

ict



TAO
Series

**Bill Acceptor
Installation Guide**



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1. Introduction

1-1. Overview

TAO-A/V is a bill acceptor which features a lockable bill box for high-security with acceptance rate up to 96% or greater.

1-2. Features

- Four way bill insertion acceptance.
- Auto-calibrating.
- Win 98/XP/Vista and Linux compatible USB interface available.
- Secure lockable-removable bill box available in 200 & 500 bill capacity.

2. Specifications

Common

Acceptance Rate

96% or greater

Transaction Speed

Approx. 3 seconds to stack

Bill Insertion

Four way acceptance

Electrical

Power Source

TAO-A: 12V DC ±10%
117V AC ±10%

TAO-V: 12V DC ±10%
34V DC ±10%

Power Consumption

50 watts maximum

Mechanical

Bill Capacity

Approx. 200 bills (230~250)
Approx. 500 bills (480~530)

Weight

Bill Acceptor with 200 bill box - Approx. 1.22kg
Bill Acceptor with 500 bill box - Approx. 1.35kg

Interface

TAO-A: S.T.D. Pulse, 5V ENABLE, NISR, ICT Protocol, USB(Optional)

TAO-V: MDB, Pulse, USB(Optional), ICT Protocol

Installation

Indoor

Operation Environment

Operation Temperature: 0°C~55°C
Storage Temperature: -30°C~70°C
Humidity: 30%~85%RH(no condensation)

Outline Dimension

TAO-A/V Installation Guide-Page.2

3. Packing List

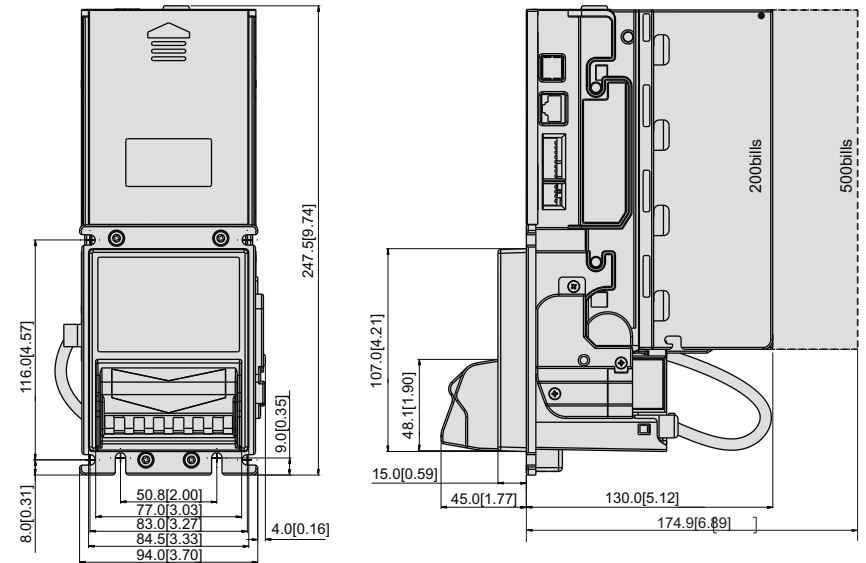
Main

Bill Acceptor

Accessory

Harnesses: see 5-1
TAO-A/V Installation Guide
TAO-A/V Switches Setting Guide
Key for bill box

