



P Series

Bill Acceptor

Installation Guide



P70/P5



P77/P5



P85/P5

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1. Introduction

1-1. Overview

The P series is a bill acceptor which features high-security with acceptance rate of 96% or greater. In addition, multiple bezel and bill box selections offer users the most convenient and complete services.

1-2. Features

- High acceptance rate.
- Multiple bezel selections.
- Four ways bill insertion acceptance.
- High security by protective mechanism.
- Stacker with capacity of 200 or 500 bills are available.

2. Specifications

General

Acceptance Rate 96% or greater

**Note: The Incomplete bills such as extremely dirty, wet, broken, or wrinkled ones are excluded!*

Bill Insertion Four way acceptable

Transaction Time Approx. 2 seconds without stacking
Approx. 3 seconds to stack

Interface Pulse
MDB
ICT Protocol
RS232 A0
Parallel A3
RS232 A1
ccNet
ccTalk
*Combination is possible. Ex. Pulse+MDB.

Electrical

Power Source 12V DC (11.4~12.6V DC)

Power Consumption Standby: 0.21A~0.35A (2.5W~4.2W)
Operation Current: 2A, 24W
Motor Lock: 2.2A, 26.4W

Operation Environment Operation Temperature: 0°C~55°C
Storage Temperature: -20°C~70°C
Humidity: 30%~85%RH (no condensation)

Mechanical

Bill Accepted Width	P70/P5/P701: 62mm~70mm P77/P2/P5 : 66mm~77mm P85/P5 : 68mm~85mm
Outline Dimension	P70/P5/P701: Refer to page. 5 P77/P2/P5 : Refer to page. 6 P85/P5 : Refer to page. 8
Bill Box Capacity	P2: Approx. 200 bills P5: Approx. 500 bills
Weight	0.65~0.75kg (Stackerless) 1.5~1.65kg (With Stacker)



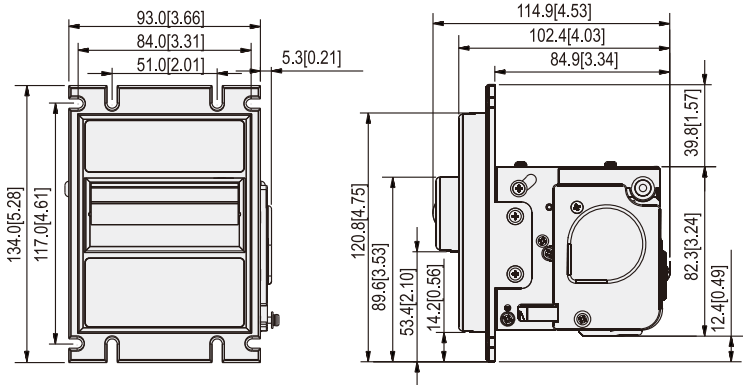
Installation: Indoor use only!!

3. Packing List

Main	Bill Acceptor
Accessory	Harness: Refer to 5-1 P Series Installation Guide P Series DIP Switch Setting Guide

4. Dimension

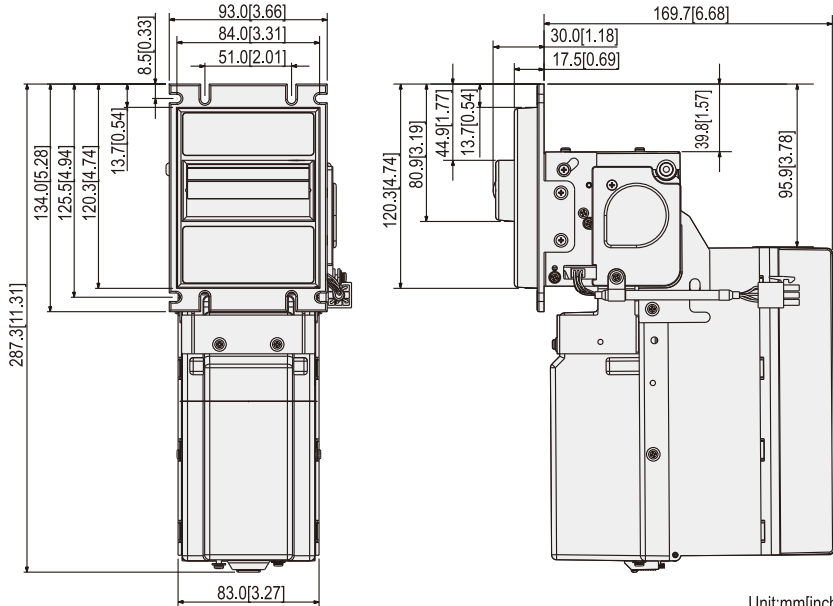
P70, P701



Unit:mm[inch]

4 FIG.01

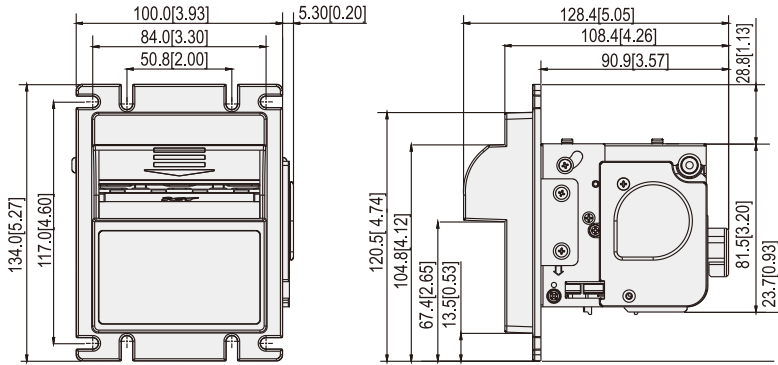
P70-P5



Unit:mm[inch]

