



Bill Acceptor

V77E

Installation Guide

Use of Materials Limitations

International Currency Technologies Corporation (ICT) all rights reserved.

All materials contained are the copyrighted property of ICT.

All trademarks, service marks, and trade names are proprietary to ICT.

ICT reserves the right at all times to disclose or to modify any information as ICT deems necessary to satisfy any applicable law, regulation, legal process or governmental request, or to edit, refuse to post or to remove any information or materials, in whole or in part, in ICT's sole discretion.

Contents

1. Introduction	
1-1. Overview	2
1-2. Features	2
2. Specifications	2
3. Packing List	3
4. Dimension	4
5. Installation	
5-1. Harness Application	7
5-1-1. I/O Circuit	16
5-2. DIP Switch Setting	20
5-3. Software Download and Upgrade	21
6. Maintenance	22
7. Troubleshooting	
7-1. Bezel LED Errors	23
7-2. Back LED Errors	24

1. Introduction

1-1. Overview

V77E is a bill acceptor which features a double-lock bill box for high security with acceptance rate up to 96% or even greater.

1-2. Features

- Auto-calibrating.
- Four way bill insertion acceptance.
- Win 98/XP compatible USB interface available.
- Online upgrade firmware function.
- Secure double-lock removable bill box available in 150, 350, 900 and 1000 banknotes capacity.

2. Specifications

General

Acceptance Rate	96% or greater
<i>Note: The acceptance rate excludes notes that are dirty, wet, broken or wrinkled.</i>	
Bill Insertion	Four-way acceptable
Transaction Speed	Approx. 3 seconds to stack
Interface	Pulse, MDB, ccNet, RS232 A0, Parallel A3 ICT Protocol <TTL RS232>, ICT Protocol <USB (Optional)>, * <i>Combination is possible ex:Pulse+MDB.</i>

Electrical

Power Source	12V DC (10.8~13.2 V DC) 24V AC (21.6~26.4 V AC) 24V/34V DC (20~42.5 V DC)
---------------------	---

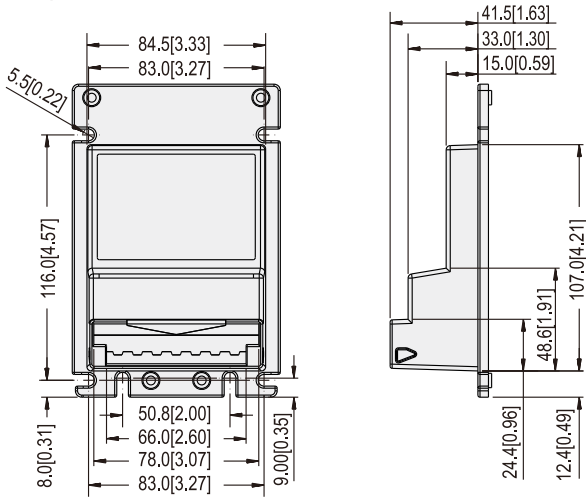
Power Consumption	12V- Standby: 3.6W Operation: 21.6W Maximum: 30W
Operation Environment	Operation Temperature: -10°C~55°C Storage Temperature: -30°C~70°C Humidity: 30%~85%RH (no condensation)
<i>Mechanical</i>	
Bill Accepted Width	62~77mm <62~66mm (Insert bills from bezel center)>
Lock Type	Tubular lock, Padlock (Optional/ Ø5.0~6.0mm)
Bill Capacity	Approx. 150 bills (Range 130~ 170) Approx. 350 bills (Range 340~ 400) Approx. 900 bills (Range 850~ 950) Approx. 1000 bills (Range 950~1100)
Weight	Approx. 1.5kg (With 150 bills Stacker) Approx. 1.6kg (With 350 bills Stacker) Approx. 1.7kg (With 900 bills Stacker) Approx. 1.8kg (With 1000 bills Stacker)
Installation	Indoor

3. Packing List

Main	Bill Acceptor
Accessory	Harnesses: Refer to 5-1 V77E Installation Guide V77E DIP Switch Setting Guide A Pair of Keys

4. Dimension

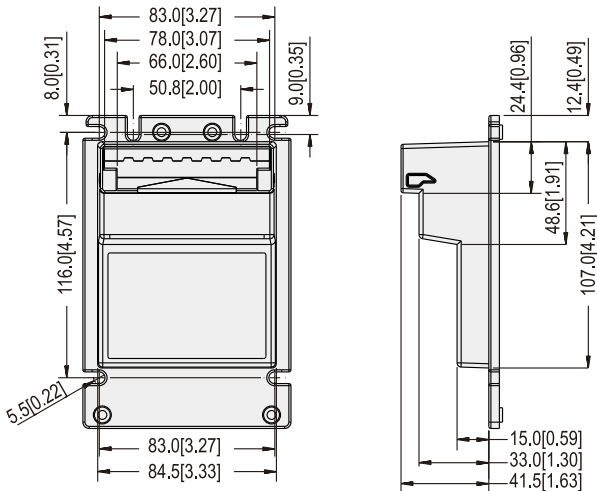
Bezel- Up Stacker



Unit : mm [inch]

4 FIG.01

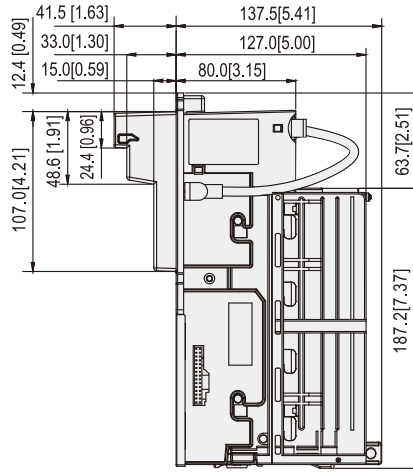
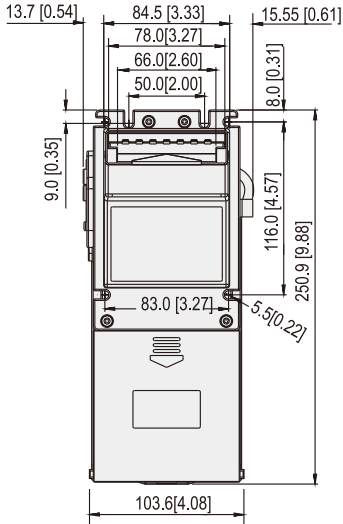
Bezel- Down Stacker



