter, then r, g, and b are processed after lang, and therefore, the font color specified in r, g, b is applied.

addReverseText method

Adds reverse display setting of a character in the customer display to the command buffer.

Syntax

- ❏ addReverseText(data);
- ❏ addReverseText(data, lang);
- ❏ addReverseText(data, x, y);
- ❏ addReverseText(data, x, y, lang);

Parameter

data

Value	Description
data	Specifies the character to display as a string.

lang

Value	Description
"en" (default)	English
"ja"	Japanese (Kana)

x

Value	Description
1 to 20	Specifies the X coordinate of the display position.

y

Value	Description
1 to 2	Specifies the Y coordinate of the display position.

Return value

Return value	Object type
Display object	Display

Supplementary explanation

If the coordinates of the display position are omitted, the coordinates of the cursor position upon execution of the addReverseText method are used.

addMarquee method

Adds marquee display setting to the command buffer.
Marquee display setting is not influenced by the window scroll mode specified by createWindow method, and one line of text string is displayed in the scroll mode.

Syntax

```
addMarquee(data, format, unitWait, repeatWait, repeatCount,
lang);
```

Parameter

data

Value	Description
data	Specifies the character to display as a string.

format

Value	Description
MARQUEE_WALK	Displays the text from the rightmost position of the window.
MARQUEE_PLACE	Displays the text from the leftmost position of the window.

unitWait

Value	Description
0 to 2000	Specifies the display interval per character (in milli-seconds).

repeatWait

Value	Description
100 to 2000	Specifies the display repeat interval (in milliseconds).

repeatCount

Value	Description
0	Unlimited
1 to 127	Specifies the display repeat count.

lang

Value	Description
"en" (default)	English

Value	Description
"ja"	Japanese (Kana)

Return value

Return value	Object type
Display object	Display

Supplementary explanation

- When using DM-D30 or DM-D70 and when using a combination of TM-H6000V with DM-D110/DM-D210, "0" is only allowed in repeatCount.
- When controlling DM-D30 or DM-D70, its marquee display may be distorted if the interval for displaying text is too short due to the characteristics of the LCD.
  For unitWait and repeatWait, the following values are recommended.
  DM-D30: 600 msec or more
  DM-D70: 100 msec or more

setBlink method

Adds blink setting of the customer display to the command buffer.

Syntax

```
setBlink(interval);
```

Parameter

interval

Value	Description
0 to 12700	Specifies the blinking period in milliseconds.

Return value

Return value	Object type
Display object	Display

Supplementary explanation

- Specifies 0 does not blink the customer display.
- The setting value is rounded to the nearest 50 milliseconds.
  Example: 1 -> 50, 51 -> 100, 101 -> 150

setBrightness method

Adds brightness setting of the customer display to the command buffer.

Syntax

```
setBrightness(brightness);
```

Parameter

brightness

Value	Description
BRIGHTNESS_20	Sets the brightness to 20%.
BRIGHTNESS_40	Sets the brightness to 40%.
BRIGHTNESS_60	Sets the brightness to 60%.
BRIGHTNESS_100	Sets the brightness to 100%.

Return value

Return value	Object type
Display object	Display

addBackgroundColor method

Adds the specification of the background color to the command buffer.
The background color from the beginning till the end of the row specified in the text area can be changed.

Syntax

```
addBackgroundColor(row, r, g, b);
```

Parameter

row

Value	Description
Integer value from 1 to 19	Changes the background color of the specified row.
EVEN_ROWS	Changes the background color of all even rows.
ODD_ROWS	Changes the background color of all odd rows.
ALL_ROWS	Changes the background color of all rows.

r

Value	Description
Integer value from 0 to 255	Specifies the red color value of the background color.

g

Value	Description
Integer value from 0 to 255	Specifies the green color value of the background color.

b

Value	Description
Integer value from 0 to 255	Specifies the blue color value of the background color.

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ The background color can be applied only to the text area.
- ❏ Specify the r, g, b parameters in the RGB565 format.
- ❏ Specify the setting value in all of the r, g, and b parameters.
- ❏ To apply the background color to a plurality of rows, execute this API a plurality of times.
- ❏ To individually specify the background color in a plurality of windows, define the window in setCurrentTextArea method before executing this API.
  If the window is defined beforehand, the background color can be specified individually for each window.
  By dividing the window at the position where the background color is to be changed, the background color can be changed in the middle of the row.

addStartSlideShow method

Adds the start of the slide show to the command buffer.

Syntax

```
addStartSlideShow(interval);
```

Parameter

interval

Value	Description
Integer value from 200 to 51000	Specifies the switching period of the slide show in milliseconds.

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

addStopSlideShow method

Adds the stopping of the slide show to the command buffer.

Syntax

```
addStopSlideShow();
```

Return value

Return value	Description
Display object	Display

addDownloadImage method

Adds the display of the image registered in addRegisterDownloadImage method to the command buffer.

Syntax

```
addDownloadImage (key1, key2, dotX, dotY, width, height);
```

Parameter

key1

Value	Description
Integer value from 0 to 255	Specifies keycode 1 indicated in addRegisterDownloadImage method.

key2

Value	Description
Integer value from 0 to 255	Specifies keycode 2 indicated in addRegisterDownloadImage method.

dotX

Specifies the x-coordinate of the image display position, with the top left of the customer display as the origin.

Value	Description
Integer value from 0 to 799	Effective specification range during landscape orientation
Integer value from 0 to 479	Effective specification range during portrait orientation

dotY

Specifies the y-coordinate of the image display position, with the top left of the customer display as the origin.

Value	Description
Integer value from 0 to 479	Effective specification range during landscape orientation
Integer value from 0 to 799	Effective specification range during portrait orientation

width

Value	Description
Integer value from 0 to 1440	Specifies the width display size (in dots) of the image

height

Value	Description
Integer value from 0 to 1440	Specifies the height display size (in dots) of the image

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ Can be used when the layout is specified in addCreateScreenCustom method.
- ❏ To display in the size of the original image, specify 0 in both the width and height parameters.
- ❏ The image is not displayed if it does not fit into the display area.
- ❏ The image specified by this API is displayed in front of the text or image being displayed during the execution of the API.
- ❏ When using a transmission image, use data in the png format.

addRegisterDownloadImage method

Adds the registration of the image data drawn on the HTML5 Canvas to the command buffer.
The specified image data can be registered in the download graphics area of customer display, and can be called by addDownloadImage method.
Converts the specified range of the RGBA full color image of HTML5 Canvas to image data.
One pixel of the image corresponds to one dot of the customer display, and if a transparent color is included, the background color of the image is assumed to be white.

Syntax

```
addRegisterDownloadImage(data, key1, key2);
```

Parameter

context

Value	Description
context	Specifies the 2D context of HTML5 Canvas.

key1

Value	Description
Integer value from 48 to 57, 65 to 90, and 97 to 122	Specifies keycode 1.

key2

Value	Description
Integer value from 48 to 57, 65 to 90, and 97 to 122	Specifies keycode 2.

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- This API cannot be used simultaneously with other APIs.
  After executing this API, do not execute any other API until the callback is returned.
- Execute a send method after each execution of this API to register images one by one.

- ❏ If success is not returned in onreceive event by the send method execution results after the execution of this API, restart the printer.
  Depending on the system environment, it may take some time for the recovery process.
- ❏ If the power supply to the customer display is cut off, the registered image is erased.
- ❏ As the data size of the image to be registered increases, the processing time becomes longer. (Max. 320 seconds)
- ❏ If the data size of the image to be registered is large, and the communication environment is poor, the image may not be registered in this API.
  If the image cannot be registered in this API, use a dedicated Utility software.
  For details on the dedicated Utility software, refer to the Technical Reference Guide of each customer display.
- ❏ If an image is registered in the specified keycode, it is overwritten and registered.
- ❏ Image data expressed in the pixel format of YCbCr422 or YCbCr420 can be used.
- ❏ The image size should be about 100 KB although the upper limit of the image size is 1.5 MB.
- ❏ Total size of images that can be registered is 1.5 MB.
  This API converts the image format and pixel count so that the customer displays can process the images and then register them. The conversion processing may increase the size of images, so ensure that there is sufficient free space in the download graphics area to accommodate the total size of the images to be registered.
  No error is returned when registration was not successful due to insufficient free space in the download graphics area.
- ❏ Pixel values for width and height of an image should be even numbers.
- ❏ When using a transmission image, use data in the png format.
- ❏ Please use an image that matches the size of the image area in the customer display.
  Using an image larger than the size of the image area will cause the image to be trimmed to fit the size of the image area.
- ❏ An HTML5 Canvas including images downloaded from different domains cannot be displayed.
  A security error occurs as a result of the same-origin policy of JavaScript.

addNVImage method

Adds the display of the image registered in the NV Graphics area of the customer display to the command buffer.

Syntax

```
addNVImage (key1, key2, dotX, dotY, width, height);
```

Parameter

key1

Value	Description
Integer value from 0 to 255	Specifies keycode 1 of NV Graphics.

key2

Value	Description
Integer value from 0 to 255	Specifies keycode 2 of NV Graphics.

dotX

Specifies the x-coordinate of the image display position, with the top left of the customer display as the origin.

Value	Description
Integer value from 0 to 799	Effective specification range during landscape orientation
Integer value from 0 to 479	Effective specification range during portrait orientation

dotY

Specifies the y-coordinate of the image display position, with the top left of the customer display as the origin.

Value	Description
Integer value from 0 to 479	Effective specification range during landscape orientation
Integer value from 0 to 799	Effective specification range during portrait orientation

width

Value	Description
Integer value from 0 to 1440	Specifies the width display size (in dots) of the image

height

Value	Description
Integer value from 0 to 1440	Specifies the height display size (in dots) of the image

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ Can be used when the layout is specified in addCreateScreenCustom method.
- ❏ To display in the size of the original image, specify 0 in both the width and height parameters.
- ❏ The image is not displayed if it does not fit into the display area.
- ❏ The image specified by this API is displayed in front of the text or image being displayed during the execution of the API.
- ❏ When using a transmission image, use data in the png format.
- ❏ Use the dedicated Utility software for registration of the image to the NV Graphics area of customer display.
  For details, refer to the Technical Reference Guide of each customer display.

addClearImage method

Adds the deletion of the image being displayed to the command buffer.

Syntax

```
addClearImage();
```

Return value

Return value	Object type
Display object	Display

Supplementary explanation

In this API, the image displayed in the image area is deleted.

To delete the image displayed in the text area, initialize the customer display in reset method.

addSymbol method

Adds the display of the two-dimensional symbol to the command buffer.

Syntax

```
addSymbol(data, type, level, width, height, dotX, dotY,
quietZone);
```

Parameter

data

Specifies the two-dimensional symbol data as a string.

Specify a string in accordance with the standard of the two-dimensional symbol specified in type.

Type	Description
QR Code Model 1	After converting the string to shift JIS, perform the escape sequence processing, select the data type from the following, and perform encoding. • Numbers: 0 to 9 • Alphanumeric characters: 0 to 9, A to Z, space, $, %, *, +, -, ., /, : • Kanji characters: Kanji characters that can be expressed in shift JIS • 8-bit byte data: 0x00 to 0xff
QR Code Model 2	

When specifying binary data that cannot be expressed as a string, specify in the following escape sequence.

String	Description
\xnn	Control code (nn is specified in hexadecimals)
\\	Backslash

type

Value	Description
SYMBOL_QRCODE_MODEL_1	Specifies QR Code Model 1
SYMBOL_QRCODE_MODEL_2	Specifies QR Code Model 2

level

Value	Description
LEVEL_L	Specifies error revision level L.
LEVEL_M	Specifies error revision level M.
LEVEL_Q	Specifies error revision level Q.
LEVEL_H	Specifies error revision level H.
LEVEL_DEFAULT(LEVEL_M)	Specifies the default value (error revision level M).

width

Value	Description
Integer value from 1 to 255	Specifies the module width (in dots). Effective specification range of QR Code Integer value from 3 to 16 (default value: 3)

height

Value	Description
Integer value from 1 to 255	Specifies the module height (in dots). No effective specification range of QR Code. Since the QR Code is square, the specification of the height is ignored.

dotX

Specifies the origin of the x-coordinate for displaying the two-dimensional symbol (in dots).

Value	Description
Integer value from 0 to 799	Effective specification range during landscape orientation
Integer value from 0 to 479	Effective specification range during portrait orientation

dotY

Specifies the origin of the y-coordinate for displaying the two-dimensional symbol (in dots).

Value	Description
Integer value from 0 to 479	Effective specification range during landscape orientation
Integer value from 0 to 799	Effective specification range during portrait orientation

quietZone

Value	Description
true	Specifies quiet zone assignment as enabled.
false	Specifies quiet zone assignment as disabled.

Return value

Return value	Object type
Display object	Display

Exception

Return value	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ Specify addSymbol method at the "Beginning of the row".
- ❏ Can be used when the layout is specified in addCreateScreenCustom method.
- ❏ In case there is overlapping with the display of text or image, the two-dimensional symbol is displayed right in front.
- ❏ If the two-dimensional symbol data specified in data is not in accordance with the type of the two-dimensional symbol specified in type, the two-dimensional symbol is not displayed.
- ❏ If quiet zone assignment is enabled, a dot white margin (quiet zone) that is four times the value specified in width is added at the top, bottom, left, and right of the two-dimensional symbol.
- ❏ To enable quiet zone assignment, specify a value in dotX and dotY, with top left of the quiet zone as the origin.

addClearSymbol method

Adds the deletion of the two-dimensional symbol being displayed to the command buffer.

Syntax

```
addClearSymbol();
```

Return value

Return value	Object type
Display object	Display

Supplementary explanation

If the two-dimensional symbol being displayed overlaps the image, the image at the overlapping portion is erased together with the two-dimensional symbol.

showClock method

Adds time display setting to the command buffer.
Executing this method erases the entire contents of the window. When another command is sent while the time is displayed, the time disappears.

Syntax

```
showClock();
```

Return value

Return value	Object type
Display object	Display

addCommand method

Adds the ESC/POS command to the command buffer.

Syntax

```
addCommand(data);
```

Parameter

data

Value	Description
data	Specifies an ESC/POS command as a string.

Return value

Return value	Object type
Display object	Display

Supplementary explanation

- Refer to the following URL for details of the ESC/POS command.
  www.epson-biz.com/pos/reference/
- Epson ePOS SDK does not check the commands sent using this API. If the commands interfere with Epson ePOS SDK operations, other APIs may work wrongly or status values may become invalid. This API should be used with a full understanding of ESC/POS commands and the customer display specifications.

send method

Sends data in the command buffer to the printer. The execution result of the send method is passed to the callback function of onreceive event.

Syntax

```
send();
```

reset method

Adds initialization setting of the customer display to the command buffer.
Executing the reset method:

- Erases displayed text and registered windows,
- Initializes the cursor setting and moves the cursor to the origin of the customer display.
- Initializes the display blinking and brightness setting.

Syntax

```
reset();
```

Return value

Return value	Object type
Display object	Display

onreceive event

Receives the execution results of a command sent by send method.

Syntax

```
Function(response);
```

Parameters of callback function

Parameter: response

Object type: Object

response object properties

Property	Description	Object type
success	Execution result of a command	Boolean
code	Error code	String

success

Value	Description
true	Process succeeded.
false	Process failed.

code

Value	Description
'EDSP_NOT_FOUND'	The device was not found.
'EDSP_NOT_OPEN'	Failed to open the device.
'EDSP_INVALID_WINDOW'	An unregistered window was specified.
'EDSP_UNRECOVERABLE'	Unrecoverable error occurred on the connected printer.
'EDSP_CUTTER'	Auto cutter error occurred on the connected printer.
'EDSP_MECHANICAL'	Mechanical error occurred on the connected printer.
'EDSP_COVER_OPEN'	Cover of the connected printer is open.
'EDSP_REC_EMPTY'	Connected printer has run out of paper.
'EDSP_AUTOMATICAL'	Automatic recovery error occurred on the connected printer.
'EDSP_SCHEMA_ERROR'	The XML structure is not correct.
'EX_BADPORT'	An internal communication error with the device occurred.

Value	Description
'EX_TIMEOUT'	A timeout error occurred during communication with the device.
'EX_INVALID_VALUE'	Invalid parameter was detected.
'TooManyRequests'	The number of display data sent to the display has exceeded the allowable limit.

Supplementary explanation

- No onreceive event is notified if a communication error occurs.
  To notify the disconnection event, implement the onreconnecting event, onreconnect event, ondisconnect event.
- If a communication error occurs and it is deemed that no recovery will take place, notify ondisconnect event.
  Since no onreceive event is notified in this case, detect the display failure in ondisconnect event.

Keyboard object

setPrefix method

Sets a key code which is recognized as the start of a string to accept keyboard input as a sequence of strings.

Syntax

```
setPrefix(data);
```

Parameter

data

Value	Description
data	Specifies the key code arrangement.

Supplementary explanation

Refer to Key code list for the key code to specify.

onkeypress event

Receives the key press event.

Syntax

```
Function(data);
```

Parameters of callback function

Parameter: data

Object type: Object

Properties of data object

Property	Description	Object type
keycode	Key code	Number
ascii	The character corresponding to the key code	String

Supplementary explanation

- ❏ When no character corresponds to the specified key code, undefined is set in ascii.
- ❏ Depending on the keyboard used, double-byte characters may be included in ascii.

onstring event

Receives characters starting with one of the strings specified by setPrefix method and ending with the Enter key as a string.

Syntax

```
Function(data);
```

Parameters of callback function

Parameter: data

Object type: Object

Properties of data object

Property	Description	Object type
input	Detected string	String
prefix	Key code recognized as the start of a string	Number

setMSRPrefix method

Specifies a key code to start using the programmable keyboard with MSR. Use a callback event to call setMSRPrefix which is an extended method.

Syntax

```
callEvent(setMSRPrefix, data);
```

Parameter

setMSRPrefix

Value	Description
setMSRPrefix	Fixed

data

Value	Description
keycode	Specifies a key code to detect the start of receiving card information.

Return value

Return value	Description	Object type
sq	Process sequence number	String

Supplementary explanation

Refer to Key code list for the key code to specify.

ondata event

Receives card read information from the programmable keyboard with MSR.

Syntax

```
Function(data);
```

Parameters of callback function

Parameter: data

Object type: Object

Properties of data object

Property	Description	Object type
track1	Entire data for track 1	String
track2	Entire data for track 2	String
track4	Entire data for track 4 (JIS2 track)	String
account_number	Account number	String
expiration_date	Expiration date (YYMM format)	String
surname	Surname	String
first_name	First name	String
middle_initial	Middle name/initial	String
title	Title	String
service_code	Service code	String
track1_dd	Optional data for track 1	String
track2_dd	Optional data for track 2	String

POSKeyboard object

onkeypress event

Receives the POS key press event.

Syntax

```
Function(data);
```

Parameters of callback function

Parameter: data

Object type: Object

Properties of data object

Property	Description	Object type
poskeycode	Key code set in the POS key	Number

MSR object

ondata event

Receives card read information from the MSR device.

Syntax

```
Function(data);
```

Parameters of callback function

Parameter: data

Object type: Object

Properties of data object

Property	Description	Object type
track1	Entire data for track 1	String
track2	Entire data for track 2	String
track4	Entire data for track 4 (JIS2 track)	String
account_number	Account number	String
expiration_date	Expiration date (YYMM format)	String
surname	Surname	String
first_name	First name	String
middle_initial	Middle name/initial	String
title	Title	String
service_code	Service code	String
track1_dd	Optional data for track 1	String
track2_dd	Optional data for track 2	String

Printer object

addTextAlign method

Adds print position setting to the command buffer.

Syntax

```
addTextAlign(align);
```

Parameter

align

Constant	Description
ALIGN_LEFT (default)	Left alignment
ALIGN_CENTER	Center alignment
ALIGN_RIGHT	Right alignment

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- Specify the addTextAlign method at the beginning of a line. If this API is used elsewhere, it will be ignored.
- This API does not work in the page mode.
- Setting of the addTextAlign method is also applied to the raster image, NV logo, barcode, and 2D symbol.
- Use addTextPosition method for horizontal print setting in the page mode.

addTextLineSpace method

Adds line spacing setting to the command buffer.

Syntax

```
addTextLineSpace(linespc);
```

Parameter

linespc

Value	Description
Integer from 0 to 255	Specifies line spacing in dots.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

If the line spacing for a single line is set smaller than the print character size, paper may be fed for a larger quantity than the set amount to ensure proper printing.

addTextRotate method

Adds text rotation setting to the command buffer.

Syntax

```
addTextRotate(rotate);
```

Parameter

rotate

Value	Description
true	Enables text rotation.
false (default)	Disables text rotation.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ Specify the addTextRotate method at the beginning of a line. If this API is used elsewhere, it will be ignored.
- ❏ This API does not work in the page mode.
- ❏ Setting of the addTextRotate method is also applied to the barcode and 2D symbol.
- ❏ Use addPageDirection method for text rotation setting in the page mode.

addText method

Adds characters to print to the command buffer.

Syntax

```
addText(data);
```

Parameter

data

Value	Description
String	Specifies characters to print as a string.

Use the following escape sequences for a horizontal tab, line feed, and back slash:

String	Description
\t	Horizontal tab (HT)
\h	Line feed (LF)
\\	Back slash

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ To print data other than text after printing text using the addText method, feed a line or page.
- ❏ In the page mode, text is printed from the current print position with the base line dot of the characters as the standard.

addTextLang method

Adds language setting to the command buffer.
Sets the language of text specified by addText method.

Syntax

```
addTextLang(lang);
```

Parameter

lang

Value	Description
"en" (default)	English (ANK specification)
de	German (ANK specification)
fr	French (ANK specification)
it	Italian (ANK specification)
es	Spanish (ANK specification)
ja	Japanese (International character set is also changed to Japanese.)
ja-jp	
ko	Korean (International character set is also changed to Korean.)
ko-kr	
zh-hans	Simplified Chinese (International character set is also changed to Chinese.)
zh-cn	
zh-hant	Traditional Chinese
zh-tw	
th	Thai (South Asian model only)
mul	Multiple languages (UTF-8)
Language code other than above	English (ANK specification)

Depending on the specified language, some characters are printed as follows:

Language	Characters $ (U+0024)	Characters \ (U+005C)
Japanese	$	¥
Korean	$	₩
Simplified Chinese	¥	\
Traditional Chinese	$	\

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ Use this API at the top of each print job.
- ❏ Available languages differ depending on character specifications of the printer. For details, see Technical Reference Guide of the printer.

addTextFont method

Adds character font setting to the command buffer.

Syntax

```
addTextFont(font);
```

Parameter

font

Constant	Description
FONT_A (default)	Font A
FONT_B	Font B
FONT_C	Font C
FONT_D	Font D
FONT_E	Font E
FONT_SPECIAL_A	Special font A
FONT_SPECIAL_B	Special font B

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

addTextSmooth method

Adds smoothing setting to the command buffer.

Syntax

```
addTextSmooth(smooth);
```

Parameter

smooth

Value	Description
true	Enables smoothing.
false (default)	Disables smoothing.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

addTextDouble method

Adds character scaling factor setting to the command buffer.

Syntax

```
addTextDouble(dw, dh);
```

Parameter

dw

Value	Description
true	Enables horizontal doubling.
false (default)	Disables horizontal doubling.
undefined	Not specify.

dh

Value	Description
true	Enables vertical doubling.
false (default)	Disables vertical doubling.
undefined	Not specify.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

To quadruple text, specify true in dw and dh.

addTextSize method

Adds character scaling factor setting to the command buffer.

Syntax

```
addTextSize(width, height);
```

Parameter

width

Value	Description
Integer from 1 to 8 (default: 1)	Specifies the horizontal scaling factor rate.
undefined	Not specify.

height

Value	Description
Integer from 1 to 8 (default: 1)	Specifies the vertical scaling factor rate.
undefined	Not specify.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

For slip, endorsement, or validation printing, an integer from 1 to 2 can be set for the width and height.

addTextStyle method

Adds character style setting to the command buffer.

Syntax

```
addTextStyle(reverse, ul, em, color);
```

Parameter

reverse

Value	Description
true	Enables the reverse style.
false (default)	Disables the reverse style.
undefined	Not specify.

ul

Value	Description
true	Enables the underscore style.
false (default)	Disables the underscore style.
undefined	Not specify.

em

Value	Description
true	Enables the bold style.
false (default)	Disables the bold style.
undefined	Not specify.

color

Value	Description
COLOR_NONE	No printing
COLOR_1 (default)	First color
COLOR_2	Second color
COLOR_3	Third color
COLOR_4	Fourth color
undefined	Not specify.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

addTextPosition method

Adds horizontal character print start position setting to the command buffer.

Syntax

```
addTextPosition(x);
```

Parameter

x

Default: 0

Value	Description
Integer from 0 to 65535	Specifies the horizontal print start position in dots.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- Calling this API causes the printer positioned at "other than the beginning of the line." This is also true even if 0 is set to "x."
- addTextAlign method and addTextRotate method cannot be used after running this API.
- Setting of this API is also applied to the barcode/2D symbol/raster image/NV logo.
- The setting of this API is applied to each line (Or to each barcode, 2D symbol, raster image, or NV logo). If you want to apply the setting to multiple lines, set this API to each of the lines.

addTextVPosition method

Adds vertical print start position start setting to the command buffer.

Syntax

```
addTextVPosition(y);
```

Parameter

y

Default: 21

Value	Description
Integer from 0 to 65535	Specify the horizontal print start position in dots.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

This API does not work in the standard mode.

addFeedUnit method

Adds paper-feed-by-dot amount setting to the command buffer.

Syntax

```
addFeedUnit(unit);
```

Parameter

unit

Value	Description
Integer from 0 to 255	Specifies paper feed amount in dots.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

addFeedLine method

Adds paper-feed-by-line amount setting to the command buffer.

Syntax

```
addFeedLine(line);
```

Parameter

line

Value	Description
Integer from 0 to 255	Specifies paper feed amount in lines.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

addFeedPosition method

Adds receipt and label sheet paper feed setting to the command buffer.

Syntax

```
addFeedPosition(pos);
```

Parameter

pos

Value	Description
FEED_PEELING	Feed the sheet to the peeling position.
FEED_CUTTING	Feed the sheet to the cut position.
FEED_CURRENT_TOF	Feed the sheet to the top of the current label.
FEED_NEXT_TOF	Feed the sheet to the top of the next label.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

This API does not work in the page mode.

addFeed method

Adds a line feed to the command buffer.

Syntax

```
addFeed();
```

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

addImage method

Adds a print command for HTML5 Canvas image data to the command buffer.
Converts the specified area of an HTML5 Canvas RGBA full-color image into raster image data according to the color mode setting by the addImage method as well as halftone property and brightness property setting. One pixel of an image corresponds to one dot of the printer, and when a transparent color is contained in the image, the background of the image is assumed to be white.

Syntax

```
addImage(context, x, y, width, height, color, mode);
```

Parameter

context

Value	Description
context	Specifies 2D context of HTML5 Canvas.

x

Value	Description
Integer from 0 to 65535	Specifies the horizontal start position of the print area.

y

Value	Description
Integer from 0 to 65535	Specifies the vertical start position of the print area.

width

Value	Description
Integer from 0 to 65535	Specifies the width of the print area.

height

Value	Description
Integer from 0 to 65535	Specifies the height of the print area.

color

Value	Description
COLOR_NONE	No printing
COLOR_1 (default)	First color
COLOR_2	Second color

Value	Description
COLOR_3	Third color
COLOR_4	Fourth color
undefined	Not specify.

mode

Value	Description
MODE_MONO	Monochrome (2 scales)
MODE_GRAY16	Multi-gradation (16 scales)
undefined	Monochrome (2 scales)

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ HTML5 Canvas data containing image data downloaded from different domains cannot be printed. A security error occurs due to the Same-Origin policy of JavaScript.
- ❏ Multi-gradation printing can be used in the standard mode but not in the page mode.
- ❏ In order to print a image data at a high speed, set the parameter constant of addTextAlign method to ALIGN_LEFT and the width parameter of the addImage method to a multiple of 8 which does not exceed the sheet width of the printer.
- ❏ In the page mode, because image data is printed at the current print position with the lower-left dot of the image data as the reference point, the print position does not move.

addLogo method

Adds a NV logo print registered in the NV memory of the printer to the command buffer.
The NV logo needs to be registered to the printer in advance. For how to register the NV logo, refer to the Technical Reference Guide of the printer.

Syntax

```
addLogo(key1, key2);
```

Parameter

key1

Value	Description
Integer from 0 to 255	Specifies the key code 1 of the NV logo.

key2

Value	Description
Integer from 0 to 255	Specifies the key code 2 of the NV logo.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ Multi-gradation printing can be used in the standard mode but not in the page mode.
- ❏ In the page mode, the NV log is printed at the current print position with the lower-left dot of the NV logo as the reference point.
- ❏ The NV logo specified by this API is printed with the color setting specified by addTextStyle method buffered in advance.

addBarcode method

Adds a barcode print command to the command buffer.

Syntax

```
addBarcode(data, type, hri, font, width, height);
```

Parameter

data

String	Description
String	Specifies barcode data as a string.

Use the following escape sequences to specify binary data which cannot be represented as a string:

String	Description
\xnn	Control code (set nn in hexadecimal)
\\	Back slash

type

Constant	Barcode type
BARCODE_UPC_A	UPC-A
BARCODE_UPC_E	UPC-E
BARCODE_EAN13	EAN13
BARCODE_JAN13	JAN13
BARCODE_EAN8	EAN8
BARCODE_JAN8	JAN8
BARCODE_CODE39	CODE39
BARCODE_ITF	ITF
BARCODE_CODABAR	CODABAR
BARCODE_CODE93	CODE93
BARCODE_CODE128	CODE128
BARCODE_CODE128_AUTO	CODE128 auto
BARCODE_GS1_128	GS1-128
BARCODE_GS1_DATABAR_OMNIDIRECTIONAL	GS1 DataBar Omnidirectional
BARCODE_GS1_DATABAR_TRUNCATED	GS1 DataBar Truncated
BARCODE_GS1_DATABAR_LIMITED	GS1 DataBar Limited
BARCODE_GS1_DATABAR_EXPANDED	GS1 DataBar Expanded

Barcode type	Description
UPC-A	If an 11-digit figure is specified, the check digit is automatically appended. If a 12-digit figure is specified, the 12th digit is used as the check digit but verification is not performed.
UPC-E	Specify 0 in the first digit. Specify the manufacturer code in the 2nd to 6th digits. Specify the item code in right justification in the 7th to 11th digits. The number of digits of the item code depends on the manufacturer code. Specify 0 in each unused data. If an 11-digit figure is specified, the check digit is automatically appended. If a 12-digit figure is specified, the 12th digit is used as the check digit but verification is not performed.
EAN13	If an 12-digit figure is specified, the check digit is automatically appended. If a 13-digit figure is specified, the 13th digit is used as the check digit but verification is not performed.
JAN13	
EAN8	If an 7-digit figure is specified, the check digit is automatically appended. If an 8-digit figure is specified, the 8th digit is used as the check digit but verification is not performed.
JAN8	
CODE39	If the first character is * , this character is processed as the start character. Otherwise, the start character is automatically added.
ITF	The start and stop codes are automatically added. Addition and verification of the check digit are not performed.
CODABAR	Specify the start character ((A to D, a to d). Specify the stop character ((A to D, a to d). Addition and verification of the check digit are not performed.
CODE93	The start and stop characters are automatically added. The check digit is automatically calculated and added.
CODE128	Specify the start character (CODE A, CODE B, CODE C). The stop character is automatically added. The check digit is automatically calculated and added. To encode the following characters, specify the corresponding 2-digit code starting with { : • FNC1: {1 • FNC2: {2 • FNC3: {3 • FNC4: {4 • CODE A: {A • CODE B: {B • CODE C: {C • SHIFT: {S • {: {{ When specifying CODE C, specify the barcode data as the control code of the escape sequence.

Barcode type	Description
CODE128 auto	The start character, check digit, and stop character are automatically added. The character string added to make the overall width of the CODE128 symbol as mini-mum is automatically converted. In this function, there is no need to specify the code set, and the barcode is printed simply by entering the data to be converted to symbols. Example) When entering numbers: "123", etc. When entering alphabets: "ABCabc", etc. Data from 0 to 255 (control codes and character codes) can be specified. Since the overall width changes automatically, use this function after confirming that the barcode fits into the print area and is printed without any problem. When using FNC1, etc., use CODE128 rather than CODE128 auto.
GS1-128	The start character, FNC1, check digit, and stop characters are automatically added. To automatically calculate and add the application ID (AI) and the following check digit, specify "*" at the check digit position. The application ID (AI) can be put in parentheses. The parentheses are used as print characters for HRI and not encoded as data. A blank space can be inserted between the application ID (AI) and data. The blank space is used as print characters for HRI and not encoded as data. To encode the following characters, specify the corresponding 2-digit code starting with { : • FNC1: {1 • FNC3: {3 • (: {(•): {) • *: {* • {: {{
GS1 DataBar Omnidirectional	Specify a 13-digit product ID (GTIN) excluding the application ID (AI) and check digit.
GS1 DataBar Truncated	
GS1 DataBar Limited	
GS1 DataBar Expanded	The application ID (AI) can be put in parentheses. The parentheses are used as print characters for HRI and not encoded as data. To encode the following characters, specify the corresponding 2-digit code starting with { : • FNC1: {1 • (: {(•): {)

hri

Constant	Description
HRI_NONE (default)	No printing.
HRI_ABOVE	Above the barcode
HRI_BELOW	Below the barcode
HRI_BOTH	Both above and below the barcode

font

Constant	Description
FONT_A (default)	Font A
FONT_B	Font B
FONT_C	Font C
FONT_D	Font D
FONT_E	Font E

width

Default: 3

Value	Description
Integer from 2 to 6	Specifies the width of a single module in dots.

height

Default: 162

Value	Description
Integer from 1 to 255	Specifies the height of the barcode in dots.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ Specify the addBarcode method at the beginning of a line.
- ❏ In the page mode, this method is executed at the current position with the lower-left dot of the barcode (except for HRI) as the reference point.
- ❏ Specify a string in accordance with the type of the barcode specified in type. The barcode is not printed if the string specified in data does not match the barcode type specified in type.
- ❏ The "CODE 128 auto" type of barcode can be specified when the printer is TM-m30II, TM-m30II-H, TM-m30II-NT, TMm30II-S, TM-m50, TM-T88VII, or TM-L100.

addSymbol method

Adds a 2D symbol print command to the command buffer.

Syntax

```
addSymbol(data, type, level, width, height, size);
```

Parameter

data

String	Description
String	Specifies 2D symbol data as a text string.

Use the following escape sequences to specify binary data which cannot be represented as a string:

String	Description
\xnn	Control code (set nn in hexadecimal)
\\	Back slash

type

Constant	2D symbol type
SYMBOL_PDF417_STANDARD	Standard PDF417
SYMBOL_PDF417_TRUNCATED	Truncated PDF417
SYMBOL_QRCODE_MODEL_1	QR Code Model 1
SYMBOL_QRCODE_MODEL_2	QR Code Model 2
SYMBOL_QRCODE_MICRO	Micro QR Code
SYMBOL_MAXICODE_MODE_2	MaxiCode Mode 2
SYMBOL_MAXICODE_MODE_3	MaxiCode Mode 3
SYMBOL_MAXICODE_MODE_4	MaxiCode Mode 4
SYMBOL_MAXICODE_MODE_5	MaxiCode Mode 5
SYMBOL_MAXICODE_MODE_6	MaxiCode Mode 6
SYMBOL_GS1_DATABAR_STACKED	GS1 DataBar Stacked
SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL	GS1 DataBar Stacked Omnidirectional
SYMBOL_GS1_DATABAR_EXPANDED_STACKED	GS1 DataBar Expanded Stacked
SYMBOL_AZTECCODE_FULLRANGE	Aztec Code Full-Range mode
SYMBOL_AZTECCODE_COMPACT	Aztec Code Compact mode
SYMBOL_DATAMATRIX_SQUARE	DataMatrix ECC200 Square
SYMBOL_DATAMATRIX_RECTANGLE_8	DataMatrix ECC200 Rectangle, 8 lines

Constant	2D symbol type
SYMBOL_DATAMATRIX_RECTANGLE_12	DataMatrix ECC200 Rectangle, 12 lines
SYMBOL_DATAMATRIX_RECTANGLE_16	DataMatrix ECC200 Rectangle, 16 lines

2D symbol type	Description
Standard PDF417	Converts the string into UTF-8, processes the escape sequence(s), and encodes the data. The maximum number of code words in the data area is 928, the maximum number of code words in a single stage is 30, and the maximum number of stages is 90.
Truncated PDF417	
QR Code Model 1	Converts the string into JIS, processes the escape sequence(s), and encodes the data by choosing the data type from the following: • Figure: 0 to 9 • Alphanumeric: 0 to 9, A to Z, space, $, %, *, +, -, ., /, : • Kanji character: Shift JIS value • 8-bit byte data: 0X00 to 0xff
QR Code Model 2	
Micro QR Code2	
MaxiCode Mode 2	Converts the string into UTF-8, processes the escape sequence(s), and encodes the data. In Mode 2 or 3, if the first data is][)>\x1e01\x1dyy ("yy" is a 2-digit figure), this is processed as the message header and the second and succeeding data sequence is processed as the primary message. Otherwise, the primary message starts with the fist data. For the mode 2, specify the primary message in the following format: • Postal code (1- to 9-digit number) GS: (\x1d) • ISO country code (1- to 3-digit number) GS: (\x1d) • Service class code (1- to 3-digit number) For the mode 3, specify the primary message in the following format: • Postal code (data which can be converted with 1 to 6 code sets A) GS (\x1d) ISO • country code (1- to 3-digit figure) GS (\x1d) • Service class code (1- to 3-digit number)
MaxiCode Mode 3	
MaxiCode Mode 4	
MaxiCode Mode 5	
MaxiCode Mode 6	
GS1 DataBar Stacked	Converts the string into UTF-8, processes the escape sequence(s), and encodes the data. Specify a 13-digit product ID (GTIN) excluding the application ID (AI) and check digit.
GS1 DataBar Stacked Omnidirectional	
GS1 DataBar Expanded Stacked	Converts the string into UTF-8, processes the escape sequence(s), and encodes the data. The application ID (AI) can be put in parentheses. The parentheses are used as print characters for HRI and not encoded as data. To encode the following characters, specify the corresponding 2-digit code starting with { : • FNC1: {1 • (: {(•): {)
Aztec Code	Converts the string into UTF-8, processes the escape sequence(s), and encodes the data.