4. Dimension

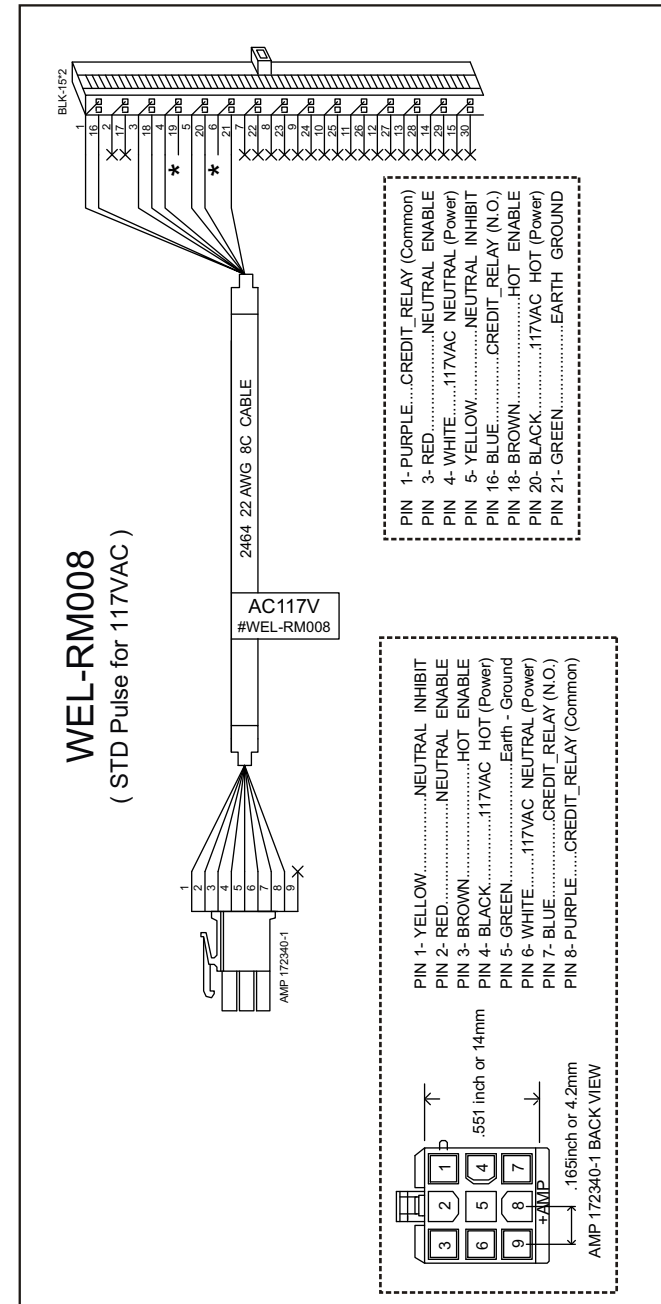


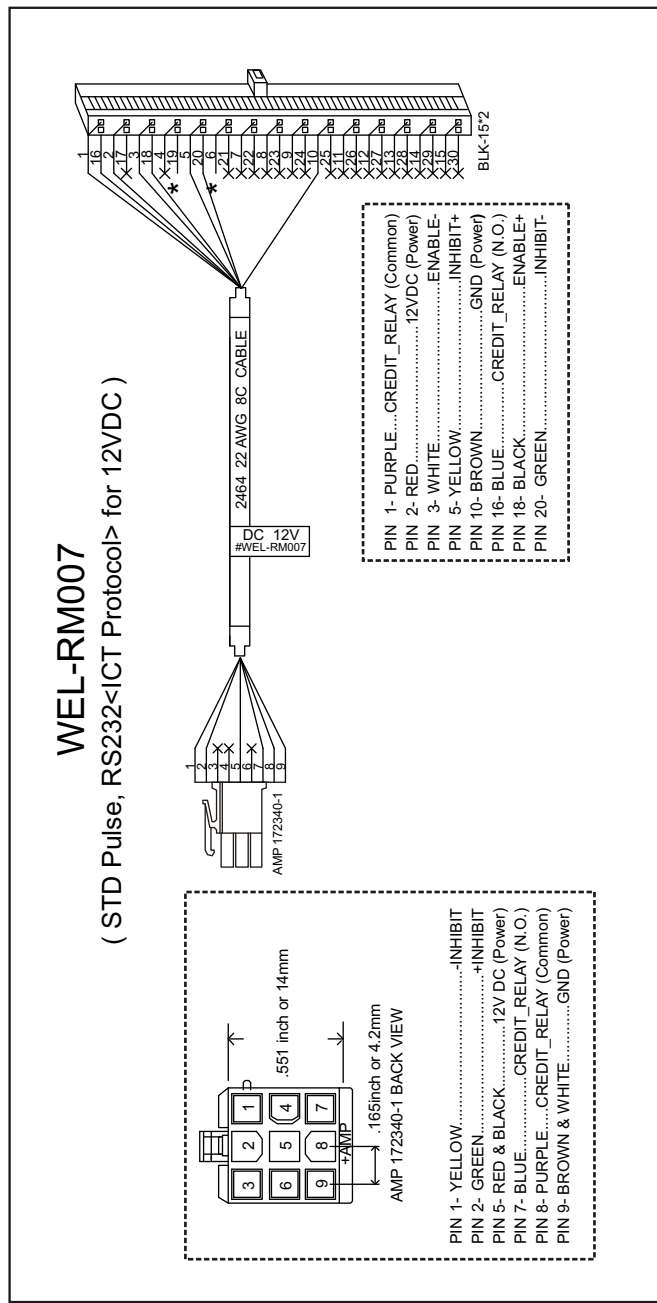
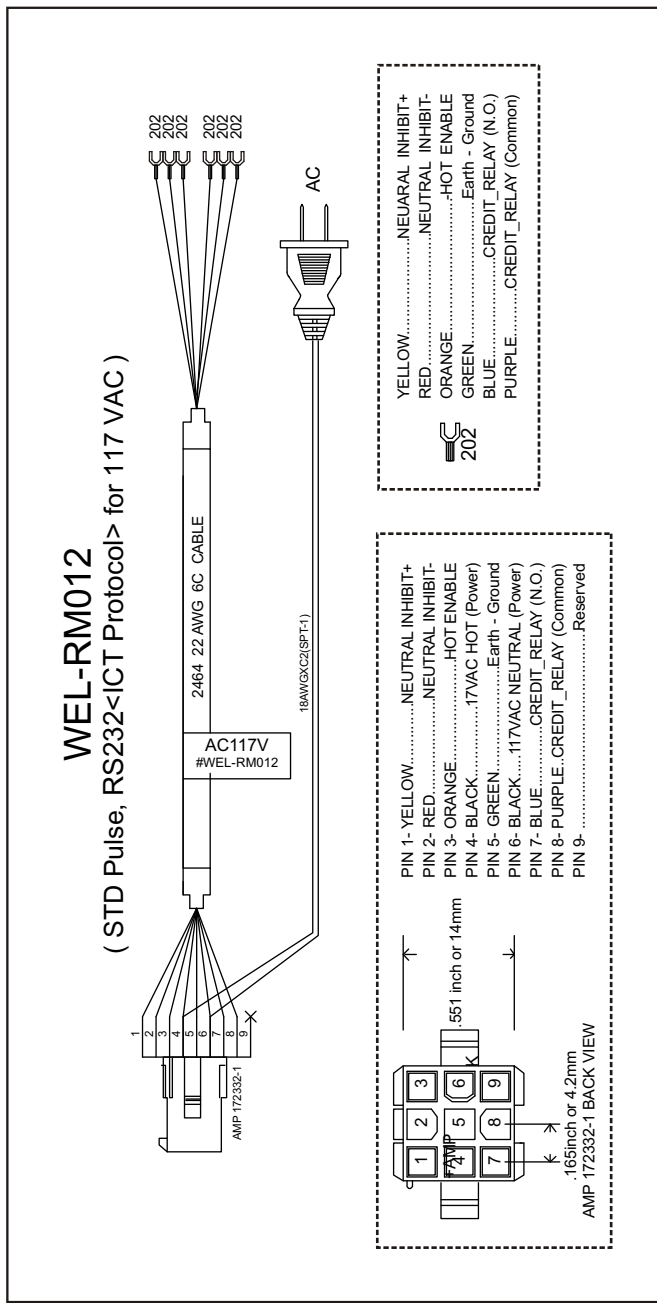
Unit : mm
() : inch

