

Bill Acceptor
BS7
Installation Guide



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1. Introduction

1-1. Overview

BS7 is a bill acceptor which features not only high-security module with bill box but also outstanding recognition, acceptance rate up to 96% or even greater.

1-2. Features

- High Acceptance Rate up to 96%.
- Four way bill insertion acceptance.
- Numerous interfaces available.
- Easily Install & Maintain.

2. Specifications

General

Acceptance Rate	96% or greater
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Note: The incomplete bills such as extremely dirty, wet, broken or wrinkled ones are excluded.

Bill Insertion	Four-way acceptance
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Transaction Speed	Approx. 3 seconds to stack
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Interface	Pulse
	MDB
	Parallel A3
	ICT Protocol

Electrical

Power Source	12V DC (11.4~12.6V DC) 24V AC (21.6~26.4V AC) 24V/34V DC (20V~42.5V DC)						
Power Consumption	<table> <tr> <td>12V DC</td><td>Standby : 0.3A, 4W Operation: 0.8A, 10W Maximum: 2.5A, 30W</td></tr> <tr> <td>24V AC</td><td>Standby : 0.2A, 5W Operation: 0.5A, 12W Maximum: 1.5A, 36W</td></tr> <tr> <td>24V/34V DC</td><td>Standby : 0.15A, 6W Operation: 0.4A, 14W Maximum: 1.35A, 46W</td></tr> </table>	12V DC	Standby : 0.3A, 4W Operation: 0.8A, 10W Maximum: 2.5A, 30W	24V AC	Standby : 0.2A, 5W Operation: 0.5A, 12W Maximum: 1.5A, 36W	24V/34V DC	Standby : 0.15A, 6W Operation: 0.4A, 14W Maximum: 1.35A, 46W
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24V/34V DC	Standby : 0.15A, 6W Operation: 0.4A, 14W Maximum: 1.35A, 46W						
Operation Environment	Operation Temperature: 0°C~55°C Storage Temperature: -30°C~70°C Humidity: 30%~85RH(no condensation)						

Mechanical

Bill Capacity	Approx. 400 bills (350~450)
Weight	Approx. 1.25kg
Outline Dimension	Refer to page.4



Installation: Indoor use only!!

3. Packing List

Main

Bill Acceptor

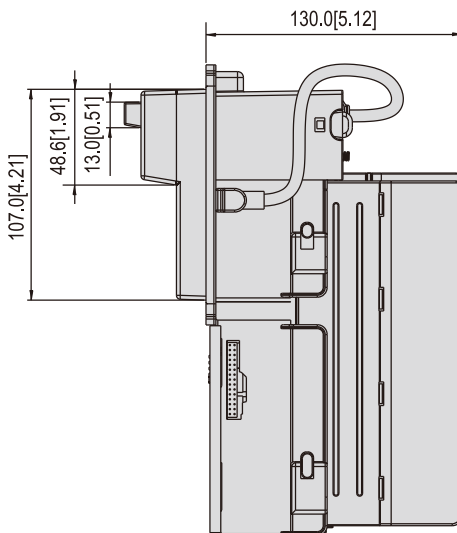
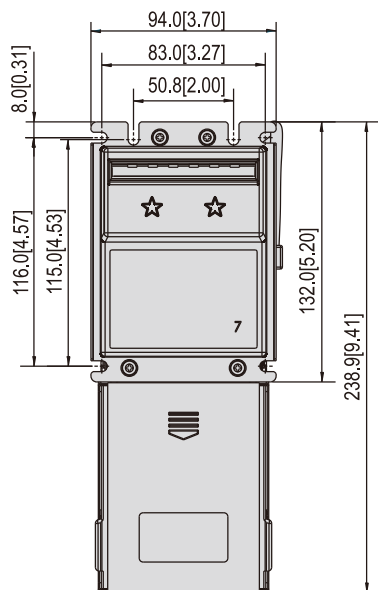
Accessory

Harnesses: Refer to 5-1

BS7 Installation Guide

BS7 DIP Switch Setting Guide

4. Dimension



Unit : mm [inch]

