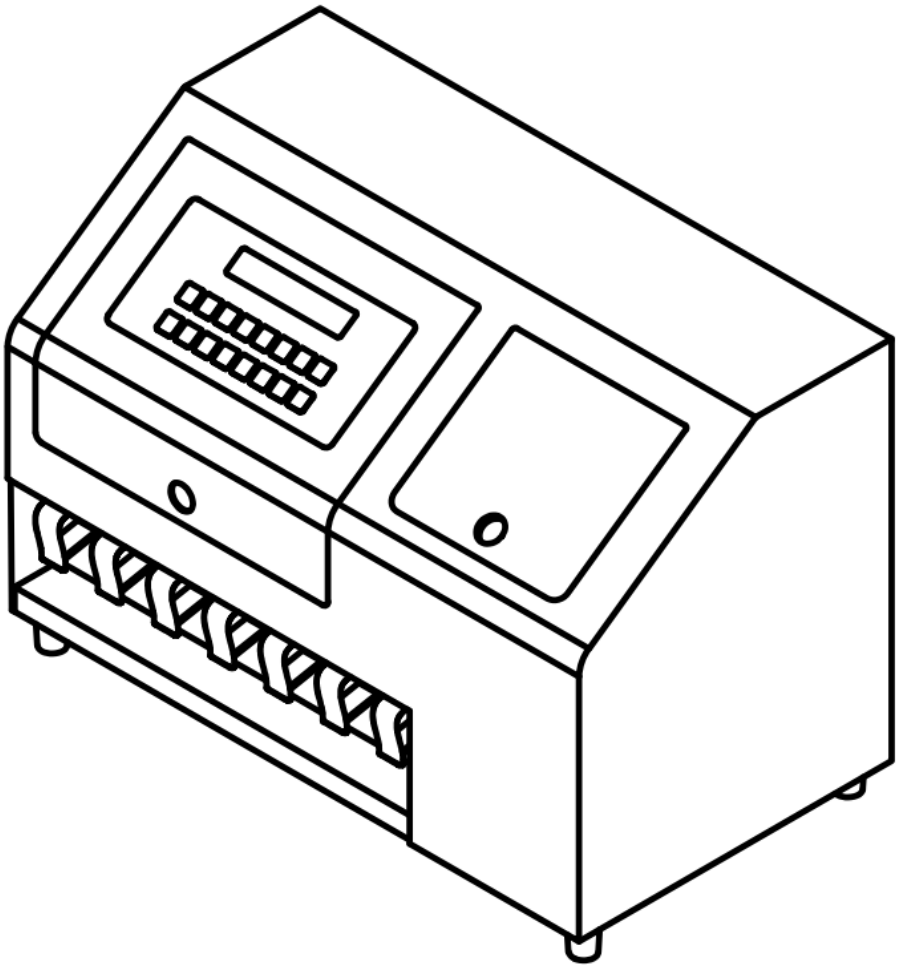
Coin Sorter
CS-600B
Operation Manual



Contents

1. Overview

CS-600B is a coin sorter designed and produced by our company with the function of detecting counterfeit coins. The CIS sensor adopted in CS-600B can detect the diameter of coins, thus automatically identifying other foreign coins, counterfeit coins, metal pieces and so on. CS-600B can sort 6 different coins simultaneously (a certain amount of incompatible coins can be mixed), with functions such as automatic identification, statistics, and sorting coins in different denominations, among which incompatible coins will be automatically kicked into the reject bucket.

CS-600B can be connected to a printer (baud rate is 115200 by default) or computer through an RS-232 interface to print all data at any time; CS-600B can also be connected to an external display through a PS2 port to display all coin data at any time.

