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XBA Bill Acceptor
Quick Start Guide

International Currency Technologies

Before Starting

Dear Valued Customer, thank you for purchasing the XBA Bill Acceptor. The XBA comes equipped with innovative wide-angle banknote insertion technology to offer superior acceptance rate of 98% or higher. With outstanding design, the XBA has the ability to provide a very high degree of resistance to strong ambient light as well as advanced optical and mechanical anti-fishing structure for better investment protection. The built-in USB port allows for convenient firmware upgrades via an USB flash drive.

Before installation, please check that the package contents of the XBA bill acceptor are as listed below:

♦ XBA Bill Acceptor

♦ WEL-RS7P02 Power and Data Communication cable

♦ Bill insertion bezel sticker

♦ DIP switch setting guide

♦ Quick Start Guide

Should you have further questions,
XBA Bill Acceptor Installation & Service Manual can be downloaded at:
www.ictgroup.com.tw

Select "Support" from menu, then click "Manual Download".

Start Installation

STEP 1: Confirm the bezel type

There are two types of bezels based on the vending machine requirements. Be sure to choose the bezel you need before ordering/ installation as each bill acceptor comes with only ONE bezel.

T-Bezel   Standard Bezel

Figure.1   *Figure.2*
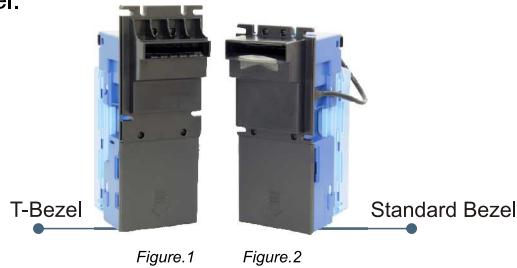
STEP 2: Select interface

DIP Switch

Figure.3
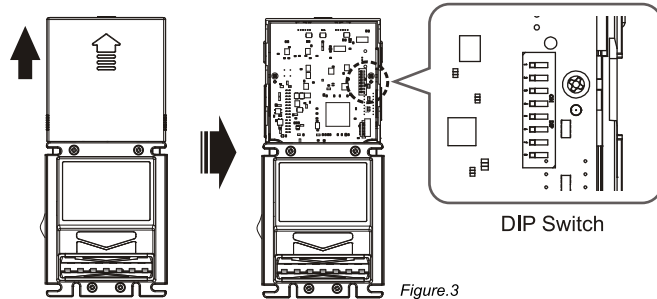
Interface	SW6	SW7	SW8
Pulse	ON		
MDB	OFF	OFF	OFF
RS-232(ICT-002 Protocol)	OFF	OFF	ON
RS-232(ICT-104V Protocol)	OFF	ON	ON

Table.1

Note: Please select RS-232 interface(ICT-104V) if you choose to connect the XBA through an ICT coin changer.