4 FIG.02

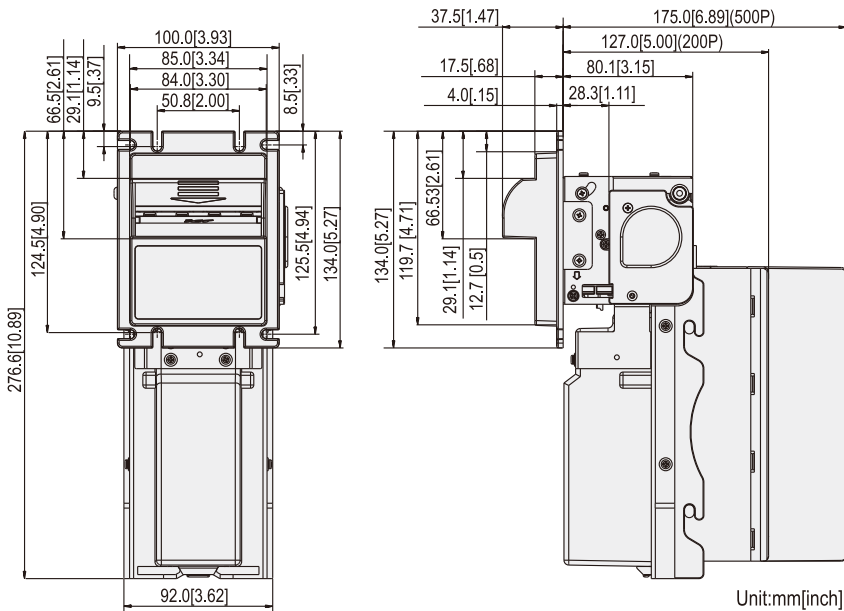
P77 (Down Stacker Type)



Unit:mm[inch]

4 FIG.03

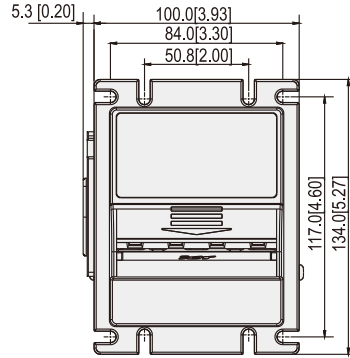
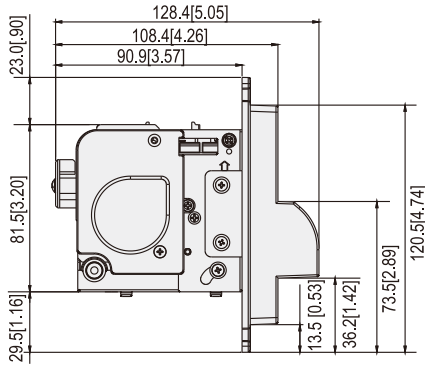
P77-P2/P5 (Down Stacker Type)



Unit:mm[inch]

4 FIG.04

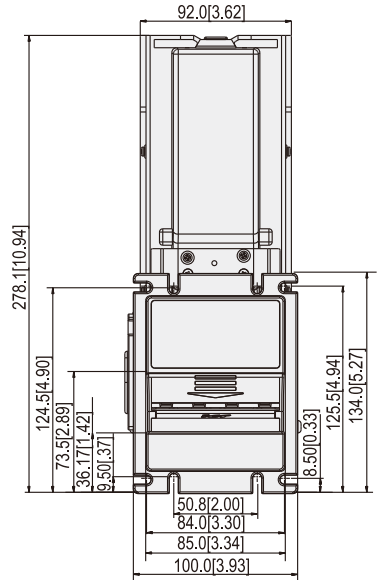
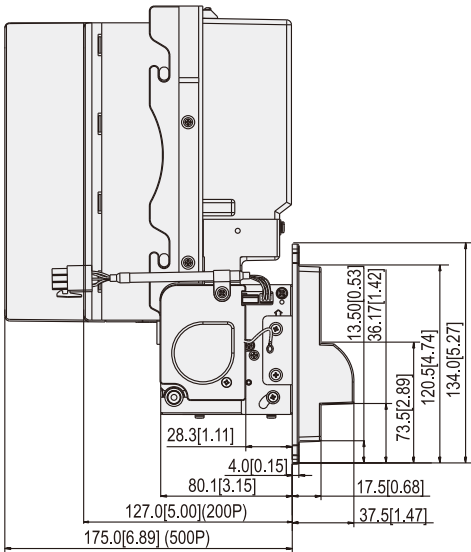
P77 (Up Stacker Type)



Unit:mm[inch]

4 FIG.05

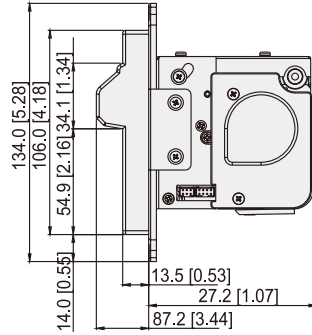
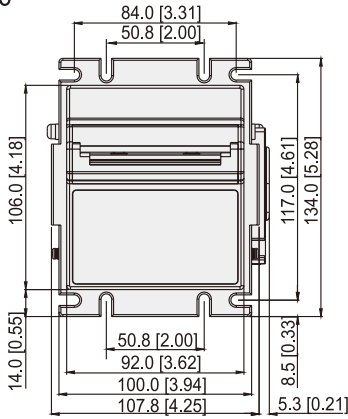
P77-P2/P5 (Up Stacker Type)



Unit:mm[inch]

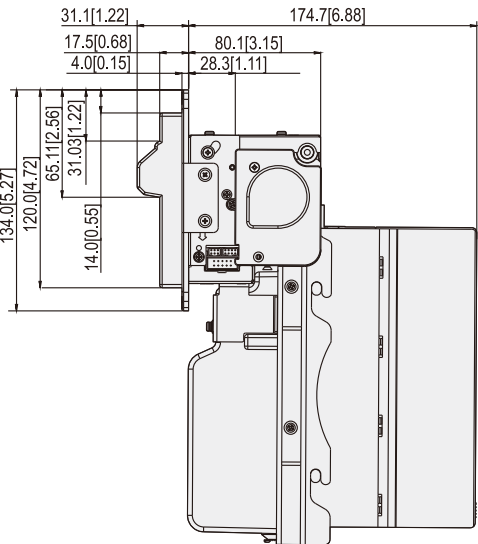
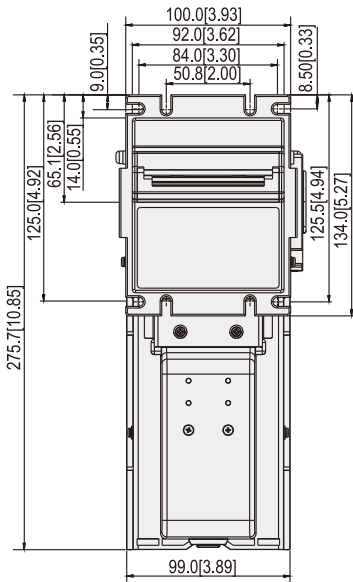
4 FIG.06

