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BILL ACCEPTOR

PA7/PA7-U

INSTALLATION GUIDE

International Currency Technologies Corp.

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Contents

1. Introduction	
1-1. Overview	2
1-2. Features	2
2. Specifications	3
3. Packing List	3
4. Dimension	4
4-1. Bezel Style	5
5. Installation	
5-1. Harness Application	6
5-1-1. I/O Circuit	17
5-2. DIP Switch Setting	23
5-3. Software Download and Upgrade	23
6. Maintenance	24
7. Troubleshooting	
7-1. Bezel LED Errors	25
7-2. Back LED Errors	26

1. Introduction

1-1. Overview

PA7/PA7-U is a bill acceptor which features as high-security with acceptance rate up to 96% or even greater.

1-2. Features

- Auto-calibrating.
- Easy Maintenance.
- Four-way bill insertion acceptance.

2. Specifications

General

Acceptance Rate 96% or greater

Note: The acceptance rate excludes notes that are dirty, wet, broken or wrinkled.

Bill Insertion Four-way acceptable

Transaction Speed Approx. 3 seconds to stack

Interface Pulse, ICT Protocol, NISR, 5V ENABLE, single price(PA7-U).

Electrical

Power Source 12V DC(10.8~13.2V DC)
117V AC(105.3~128.7V AC)

Power Consumption	12V DC - Standby: 0.28A, 3.4W Operation: 0.9A, 11W Maximum: 2.5A, 30W 117V AC- Standby: 0.045A, 5W Operation: 0.1A, 11W Maximum: 0.2A, 22W
Operation Environment	Operation Temperature: 0°C~55°C Storage Temperature: -30°C~70°C Humidity: 30%~85% RH(no condensation)

Mechanical

Bill width	62~72mm
Bill Capacity	Approx. 400 bills(300~400) Approx. 500 bills(400~500) Approx. 800 bills(700~800)
Weight	Approx. 1.3kg

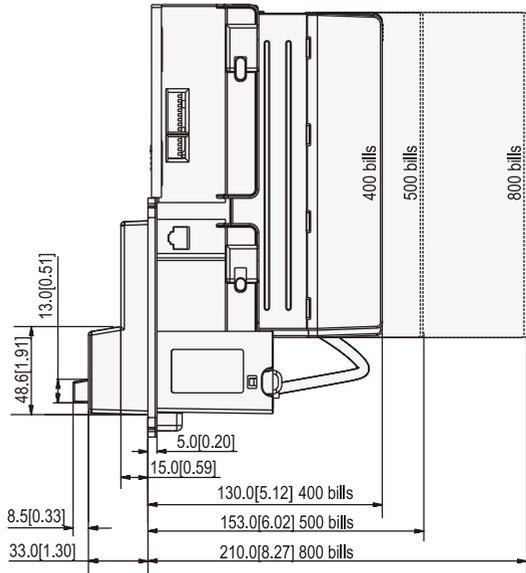
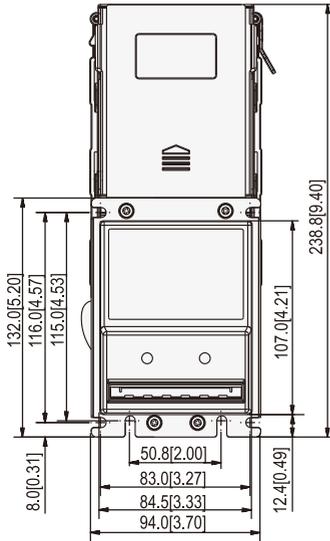


Installation: Indoor use only!!

3. Packing List

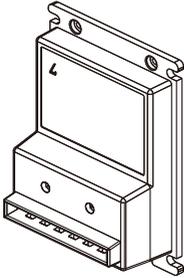
Main	Bill Acceptor
Accessory	Harness: Refer to 5-1 PA7/PA7-U Installation Guide PA7/PA7-U DIP Switch Setting Guide

4. Dimension



Unit:mm[inch]

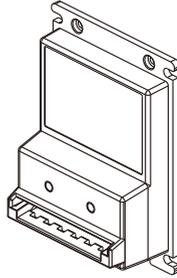
4-1. Bezel Style



4-1 FIG.01

Compact Bezel

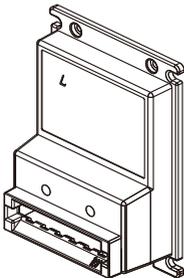
Part Number: A2209A00-R



4-1 FIG.02

Bezel (Step Style)

