

# **FRAUD FIGHTER™**

## **CT-550**

### **Currency Detector**



## **Operation Manual**



Supplier of Fraud Fighter™ Products

# CT-550 USER MANUAL

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## Safety Instructions

1. Before using the machine, read the instructions and safety guidelines carefully. Store these instructions within reach so that you can consult them later. Take special note of the warnings on the machine and in these instructions.
2. If the machine is passed on to third parties, these instructions must also be passed on.
3. Only plug the adaptor into an A/C voltage of 100-240V~50/60Hz.
4. The power outlet into which the machine is connected must be easily accessible at all times, so that the plug can be pulled out in case of emergencies.
5. In order to completely switch off the machine, pull the plug out of the socket.
6. Do not open the casing under any circumstances. Always contact customer service for maintenance.
7. Do not use this machine in the direct vicinity of water such as near a bath, a wash basin, a sink, a wash bucket in a damp cellar or close to a swimming pool.
8. Avoid foreign substances and fluids coming into the casing of the machine.
9. Do not place the machine close to a radiator, a heater flap, an oven or other devices which emit heat.
10. Under no circumstances try to repair the machine yourself. Contact the dealer who you bought it from or a customer service office in your area.
11. If the power cable of this machine is damaged it must be replaced by the manufacturer, its customer service department or a similarly qualified person in order to avoid hazards.
12. Do not use any accessories which were not supplied on purchase or with the packaging. The guarantee is no longer valid if this is not observed.
13. The machine must not be connected with the mains and not switched on if the case of the machine is open. It must be noted that the machine can still be active even if it is not connected to the mains. Moving parts in the interior may cause injuries.
14. This machine is exclusively intended for indoor use.

## Introduction

This device is a reliable and easy-to-operate banknote detector. It can detect counterfeit banknotes and identify genuine currency. With the included rechargeable battery, it can be used portably. The currency detection techniques include magnetism, infrared, image, paper quality, and a variety of other physical characteristic tests.

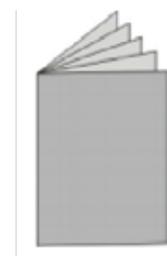
## Features

- Passed CE, REACH, ROHS, EUP, and ECB authentication.
- Distinguishes currency types and denominations automatically.
- Displays number of banknotes and total value of each currency type.
- Rechargeable lithium battery inside for portable usage.
- Provided with sound-light alarm function.
- Software can be updated through USB port.

## List of Accessories



**Detector**



**User Manual**



**AC/DC Power Adapter**

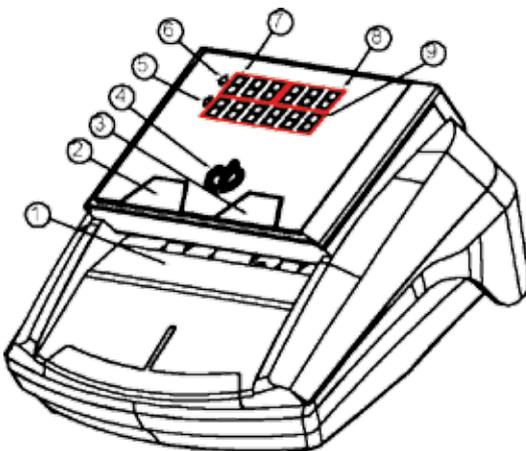


**USB Download Cable**



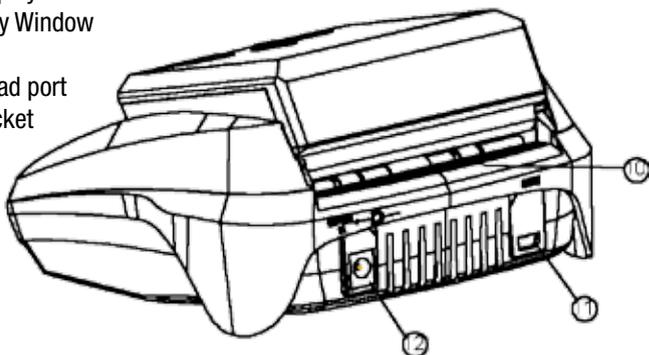
**Rechargeable Battery**

## Illustration



### Description:

- (1) Feed port
- (2) REP/DIR key
- (3) CLR key
- (4) Power ON/OFF key
- (5) Backward Direction Indicator
- (6) Forward Direction Indicator
- (7) Currency Type Display Window
- (8) Quantity Display Window
- (9) Value Display Window
- (10) Exit
- (11) USB download port
- (12) DC input socket



