Mini *Intelligent Banknote Counter*

User's Manual

Please check whether the appearance of the machine is in good conditions and whether all of the accessories are available. Inside the package there shall be the following:
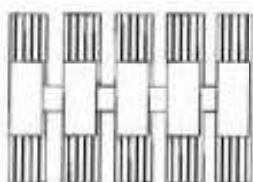
Banknote counter   Power cable   User's manual   Rubber belt

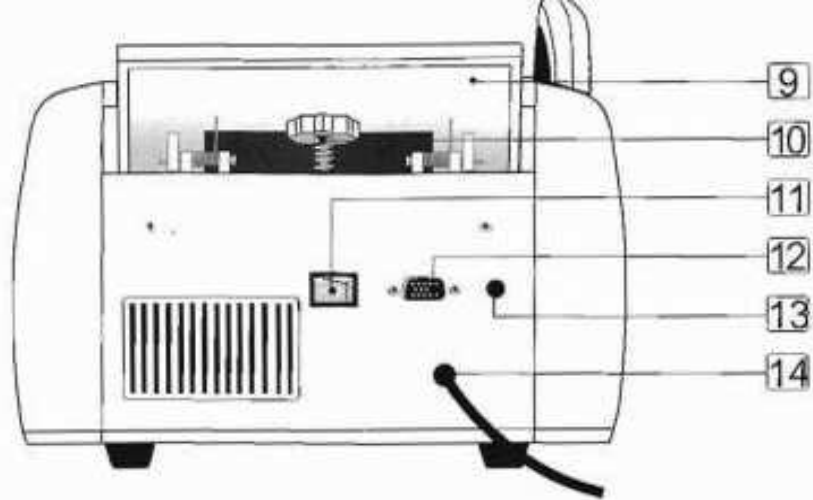Resistance slice   Banknote twiddling gear   Cleaning brush   Fuse

# Exterior Introduction

Three-view drawing

1 Counting display window   5 Banknote holder
2 Preset display window   6 Banknote feeder
3 Top cover   7 Handle
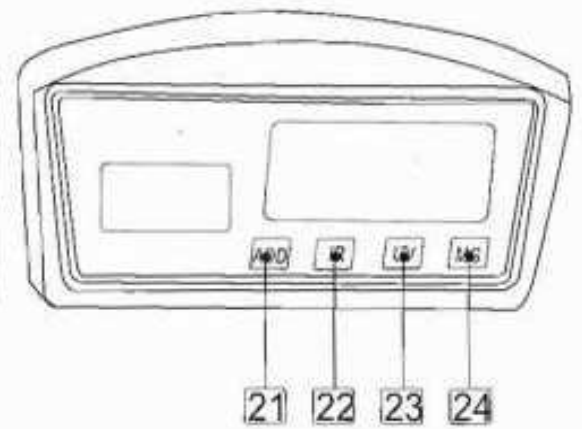4 Banknote receiving wheel   8 Operation panel

9 Banknote sliding board   12 Interface for external display
10 Vertical adjusting screw   13 Fuse holder
11 Power switch   14 Power cable

Operation panel   ## *Display*

15   16   17   18   19   20   21 22 23 24
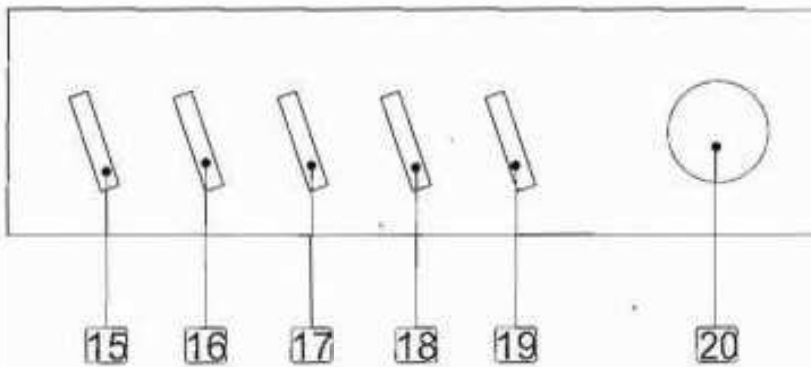
Full function model