P85



Unit:mm[inch]
4 FIG.07

P85-P5



Unit:mm[inch]
4 FIG.08

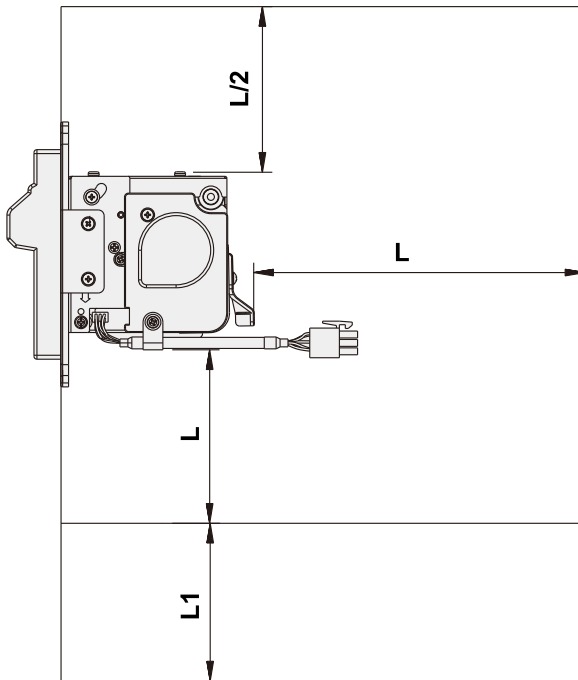


To install the bill acceptor on your VMC, please be aware of the dimension as below:

[L] : Longer than the maximum length of accepted bills.

[L1] : Bill box capacity depth.

* [L/2] has to be longer than 70mm to open upper base.



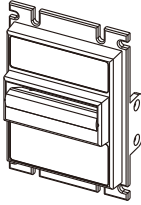
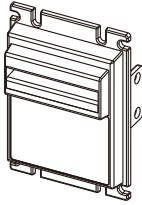
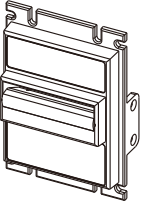
4 FIG.09

4-1. Bezel Application

P70, P701

Bill Accepted Width: 62mm~70mm

4-1 TABLE 01

Figure			
Name	Break Proof Bezel Module (Green)	Break Proof Bezel Module (Green-Russia)	Break Proof Bezel Module (White)
Part Number	3RBA-FAC23XXX	3RBA-FAC24XXX	3RBA-FAC56XXX
Mounting Kits Application	V	V	V

P77

Bill Accepted Width: 66mm~77mm

4-1 TABLE 02

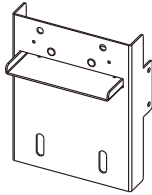
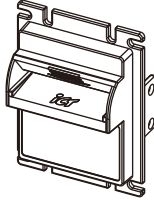
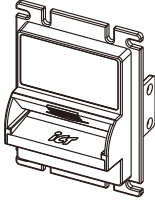
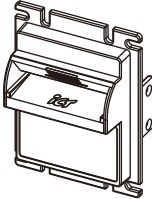
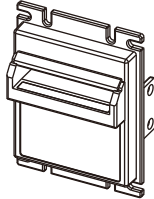
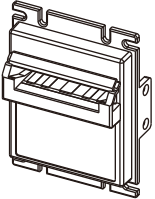
Figure			
Name	Metal Bezel	Tricolor Marquee Bezel (Down Stacker)	Tricolor Marquee Bezel (Up Stacker)
Part Number	3RBA-STP07XXX	3RBA-FAC22XXX	3RBA-FAC39XXX
Mounting Kits Application		V	V

Figure			
Name	Self-color Marquee Bezel	Green Bezel Module (Non Step Style)	Green Bezel Module (Step Style)
Part Number	3RBA-FAC22XXX	3RBA-FAC25XXX	3RBA-FAC26XXX
Mounting Kits Application	V	V	V

P77

Bill Accepted Width: 66mm~77mm

4-1 TABLE 03

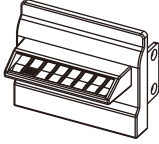
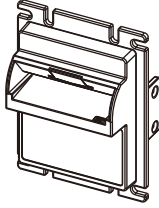
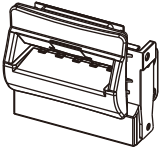
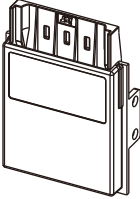
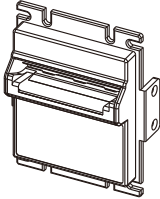
Figure			
Name	Angular Snout Bezel	Marquee Break Proof Bezel (Aluminum)	S Type Marquee Bezel
Part Number	3RBA-FAC29XXX	3RBA-FAC40XXX	3RBA-FAC43XXX
Mounting Kits Application			

Figure			
Name	Horizontal Bezel Module		
Part Number	3RBA-FAC21XXX		
Mounting Kits Application			

P85

Bill Accepted Width: 68mm~85mm

4-1 TABLE 04

Figure			
Name	Bezel Module (Green)		
Part Number	3RBA-FAC27XXX		
Mounting Kits Application	V		

5. Installation

5-1. Harness Application

5-1 TABLE 01

Interface	Used Voltage	Usage	Harnesses	Page
Pulse	12V DC	Extension Wire	CU-R961-1	15
		Power & *Data Comm.	WEL-R7U02	16
ICT Protocol	12V DC	Extension Wire	CU-R961-1	15
		Power	WEL-R7U02	16
		*Data Comm.	WEL-R7U06-2 or 2-BA-R7U06	17
RS232 A1	12V DC	*Data Comm.	WEL-R8U08	18
		Power	WEL-R7U02	16
RS232 A0	12V DC	Extension Wire	CU-R961-1	15
		Power	WEL-R7U02	16
		*Data Comm.	WEL-R7U06-2 or 2-BA-R7U06	17
**ccTalk	12V DC	Extension Wire	CU-R961-1	15
		Power & *Data Comm.	WEL-R7U02	16
ccNet	12V DC	Extension Wire	CU-R961-1	15
		Power	WEL-R7U02	16
		*Data Comm.	WEL-R7U06-2 or 2-BA-R7U06	17
Parallel A3	12V DC	Extension Wire	CU-R961-1	15
		Power	WEL-R7U02	16
		*Data Comm.	5RBG-AA203M1-0X	19
MDB	34V DC	Power & *Data Comm. (BA↔Plug-in Board)	WEL-RBG01	20
		Power & *Data Comm.(200cm) (**Plug-in Board↔VMC)	WEL-RBG07	21
		Power & *Data Comm.(35cm) (**Plug-in Board↔VMC)	WEL-RBG08	22

* Data Comm.: Data Communication.

