

# MAGNER100

## *User Manual*



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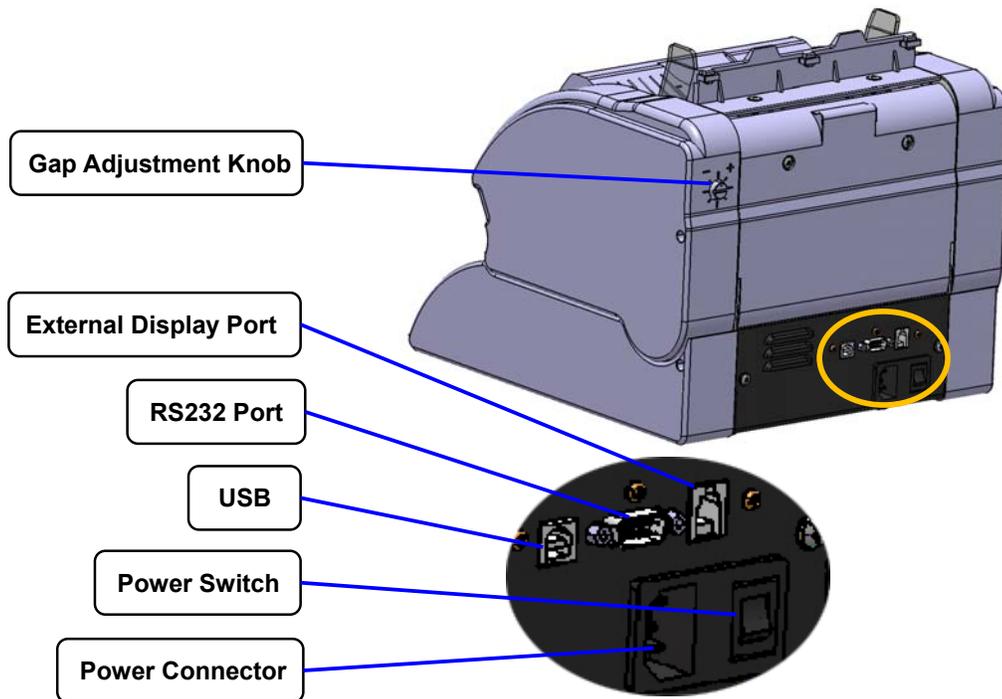
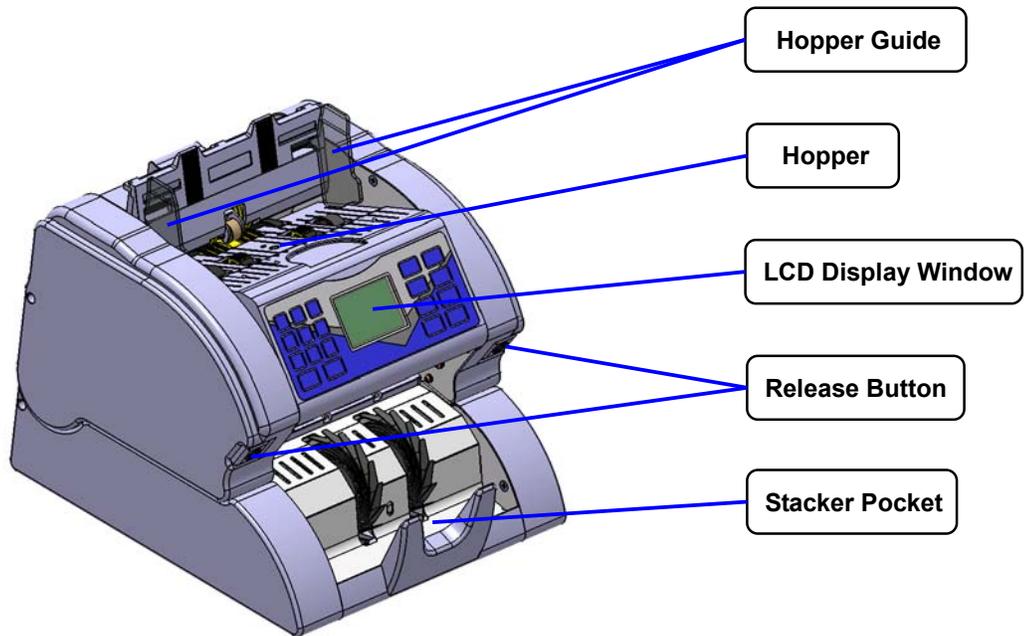
## **- Important Safety Precautions -**

- ✓ Do not plug several products in one multi-outlet.
- ✓ Do not bend the cable by force or leave it under any heavy object.
- ✓ Install the machine on the stable surface
- ✓ Unplug the machine before it is moved
- ✓ Do not pull the cable it unplugged.
- ✓ Do not plug in or unplug with your hands wet.
- ✓ Use only approved accessories and do not try to disassemble, repair or remodel it for yourself.
- ✓ Do not let coin or other foreign objects in the machine.
- ✓ Do not keep and operate the machine at a place with high temperature and humidity.

