



[www.ictgroup.com.tw](http://www.ictgroup.com.tw)

Coin Acceptor  
**UCA**  
Series  
Installation Guide



**International Currency Technologies Corp.**

## **Use of Materials Limitations**

International Currency Technologies Corporation (ICT) all rights reserved.

All materials contained are the copyrighted property of ICT.

All trademarks, service marks, and trade names are proprietary to ICT.

ICT reserves the right at all times to disclose or to modify any information as ICT deems necessary to satisfy any applicable law, regulation, legal process or governmental request, or to edit, refuse to post or to remove any information or materials, in whole or in part, in ICT's sole discretion.

## Contents

|                                         |           |
|-----------------------------------------|-----------|
| <b>1. Introduction</b>                  |           |
| 1-1. Overview.....                      | 2         |
| 1-2. Features.....                      | 2         |
| <b>2. Specifications .....</b>          | <b>2</b>  |
| <b>3. Packing List.....</b>             | <b>3</b>  |
| <b>4. Dimension.....</b>                | <b>4</b>  |
| <b>5. Installation</b>                  |           |
| 5-1. How to Install?.....               | 5         |
| 5-2. Harness Application.....           | 7         |
| 5-3. I/O Circuits.....                  | 12        |
| 5-4. DIP Switch Setting.....            | 14        |
| 5-5. Software Download and Upgrade..... | 14        |
| <b>6. Maintenance.....</b>              | <b>15</b> |
| <b>7. Troubleshooting.....</b>          | <b>17</b> |

## **1. Introduction**

### **1-1. Overview**

UCA series is designed as reliable coin acceptors which are able to work steadily in high temperature for high-security with acceptance rate up to 96% or greater. Moreover, UCA Series includes UCA2 and UCAES for different accepted coins and applications to fulfill your needs.

### **1-2. Features**

- Low power consumption.
- Eight coin channels available at once.
- Mechanical and electrical anti-string functions.
- Accepting speed up to 3 coins per second.
- Coin sorter option available for UCA2 and UCAES.

## **2. Specifications**

### ***General***

|                        |                                                |
|------------------------|------------------------------------------------|
| <b>Acceptance Rate</b> | 96 % or greater                                |
| <b>Accepting Speed</b> | Approx. 3 coin/sec                             |
| <b>Interface</b>       | Pulse<br>RS232 (TTL level)                     |
| <b>Coin Parameters</b> | Diameter : 20mm~32mm<br>Thickness: 1.2mm~3.2mm |

**Electrical**

|                              |                                                                                                                  |
|------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Power Source</b>          | 12V±10% (10.8V~13.2V DC)                                                                                         |
| <b>Power Consumption</b>     | Standby : 0.05A, 0.6W<br>Operation: 0.2A, 2.4W<br>Maximum: 0.5 A, 6W                                             |
| <b>Operation Environment</b> | Operation Temperature: -5°C~60°C<br>Storage Temperature: -20°C~75°C<br>Humidity: 30%~85% RH<br>(no condensation) |

**Mechanical**

|                          |                  |
|--------------------------|------------------|
| <b>Outline Dimension</b> | Refer to page. 4 |
| <b>Net Weight</b>        | Approx. 0.35 kg  |



