

# [TSPL Windows SDK]

[Printer TSPL Command Development Manual v2.0.3]

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# 1. Information of the Manual

This SDK manual provides the dll file information for Windows application development. We continuously promote and update the function and quality of all our products. Any change to the product specification and the manual will be without any further notice.

## 2. Operation System

Windows 10 or above

## 3. Remark

When error code Return Value is greater than 0, it is the internal error of Windows system, please refer to related help file.  
The printer resolution is 200 dpi,1 mm=8 dot;The printer resolution is 300 dpi,1 mm=12 dot.

## 4. Method

### 4.1.InitPrinter

Set up the target printer of specified model (the printer object must be created before any printer operation).

```
void* InitPrinter (  
    const TCHAR* model  
);
```

**Parameter:**

*const TCHAR\* model*  
[in] Specify the model of target printer.

**Return Value:**

success:Returns a handle to the printer object  
fail:Return NULL

### 4.2.ReleasePrinter

The method is to release the resources of the printer object (the created printer object must be released after the operation is completed ).

```
int ReleasePrinter (
```

```
void* hPrinter
);
```

**Parameter:**

*void\* hPrinter*

[in] Handle to the target printer object that needs to be released

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory

### 4.3.OpenPort

Open the communication port and connect with the printer. After successfully connected, other functions can be used. If failed connecting, please check the error information. Currently it supports USB, internet, serial interface.

```
int OpenPort (
    void* hPrinter,
    const TCHAR* setting
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*const TCHAR\* setting*

[in] Set the communication port parameters to connect to the target printer. See the table below for details:

Configuration List:

Type	Configuration	Description	Sample
USB	USB,Model/PortNum	USB,printer model USB,The port number If you connect multiple printers of different models of our company at the same time, it is recommended to use "USB, model" to connect	USB,4B-2054A USB,USB031
NET	NET, IP address (IPV4)[,port]	Specify the IPAddress and port.If no port is specified,The default port is 9100.	NET,192.168.1.10 NET,192.168.1.10,9100
COM	COMn,rate	Specify the number and baud rate of connected serial port	COM10,19200

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_USB_DEVICE_NOT_FOUND	-17	Failed, device not found
ERROR_IO_OPEN_FAILED	-8	Failed to open port

## 4.4.ClosePort

This function is to close the communication port and disconnect with the printer.

```
int ClosePort (
    void* hPrinter
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-3	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-2	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory

## 4.5.WriteData

This function is to send data to the printer.

```
int WriteData(
    void* handle,
    unsigned char* buffer,
    unsigned int size
);
```

**Parameter:**

*void\* handle*

[in] The created target printer object.

*unsigned char\* buffer*

[in] The data sent to the printer (hex string).

*unsigned int size*

[in] The length of the sent data.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument

ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out

## 4.6.ReadData

This function is to read the printer data.

```
int ReadData(
    void* handle,
    unsigned char* buffer,
    unsigned int size
);
```

**Parameter:**

*void\* handle*

[in] The created target printer object.

*unsigned char\* buffer*

[in] Printer data to be read.

*unsigned int size*

[in] The length of the data to be read.

**Return Value:**

Code	Value	Description
>0	>0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_OPEN_FAILED	-8	Failed to open port

## 4.7.TSPL SelfTest

This method is to print a self-test page for the printer, which contains basic configuration information for the printer.

```
int TSPL_SelfTest(
    void* hPrinter
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory

ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.8.TSPL\_Bar

The function is to draw a bar.

```
int TSPL_Bar(
    void* hPrinter,
    int x,
    int y,
    int width,
    int height
);
```

### Parameter:

*void\* hPrinter*

[in] The created target printer objec

*int x*

[in] horizontal starting position, unit: dot

*int y*

[in] vertical starting position,unit: dot

*int width*

[in] width,unit: dot

*int height*

[in] height,unit: dot

### Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.9.TSPL\_BarCode

The method is to print a one-dimensional barcode.

