



XBA

Bill Acceptor

Installation Guide



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1. Introduction

1-1. Overview

The XBA Bill Acceptor equips with innovative wide-angle banknote insertion technology to offer superior acceptance rate of 98% or higher. With the outstanding design, the XBA has the ability to provide very high degree of immunity to strong ambient light, and the advanced optical/mechanical anti-fishing structure for better investment protection. The built-in USB port allows firmware upgrades via USB flash drive conveniently.

1-2. Features

- Auto-calibration, multi-color optical sensor.
- Allow bill insertion from very wide angle.
- Immune to strong ambient light.
- Advanced optical/mechanical anti-fishing structure.
- Power saving function.
- High MTBF.
- Support firmware upgrade through USB Flash Disk.
- Support Firmware upgrade through MDB-FTL, and IrDA.
- Works under severe weather condition.
- Support connect with Coin Changer.

2. Specifications

General

Acceptance Rate 98% or greater

Note: The incomplete bills such as extremely dirty, wet, broken or wrinkled ones are excluded.

Bill Insertion Four way acceptable

Transaction Speed Approx. 2.5 s to stack

Interface Pulse, MDB, RS232

Installation Indoor & Outdoor

Electrical

Power Source 12V DC $\pm 10\%$
24V DC $\pm 10\%$
34V DC $\pm 10\%$

Power Consumption Normal Mode- Standby : 0.15A, 1.8W
Operation: 1.0A, 12W
Maximum: 2A, 24W

Power Saving Mode- Mode 1: 50 μ A
Mode 2: 15 μ A

Operation Environment Operating Temperature: -20°C~65°C
Storage Temperature: -30°C~70°C
Humidity: 30%~95%RH (no condensation)

Mechanical

Outline Dimension	Refer to page.5
Bill Capacity	Approx. 200 bills 400 bills
Weight	Approx. 1.5kg
Bill Accepted Width	62~77mm

3. Packing List

Main	Bill Acceptor
Accessory	Harnesses: Refer to page. 6

4. Dimension

Two Sided Bezel

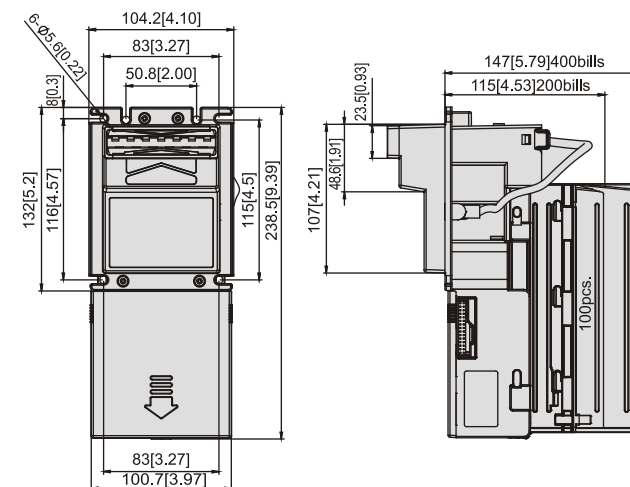


Figure.1

Unit : mm [inch]

TOB Bezel

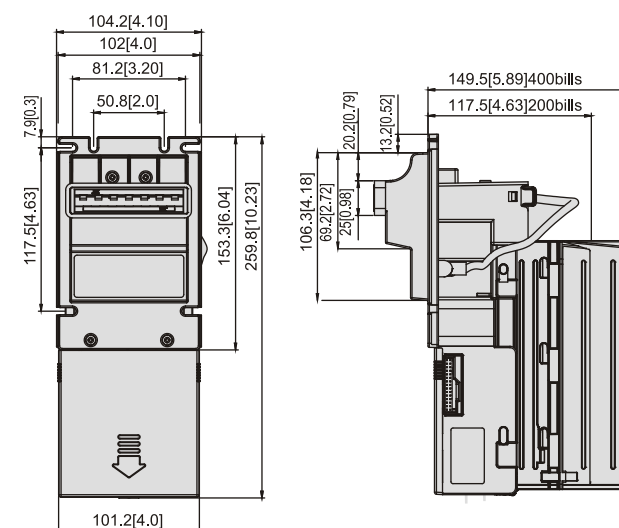


Figure.2

Unit : mm [inch]

5. Installation

5-1. Harness Application

Table.1

Interface	Used Voltage	Mode	Usage	Harness	Page
MDB	12VDC	Sleep	Power & Data comm.	WEL-RV705	7
	12/24VDC			WEL-RS7P02	8
	34VDC	Normal		WEL-RM006	9
Pulse	12VDC	Sleep	Power & Data comm.	WEL-RV701	10
			Extension Wire	CU-R961	11
	24VAC	Normal	Power & Data Comm.	WEL-RV703	12
			Extension Wire	WEL-RV702	13
ICT Protocol	12VDC	Normal	Power & Data Comm.	WEL-RXBA18	14
			Extension Wire	CU-R961	11

*Date Comm.:Data Communication.

