

# CT600-AD

## Digital Counterfeit Detector

# USER MANUAL



**FRAUD  
FIGHTER™**  
by **UVentech**




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# 1. SAFETY PRECAUTIONS

Please read all of the following safety precautions before using the unit to avoid personal injury and damage to the machine.

 <b>POWER ADAPTER</b>	<ul style="list-style-type: none"><li>• Do not use another type of power adapter. Only use the power adapter provided.</li><li>• Do not disconnect the power adapter when hands are wet.</li><li>• Unplug the unit first when moving the unit to another position.</li><li>• Hold and pull the plug - not the cord - when disconnecting the power adapter from a power supply.</li><li>• Do not place heavy objects on the power adapter cord.</li></ul>
 <b>BATTERY</b>	<ul style="list-style-type: none"><li>• Store the battery in a clean, dry, and well-ventilated room between -5°C — 35°C (23°F — 95°F).</li><li>• Do not expose the battery to fire, heat, or corrosive elements.</li><li>• Take the battery out of the unit if the battery will be unused for a long period.</li><li>• Recharge the battery at least once every 6 months.</li></ul>
 <b>GENERAL</b>	<ul style="list-style-type: none"><li>• Do not spray the unit with flammable liquids/gases when cleaning the unit.</li><li>• If the unit is exposed to cold temperatures for a long time, leave the unit at room temperature for at least 2 hours before use.</li><li>• Do not allow metal objects or flammable liquids to fall inside the unit.</li></ul>

## 2. INTRODUCTION

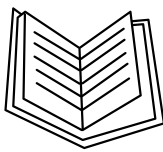
The CT-660 AD will allow you to quickly and easily identify counterfeit money.

Please read this user manual in full before using the unit. Please contact us if you need support on using this unit.

### 2.1 Package Contents



CT-660 AD



User Manual



AC/DC Power Adapter

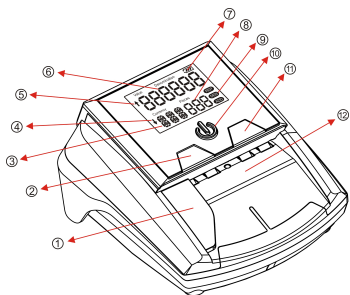


USB Download Cable

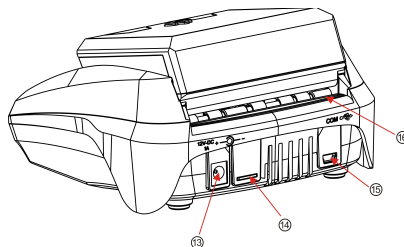


Rechargeable Battery

### 2.2 Unit Design



- 1) Removable USD guide
- 2) REPORT/DIRECTION button
- 3) Currency Type Indicator
- 4) Front Exit Direction Indicator
- 5) Rear Exit Direction Indicator
- 6) Value/Grand Total Indicator
- 7) Battery Information Indicator
- 8) Bill Quantity Indicator



- 9) Report, Denomination, Add Mode
- 10) ON/OFF (& Add/Denomination) Button
- 11) Clear + Change Currency Type Button
- 12) Bill Feed Port
- 13) Power Adapter Connector
- 14) Mini SD Slot
- 15) USB Cord Connector
- 16) Rear Exit Direction Slot

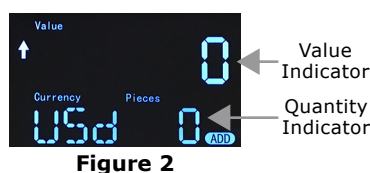


## 3. OPERATION

### 3.1 How to Turn the Unit On & Off

Turn on the unit by holding down the ON/OFF button for about 2 seconds - the ON/OFF button should light up and the display window should show the software version (see Figure 1). When the Value Indicator and Quantity Indicator both display a "0" (see Figure 2), your unit is ready to use.

Turn off the unit by holding down the ON/OFF button for about 2 seconds.