** Plug-in Board: (1) ccTalk: 5RBG-AA248M2-04-2

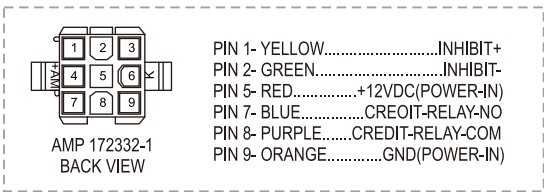
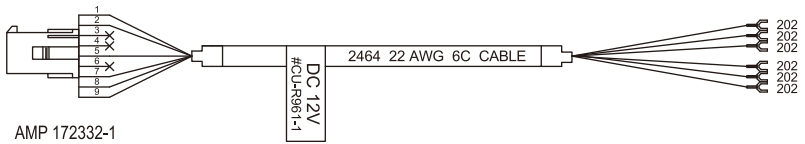
(2) MDB : (New) 5RBG-AA313NA0-01

(Old) 5RBG-AA266NA0-01

5-1 FIG.01

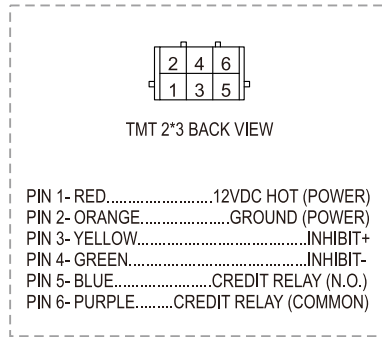
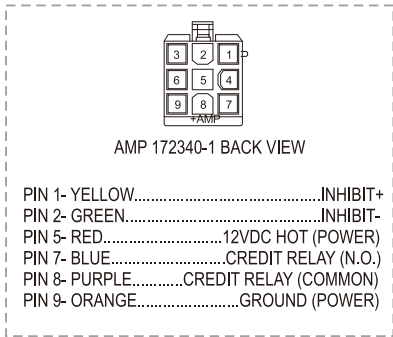
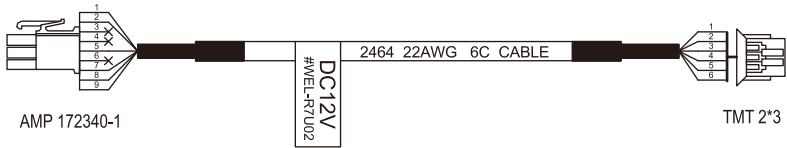
Interface	Used Voltage	Usage
Pulse	12V DC	Extension Wire for WEL-R7U02
ICT Protocol	12V DC	Extension Wire for WEL-R7U02
RS232 A0	12V DC	Extension Wire for WEL-R7U02
ccTalk	12V DC	Extension Wire for WEL-R7U02
ccNet	12V DC	Extension Wire for WEL-R7U02
Parallel A3	12V DC	Extension Wire for WEL-R7U02

CU-R961-1



Interface	Used Voltage	Usage
Pulse	12V DC	Power & *Data Comm.
ICT Protocol	12V DC	Power
RS232 A1	12V DC	Power
RS232 A0	12V DC	Power
ccTalk	12V DC	Power
ccNet	12V DC	Power
Parallel A3	12V DC	Power

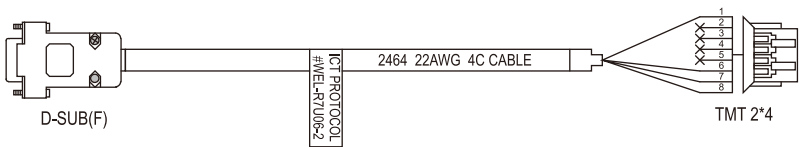
WEL-R7U02



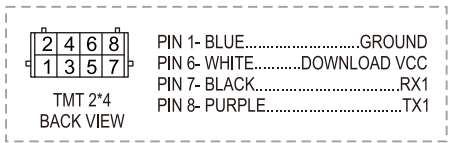
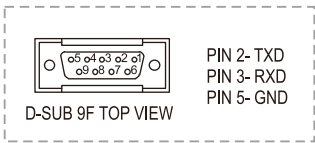
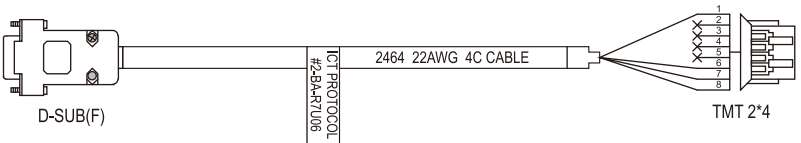
5-1 FIG.03