Figure.3

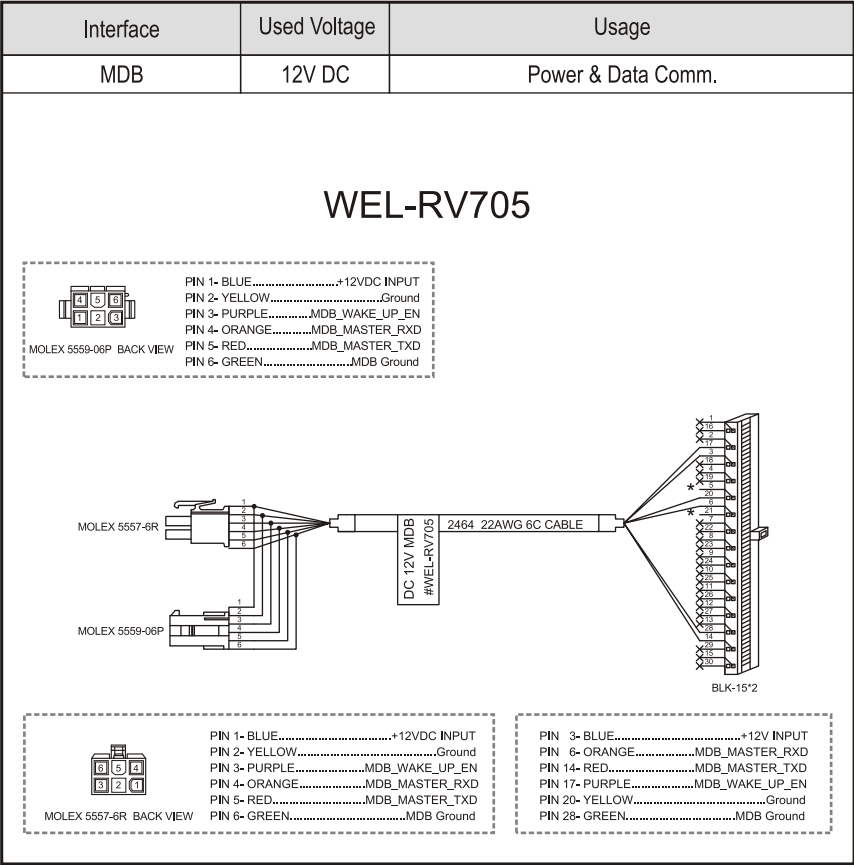


Figure.4

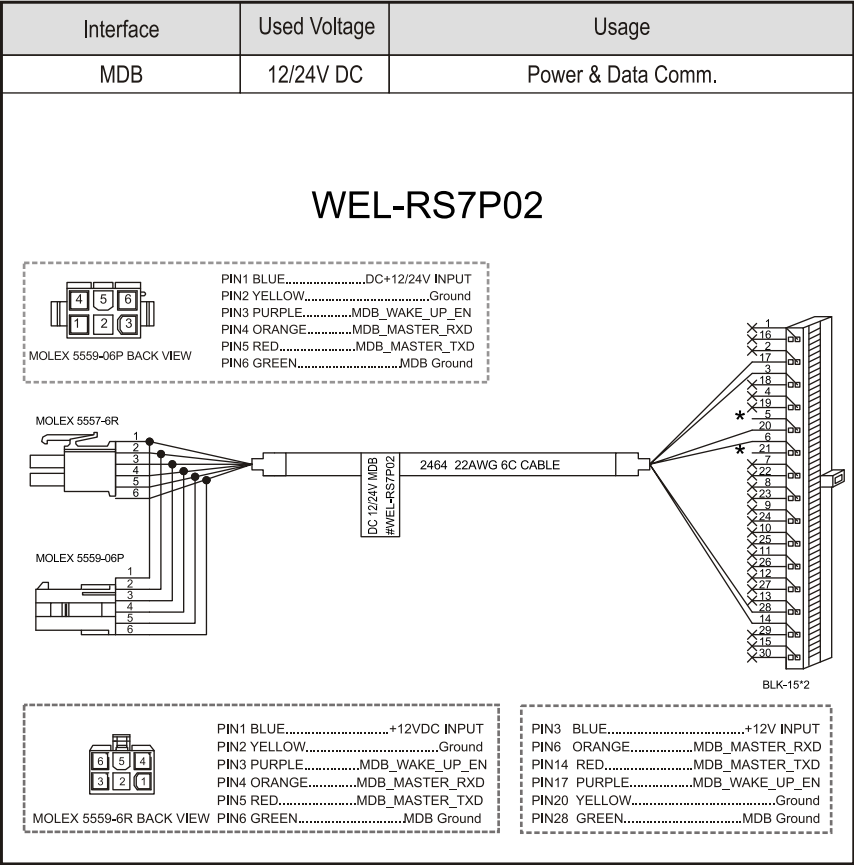