4 FIG.01

5. Installation

5-1. Harness Application

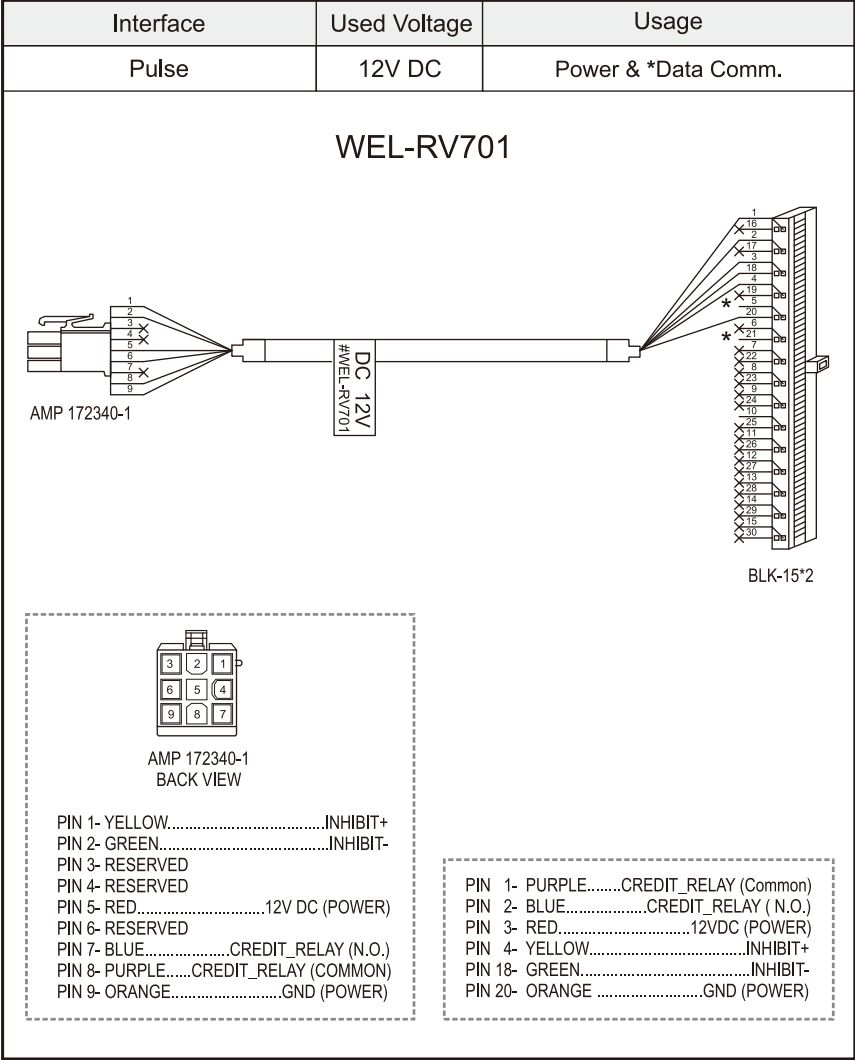
5-1 TABLE 01

Interface	Used Voltage	Usage	Harness	Page
Standard Pulse	12V DC	Power & *Data Comm.	WEL-RV701	6
		Extension Wire	CU-R961-1	7
	24V AC	Power & *Data Comm.	WEL-RV703	8
		Extension Wire	WEL-RV702	9
MDB	24V/34V DC	Power & *Data Comm.	WEL-RM006	10
ICT Protocol (RS232)	12V DC	Power	WEL-RV701	6
		Extension Wire	CU-R961-1	7
		*Data Comm.	WEL-RV706-1 or 2-BA-RV706	11
Parallel A3	24V AC	Power & *Data Comm.	**5RBG-AA203L1-XX	12

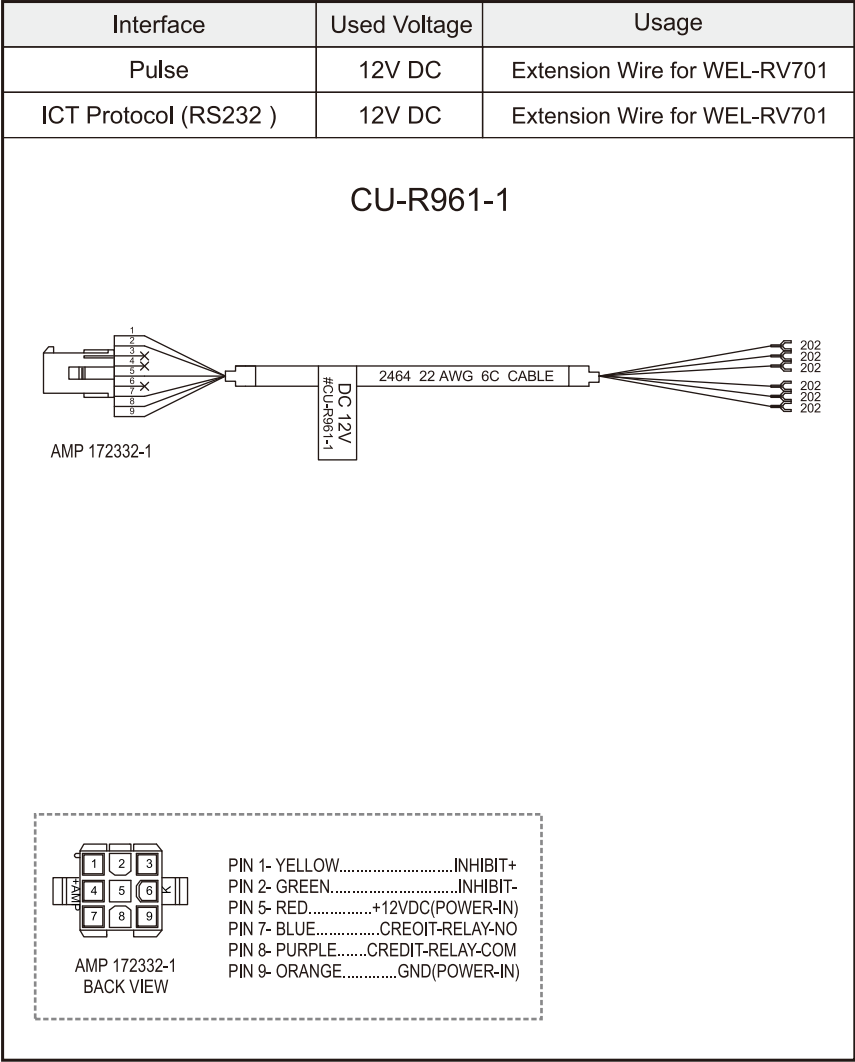
*Data Comm.: Data Communication.