2D symbol type	Description
DataMatrix	Converts the string into UTF-8, processes the escape sequence(s), and encodes the data.

level

❏ PDF417

Constant	Description
LEVEL_0	Error correction level 0
LEVEL_1	Error correction level 1
LEVEL_2	Error correction level 2
LEVEL_3	Error correction level 3
LEVEL_4	Error correction level 4
LEVEL_5	Error correction level 5
LEVEL_6	Error correction level 6
LEVEL_7	Error correction level 7
LEVEL_8	Error correction level 8
LEVEL_DEFAULT	Default value (error correction level 1)

❏ QR Code

Constant	Description
LEVEL_L	Error correction level L
LEVEL_M	Error correction level M
LEVEL_Q	Error correction level Q
LEVEL_H	Error correction level H
LEVEL_DEFAULT	Default value (error correction level M)

❏ Aztec Code

Constant	Description
Integer (5 to 95)	Error correction level
LEVEL_DEFAULT	Default value (error correction level 23)

width

2D symbol type	Valid value	Default value
PDF417	2 to 8	3
QR Code	3 to 16	3
MaxiCode	Not used	

2D symbol type	Valid value	Default value
2D GS1 DataBar	2 to 8	2
Aztec Code	2 to 16	3
DataMatrix	2 to 16	3

height

2D symbol type	Valid value	Default value
PDF417	2 to 8 (Scaling factor for width)	3
QR Code	Not used	
MaxiCode		
2D GS1 DataBar		
Aztec Code		
DataMatrix		

size

2D symbol type		Default value	Description
PDF417		0 (auto)	Specifies the number of code words per stage.
QR Code		Ignored	
MaxiCode		Ignored	
2D GS1 DataBar	Expanded Stacked	0 (auto)	Specifies the maximum width of the 2D symbol (106 or more).
	Other	Ignored	
Aztec Code		Ignored	
DataMatrix		Ignored	

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ Use the addSymbol method at the beginning of a line.
- ❏ In the page mode, a 2D symbol is printed at the current print position with the lower-left dot of the 2D symbol as the reference point.
- ❏ Specify a string in accordance with the type of the 2D symbol specified in type. The 2D symbol is not printed if the string specified in data does not match the 2D symbol type specified in type.
- ❏ Micro QR Code does not support LEVEL_H.
- ❏ Specify a constant in accordance with the 2D symbol type specified in type.
- ❏ When MaxiCode or 2D GS1 DataBar is specified in data, specify LEVEL_DEFAULT.

addHLine method

Draws a horizontal ruled line and adds a horizontal ruled line print command to the command buffer.

Syntax

```
addHLine(x1, x2, style);
```

Parameter

x1

Value	Description
Integer from 0 to 65535	Specifies the start position to draw a horizontal ruled line in dots.

x2

Value	Description
Integer from 0 to 65535	Specifies the end position to draw a horizontal ruled line in dots.

style

Constant	Description
LINE_THIN	Solid line: Fine
LINE_MEDIUM	Solid line: Middle
LINE_THICK	Solid line: Thick
LINE_THIN_DOUBLE	Double line: Fine
LINE_MEDIUM_DOUBLE	Double line: Middle
LINE_THICK_DOUBLE	Double line: Thick
undefined	Solid line: Fine

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- This API does not work in the page mode.
- Use addPageLine method to draw a horizontal ruled line in the page mode.

addVLineBegin method

Adds a command to start drawing a vertical ruled line to the command buffer.

Syntax

```
addVLineBegin(x, style);
```

Parameter

x

Value	Description
Integer from 0 to 65535	Specifies the start position to draw a vertical ruled line in dots.

style

Constant	Description
LINE_THIN	Solid line: Fine
LINE_MEDIUM	Solid line: Middle
LINE_THICK	Solid line: Thick
LINE_THIN_DOUBLE	Double line: Fine
LINE_MEDIUM_DOUBLE	Double line: Middle
LINE_THICK_DOUBLE	Double line: Thick
undefined	Solid line: Fine

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- This API does not work in the page mode.
- Use addPageLine method to draw a horizontal ruled line in the page mode.
- This API draws a vertical ruled line until stopped by addVLineEnd method. Use the addVLineBegin method together with the addVLineEnd method.

addVLineEnd method

Adds a command to stop drawing a vertical ruled line to the command buffer.

Syntax

```
addVLineEnd(x, style);
```

Parameter

x

Value	Description
Integer from 0 to 65535	Specifies the end position to draw a vertical ruled line in dots.

style

Constant	Description
LINE_THIN	Solid line: Fine
LINE_MEDIUM	Solid line: Middle
LINE_THICK	Solid line: Thick
LINE_THIN_DOUBLE	Double line: Fine
LINE_MEDIUM_DOUBLE	Double line: Middle
LINE_THICK_DOUBLE	Double line: Thick
undefined	Solid line: Fine

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- This API does not work in the page mode.
- Use addPageLine method to draw a vertical ruled line in the page mode.
- Use this method together with addPageBegin method.

addPageBegin method

Adds a page mode start command to the command buffer.
Executing the addPageBegin method starts operation in the page mode.

Syntax

```
addPageBegin();
```

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Supplementary explanation

- The page mode does not support multi-gradation printing.
- Use this method together with addPageEnd method.

addPageEnd method

Adds a page mode end command to the command buffer.
Executing the addPageBegin method ends operation in the page mode.

Syntax

```
addPageEnd();
```

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Supplementary explanation

Use this method together with addPageBegin method.

addPageArea method

Adds page mode print area setting to the command buffer.
Use the addPageArea method to specify the page mode print area (coordinates) and to specify print data by the addText or other methods.

Syntax

```
addPageArea(x, y, width, height);
```

Parameter

x

0 indicates the left edge of the printable area.

Value	Description
Integer from 0 to 65535	Specifies the horizontal origin in dots.

y

0 indicates the position before paper feed.

Value	Description
Integer from 0 to 65535	Specifies the vertical origin in dots.

width

Value	Description
Integer from 0 to 65535	Specifies the width of a print area in dots.

height

Value	Description
Integer from 0 to 65535	Specifies the height of a print area in dots.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ Define the print area in accordance with the contents to print. Any portion of print data outside the print area is not printed.
- ❏ This API does not work in the standard mode.
- ❏ Specify the width and height of the print area in accordance with the print direction setting. If the width and height of the print area do not match the print direction setting, any portion of print data outside the print area will not be printed. The print direction is specified by addPageDirection method.

addPageDirection method

Adds page mode print direction setting to the command buffer.

Syntax

```
addPageDirection(dir);
```

Parameter

dir

Constant	Description
DIRECTION_LEFT_TO_RIGHT (default)	Do not rotate data. (Data is printed rightward from the upper-left position.)
DIRECTION_BOTTOM_TO_TOP	Rotate data counterclockwise by 90 degrees. (Data is printed upward from the lower-left position.)
DIRECTION_RIGHT_TO_LEFT	Rotate data by 180 degrees. (Data is printed leftward from the lower-right position.)
DIRECTION_TOP_TO_BOTTOM	Rotate data clockwise by 90 degrees. (Data is printed downward from the upper-right position.)

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

This API does not work in the standard mode.

addPagePosition method

Specifies the print start position (coordinates) within the print area specified by addPageArea method and adds print position setting within the print area in the page mode to the command buffer.

Syntax

```
addPagePosition(x, y);
```

Parameter

x

Default: 0

Value	Description
Integer from 0 to 65535	Specify the horizontal print position in dots.

y

Default: 21

Value	Description
Integer from 0 to 65535	Specify the horizontal print position in dots.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

❏ This API does not work in the standard mode.

❏ Define the print start position (coordinates) in accordance with the contents to print.

Print data	Specification method
String	Specify the leftmost position of the baseline for the first character. This can be omitted when printing data with the standard size in left justification. When printing a double-height character, set y to 42 or larger.
Barcode	Specify the lower-left position of the symbol. Specify the height of the barcode in y.

Print data	Specification method
Graphics/logo	Specify the lower-left position of the graphic data. Specify the height of the graphic data in y.
2D symbol	Specify the upper-left position of the symbol. This can be omitted when printing from the upper-left position.

addPageLine method

Adds a page mode line draw setting command to the command buffer.

Syntax

```
addPageLine(x1, y1, x2, y2, style);
```

Parameter

x1

Value	Description
Integer from 0 to 65535	Specifies the horizontal draw start position in dots.

y1

Value	Description
Integer from 0 to 65535	Specifies the vertical draw start position in dots.

x2

Value	Description
Integer from 0 to 65535	Specifies the horizontal draw end position in dots.

y2

Value	Description
Integer from 0 to 65535	Specifies the vertical draw end position in dots.

style

Constant	Description
LINE_THIN	Solid line: Fine
LINE_MEDIUM	Solid line: Middle
LINE_THICK	Solid line: Thick
LINE_THIN_DOUBLE	Double line: Fine
LINE_MEDIUM_DOUBLE	Double line: Middle
LINE_THICK_DOUBLE	Double line: Thick
undefined	Solid line: Fine

Return value

Return value	Object type
Printer object	Printer

Return value	Object type
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- This API does not work in the standard mode.
- A diagonal line cannot be drawn. Specify the parameters so that the line to be drawn will be a vertical or horizontal line.

addPageRectangle method

Adds a page mode rectangle draw setting command to the command buffer.

Syntax

```
addPageRectangle(x1, y1, x2, y2, style);
```

Parameter

x1

Value	Description
Integer from 0 to 65535	Specifies the horizontal draw start position in dots.

y1

Value	Description
Integer from 0 to 65535	Specifies the vertical draw start position in dots.

x2

Value	Description
Integer from 0 to 65535	Specifies the horizontal draw end position in dots.

y2

Value	Description
Integer from 0 to 65535	Specifies the vertical draw end position in dots.

style

Constant	Description
LINE_THIN	Solid line: Fine
LINE_MEDIUM	Solid line: Middle
LINE_THICK	Solid line: Thick
LINE_THIN_DOUBLE	Double line: Fine
LINE_MEDIUM_DOUBLE	Double line: Middle
LINE_THICK_DOUBLE	Double line: Thick
undefined	Solid line: Fine

Return value

Return value	Object type
Printer object	Printer

Return value	Object type
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

This API does not work in the standard mode.

addRotateBegin method

Adds the start batch rotate print mode to the command buffer.

Syntax

```
addRotateBegin();
```

Return value

Return value	Object type
Printer object	Printer

Supplementary explanation

❏ This API does not work in the page mode.

❏ Use the add APIs for batch rotate printing (Example: addText method) by enclosing between this API and addRotateEnd method.

❏ Do not use the following APIs between this API and addRotateEnd method.

· addPageBegin method
· addPageEnd method
· addCut method
· addPulse method
· addSound method
· ejectPaper method

❏ The data volume that the printer can process in a single batch rotate printing is as described below.

· Strings: 80 lines
· Graphics: 2400 dots

❏ When you are using the add APIs (Example: addText method) in the batch rotate print mode, you must take care while using certain APIs.

API	Precautions
addTextSize method	• If the longitudinal direction is set to triple angle or higher with addTextSize method before this API, then this API and the succeeding APIs will become double-angled. • If the longitudinal direction is set to triple angle or higher with addTextSize method after this API, then the specification in the longitudinal direction will be ignored and become single-angled.
addFeedUnit method	The number of paper feed lines varies depending on the line spacing specified in addTextLineSpace method. If the line spacing is specified as 30 in addTextLineSpace method, paper feeding can be performed for 8 lines with the maximum value of addFeedUnit method as 255.

API	Precautions
addImage method	• If the total vertical size of print data exceeds 2400 dots, printing may not be performed as intended. For example, if 500-dot data B is sent to a location in the printer buffer where 2000-dot data A is accumulated, then data B will be accumulated in the printer buffer after data A has been printed. • The multi-gradation (16 scales) maximum size is up to 600 dots vertically. In the case of multi-gradation (16 scales), a data volume that is four times that of monochrome (2 scales) is required. • If the vertical size of one image element exceeds the data volume that can be processed in one go, printing will not be performed. Monochrome (2 scales) maximum value: 2400 dots Multi-gradation (16 scales) maximum value: 600 dots

addRotateEnd method

Adds the end batch rotate print mode to the command buffer.

Syntax

```
addRotateEnd();
```

Return value

Return value	Object type
Printer object	Printer

Supplementary explanation

- This API does not work in the page mode.
- Use the add APIs for batch rotate printing (Example: addText method) by enclosing between this API and addRotateBegin method.

addCut method

Adds a sheet cut command to the command buffer.

Syntax

```
addCut(type);
```

Parameter

type

Value	Description
CUT_NO_FEED	Cut without feed (cut the sheet without feeding paper).
CUT_FEED	Feed cut (cut the sheet after feeding paper).
CUT_RESERVE	Cut reservation (print the following texts and cut the sheet at the cutting position).
undefined	Feed cut (cut the sheet after feeding paper).

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- This API does not work in the page mode.
- Use this API at the "beginning of a line." If this API is used elsewhere, it will be ignored.
- If print data is not specified after the cut reservation (CUT_RESERVE), the printer will execute the cut after feeding paper up to the position of the reserved cut.
- Depending on the printer, it may wait approximately 2 seconds for the print data after the cut reservation (CUT_RESERVE) before starting the paper feed operation.
- When using the cut reservation (CUT_RESERVE), set the length of one receipt to at least 20 mm.

addPulse method

Adds a drawer kick setting command to the command buffer.

Syntax

```
addPulse(drawer, time);
```

Parameter

drawer

Value	Description
DRAWER_1	Drawer kick connector pin No.2
DRAWER_2	Drawer kick connector pin No.5
undefined	Drawer kick connector pin No.2

time

Value	Description
PULSE_100	100-msec signal
PULSE_200	200-msec signal
PULSE_300	300-msec signal
PULSE_400	400-msec signal
PULSE_500	500-msec signal
undefined	100-msec signal

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ This API does not work in the page mode.
- ❏ The drawer function cannot be used with the buzzer function.
- ❏ Do not open the drawer repeatedly for a short time. The drawer may be damaged due to too much load.

addSound method

Adds buzzer sound setting to the command buffer.

Syntax

```
addSound(pattern, repeat, cycle);
```

Parameter

pattern

Value	Description
PATTERN_NONE	Stop
PATTERN_A	Pattern A (optional external buzzer)
PATTERN_B	Pattern B (optional external buzzer)
PATTERN_C	Pattern C (optional external buzzer)
PATTERN_D	Pattern D (optional external buzzer)
PATTERN_E	Pattern E (optional external buzzer)
PATTERN_ERROR	Error sound pattern (optional external buzzer)
PATTERN_PAPER_END	Paper empty sound pattern (optional external buzzer)
PATERN_0	Pattern 0 (built-in buzzer)
PATERN_1	Pattern 1 (built-in buzzer)
PATERN_2	Pattern 2 (built-in buzzer)
PATERN_3	Pattern 3 (built-in buzzer)
PATERN_4	Pattern 4 (built-in buzzer)
PATERN_5	Pattern 5 (built-in buzzer)
PATERN_6	Pattern 6 (built-in buzzer)
PATERN_7	Pattern 7 (built-in buzzer)
PATERN_8	Pattern 8 (built-in buzzer)
PATERN_9	Pattern 9 (built-in buzzer)
PATERN_10	Pattern 10 (built-in buzzer)
undefined	Pattern A (optional external buzzer)

repeat

Value	Description
0	Unlimited
1 to 255	1 to 255 times

Value	Description
undefined	Once

cycle

Value	Description
1000 to 25500	Specifies the buzzer sound cycle in milliseconds.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ This API does not work in the page mode.
- ❏ The buzzer function cannot be used with the drawer function.
- ❏ Cycle is only available when PATTERN_0 to PATTERN_10 is specified in pattern.
- ❏ When PATERN_0 is specified in pattern, specify a value in cycle within the range from 1000 to 6000.

addLayout method

Adds sheet layout setting to the command buffer.

Syntax

```
addLayout(type, width, height, margin_top, margin_bottom,
offset_cut, offset_label);
```

Parameter

type

Value	Description
LAYOUT_RECEIPT	Receipt
LAYOUT_RECEIPT_BM	Receipt (with black mark)
LAYOUT_LABEL	Label sheet
LAYOUT_LABEL_BM	Label sheet (with black mark)

width

Value	Description
290 to 800	Specifies the paper width in 0.1-mm units.

height

Sheet type	Valid value	Description
Receipt	0	Specification is not required.
Receipt (with black mark)	• 0 (auto) • 284 to 1550 (manual)	Specifies the distance between the top edges of two consecutive black marks in 0.1-mm units.
Label sheet		Specifies the distance between the top edges of two consecutive labels in 0.1-mm units.
Label sheet (with black mark)		Specifies the distance between the bottom edges of two consecutive black marks in 0.1-mm units.

margin_top

Sheet type	Valid value	Description
Receipt	0	Specification is not required.
Receipt (with black mark)	-150 to 1500	Specifies the distance between the top edge of a black mark to the top of the sheet in 0.1-mm units.
Label sheet	0 to 1500	Specifies the distance between the top edge of a label to the top of the sheet in 0.1-mm units.

Sheet type	Valid value	Description
Label sheet (with black mark)	-15 to 1500	Specifies the distance between the bottom edge of a black mark to the top of the sheet in 0.1-mm units.

margin_bottom

Sheet type	Valid value	Description
Receipt	0	Specification is not required.
Receipt (with black mark)	0	Specification is not required.
Label sheet	-15 to 0	Specifies the distance between the bottom edge of a label to the bottom of the print area in 0.1-mm units. (A positive value widens the margin and a negative value narrows it.)
Label sheet (with black mark)	-15 to 15	Specifies the distance between the bottom edge of a black mark to the bottom of the print area in 0.1-mm units. (A positive value widens the margin and a negative value narrows it.)

offset_cut

Sheet type	Valid value	Description
Receipt	0	Specification is not required.
Receipt (with black mark)	-290 to 50	Specifies the distance between the top edge of a black mark to the cut position in 0.1-mm units.
Label sheet	0 to 50	Specifies the distance between the bottom edge of a label to the cut position in 0.1-mm units.
Label sheet (with black mark)	0 to 50	Specifies the distance between the top edge of a black mark to the cut position in 0.1-mm units.

offset_label

Sheet type	Valid value	Description
Receipt	0	Specification is not required.
Receipt (with black mark)	0	Specification is not required.
Label sheet	0	Specification is not required.
Label sheet (with black mark)	0 to 15	Specifies the distance between the top edge of a black mark to the bottom edge of a label in 0.1-mm units.

Return value

Return value	Object type
Printer object	Printer

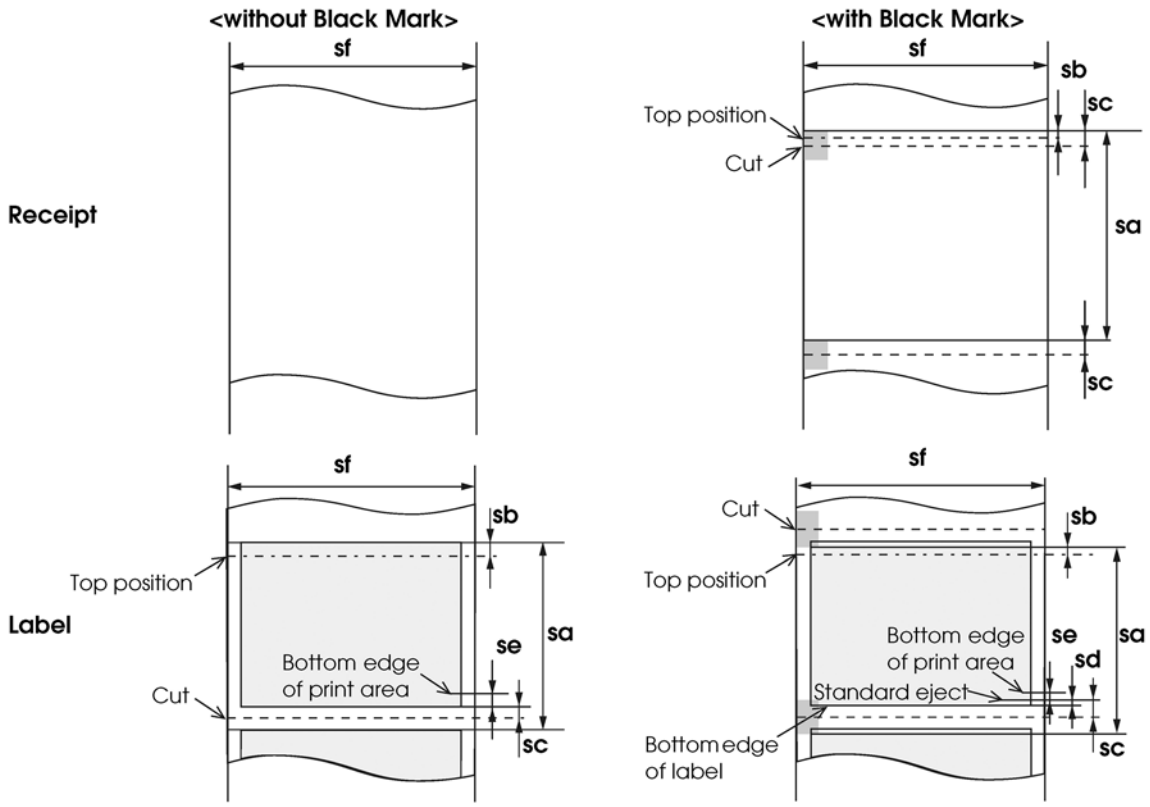
Return value	Object type
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Detailed description

Refer to the following for the parameter positions available for each type of paper.



Symbol	Parameter
sf	width
sa	height
sb	margin_top
se	margin_bottom
sc	offset_cut
sd	offset_label

Supplementary explanation

This API does not work in the page mode.

recover method

Recovers the printer from a recoverable error status (example: auto cutter error).
For details on recoverable errors, refer to the Technical Reference Guide of each printer.
When a recoverable error occurs with the printer, just removing the error cause does not recover the printer from the error. By executing the recover method, the printer recovers from the error and becomes ready for printing.

Syntax

```
recover();
```

addRecovery method

Add a command to recover the printer from an error condition to the command buffer.
When a recoverable error occurs with the printer, executing the addRecovery method recovers the printer from the error and makes it ready for printing.
The execution result of the addRecovery method is same as that of recover method. It is recommended to use the recover method to recover the printer from an error condition.

Syntax

```
addRecovery();
```

Return value

Return value	Object type
Printer object	Printer

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ Enable the forced transmission mode (force property) when using this method.
- ❏ After recovering from a recoverable error, the buffer of the printer is reset.

reset method

Resets the printer.
The printer returns to the initialized state and print data remaining in the printer buffer and any other data which is not stored in the printer (e.g., print setting) will be all lost.

Syntax

```
reset();
```

addReset method

Add a command to reset the printer to the command buffer.
The printer returns to the initialized state and print data remaining in the printer buffer and any other data which is not stored in the printer (e.g., print setting) will be all lost.
The execution result of the addReset method is same as that of reset method.
When the addReset method is added to the command buffer to reset the printer, other print commands remaining in the command buffer will not be executed. It is recommended to use the rest method to reset the printer.

Syntax

```
addReset();
```

Return value

Return value	Object type
Printer object	Printer

Exception

Exception	Object type
Parameter " ... " is invalid	Error

addCommand method

Adds the ESC/POS command to the command buffer.

Syntax

```
addCommand(data);
```

Parameter

data

Value	Description
String	Specifies an ESC/POS command as a string.

Return value

Return value	Object type
Printer object	Printer
HybridPrinter2 object	HybridPrinter2

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- Refer to the following URL for details of the ESC/POS command.
  www.epson-biz.com/pos/reference/
- Epson ePOS SDK does not check the commands sent using this API. If the commands interfere with Epson ePOS SDK operations, other APIs may work wrongly or status values may become invalid. This API should be used with a full understanding of ESC/POS commands and the receipt printer specifications.

send method

Sends data in the command buffer to the printer.
The print job ID can be specified.

Syntax

- ❑ send();
- ❑ send(printjobid);

Parameter

printjobid

Value	Description
String	Alphanumeric characters, underscore, hyphen, and period in 1 to 30 digits can be used.

Sample program

Send data by specifying the print job ID.

```
var printjobid = 'ABC123';

printer.addText('Hello, World!\n');
printer.addCut();
printer.onreceive = function (res) { alert(res.printjobid); };
printer.onerror = function (err) { alert(err.status); };
printer.send(printjobid);
```

Supplementary explanation

- ❑ The execution result of the send method is passed to the callback function of onreceive event.
- ❑ If executing the send method when the forced transmission mode (force property) is enabled, the forced transmission mode is disabled after data transmission.
- ❑ The specification function of the print job ID can be used in the TM-i series/TM-DT series.

print method

Prints image data drawn in HTML5 Canvas.
The print job ID can be specified.
Converts the specified area of an HTML5 Canvas RGBA full-color image into raster data according to halftone property and brightness property setting. One pixel of an image corresponds to one dot of the printer. When a transparent color is contained in the image, the background of the image is assumed to be white.

Syntax

- print(canvas, cut, mode);
- print(canvas, cut, mode, printjobid);

Parameter

canvas

Value	Description
canvas	Specifies an HTML5 Canvas object.

cut

Value	Description
true	Uses the automatic cutting function.
false	Does not use the automatic cutting function.
undefined	Does not use the automatic cutting function.

mode

Value	Description
MODE_MONO	Monochrome (2 scales)
MODE_GRAY16	Multi-gradation (16 scales)
undefined	Monochrome (2 scales)

printjobid

Value	Description
String	Alphanumeric characters, underscore, hyphen, and period in 1 to 30 digits can be used.

Exception

Exception	Object type
Parameter " ... " is invalid	Error

Supplementary explanation

- ❏ HTML5 Canvas data containing image data downloaded from different domains cannot be printed. A security error occurs due to the Same-Origin policy of JavaScript.
- ❏ Multi-gradation printing can be used in the standard mode but not in the page mode.
- ❏ The specification function of the print job ID can be used in the TM-i series/TM-DT series.

getPrintJobStatus method

Acquires the status of the specified print job ID. The print job ID status acquired by the getPrintJobStatus method is passed to onreceive event.

Syntax

```
getPrintJobStatus(printjobid);
```

Parameter

printjobid

Value	Description
String	Alphanumeric characters, underscore, hyphen, and period in 1 to 30 digits can be used.

Supplementary explanation

When multiple print processes were performed with the same print job ID, the status of the latest print job is acquired.

startMonitor method

Enables acquisition and update of printer status by the Printer object.
Executing the startMonitor method enables the Printer object to acquire and update the printer status at the interval specified by interval property and passes the acquired or updated printer status to the following events:

- ❏ onstatuschange event
- ❏ onbatterystatuschange event
- ❏ ononline event
- ❏ onoffline event
- ❏ onpoweroff event
- ❏ oncoverok event
- ❏ oncoveropen event
- ❏ onpaperok event
- ❏ onpapernearend event
- ❏ onpaperend event
- ❏ ondrawerclosed event
- ❏ ondraweropen event
- ❏ onbatteryok event
- ❏ onbatterylow event

Syntax

```
startMonitor();
```

stopMonitor method

Disables acquisition and update of printer status by the Printer object enabled by startMonitor method.

Syntax

```
stopMonitor();
```

halftone property

Specifies the halftone processing method.
Applied to monochrome (2-scale) printing by addImage method and print method.

Object type

String

Constant	Processing method	Description
HALFTONE_DITHER (default)	Dithering	Printing graphics only
HALFTONE_ERROR_DIFFUSION	Error diffusion	Printing that includes text and graphics
HALFTONE_THRESHOLD	Threshold	Printing text only

brightness property

Specifies the brightness compensation value.
Applied to printing by addImage method and print method.

Object type

Number

Default: 1.0

Value	Description
0.1 to 10.0	Specifies the brightness compensation value.

force property

Specifies the forced transmission mode.
In the forced transmission mode, print commands are forcibly transmitted to the printer.

Object type

Boolean

Value	Description
true	Enabled
false (default)	Disabled

Supplementary explanation

- ❏ Use the forced transmission mode while the printer is offline.
- ❏ When it is used while the printer is online, the error code EX_BADPORT will be passed to code of onreceive event.
- ❏ The following functions are available in the forced transmission mode:
  Drawer kick (addPulse method)
  Buzzer stop (addSound method)
  Recovery from a recoverable error (addRecovery method)
  Reset (addReset method)
  Real-time command transmission (addCommand method)
- ❏ For TM-H6000V, you need to enable the Command execution during offline settings.
  Refer to TM-H6000V Utility User's Manual for details.

timeout property

Specifies the timeout period for messages sent by send method.
Adjust the timeout period depending on the model specifications, communication interface, and transmission data size.

Object type

Number

Default: 10000

Value	Description
0 to 300000	Specifies the timeout period in milliseconds.

interval property

Specifies the interval of acquisition and update of printer status enabled by startMonitor method.

Object type

Number

Default: 3000 When an invalid value is specified, the default value will be used.

Value	Description
1000 to 6000	Specifies the printer status update interval in milli-seconds.

drawerOpenLevel property

Specifies the signal line status of the drawer to generate ondraweropen event and ondrawerclosed event. Change this value in accordance with the specifications of the drawer used.

Object type

Integer

Value	Signal line status	Description
DRAWER_OPEN_LEVEL_LOW (default)	HIGH -> LOW	ondraweropen event is generated.
	LOW -> HIGH	ondrawerclosed event is generated.
DRAWER_OPEN_LEVEL_HIGH	HIGH -> LOW	ondrawerclosed event is generated.
	LOW -> HIGH	ondraweropen event is generated.

message property

Displays a command added by an API of the Printer object as a code.
This property can be used to directly manipulate codes to check, add, and/or delete commands.

Object type

String

onreceive event

Receives the print result.

Syntax

```
Function (response)
```

Parameters of callback function

Parameter: response

Object type: Object

response object properties

Property	Description	Object type
success	Print result	Boolean
code	Error code	String
status	Status	Number
battery	Battery status	Number
printjobid	Print job ID	String

success

Value	Description
true	• Printing succeeded. • Process succeeded (when the spooler function is enabled).
false	• Printing failed. • Process failed (when the spooler function is enabled).

code

Value	Description
'EPTR_AUTOMATICAL'	Automatic recovery error occurred.
'EPTR_BATTERY_LOW'	Battery has run out.
'EPTR_COVER_OPEN'	Cover open error occurred.
'EPTR_CUTTER'	Auto cutter error occurred.
'EPTR_MECHANICAL'	Mechanical error occurred.
'EPTR_REC_EMPTY'	Roll paper has run out.
'EPTR_UNRECOVERABLE'	Unrecoverable error occurred.
'SchemaError'	Print request XML contains a syntax error.

Value	Description
'DeviceNotFound'	Printer specified by the device ID does not exist.
'PrintSystemError'	Error occurred with the printing system.
'EX_BADPORT'	Error was detected with the communication port.
'EX_TIMEOUT'	Print timeout occurred.
'EX_SPOOLER'	Print queue is full.
'JobNotFound'	Specified job ID does not exist.
'Printing'	Printing
'TooManyRequests'	The number of print jobs sent to the printer has exceeded the allowable limit.
'RequestEntityTooLarge'	The size of the print job data exceeds the capacity of the printer.
'JobSpooling'	Job is spooling.
'ERROR_WAIT_EJECT'	Waiting for paper removal

status

Perform an AND operation with a constant.

Constant (status)	Description
ASB_NO_RESPONSE	No response from printer
ASB_PRINT_SUCCESS	Print finished/spool completed
ASB_DRAWER_KICK	Drawer kick connector pin No.3 status = "H"
ASB_BATTERY_OFFLINE	Offline status due to the battery level
ASB_OFF_LINE	Offline status
ASB_COVER_OPEN	Cover open
ASB_PAPER_FEED	Paper is being fed by the paper feed switch.
ASB_PANEL_SWITCH	Panel switch is being operated.
ASB_MECHANICAL_ERR	Mechanical error occurred.
ASB_AUTOCUTTER_ERR	Auto cutter error occurred.
ASB_UNRECOVER_ERR	Unrecoverable error occurred.
ASB_AUTORECOVER_ERR	Automatic recovery error occurred.
ASB_RECEIPT_NEAR_END	Roll paper has almost run out.
ASB_RECEIPT_END	Roll paper has run out.
ASB_BUZZER	Buzzer is sounding (supported model only)
ASB_WAIT_REMOVE_LABEL	Waiting for labels to be peeled.

Constant (status)	Description
ASB_NO_LABEL	No labels awaiting peeling.
ASB_SPOOLER_IS_STOPPED	Spooler stopped

battery

❏ AC adapter connection status

Constant (battery)	Description
0x30XX	Connected
0x31XX	Not connected

❏ Remaining battery capacity

Constant (battery)	Description
0xXX36	Remaining battery capacity 6
0xXX35	Remaining battery capacity 5
0xXX34	Remaining battery capacity 4
0xXX33	Remaining battery capacity 3
0xXX32	Remaining battery capacity 2
0xXX31	Remaining battery capacity 1 (almost run out)
0xXX30	Remaining battery capacity 0 (run out)

printjobid

Value	Description
printjobid	Print job ID

Supplementary explanation

❏ For a model without battery, 0xXX30 is set to the battery constant.

❏ When there is no print job ID, "" (blank character) is set in printjobid.

❏ No onreceive event is notified if a communication error occurs.
To notify the disconnection event, implement the onreconnecting event, onreconnect event, ondisconnect event.

❏ If a communication error occurs and it is deemed that no recovery will take place, notify ondisconnect event.
Since no onreceive event is notified in this case, detect print failures in ondisconnect event.

onstatuschange event

Receives the printer status acquired by the Printer object.

Syntax

```
Function (status)
```

Parameters of callback function

Parameter: status

Object type: Number

onbatterystatuschange event

Receives the battery status acquired by the Printer object.

Syntax

```
Function (battery)
```

Parameters of callback function

Parameter: battery

Object type: Number

ononline event

Receives the online status acquired by the Printer object.

Syntax

```
Function ()
```

onoffline event

Receives the offline status acquired by the Printer object.

Syntax

```
Function ()
```

onpoweroff event

Receives the no response status acquired by the Printer object.

Syntax

```
Function ()
```

oncoverok event

Receives the cover close status acquired by the Printer object.

Syntax

```
Function ()
```

oncoveropen event

Receives the cover open status acquired by the Printer object.

Syntax

```
Function ()
```

onpaperok event

Receives the paper remaining status acquired by the Printer object.

Syntax

```
Function ()
```

onpapernearend event

Receives the paper almost run out status acquired by the Printer object.

Syntax

```
Function ()
```

onpaperend event

Receives the paper has run out status acquired by the Printer object.

Syntax

```
Function ()
```

ondrawerclosed event

Receives the drawer close status acquired by the Printer object.

Syntax

```
Function ()
```

Supplementary explanation

The signal line status to generate the ondrawerclosed event is specified by drawerOpenLevel property.

ondraweropen event

Receives the drawer open status acquired by the Printer object.

Syntax

```
Function ()
```

Supplementary explanation

The signal line status to generate the ondraweropen event is specified by drawerOpenLevel property.

onbatteryok event

Receives the battery remaining status acquired by the Printer object.

Syntax

```
Function ()
```

onbatterylow event

Receives the battery run out status acquired by the Printer object.

Syntax

```
Function ()
```

HybridPrinter2 object

lock method

Locks the device port. Use this method when, for example, performing MICR control and slip printing sequentially to prevent other processes from interrupting the operation.
The execution result of the lock method is passed to the callback function of onreceive event.

Syntax

```
lock();
```

Supplementary explanation

After executing the lock method, execute unlock method before closing the application. If the unlock method is not executed, the port cannot be locked for approximately five minutes until the ePOS-Device unlocks it and ERROR_DEVICE_BUSY will be passed to onreceive event during this period.

unlock method

Unlocks the device port. The execution result of the unlock method is passed to the callback function of onreceive event.

Syntax

```
unlock();
```

selectPaperType method

Specifies the print method.

Syntax

```
selectPaperType(paperType);
```

Parameter

paperType

Value	Description
PAPERTYPE_RECEIPT (default)	Receipt printing
PAPERTYPE_SLIP	Slip printing
PAPERTYPE_ENDORSE	Endorsement printing
PAPERTYPE_VALIDATION	Validation printing

waitInsertion method

Enables the paper insertion wait status.
After running this API, set the paper appropriate for the print method specified by the paperType property.

Syntax

```
waitInsertion(timeout);
```

Parameter

timeout

When an invalid value is specified, the default value will be used.

Value	Description
Integer from 5000 to 900000	Specifies the timeout period for the paper insertion wait status in milliseconds.
undefined	Specifies the default value (60000).

Supplementary explanation

When paper is inserted, paper is cued according to the printing method specified by paperType property.

cancelInsertion method

Cancels the paper insertion wait status.

Syntax

```
cancelInsertion();
```

ejectPaper method

Ejects the paper. The execution result of the eject method is passed to the callback function of onreceive event.

Syntax

```
ejectPaper();
```

sendData method

Sends data in the command buffer to the printer to perform printing in the print method specified in paperType property. The execution result of the sendData method is passed to the callback function of onreceive event.

Syntax

```
sendData (timeout);
```

Parameter

timeout

Specifies the timeout period before completion of printing in milliseconds.

When an invalid value is specified, the default value will be used.

❏ Receipt

Value	Description
Integer from 1 to 300000	Timeout period (in milliseconds)
undefined	Specifies the default value (60000).

❏ Slip/Endorsement/Validation

Value	Description
Integer from 60000 to 900000	Timeout period (in milliseconds)
undefined	Specifies the default value (60000).

print method

Prints image data drawn in HTML5 Canvas.
Converts the specified area of an HTML5 Canvas RGBA full-color image into raster data according to halftone property and brightness property setting. One pixel of an image corresponds to one dot of the printer. When a transparent color is contained in the image, the background of the image is assumed to be white.
Prints on a receipt without regard to the paperType property setting. The execution result of the print method is passed to the callback function of onreceive event.

Syntax

```
print(canvas,cut,mode,timeout);
```

Parameter

canvas

Value	Description
canvas	Specifies an HTML5 Canvas object.

cut

Value	Description
true	Uses the automatic cutting function.
false	Does not use the automatic cutting function.
undefined	Does not use the automatic cutting function.

mode

Value	Description
MODE_MONO	Monochrome (2 scales)
MODE_GRAY16	Multi-gradation (16 scales)
undefined	Monochrome (2 scales)

timeout

When an invalid value is specified, the default value will be used.

Value	Description
Integer from 1 to 1000000	Specifies the timeout period before completion of printing in milliseconds.
undefined	Specifies the default value (60000).

Supplementary explanation

- HTML5 Canvas data containing image data downloaded from different domains cannot be printed. A security error occurs due to the Same-Origin policy of JavaScript.

❏ Multi-gradation printing can be used in the standard mode but not in the page mode.

readMicrData method

Performs read by MICR.
Inserting a slip sheet after executing the readMicrData method starts the MICR read operation.
The execution result of the readMicrData method is passed to the callback function of onreceive event.

Syntax

```
readMicrData(ignoreerror, micrFont, timeout);
```

Parameter

ignoreerror

Value	Description
true	Continues processing by replacing an illegible character with "?".
false	Stops processing when an illegible character is encountered.
undefined	Specifies the default value (true).

micrFont

Value	Description
MICR_FONT_E13B	Specifies E13B as the read font.
MICR_FONT_CMC7	Specifies CMC7 as the read font.
undefined	Specifies the default value (E13B).

timeout

When an invalid value is specified, the default value will be used.

Value	Description
Integer from 5000 to 900000	Specifies the timeout period before completion of reading by MICR in milliseconds.
undefined	Specifies the default value (60000).

cleanMicrReader method

Cleans the MICR mechanism.
Inserting a cleaning sheet after executing the cleanMicrReader method starts cleaning the MICR mechanism.
The execution result of the cleanMicrReader method is passed to the callback function of onreceive event.

Syntax

```
cleanMicrReader (timeout);
```

Parameter

timeout

When an invalid value is specified, the default value will be used.

Value	Description
Integer from 5000 to 900000	Specifies the timeout period before completion of cleaning the MICR mechanism in milliseconds.
undefined	Specifies the default value (60000).

recover method

Recovers the printer from an error condition.
When a recoverable error occurs with the printer, just removing the error cause does not recover the printer from the error. By executing the recover method, the printer recovers from the error and becomes ready for printing.

Syntax

```
recover();
```

reset method

Resets the printer.
The printer returns to the initialized state and print data remaining in the printer buffer and any other data which is not stored in the printer (e.g., print setting) will be all lost.

Syntax

```
reset();
```

startMonitor method

Enables acquisition and update of printer status by the HybridPrinter2 object.
Executing the startMonitor method enables the HybridPrinter2 object to acquire and update the printer status at the interval specified by interval property and passes the acquired or updated sprinter status to the following events:

- onstatuschange event
- ononline event
- onoffline event
- onpoweroff event
- oncoverok event
- oncoveropen event
- onpaperok event
- onpapernearend event
- onpaperend event
- ondrawerclosed event
- ondraweropen event

Syntax

```
startMonitor();
```

stopMonitor method

Disables acquisition and update of printer status by the HybridPrinter2 object enabled by startMonitor method.