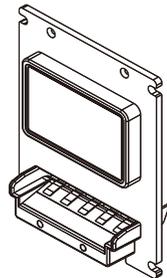
Part Number: A3025000-R



4-1 FIG.03

Two Sided Bezel

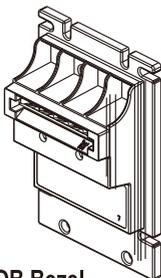
Part Number: A2422B00-R



4-1 FIG.04

Horizontal Stacker Bezel

Part Number: A24260-R



4-1 FIG.05

TOB Bezel

Part Number: A2582000-R

5. Installation

5-1. Harness Application

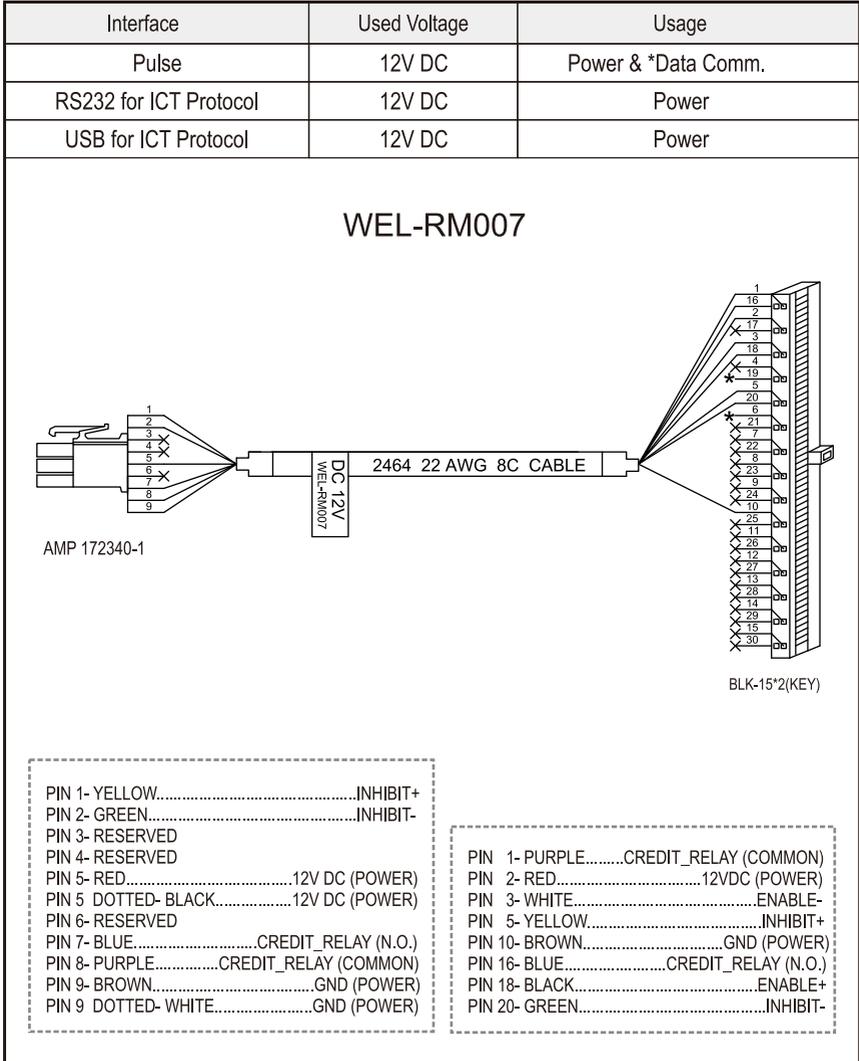
5-1 TABLE 01

Model	Interface		Used Voltage	Usage	Harness	Page	
PA7/ PA7-U	Pulse		12VDC	Power & *Data Com.	WEL-RM007	7	
				Extension Wire	CU-R961-1	8	
			117VAC	Power & *Data Com.	WEL-RM008	9	
				Extension Wire	WEL-RM012	10	
	Pulse+5V Enable		117VAC	Power & *Data Com.	WEL-RM017	11	
				Extension Wire	WEL-RM018	12	
	NISR		117VAC	Power & *Data Com.	3-BA-RM023	13	
	ICT Protocol		RS232	12V DC	Power	WEL-RM007	7
					Extension Wire	CU-R961-1	8
				*Data Comm.	WEL-RV706-1 or 2-BA-RV706	15	
			117V AC	Power	WEL-RM008	9	
				Extension Wire	WEL-RM012	10	
				*Data Comm.	WEL-RV706-1 or 2-BA-RV706	15	
			** USB	12V DC	Power	WEL-RM007	7
				117V AC	Power	WEL-RM008	9
5V DC	*Data Com.	WEL-RU1180 (Optional)		14			
PA7-U	Single Price		117V AC	Power & *Data Com.	WEL-RM031	16	

*Data Com. : Data Communication.

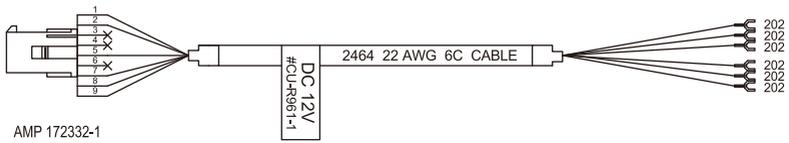
**USB is only compatible with model PA7-UXXXX-XXXX.

5-1 FIG.01

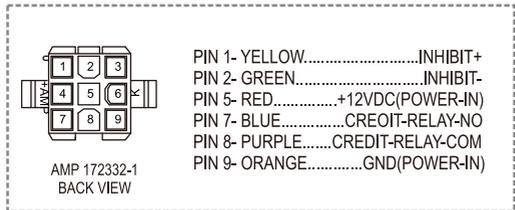


Interface	Used Voltage	Usage
Pulse	12V DC	Extension Wire for WEL-RM007
RS232 for ICT Protocol	12V DC	Extension Wire for WEL-RM007

CU-R961-1



AMP 172332-1

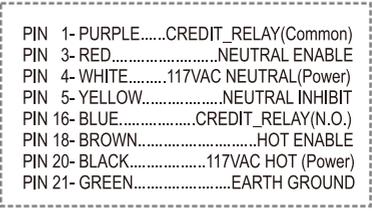
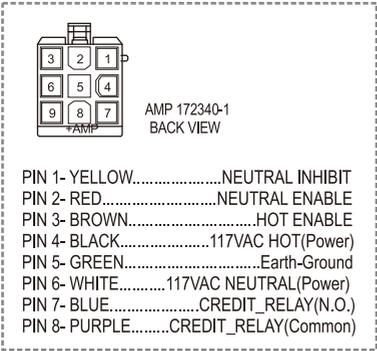
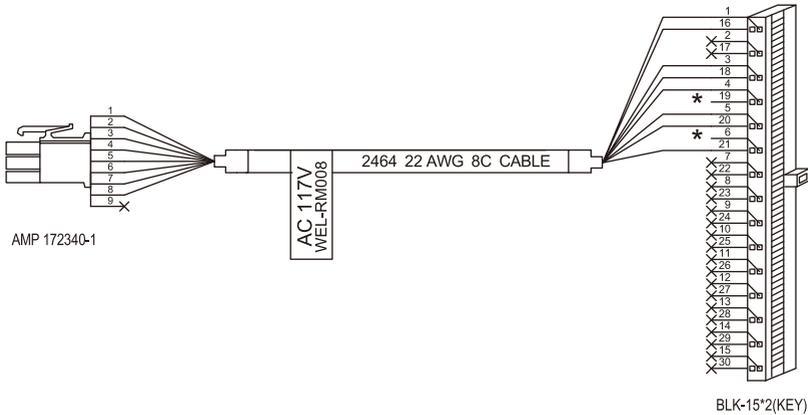