**5RBG-AA203L1-xx: Plug-in Box & Cables, "XX" varies from version to version.

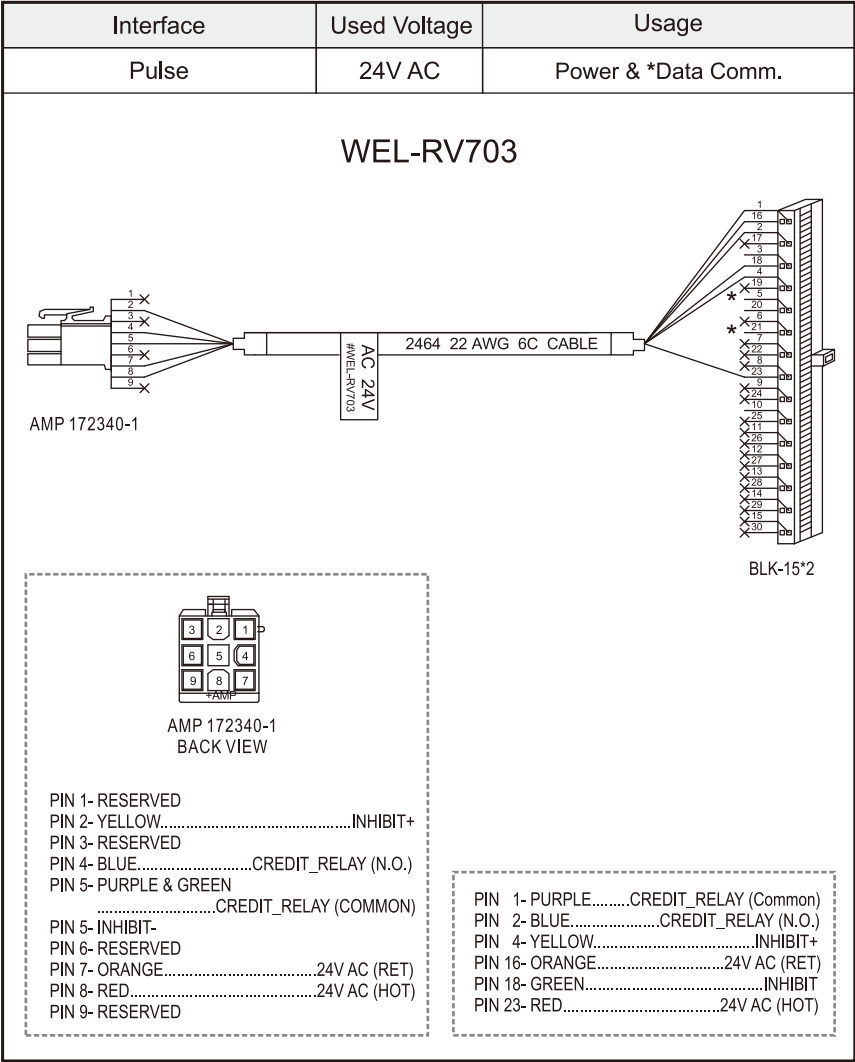
5-1 FIG. 01



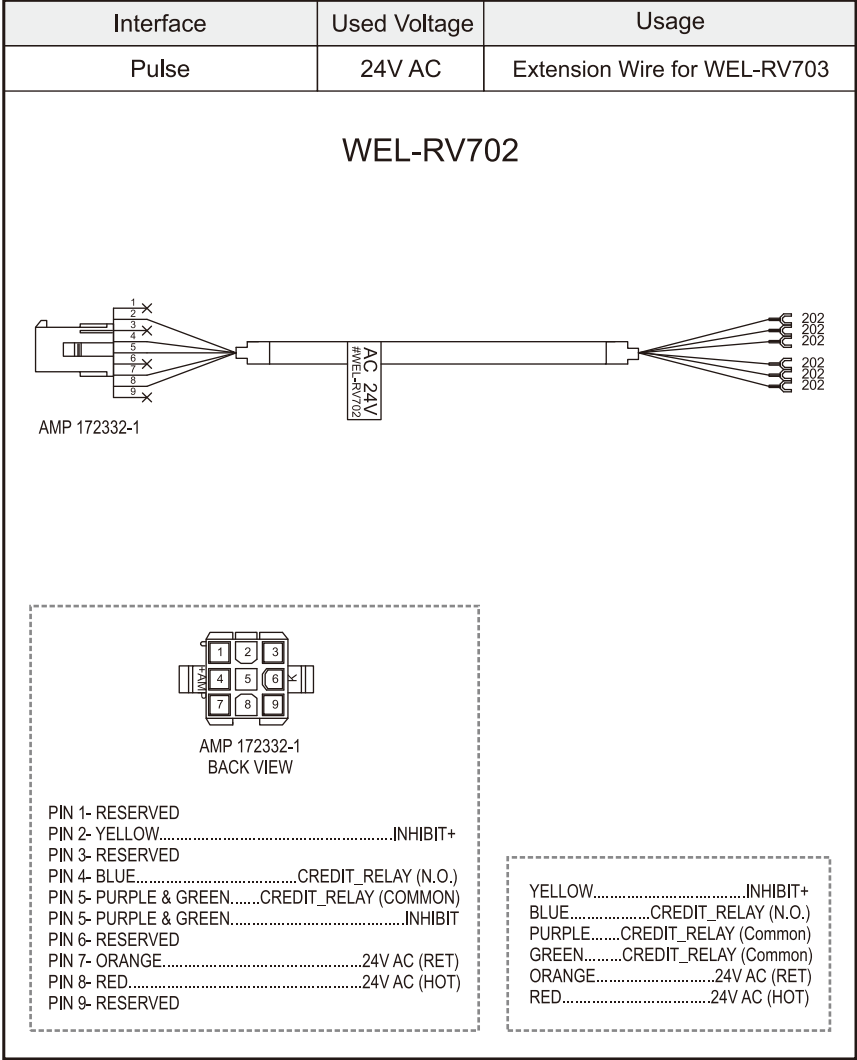
5-1 FIG. 02



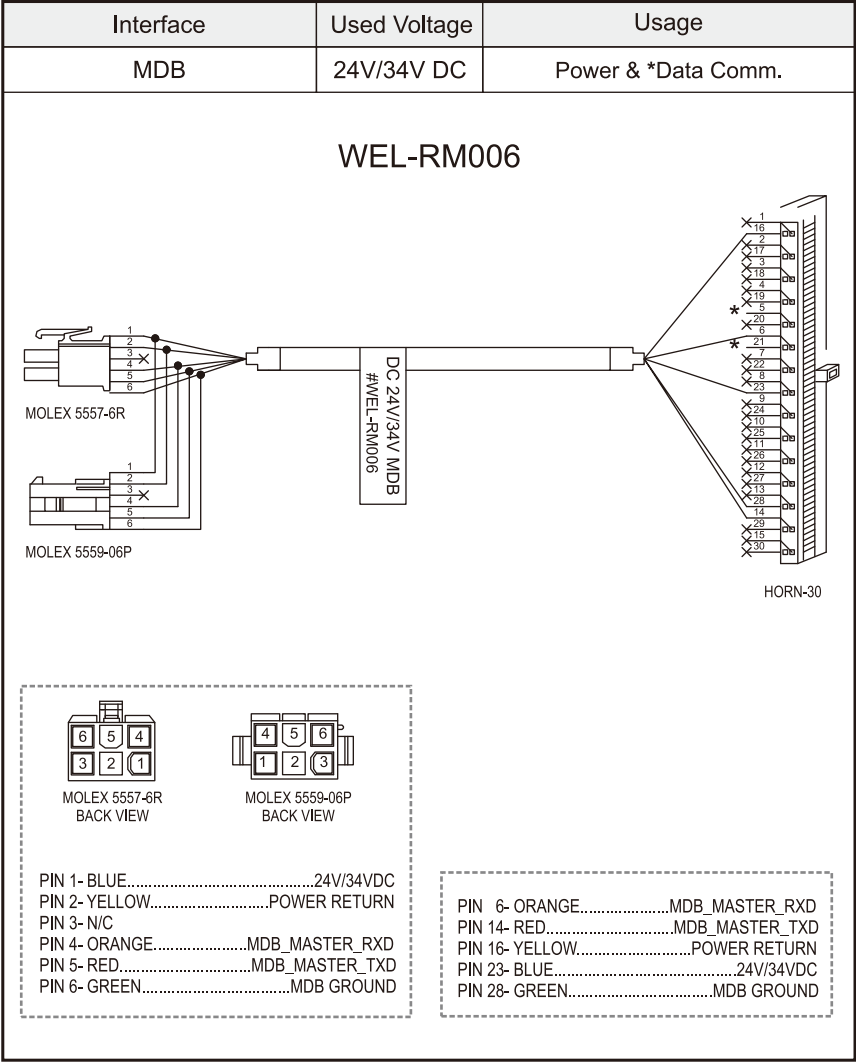
5-1 FIG. 03