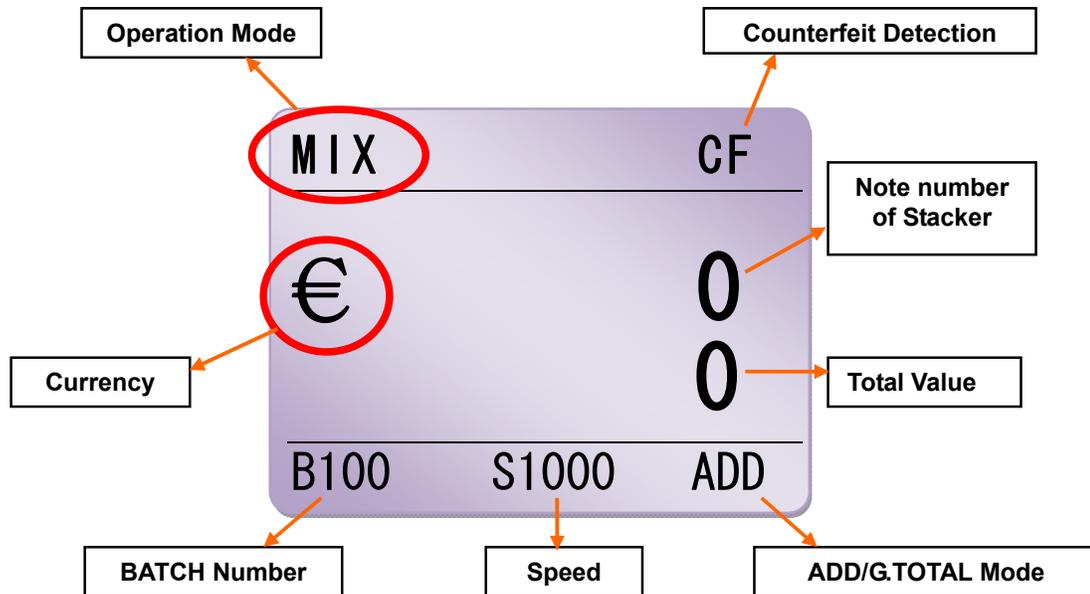
## **- Warning-**

- ✧ **Adjust the Gap Adjustment Knob before you start to count the notes.**
- ✧ **Do not let coin or other foreign objects in the machine.**
- ✧ **When folded note is inserted or notes are placed wrong on the HOPPER, the machine does not work properly.**
- ✧ **Before counting, adjust the HOPPER GUIDE.**
- ✧ **If you catch Rear Cover Knob when you move the machine, it will be possible setup value is changed or fatal error caused.**
- ✧ **When you close the Front Cover, be careful not to get hurt.**
- ✧ **Do not look at directly of UV sensor in Upper and Lower Module.**
- ✧ **Do not push all sensors on Upper and Lower Module.**

## Appearance



## 1. Display Description



**Operation Mode**

**Counterfeit Detection.**

**Note number of Stacker**

**Currency:** Currency mark which the machine can count now.

**Total Value:** Total value of counted notes.

**BATCH Number:** Selected Batch number

**Speed:** Counting Speed in COUNT Mode

**ADD/G.TOTAL Mode**

## 2. Key Operation Description



	Number Key for selecting Batch number and Shortcut Key.
	Clear Batch number to 0.
	Counterfeit detection function key (Operation Mode) & double detection function key (COUNT Mode)
	Select Currency
	Select ADD Mode and G.TOTAL Mode.
	Select Batch number which was selected already.
	1. Select Counting Speed in COUNT Mode. 2. Select denomination in SG Mode. 3. Enter Engineer Mode.
	1. Select Operation Mode. 2. Enter USER Mode
	Print counting result to print or screen.
	1. Clear counting result on the screen. 2. Exit sub Mode.

# MAGNER100 USER MANUAL

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## **Shortcut Key (Long Key Operation)**

If press and hold down Number Key, you can select special currency or mode directly.

<b>0</b>	Go to COUNT Mode.
<b>1</b>	Go to EURO (local currency 1) Mode.
<b>2</b>	Go to USD (local currency 2) Mode.
<b>3</b>	Go to local currency 3 Mode.
<b>4</b>	Go to local currency 4 Mode.
<b>5</b>	Go to local currency 5 Mode.
<b>6</b>	Go to local currency 6 Mode.
<b>7</b>	Go to NORMAL COUNT Mode.
<b>8</b>	Go to ADD Mode.
<b>9</b>	Go to GRAND TOTAL Mode.

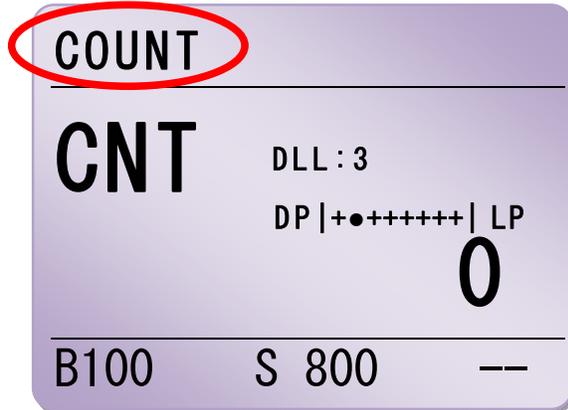
### 3. Basic Mode

#### 3-1. COUNT Mode



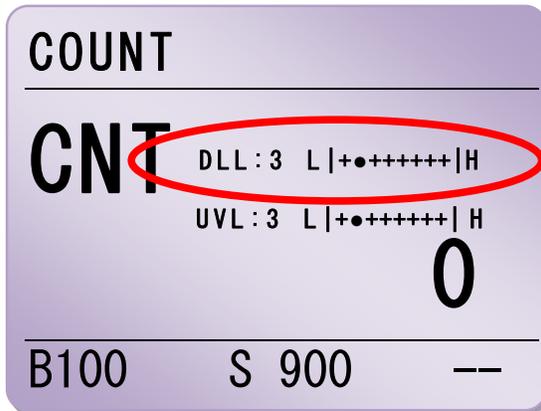
Press **CURRENCY** Key and select COUNT Mode.

Display shows as below.



User can count all currencies without recognition and detection.

#### Double Detection Level



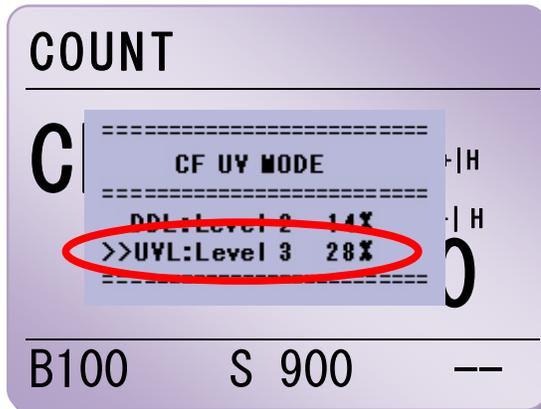
When press **LEVEL** Key, DDL is changed.

**DDL** means **Double Detection Level** in Count Mode.

User can select 1~8 levels.

- DDL 1~2 : For local currency.
- DDL 3 : For Euro
- DDL 4 : For USD
- DDL 8 : If the notes are darker than EURO or USD or the notes are so old, user can select this level to detection double notes. But when counts normal notes in this level, the machine do not detect the double notes. Please take care.

