



# OPERATION MANUAL

©VACUUM BANKNOTE COUNTER

# **English Version**

## **Contents**

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|  |          |
|--|----------|
| <b>Features</b>                              | <b>2</b> |
| <b>Specification</b>                         | <b>2</b> |
| <b>Options</b>                               | <b>2</b> |
| <b>The Control Panel &amp; Function Keys</b> | <b>3</b> |
| <b>How To Operate</b>                        | <b>4</b> |
| <b>Optional Features</b>                     | <b>7</b> |
| <b>Precautions</b>                           | <b>9</b> |
| <b>Regular Maintenance</b>                   | <b>9</b> |

➤ **Features**

- 1) Check Mode : Verifies a known quantity (100 pcs) in a bundle
- 2) Free Mode : Free Counting
- 3) Preset Mode : Count the banknotes into batches
- 4) Manual Mode : Start Counting by Manual
- 5) ACC Mode : Add different stacks of banknotes together
- 6) UV-Detection : Detect & Sort the counterfeit banknote out (Optional)

➤ **Specification**

|                              | TC-5500(Desktop)                              | TC-5500S(Floor Stand) |
|------------------------------|---|-----------------------|
| 1) Dimensions(mm) WxDxH      | 374 x 374 x 260                               | 374 x 374 x 830       |
| 2) Net Weight (kg)           | 25  | 37                    |
| 3) Power Supply              | 110V,AC±10% 60Hz or 220V,AC±10% 50Hz          |                       |
| 4) Power Consumption         | 330W  |                       |
| 5) Temperature Limits in Use | 10°C to 40 °C                                 |                       |
| 6) Counting Speed            | Approx. 100 Notes per 4 Sec                   |                       |
| 7) LED Display               | 2 Displays<br>Count - 3 digit / ACC - 5 digit |                       |
| 8) Hopper Capacity (Notes)   | Approx. 200                                   |                       |
| 9) Document Feed Mechanism   | Vacuum  |                       |

➤ **Options**

- 1. **ED** External Display: User can see counting result in External Display
- 2. **OK** Band Stamping Device: Press Option button, after counting 100 notes, this device will Stamp “**OK**” on strapped banknote.
- 3. **UV** Press \* button, and it can detect counterfeits.

\* Specifications are subject to change without notice.

## ➤ Control Panel & Function Keys



### ※ The Display Number

- The counting result will be displayed on the LED screen. The number below was the accumulated number, it will show counting result when the user selecting this ACC function.

### ※ The **Check** Function Key

- The counting result will be displayed on the LED screen. The number below is the total number of counted notes.

### ※ The **Free** Function Key

- This function is designed for free counting. So no matter what the counting result is, it will finish the counting process & release the banknotes automatically.

### ※ The **Preset** Function Key

- This function is designed to set the number of banknote which needs to be counted. The counting will stop when the counted number of banknotes reaches your setting. The number below is the total number of counted notes.

### ※ The **Manual** Function Key

- This function is designed for manual operation. Users have to press **MANUAL** button to make it work after you place the banknotes.

### ※ The **ACC & Clear** Function Key

- This function allows the users to add different stacks of banknotes together. Clear Key is for deleting the last accumulating result and it should be effective in ACC mode.

### ※ The **\*** Function Key

- This function key is designed for UV-Detection. Select this function then this machine can detect counterfeit note. There are 8 different UV sensitivity level can be selected.

## ➤ How to Operate

### ※ The Check Function

- Step 1 : Power on the machine will enter Check Mode automatically. The buzzer will alarm and the banknote gripper will be released. The LED display will show the number "0".
- Step 2 : Put the banknotes on the banknote holder and make the banknote contact the starting sensor.
- Step 3 : The machine will start counting automatically and the counting result will be displayed on the screen.
- Step 4 : The banknote gripper will be released automatically if the counting number is correct (100).
- Step 5 : The buzzer will alarm when the quantity of banknotes is less or greater than 100, user needs to press the button **RESET** to release banknotes.

### ※ The Free Function

- Step 1: Press **Free** button, then the banknote gripper will be released with alarm. The machine is ready for counting now.
- Step 2: The maximum banknote capacity is approx. 200 pieces. Put the banknotes on the banknote holder and make the banknote touch the starting sensor.
- Step 3: The machine will start counting automatically.
- Step 4: The banknote gripper will release after counting process.