- PIN 1- YELLOW.....INHIBIT+
- PIN 2- GREEN.....INHIBIT-
- PIN 5- RED.....+12VDC(POWER-IN)
- PIN 7- BLUE.....CREOIT-RELAY-NO
- PIN 8- PURPLE.....CREDIT-RELAY-COM
- PIN 9- ORANGE.....GND(POWER-IN)

5-1 FIG.03

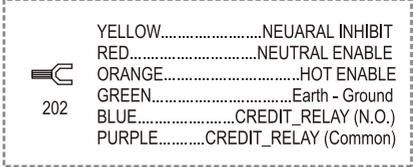
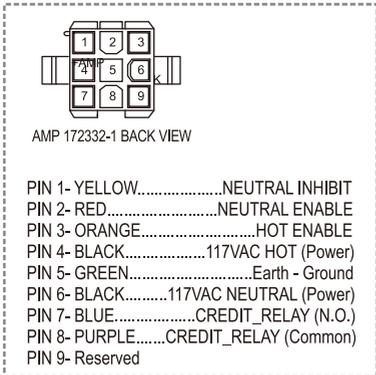
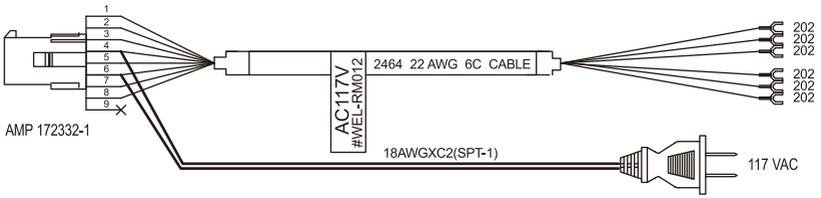
Interface	Used Voltage	Usage
Pulse	117V AC	Power & *Data Comm.
RS232 for ICT Protocol	117V AC	Power
USB for ICT Protocol	117V AC	Power

