



Bill Acceptor

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# LX7 USD

Installation Guide



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## 1. Introduction

### 1-1. Overview

LX7-USD is a bill acceptor feature the water drainage path to offer maximum protection against water and humidity.

### 1-2. Features

- Four-way bill insertion acceptance.
- Auto-calibrating.
- Safe lock removable and 200 bills box capacity.
- Selective lock between plastic knob and tubular lock

## 2. Specifications

### General

<b>Acceptance Rate</b>	96% or greater
<i>Note: The acceptance rate excludes notes that are dirty, wet, broken or wrinkled.</i>	
<b>Interface</b>	Pulse, ICT Protocol <RS232>, V2.2, NISR, RS232 A0
<b>Transaction Speed</b>	Approx. 3 seconds to stack
<b>Bill Insertion</b>	Four-way acceptable



**Installation: Indoor use only!!**

### Electrical

<b>Power Source</b>	12V DC 117V AC
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### Power Consumption

12V DC-	Standby: 0.3A, 4W Operation: 0.8A, 10W Maximum: 2.5A, 30W
117V AC-	Standby: 63mA, 7W Operation: 0.12A, 13.5W Maximum: 0.27A, 30W

### Operation Environment

<With Converter Board>	Operation Temperature: 0°C~55°C Storage Temperature: -30°C~70°C Humidity: 30%~85% RH (no condensation)
<Without Converter Board>	Operation Temperature: -15°C~60°C Storage Temperature: -30°C~70°C Humidity: 30%~85% RH (no condensation)

### Mechanical

#### Bill Capacity

Approx. 200 bills

#### Outline Dimension

Plastic knob- Refer to page.5  
Tubular lock- Refer to page.6

#### Weight

Approx. 1.25kg

#### Lock Type

Plastic Knob  
Tubular lock(Customize)

#### Bill Accepted Width

62~72mm

## 3. Packing List

### Main

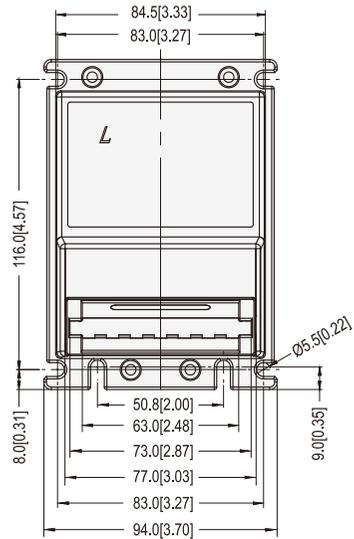
Bill Acceptor

### Accessory

Harness: Refer to 5-1  
LX7-USD Installation Guide  
LX7-USD DIP Switch Setting Guide  
A Pair of keys (For tubular lock only)

### 4. Dimension

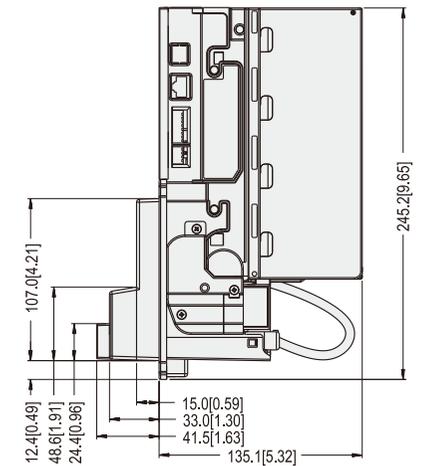
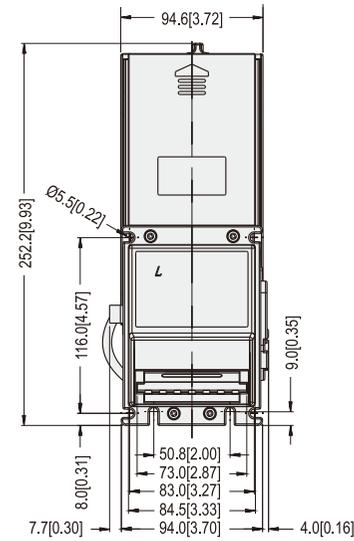
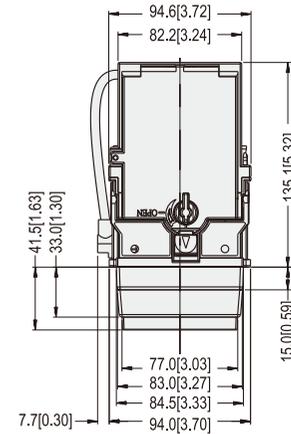
#### Bezel



Unit : mm [inch]

4 FIG.01

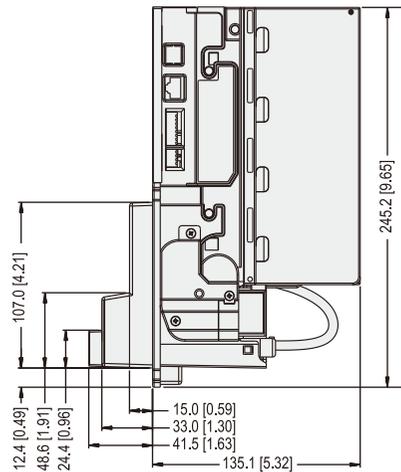
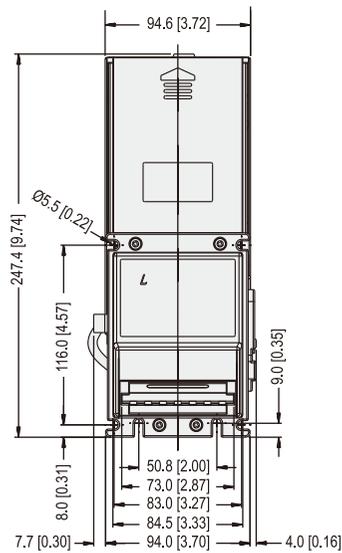
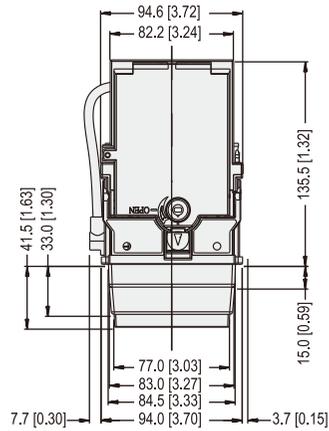
#### Plastic Knob



Unit : mm [inch]

4 FIG.02

Tubular lock



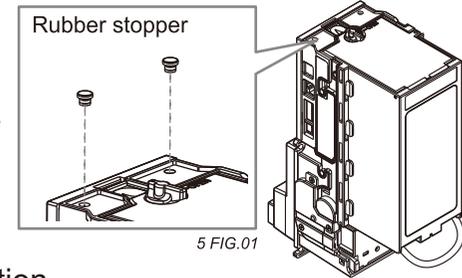
Unit : mm [inch]

4 FIG.03

5. Installation



When LX7-USD is installed in down stacker direction, please remove the rubber stopper.