### 3.2 How to Change the Bill Exit Direction

Change the bill exit direction by holding down the REP/DIR button for about 2 seconds. When the Exit Direction Indicator shows a down arrow (↓), the bill will exit out the front. When the Exit Direction Indicator shows an up arrow (↑), the bill will exit out the back.

**Note:** Counterfeit bills will always exit out the front, regardless of the Exit Direction Indicator setting.

### 3.3 How to Change the Currency Type

Change the currency type by pressing the CLR button. EUR and USD are the default currency types - other currencies are optional.

### 3.4 How to Correctly Feed Bills

#### USD bills:

- Use the Removable USD Guide to reduce bill feeding errors
- Insert bills front-side up

#### EUR & GBP (British Pound) bills:

- Insert bills front-side up or back-side up

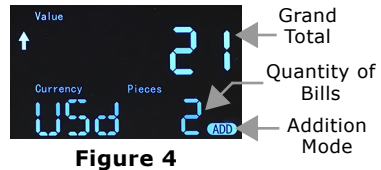
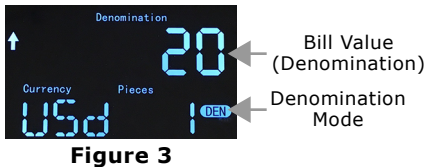
#### All bills:

- Feed bill into unit along the right edge of the feeder
- Retest rejected bills at least 3 times

### 3.5 ADD vs. DEN Modes & Real vs. Counterfeit Bills

If a bill is real, the screen will show either:

- The value of the bill, if DEN (denomination) mode is selected (see Figure 3)
- The quantity of all bills scanned and the grand total, if ADD (addition) mode is selected (see Figure 4)

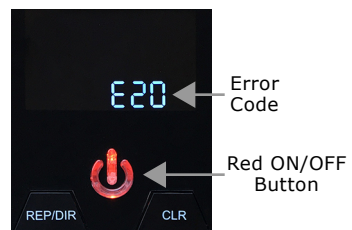


To switch between ADD and DEN modes, press the ON/OFF button.

Note: Switching modes will reset the grand total count.

If more than 999 bills are scanned or if the grand total amounts to more than 999999 (for any currency type), the counters will automatically reset to 0.

If a counterfeit bill is detected, the bill will eject out the front, the ON/OFF button will flash red, and an error code will appear on the screen (see Figure 5). To see the specific parameter flagged as suspicious, check the corresponding error code description in Section 5.2.2.



### 3.6 Report Mode

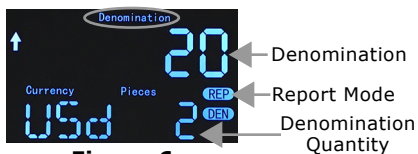
Report mode allows you to see:

- The quantity of each denomination scanned (see Figure 6)
- The quantity of all bills and the grand total (see Figure 7)

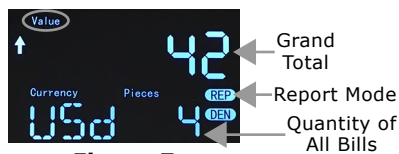
To enter Report mode, press the REP/DIR button. To cycle through the denominations (ascending in value) and the grand total, press the REP/DIR button in succession.

Data on all the bills scanned is stored until the data is cleared - i.e., a new count is started.

If you'd like to continue adding to the total, simply insert another bill. If you'd like to start a new count, hold the CLR button for about 2 seconds or turn off the unit.



**Figure 6**



**Figure 7**

### 3.7 Sleep Mode

After 5 minutes of inactivity, sleep mode is activated: the screen will turn off, but the ON/OFF button will remain blue. To deactivate sleep mode, touch any key or insert a bill.

If sleep mode is activated while the unit is running on its rechargeable battery, the unit will automatically turn off after 15 minutes of inactivity.

