COIN SORTER

Magner 610

Operation Manual

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1. Introduction

MAGNER 610 is a coin sorter designed and produced by our company. It has counterfeit coin detection function. With the installed advanced eddy current sensor, it can simultaneously detect the metal coins' diameter, thickness and material, based on this feature, our MAGNER 610 can automatically recognize foreign coins, counterfeit coins and sheet metals etc. MAGNER 610 can sort 6 kinds of coins at the same time and has the function of automatically detecting, counting and sorting coins of programmed denominations, during which process the foreign coins will be sorted into Rejected Coin Drawer. Our MAGNER 610 can be connected with printer, external display or computer through RS-232 port. All data can be printed out at any time.

2. Specifications

Sorting Speed	Approx.600coins/ min(15mm)
Hopper Capacity	Approx.600pcs
Extended Hopper Capacity	Approx.3600pcs
Suitable Sorting Coin Range	Diameter 14-31mm
	Thickness≦3.5mm
Sorting Number	1-6 different kinds of coins
Machine Dimension	510×280×320mm
Weight:	16Kg
Power Consumption	60W
Power Supply	AC 220V-240V, 50/60Hz
Display	LCD Display(12864)
Ambient Temperature	0-40C°
Humidity	30-75%

3. Function

MAGNER 610 is able to identify, count and sort the coins, it can identify at most 20 kinds of denominations, also it has one reject pocket for fake and foreign coins.

From left to right it is

Channel6	channel5	channel4	channel3	channel2	channel1	reject

The coins will be sorted according to their diameter, the biggest coin is in channel 1, the smallest coin is in channel 6. Foreign coins, fake coins and tokens will be sorted into reject pocket