Unit : mm [inch]

4 FIG.02

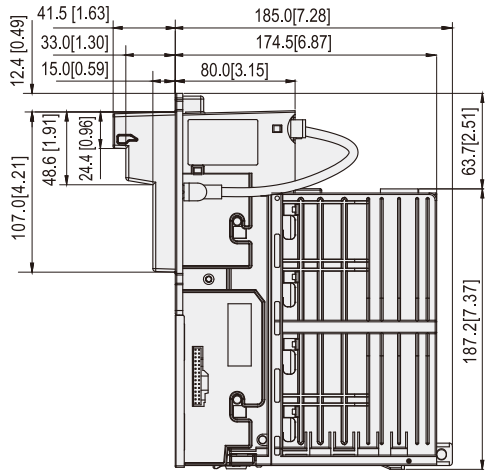
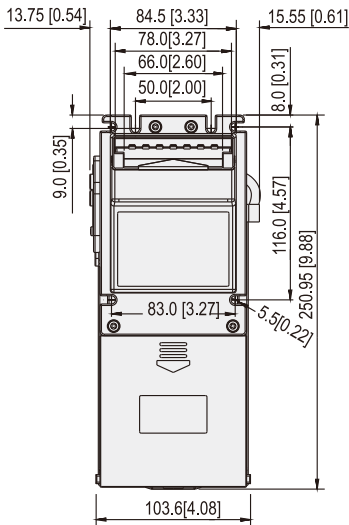
With 150 bills Stacker



Unit : mm [inch]

4 FIG.03

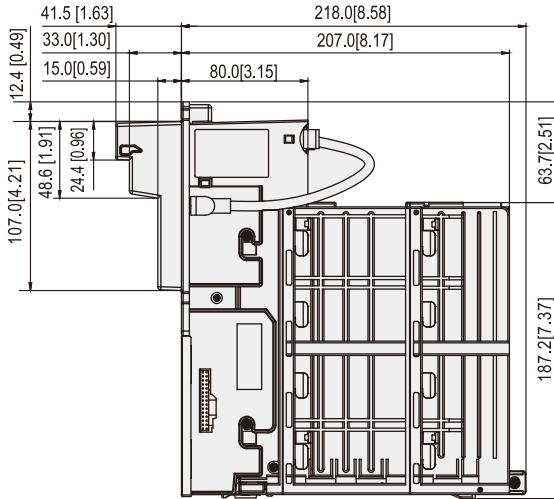
With 350 bills Stacker



Unit : mm [inch]

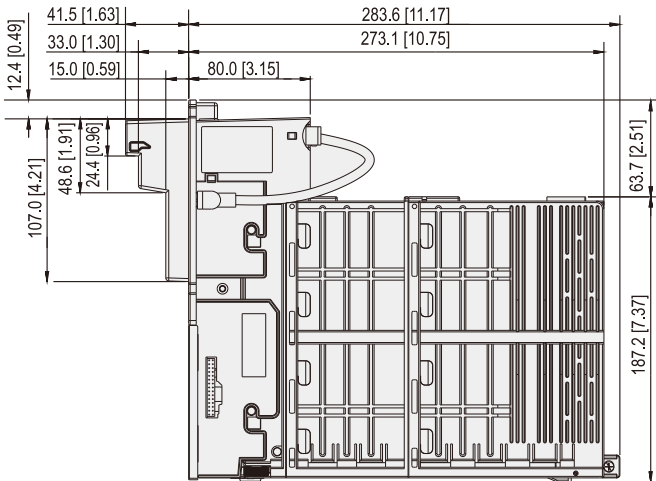
4 FIG.04

With 900 bills Stacker



Unit : mm [inch]
4 FIG.05

With 1000 bills Stacker



Unit : mm [inch]
4 FIG.06

5. Installation

5-1. Harness Application

5-1 Table 01

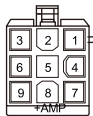
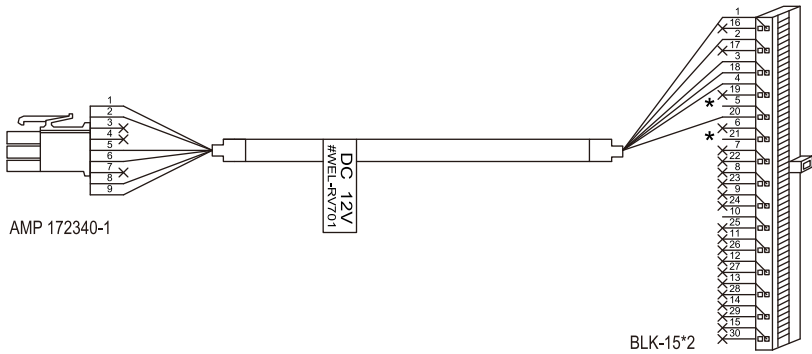
Interface		Used Voltage	Usage	Harness	Page
Pulse		12V DC	Power & *Data Comm.	WEL-RV701	8
			Extension Wire	CU-R961-1	9
		24V AC	Extension Wire	WEL-RV702	10
			Power & *Data Comm.	WEL-RV703	11
MDB		24V/34V DC	Power & *Data Comm.	WEL-RM006	12
ICT Protocol	RS232	5V to $\pm 12V$	Power	WEL-RV701	8
		5V to $\pm 12V$	*Data Comm.	WEL-RV706	13
	USB	N/A	Power & *Data Comm.	WEL-RU1180 (optional)	14
ccNet	RS232	5V to $\pm 12V$	Power	WEL-RV701	8
			*Data Comm.	WEL-RV706	13
RS232 A0		12V DC	Power	WEL-RV701	8
			*Data Comm.	WEL-RV706	13
			Extension Wire	CU-R961-1	9
Parallel A3		24V AC	Power & *Data Comm.	**5RBG-AA203L1-XX	16

*Data Comm. : Data Communication.