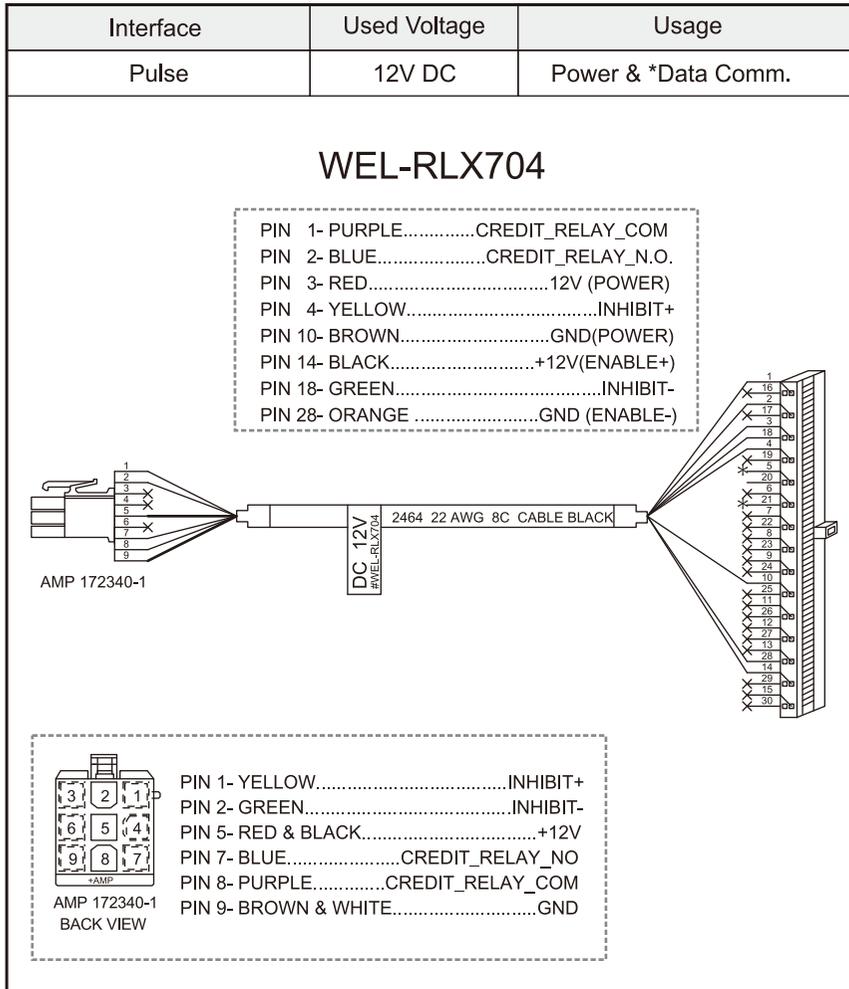
5-1. Harness Application

5-1 TABLE 01

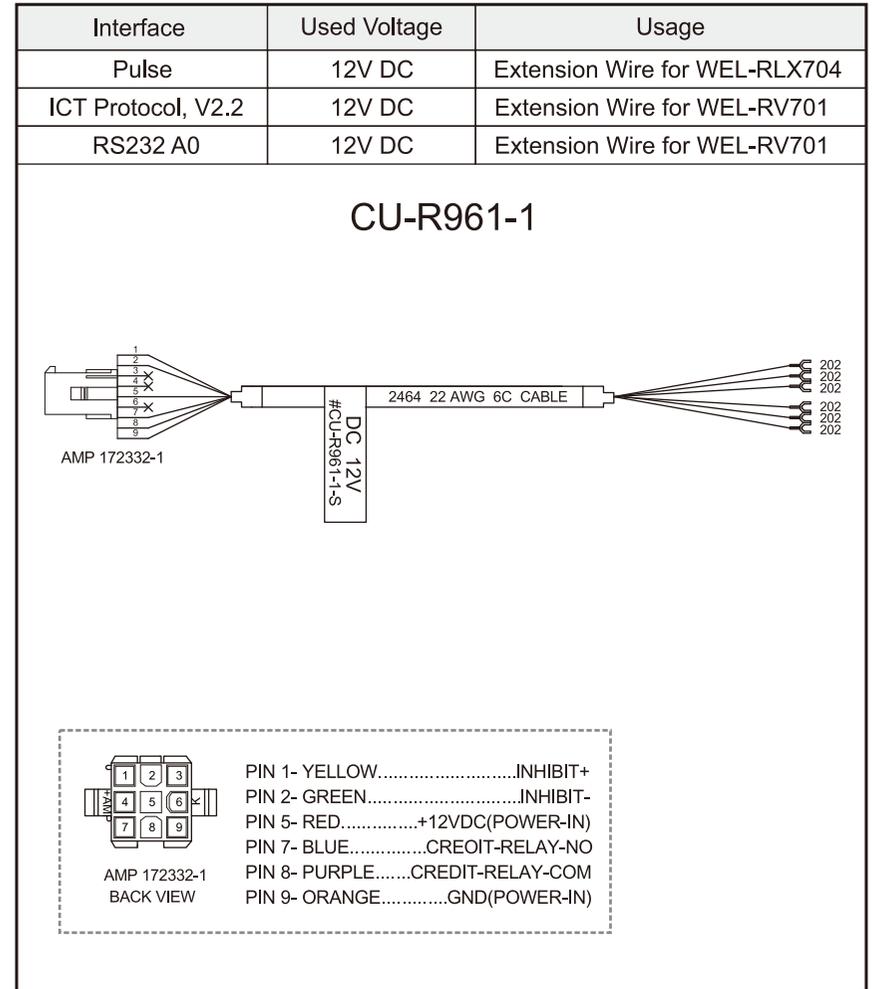
Interface	Used Voltage	CPU Board	Usage	Harness	Page
Pulse	12V DC	337-H	Power & *Data Comm.	WEL-RLX704	8
			Extension Wire	CU-R961-1	9
		337-P	Power & *Data Comm.	WEL-RM036	18
			Extension Wire	CU-R961-1	9
Pulse	117V AC	337-H	Power & *Data Comm. (LX7 ↔ AC117V Pulse Converter Board)	WEL-RLX702	10
			Power & *Data Comm. (AC117V Pulse Converter Board ↔ VMC)	3-BA-RLX703-01	11
			Extension Wire	WEL-RM012	12
		337-P	Power & *Data Comm.	WEL-RM035	17
			Extension Wire	WEL-RM012	12
			*Data Comm.	WEL-RV706	13
ICT Protocol V2.2	12V DC	337-H/ 337-P	Power	WEL-RV701	14
			Extension Wire	CU-R961-1	9
			Power & *Data Comm. (LX7 ↔ AC117V NISR Converter Board)	WEL-RLX705	15
NISR	117V AC	337-H	Power & *Data Comm. (AC117V NISR Converter Board ↔ VMC)	3-BA-RLX701-01	16
			Power & *Data Comm.	WEL-RM037	19
		337-P	*Data Comm.	WEL-RV706	13
			Power	WEL-RV701	14
RS232 A0	12V DC	337-H/ 337-P	Extension Wire	CU-R961-1	9

\*Data Comm. : Data Communication.