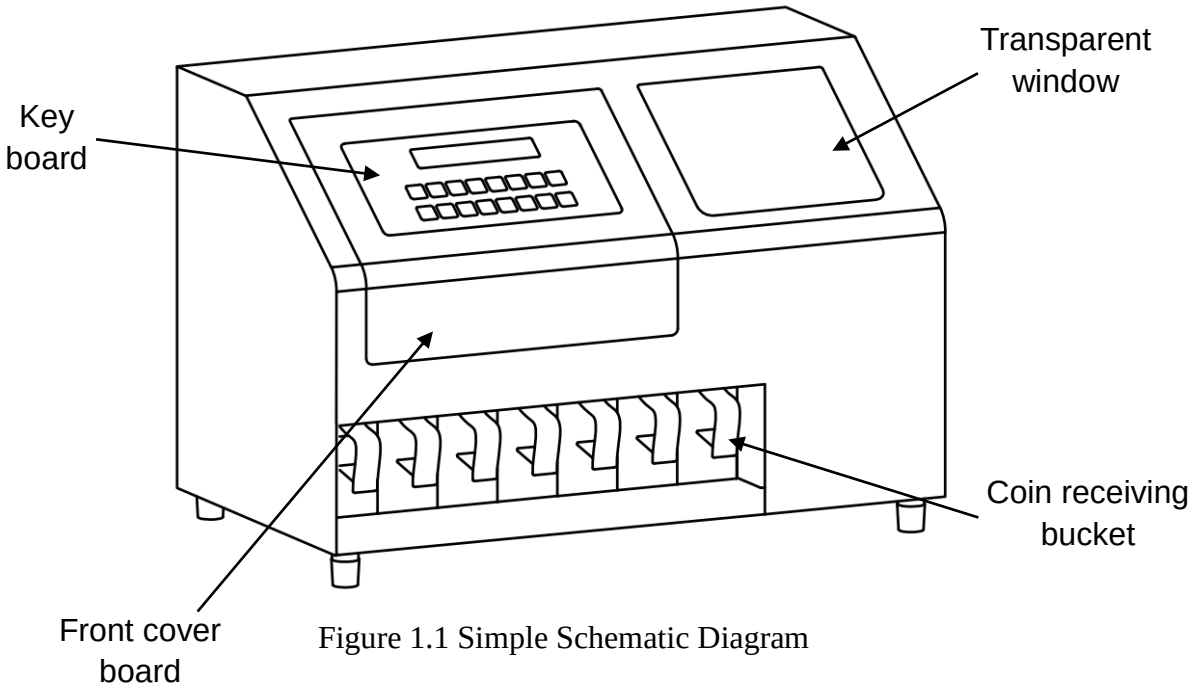


Figure 1.1 Simple Schematic Diagram

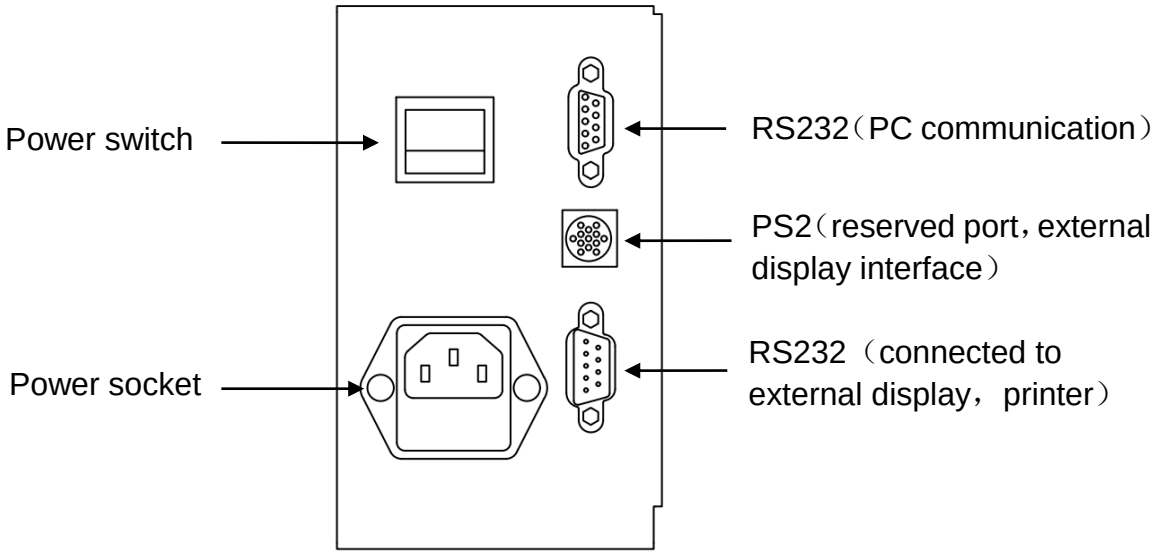


Figure 1.2 Schematic Diagram of Socket Board

2. Technical Parameters

Sorting speed	About 600 coins/min
Bucket capacity	About 600 coins
Countable Coin size	Diameter 14-33mm
	Thickness 1-4mm
Sorting type	1- 6 different coins.
Dimensions	510×280×320mm
Weight	16Kg
Power	45W
Current	AC 110V ±10%, 60Hz
	or AC 220V ±10%, 50Hz
Display	8-bit (LED display)
Working temperature	0-40C °
Humidity	30-75%

3. Precautions

- Use the power cord and data cable configured by the machine.
- Unplug the power cord before moving the machine.
- Do not operate the machine in direct sunlight.