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

Interface	Used Voltage	Usage
Pulse	12V DC	Power & *Data Comm.
RS232 for ICT Protocol	5V to ±12V	Power
RS232 for ccNet	5V to ±12V	Power
RS232 A0	12V DC	Power

WEL-RV701

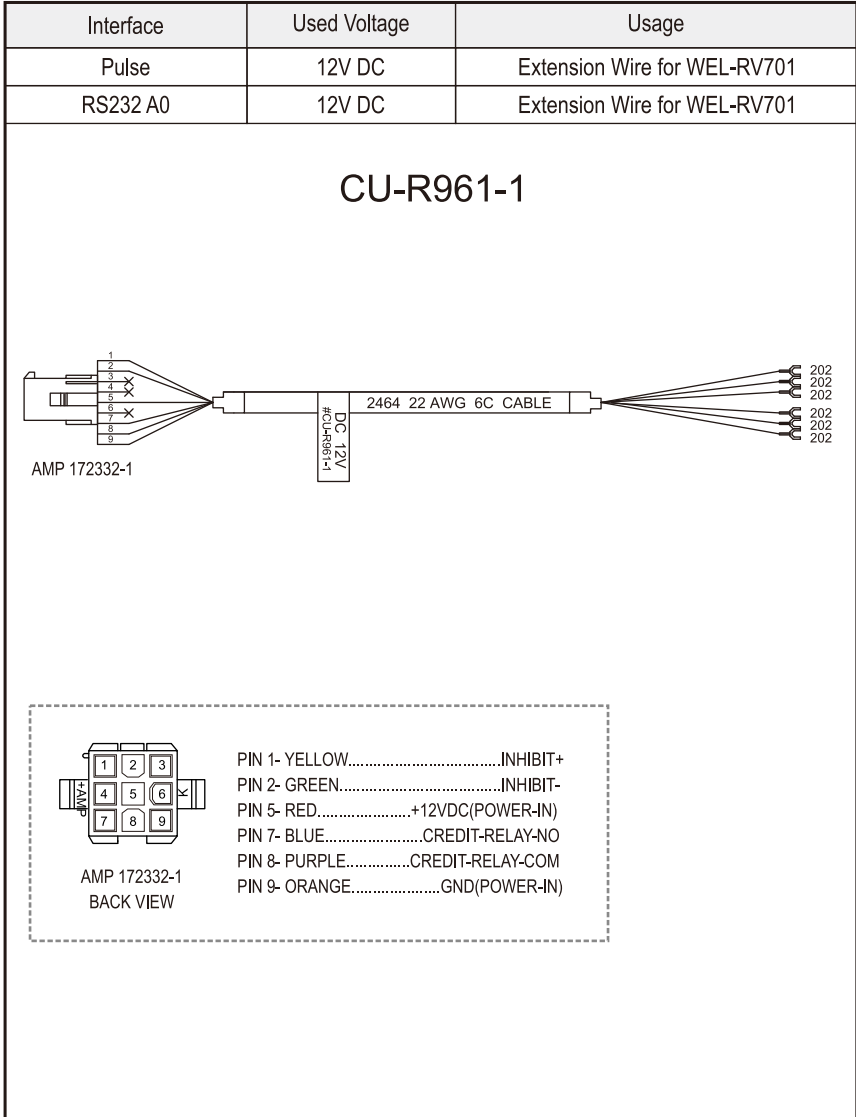


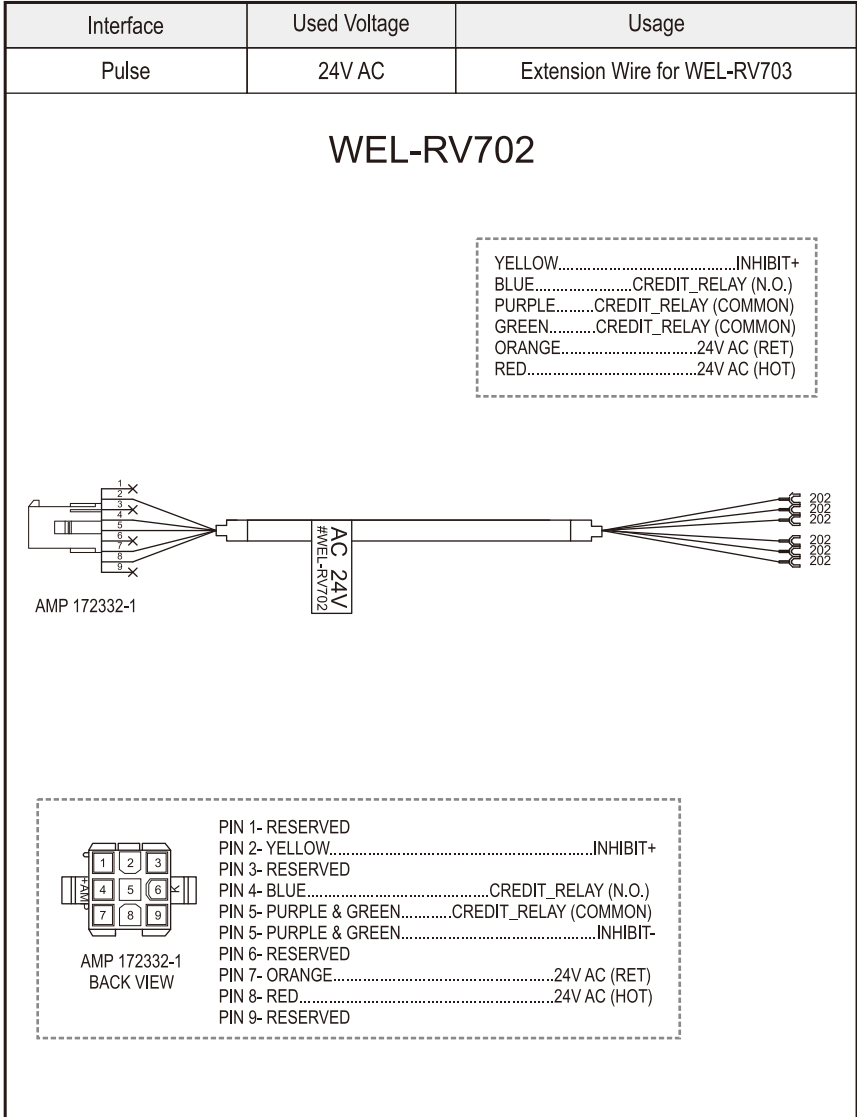
AMP 172340-1
BACK VIEW

- PIN 1- YELLOW.....INHIBIT+
- PIN 2- GREEN.....INHIBIT-
- PIN 3- RESERVED