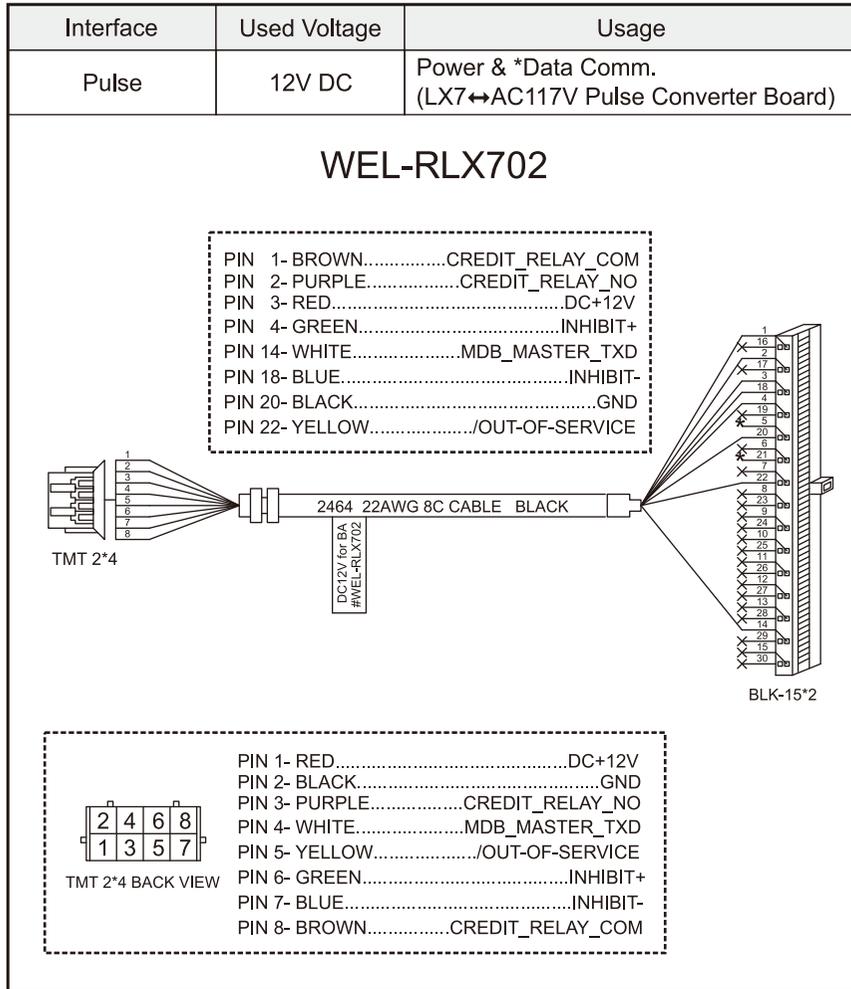
5-1 FIG.01



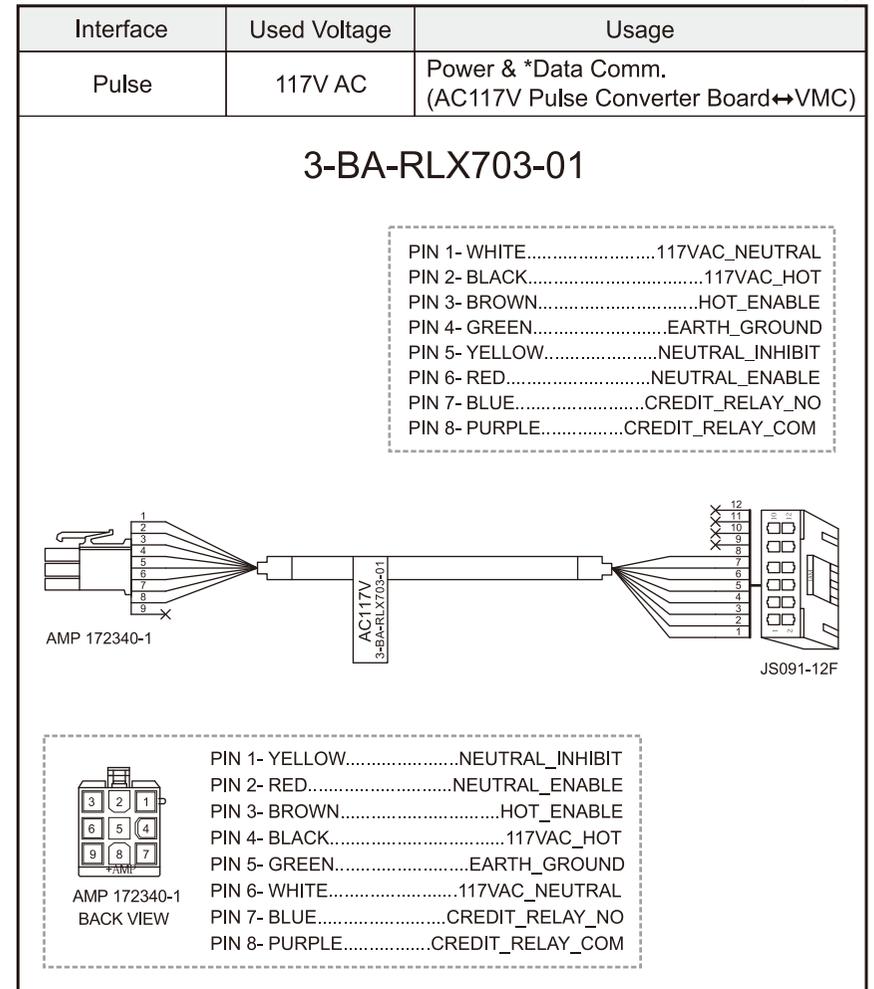
5-1 FIG.02



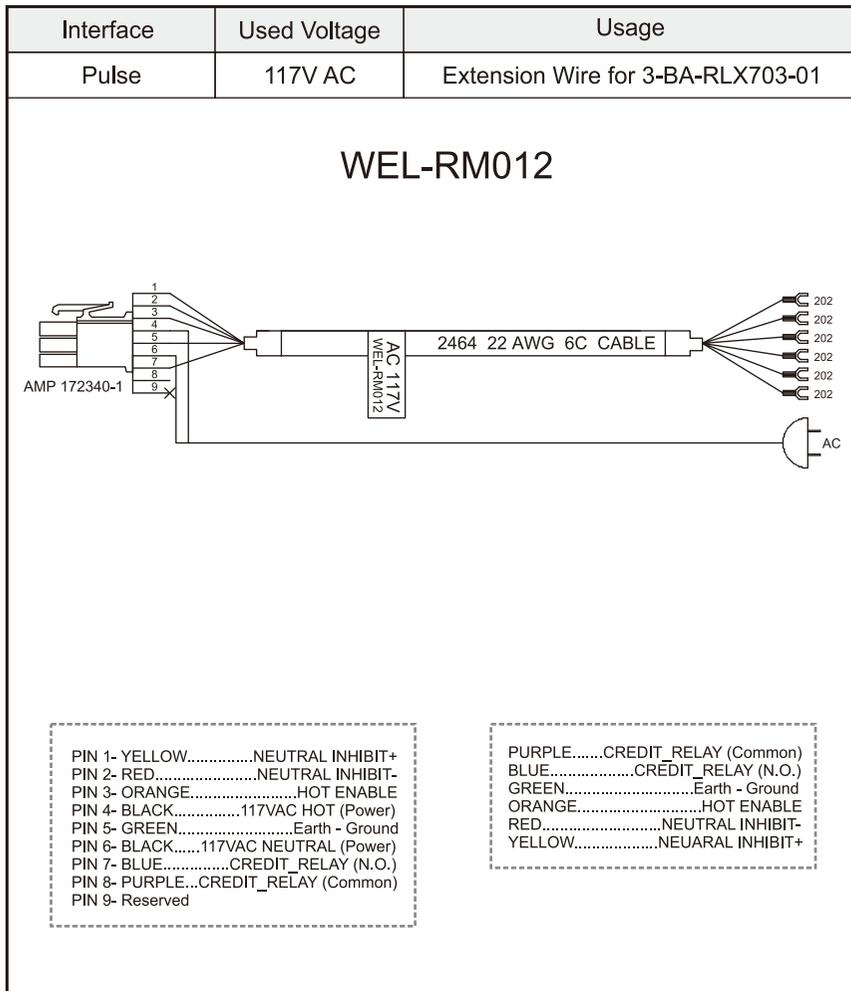
5-1 FIG.03