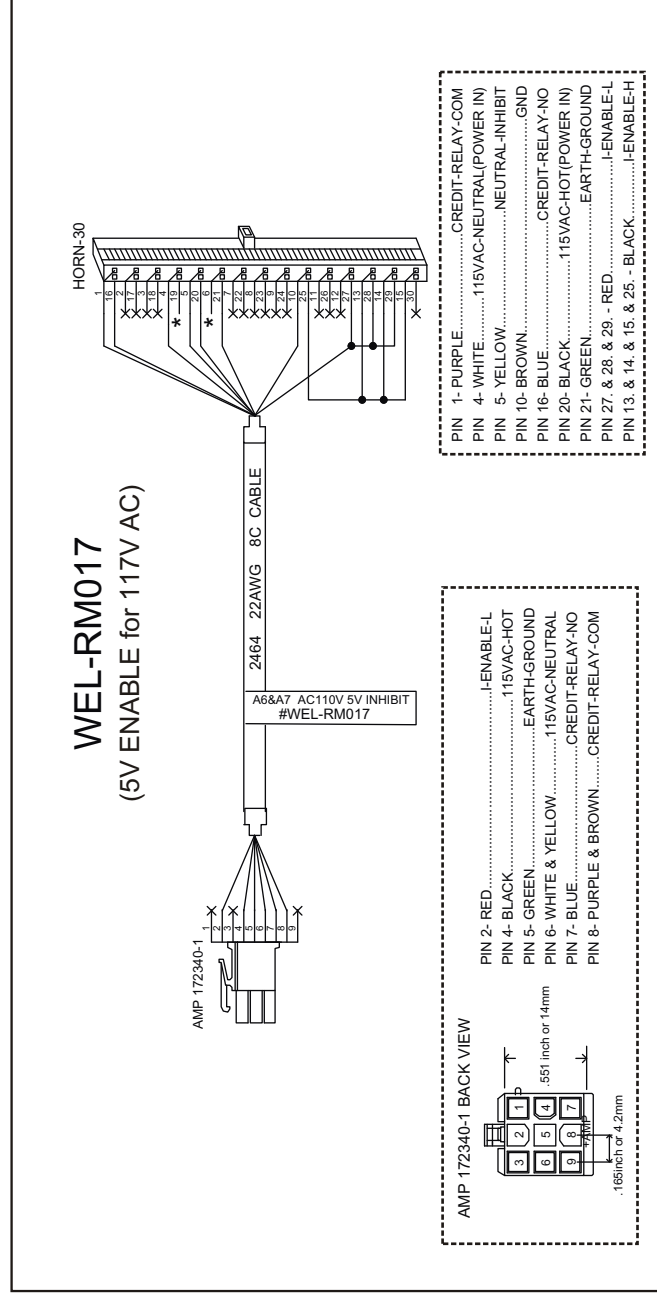
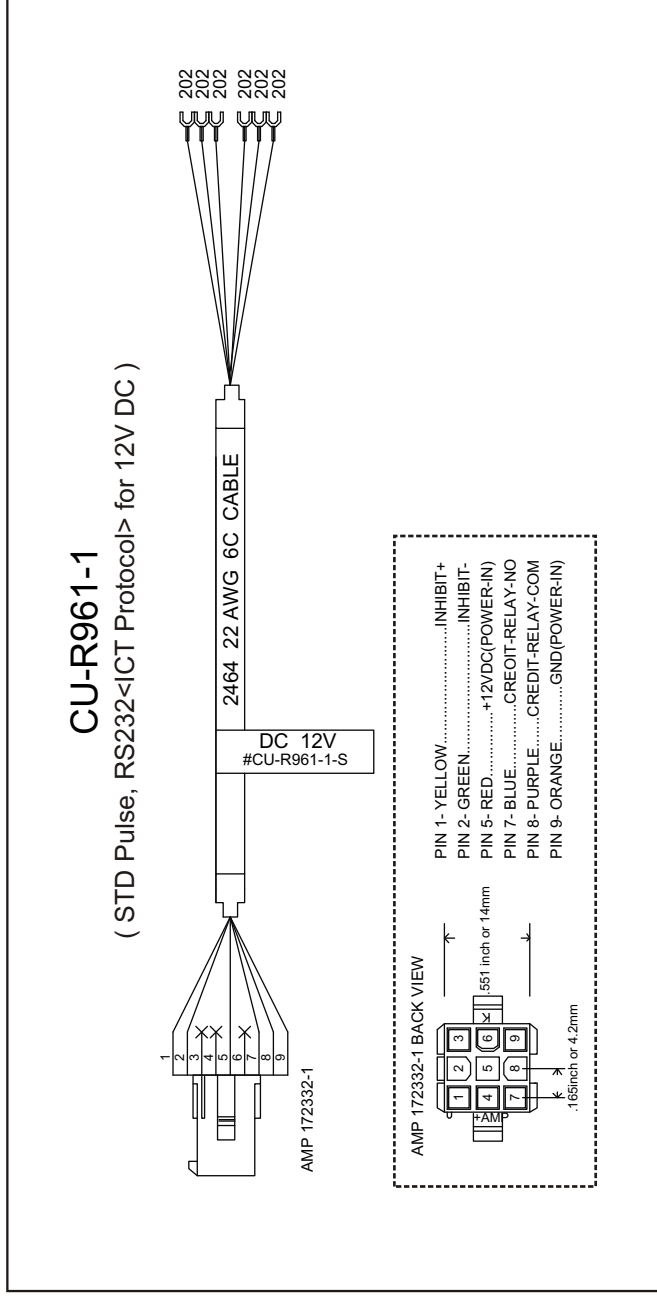
5. Installation

