



# PA7/PV7

Bill Acceptor  
Installation Guide



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## 1. Introduction

### 1-1. Overview

PA7/PV7 is a bill acceptor which features as high-security with acceptance rate up to 96% or even greater.

### 1-2. Features

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

## 2. Specifications

### Common

#### Acceptance Rate

96% or greater

#### Identification Speed

Approx. 3 seconds to stack

#### Installation

Indoor

### Electrical

#### Power Source

12V DC, 3Amp  
34V DC(24V~45V), 1.5Amp  
117V AC, 0.2Amp

#### 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 (300~400)  
500 bills (400~500)  
800 bills (700~800)

#### Bill Insertion

Four way acceptance

#### Interface

**PA7:** Pulse, NISR, 5V ENABLE  
ICT Protocol

**PV7:** MDB, Pulse, ICT Protocol

#### Power Consumption

Standby: 200~350mA  
Operation Current: 850~900mA  
Transient Current: 1.2A/ms  
Motor Lock: 1.5A maximum

#### Weight

<1.3kg

#### Outline Dimension

See Page.2

## 3. Packing List

### Main

Bill Acceptor

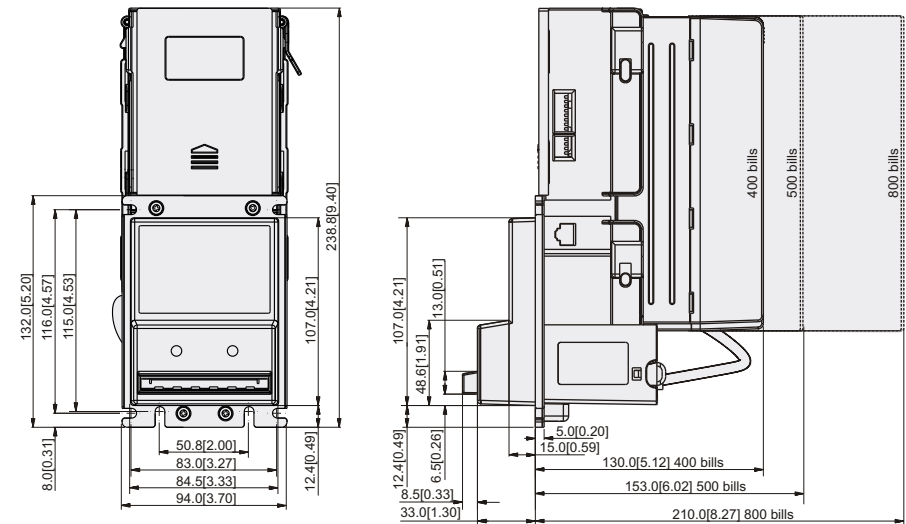
### Accessory

Harnesses: see 5-1

PA7/PV7 Installation Guide

PA7/PV7 Switches Setting Guide

## 4. Dimension



Unit : mm[inch]