## UV Level



When press and hold down LEVEL Key, you can change UVL.



Press MODE Key and move cursor to UVL.



Change UVL.



Save data and exit CF UV MODE.

In COUNT Mode, machine has adjust UV Level function for detecting white paper.

User can select 1~8 levels.

According to thickness of notes, UV Level is different.

Before counting, please check and adjust Level first.

## 3-2. EURO Mode

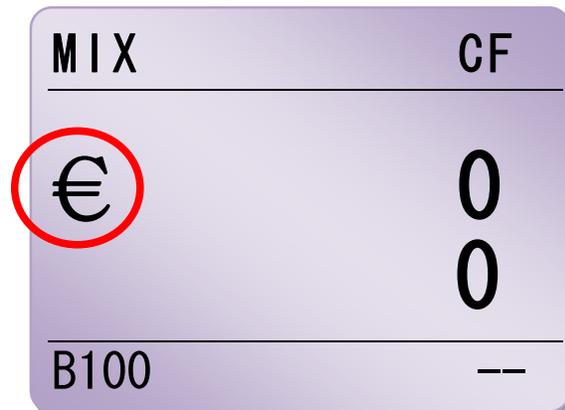


Press **CURRENCY** Key and select EURO Mode.



Press **MODE** Key and select Operation Mode.

Display shows as below.



In this Mode, the machine can **recognize** and **detect** EURO currency.

## 3-3. USD Mode

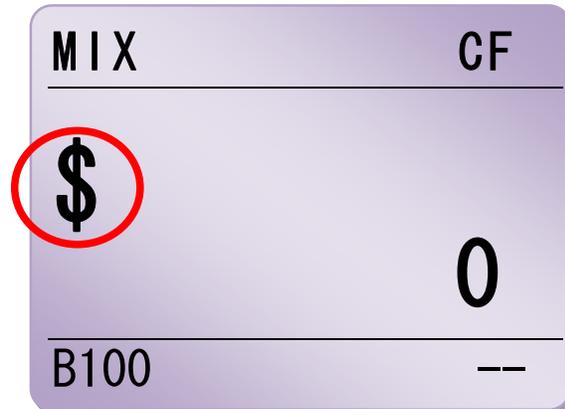


Press **CURRENCY** Key and select USD Mode.



Press **MODE** Key and select Operation Mode.

Display shows as below.



In this Mode, the machine can **recognize** and **detect** USD currency.

## 3-4. Local Currencies Mode

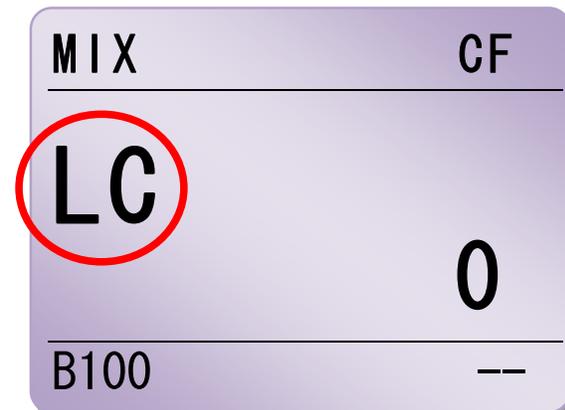


Press **CURRENCY** Key and select local currency.



Press **MODE** Key and select Operation Mode.

Display shows as below.



### **Note!**

***Machine only can count notes in Local currencies Mode except WON (Korea) Mode.***

## 4. Operation I

### 4-1. BATCH Mode



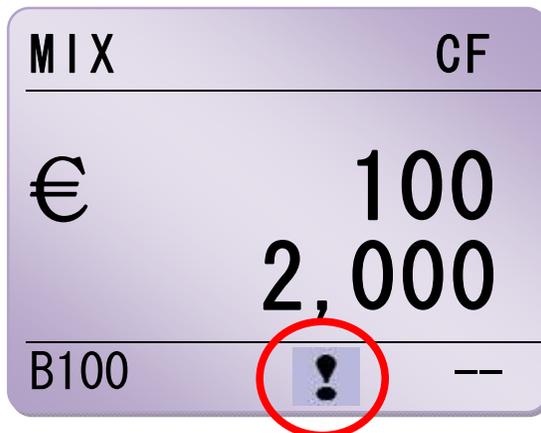
If press BATCH Key, user can select batch number which is registered already. (5, 10, 20, 50, 100)

When user wants to select special batch number, please use Number Key (0~9).



If press CLEAR Key, batch number will be changed to 0.

Display shows as below.



#### Note!

When counting number gets to batch number, machine stops to count and ! mark is shown.

! means a note can be placed inside the machine. When remove notes from Stacker, one note will come out.

## 4-2. CF Mode



If you want to detect counterfeit during counting, press CF Key..

Display shows as below.



## 4-3. ADD Mode



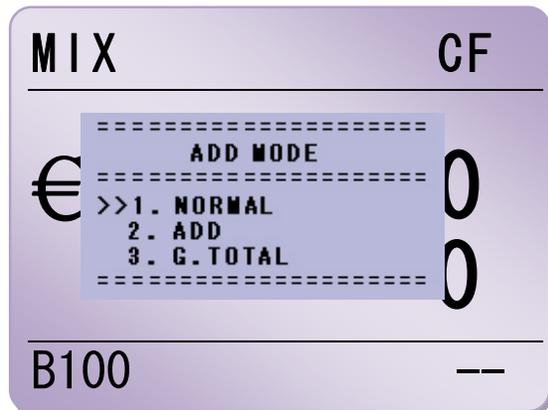
When press and hold down ADD Key, you can enter ADD or G.TOTAL Mode.



Press MODE Key to select item.



Select 2. ADD and press SET Key to enter.



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Display shows as below.

MIX	CF
€	[ADD TOTAL] 0
	0
B100	ADD

When count notes, display shows the current counted information

MIX	CF
€	[CURRENT] 76
	1,180
B100	ADD

When count notes again, display shows the current counted information

MIX	CF
€	[ADD TOTAL] 76
	1,180
B100	ADD

MIX	CF
€	[CURRENT] 42
	650
B100	ADD

When remove the notes from stacker, display shows added information between current and ahead counted notes.