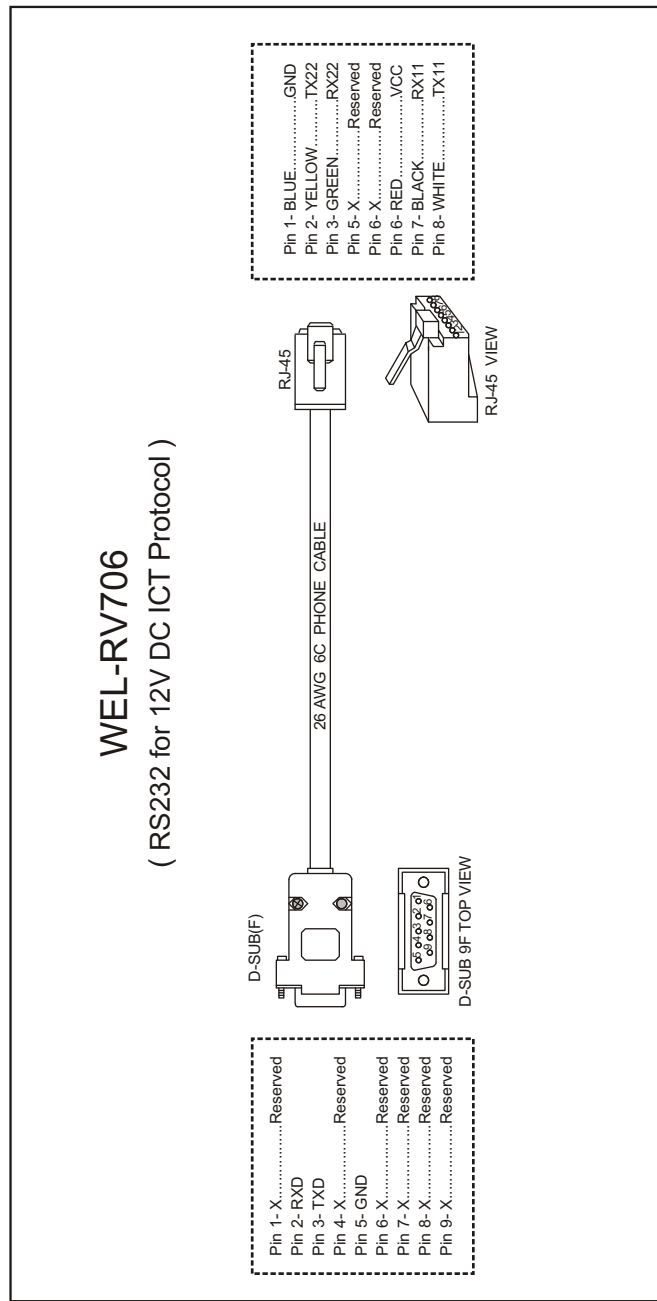
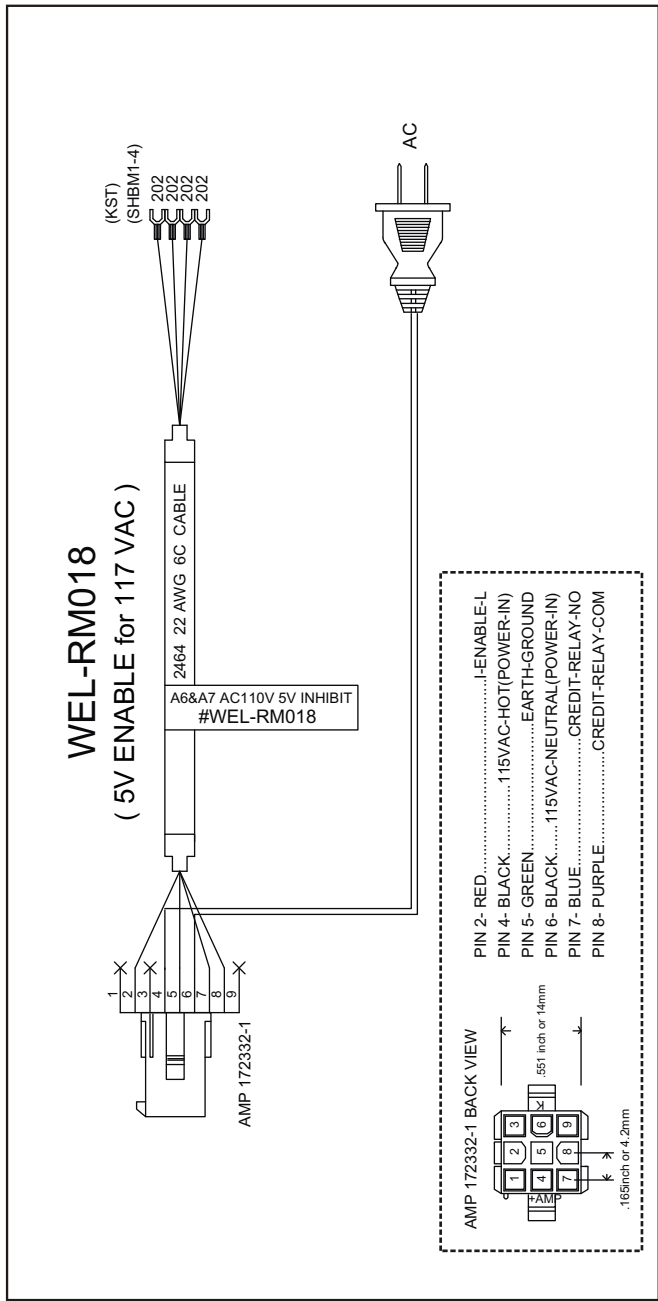
5-1. Harness Application

