iH-110 Series User Guide

Innovative and sophisticated 2 pocket banknote counter &authenticator



Are you searching for a high efficient banknote detector?

Then look no further!

iH-110 is a machine to obtain all your needs and requirements.

It can accurately count notes and safely detect counterfeit all at high speed operation.

This compact machine performs more than you might imagine.

Experience one for yourself and you will find your search is finally over!

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Introduction

Thank you for purchasing iH-110.

The iH-110 is the new paradigm of counterfeit detection so your banknotes will be safe, and has added many functions and options to make your duties even easier.

The iH-110 is an enhanced high speed banknote counter that has accurate OCR (up to 800 notes/min) for reading the serial numbers on banknotes.

Through a visible 4.3 inch color Graphic LCD, convenient audio alert, LAN/USB for networking/upgrading, flexibly designed menu, GUI, and duplicated keys for two tellers, the iH-110 offers a highly convenient and easy operation.

Safety Guidelines

In this section, the compliance matters are described in order to use the product safely, and to prevent you and other people from the damages brought by the product to the human bodies or properties.

Please read this instruction manual thoroughly in advance to use in the correct way.

Warning	It denotes the contents in which mishandling of the product by neglecting this indication may cause people serious injury.
Caution	It denotes the contents in which mishandling of the product by neglecting this indication may cause people light injury or, physical damage.

	This symbol indicates that the precautions for handling the product. Please read the indications well and utilize the product safely.	
	This symbol indicates prohibited matters, do not attempt. Please read the indications well. Never try any prohibited matters.	
	This symbol denotes that there are indication matters which should be done without fail. Please read the indicated matters thoroughly and always perform them as shown.	

Warning

Installation



1. At installation and relocation of the products, please contact our distributor near you or our designated dealers. If installation is not perfect, there is a risk of a falling accident, electric shock, fire, or burn injury.
2. At installation and use of the products, keep the space sufficient for opening and closing the door, cover and operation. If a part of the product touches a human body incorrectly, it may cause an accident.
3. In case of installing the product at the following places, you should confirm the Road Law, Road Traffic Law and Fire Protection Law, etc. If compliance conditions are not clear, please consult with the authorities concerned.
   - The place which may disturb traffic or accident prevention.
   - The place adjacent to the fire extinguishing and detecting apparatus.
   - The place adjacent to the road signs or traffic signals.
   - The place where combustible materials or gas are treated (gas stations, etc.)

   Passages and facilities for evacuation Illegal installation may cause an accident.
4. Keep an installation space as described in the instruction manual, and do not block or close the ventilation inlet. If the ventilation inlet is blocked, heat is accumulated inside and it may cause fire.
5. Depending on the installation place, mounting of an earth leakage breaker is required by Electricity Enterprises Law. Illegal installation may cause an accident.



1. Do not install the product in any place where water may spill on it. If water enters into the product, insulation performance degrades and it may cause fire and/or electric shock.
2. Do not install the product at the place where the floor cannot bear the load of the product, or at any unstable place with inclination and/or irregularity. It may cause floor caving and sudden movement accidents of the product to occur.
3. Installation at the following places should be avoided:
   - 1m or less from volatile combustible materials or curtains.
   - 1m or less from heating apparatus such as stoves, heaters etc.
   - Any place with direct winds blown from air conditioners, ventilating openings etc.
   - There are safety problems and deterioration of the product may be accelerated, which leads to any cause for failure.

- Any place with high temperature, high humidity, or low temperature.
- Any place with direct sunlight.
- Any place with large amounts of dust.

When installing the product at the following places, please contact our distributor near you or our designated dealers.

- Any place exposed to salty winds or corrosive gas.
- Any place with a large amount of swinging or vibration.



Grounding work should be made for safety and prevention of static electricity and noise failure. In addition, a ground wire should be installed independently without sharing the wire with other products. At grounding work, please be sure to contact our distributor near you or our designated dealers. In case of electrical leakage when grounding is insufficient or not connected, it may cause fire and/or electric shock.

The place where a ground wire can be fitted:

- Ground terminals for power receptacle.
- The copper piece etc. with a length of 65 cm or more, buried in the ground.
- The ground terminals on which grounding work is made.

The place where is a ground wire must not be fitted.

- Gas pipes
- Telephone wires for exclusive use
- Lightning rods
- Water pipes or faucets with plastic materials at their intermediate part.



Do not use or put the combustible materials such as thinner, combustible gas, or a high-volatile object around/inside the product. Otherwise, it may cause explosion and/or fire due to heating from the product or flashing from power supply..

Warning

Power Supply



1. When using the product, connect it to the power supply specified in the instruction manual. If it is connected to the power supply, other than the product's specification, it may become a cause of fire, electric shock, and/or electrical leakage.
2. Do not use a power supply cord and the plug other than the attached ones. If a current that exceeds the rating flows in the power supply cord, it may cause fire.
3. Be sure to insert the blade part of the power supply plug into an outlet. Insufficient insertion may cause fire.



1. When the earth leakage breaker frequently operates, please contact our distributor near you or our designated dealers. If the product is used or left as it is, it may cause fire and/or electric shock.
2. Do not modify, process, or repair the power supply cord and the plug. In addition, do not convert a 3-prong power supply plug into a two-pole type. Grounding becomes insufficient and there may cause electric shock.



Please follow the items below to prevent electric shock and/or fire due to damage of the power supply cord.

- Do not pull the cord part when pulling out the power supply plug.
- Do not put anything on the cord part.
- Do not pass the cord near a source of heat.
- Do not bend or pinch the cord.
- Do not tread or twist the cord.
- Do not spill chemicals on the cord.
- Do not use it while it is bundled.
- Do not fix it with a stapler etc.



1. Do not use the power supply cord and the plug for other products or purposes. Further, when they are lost or damaged, please purchase them at our distributor near you or our designated dealers. The attached power supply cord and the plug are designed and confirmed the safety for connecting to this product to use. If they are used for other products or purposes, it may cause fire and/or electric shock.
2. The product should be used at the specified frequency. If it is used at other than the specified frequency, it may cause an accident.

Caution Handling



1. The product should be used under the environment specified in the instruction manual. If it is used under the other environment of the specification, there may cause fie and electric shock.
2. When operating inside the product for error or clearing or cleaning etc., the operation should be made in accordance with the description in the instruction manual. Operation other than the description may cause an accident.



1. Do not turn off the power, pull out the power supply plug, or open the cover of the product during the operation. Otherwise, it may cause an accident.
2. Do not put a vase or glass with an object and/or water etc. on the product. Otherwise, it may cause fire, electric shock, and/or injury by spilling water or dropping.
3. Do not apply shock on the product. There is a risk of damaging the product and normal operation cannot be performed.
4. Do not use chemicals such as thinner or benzene when removing dirt of the product. Otherwise, it may cause damages.
5. Do not use a interface cable other than the attached one. When cables are other than the attachment, it may cause the interface error or machine trouble.



Do not use a combustible spray etc. around product. If spraying gas etc. contacts the electrical parts inside the product, it may cause explosion and fire.



1. When touching inside the product for cleaning or parts replacement etc., be sure to turn off the power. If you work with turning the power on, it may cause electric shock and/or injury.
2. Do not touch the product, power supply plug, and cord with a wet hand. There is a risk of electric shock.
3. The electrical parts inside the product should not get wet by rain or water at cleaning etc. if they get wet, it may cause electric shock and/or shock.
4. Do not turn off air heating suddenly when the product is completely cold. Moisture may adhere inside the product due to sudden air heating and it may cause electric shock.

5. There is a charging part inside. Be sure to turn off the power before opening any cover. If the cover is opened without turning off the power, it may cause electric shock.



1. Do not drop any metallic piece such as a clip, staple etc. inside or in a clearance of the product. If a metallic piece drops inside the product and contacts the electric circuit, it may cause fire and/or damage to the product.
2. When the product is not use for a long time, be sure to pull out the power supply plug from an outlet for safety. Otherwise, it may cause heating and/or firing due to dust accumulation.



Do not modify the product or mount modified parts on the product. Further, do not dismount the portion which is not indicated to be opened/closed in the manual or the cover and parts etc. fixed with screws etc. Otherwise, it may cause fire, electric shock, and/or injury.



1. Keep your hand or clothes away from the machine during operation or any moving parts of the product reachable. This may cause body injury and/or damage to personal property.
2. When closing a door, pay attention not to not cause body injury or damage property.
3. When working ensure that all doors of the machine are locked. If a door is left open it may cause body injury or damage to property.



Do not touch the gear etc. It may cause injury.

Warning

Maintenance



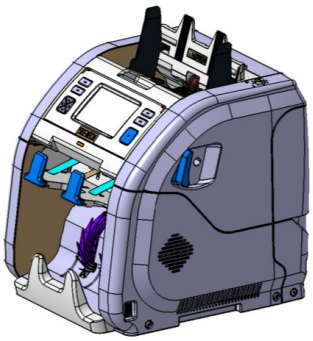
1. For repairing the product, please contact our distributor near you or our designated dealers. Insufficient repair may cause fire, electric shock, and/or injury.
2. When the product has sunk under the water due to a disaster etc., stop using it and please ask for repair/check to our distributor near you or our designated dealers. If used as it is, it may cause fire and/or electric shock.
3. Check periodically whether its installation place is unstable or not. If there is any abnormality, please contact our distributor near you or our designated dealers. If it is continuously used with insufficient installation, it may cause a falling accident.
4. Check and clean the power supply plug and the cord regularly. It the power supply plug is broken or the cord is damaged, stop using and please replace it by contacting our distributor near you or our designated dealers. It may cause fire and/or electric shock.



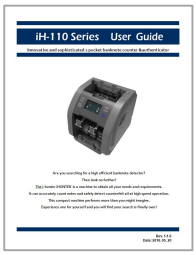
When smoke, abnormal smell or abnormal sound is generated from the product, stop using it immediately, cut off power supply and pull out the plug from the outlet. Then, please contact our distributor near you or our designated dealers. It used or left as it is, it may cause fire and/or electric shock.

Packing List

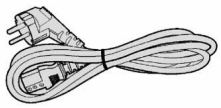
iH-110 Series



Manual



Power Cable

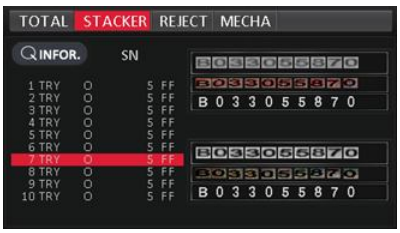
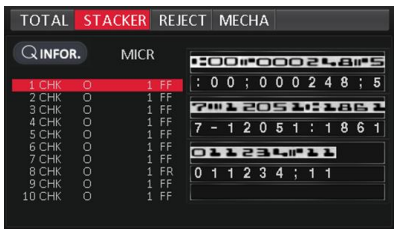
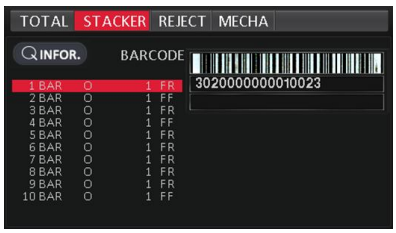