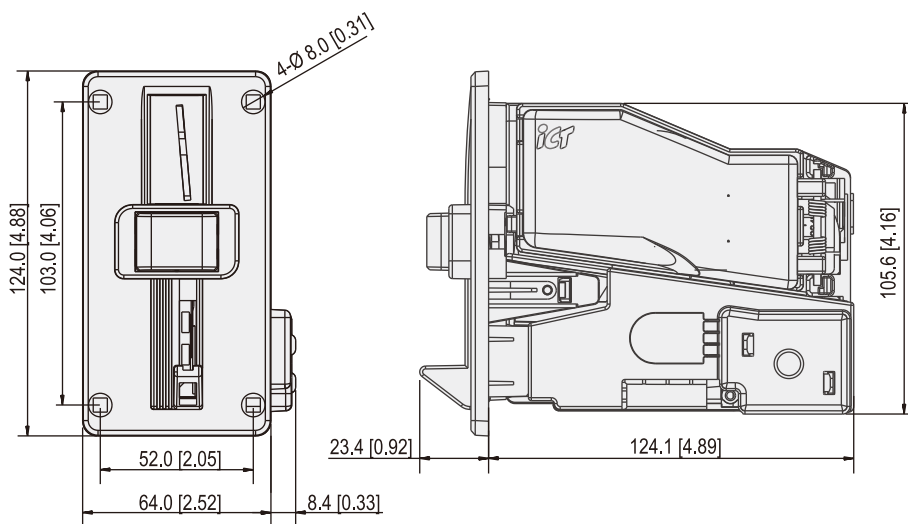
**Installation: Indoor use only!!**

**3. Packing List**

|                  |                                                                                               |
|------------------|-----------------------------------------------------------------------------------------------|
| <b>Main</b>      | UCA Series Coin Acceptor                                                                      |
| <b>Accessory</b> | Harnesses: Refer to 5-2<br>UCA Series Installation Guide<br>UCA Series Switches Setting Guide |

| Mode Type | Harness      | Others     |
|-----------|--------------|------------|
| Pulse     | Refer to 5-2 | Screw pack |
| RS232     | Refer to 5-2 | Screw pack |

## 4. Dimension



Unit : mm [inch]

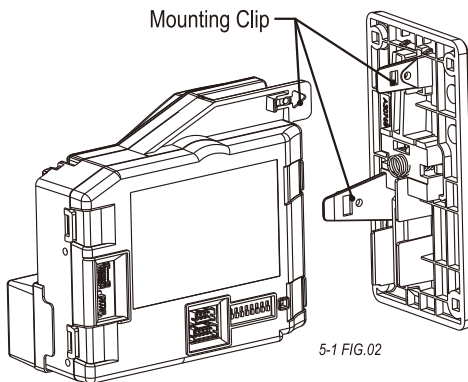
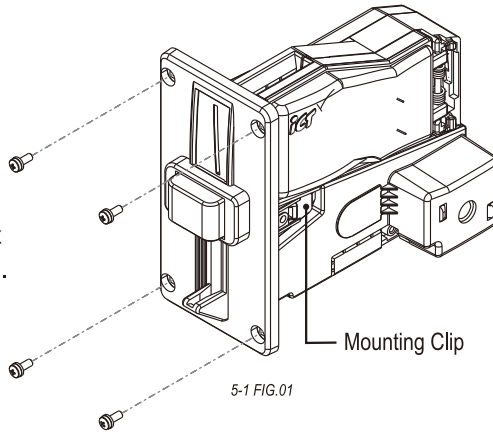
4 FIG.01

## 5. Installation

### 5-1. How to Install?

To install UCA Series coin acceptor on your machine, please follow the steps as below:

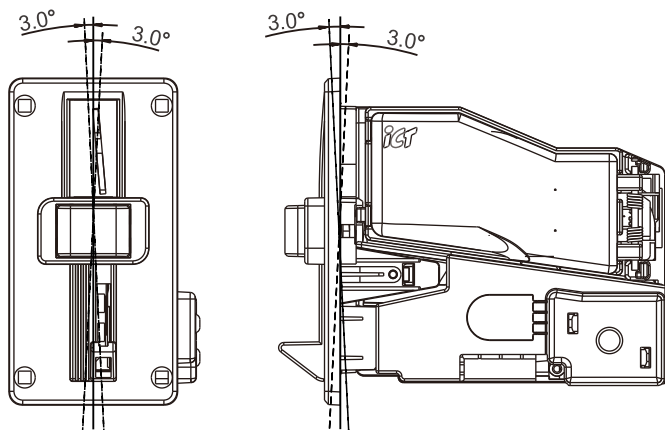
1. Use four screws to fix bezel on the machine.