Figure.5

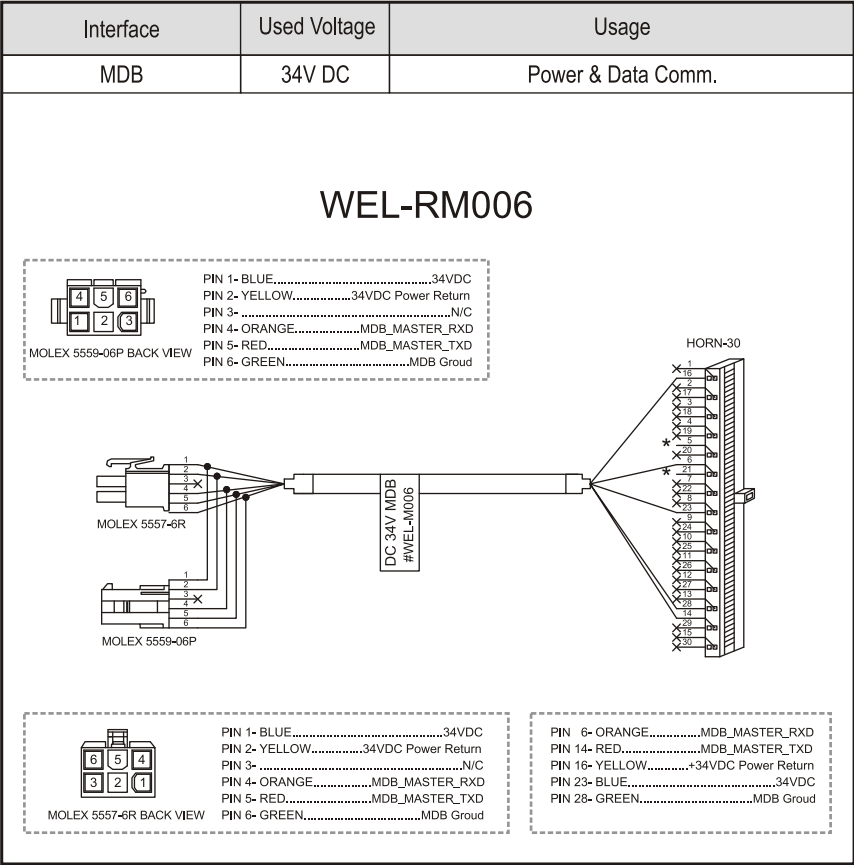


Figure.6

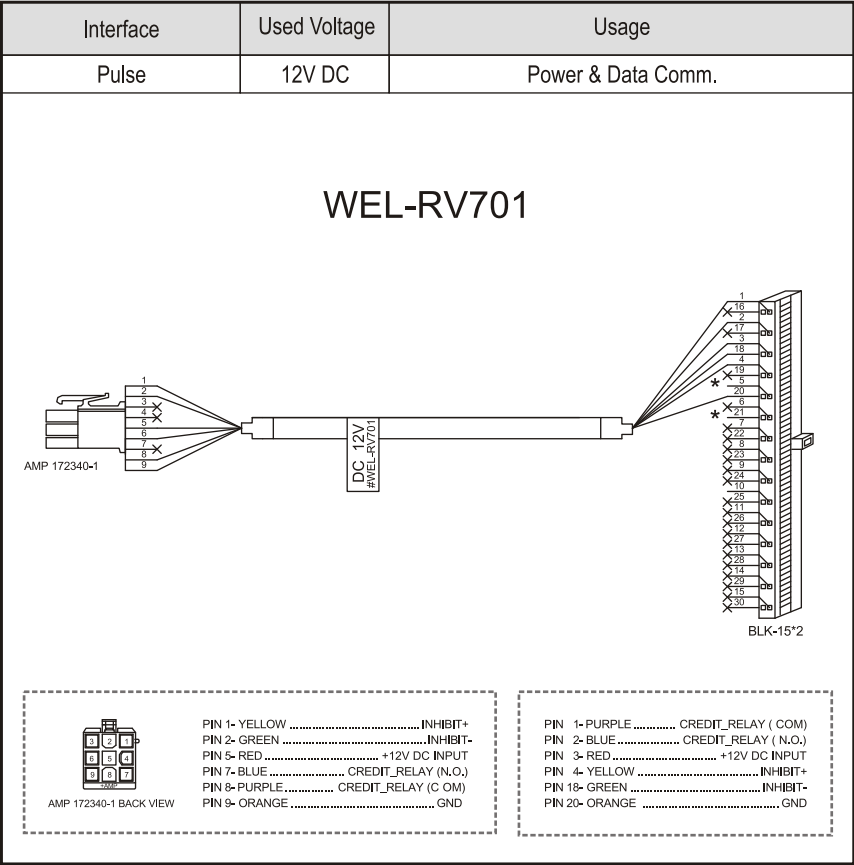


