

# **MAGNER 110**

Operation Manual

Magner Corporation

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CT 06455

This instruction sheet for MAGNER 110 will provide you with the essential information to operate your MAGNER 110 Electronic Coin Sorting/Counting Machine.

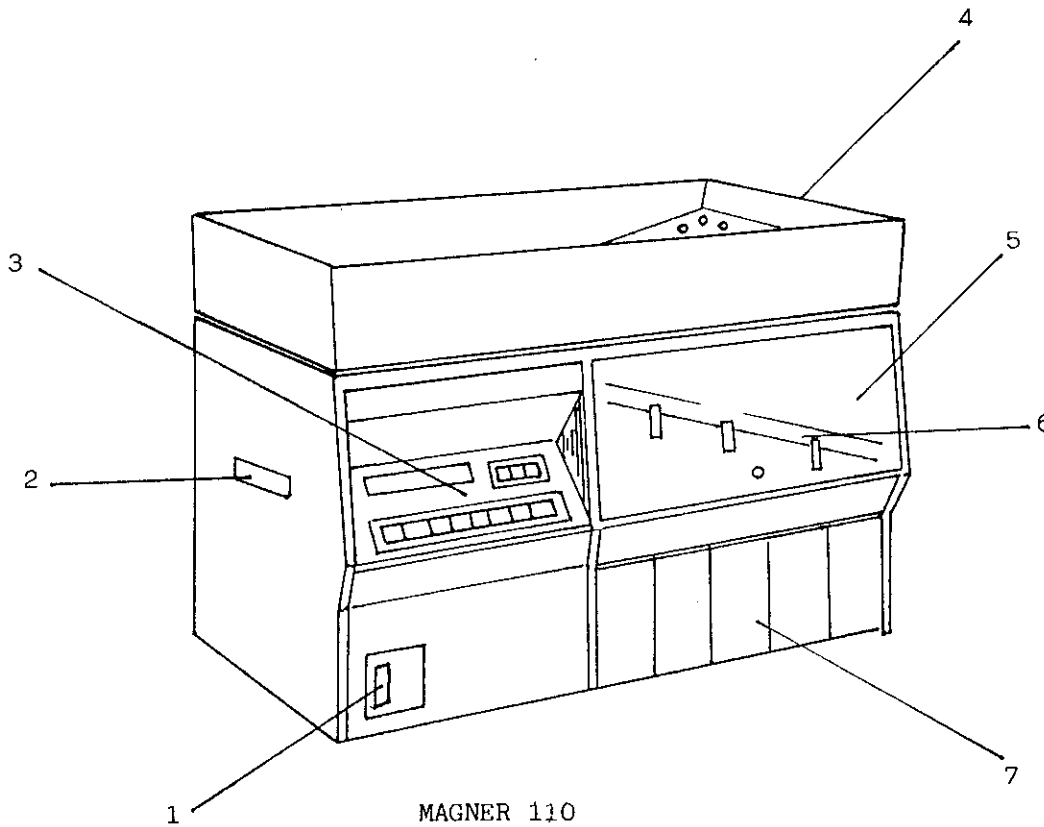
Please read these instructions carefully before using this machine.

Main features of your MAGNER 100 are:

1. Sophisticated electronics and multiple sensor usage ensure the accuracy of the count.
2. 3 levels of Bag Stop Functions are built-in.
3. Coin Box Full Sensor is built-in.
4. Memory Back-up System is built-in. (2 - 4 weeks)
5. Built-in RS-232C Interface Plug allows the unit to be plugged into MAGNER 4001 Cash Settlement System.
6. Coins are sorted in increasing value order, making it easy to refill cash drawers.
7. Interface Plug for an external printer is built-in for hard copy count records.
8. A large, well designed detachable inspection tray is standard.
9. Total access to the entire travel path makes cleaning and jam removal quick and easy.
10. The MAGNER 110's small size and low operation noise level allows the unit to be used in both cramped quarters, and open lobby areas without disturbing others.
11. Auto-Stop Function is built-in.
12. 8 Bit Microprocessor ensures the accurate function of each sensor.

Thank you very much for choosing MAGNER 110.

1. Parts Description.



1. Power Switch.
2. Dust Tray.
3. Operation Panel.
4. Detachable Inspection Tray.
5. Plastic Front Cover.
6. Sorting Rail and Counting Sensors
7. Coin Boxes.
8. RS-232C Interface Plug. (serial)
9. Interface Plug for an external printer. (parallel)

Note: (8) and (9) are located on the back cover.