WEL-RM008

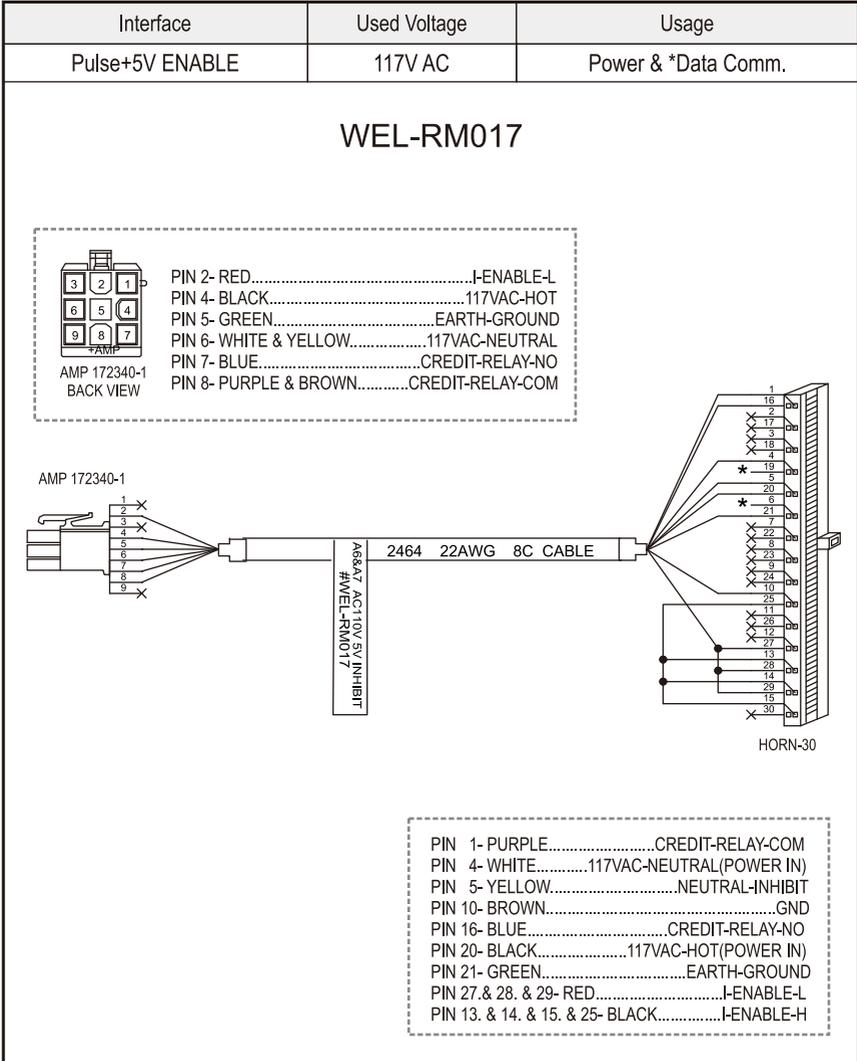


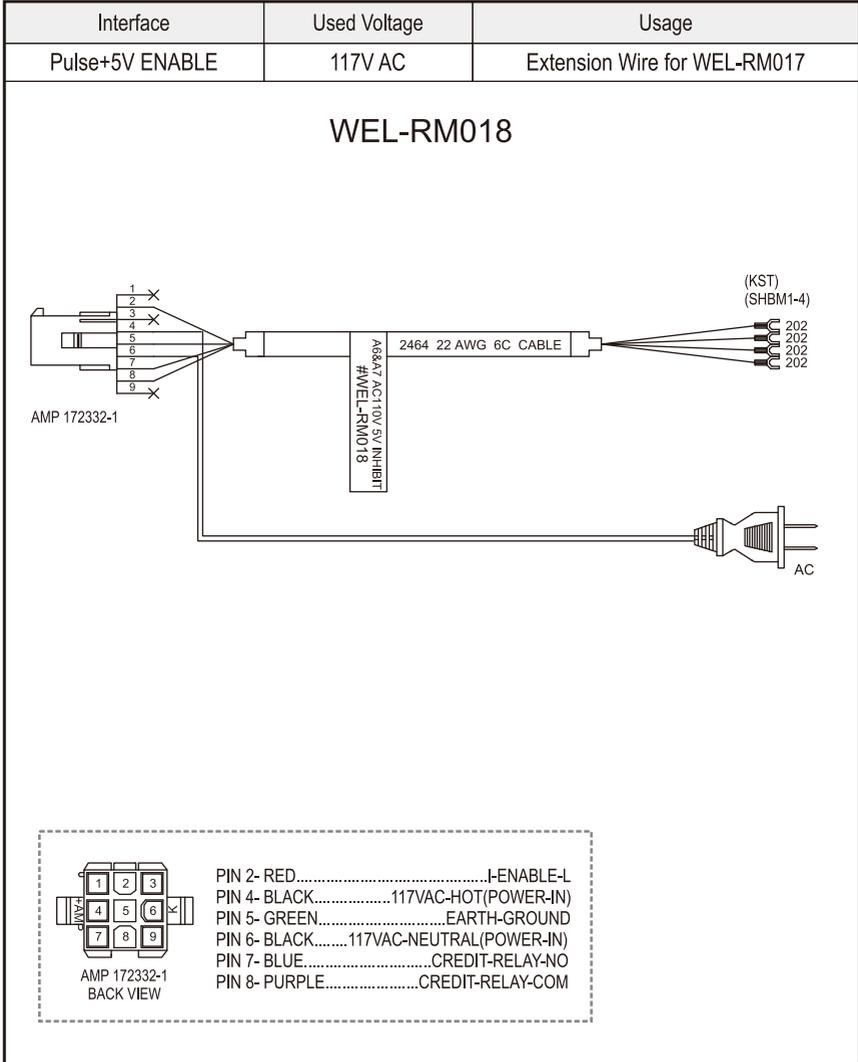
Interface	Used Voltage	Usage
Pulse	117V AC	Extension Wire for WEL-RM008
RS232 for ICT Protocol	117V AC	Extension Wire for WEL-RM008