Syntax

```
stopMonitor();
```

setMessage method

Directly manipulates the command buffer for the print method specified in paperType property.

Syntax

```
setMessage(message);
```

Parameter

message

Command buffer

getMessage method

Acquires the command buffer of the print method specified in paperType property.

Syntax

```
getMessage();
```

halftone property

Specifies the halftone processing method.
Applied to monochrome (2-scale) printing by print method and addImage method.

Object type

Number

Constant	Processing method	Description
HALFTONE_DITHER (default)	Dithering	Printing graphics only
HALFTONE_ERROR_DIFFUSION	Error diffusion	Printing that includes text and graphics
HALFTONE_THRESHOLD	Threshold	Printing text only

brightness property

Specifies the brightness compensation value.
Applied to printing by print method and addImage method.

Object type

Number

Default: 1.0

When an invalid value is specified, the default value will be used.

Value	Description
0.1 to 10.0	Specifies the brightness compensation value.

force property

Specifies the forced transmission mode.
In the forced transmission mode, print commands are forcibly transmitted to the printer.

Object type

Boolean

Value	Description
true	Enabled
false (default)	Disabled

Supplementary explanation

- ❏ Use the forced transmission mode while the printer is offline.
- ❏ When it is used while the printer is online, the error code EX_BADPORT will be passed to code of onreceive event.
- ❏ The following functions are available in the forced transmission mode:
  Drawer kick (addPulse method)
  Buzzer stop (addSound method)
  Recovery from a recoverable error (recover method)
  Reset (reset method)
  Real-time command transmission (addCommand method)
- ❏ For TM-H6000V, you need to enable the Command execution during offline settings.
  Refer to TM-H6000V Utility User's Manual for details.

paperType property

Acquires the print method settings.

Object type

Number

Value	Description
PAPERTYPE_RECEIPT (default)	Receipt printing
PAPERTYPE_SLIP	Slip printing
PAPERTYPE_ENDORSE	Endorsement printing
PAPERTYPE_VALIDATION	Validation printing

Supplementary explanation

Use selectPaperType method to change the setting value.

interval property

Specifies the interval of acquisition and update of printer status enabled by startMonitor method.

Object type

Number

Default: 3000

When an invalid value is specified, the default value will be used.

Value	Description
1000 to 6000	Specifies the printer status update interval in milli-seconds.

waitTime property

Specifies the time from insertion of a paper to start of insertion operation.

Object type

Number

Default: 500

When an invalid value is specified, the default value will be used.

Value	Description
0 to 6400	Specifies the interval in milliseconds.

Supplementary explanation

Set values are rounded down to the nearest 100 milliseconds.

Example: 1 -> 0, 101 -> 100, 150 -> 100

enable40cplMode property

Enables or disables the 40cpl mode.

Object type

Boolean

Value	Description
true (default)	Enables the 40cpl mode.
false	Disables the 40cpl mode.

onreceive event

Receives the execution results of the HybridPrinter2 object.

Syntax

```
Function(data, sq);
```

Parameters of callback function

Parameter: data,sq

Object type: Object,Number

Properties of data object

Property	Description	Object type
method	Method name to return the event	String
success	Method processing result to return the event	Boolean
code	Method execution result to return the event	String
status	Printer status	String
data	MICR read result	String

success

Value	Description
true	Success
false	Failure

code

Value	Description
'SUCCESS'	Success
'EPTR_AUTOMATICAL'	Automatic recovery error occurred.
'EPTR_COVER_OPEN'	Cover open error occurred.
'EPTR_CUTTER'	Auto cutter error occurred.
'EPTR_MECHANICAL'	Mechanical error occurred.
'EPTR_REC_EMPTY'	Roll paper has run out.
'EPTR_UNRECOVERABLE'	Unrecoverable error occurred.
'SchemaError'	Print request XML contains a syntax error.
'DeviceNotFound'	Printer specified by the device ID does not exist.
'PrintSystemError'	Error occurred with the printing system.

Value	Description
'EX_BADPORT'	Error was detected with the communication port.
'ERROR_BADPORT'	Error was detected with the communication port.
'EPTR_PAPER_PULLED_OUT'	The paper was pulled out.
'EX_TIMEOUT'	Print timeout occurred.
'ERROR_DEVICE_NOT_FOUND'	The device was not found.
'ERROR_DEVICE_BUSY'	• Failed to open the port. • Port lock timeout. • The specified device is in process and the process cannot be executed.
'CANCEL'	Cancels the paper insertion wait status.
'ERROR_COVER_OPEN'	Cover open error occurred.
'ERROR_CANCEL_FAILED'	Failed to cancel the paper insertion wait status.
'ERROR_TIMEOUT'	Paper insertion wait timeout occurred.
'ERROR_PARAMETER'	A parameter error occurred.
'ERROR_NOT_SUPPORTED'	Printer does not support the requested function.
'EPTR_SCHEMAERROR'	Print request XML contains a syntax error.
'ERROR_COMMAND'	The paper type of the request to clear the insertion wait status does not match the paper type of the insertion wait status in the printer.
'ERROR_WAIT_EJECT'	Paper eject error occurred.
'EMICR_ILLEGAL_LENGTH'	Inserted slip paper is not of an appropriate length.
'EMICR_NO_MICR'	Cannot detect MICR data.
'EMICR_RECOGNITION'	Illegible MICR text was detected.
'EMICR_READ'	Error occurred during MICR read operation.
'EMICR_NOISE_DETECTED'	MICR noise error was detected.
'EMICR_COVER_OPEN'	Cover was opened during MICR read operation.
'EMICR_PAPER_JAM'	Paper jam error occurred.
'EMICR_PAPER_PULLED_OUT'	The MICR paper was pulled out.
'SYSTEM_ERROR'	A system error occurred.

status

Perform an AND operation with a constant.

Value	Description
ASB_NO_RESPONSE	No response from printer

Value	Description
ASB_PRINT_SUCCESS	Printing completed.
ASB_DRAWER_KICK	Drawer kick connector pin No.3 status = "H"
ASB_OFF_LINE	Offline status
ASB_COVER_OPEN	Cover open
ASB_PAPER_FEED	Paper is being fed by the paper feed switch.
ASB_PANEL_SWITCH	Paper feed switch is held depressed.
ASB_MECHANICAL_ERR	Mechanical error occurred.
ASB_AUTOCUTTER_ERR	Auto cutter error occurred.
ASB_UNRECOVER_ERR	Unrecoverable error occurred.
ASB_AUTORECOVER_ERR	Automatic recovery error occurred.
ASB_INSERTION_WAIT_PAPER	Paper insertion wait status in slip printing, endorsement printing, validation printing, or reading by MICR.
ASB_REMOVAL_WAIT_PAPER	Paper removal wait status
ASB_RECEIPT_NEAR_END	Roll paper has almost run out.
ASB_RECEIPT_END	Roll paper has run out.
ASB_TOF_NOPAPER	Paper is not inserted deep enough.
ASB_BOF_NOPAPER	Paper is not correctly aligned with the right edge of the paper guide.
ASB_EJD_NOPAPER	Paper has been removed
ASB_SLIP_NO_SELECT	Slip printing is not selected.
ASB_SLIP_IMPOSSIBLE_PRINT	Cannot print on the slip paper.
ASB_VALIDATION _NO_SELECT	Validation printing is not selected.
ASB_VALIDATION _IMPOSSIBLE_PRINT	Cannot print on the validation paper.

sq object properties

Property	Description	Object type
sq	Process sequence number	String

Supplementary explanation

- When a method other than readMicrData method is executed, null will be set in the data property.
- No onreceive event is notified if a communication error occurs.
  To notify the disconnection event, implement the onreconnecting event, onreconnect event, ondisconnect event.

❏ If a communication error occurs and it is deemed that no recovery will take place, notify ondisconnect event.
Since no onreceive event is notified in this case, detect print failures in ondisconnect event.

Scanner object

ondata event

Receives information ready by the barcode scanner from a barcode.

Syntax

```
Function(data);
```

Parameters of callback function

Parameter: data

Object type: Object

Properties of data object

Property	Description	Object type
input	Detected string	String

SimpleSerial object

sendCommand

Transfers a command. Response data from a device acquired by executing sendCommand is passed to the callback function of oncommandreply event.

Syntax

```
sendCommand(data);
```

Parameter

data

Value	Description
data	Specifies a command as a string.

oncommandreply event

Receives response data from a device acquired by executing sendCommand.

Syntax

```
Function(data);
```

Parameters of callback function

Parameter: data

Object type: Object

Properties of data object

Property	Description	Object type
data	Response data string	String

Supplementary explanation

- Since response data from a device may be divided into several packets, be sure to check if the entire response data has been received with the oncommandreply event.
  When the response data is divided into multiple packets, multiple oncommandreply events occurs. Wait for the succeeding data before proceeding with the process.
- When a communication error occurs, communication disconnection is not notified.
  To notify the disconnection event, implement the onreconnecting event, onreconnect event, ondisconnect event.

GermanyFiscalElement objects

operate method

Sends a JSON string to German fiscal element (TSE).
operate method execution results are returned by ongfereceive event.

Syntax

```
operate(jsonString, timeout)
```

Parameter

jsonString

Value	Description
jsonString	Sends a JSON string to German fiscal element (TSE).

timeout

Value	Description
100 to 120000	Specifies the timeout period in milliseconds.

ongfereceive event

Returns operate method execution results.

Syntax

```
Function(data)
```

Parameters of callback function

Parameter: data

Object type: Object

Properties of data object

Property	Description	Object type
success	operate execution result	Boolean
code	Error code	String
resultdata	German fiscal element (TSE) response data.	String

success

Value	Description
true	Success
false	Failure

code

Value	Description
'SUCCESS'	Success
'ERROR_PARAMETER'	A parameter error occurred.
'ERROR_DEVICE_BUSY'	Failed to open the port. Port lock timeout. The specified device is in process and the process cannot be executed.
'ERROR_DEVICE_NOT_FOUND'	The device was not found.
'ERROR_TIMEOUT'	Paper insertion wait timeout occurred.
'ERROR_AUTOMATICAL'	Automatic recovery error occurred.
'ERROR_UNRECOVERABLE'	Unrecoverable error occurred.
'EPTR_CUTTER'	Auto cutter error occurred.
'EPTR_MECHANICAL'	Mechanical error occurred.

DeviceHubTerminal object

shutdown method

Shuts down the printer.

Syntax

```
shutdown(password, callback);
```

Parameter

password

Value	Description
password	Specify the password set in EPSON TMNet WebConfig as a string.

callback

Value	Description
callback	Specifies a callback function to receive the execution result.

Parameters of callback function

Parameter: data

Object type: Object

Properties of data object

Property	Description	Object type
status	Shutdown result	String

status

Value	Description
"SUCCESS"	Success
"AUTHENTICATION_ERROR"	Password authentication error
"ACCESS_DENIED"	Shutdown was tried while it is set to "Not Allowed".
"SYSTEM_ERROR"	System error

Supplementary explanation

❏ Required to set the printer shutdown setting to "Allow" by using EPSON TMNet WebConfig. For details, refer to the Technical Reference Guide of the printer.

❏ When password authentication is set to "Required" in EPSON TMNet WebConfig shutdown setting, authenticate with the password as a specified string.

restart method

Restarts the printer.

Syntax

```
restart(password, callback);
```

Parameter

password

Value	Description
password	Specify the password set in EPSON TMNet WebConfig as a string.

callback

Value	Description
callback	Specifies a callback function to receive the execution result.

Parameters of callback function

Parameter: data

Object type: Object

Properties of data object

Property	Description	Object type
status	Execution result of restart	String

status

Value	Description
"SUCCESS"	Success
"AUTHENTICATION_ERROR"	Password authentication error
"ACCESS_DENIED"	Restart was tried while shutdown is set to "Not Allowed".
"SYSTEM_ERROR"	System error

Return value

Return value	Description	Object type
sq	Process sequence number	String

Supplementary explanation

- ❏ Required to set the printer shutdown setting to "Allow" by using EPSON TMNet WebConfig. For details, refer to the Technical Reference Guide of the printer.
- ❏ When password authentication is set to "Required" in EPSON TMNet WebConfig shutdown setting, authenticate with the password as a specified string.

CommBoxManager object

openCommBox method

Opens the communication box.
The TM-DT software and TM-i firmware create a communication box and add an application as its member.

Syntax

```
openCommBox(boxID, option, callback);
```

Parameter

boxID

Value	Description
boxID	Specifies the box ID to open.

option

Property	Description	Object type
memberID	Specifies a member ID to identify the application itself in the communication box.	String

callback

Specifies a callback function to receive the open process result.

The commBox object is passed to the first parameter and the following strings is passed to the second parameter to indicate the result.

A sequence number which is same as the return value is passed to the third parameter.

String	Description
"OK"	Communication box opened successfully.
"ALREADY_OPENED"	Communication box is already open.
"MEMBERID_ALREADY_USED"	Specified member ID is already in use.
"BOX_COUNT_OVER"	The number of created communication boxes has exceeded the upper limit.
"BOX_CLIENT_OVER"	The number of members belong to the communication box has exceeded the upper limit.
"PARAMETER_ERROR"	A parameter error occurred.
"SYSTEM_ERROR"	An unknown error occurred.

Return value

Return value	Description	Object type
sq	Process sequence number	String

Supplementary explanation

When the process of the openCommBox method fails, null will be passed to the first parameter.

closeCommBox method

Closes the communication box.
The TM-DT software and TM-i firmware delete applications from the member of communication box and the empty communication box will be deleted.

Syntax

```
closeCommBox(commBoxObj, callback);
```

Parameter

commBoxObj

Value	Description
commBoxObj	Specifies the commBox object to close.

callback

Specifies a callback function to receive the close process result.

One of the following strings is passed to the first parameter to indicate the result and a sequence number which is same as the return value is passed to the second parameter.

String	Description
"OK"	Communication box closed successfully.
"NOT_OPENED"	Communication box is not open.
"PARAMETER_ERROR"	A parameter error occurred.
"SYSTEM_ERROR"	An unknown error occurred.

Return value

Return value	Description	Object type
sq	Process sequence number	String

CommBox object

getCommHistory method

Acquires the transmission history of the communication box.

Syntax

- ❏ getCommHistory(callback);
- ❏ getCommHistory(option, callback);

Parameter

option

Value	Description
true	Acquires the entire transmission history of the communication box.
false	Acquires the transmission history of data sent to the own member ID only.

callback

Specifies the callback function which acquires the transmission history of the communication box.

One of the following strings is passed to the first parameter to indicate the result.

String	Description
"OK"	Transmission history acquired successfully.
"NOT_OPENED"	Communication box is not open.
"SYSTEM_ERROR"	An unknown error occurred.

The following historyList is passed to the second parameter.

historyList.[index]	Description	Object type
senderId	memberID of the sender	String
receiverId	memberID of the receiver	String
message	Received message	Hash

A sequence number which is same as the return value is passed to the third parameter.

Return value

Return value	Description	Object type
sq	Process sequence number	String

Supplementary explanation

false is set to an option omitted.

send method

Sends data to the communication box.

Syntax

```
send(message, memberId, callback);
```

Parameter

message

Value	Description
message	Specifies data to send.

memberId

Value	Description
memberId	Specifies the member ID of the receiver.

callback

Specifies a callback function to receive the execution result of the send method.

One of the following strings is passed to the first parameter to indicate the result.

String	Description
"OK"	Message transmission succeeded.
"NOT_OPENED"	Communication box is not open.
"MEMBER_NOT_FOUND"	Specified member cannot be found.
"SYSTEM_ERROR"	An unknown error occurred.

The number of clients which tried data transmission is passed to the second parameter and a sequence number which is same as the return value is passed to the second parameter.

Return value

Return value	Description	Object type
sq	Process sequence number	String

Supplementary explanation

When null or "" (blank character) is specified in member Id, data is sent to all the members other than the sender.

onreceive event

Notifies an application of the contents received in the communication box.

Syntax

```
Function(data);
```

Parameters of callback function

Parameter: data

Object type: Object

Properties of data object

Property	Description	Object type
senderId	The member ID of the sender	String
receiverId	The member ID of the receiver	String
message	Received data	String

Supplementary explanation

- If no member ID was specified when running openCommBox method, "" (blank character) is set in senderId.
- If data was sent to all the members of the communication box, "" (blank character) is set in receiverId.
- No onreceive event is notified if a communication error occurs.
  To notify the disconnection event, implement the onreconnecting event, onreconnect event, ondisconnect event.
- If a communication error occurs and it is deemed that no recovery will take place, notify ondisconnect event.
  Since no onreceive event is notified, detect data transmission failures in ondisconnect event.

ePOSDeviceConfiguration object

Constructor

Creates an ePOSDeviceConfiguration object.

Syntax

```
ePOSDeviceConfiguration(address);
```

Parameter

address

Value	Description
address	Specifies the IP address of the connecting printer.

getRegisterdDevices method

Acquires the device availability information registered to the printer and notifies an application of the information.

Syntax

```
getRegisterdDevices(deviceGroup, callback);
```

Parameter

deviceGroup

Value	Description
DEVICE_GROUP_ALL	Acquires all devices.

callback

Specifies a callback function to receive the execution result of the getRegisterdDevices method.

The ePOSDeviceConfiguration object is passed to the first parameter and the following value is passed to the second parameter to indicate the result:

Property	Description
deviceId	Device ID
deviceType	Device type
status	Device status

- deviceType

Value	Description
type_display	Customer display
type_keyboard	Keyboard
type_msr	MSR
type_printer	Printer
type_hybrid_printer	Hybrid printer
type_scanner	Barcode scanner
type_simple_serial	Serial communication device
type_gfe	German fiscal element (TSE)

- status

Value	Description
online	Available
offline	Unavailable

Value	Description
unknown	Unknown status

Supplementary explanation

The deviceGroup parameter is fixed to DEVICE_GROUP_ALL.

Error code list

Error Codes acquired in the Callback Parameter and Counteractions

Error code	Cause	Countermeasure
PARAM_ERROR	An invalid parameter was passed. <Example> A value outside the supported range was specified.	Check the value specified in the parameter.
ERROR_PARAMETER		
PARAMETER_ERROR		
ERROR_TIMEOUT	Failed to communicate with the devices within the specified time.	Check the timeout period. Set the timeout period to longer than the time required for printing.
DEVICE_NOT_FOUND	The specified target could not be found. <Example> The printer specified as the connection target does not exist.	Confirm that the deviceId and deviceType are correct.
DEVICE_IN_USE	The specified device is in use. <Example> The device is being used by another application.	Stop using the device from another application.
DEVICE_TYPE_INVALID	• The device object is not correct (Printer, Display). • An unsupported connection method is specified.	The device type specified in deviceId does not match the deviceType. Revise the specification of the deviceId and deviceType parameters.
DEVICE_OPEN_ERROR	Failed to connect to the device.	Check connection with the device.
DEVICE_NOT_OPEN	• The device is not connected. • Tried to control the device without calling createDevice method.	• Check communication status and connect with the device. • Check if createDevice method has been called.
DEVICE_CLOSE_ERROR	Failed to disconnect the device.	Check connection with the device.
ALREADY_OPENED	Communication box is already open.	Finish communication with the communication box.
MEMBERID_ALREADY_USED	Specified member ID is already in use.	Specify a different member ID.
MEMBER_NOT_FOUND	The specified target could not be found. <Example> The member specified as the data receiver does not exist in the communication box.	Check the member ID and communication with the device.
BOX_COUNT_OVER	The number of created communication boxes has exceeded the upper limit.	Delete an unnecessary communication box.

Error code	Cause	Countermeasure
BOX_CLIENT_OVER	The number of members belong to the communication box has exceeded the upper limit.	Delete a member who is not using the communication box.
NOT_OPENED	Communication box is not open.	Open the communication box.
SYSTEM_ERROR	An unknown error occurred.	Check for a problem with the execution environment.

Error Codes acquired in the Onreceive Event and Countermeasure

Error code

❏ Printer object

Error code	Cause	Countermeasure
EPTR_AUTOMATICAL	Automatic recovery error occurred.	Run the process after the printer has been recovered.
EPTR_BATTERY_LOW	Battery has run out.	Replace the battery or connect the AC adapter.
EPTR_COVER_OPEN	Cover is open.	Close the printer cover.
EPTR_CUTTER	Auto cutter error occurred.	Remove the error cause and power off and then on the printer.
EPTR_MECHANICAL	Mechanical error occurred.	Remove the error cause and power off and then on the printer.
EPTR_REC_EMPTY	Paper has run out.	Refill the paper.
EPTR_UNRECOVERABLE	Unrecoverable error occurred.	Power off and then on the printer. Contact the distributor or service center if the problem persists.
SchemaError	Print request XML contains a syntax error.	Check the print request XML syntax.
DeviceNotFound	• The connection type and/or IP address are not correct. • The specified device is not connected. • The specified device is not connected to the printer.	• Check if the connection type and/or IP address are correct. • Check connection with the device. • Check the registration status of device to the printer.
PrintSystemError	An error occurred with the TM-i firmware or TM-DT software.	Turn off and then turn on the power supply to the TM-i series/TM-DT series, and restart the OS.
EX_BADPORT	Forced transmission was run in the online state.	Run forced transmission in the offline state.
EX_TIMEOUT	The process exceeded the specified timeout period.	Adjust the timeout period.
EX_SPOOLER	Print data exceeding the spooler capacity was transmitted.	Check if communication with the printer is disconnected.
JobNotFound	A print job ID which did not exist was specified.	Check the specified job ID.
Printing	getPrintJobStatus method was run by specifying a print job ID which was being printed.	Run the process after printing completes.

Error code	Cause	Countermeasure
TooManyRequests	The number of print jobs has exceeded the allowable limit of the printer's firmware.	Wait for the printer to process some of the tasks, then send the jobs or data again.
RequestEntityTooLarge	Check the content of the print job, reduce the size of the data, and then resend the print job.	Print job data with the size exceeding the capacity of the printer firmware was transmitted.
JobSpooling	The print job of the specified ID is waiting at the spooler.	Run the process after printing completes.

❏ HybridPrinter2 object

Error code	Cause	Countermeasure
EPTR_AUTOMATICAL	Automatic recovery error occurred.	Run the process after the printer has been recovered.
EPTR_COVER_OPEN	Cover is open.	Close the printer cover.
EPTR_CUTTER	Auto cutter error occurred	Remove the error cause and power off and then on the printer.
EPTR_MECHANICAL	Mechanical error occurred.	Remove the error cause and power off and then on the printer.
EPTR_REC_EMPTY	Paper has run out.	Refill the paper.
EPTR_UNRECOVERABLE	Unrecoverable error occurred.	Power off and then on the printer. Contact the distributor or service center if the problem persists.
EPTR_SCHEMAERROR	Print request XML contains a syntax error.	Check the print request XML syntax.
ERROR_COVER_OPEN	Cover is open.	Close the printer cover.
ERROR_DEVICE_NOT_FOUND	• The connection type and/or IP address are not correct. • The specified device is not connected. • The specified device is not connected to the printer.	• Check if the connection type and/or IP address are correct. • Check connection with the device. • Check the registration status of device to the printer.
ERROR_BADPORT	Forced transmission was run in the online state.	Run forced transmission in the offline state.
ERROR_TIMEOUT	The process exceeded the specified timeout period.	Adjust the timeout period.

Error code	Cause	Countermeasure
ERROR_DEVICE_BUSY	• The specified device is in use. • Slip printing is in progress. • The specified device is in process.	• Stop using the device from another application. • Perform the operation after slip printing completes. • Execute the process after the process completes.
ERROR_PARAMETER	An invalid parameter was passed.	Check the value specified in the parameter.
ERROR_NOT_SUPPORTED	Function not supported by the device was specified.	Check if the function is supported by the connection device.
ERROR_COMMAND	Invalid command was passed.	Check the device status.
EMICR_ILLEGAL_LENGT H	Paper length is not appropriate.	Check the paper length.
EMICR_NO_MICR	MICR data cannot be detected.	Check the slip paper and clean the MICR mechanism if necessary.
EMICR_RECOGNITION	Illegible MICR text was detected.	Check the contents of the slip paper.
EMICR_READ	MICR read error occurred.	Remove the error cause and try again. If the error persists, restart the printer.
EMICR_NOISE_DETECT ED	Error occurred during noise measurement.	Remove the error cause and try the noisemeasurement again. If the error persists,restart the printer.
EMICR_COVER_OPEN	Cover was opened during MICR read operation.	Close the printer cover.
EMICR_PAPER_JAM	Paper jam error occurred.	Remove the jammed paper.
SYSTEM_ERROR	An unknown error occurred.	Make sure there is no problem with the runtime environment

❏ Display object

Error code	Cause	Countermeasure
EDSP_NOT_FOUND	• The connection type and/or IP address are not correct. • The specified device is not connected.	• Check if the connection type and/or IP address are correct. • Check connection with the device.
EDSP_NOT_OPEN	Device may be faulty.	Restart the printer and try again. If the problem persists, contact the distributor or service support.
EDSP_INVALID_WINDOW	An unregistered window was specified.	Check the specified window number.
EDSP_UNRECOVERABLE	Unrecoverable error occurred on the connected printer.	Power off and then on the printer. Contact the distributor or service center if the problem persists.

Error code	Cause	Countermeasure
EDSP_CUTTER	Auto cutter error occurred on the connected printer.	Remove the error cause and power off and then on the printer.
EDSP_MECHANICAL	Mechanical error occurred on the connected printer.	Remove the error cause and power off and then on the printer.
EDSP_COVER_OPEN	Cover of the connected printer is open.	Close the printer cover.
EDSP_REC_EMPTY	Connected printer has run out of paper.	Refill the paper.
EDSP_AUTOMATICAL	Automatic recovery error occurred on the connected printer.	Run the process after the printer has been recovered.
EX_BADPORT	Use of display is disabled in EPSON TMNet WebConfig.	Check the setting in EPSON TMNet WebConfig.
EX_TIMEOUT	The process exceeded the specified timeout period.	Adjust the timeout period.
EX_INVALID_VALUE	An invalid parameter was passed.	Check the value specified in the parameter.
TooManyRequests	The number of data to be displayed on a display has exceeded the allowable limit of the printer's firmware.	Wait for the printer to process some of the tasks, then send the jobs or data again.

Status

❏ Printer status

Constant (status)	Cause	Countermeasure
ASB_NO_RESPONSE	• The printer is powered off. • No connection is established with the printer.	Check the power and communication status of the printer.
ASB_BATTERY_OFFLINE	The printer is offline because the battery is low.	Replace the battery or use the AC adapter.
ASB_OFF_LINE	Offline status.	Remove a cause which forces the printer offline (e.g., the cover is open or paper has run out).
ASB_COVER_OPEN	Cover is open.	Close the printer cover.
ASB_PAPER_FEED	Paper is being fed by pressing the Paper Feed button.	Run the process after paper feed completes.
ASB_PANEL_SWITCH	Panel switch is being operated.	Run the process after the operation completes.
ASB_MECHANICAL_ERR	Mechanical error occurred.	Remove the error cause and power off and then on the printer.

Constant (status)	Cause	Countermeasure
ASB_AUTOCUTTER_ERR	Auto cutter error occurred.	Remove the error cause and power off and then on the printer.
ASB_UNRECOVER_ERR	Unrecoverable error occurred.	Power off and then on the printer. Contact the distributor or service center if the problem persists.
ASB_AUTORECOVER_ERR	Automatic recovery error occurred.	Run the process after the printer has been recovered.
ASB_RECEIPT_NEAR_END	Paper has almost run out.	Set the paper.
ASB_RECEIPT_END	Paper has run out.	Refill the paper.
ASB_BUZZER	Buzzer is sounding.	Check the buzzer sounding condition of the printer, and run the process after removing the cause for buzzer sounding.
ASB_WAIT_REMOVE_LABEL	Waiting for labels to be peeled.	Start the process after the printed label has been peeled and removed.
ASB_NO_LABEL	No labels awaiting peeling.	Run the process after printing completes.
ASB_INSERTION_WAIT_PAPER	Paper insertion wait status in slip printing, endorsement printing, validation printing, or MICR reading.	Set the paper.
ASB_REMOVAL_WAIT_PAPER	Paper removal wait status	Remove the paper.
ASB_SPOOLER_IS_STOPPED	Print data exceeding the spooler capacity was transmitted.	Check if communication with the printer is disconnected.

❏ Battery status

Constant (battery)	Cause	Countermeasure
0x31XX	AC adapter is not connected.	Check connection status of the AC adapter.
0xXX31	Running short of battery.	Charge the battery or connect the AC adapter.
0xXX30	Battery has run out.	Charge the battery or use the AC adapter.

Key code list

Constant	Code	Constant	Code
VK_BACK	0x08	VK_L	0x4C
VK_TAB	0x09	VK_M	0x4D
VK_RETURN	0x0D	VK_N	0x4E
VK_SHIFT	0x10	VK_O	0x4F
VK_CONTROL	0x11	VK_P	0x50
VK_MENU	0x12	VK_Q	0x51
VK_CAPITAL	0x14	VK_R	0x52
VK_ESCAPE	0x1B	VK_S	0x53
VK_CONVERT	0x1C	VK_T	0x54
VK_NONCONVERT	0x1D	VK_U	0x55
VK_SPACE	0x20	VK_V	0x56
VK_PRIOR	0x21	VK_W	0x57
VK_NEXT	0x22	VK_X	0x58
VK_END	0x23	VK_Y	0x59
VK_HOME	0x24	VK_Z	0x5A
VK_LEFT	0x25	VK_MULTIPLY	0x6A
VK_UP	0x26	VK_ADD	0x6B
VK_RIGHT	0x27	VK_SUBTRACT	0x6D
VK_DOWN	0x28	VK_F1	0x70
VK_INSERT	0x2D	VK_F2	0x71
VK_DELETE	0x2E	VK_F3	0x72
VK_0	0x30	VK_F4	0x73
VK_1	0x31	VK_F5	0x74
VK_2	0x32	VK_F6	0x75
VK_3	0x33	VK_F7	0x76
VK_4	0x34	VK_F8	0x77
VK_5	0x35	VK_F9	0x78
VK_6	0x36	VK_F10	0x79
VK_7	0x37	VK_F11	0x7A
VK_8	0x38	VK_F12	0x7B
VK_9	0x39	VK_OEM_1	0xBA
VK_A	0x41	VK_OEM_PLUS	0xBB
VK_B	0x42	VK_OEM_COMMA	0xBC

Constant	Code	Constant	Code
VK_C	0x43	VK_OEM_MINUS	0xBD
VK_D	0x44	VK_OEM_PERIOD	0xBE
VK_E	0x45	VK_OEM_2	0xBF
VK_F	0x46	VK_OEM_3	0xC0
VK_G	0x47	VK_OEM_4	0xDB
VK_H	0x48	VK_OEM_5	0xDC
VK_I	0x49	VK_OEM_6	0xDD
VK_J	0x4A	VK_OEM_7	0xDE
VK_K	0x4B	VK_OEM_ATTN	0xF0

Device Specifications

Provides information about restriction on the use of APIs depend on devices such as printer and peripheral device, and the parameter setting value.

	Refer to the Technical Reference Guide of each printer for more information on each printer.

List of Supported Objects

The following lists the objects supported by each printer.

	ePOSDevice object*1	Common to device objects	OtherPeripheral object	Display object*1	Keyboard object	POSKeyboard object	MSR object	Printer object*1	HybridPrinter2 object	Scanner object	SimpleSerial object	GermanyFiscalElement object	DeviceHubTerminal object	CommBoxManager object	CommBox object	ePOSDeviceConfiguration object
TM-m10	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-m30	✔	-	-	✔	-	-	-	✔	-	✔*3	-	✔*7	-	-	-	-
TM-m30II	✔	-	-	✔	-	-	-	✔	-	✔	-	✔	-	-	-	-
TM-m30II-H	✔	-	-	✔	-	-	-	✔	-	✔	-	✔	-	-	-	-
TM-m30II-NT	✔	-	-	✔	-	-	-	✔	-	✔	-	✔	-	-	-	-
TM-m30II-S	✔	-	-	✔	-	-	-	✔	-	✔	-	✔	-	-	-	-
TM-m30II-SL	✔	-	-	✔	-	-	-	✔	-	✔	-	✔	-	-	-	-
TM-m50	✔	-	-	✔	-	-	-	✔	-	✔	-	✔	-	-	-	-
TM-T20II	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-T20III	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-T82III	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-T88VI	✔	-	-	✔	-	-	-	✔	-	✔*4	-	-	-	-	-	-
TM-T88VII	✔	-	-	✔	-	-	-	✔	-	✔	-	✔	-	-	-	-
TM-L100	✔	-	-	✔	-	-	-	✔	-	✔	-	-	-	-	-	-
TM-T70	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-T70II	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-T88IV	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-T88V	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-

	ePOSDevice object*1	Common to device objects	OtherPeripheral object	Display object*1	Keyboard object	POSKeyboard object	MSR object	Printer object*1	HybridPrinter2 object	Scanner object	SimpleSerial object	GermanyFiscalElement object	DeviceHubTerminal object	CommBoxManager object	CommBox object	ePOSDeviceConfiguration object
TM-U220	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-U330	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-P20	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-P60II (Receipt)	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-P60II (Peeler)	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-P80	✔	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-H6000V	✔	-	-	-	-	-	-	✔	✔*5	-	-	-	-	-	-	-
TM-T70-i	✔	-	-	✔	✔	-	✔*6	✔	-	✔*6	✔	-	-	✔	✔	-
TM-T82II-i	✔	-	-	✔	✔	-	✔*6	✔	-	✔*6	✔	-	-	✔	✔	-
TM-T83II-i	✔	-	-	✔	✔	-	✔*6	✔	-	✔*6	✔	-	-	✔	✔	-
TM-T88V-i	✔	-	-	✔	✔	-	✔*6	✔	-	✔*6	✔	-	-	✔	✔	-
TM-T88VI-iHUB	✔	-	-	✔	✔	-	✔*6	✔	-	✔*6	✔	✔*7	-	✔	✔	-
TM-U220-i	✔	-	-	✔	✔	-	✔*6	✔	-	✔*6	✔	-	-	✔	✔	-
TM-T70II-DT	✔	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	-	✔	✔	✔	✔
TM-T70II-DT2	✔	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	-	✔	✔	✔	✔
TM-T88V-DT	✔	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	-	✔	✔	✔	✔
TM-T88VI-DT2	✔	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	-	✔	✔	✔	✔
TM-H6000IV-DT	✔	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	-	✔	✔	✔	✔
TM-T20*2	-	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-T82II*2	-	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-T83II*2	-	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-T90*2	-	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-L90*2	-	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-
TM-H6000IV*2	-	-	-	-	-	-	-	✔	-	-	-	-	-	-	-	-

*1: The availability and restriction on the use of APIs varies for each printer. Refer to List of Supported APIs.

*2: Supports control as a slave printer only.

*3: Supported by TM-m30 firmware Ver. 1.40 ESC/POS or later.

*4 Supported by TM-T88VI firmware Ver. 40.50 ESC/POS or later.

*5: The availability and restriction on the use of APIs varies for each model. Refer to HybridPrinter2 object.

*6: Does not support control by the device control program.

*7: Supported with the following versions of firmware.

- TM-m30 firmware Ver. 1.46A ESC/POS or later
- TM-m30 firmware Ver. 1.46B ESC/POS or later
- TM-T88VI-iHUB firmware Ver. 50.52A ESC/POS or later
- TM-T88VI-iHUB firmware Ver. 50.52B ESC/POS or later

List of Supported APIs

Provides list of supported APIs for each printer.
The following is an explanation of the symbol indicated in table:

- ✔: Supported.
- ✔*: Supported but has a restriction on specifying the parameter setting value.
- -: Not supported.