## 5. Installation

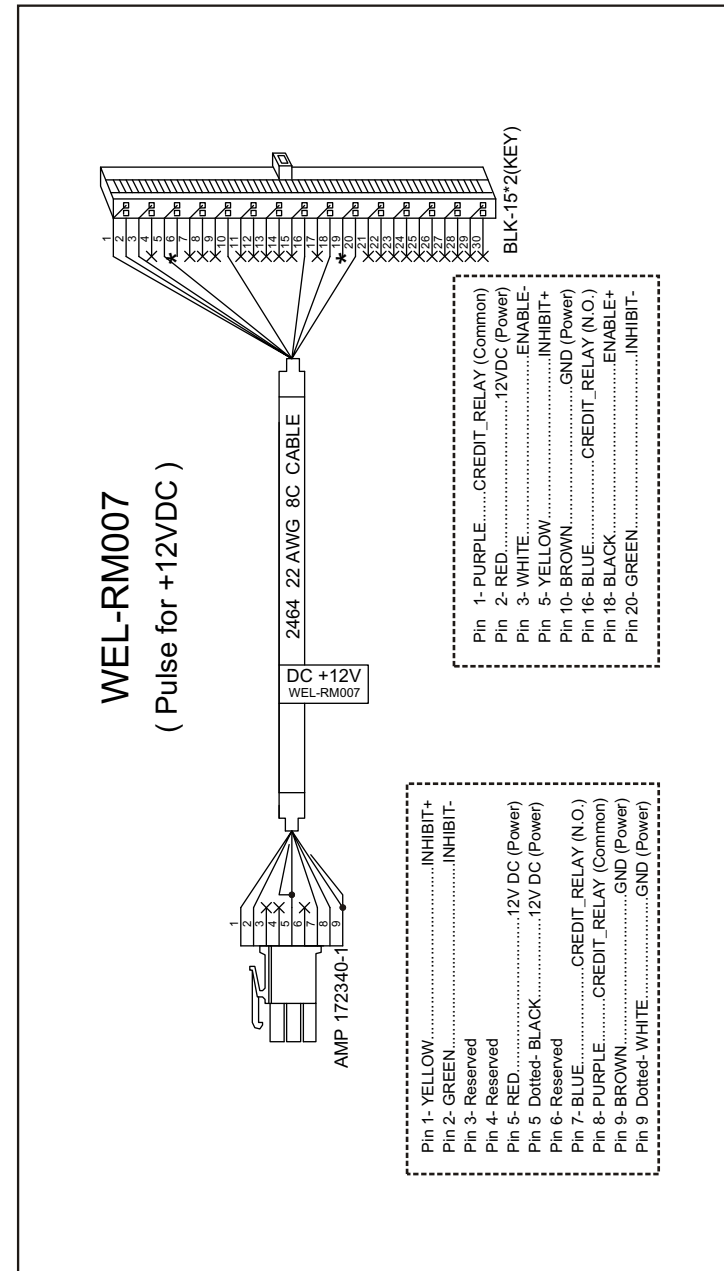
### 5-1. Harness Application

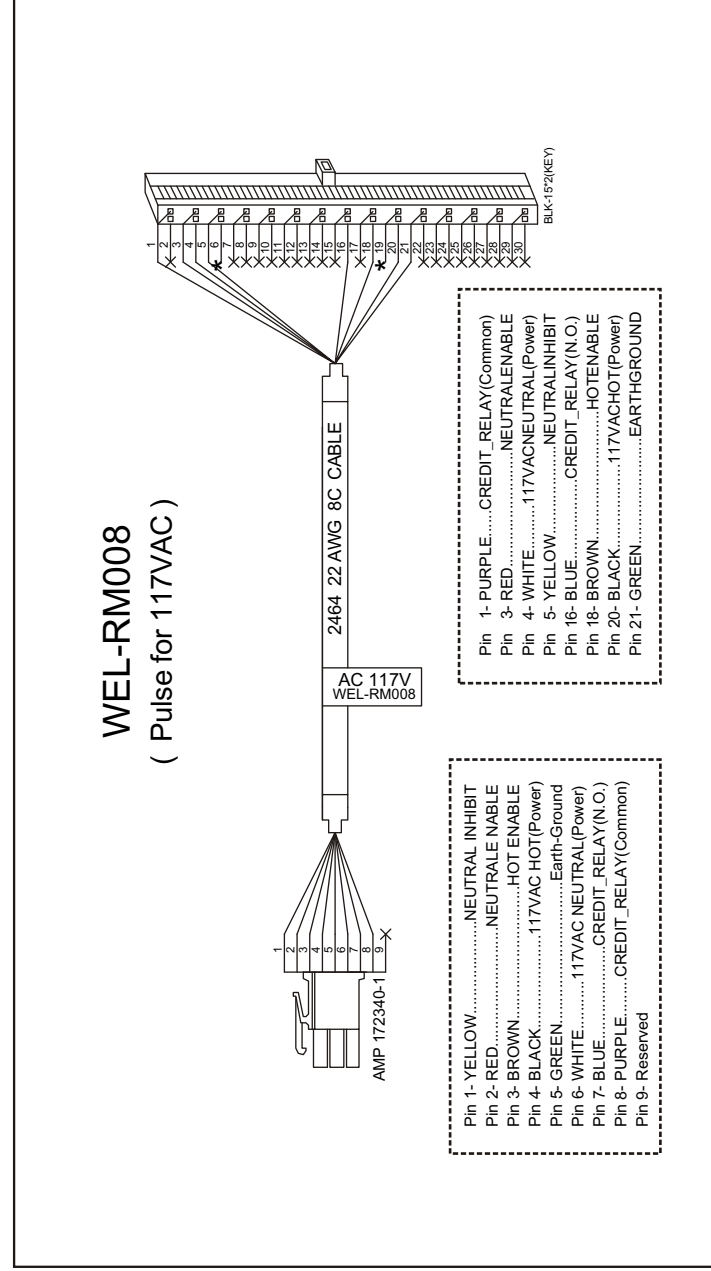
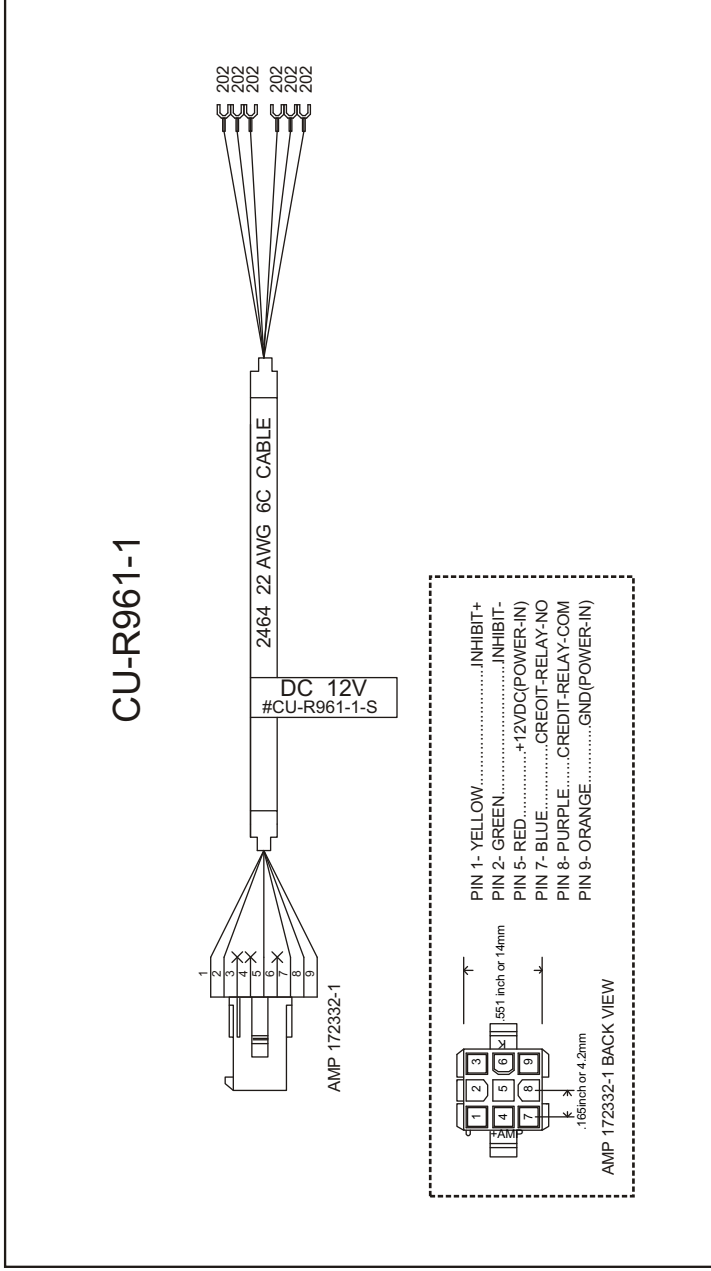
PA7/PV7 Bill Acceptor:

