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Bill Acceptor

LV77 Series

Installation Guide

International Currency Technologies Corp.

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1. Introduction

1-1. Overview

LV77 Series includes LV77-L and LV77-S, which are designed by ICT as different sizes of bezel to fit users' needs.

Note: L-large bezel, S-Small bezel.

1-2. Features

- ♦ Colorful LED light.
- ♦ Series identify sensors.
- ♦ Sharing main unit.
- ♦ Non-skid stacker.
- ♦ Numerous interfaces available.
- ♦ Bills from 67mm, up to 77mm wide accepted.
- ♦ Anti-Stringing.

2. Specifications

General

Acceptance Rate 96% or greater

Note: The incomplete bills such as extremely dirty, wet, broken or wrinkled ones are excluded.

Bill Insertion Four-way acceptable

Transaction Speed Approx. 1.5 seconds to stack

Note: The acceptance speed might be a little bit slower under 0°C degree without any effect upon Bill Acceptor.

Interface	VCCS (Type 1), VCCS (Type 2), Parallel
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Installation	Indoor/ Vertical
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Electrical

Power Source	22.8 ~ 25.2V DC
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Power Consumption	Standby : 6W Operation: 15W Maximum: 18W
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Operation Environment	Operation Temperature: -15°C~60°C Storage Temperature: -30°C~70°C Humidity: 30%~85RH (no condensation)
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Mechanical

Outline Dimension	Refer to Page.4
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Bill Capacity	Approx. 200 bills (200~230)
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Weight	Approx. 1.25kg
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3. Packing List

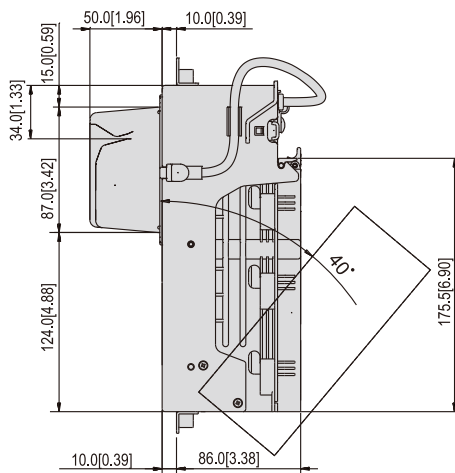
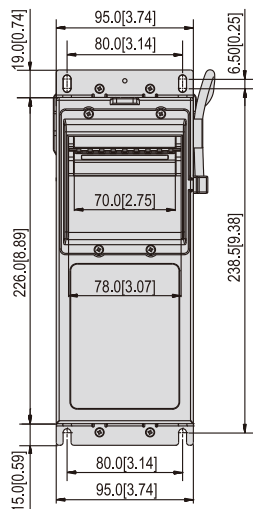
Main	Bill Acceptor
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Accessory	Harnesses: WEL-RLV7706 LV77 Installation Guide LV77 DIP Switch Setting Guide
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LV77

4. Dimension

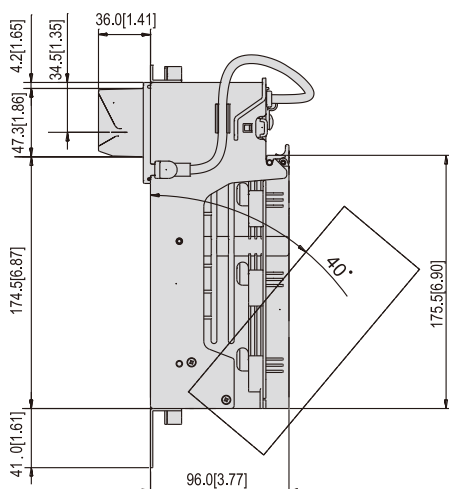
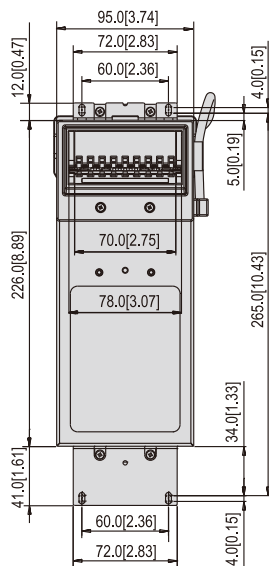
LV77-L



