

Note

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Every person working at the Fitness Sorter; MACHINE must have previously read and understand the user manual and, specially the safety information. The Fitness Sorter; MACHINE may only be operated by authorized personnel and may be serviced by trained and authorized personnel.

Safety Information

Always be careful when using the machine. To reduce the risk of fire, electrical shocks, and other injuries, keep these safety considerations in mind when installing, using, and maintaining your machine:

Stability

Place the machine on a secure, stable surface. The machine can be seriously damaged if it falls.

Power Supply

Provide correct power to the machine, as listed on the back of the machine. If you are not sure of the type of power that is supplied to your office, call your electric company.

Grounding

If the plug has three prongs, it must be plugged into a grounded (three-hole) outlet. Grounded plugs and outlets are designed for your safety - do not try to make a three-prong plug fit into a two-prong outlet by modifying the plug or outlet in any way. If you cannot insert the plug into your wall outlet easily, then a qualified electrician should inspect the outlet.

Overload

Do not plug too many electrical devices into a wall outlet or an extension cord. An overloaded outlet could be a reason of a fire and electrical shock hazard.

Cleaning

Before cleaning the machine, unplug it from the power outlet. Clean exposed parts with a soft cloth slightly dampened with water. Do not use aerosol cleaners.

Gas Leaks

Never use any machine close to a gas leak. If you think gas is leaking, call the gas company immediately. A small electrical spark in the machine could cause a fire or explosion

Precaution

1. Never push objects of any kind into the machine through the case or cabinet openings.
2. Do not use your machine near water, in wet locations, or outdoors.
3. Do not allow anything to rest on the power cord, line cord, or PC interface cable. Do not locate the machine where the cords can be damaged by persons' walking on them.
4. Do not allow pets to chew on the power cord or PC interface cable.
5. Use supplies or cleaning materials only as directed. Keep all supplies and materials out of the way of children.
6. The power supply turns this machine on and off. Make sure that the machine is installed near an outlet and is easily accessible.
7. Never remove covers or guards that require a tool for removal. There are no operator serviceable areas inside the machine. Refer servicing to authorized service personnel.
8. Never defeats interlock switches. This machine is designed to restrict operator access to unsafe areas. Covers, guards and interlock switches are provided to ensure that the machine will not operate with covers opened.
9. Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instruction.

Managing the performance of the machine

This unit has many sophisticated sensors. Without proper maintenance, it cannot last the good performance. Please read the '**Maintenance**' section, and do it everyday. When the performance is deteriorated on a sudden, please clean all the sensors first before calling a service.

Safety Notes

Your machine and the supplies are designed and tested to meet strict safety requirements. Included are safety agency examination and approval and compliance to established environmental standards. Please read the following instructions carefully before operating your machine, and refer to them as needed to ensure the continued safe operation of your machine.

WARNING

Hazardous moving ports!
Keep fingers and other body parts away

Battery is used for 'OPE Board' in this machine. If wrong date and time are displayed on LCD after correct setting, it is necessary to change the battery of 'OPE Board' Please read the following instructions carefully before changing the battery.

CAUTION

Risk of explosion: If battery is replaced by an incorrect type.
Dispose of used batteries according to the instructions.



Either the symbol , or a similar symbol, combined with the triangle shaped warning sign from ISO 3864-2, or the following statement or equivalent text shall be used:

WARNING

Hazardous moving parts keep away from moving fan blades.

FCC Compliance Statement

THIS DEVICE COMPLIES WITH PART 15 OF FCC RULES.

OPERATION IS SUBJECT TO THE FOLLOWING CONDITIONS:

THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

This manual shows user general symbols for safety information and symbols to identify special dangers.

Refer to the below Icons before reading Manual.

Icon	Word	Explanation
	DANGER WARNING	This symbol with the signal word (Danger/Warning) refers to an immediate risk to life or health.
	CAUTION	This symbol is to identify safety information. Ignoring this warning can result in damage to the system or endanger data consistency.

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1 INSTALLATION

Packing List

No.	Part Name	Qty	Remark
1	MACHINE	1 Unit	
2	AC Power Cord	1 pc.	
3	User Manual	1 pc.	
4	Sensor Cleaning Cloth	1 pc.	