- PIN 4- RESERVED
- PIN 5- RED.....12V DC (POWER)
- PIN 6- RESERVED
- PIN 7- BLUE.....CREDIT_RELAY (N.O.)
- PIN 8- PURPLE.....CREDIT_RELAY (COMMON)
- PIN 9- ORANGE.....GND (POWER)

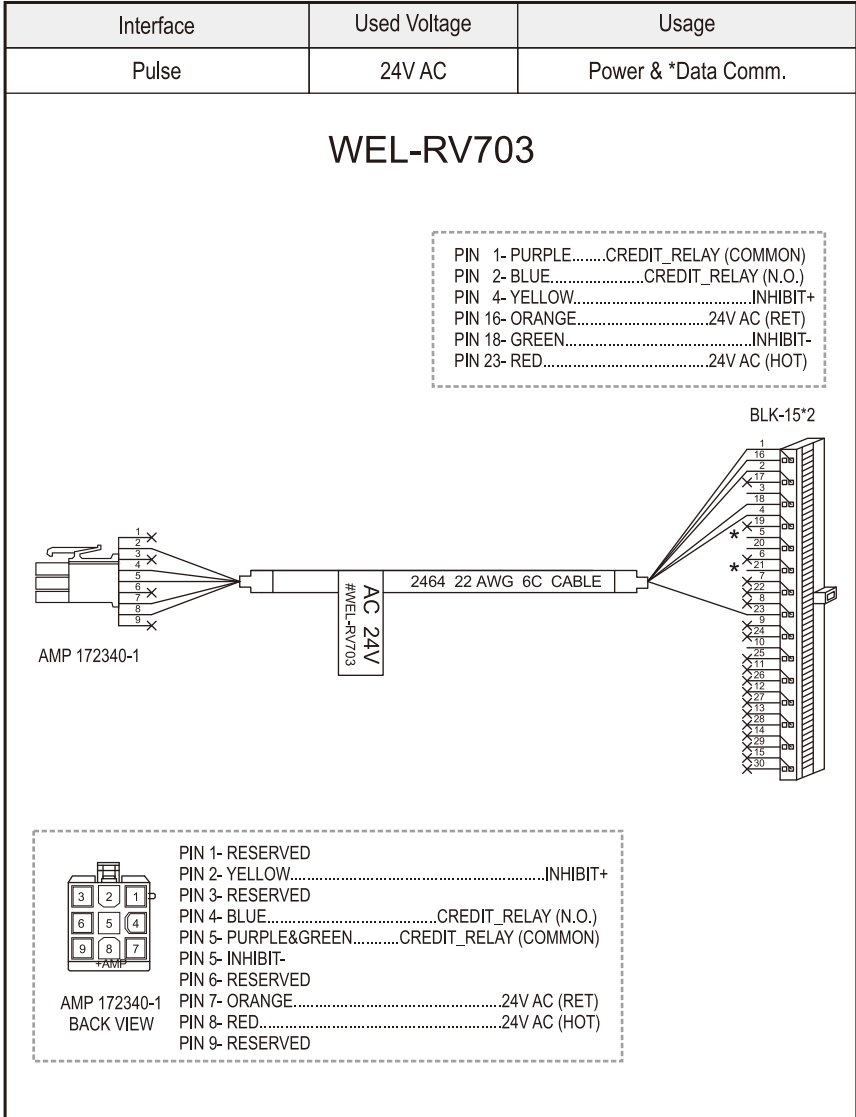
- PIN 1- PURPLE.....CREDIT_RELAY (COMMON)
- PIN 2- BLUE.....CREDIT_RELAY (N.O.)
- PIN 3- RED.....12VDC (POWER)
- PIN 4- YELLOW.....INHIBIT+
- PIN 18- GREEN.....INHIBIT-
- PIN 20- ORANGE.....GND (POWER)