WEL-RM012

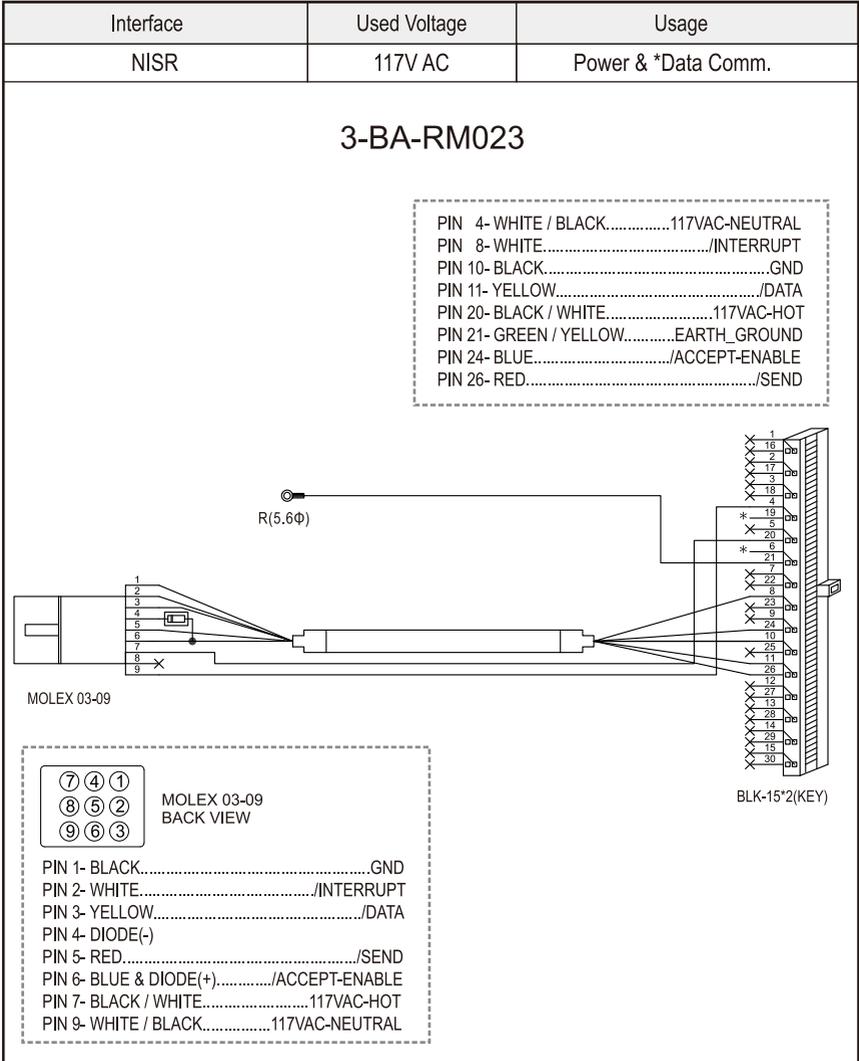


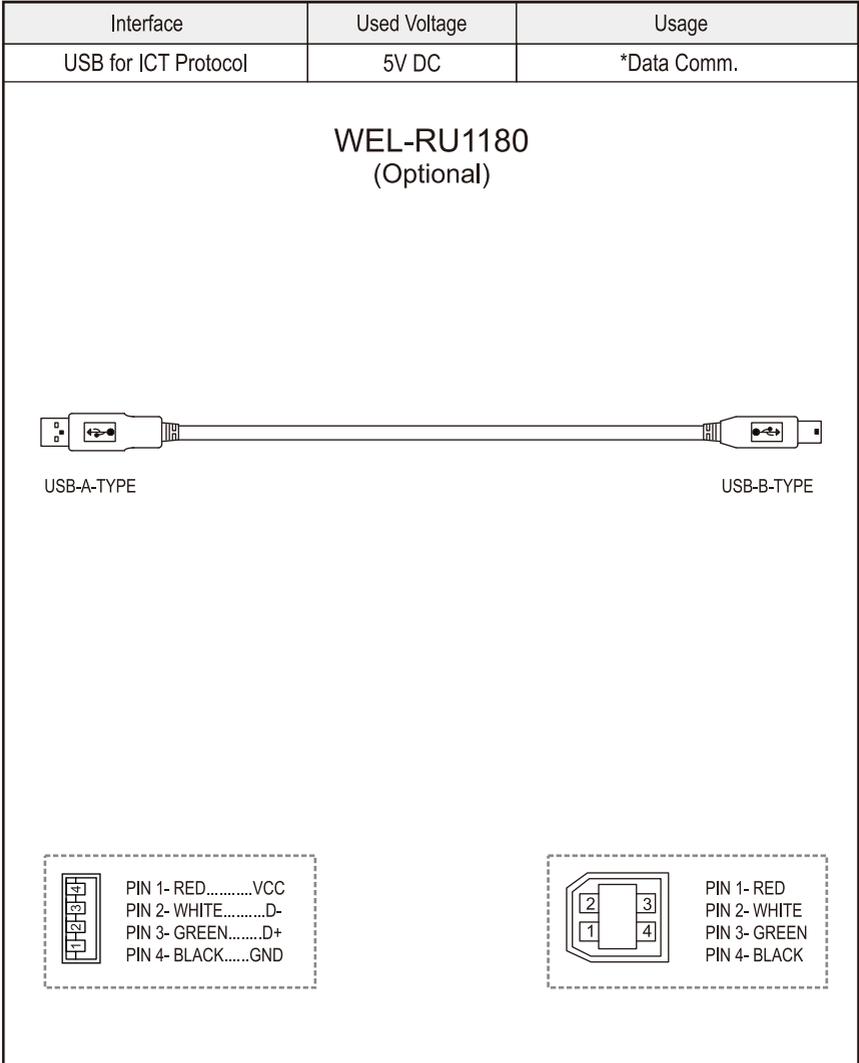
5-1 FIG.05



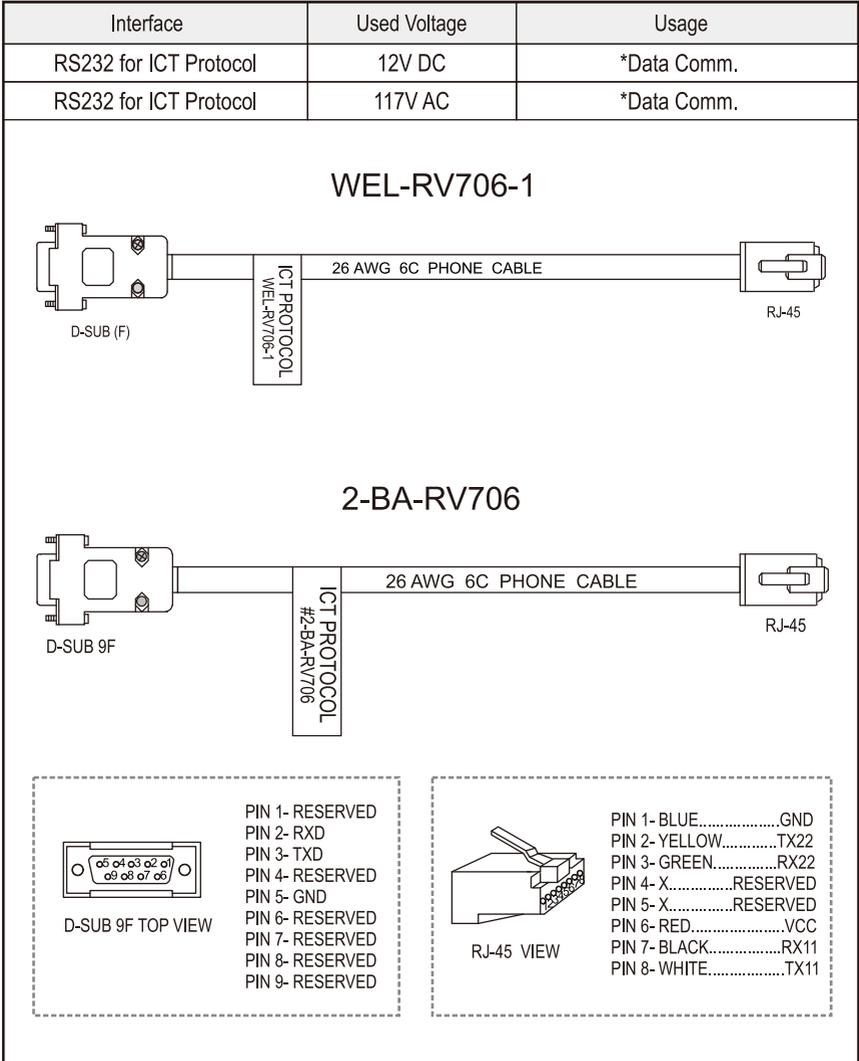


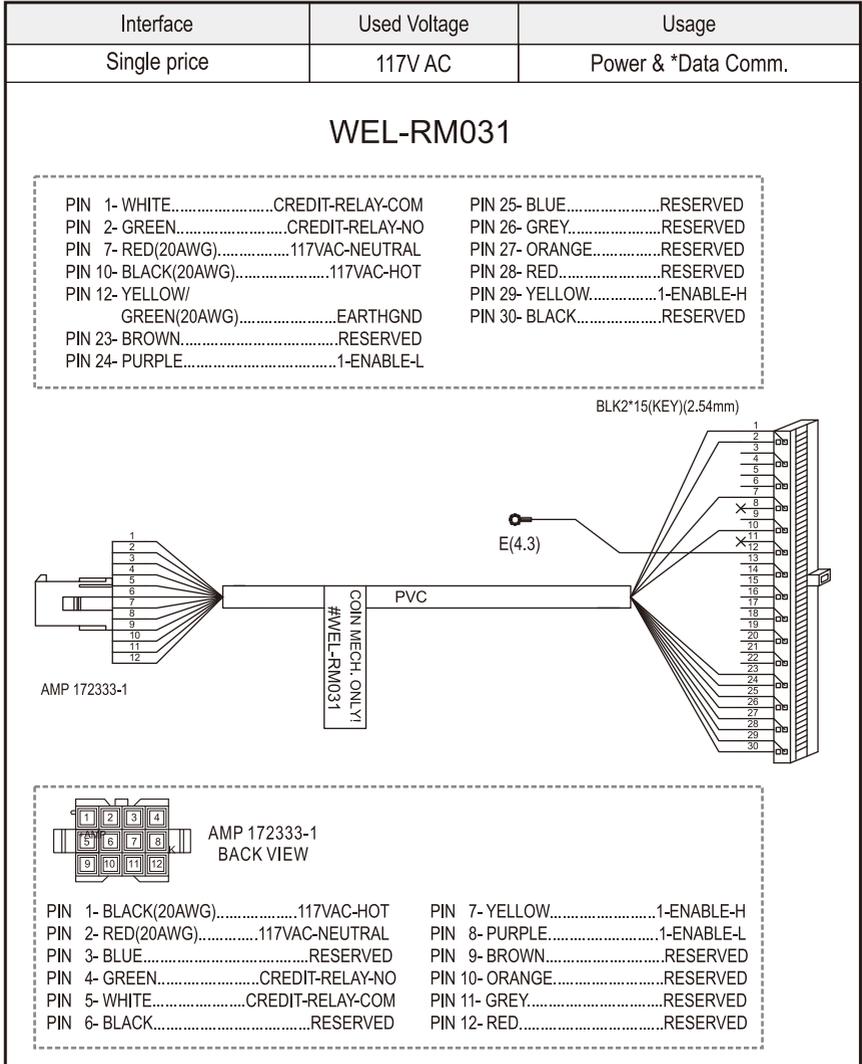
5-1 FIG.07





5-1 FIG.09

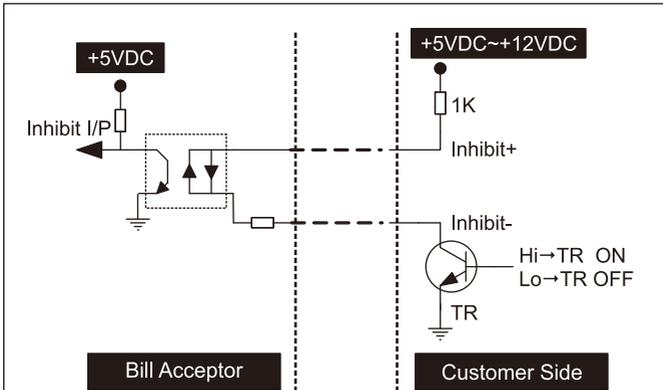
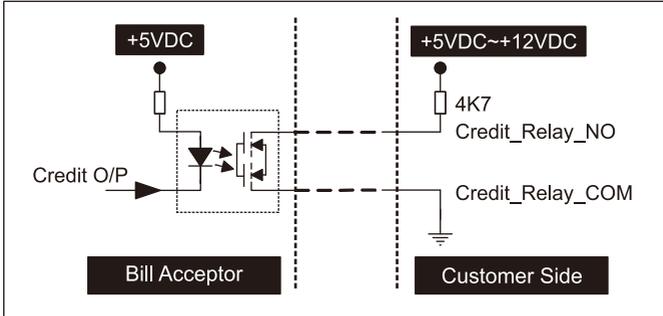