Unit : mm [inch]

4 FIG.01

LV77-S



Unit : mm [inch]

4 FIG.02

5. Installation

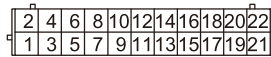
5-1. Harness Application

WEL-RLV7734



MOLEX 5559-02P
BLACK VIEW

PIN 1- RED/ BLACK.....RX12
PIN 2- WHITE/ BLACK.....TX11



TMT 2*11 BACK VIEW

PIN 1- ORANGE.....VCCS TX
PIN 2- BLUE.....SYNC
PIN 3- YELLOW.....VCCS RX
PIN 4- BLACK.....I_GND
PIN 5- RED.....E_+24V
PIN 11- WHITE/BLACK.....TX11
PIN 12- RED/BLACK.....RX12
PIN 15- PINK.....STACK FULL

PIN 16- BROWN.....CREDIT 1000
PIN 17- GREEN.....ESCROW
PIN 18- LIGHT GREEN.....OPERATE
PIN 19- PURPLE.....INHIBIT
PIN 20- GRAY.....ERROR
PIN 21- LIGHT BLUE.....ACCEPT
PIN 22- WHITE&BLACK.....RETURN

MOLEX 5559-02P



JST XLR-08V



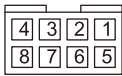
JST ELP-12V



DC 24V
#WEL-RLV7734

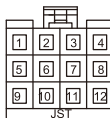
2464 24AWG 15C CABLE BLACK

TMT 2*11



JST XLR-08V
BACK VIEW

PIN 1- RED.....E_+24V
PIN 4- BLUE.....SYNC
PIN 5- YELLOW.....VCCS RX
PIN 6- ORANGE.....VCCS TX
PIN 8- BLACK.....I_GND



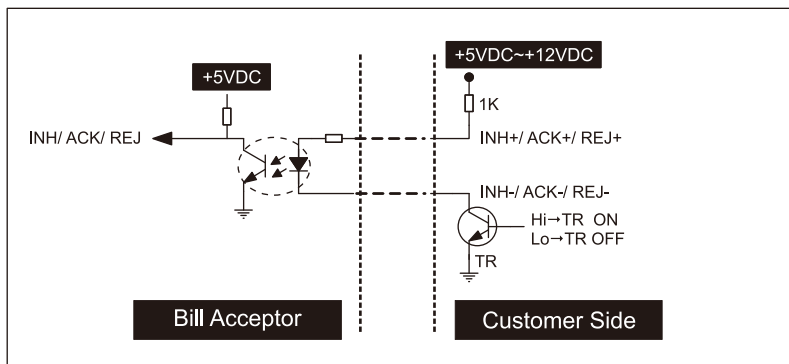
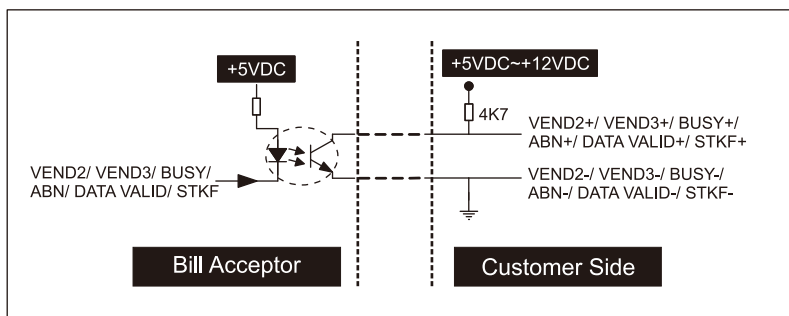
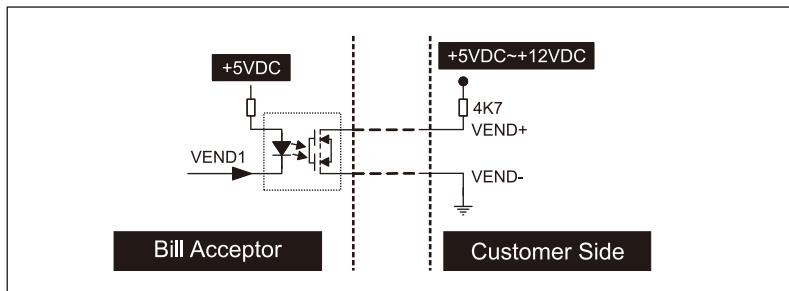
JST ELP-12V
BACK VIEW