2. Function of Parts.

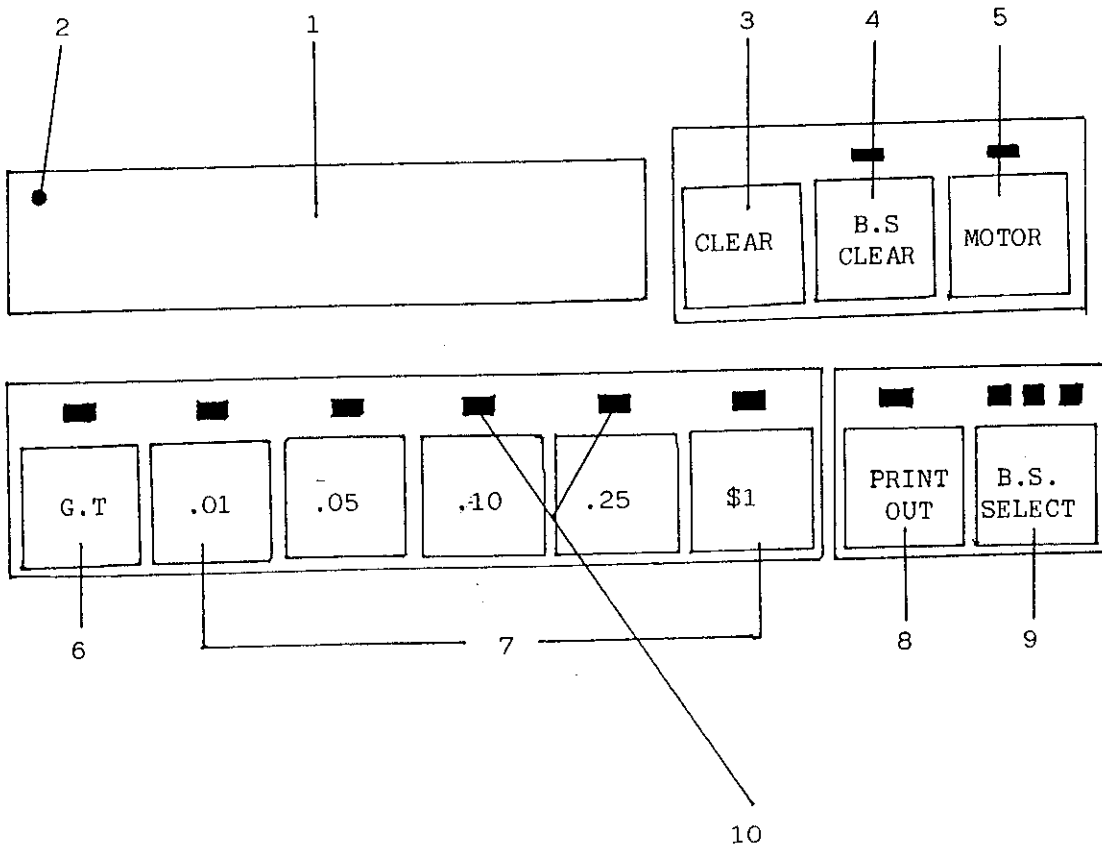
1. Power Switch.

- 1-1. Turn the Power Switch on to start sorting/counting operation.
- 1-2. The Power Switch should be turned off if the machine is not used for an extended period of time.
- 1-3. A built-in Memory Back-up System holds all memories for 2-4 weeks after the Power Switch is turned off.

2. Dust Tray.

- 2-1. Dust from the Hopper is accumulated in this Dust Tray. Please clean the tray regularly.

3. Operation Panel.



1. 7 Digit LED Display.
2. Bag Stop Memory LED Indicator.
3. Clear Switch.
4. B.S Clear Switch. (Bag Stop Clear Switch)
5. Motor On/Off Switch.
6. G.T Switch. (Grand Total Switch)
7. Denomination Switches. (\$.01, .05, .10, .25, \$1/Token)
8. Print Out Switch.
9. B.S Select Switch. (Bag Stop Select)
10. Red LED Lamps.

3-1. 7 Digit LED Display.

- \* Counts and error messages are displayed.

3-2. Bag Stop Memory LED Indicator.

- \* Bag Stop Memory LED Indicator will be on when any Bag Stop Memory is stored in the 8 bit microprocessor.

3-3. Clear Switch.

- \* Clear the display before starting counting of next deposit of coins by depressing the Clear Switch. All registers of the current deposit will be stored in the G.T. memory.
- \* Hold down the G.T and depress the Clear Switch to clear the grand total value of all denominations.
- \* Hold down the G.T and appropriate denomination switches, then, depress the Clear Switch to clear the grand total value of each denomination. The sequence must be in this order.
- \* G.T. memory automatically resets itself to the end of previous deposit memory when the Clear Switch is depressed after an error is encountered.  
The batch memory in which an error is encountered will be

automatically cleared, therefore, the display goes back to "0.00" in this case.