15 CHK key   17 BAT/UV key   19 CNT/CE key   21 ADD LED   23 UV LED
16 ADD/IR key   18 +1/MG key   20 RESET key   22 IR LED   24 MG LED

Basic model   ## *Display*

15 ADD   17 +1   19 CE
16 BAT   18 +10   20 RESET
21 ADD LED

21

3
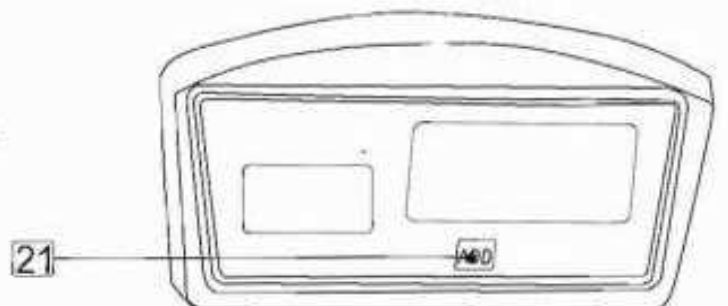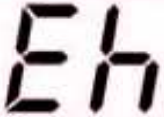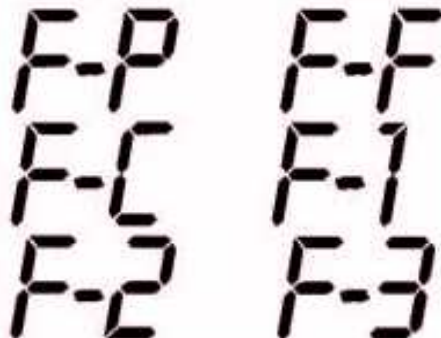
before counting the banknotes, the number displayed on the display window will be cleared, and a new counting will be started.

---

5. Correct operation methods for banknotes counting:

Before counting the banknotes, you shall neaten them first. Separate the banknotes according to the par value and eliminate contamination and paper stuck on the banknotes, then make the banknotes into a certain slope. Tightened bundles of banknotes shall be loosed before being made into slope. Then put the banknotes on the entrance of the banknote feeder.

The operation shown in Figure 1 is correct operation, while operations shown in Figure 2 and 3 are wrong operations. In Figure 2, the slope direction is wrong, in Figure 3, the banknotes are not made into a slope.