Options

External Display

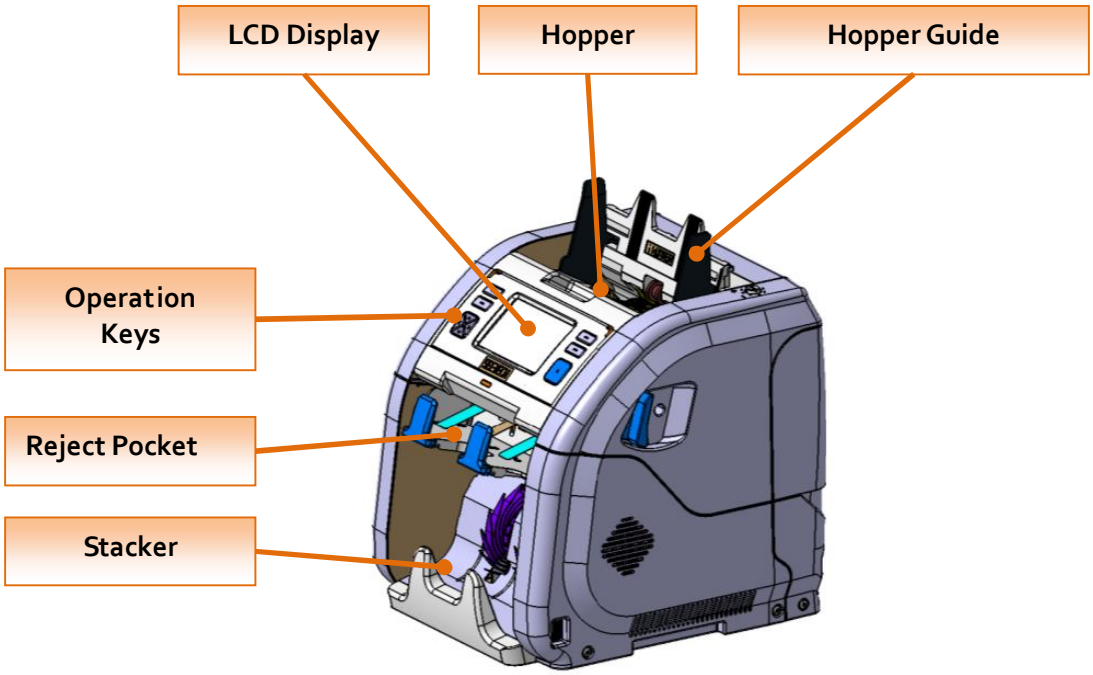


Series

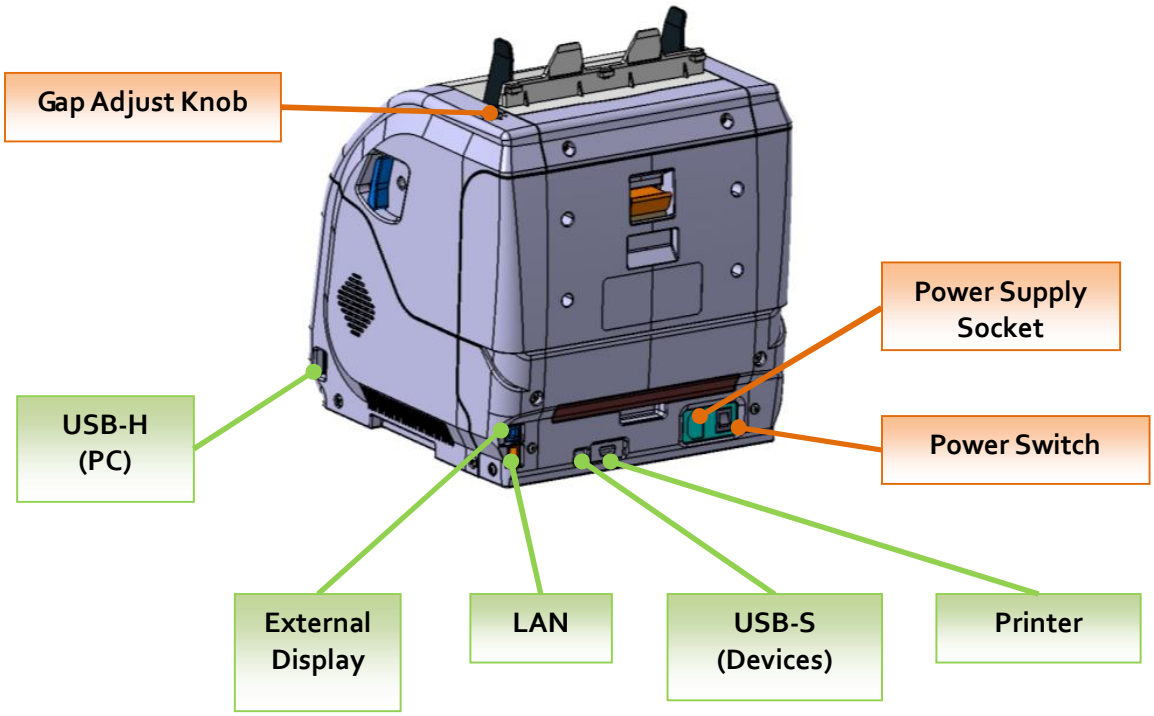
iH-110	iH-110S	iH-110B
Accurate recognition of serial number with full color image and accurate recognition of OCR for serial number.	MICR recognition of cheque and voucher with full color Image and OCR of MICR.	Barcode recognition with full color image.
		

Appearance

<Front View>

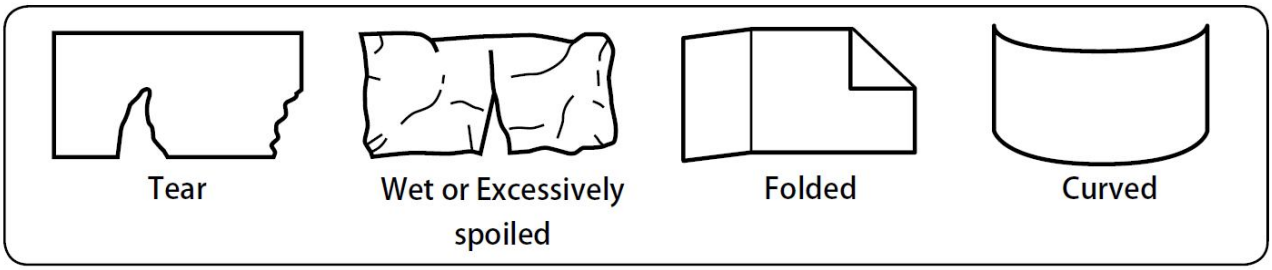


<Rear View>

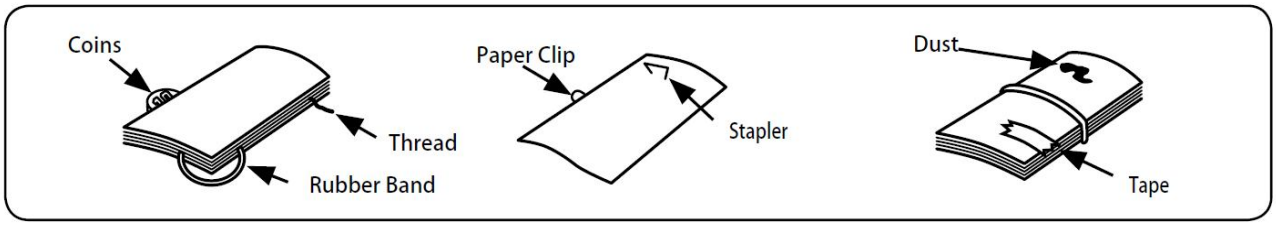


Before Using

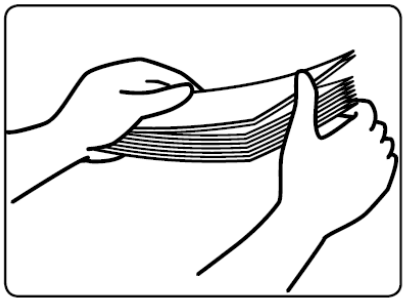
Avoid counting wet, excessively dirty or spoiled notes.



Check for foreign matter (paper chips, rubber bands, clips, dust etc.) mixed with notes.



Remove folds or end from notes beforehand. Spread and separate brand new notes well for some of them are slightly adhesive.



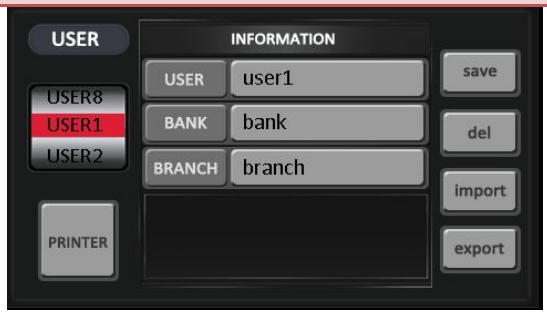
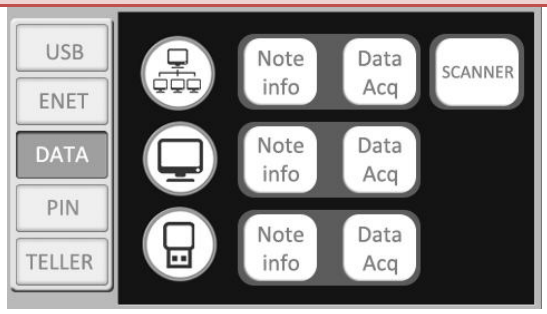
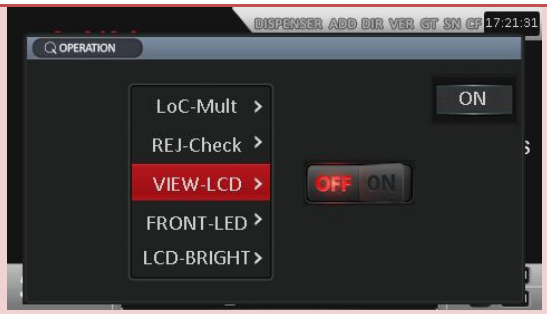
Align all the four corners and edges of notes. Any unevenness may cause an error.

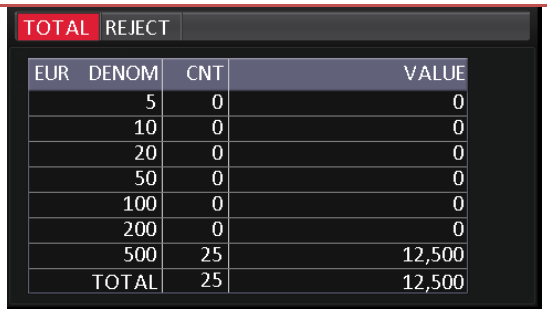
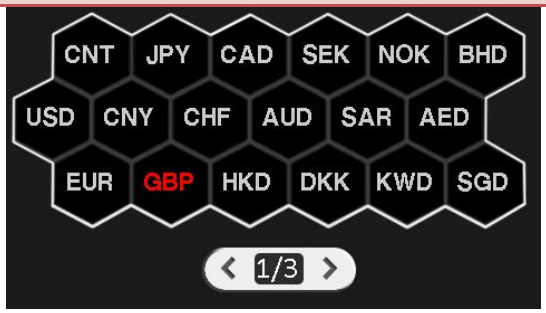
1. Key Operation



