Software Information Sheet

JCM American Corporation	TEL +1-702-651-0000
JCM Europe GmbH	TEL +49-211-530-6450
JCM Gold (H.K.) Ltd.	TEL +852-2429-7187
J-Cash Machine (Thailand) Co., Ltd.	TEL +66-2712-3155-6
Japan Cash Machine Co., Ltd. (Headquarters – Japan)	TEL +81-6-6703-8405

General Information

Model Name:	iPRO-100-SH2-RC				SW. Req. No.	C19-0327-02		G19-183
SW. Name:	iPRO-100(EUR5)-SH2-RC ID003-05				Date: (mm,dd,yyyy)		07.25.2019	Rev: A1
SW. Version:	**V3.07-38**				Note:		-	
Country (Code):	European Union (EUR)				Guide:		None	
Currency:	Euro				Check Sum:		8D95	
Direction:	4Way				CRC (seed= 0000):		F289	
					CRC32		670A1F9D	

Denomination:	Denomi.	Printed	Issued	MRI#	Denomi.	Printed	Issued	MRI#
MRI Bankers' Guide to Foreign Currency 93rd Edition	5	'02	'02	EUR5.1	50	'17	'17	EUR50.2
	5	'13	'13	EUR5.2	100	'02	'02	EUR100.1
	10	'02	'02	EUR10.1	100	'19	'19	EUR100.2
	10	'14	'14	EUR10.2	200	'02	'02	EUR200.1
	20	'02	'02	EUR20.1	200	'19	'19	EUR200.2
	20	'15	'15	EUR20.2	500	'02	'02	EUR500.1
	50	'02	'02	EUR50.1				

Acceptance Rate:	No less than 98%
JCM Tool Suite	JCM Tool Suite — From V1.16
ICB	-
Bar Ticket:	Accepts JCM specified barcode tickets.
EPROM:	Flash ROM only (64Mbit)

Modifications:	**V3.06-38 → V3.07-38**
Validation:	1. Improved countermeasures against EUR10.2 and EUR20.1 fake notes.
Operation:	1. Fixed the problem of iPRO-RC not reporting VEND VALID for the last stacked banknote before Stacker Full.
Interface:	
Recycler:	
Memo:	- The setting of recyclable denomination using dipswitch on the Recycler is possible only at power-up of the test mode. In the ID-003 comm. mode, the setting of recyclable denomination with the Recycler dipswitch is not supported. - This software works with the Boot program "B04", or greater. (Does not work with the Boot programs "B01", "B02" and "B03". - When using "ID-003 Authentication Code" feature, the Authentication Key Tool Version 1.00 should be used. - EUR500.1 notes are out of specification for recycler boxes. The customer accepts the risk to recycle out of spec EUR500 denomination.

Dip Switch Settings

#		Dip Switch	
1	**OFF**	**5 ACCEPT**	
	ON	**5 INHIBIT**	
2	**OFF**	**10 ACCEPT**	
	ON	**10 INHIBIT**	
3	**OFF**	**20 ACCEPT**	
	ON	**20 INHIBIT**	
4	**OFF**	**50 ACCEPT**	
	ON	**50 INHIBIT**	
5	**OFF**	**100 ACCEPT**	
	ON	**100 INHIBIT**	
6	**OFF**	**200/500 ACCEPT**	
	ON	**200/500 INHIBIT**	
7	**OFF**	**ES1 ACCEPT**	
	ON	**ES1 INHIBIT**	
8	OFF	Setting OFF	
	ON	Setting OFF	

ID-003 Data Setting specification

VERSION DATA

SW. Version	U(EUR5)100-SH2-RC ID003-05V307-38 25JUL19 F289
Boot Version	B04 / B05

ESCROW DATA

Code	Denomination
61h	Reserved
62h	**5**
63h	**10**
64h	**20**
65h	**50**
66h	**100**
67h	**200**
68h	**500**

CURRENCY ASSIGN DATA

Code	Country	Denomination	Exp.
61h	00h	00h	00h
62h	**E0h**	**05h**	**00h**
63h	**E0h**	**0Ah**	**00h**
64h	**E0h**	**14h**	**00h**
65h	**E0h**	**32h**	**00h**
66h	**E0h**	**0Ah**	**01h**
67h	**E0h**	**14h**	**01h**
68h	**E0h**	**32h**	**01h**