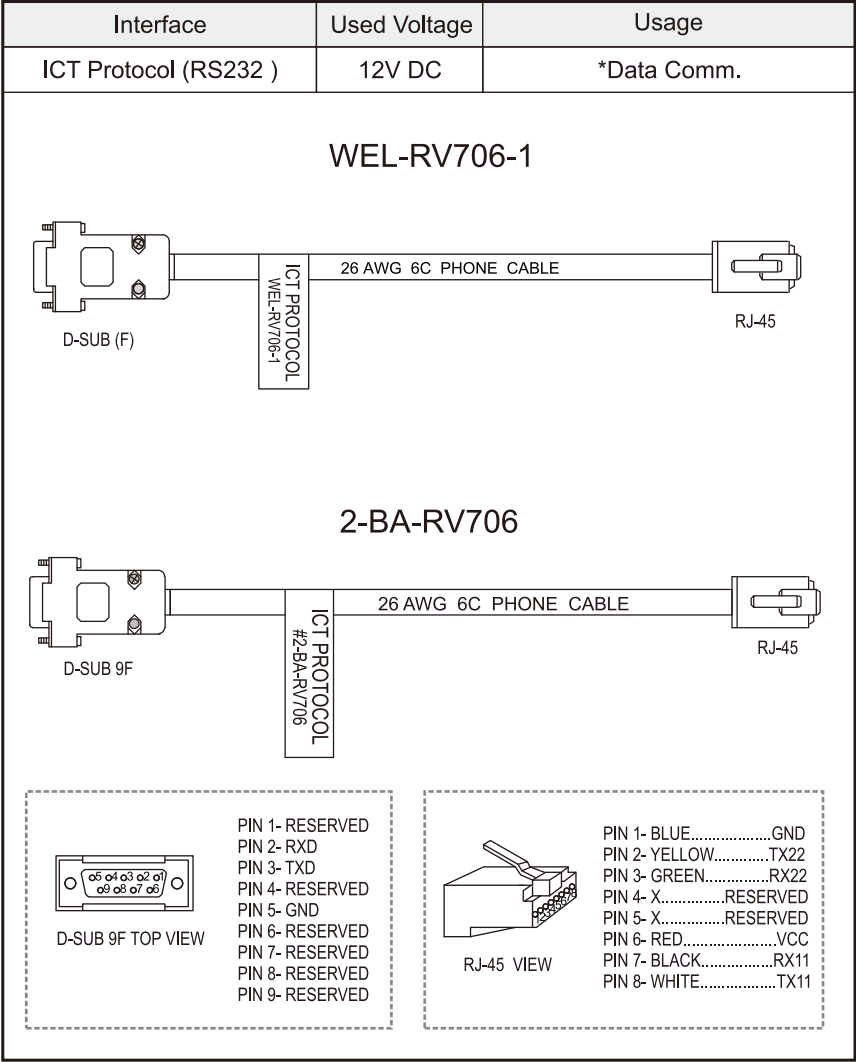
5-1 FIG. 04

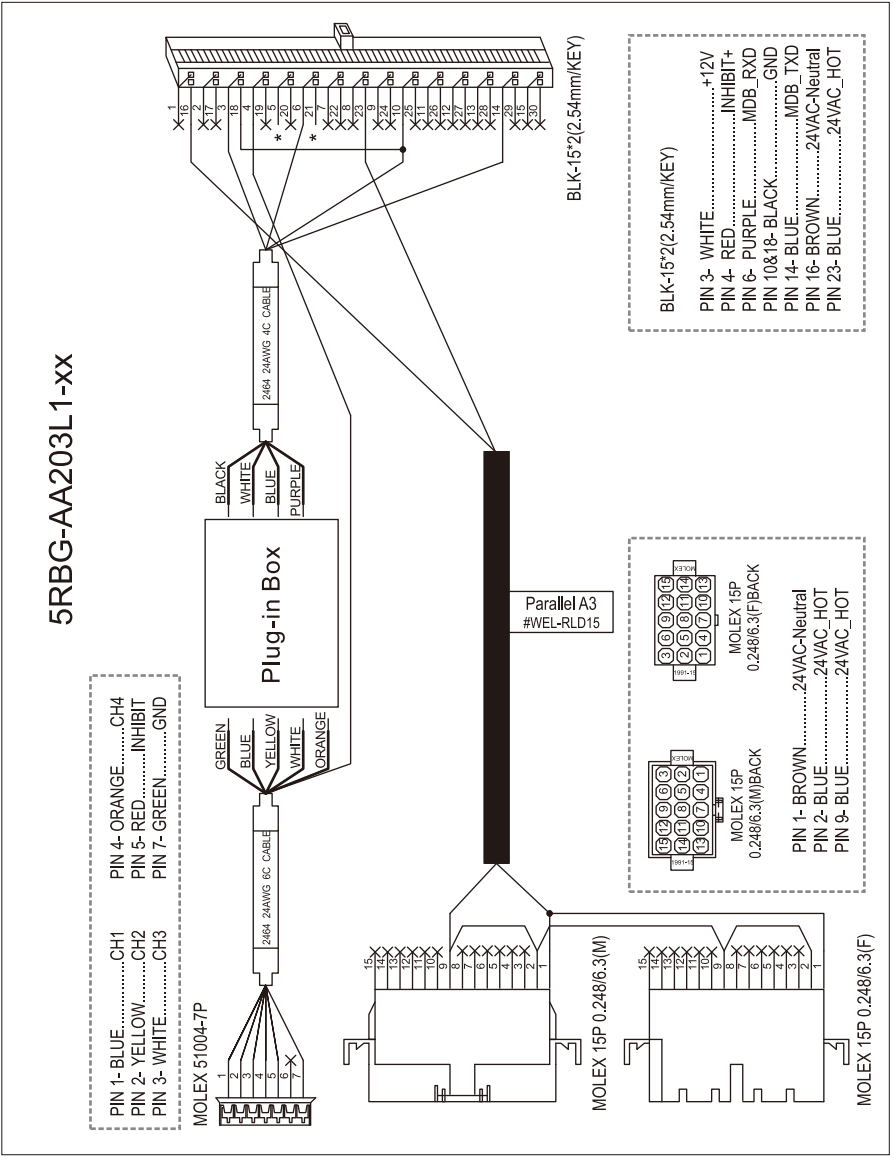


5-1 FIG. 05



5-1 FIG. 06

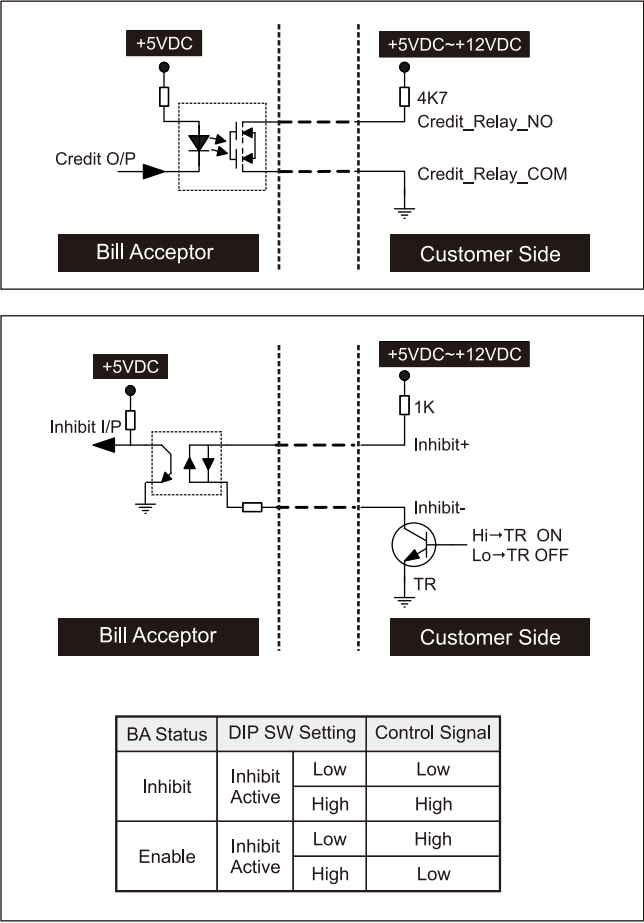




5-1-1. I/O Circuit

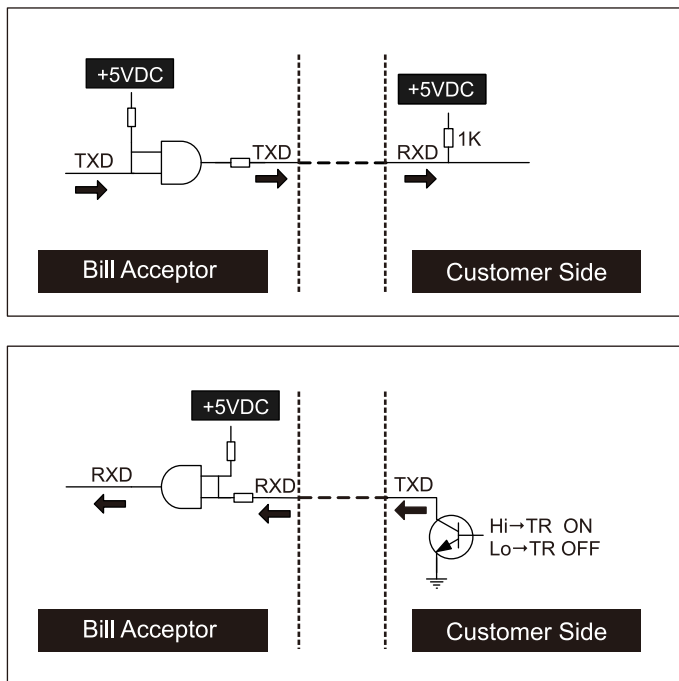