MIX	CF
€	[ADD TOTAL] 118
	1,830
B100	ADD

When remove the notes from stacker, display shows added information between current and ahead counted notes.

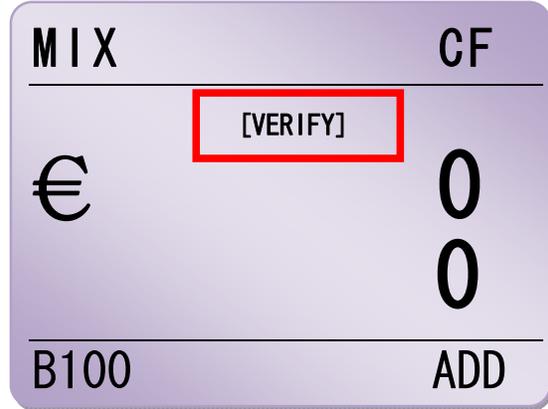
## Verify Function

**ADD**

In ADD Mode, press ADD Key again shortly.

VERIFY function is activated and display shows as below.

When VERIFY function is turned on, you can count new notes which is no relation with ADD value.

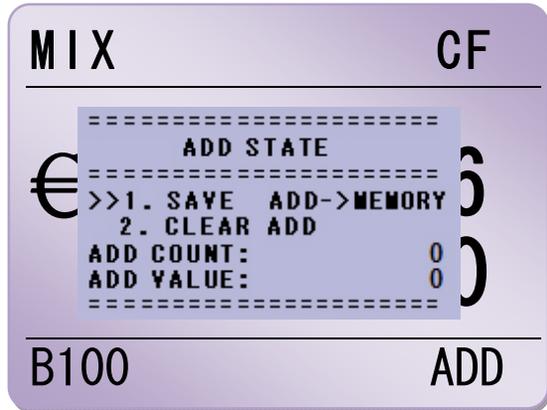


## Save ADD value to MEMORY

**START  
RESET**

Press and hold down START Key, ADD STATE menu appears.

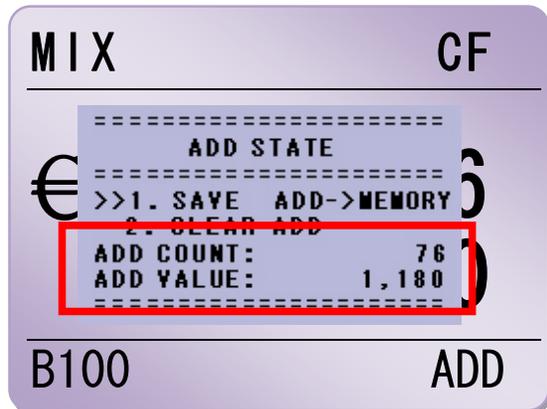
You can save or delete ADD value to MEMORY.



Select item 1. SAVE ADD and press SET Key.

The value is saved to MEMORY and exit ADD STATE menu.

You can check it ADD STATE menu.

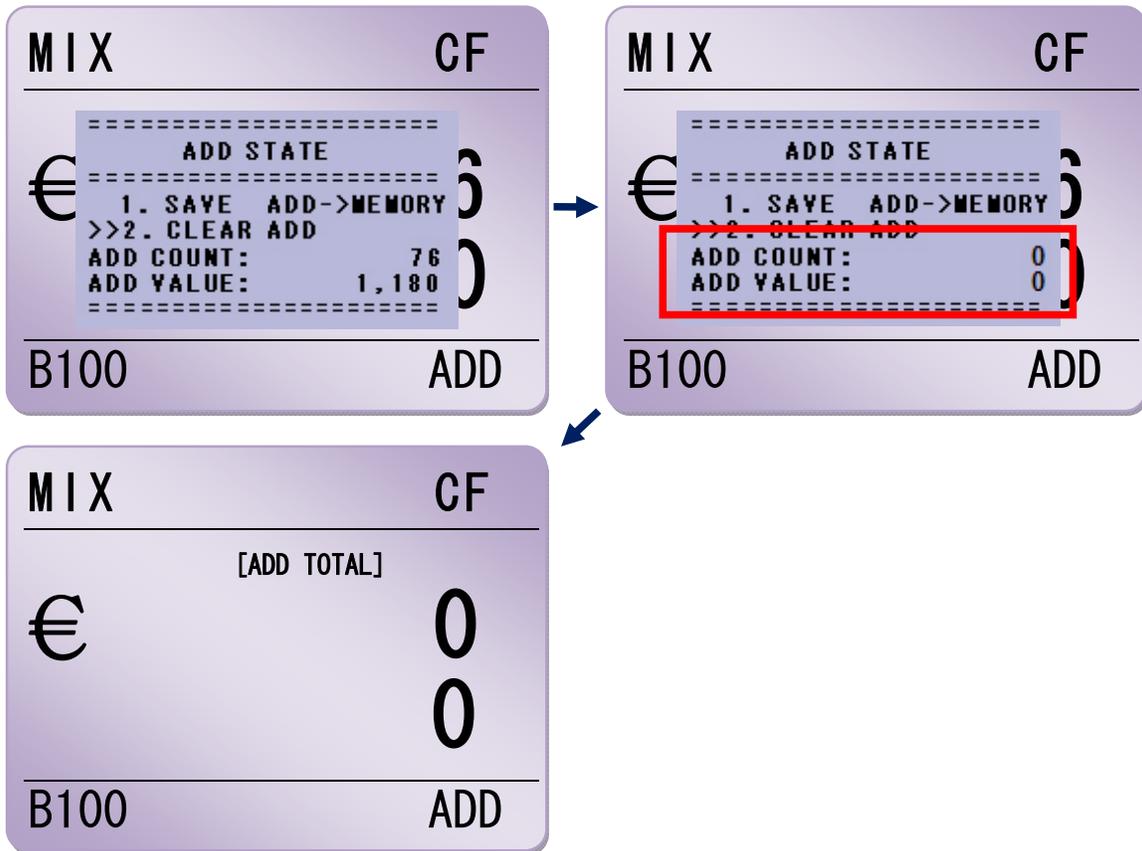


## Note!

Frequent saving data to MEMORY can shorten the life of Main Board.

## Delete ADD value from MEMORY

Select item 2. CLEAR ADD and press SET Key. The value is deleted from MEMORY and exit ADD STATE menu.