### ※ The Preset Function

- Step 1: Press **Preset** button, then the banknote gripper will be released with alarm. The machine is ready to count now. (The LED display will show the number of “0” for starting the counting processing).
- Step 2: Select the preset number that you need and this preset number will be showed on the LED display.
- Step 3: Put the banknotes on the banknote holder and move them forward to touch the starting sensor.
- Step 4: The machine will start counting automatically. The counting result should be the same as preset on the LED display.
- Step 5: The banknote gripper will release automatically (wait about 3 sec) after this counting process if this operation is correct.
- Step6: The buzzer will alarm when the counting number is less than the preset number, user needs to press the button **RESET** to release banknotes.

### ※ The Manual Function

- Step 1: Press **Manual** button, then the banknote gripper will be released with alarm. The machine is ready for counting now.
- Step 2: Put the banknotes on the banknote holder and move them forward.
- Step 3: Press **Manual** button again to start the counting process.
- Step 4: The counting number will be showed on the LED display after this process.

### ※ The ACC & Clear Function

- Step 1: Press **Check**, **Free**, **Preset** or **Manual** button to select the counting mode.

- Step 2: Re-press the **ACC** button after the counting mode selected. (The lower part of LED display will show the number of “0” for starting the counting processing.)
- Step 3: The incorrect counting result will not be totaled if there is problem in counting process. The **CLEAR** key can be used to delete the last counting result if the user doesn’t want it to be totaled.

### ※ The Self-Diagnosis Test Function

**Function:** This function is designed for checking the system's: 1) Vacuum Pressure, 2) LED display, 3) Spindle Sets, 4) Counter Sets, 5) Motors banknote counting and feeding process.

- Step 1: User need to block the holes of Spindle Sets by adhesive plastic tape and select **0** function key after the machine is power-on. The Self-Diagnosis Test will operate automatically. User can press the same key again to turn off this function.
- Step 2: During testing mode, user can check the following five parts:
  - 1) The Vacuum Pressure:** The air pressure under counting cannot be lesser than 480 cm/Hg. If it is lesser than this, then the machine might not count the notes properly because of insufficient pressure. User needs to check the vacuum system, including Vacuum Pump, Pipe System and Filters. Most of time the operator just needs to clean the filters of Pump (E007 / E008) and Suction Head (A002) only.
  - 2) The LED Display:** If the numbers from 1-999 cannot be showed properly on the screen, then please replace it with a new display.
  - 3) The Spindle Set:** It is driven by the motors to supply the vacuum suction for banknote counting.
  - 4) The Counter Set:** User needs to block the holes on Spindle Set with adhesive plastic tape. Then if the numbers from 1 to 999 are displayed on the screen, it means Counter Set work properly.
  - 5) The Motors:** Checking Motor1 is to make sure the banknote gripper is working properly; Checking Motor 2 is to make sure the spindle set is driven by the motor properly.

#### **Caution:**

*Test Mode is effective only after the machine is just power-On. You should re-start the machine again if you need to use the Test Mode after any counting.*

## ➤ Optional Features

### ※ The Stamp Function

**Function:** The device is design to stamp a mark (OK) on first banknote if the number of banknote is exactly 100 pieces.

- Step 1: Press **Option** button, then the banknote gripper will be released with alarm. The machine is ready for counting now.
- Step 2: In the same process as Check mode (Please see the previous explanation). The stamping mark will be punched if the process of counting number is 100 pieces. Otherwise, it would not do anything.
- Step 3: Release this stamping function, please press the button again.

### ※ The External Display Function

**Function:** This function is designed for users to check the counting result in the remote display. The wire of remote display can be more than 3~6m. It is the helpful tool for customer to monitor the counting result.