```
int TSPL_BarCode(
    void* hPrinter,
    int x,
    int y,
    BarcodeType type,
    const char* content,
```

```

    int height,
    TextAlign showText = TextAlign::HIDE,
    Rotation rotation = Rotation::ROTATION_0,
    int narrow = 2,
    int wide = 2
);

```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int x*

[in] Horizontal starting position, unit:dot.

*int y*

[in] Vertical starting position,unit:dot.

*BarcodeType type*

[in] barcode type.

Barcode type	Value
Code 128	CODE_128
Code 128M	CODE_128M
EAN 128	EAN_128
Interleaved 2 of 5	CODE_25
Interleaved 2 of 5 with check digits	CODE_25C
Code 39	CODE_39
Code 39C	CODE_39C
Code 93	CODE_93
EAN 13	EAN_13
EAN 13 with 2 digits add-on	EAN_13_2
EAN 13 with 5 digits add-on	EAN_13_5
EAN 8	EAN_8
EAN 8 with 2 digits add-on	EAN_8_2
EAN 8 with 5 digits add-on	EAN_8_5
Codabar	CODA
Postnet	POST
UPC-A	UPCA
UPC-A with 2 digits add-on	UPCA_2
UPC-A with 5 digits add-on	UPCA_5
UPC- E	UPCE
UPC- E with 2 digits add-on	UPCE_2
UPC- E with 5 digits add-on	UPCE_5
China post code	CPOST
MSI code	MSI
MSI with check digit	MSIC
PLESSEY code	PLESSEY
ITF 14 code	ITF_14
EAN 14 code	EAN_14
Code 11	EAN_14
TELEPEN	TELEPEN
TELEPENN	TELEPENN
PLANET	PLANE
CODE_49	CODE_49
DPI	DPI



DPL	DPL
-----	-----

*const char\* content*

[in] barcode data.

*int height*

[in] height, unit:dot.

*TextAlign showText*

[in] text display type

Text display type	Value
do not display text	HIDE
text is displayed on the left	LEFT
text centered	CENTER
text is displayed on the right	RIGHT

*Rotation rotation*

[in] barcode rotation direction

Rotation direction	Value
No rotation	ROTATION_0
Rotate 90 degrees	ROTATION_90
Rotate 180 degrees	ROTATION_180
Rotate 270 degrees	ROTATION_270

*int narrow*

[in] Narrow Bar Width, unit:dot.

*int wide*

[in] Wide Bar Width, unit:dot.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.10. TSPL\_BitMap

This method is used to draw the binarized bitmap.

```
int TSPL_BitMap(
    void* hPrinter,
    int x,
    int y,
    int width,
    int height,
    int mode,
    unsigned char * data
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int x*

[in] Horizontal starting position, unit:dot.

*int y*

[in] Vertical starting position,unit:dot.

*int width*

[in] Image width, unit:byte.

*int height*

[in] Bitmap height, unit:dot.

*int mode*

[in] Mode for printing bitmap.

mode	Value
OVERWRITE	0
OR	1
XOR	2

*unsigned char \* data*

[in] Binarized bitmap data

#### Return Value:

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.11. TSPL\_Image

This method is for printing the specified image (supports bmp, jpg, gif, etc), this function is suitable for printing LOGO.

Convert the image of the specified path to bitmap data and send it to the printer and print.

```
int TSPL_Image(  
    void* hPrinter,  
    int x,  
    int y,  
    int mode,  
    const char* imgPath  
);
```

#### Parameter:

*void\* hPrinter*

[in] The created target printer object.

*int x*

[in] Horizontal starting position, unit:dot.

*int y*

[in] Vertical starting position,unit:dot.

*int mode*

[in] Mode for printing Image.

mode	Value
OVERWRITE	0

OR	1
XOR	2

*const char\** imgPath

[in] The correct path to the image.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.12. TSPL\_Setup

This method is to set for the printer's basic parameters.

```
int TSPL_Setup(
    void* hPrinter,
    int printSpeed,
    int printDensity,
    int labelWidth,
    int labelHeight,
    int labelType,
    int gapHeight,
    int offset
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int printSpeed*

[in] printing speed.

*int printDensity*

[in] print density (range: 0- 15).

*int labelWidth*

[in] Label width, unit:mm.

*int labelHeight*

[in] Label length, unit:mm.

*int labelType*

[in] label paper type (0: black mark/continuous paper 1: seam label/continuous paper).

*int gapHeight*

[in] The space between two labels, if it is set to 0, it means that it is continuous paper,unit:mm.

*int offset*

[in] offset position,unit:mm.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success

ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

### 4.13. TSPL\_ClearBuffer

This function is to clear the printer memory cache. Clear the printer cache before executing print data.

