Bill Acceptor

A6E / V6E Series

Installation Guide

International Currency Technologies Corp.

Use of Materials Limitations

Contents

1. Introduction

1-1. Overview

A6E/V6E Series is a bill acceptor which features not only high-security module with bill box but also outstanding recognition, acceptance rate up to 96% or even greater.

1-2. Features

- Four way bill insertion acceptance.
- Auto-calibrating.
- Numerous interfaces available.
- Easily Install & Maintain.

2. Specifications

General

Acceptance Rate	96 % or greater
Bill Insertion	Four way acceptable
Transaction Speed	Approx. 3 seconds to stack
Interface	**A6E** STD Pulse, 5V ENABLE, ICT Protocol **V6E** MDB

Electrical

Power Source	**A6E** 12V DC(11.4~12.6V DC) 117V AC(105.3~128.7V AC) **V6E** 24V/34V DC(20V~42.5V DC)

Power Consumption	**A6E** 12V DC	Standby : 0.3A, 4W Operation: 0.9A, 11W Maximum: 2.6A, 32W
	117V AC	Standby : 0.06A, 7W Operation: 0.112A, 14W Maximum: 0.4A, 47W
	V6E 24V/34V DC	Standby : 0.15A, 6W Operation: 0.4A, 14W Maximum: 1.35A, 46W
Operation Environment	Operation Temperature: 0°C~55°C Storage Temperature : -30°C~70°C Humidity: 30%~85% RH(no condensation)	

Mechanical

Bill Width Accepted	60~67 mm
Bill Capacity	Approx. 100 bills(40~ 140) 300 bills(200~ 300) 500 bills(300~ 500) 550 bills(440~ 640) 800 bills(750~ 850) 1000 bills(1000~1140)
Weight	Approx. 2kg(shipping)
Installation	Indoor

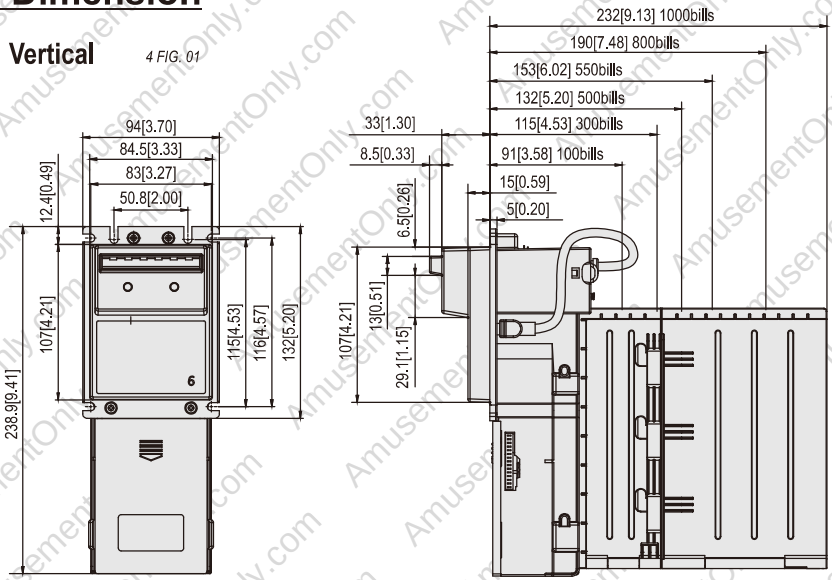
3. Packing List

Main	Bill Acceptor
Accessory	Harnesses: Refer to 5-1 A6E/V6E Installation Guide A6E/V6E Switches Setting Guide

4. Dimension

Vertical

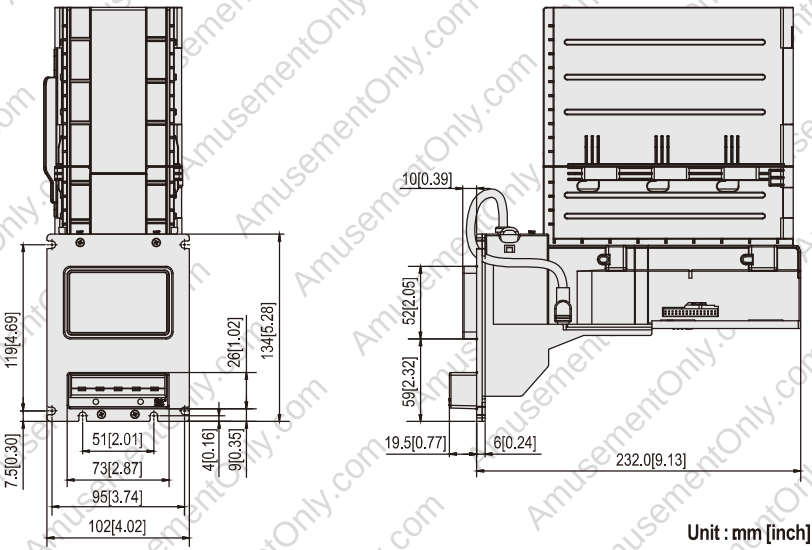
4 FIG. 01



Unit : mm [inch]