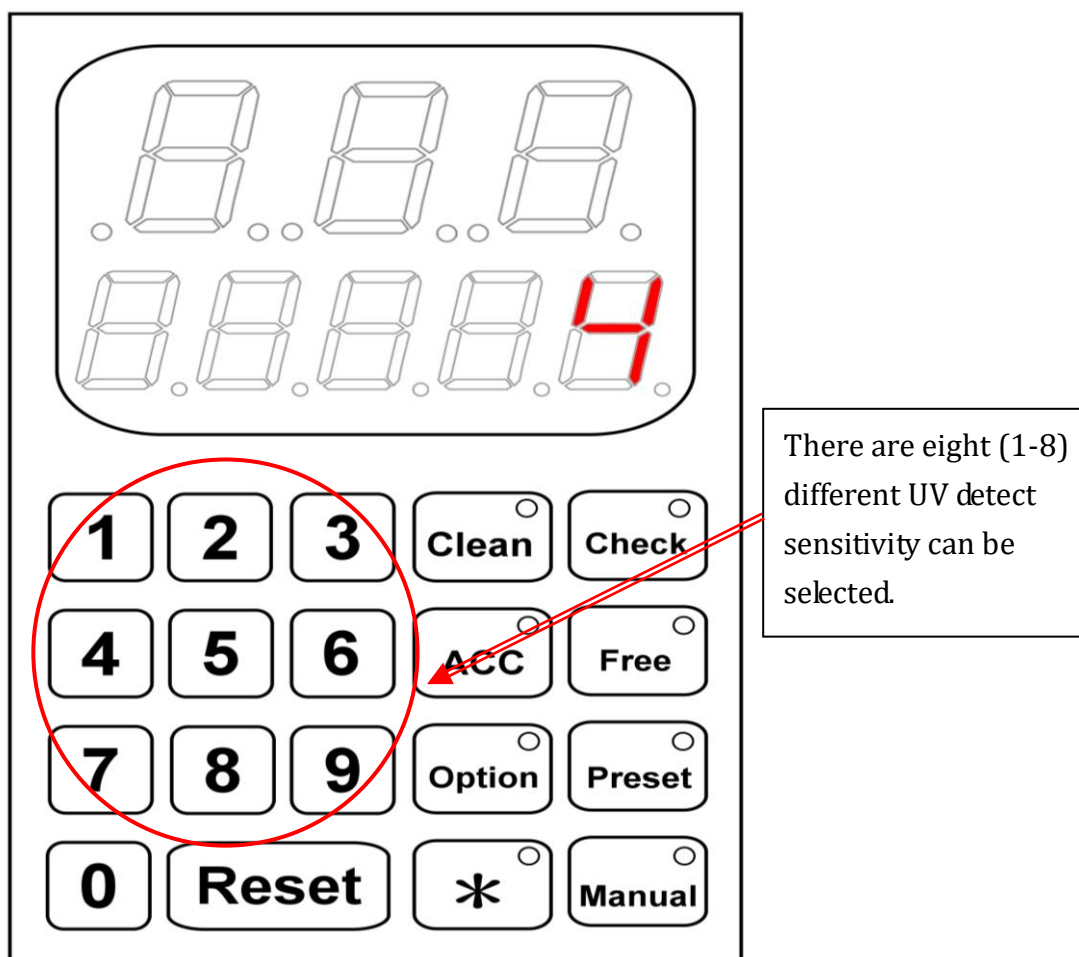
### ※ The UV-Detection Function

**Function:** This function is simply started by pressing the button of **\*** before counting process. This is designed for detecting the counterfeit banknotes. UV feature can work with other counting modes. E.g. Check, Free, Preset, Manual and ACC together.



## ※ How to Use the Feature of UV-Detection

There are 8 different UV-detecting levels can be selected. User can select the best sensitivity from 1 ~ 8 for the particular banknote. (In default setting, the detecting sensitivity level is 4)



- Step 1: Turn on the machine and select the UV-Detection feature by press the key of **\***. The UV-detection will be level 4, and the user can count and test the UV-feature by genuine notes and counterfeit notes.
- Step 2: Then user can select the levels by pressing the Number Key 1, 2, 3... 8. The most sensitive level is 1; and consequently, the most insensitive level is 8.
- Step 3: If level 1 can count genuine note and catch the counterfeit note perfectly, then you can use this level for this particular banknote. Otherwise you must test the level from 2 to 8.

➤ **Precautions**

(1) Please check your AC Voltage; it should be the same as the Voltage specification showed on the back sticker of our Banknote Counting Machine.

(2) Disconnect the AC cord and inform the qualified engineers for repairing our banknote counter if there is any technical trouble or damage on our machine.

(3) Do not use the machine in following situation, which are extremely hot, cold, dusty or humid.

(4) When you are not going to use the machine for a long period of time, please disconnect the AC cord.

(5) If the AC cord is broken or damaged, or if the wires are exposed, contact your local agent to replaced or repaired.

➤ **Regular Maintenance**

(1) Clean the metal cover

Use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents, such as alcohol, benzene or thinner.

(2) Clean the filters regularly

There are two different filters in the machine need to be cleaned. One is the filters of compressor, which are fixed in front of inlet, and outlet of compressor. The other one is the filters of spindle which are fixed on the top of spindle.

Compressor Filters cleaning should be conducted once every 6 months and for the filters of spindle is every 2 months.