5-1-1. I/O Circuit

Pulse Interface.

5-1-1 FIG.01

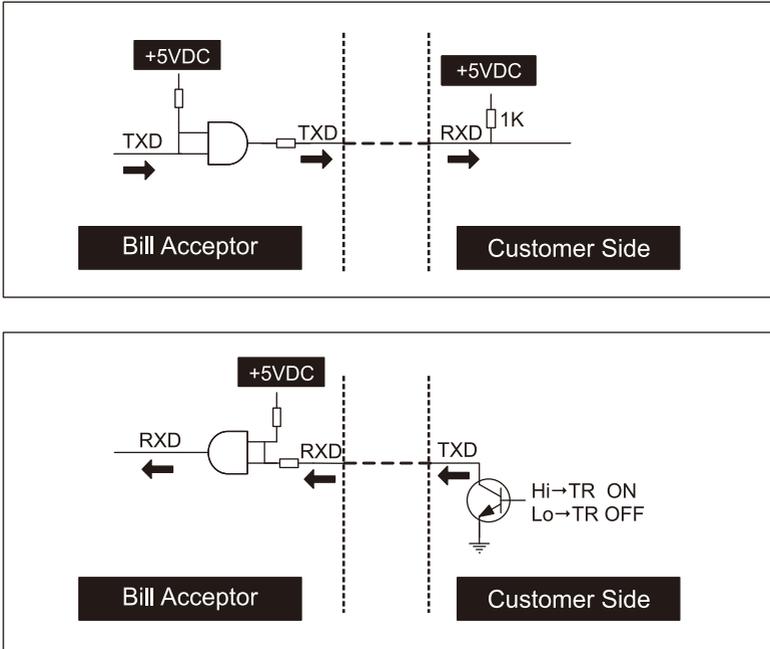


BA Status	*DIP SW Setting	Control Signal
Inhibit	Low	Low
	High	High
Enable	Low	High
	High	Low

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

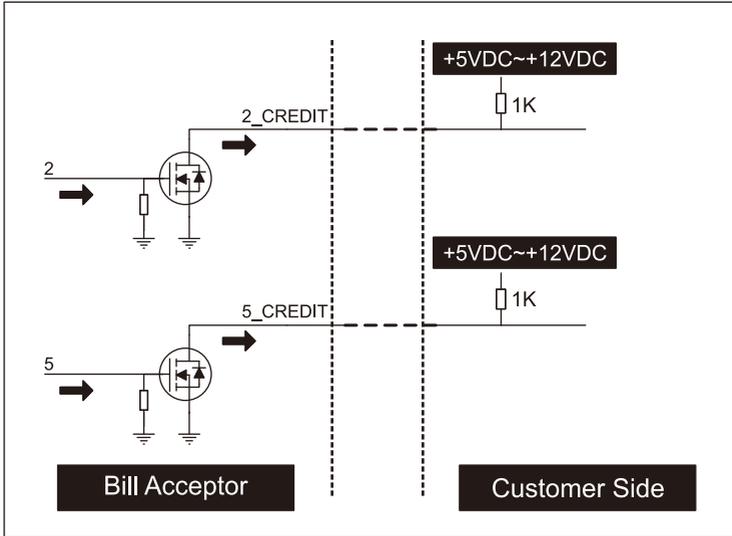
ICT Protocol Interface.