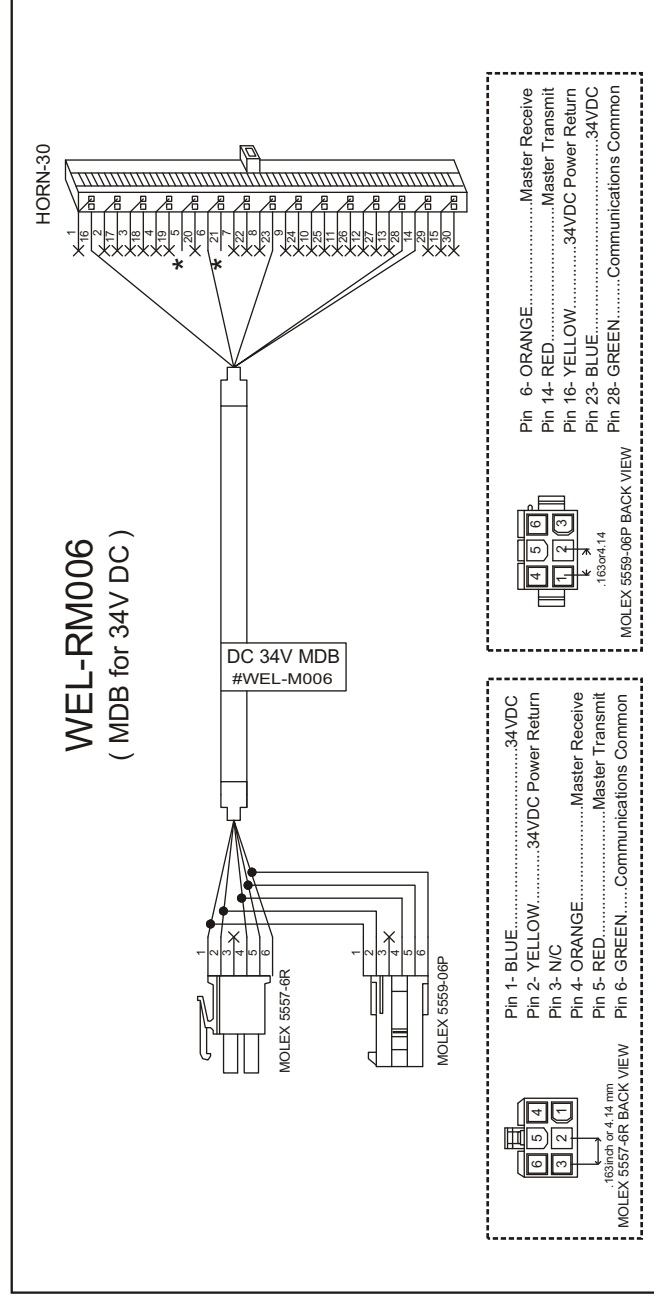
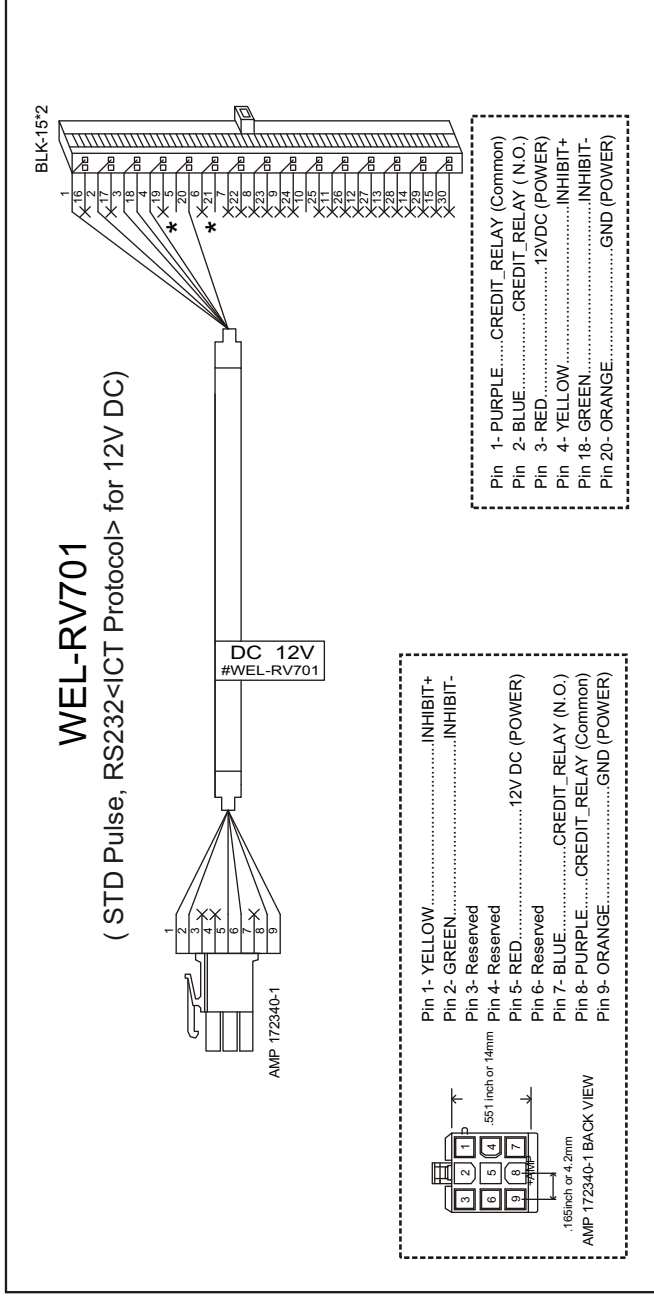
Model	Interface	Used Voltage	Harness No.	Page
TAO-A	STD Pulse	117V AC	WEL-RM008	4
			WEL-RM012	5
		12V DC	WEL-RM007	6
			CU-R961-1	7
	5V ENABLE	117V AC	WEL-RM017	8
			WEL-RM018	9
	RS232 for ICT Protocol	12V DC	WEL-RM007	6
			CU-R961-1	7
		117V AC	WEL-RV706	10
			WEL-RM008	4
NISR	117V AC	WEL-RM012	5	
		WEL-RM013	13	
USB for ICT Protocol	117V AC/ 12V DC		WEL-RU1180 (Optional)	14
TAO-V	STD Pulse	12V DC	WEL-RV701	11
			CU-R961-1	7
	RS232 for ICT Protocol	12V DC	WEL-RV701	11
			WEL-RV706	10
	USB for ICT Protocol	12V DC		WEL-RU1180 (Optional)
MDB	34V DC		WEL-RM006	12