Figure.7

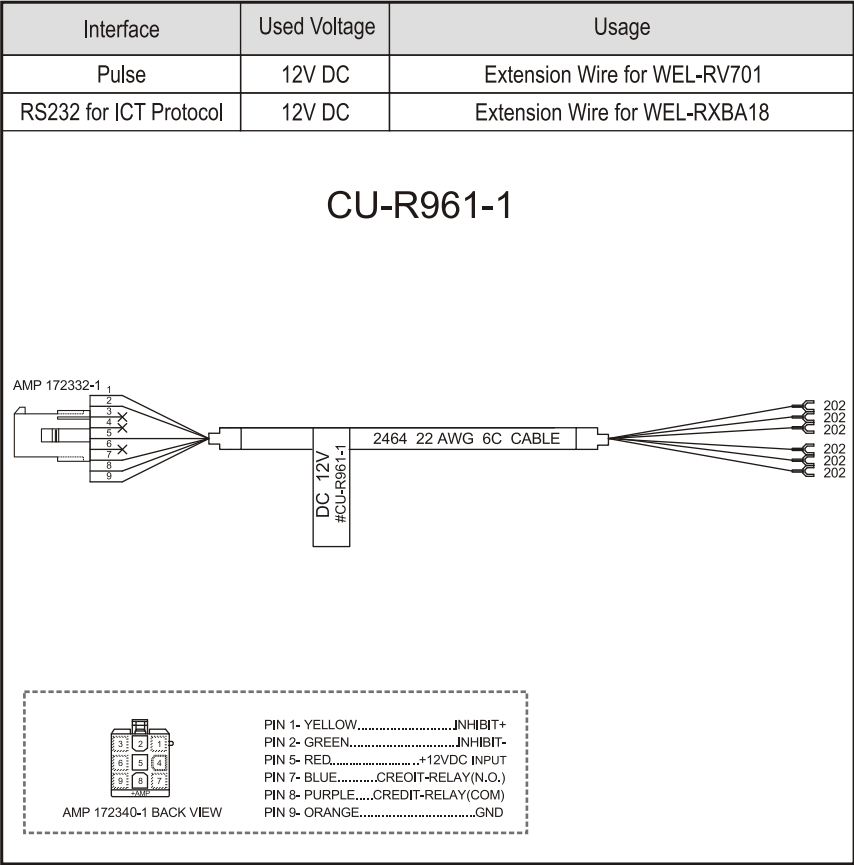


Figure.8

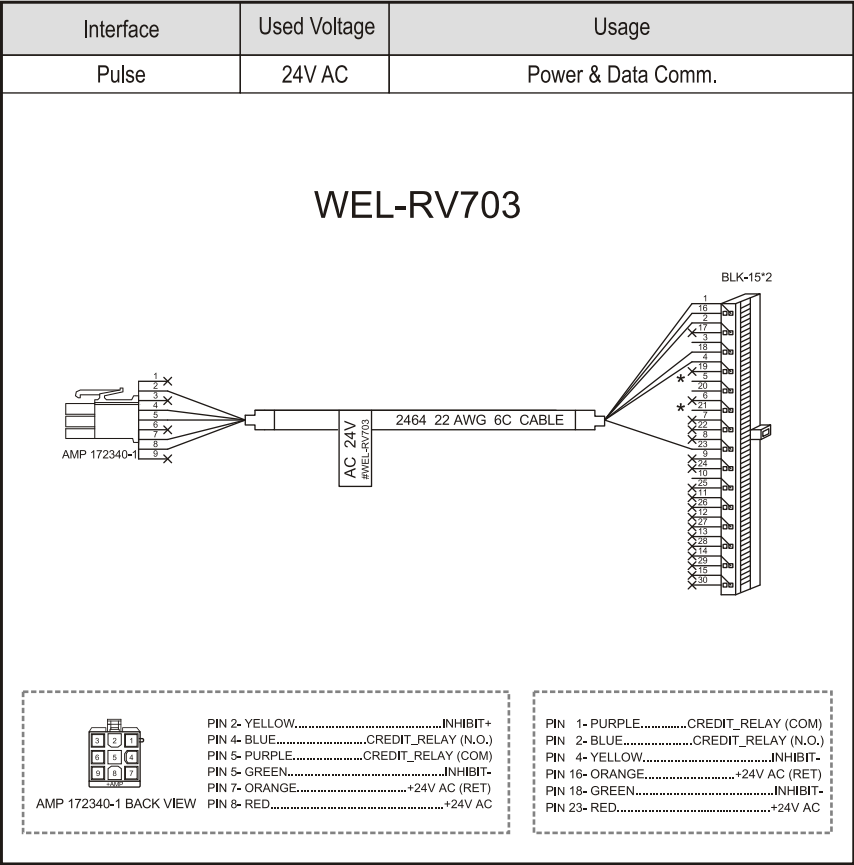