PIN 1- RED.....E_+24V
PIN 4- BROWN.....CREDIT 1000
PIN 5- LIGHT GREEN.....OPERATE
PIN 6- GRAY.....ERROR
PIN 7- WHITE&BLACK.....RETURN
PIN 8- LIGHT BLUE.....ACCEPT
PIN 9- PURPLE.....INHIBIT
PIN 10- GREEN.....ESCROW
PIN 11- PINK.....STACK FULL
PIN 12- BLACK.....I_GND

5-1-1. I/O Circuit

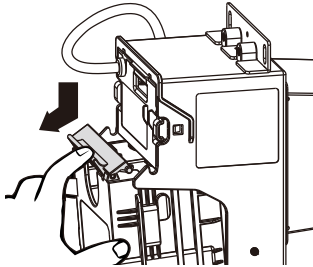
Parallel Interface

5-1-1 FIG.01

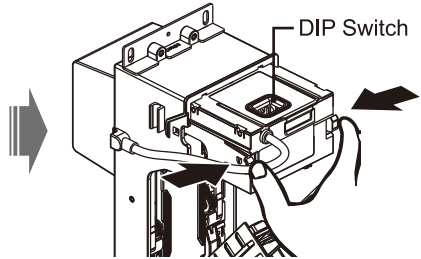


5-2. DIP Switch Setting

DIP switch setting varies according to different currencies which are used by users, for DIP switch setting which fits your need, please check “LV77 DIP Switch Setting” installation guide in the package.



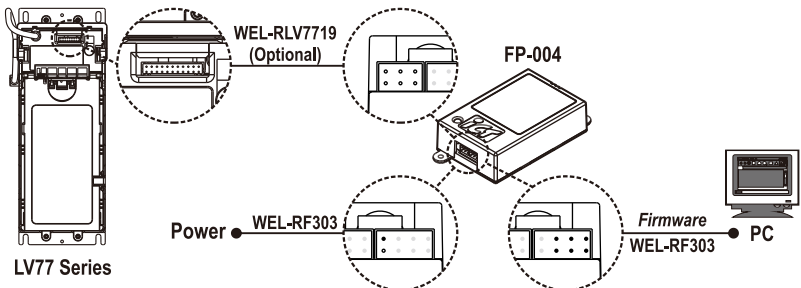
5-2 FIG.01



5-2 FIG.02

5-3. Software Download and Upgrade

To download and upgrade the software to LV77 Series, 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.



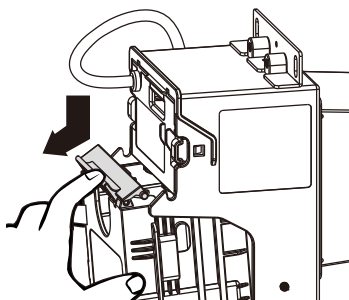
Power must be applied to BA AFTER connection.

6. Maintenance

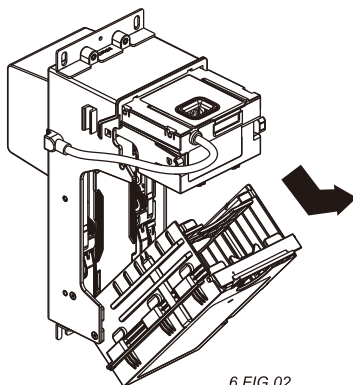
To make sure the bill acceptor always works smoothly, we suggest you to clean the internal parts regularly.