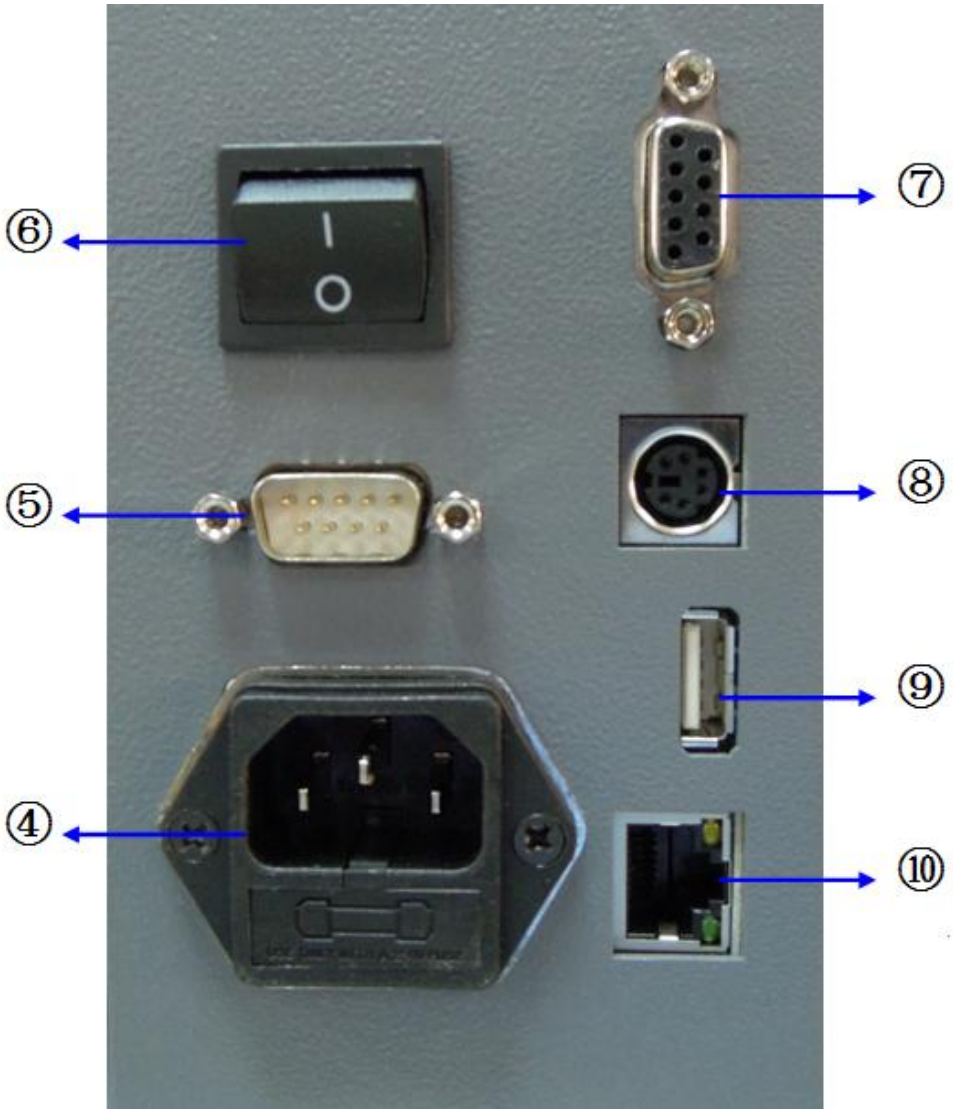
4.Diagram

①: Key panel

②: Visible window

③: Drawer

5. Socket board



④: Power socket

⑤: RS232(can be connected with external display and printer)

⑥: Power switch

⑦: RS232(communication with PC)

⑧: PS2(reserved socket for external display)

⑨: USB(for software upgrading)

⑩: LAN(reserved for network)

5. Key Panel

Key Function:

1） 0 ~ 9: Numeric key for fast batch number settings

2） START /STOP: Start or Stop

3） SET: Set MENU or set some functions

4） ESC: Return to MENU or clear rejected coin records

5） CLR: Clear counting records or clear error codes

6) , , , : Select different Channels, or select different Menu Setting; can also control Batch function ON/OFF

7) MR: Read memory data

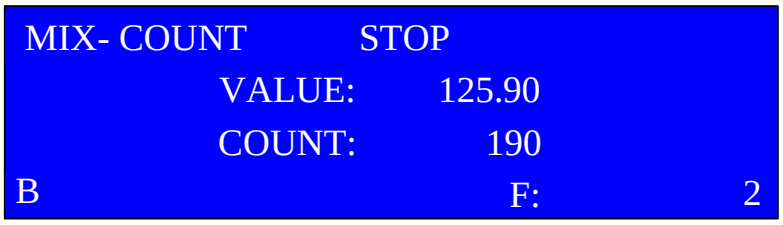
8) M+: Save Self-learning parameters

9) LIST: Check detailed counting list

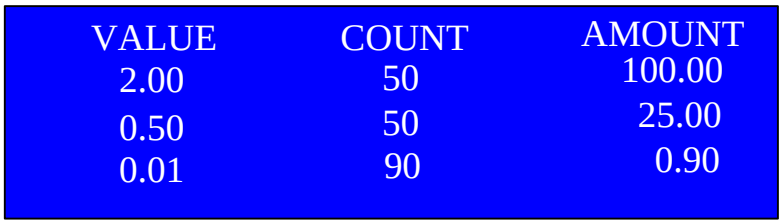
10) Print: Print sorting result and Self-learning parameters

6. Main Display Modes

1）Total Amount & Quantity Display Mode:



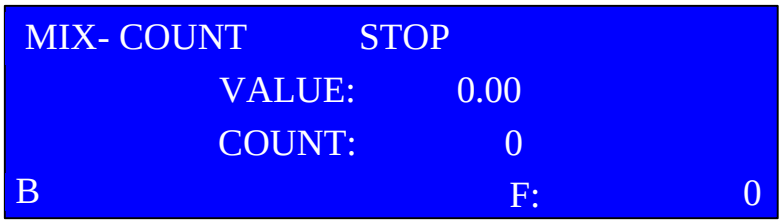
2）Separate Channel Amount & Quantity Display Mode:



7. Operating Procedures

Turn on the machine, the machine will enter into self-test mode and show following interface

This self-test stage may need about 10 seconds for machine to get warmed up. If the test result is OK, then machine will enter into normal working status shown as following interface:



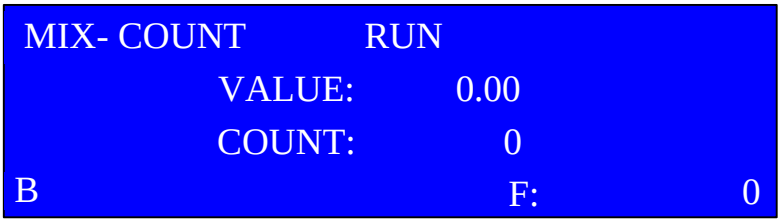
MIX-COUNT means mix-counting mode

RUN/STOP is the sign showing machine's running or stop status.