Work Area

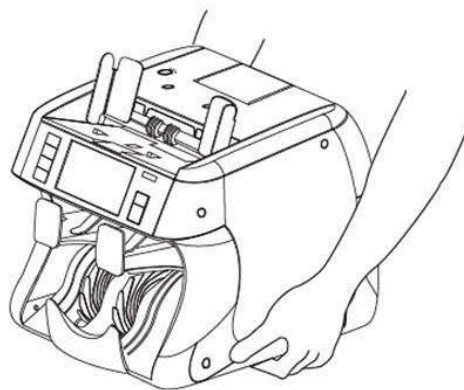
To help guarantee trouble-free operation of the machine, place it on a flat, stable surface near your workstation.

Do not place the machine:

- in direct sunlight
- Near heat sources or air conditioners
- In dusty or dirty environments

Handling

When handling or moving the machine, do not lift with grasping the Front Area. The picture shows how to lift the machine correctly. Please refer to the pictures as right.



Connection

Plug one end of the cord into the back of the machine and the other end into a standard AC power outlet.

Interface



MICRO SD

[Micro SD]

For optional function

USB Type A

[USB Type A]

The firmware can be upgraded with USB Memory Stick (Flash drive).

LAN

[LAN]

1. The counting results is sent to PC though LAN
2. PC can control the set though LAN
3. The machine can be upgraded through LAN

RJ11

RJ11

[RJ11]

External Display for customer [option] can be connected with these 2 ports 1 or 2 user can make the counting result display using these ports.

RS232C

[RS232C Serial Port]

MACHINE has a serial interface port, which allows you to connect your printer to print out counting result. To connect your printer to the machine, follow the steps as below:

1. Make sure that both the MACHINE and the printer are turned off.
2. Connect the end of printer cable to the serial port of MACHINE.
3. Turn on the MACHINE and set parameters referring to the **Chapter 5**.



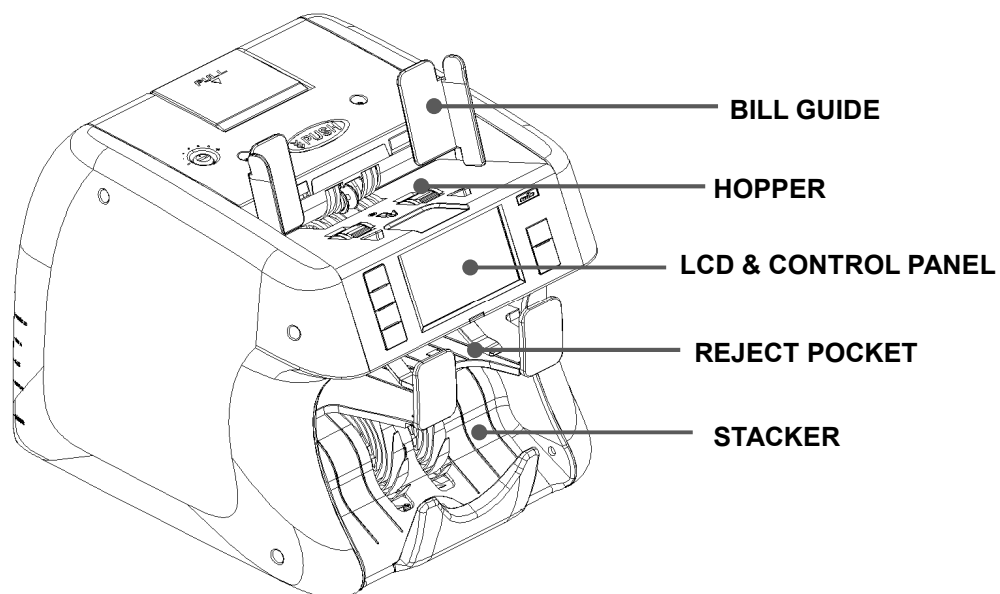
[Warning]

If user inserts improper cable terminal into the port, the machine could be turn off.
Please, check the right port before inserting.