Figure.9

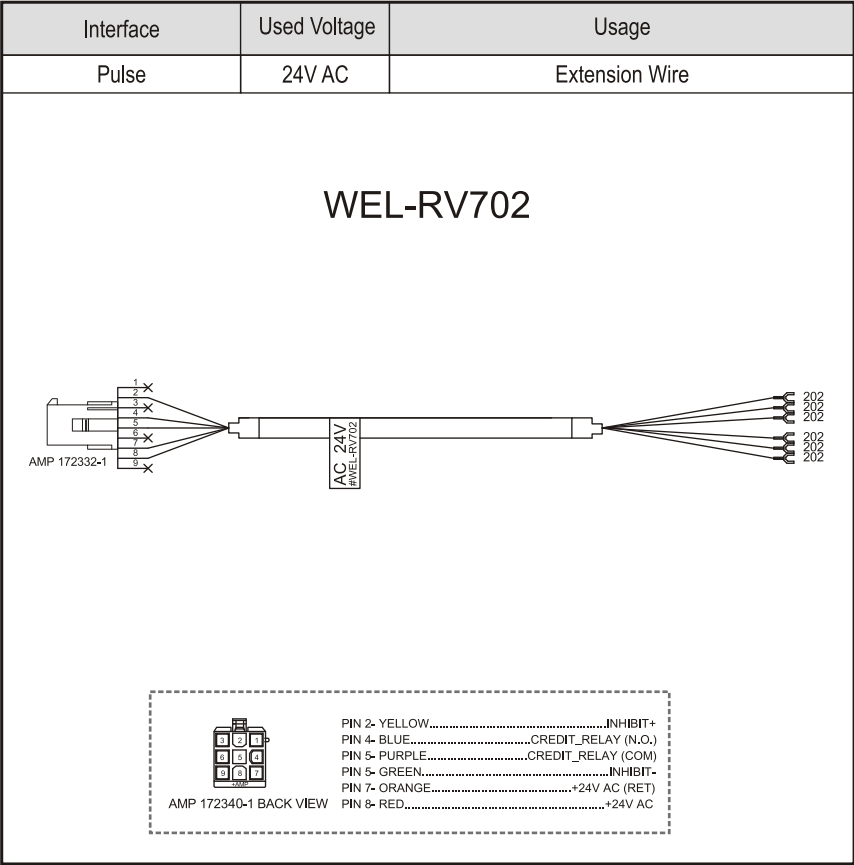
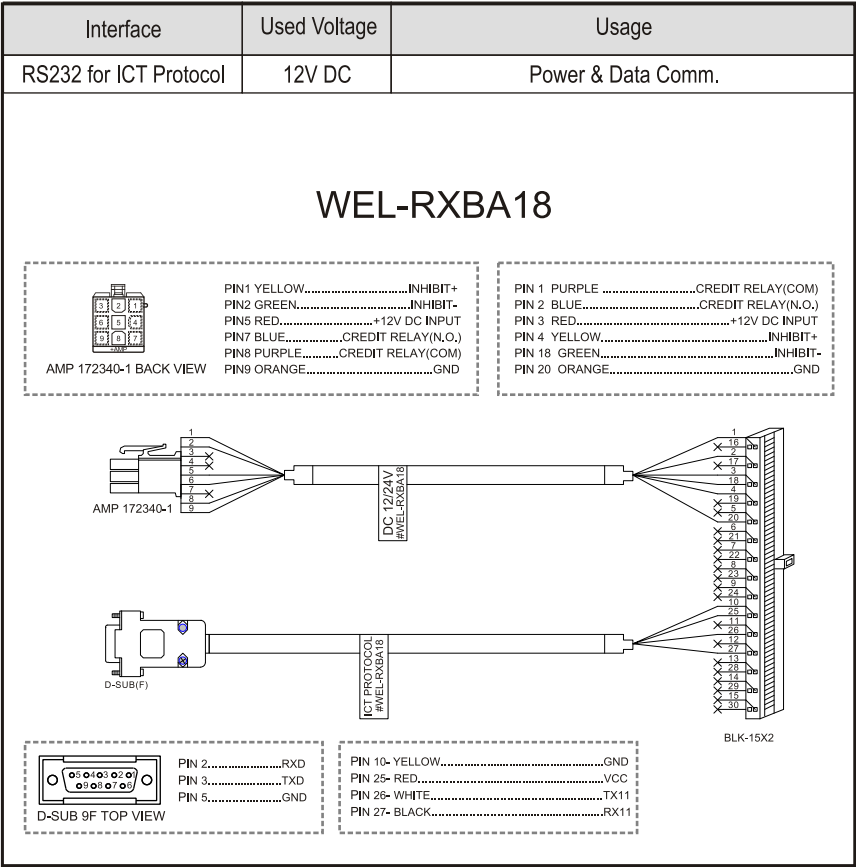