B is the sign of Batch Function is ON.

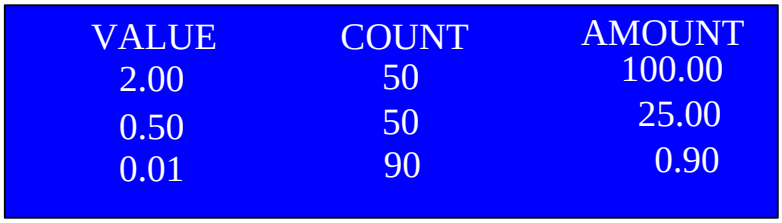
VALUE is for total Amount. **COUNT** is for total Quantity, **F** shows the quantity of foreign/fake coins.

• Press START/STOP key，the machine will enter into Total Amount & Quantity Display Mode interface:



At the same time, Motor will begin to run to get the machine work. When coin sorting is finished, it will display the sorting result of genuine and foreign coins on the above interface. The foreign coins will be rejected into the right-most Rejected Coin Drawer.

After the machine stops running, press LIST key to check Separate Channel Amount & Quantity Display Mode, shown as follows: (Press , key to turn to choose different channel)



VALUE: refers to the denomination
COUNT: refers to the quantity for each denomination
AMOUNT: refers the amount for each denomination

Data Clear:

·Under main modes interface, press CLR key to clear all counted data.

·Under main modes interface, press ESC key to clear rejected coin record.

Data Memory:

.Under main interface, press M+ key to save the quantity and amount for genuine coins. It saves the accumulated data of the counting results. Under main interface, when the counting quantity and amount for genuine coins is 0, you can press M+ key to clear the saved data.

. Under self-learning interface, press M+ key to save the self-learning data, this function is only available for maintenance people

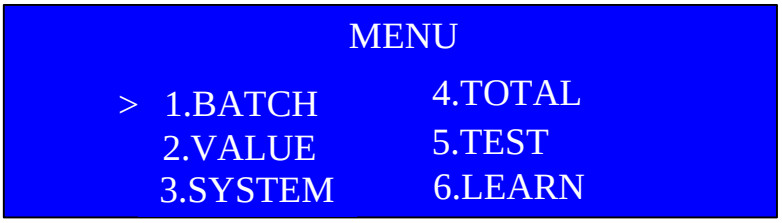
Data Memory Read:

·Under main modes interface, press MR key to read stored data;

·Under self-learning interface, press M+ key to read the original self-learning data, this function is only available for maintenance people

8. Function Settings

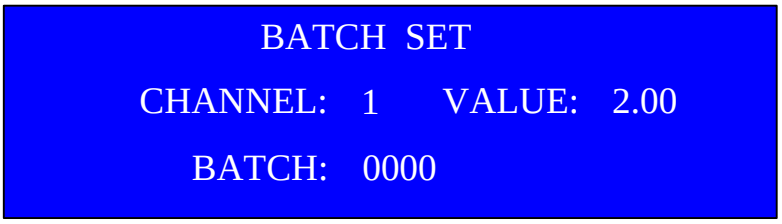
Press SET key to enter into Menu interface, shown as follows:



Directly press ⇦, ⇧, ⇩, ⇨ four keys to choose target submenu and then press SET key to enter each into detailed operation

interface:

(1) **BATCH**



Enter into BATCH SET interface, press ↑, ↓key to switch the channel. Under one channel, press SET key, the BATCH will flash, at this moment you can set the BATCH value through the numeric key 0 ~ 9（the upper limit is 9999）.Press CLR key you can clear the BATCH setting.

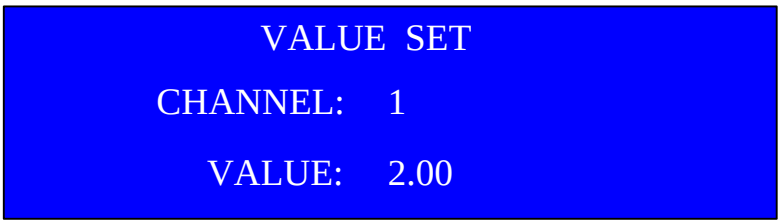
NOTES：The above steps are used for setting the BATCH number. If you need to set the BATCH, you need to turn on the BATCH function in system. Under main interface, press ↓key to turn on the BATCH on/off. When BATCH function is on, there is a B shown at the left corner; if there is no B, it means the BATCH function is turned off.