```
int TSPL_ClearBuffer(
    void* hPrinter
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

### 4.14. TSPL\_Box

The method is used to draw box.

```
int TSPL_Box(
    void* hPrinter,
    int x,
    int y,
    int x_end,
    int y_end,
    int thickness = 1,
    int radius = 0
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int x*

[in] Horizontal starting position, unit:dot.

*int y*

[in] Vertical starting position,unit:dot.

*int x\_end*

[in] Horizontal end position, unit:dot.

*int y\_end*

[in] Vertical end position, unit:dot.

*int thickness*

[in] Line thickness., unit:dot.

*int radius*

[in] Specifies whether to have rounded corners, unit:dot.,default is 0.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.15. TSPL\_QrCode

This method is used to print a QR code.

```
TSPL_QrCode(  
    void* hPrinter,  
    int x,  
    int y,  
    int width,  
    int eccLevel,  
    int mode,  
    int rotate,  
    int model,  
    int mask,  
    const char* data  
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int x*

[in] Horizontal starting position, unit:dot.

*int y*

[in] Vertical starting position,unit:dot.

*int eccLevel*

[in] Error correction level.

Error correction level	Value
7%	0
15%	1
25%	2

30%	3
-----	---

*int width*

[in] QR code print width (range: 1- 10).

*int mode*

[in] Automatic / manual coding (A : automatic, 1 : manual).

*int rotate*

[in] QR code rotation angle.

Rotation direction	Value
No rotation	ROTATION_0
Rotate 90 degrees	ROTATION_90
Rotate 180 degrees	ROTATION_180
Rotate 270 degrees	ROTATION_270

*int model*

[in] QR code version (0 : Basic, 1 : Enhanced).

*int mask*

[in] mask(range: 0-8).

*const char\* data*

[in] QR code data.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.16. TSPL\_Text

This method is to print text for the printer.

```
int TSPL_Text(
    void* hPrinter,
    int x,
    int y,
    const char* fontName,
    const char* content,
    int rotation = 0,
    int x_multiplication = 1,
    int y_multiplication = 1,
    int alignment = 0
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int x*

[in] Horizontal starting position, unit:dot.

*int y*

[in] Vertical starting position,unit:dot.

*const char\* fontName*

[in] Font name.

Font name	Value
normal	"0"
8x12	"1"
12x20	"2"
16x24	"3"
24x32	"4"
32x48	"5"
14x19	"6"
21x27	"7"
14x25	"8"
Simplified Chinese	"TSS24.BF2"

*const char\* content*

[in] text content.

*int rotation*

[in] Rotation angle.

Rotation direction	Value
No rotation	0
Rotate 90 degrees	1
Rotate 180 degrees	2
Rotate 270 degrees	3

*int x\_multiplication*

[in] Horizontal magnification ratio, effective parameters: 1~10.

*int y\_multiplication*  
[in] Vertical magnification ratio, effective parameters: 1~10.

*int alignment*

[in] the alignment of the text.

Alignment	Value
Default (Left)	0
Left	1
Center	2
Right	3

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.17. TSPL\_Print

This method is to perform printing operations.

*int TSPL\_Print(*

```

        void* hPrinter,
        int num,
        int copies
    );

```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int num*

[in] The number of labels.

*int copies*

[in] Print the number of copies of each label.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.18. TSPL\_FormFeed

The method is to push the paper to the starting position of the next label.

```

int TSPL_FormFeed(
    void* hPrinter
);

```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.19. TSPL\_SetTear

This function is to enable/disable the tear-off function for setting the printer.



```
int TSPL_SetTear(
    void* hPrinter,
    int mode
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int mode*

[in] Enable/disable the tear-off function (0 : OFF, 1 : ON).

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.20. TSPL\_SetRibbon

The method is used to set the ribbon working mode.

```
int TSPL_SetRibbon(
    void* hPrinter,
    int mode
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int mode*

[in] Ribbon mode; 0=turn off the ribbon function; 1=start the ribbon function; 2=inner winding ribbon; 3=outer winding ribbon.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.21. TSPL\_Offset

This method is used to define the extra feed length of each label of the printer.

```
int TSPL_Offset(  
    void* hPrinter,  
    int distance  
)
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int distance*

[in] Extra feed length, unit:dot.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.22. TSPL\_Direction

This method is used to set the printer printing direction.

```
int TSPL_Direction(  
    void* hPrinter,  
    Direction direction,  
    int mirror  
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*Direction direction*

[in] Define the print orientation of the printer(DIRECTION\_FORWARD:Forward printing,DIRECTION\_REVERSE:reverse print).

*int mirror*

[in]  
Define the mirror of the printed content, 0-normal; 1-mirror

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data

ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.23. TSPL\_Feed

This method is used to feed a specified length of paper to the printer.