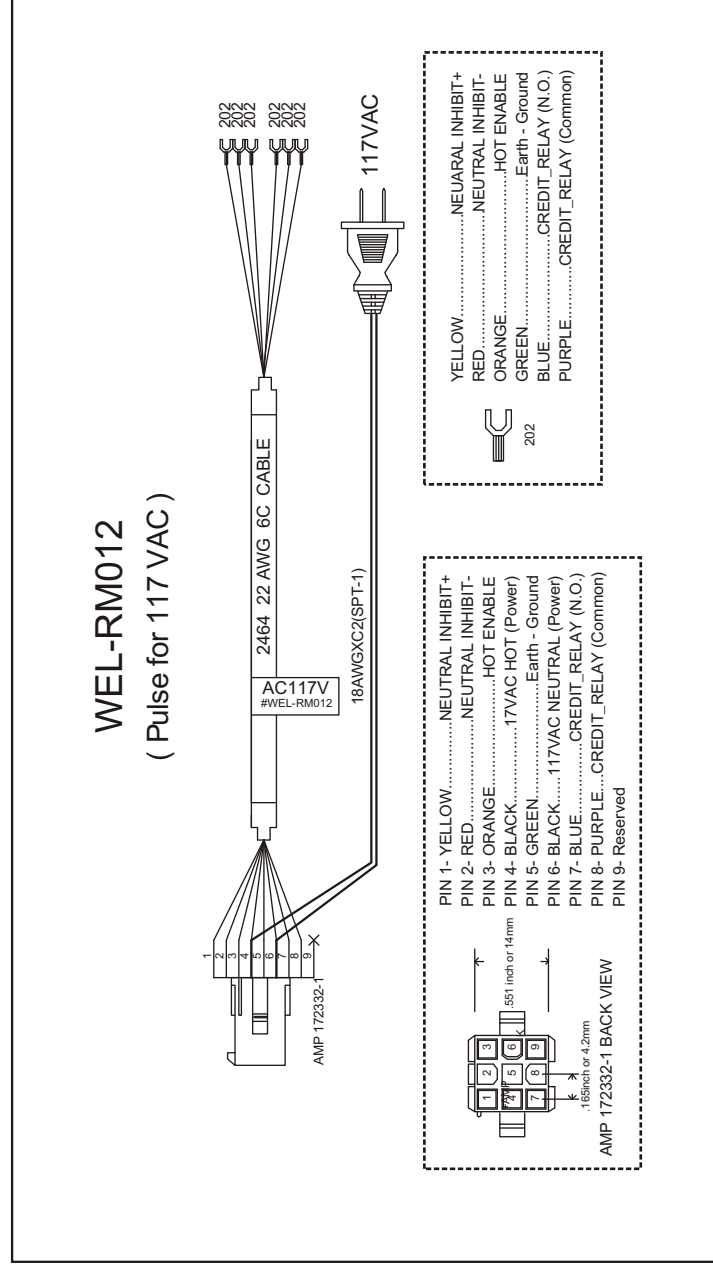
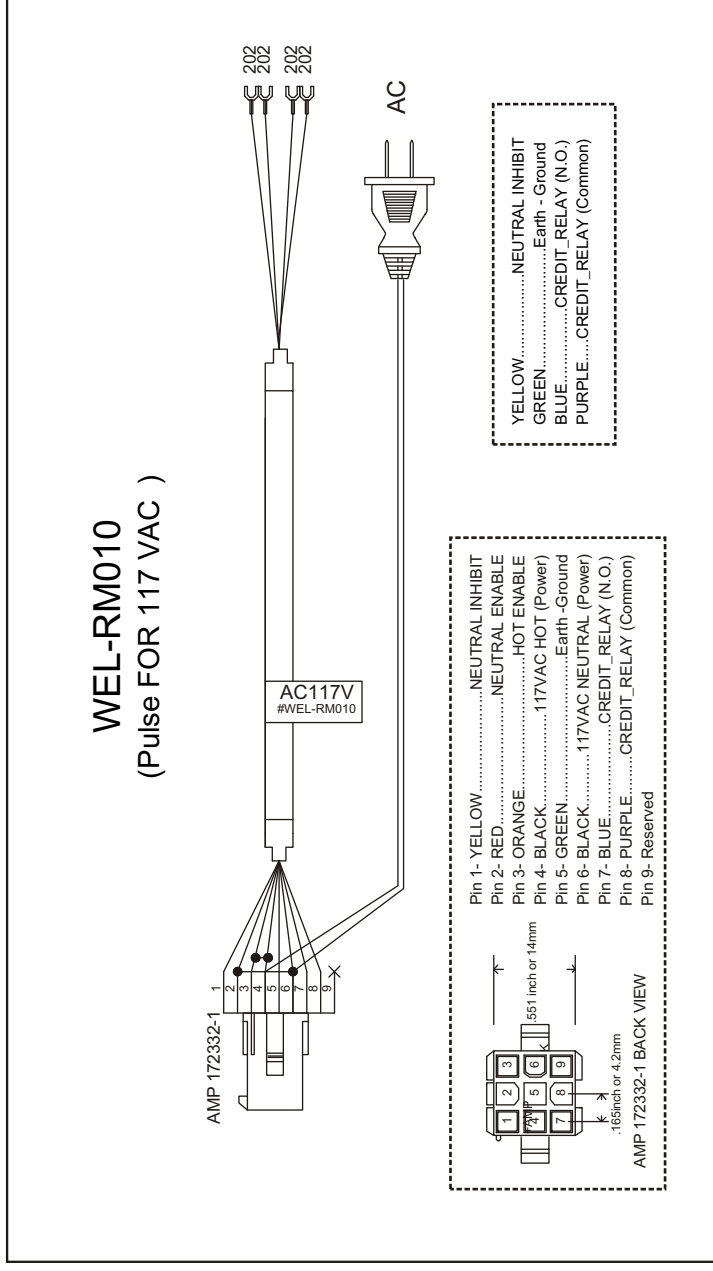
Model	Interface	Used Voltage	Harness	See Page
PA7	Pulse	12VDC	WEL-RM007	4
			CU-R961-1	5
		117VAC	WEL-RM008	6
			WEL-RM010	7
	Pulse + 5V Enable	117VAC	WEL-RM012	8
			WEL-RM017	9
	NISR	117VAC	WEL-RM018	10
ICT Protocol	RS232	+5V to ±12V	WEL-RM013	11
	USB	USB	WEL-RV706	12
PV7	Pulse	12V DC	WEL-RV706 (Optional)	12
		24V AC	WEL-RV701	13
	M.D.B.	34V DC	CU-R961-1	5
	ICT Protocol (RS232)	+5V to ±12V	WEL-RV702	14
			WEL-RM006	15
			WEL-RV706	12

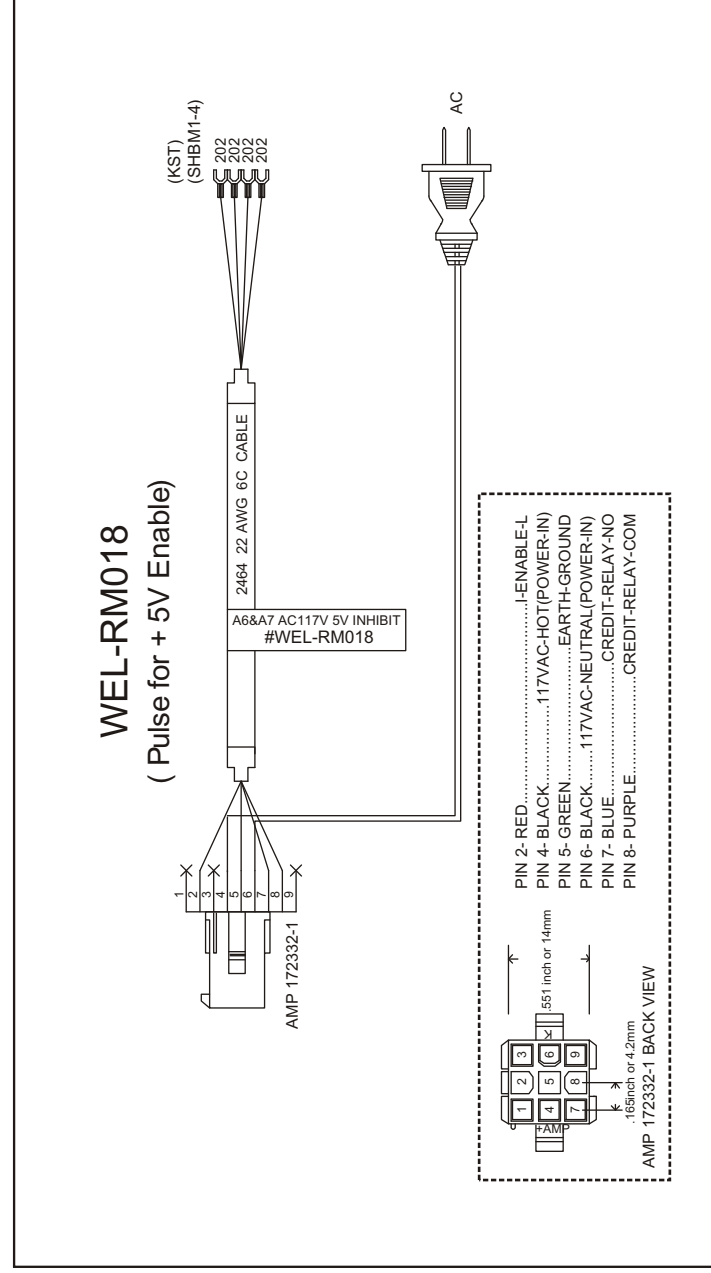
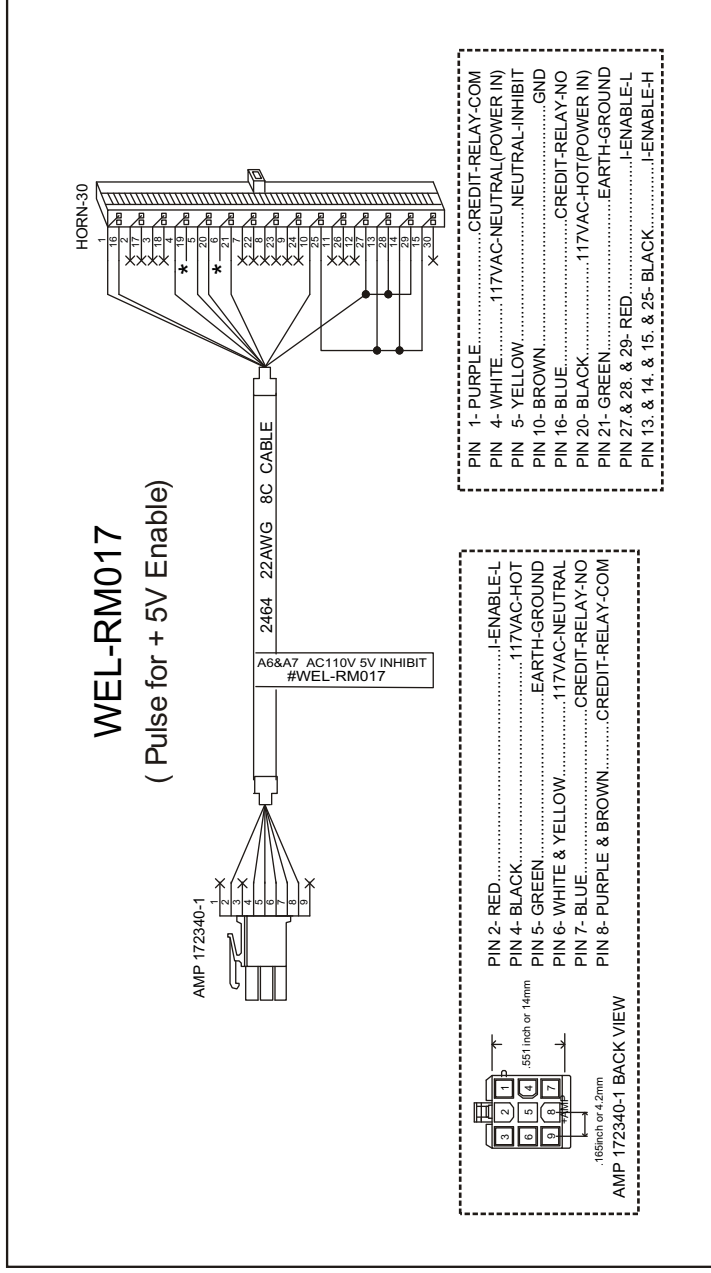
Programmer (Refer to 5-3):