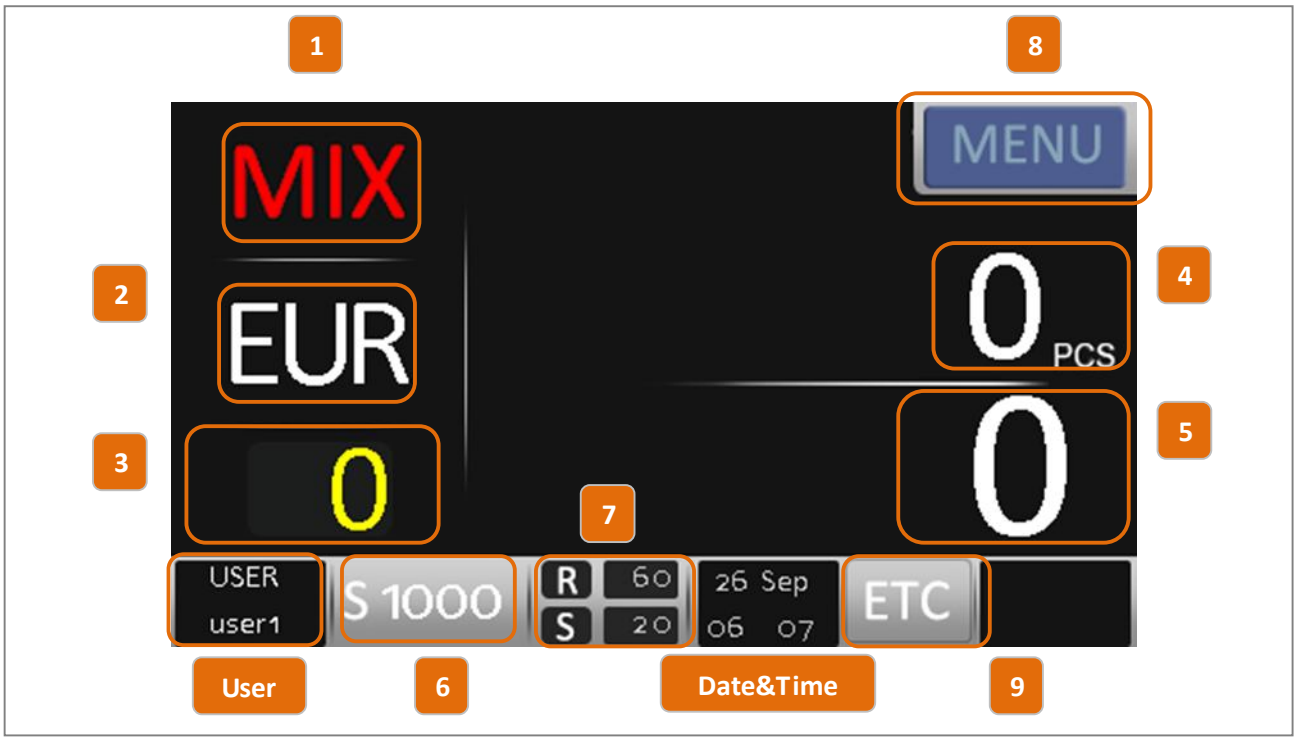
Key		Explain
LS1	Short Key	Change Mode and select Teller 1.
	Long Key	View Operation.
LS2	Short Key	Change Speed. Print Key for Teller 1.
	Long Key	View Version.
RS1	Short Key	Change Local and select Teller 2.
	Long Key	View all locals.
RS2	Short Key	Print Receipt. Print Key for Teller 2.
	Long Key	View counting reseult.
Arrow		Used to move to the next item, change the value and menu selection and etc.
Start		Used to start and stop the counting or exit menus.
LED(L)		When Stacker is full, LED(L) is blinked. Turn on when Teller 1 is selected.
LED(R)		When Batch is full, LED(L) is blinked. Turn on when Teller 2 is selected.
LED(B)		When CF is detected or Reject is full, LED(B) is blinked with Red(CF) and Green(Reject).

※ Special Key or Drag Pattern Operation

No.	Key Combination	Screen Drag Pattern	Mode(screen)
1	L1 + R1	<	
2	L1 + R2	>	
3	L2 + R1	V	
4	L2+ R2	^	
5	None	Z	

6	None		
7	Long press L1	None	
8	Long press L2	None	

2. Display Operation



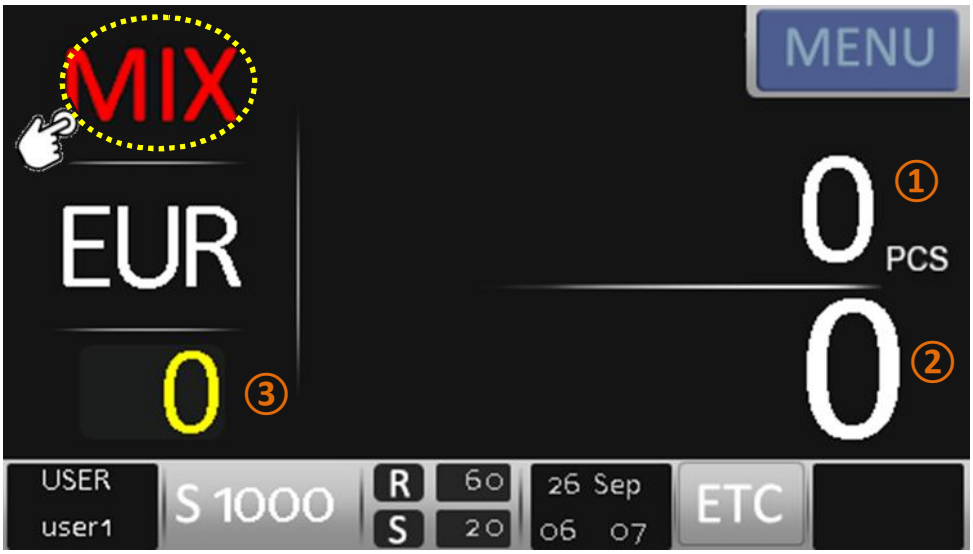
1	Display and change Counting Mode.
2	Display the current local currency and change the currency.
3	Display Reject Amount and see the details.
4	Display Quantity(Pieces) and view total count result.
5	Display Amount and view Stacker information.
6	Display and change Speed.
7	Display and change Batch quantity of Reject and Stacker.
8	Enter Menu screen. Go to P. 31
9	User Setting Mode. Go to P. 24
Date&Time	Display and set date and time.
User	Display the current user. Go to P. 38

3. Normal Operation

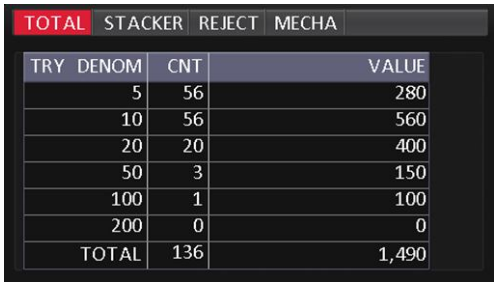
3-1. Basic Count Mode (Mix/SP/SG)

By touch the screen, Count Mode is changed from Mix, SP and SG.

Mix -> SP -> SG -> Mix

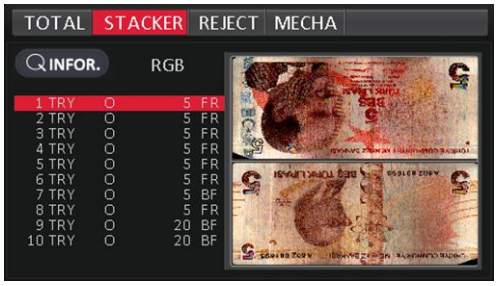


①



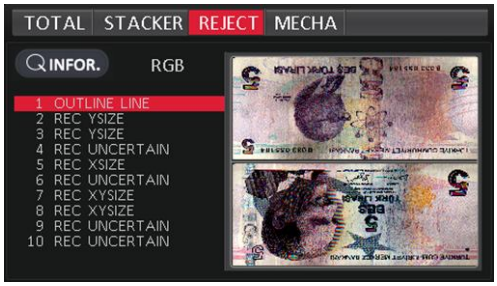
View total counting result.

②



View counting result from Stacker Pocket.

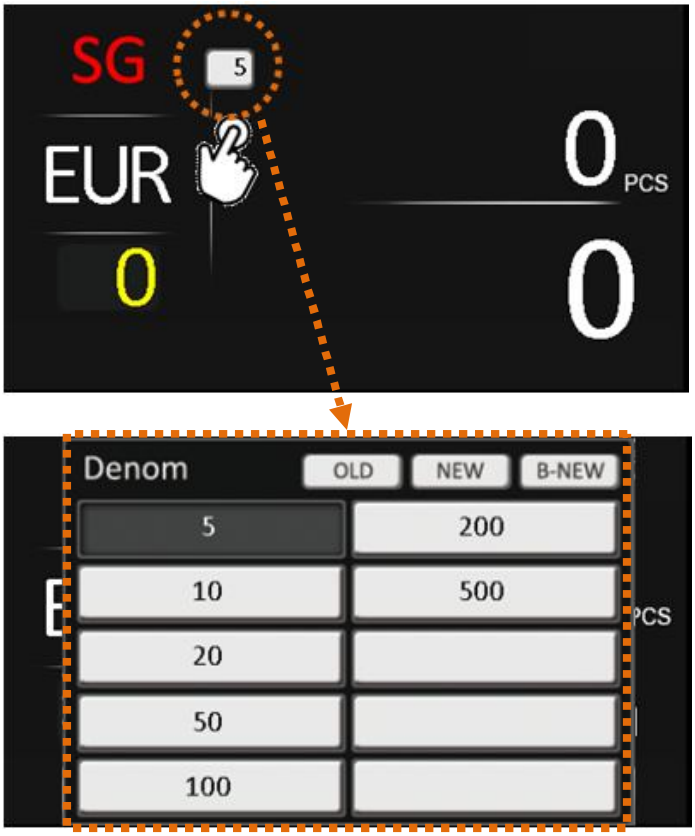
③



View counting result from Reject Pocket.

SG Mode

A user can select the version and denomination which he counts.



3-2. SN Reading

A user can check the serial numbers about all counted notes on screen.



3-3. Barcode Reading (Only iH-110B)

By long touch of Currency area, a user can select Barcode mode directly.

In this mode, a user can count Barcode tickets and check the recognized Barcode directly.

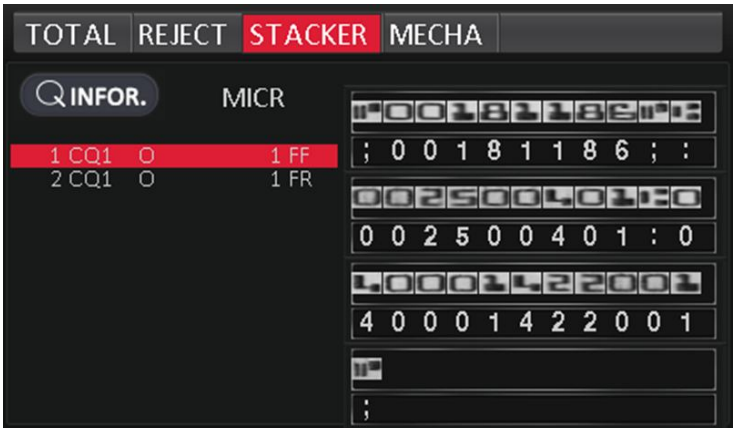


3-4. Check Reading(MICR) (Only IH-110S)

By long touch of Currency area, a user can select Check Reading mode directly.

In this mode, a user can count Checks and see the recognized information directly.





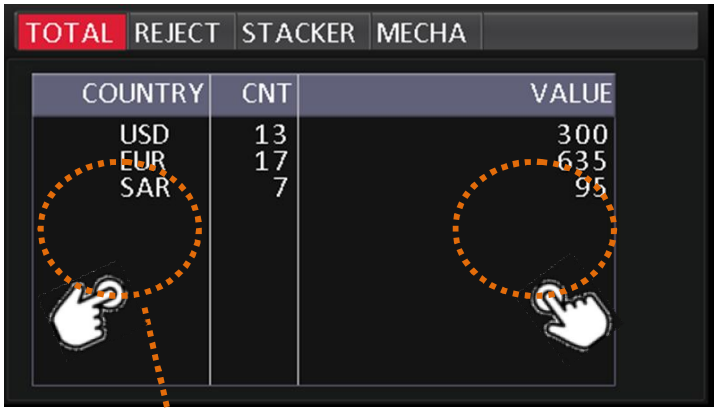
3-5. Multi Mix

By long touch of Currency area, a user can select Multi Currency mode directly.

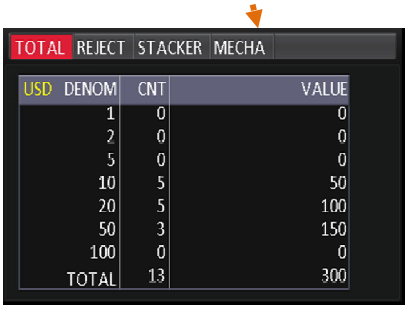
In Multi Currency mode, a user can count the mixed currencies together.

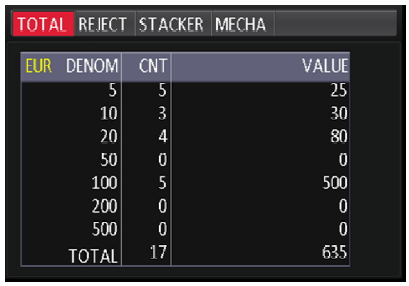
A user can also check the counting result in detail about each currency separately.