Horizontal

4 FIG. 02

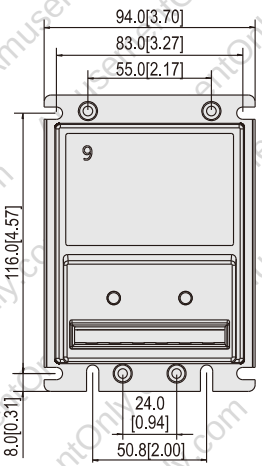


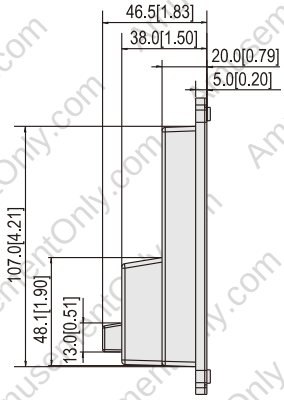
Unit : mm [inch]

4-1. Bezel Styles

Standard bezel

Part Number: 3RMB-FAC01001



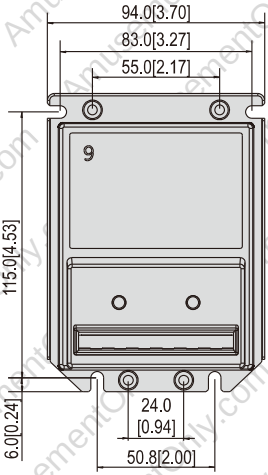


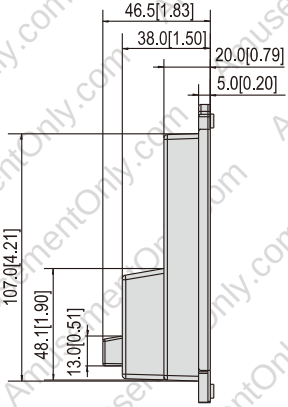
Unit : mm [inch]

4-1 FIG.01

Fitted bezel

Part Number: 3RMB-FAC02000



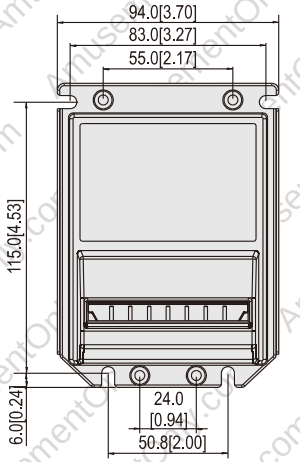


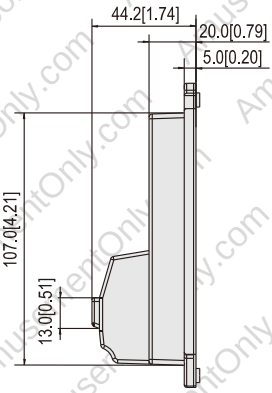
Unit : mm [inch]

4-1 FIG.02

Anti-coin Bezel

Part Number: 3RMB-FAC16002



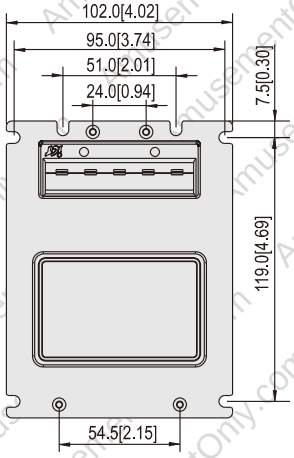


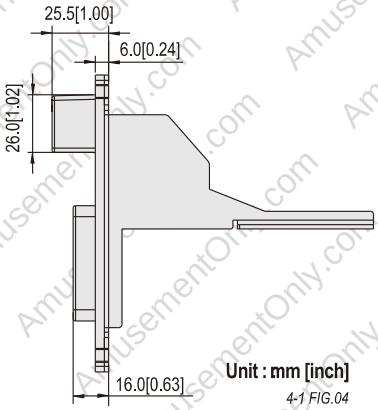
Unit : mm [inch]

4-1 FIG.03

Horizontal Bezel

Part Number: 3RMB-FAC10000



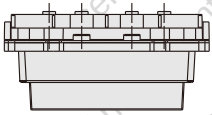


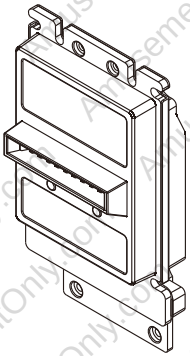
Unit : mm [inch]