Figure 1

Figure 2

Figure 3
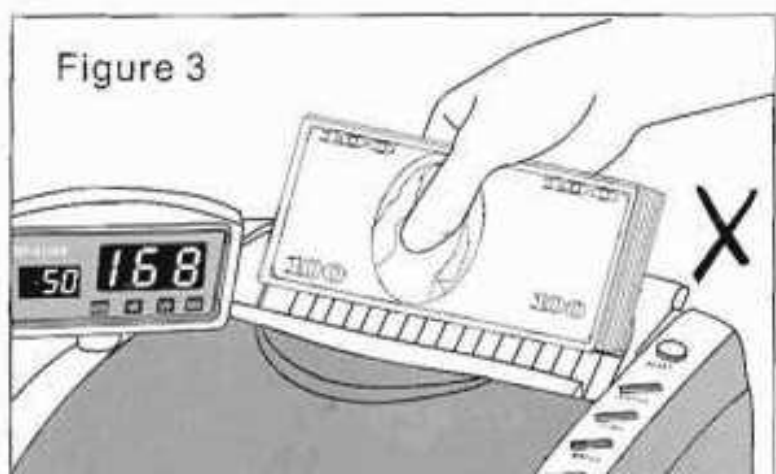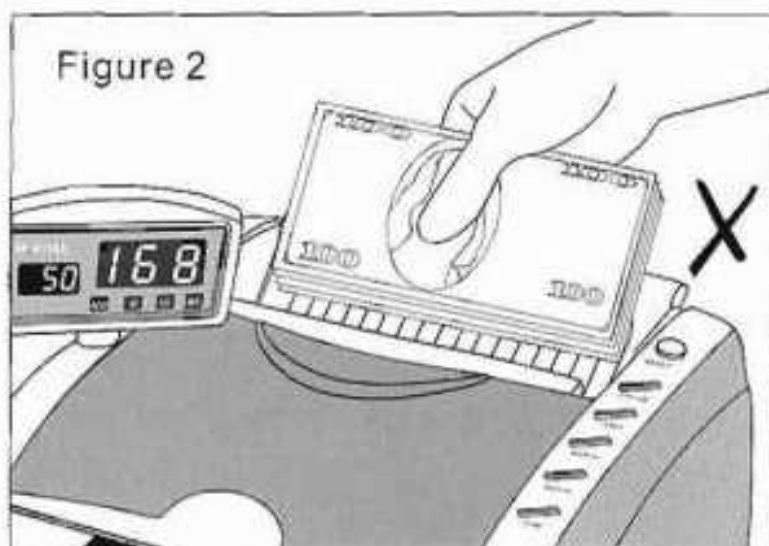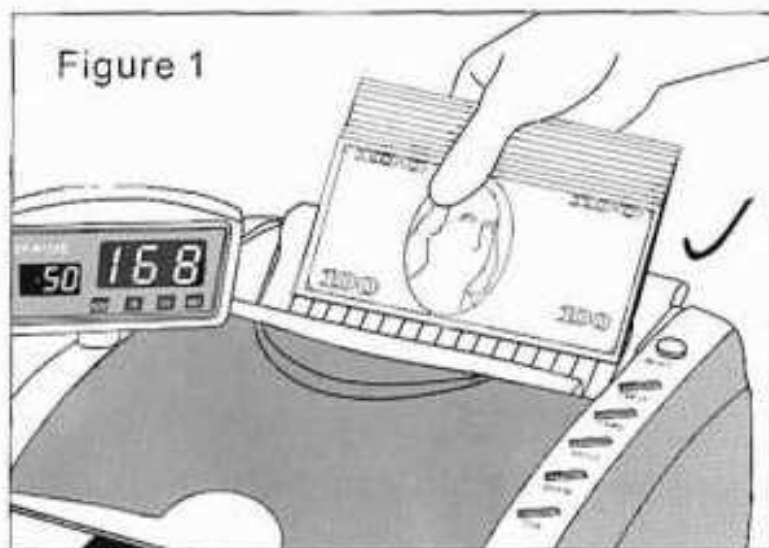
Eh	Half piece or incomplete banknote, remove it, and press RESET to continue the counting
EJ	Some banknotes are connected or overlapped, put the banknotes on the banknote holder back to the banknote feeder to count again. If EJ is displayed frequently, you can finely adjust the vertical adjusting screw clockwise.
ES	Banknote tilt, press RESET to continue the counting
Ed	Some banknote is nonconforming in size, remove it and press RESET to continue.
F-P F-F **F-C F-1** **F-2 F-3**	Counterfeit or suspicious banknote, remove it and press RESET to continue the counting. If false detection occurs frequently (regards real banknotes as counterfeit ones), you can adjust the sensitivity to a lower level.

❗ **The banknotes should be re-counted if one of the above errors has occurred.**

How to adjust the feeder

When banknote feeding is unsmooth, or banknote counting is inaccurate, it can be solved through adjusting the vertical adjusting screw as well as the gap between the resistance slice and the banknote twiddling gear (clockwise for tightening and counterclockwise for loosening). Then you can put in a banknote and hold, if you feel the pull, the machine is workable.
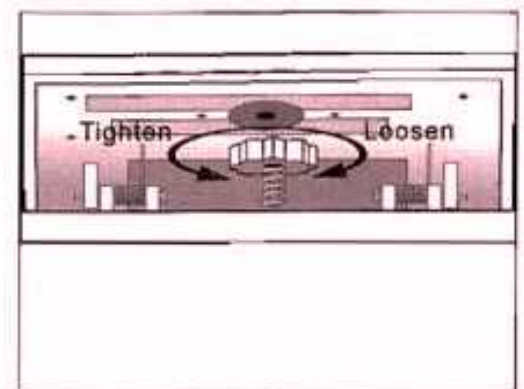
"EJ" , it means an error has occurred, please get the banknotes from the banknote holder and put back to the banknote feeder (as shown in the right figure) for re-counting.
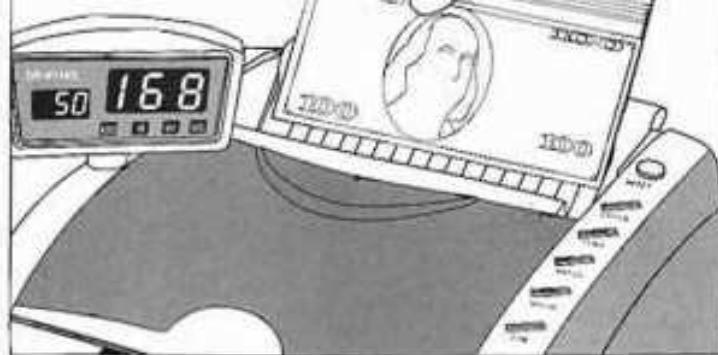
6. *Accumulative display*