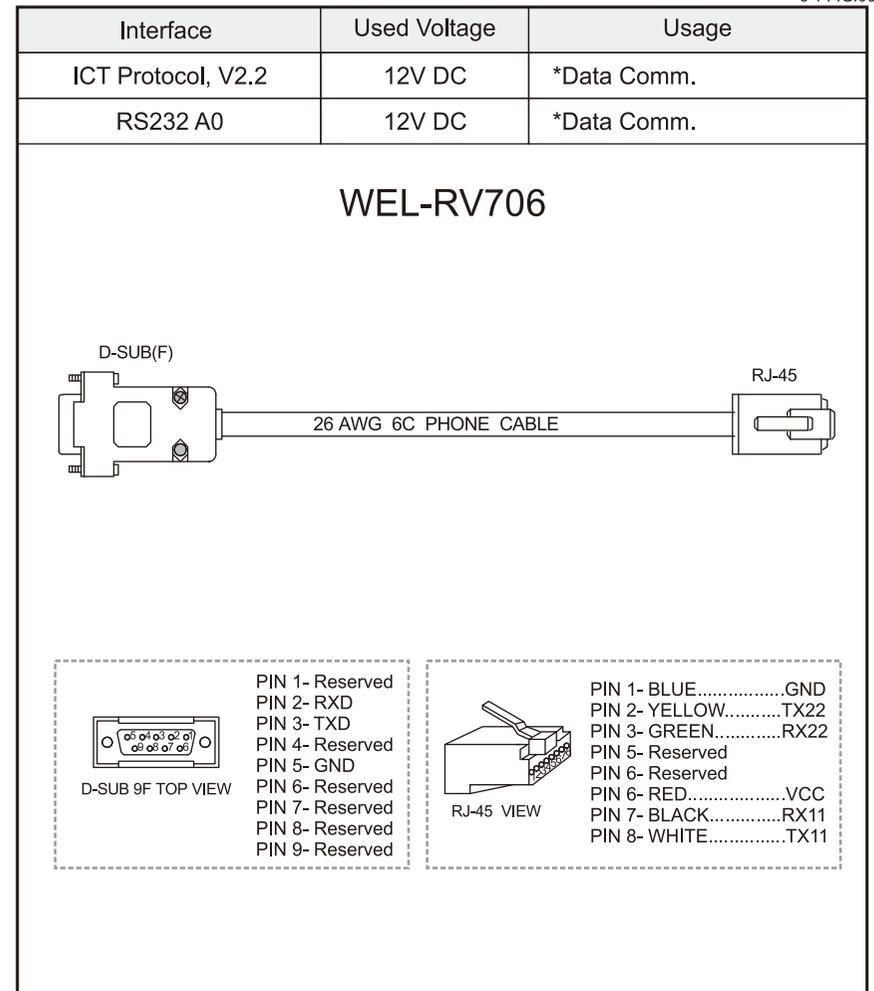
5-1 FIG.04



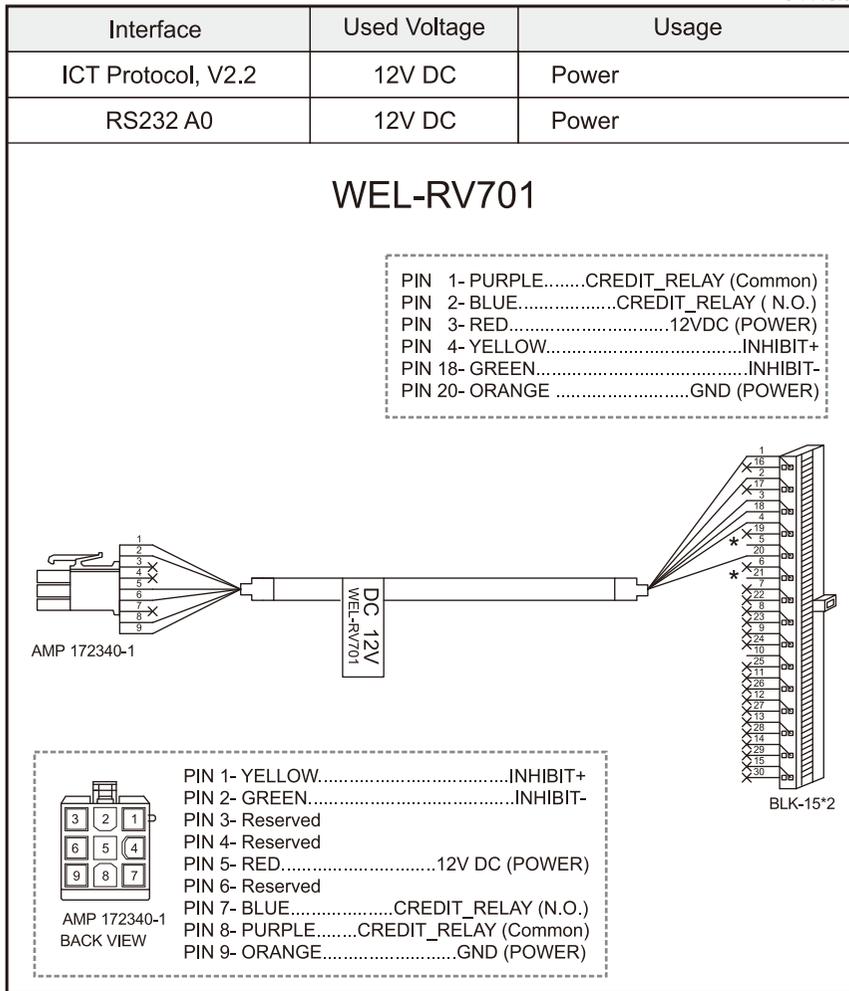
5-1 FIG.05



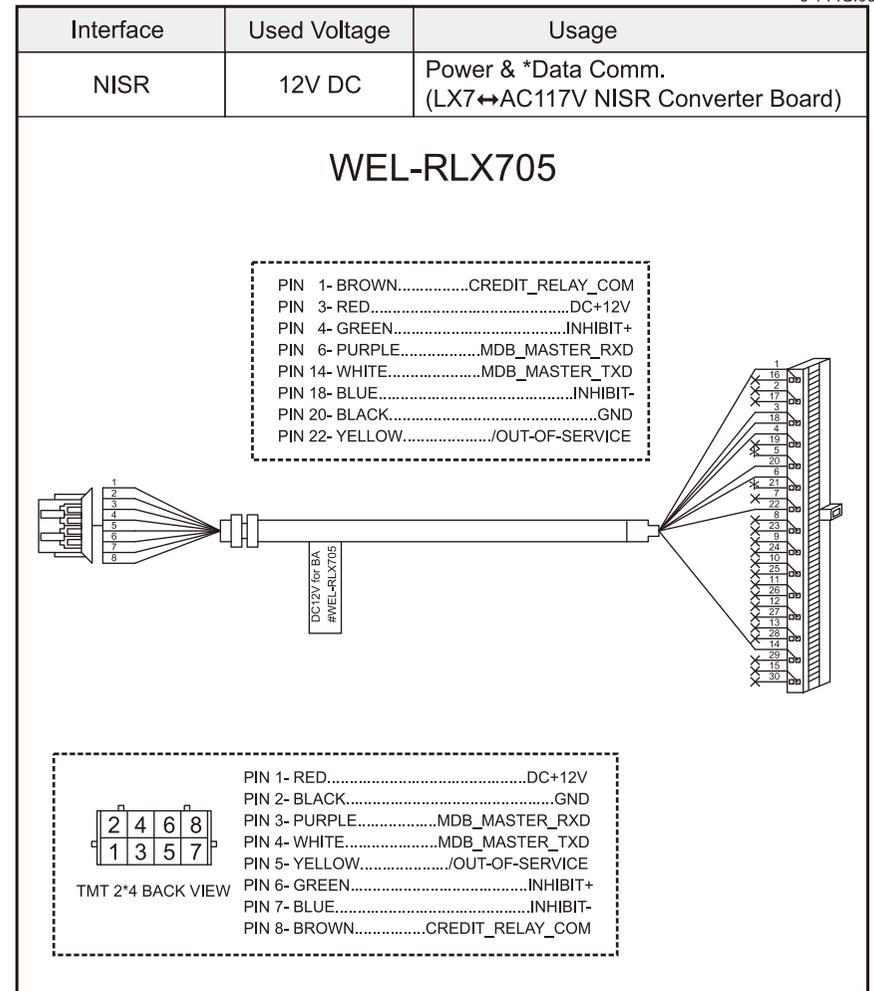
5-1 FIG.06



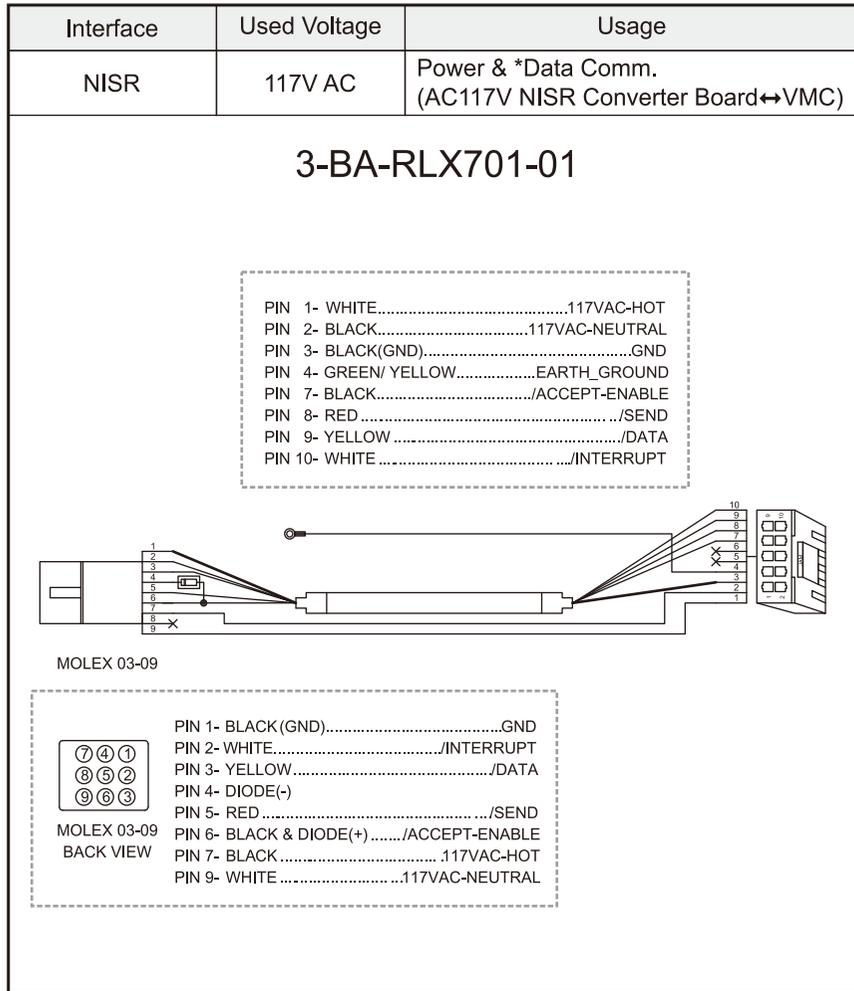