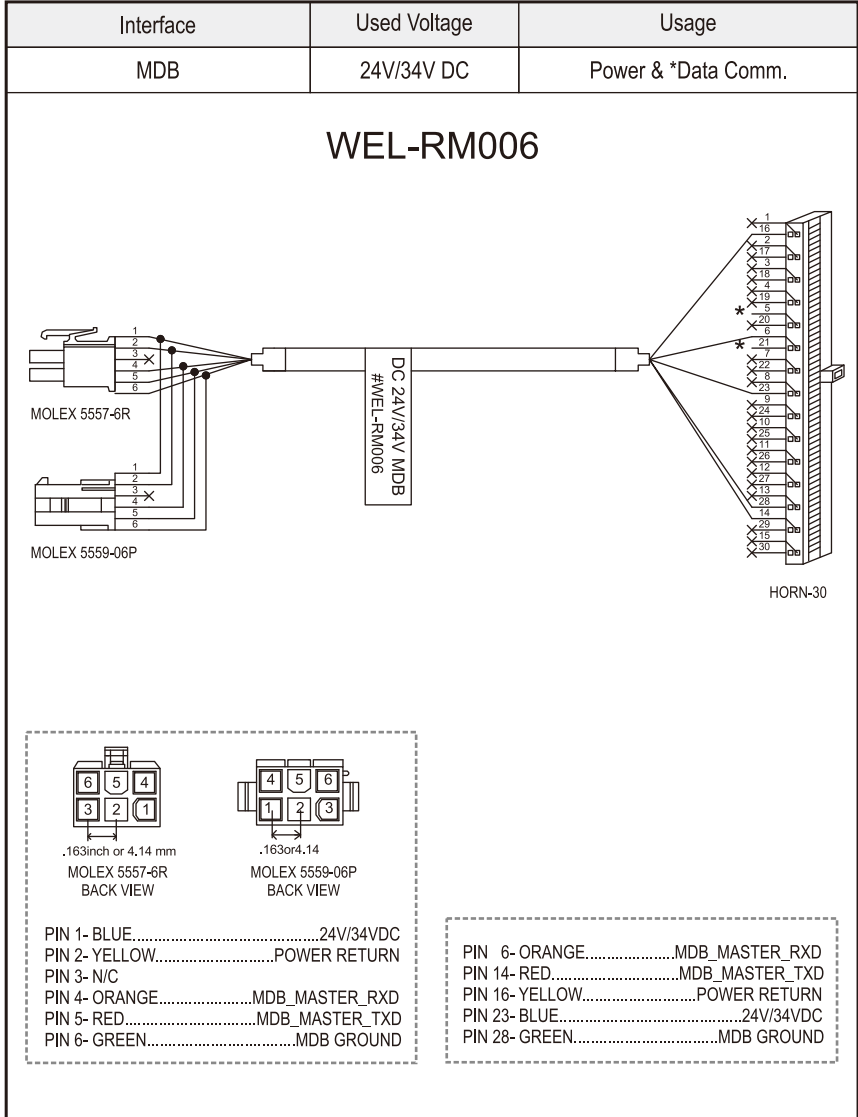
5-1 FIG.02





5-1 FIG.04

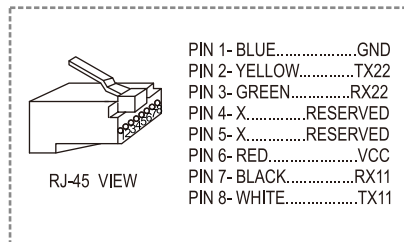
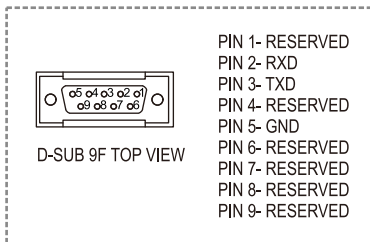