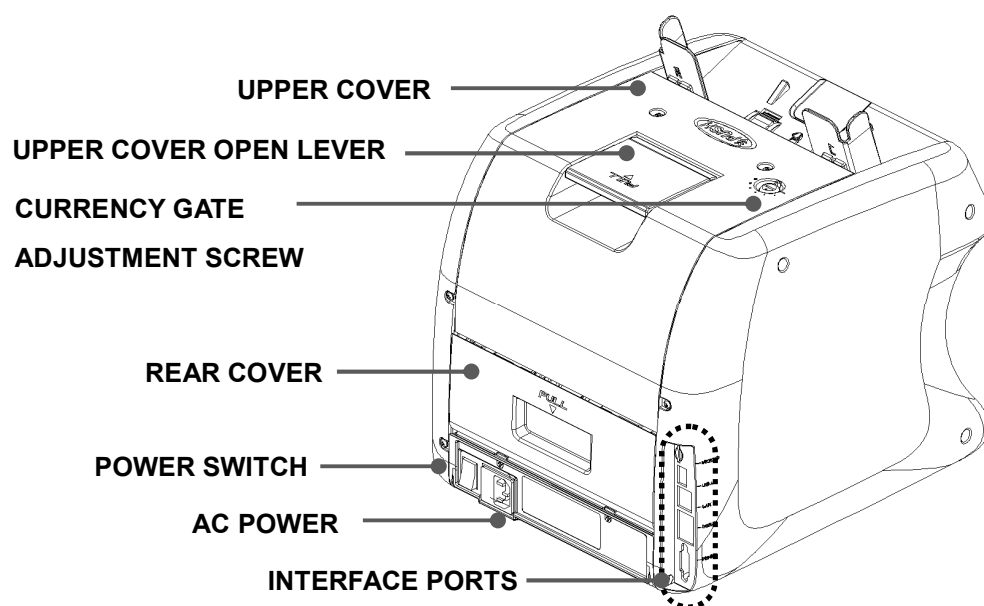
2 OVERALL DESCRIPTION

2-1 Description of the Parts

[FRONT VIEW]



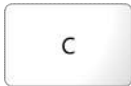
[REAR VIEW]