5-1 FIG.07



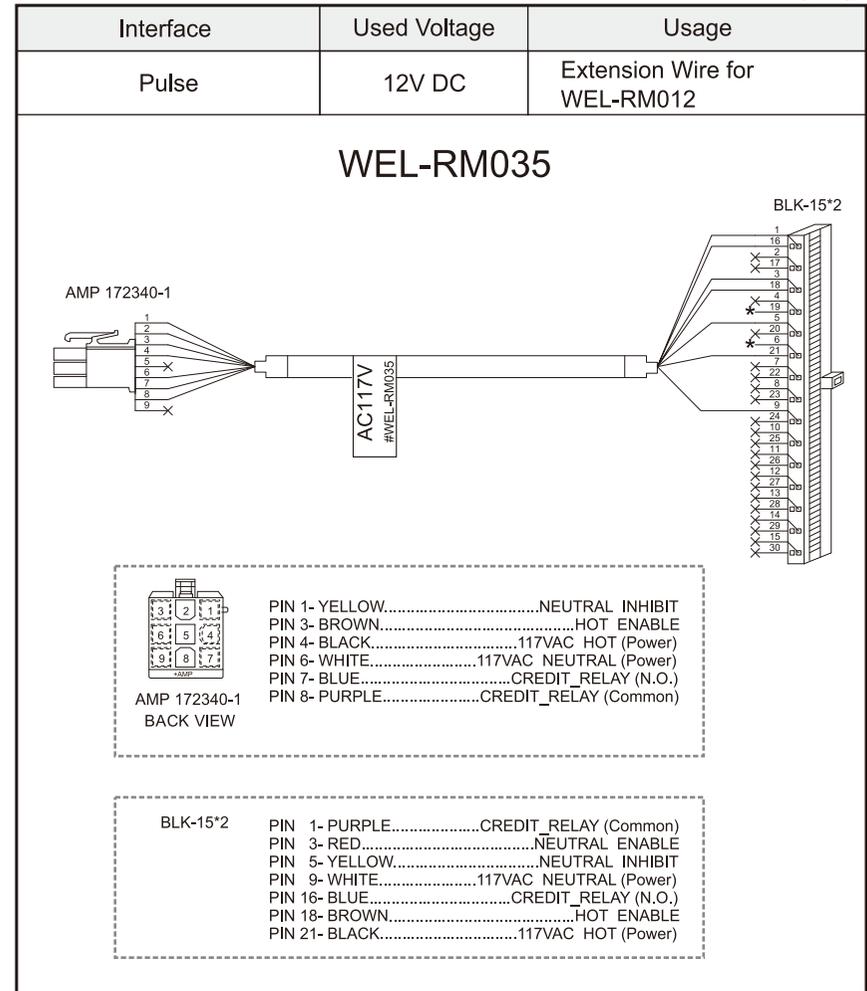
5-1 FIG.08



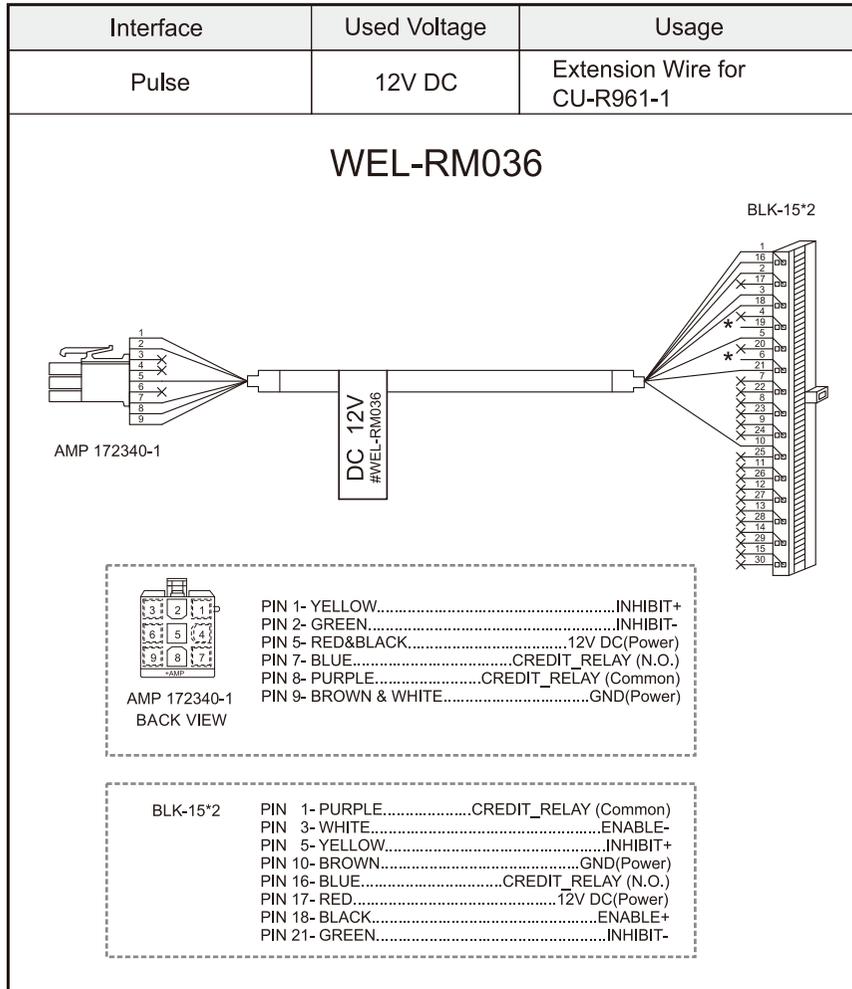
5-1 FIG.09



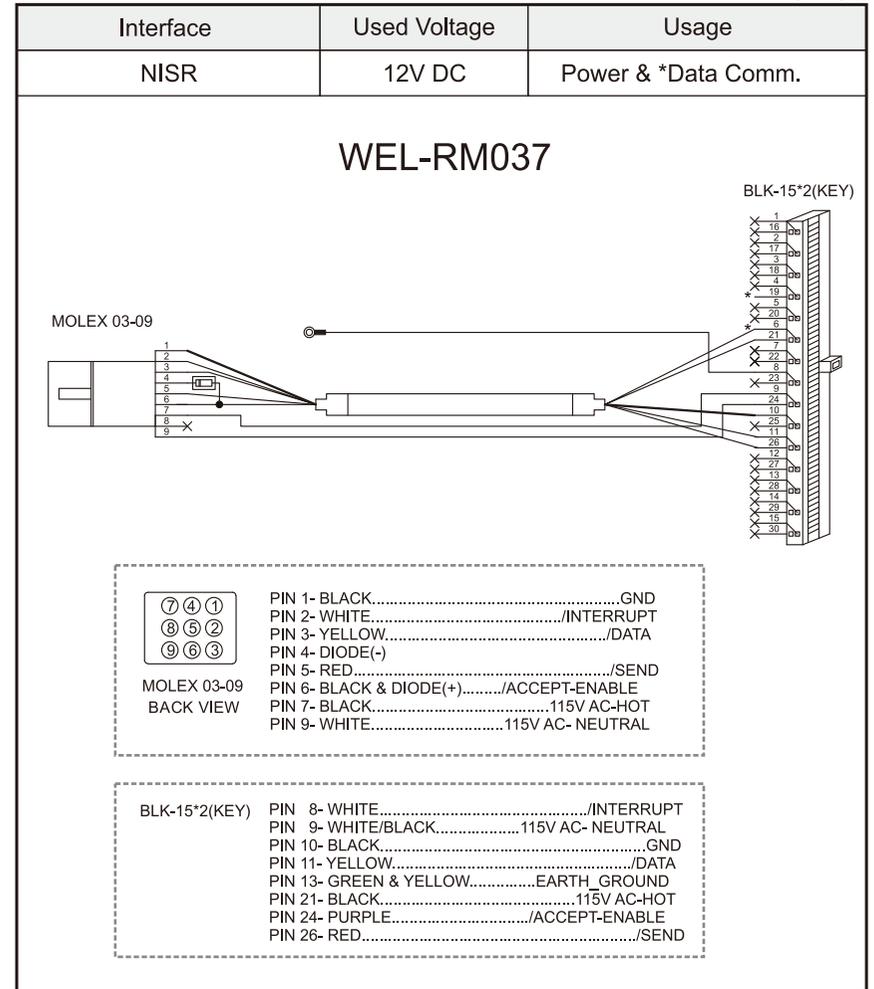
5-1 FIG.10