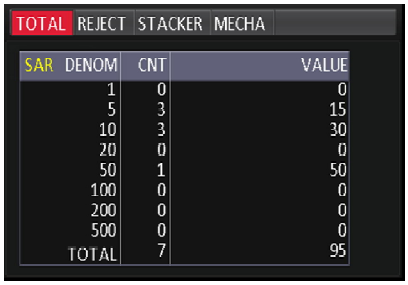




When touch left or right side of Display, a user can see the details counting result of each currency.







3-6. Multi SC (Auto Mode)

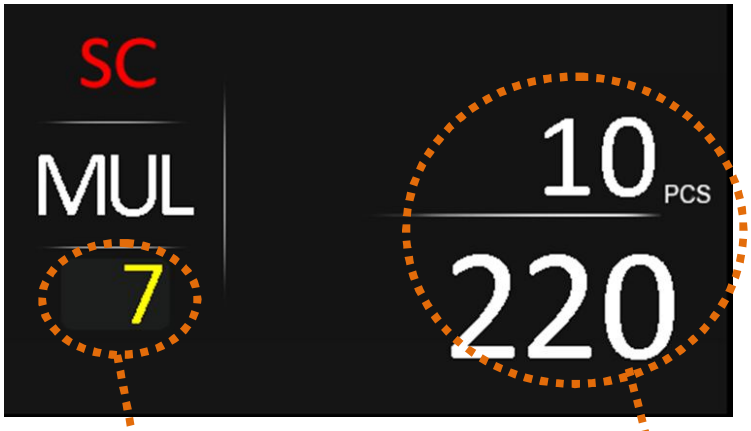
From Multi(Mix) screen, user can enter Multi SC mode.

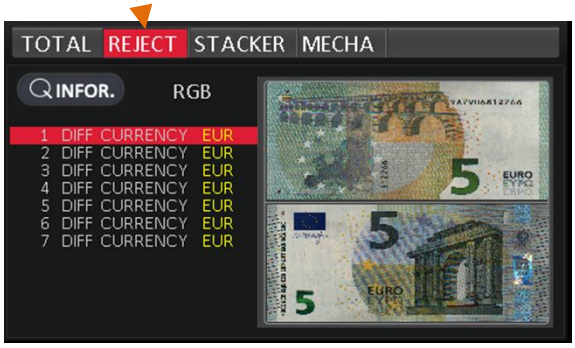
In Multi SC mode, the first recognized currency is accepted only and the others are rejected.

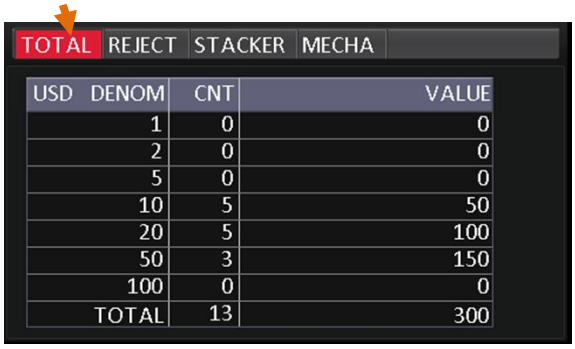
Error code of the rejected other currencies is DIFF CURRENCY.







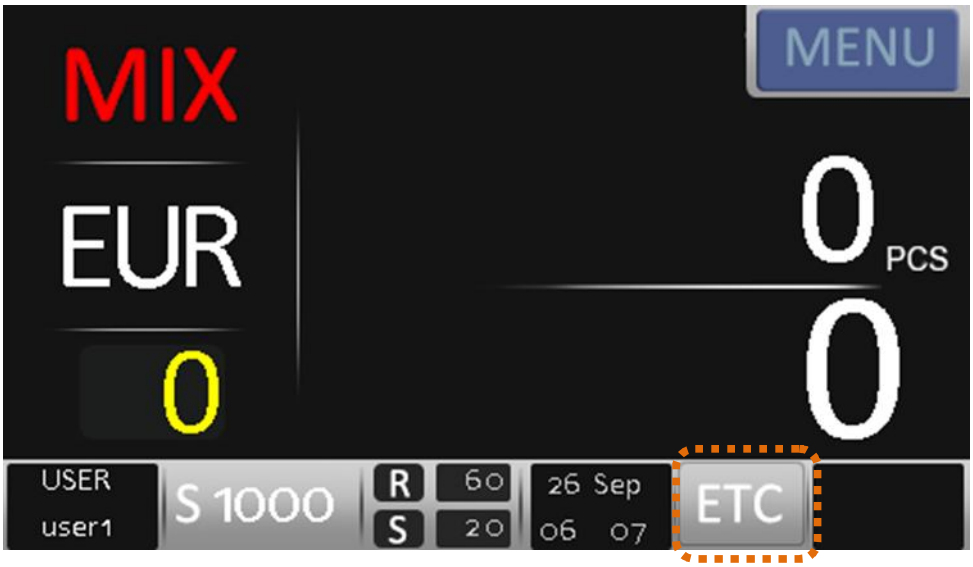




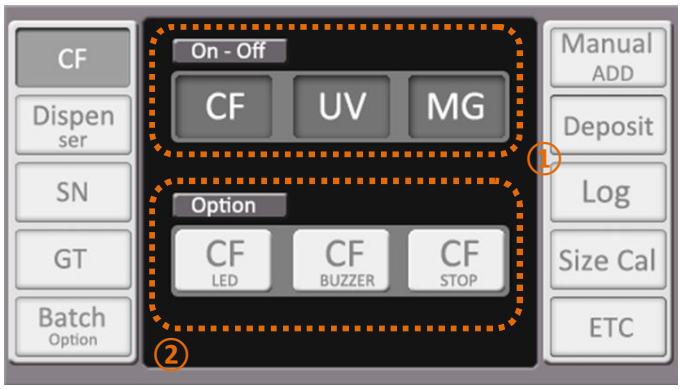
USD DENOM	CNT	VALUE
1	0	0
2	0	0
5	0	0
10	5	50
20	5	100
50	3	150
100	0	0
TOTAL	13	300

4. Settings

4-1. ETC



1) CF



① On-Off

A user can turn on or off CF, UV and MG separately.

② Option

CF LED

When CF is detected, LED(B) is turned on.

CF BUZZER

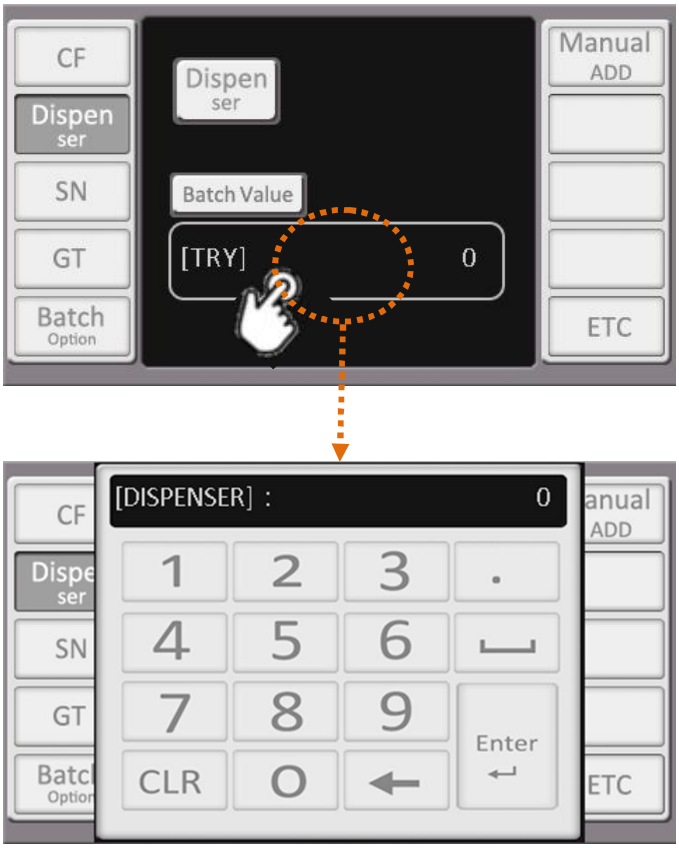
When CF is detected, the warning buzzer is turned on.

CF STOP

when CF is detected, the machine is stopped.

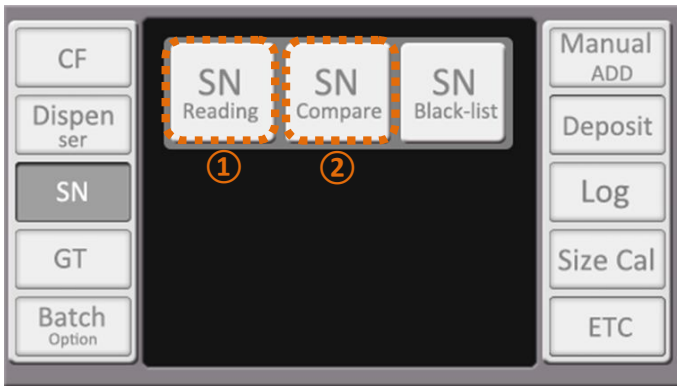
2) Dispenser

Batch by total value.



3) SN

Turn on or off SN Reading, SN Compare and SN Black-list.



① SN Reading

By OCR, Machine recognizes serial numbers of banknotes.

Machine can read both serial numbers on the note.

② SN Compare

Compare serial numbers from both side of a banknote.

If the numbers are different, the note is rejected.



③ SN Black-list (Max 100 ea)

If a serial number is entered, the banknote with the serial number is rejected.

┼ : Enter serial number to black list.

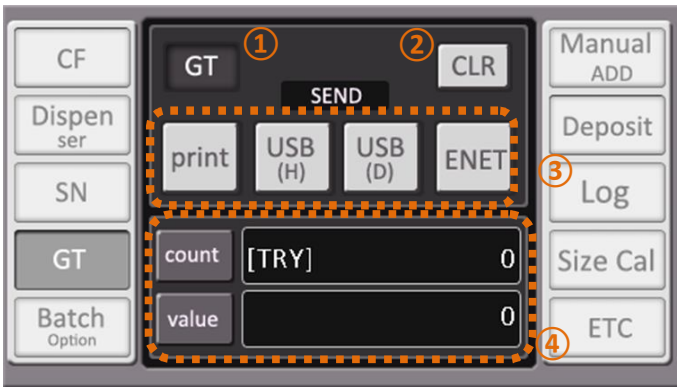
— : Delete serial number from black list.





4) GT

User can clear Grand Total or send Grand Total to Printer, USD or ENET.



① GT ON/OFF

Turn on or off GT function.

② CLR

Clear GT result.

③ SEND

Print or export GT result.

④ GT Result.

5) Batch Option



① WARNING

If Batch is not completed, Warning message is shown

② OPTION

Continue

When next Batch is started, the displayed value is started from the previous counting result.

Clear

When next Batch is started, the displayed value is started from 0.

V.continue

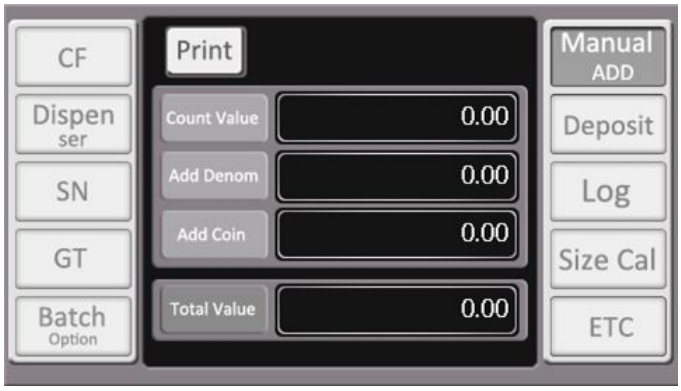
When next Batch is started, the displayed value is started from the previous counting result.

V. Clear

When next Batch is started, the displayed value is started from 0.