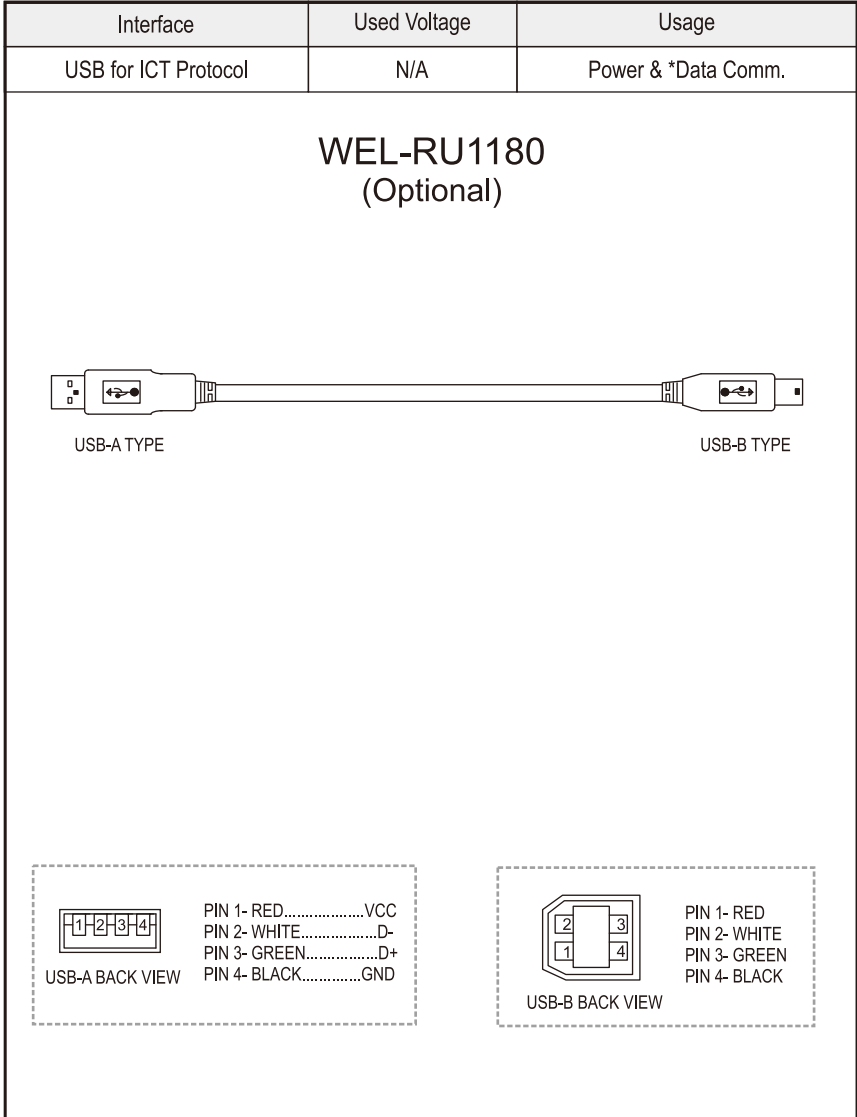


5-1 FIG.06

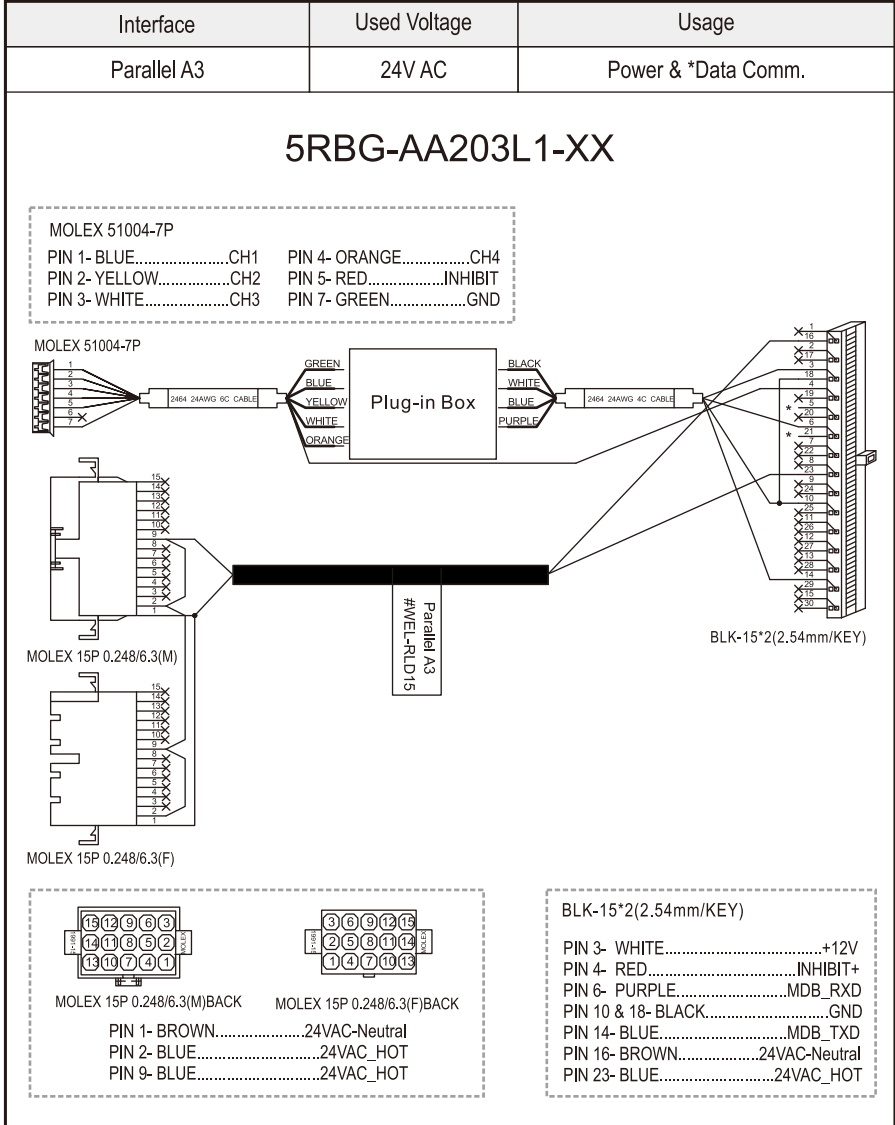
Interface	Used Voltage	Usage
RS232 for ICT Protocol	5V to ±12V	*Data Comm.
RS232 for ccNet	5V to ±12V	*Data Comm.
RS232 A0	12V DC	*Data Comm.

WEL-RV706-1





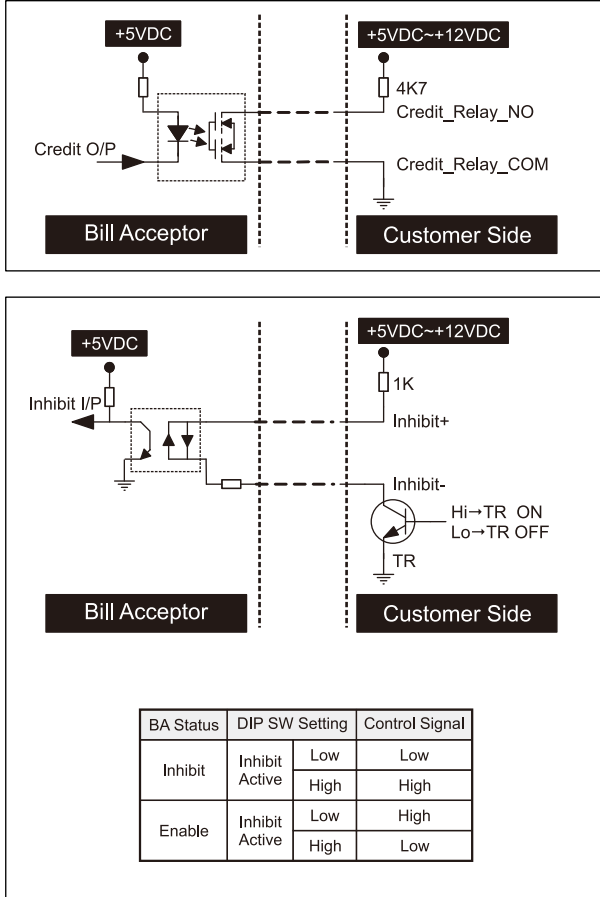
5-1 FIG.08



5-1-1. I/O Circuit

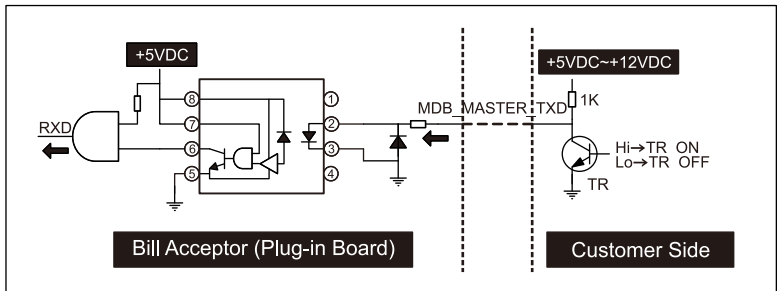
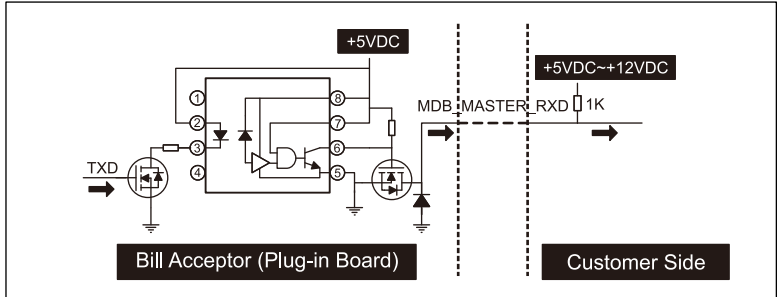
Pulse Interface.