Model	Function	Harness	See Page
FP-001	Download	WEL-R087	16
		WEL-RM009	16

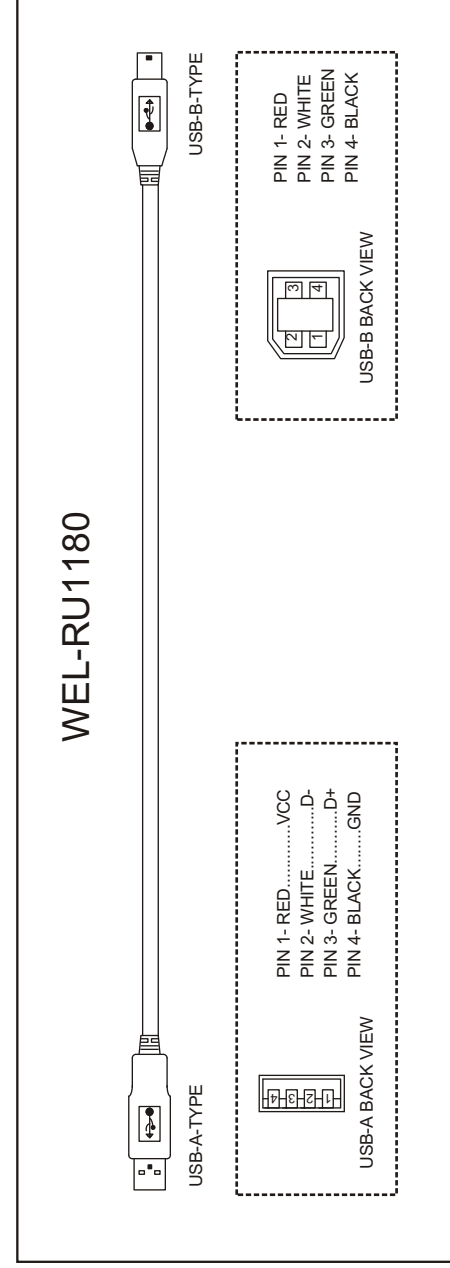
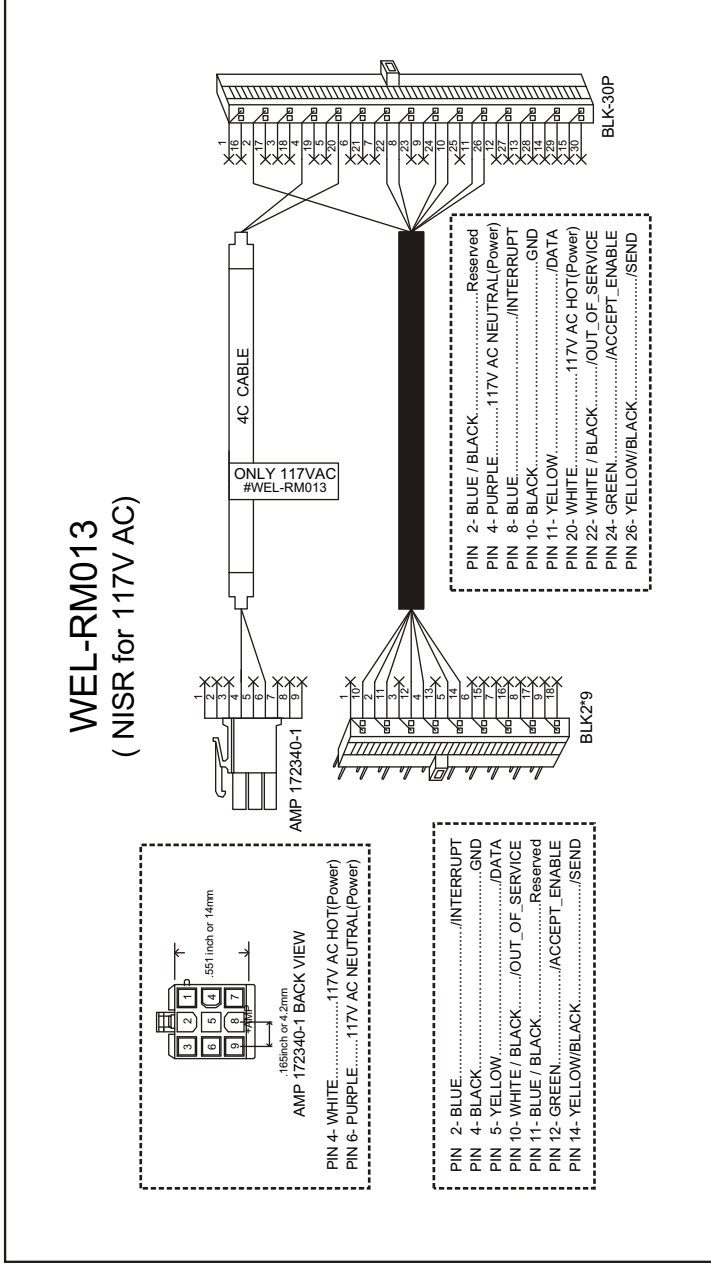