STEP 3: Prepare the connection cable

We provide the cables for MDB, RS-232(ICT Protocol) and PULSE interfaces. Each bill acceptor comes with ONE cable only. Please select the one you need to connect.
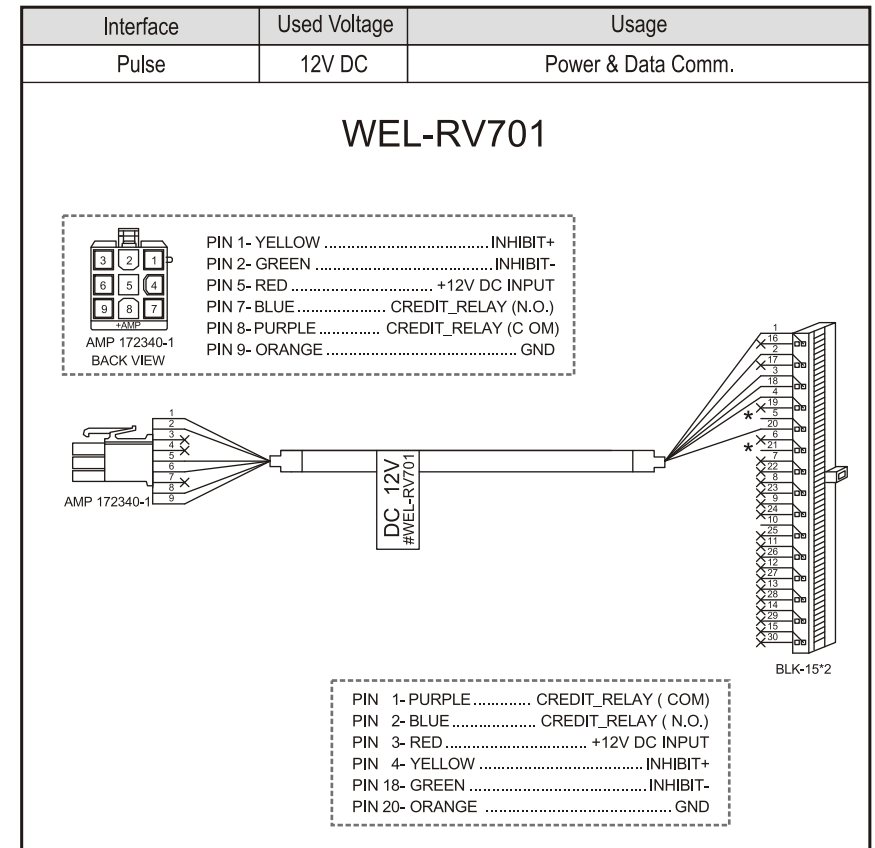
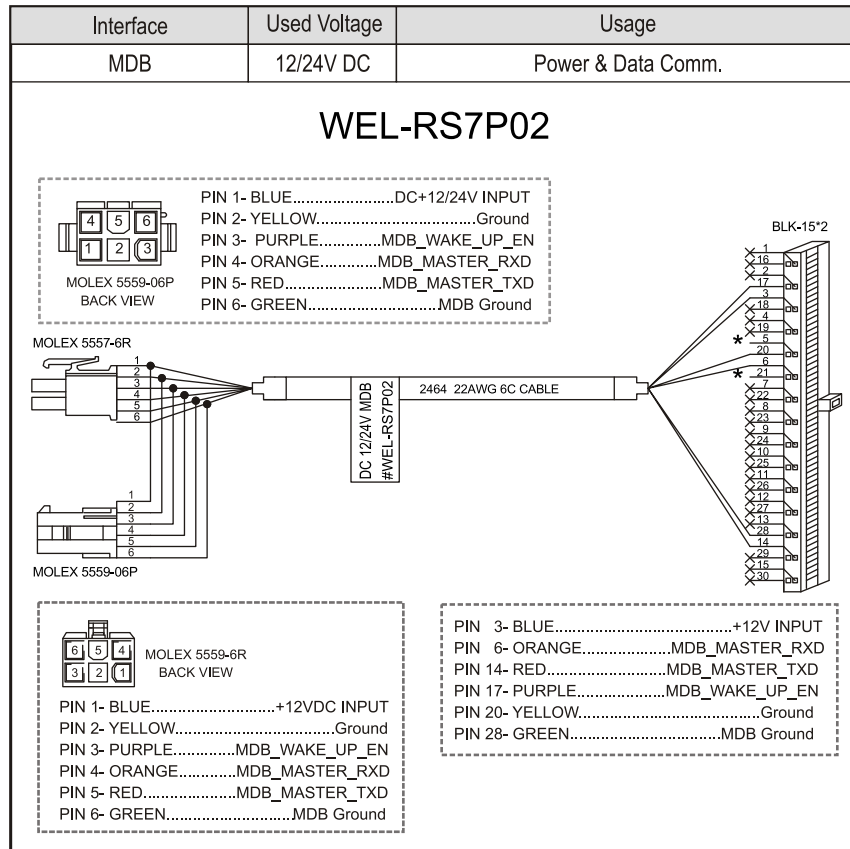| Interface	Used Voltage	Usage
Pulse	12V DC	Power & Data Comm.