### Specification

Test feature:	magnetism, infrared, image, paper quality, thickness
Dimension:	155x137x82 (mm)
Power Supply:	AC100V~240V 50/60Hz or DC12V/1.0A
Operating temperature:	0~40°C
Storage temperature:	-20~65°C
Battery:	rechargeable lithium battery 10.8V/600mAH
Power Consumption:	<10W
Speed:	<0.5s/sheet

## Operation

### Turn on/off the machine

Press the “ON/OFF” key and hold on for about 2 seconds. The ON/OFF indicator lights up and a self test will start after turning on the detector. If the test is successful, the Quantity Display Window will display the software version (See Figure 1). Next two “0” will respectively display on the Quantity Display Window and Value Display Window (See Figure 2). In this mode, the detector is ready for use.

The user can turn the machine off by pressing the “ON/OFF” key and holding for about 2 seconds.



Figure 1

Figure 2

### Select Genuine Banknote Exit Direction

Press “REP/DIR” key and hold on for 2 second to select the exit direction of the genuine banknote. The denotation of direction will be shown on the left part of the top cover.

A ▼ means the genuine banknote will exit from the front while a ▲ means genuine banknotes will exit from the rear.

The CT-550 will remember the last setting for exit direction.

### Detecting

You need not select currency type when testing banknotes because the machine can distinguish the type automatically. The type of currency being tested will be displayed on the Currency Type Display Window.

When the machine detects a banknote in the feed port, it will automatically start the motor and the bill will be pulled into the sensing area.

The CT-550 requires the user to insert banknotes on the correct side of the feeding port, and with the banknote facing the correct direction. The user should consult the printed label on the machine to see which side and direction is to be used. When inserting a banknote, please make sure to align the bill so it is not crooked, otherwise the test may fail.

If the banknote is genuine, the tally of the total number of notes will be increased by one and the value of the tested note will be added to the cumulative value. The banknote will exit from the selected exit direction (See Figure 3). When the number of bills is greater than 999 or the total value is greater than 999999, the data will be automatically reset to zero.



Figure 3



Figure 4

If the banknote is a suspicious one, it will be rejected and exit from the feed port with 3 beeps. At the same time, the “ON/OFF” key will flash, and an error code will be displayed on “Quantity Display Window” (See Figure 4). The error codes are listed in the Troubleshooting section on pages 7 and 8.

### Detecting Report and Clearing

After finishing detection, press “REP/DIR” key to enter report mode. When checking the detection record, it is possible for you to press “REP/DIR” key repeatedly to display records for different denomination and its pieces by turns (See Figure 5). Press “CLR” key and hold it for 2 seconds to clear records.

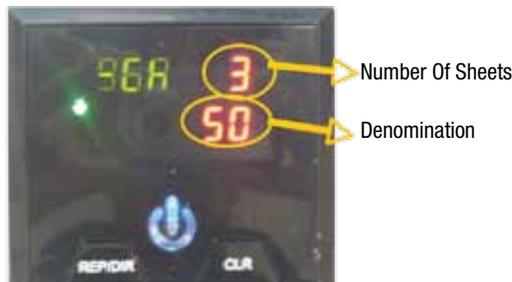


Figure 5

### Power Saving Mode

When operating on battery power, the CT-550 will power off automatically when the detector is idle for more than 15 minutes.

### Battery Status Message

When the machine is charging the battery, the Currency Type Display Window will display “-Ch” every 5 seconds to indicate the charging status. Usually, the battery needs about 15 hours to achieve a full charge.

If the voltage is low, the Currency type Display Window will display “-Lo” at an interval to remind the user of that the battery needs to be charged or the user should turn off the banknote detector.