ENABLE/DISABLE DATA

DATA bit	Data 1	Data 2
0	Reserved	Reserved
1	**5**	**5.1**
2	**10**	**10.1**
3	**20**	**20.1**
4	**50**	**50.1**
5	**100**	**100.1**
6	**200**	**200.1**
7	**500**	Reserved

0: Enable   1: Disable   (Default: **0181h**)

SECURITY DATA

DATA bit	Data 1	Data 2
0	Reserved	**High Acceptance**
1	**5**	Reserved
2	**10**	**High Acceptance**
3	**20**	Reserved
4	**50**	Reserved
5	**100**	**High Acceptance**
6	**200**	Reserved
7	**500**	**High Acceptance**

0: Normal 1: Security Level high (Default**: 0000h**)

DIRECTION DATA

DATA bit	Direction	Sample denomination:100
0	'A' Direction	
1	'B' Direction	A ← (FA) [Front 100] → B (FB)
2	'C' Direction	
3	'D' Direction	D ← (BB) [Back 100] → C (BA)
4	Not used	
5	Not used	
6	Not used	
7	Not used	

0: Not Inhibit 1: Inhibit   (Default: **00h**)

OPTIONAL FUNCTION DATA

DATA bit	Data 1	Data 2
0	Not used	Change Pay Valid Timing [01]
1	Power Recovery [02]	Enable dispensing spray type [02]
2	Not used	Extend Payout Limit [04]
3	24char bar ticket accept [08]	Enable standard security [08]
4	Not used	Not used
5	Nearly Full [20]	Not used
6	Entrance Sensor Event [40]	Not used
7	Encryption [80]	Not used

0: Disable 1: Enable (Default: **0000h**)

BAR CODE FUNCTION DATA

	Code	Function
Data 1	01h	Barcode type (interleaved 2 of 5)
Data 2	12h	Character length (18 char)
	FFh	Multi Barcode Ticket acceptance in the range of length 18 characters to 28 characters.

<u>< Data 1></u>
[02] POWER RECOVERY
> If power supply goes off when Acceptor is in [STACKING] and if the power up status is [POWER UP WITH
>
> BILL IN STACKER], Acceptor sends [VEND VALID] after initialization is completed normally.
> SETTING STATUS becomes DEFAULT 0000H after power off, it is necessary for the host controller to make
>
> setting after Acceptor sends [RESET].

[08] 24-digit Barcode Ticket Acceptance
> Assigned Optional Function "Data 1, bit 3" to enable / disable 24-digit barcode tickets.
> (1) Set "0": only 18-digit barcode tickets will be accepted (default setting)
> (2) Set "1": both 18-digit and 24-digit barcode tickets will be accepted
> This setting command is accepted during the initial status only. The last barcode ticket number registered in the ICB shows the first 18 digits only even if 24-digit barcode is accepted because the ICB supports only up to 20 digits.

[20] Nearly Full Function
> The Nearly Full function will be enabled when "1" is set in the OPTIONAL FUNCTION DATA Bit 5.
> The "NEARLY FULL" status will be sent when the remaining quantity to full notes becomes equal to or goes below 10 notes as a response to the Status Request only after the "STACKED" status.
> The "IDLING" status will be sent to the next Status Request.

[40] Entrance Sensor Event
> The "Entrance Sensor Event" will be enabled when "1" is set in the OPTIONAL FUNCTION "Data1 Bit 6".
> 1. When the Entrance Sensor detects a note while the ACCEPTOR is in the DISABLE (INHIBIT) Status, the insertion of the note will be reported to the CONTROLLER in the Status Response from the ACCEPTOR.
> 2. This function will be included in the OPTIONAL FUNCTION. When the setting is enabled, a data byte [one byte] will follow the DISABLE (INHIBIT) Status of the ACCEPTOR, and the status of the Entrance Sensor (ON or OFF) will be reported to the CONTROLLER in the lower byte.
> 3. This setting will be cleared when the ACCEPTOR is powered off, or the Reset Command from the CONTROLLER is received.
> 4. UBA will also send Idle [11h] + 1 byte showing whether any of the sensors between entrance sensor and escrow position are ON.
>
> For more details, please refer to "ID-003 Function to Report the Status of the Entrance Sensor in the DISABLE Status".