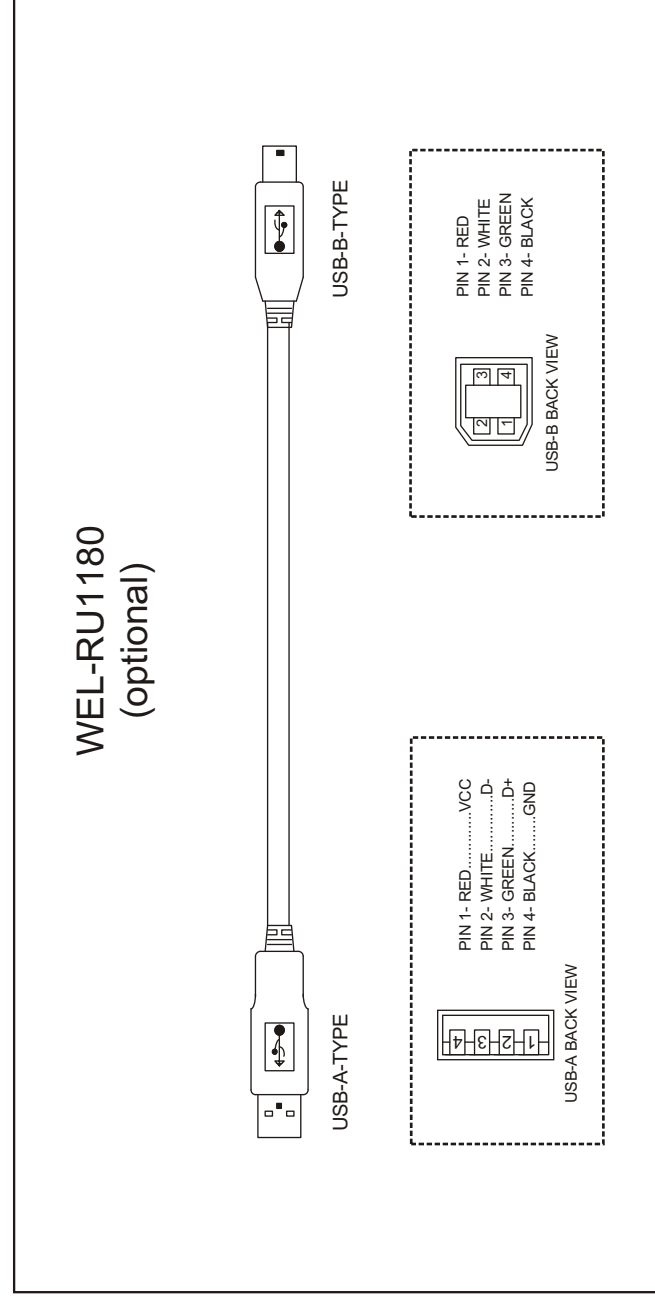
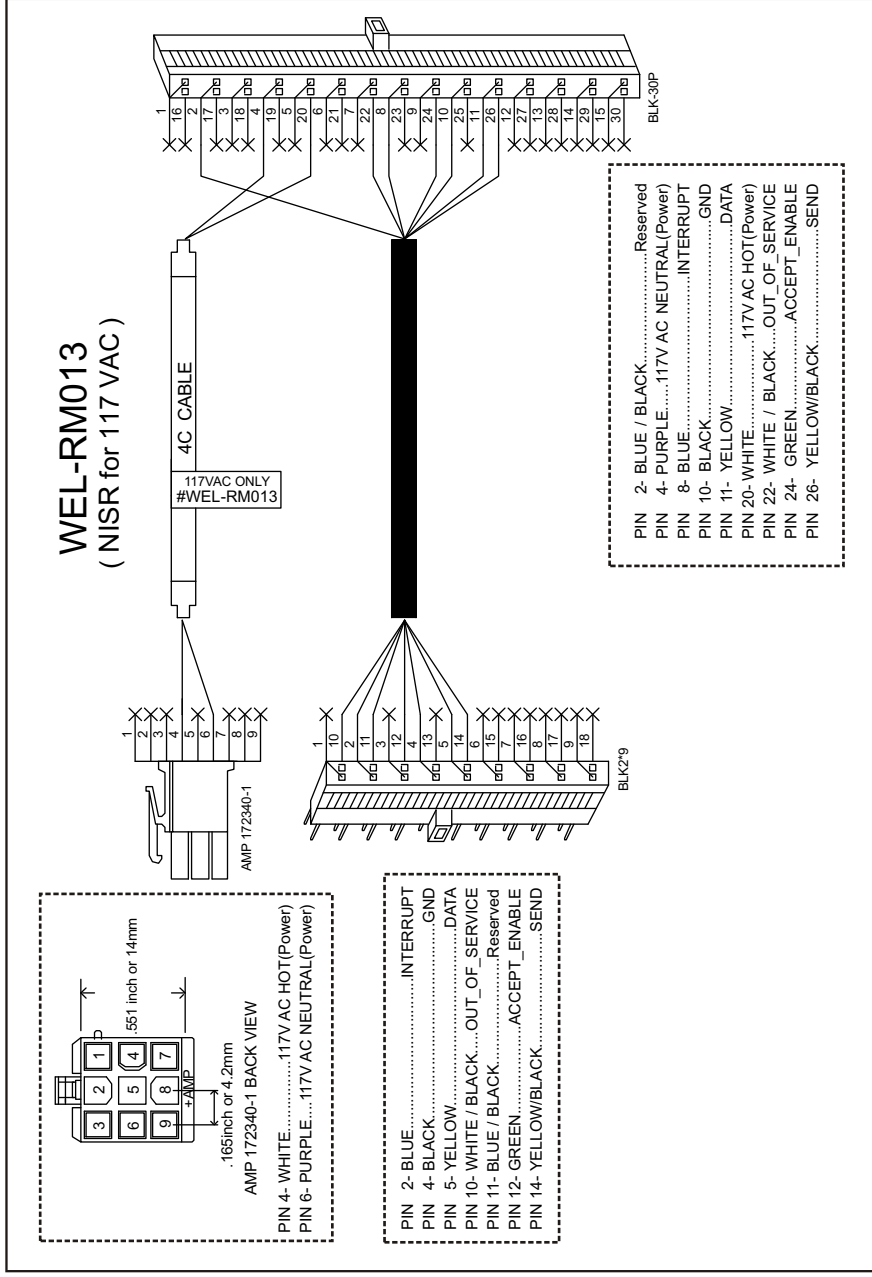






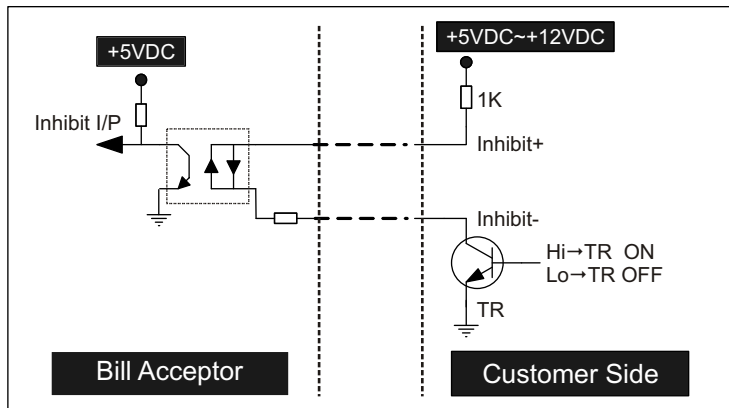
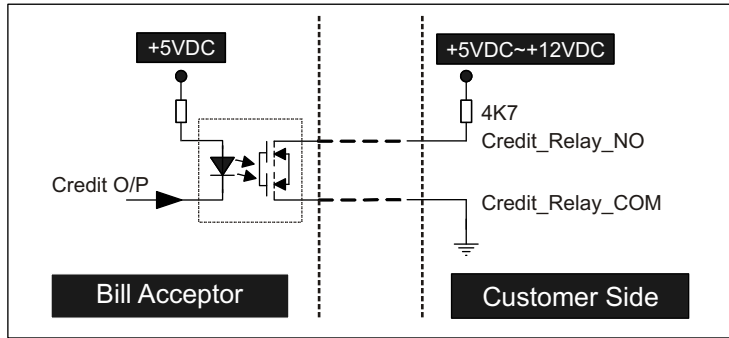




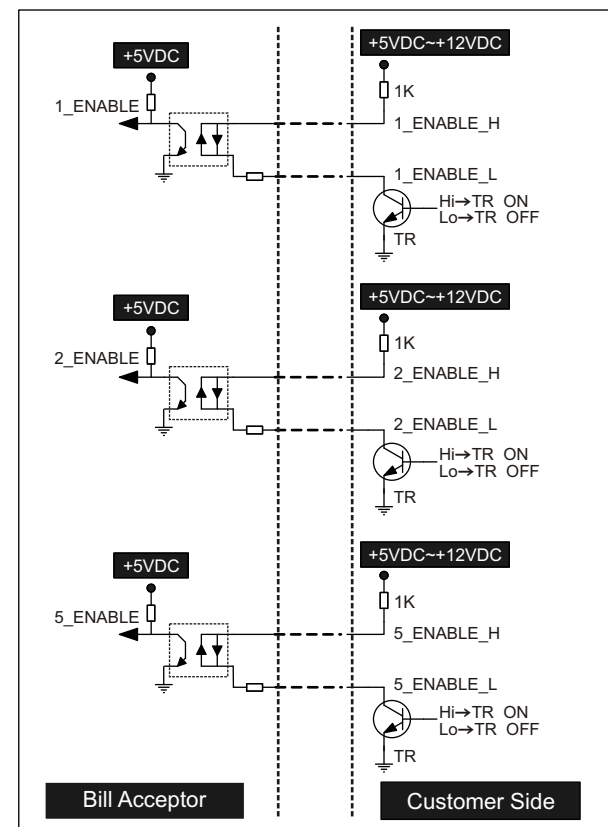
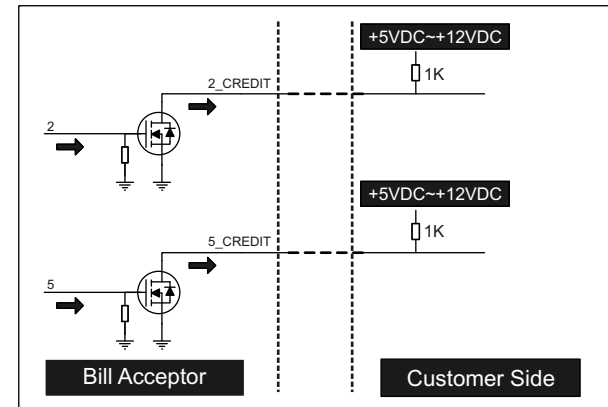