For information on the "✔*" restrictions, refer to Printer-specific Support Information.

ePOSDevice object

Single-function models (1)

API	TM-m10	TM-m30	TM-m30II	TM-m30II-H	TM-m30II-NT	TM-m30II-S	TM-m30II-SL	TM-m50	TM-T20II	TM-T20III	TM-T82III	TM-T88VI
Constructor	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
connect method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
disconnect method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
isConnected method	-	-	-	-	-	-	-	-	-	-	-	-
createDevice method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
deleteDevice method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
getAdmin method	-	-	-	-	-	-	-	-	-	-	-	-
getLocation method	-	-	-	-	-	-	-	-	-	-	-	-
sendOfscXml method	-	-	-	-	-	-	-	-	-	-	-	-
getCommBoxManager method	-	-	-	-	-	-	-	-	-	-	-	-
onreconnecting event	-	-	✔	✔	✔	✔	✔	✔	-	-	-	-
onreconnect event	-	-	✔	✔	✔	✔	✔	✔	-	-	-	-
ondisconnect event	-	-	✔	✔	✔	✔	✔	✔	-	-	-	-

Single-function models (2)/Mobile models

API	TM-T88VII	TM-L100	TM-T70	TM-T70II	TM-T88IV	TM-T88V	TM-U220	TM-U330	TM-P20	TM-P60II (Receipt)	TM-P60II (Peeler)	TM-P80
Constructor	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
connect method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

API	TM-T88VII	TM-L100	TM-T70	TM-T70II	TM-T88IV	TM-T88V	TM-U220	TM-U330	TM-P20	TM-P60II (Receipt)	TM-P60II (Peeler)	TM-P80
disconnect method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
isConnected method	-	-	-	-	-	-	-	-	-	-	-	-
createDevice method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
deleteDevice method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
getAdmin method	-	-	-	-	-	-	-	-	-	-	-	-
getLocation method	-	-	-	-	-	-	-	-	-	-	-	-
sendOfscXml method	-	-	-	-	-	-	-	-	-	-	-	-
getCommBoxManager method	-	-	-	-	-	-	-	-	-	-	-	-
onreconnecting event	-	-	-	-	-	-	-	-	-	-	-	-
onreconnect event	-	-	-	-	-	-	-	-	-	-	-	-
ondisconnect event	-	-	-	-	-	-	-	-	-	-	-	-

Hybrid models/TM-i Series/TM-DT Series

API	TM-H6000V	TM-T20II-i	TM-T70-i	TM-T82II-i	TM-T83II-i	TM-T88V-i	TM-T88VI-iHUB	TM-U220-i	TM-T70II-DT	TM-T70II-DT2	TM-T88V-DT	TM-T88VI-DT2	TM-H6000IV-DT
Constructor	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
connect method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
disconnect method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
isConnected method	-	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
createDevice method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
deleteDevice method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
getAdmin method	-	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
getLocation method	-	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
sendOfscXml method	-	-	-	-	-	-	-	-	-	-	-	-	-
getCommBoxManager method	-	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onreconnecting event	-	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onreconnect event	-	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
ondisconnect event	-	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

Slave Printers

API	TM-T20	TM-T82II	TM-T83II	TM-T90	TM-L90	TM-H6000IV
Constructor	-	-	-	-	-	-
connect method	-	-	-	-	-	-
disconnect method	-	-	-	-	-	-
isConnected method	-	-	-	-	-	-
createDevice method	-	-	-	-	-	-
deleteDevice method	-	-	-	-	-	-
getAdmin method	-	-	-	-	-	-
getLocation method	-	-	-	-	-	-
sendOfscXml method	-	-	-	-	-	-
getCommBoxManager method	-	-	-	-	-	-
onreconnecting event	-	-	-	-	-	-
onreconnect event	-	-	-	-	-	-
ondisconnect event	-	-	-	-	-	-

Display object

Single-function models (1)

API	TM-m10	TM-m30	TM-m30II	TM-m30II-H	TM-m30II-NT	TM-m30II-S	TM-m30II-SL	TM-m50	TM-T20II	TM-T20III	TM-T82III	TM-T88VI
createWindow method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
destroyWindow method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
setCurrentWindow method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
clearWindow method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
addCreateScreen method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
addCreateScreenCustom method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
createTextArea method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
destroyTextArea method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
setCurrentTextArea method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
clearTextArea method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
setCursorPosition method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
moveCursorPosition method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
setCursorType method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
addText method	-	✔*	✔*	✔	✔	✔	✔	✔*	-	-	-	✔*
addReverseText method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
addMarquee method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
setBlink method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
setBrightness method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
addBackgroundColor method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
addStartSlideShow method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
addStopSlideShow method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
addDownloadImage method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
addRegisterDownloadImage method	-	-	-	✔	✔	✔	✔	-	-	-	-	-

API	TM-m10	TM-m30	TM-m30II	TM-m30II-H	TM-m30II-NT	TM-m30II-S	TM-m30II-SL	TM-m50	TM-T20II	TM-T20III	TM-T82III	TM-T88VI
addNVImage method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
addClearImage method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
addSymbol method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
addClearSymbol method	-	-	-	✔	✔	✔	✔	-	-	-	-	-
showClock method	-	-	-	-	-	-	-	-	-	-	-	✔
addCommand method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
send method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
reset method	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔
onreceive event	-	✔	✔	✔	✔	✔	✔	✔	-	-	-	✔

Single-function models (2)/Mobile models

API	TM-T88VII	TM-L100	TM-T70	TM-T70II	TM-T88IV	TM-T88V	TM-U220	TM-U330	TM-P20	TM-P60II (Receipt)	TM-P60II (Peeler)	TM-P80
createWindow method	✔	✔	-	-	-	-	-	-	-	-	-	-
destroyWindow method	✔	✔	-	-	-	-	-	-	-	-	-	-
setCurrentWindow method	✔	✔	-	-	-	-	-	-	-	-	-	-
clearWindow method	✔	✔	-	-	-	-	-	-	-	-	-	-
addCreateScreen method	✔	✔	-	-	-	-	-	-	-	-	-	-
addCreateScreenCustom method	✔	✔	-	-	-	-	-	-	-	-	-	-
createTextArea method	✔	✔	-	-	-	-	-	-	-	-	-	-
destroyTextArea method	✔	✔	-	-	-	-	-	-	-	-	-	-
setCurrentTextArea method	✔	✔	-	-	-	-	-	-	-	-	-	-
clearTextArea method	✔	✔	-	-	-	-	-	-	-	-	-	-
setCursorPosition method	✔	✔	-	-	-	-	-	-	-	-	-	-
moveCursorPosition method	✔	✔	-	-	-	-	-	-	-	-	-	-
setCursorType method	✔	✔	-	-	-	-	-	-	-	-	-	-
addText method	✔	✔	-	-	-	-	-	-	-	-	-	-
addReverseText method	✔	✔	-	-	-	-	-	-	-	-	-	-

API	TM-T88VII	TM-L100	TM-T70	TM-T70II	TM-T88IV	TM-T88V	TM-U220	TM-U330	TM-P20	TM-P60II (Receipt)	TM-P60II (Peeler)	TM-P80
addMarquee method	✔	✔	-	-	-	-	-	-	-	-	-	-
setBlink method	✔	✔	-	-	-	-	-	-	-	-	-	-
setBrightness method	✔	✔	-	-	-	-	-	-	-	-	-	-
addBackgroundColor method	✔	✔	-	-	-	-	-	-	-	-	-	-
addStartSlideShow method	✔	✔	-	-	-	-	-	-	-	-	-	-
addStopSlideShow method	✔	✔	-	-	-	-	-	-	-	-	-	-
addDownloadImage method	✔	✔	-	-	-	-	-	-	-	-	-	-
addRegisterDownloadIm-age method	✔	✔	-	-	-	-	-	-	-	-	-	-
addNVImage method	✔	✔	-	-	-	-	-	-	-	-	-	-
addClearImage method	✔	✔	-	-	-	-	-	-	-	-	-	-
addSymbol method	✔	✔	-	-	-	-	-	-	-	-	-	-
addClearSymbol method	✔	✔	-	-	-	-	-	-	-	-	-	-
showClock method	✔	✔	-	-	-	-	-	-	-	-	-	-
addCommand method	✔	✔	-	-	-	-	-	-	-	-	-	-
send method	✔	✔	-	-	-	-	-	-	-	-	-	-
reset method	✔	✔	-	-	-	-	-	-	-	-	-	-
onreceive event	✔	✔	-	-	-	-	-	-	-	-	-	-

Hybrid models/TM-i Series/TM-DT Series

API	TM-H6000V	TM-T20II-i	TM-T70-i	TM-T82II-i	TM-T83II-i	TM-T88V-i	TM-T88VI-iHUB	TM-U220-i	TM-T70II-DT	TM-T70II-DT2	TM-T88V-DT	TM-T88VI-DT2	TM-H6000IV-DT
createWindow method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
destroyWindow method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
setCurrentWindow method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
clearWindow method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addCreateScreen method	-	-	-	-	-	-	-	-	-	✔	-	✔	-

API	TM-H6000V	TM-T20II-i	TM-T70-i	TM-T82II-i	TM-T83II-i	TM-T88V-i	TM-T88VI-iHUB	TM-U220-i	TM-T70II-DT	TM-T70II-DT2	TM-T88V-DT	TM-T88VI-DT2	TM-H6000IV-DT
addCreateScreenCustom method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
createTextArea method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
destroyTextArea method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
setCurrentTextArea method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
clearTextArea method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
setCursorPosition method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
moveCursorPosition method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
setCursorType method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addText method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addReverseText method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addMarquee method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
setBlink method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
setBrightness method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addBackgroundColor method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
addStartSlideShow method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
addStopSlideShow method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
addDownloadImage method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
addRegisterDownloadIm-age method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
addNVImage method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
addClearImage method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
addSymbol method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
addClearSymbol method	-	-	-	-	-	-	-	-	-	✔	-	✔	-
showClock method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addCommand method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
send method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
reset method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

API	TM-H6000V	TM-T20II-i	TM-T70-i	TM-T82II-i	TM-T83II-i	TM-T88V-i	TM-T88VI-iHUB	TM-U220-i	TM-T70II-DT	TM-T70II-DT2	TM-T88V-DT	TM-T88VI-DT2	TM-H6000IV-DT
onreceive event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

Slave Printers

API	TM-T20	TM-T82II	TM-T83II	TM-T90	TM-L90	TM-H6000IV
createWindow method	-	-	-	-	-	-
destroyWindow method	-	-	-	-	-	-
setCurrentWindow method	-	-	-	-	-	-
clearWindow method	-	-	-	-	-	-
addCreateScreen method	-	-	-	-	-	-
addCreateScreenCustom method	-	-	-	-	-	-
createTextArea method	-	-	-	-	-	-
destroyTextArea method	-	-	-	-	-	-
setCurrentTextArea method	-	-	-	-	-	-
clearTextArea method	-	-	-	-	-	-
setCursorPosition method	-	-	-	-	-	-
moveCursorPosition method	-	-	-	-	-	-
setCursorType method	-	-	-	-	-	-
addText method	-	-	-	-	-	-
addReverseText method	-	-	-	-	-	-
addMarquee method	-	-	-	-	-	-
setBlink method	-	-	-	-	-	-
setBrightness method	-	-	-	-	-	-
addBackgroundColor method	-	-	-	-	-	-
addStartSlideShow method	-	-	-	-	-	-
addStopSlideShow method	-	-	-	-	-	-

API	TM-T20	TM-T82II	TM-T83II	TM-T90	TM-L90	TM-H6000IV
addDownloadImage method	-	-	-	-	-	-
addRegisterDownloadImage method	-	-	-	-	-	-
addNVImage method	-	-	-	-	-	-
addClearImage method	-	-	-	-	-	-
addSymbol method	-	-	-	-	-	-
addClearSymbol method	-	-	-	-	-	-
showClock method	-	-	-	-	-	-
addCommand method	-	-	-	-	-	-
send method	-	-	-	-	-	-
reset method	-	-	-	-	-	-
onreceive event	-	-	-	-	-	-

Printer object

Single-function models (1)

API	TM-m10	TM-m30	TM-m30II	TM-m30II-H	TM-m30II-NT	TM-m30II-S	TM-m30II-SL	TM-m50	TM-T20II	TM-T20III	TM-T82III	TM-T88VI
addTextAlign method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextLineSpace method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextRotate method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addText method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextLang method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addTextFont method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addTextSmooth method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextDouble method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextSize method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextStyle method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addTextPosition method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextVPosition method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addFeedUnit method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addFeedLine method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addFeedPosition method	-	-	-	-	-	-	-	-	-	-	-	-
addFeed method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addImage method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addLogo method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addBarcode method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addSymbol method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addHLine method	-	-	-	-	-	-	-	-	-	-	-	-
addVLineBegin method	-	-	-	-	-	-	-	-	-	-	-	-
addVLineEnd method	-	-	-	-	-	-	-	-	-	-	-	-
addPageBegin method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addPageEnd method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addPageArea method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addPageDirection method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addPagePosition method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addPageLine method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	-	-	-	✔*

API	TM-m10	TM-m30	TM-m30II	TM-m30II-H	TM-m30II-NT	TM-m30II-S	TM-m30II-SL	TM-m50	TM-T20II	TM-T20III	TM-T82III	TM-T88VI
addPageRectangle method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	-	-	-	✔*
addRotateBegin method	-	-	✔	✔	✔	✔	✔	✔	-	-	-	-
addRotateEnd method	-	-	✔	✔	✔	✔	✔	✔	-	-	-	-
addCut method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addPulse method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addSound method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addLayout method	-	-	-	-	-	-	-	-	-	-	-	-
recover method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addRecovery method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
reset method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addReset method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addCommand method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
send method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
print method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔
getPrintJobStatus method	-	-	-	-	-	-	-	-	-	-	-	✔
startMonitor method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
stopMonitor method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
halftone property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
brightness property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
force property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
timeout property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
interval property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
drawerOpenLevel property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
message property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onreceive event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onstatuschange event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onbatterystatuschange event	-	-	-	-	-	-	-	-	-	-	-	-
ononline event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onoffline event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpoweroff event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
oncoverok event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

API	TM-m10	TM-m30	TM-m30II	TM-m30II-H	TM-m30II-NT	TM-m30II-S	TM-m30II-SL	TM-m50	TM-T20II	TM-T20III	TM-T82III	TM-T88VI
oncoveropen event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpaperok event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpapernearend event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpaperend event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
ondrawerclosed event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
ondraweropen event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onbatteryok event	-	-	-	-	-	-	-	-	-	-	-	-
onbatterylow event	-	-	-	-	-	-	-	-	-	-	-	-

Single-function models (2)/Mobile models

API	TM-T88VII	TM-L100	TM-T70	TM-T70II	TM-T88IV	TM-T88V	TM-U220	TM-U330	TM-P20	TM-P60II (Receipt)	TM-P60II (Peeler)	TM-P80
addTextAlign method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextLineSpace method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextRotate method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addText method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextLang method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addTextFont method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔	✔*	✔*	✔*
addTextSmooth method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextDouble method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextSize method	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔
addTextStyle method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addTextPosition method	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔
addTextVPosition method	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔
addFeedUnit method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addFeedLine method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addFeedPosition method	-	✔*	-	-	-	-	-	✔*	✔*	-	✔	✔*
addFeed method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addImage method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addLogo method	✔	✔	✔	✔	✔	✔	✔*	✔	✔	✔	✔	✔
addBarcode method	✔*	✔*	✔*	✔*	✔*	✔*	-	-	✔*	✔*	✔*	✔*

API	TM-T88VII	TM-L100	TM-T70	TM-T70II	TM-T88IV	TM-T88V	TM-U220	TM-U330	TM-P20	TM-P60II (Receipt)	TM-P60II (Peeler)	TM-P80
addSymbol method	✔*	✔*	✔*	✔*	✔*	✔*	-	-	✔*	✔*	✔*	✔*
addHLine method	-	-	-	-	-	-	-	-	-	-	-	-
addVLineBegin method	-	-	-	-	-	-	-	-	-	-	-	-
addVLineEnd method	-	-	-	-	-	-	-	-	-	-	-	-
addPageBegin method	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔
addPageEnd method	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔
addPageArea method	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔
addPageDirection method	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔
addPagePosition method	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔
addPageLine method	✔*	✔*	-	-	-	-	-	-	✔*	✔*	✔*	✔*
addPageRectangle method	✔*	✔*	-	-	-	-	-	-	✔*	✔*	✔*	✔*
addRotateBegin method	✔	✔	-	-	-	-	-	-	-	-	-	-
addRotateEnd method	✔	✔	-	-	-	-	-	-	-	-	-	-
addCut method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addPulse method	✔	✔	✔	✔	✔	✔	✔	✔	-	-	-	-
addSound method	✔*	✔*	-	✔*	-	✔*	-	✔*	✔*	✔*	✔*	✔*
addLayout method	-	-	-	-	-	-	-	-	✔*	-	✔	✔*
recover method	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔
addRecovery method	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔
reset method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addReset method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addCommand method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
send method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
print method	✔	✔	✔*	✔*	✔	✔	✔*	✔*	✔*	✔*	✔*	✔*
getPrintJobStatus method	✔	✔	-	-	-	-	-	-	-	-	-	-
startMonitor method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
stopMonitor method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
halftone property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
brightness property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
force property	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔
timeout property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

API	TM-T88VII	TM-L100	TM-T70	TM-T70II	TM-T88IV	TM-T88V	TM-U220	TM-U330	TM-P20	TM-P60II (Receipt)	TM-P60II (Peeler)	TM-P80
interval property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
drawerOpenLevel property	✔	✔	✔	✔	✔	✔	✔	✔	-	-	-	-
message property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onreceive event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onstatuschange event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onbatterystatuschange event	-	-	-	-	-	-	-	-	✔	✔	✔	✔
ononline event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onoffline event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpoweroff event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
oncoverok event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
oncoveropen event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpaperok event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpapernearend event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpaperend event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
ondrawerclosed event	✔	✔	✔	✔	✔	✔	✔	✔	-	-	-	-
ondraweropen event	✔	✔	✔	✔	✔	✔	✔	✔	-	-	-	-
onbatteryok event	-	-	-	-	-	-	-	-	✔	✔	✔	✔
onbatterylow event	-	-	-	-	-	-	-	-	✔	✔	✔	✔

Hybrid models/TM-i Series/TM-DT Series

API	TM-H6000V	TM-T20II-i	TM-T70-i	TM-T82II-i	TM-T83II-i	TM-T88V-i	TM-T88VI-iHUB	TM-U220-i	TM-T70II-DT	TM-T70II-DT2	TM-T88V-DT	TM-T88VI-DT2	TM-H6000IV-DT
addTextAlign method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextLineSpace method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextRotate method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addText method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextLang method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addTextFont method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addTextSmooth method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

API	TM-H6000V	TM-T20II-i	TM-T70-i	TM-T82II-i	TM-T83II-i	TM-T88V-i	TM-T88VI-iHUB	TM-U220-i	TM-T70II-DT	TM-T70II-DT2	TM-T88V-DT	TM-T88VI-DT2	TM-H6000IV-DT
addTextDouble method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addTextSize method	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔
addTextStyle method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addTextPosition method	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔
addTextVPosition method	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔
addFeedUnit method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addFeedLine method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addFeedPosition method	-	-	-	-	-	-	-	-	-	-	-	-	-
addFeed method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addImage method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addLogo method	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔
addBarcode method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	-	✔*	✔*	✔*	✔*	✔*
addSymbol method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	-	✔*	✔*	✔*	✔*	✔*
addHLine method	-	-	-	-	-	-	-	-	-	-	-	-	-
addVLineBegin method	-	-	-	-	-	-	-	-	-	-	-	-	-
addVLineEnd method	-	-	-	-	-	-	-	-	-	-	-	-	-
addPageBegin method	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔
addPageEnd method	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔
addPageArea method	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔
addPageDirection method	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔
addPagePosition method	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔
addPageLine method	✔*	-	-	-	-	-	✔*	-	-	-	-	-	-
addPageRectangle method	✔*	-	-	-	-	-	✔*	-	-	-	-	-	-
addRotateBegin method	-	-	-	-	-	-	-	-	-	-	-	-	-
addRotateEnd method	-	-	-	-	-	-	-	-	-	-	-	-	-
addCut method	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*	✔*
addPulse method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addSound method	-	✔*	-	✔*	✔*	✔*	✔*	-	✔*	✔*	✔*	✔*	-
addLayout method	-	-	-	-	-	-	-	-	-	-	-	-	-
recover method	-	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔
addRecovery method	-	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔

API	TM-H6000V	TM-T20II-i	TM-T70-i	TM-T82II-i	TM-T83II-i	TM-T88V-i	TM-T88VI-iHUB	TM-U220-i	TM-T70II-DT	TM-T70II-DT2	TM-T88V-DT	TM-T88VI-DT2	TM-H6000IV-DT
reset method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addReset method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
addCommand method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
send method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
print method	✔	✔*	✔*	✔*	✔*	✔	✔	✔*	✔	✔	✔	✔	✔
getPrintJobStatus method	-	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
startMonitor method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
stopMonitor method	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
halftone property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
brightness property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
force property	✔	✔	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔
timeout property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
interval property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
drawerOpenLevel property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
message property	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onreceive event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onstatuschange event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onbatterystatuschange event	-	-	-	-	-	-	-	-	-	-	-	-	-
ononline event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onoffline event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpoweroff event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
oncoverok event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
oncoveropen event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpaperok event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpapernearend event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onpaperend event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
ondrawerclosed event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
ondraweropen event	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
onbatteryok event	-	-	-	-	-	-	-	-	-	-	-	-	-
onbatterylow event	-	-	-	-	-	-	-	-	-	-	-	-	-

Slave Printers

API	TM-T20	TM-T82II	TM-T83II	TM-T90	TM-L90	TM-H6000IV
addTextAlign method	✔	✔	✔	✔	✔	✔
addTextLineSpace method	✔	✔	✔	✔	✔	✔
addTextRotate method	✔	✔	✔	✔	✔	✔
addText method	✔	✔	✔	✔	✔	✔
addTextLang method	✔*	✔*	✔*	✔*	✔*	✔*
addTextFont method	✔*	✔*	✔*	✔*	✔*	✔*
addTextSmooth method	✔	✔	✔	✔	✔	✔
addTextDouble method	✔	✔	✔	✔	✔	✔
addTextSize method	✔	✔	✔	✔	✔	✔
addTextStyle method	✔*	✔*	✔*	✔*	✔*	✔*
addTextPosition method	✔	✔	✔	✔	✔	✔
addTextVPosition method	✔	✔	✔	✔	✔	✔
addFeedUnit method	✔	✔	✔	✔	✔	✔
addFeedLine method	✔	✔	✔	✔	✔	✔
addFeedPosition method	-	-	-	-	✔	-
addFeed method	✔	✔	✔	✔	✔	✔
addImage method	✔*	✔*	✔*	✔*	✔*	✔*
addLogo method	✔	✔	✔	✔	✔	✔
addBarcode method	✔*	✔*	✔*	✔*	✔*	✔*
addSymbol method	✔*	✔*	✔*	✔*	✔*	✔*
addHLine method	-	-	-	-	-	-
addVLineBegin method	-	-	-	-	-	-
addVLineEnd method	-	-	-	-	-	-
addPageBegin method	✔	✔	✔	✔	✔	✔
addPageEnd method	✔	✔	✔	✔	✔	✔
addPageArea method	✔	✔	✔	✔	✔	✔
addPageDirection method	✔	✔	✔	✔	✔	✔
addPagePosition method	✔	✔	✔	✔	✔	✔
addPageLine method	-	-	-	-	-	-
addPageRectangle method	-	-	-	-	-	-
addRotateBegin method	-	-	-	-	-	-

API	TM-T20	TM-T82II	TM-T83II	TM-T90	TM-L90	TM-H6000IV
addRotateEnd method	-	-	-	-	-	-
addCut method	✔*	✔*	✔*	✔*	✔*	✔*
addPulse method	✔	✔	✔	✔	✔	✔
addSound method	✔*	✔*	✔*	-	-	-
addLayout method	-	-	-	-	-	-
recover method	✔	✔	✔	✔	✔	✔
addRecovery method	✔	✔	✔	✔	✔	✔
reset method	✔	✔	✔	✔	✔	✔
addReset method	✔	✔	✔	✔	✔	✔
addCommand method	✔	✔	✔	✔	✔	✔
send method	✔	✔	✔	✔	✔	✔
print method	✔*	✔*	✔*	✔	✔	✔
getPrintJobStatus method	-	-	-	-	-	-
startMonitor method	✔	✔	✔	✔	✔	✔
stopMonitor method	✔	✔	✔	✔	✔	✔
halftone property	✔	✔	✔	✔	✔	✔
brightness property	✔	✔	✔	✔	✔	✔
force property	✔	✔	✔	✔	✔	✔
timeout property	✔	✔	✔	✔	✔	✔
interval property	✔	✔	✔	✔	✔	✔
drawerOpenLevel property	✔	✔	✔	✔	✔	✔
message property	✔	✔	✔	✔	✔	✔
onreceive event	✔	✔	✔	✔	✔	✔
onstatuschange event	✔	✔	✔	✔	✔	✔
onbatterystatuschange event	-	-	-	-	-	-
ononline event	✔	✔	✔	✔	✔	✔
onoffline event	✔	✔	✔	✔	✔	✔
onpoweroff event	✔	✔	✔	✔	✔	✔
oncoverok event	✔	✔	✔	✔	✔	✔
oncoveropen event	✔	✔	✔	✔	✔	✔
onpaperok event	✔	✔	✔	✔	✔	✔
onpapernearend event	✔	✔	✔	✔	✔	✔

API	TM-T20	TM-T82II	TM-T83II	TM-T90	TM-L90	TM-H6000IV
onpaperend event	✔	✔	✔	✔	✔	✔
ondrawerclosed event	✔	✔	✔	✔	✔	✔
ondraweropen event	✔	✔	✔	✔	✔	✔
onbatteryok event	-	-	-	-	-	-
onbatterylow event	-	-	-	-	-	-

Printer-specific Support Information

TM-m10

Printer Specifications

Item	Specification
Amount of initial feed	30 dots
Initial page mode area	420 x 2400 dots
Maximum page mode area	420 x 2400 dots
Baseline of Font A	21 dots from the top of the character
Baseline of Font B	21 dots from the top of the character
Baseline of Font C	16 dots from the top of the character

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_C

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-m30

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area		420 x 2400 dots	576 x 2400 dots
Maximum page mode area		420 x 2400 dots	576 x 2400 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B	ANK	21 dots from the top of the character	
	Chinese characters	21 dots from the top of the character	
	Hangul character	15 dots from the top of the character	
Baseline of Font C		16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_GFE
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_C
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-m30II

Printer Specifications

Item	58mm Specification	80mm Specification
Amount of initial feed	30 dots	
Initial page mode area	420 x 4800 dots	576 x 4800 dots
Maximum page mode area	420 x 4800 dots	576 x 4800 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	21 dots from the top of the character	
Baseline of Font C	16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_GFE
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "mul" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th • mul
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_C
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_CODE128_AUTO • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-m30II-H

Printer Specifications

Item	58mm Specification	80mm Specification
Amount of initial feed	30 dots	
Initial page mode area	420 x 4800 dots	576 x 4800 dots
Maximum page mode area	420 x 4800 dots	576 x 4800 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	21 dots from the top of the character	
Baseline of Font C	16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_GFE
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th • mul
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_C

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_CODE128_AUTO • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-m30II-NT

Printer Specifications

Item	58mm Specification	80mm Specification
Amount of initial feed	30 dots	
Initial page mode area	420 x 4800 dots	576 x 4800 dots
Maximum page mode area	420 x 4800 dots	576 x 4800 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	21 dots from the top of the character	
Baseline of Font C	16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_GFE
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th • mul
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_C

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_CODE128_AUTO • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-m30II-S

Printer Specifications

Item	58mm Specification	80mm Specification
Amount of initial feed	30 dots	
Initial page mode area	420 x 4800 dots	576 x 4800 dots
Maximum page mode area	420 x 4800 dots	576 x 4800 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	21 dots from the top of the character	
Baseline of Font C	16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_GFE
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • mul
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_C

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_CODE128_AUTO • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-m30II-SL

Printer Specifications

Item	58mm Specification	80mm Specification
Amount of initial feed	30 dots	
Initial page mode area	420 x 4800 dots	576 x 4800 dots
Maximum page mode area	420 x 4800 dots	576 x 4800 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	21 dots from the top of the character	
Baseline of Font C	16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_GFE
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • mul
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_C

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_CODE128_AUTO • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-m50

Printer Specifications

Item	58mm Specification	80mm Specification
Amount of initial feed	30 dots	
Initial page mode area	360 x 4800 dots	512 x 4800 dots
Maximum page mode area	360 x 4800 dots	512 x 4800 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_GFE
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "mul" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th • mul
addTextFont method	font	• FONT_A (default) • FONT_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_CODE128_AUTO • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T20II

Printer Specifications

Item	58mm Specification	80mm Specification
Amount of initial feed	30 dots	
Initial page mode area	420 x 831 dots	576 x 831 dots
Maximum page mode area	420 x 1662 dots	576 x 1662 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es
addTextFont method	font	• FONT_A (default) • FONT_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined

API	Parameter	Specificable Setting Value
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined

API	Parameter	Specificable Setting Value
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T20III

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area	Standerd mode	420 x 1662 dots	576 x 1662 dots
	42 column mode	378 x 1662 dots	546 x 1662 dots
Maximum page mode area	Standerd mode	464 x 3324 dots	639 x 3324 dots
	42 column mode	639 x 3324 dots	
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B		16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es
addTextFont method	font	• FONT_A (default) • FONT_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined

API	Parameter	Specificable Setting Value
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined

API	Parameter	Specificable Setting Value
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T82III

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area	Standerd mode	420 x 1662 dots	576 x 1662 dots
	42 column mode	378 x 1662 dots	546 x 1662 dots
Maximum page mode area	Standerd mode	464 x 3324 dots	639 x 3324 dots
	42 column mode	639 x 3324 dots	
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B		16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hans • zh-cn • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined

API	Parameter	Specificable Setting Value
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T88VI

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area		360 x 831 dots	512 x 831 dots
Maximum page mode area		360 x 1662 dots	512 x 1662 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B	ANK	16 dots from the top of the character	
	Chinese characters	15 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined

TM-T88VII

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area	Standerd mode	360 x 1662 dots	512 x 1662 dots
	48 column mode	360 x 1662 dots	480 x 1662 dots
Maximum page mode area	Standerd mode	360 x 4800 dots	512 x 4800 dots
	48 column mode	360 x 4800 dots	480 x 4800 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B		16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_GFE
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th • mul
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_CODE128_AUTO • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined

TM-L100

Printer Specifications

Item	40mm Specification	58mm Specification	80mm Specification (42 column)	80mm Specification (48 column)
Amount of initial feed	30 dots			
Initial page mode area	280 x 4800 dots	400 x 4800 dots	552 x 4800 dots	576 x 4800 dots
Maximum page mode area	280 x 4800 dots	420 x 4800 dots	576 x 4800 dots	
Baseline of Font A	21 dots from the top of the character			
Baseline of Font B	21 dots from the top of the character			

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • mul
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addFeedPosition method	pos	• FEED_CUTTING
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_CODE128_AUTO • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined

Reference information

Restrictions when the waiting for paper removal function is enabled

The following controls may stop when the printer is waiting for paper removal (ERROR_WAIT_EJECT).

❏ Ringing control of built-in buzzer

❏ Ringing control of optional external buzzer

❏ Control of customer display

❏ Control of barcode scanner

Recovered when the paper has been removed and the printer is no longer waiting for paper removal.
The built-in buzzer and optional external buzzer can be caused to ring while the printer is waiting for paper removal by making the settings for ringing while waiting for paper removal in the software settings of the printer.
For details, refer to the Technical Reference Guide.

TM-T70

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area	ANK model	416 x 1662 dots	512 x 831 dots
	Multiple languages model	416 x 1662 dots	576 x 1662 dots
Maximum page mode area	ANK model	416 x 1662 dots	512 x 1662 dots
	Multiple languages model	576 x 1662 dots	
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B		16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hans • zh-cn • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T70II

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area	ANK model	416 x 1662 dots	512 x 1662 dots
	Multiple languages model	416 x 1662 dots	576 x 1662 dots
Maximum page mode area	ANK model	416 x 1662 dots	512 x 1662 dots
	Multiple languages model	576 x 1662 dots	
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B		16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined

API	Parameter	Specificable Setting Value
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T88IV

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area	Monochrome printing	360 x 831 dots	512 x 831 dots
	Two-color printing	360 x 415 dots	512 x 415 dots
Maximum page mode area	Monochrome printing	360 x 1662 dots	512 x 1662 dots
	Two-color printing	360 x 831 dots	512 x 831 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B		16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • COLOR_2 • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • COLOR_2 • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined

TM-T88V

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area		360 x 831 dots	512 x 831 dots
Maximum page mode area		360 x 1662 dots	512 x 1662 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B	ANK	16 dots from the top of the character	
	Chinese characters	15 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined

TM-U220

Printer Specifications

Item	76mm Specification	69.5mm Specification	57.5mm Specification
Amount of initial feed	12 dots		

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • COLOR_2 • undefined

API	Parameter	Specificable Setting Value
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • COLOR_2 • undefined
	mode	• MODE_MONO • undefined
addLogo method	key1	• Integer from 0 to 255
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-U330

Printer Specifications

Item	76mm Specification	69.5mm Specification	57.5mm Specification
Amount of initial feed	12 dots		

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hans • zh-cn
addTextFont method	font	• FONT_A (default) • FONT_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • COLOR_2 • undefined
addFeedPosition method	pos	• FEED_CUTTING

API	Parameter	Specificable Setting Value
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • COLOR_2 • undefined
	mode	• MODE_MONO • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATERN_0
	repeat	• 0 • 1 to 255 • undefined
	cycle	• 1000 to 25500
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-P20

Printer Specifications

Item	Specification
Amount of initial feed	30 dots
Initial page mode area	384 x 2400 dots
Maximum page mode area	384 x 2400 dots
Baseline of Font A	21 dots from the top of the character
Baseline of Font B	21 dots from the top of the character
Baseline of Font C	16 dots from the top of the character
Baseline of Font D	21 dots from the top of the character
Baseline of Font E	15 dots from the top of the character

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addFeedPosition method	pos	• FEED_CUTTING • FEED_CURRENT_TOF • FEED_NEXT_TOF
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C • FONT_D • FONT_E
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATERN_1 • PATERN_2 • PATERN_3 • PATERN_4 • PATERN_5 • PATERN_6 • PATERN_7 • PATERN_8 • PATERN_9 • PATERN_10 • undefined
	repeat	• 1 to 255 • undefined
	cycle	• 1000 to 25500
addLayout method	type	• LAYOUT_RECEIPT • LAYOUT_RECEIPT_BM
	width	• 290 to 800
	height	• Receipt • Receipt (with black mark)
	margin_top	• Receipt • Receipt (with black mark)
	margin_bottom	• Receipt • Receipt (with black mark)
	offset_cut	• Receipt • Receipt (with black mark)
	offset_label	• Receipt • Receipt (with black mark)

API	Parameter	Specificable Setting Value
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-P60II (Receipt)

Printer Specifications

Item	Receipt Specification	Die-cut Label Specification
Amount of initial feed	30 dots	
Initial page mode area	432 x 1624 dots	400 x 1624 dots
Maximum page mode area	432 x 1624 dots	400 x 1624 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	16 dots from the top of the character	
Baseline of Font C	15 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_C

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATERN_1 • PATERN_2 • PATERN_3 • PATERN_4 • PATERN_5 • PATERN_6 • PATERN_7 • PATERN_8 • PATERN_9 • PATERN_10 • undefined
	repeat	• 1 to 255 • undefined
	cycle	• 1000 to 25500
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-P60II (Peeler)

Printer Specifications

Item	Receipt Specification	Die-cut Label Specification
Amount of initial feed	30 dots	
Initial page mode area	432 x 1624 dots	400 x 1624 dots
Maximum page mode area	432 x 1624 dots	400 x 1624 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	16 dots from the top of the character	
Baseline of Font C	15 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_C

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATERN_1 • PATERN_2 • PATERN_3 • PATERN_4 • PATERN_5 • PATERN_6 • PATERN_7 • PATERN_8 • PATERN_9 • PATERN_10 • undefined
	repeat	• 1 to 255 • undefined
	cycle	• 1000 to 25500
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-P80

Printer Specifications

Item	Specification
Amount of initial feed	30 dots
Initial page mode area	576 x 1662 dots
Maximum page mode area	576 x 1662 dots
Baseline of Font A	21 dots from the top of the character
Baseline of Font B	21 dots from the top of the character
Baseline of Font C	15 dots from the top of the character

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_PRINTER
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined

API	Parameter	Specificable Setting Value
addFeedPosition method	pos	• FEED_CUTTING • FEED_CURRENT_TOF • FEED_NEXT_TOF
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATERN_1 • PATERN_2 • PATERN_3 • PATERN_4 • PATERN_5 • PATERN_6 • PATERN_7 • PATERN_8 • PATERN_9 • PATERN_10 • undefined
	repeat	• 1 to 255 • undefined
	cycle	• 1000 to 25500
addLayout method	type	• LAYOUT_RECEIPT • LAYOUT_RECEIPT_BM
	width	• 290 to 800
	height	• Receipt • Receipt (with black mark)
	margin_top	• Receipt • Receipt (with black mark)
	margin_bottom	• Receipt • Receipt (with black mark)
	offset_cut	• Receipt • Receipt (with black mark)
	offset_label	• Receipt • Receipt (with black mark)

API	Parameter	Specificable Setting Value
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-H6000V

Printer Specifications

Item	Receipt	Slip	Validation	Endorsement	Endorsement (40cpl)
Amount of initial feed	30 dots	24 dots			18 dots
Initial page mode area	512 x 1662 dots	540 x 1408 dots		-	
Maximum page mode area	512 x 2400 dots	540 x 1408 dots		-	
Baseline of Font A	21 dots from the top of the character	9 dots from the top of the character			7 dots from the top of the character
Baseline of Font B	21 dots from the top of the character	9 dots from the top of the character			-
Baseline of Font C	16 dots from the top of the character	-			

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_PRINTER • DEVICE_TYPE_HYBRIDPRINTER2
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_C • FONT_SPECIAL_A • FONT_SPECIAL_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined

TM-T20II-i

Printer Specifications

Item	58mm Specification	80mm Specification
Amount of initial feed	30 dots	
Initial page mode area	420 x 831 dots	576 x 831 dots
Maximum page mode area	420 x 1662 dots	576 x 1662 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"
addTextLang method	lang	• "en" (default) • de • fr • it • es
addTextFont method	font	• FONT_A (default) • FONT_B

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 0 • 1 to 255 • undefined

API	Parameter	Specificable Setting Value
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T70-i

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area	ANK model	416 x 1662 dots	512 x 831 dots
	Multiple languages model	416 x 1662 dots	576 x 1662 dots
Maximum page mode area	ANK model	416 x 1662 dots	512 x 1662 dots
	Multiple languages model	416 x 1662 dots	576 x 1662 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B		16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hans • zh-cn • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined

API	Parameter	Specificable Setting Value
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T82II-i

Printer Specifications

Item	Specification
Amount of initial feed	30 dots
Initial page mode area	576 x 831 dots
Maximum page mode area	576 x 1662 dots
Baseline of Font A	21 dots from the top of the character
Baseline of Font B	16 dots from the top of the character

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hans • zh-cn • zh-hant • zh-tw • th

API	Parameter	Specificable Setting Value
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 0 • 1 to 255 • undefined

API	Parameter	Specificable Setting Value
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T83II-i

Printer Specifications

Item		Specification
Amount of initial feed		30 dots
Initial page mode area		512 x 1662 dots
Maximum page mode area		512 x 1662 dots
Baseline of Font A		21 dots from the top of the character
Baseline of Font B	ANK	16 dots from the top of the character
	Chinese characters	15 dots from the top of the character

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr

API	Parameter	Specificable Setting Value
addTextFont method	font	• FONT_A (default) • FONT_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 0 • 1 to 255 • undefined

API	Parameter	Specificable Setting Value
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T88V-i

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area		360 x 831 dots	512 x 831 dots
Maximum page mode area		360 x 1662 dots	512 x 1662 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B	ANK	16 dots from the top of the character	
	Chinese characters	15 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 0 • 1 to 255 • undefined

TM-T88VI-iHUB

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area		360 x 831 dots	512 x 831 dots
Maximum page mode area		360 x 1662 dots	512 x 1662 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B	ANK	16 dots from the top of the character	
	Chinese characters	15 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_MSR • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL • DEVICE_TYPE_GFE
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addPageLine method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined

API	Parameter	Specificable Setting Value
addPageRectangle method	x1	• Integer from 0 to 65535
	y1	• Integer from 0 to 65535
	x2	• Integer from 0 to 65535
	y2	• Integer from 0 to 65535
	style	• LINE_THIN • LINE_MEDIUM • LINE_THICK • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined

TM-U220-i

Printer Specifications

Item	76mm Specification	69.5mm Specification	57.5mm Specification
Amount of initial feed	12 dots		

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • COLOR_2 • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • COLOR_2 • undefined
	mode	• MODE_MONO • undefined
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T70II-DT

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area	ANK model	416 x 1662 dots	512 x 1662 dots
	Multiple languages model	416 x 1662 dots	576 x 1662 dots
Maximum page mode area	ANK model	416 x 1662 dots	512 x 1662 dots
	Multiple languages model	416 x 1662 dots	576 x 1662 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B		16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_MSR • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL • DEVICE_TYPE_DT • DEVICE_TYPE_POSKEYBOARD • DEVICE_TYPE_OTHER_PERIPHERAL
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hans • zh-cn • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 0 • 1 to 255 • undefined

TM-T70II-DT2

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area	ANK model	416 x 1662 dots	512 x 1662 dots
	Multiple languages model	416 x 1662 dots	576 x 1662 dots
Maximum page mode area	ANK model	416 x 1662 dots	512 x 1662 dots
	Multiple languages model	416 x 1662 dots	576 x 1662 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B		16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_MSR • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL • DEVICE_TYPE_DT • DEVICE_TYPE_POSKEYBOARD • DEVICE_TYPE_OTHER_PERIPHERAL
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-

API	Parameter	Specificable Setting Value
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"
	r	• Integer value from 0 to 255 • "undefined"
	g	• Integer value from 0 to 255 • "undefined"
	b	• Integer value from 0 to 255 • "undefined"
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hans • zh-cn • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined

API	Parameter	Specificable Setting Value
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 0 • 1 to 255 • undefined

TM-T88V-DT

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area		360 x 831 dots	512 x 831 dots
Maximum page mode area		360 x 1662 dots	512 x 1662 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B	ANK	16 dots from the top of the character	
	Chinese characters	15 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_MSR • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL • DEVICE_TYPE_DT • DEVICE_TYPE_POSKEYBOARD • DEVICE_TYPE_OTHER_PERIPHERAL
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 0 • 1 to 255 • undefined

TM-T88VI-DT2

Printer Specifications

Item		58mm Specification	80mm Specification
Amount of initial feed		30 dots	
Initial page mode area		360 x 831 dots	512 x 831 dots
Maximum page mode area		360 x 1662 dots	512 x 1662 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B	ANK	16 dots from the top of the character	
	Chinese characters	15 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_MSR • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL • DEVICE_TYPE_DT • DEVICE_TYPE_POSKEYBOARD • DEVICE_TYPE_OTHER_PERIPHERAL
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-

API	Parameter	Specificable Setting Value
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"
	r	• Integer value from 0 to 255 • "undefined"
	g	• Integer value from 0 to 255 • "undefined"
	b	• Integer value from 0 to 255 • "undefined"
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined

API	Parameter	Specificable Setting Value
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED • SYMBOL_AZTECCODE_FULLRANGE • SYMBOL_AZTECCODE_COMPACT • SYMBOL_DATAMATRIX_SQUARE • SYMBOL_DATAMATRIX_RECTANGLE_8 • SYMBOL_DATAMATRIX_RECTANGLE_12 • SYMBOL_DATAMATRIX_RECTANGLE_16
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • Integer (5 to 95) • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined

API	Parameter	Specificable Setting Value
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined

TM-H6000IV-DT

Printer Specifications

Item	58mm Specification	80mm Specification
Amount of initial feed	30 dots	
Initial page mode area	360 x 831 dots	512 x 831 dots
Maximum page mode area	360 x 1662 dots	512 x 1662 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
createDevice method	deviceId	• deviceId
	deviceType	• DEVICE_TYPE_DISPLAY • DEVICE_TYPE_KEYBOARD • DEVICE_TYPE_MSR • DEVICE_TYPE_PRINTER • DEVICE_TYPE_SCANNER • DEVICE_TYPE_SIMPLE_SERIAL • DEVICE_TYPE_HYBRIDPRINTER2 • DEVICE_TYPE_DT • DEVICE_TYPE_POSKEYBOARD • DEVICE_TYPE_OTHER_PERIPHERAL
	options	• crypto (Boolean) • buffer (Boolean)
	crypto	• crypto (Boolean)
	callback	-
addText method	data	• data
	lang	• "en" (default) • "ja" • "undefined"
	x	• 1 to 44 • "undefined"
	y	• 1 to 19 • "undefined"

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hans • zh-cn • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined

TM-T20

Printer Specifications

Item	58mm Specification	80mm Specification
Amount of initial feed	30 dots	
Initial page mode area	420 x 831 dots	576 x 831 dots
Maximum page mode area	420 x 1662 dots	576 x 1662 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es
addTextFont method	font	• FONT_A (default) • FONT_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined

API	Parameter	Specificable Setting Value
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T82II

Printer Specifications

Item	Specification
Amount of initial feed	30 dots
Initial page mode area	576 x 831 dots
Maximum page mode area	576 x 1662 dots
Baseline of Font A	21 dots from the top of the character
Baseline of Font B	16 dots from the top of the character

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined

API	Parameter	Specificable Setting Value
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined

API	Parameter	Specificable Setting Value
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T83II

Printer Specifications

Item		Specification
Amount of initial feed		30 dots
Initial page mode area		512 x 1662 dots
Maximum page mode area		512 x 1662 dots
Baseline of Font A		21 dots from the top of the character
Baseline of Font B	ANK	16 dots from the top of the character
	Chinese characters	15 dots from the top of the character

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_SPECIAL_A • FONT_SPECIAL_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined

API	Parameter	Specificable Setting Value
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • undefined
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined
addSound method	pattern	• PATTERN_NONE • PATTERN_A • PATTERN_B • PATTERN_C • PATTERN_D • PATTERN_E • PATTERN_ERROR • PATTERN_PAPER_END • undefined
	repeat	• 1 to 255 • undefined

API	Parameter	Specificable Setting Value
print method	canvas	• canvas
	cut	• true • false • undefined
	mode	• MODE_MONO • undefined
	printjobid	• String

TM-T90

Printer Specifications

Item		58mm Specification	60mm Specification	80mm Specification
Amount of initial feed		30 dots		
Initial page mode area	Monochrome printing	420 x 738 dots	384 x 831 dots	576 x 738 dots
	Two-color printing	420 x 369 dots	384 x 415 dots	576 x 369 dots
Maximum page mode area	Monochrome printing	420 x 1476 dots	384 x 1662 dots	576 x 1476 dots
	Two-color printing	420 x 738 dots	384 x 831 dots	576 x 738 dots
Baseline of Font A		21 dots from the top of the character		
Baseline of Font B		16 dots from the top of the character		

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B • FONT_C

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • COLOR_2 • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • COLOR_2 • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B • FONT_C
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined

TM-L90

Printer Specifications

Item		Receipt Specification	Die-cut Label Specification
Amount of initial feed		30 dots	
Initial page mode area	Monochrome printing	576 x 738 dots	560 x 738 dots
	Two-color printing	576 x 369 dots	560 x 369 dots
Maximum page mode area	Monochrome printing	576 x 1476 dots	560 x 1476 dots
	Two-color printing	576x 738 dots	560 x 738 dots
Baseline of Font A		21 dots from the top of the character	
Baseline of Font B		ANK: 16 Chinese characters: 15 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • ko • ko-kr • zh-hans • zh-cn • zh-hant • zh-tw • th
addTextFont method	font	• FONT_A (default) • FONT_B

API	Parameter	Specificable Setting Value
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • COLOR_2 • undefined
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • COLOR_2 • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined

API	Parameter	Specificable Setting Value
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined

TM-H6000IV

Printer Specifications

Item	58mm Specification	80mm Specification
Amount of initial feed	30 dots	
Initial page mode area	360 x 831 dots	512 x 831 dots
Maximum page mode area	360 x 1662 dots	512 x 1662 dots
Baseline of Font A	21 dots from the top of the character	
Baseline of Font B	16 dots from the top of the character	

APIs for which restricted parameter setting values can be specified

API	Parameter	Specificable Setting Value
addTextLang method	lang	• "en" (default) • de • fr • it • es • zh-hans • zh-cn • zh-hant • zh-tw
addTextFont method	font	• FONT_A (default) • FONT_B
addTextStyle method	reverse	• true • false (default) • undefined
	ul	• true • false (default) • undefined
	em	• true • false (default) • undefined
	color	• COLOR_1 (default) • undefined

API	Parameter	Specificable Setting Value
addImage method	context	• context
	x	• Integer from 0 to 65535
	y	• Integer from 0 to 65535
	width	• Integer from 0 to 65535
	height	• Integer from 0 to 65535
	color	• COLOR_1 (default) • undefined
	mode	• MODE_MONO • MODE_GRAY16 • undefined
addBarcode method	data	• String
	type	• BARCODE_UPC_A • BARCODE_UPC_E • BARCODE_EAN13 • BARCODE_JAN13 • BARCODE_EAN8 • BARCODE_JAN8 • BARCODE_CODE39 • BARCODE_ITF • BARCODE_CODABAR • BARCODE_CODE93 • BARCODE_CODE128 • BARCODE_GS1_128 • BARCODE_GS1_DATABAR_OMNIDIRECTIONAL • BARCODE_GS1_DATABAR_TRUNCATED • BARCODE_GS1_DATABAR_LIMITED • BARCODE_GS1_DATABAR_EXPANDED
	hri	• HRI_NONE (default) • HRI_ABOVE • HRI_BELOW • HRI_BOTH
	font	• FONT_A (default) • FONT_B
	width	• Integer from 2 to 6
	height	• Integer from 1 to 255

API	Parameter	Specificable Setting Value
addSymbol method	data	• String
	type	• SYMBOL_PDF417_STANDARD • SYMBOL_PDF417_TRUNCATED • SYMBOL_QRCODE_MODEL_1 • SYMBOL_QRCODE_MODEL_2 • SYMBOL_MAXICODE_MODE_2 • SYMBOL_MAXICODE_MODE_3 • SYMBOL_MAXICODE_MODE_4 • SYMBOL_MAXICODE_MODE_5 • SYMBOL_MAXICODE_MODE_6 • SYMBOL_GS1_DATABAR_STACKED • SYMBOL_GS1_DATABAR_STACKED_OMNIDIRECTIONAL • SYMBOL_GS1_DATABAR_EXPANDED_STACKED
	level	• LEVEL_0 • LEVEL_1 • LEVEL_2 • LEVEL_3 • LEVEL_4 • LEVEL_5 • LEVEL_6 • LEVEL_7 • LEVEL_8 • LEVEL_L • LEVEL_M • LEVEL_Q • LEVEL_H • LEVEL_DEFAULT
addCut method	type	• CUT_NO_FEED • CUT_FEED • undefined

Usage restriction by firmware version

Availability and restriction on the use of APIs and parameters differ by the versions of the firmware and software installed on the printer.
For how to check or update the versions of the firmware and software, refer to the Technical Reference Guide of the printer.

TM-i Series/TM-DT Series

❏ Supported by TM-DT software Ver. 2.2 and TM-i firmware 4.0 or later.

Class	API	Parameter	Value
ePOSDevice object	createDevice method	options	-
Printer object	addTextVPosition method	-	-
	addLayout method	-	-
	addRecovery method	-	-
	addReset method	-	-
	force property	-	-
	onbatterystatuschange event	-	-
	onbatteryok event	-	-
	onbatterylow event	-	-
	addTextLang method	lang	zh-hans
		lang	zh-hant
	addSymbol method	type	SYMBOL_AZTECCODE_FULLRANGE
			SYMBOL_AZTECCODE_COMPACT
			SYMBOL_DATAMATRIX_SQUARE
			SYMBOL_DATAMATRIX_RECTANGLE_8
			SYMBOL_DATAMATRIX_RECTANGLE_12
			SYMBOL_DATAMATRIX_RECTANGLE_16
		level	Integer (5 to 95)

Class	API	Parameter	Value
Printer object	addSound method	pattern	PATERN_1
			PATERN_2
			PATERN_3
			PATERN_4
			PATERN_5
			PATERN_6
			PATERN_7
			PATERN_8
			PATERN_9
			PATERN_10
		cycle	-

❏ Supported by TM-DT software Ver. 2.5 and TM-i firmware 4.0 or later.

Class	API	Parameter	Value
Printer object	recover method	-	-
	reset method	-	-

❏ Supported by TM-DT software Ver. 2.5 and TM-i firmware 4.1 or later.

Class	API	Parameter	Value
Printer object	send method	printjobid	-
	print method	printjobid	-
	getPrintJobStatus method	-	-
	onreceive event	printjobid	-
		code	EX_SPOOLER
			JobNotFound
			Printing
		status	ASB_SPOOLER_IS_STOPPED

❏ Supported by TM-DT software Ver. 3.0 and TM-i firmware 4.1 or later.

Class	API	Parameter	Value
Printer object	drawerOpenLevel property	-	-
DeviceHubTerminal object	restart method	-	-
CommBox object	getCommHistory method	option	-
ePOSDeviceConfiguration object	-	-	-

❏ Supported by TM-DT software Ver. 4.0 or later.

Class	API	Parameter	Value
ePOSDevice object	createDevice method	deviceType	DEVICE_TYPE_POSKEYBOARD
			DEVICE_TYPE_OTHER_PERIPHERAL
OtherPeripheral object	-	-	-
POSKeyboard object	-	-	-

❏ Supported by TM-DT software Ver. 5.10 or later.

Class	API	Parameter	Value
Display object	addCreateScreen method	-	-
	addCreateScreenCustom method	-	-
	createTextArea method	-	-
	destroyTextArea method	-	-
	setCurrentTextArea method	-	-
	clearTextArea method	-	-
	addText method	lang	"mul"
		r	-
		g	-
		b	-
	addBackgroundColor method	-	-
	addStartSlideShow method	-	-
	addStopSlideShow method	-	-
	addDownloadImage method	-	-
	addRegisterDownloadImage method	-	-
	addNVImage method	-	-
	addClearImage method	-	-
	addSymbol method	-	-
	addClearSymbol method	-	-

TM-m30

❏ Supported by TM-m30 firmware Ver. 1.40 ESC/POS or later

Class	API	Parameter	Value
Scanner object	-	-	-

❏ Supported with the following versions of firmware.

- TM-m30 firmware Ver. 1.46A ESC/POS or later
- TM-m30 firmware Ver. 1.46B ESC/POS or later

Class	API	Parameter	Value
GermanyFiscalEle-ment object	-	-	-

TM-m30II-H/TM-m30II-NT/TM-m30II-S/TM-m30II-SL

❏ Supported by firmware Ver. 3.06A/3.06B ESC/POS or later

Class	API	Parameter	Value
Display object	addCreateScreen method	-	-
	addCreateScreenCustom method	-	-
	createTextArea method	-	-
	destroyTextArea method	-	-
	setCurrentTextArea method	-	-
	clearTextArea method	-	-
	addText method	lang	"mul"
		r	-
		g	-
		b	-
	addBackgroundColor method	-	-
	addStartSlideShow method	-	-
	addStopSlideShow method	-	-
	addDownloadImage method	-	-
	addRegisterDownloadImage method	-	-
	addNVImage method	-	-
	addClearImage method	-	-
	addSymbol method	-	-
	addClearSymbol method	-	-

TM-T88VI

❏ Supported by TM-T88VI firmware Ver. 40.50 ESC/POS or later.

Class	API	Parameter	Value
Scanner object	-	-	-

TM-T88VI-iHUB

❏ Supported with the following versions of firmware.

- TM-T88VI-iHUB firmware Ver. 50.52A ESC/POS or later
- TM-T88VI-iHUB firmware Ver. 50.52B ESC/POS or later

Class	API	Parameter	Value
GermanyFiscalEle-ment object	-	-	-

ePOS-Print Settings

Printer Model	Printing Method	Character Code Tables
TM-m10	Thermal (203 dpi)	Page 0-5, 16-19, 20-21, 26,30-31, 11-15, 32-53
TM-m30	Thermal (203 dpi)	Page 0-5, 16-19, 20-21, 26,30-31, 11-15, 32-53
TM-T70	Thermal (180 dpi)	Page 0-5, 16-19
TM-T70II	Thermal (203 dpi)	Page 0-5, 16-19, 20-21, 26,30-31, 11-15, 32-53
TM-T88IV	Thermal (180 dpi)	Page 0-5, 16-19
TM-T88V	Thermal (180 dpi)	Page 0-5, 16-19, 20-21, 26,30-31, 11-15, 32-53
TM-L90	Thermal (203 dpi)	Page 0-5, 16-19
TM-U220	Impact	Page 0-5, 16-19
TM-U330	Impact	Page 0

Sample Programs

The sample programs provided with Epson ePOS SDK for JavaScript are implementation samples of Web applications.

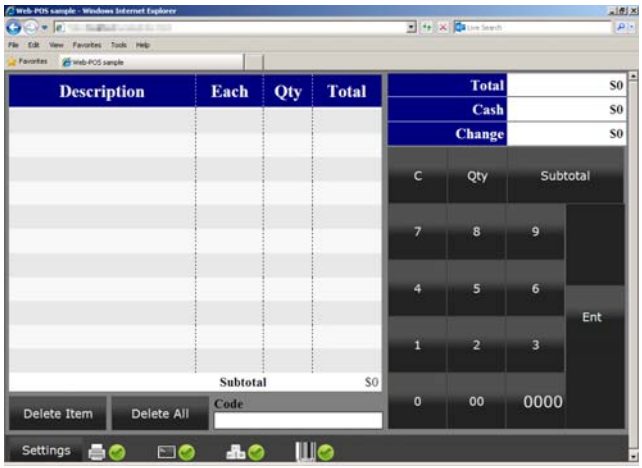
Functionality

The sample programs provided with the Epson ePOS SDK for JavaScript contains the following functions.

POS Terminal

This is the POS system sample program.
This enables use of communication box functionality for tablet terminal displays.

> When using POS Terminal Sample in Internet Explorer, use Internet Explorer 9 or later.



<POS Terminal Customer Display Sample>

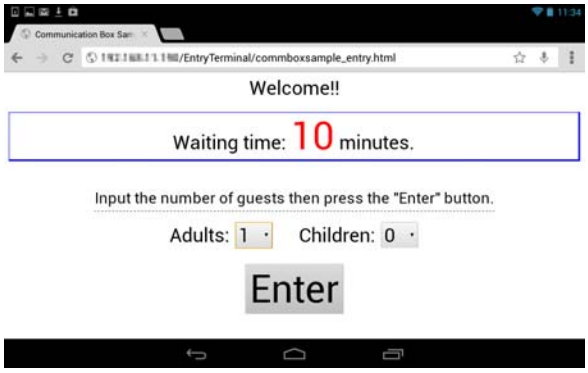
Supported system configuration:

- POS Terminal model

Entry Terminal

This is the reception terminal sample program.
This program enables communication with Web browsers on tablets or similar devices using bi-directional communication functionality of communication boxes.

<Entry Sample>



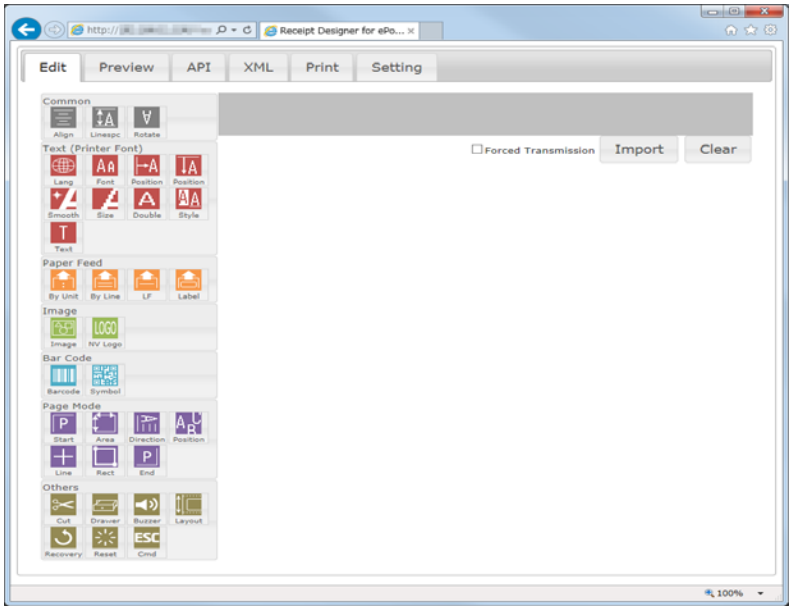
<Call Sample>

Supported system configuration:

- POS Terminal model

Receipt Designer

This program easily generates and prints print data for receipt printers.



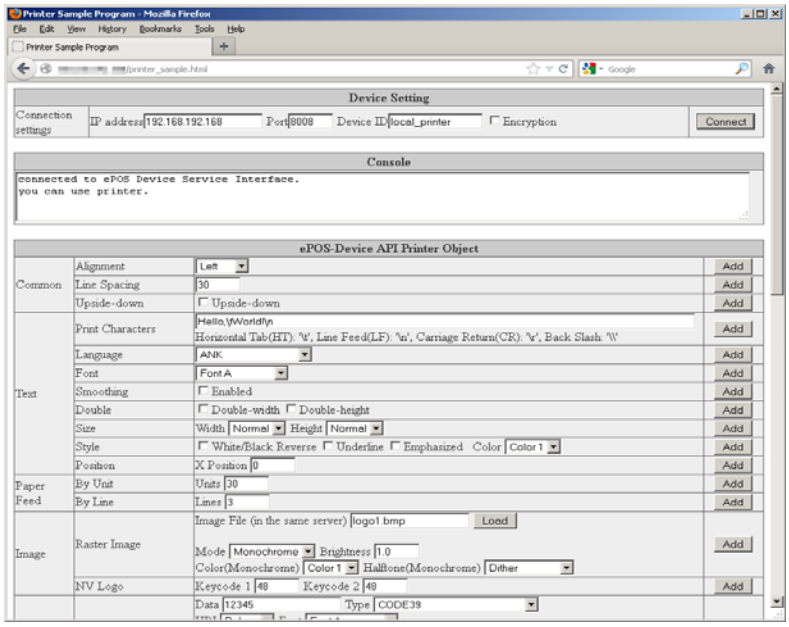
Supported system configuration:

- TM Printer Models
- Customer Display model
- TM Printer + DM-D + barcode scanner model
- POS Terminal model

Printer Sample

This program generates and prints printer print data.

We recommend to use Receipt Designer to generate data for receipt printers.



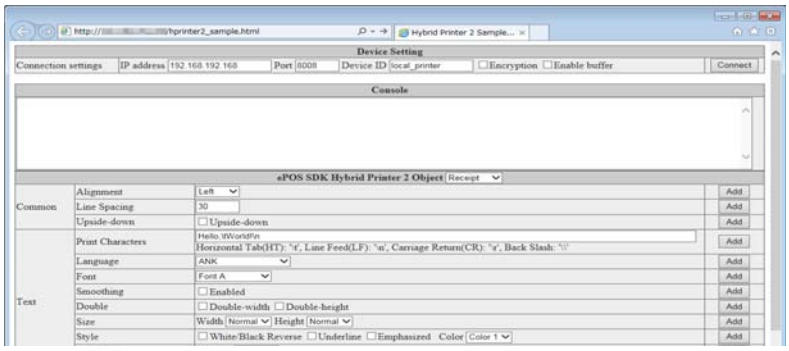
Supported system configuration:

- TM Printer Models
- Customer Display model
- TM Printer + DM-D + barcode scanner model
- POS Terminal model

Hybrid Printer2 Sample

This is the sample program for hybrid printers.

This program generates and prints print data, and reads the MICR data.

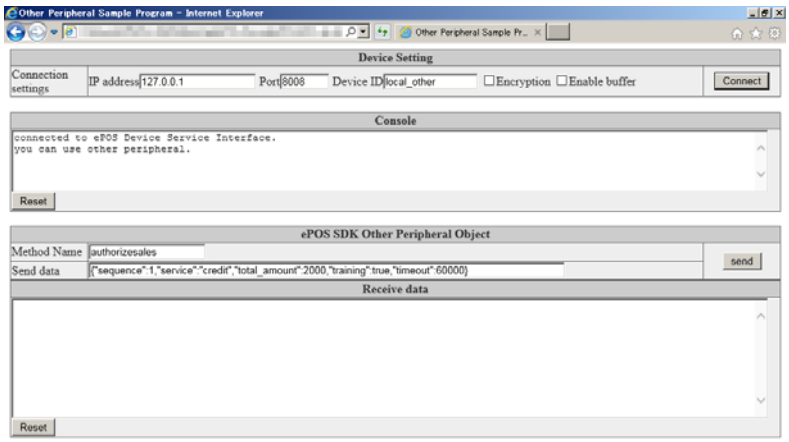


Supported system configuration:

- POS Terminal model

OtherPeripheral Sample

This program confirms data transmission and reception with other peripheral devices using the device control program samples.

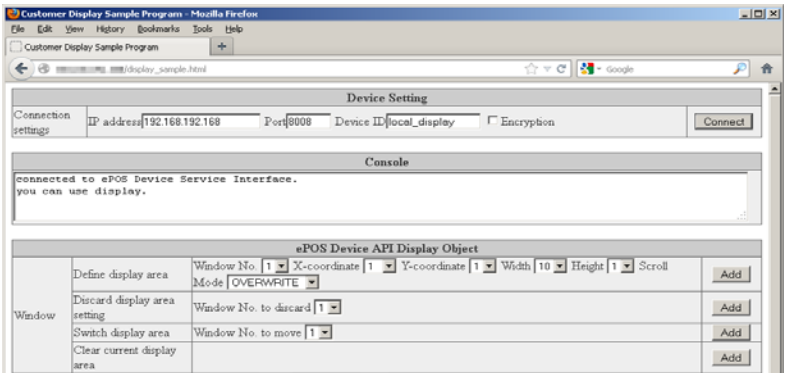


Supported system configuration:

- POS Terminal model

Customer Display Sample

This program generates and displays display data for customer displays.

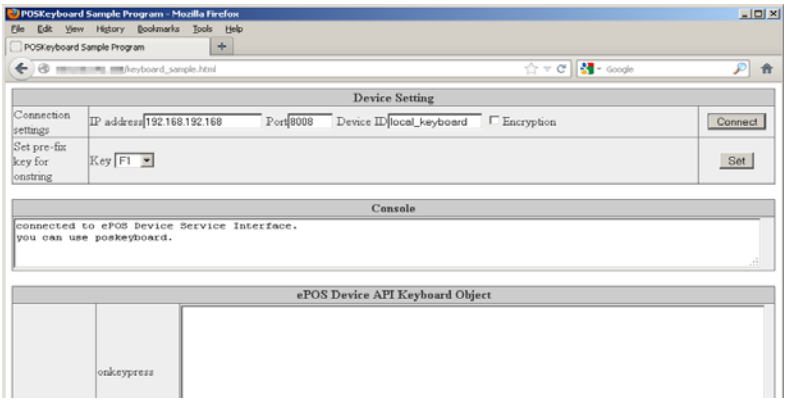


Supported system configuration:

- Customer Display model
- TM Printer + DM-D + barcode scanner model
- POS Terminal model

Keyboard Sample

This program retrieves data input from keyboards.

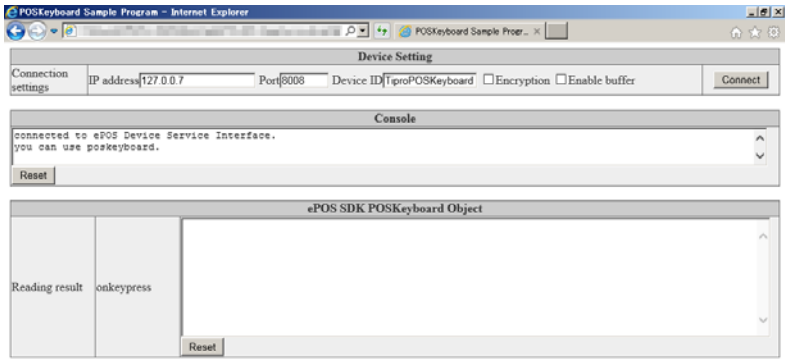


Supported system configuration:

- POS Terminal model

POSKeyboard Sample

This program retrieves data input from POS keyboards.

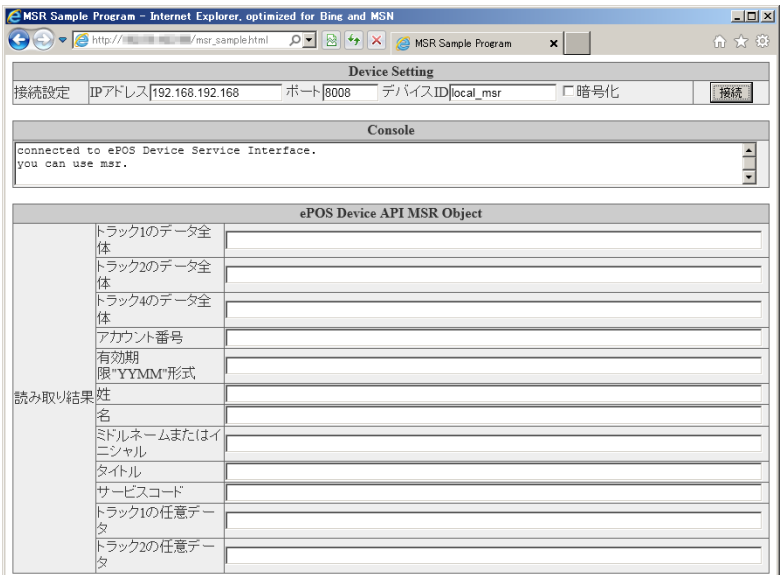


Supported system configuration:

- POS Terminal model

MSR Sample

This program retrieves MSR data.

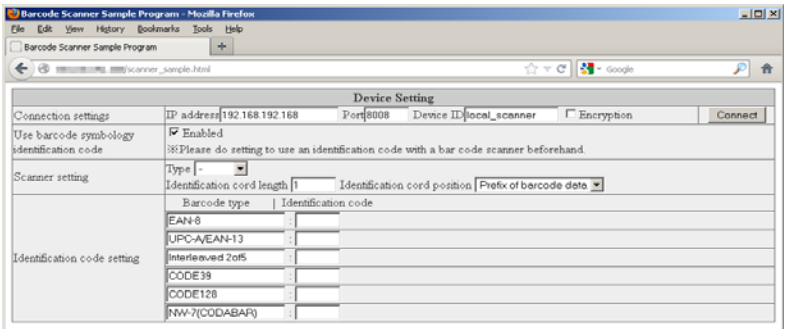


Supported system configuration:

- POS Terminal model

Barcode Scanner Sample

This program retrieves barcode data from barcode scanners.

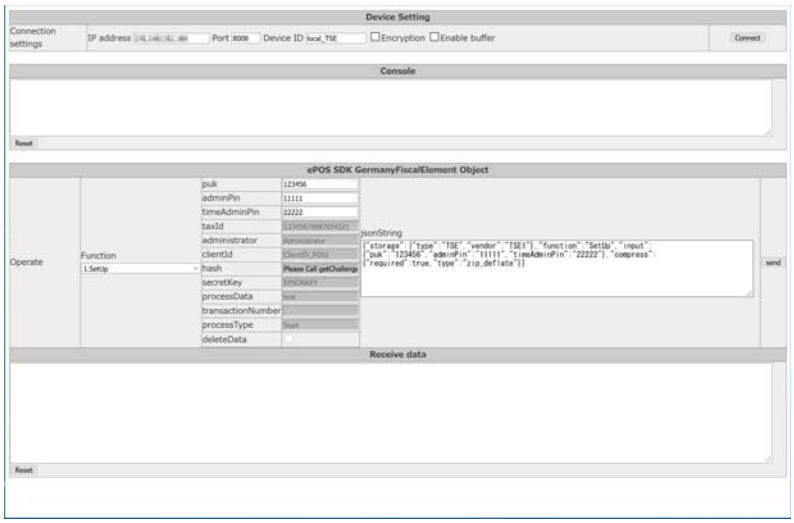


Supported system configuration:

- TM Printer + DM-D + barcode scanner model
- POS Terminal model

GermanyFiscalElement sample

Used to check data transmission to and reception from German fiscal element (TSE).



Supported system configuration:

- TM Printer Models
- Customer Display model
- TM Printer + DM-D + barcode scanner model
- POS Terminal model

Available on a printer that supports GermanyFiscalElement object.

Use Environment

Refer to Application Operating Environment.

Procedure to Start Sample Programs

This sections describes the procedure to start sample programs provided with Epson ePOS SDK for JavaScript.

1. Configure the printer environment

2. Starting Sample Programs

Configure the printer environment

The method by which the environment is configured varies depending on the printer.

- ❏ TM-i Series/TM-DT Series
- ❏ Single-function models/Mobile models/Hybrid models

TM-i Series/TM-DT Series

The environment setting procedure differs depending on the sample program to be used.

❏ Executing Samples other than the Other Peripheral Sample

❏ Executing the Other Peripheral Sample

Executing Samples other than the Other Peripheral Sample

Refer to the Technical Reference Guide of the printer for information on the operation of EPSON TMNet WebConfig.

1 Connect the desired device to the printer.

2 Configure network settings on the printer.

3 Register the sample programs (ePOS_SDK_Sample_JavaScript.zip) into the printer.
From the **Web Service Settings** menu in EPSON TMNet WebConfig, navigate to **Web Content** and then **Update Settings** to use the manual update tool to register the sample programs.

4 Configure devices in the printer.
Use EPSON TMNet WebConfig to configure the following settings for each device that will be used.

❏ Peripheral devices conforming to OPOS specification
Configure the following from **Web service setting** - **Control program** - **Device registration** in EPSON TMNet WebConfig.

Device	Configuration Parameter	Setting value
MSR	Device ID	Logical device name
	Control program	OposMSRHandler.exe
POS keyboard	Device ID	Logical device name
	Control program	OposPOSKeyboardHandler.exe
Barcode Scanner	Device ID	Logical device name
	Control program	OposScannerHandler.exe

❏ Customer Display, Standard HID device, Serial communication device

Device	Configuration Parameter	Setting value
Customer Displays	Customer Displays	Use
Keyboard	Device ID	local_keyboard
	Device name	Select the appropriate device from the list.
	Control script	Keyboard_Generic.js
MSR	Device ID	local_msr
	Device name	Select the appropriate device from the list.
	Control script	MSR_V3TU_FK.js

Device	Configuration Parameter	Setting value
Barcode Scanner	Device ID	local_scanner
	Device name	Select the appropriate device from the list.
	Control script	Scanner_Generic.js

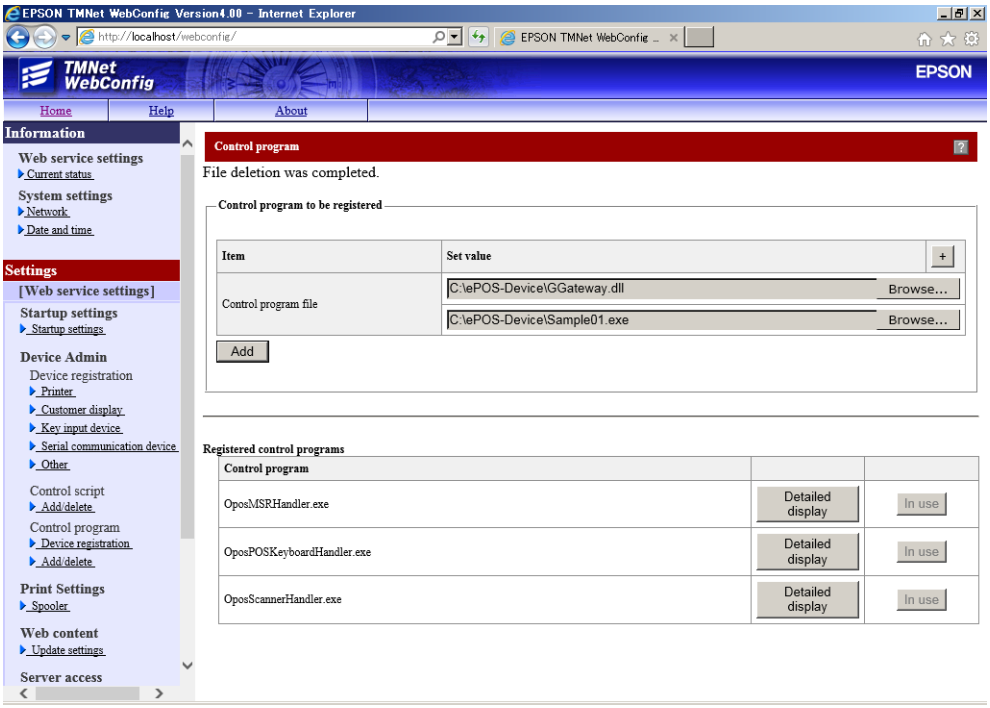
Executing the Other Peripheral Sample

Refer to the Technical Reference Guide of the printer for information on the operation of EPSON TMNet WebConfig.

1 Configure network settings on the printer.

2 Register the sample programs (ePOS_SDK_Sample_JavaScript.zip) into the printer.
From the **Web Service Settings** menu in EPSON TMNet WebConfig, navigate to **Web Content** and then **Update Settings** to use the manual update tool to register the sample programs.

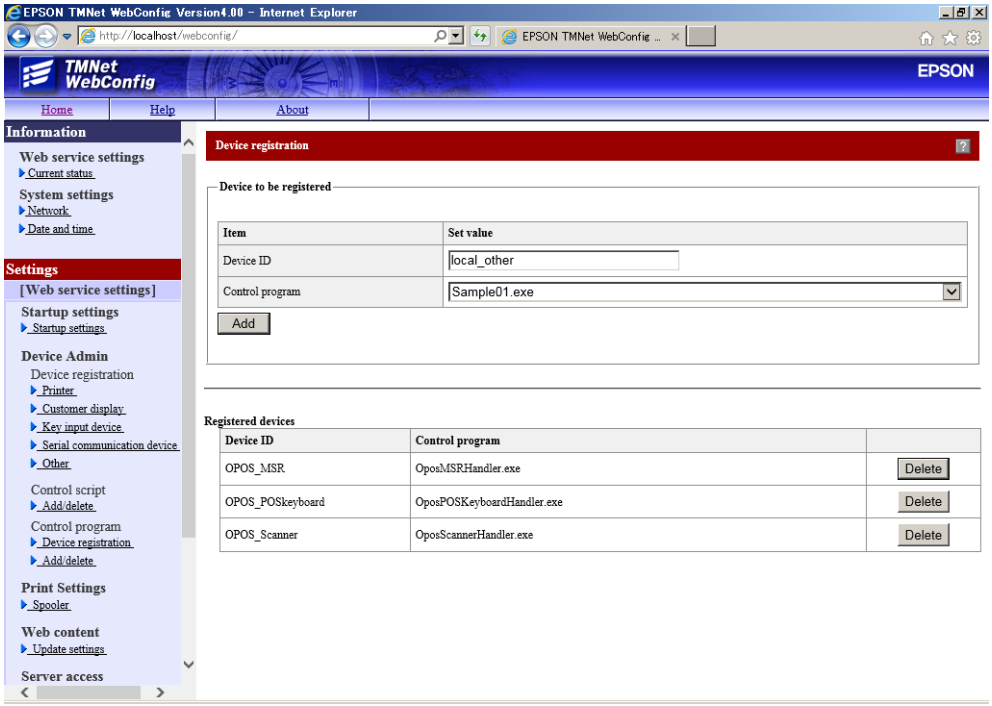
3 Register sample programs of the device control program to the printer.
Select and add control program files in **Web service settings** - **Control program** - **Add/delete** in EPSON TMNet WebConfig.
Register Sample01.exe and GGateway.dll from the sample program file of the device control program.



4 Register a device.

Register a device from **Web service settings** - **Control program** - **Device registration** in EPSON TMNet WebConfig .

Device	Configuration Parameter	Setting value
Other peripheral	Device ID	local_other
	Control program	Sample01.exe



Single-function models/Mobile models/Hybrid models

Refer to the Technical Reference Guide of each printer for more information on configuration procedures.

1 Decompress the ePOS_SDK_Sample_JavaScript.zip file containing the sample programs and copy the files to the following folder on the Web server.
System drive: \Inetpub\wwwroot (IIS Web servers)

Perform the copy operation of the sample programs as a user with administrative privileges.

2 Enable the ePOS-Print settings of the TM printer referring to ePOS-Print Settings.

When using Hybrid Printer2 sample, set ePOS-Device as the hybrid printer. (Refer to Hybrid models)

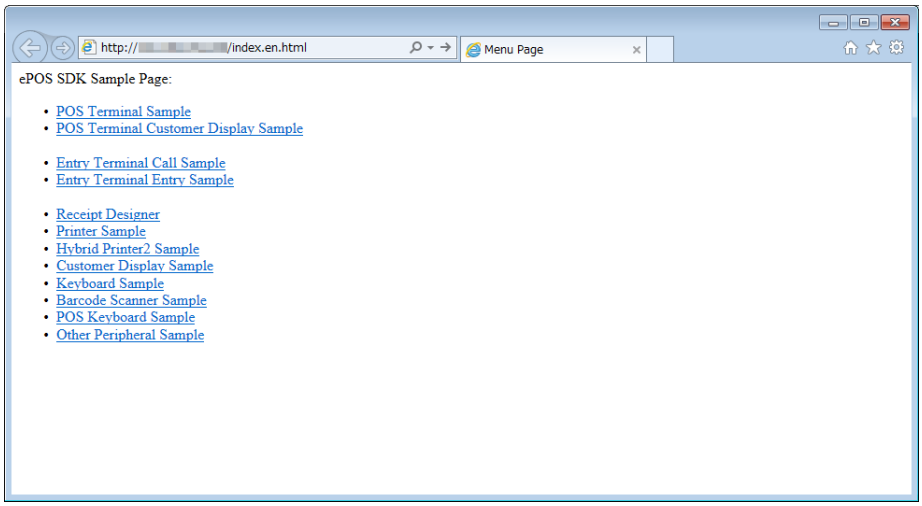
Starting Sample Programs

1 Start a Web browser and access the following URL.

Printers	URL
TM-DT series	http://[Printer IP address]/index.en.html
TM-i series	http://[Printer IP address]/webapp/index.en.html
Single-function models/Mobile models/Hybrid models	http://[Server IP address]/index.en.html

2 The sample program appears in the Web browser.

If the programs do not appear, check the printer network connection.