5-1-1 FIG.02



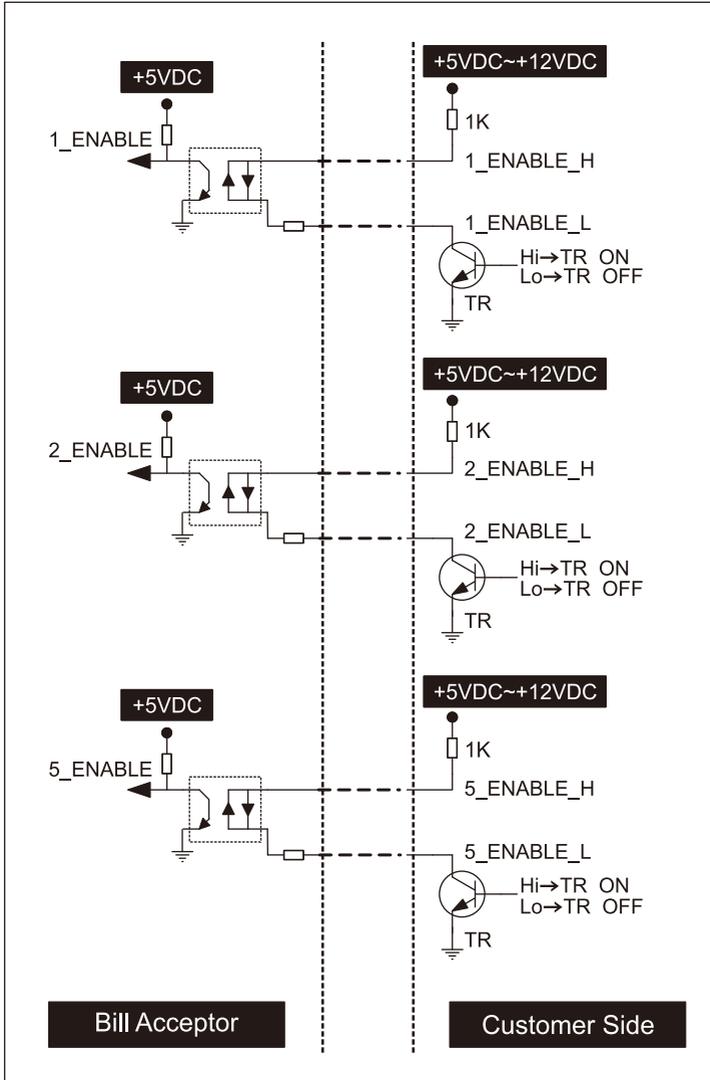
5V Enable Interface-1.

5-1-1 FIG.03-1



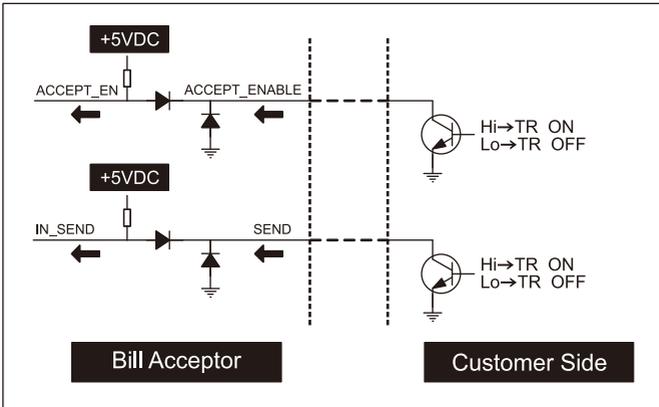
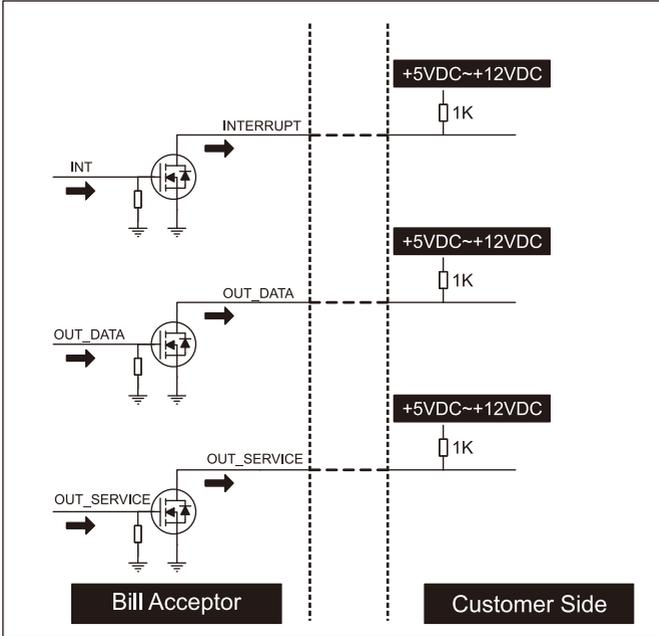
5V Enable Interface-2.

5-1-1 FIG.03-2



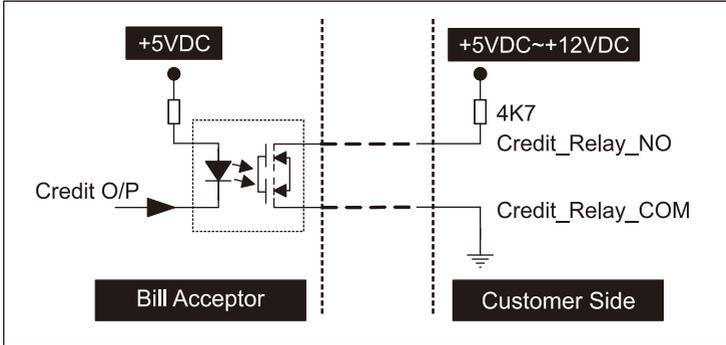
NISR Interface.

5-1-1 FIG.04



Single Price Interface.