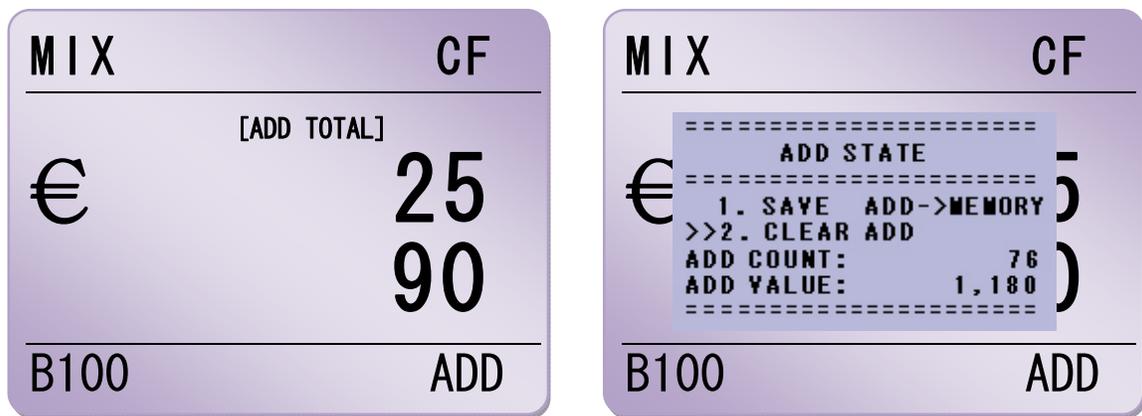


## Change Currency or ADD Mode to GRAND TOTAL Mode

When change Currency, machine asks to save current ADD value to MEMORY.

For example, after counting EURO in ADD Mode, if press CURRENCY Key, ADD STATE menu is shown and asks to save current ADD value to MEMORY.

When change ADD Mode to GRAND TOTAL Mode, asks too.



## 4-4. GRAND TOTAL Mode



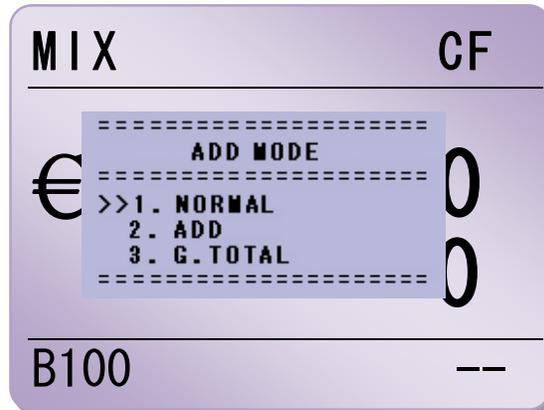
When press and hold down ADD Key, you can enter ADD or G.TOTAL Mode.



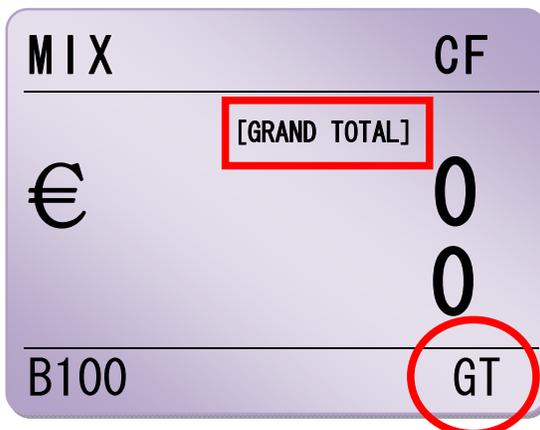
Press MODE Key to select item.



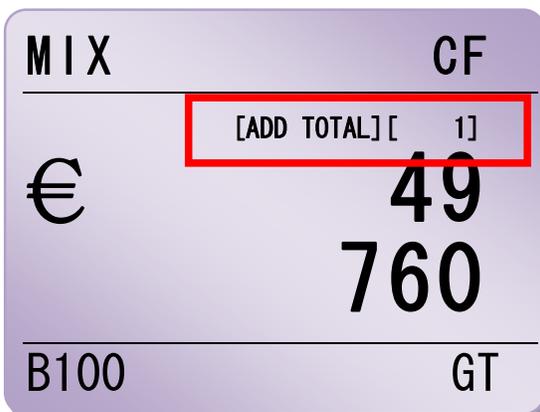
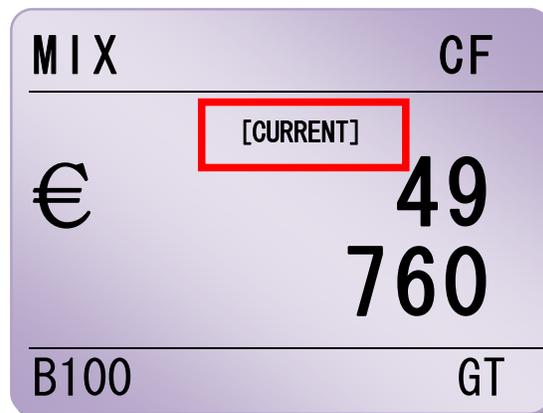
Select 3. G.TOTAL and press SET Key to enter.



Display shows as below.



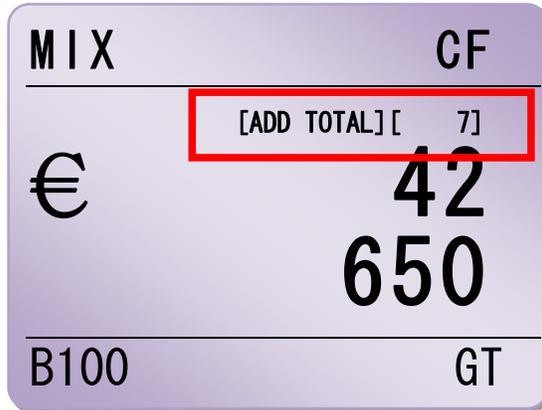
When count notes, display shows the current counted information



When remove the notes from stacker, display shows ADD TOTAL x value .



When press START Key, you can check ADD TOTAL and GRAND TOTAL value.