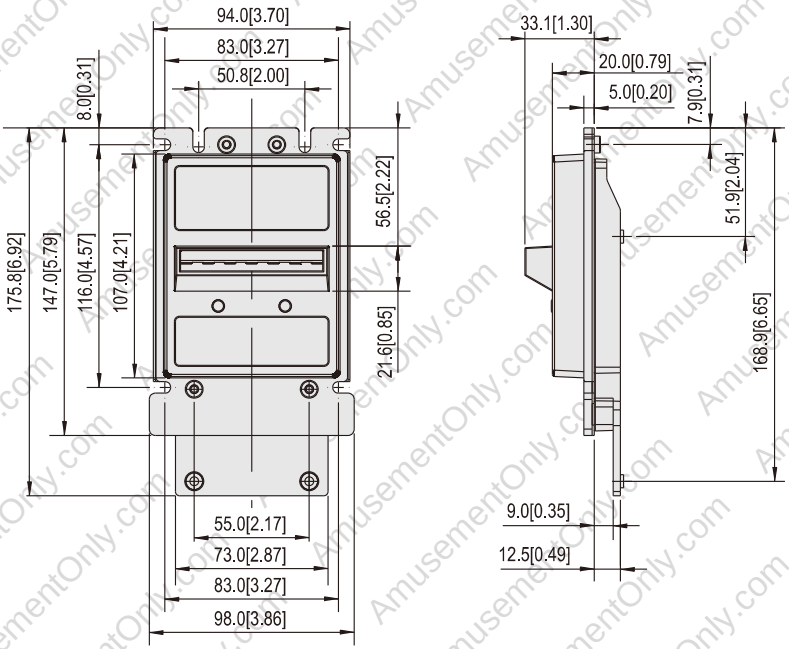
4-1 FIG.04

For VFM bezel

Part Number: 3RMB-FAC23000







Unit : mm [inch]

4-1 FIG.05

5. Installation

5-1. Harness Application

5-1 TABLE 01

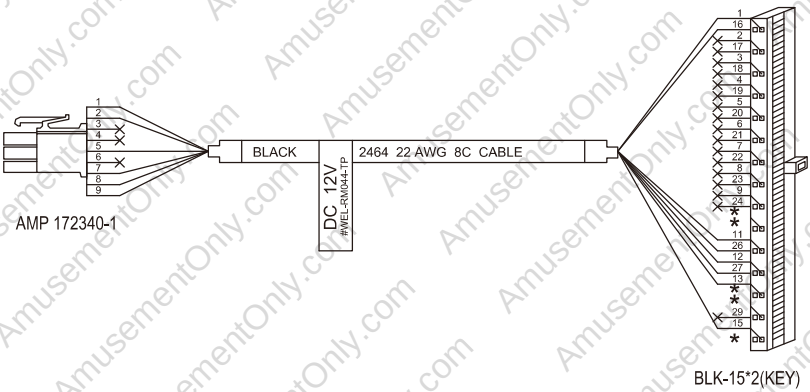
Model	Interface	Used Voltage	Usage	Harness	Page
A6E	STD Pulse	12V DC	Power & *Data Comm.	WEL-RM044	9
			Extension Wire	CU-R961-1	10
		117V AC	Power & *Data Comm.	WEL-RM045	11
			Extension Wire	WEL-RM012	12
	ICT Protocol (RS232)	12V DC	Power	WEL-RM044	9
			Extension Wire	CU-R961-1	10
			*Data Comm.	WEL-RV706-1 or 2-BA-RV706	15
		117V AC	Power	WEL-RM045	11
			Extension Wire	WEL-RM012	12
			*Data Comm.	WEL-RV706-1 or 2-BA-RV706	15
	5V Enable	117V AC	Power & *Data Comm.	WEL-RM047	13
			Extension Wire	WEL-RM018	14
V6E	MDB	24V/34V DC	Power & *Data Comm.	WEL-RM006	16

*Data Comm. : Data Communication.