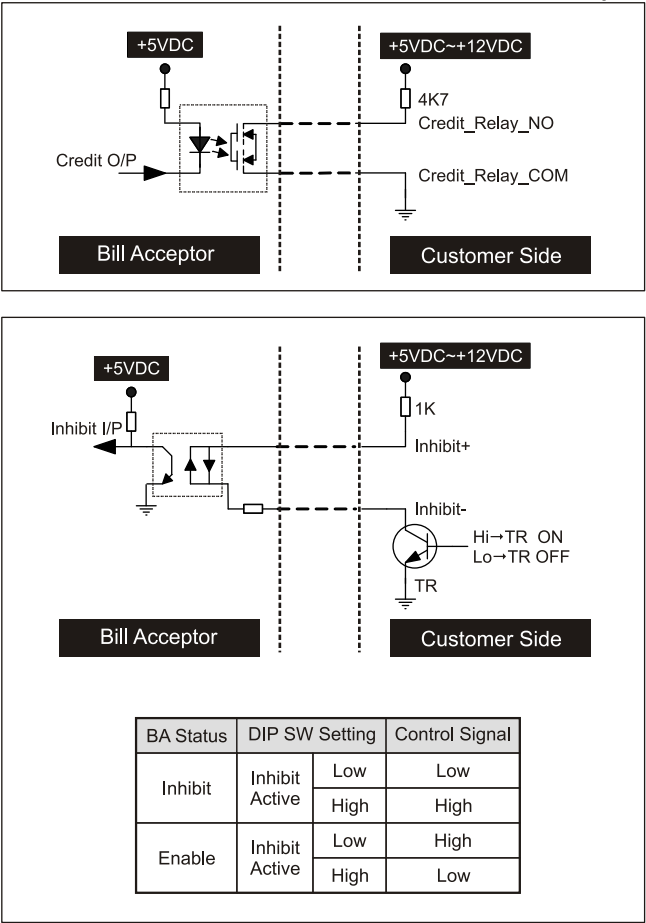
Figure.10



5-1-1. I/O Circuit

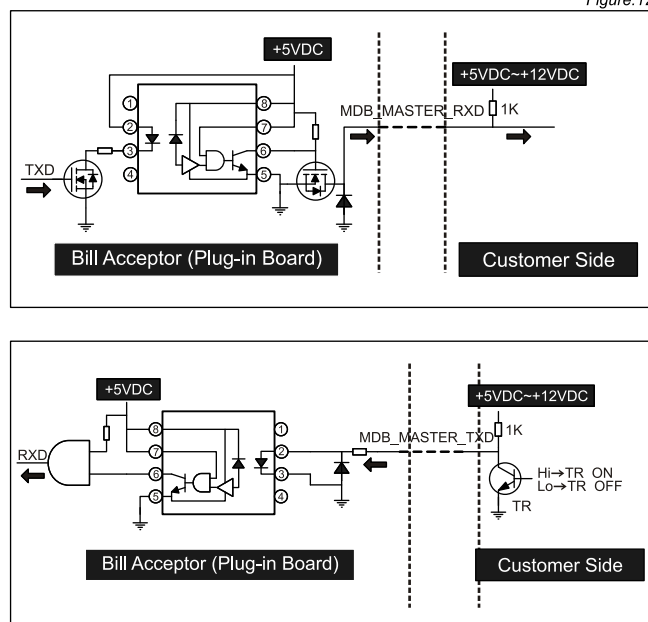
Pulse Interface.