Using Sample Programs

- POS Terminal Sample
- Entry Terminal
- Receipt Designer
- Printer Sample
- Hybrid Printer 2 Sample
- Customer Display Sample
- Keyboard Sample
- MSR Sample
- Barcode Scanner Sample
- POSKeyboard Sample
- OtherPeripheral Sample

POS Terminal Sample

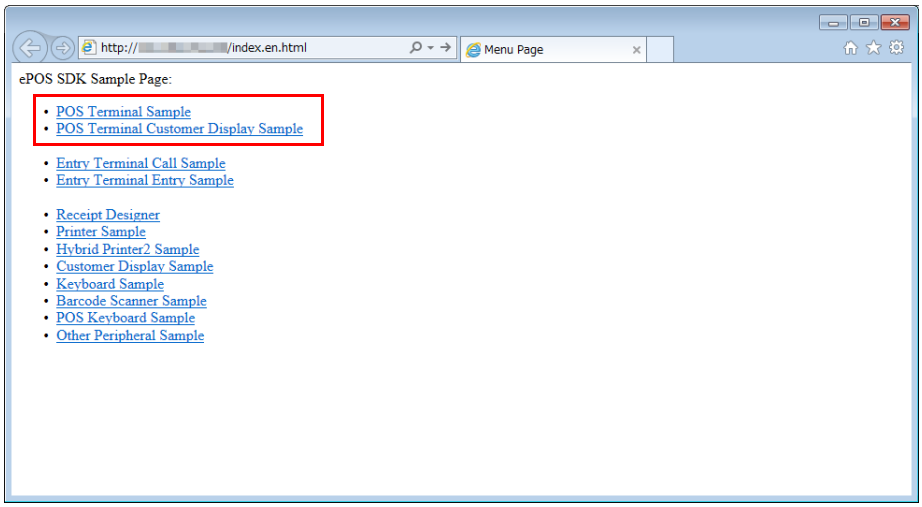
This sample program can be used to operate POS systems.

Preparation

Start the sample program and configure devices.
Open the following sample program in different Web browsers.

- POS Terminal Customer Display Sample
- POS Terminal Sample

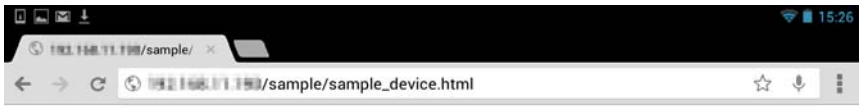
> Use the following procedure to connect the following sample programs in this order: **POS Terminal Customer Display Sample** and then **POS Terminal Sample**.
> If programs are connected in the wrong order, the POS Terminal Customer Display Sample will not function correctly.



1 Display the **POS Terminal Customer Display Sample** screen.

2 The **Connection Information** screen appears.
Enter the IP address and port number for the printer and click the **Connect** button.

3 The following screen appears.

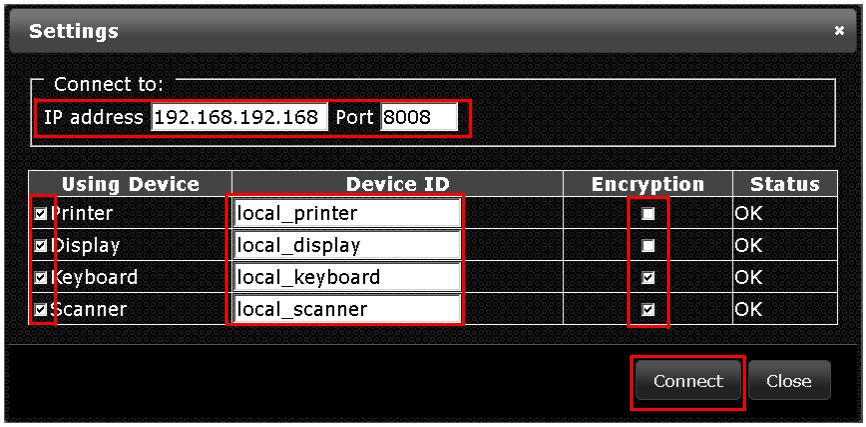


This completes the configuration of the POS Terminal Customer Display Sample.

4 Display the **POS Terminal Sample** screen. Click the **Settings** button.

5 The **Settings** screen appears. Configure the following settings and click the **Connect** button. Close the screen after confirming that "OK" appears for each status.

- ❏ Configure the settings in the **Connect to** area.
- ❏ Select the check box and enter the device ID for the desired devices in the **Device ID** area.



This completes the configuration of the POS Terminal Sample.

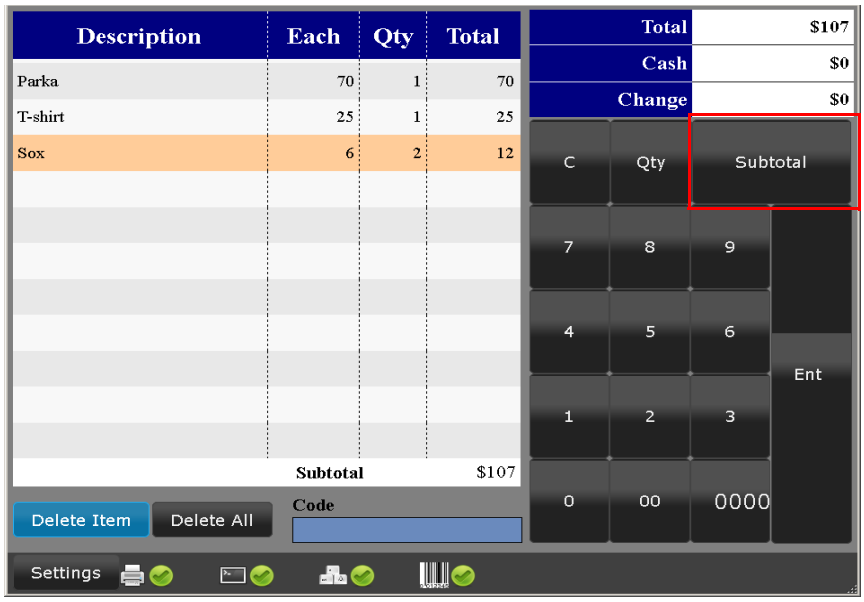
6 After a few moments, the digital signage appears on the **POS Terminal Customer Display Sample** screen.

Operation

This section describes the process from reading product data through printing receipts.

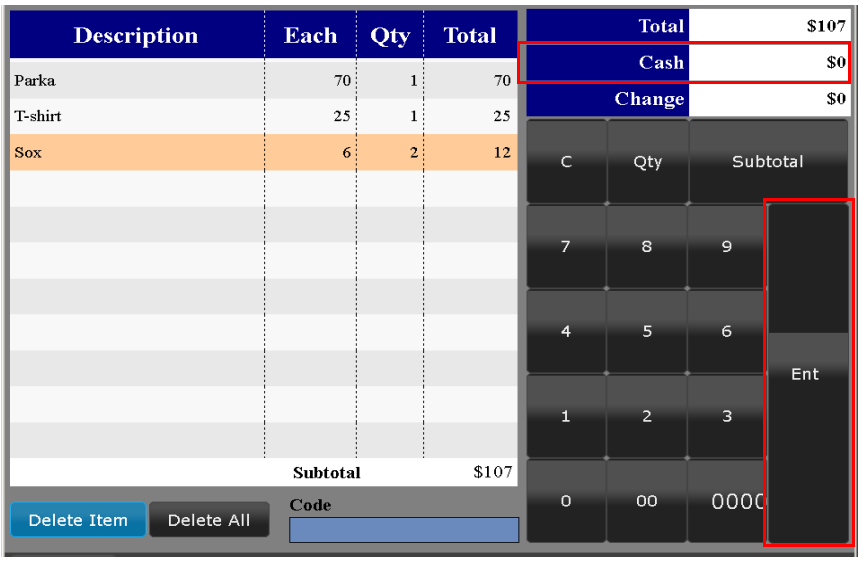
> Sample product barcodes can be found in the PDF that accompanies the sample programs. Print these barcodes for use with the sample programs.

1 Use the barcode scanner or keyboard to enter product data.
After entering the product data, click the **Subtotal** button.
Click the **Delete Item** button to remove the currently selected product. Click the **Delete All** button to remove all products.
To change quantities, click the **Qty** button after entering the product data and then enter the quantity. Click the **Ent** button to accept the quantity.

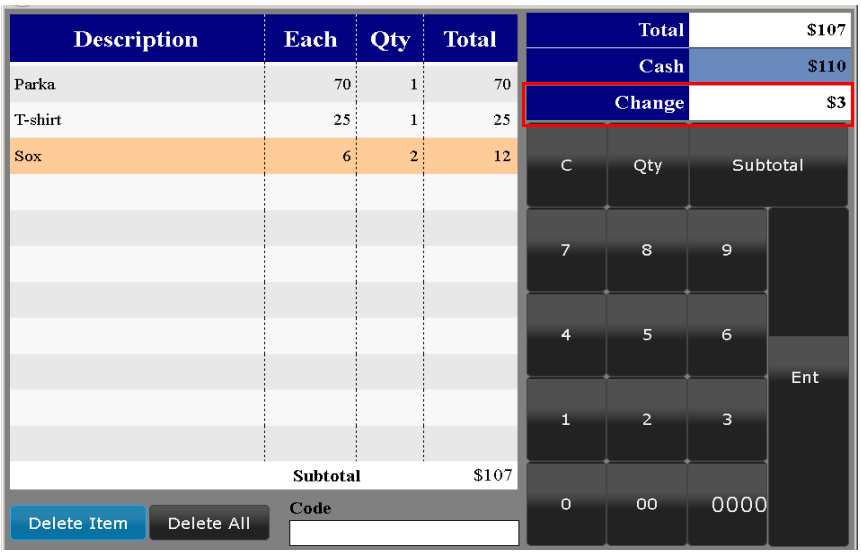


> The scanned data and **Total** appears on the **POS Terminal Customer Display Sample** screen.

2 Enter the amount of cash received. After entering the amount of cash received, click the **Ent** button.



3 The amount of change appears and a receipt is printed from the printer.

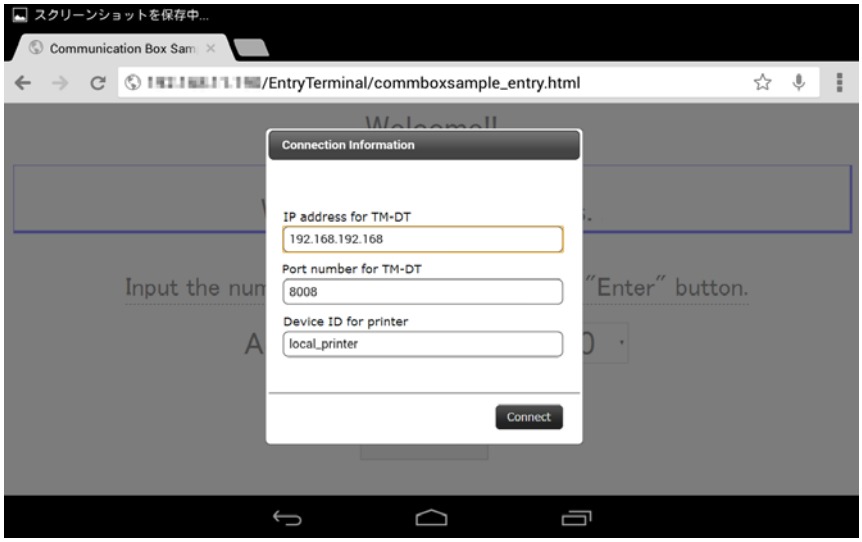


Entry Terminal

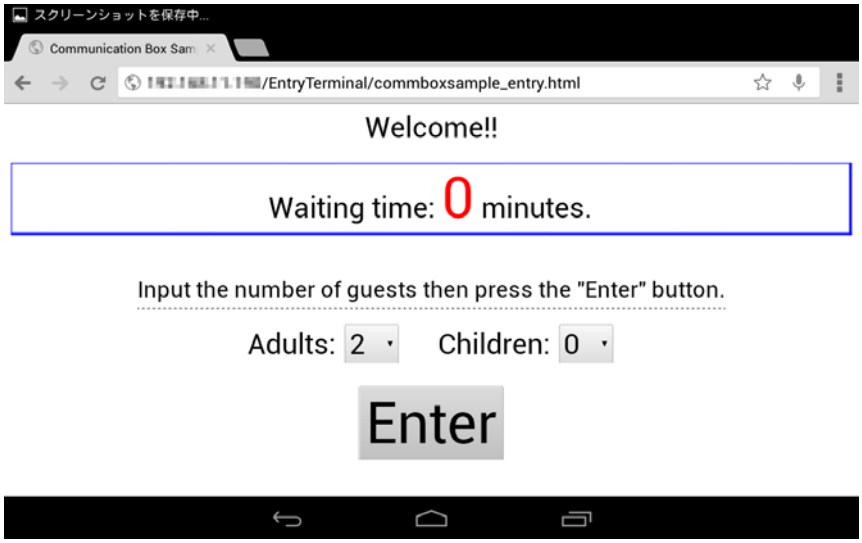
This sample program was created for use with reception terminals.
Data communication between applications is performed using communication box functionality.

1 Start the sample program for reception terminals. Select **Entry Terminal Entry Sample**.

2 The **Connection Information** screen appears.
Enter the **IP address for TM-DT**, **Port number for TM-DT**, **Device ID for printer**, and then click the **Connect** button.

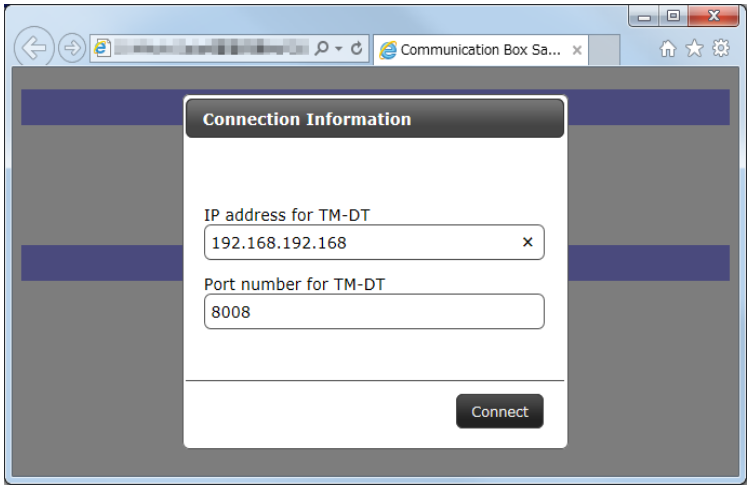


3 The **Entry Terminal Entry Sample** screen appears.

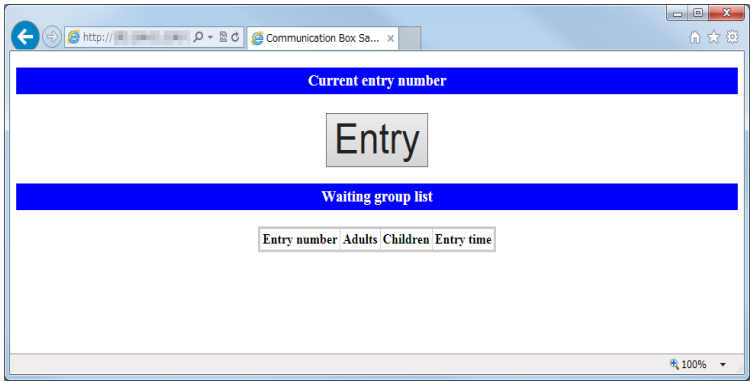


4 Start the sample program for calls. Select **Entry Terminal Call Sample**.

5 The **Connection Information** screen appears.
Enter the **IP address for TM-DT** and **Port number for TM-DT** and click the **Connect** button.

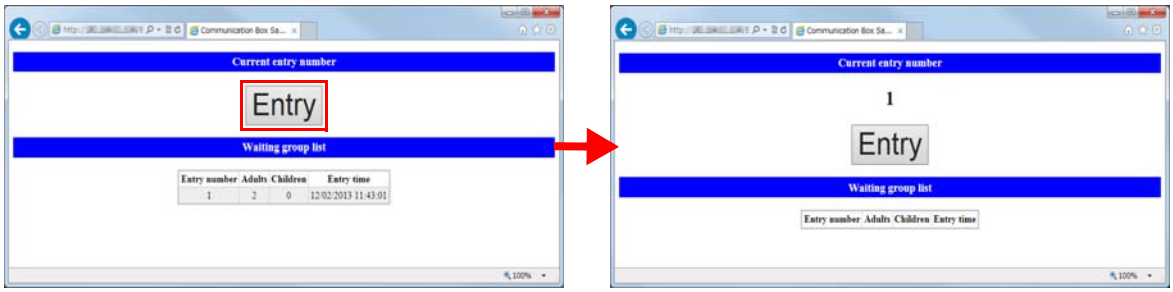


6 The **Entry Terminal Call Sample** screen appears.

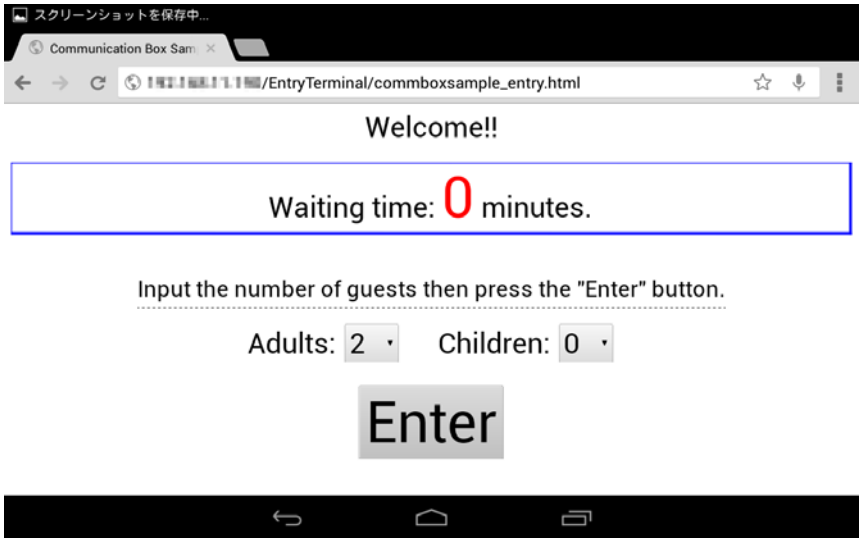


7 Perform operations in accordance with the **Entry Terminal Entry Sample** screen.
The entry number is printed from a printer and the waiting time appears.

8 After performing the operation in step 7, the entry number appears on the **Entry Terminal Call Sample** screen and the **Entry** button becomes enabled. Click **Entry**.



9 The wait time is updated in the **Entry Terminal Entry Sample** screen.



Receipt Designer

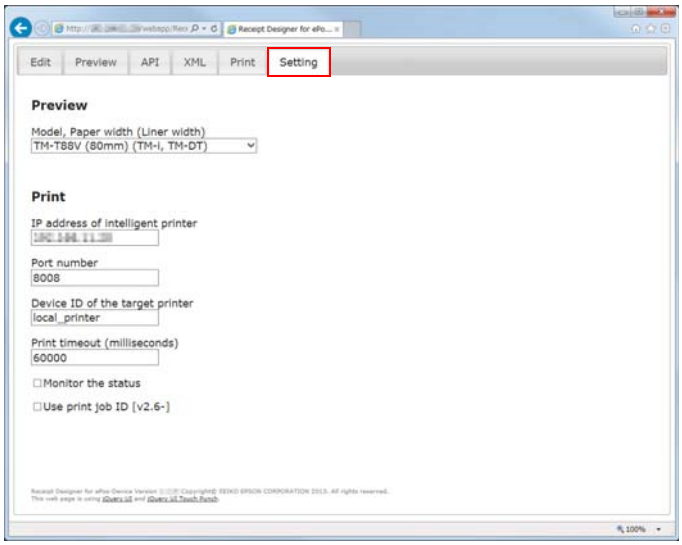
This easily generates and prints sample code for print data for receipt printers.

- Displaying previews that include images in Google Chrome generates the "SECURITY_ERR DOM Exception 18" error.
- Attempting to print in Windows Internet Explorer 9 generates the "SCRIPT5: Access is denied." error.

Preparation

1 Start the sample program. Select **Receipt Designer**.

2 The **Receipt Designer for ePOS-Device** screen appears. Click the **Setting** tab.



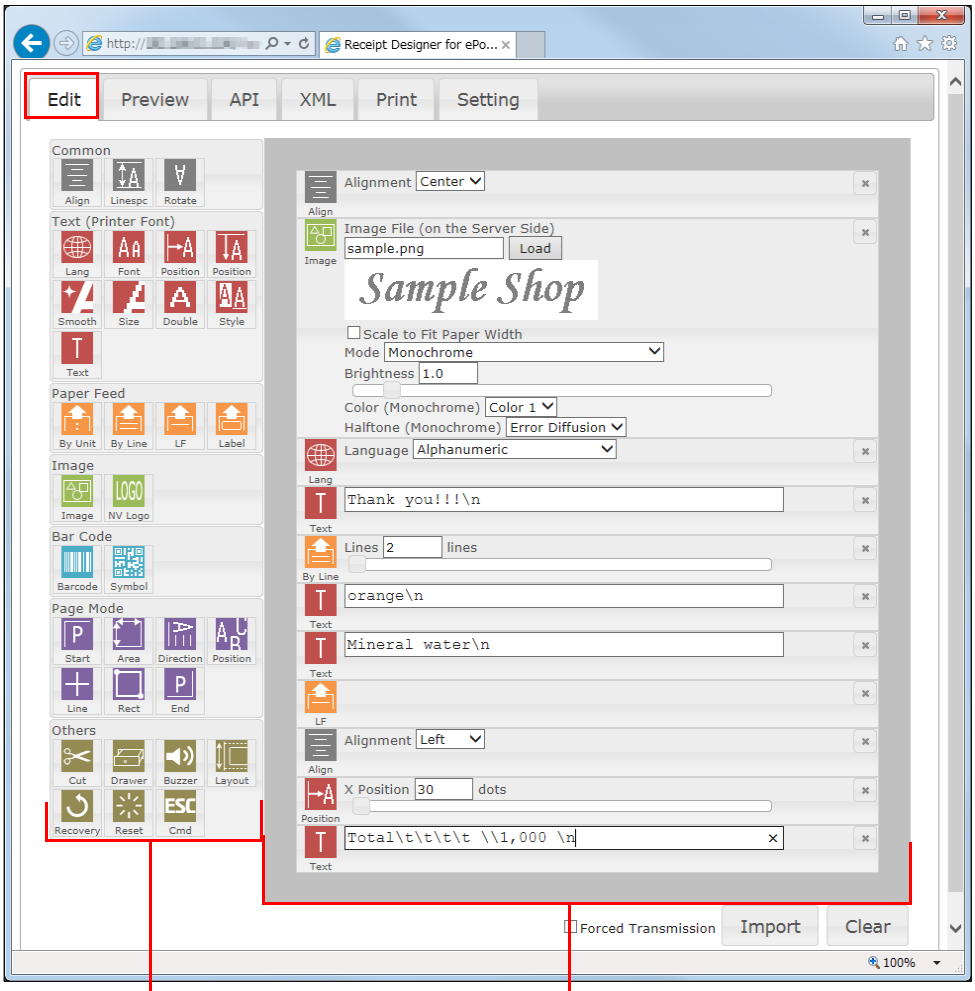
Configure the following settings.

Name of function	Description
Model, paper width	Select the model of your printer and the width of paper. The preview screen changes in accordance with the model and paper width.
Intelligent printer IP address	Specify the IP address for the printer. This parameter must be configured.
Port number	Specify the port number used by the TM-DT software. This is normally set to 8008. Set this to 8043 to use SSL/TLS communication.
Printer device ID	Specify the printer device ID. This parameter must be configured.
Print timeout (in msec units)	Specify the print timeout in units of milliseconds. The maximum possible value is 60,000 milliseconds, which is equivalent to 60 seconds.
Monitor status	Select this check box to monitor the printer status.
Use print job IDs *	Select this check box to print documents that also include the print job ID.

* Supported in TM-DT software Ver. 3.0 or later and TM-i firmware Ver. 4.1 or later.

Creating Sample Code

Select the **Edit** tab to display the Edit screen. Sample code for Epson ePOS SDK for JavaScript is created in the Edit screen.



Menu area

Edit area

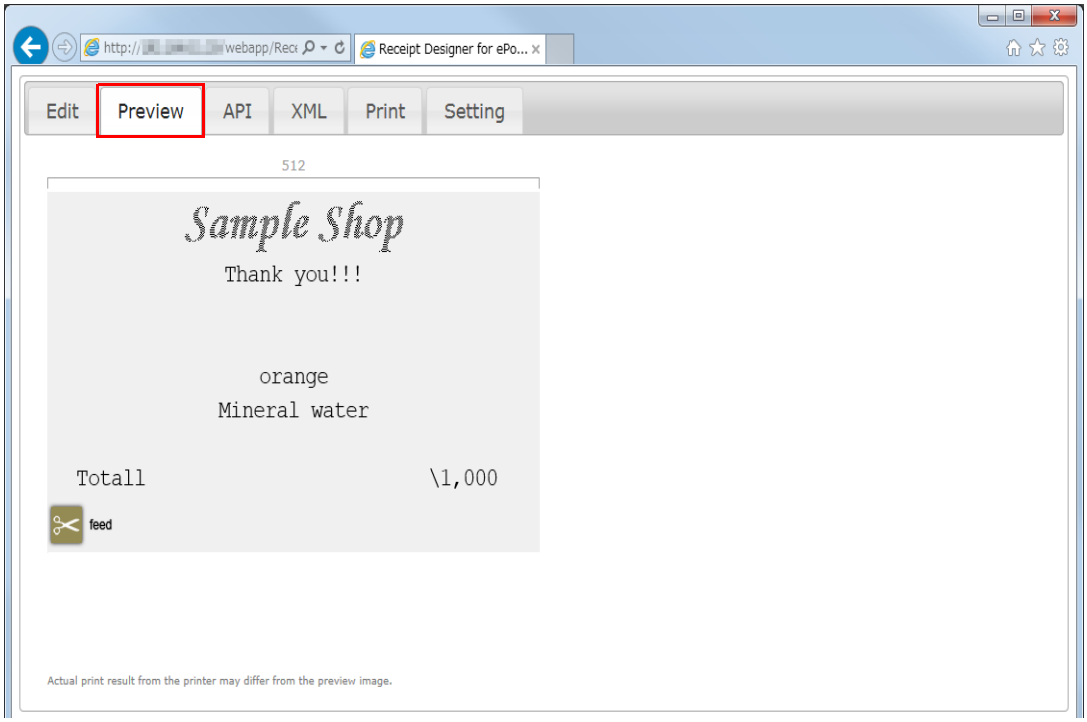
Item	Description
Menu area	This area displays the usable functions. Click to add items to the end of the Edit area or drag items to their desired positions in the Edit area.
Edit area	Functions selected in the Menu area appear here. The order of elements can be changed by dragging items to different positions. Remove elements by clicking the **x** button to the right of the element.
Import	Previously saved XML data can be imported into Receipt Designer using ePOS-Device XML. Refer to Import for more information.
Clear	Deletes the content created or edited here.
Manual transmission	Configures settings for manual transmission mode.

Use the following procedure to create sample code.

1 Click an icon in the Menu area to add the element to the Edit area.
The position of the added function can be changed by dragging it.

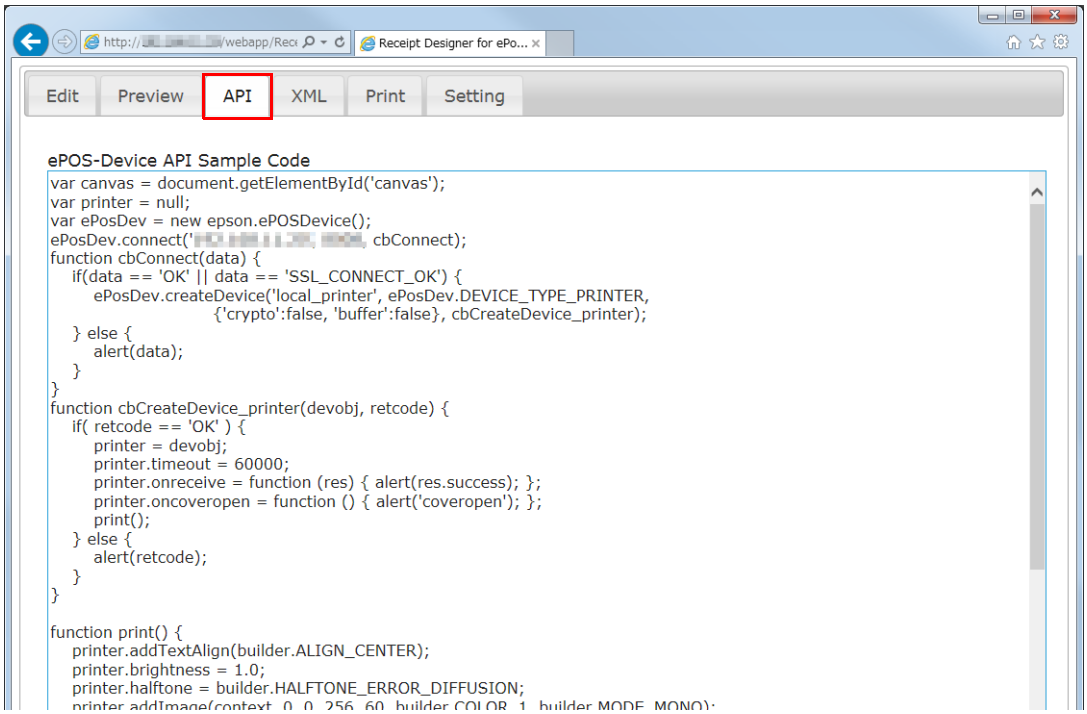
2 Configure the added element.
Ex.: Configure the keycode if the NV logo has been added.

3 Select the **Preview** tab to look at the preview.
You can perform a test print if a printer is connected.
Refer to Printing for more information.



- Logo printing, barcode printing, 2D code printing, ESC commands, buzzer sounds, drawer kicks, and paper cuts appear as icons.
- The layout may change depending on the preview settings.
  Refer to Preparation for more information.

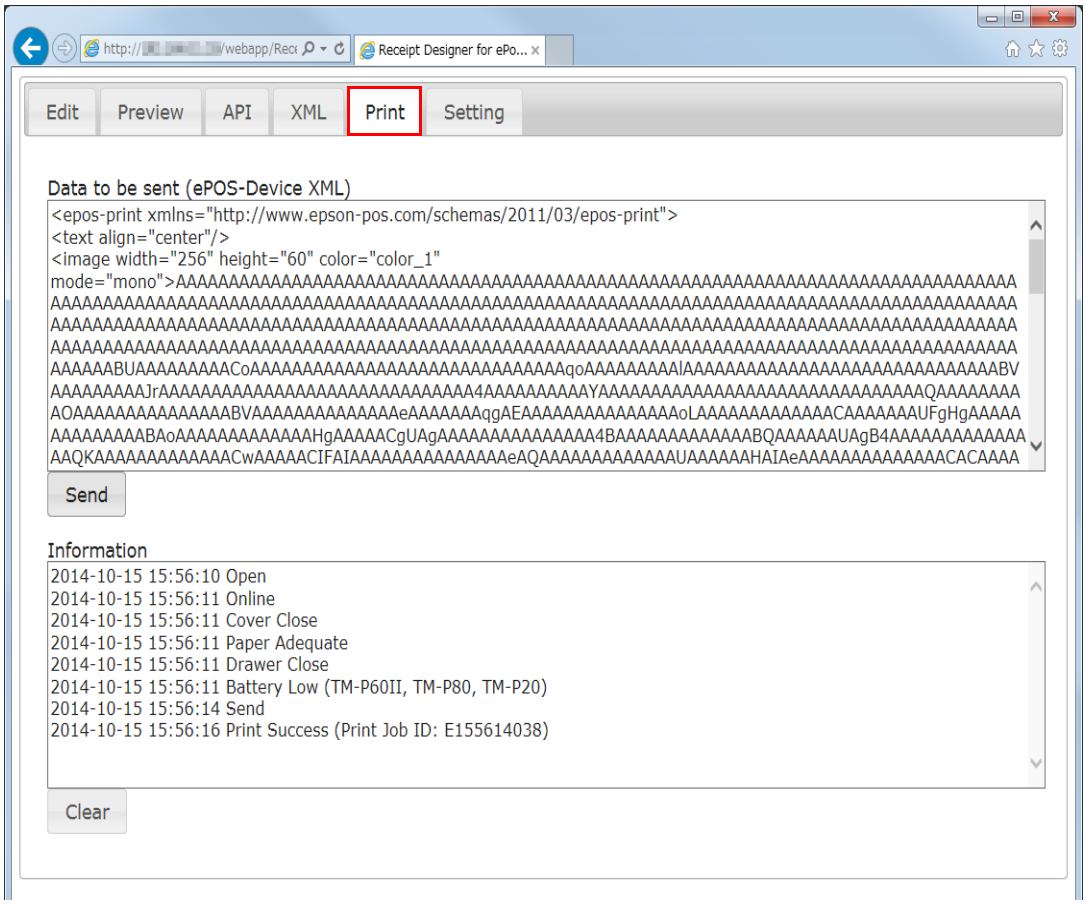
4 Select the **API** tab. The Epson ePOS SDK for JavaScript sample code appears. Copy the code for actual use.



ePOS-Device XML print documents are used for importing.
Select the **XML** tab and then copy and save the ePOS-Device XML print document as necessary.

Printing

Perform a test print of the print document using the current printer settings.
Refer to Preparation for more information on printer settings.



Item	Description
Data to be sent (ePOS-Device XML):	The ePOS-Device XML print document appears here.
Send	Sends the data to the printer to be printed.
Information	The print status appears here.
Clear	This deletes the information in the **Information** window.

Use the following procedure to print documents.

1. Select the **Print** tab.

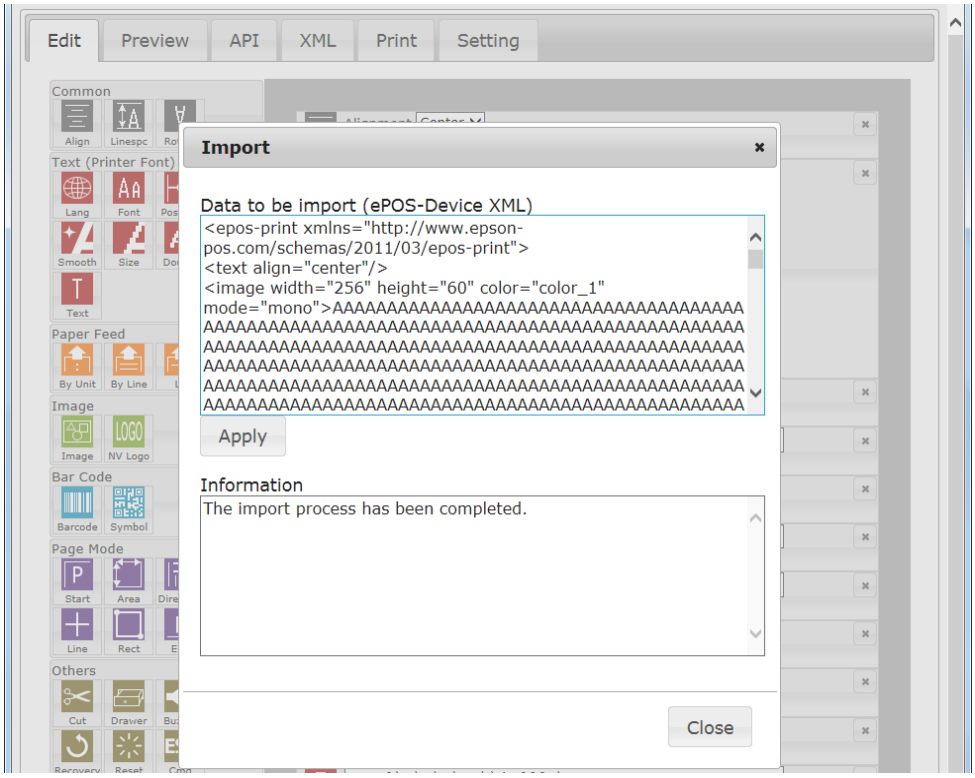
2. Check the content in the **Data to be sent (ePOS-Device XML)** area and then click the **Send** button.
   The ePOS-Device XML print document created on the **Edit** tab appears in the **Data to be sent (ePOS-Device XML)** area.

3. The print document is printed by the printer.
   The retrieved status appears in the **Information** window.

Import

Previously created and imported ePOS-Device XML print documents can be further edited in Receipt Designer.

> Source code created in the Epson ePOS SDK for JavaScript cannot be imported.
> Make sure to import print data in ePOS-Device XML format.



Item	Description
Data to be import (ePOS-Device XML):	The content of the ePOS-Device XML print document to be imported is pasted here for review.
Apply	Imports the ePOS-Device XML print documents.
Information	Information regarding the import process appears here.
Close	Closes the **Import** window.

Use the following procedure to import ePOS-Device XML print documents into Receipt Designer.

1. Select the **Edit** tab and click the **Import** button.
2. The **Import** window appears. The content of the ePOS-Device XML print document is pasted into the **Data to be import (ePOS-Device XML)** area.
3. Click the **Apply** button.
4. The **Confirm** screen appears. Click the **Yes** button.

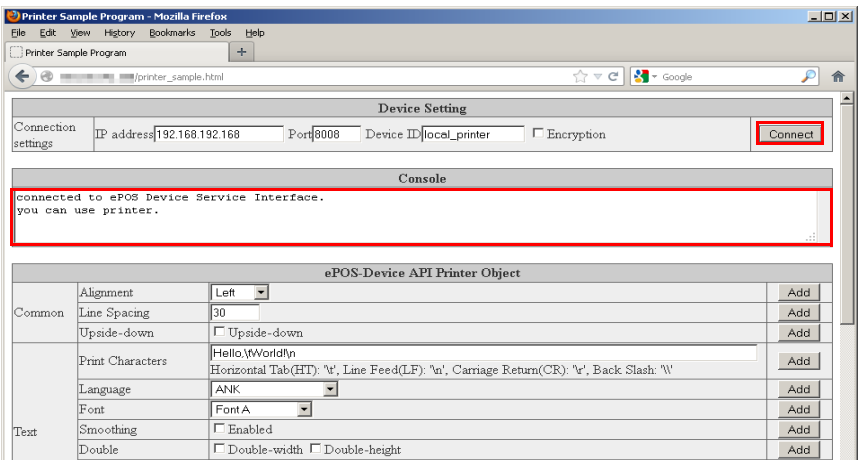
Printer Sample

This sample program can be used to operate printers and generate printer sample code.

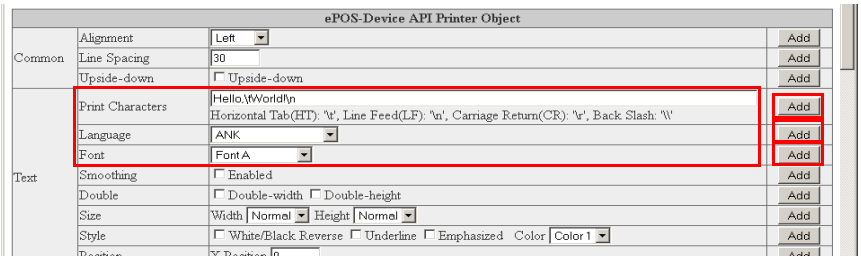
1 Start the sample program. Select **Printer Sample**.

2 The **Printer Sample** screen appears. Click the **Connect** button.
Once the connection has been successfully established, the following message appears in the **Console** area.