- To avoid injury and malfunction, please do not put your head, hands, clothes and tools into the bucket.
- Do not open the cover during operation.

4. Panel Description

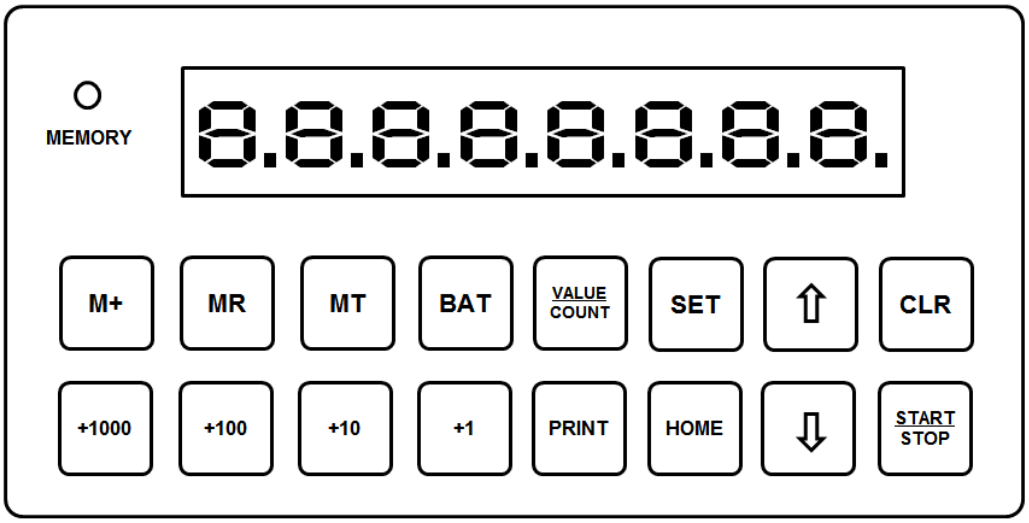


Figure 4.1 Schematic Diagram of Panel

4.1 Key Function

1） START/STOP: Start/Stop

2） HOME: Return to main interface

3） ⇧ and ⇩: Select channels

4） CLR: Clear

5） SET: Debug reserved keys

6） VALUE/COUNT: Switch between piece counting and value counting

7） BAT: Batch setting

8） MT: Data storage

9） MR: Memory Reading

10） M+: Accumulate

11） PRINT: Print the quantity and amount of coins

12） +1000、+100、+10、+1: Numeric keys

4.2 Display Mode

1) Amount display: 0.00, with decimal point;

2) Quantity display: 0, without decimal point;