2-2 Description of Control

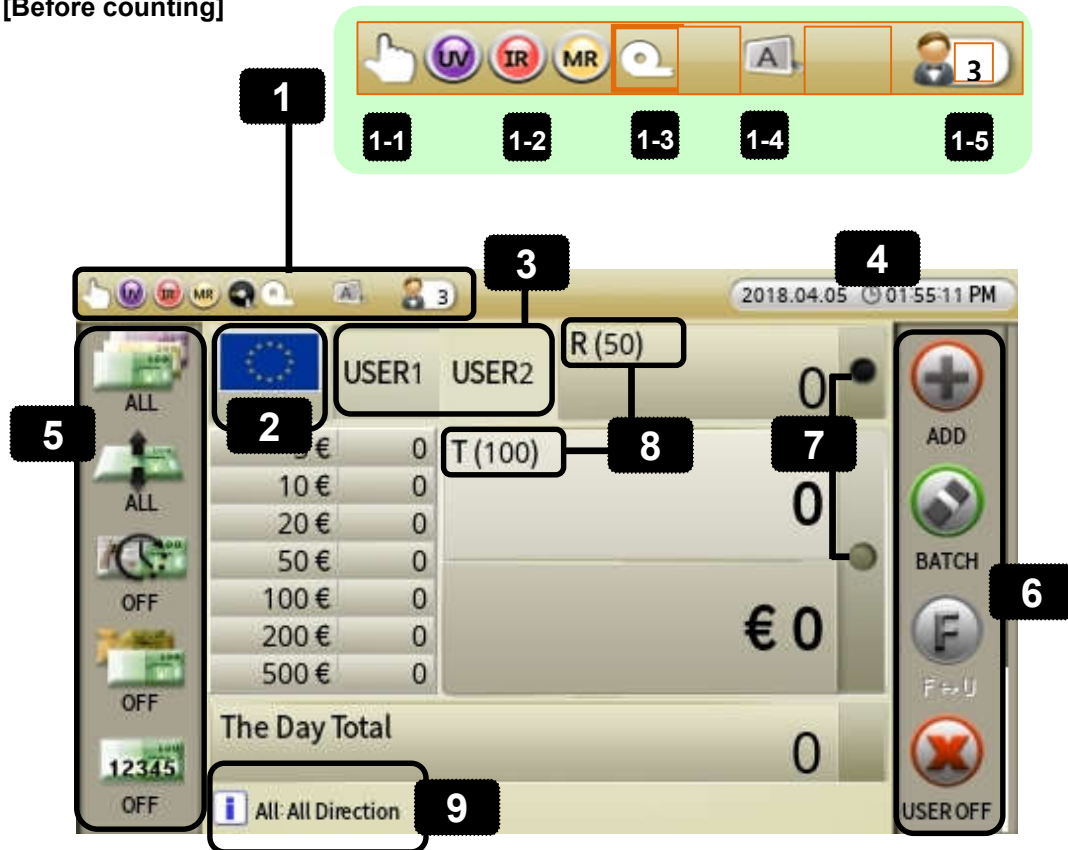
Overview of Control panel



Indication	Description
	- Manually START (when manual starting is set) - Emergency STOP & START while counting. - Save or set the mode - This key means 'OK' and 'YES.'
	- CLEAR the count result or go back to previous stage. - CANCEL the present setting. - User can remove the jammed notes. - This key means 'Cancel', 'Close' and 'No.'
	- To change the display form of count result. - To change the activated icon one by one - This key means CHANGE something. (In case of using [CHANGE] key, will be referred at {Help} part)
	- To change the WORKING MODE. - User can enter defined list
	- To enter Setting Menu (User can set various Parameters). - To escape from Setting Menu.
	- To print the counted result.

Overview of Touch Screen

[Before counting]



[After counting]



No.	Name	Description
1	Indicators	
1-1	Start mode	To show auto start or manual start Auto start is Default and in case of manual start this appears
1-2	Counterfeit	To show On/Off of UV/ IR/ MR Sensors
1-3	Tape Sensor	To show Tape Sensor On / Off except for in Fitness Mode
1-4	Customer Display	To show Customer display is on operation (Display A, B)
1-5	User Define Mode	To show User Define Mode
2	Present Currency	To show present currency. User can change currency when every touch
3	Concurrent User	2 persons can use MACHINE at the same time To set the user, touch the alternative button Double Touch can change the user
4	Date & Time	To show Date & Time
5	Mode Setting Panel	To show various selected modes
6	Function Setting Panel	To show various functions
7	Pocket LED	To show each pocket is empty/full
8	Batch Display	To show batch amount of stacker & reject pockets
9	Information	To give some information for selected modes
10	Denomination & number	To show the counted result by denomination
11	Reject	Reject reason. Touch this button to see Detail view.
12	Stacker	Stacker Pocket count result. Touch this button to see Detail view
13	The Day Total	To show the Day Total amount
14	INPUT	To correct the count result. User can add the amount of Uncounted notes or coins manually.
15	ACCEPT	Count result will be added to Grand Total

3 PREPARATION OF OPERATION

How to open and close 'Upper Door' and 'Rear Door'

Please refer below figures when you open and close the doors

[Upper Door]



[CAUTION]



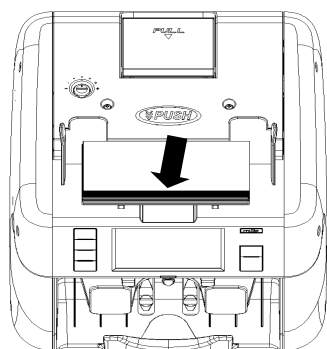
**YOU HAVE TO MAKE SURE IF THE FRONT DOOR IS CLOSED WELL. IF NOT
MACHINE WILL SEND MANY NOTES TO REJECT POCKET**

[Rear Door]

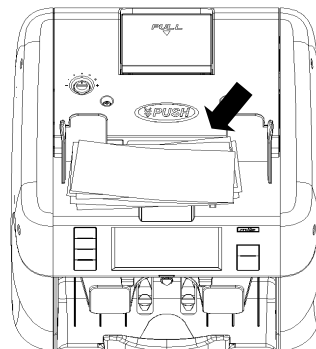


How to place banknotes onto the Hopper

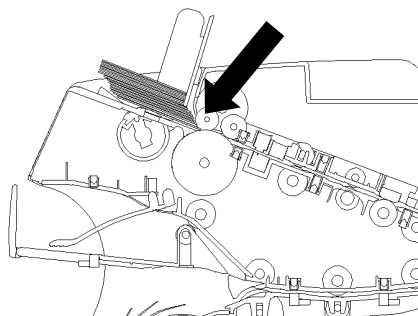
It is very important to place the banknotes on the hopper correctly because recognition performance of the banknotes is highly affected by the arrangement of the banknotes. And the number of the rejected notes can be increased when they are not arranged and placed properly. Refer to the pictures for the correct placement of the banknotes.