WEL-RV701

AMP 172340-1
BACK VIEW

PIN 1- YELLOW ....INHIBIT+
PIN 2- GREEN ....INHIBIT-
PIN 5- RED .... +12V DC INPUT
PIN 7- BLUE .... CREDIT_RELAY (N.O.)
PIN 8- PURPLE .... CREDIT_RELAY (C OM)
PIN 9- ORANGE .... GND

AMP 172340-1

DC 12V #WEL-RV701

BLK-15*2

PIN 1- PURPLE .... CREDIT_RELAY (COM)
PIN 2- BLUE .... CREDIT_RELAY (N.O.)
PIN 3- RED .... +12V DC INPUT
PIN 4- YELLOW ....INHIBIT+
PIN 18- GREEN ....INHIBIT-
PIN 20- ORANGE .... GND

Figure.4

Interface	Used Voltage	Usage
MDB	12/24V DC	Power & Data Comm.

WEL-RS7P02

PIN 1- BLUE.........................DC+12/24V INPUT
PIN 2- YELLOW......................................Ground
PIN 3- PURPLE..............MDB_WAKE_UP_EN
PIN 4- ORANGE.............MDB_MASTER_RXD
PIN 5- RED......................MDB_MASTER_TXD
PIN 6- GREEN..............................MDB Ground

MOLEX 5559-06P
BACK VIEW

MOLEX 5557-6R

BLK-15*2

DC 12/24V MDB
#WEL-RS7P02

2464 22AWG 6C CABLE

MOLEX 5559-06P

MOLEX 5559-6R
BACK VIEW

PIN 1- BLUE............................+12VDC INPUT
PIN 2- YELLOW....................................Ground
PIN 3- PURPLE..............MDB_WAKE_UP_EN
PIN 4- ORANGE.............MDB_MASTER_RXD
PIN 5- RED....................MDB_MASTER_TXD
PIN 6- GREEN.............................MDB Ground

PIN 3- BLUE..+12V INPUT
PIN 6- ORANGE...................MDB_MASTER_RXD
PIN 14- RED...........................MDB_MASTER_TXD
PIN 17- PURPLE...................MDB_WAKE_UP_EN
PIN 20- YELLOW.......................................Ground
PIN 28- GREEN................................MDB Ground

Figure.5

Interface	Used Voltage	Usage
RS232 for ICT Protocol	12/24V DC	Power & Data Comm.

WEL-RXBA18

AMP 172340-1
BACK VIEW

PIN 1- YELLOW................................INHIBIT+
PIN 2- GREEN...................................INHIBIT-
PIN 5- RED............................+12V DC INPUT
PIN 8- PURPLE..........CREDIT_RELAY(COM)
PIN 7- BLUE...............CREDIT_RELAY (N.O.)
PIN 9- ORANGE.....................................GND

PIN 1- PURPLE............CREDIT_RELAY(COM)
PIN 2- BLUE..................CREDIT_RELAY(N.O.)
PIN 3- RED..............................+12V DC INPUT
PIN 4- YELLOW.................................INHIBIT+
PIN 18- GREEN....................................INHIBIT-
PIN 20- ORANGE.......................................GND

AMP 172340-1

DC 12/24V
#WEL-RXBA18

BLK-15*2

ICT PROTOCOL
#WEL-RXBA18

D-SUB(F)