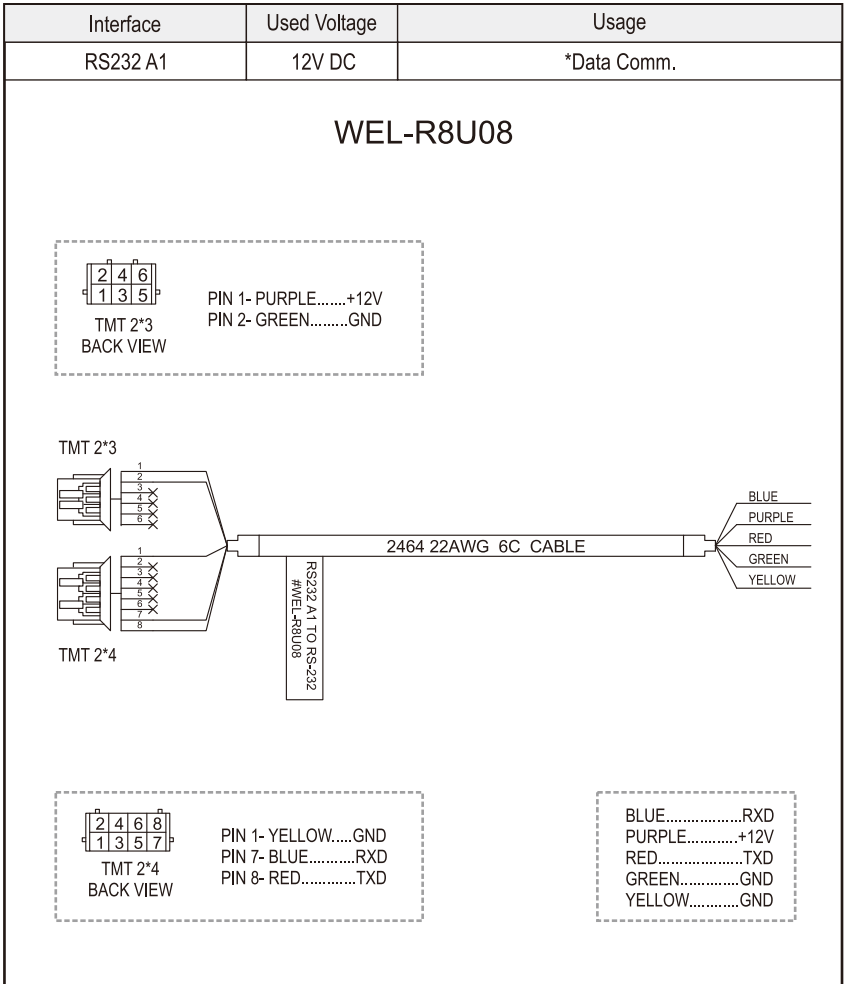
Interface	Used Voltage	Usage
ICT Protocol	12V DC	*Data Comm.
RS232 A0	12V DC	*Data Comm.
ccNet	12V DC	*Data Comm.