5-1 FIG.11



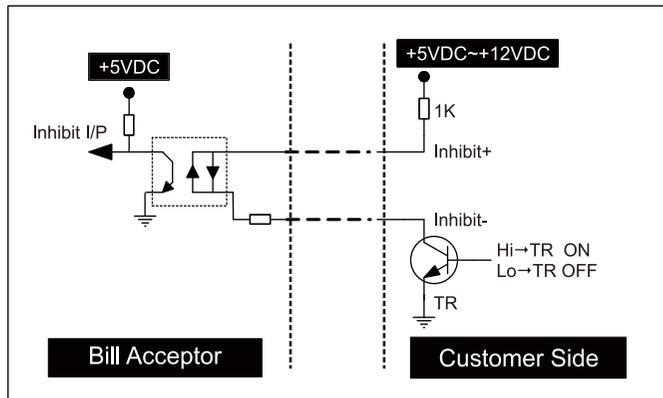
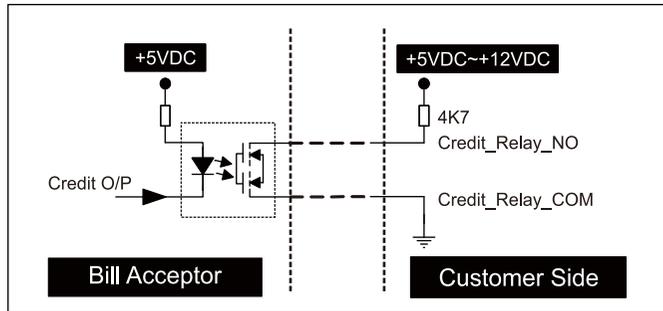
5-1 FIG.12



5-1-1. I/O Circuit

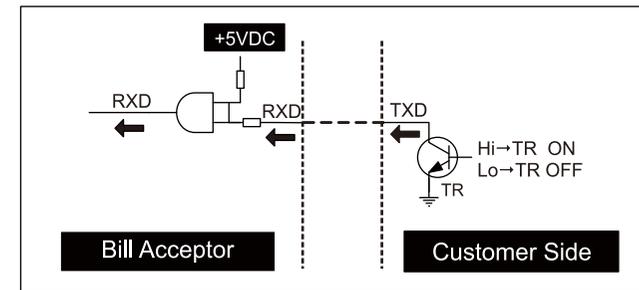