2. Fix main base on bezel by mounting clips.



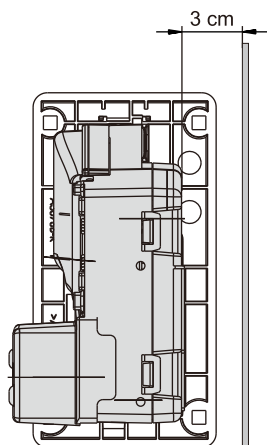
**UCA Series is not supposed to be aslope over 3°.**



5-1 FIG.03



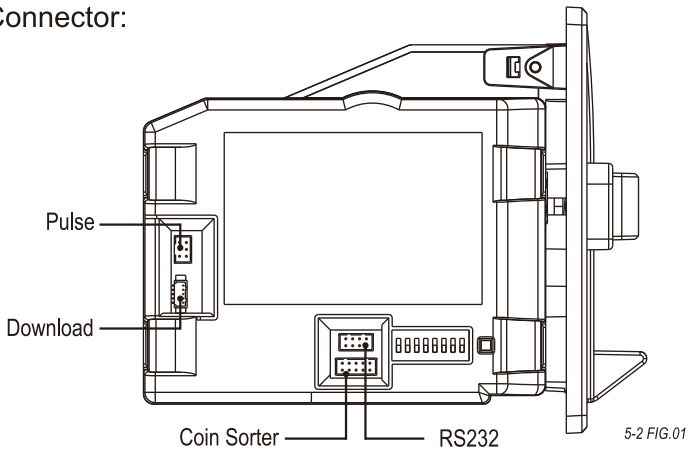
**To make sure UCA Series work smoothly, install machine farther than 3 cm from metal items is recommended.**



5-1 FIG.04

## 5-2. Harness Application

Connector:



5-2 TABLE 01

| Interface | Used Voltage | Usage               | Harness             | Page |
|-----------|--------------|---------------------|---------------------|------|
| Pulse     | 12V DC       | Power & *Data Comm. | WEL-RMS03           | 8    |
|           |              | Power & *Data Comm. | WEL-RMS02(Optional) | 8    |
|           |              | Extension Wire      | CU-R961-1(Optional) | 9    |
| RS232     | 12V DC       | Power               | WEL-RMS03           | 8    |
|           | +5V TTL      | *Data Comm.         | WEL-R7U06-2         | 10   |

\*Data Comm.: Data Communication.

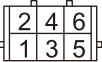
5-2 FIG.02

| Interface | Used Voltage | Usage               |
|-----------|--------------|---------------------|
| Pulse     | 12V DC       | Power & *Data Comm. |
| RS232     | 12V DC       | Power               |

WEL-RMS03



TMT 2\*3(2.0mm)



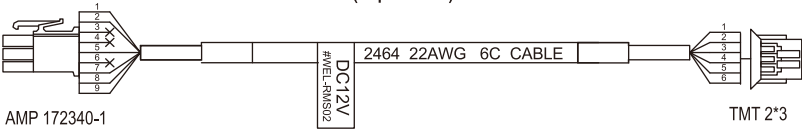
TMT 2\*3 BACK VIEW

PIN 1- RED.....+12VDC  
PIN 2- ORANGE.....GND  
PIN 3- GREEN.....INHIBIT+  
PIN 4- YELLOW.....METER  
PIN 5- BLUE.....CREDIT/TIMER  
PIN 6- PURPLE.....N/A

5-2 FIG.03

| Interface | Used Voltage | Usage               |
|-----------|--------------|---------------------|
| Pulse     | 12V DC       | Power & *Data Comm. |

WEL-RMS02  
(Optional)