## Save ADD TOTAL x to GRAND TOTAL



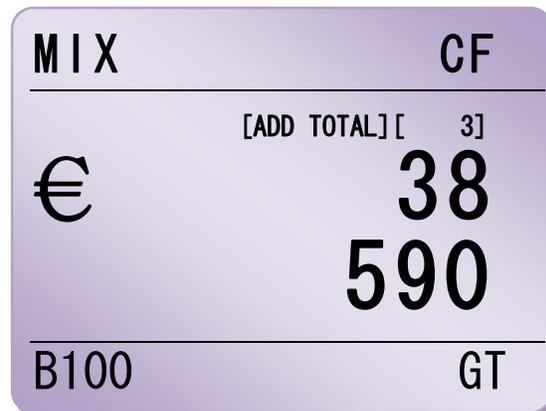
Press and hold down START Key, you can save the value to MEMORY or G.TOTAL.

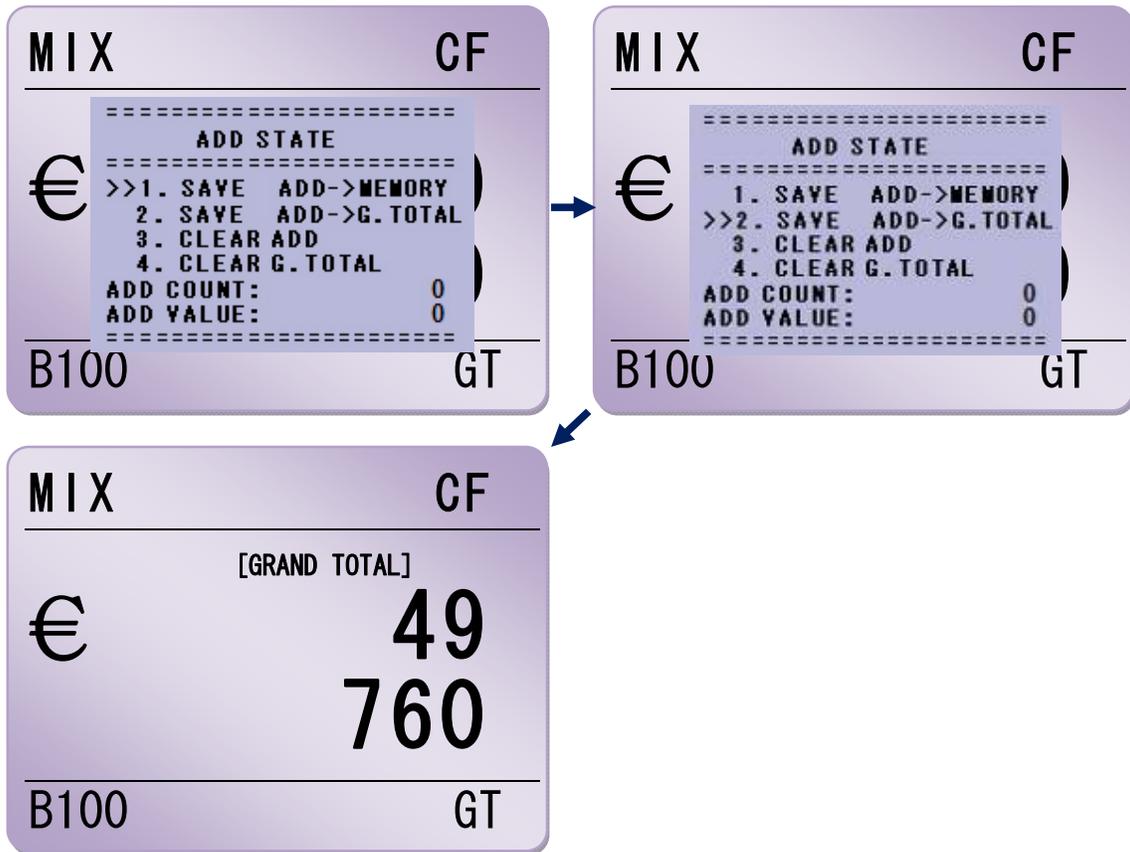


Press MODE Key and select item 2. SAVE ADD->G.TOTAL.



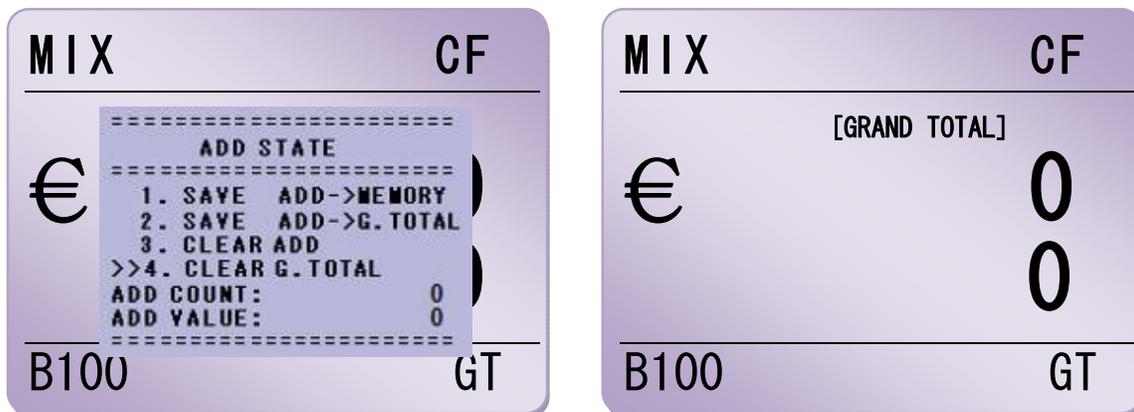
Press SET Key and save the value to GRAND TOTAL.