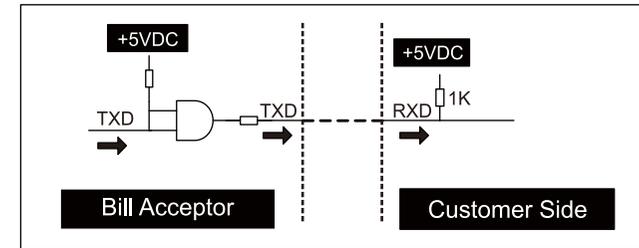
Pulse Interface.

5-1-1 FIG.01



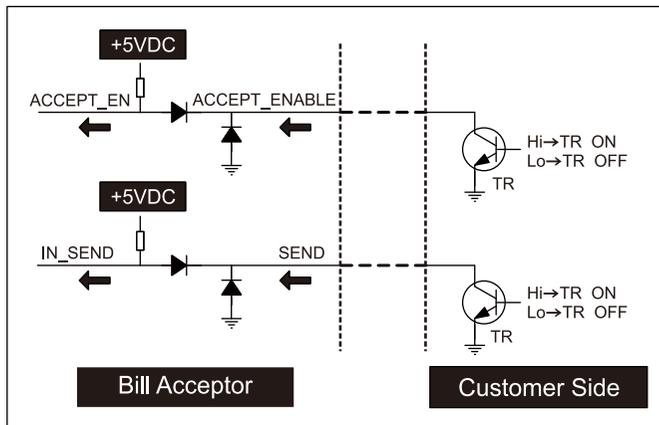
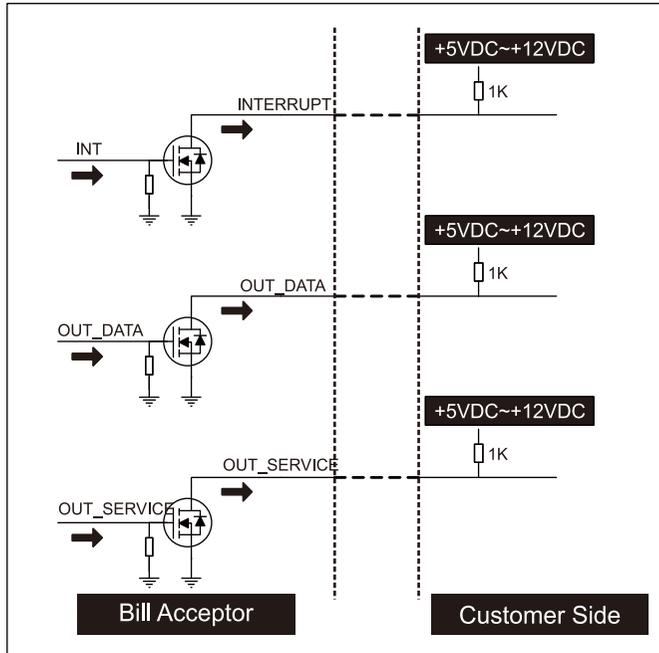
ICT Protocol<RS232> & V2.2 Interface.