- \* Hold down the appropriate denomination switch and "B.S. Clear", then, depress the "Clear" switch to clear the Bag Stop Memory of each denomination. (This function will be activated 2 seconds after the motor stops, therefore please allow 2 seconds before depressing any switches.)
- \* Hold down the "B.S. Clear" and depress the "Clear" to clear the Bag Stop Memory of all denominations at once.

#### 3-4. B.S. Clear Switch. ( Bag Stop Clear Switch )

- \* When the count of any denomination reaches the preset quantity, the MAGNER 110 will automatically stop and a lamp over the appropriate denomination and "B.S Clear" will flash. Hold down the appropriate denomination switch and depress the "B.S. Clear" switch at the same time to reset its Bag Stop Memory.
- \* "B.S. Clear" switch can be activated 2 seconds after the motor stops.
- \* Hold down the "B.S. Clear" and then, depress the "Clear" switch to clear the entire Bag Stop Memory of all denominations at once. The Bag Stop Memory LED Indicator on the display will go off when the entire Bag Stop Memory is cleared.
- \* Hold down the appropriate denomination and "B.S. Clear" switches and depress the "Clear" switch to clear the Bag Stop Memory of each denomination.

#### 3-5. Motor Switch.

- \* The red LED lamp on the switch illuminates and the motor starts when the "Motor" switch is activated.
- \* Turn the motor off by depressing the Motor switch again until ready to count next deposit.
- \* The display and all registered memories go back to the accumulated dollar value/units which are stored in the memory or shown on the display just before error is encountered when the Motor switch is depressed after an error is encountered.
- \* The Motor should be turned off before the Print Out Switch is depressed to print out data.
- \* The motor stops automatically, approximately 12 seconds after the last coin is counted.
- \* All counting sensors are still activated for 2 seconds after the motor stops.

3-6. G.T. Switch. (Grand Total Switch)

- \* The grand total amount of all denominations is displayed by holding down the G.T. Switch after several sorting/counting operations.
- \* The grand total amount of each denomination is displayed by holding down the G.T. and appropriate denomination switches at the same time.
- \* Holding down the G.T. and the appropriate denomination switches at the same time for 10 seconds, the display shows the total number of units of that denomination counted.

3-7. Denomination Switches. (\$.01, \$.05, \$.10, \$.25, \$1/Token)

- \* To get the totals for each denomination hold down the appropriate switch.
- \* Holding down the appropriate denomination switch for 10 seconds, the display shows the number of units in the current bag.

3-8. Print Out Switch.

- \* A parallel Interface Plug is located on the back cover for an external printer.
- \* Depress the Print Out Switch to print out hard copy count records.
- \* The Print Out Switch is not activated for 2 seconds after the motor stops.
- \* The motor must be stopped before the Print Out Switch is depressed.

3-9. B.S. Select Switch. (Bag Stop Select Switch)

- \* MAGNER 110 allows for 3 levels of Bag Stop quantities, which are "Test", "Half Bag" and "Full Bag".
- \* Each level of Bag Stop quantities is preset as follows:

	<u>\$.01</u>	<u>\$.05</u>	<u>\$.10</u>	<u>\$.25</u>	<u>\$1</u>
Test	50 pcs.	40	50	40	25
Half Bag	2500	2000	5000	2000	1000
Full Bag	5000	4000	10000	4000	2000

- \* When the count of any denomination reaches the preset quantity, the MAGNER 110 will automatically stop and a LED lamp will light over that denomination and B.S. Clear Switches. The display will change to the exceeded number if any coin is counted over the preset quantity. Remove that number of coins from the bag and place them directly into the new bag. Turn the motor on to start again.
- \* To reset the bag stop memory, please refer to "3-4. B.S. Clear Switch" of this manual. (page 5)
- \* Holding down the appropriate denomination switch for 10 seconds, the display will change to the number of units in the current bag.
- \* The level of Bag Stop quantity will not be changed when the Bag Stop Memory LED indicator is on. (ie. when any bag stop memory has been stored.) Please clear the entire bag stop memory before depressing the B.S. Select Switch to change the level of bag stop quantity.
- \* The B.S. Select Switch is not activated when the motor is on.

#### 4. Detachable Inspection Tray.

- 4-1. Make sure the Detachable Inspection Tray is properly placed.
- 4-2. Clean the dust accumulated on the bottom of Detachable Inspection Tray regularly.
- 4-3. Do not place too large an amount coins in the Detachable Inspection Tray.