Pulse Interface

5-1-1 FIG. 01



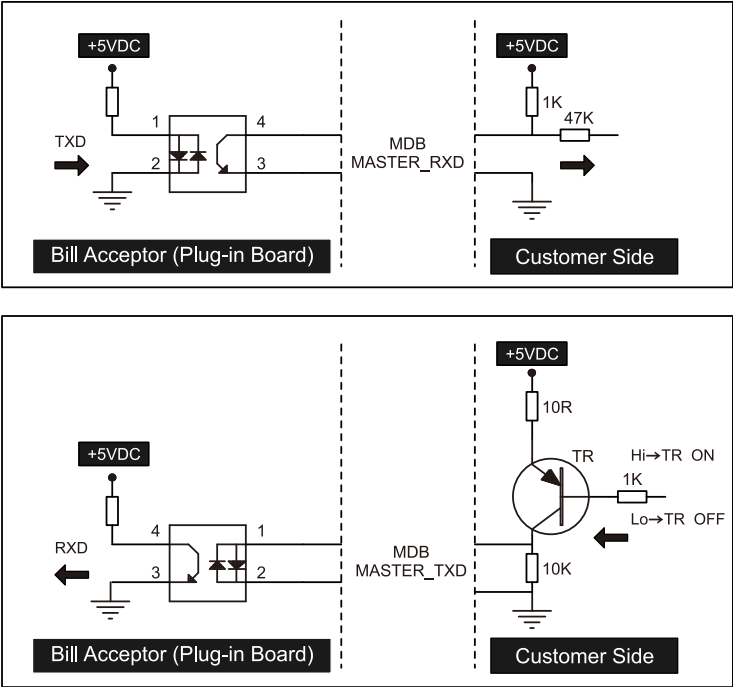
ICT-Protocol Interface.

5-1-1 FIG. 02



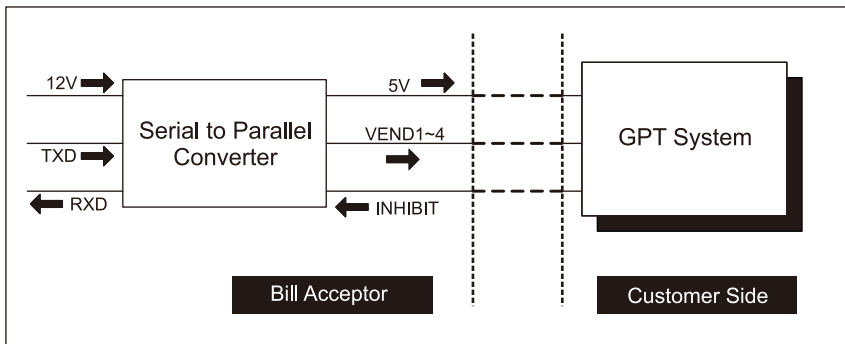
MDB Interface

5-1-1 FIG. 03



Parallel A3 Interface

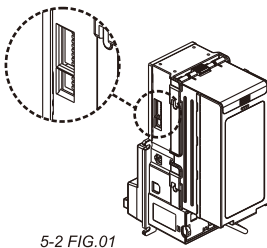
5-1-1 FIG. 04



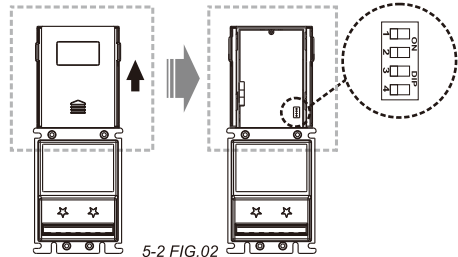
5-2. DIP Switch Setting

There are two serial DIP switches which are located on the side of BS7(as FIG.01). According to different currencies which are used by users, DIP switch settings could be varied to fit users' need. Besides, there's also a serial DIP switches on CPU board inside of BS7 for interface settings.(as FIG.02)

Please refer to "BS7 DIP Switch Setting" Guide in the package for more detail.