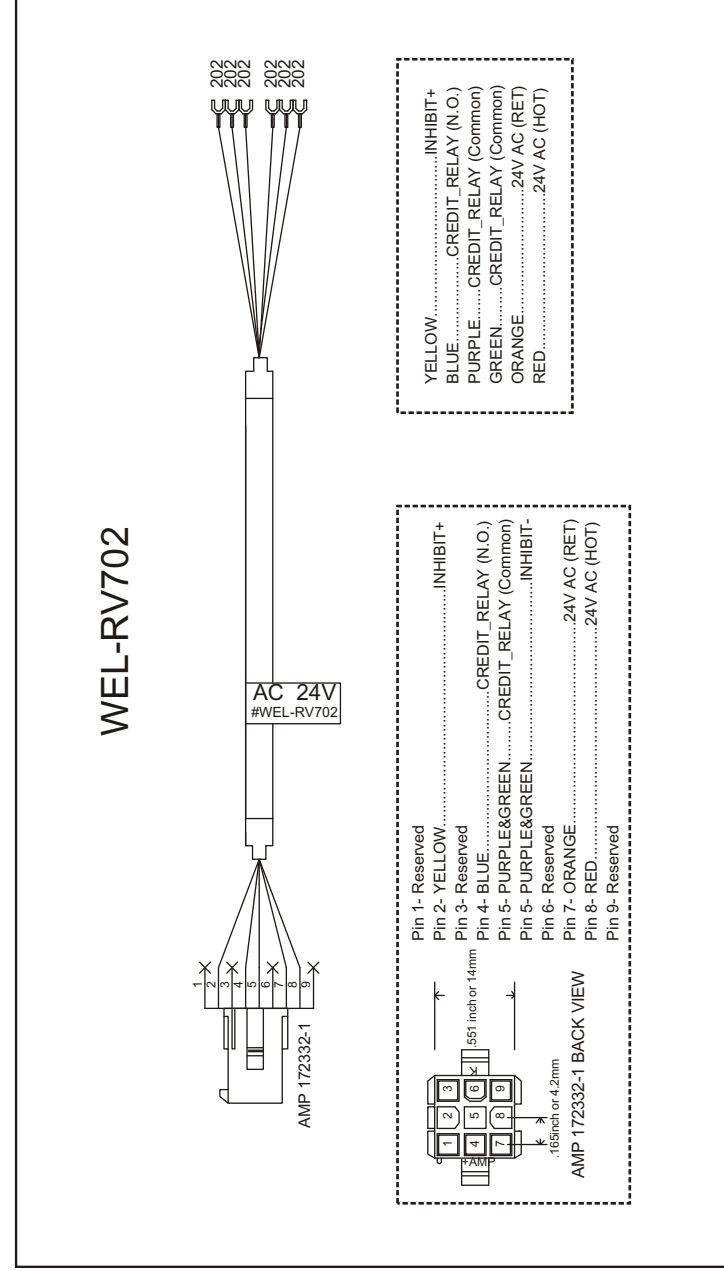
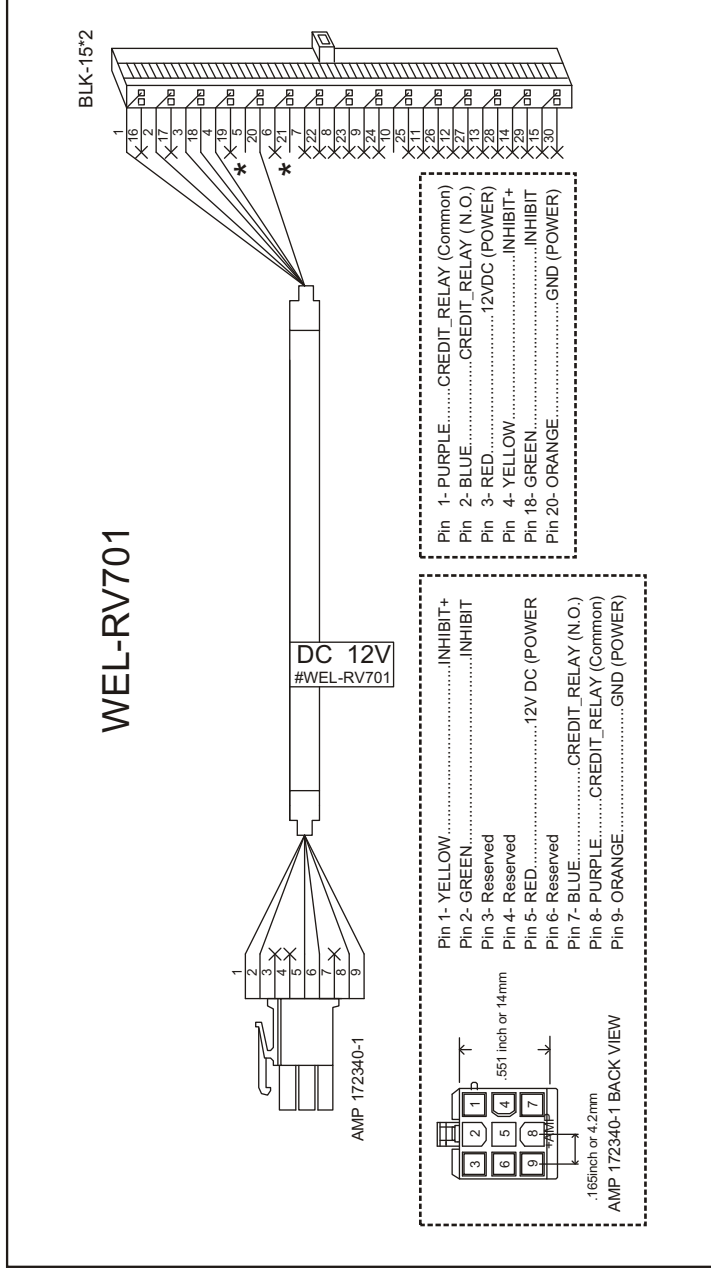