When you need accumulative counting, press the "ADD/IR" button on the panel, and the "ADD" LED will be on. Then the machine will count on the basis of the original number displayed on the display window. After the banknote counting is finished, the number displayed on the display window is the summation of the several times' counting. When the accumulative display reaches 999+1, the number displayed on the display window will be resumed to 0 .

$$999 \circledcirc 888$$

7. *Batch counting*

When you need a batch counting, press the "BAT/UV" button and 100 is displayed on the preset window, and the machine enters batch counting mode, the batch counting number is 100. Each time when you press "BAT" button, 100 , 50 , 20 , 10 , 5 and blank will be displayed in turn repeatedly. If the blank displayed , the batch counting mode is disabled. If you press "+1" , the batch number will be added with 1 automatically. The batch number can be selected in the range of 1-999. Put banknotes on the banknote feeder, and the machine will count automatically. When the banknotes on the banknote holder equals to the batch number, the machine will stop automatically. If you want to repeat the batch counting, you only need to get out the banknotes on the banknote holder, and the machine will automatically repeat the above operation.

❶ Note: Press "CNT/CE" key to exit from batch counting

Thank you for using Mini intelligent banknote counter. It is a high-performance intelligent counterfeit detector applying digital fuzzy processing technology, suitable for counting/ detecting Euro, US dollar and other banknotes. The structure design and performances are more scientific, and the counterfeit detection ability is more outstanding.

In order to make best use of the accurate banknote counting capability and outstanding counterfeit detection function of the unit, please read this manual carefully before using the unit and operate as per the procedures stipulated in the manual.

Contents

You may need the switch from one to another banknote, this is done by press "CNT/CE" key and hold it for about 2 seconds.

9. Counting with short banknote

Since the banknote counter is designed for multi-banknote, it has an adjustable feeder for short banknote. When counting with short banknotes, User should adjust the feeder to an appropriate size for special banknote, as shown in the right figure:
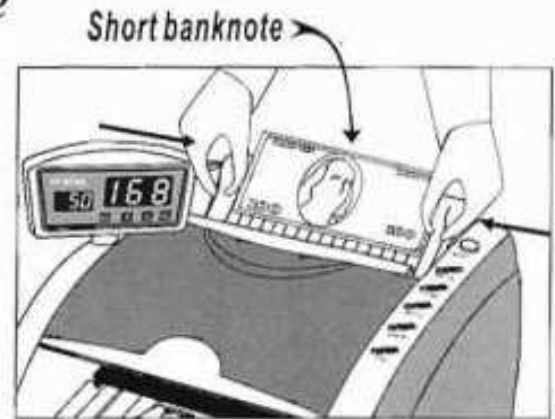
Short banknote

❶ **Available in special model.**

Select detecting options

With several options for detecting counterfeit, the banknote counter can find out the counterfeit banknotes. Users can select the counterfeit detection options and adjust the sensitivity according to the requirements of the banknotes counting.