WEL-R7U06-2

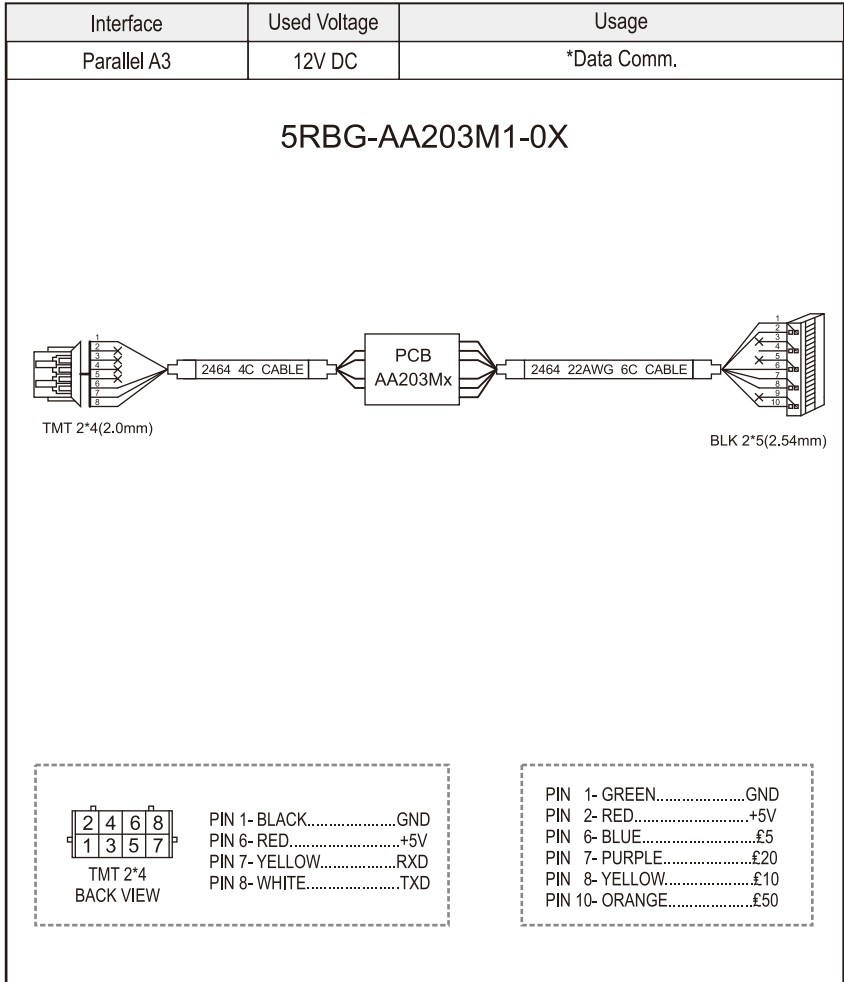


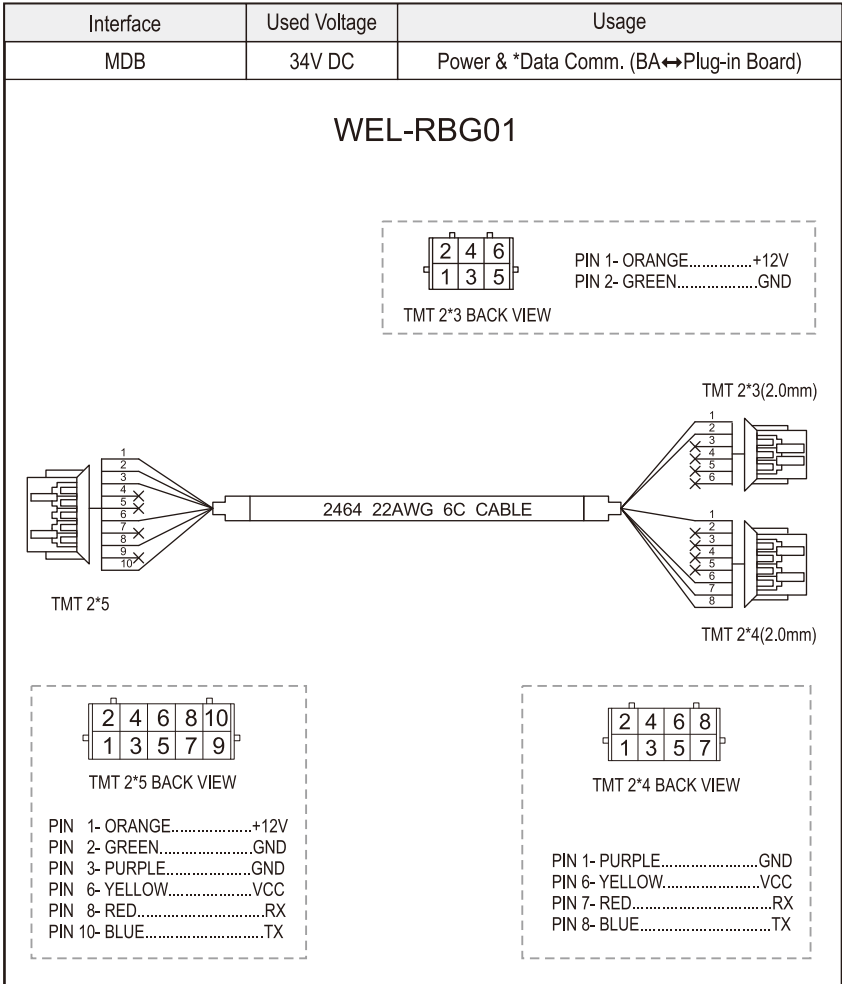
2-BA-R7U06



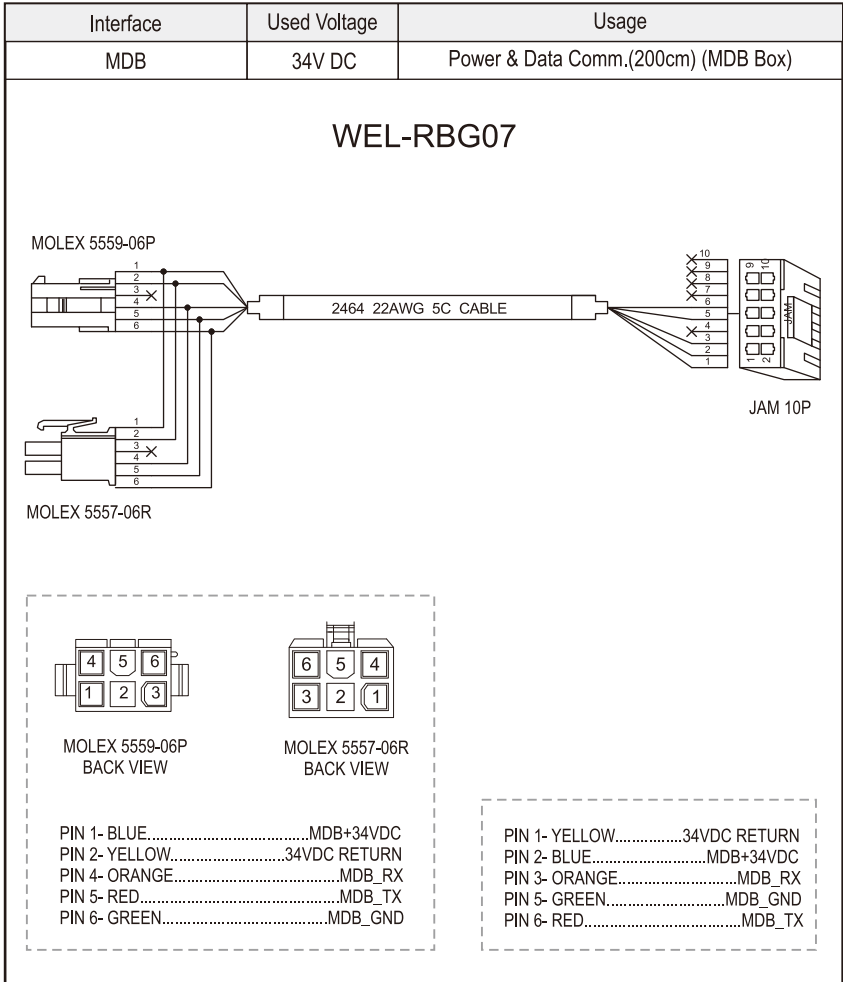


5-1 FIG.05

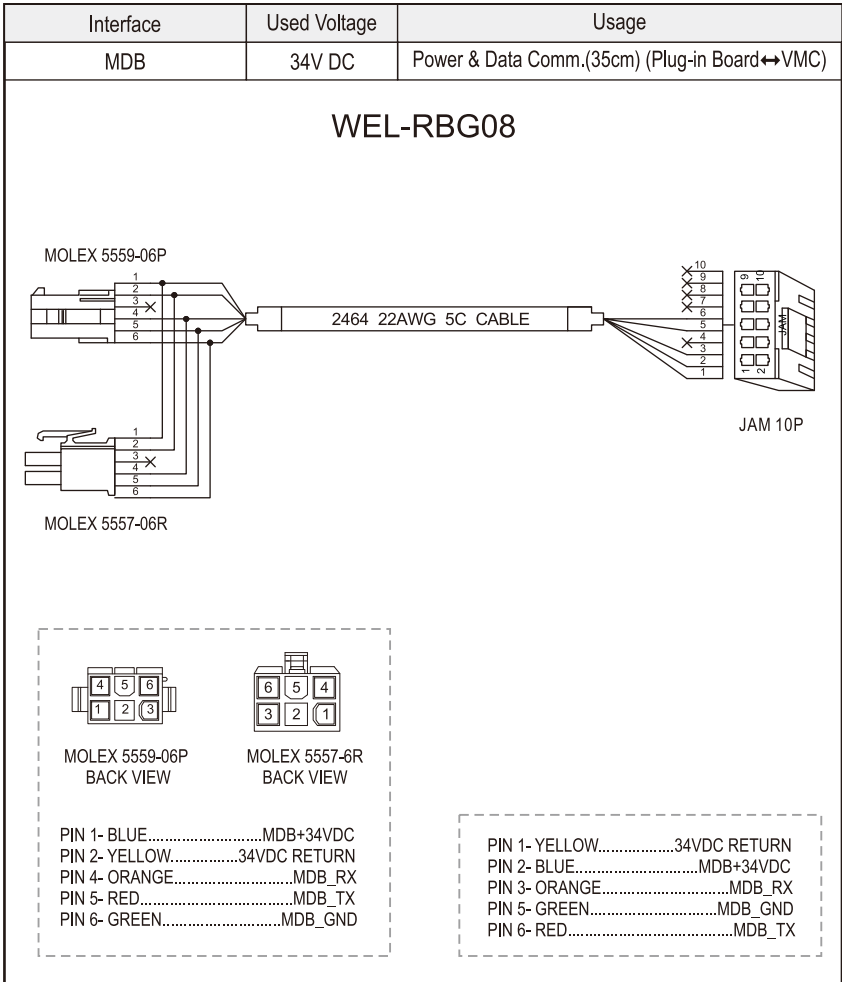




5-1 FIG.07



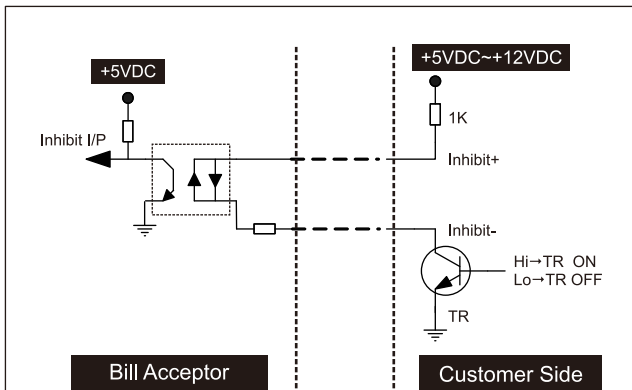
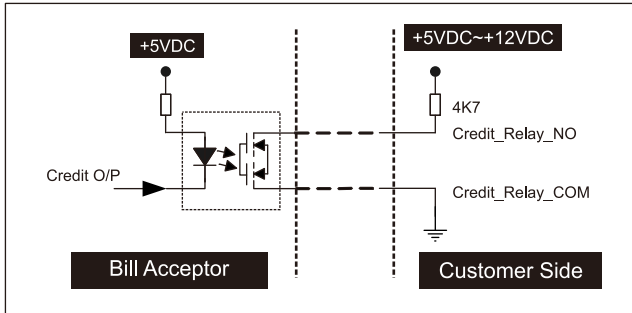
5-1 FIG.08



5-1-1. I/O Circuit

Pulse Interface.

5-1-1 FIG. 01