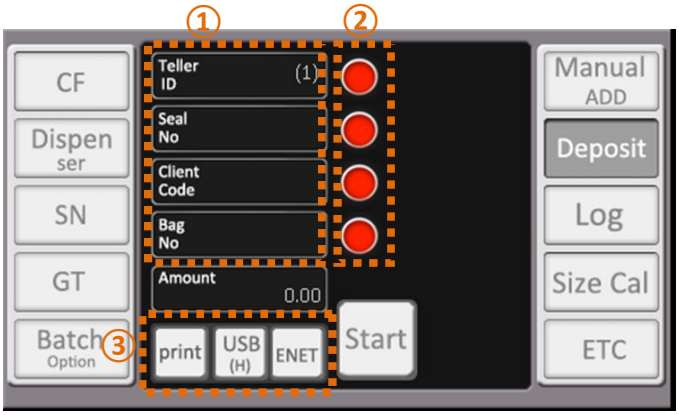
6) Manual ADD

An arbitrary amount can be added to counting result by a user



7) Deposit

Enter the client information, account no, type of deposit and keep and print value of the deposit.



① Customer information - Keypad

Enter all information by keypad.

② Barcode Scanner ON/OFF

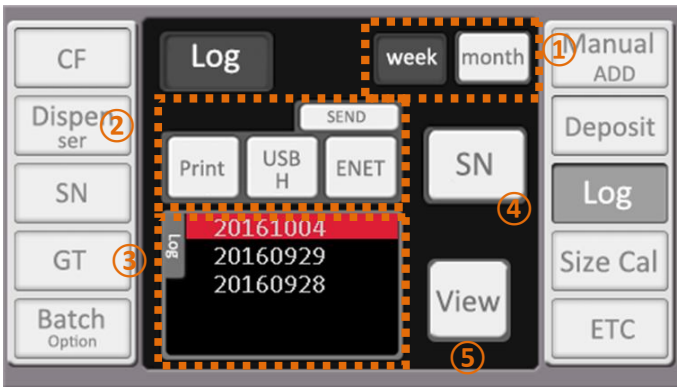
Enter all information by Barcode Scanner.

③ Data export method

User can select the data export method.

8) Log (Option menu - Special S/W is needed.)

Save counting result daily.



① Delete Period of Log

Select Log delete period. (week or month)

② Export method of Log

Log data can be exported by Printer, USBH or ENET.

③ Log list

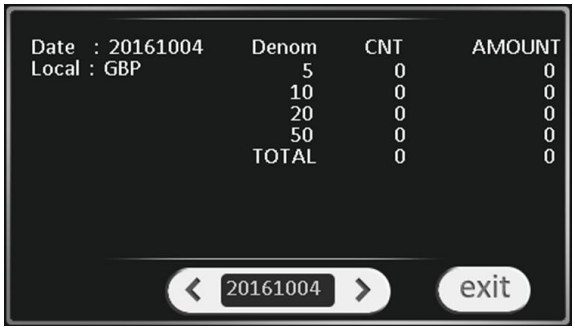
The created log lists are shown.

④ SN

If the same serial number is counted within 10 minutes, the data is not saved.

⑤ View

View Log data.



9) Size Cal (Option menu - Special S/W is needed.)

From this menu, user can check the damaged condition of the counted note by X and Y size and image.

From Main Screen, select Currency and enter Size Cal menu.

Select denomination which you want to check Size.

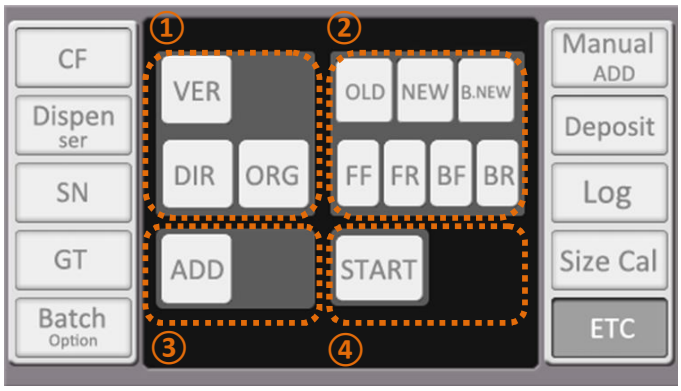
After put the note on Hopper, touch “Start” icon.

The note is counted automatically and Size and Image data of the note is shown.



10) ETC

A user can set the counting conditions by himself.



① Stacker condition 1

A user can sort banknotes by Version and Direction.

② Stacker condition 2

A user can sort banknotes by Version, Direction and Orientation of the first counted note

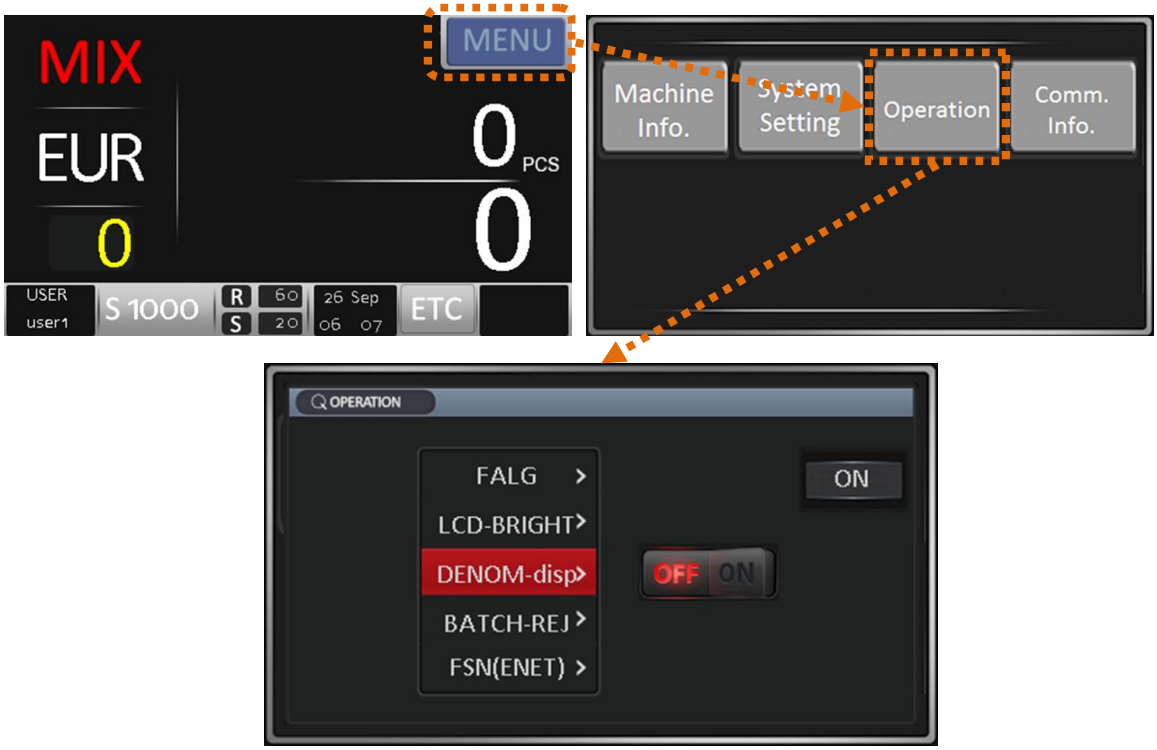
③ ADD function

④ MANUAL START

4-2. Operation

When touch MENU from Main Screen, the hidden menus are show.

Select(or enter) Operation.



1) FLAG

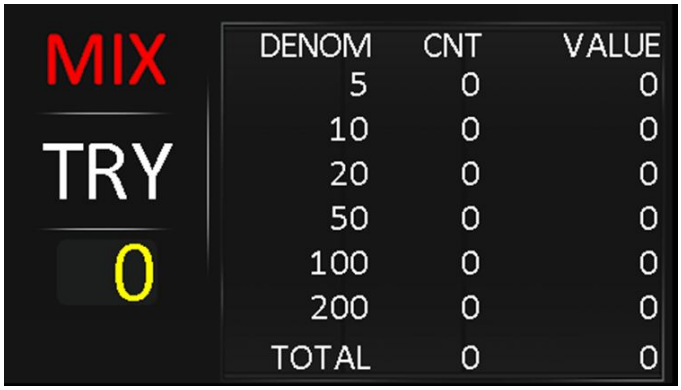
Select the display currency is Flag or Symbol.

2) LCD-BRIGHT

Adjust LCD brightness level.

3) DENON-disp

Show the denomination info. On Main screen.



4) BATCH-REJ

ON - After Batch is completed, the notes from note path is sent to Reject Pocket.

OFF - After Batch is completed, Machine just stops without rejecting notes.

5) VIEW-LCD

When ENET is connected, LCD screen is transferred to PC.

6) LANGUAGE

Select the displayed language.

7) HISTORY

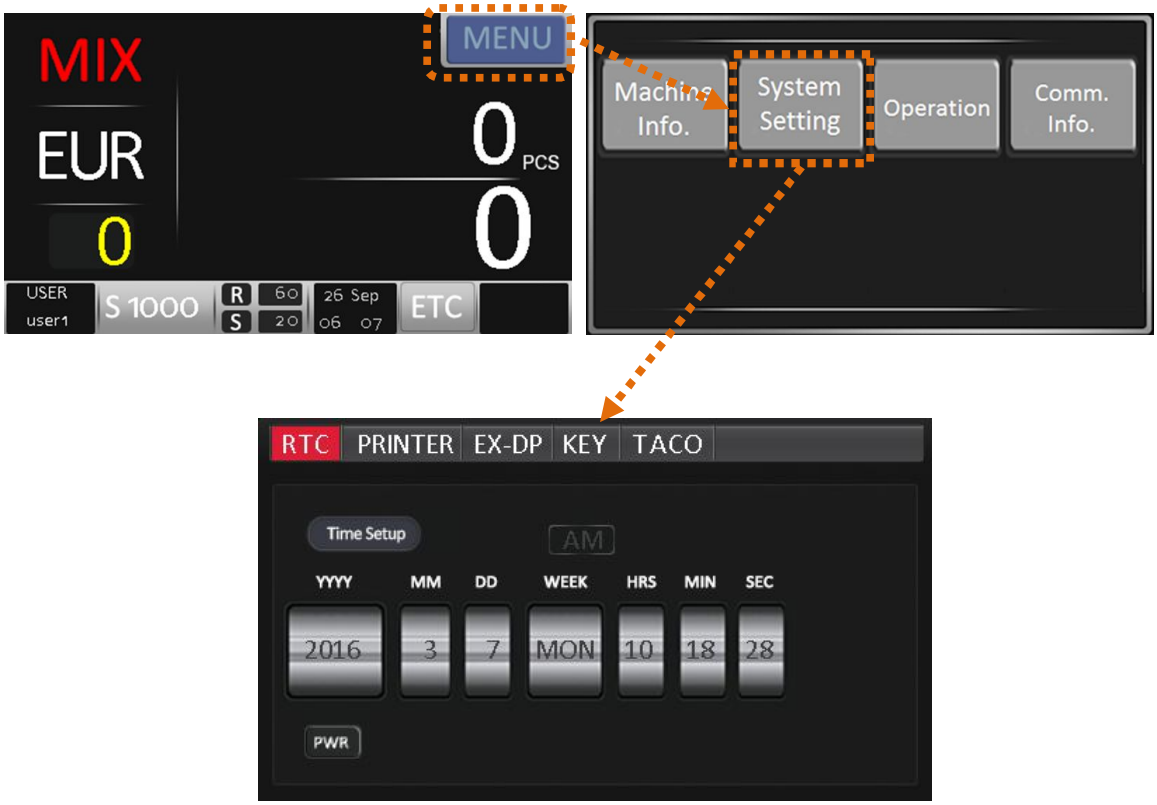
Save Counting result about each boundle.

4-3. System Setting

When touch 

from Main Screen, the hidden menus are show.

Select(or enter) System Setting.