Figure.11



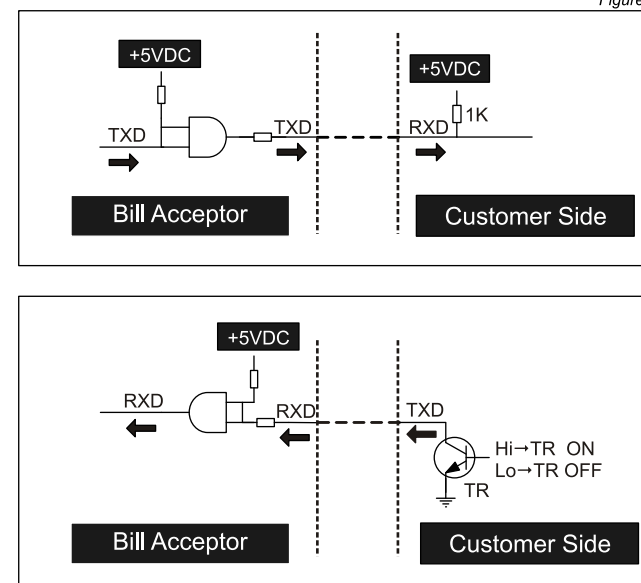
MDB Interface.

Figure.12



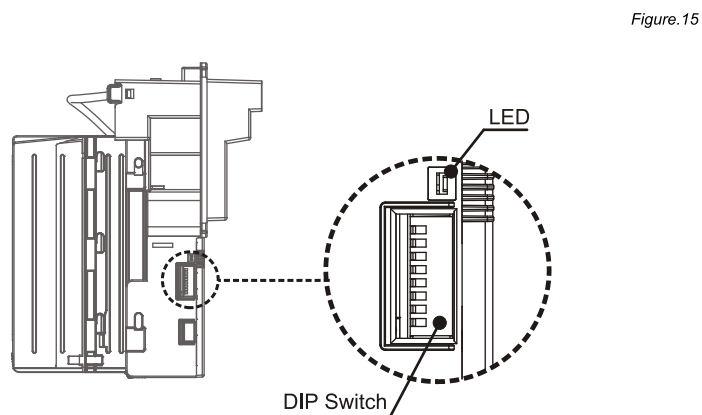
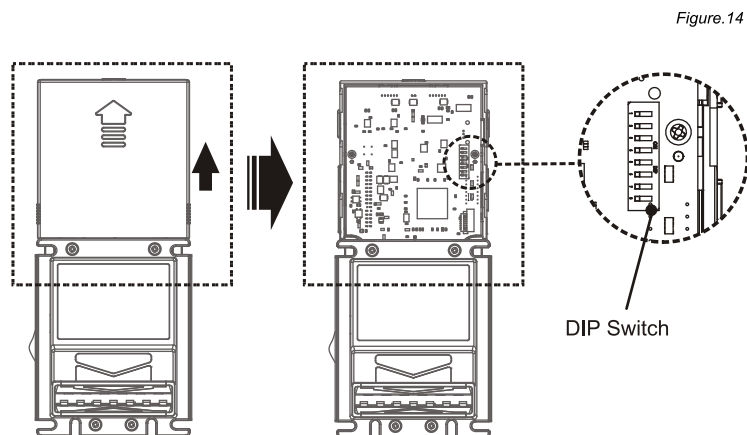
ICT-Protocol Interface.

Figure.13



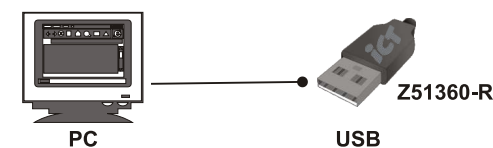
5-2. DIP Switch Setting

Two dip switches are located on as figure 14 the CPU board, and as figure 15 the sides of XBA series.

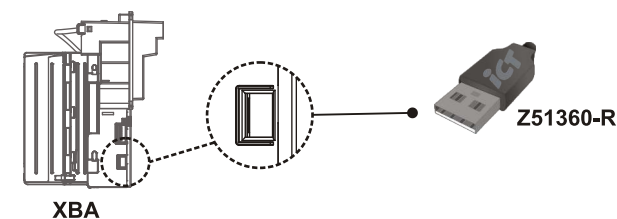


5-3. Firmware Download and Upgrade

Step 1 : Put the “XBAXxx.bin” file into your USB Flash Disk.