## Download Software

1. Turn off the banknote detector first, and then use the provided download cable to connect the USB port on your PC to the USB port of the detector.
2. First plug-in the power adaptor. Next press and hold “CLR” key and ON/OFF key together, then turn on the banknote detector. If twelve “dashes” (“-”) are displayed on the display window, this means the machine has entered download mode (See Figure 6). If the display window doesn’t display twelve pieces of “-”, please retry steps 1 and 2 again.
3. Run the “AS410.exe” program provided to you on your PC and click the “Load File” button to select the updated currency software (\*\*\*.UPL) (See Figure 7), then click “Upload Unit” button to download the software (See Figure 8).

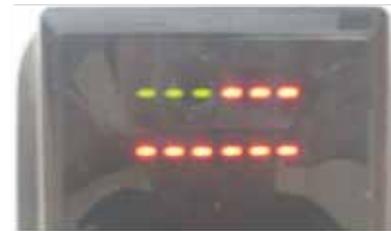


Figure 6



Figure 7

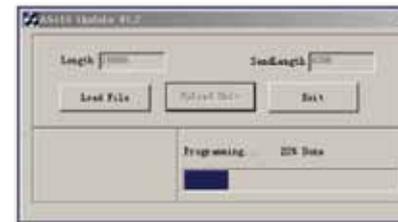


Figure 8

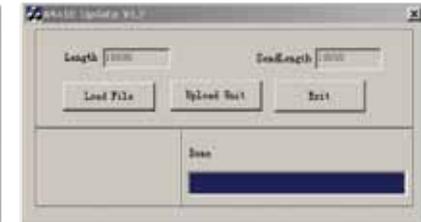


Figure 9

4. If the download is successful, (see Figure 9) please restart the machine.

## Troubleshooting

### Self test error code display

The detector automatically performs a self test when powered on. If one of the following error messages is displayed on the display window, usually it is because the sensor is blocked by banknotes or dust. Please use a brush or a piece of soft cloth to clean the dust on the sensor or remove the banknotes, and then restart the machine.

Error message display	Error type
P01	The upper left IR sensor is failure.
<b>P02</b>	<b>The upper right IR sensor is failure.</b>
P03	The lower left IR sensor is failure.
<b>P04</b>	<b>The lower right IR sensor is failure.</b>
P05	The feeding sensor has failed.
<b>P06</b>	<b>The bill size sensor has failed.</b>
P07	The red spectrum sensor has failed
<b>P08</b>	<b>The blue spectrum sensor has failed</b>
P09	The left passing sensor has failed.
<b>P10</b>	<b>The right passing sensor has failed.</b>

### **Detection Error Code Display**

The following error codes shown in the display window during banknote detection indicate the type of detection error and the reason the note was rejected.

Error message display	Error type
E01	Length Error
<b>E02/ E03</b>	<b>Magnetic feature Error</b>
E04/ E05	IR feature Error
<b>E06</b>	<b>Thickness Error</b>
E07	Slant note
<b>E20</b>	<b>Passing Error</b>
E09	Spectrum Error

### **Important Notices**

- If the machine works abnormally, check the following:

Confirm that the power outlet is within specified range (AC 100V~240V/50~60Hz).

Confirm the power cord is firmly connected to the power input on the rear of the machine.

(If on battery power) Confirm the built-in battery is sufficiently charged by testing the machine on AC /DC power.

Keep away from strong magnetic fields, which can affect electronic function.

Clean any dust or other contaminant from the sensors.

- If a banknote is blocked while it is being detected, please open the top cover and remove the banknote to detect it again.
- Please ensure that banknotes have been “smoothed” (e.g. folds and wrinkles repaired) before inserting. Also, remember that the banknote must be put in straight – crooked notes will usually be rejected by the CT-550.

### **Maintenance**

This CT-550 is a precise financial detecting equipment which requires periodic maintenance.

- Keep the banknote detector in a ventilated place and away from magnetic fields.
- Periodically clean the sensors: use a piece of cotton with a small amount of alcohol to clean all sensors, rubber wheels and rubber synchronous belts. Be sure not to expose the sensors to sharp or hard articles in order to avoid damage to them.
- Do not disassemble the detector. Doing so will invalidate any warranties provided on the machine.