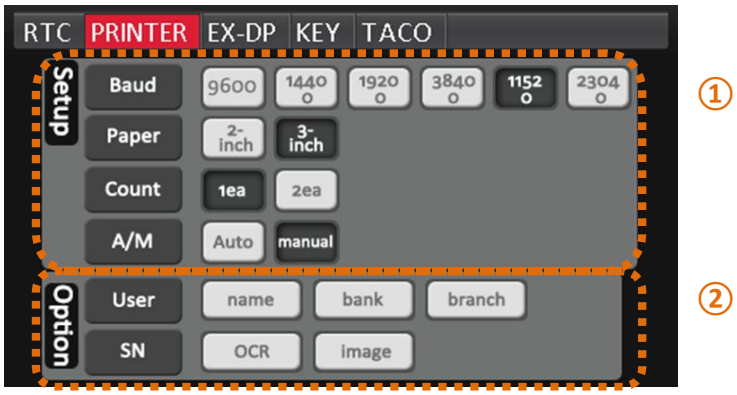
1) RTC

Set date and time.



2) PRINTER

Set Printer Configurations.



① Setup

- **Baud** - Set Baud Rate between Machine and Printer.
- **Paper** - Select size of font.
- **Count** - Select the number of Receipt.
- **A/M** - Select Auto Print or Manual Print.

② Option

- **User** - A user can print user name, bank name and branch name to Receipt.
- **SN** - A user can select the printed data type of Serial Number.

3) EX-DP



① DP TYPE

A user can select External Display Type.

② DP MODE

- AUTO

The same screen of Machine is displayed on External Display.

- Count/Value

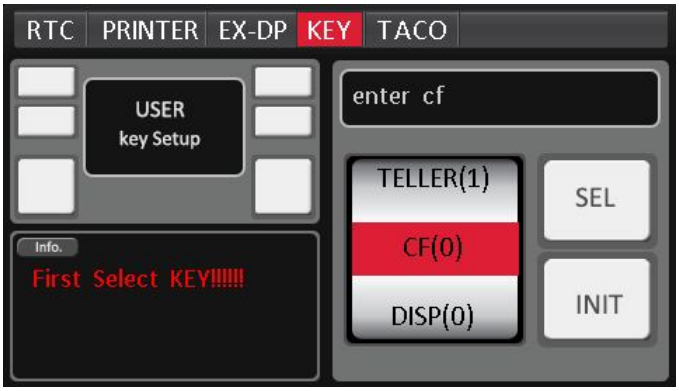
Only quantity and amount are displayed.

- DENOM

Count result by denominations is displayed.

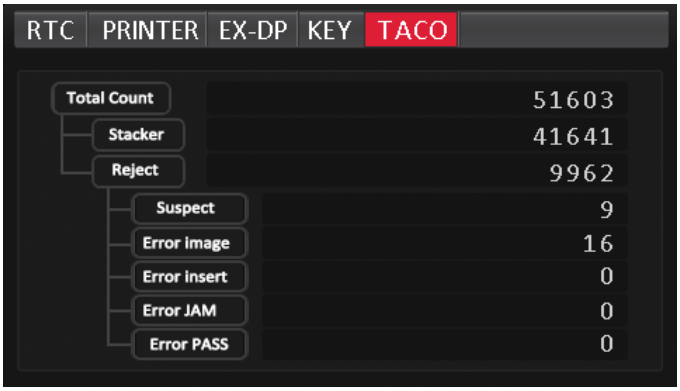
4) KEY

A user can change Key operation personally.



5) TACO

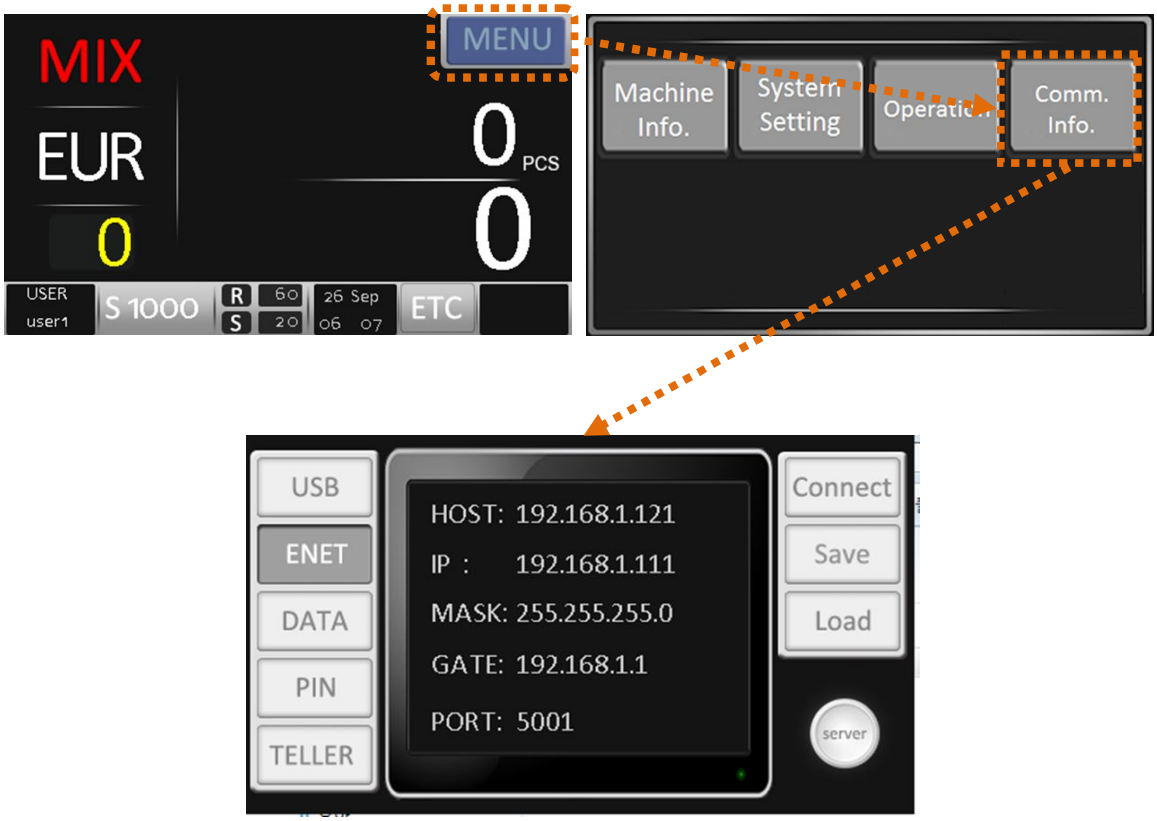
User can see Tacometer of the machine.



4-4. Comm. Info (Comminication Setting)

When touch MENU from Main Screen, the hidden menus are show.

Select(or enter) Comm. Info.



1) USB



① **Upgrade** – Upgrade the machine.

② **Select** – Select the file for special upgrading.

③ **Load** – Load data and settings from USB to Machine.

For example, User Info, Exported data and etc.

④ **Export** – Export data to USB.

2) ENET



① **Connect**

After connect Machine to PC by ENET, click this button.

② **Save**

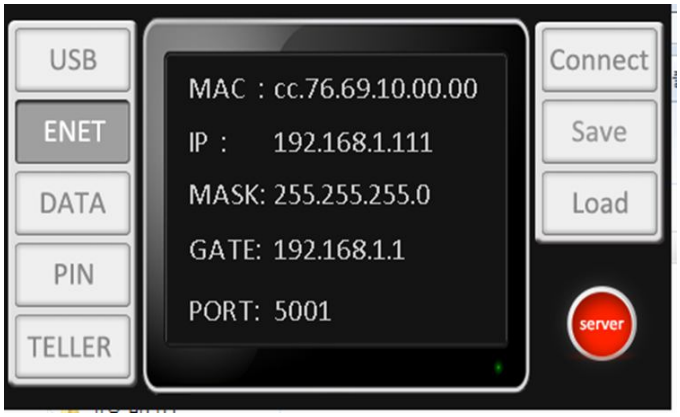
Save button of MAC, IP and etc.

③ **Load**

Load button for loading ENET information from USB.

④ **Server**

Set Sever and HOST.



3) DATA



By Network, USB Cable and USB Stick, Note Information, Data Acquistion and Scanned data are tranferred

- Note info

Counting information, Serial Number, MICR, Barcode and Sensor Information are tranferred..

- Data Acq

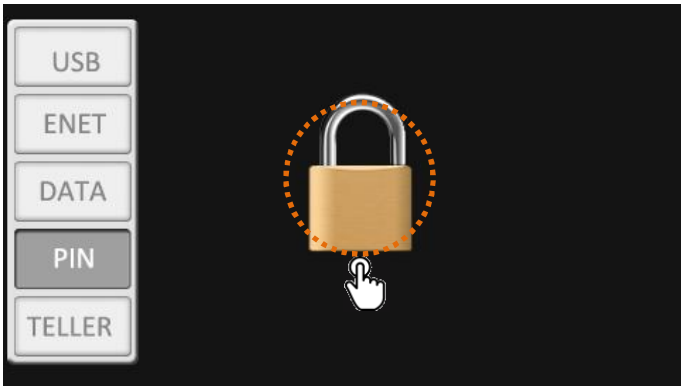
Including Note info, CIS Full Image is saved.

- SCANNER

only for iH-100(B) and iH-110(S) model.

Including Note info, CIS Color Image is tranferred.

4) PIN



Some modes and menues are hide only for engineers.

You can enter the hidden screen by enterring Pincode.

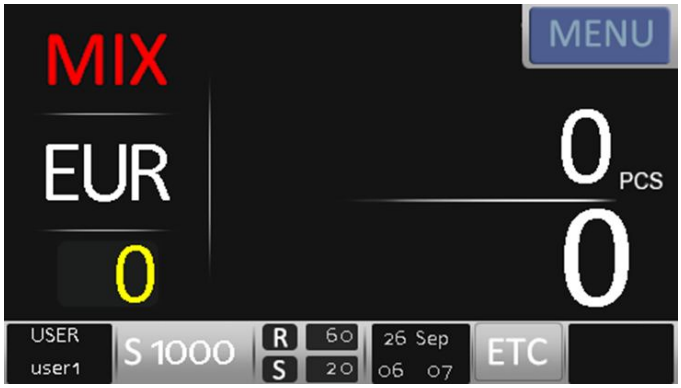


5) TELLER

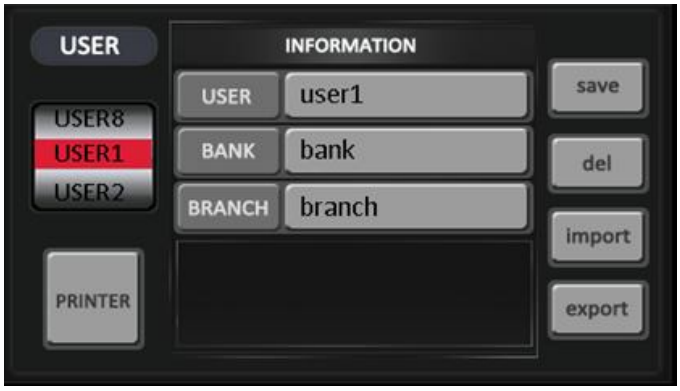
Set 2 Teller mode.

Before user 2 Teller mode, you need to add thesecond User to the machine first.

(1) Press **L1 and RS2 Key** together from Main screen.



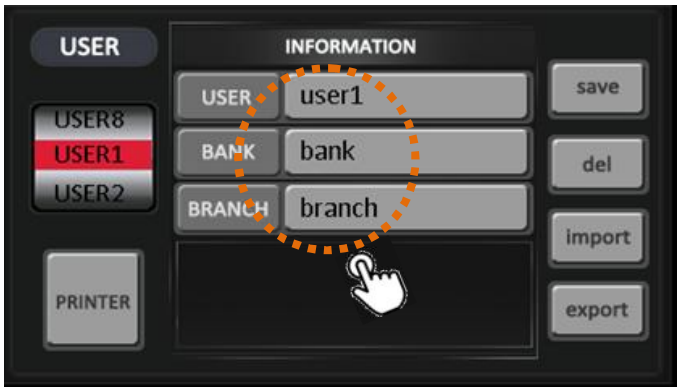
(2) You can see Machine Information Screen as below.