When one channel Batch No. setting is finished, you can come back to channel number selection interface by pressing SET key and then repeat the above number setting way to set batch number for other target channels. After all settings are finished, press ESC key to quit from BATCH submenu to come back into main menu interface.

When the machine reaches set Batch number, the LCD display will show as follows:

For example, set batch number as 10 for Denomination 2.00 coin. When the machine counted the 10th coin, the machine will stop running with blinking warning message "2.00 BATCH OK" and the buzzer will beep. After user takes out the coins and then presses START/STOP key, the machine will continue counting and the warning message will disappear.

(2) **VALUE**

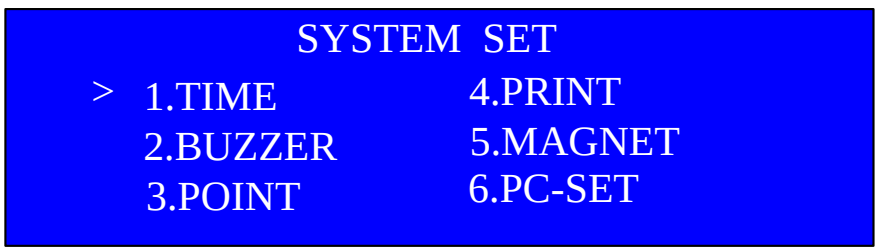


Under VALUE interface, press ↑, ↓ key to switch the channel. Under one channel, press SET key to fix the VALUE setting mode, the VALUE will flash. At this moment, you can change the value of this channel through pressing numeric key 0 ~ 9. Press CLR key, the setted the value can be cleared to be 0.

Notes: The value is already set in the factory and the function is locked so the user can not change the value.

When one channel Value No. setting is finished, you can come back to channel number selection interface by pressing SET key and then repeat the above number setting way to set value number for other target channels. After all settings are finished, press ESC key to quit from VALUE submenu to come back into main menu interface.

(3) **SYSTEM**

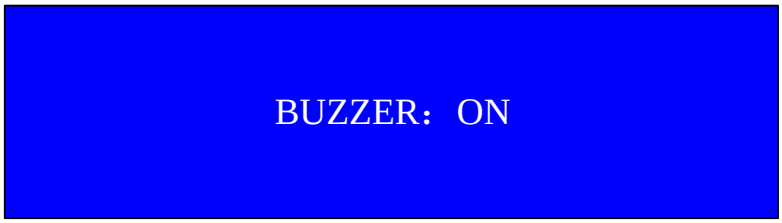


Firstly, it will enter into SYSTEM SET submenu, press ⇧ or ⇩ key to make the cursor up and down. And then press SET key to enter different setting interface.

1. TIME

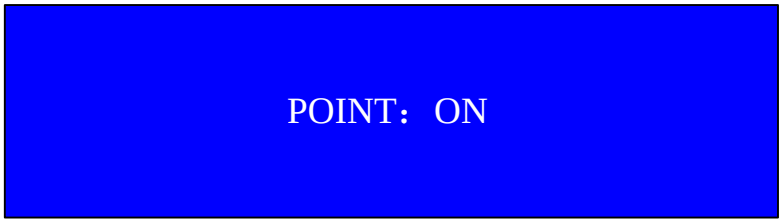
Under this interface, if you need to update date and time, please firstly press SET key to make the cursor blinking and then by press ⇨ key to make the cursor moving. Directly press 0~9 numeric key to set your desired date and time. Press CLR key to clear data. After all settings are finished, press ESC key to return to main menu interface.

2. BUZZER



Under this interface, please press ⇧ or ⇩ key to turn ON/OFF this function. After setting, press ESC key to return to main menu interface.

3. POINT

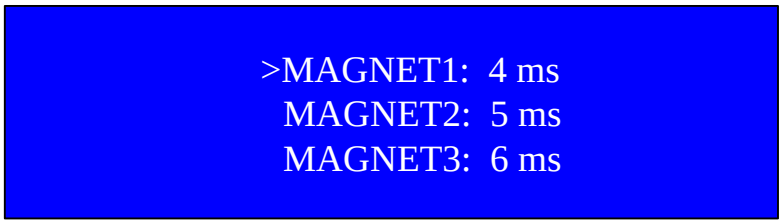


Under this interface, please press ⇧ or ⇩ key to turn ON/OFF this function. After setting, press ESC key to return to main menu interface.