5-1 FIG.01

Interface	Used Voltage	Usage
STD Pulse	12V DC	Power & *Data Comm.
ICT Protocol (RS232)	12V DC	Power

WEL-RM044



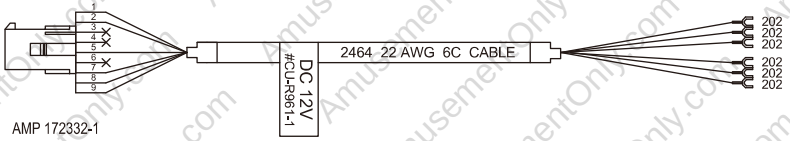
PIN 1- YELLOW.....INHIBIT-
PIN 2- GREEN.....INHIBIT+
PIN 5- RED.....12V DC
PIN 5- BLACK.....ENABLE+
PIN 7- BLUE.....CREDIT_RELAY_N.O.
PIN 8- PURPLE.....CREDIT_RELAY_COM
PIN 9- WHITE.....ENABLE-
PIN 9- BROWN.....GND

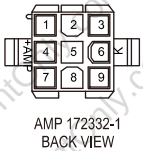
PIN 1- RED.....12VDC
PIN 11- BLUE.....CREDIT_RELAY_N.O.
PIN 12- WHITE.....ENABLE-
PIN 13- YELLOW.....INHIBIT-
PIN 15- GREEN.....INHIBIT+
PIN 16- BROWN.....GND
PIN 26- PURPLE.....CREDIT_RELAY_COM
PIN 27- BLACK.....ENABLE+

5-1 FIG.02

Interface	Used Voltage	Usage
STD Pulse	12V DC	Extension Wire for WEL-RM044
ICT Protocol (RS232)	12V DC	Extension Wire for WEL-RM044

CU-R961-1





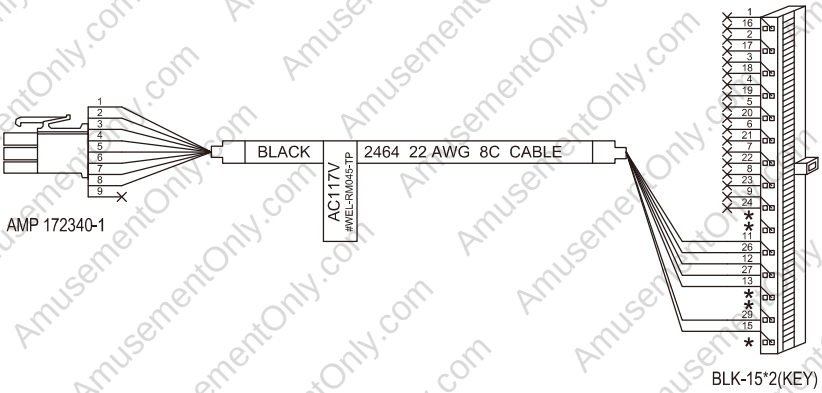
AMP 172332-1
BACK VIEW

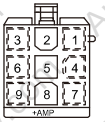
PIN 1- YELLOW.....INHIBIT+
PIN 2- GREEN.....INHIBIT-
PIN 5- RED.....+12VDC(POWER-IN)
PIN 7- BLUE.....CREOIT-RELAY-NO
PIN 8- PURPLE.....CREDIT-RELAY-COM
PIN 9- ORANGE.....GND(POWER-IN)

5-1 FIG.03

Interface	Used Voltage	Usage
STD Pulse	117V AC	Power & *Data Comm.
ICT Protocol (RS232)	117V AC	Power

WEL-RM045





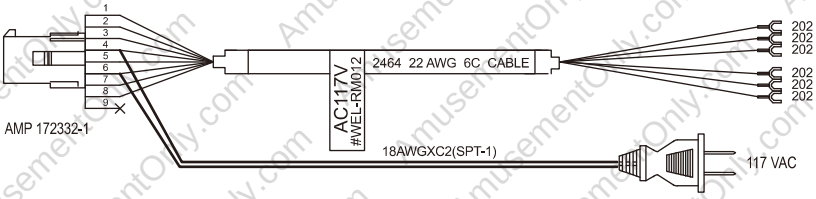
PIN 1- YELLOW.....NEUTRAL_INHIBIT
PIN 2- RED.....NEUTRAL_ENABLE
PIN 3- BROWN.....HOT_ENABLE
PIN 4- BLACK.....115VAC_HOT
PIN 5- GREEN.....RESERVE
PIN 6- WHITE.....115VAC_NEUTRAL
PIN 7- BLUE.....CREDIT_RELAY_N.O.
PIN 8- PURPLE.....CREDIT_RELAY_COM

PIN 11- BLUE.....CREDIT_RELAY_N.O.
PIN 12- RED.....NEUTRAL_ENABLE
PIN 13- YELLOW.....NEUTRAL_INHIBIT
PIN 15- BLACK.....115VAC_HOT
PIN 26- PURPLE.....CREDIT_RELAY_COM
PIN 27- BROWN.....HOT_ENABLE
PIN 29- WHITE.....115VAC_NEUTRAL

5-1 FIG.04

Interface	Used Voltage	Usage
STD Pulse	117V AC	Extension Wire for WEL-RM045
ICT Protocol (RS232)	117V AC	Extension Wire for WEL-RM045