AMP 172340-1

DC12V  
#WEL-RMS02

2464 22AWG 6C CABLE

TMT 2\*3



AMP 172340-1  
BACK VIEW

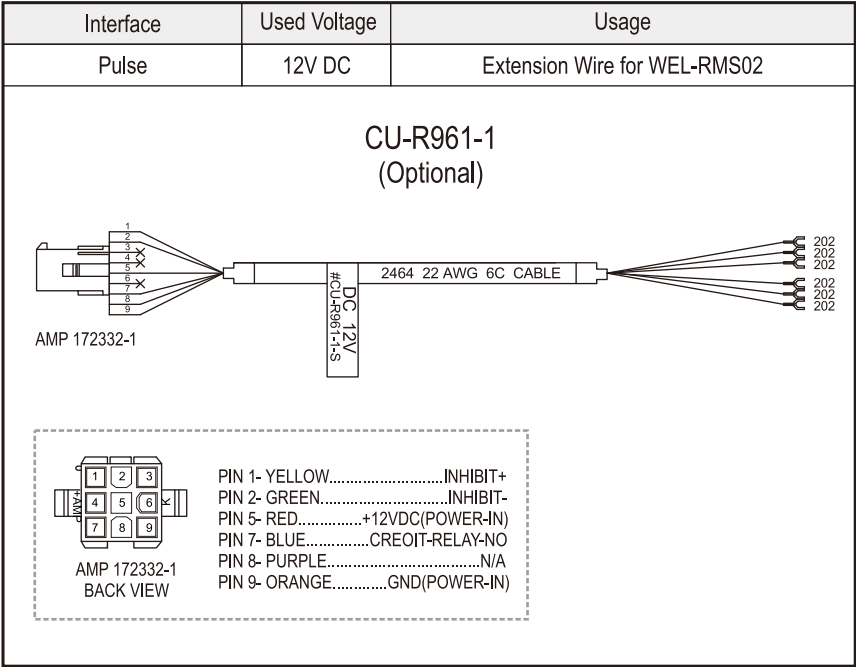
PIN 1- YELLOW.....METER  
PIN 2- GREEN.....INHIBIT+  
PIN 5- RED.....+12V  
PIN 7- BLUE.....CREDIT-ON  
PIN 8- PURPLE.....N/A  
PIN 9- ORANGE.....GND

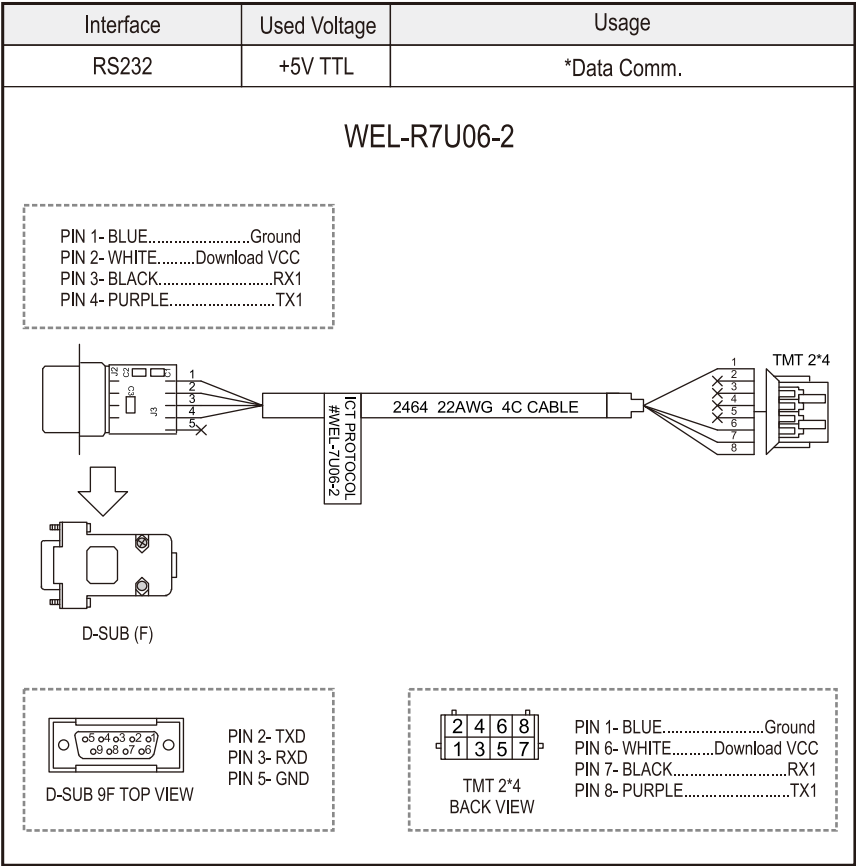


TMT 2\*3  
BACK VIEW

PIN 1- RED.....+12V  
PIN 2- ORANGE.....GND  
PIN 3- GREEN.....INHIBIT+  
PIN 4- YELLOW.....METER  
PIN 5- BLUE.....CREDIT-ON  
PIN 6- PURPLE.....N/A