[80] Encryption
> When "1" is set in the OPTIONAL FUNCTION DATA Bit7, ENCRYPTION will be enabled.
> When the ENCRYPTION is enabled, the ESCROW and VEND VALID messages are encrypted.
> When banknotes are dispensed, "PAY OUT" and "PAY VALID" are encrypted. The host controller shall encrypt "PAY OUT" command.
> For more details, please refer to "ID-003 Encryption Procedure".

<u>< Data 2></u>

[01] CHANGE PAY VALID TIMING

This function will be enabled by setting "1" in the OPTIONAL FUNCTION "Data2 Bit0".

Also, the timing for sending the PAY VALID Status during the paying out of the note can be changed by enabling/disabling this function.

- Set "0": The PAY VALID will be sent when the note is removed after it has been transported to the position where the note can be removed.
- Set "1": The PAY VALID will be sent after the note is transported to the position where it can be removed (without the dispensed note being removed)

[02] Enable dispensing spray type

This function will be enabled by setting "1" in the OPTIONAL FUNCTION "Data2 Bit1".

- Set "0": Hang bill note at acceptor part during Pay Stay status.
- Set "1": Will not hang bill note at acceptor part when Pay Stay status.
- When pay out bill note payed out bill note hanging to only entrance sensor, acceptor sends Pay Valid as movement completed.

This setting command is accepted during the initial status only.

[04] Extend Payout Limit

This function will be enabled by setting "1" in the OPTIONAL FUNCTION "Data2 Bit1" and sending "Set Recycle Currency" command.

When this function is enabled bill length limits for payout are extended. Fewer bills will be rejected during payout but security against payout of wrong denomination is lowered. Not recommended to use with manual refills.

For change in use of this function to take effect the "Set Recycle Currency" command MUST be sent after the Optional Function bit is enabled / disabled – otherwise the old limits will still be in place.

[08] Enable standard security

This Function will be enabled by setting "1" in Optional Function "Data2 Bit 3".

When this function is enabled iPRO will use the standard security features.

ID-003 Recycler Data Setting specification

RECYCLER SOFTWARE VERSION

SW. Version	0200-44-09 03AUG18
Recycler Unit ID	Recycler 【20h】

RECYCLE BOX NUMBER

Number	Code	Recycle Box
1	01h	Upper Recycle Box
2	02h	Lower Recycle Box

RECYCLE DENOMINATION

DATA bit	Data 1	Data 2
0	Reserved	Reserved
1	**5**	Reserved
2	**10**	Reserved
3	**20**	Reserved
4	**50**	Reserved
5	**100**	Reserved
6	**200**	Reserved
7	**500**	Reserved

0: None Recycle   1: Recycle   (Default: **0000h**)

Recycler Dip Switch Settings (Test Mode)

	Dip Switch No.							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Denomi	**Recycle Unit No.1**				**Recycle Unit No.2**			
5 Euro	**OFF**	**ON**	**OFF**	**OFF**	**OFF**	**ON**	**OFF**	**OFF**
10 Euro	**ON**	**ON**	**OFF**	**OFF**	**ON**	**ON**	**OFF**	**OFF**
20 Euro	**OFF**	**OFF**	**ON**	**OFF**	**OFF**	**OFF**	**ON**	**OFF**
50 Euro	**ON**	**OFF**	**ON**	**OFF**	**ON**	**OFF**	**ON**	**OFF**
100 Euro	**OFF**	**ON**	**ON**	**OFF**	**OFF**	**ON**	**ON**	**OFF**
200 Euro	**ON**	**ON**	**ON**	**OFF**	**ON**	**ON**	**ON**	**OFF**
500 Euro	**OFF**	**OFF**	**OFF**	**ON**	**OFF**	**OFF**	**OFF**	**ON**

Recycle Unit Bill Guide Setting

	Length	Width
5 Euro	**Type1 Length Guide 120(Gray)**	**Type1 Width Guide 62(Gray)**
10 Euro	**Type2 Length Guide 127(Red)**	**Type2 Width Guide 67(Red)**
20 Euro	**Type3 Length Guide 133(Blue)**	**Type3 Width Guide 72(Blue)**
50 Euro	**Type4 Length Guide 140(Orange)**	**None**
100 Euro	**Type5 Length Guide 147(Green)**	**None**
200 Euro	**Type6 Length Guide 152(Black)**	**None**
500 Euro	**Type7 Length Guide 158(Black)**	**None**