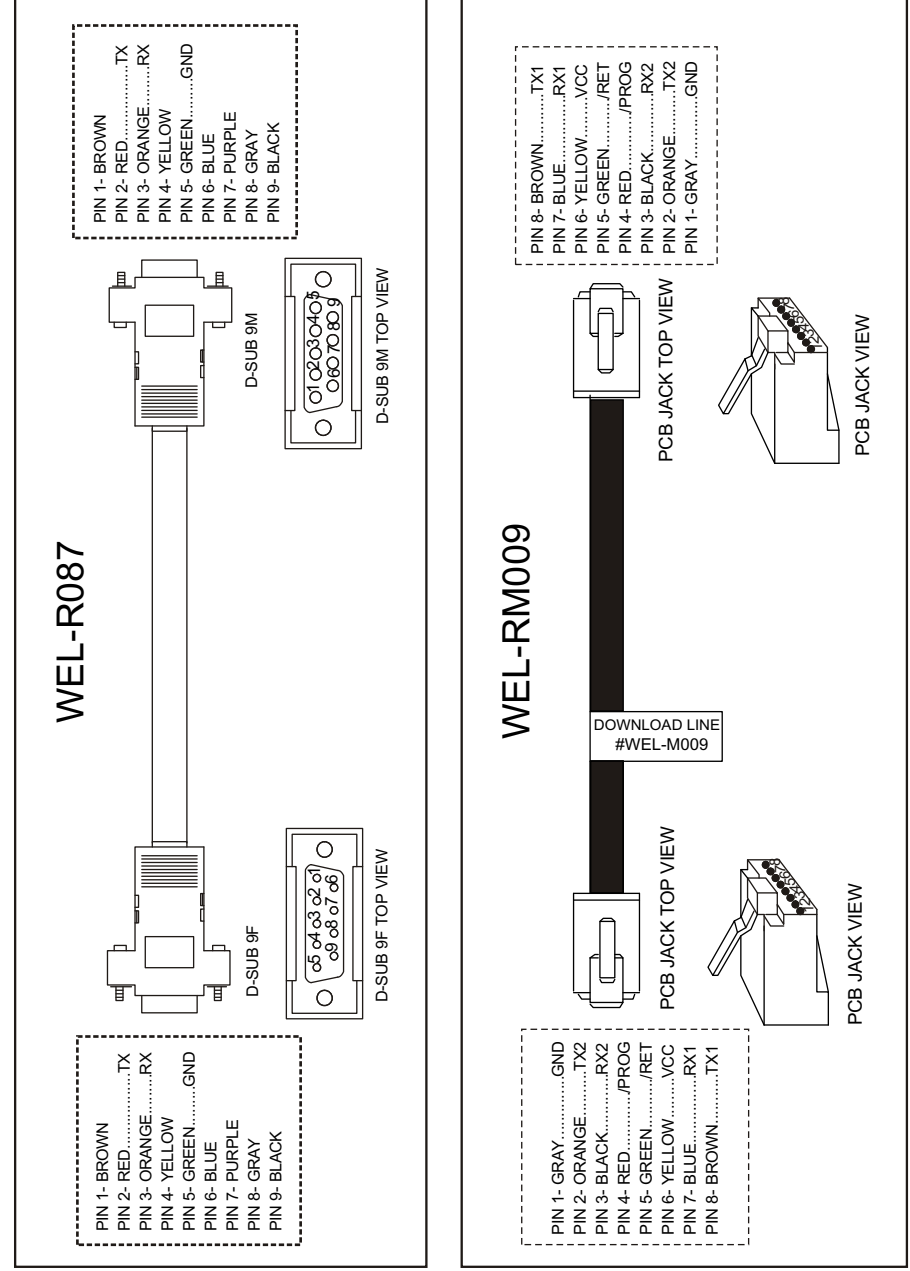
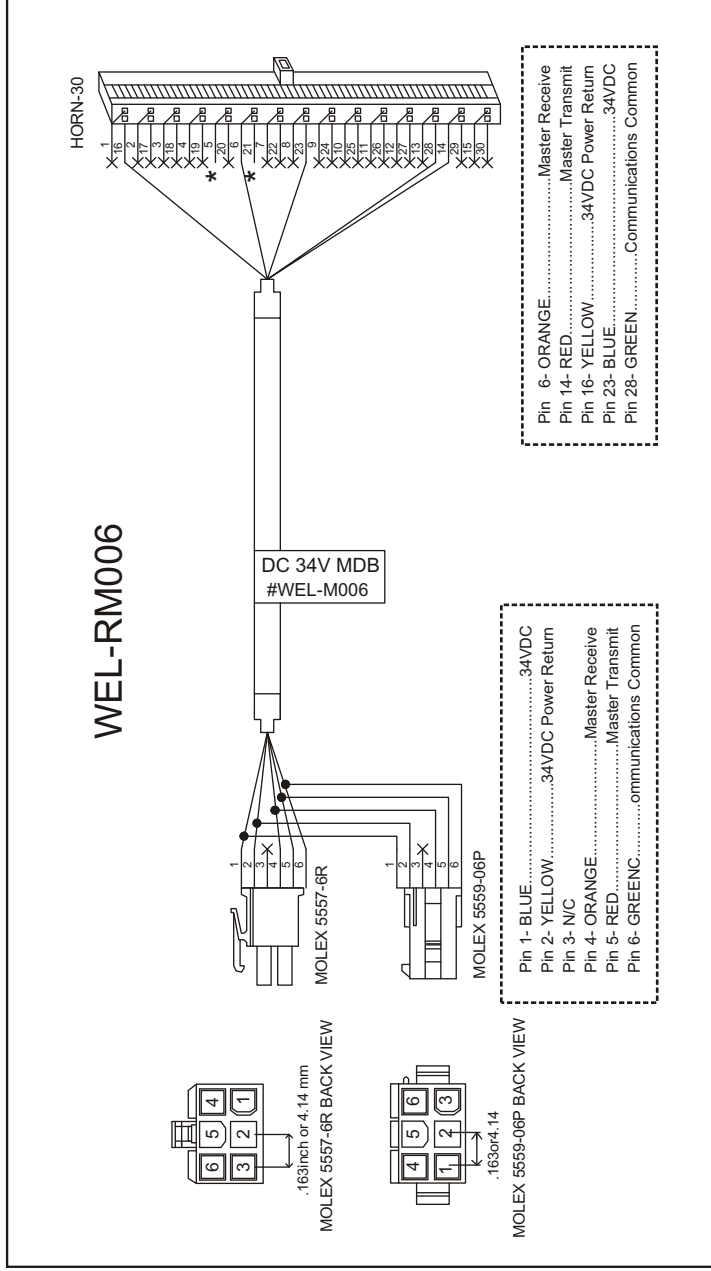






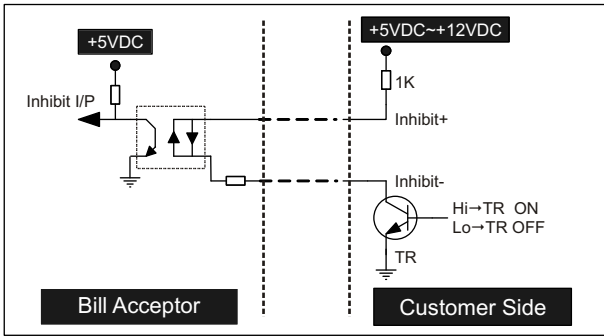
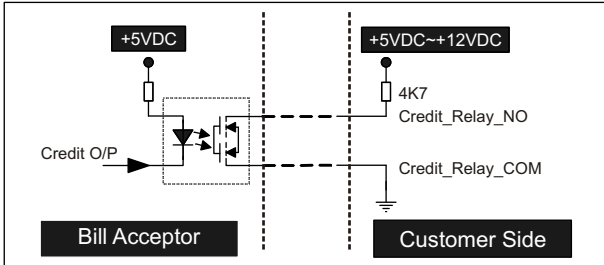




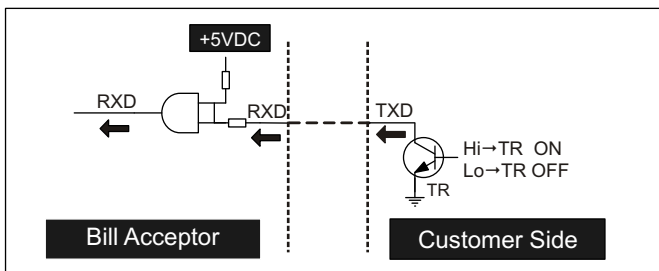
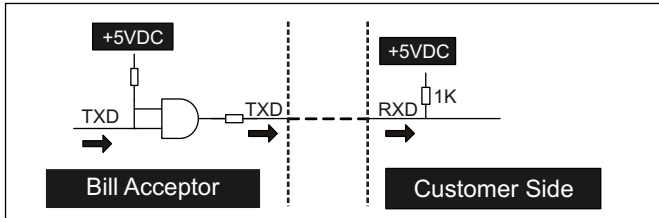