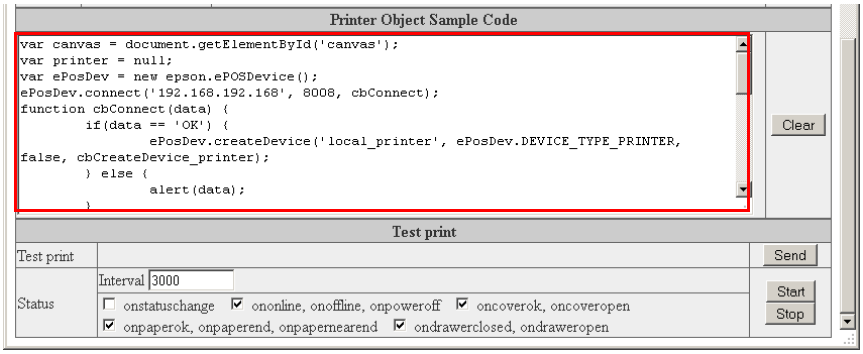
> The settings in the **Device Setting** area do not need to be changed. However, change the values as necessary when the IP address and others are changed.



3 Configure the desired devices and then click the **Add** button.



4 The source code for the device added in step 3 appears in the **Printer Object Sample Code** area. This code can be copied for use elsewhere.



5 Click the **Send** button to perform a test print using the function added in step 3.

Hybrid Printer 2 Sample

This sample program can be used to control hybrid printers.
The following functions are available in the sample program.

❏ Print function (Receipt/Slip/Endorsement/Validation)

❏ MICR function

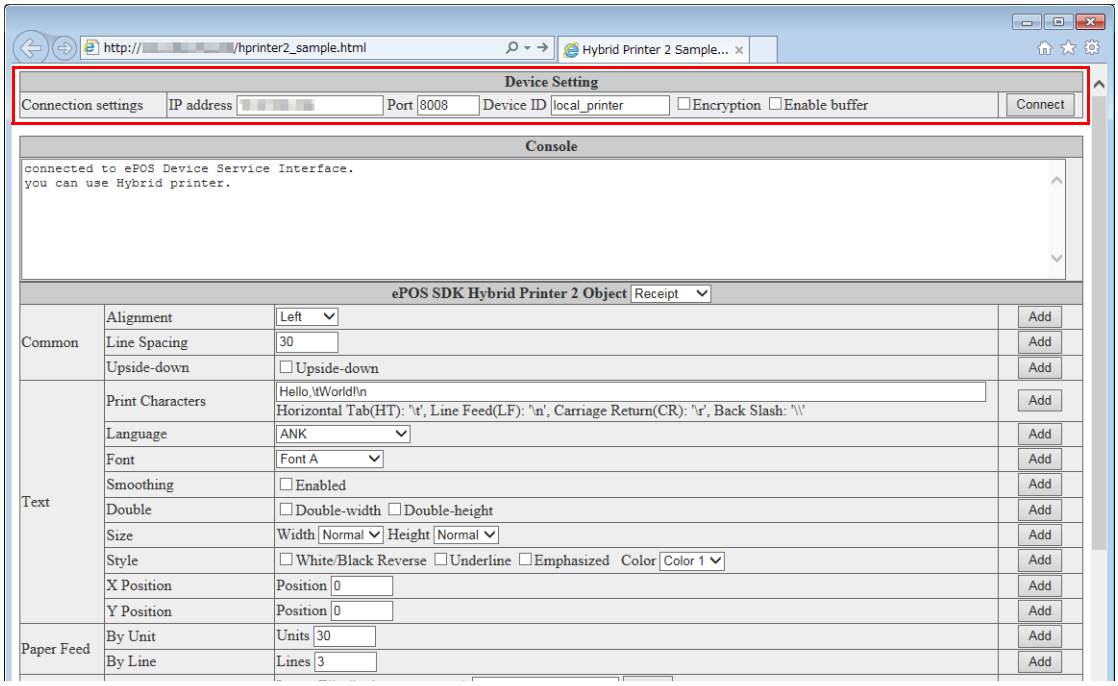
❏ Continuous operation function

Preparation

1 Start the sample program. Select **Hybrid Printer2 Sample**.

2 The **Hybrid Printer2 Sample** screen appears. Click the **Connect** button.
Once the connection has been successfully established, the following message appears in the **Console** area.

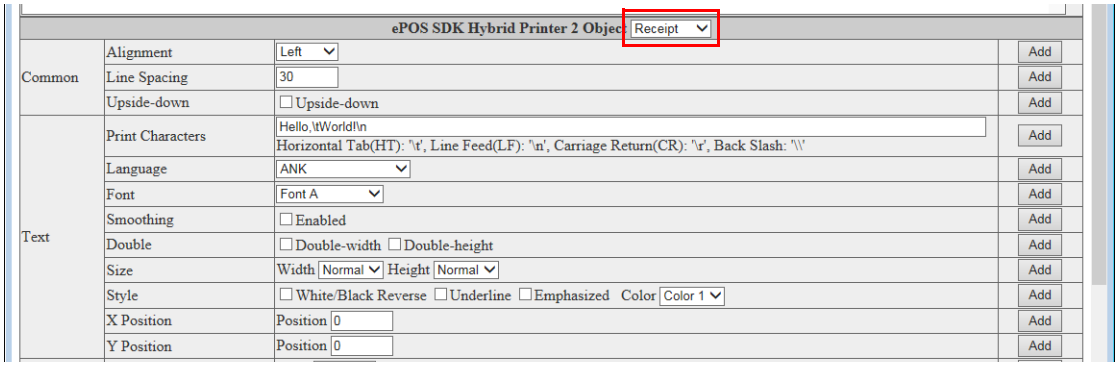
> The settings in the **Device Setting** area do not need to be changed. If the IP address, etc. is changed, set the value.



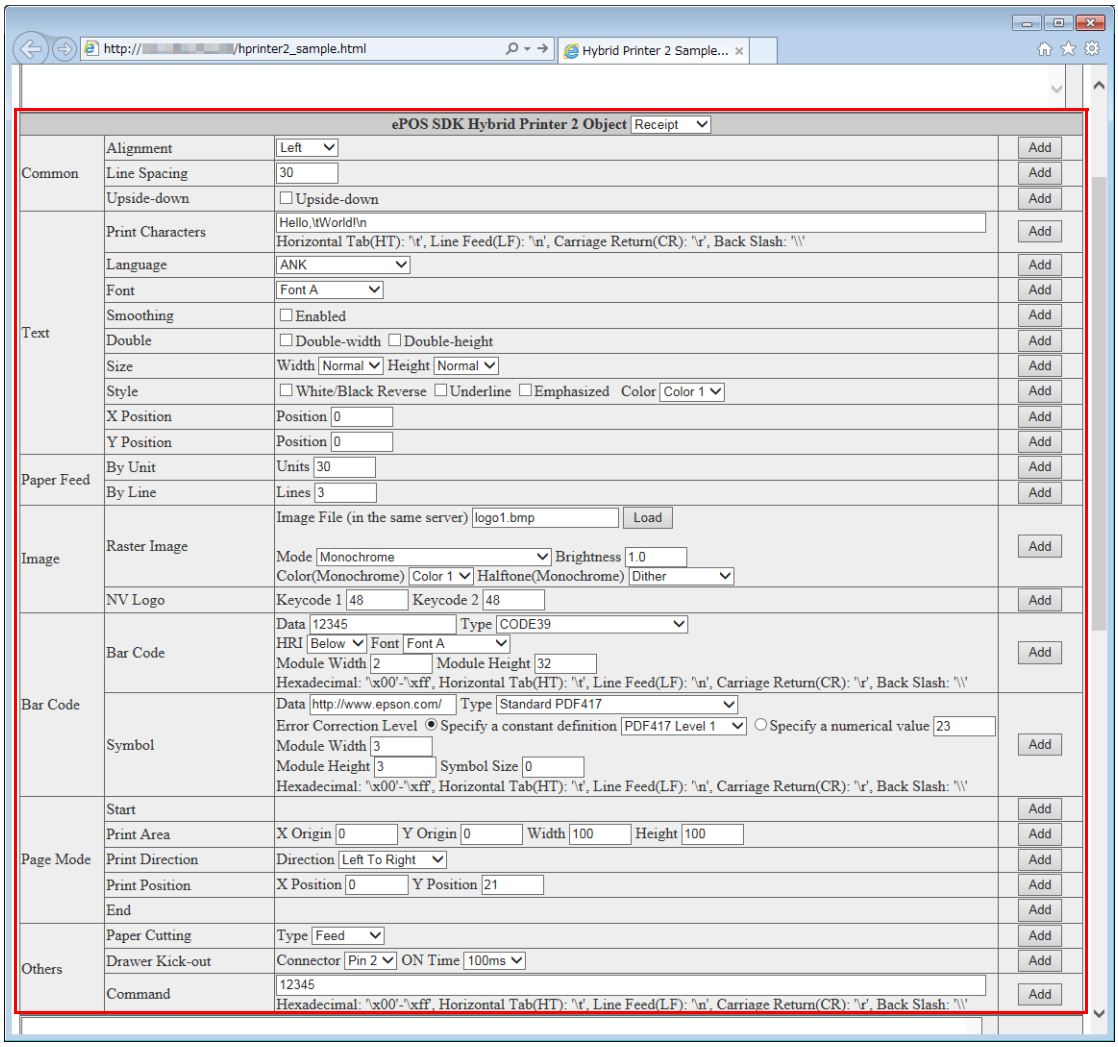
Using Printer Functions

Controls receipt printing, slip printing, endorsement printing, and validation printing.

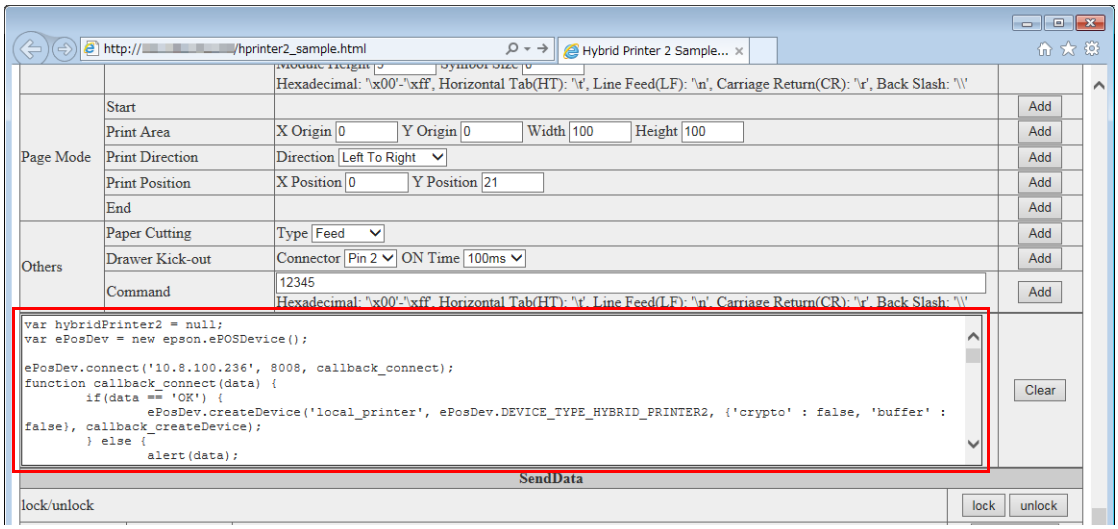
1 Select the print method from the pull-down list.



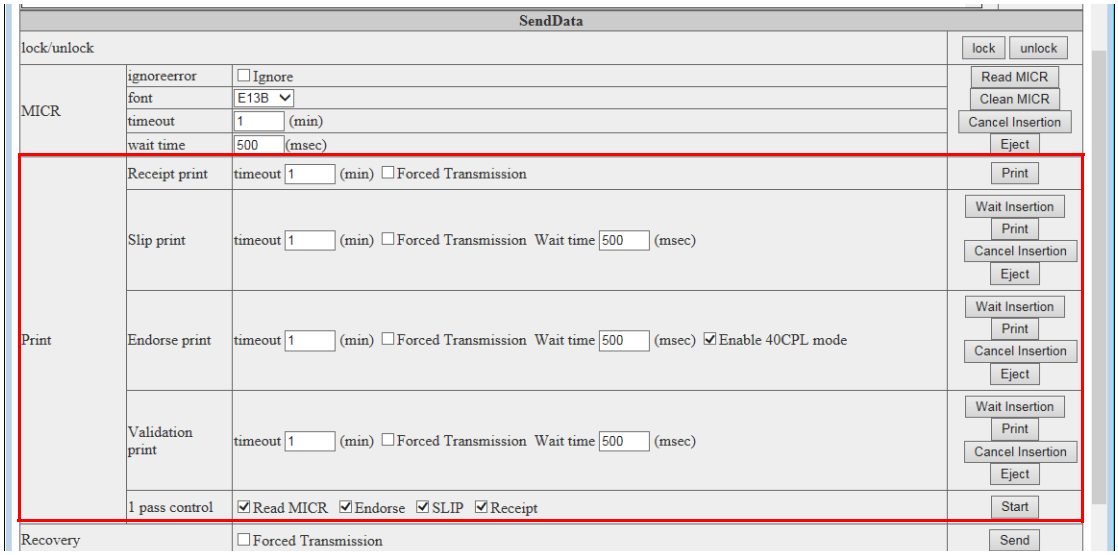
2 Set the functions to be used from **ePOS SDK Hybrid Printer 2 Object**, and click the **Add** button.



3 The source codes for the functions added in step 2 appear in the text box.



4 Controls the print operation for each print method selected in step 1 from **Print**.

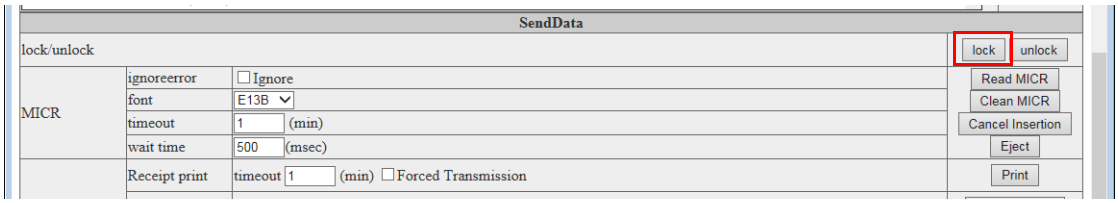


Slip, endorsement, and validation printings are performed in the following procedure:

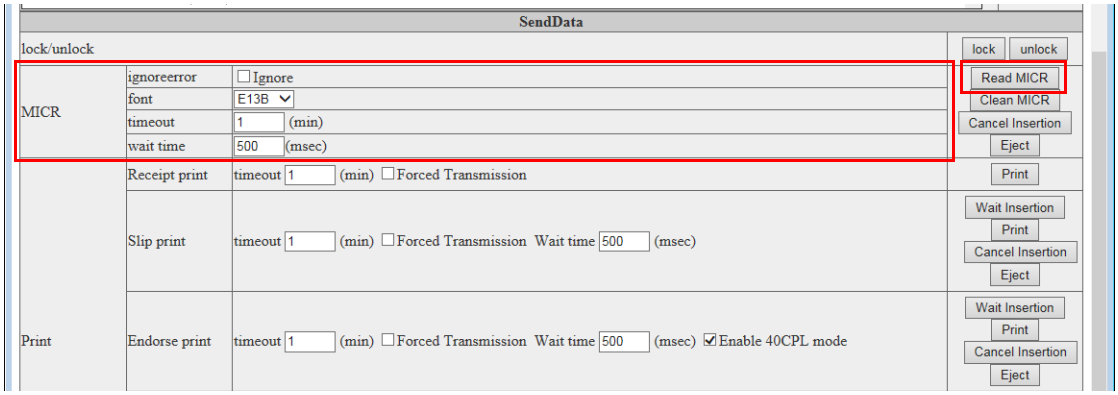
1. Click the **Wait Insertion** button.
2. Set the papers in the printer.
3. After confirming that the printer has set the papers, click the **Print** button.
4. After confirming that the print operation has been completed, click the **Eject** button.
5. Remove the papers.

Using MICR Functions

1 Click the **lock** button.



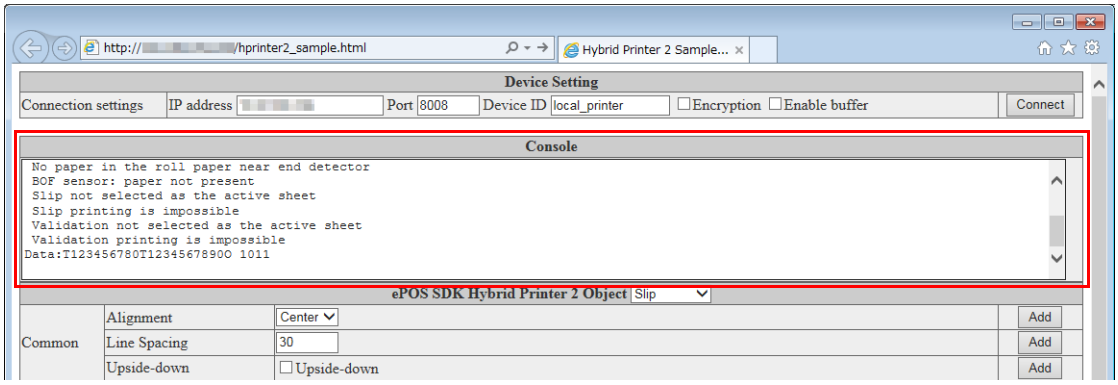
2 Configure the MICR settings and then click the **Read MICR** button.



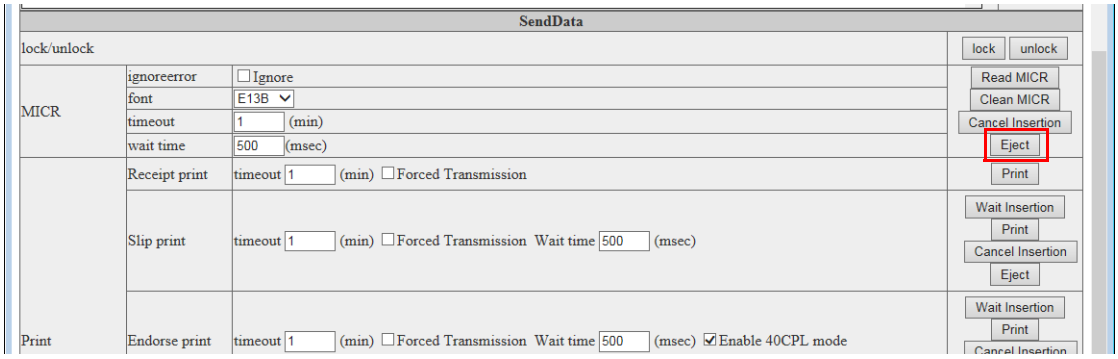
3 Add papers into the hybrid printer.

Starts MICR read operation when the papers are set.

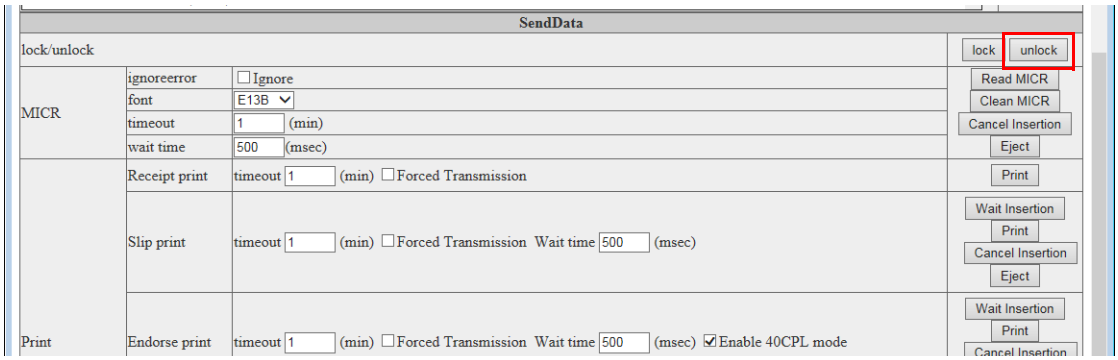
4 The MICR read result appears in **Console**.



5 Click the **Eject** button to eject the paper.



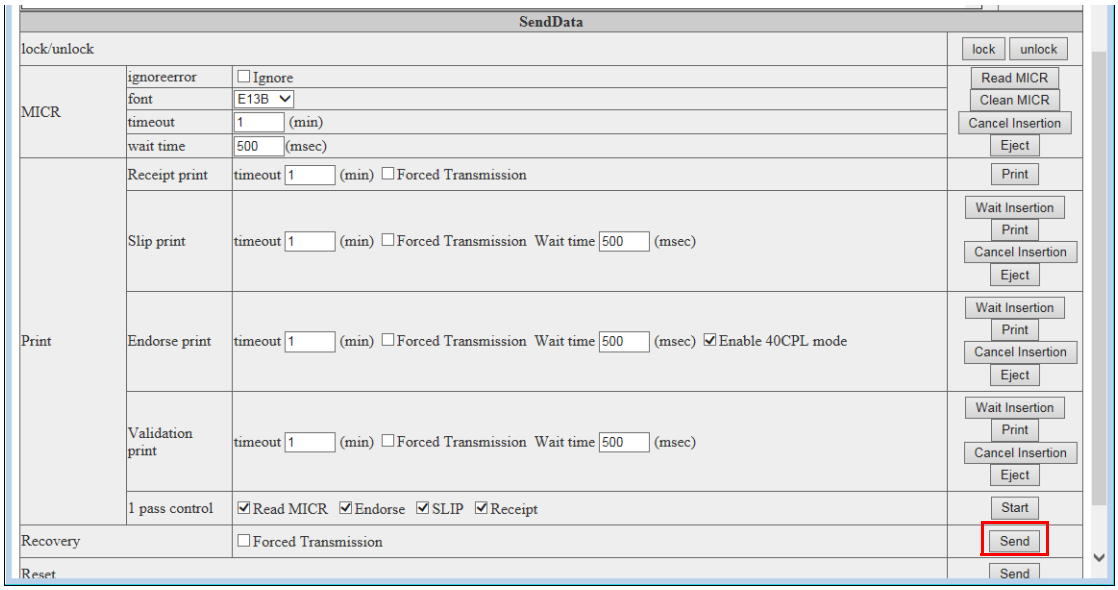
6 Remove the paper, and click the **unlock** button.



Continuous operation function

Controls operations continuously from endorsement printing after MICR reading to slip and receipt printings.
With this function, the operation to control can be selected from **1 pass control**.
The following describes how the entire printing operation from MICR reading to endorsement, slip, and receipt printings is controlled.

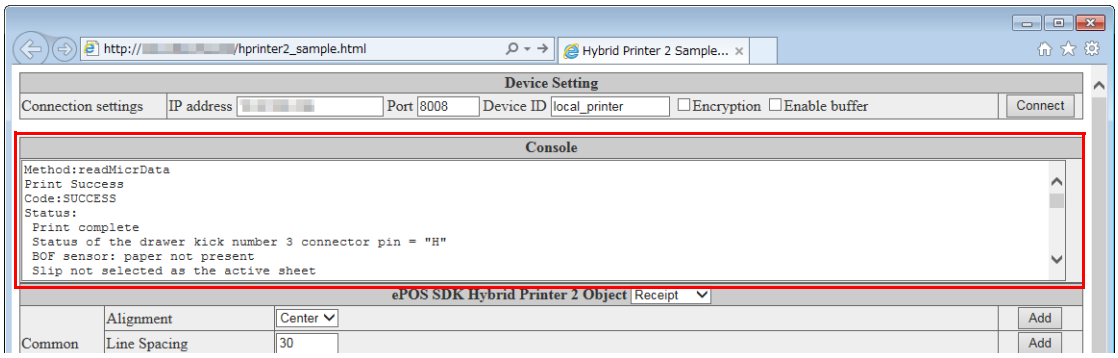
1 Click the **Start** button.



2 Add papers into the hybrid printer.
Starts MICR read operation when the papers are set, and then performs endorsement and slip printings.
The papers are automatically ejected after slip printing.

3 Remove the papers.
Starts receipt printing when the papers are removed.

4 The processing result appears in **Console**.



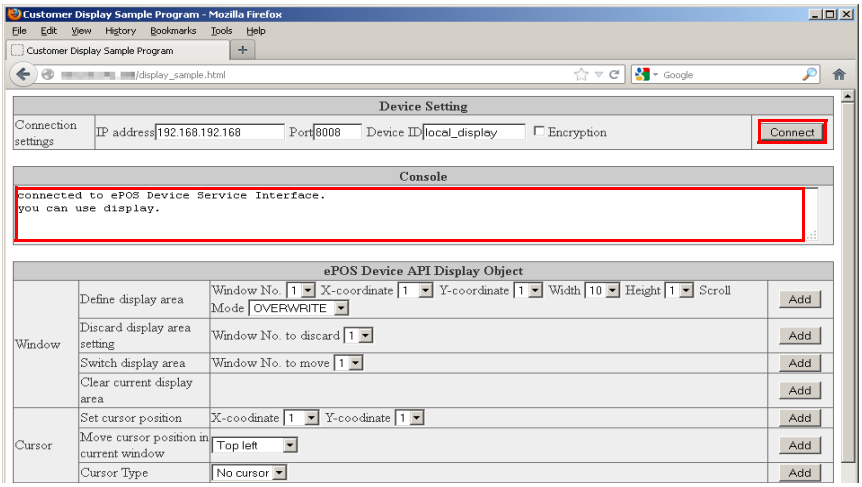
Customer Display Sample

This sample program can be used to generate sample code that appears on customer displays and to send generated code used to operate customer displays.

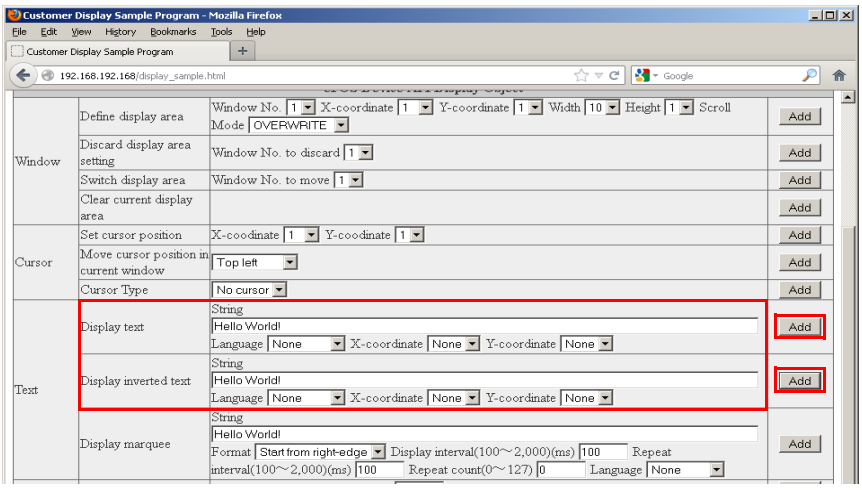
1 Start the sample program. Select **Customer Display Sample**.

2 The **Customer Display Sample** screen appears. Click the **Connect** button.
Once the connection has been successfully established, the following message appears in the **Console** area. The customer display also changes.

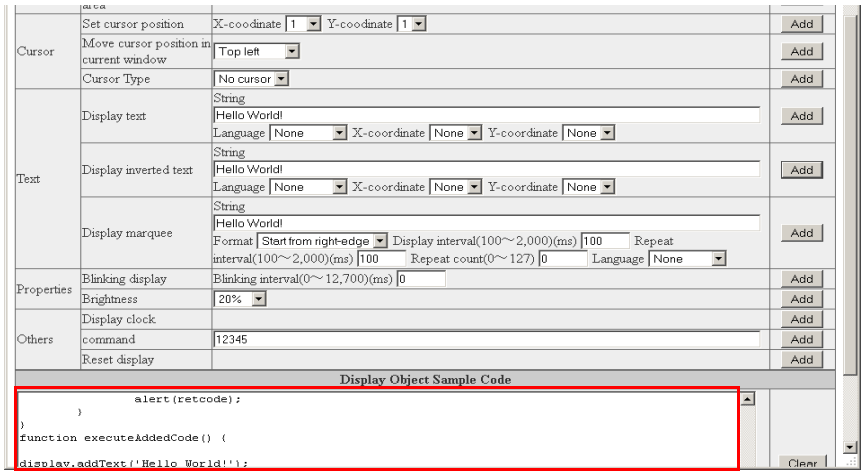
> The settings in the **Device Setting** area do not need to be changed. Change the values as necessary when desired.



3 Configure the desired devices and then click the **Add** button.



4 The source code for the function added in step 3 appears in the **Display Object Sample Code** area. This code can be copied for use elsewhere.



5 Clicking the **Send** button changes the customer display using the function added in step 3.

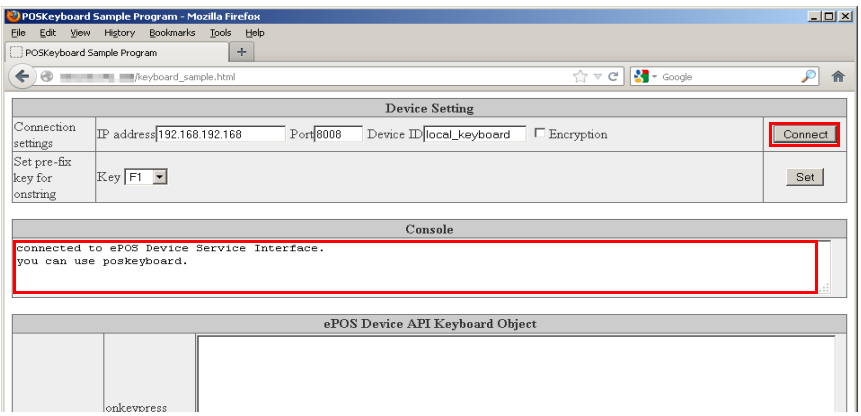
Keyboard Sample

This sample program can be used to retrieve input from keyboards.

1 Start the sample program. Select **Keyboard Sample**.

2 The **Keyboard Sample** screen appears. Click the **Connect** button.
Once the connection has been successfully established, the following message appears in the **Console** area.

> The settings in the **Device Setting** area do not need to be changed. Change the values as necessary when desired.

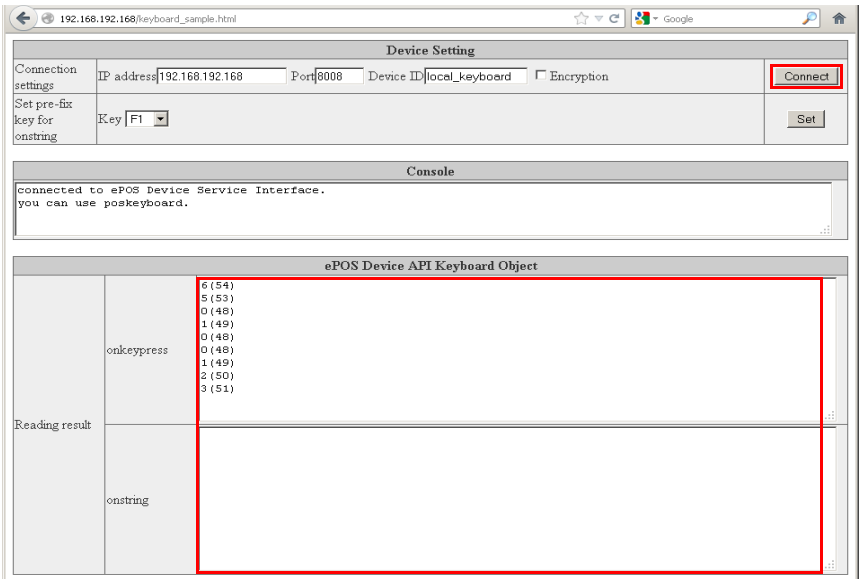


3 Select the key which determines when a text string starts and then click the **Register** button.
This configuration needs to be registered on the keyboard beforehand.
Ex.: F1 + specified text string + Enter

4 When input is generated with the keyboard, the input data appears in the **ePOS Device API Keyboard Object** area.

Direct input of text strings: Appears in the onkeypress area.

Input of text string configured to a key: Pressing the key of the specified text string displays the text string in the onstring area.



MSR Sample

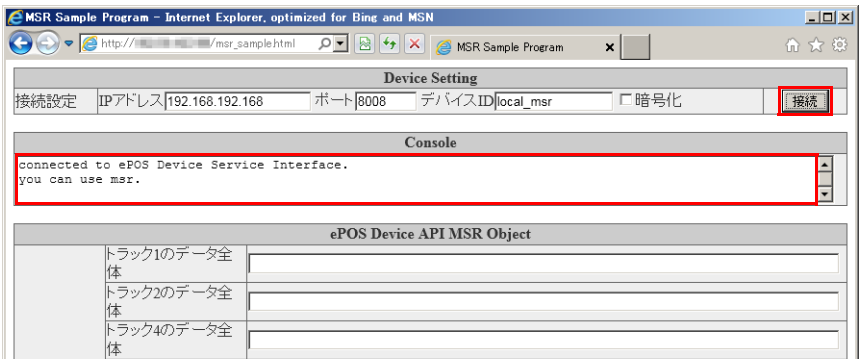
This sample program can be used to retrieve input from MSR devices.

> It can be used only in the TM-DT series.

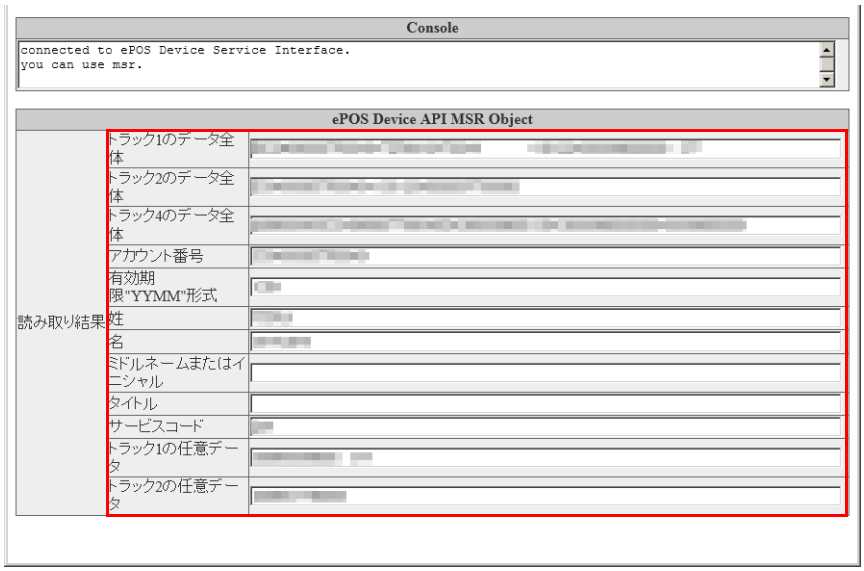
1 Start the sample program. Select **MSR Sample**.

2 The **MSR Sample** screen appears. Click the **Connect** button.
Once the connection has been successfully established, the following message appears in the **Console** area.

> - For using MSR of the standard HID, it is not necessary to change the setting of **Device Setting**. If the IP address, etc. is changed, set the value.
> - For using MSR conforming to OPOS standard, enter the logical device name set in Configure the printer environment for the device ID.



3 The information in the card read by the MSR device appears in the **ePOS Device API MSR Object** area.



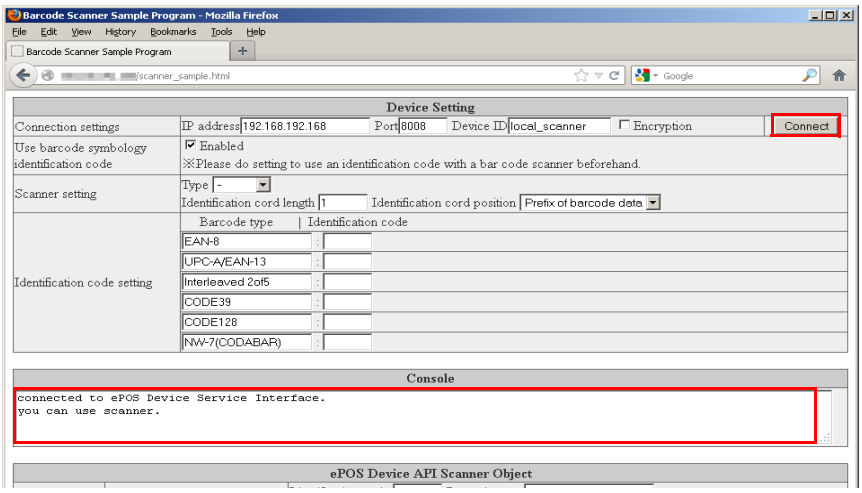
Barcode Scanner Sample

This sample program can be used to retrieve input from barcode scanners.

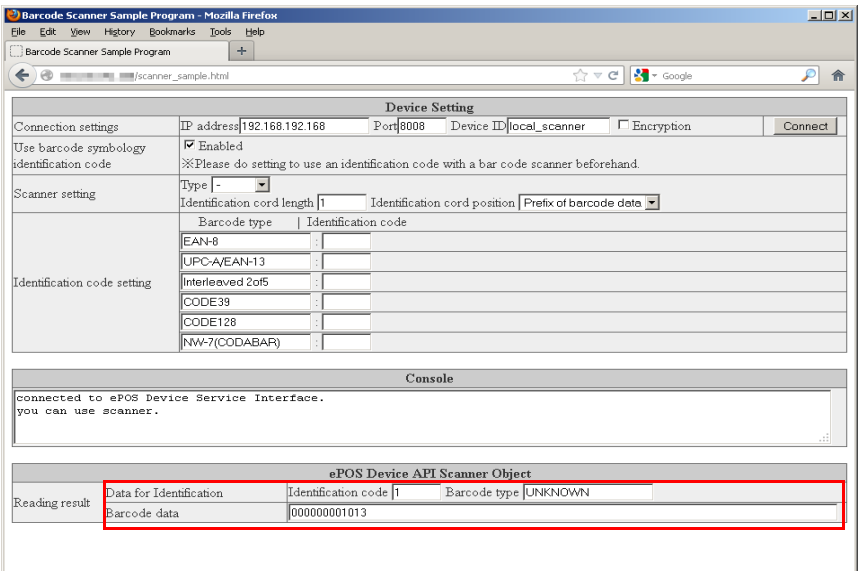
1 Start the sample program. Select **Barcode Scanner Sample**.

2 The **Barcode Scanner Sample** screen appears. Click the **Connect** button.
Once the connection has been successfully established, the following message appears in the **Console** area.

- If using a barcode scanner of the standard HID, it is not necessary to change the setting of **Device Setting**. If the IP address, etc., is changed, set the value.
- If using a barcode scanner conforming to OPOS specification, enter the logical device name set in Configure the printer environment for the device ID.



3 The information corresponding to the read barcode appears in the **ePOS Device API Scanner Object** area.



POSKeyboard Sample

This sample program can be used to retrieve input from POS keyboards.

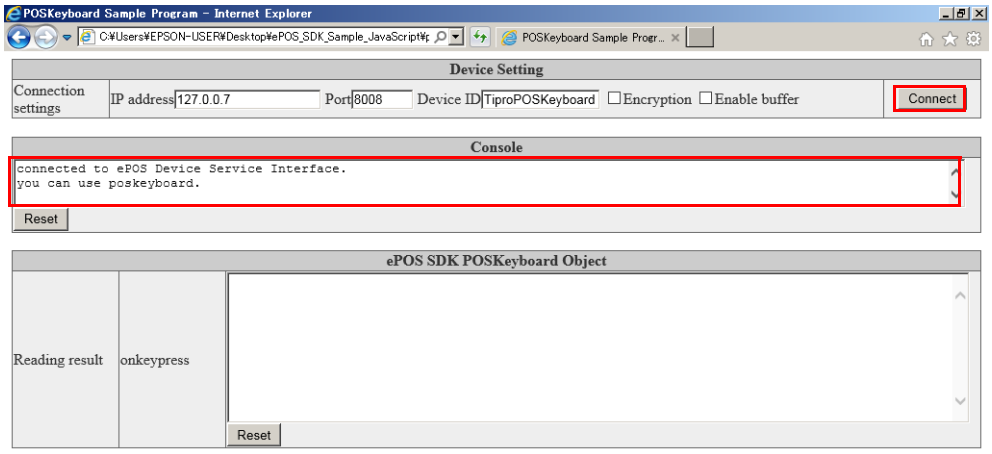
> Register POS keys in the POS keyboards beforehand.