4. PRINT

Under this interface, please press ↑ or ↓ key to choose PRINT 0 or set BAUD rate. Press SET key to choose either one, and then press ↑ or ↓ key to turn ON/OFF the function. After setting, press ESC key to return to main menu interface.

5. MAGNET



Under this interface, please press ↑ or ↓ key to choose MAGNET 1,2, or 3, and then press SET key to set solenoid activation time(suggested range is 3~9ms). By press ↑ or ↓ key, the time will be increased or decreased. After setting, press ESC key to return to main menu interface.

Notes: MAGNET 2 AND MAGNET 3 are reserved in software and user does not need to set it

6.**PC-SET**

Under this interface, please press ↑ or ↓ key to choose set PC- BAUD rate. Press SET key to choose either one, After setting,

press ESC key to return to main menu interface

(4) **TOTAL**

This interface shows a memory record of all counted coin quantity. You can enter the 1017 view or press the ESC key to exit back to the main menu interface.

(5) **TEST**

This submenu is for production adjustments purpose only. It is not available for users.

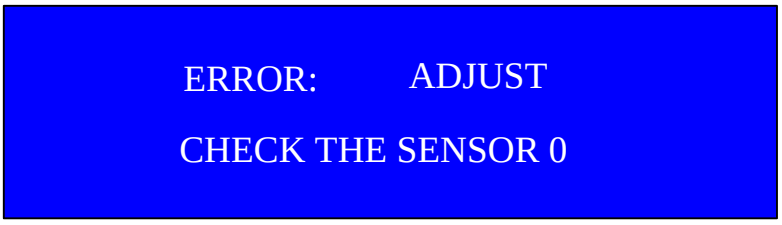
(6) **LEARN**

This submenu is for coin self-learning parameter tests and adjustments. It is not available for users.

9. Trouble Shooting

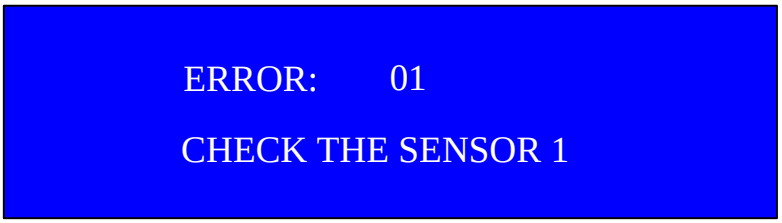
During self-testing or machine working status, sometimes the LCD screen may display following error code:

（1）**ERROR ADJUST**



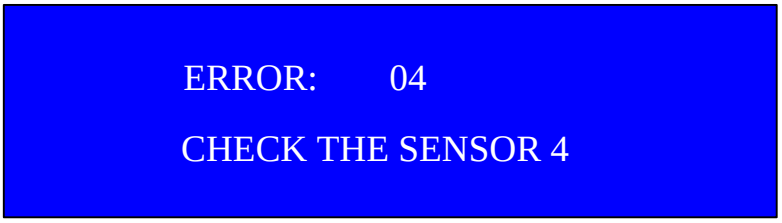
·When it displays ERROR ADJUST, it means the signal of alloy sensor is abnormal, the self-test can not be done normally, please contact your local distributor for solution.

（2）**ERROR 01**



·When it displays ERROR 01, it means the IR transistor is blocked, please check the IR transistor and also the connecting cable. After the problem is solved, please press CLR key to enter into main interface. If the problem can not be solved, please contact your local distributor for solution

（3）**ERROR 04**



·When it displays such error message, it means there is something wrong with the rail sensor. Please check if any rail place gets short-circuit, including all connecting wires check. After solving this problem, press CLR key to come back into main display modes interface.

10. Precautions

·Power cord using the machine configuration.

·Unplug the power cord before moving the machine.

·Avoid operation under direct sunlight.

·Do not put your hands, tools and clothes into the hopper to avoid personal injury or malfunction of the machine.

·Don’t open the Visible Cover during operation.

11. Daily Maintenance

·Be sure to unplug the power cord before daily maintenance.

·Please clean the rail and side board at least once a day.

·Clean the disc and hopper at least once a day with a brush.

· If the machine needs maintenance or spare parts, please contact the local supplier.

12. Accessories

1. Power Cable 1pc
2. Nylon Brush 1pc
3. Coin Scoop 1pc
4. Turn brush 1pc

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