WEL-RM012



AMP 172332-1 BACK VIEW

PIN 1- YELLOW.....NEUTRAL INHIBIT
PIN 2- RED.....NEUTRAL ENABLE
PIN 3- ORANGE.....HOT ENABLE
PIN 4- BLACK.....17VAC HOT (Power)
PIN 5- GREEN.....Earth - Ground
PIN 6- BLACK.....117VAC NEUTRAL (Power)
PIN 7- BLUE.....CREDIT_RELAY (N.O.)
PIN 8- PURPLE..CREDIT_RELAY (Common)
PIN 9- RESERVED

202

YELLOW.....NEUARAL INHIBIT
RED.....NEUTRAL ENABLE
ORANGE.....HOT ENABLE
GREEN.....Earth - Ground
BLUE.....CREDIT_RELAY (N.O.)
PURPLE.....CREDIT_RELAY (Common)

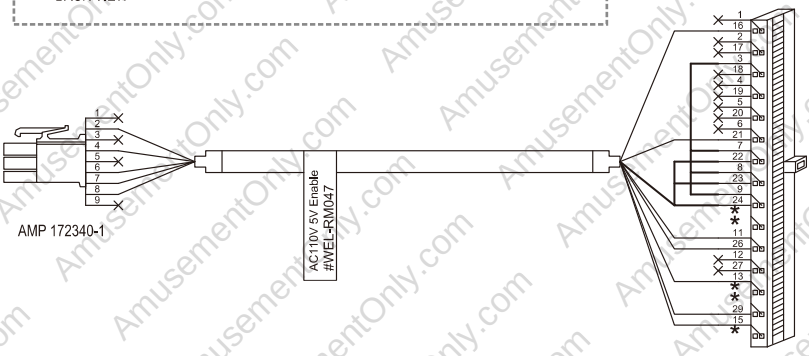
5-1 FIG.05

Interface	Used Voltage	Usage
5V Enable	117V AC	Power & *Data Comm.

WEL-RM047

AMP 172340-1
BACK VIEW

PIN 2- RED.....5V_ENABLE_L
PIN 4- BLACK.....115VAC_HOT
PIN 6- WHITE & YELLOW
.....115VAC_NEUTRAL & NEUTRAL_INHIBIT
PIN 7- BLUE.....CREDIT_RELAY_NO
PIN 8- PURPLE & BROWN
.....CREDIT_RELAY_COM & GND

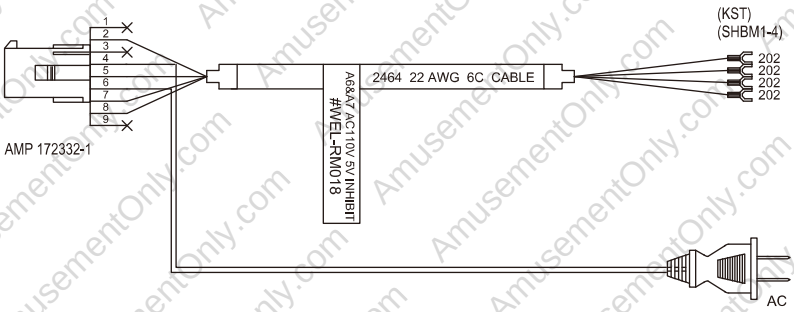


PIN 26- PURPLE.....CREDIT_RELAY_COM
PIN 29- WHITE.....115VAC_NEUTRAL
PIN 13- YELLOW.....NEUTRAL_INHIBIT
PIN 16- BROWN.....GND
PIN 11- BLUE.....CREDIT_RELAY_NO
PIN 15- BLACK.....115VAC_HOT
PIN 22.& 23. & 24.- RED.....5V_ENABLE_L
PIN 3. & 7. & 8. & 9- BLACK.....ENABLE_H

5-1 FIG.06

Interface	Used Voltage	Usage
5V Enable	117V AC	Extension Wire for WEL-RM047

WEL-RM018



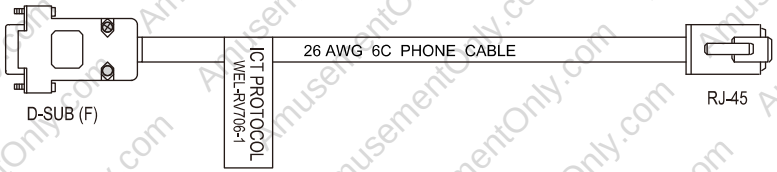
AMP 172332-1
BACK VIEW

PIN 2- RED.....I-ENABLE-L
PIN 4- BLACK.....115VAC-HOT(POWER-IN)
PIN 5- GREEN.....EARTH-GROUND
PIN 6- BLACK.....115VAC-NEUTRAL(POWER-IN)
PIN 7- BLUE.....CREDIT-RELAY-NO
PIN 8- PURPLE.....CREDIT-RELAY-COM