Step 2 : Turn off XBA, plug the USB Flash Disk into the USB connector on the XBA and then turn on the XBA.



Step 3 : The LED in the rear side of bill insertion module will flash twice, then remove the USB Flash Disk from XBA.

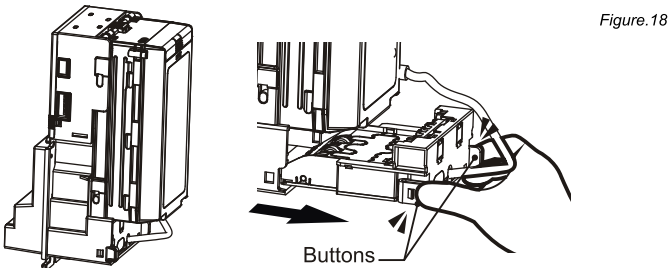
Step 4 : Wait for about 30sec., then XBA will automatically reset and standby for normal operation.

6. Maintenance

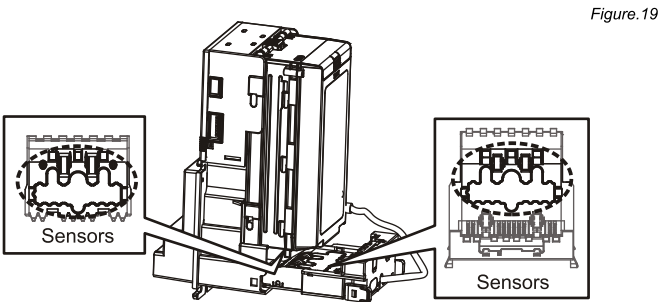
To make sure the bill acceptor always works smoothly, please clean the internal parts regularly.

To clean the internal parts:

- 1. Press the buttons on the sides of bill path and pull the unit out.



- 2. Use a soft, dry cloth or towel to clean the bill path and sensors.





Maintenance Notice
(Any improper maintenance will result in invalid warranty.)

Recommended	Mild, non-abrasive, soap water.
DO NOT USE	Organic solvent , Alcohol, Volatility liquid.

7. Troubleshooting

7-1. Bezel LED messages

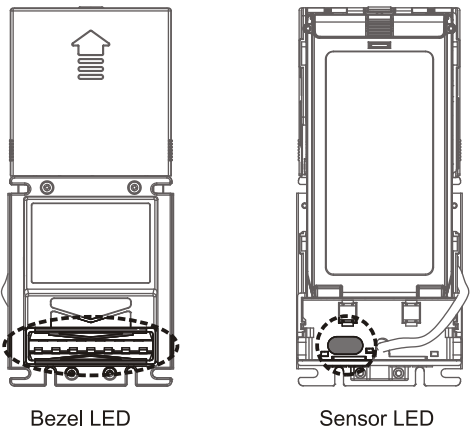


Figure.20

Table.2

LED Flashes	Status	Corrective Actions
Constant green	Bill Acceptor is normal	N/A

7-2. Back LED Errors

Table.3

LED Flashes	Status	Corrective Actions
1	Bill jammed.	Remove the bill box by sliding the top button and the bill path (as figure 21), and then remove the jammed bill.
2	Disable.	Inspect for right DIP switch setting.
3	Recognition 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 (Optional)	Out sensor error.	Inspect for foreign objects on sensor or bill path and clean.
4	Anti-string sensor error or a stringing attempt has detected.	Inspect for foreign objects on sensor or bill path and clean.
5	Bill box has been removed.	Replace the bill box.
6	Stacker error or stacker full.	Empty the bill box.
7	Motor error.	Inspect for foreign objects on bill path and clean.

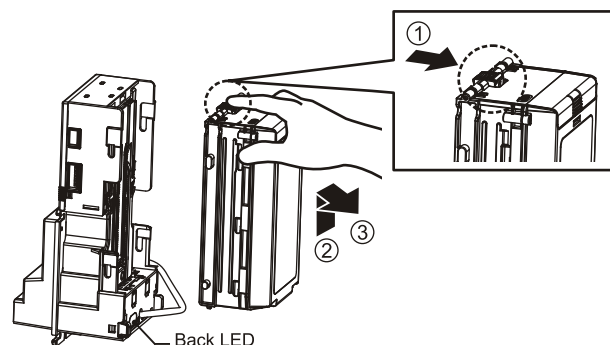


Figure.21

ict Taiwan

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