**Delete GRAND TOTAL value**

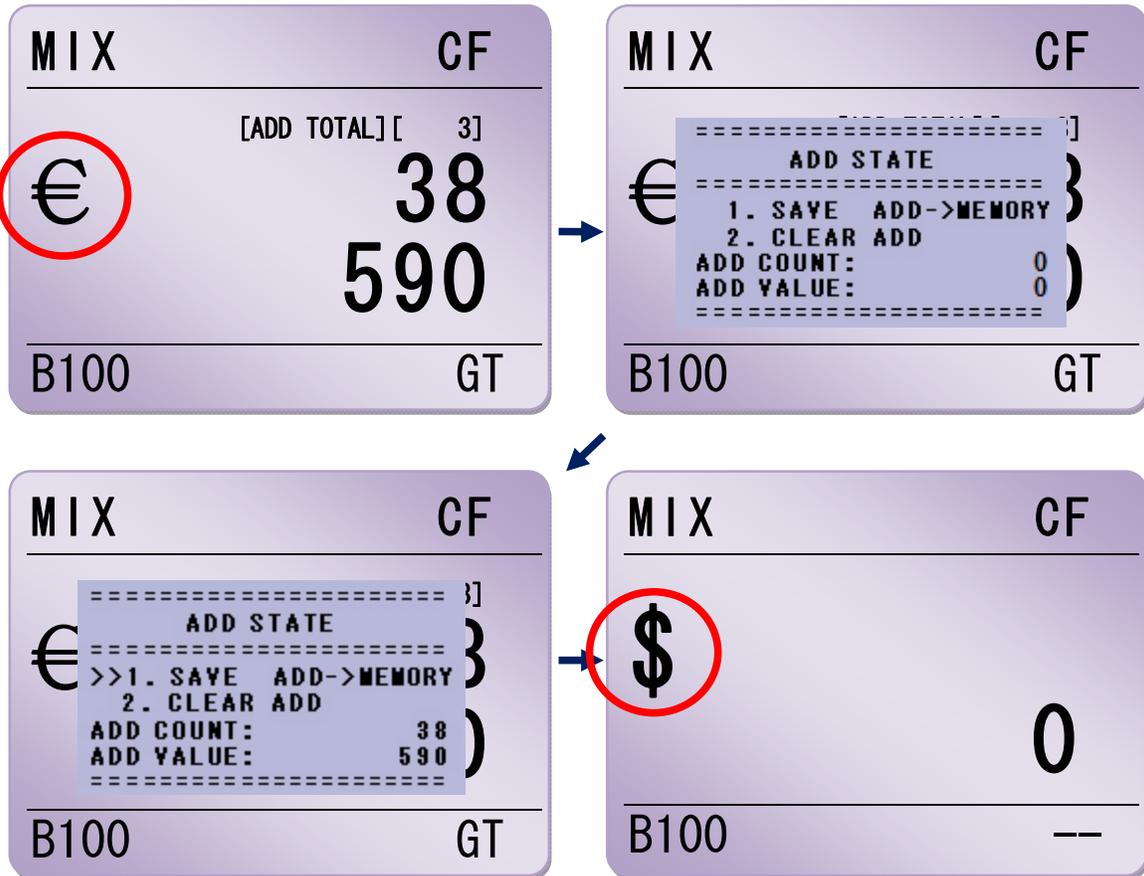
Select item 4. CLEAR G.TOTAL and press SET Key.  
 G.TOTAL value is deleted exit ADD STATE menu.



## Change Currency

When change Currency, machine asks to save current ADD TOTAL x.

For example, after counting EURO in ADD Mode, if press CURRENCY Key, ADD STATE menu is shown and asks to save ADD TOTAL x to MEMORY.



## 5. Operation Mode II

Operation Mode	
MIX Mode	Count all denomination of selected currency.
SP Mode	The machine saves denomination information from first inserted note.
SP VERS Mode	The machine saves denomination and version information from first inserted note.
SG Mode	Before counting, the user can select a specific denomination to be counted.

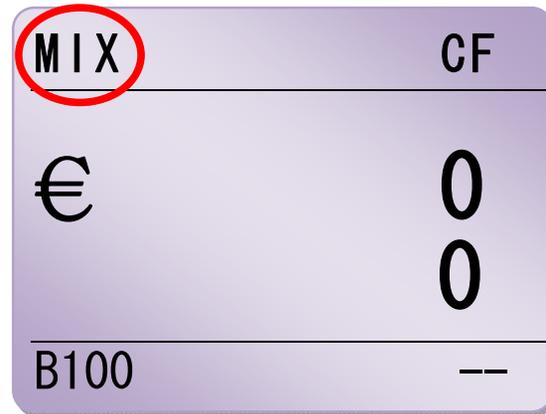
### 5-1. Mix Mode



Press **CURRENCY** Key and select currency which you want to count.



Press **MODE** Key and select MIX Mode.



You can count all denomination of selected currency without any selection.

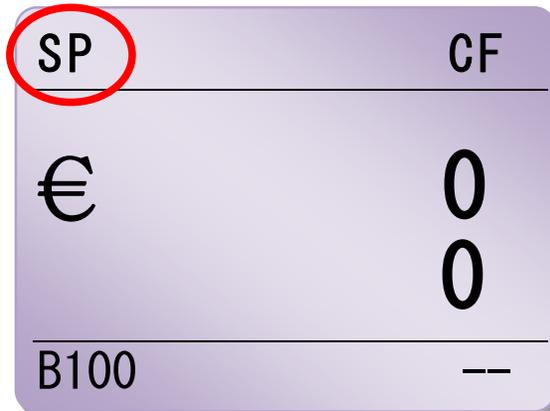
### 5-2. SP Mode



Press **CURRENCY** Key and select currency which you want to count.



Press **MODE** Key and select SP Mode



The machine sorts out the same denomination with first inserted note.

## 5-3. SP VERS Mode



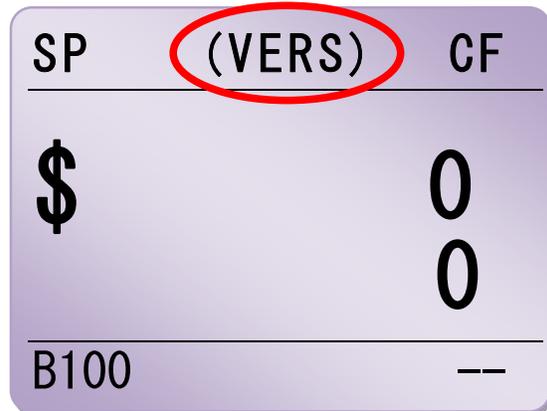
Press **CURRENCY** Key and select currency which you want to count.



Press **MODE** Key and select SP Mode



Press **SET** Key.



The machine sorts out the same denomination and version with first inserted note.