5-1-1. I/O Circuit

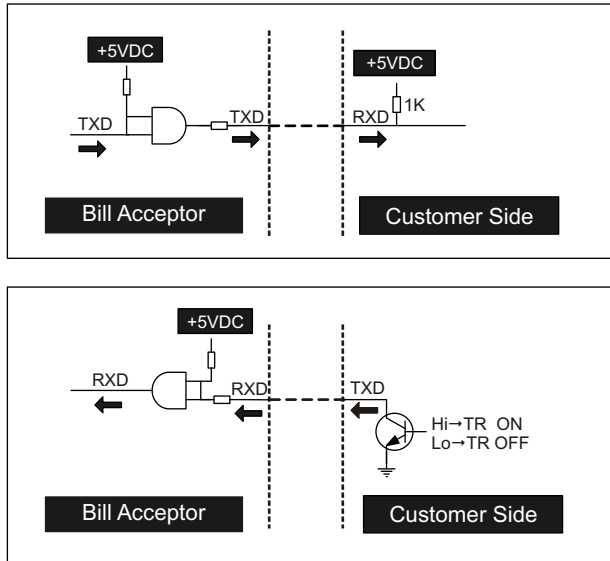
Pulse Interface Customer Recommend Circuit.



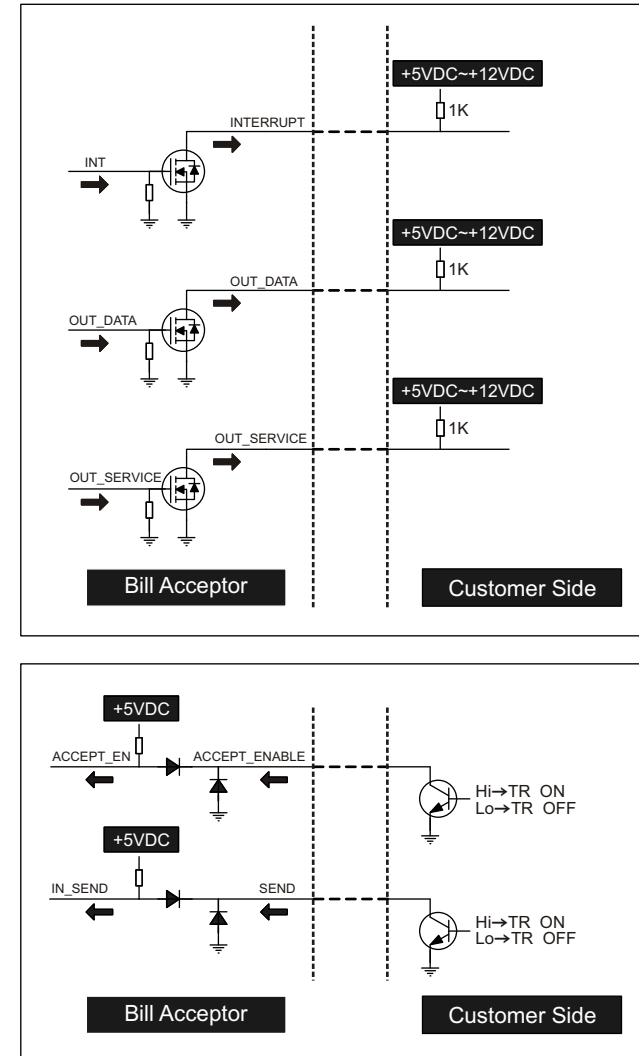
5V Enable Interface Customer Recommend Circuit.



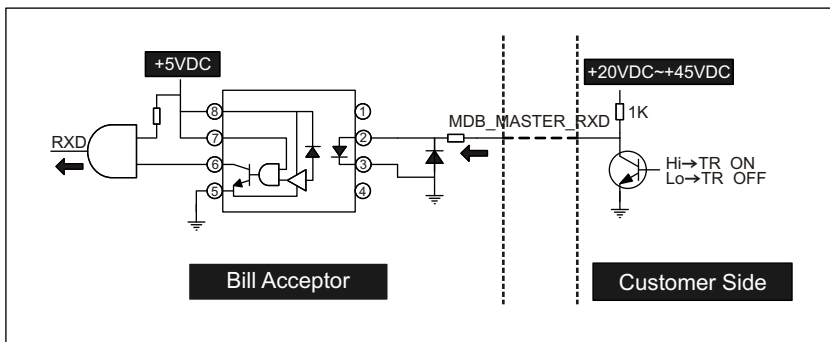
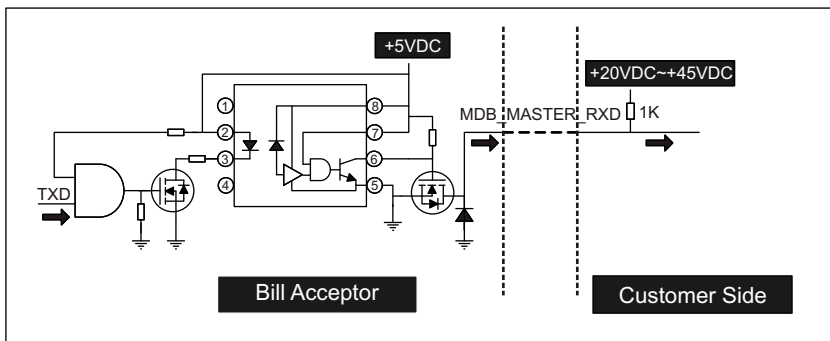
ICT Protocol Interface Customer Recommend Circuit.