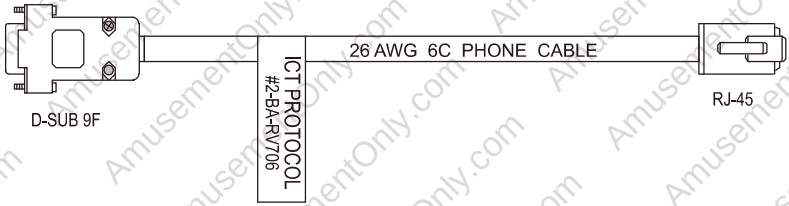
5-1 FIG.07

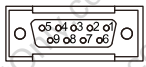
Interface	Used Voltage	Usage
ICT Protocol (RS232)	12V DC	*Data Comm.
	117V AC	*Data Comm.

WEL-RV706-1



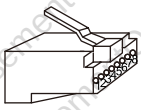
2-BA-RV706





D-SUB 9F TOP VIEW

PIN 1- RESERVED
PIN 2- RXD
PIN 3- TXD
PIN 4- RESERVED
PIN 5- GND
PIN 6- RESERVED
PIN 7- RESERVED
PIN 8- RESERVED
PIN 9- RESERVED



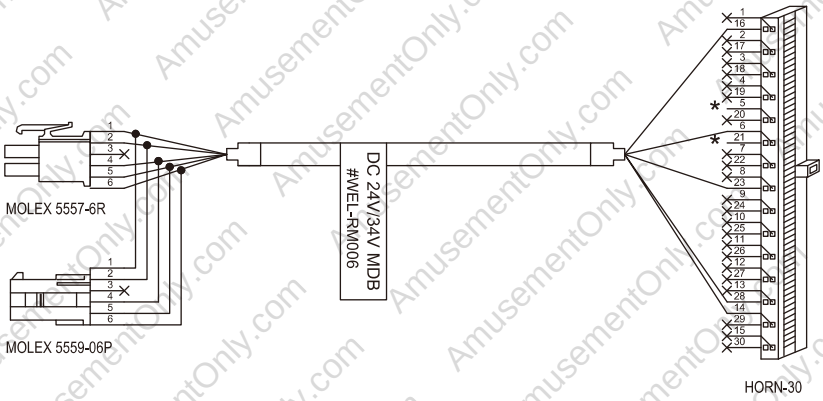
RJ-45 VIEW

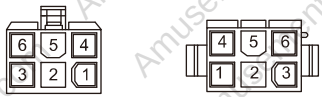
PIN 1- BLUE.....GND
PIN 2- YELLOW.....TX22
PIN 3- GREEN.....RX22
PIN 4- X.....RESERVED
PIN 5- X.....RESERVED
PIN 6- RED.....VCC
PIN 7- BLACK.....RX11
PIN 8- WHITE.....TX11

5-1 FIG.08

Interface	Used Voltage	Usage
MDB	24V/34V DC	Power & *Data Comm.

WEL-RM006





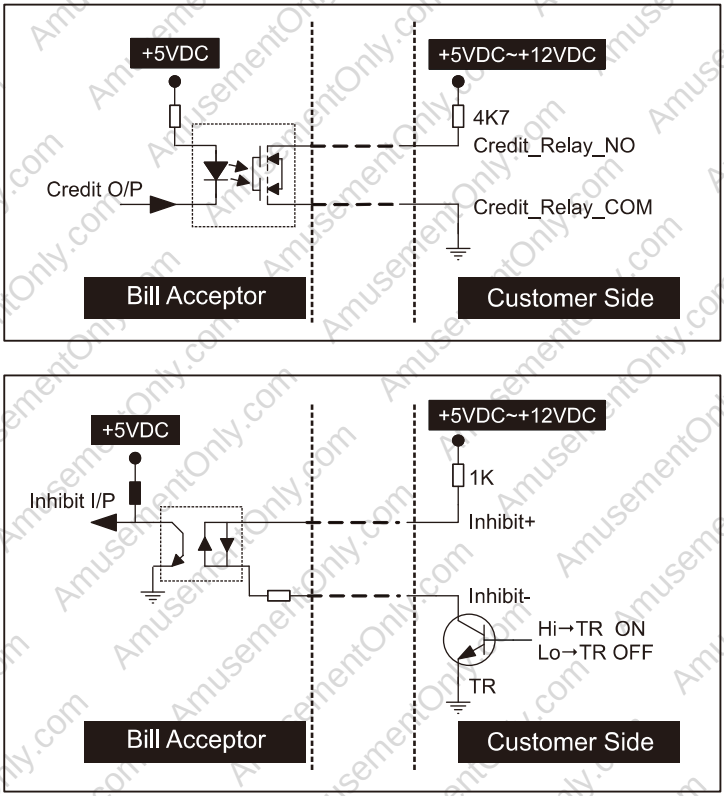
PIN 1- BLUE.....24V/34VDC
PIN 2- YELLOW.....POWER RETURN
PIN 3- N/C
PIN 4- ORANGE.....MDB_MASTER_RXD
PIN 5- RED.....MDB_MASTER_TXD
PIN 6- GREEN.....MDB GROUND