5-1-1 FIG.02



NISR Interface.

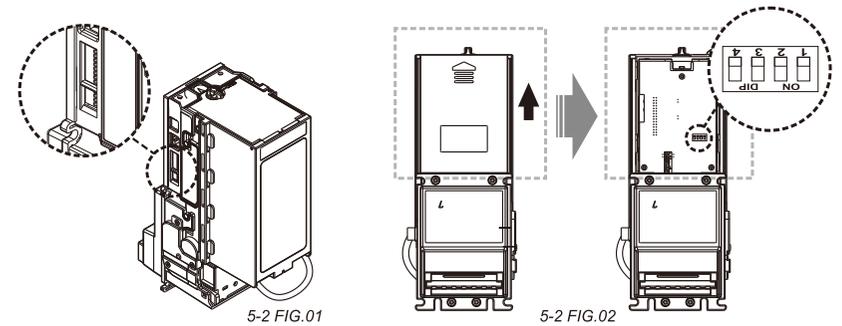
5-1-1 FIG.03



5-2. DIP Switch Setting

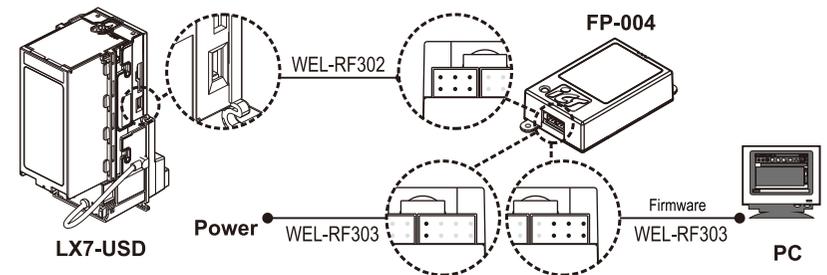
There are two serial DIP switches which are set on the side of LX7-USD (as 5-2 FIG.01). According to different currencies which are used by users, DIP switch settings could be varied to fit users' needs. There is also a serial DIP switch on the base of the unit for inside interface settings (as 5-2 FIG.02).

Please refer to "LX7-USD DIP Switch Setting Guide" in the package for more details.



5-3. Software Download and Upgrade

To download and upgrade the software to LX7-USD, 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.



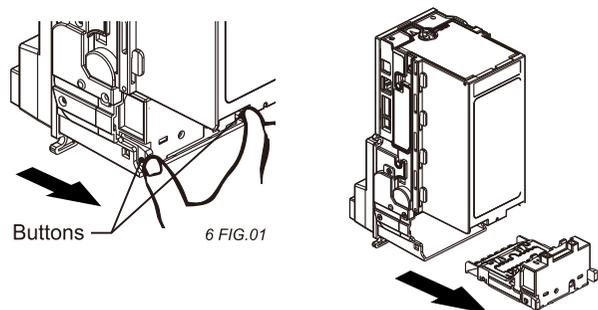
Please turn on Bill Acceptor after connecting.

## 6. Maintenance

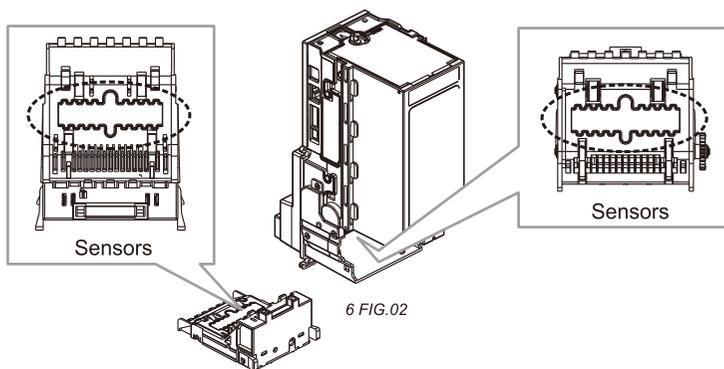
To make sure the bill acceptor always works smoothly, please clean the internal parts every two weeks to every two months.

To clean the internal parts:

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



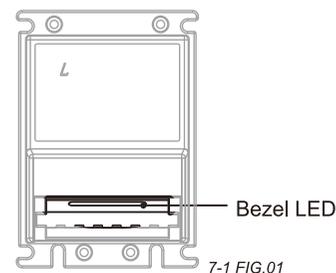
2. Use a soft, dry cloth or towel to clean the bill path and sensors.



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

## 7. Trouble Shooting

### 7-1. Bezel LED Errors



7-1 TABLE 01

LED Flashes		Status	Corrective Actions
Red	Green		
	<b>1</b>	White Card Calibration	Please calibrate with ICT white calibration card.
<b>1</b>		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.
<b>2</b>		Disable.	Inspect the right DIP switch setting.
<b>3</b>		Recognition sensor module error.	Inspect the foreign objects on sensor or bill path and clean.
<b>3+2</b>		Hook sensor error.	Inspect the foreign objects on security hook and clean.
<b>3+4</b>		Out sensor error.	Inspect the foreign objects on sensor or bill path and clean.
<b>4</b>		Anti-string sensor error or a stringing attempt has detected.	Inspect the foreign objects on sensor or bill path and clean.
<b>5</b>		Bill box has been removed.	Replace the bill box.
<b>6</b>		Stacker error or stacker full.	Empty the bill box.
<b>7</b>		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.



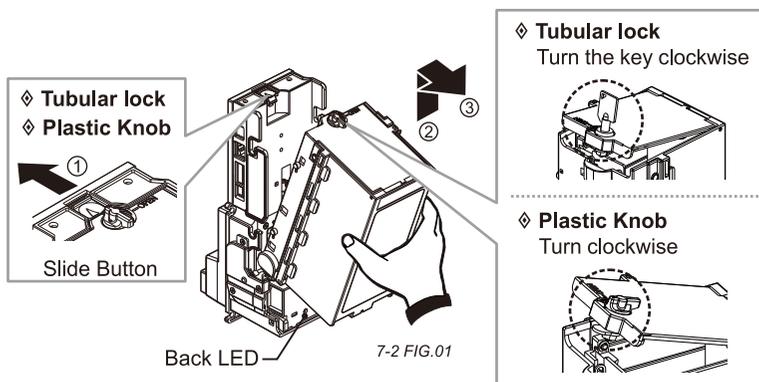
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**! If the error can not be solved after corrective actions or it recurs, please contact ICT for technical support.**