5. Coin Receiving Bucket Corresponding to Each Channel

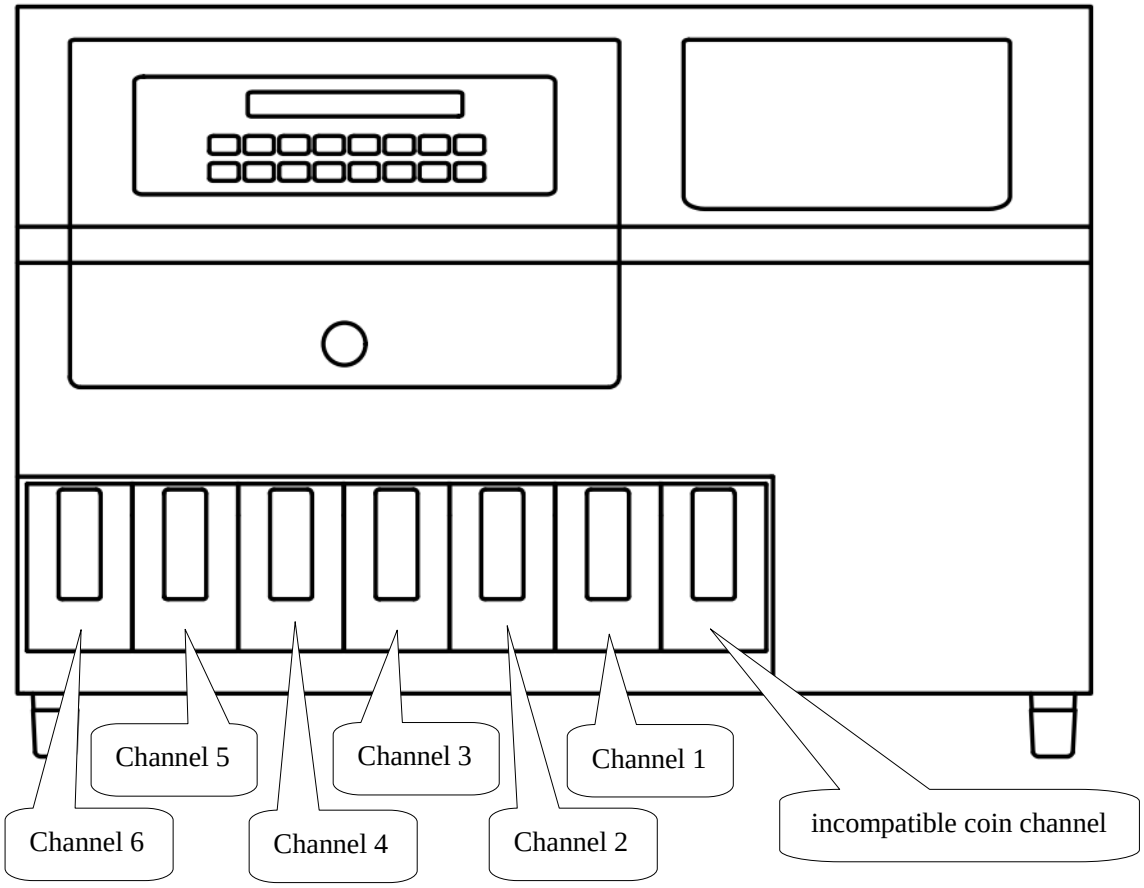


Figure 5.1 Schematic Diagram of Channel

The coin receiving channels from right to left are incompatible coin bucket, channel 1, channel 2, channel 3, channel 4, channel 5, and channel 6. Coin diameters are also ordered from largest to smallest. We take USD as an example: channel 1 is $0.5, channel 2 is $1, channel 3 is $0.25, channel 4 is $0.05, channel 5 is $0.01, and channel 6 is $0.1.