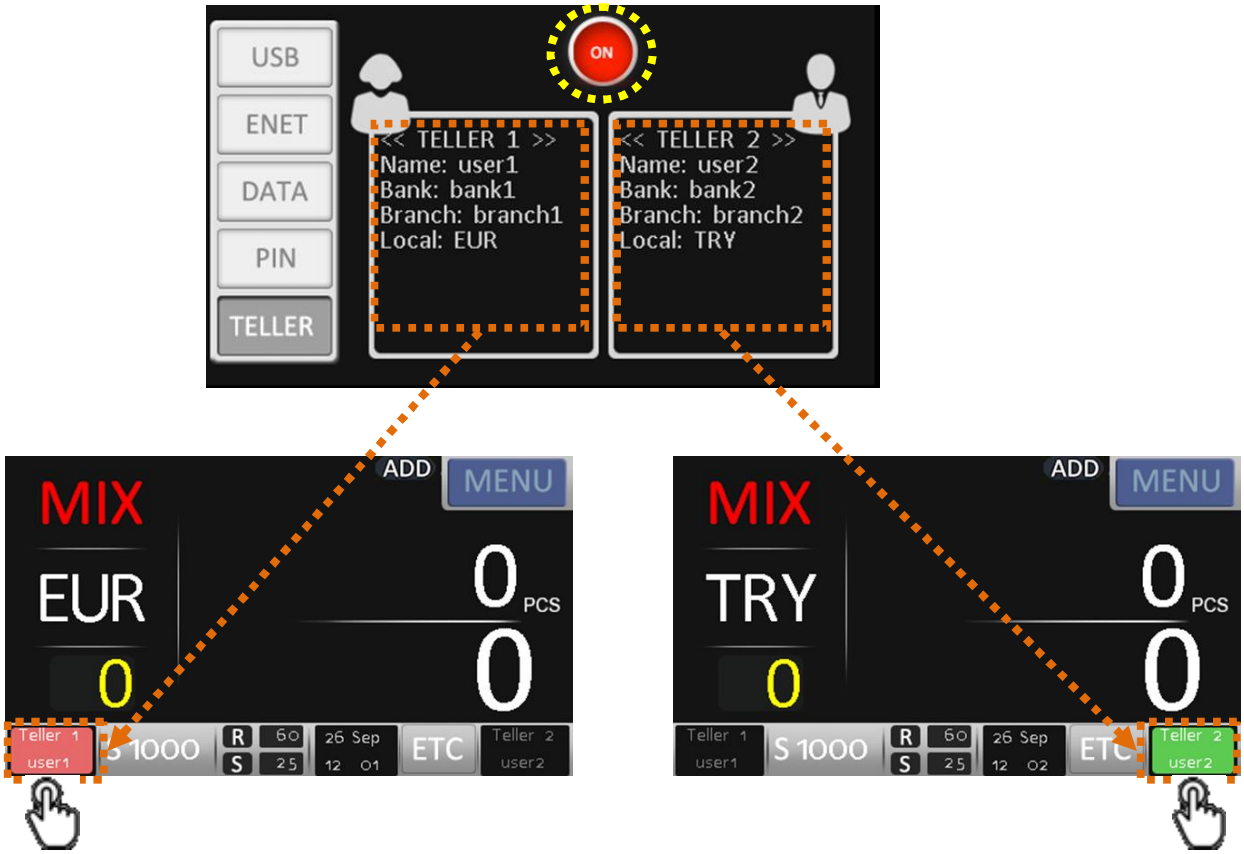
(3) Select User Number by pressing **Arrow Key**. (For example, USER2.)



(4) Touch INFORMATION area and enter USER, BANK and BRANCH information.



(5) After enter all information, press **RS1 Key** for saving.
You can delete the information by pressing **RS2 Key**.
When press **START Key**, you can exit the menu.



Teller 1 **Teller 2**



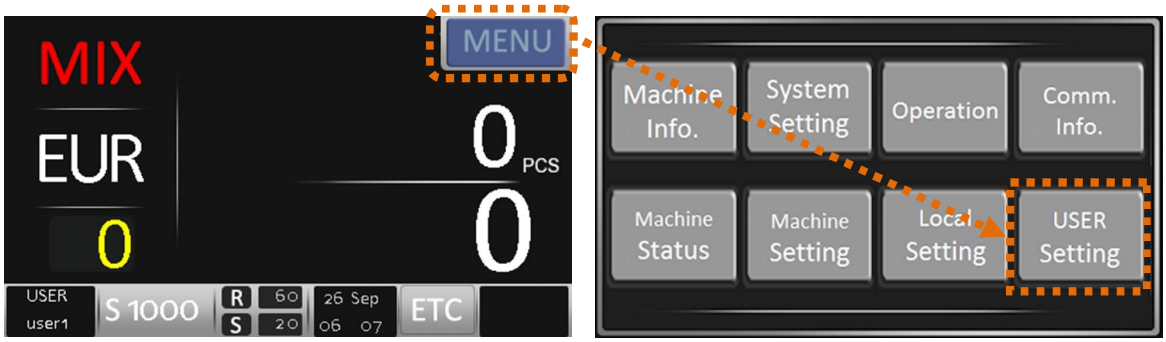
LS 1: Select Teller 1.
LS 2: Print Counting result of Teller 1.

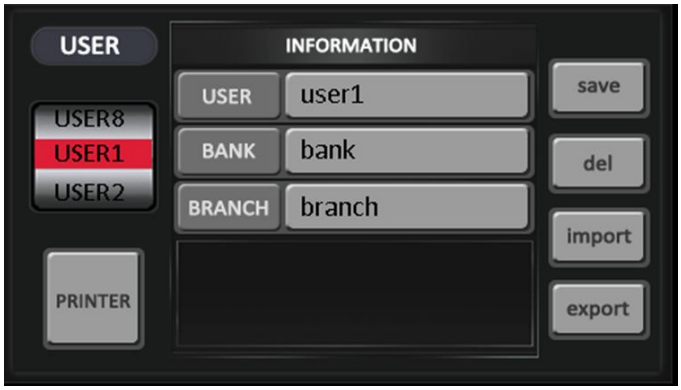
RS 1: Select Teller 2.
RS 2: Print Counting result of Teller 2.

4-5. USER Setting (Pincode is needed.)

When touch MENU from Main Screen, the hidden menus are show.

Select(or enter) USER Setting.





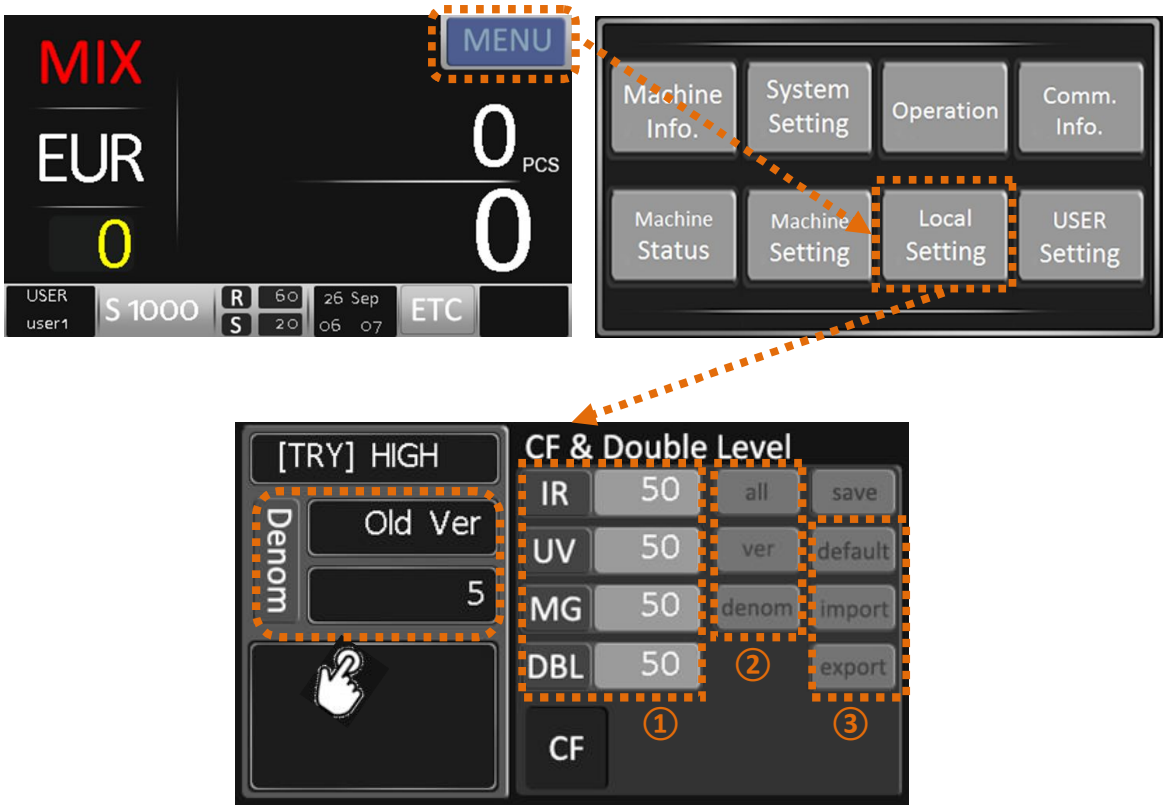
Enter User name, Bank name and Brach name for each user.

The entered data can be printed to Receipt.



4-6. Local Setting(Pincode is needed.)

A user can change IR, UV, MG and Double Level for each currency and denomination.

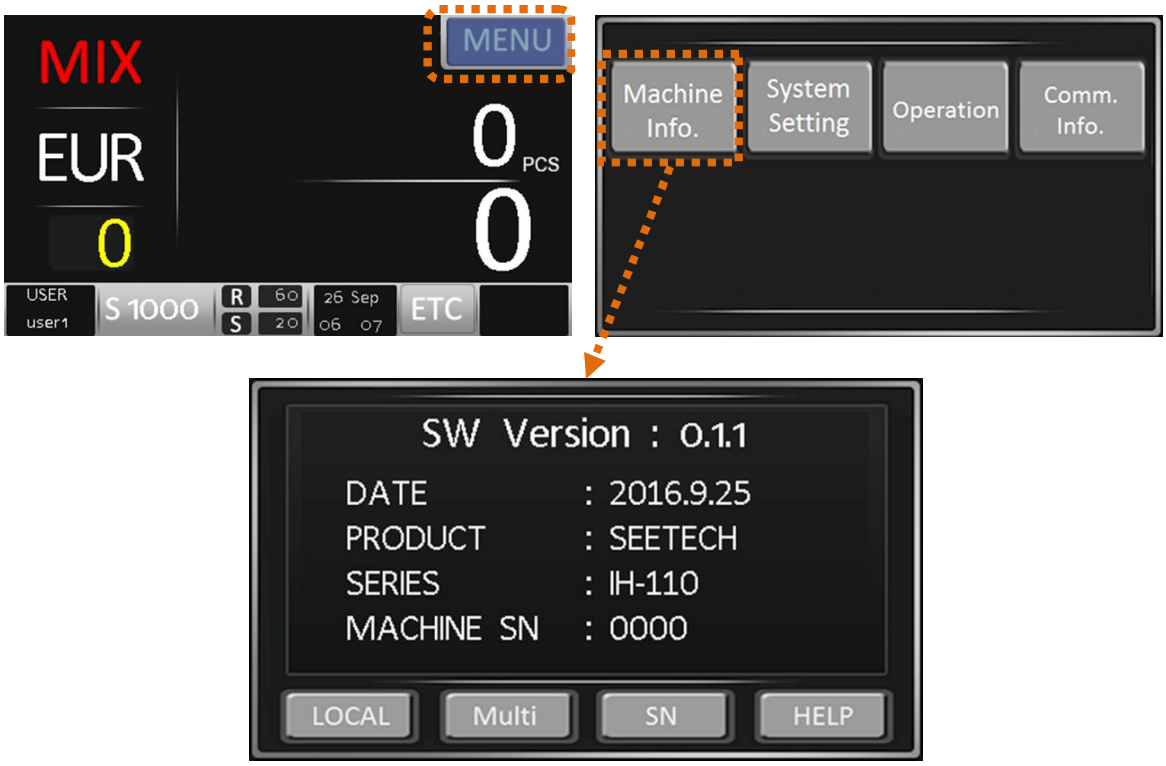


① A user can adjust IR, UV, MG and DBL(Double Level). (Range 0 ~ 100)

② Changed Levels can be applied for all included currencies, version or denomination at once.