5-2 FIG.04

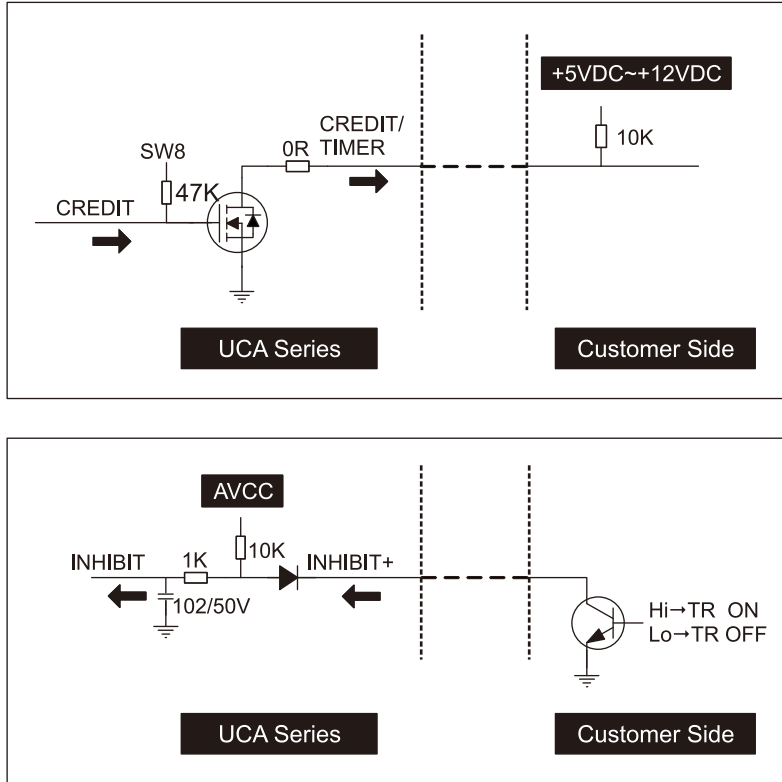




### 5-3. I/O Circuits

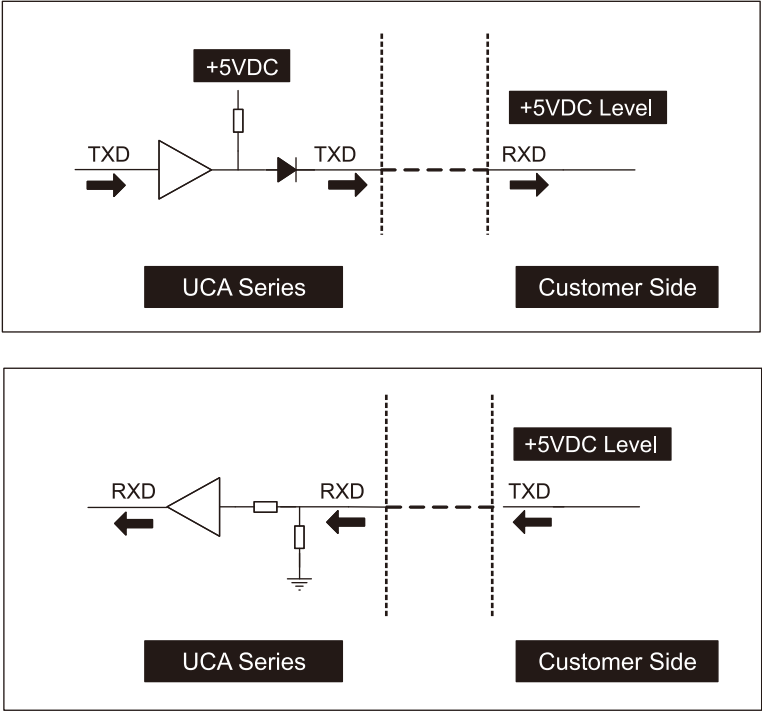
#### Pulse Interface.