D-SUB 9F TOP VIEW

PIN 2- RXD
PIN 3- TXD
PIN 5- GND

PIN 10- YELLOW.......................GND
PIN 25- RED.............................VCC
PIN 26- WHITE.........................TX11
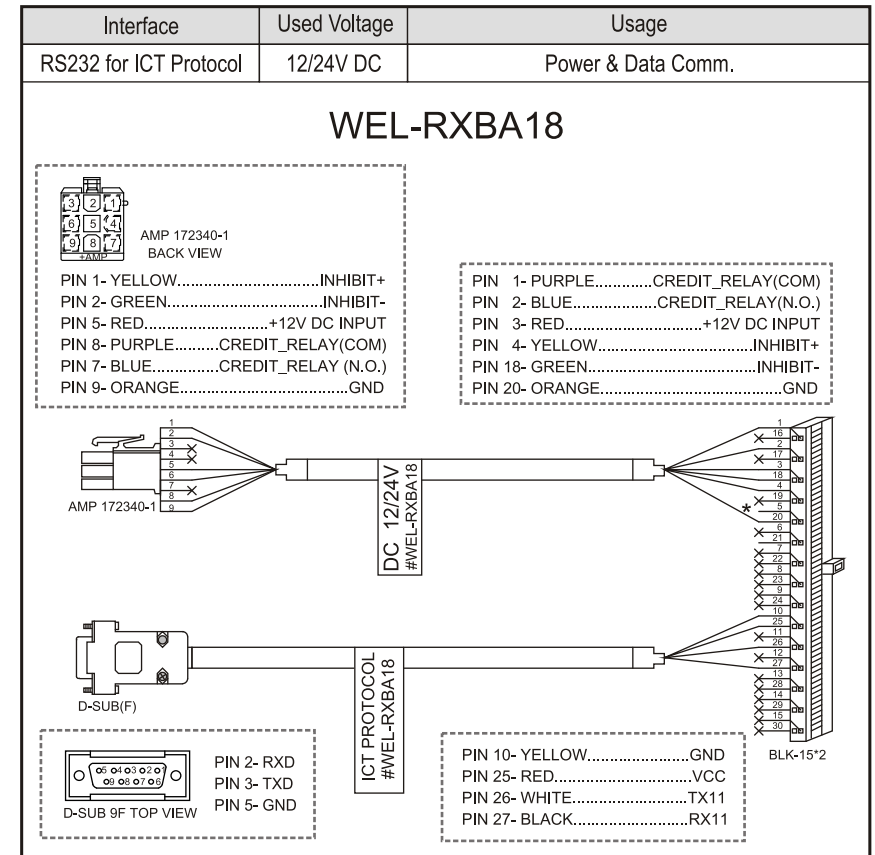PIN 27- BLACK.........................RX11

Figure.6

Note: Please select MDB: WEL-RS7P02 cable if you choose to connect the XBA through an ICT coin changer.

STEP 4: Configure the power-saving function

If your control board provides a sleep and wake-up feature (for example a battery-powered vending machine), then it can function with our power-saving mode to minimize power consumption while the machine is idle. This function allows your battery-powered machine to operate longer between chargings.

Note: 1. The wake-up function is triggered through PIN3 of the WEL-RS7P02 cable.
2. Please do NOT select this mode if your VMC does not support sleep/wake-up feature. It may cause abnormal operation that affects the transaction.

Mode	SW3	SW4
No power-saving mode	OFF	OFF

Table.2

Mode 1	SW3	SW4
XBA wakes up by bill insertion and then wakes up VMC	OFF	ON

Table.3

Mode 2	SW3	SW4
XBA wakes up by VMC	ON	OFF

Table.4

Mode 1 + 2	SW3	SW4
XBA wakes up by bill insertion or VMC	ON	ON

Table.5

STEP 5: Power off the vending machine
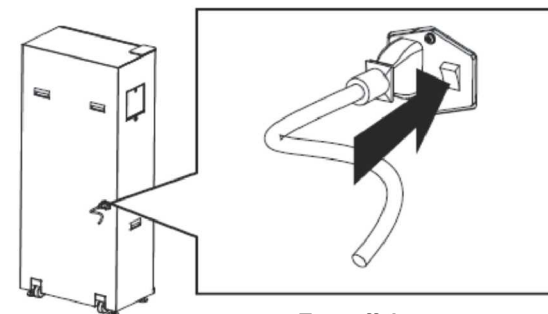
Figure.7

Turn off the power

STEP 6: Open the door and install the XBA on the vending machine

<T-Bezel>

Step 6-1.
Install the mounting frame on the vending machine and ensure it is secured.
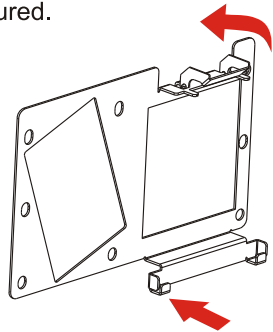
Figure.8