PIN 6- ORANGE.....MDB_MASTER_RXD
PIN 14- RED.....MDB_MASTER_TXD
PIN 16- YELLOW.....POWER RETURN
PIN 23- BLUE.....24V/34VDC
PIN 28- GREEN.....MDB GROUND

5-1-1. I/O Circuit

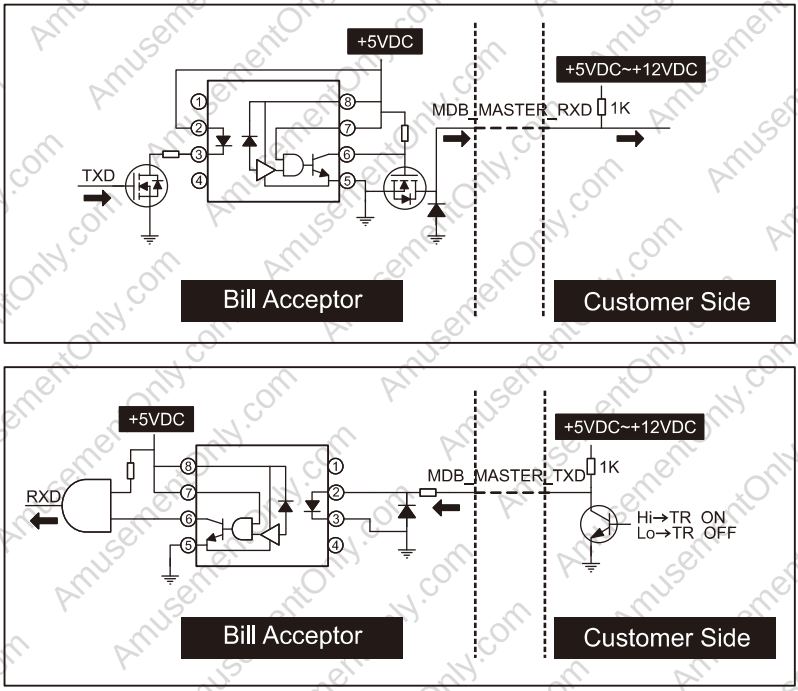
Pulse Interface.

5-1-1 FIG. 01



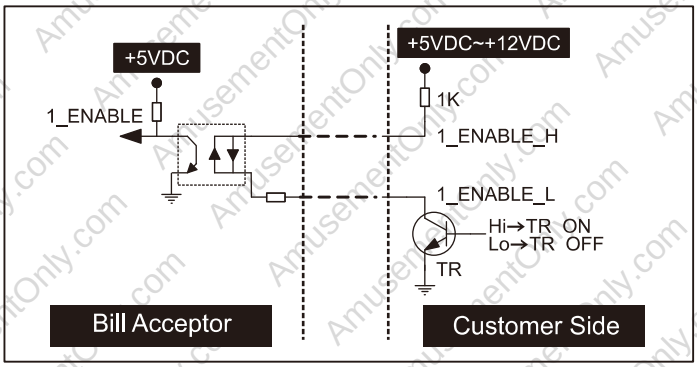
MDB Interface.

5-1-1 FIG. 02



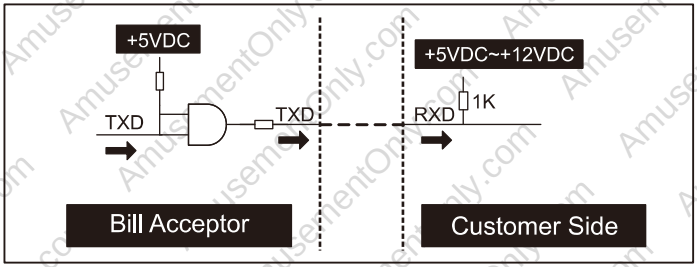
5V Enable Interface.

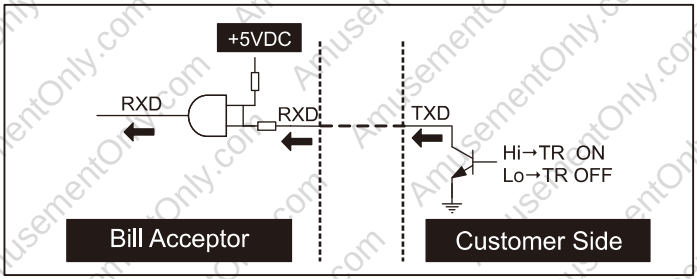
5-1-1 FIG. 03



ICT-Protocol Interface.