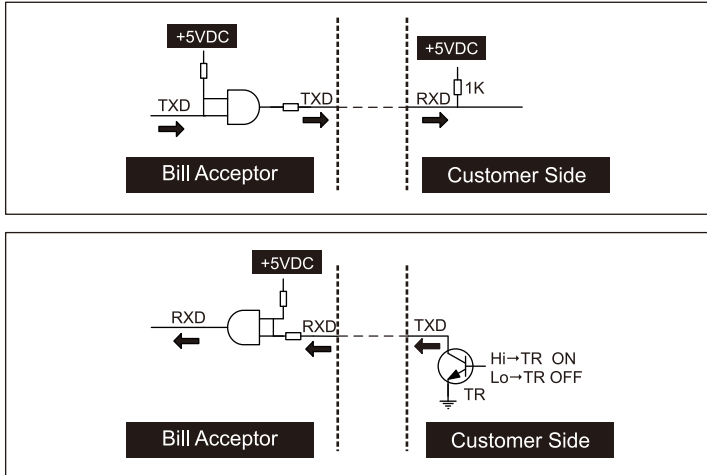


BA Status	*DIP SW Setting	Control Signal
Inhibit	Low	Low
	High	High
Enable	Low	High
	High	Low

*Note: Please refer to DIP Switch Setting Guide for detail.

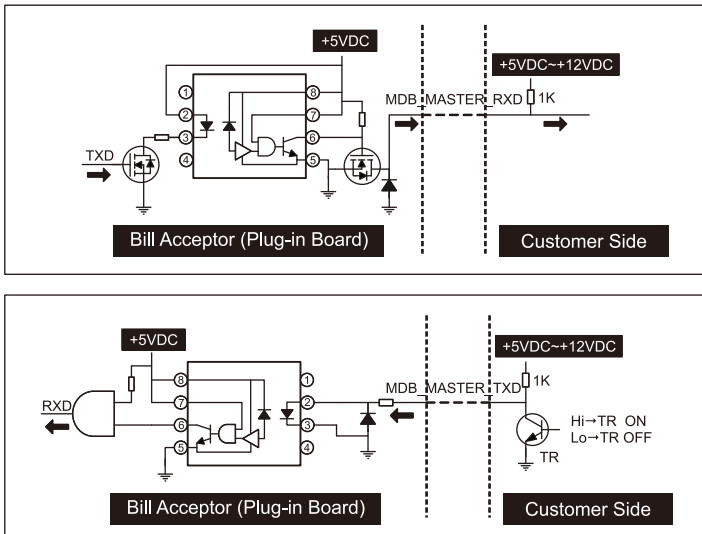
ICT Protocol, ccNet, RS232 A0 and RS232 A1 interface.

5-1-1 FIG.02



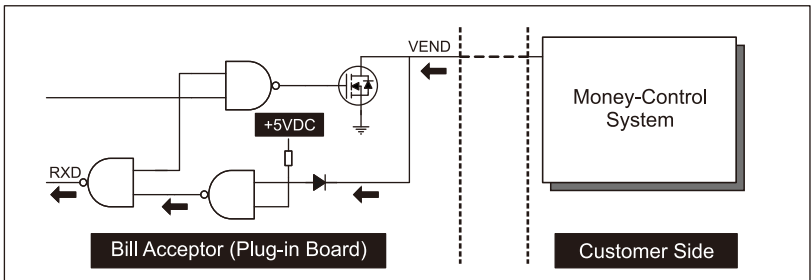
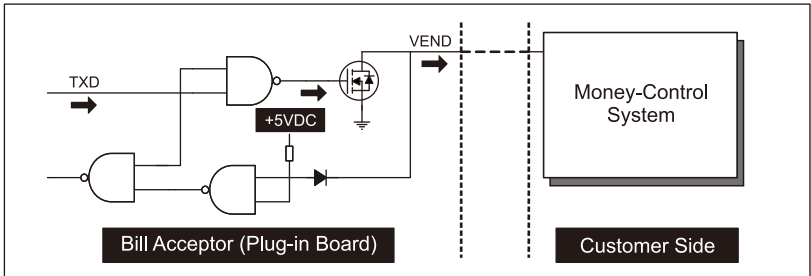
MDB Interface