5-1-1 FIG.01



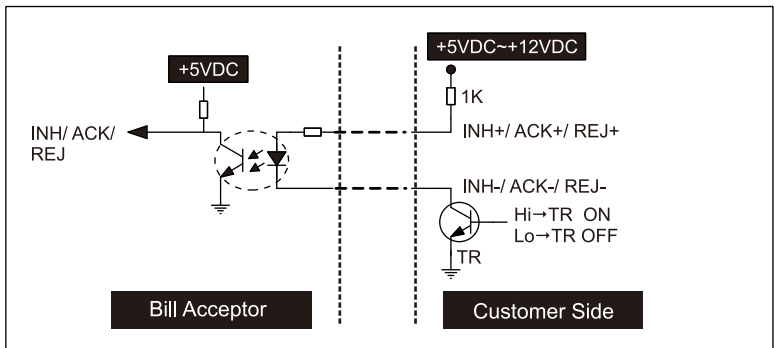
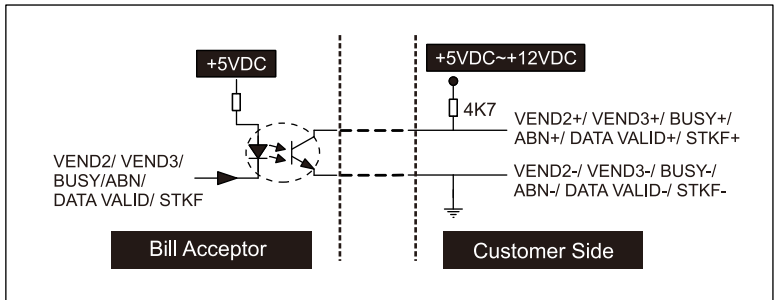
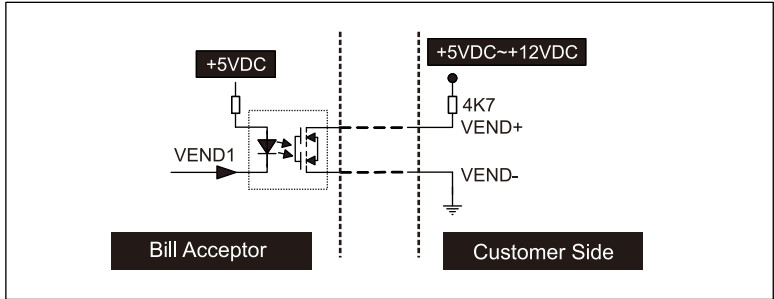
MDB Interface.

5-1-1 FIG.02



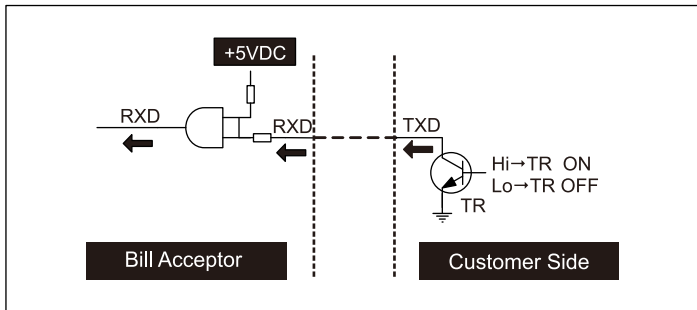
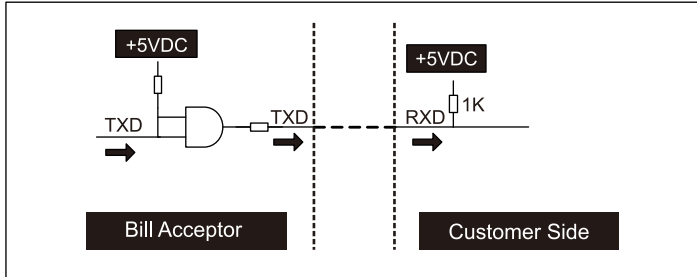
Parallel A3 Interface.

5-1-1 FIG.03



ICT-Protocol & RS232 A0 Interface.

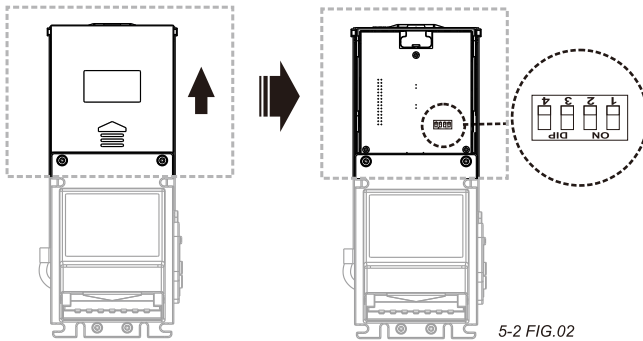
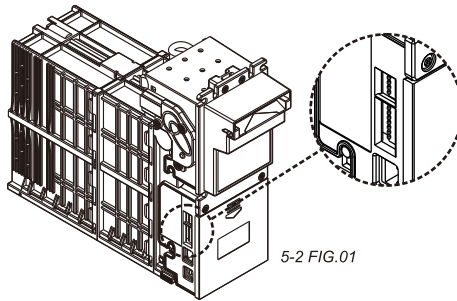
5-1-1 FIG.04



5-2. DIP Switch Setting

There are two serial DIP switches which are located on the side of V77E(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 V77E for interface settings (as FIG.02).

Please refer to “V77E Series DIP Switch Setting” Guide in the package for more detail.