6. Operation Steps

- Plug in the power cord at the power socket on the right rear side of the machine, and then turn on the power switch upward;
- After the end of the machine self-inspection, no error found will be regarded as entering the working state;
- Open the right window, pour the coins into the coin hopper and press START/STOP key to automatically count coins;

6.1 Channel Selection

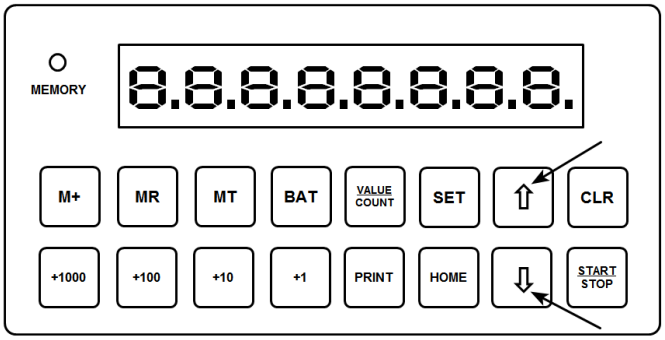


Figure 6.1.1 Schematic Diagram of Selecting channels

- Press ⇧ and ⇩ keys to select different channels and check the amount and quantity of coins in channels;

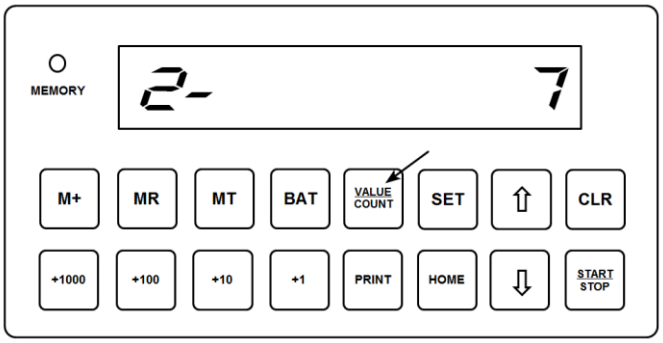


Figure 6.1.2 Schematic Diagram of Switching between Amount and Quantity

- Press VALUE/COUNT key to switch display between amount and quantity.

6.2 Data Clear

- Press CLR key to clear all data after the machine is stopped.
- Press ⇧ and ⇩ keys to select different channels, and press CLR key to clear the data for the selected channel.

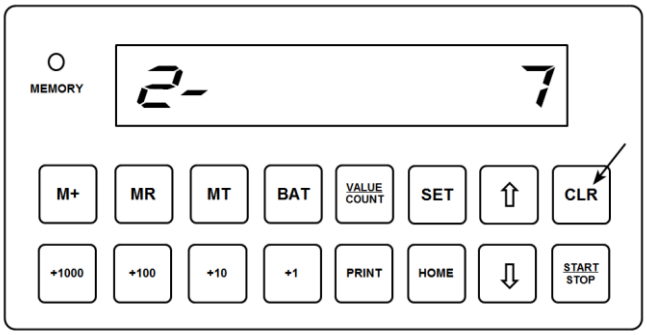


Figure 6.2 Schematic Diagram of Data Clear in Channel 2

6.3 Data Storage

- After counting, press MT key to store the coin counting data.
- Press MT key to store the data, and the indicator light next to it will be on.
- If the indicator light is on, data is stored in memory.

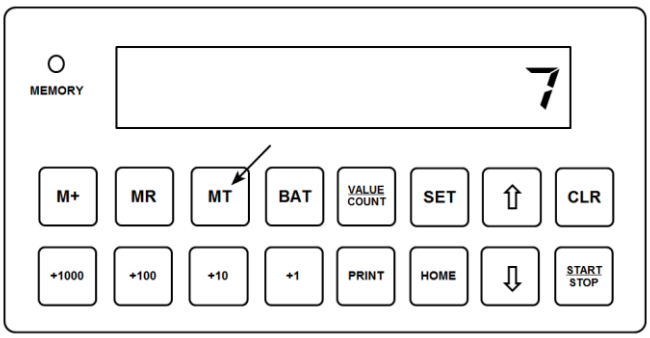


Figure 6.3 Schematic Diagram of Storing Coin Counting Data

6.4 Memory Reading

- After counting, if the data has been stored, you can press MR key to read the stored data.