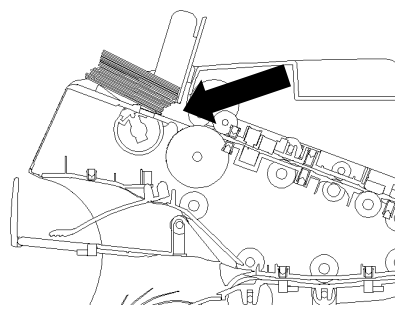
(Good)



(No good)



(Good)



(No good)

[CAUTION]



YOU HAVE TO MAKE SURE THAT THERE ARE NO CLIPS, BANDS OR SIMILAR FOREIGN MATERIALS ON THE BANKNOTES. SOMETIMES IT CAUSES MALFUNCTION OF THE MACHINE.

Counting

In AUTO mode, MACHINE starts to count the bill automatically as it detects the existence of the banknotes on the hopper. In MANUAL mode, the machine will start to count the banknotes only if the banknotes are placed onto the hopper and 'START'  is pressed. While counting, the machine will display the number of the banknotes on LCD display and it stops working when it meets the conditions described as below;

- No bills on the hopper
- Stacker is full.
- Rejecter is full.
- The number of the bills counted is the same as the batch number to be set in BATCH function.
- Errors have occurred.

If an error is occurred during operation and the machine stops, then an error message will be displayed. To clear the error, press 'C'  key. The machine will try to solve the problem automatically, but if it fails to clear a jam or there are some other mechanical errors, open the top door or rear door and get rid of the jammed banknotes and close the cover correctly. Then the machine can clear error message automatically.

(Stop in operation)

Press 'START'  button to stop operation for an instant while the machine is operating.

If you want to count continuously again, press 'START'  button.



[CAUTION] Stop in operation

Please 'START'  button to stop operation while the machine is counting.

If you want to count continuously again, press 'START'  button.

4 BASIC OPERATION

4-1 Procedure of Operation



4.1.1. Currency Selection

User can set up the currency by selecting the national flag. (ex>   )

'AUTO'  means that MACHINE will set up the first detected currency automatically.

4.1.2. Mode Selection



'DENOMINATION' : To select piece count, all denominations, detected or selected denominations



'Direction' : To select the directions of the banknotes (face/back and up/down)



'ISSUE' : To select the issue (Banknote Version of printing) separating function

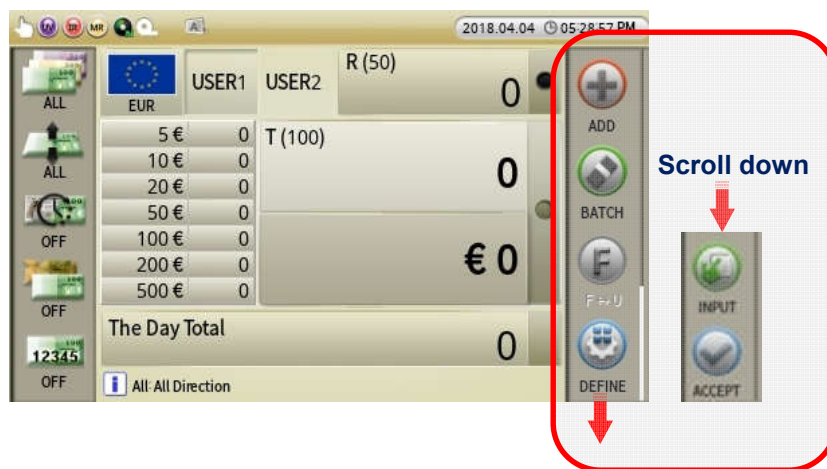


'FITNESS' : To select the fitness parameter (ATM / FIT1 / FIT2)



'SERIAL NUMBER' : To select Banknote serial numbers extraction

4.1.3. Function Selection



'ADD'

To select ADD function.

In general situation, counting result initialize when pocket empty, but if ADD button was activated, counting result is displayed by automatically added from the previous counting result even if pocket is empty.



'BATCH'

To select BATCH function

Batch is used when user want to count specific number of banknotes. When BATCH Function is on, the operation will be stopped after counting the number user set in advance even if banknotes still remain on Hopper. Batch size cannot exceed Stacker pocket's maximum size.



The status for stacker

When Fitness mode is on, user can allocate the pocket for the fit notes.



'FIT On' : Fit notes will go to the stacker pocket.



'UNFIT On' : Unfit notes will go to the stacker pocket.