NISR Interface Customer Recommend Circuit.



MDB Interface Customer Recommend Circuit.

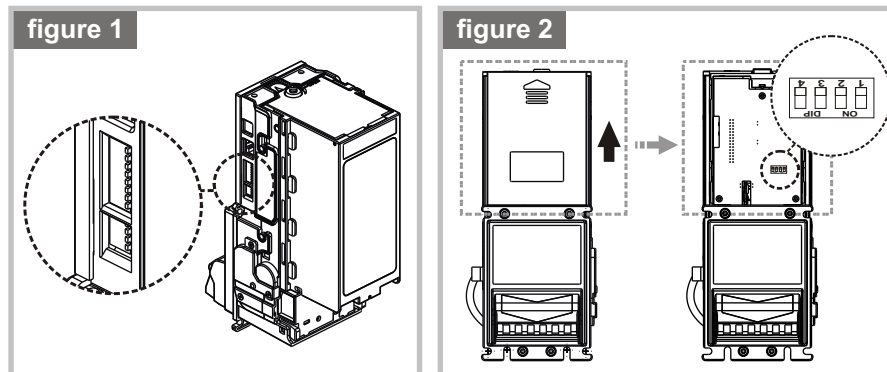


5-2. DIP Switch Setting

There are two serial DIP switches which are located on the side of TAO-A/V. (as figure 1) According to different currencies which are used by users, DIP switch settings could be varied to fit users' need.

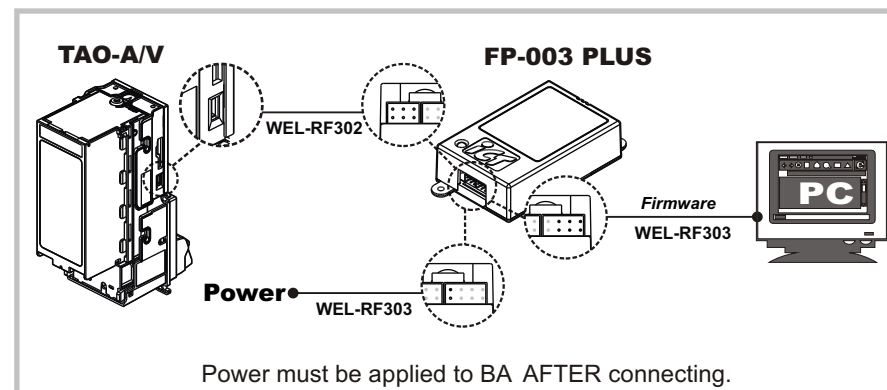
Besides, there's also a serial DIP switches on CPU board inside of TAO-A/V for interface settings. (as figure 2)

Please refer to "TAO-A/V DIP Switch Setting" Guide in the package for more detail.



5-3. Software Download and Upgrade

To download and upgrade the software to TAO-A/V, the programmer (FP-003 PLUS) is needed. Please contact ICT to purchase FP-003 PLUS and refer to FP-003 PLUS user guide for software download and upgrade information.

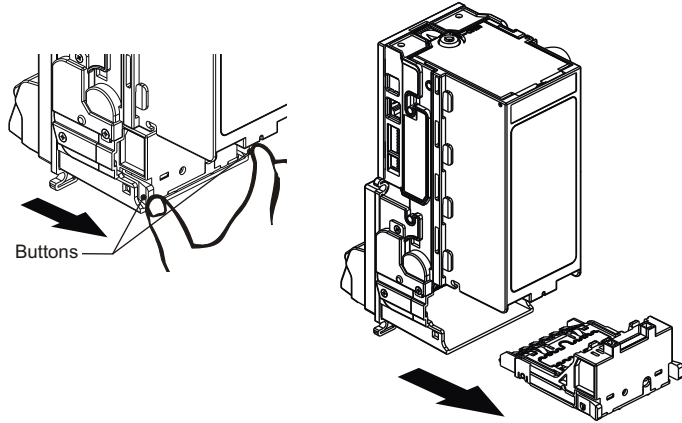


6. Maintenance

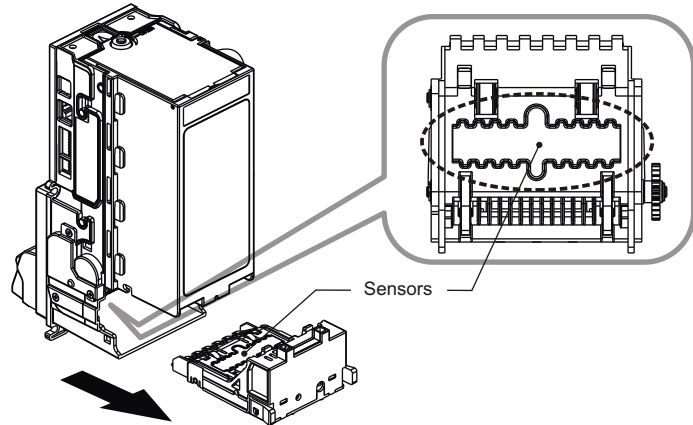
To make sure the bill acceptor always works smoothly, please clean the internal parts every two weeks to every two months.

To clean the internal parts:

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



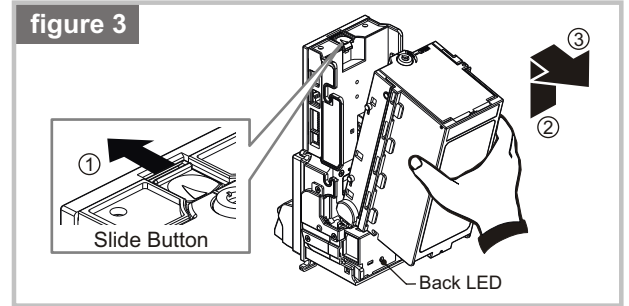
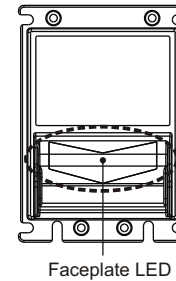
2. Use a soft, dry cloth or towel to clean the bill path and sensors.



7. Troubleshooting

7-1. Faceplate LED Errors

LED Flashes	Status	Correct Actions
Colorful	Bill Acceptor is normal	N/A
Red	Bill Acceptor is error	Check the back LED flash



7-2. Back LED Errors

LED Flashes	Status	Corrective Actions
1	Bill jammed.	Remove the bill box by sliding the top button and the bill path unit (as figure 3), and then remove the jammed bill.
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	Out sensor error.	Inspect for foreign objects on sensor or bill path and clean.
2	Disable	Inspect for right DIP switch setting.
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.



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

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