When finding counterfeit banknotes, the machine will stop immediately, and the buzzer will beep; the top banknote on the banknote holder is a counterfeit banknote or suspicious banknote. The machine will count this banknote after eliminating the counterfeit banknote, press the "RESET" button, and the machine will restart the counting.
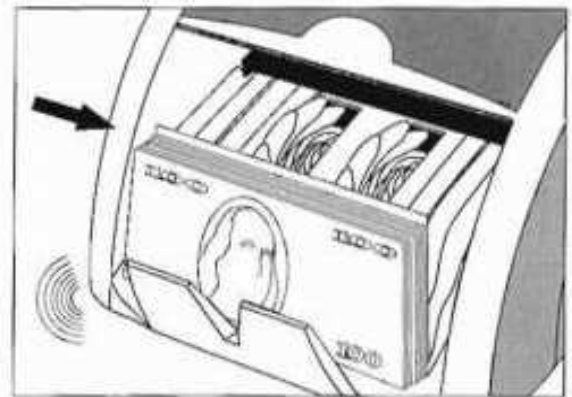
1. Infra-Red function

Press "CHK" key and then press the "ADD/IR" button, the "IR" LED will be on, which means this function is active. The counter will check the infra-red ink feature of the counted banknotes.

2. Ultra-violet function

Press "CHK" key and then press the "BAT/UV" button, the "UV" LED will be on, which means this function is active. The counter will check the ultra-violet feature of the counted banknotes.

1. The machine automatically performs a system self-test after being turned on. If one of the following error messages is displayed on the preset display window, usually it is because the sensor is blocked by banknotes or dusts. Then use a brush or a soft cloth to clean the dusts on the sensor or remove the banknote, and then restart the machine.

Error message display	Fault position	Solution
E00	Fluorescence sensor	Adjust the top cover to the right position so as to avoid strong light source
E10	Banknote feeding sensor	Remove the banknote and clear away the dusts
E11	Banknote receiving sensor	Remove the banknote and clear away the dusts
E30	Left counting sensor	Same as above, or aim at the axes of the light beam
E31	Right counting sensor	Same as above
E50	Rotate speed sensor	Clean the code wheel and sensor, or replace the rubber-belt
E80	Internal memory fault	Resume to factory setting

2. Error message display and solutions:

If the following error message is displayed on the preset display window during the course of counting, you can handle as per the following solutions after the machine is stopped.

display, connect it to the interface for external display on the back of the banknote counter. Turn on the switch, the counting display window and preset display window display "0" .If any other symbols are displayed, please handle according to Troubleshooting on page 9 in this manual

Interface for external display
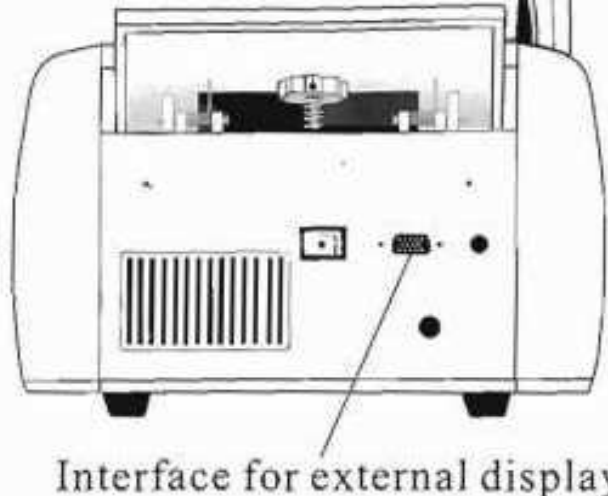
❶ In order to ensure personal safety, the electric socket shall be properly grounded.

---

2. In order to avoid error inspection, the following banknotes shall be eliminated before counting:
   A. Banknotes mended with white paper
   B. Banknotes which were once washed
   C. Banknotes seriously contaminated
   D. Damaged or broken banknotes

3.Key operation basis

Some keys are multi-used, for example, "ADD/IR" key is used not only for accumulative counting but also for setting "IR" function, and "ADD" is normal function and "IR" is the second function.

"CHK" key is used to switch the key's function, Press "CHK" key once, the preset display window will display "-CH" in a flash way, this means now all the multi-function keys are switched to their second function mode. Press "CHK" key again to exit and return to normal status.