5-1-1 FIG. 04

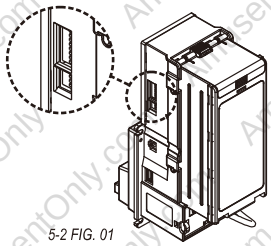




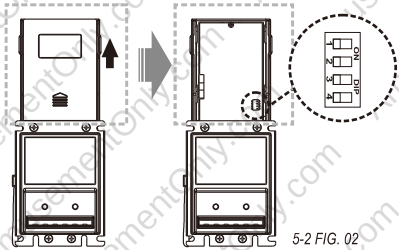
5-2. DIP Switch Setting

There are two serial DIP switches which are set on the side of A6E/V6E series(as 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 FIG.02).

Please refer to "A6E/V6E series DIP Switch Setting Guide" in the package for more details.



5-2 FIG. 01

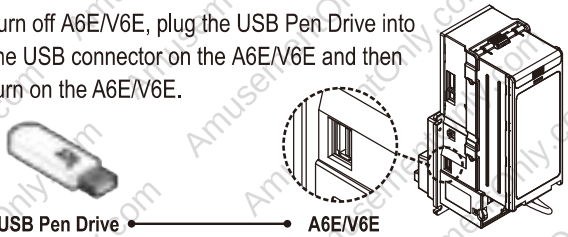


5-2 FIG. 02

5-3. Firmware Download and Upgrade

Step 1. Put the "A6E/V6Exxx.bin" file into your USB Pen Drive.

Step 2. Turn off A6E/V6E, plug the USB Pen Drive into the USB connector on the A6E/V6E and then turn on the A6E/V6E.

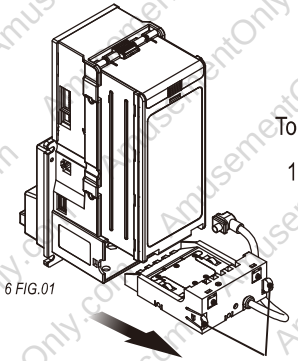


Step 3. The LED in the front side of bezel will flash twice, then remove the USB Pen Drive from A6E/V6E.

Step 4. Wait for about 30sec., Then A6E/V6E will automatically reset and standby for normal operation.

6. Maintenance

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

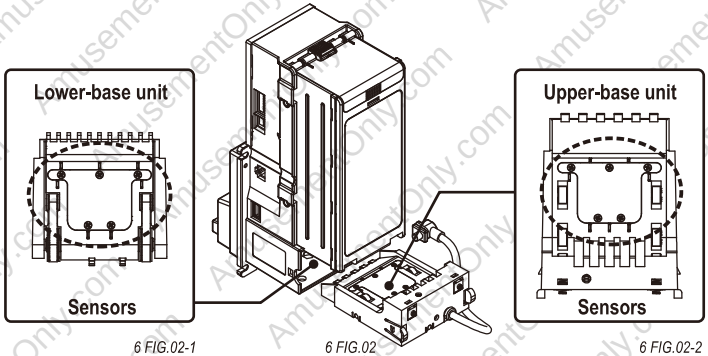


6 FIG.01

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.



6 FIG.02-1 6 FIG.02 6 FIG.02-2

Maintenance Notice

(Any improper maintenance will invalidate the warranty.)

Recommended	Mild, non-abrasive, soap water.
DO NOT USE	Organic solvent , Alcohol, Volatile liquid.

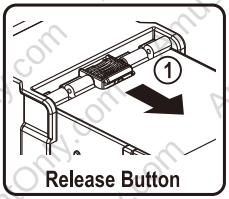
7. Troubleshooting

7 TABLE 01

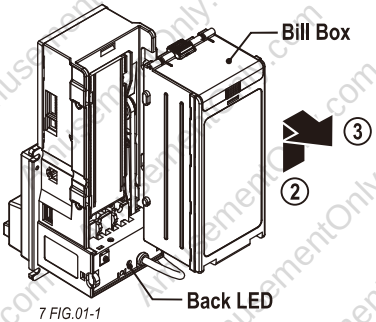
LED	Status	Corrective Actions
Green	White Card Calibration.	Please calibrate with ICT white calibration card.

7 TABLE 02

LED Flashes (Green)	Status	Corrective Actions
1	Bill jammed.	Remove the bill box by sliding the top button and the bill path unit (*as 7 FIG.01*), and then remove the jammed bill.
2	Disable	Inspect for right DIP switch setting.
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.
4	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 for foreign objects on bill path and clean.



7 FIG.01



7 FIG.01-1

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

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