5-3 FIG.01



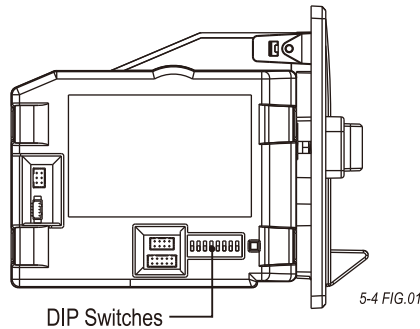
RS232 Interface.

5-3 FIG.02



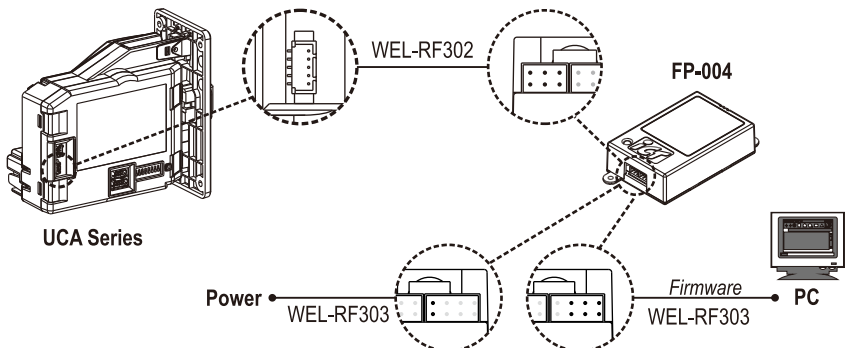
## 5-4. DIP Switch Setting

The DIP switches are located on side of UCA Series. DIP switch setting varies according to different functions which are used by users. For DIP switch setting which fits your needs, please refer to “UCA Series Switch Setting” guide in the package.



## 5-5. Software Download and Upgrade

To download and upgrade the software to UCA 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.



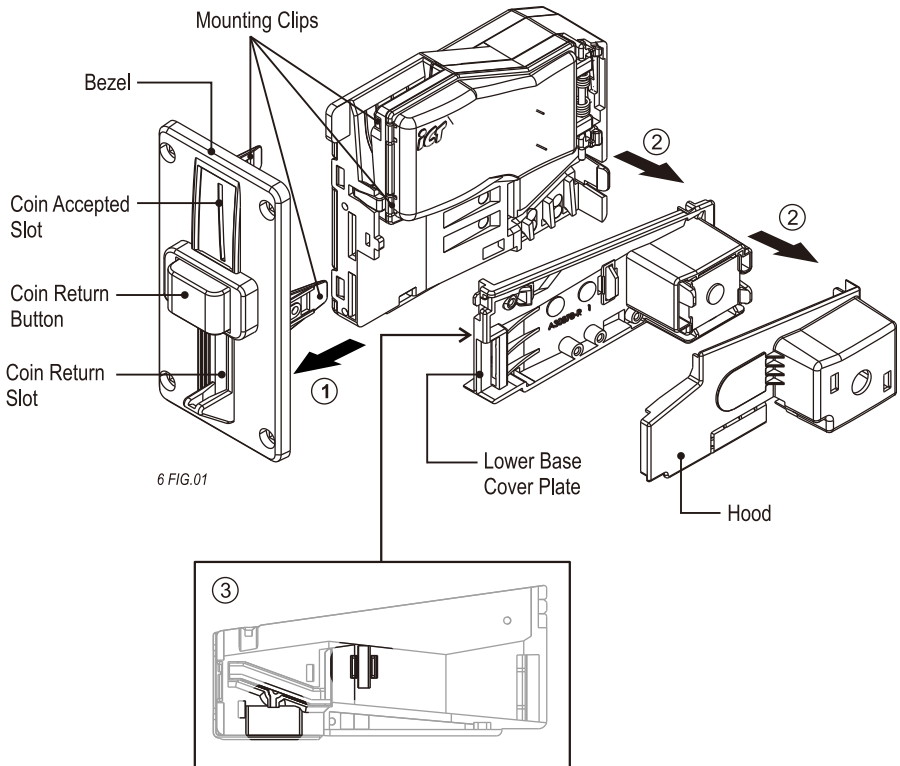
Power must be applied to UCA Series after connecting.