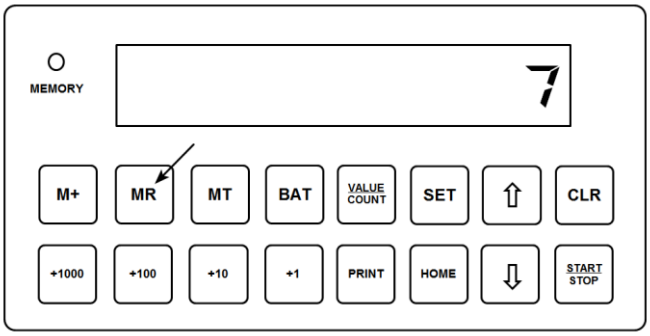


Figure 6.4 Schematic Diagram of Reading Stored Data

6.5 Storage Clear

- First press CLR key to clear the current data.
- Then press MT key. When the data is cleared, the indicator light will be off.

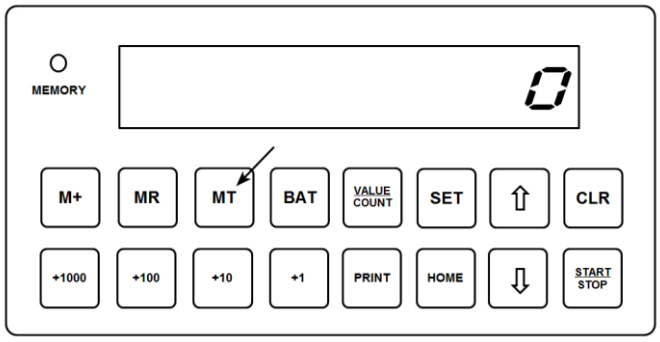


Figure 6.5 Schematic Diagram of Clearing Stored Data

6.6 Storage Accumulation

- Press M+ key to accumulate the current data to the previous data and save it, and clear the current display data to zero.
- Press ⇧ and ⇩ keys to select different channels, and press M+ key to accumulate only the data of the selected channel.
- Press M+ on the home screen to accumulate the data of all channels.

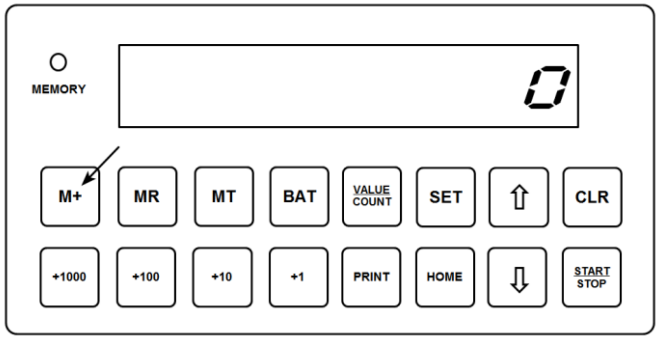


Figure 6.6 Schematic Diagram of Accumulating Data

6.7 Batch Setting

- Press BAT key to enter the batch setting mode.
- Press ⇧ and ⇩ keys to select different channels, press +1000, +100, +10, +1 keys to set the batch quantity of each channel, and press CLR key to clear the batch quantity.

1) +1000 means1000, +100 means100, +10 means10, +1 means 1;

2) For example, if you want to increase 1, press +1 key once to increase 1, and press +1 twice to increase 2.

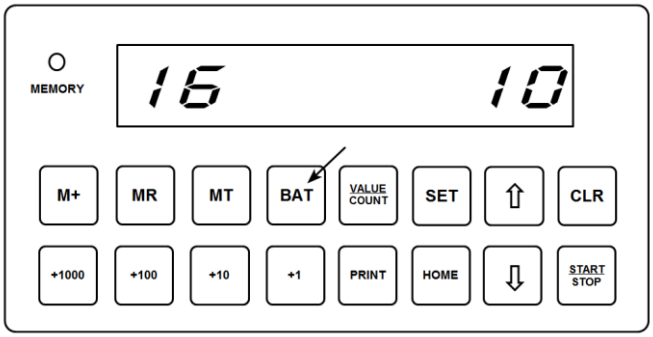


Figure 6.7.1 Batch Quantity of 10 Coins in Channel 1

Notes:

- If the batch quantity is not equal to 0, the batch function is regarded to be turned on. When the number of coins in a single channel reaches the batch quantity, then, the machine stops running, the corresponding channel flickers, indicating that the batch quantity has been reached.
- Press CLR key to clear flicker. By pressing START/STOP key, the machine will start, and continue counting and sorting coins.

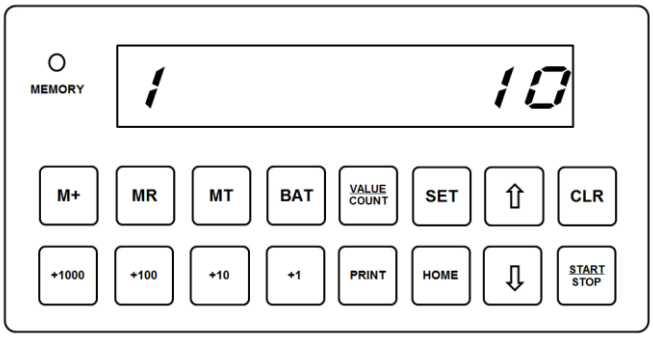
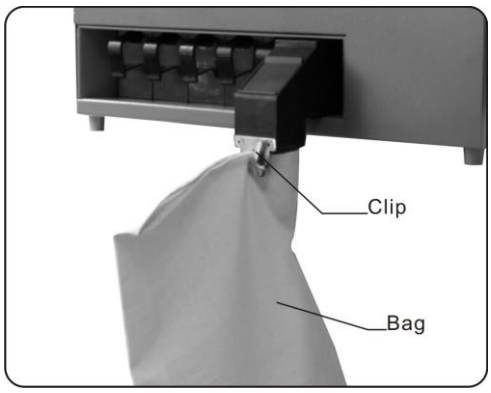


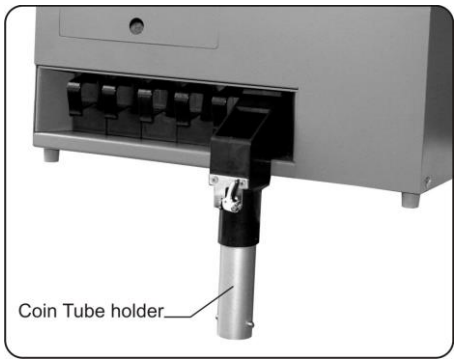
Figure 6.7.2 Channel 1 Flickers to Reach Batch Quantity of 10 Coins

Note: In the counting process, when the batch quantity is reached, the machine will stop running, and the coins on the guide rail that have not passed the sensor will be kicked into the incompatible coin bucket

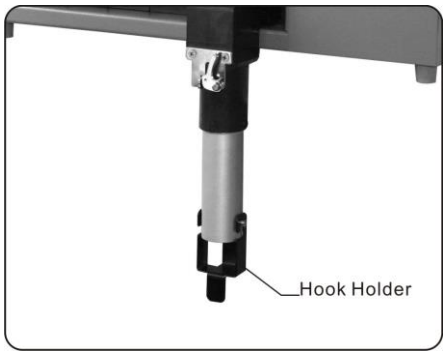
7. Installation of Coin Bag Adaptor (Optional)



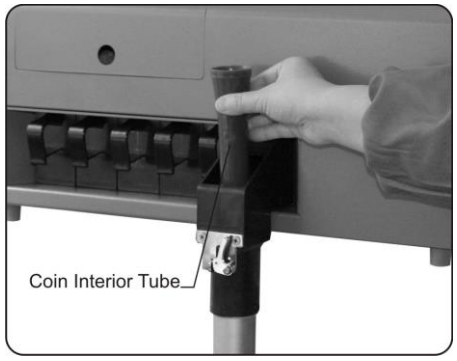
- As shown in the figure, install the coin bag adaptor, hang the bag and clamp it with clip.