### 3.8 Battery Information Indicator

- Solid Battery Symbol: Full battery
- Empty Battery Symbol: Battery is almost empty
- Flashing + Solid ↔ Empty Symbol: Battery is charging
- "Low Battery" text: Battery is not powerful enough to scan bills
- Unit Won't Turn On: Battery is empty

## 4. Update Function

Software updates are periodically released as an online downloads. To correctly update your unit, follow the steps below.

Note: The software update must be performed using the power adapter. The battery is not powerful enough to perform the update.

- 1) Turn off the unit and disconnect the power adapter.
- 2) Use the USB download cable to connect the unit to your computer.
- 3) Reconnect the power adapter to the unit.
- 4) Simultaneously press the ON/OFF button and the CLR button. The display should show 12 dashes (see Figure 8). Repeat this step if the display does not show 12 dashes.
- 5) Run the software download/update software on your computer.
- 6) Click the "Load File" button. Find and select the downloaded update file.
- 7) Click the "Update Soft" button to install the software update.
- 8) Once the update is finished, turn the unit off. If the update is successful, the software version that appears when the unit is powered on should be updated (see Figure 1).



**Figure 8**

# 5. MAINTENANCE & TROUBLESHOOTING

## 5.1 Maintenance & General Use Information

- 1) Use the unit in ambient temperatures and well-ventilated environments.
- 2) Avoid placing the unit near any strong magnets.
- 3) Clean the sensors and rubber belts at least once a month using non-flammable liquids and/or gases.
- 4) Keep sharp objects away from the unit.
- 5) Do not disassemble the unit.

## 5.2 Troubleshooting: Error Messages

### 5.2.1 Self-Test Error Code Display

The unit automatically performs a self-test when it is powered on. If an error code is displayed, check the corresponding error code description below to troubleshoot your unit. If a sensor is blocked, use a soft cloth or brush to unblock the sensor and restart the unit.

Error Code	Error Description
<b>P01</b>	Left pass-through sensor not working properly
<b>P02</b>	Middle pass-through sensor not working properly
<b>P03</b>	Right pass-through sensor not working properly
<b>P04</b>	Upper-left IR sensor not working properly
<b>P05</b>	Upper-right IR sensor not working properly
<b>P06</b>	Lower-left IR sensor not working properly
<b>P07</b>	Lower-right IR sensor not working properly
<b>P12</b>	Feeding sensor not working properly
<b>P13</b>	Magnetic sensor A not working properly
<b>P14</b>	Magnetic sensor B not working properly
<b>P15</b>	Magnetic sensor C not working properly
<b>P16</b>	Magnetic sensor D not working properly
<b>P18</b>	Rotate speed sensor not working properly

### 5.2.2. Defective Error Code Display

Defective error codes are displayed a scanned bill has a parameter that was flagged as suspicious. Check the corresponding error code message below to see which parameter was flagged.

To make sure that the error did not occur from a feeding error (i.e., the bill was inserted into the unit correctly), run a flagged bill through the unit at least 3 times before marking it as counterfeit.

Error Code	Parameter Error Description
E01	Length Error
E02 & E03	Magnetic Feature Error
E04 & E05	IR Feature Error
E06	Paper Thickness Error
E07	Slanted Bill Error
E08	Hologram Feature Error
E09-E12	Paper Quality Error
E20	Passing Quality Error
E22	Denomination Judgement Error
E24	UV Feature Error

## 6. TECHNICAL SPECIFICATIONS

Test Features	Magnetism, Infrared (IR), Paper Quality, UV
Dimensions	155 mm x 137 mm x 82 mm
Power Supply	AC 100V~240V 50/60HZ   DC 12V/1.0A
Operating Temp.	0 - 40°C (32°F - 104°F)
Storage Temp.	-5°C - 35°C (23°F - 95°F)
Battery	Rechargeable Lithium   10.8V/600mAH
Power Consumption	<10W
Scan Speed	<0.5 seconds/sheet