### 5-1-1. I/O Circuit

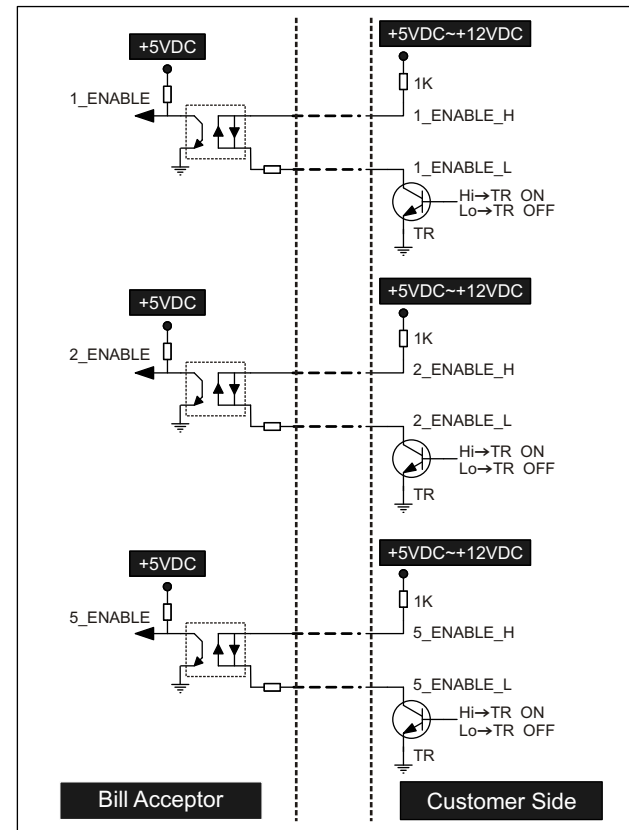
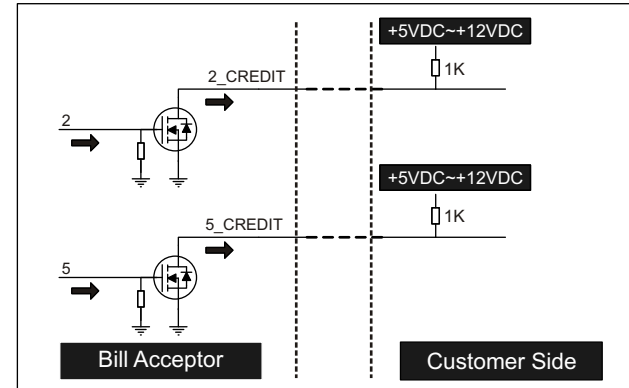
#### Pulse Interface Customer Recommend Circuit.



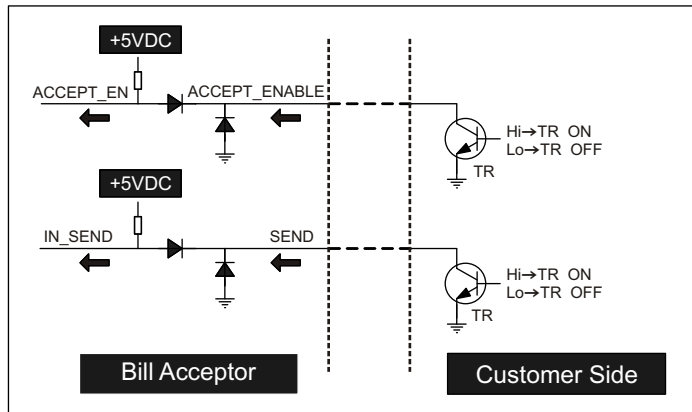
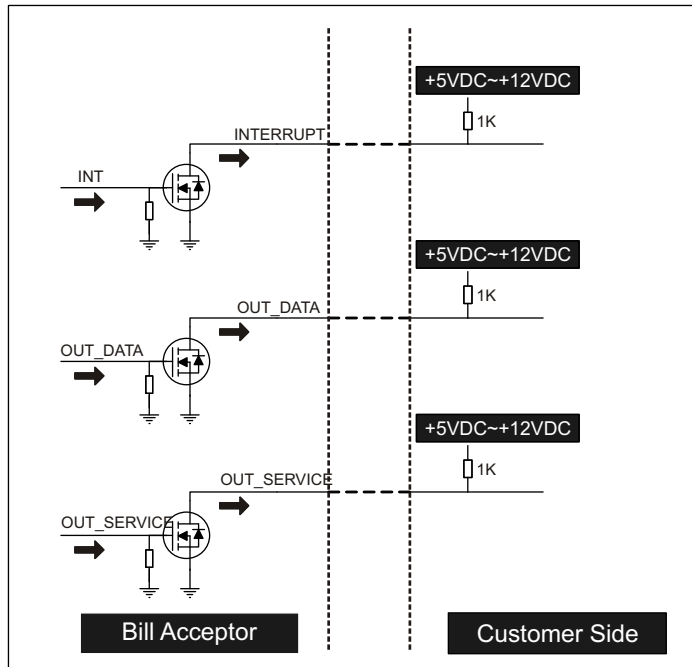
#### ICT Protocol Interface Customer Recommend Circuit.



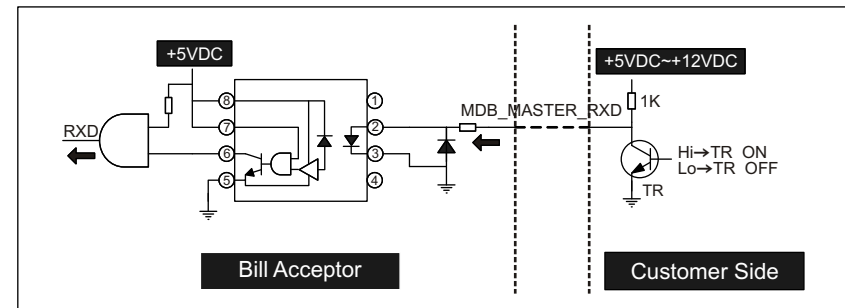
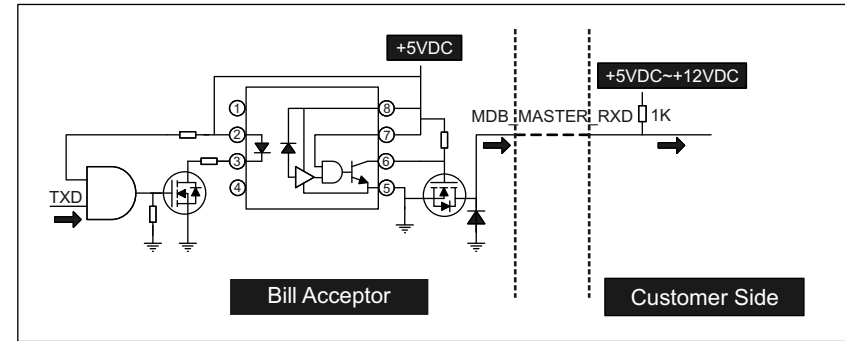
#### 5V Enable Interface Customer Recommend Circuit.