1 Start the sample program. Select **POSKeyboard Sample**.

2 The **POSKeyboard Sample** screen appears. Enter the logical device name set in Configure the printer environment for the device ID and then click **Connect**.

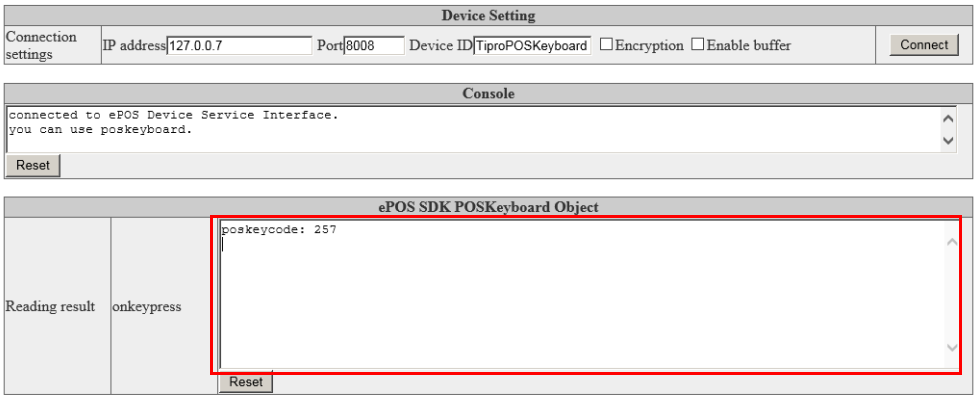
> If the IP address, etc. is changed, set the value.

3 Once the connection has been successfully established, the following message appears in the **Console** area.



4 When input is generated with the POS keyboard, the input data appears in the **ePOS SDK POSKeyboard Object** area.

POS key input: Displays the keycodes set in the POS keys.



OtherPeripheral Sample

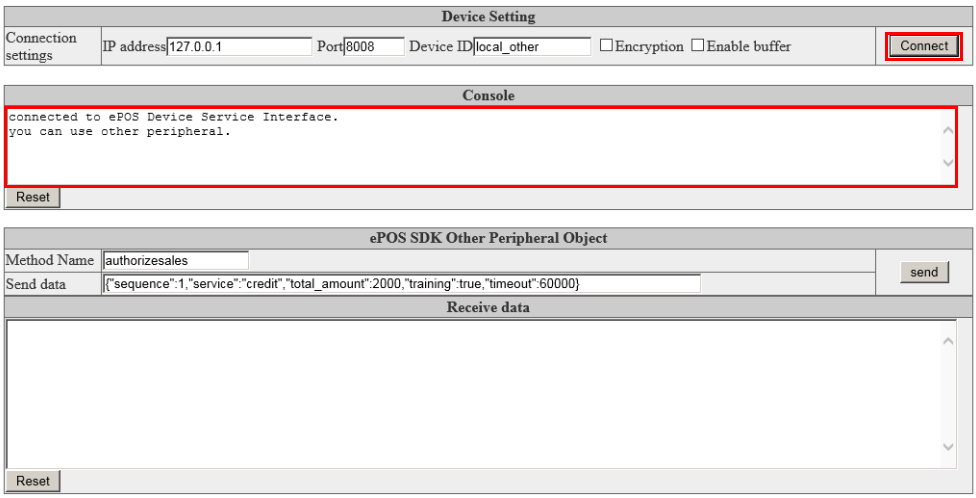
This sample program can be used to confirm data transmission and reception with other peripheral devices (that can be controlled with the device control program) using the device control program samples.

> Add the device control program and register the device. Refer to Executing the Other Peripheral Sample for details.

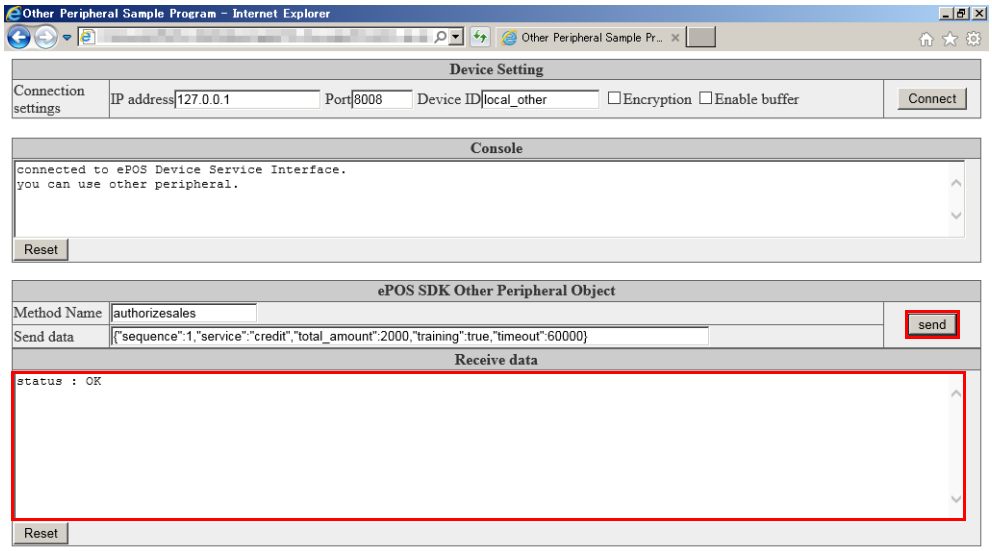
1 Start the sample program. Select **OtherPeripheral Sample**.

2 The **OtherPeripheral Sample** screen appears. Click **Connect**.
Once the connection has been successfully established, the following message appears in the **Console** area.

> It is not necessary to change the setting of **Device Setting**. If the IP address, etc, is changed, set the value.



3 Click **send** to transmit request data to the device control program.
The response from the device control program appears in **Receive data**.



Application Guide

To monitor continuously

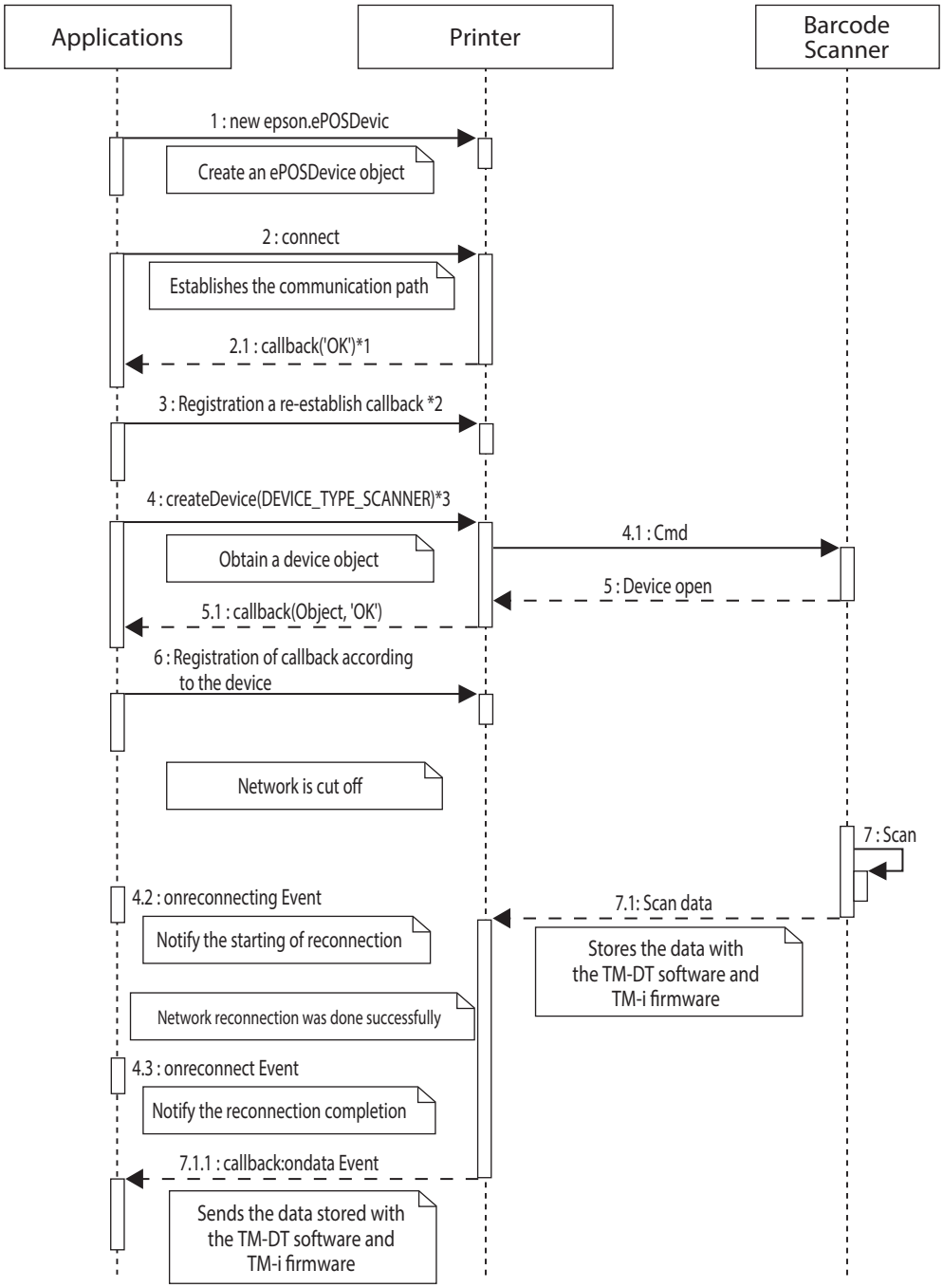
```
var ePosDev = new epson.ePOSDevice();
var printer = null;

function connect(){
   //Connects to a device
   ePosDev.connect('192.168.192.168', '8008', callback_connect);
}

function callback_connect(resultConnect){
   if ((resultConnect == 'OK') || (resultConnect == 'SSL_CONNECT_OK')) {
      //Retrieves the Printer object
      ePosDev.createDevice('local_printer', ePosDev.DEVICE_TYPE_PRINTER, {'crypto' : false,
'buffer' : false}, callback_createDevice);
   }
   else {
      //Displays error messages
   }
}

function callback_createDevice(deviceObj, retcode){
   printer = deviceObj;
   if( retcode == 'OK' ) {
      printer.timeout = 60000;
   //Registers an event
      printer.onstatuschange = function (res) { alert(res.success); };
      printer.onbatterystatuschange = function (res) { alert(res.success); };
      print();
   } else {
      alert(retcode);
   }
}

function startMonitor(){
   //Starts the status monitoring process
   printer.startMonitor();
}

//Opens the printer cover

function stopMonitor(){
   //Stops the status monitoring process
   printer.stopMonitor();
}

function disconnect(){
   //Discards the Printer object
   ePosDev.deleteDevice(printer, callback_deleteDevice);
}

function callback_deleteDevice(errorCode){
   //Terminates connection with device
   ePosDev.disconnect();
}
```

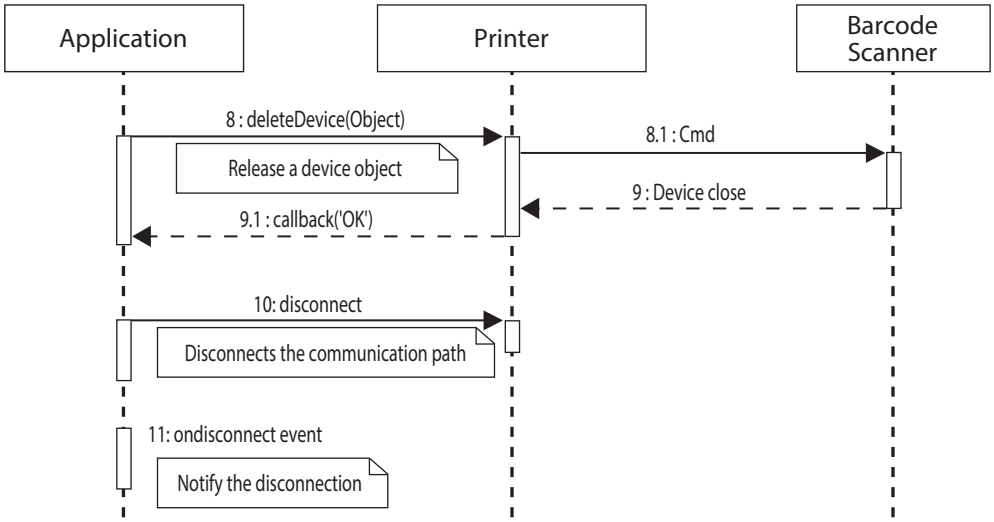
Refer to Error Codes acquired in the Onreceive Event and Countermeasure for the messages displayed on "Displays notification messages".

To reconnect to the network automatically

The following is a sequence for automatically reconnecting if network communication is cut off with the printer.

> The following uses a case where the barcode scanner is used as an example.





*1: "SSL_CONNECT_OK" (SSL/TLS communication)

*2: The reconnection process start event, reconnection stop event, and reconnection failure event are included.

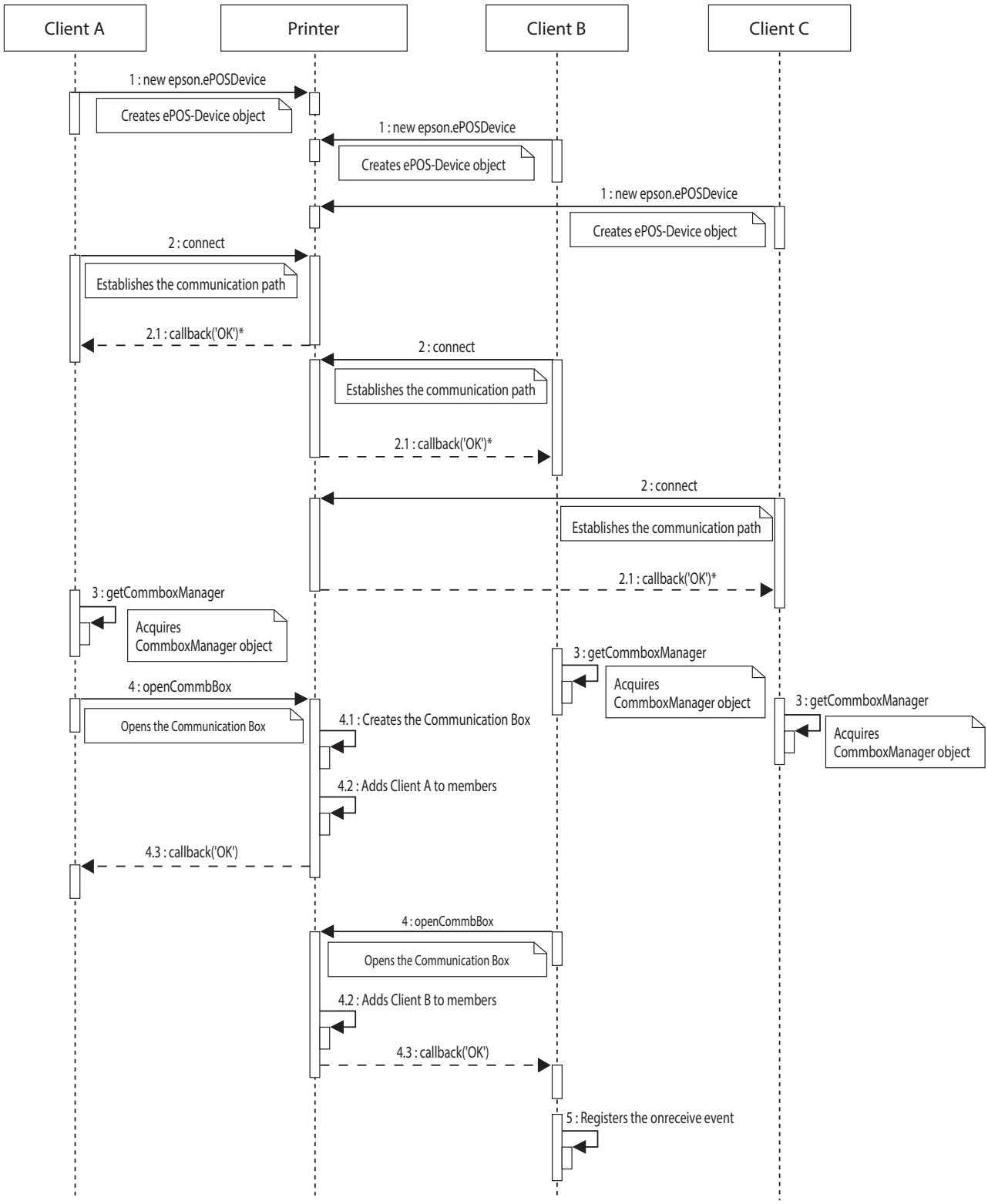
*3: Configure the options parameters so that data is resent when the network connection is reestablished.

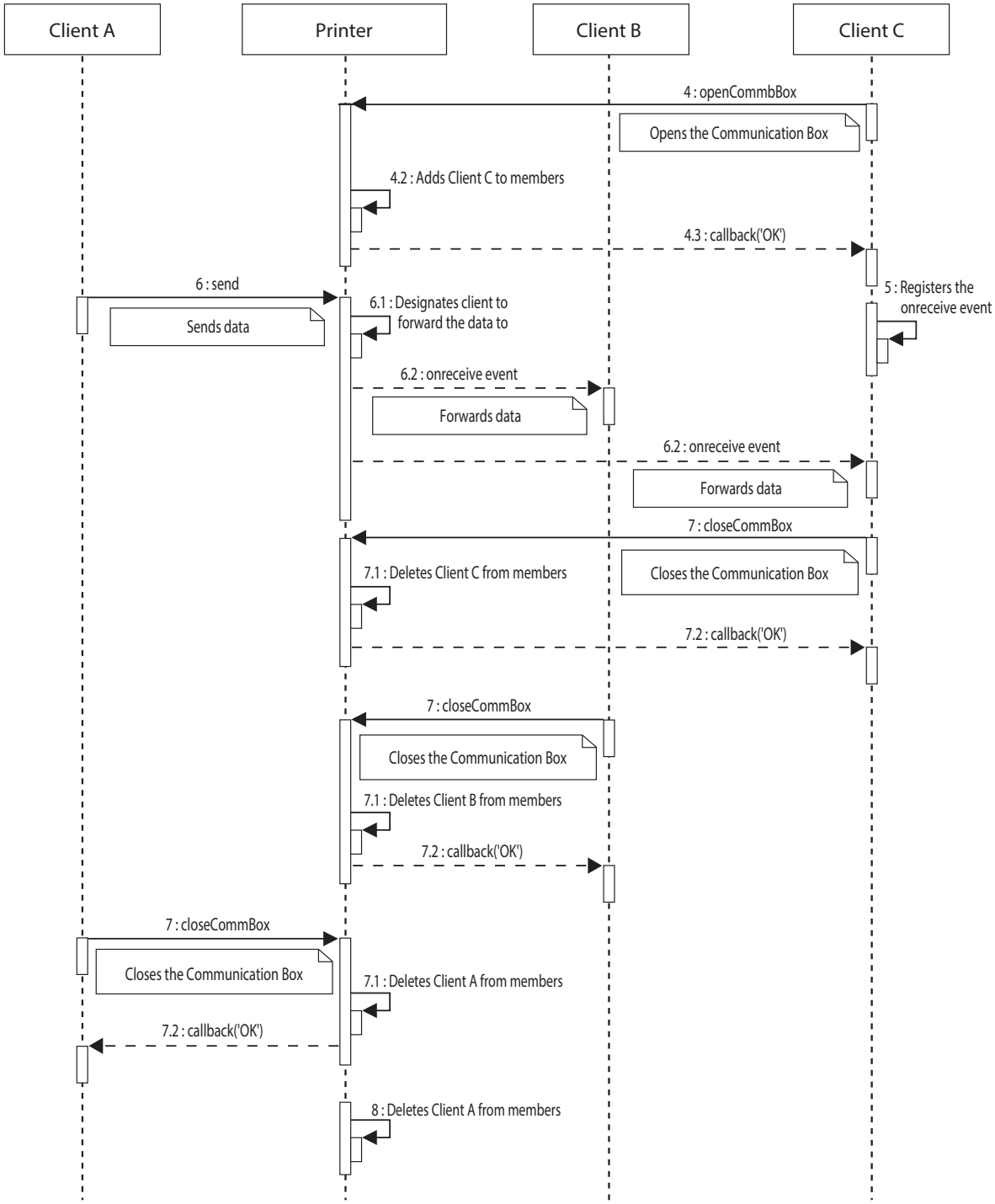
To transmit and receive the data between applications

Use the Communication Box function of the printer.

For details on a printer equipped with the Communication Box function, refer to Functions provided in each printer.

The following diagram illustrates the sequence of basic programming using communication boxes. The term "Client" as used in the sequence diagram represents the application.





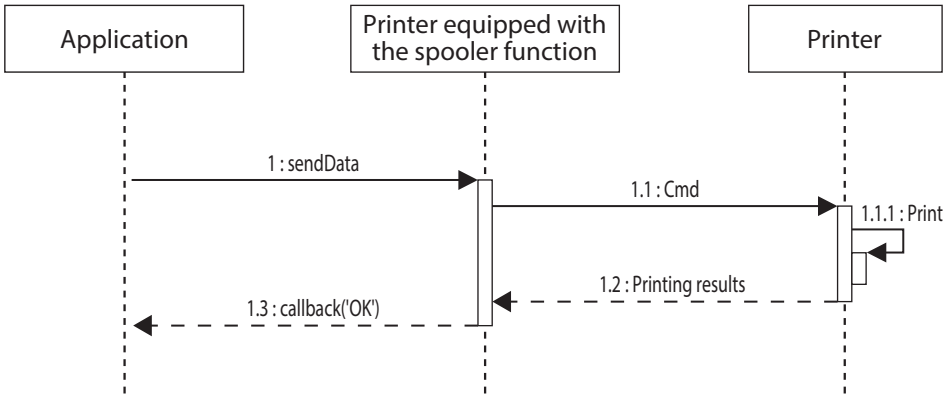
*: "SSL_CONNECT_OK" (SSL/TLS communication)

To perform forward printing

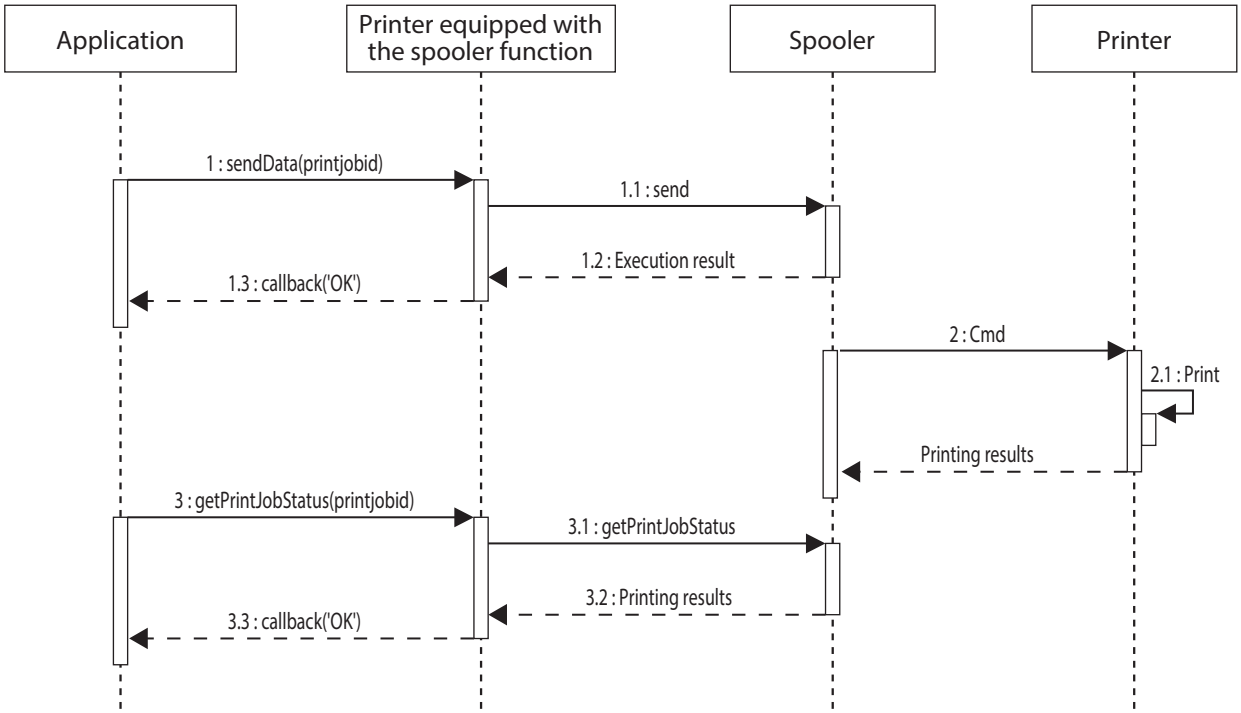
Use the spooler function of printers.

For details on a printer equipped with the spooler function, refer to Functions provided in each printer.

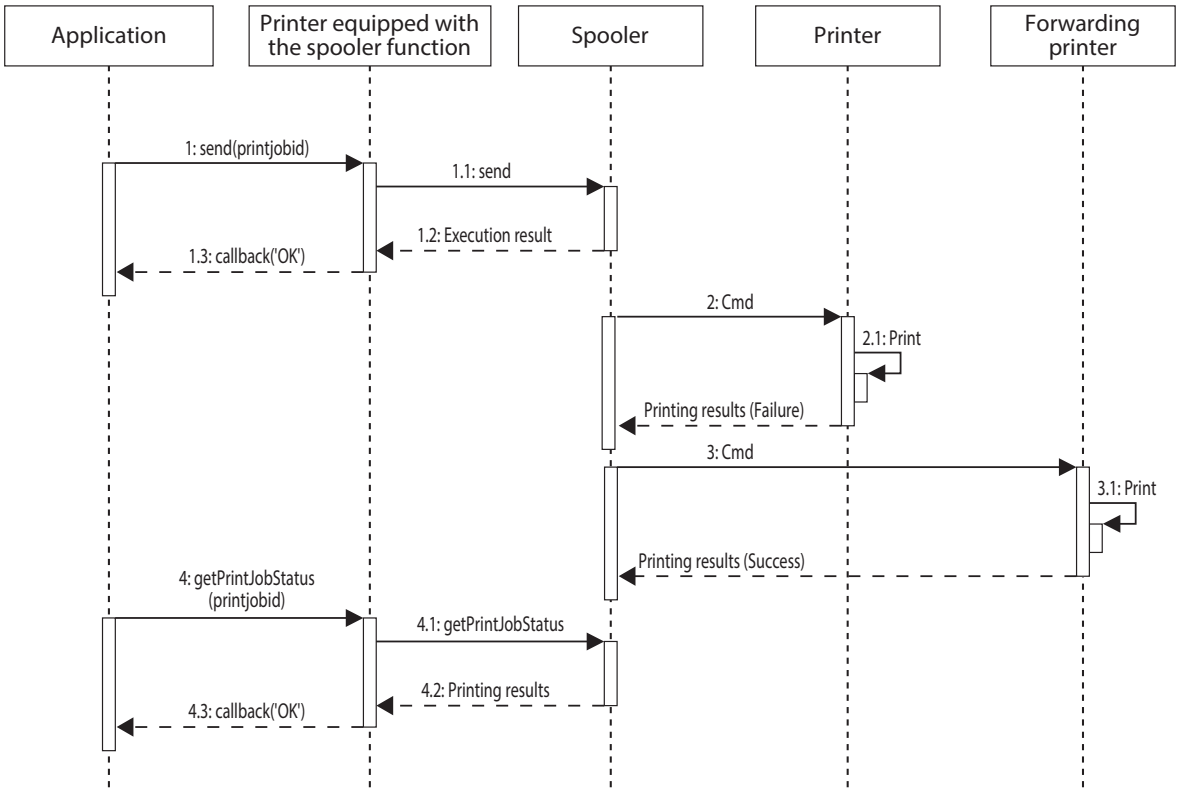
If a request is sent to the printer equipped with the spooler function from the application when the spooler function is disabled, printing is immediately executed and a response is returned to the application after printing completes.



If a request is sent to the printer equipped with the spooler function from the application when the spooler function is enabled, the print job is stored in the print queue and a response is returned to the application before printing completes.



If the destination printer cannot print, the printer equipped with the spooler function does not return the error to the application. Enabling forward printing will allow the printing task to be completed on a substitute printer with the application acquiring the printing results afterward. Refer to the following sequence diagram.



❏ Programming Example

Enabling the spooler function returns a response that contains the print job ID.

If an ID is not specified for a print job by an application, an ID is issued by a printer equipped with the spooler function.

The print job status is represented in the print job ID that is contained in the retrieved response.

```
var printjobid = '';

function sendJob() {
   printer.addText('Hello, World!\n');
   printer.addCut();
   printer.onreceive = function (res) {
      if (res.success) {
         printjobid = res.printjobid;
      }
   }
   printer.onerror = function (err) { alert(err.status); };
   printer.send();
}

function getJobStatus() {
   if (printjobid.length > 0) {
      printer.onreceive = function (res) { alert(res.success); };
      printer.onerror = function (err) { alert(err.status); };
      printer.getPrintJobStatus(printjobid);
   }
}
```

Developing Applications that Frequently Update or Transition Web Pages

Applications created with Epson ePOS SDK for JavaScript must terminate connections with devices and then reestablish these connections every time a Web page is updated or a transition is made. Therefore, the start of printing or the display may be delayed.
The time taken by the connection process can be reduced by enabling ePOS-Print options.

Enabling ePOS-Print options

The ePOS-Print options are configured with the connect method option parameters.

Example: Enabling ePOS-Print options.

```
connect("192.168.192.168", "8008", callback, {"eposprint" : true});
```

Limitations

- The ePOS-Print option does not affect the control of single-function models and mobile models.
- When the ePOS-Print option has been enabled, the peripheral devices other than the slave printers and customer display cannot be controlled.

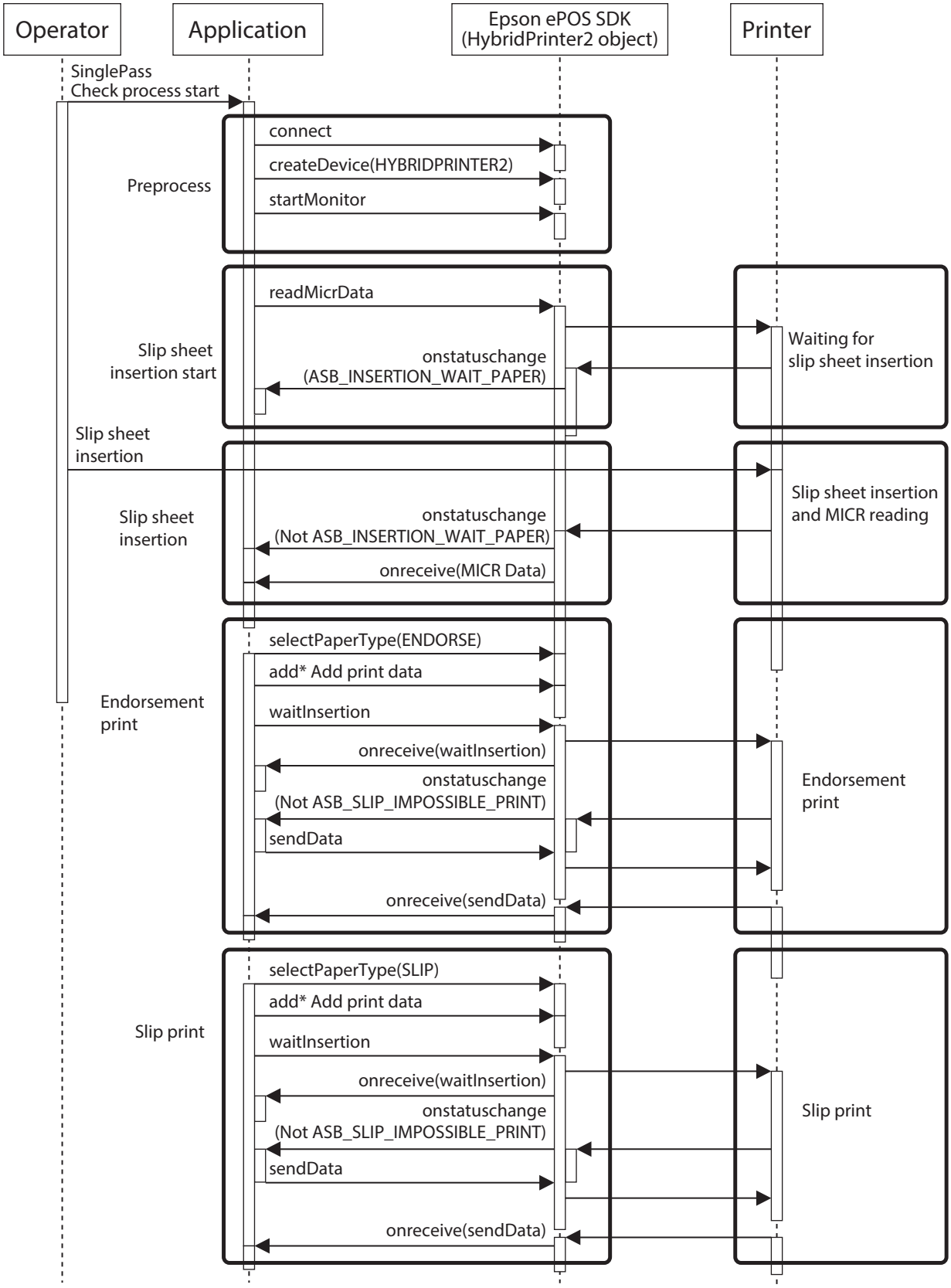
  The objects that can be used when the ePOS-Print option has been enabled are as follows. (Reference: List of Supported Objects)
  - ePOSDevice object
  - Display object
  - Printer object

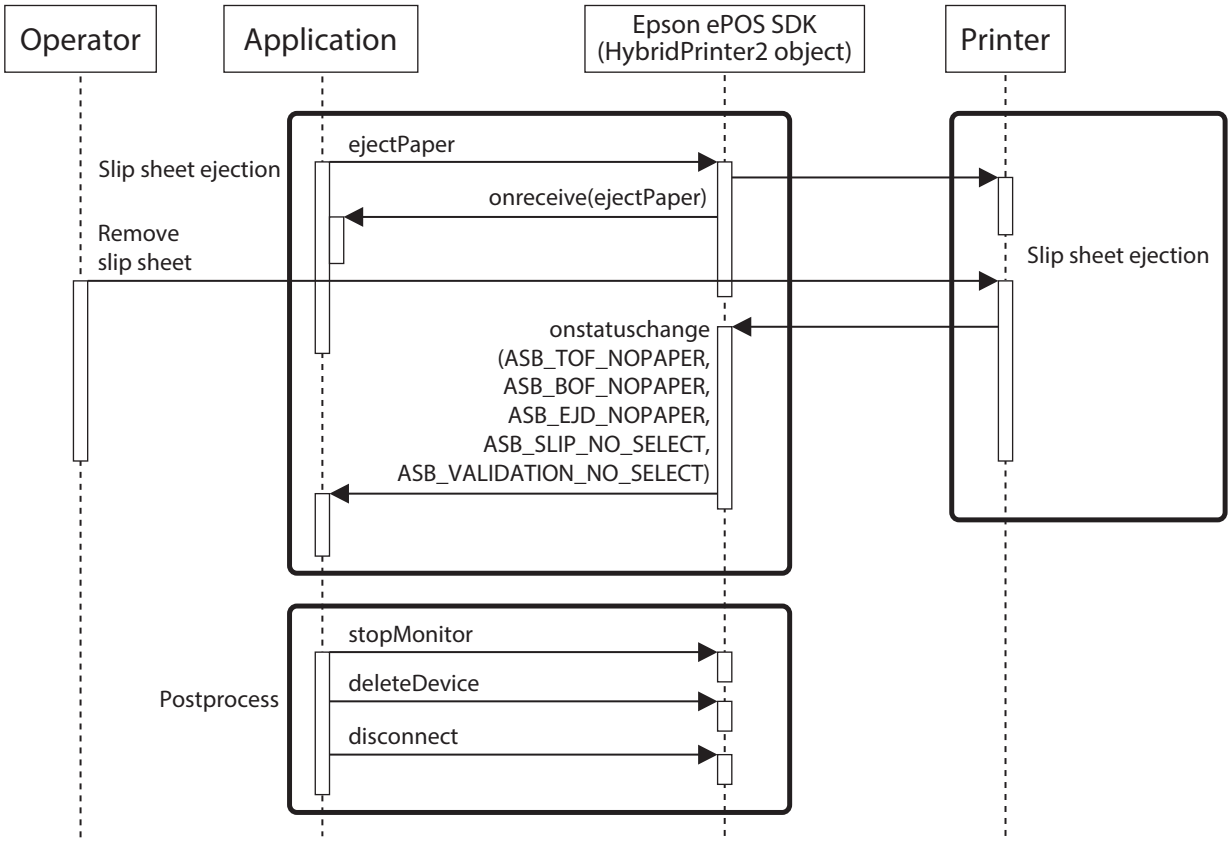
- Do not enable the ePOS-Print option in the system configuration of TM Printer + DM-D + barcode scanner model and POS terminal model.
  It may no longer be possible to control peripheral devices other than the slave printers and customer display.

To perform check process

The HybridPrinter2 object is used to control the hybrid model printers.

The following sequence diagram shows the flow from endorsement printing after MICR reading to slip printing.




Operator
Application
Epson ePOS SDK
(HybridPrinter2 object)
Printer
Slip sheet ejection
ejectPaper
onreceive(ejectPaper)
Remove
slip sheet
Slip sheet ejection
onstatuschange
(ASB_TOF_NOPAPER,
ASB_BOF_NOPAPER,
ASB_EJD_NOPAPER,
ASB_SLIP_NO_SELECT,
ASB_VALIDATION_NO_SELECT)
Postprocess
stopMonitor
deleteDevice
disconnect

Appendix

Open Source Software Licensing

The following open-source software is used in the sample programs and libraries provided by the Epson ePOS SDK for JavaScript.

MIT Licensed

```
/**
 * @license
 * zlib.js
 * JavaScript Zlib Library
 * https://github.com/imaya/zlib.js
 *
 * The MIT License
 *
 * Copyright (c) 2012 imaya
 *
 * Permission is hereby granted, free of charge, to any person obtaining a copy
 * of this software and associated documentation files (the "Software"), to deal
 * in the Software without restriction, including without limitation the rights
 * to use, copy, modify, merge, publish, distribute, sublicense, and/or sell
 * copies of the Software, and to permit persons to whom the Software is
 * furnished to do so, subject to the following conditions:
 *
 * The above copyright notice and this permission notice shall be included in
 * all copies or substantial portions of the Software.
 *
 * THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
 * IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
 * FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
 * AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
 * LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,
 * OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN
 * THE SOFTWARE.
 */
```

BSD Licensed

Copyright (c) 2008-2018 Brian Turek, 1998-2009 Paul Johnston & Contributors
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
* Neither the name of the the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.