5-1-1 FIG.03



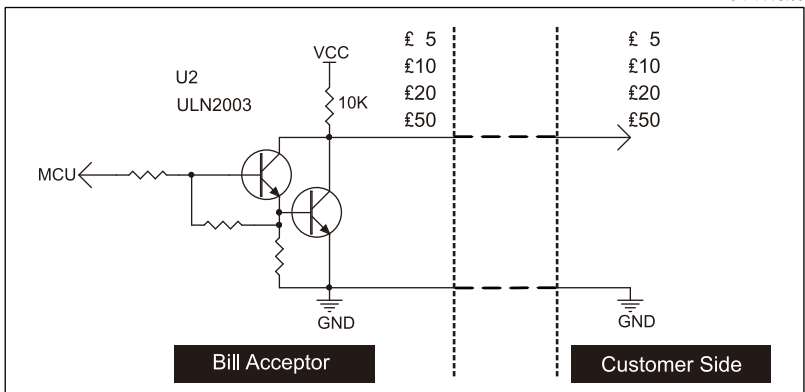
ccTalk Interface

5-1-1 FIG.04



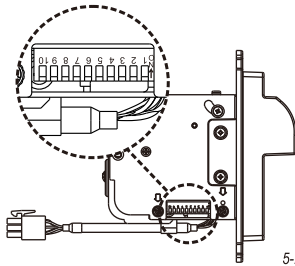
Parallel A3 Interface.

5-1-1 FIG.05

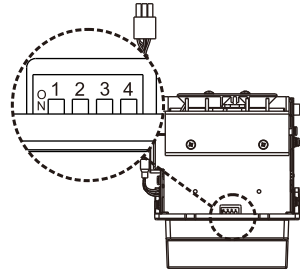


5-2. DIP Switch Setting

The serial DIP switches which are located on the side of P series (as 5-2 FIG.01). According to different currencies and credit output format which are used by users, DIP switch settings could be varied to fit users' needs. Besides, there's also a serial DIP switches at the bottom of P series for interface settings (as 5-2 FIG.02). Please refer to "P Series DIP Switch Setting Guide" in the package for more details.



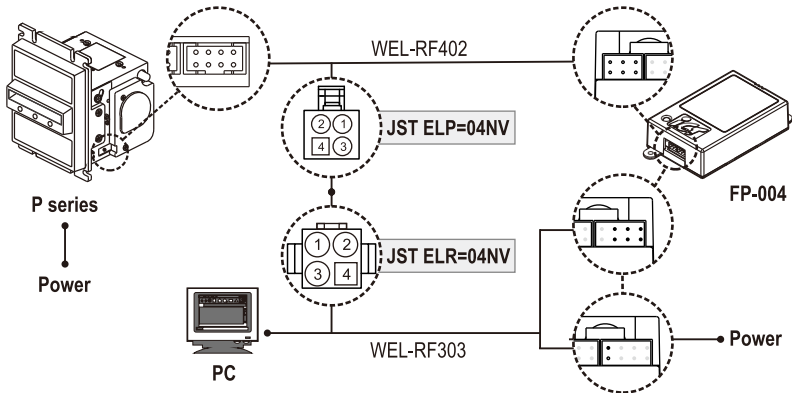
5-2 FIG.01



5-2 FIG.02

5-3. Software Download and Upgrade

To download and upgrade the software to P Series, the programmer (FP-004) is needed. Please contact ICT to purchase(FP-004) and refer to FP-004 user guide for software download and upgrade information.



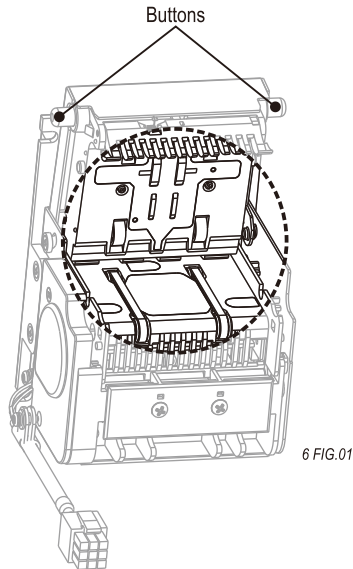
Turn on Bill Acceptor after connecting. _____


6. Maintenance

Foreign objects on the LED or sensor may cause bill jamming and decrease acceptance rate. To make sure the bill acceptor always works smoothly, please clean the internal parts regularly.

To clean the internal parts:

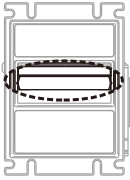
1. Turn Bill Acceptor off.
2. Open LED Assembly by pushing buttons on both sides.
3. Use a soft, dry cloth or towel to clean the bill path and sensors.



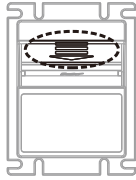
	Maintenance Notice	
	<i>(Any improper maintenance will result invalid warranty.)</i>	
	Recommended	Mild, non-abrasive, soap water.
DO NOT USE	Organic solvent , Alcohol, Volatile liquid.	

7. Troubleshooting

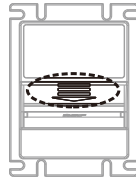
Bezel LED Errors



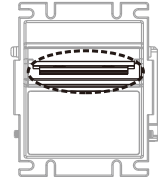
P70



P77
(Down Stacker)



P77
(Up Stacker)



P85

7 TABLE 01

LED		Status	Corrective Actions
RED FLASH	GREEN		
	1	White Card Calibration.	Please calibrate with ICT white calibration card.
1		Bill jammed.	Open bill path unit and then remove the jammed bill.
2		Disable.	Inspect for right DIP switch setting.
3		Recognition sensor module error.	Inspect for foreign objects on sensor or bill path and clean.
3+1		Purple sensor error.	Inspect for foreign objects on sensor or bill path and clean.
3+2		Hook sensor error.	Inspect for foreign objects on security hook and clean.
3+4		Fish sensor error.	Inspect for foreign objects on sensor or bill path and clean.
4		A stringing attempt has detected.	Inspect for foreign objects on sensor or bill path and clean.
6		Stacker error or stacker full.	Inspect for foreign objects on stacker and clean or empty the bill box.
7		Motor error.	Inspect for foreign objects on bill path and clean.



If the error can not be solved after corrective actions or happen again, please contact ICT for technical support.

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