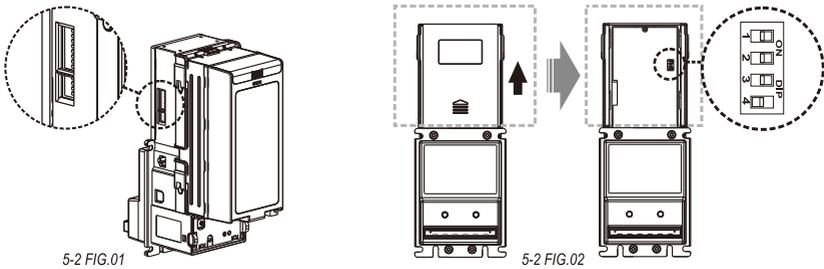
5-1-1 FIG.05



5-2. DIP Switch Setting

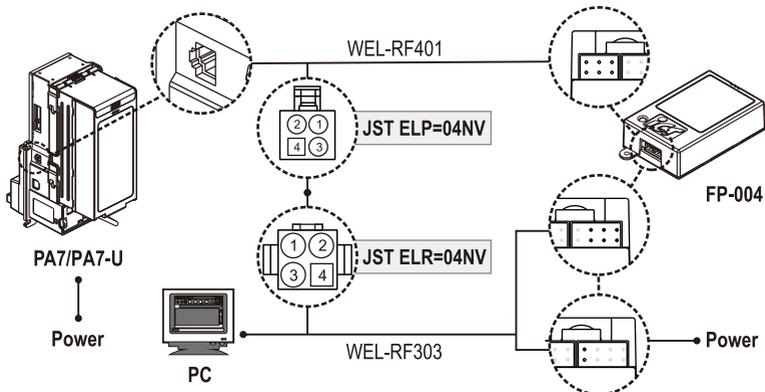
There are two serial DIP switches which are located on the side of PA7/PA7-U(as 5-2 FIG.01). According to different currencies which are used by users, DIP switch settings could be varied to fit users' needs. Besides, there's also a serial DIP switches on CPU board inside of PA7/PA7-U for interface settings(as 5-2 FIG.02).

Please refer to "PA7/PA7-U DIP Switch Setting Guide" in the package for more details.



5-3. Software Download and Upgrade

To download and upgrade the software to PA7/PA7-U, 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.



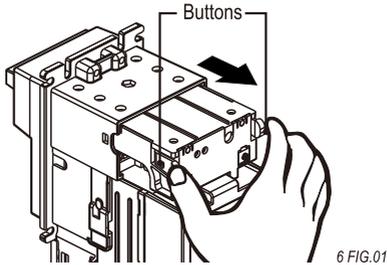
Power must be applied to Bill Acceptor **after** connecting.

6. Maintenance

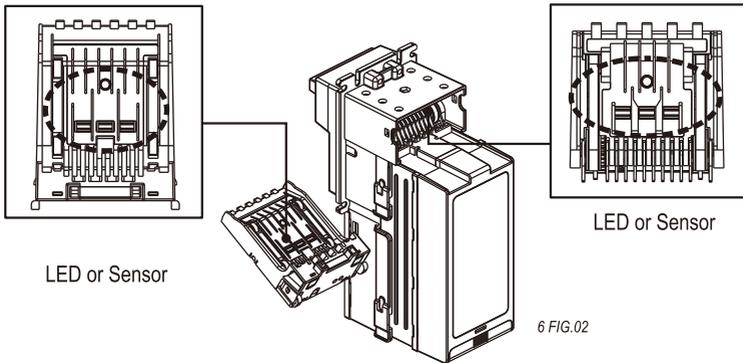
To make sure the bill acceptor always works smoothly, please clean the internal parts regularly.

To clean the internal parts:

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



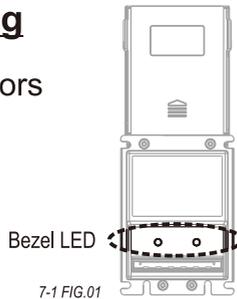
2. Use a soft, dry cloth, or towel to clean the bill path and LED/sensors.



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

7. Troubleshooting

7-1. Bezel LED Errors



7-1 TABLE 01

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

7-1 TABLE 02

LED Flashes	Status	Corrective Actions
RED		
1	Bill jammed.	Remove the bill box by sliding the top button (as 7-2 FIG.01) and the bill path unit, and then remove the jammed bill.
2	Inhibit on.	Inspect for right DIP switch settings.
3	Sensor error.	Inspect for foreign objects on sensor and hook then clean.
4	Stringing attempt has detected.	Inspect for foreign objects on sensor or bill path and clean.
5	Stacker has been removed.	Replace the bill box.
7	Motor error.	Inspect for foreign objects on bill path and clean.
8	Stacker error or Stacker full.	Inspect for foreign objects in bill box and clean or remove bills in bill box.



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

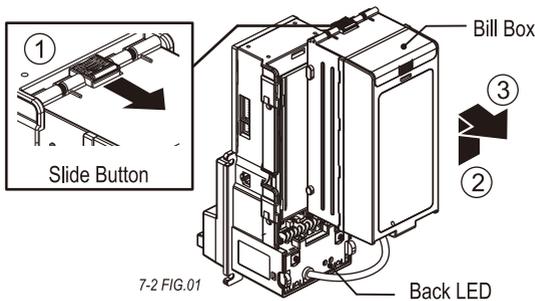
7-2. Back LED Errors

7-2 TABLE 01

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

7-2 TABLE 02

LED Flashes	Status	Corrective Actions
RED		
1	Bill jammed.	Remove the bill box by sliding the top button (as 7-2 FIG.01) and the bill path unit, and then remove the jammed bill.
2	Inhibit on.	Inspect for right DIP switch settings.
3	Sensor error.	Inspect for foreign objects on sensor and hook then clean.
4	Stringing attempt has detected.	Inspect for foreign objects on sensor or bill path and clean.
5	Stacker has been removed.	Replace the bill box.
7	Motor error.	Inspect for foreign objects on bill path and clean.
8	Stacker error or Stacker full.	Inspect for foreign objects in bill box and clean or remove bills in bill box.



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

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