Step 6-2.
Hook up the cable with the XBA through the 30-pin connector.
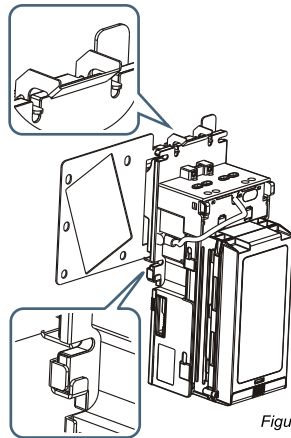

Figure.9

Step 6-3.
Buckle the XBA to the mounting frame.

Figure.10

Step 6-4.
Connect the other end of the cable to VMC to complete the installation.

Figure.11

Note:
Please hook up the MOLEX 5557-6R connector of WEL-RS7P02 with the ICT coin changer cable if you choose to connect the XBA through it.

<Standard Bezel>

Step 6-1.
Install the mounting frame on the vending machine and ensure it is secured.
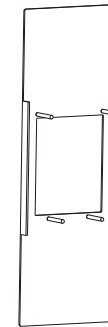
Figure.12

Step 6-2.
Hook up the cable to the XBA through the 30-pin connector.

Figure.13

Step 6-3.
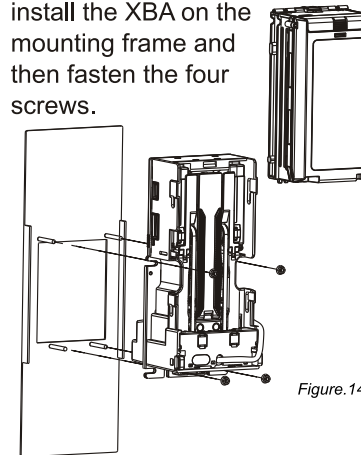Remove the cashbox, install the XBA on the mounting frame and then fasten the four screws.

Figure.14

Step 6-4.
Install the cashbox and connect the other end of the cable to VMC to complete the installation.

Figure.15

Note:
Please hook up the MOLEX 5557-6R connector of WEL-RS7P02 with the ICT coin changer cable if you choose to connect the XBA through it.
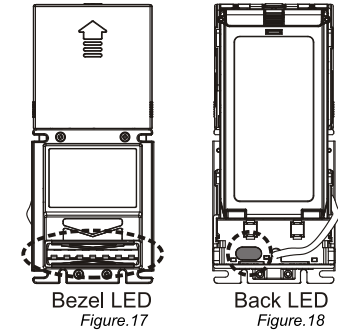
STEP 7: Power on the vending machine
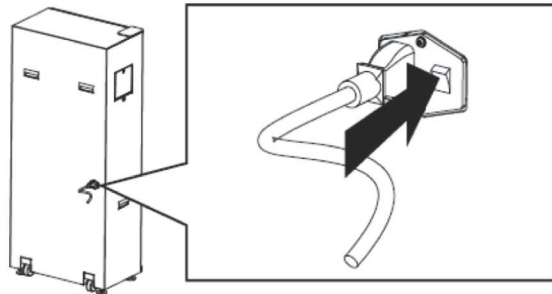
Figure.16

Close the door and power on

STEP 8: Check the bezel LED :

Green means the bill acceptor is functioning normally; if not please check the rear LED and refer to the chart below.

Bezel LED *Figure.17* Back LED *Figure.18*

LED Flashes	Status	Corrective Actions
1	Bill jammed.	Remove the bill box by sliding the top button and the bill path, 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.
3+4 (Optional)	Out sensor error.	Inspect for foreign objects on sensor or bill path and clean.
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.

Table.6

STEP 9: Transaction testing

Insert bills of each accepted denomination, check if they are accepted and stored into the cashbox. If any problem occurs, please refer to the troubleshooting section in the service manual or contact local ICT distributor.

Note: Please refer to the provided DIP switch setting guide to configure more options if necessary.