---

4. Quick counting

When you only need to count the banknotes without needing to detect the counterfeit, turn on the power, and turn off all the LEDs for the functions of counterfeit detection, then make a pile of banknotes of same par value into a certain pitch and put on the banknotes feeder (as

and the counting will be inaccurate.

6. Dusts on ultraviolet LED, IR sensors, and magnetic head shall be thoroughly cleaned at least once a week.

Specifications

Counting Speed:	1000 Notes / Minute.
Feeder Capacity:	200 Notes
Holder Capacity:	300 Notes
Display:	3 Digital LED for Counting/Preset.
Power Supply:	220V /50 Hz, (110V /60 Hz)
Power Consumption:	<80W
Temperature	0℃ −40℃
Humidity	40−90%
Dimensions:	348(L)×238(W)×205(H)(mm)
Weight:	7.5kg.

❶ **If the machine has some faults that you can't solve, please contact the Technical Support Dept of our company or our agent for services.**

❶ **Products subject to change without further notice.**

1. When the resistance slice is seriously worn, it shall be replaced. Draw out the banknote feeder, press down the banknote sliding board, and replace the worn resistance slice with a new one or change to another rubber wearing side, then resume to the original state.
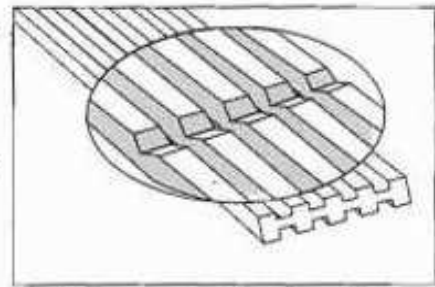

Resistance slice is seriously worn

2. Rubdown banknote twiddling gear will cause unsmooth banknote feeding and inaccurate banknote counting, so it shall be replaced. Draw out the banknote feeder, remove both the left and right plastic side covers, and replace the worn gear wheel with a new one, and then resume to the original state.
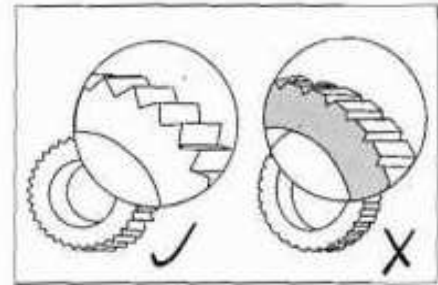
New banknote twiddling gear is rubbed down

3. The fuse can be replaced if it is burned -out, open the cover of fuse holder and insert a new one, then re-cover it.
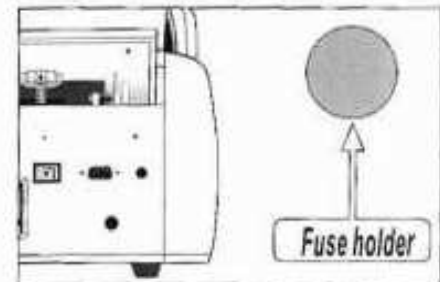
Replace the fuse

Instructions for maintenance

1. If the temperature is lower than 20℃,please turn on machine and wait for three minutes before counting.

2. The machine shall be operated at places with good ventilation and kept away from strong sunshine and strong magnetic field.

3. The plug of the machine shall be inserted to electrical socket with safe grounding.

4. The power supply of the machine shall be within the scope of 220V~±10% (Please specify if requiring the machine to work under 110V~±10%).Otherwiser it will affect the machine's normal operation.

and the counting will be inaccurate.

6. Dusts on ultraviolet LED, IR sensors, and magnetic head shall be
thoroughly cleaned at least once a week.

Specifications

Counting Speed:	1000 Notes / Minute.
Feeder Capacity:	200 Notes
Holder Capacity:	300 Notes
Display:	3 Digital LED for Counting/Preset.
Power Supply:	220V /50 Hz, (110V /60 Hz)
Power Consumption:	<80W
Temperature	0℃ −40℃
Humidity	40−90%
Dimensions:	348(L)×238(W)×205(H)(mm)
Weight:	7.5kg.

**❶ If the machine has some faults that you can't solve,
please contact the Technical Support Dept of our
company or our agent for services.**

❶ Products subject to change without further notice.