#### 5. Plastic Front Cover.

- 5-1. Place the Plastic Front Cover properly whenever operating the machine.

#### 6. Sorting Rail and Counting Sensors.

- 6-1. Clean the Sorting Rail and Counting Sensor area rerularly. Remove the Detachable Inspection Tray for easy access to clean the Sorting Rail and Counting Sensors.
- 6-2. Please use ONLY MAGNER CLEANING FLUID to clean the Sorting Rail.
- 6-3. The Counting Sensors are still activated for 2 seconds after the motor stops.



7. Coin Boxes.

- 7-1. Make sure the five (5) Coin Boxes are secure and empty.
- 7-2. Bagging Attachments are available as optional parts.
- 7-3. The "Full Coin Box Sensor" is built-in. The display shows the error code "E - - - -F" when any coin box becomes full. Remove and empty the coin box and place it again. The display will automatically go back to the information shown on the display just before the error is encountered.

8. RS-232C Interface Plug. (Standard)

- 8-1. RS-232C Interface Plug (serial) is standard and located on the back cover to interface MAGNER 110 with MAGNER 4001 Cash Settlement System.

9. Interface Plug for an External Printer. (Parallel)

- 9-1. The Interface Plug for an External Printer is standard for hard copy count records, and located on the back cover.

3. Error Codes.

When an error occurs, the machine automatically stops and the display flashes an error code. Re-counting from the beginning is recommended as the accuracy of the display number may be questionable when an error occurs.

<u>Error Codes</u>	<u>Condition</u>
E - - - - 1	Sensor for \$.10 has trouble.
E - - - - 2	" \$.01 "
E - - - - 3	" \$.05 "
E - - - - 4	\$.25 "
E - - - - 5	\$1/Token "
E - - - - J	Coins jammed in the Hopper.
E - - - - F	Coin Box is full.
Full - 9	Memory capacity is full. (refer 4-1.)
A	Ram has trouble.
E - - - - P	Power failure. (ie. The power switch is turned off or power plug is pulled out, or electric current becomes extremely low during the operation.)
E - - - - 6	Same as E - - - - F

#### 4. How to clear the entire RAM Memory.

- 4-1. When any of the memory functions (ie. Batch Counting, Grand Total Counting and Bag Stop Counting) exceeds \$99,999.99, the display shows the error code, "FULL - 9". This means the RAM memory capacity (capacities) is (are) completely full.

In this case:

- a) Clear the memory which exceeds \$99,999.99.  
or,  
b) Clear the entire RAM memory.

Turn the Power Switch off, and hold down \$.05, \$.10 and \$.25 at the same time, then, turn the Power Switch on to clear the entire RAM memory at once.

The display flashes " 0 " for a short period when the Power Switch is turned on, indicating the built-in microprocessor is checking the RAM memory.

#### 5. Manual Addition and Deduction for \$1.00 and \$.50

##### 1. Addition and Deduction for \$1.00

Addition ..... Hold down \$1 and \$.10 at the same time, then, depress \$.01 to add \$1.00 to the memory.

Deduction .... Hold down \$1 and \$.10 at the same time, then, depress \$.05 to deduct \$1.00 from the memory.

##### 2. Addition and Deduction for \$.50.

Addition ..... Hold down \$1 and \$.25 at the same time, then, depress \$.01 to add \$.50 to the memory.

Deduction .... Hold down \$1 and \$.25 at the same time, then, depress \$.05 to deduct \$.50 from memory.

3. Holding down \$1 and Depress \$.25, the display shows the total dollar value of \$.50.

4. Holding down \$1 and depress \$.10, the display shows the total dollar value of \$1.00.

## 6. A Built-in Battery Back-up System.

MAGNER 110 has a Built-in Battery Back-up System to hold all memories for a certain extended period. The battery will last for 2 - 4 weeks. Therefore, the display and all modes automatically go back to the last position when the Power Switch is turned on.

The battery is being re-charged when the Power Switch is on.

## 7. Requests and Cautions.

1. Do not depress the Clear Switch during sorting/counting operations as this will clear the display.
2. Please check whether any previous memory is still in RAM or not before strat counting coins.
3. Clean the Sorting Rail and Counting Sensors regularly to ensure the accurate counting operation.  
Turn the Motor off and wait for 2 seconds before cleaning the sensor area. All sensors are still activated for 2 second after the motor stops.
4. Place the machine on a level surface, and avoid using the machine under extremely high or low temperatures, high humidity, and direct sunshine.
5. Do not touch any inside parts when the power cord is connected.
6. The power switch should be turned "OFF" when the machine will not be used for a extended period of time.