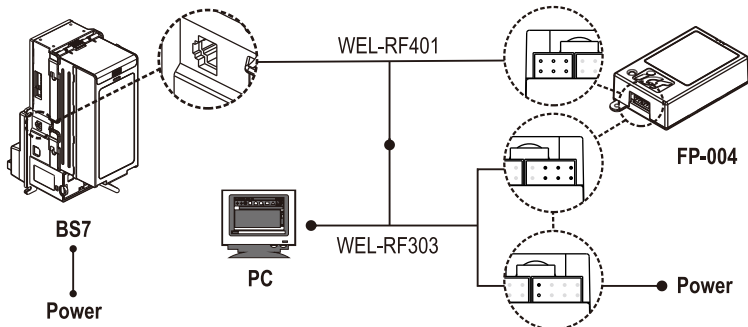
5-2 FIG.01



5-2 FIG.02

5-3. Software Download and Upgrade

To download and upgrade the software to BS7, 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.



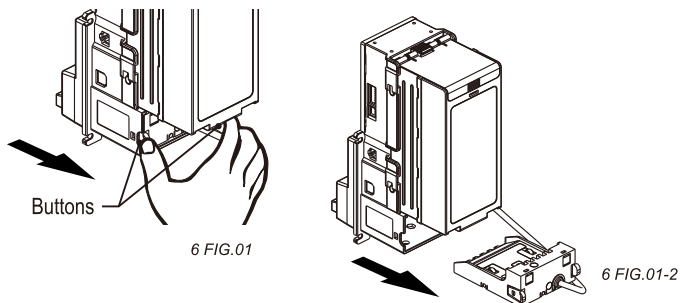
Power must be applied to Bill Acceptor **after** connecting.

6. Maintenance

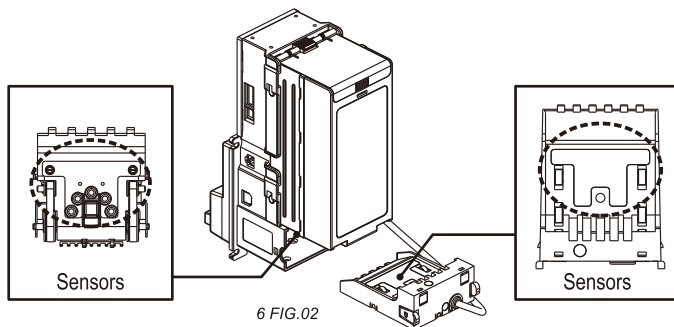
To make sure the bill acceptor always works smoothly, please clean the internal parts regularly.

To clean the internal parts:

1. Press the buttons on the sides of bill path unit 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 invalidate the warranty.)

Recommended

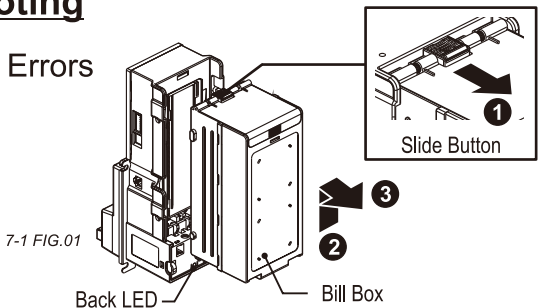
Mild, non-abrasive, soap water.

DO NOT USE

Organic solvent , Alcohol, Volatile liquid.

7. Troubleshooting

7-1. Back LED Errors



7-1 TABLE 01

LED	Status	Correct Actions
GREEN		
1	White Card Calibration.	Please calibrate with ICT white calibration card.

7-1 TABLE 01-1

LED Flashes	Status	Corrective Actions
GREEN		
1	Bill jammed.	Remove the bill box by sliding the top button and the bill path(as 7-1 FIG.01), and then remove the jammed bill.
2	Disable.	Inspect the right DIP switch setting.
3	Recognition sensor module error.	Inspect the foreign objects on sensor or bill path and clean.
3+2	Hook sensor error.	Inspect the foreign objects on security hook and clean.
4	Anti-string sensor error or a stringing attempt has detected.	Inspect the 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 the 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.



International Currency Technologies Corporation

No.28, Ln. 15, Sec. 6, Minguang E. Rd., Neihu Dist., Taipei City 114, Taiwan

sales@ictgroup.com.tw (For Sales)

fae@ictgroup.com.tw (For Customer Service)

Website: www.ictgroup.com.tw