To clean the internal parts:

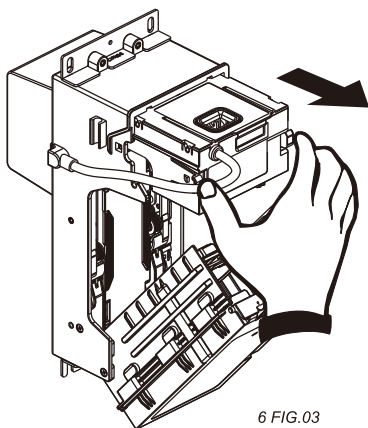
1. Hold the bezel with one hand, unlatch the bill box by pulling on the top latch with the other hand.
2. Lift the bill box up and take it out.



6 FIG.01



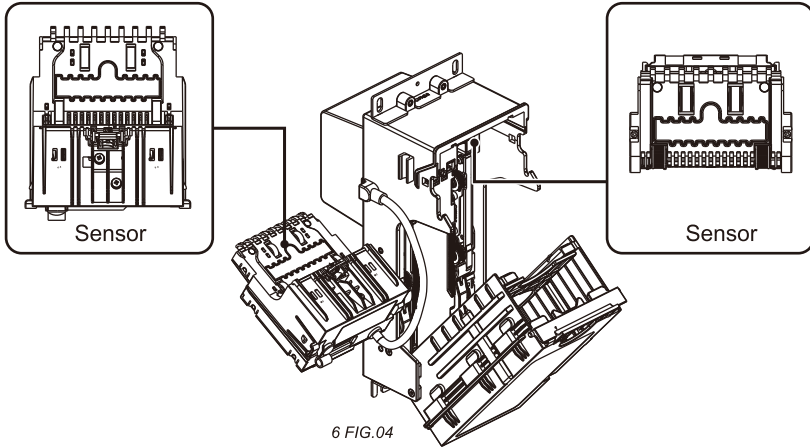
6 FIG.02



6 FIG.03

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

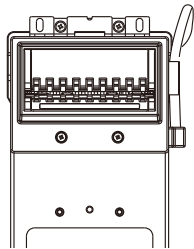
4. Use a soft, dry cloth or towel to clean the bill path and sensors.



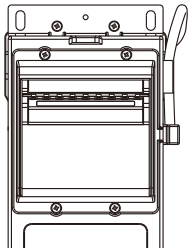
	Maintenance Notice <i>(Any improper maintenance will result invalid warranty.)</i>	
	Recommended	Mild, non-abrasive, soap water.
	DO NOT USE	Organic solvent , Alcohol, Volatility liquid.

7. Troubleshooting

Bezel LED



7 FIG.01



7 FIG.02

7 TABLE 01

LED Flashes		Status	Corrective Actions
Green	Red		
Stays ON	N/A	No error exist-acceptor is normal.	N/A
LED is OFF		Inhibit activated.	Inspect for the settings and connections between bill acceptor and vending machine.
N/A	1	Device is not ready.	Inspect for connections between bill acceptor and vending machine, make sure the interface on bill acceptor is suitable for vending machine.
1	1	Bill jammed.	Remove the stuck bill or foreign object on the bill path.
1	2	Stacker full.	Empty the bill box.
1	3	Anti-string sensor error or a stringing attempt has detected.	Inspect for foreign objects on sensor or bill path and clean.
1	4	Acceptor sensor error.	Inspect for foreign objects around belts and clean.
1	5	Stack motor or Sensor error.	
1	6	Security teeth or Sensor error.	Make sure the security teeth are in position.

7 TABLE 02

LED Flashes		Status	Corrective Actions
Green	Red		
2	1	Identify sensor or LED error.	Inspect for foreign objects on the identify sensor and clean.
2	2	Solenoid error.	Make sure the security teeth are in position.
2	3	Bill box has been removed.	Replace the bill box.

7 TABLE 03

LED Flashes		Status	Corrective Actions
Green	Blue		
1	1	Input sensors error. (The input sensors are on both sides of the bill path.)	Inspect for foreign objects on both input sensors and clean.
N/A	1	Left input sensor error. (The left input Sensor is on the left side of the bill path.)	Inspect for foreign objects on the left input sensor and clean.
1	N/A	Right input sensor error. (The right input Sensor is on the left side of the bill path.)	Inspect for foreign objects on the right input sensor 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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