## 6. Maintenance

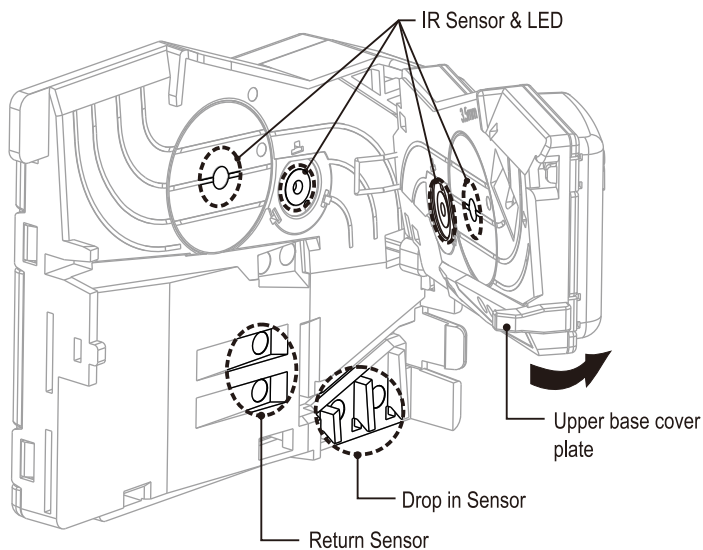
To make sure UCA Series coin acceptor always works smoothly, please clean the internal sensors regularly.

To clean the internal sensors:

1. Remove bezel by releasing mounting clips and pulling it out.
2. Release the clip and remove lower base cover plate and hood.
3. Use a soft, dry cloth, or towel to clean lens.



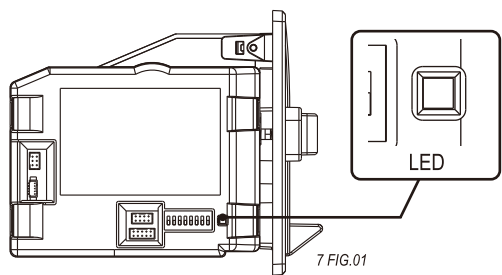
4. Open upper base cover plate and then use a soft, dry cloth, or towel to clean sensors.



6 FIG.02

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

7. Troubleshooting



7 FIG.01

7 TABLE 01

| LED Flashes |        |        | Status                                 | Corrective Actions                                  |
|-------------|--------|--------|----------------------------------------|-----------------------------------------------------|
| Green       | Orange | Red    |                                        |                                                     |
| N/A         | N/A    | 1      | First coil set error                   | Call ICT or agents for technical support.           |
| N/A         | N/A    | 2      | Second coil set error                  |                                                     |
| N/A         | N/A    | 3      | Fish sensor error                      | Inspect for foreign objects in coin path and clean. |
| N/A         | N/A    | 4      | Drop sensor error                      |                                                     |
| N/A         | N/A    | 5      | Return sensor error                    |                                                     |
| N/A         | N/A    | 6      | IR sensor error                        | Call ICT or agents for technical support.           |
| N/A         | N/A    | 7      | Program error                          |                                                     |
| Fast 1      | N/A    | Fast 1 | A Stringing attempt has been detected. | Inspect for foreign objects in coin path and clean. |

7 TABLE 01-1

| LED Flashes |         |     | Status        |
|-------------|---------|-----|---------------|
| Green       | Orange  | Red |               |
| ON          | N/A     | N/A | Power ON      |
| N/A         | ON      | N/A | INHIBIT       |
| N/A         | Flashes | N/A | I/O Test Mode |



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



**International Currency Technologies Corporation**

No.28, Ln. 15, Sec. 6, Minquan E. Rd., Neihu Dist., Taipei City 114, Taiwan

[sales@ictgroup.com.tw](mailto:sales@ictgroup.com.tw) (For Sales)

[fae@ictgroup.com.tw](mailto:fae@ictgroup.com.tw) (For Customer Service)

Website: [www.ictgroup.com.tw](http://www.ictgroup.com.tw)