③ A user can load or export local levels.

4-7. Machine Info.



By Network, USB Cable and USB Stick, Note Information, Data Acquistion and Scanned data are tranferred

- LOCAL

Check all installed currencies.

- Multi

Check the currencies which are availble int Multi-Mix mode.

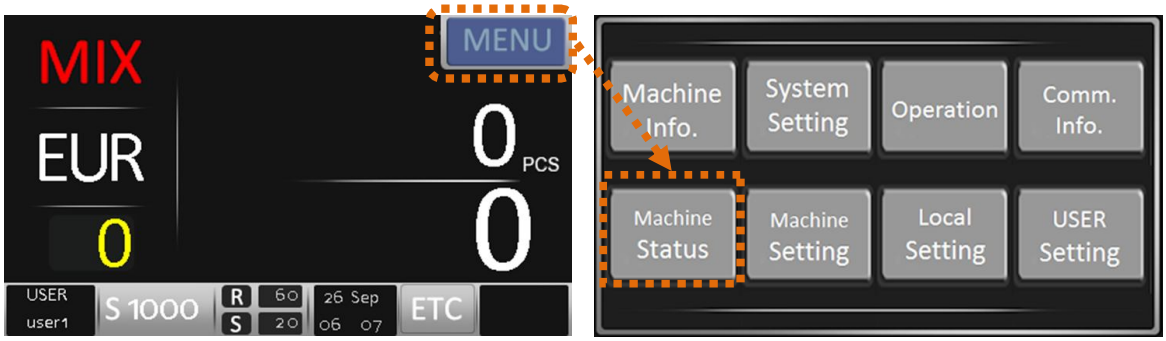
- SN

Check the currencies with Serial Reading function.

- HELP

Under developing

5. Machine Status (Pincode is needed.)



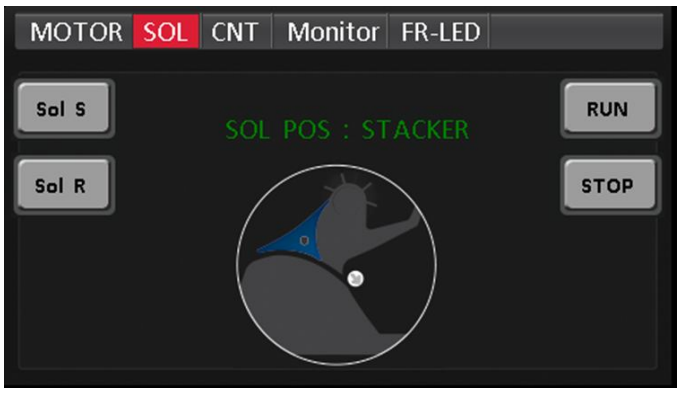
5-1. MOTOR

Test 3 kinds of Motor by a simple touch.



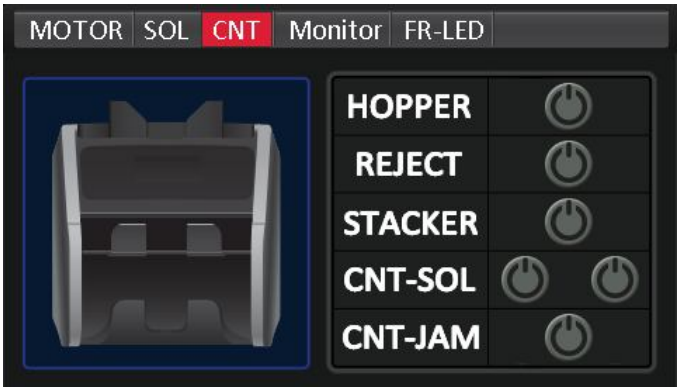
5-2. SOL

Test Solenoid condition.

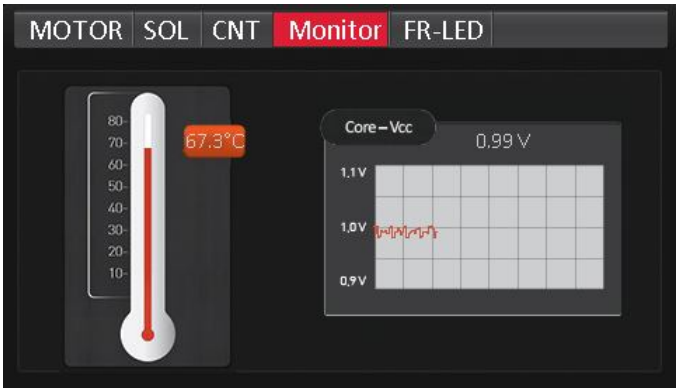


5-3. CNT

Check the condtion of internal and external count sensors.



5-4. Monitor

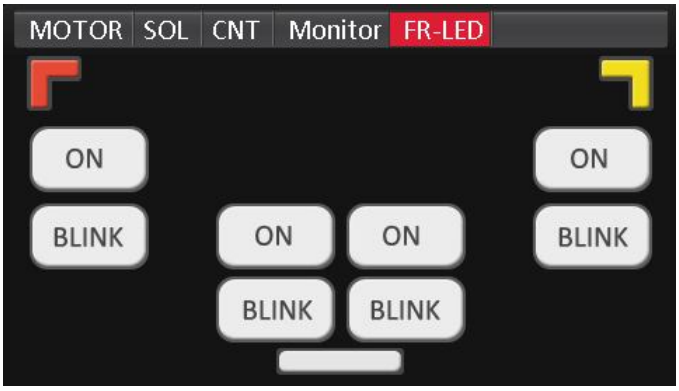


Check and monitor CPU internal power and temperature.

If some problems are caused, warning message is shown on Main Screen.

5-5. FR-LED

Test the conditions of 3 LEDs.



6. Specifications

Currency	Up to 80 currencies	
Operating Speed	Value Counting	Max 1300 notes/min
	Capture and Records: OCR, MICR, Barcode etc. with Full Color Image	700 ~ 900 notes/min
Pocket Capacity	Hopper	500 notes (Max 700 notes)
	Reject	60 notes (Max 100 notes)
	Stacker	200 notes (Max 250 notes)
Display	4.3 inch Color touch screen	
Interface	LAN, USB, (EX-DP), (Printer)	
Dimension	300(W) x 320(D) x 315(H)	
Weight	Approx. 13 Kg	
Power Supply	100 ~ 240V AC, 50/60 Hz	
Accessories	External Display, Thermal Printer, OSD(ON Screen Display)	

7. Error Code - under construction

No.	Error	Explanation
1	CHAIN	The gap between two notes is narrow.
2	SKEW L	The note is skewed to the left.
3	SKEW R	The note is skewed to the right.
4	DOUBLE	Two notes are inserted together.
5	NO RESULT (CIS)	CIS process is not completed.
6	NO RESULT (UV)	UV process is not completed.
7	BATCH FULL	Batch of Stacker of Reject Pocket is full.
8	OUTLINE LR	Not found the left or right outline of banknote.
9	OUTLINE LINE	Not found the lower or upper outline of banknote.
10	OUTLINE PIXEL X	There is a difference between the upper and lower outline pixel.
11	OUTLINE PIXEL Y	There is a difference between the left and right outline pixel.
12	XSIZE	X size of banknote is out of range.
13	YSIZE	Y size of banknote is out of range.
14	REC XSIZE	X size of each denominaton is out of range.
15	REC YSIZE	Y size of each denominaton is out of range.
16	REC XYSIZE	X and Y size of each denominaton is out of range.
17	REC UNCERTAIN	Not recognized the denomination.
18	REC DENOM	The denomination information from TOP and Bottim CIS Sensor is different.
19	REC NOT VERIFY	The recognition rate is bad.
20	REC O VER	Reject OLD Version note.
21	REC N VER	Reject NEW Version note.
22	REC V VER	Reject Very NEW Version note.
23	DIFF DENOM	The different denomination is counted. (in SP mode)
24	DIFF FACE	A note with the different Face is counted. (In DIR mode)
25	DIFF ORG	A note with the different Direction is counted. (In ORG mode)
26	DIFF VERSION	A note with the different version is counted. (In Ver mode)
27	OLD VERSION	Reject OLD Version note.
28	NEW VERSION	Reject NEW Version note.
29	B-NEW VERSION	Reject Very NEW Version note.
30	DISPENSER REJECT	Conditional Error (Dispenser is completed.)
31	DIFF CURRENCY	A different currency is counted. (In Auto Currency mode)
32	DOGEAR ERROR	A Dog-Ear note is counted.
33	SN DIFF	A note with the different SN is counted.
34	SN MISS	The recognition of letters of serial numbers is failed.

No.	Error	Explanation
35	SN UNCERTAIN	The recognition rate of seiral numbers is bad.
36	SN BLACK LIST	Serial number from Black List is recognized. (When SN Black List is on)
37	BAR WRONG SIDE	Not found barcode.
38	BAR SEARCH	Not found the start position of barcode pattern.
39	IR(XXX)	IR Error XXX
40	MG(XX)	MG Error XX
41	UV(XX)	UV Error XX
42	IR(XXX), MG(XX), UV(XX)	IR+MG+UV Error
43	IR(XXX), MG(XX)	IR+MG Error
44	IR(XXX), UV(XX)	IR+UV Error
45	MG(XX), UV(XX)	MG+UV Error
46	UNFIT(XXXX)	SOIL DEINKED STAIN GRAFFITI COMPOSED MULTILATION CRUMPLE LIMPNESS DOGEAR1, DOGEAR2, DOGEAR3, DOGEAR4 HOLE1, HOLE2, HOLE3, HOLE4 TEAR1, TEAR2, TEAR3, TEAR4 TAPE1, TAPE2, TAPE3, TAPE4 (reserved)

8. Maintenance

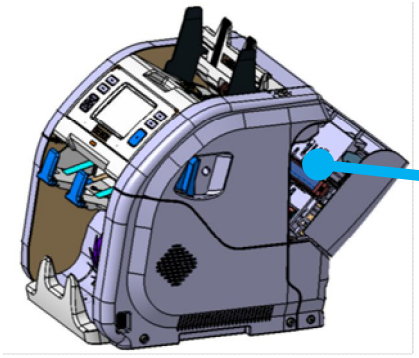
The machine has many sensitive sensors to perform high technology functions, for example counterfeit detection, denominations, etc.

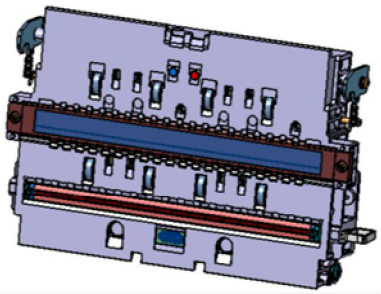
Users are recommended to clean the machine sensors at least once a day.

Refer to following section and clean the machine regularly.

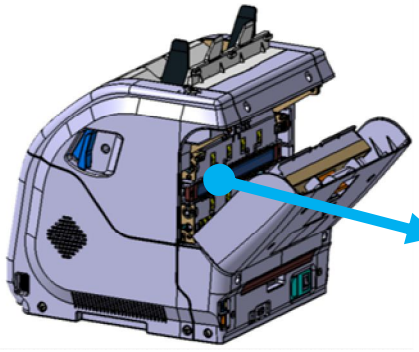
※ Please turn the power off before cleaning the machine.

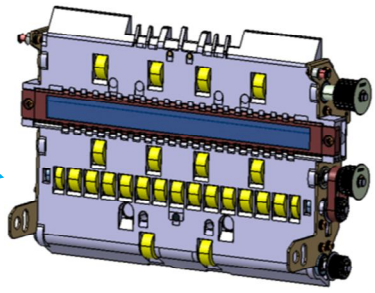
Up Sensor Module





Down Sensor Module





Lower Drive Body