```
int TSPL_Feed(
    void* hPrinter,
    int n
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int n*

[in] Feed length Valid parameter:  $\pm 1 \sim 9999$ , When the number is negative, the paper will be ejected backward, unit: dot.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.24. TSPL\_Home

This method is used to feed the paper to the starting position for the printer.

```
int TSPL_Home(
    void* hPrinter
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out

Other values	Other values	the error code returned by the Windows system
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## 4.25. TSPL\_Learn

This method is used to learn labels for the printer.

```
int TSPL_Learn(
    void* hPrinter
)
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.26. TSPL\_GetSN

This method is used to obtain the serial number of the printer SN.

```
int TSPL_GetSN(
    void* hPrinter,
    char* snBuffer,
    int bufSize
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*char\* snBuffer*

[in/out]The buffer address used to get the serial number.

*int bufSize*

[in]buffer size.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory

ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.27. TSPL\_GetPrinterStatus

This method is used to get the current state of the printer.

```
int TSPL_GetPrinterStatus(
    void* hPrinter,
    unsigned int* printerStatus
)
```

**Parameter:**

*void\* hPrinter*

[in]The created target printer object.

*int \*printerStatus*

[in,out]

Current status of the printer.

status	value
Normal	0
The print head is opened	1
Paper jam	2
Out of paper	4
Out of ribbon	8
Print pause	16
Printing	32
Cover opened	64
Other error	128

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_READ_FAILED	-11	Failed to read data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.28. TSPL\_SetCodePage

This method is used to set the code page for the printer.

```
int TSPL_SetCodePage(
    void* hPrinter,
```

```
const char* codepage
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

const char\* codepage

[in]code page.

7-bit code page		8-bit code page		Windows code page		ISO code page	
US A	USA	437	United States	1250	Central Europe	8859- 1	Latin 1
BRI	British	737	Greek	1251	Cyrillic	8859-2	Latin 2
GE R	German	850	Multilingual	1252	Latin I	8859-3	Latin 3
FRE	French	851	Greek1	1253	Greek	8859-4	Batltic
DA N	Danish	852	Slavic	1254	Turkish	8859-5	Cyrillic
ITA	Italian	855	Cyrillic	1255	Hebrew	8859-6	Arabic
SPA	Spansh	857	Turkish	1256	Arabic	8859-7	Greek
SW E	Sweidsh	860	Portuguese	1257	Batltic	8859-8	Hebrew
SWI	Swiss	861	Icelandic	1258	Vietnam	8859-9	Turkish
		862	Hebrew	932	Japanese shift-JIS	8859- 10	Latin 6
		863	Canadian/Fren ch	936	simplified	8859- 15	Latin 9
		864	Arabic	949	Korean		
		865	Nordic	950	Traditional Chinese BIG5		
		866	Russian	UTF-8	UTF 8		
		869	Greek2				

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.29. TSPL\_PDF417

This method is used to print PDF417 QR code.

```
int TSPL_PDF417(
    void* hPrinter,
    int x,
```

```

    int y,
    int width,
    int height,
    int rotate,
    const char* option,
    const char* data
);

```

**Parameter:**

*void \* hPrinter*

[in] The created target printer object.

*int x*

[in] Horizontal starting position, unit:dot.

*int y*

[in] Vertical starting position,unit:dot.

*int width*

[in] QR code width, unit:dot.

*int height*

[in] QR code height, unit:dot.

*int rotate*

[in] Rotation angle.

Rotation direction	Value
No rotation	0
Rotate 90 degrees	1
Rotate 180 degrees	2
Rotate 270 degrees	3

*const char\* option*

[in]Options (Example: E3,W2,H8).