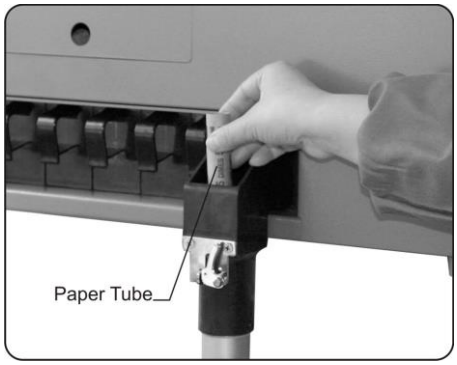
- Rotate and mount a coin tube holder.



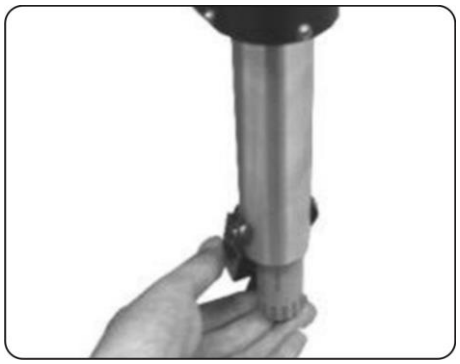
- Install a hook holder on the coin tube holder.



- Depending on the denomination of coins, select a plastic coin interior tube and place it inside the coin tube holder.



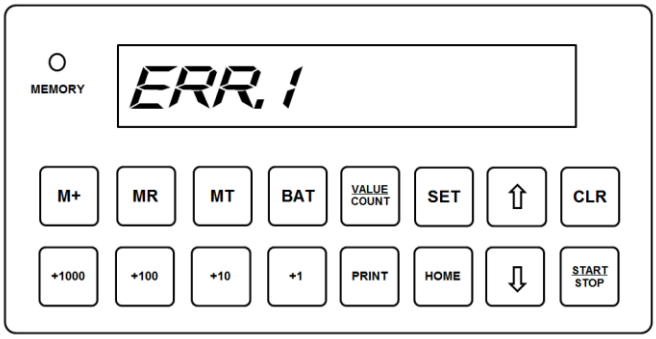
- Place the paper tube inside the coin interior tube.



- Depending on the number of coins each paper tube can hold, select a batch quantity (in batch counting mode) and start counting. When the batch quantity is reached, the machine stops. All the counted coins fall into the paper tube, which is removed by pushing back the hook holder, and then sealed.

8. Troubleshooting

During the counting process, the following error information may be displayed, and the machine will stop working.



1. When Err.1 is displayed, it indicates that the front cover weld assembly is in open state. By closing the front cover weld assembly, the machine can return to the normal counting procedure.
2. When Err.2 is displayed, it indicates that coins are blocked on the rail. By clearing

the blocked coins on the rail and pressing CLR key, the machine can return to the normal interface of counting coins.

3. When Err.3 is displayed, it indicates that there is a coin or foreign object blocking on the CIS sensor. By clearing the coin or foreign object on the sensor and pressing CLR key, the machine can return to the normal interface of counting coins.

Note: If there is a foreign object blocking the track, the coins can not fall into the corresponding channel, so the number of coins in the corresponding coin receiving bucket will be different from the actual quantity. So before counting, please clear the mixed foreign object in the coins.

9. Routine Maintenance

Be sure to unplug the power cord before routine maintenance.

Clean the rail with a brush at least once a day.

Clean the rotate disk and hopper with a brush at least once a day.

Please contact your local supplier for further assistance.

10. Accessories

1.Extra Plastic Trays	1pcs
2.Power plug	1pcs
3.Plastic brush	1pcs
4.Coin bag	2pcs
5.Coin Bag Adaptor	2pcs

*** In the interests of our ongoing policy of continual product improvement, specifications are subject to change without prior notice. ***