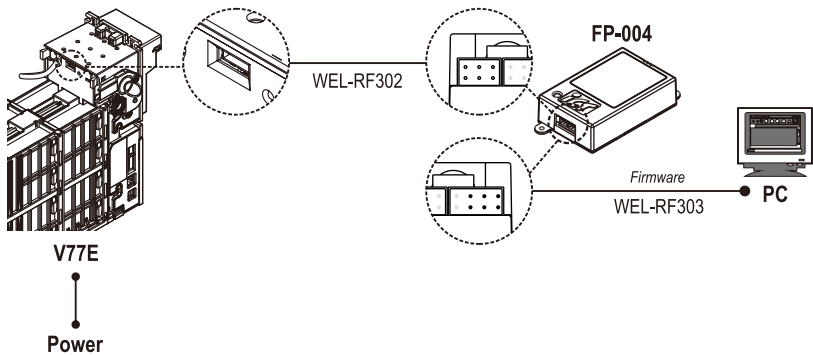


5-3. Software Download and Upgrade

To download and upgrade the software to V77E, the programmer(FP-004) is needed. Please contact ICT to purchase FP-004 and refer to the FP-004 user guide for software download and upgrade information.

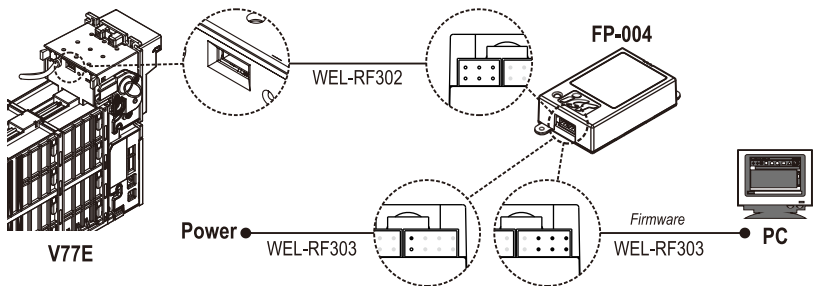
FP-004 (Ver, AA251G5 or later version)

Power must be applied to BA **AFTER** connecting.



FP-004 (Ver, AA251G4 or earlier version)

Power must be applied to BA **AFTER** connecting.

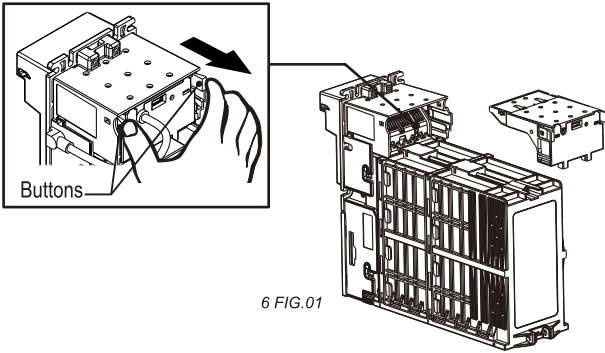


6. Maintenance

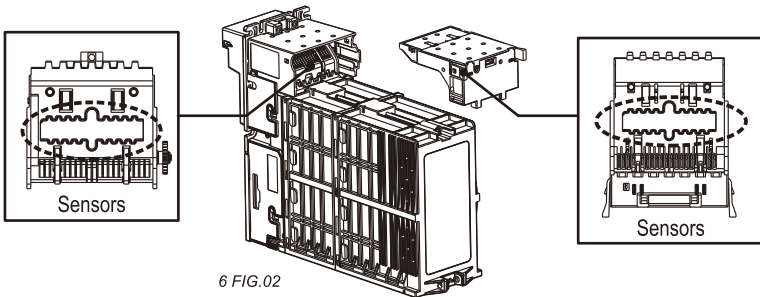
To make sure the bill acceptor always works smoothly, please clean the internal parts regularly.

To clean the internal parts:

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



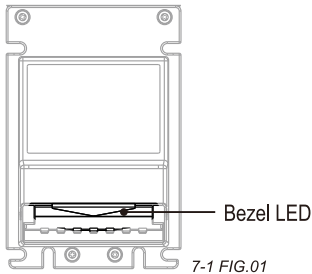
2. Use a soft, dry cloth or towel to clean the bill path and sensors.



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

7. Troubleshooting

7-1. Bezel LED Errors



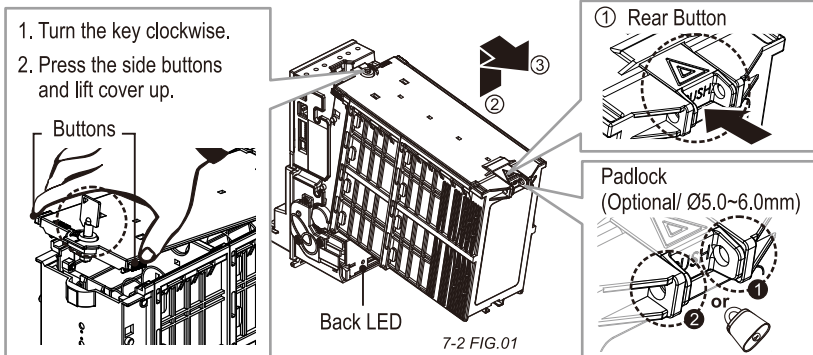
7-1 TABLE 01

LED Flashes		Status	Correct Actions
Red	Green		
	1	White Card Calibration	Please calibrate with ICT white calibration card.
1		Bill jammed.	Remove the bill box by sliding the top button and the bill path (as 7-2 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.
3+4		Out sensor error.	Inspect the foreign objects on sensor or bill path 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.

7-2. Back LED Errors

7-2 TABLE 01

LED Flashes	Status	Corrective Actions
Green		
1	White Card Calibration	Please calibrate with ICT white calibration card.
1	Bill jammed.	Remove the bill box by sliding the top button and the bill path(as 7-2 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.
3+4	Out sensor error.	Inspect the foreign objects on sensor or bill path 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.

ict Taiwan

International Currency Technologies Corporation

No.28, Ln. 15, Sec. 6, Minquan 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