P	Data compression method: 0 : automatic 1 : binary mode
E	Error check level (0~8)
M	Bar code center print mode 0 : This mode will print in the upper left corner alignment area 1 : will print in the middle area
Ux,y,z	Code readable x: the x coordinate specified by the readable character y: the y coordinate specified by the readable character c: maximum number of readable characters per line
W	Module width (2~9: dot)
H	Height of small bar code (4~99: dot)
R	Maximum number of rows
C	Maximum number of columns
T	Whether to cut off 0 : No 1 : Yes
Lm	Indicates the length (1~2048)

*const char\* data*

[in] QR code data.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.30. TSPL\_Block

This method is used to prints paragraph on label.

```
int TSPL_Block(  
    void* hPrinter,  
    int x,  
    int y,  
    int width,  
    int height,  
    const char* fontName,  
    const char* content,  
    Rotation rotation = ROTATION_0,  
    int x_multiplication = 1,  
    int y_multiplication = 1,  
    int alignment = 0  
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int x*

[in] Horizontal starting position, unit:dot.

*int y*

[in] Vertical starting position,unit:dot.

*int width*

[in] The width of block for the paragraph in dots.

*int height*

[in] The height of block for the paragraph in dots

*const char\* fontName*

[in] Font name.

Font name	value
normal	"0"
8x12	"1"
12x20	"2"
16x24	"3"
24x32	"4"
32x48	"5"
14x19	"6"



21x27	"7"
14x25	"8"
简体中文	"TSS24.BF2"

*const char\* content*

[in] Data in block. The maximum data length is 4092 bytes.

*Rotation rotation*

[in] The rotation angle of text.

Rotation direction	Value
No rotation	ROTATION_0
Rotate 90 degrees	ROTATION_90
Rotate 180 degrees	ROTATION_180
Rotate 270 degrees	ROTATION_270

*int x\_multiplication*

[in] Horizontal multiplication, up to 10x, Available factors: 1~10.

*int y\_multiplication*

[in] Vertical multiplication, up to 10x, Available factors: 1~10.

*int alginment*

[in] Text alignment.

Alignment	Value
Default (Left)	0
Left	1
Center	2
Right	3

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.31. TSPL\_Reverse

This method is used to reverses a region in image buffer.

```
int TSPL_Reverse(
    void* hPrinter,
    int x,
    int y,
    int width,
    int height
);
```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int x*

[in] Horizontal starting position, unit:dot.  
*int y*  
[in] Vertical starting position,unit:dot.  
*int width*  
[in] width, unit:dot.  
*int heigh*  
[in] height, unit:dot.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.32. TSPL\_GapDetect

This method is used to detect paper size and gap size.

*int* TSPL\_GapDetect(void\* hPrinter, *int* x = 0, *int* y = 0);

**Parameter:**

*void\* hPrinter*  
[in] The created target printer object.  
*int x*  
[in] Paper length (in dots).  
*int y*  
[in] Gap length (in dots)

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.33. TSPL\_Dmatrix

This method is used to print Data Matrix 2D barcodes.

*int* TSPL\_Dmatrix(  
void\* hPrinter,  
*int* x,

```

    int y,
    int width,
    int height,
    const char* content,
    int blockSize = 0,
    int row = 10,
    int col = 10
);

```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int x*

[in] Horizontal starting position, unit:dot.

*int y*

[in] Vertical starting position,unit:dot.

*int width*

[in] The expected width of barcode area (in dots)

*int height*

[in] The expected height of barcode area (in dots)

*const char\* content*

[in] Content of DataMatrix 2D bar code.

*int blockSize*

[in] optional,Module size (in dots).

*int row*

[in] optional,Symbol size of row: 10 to 144.

*int col*

[in] optional,Symbol size of col: 10 to 144.

**Return Value:**

Code	Value	Description
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system

## 4.34. TSPL\_SetCutter

This method is used to set the cutter working mode.

```

int TSPL_SetCutter(
    void* hPrinter,
    int pieces
);

```

**Parameter:**

*void\* hPrinter*

[in] The created target printer object.

*int copies*

[in] Set number of printing labels per cut.0=Turn off the cutter function,-1=Cut paper after printing job, 1-65535=Number of labels for cut paper

**Return Value:**

<b>Code</b>	<b>Value</b>	<b>Description</b>
ERROR_CM_SUCCESS	0	success
ERROR_CM_INVALID_HANDLE	-2	failed with invalid handle
ERROR_CM_INVALID_PARAMETER	-1	Invalid argument
ERROR_CM_INSUFFICIENT_MEMORY	-4	failed, out of memory
ERROR_IO_WRITE_FAILED	-9	Failed to send data
ERROR_IO_WRITE_TIMEOUT	-10	Write data timed out
Other values	Other values	the error code returned by the Windows system