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 PA7/PV7. (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 PA7/PV7 for interface settings. (as figure 2)

Please refer to "PA7/PV7 DIP Switch Setting" Guide in the package for more detail.

figure 1

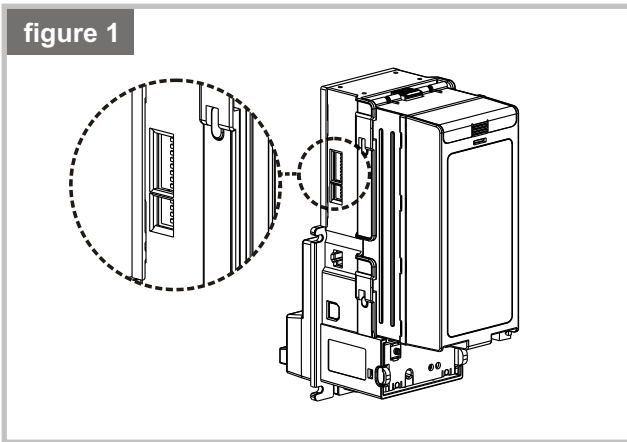
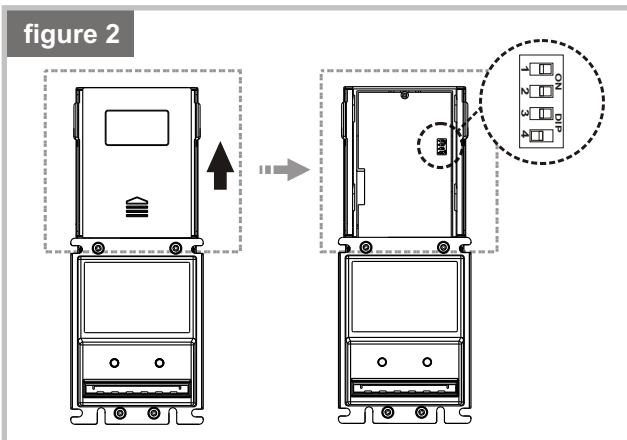
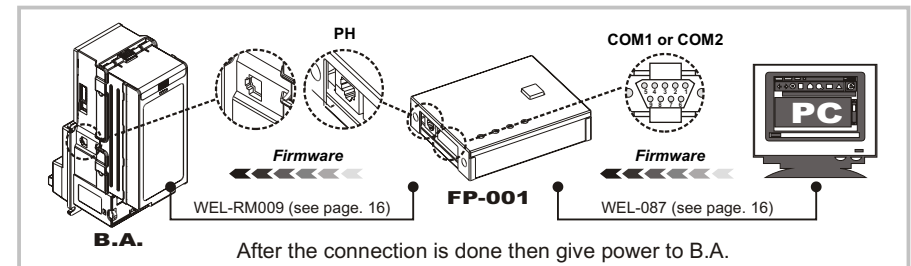


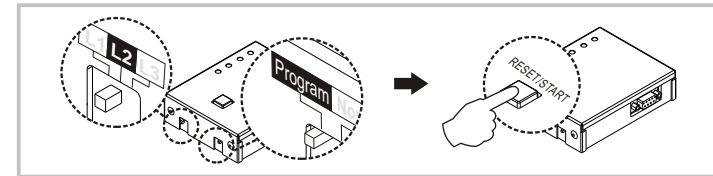
figure 2



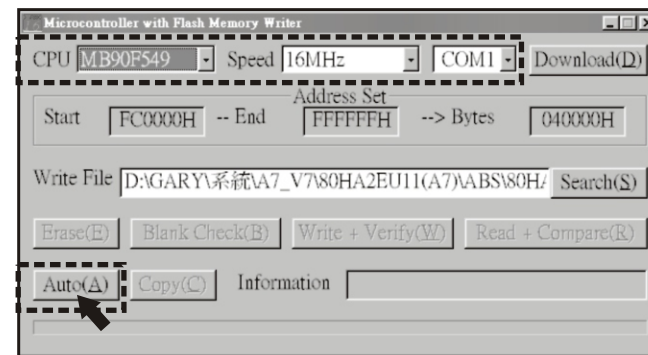
## 5-3. Software Download and Upgrade



1. Connect PC to PA7/ PV7, switch FP-001 to L2 Program mode Power ON, and then press Reset button.



2. Start FW16.EXE, and then choose:  
CPU : MB90F549  
Speed: 16MHz  
COM : COM port which is connected to FP-001.
3. Click Auto (A) to start to download.
4. Shut down software after downloading.



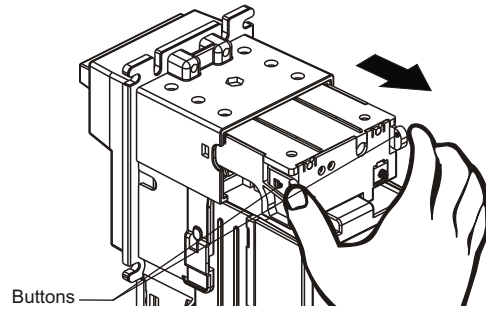
Please contact ICT for technical support if there is any error messages or system frozen.

## 6. Maintenance

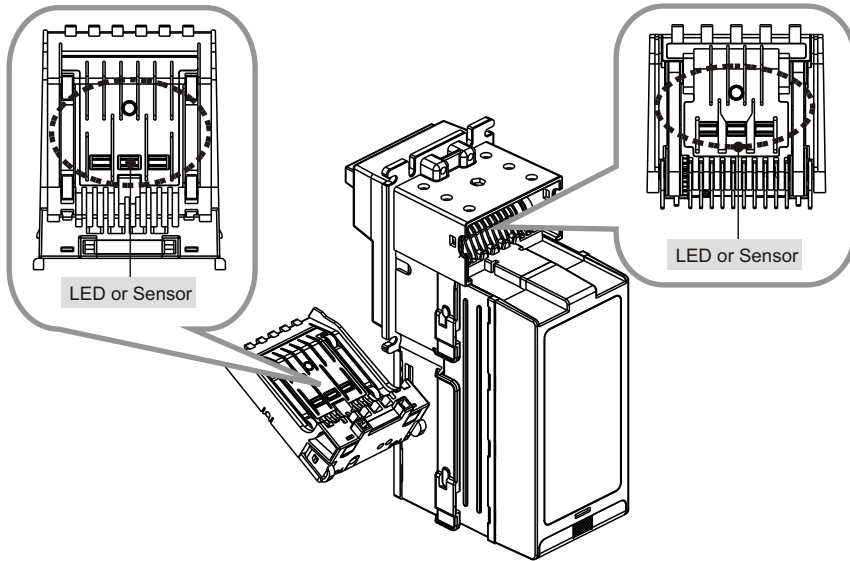
To make sure the bill acceptor always works smoothly, please clean the internal parts every two weeks to every two months.

To clean the internal parts:

1. Press the buttons on the sides of upper base and pull the unit out.

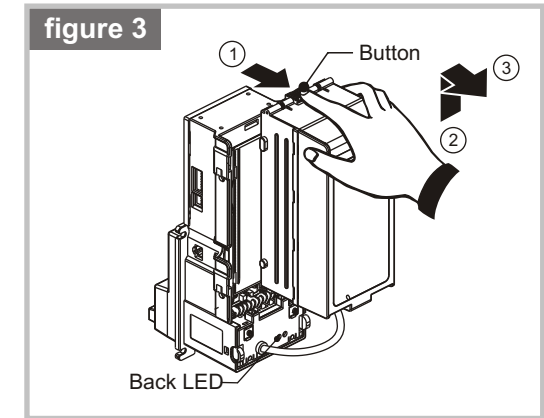
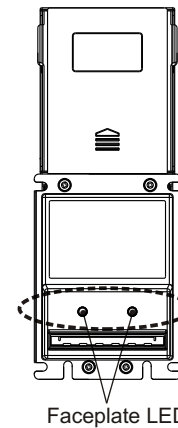


2. Use a soft, dry cloth or towel to clean the bill path and LED/sensor.



Do not use an organic solvent such as gasoline or paint thinner to clean the unit.

## 7. Troubleshooting



LED Flashes	Status	Corrective Actions
1	Bill jammed.	Remove the bill box by sliding the top button (as figure 3) 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 full or error.	Inspect for foreign objects in bill box 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.