## 5-4. SG Mode



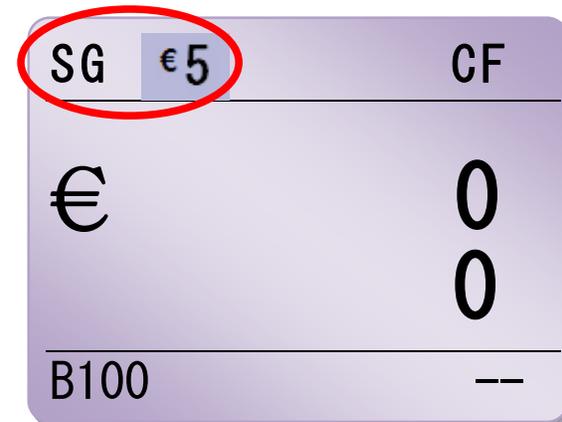
Press **CURRENCY** Key and select currency which you want to count except USD.



Press **MODE** Key and select SG Mode.



Press **SET** Key and select denomination.



You can sort the selected denominations.

## 6. USER Mode



Press and hold down **MODE** Key.  
USER Mode is shown.

**USER MODE** p1/1

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```

>>1. PRINTER SET
  2. USER ID      : "NONE      "
  3. ID PRINT     : NO
  4. LCD LANGUAGE : ENGLISH
  5. SP SELECT    : REFRESH
  6. WARNING BUZ  : ON
  7. CF KEY       : LOCK
  8. COMMA        : ENABLE
  9. STOP STATE   : HOLDING
 10. STACKER BRAKE : ON
    
```

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	Move cursor to upside or downside.
	Enter item.
	Move cursor to left or right.
	Go to higher mode or exit User Mode

### 1. PRINTER SET

**1. PRINTER MODE** p1/1

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```

>>1. BAUD RATE      : 115200BPS
  2. PAPER SIZE    : 3 INCH
  3. FONT          : 12 X 24
  4. BLANK OF TAIL : 5 LINE
  5. PRINT NUMBER  : 1 PIECE
  6. PAPER CUTTING : NO
    
```

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1. BAUD RATE	Set up the baud rate between machine and printer.
2.PAPER SIZE	Set up the size of printer paper.
3. FONT	Set up the font size
4. BLANK OF TAIL	User set up the blank of tail.
5. PRINT NUMBER	Set up number of receipt.
6. PAPER CUTTING	Set up cutting paper automatically or manually.

## 2. USER ID:

Enter user ID to machine.

**LEVEL and CURRENCY Key:** Move position.

**ADD and SET Key:** Select characters.

## 3. ID PRINT

Select to print ID to receipt or not.

## 4. LCD LANGUAGE

Select displayed language on screen.

## 5. SP SELECT

In SP Mode, machine recognized first note continuously or not.

**REFRESH:** After stop, machine remembers next inserted note again.

**CONTINUE:** Machine memorizes the first note continuously.

## 6. WARNING BUZ

If select ON, when error is caused, machine makes a beep.

## 7. CF KEY

Select to use CF function or not. But this function is always on. **(LOCK)**

## 8. COMMA

If select ENABLE, display shows COMMA by the thousand.

## 9. STOP STAGE

When **!** appears and hopper has nothing, if select REMOVE, machine works again to remove a note from inside. If select HOLD, machine doesn't work before remove notes from Stacker.

## 10. STACKER BRAKE

If select ON, when error appears, machine stops the stacker before the error note goes to Stacker pocket.

# MAGNER100 USER MANUAL

## SPECIFICATION

### -Technical Specification

Available currencies	EURO, USD, LOCAL		
Dimension(mm)	296(W)×325(L)×280(H)	Display	3.1" Graphic LCD (192x128 dot)
Weight	Approx. 10 Kg	Denomination Detection	Full Line Image Sensor, Color Sensor
Countable Notes Size	W: 100 × 180mm H: 60 × 90mm	Counterfeit Detection	UV, FL, MG (Magnetic Thread Detection), IR
Countable Note Thickness	0.08 ~ 0.12mm	Speed	Recognition Count 900 notes/min
Hopper Capacity	500 notes		Piece Count Max. 1400 notes/min
Stacker Capacity	200 notes	Feed System	Roller friction type
Power Supply	100 ~ 240V AC, 50/60Hz	Power consumption	Approx. 140 Watts

### -Features

Local Currency	Max. 6 currency
IR Detection	Full Line IR CIS Sensor
External Display	LCD type for customer
Bill Printout	With RS232C Interface for PC and external printer. Print user name.

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## Error Code List

No	Error Code	Description
1	<b>Chain 1 error</b>	The gap between two notes is under 100mm.
2	<b>Chain 2 error</b>	After note passes counter sensor, note length is over 100mm.
3	<b>JAM 1 error</b>	Encoder value isn't increased although motor turns.
4	<b>JAM 2 error</b>	Because note places on Counter sensor and motor is kept turning ticking over, length information is increased.
5	<b>JAM 3 error</b>	Note is not moved to upside when motor turns counter direction.
6	<b>Motor error</b>	Motor isn't controlled properly.
7	<b>Double error</b>	Thickness by measuring IR is lower than the standard.
8	<b>Half error</b>	Only half of note is recognized.
9	<b>MinSize error</b>	Note size is smaller than the minimum size.
10	<b>SKEW error</b>	The difference between R and L is over 10 mm.
11	<b>Rotate error</b>	Note is rotated over an angle of 20 degrees.
12	<b>XSize error</b>	X size of note is not matched. (CIS sensor information)
13	<b>YSize error</b>	Y size of note is not matched. (Cnt sensor information)
14	<b>IR 1 error</b>	IR error
15	<b>Color 1 error</b>	Color error
16	<b>UV 1 error</b>	UV error
17	<b>MG 1 error</b>	MG error
18	<b>Differ value</b>	Counted note is not matched with the selected denomination.
19	<b>Differ version</b>	Version is different with the set version.

## Maintenance

The machine has many sensitive sensors to perform high technology functions, for example counterfeit detection, denominations, etc.

We recommend cleaning the machine sensors at least once a week.

Refer to following section and clean the machine regularly.

※ Please turn the power off before cleaning the machine.