'Fitness Off' : Fitness function off.



'DEFINE'

To select User Define mode

'User Define Mode' means that user can set up Max 16 modes for his/her usual or specific purpose. User can set and save his/her own mode and can select easily just touching the button.

After the setting is done, press  button to save. Then, user can see the

availability of  slots. Selected the slot, MACHINE shows the defined

user number  at main screen and is ready to count.

If user wants to stop using user define mode, press the “user off”  icon. Then the defined user number will disappear.

If user wants to look for the list of defined modes, press “MODE” button key.



‘MANUAL INPUT’

To input special amount, e.g., uncounted notes or coin manually.

User can see the INPUT icon when scroll up the right side icons or when counting is done. [INPUT] function is designed to correct the counting result. User can add the amount of uncounted notes (because of seriously damaged notes) or coins manually.

Touching [INPUT] icon in counting result display, user can see INPUT VALUE screen and can correct the count result minutely.



‘ACCEPT’

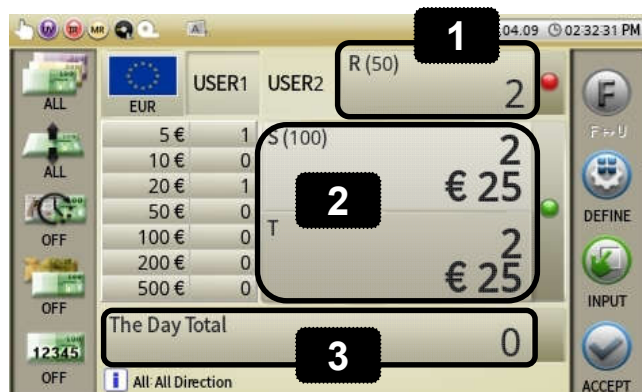
To ACCEPT to add the counted result to Grand Total.

Press [C] and check the counted result is added to the Day Total.

4.1.4 Counting Result Confirmation



can show 3 screens like below pictures.



COUNTING DETAILS			
DENOM.	STACKER	AMOUNT	
5 €	1	5	5
10 €	0	0	0
20 €	1	20	20
50 €	0	0	0
100 €	0	0	0
200 €	0	0	0
500 €	0	0	0
Sum	2	25	25
Reject	2	Coin	0
Total	2		25

REJECT REASON (2)		
NO.	REASON	DETAIL
1	NO I.D.7	LONG DISTANCE WITH TOTAL IMAGE
2	NO I.D.7	LONG DISTANCE WITH TOTAL IMAGE

If user press 'CHANGE' button or touch the section of result in screen, machine will show specific results.

- Touching '1' in the screen will show the 'REJECT REASON'.
- Touching '2' in the screen will show the 'DETAIL DISPLAY'.
- Touching '3' in the screen will show 'The Day Total' and 'Grand Total'.



By touching 'Accept' , user can confirm counting result and it will added in 'The day total' and 'Grand total' field.

4.1.5 Grand Total (GT)

Grand Total means, the accumulation of counted notes that user accepted. Namely, if you touch [ACCEPT] icon after counting, the result will be added to 'GRAND TOTAL'.

MACHINE can shows 'Total', 'The Day Total', and 'Grand Total.' User can control [Grand Total] at ADMIN. MENU. (Chapter 5-2)

4.1.6 Reject Reasons

No.	Display on Screen	Meaning
1	NO I.D	The machine failed to identify the denomination.
2	NO READ	The note was not successfully read
3	OVER RUN	The next note was fed too close to the first one.
4	SUSPECT (CF)	The note was suspected to be counterfeit by UV,MR

		and IR sensors
5	STAY NOTE	The note was not fit to the condition of sorting
6	DOUBLE	More than two pieces of notes were fed into machine.
7	CHAIN	Chain Error
8	HALF	Half Error
9	SRL ERROR	Serial numbers are not recognized properly.
10	Over count	The note was in machine after completing the count fit to the condition of sorting.

(Caution)



If the reject reason is double or chain, the number of the reject note displayed on LCD can be different with the actual number of notes in the reject pocket.

4-2 Special Mode & Functions

■ FITNESS Mode

'FITNESS Function' discriminates circulated bank notes between to recycle and to dispose. Therefore, unfit bank notes by stains, holes and graffiti etc. are sent to the designated pocket. There are 8 items of the Fitness standards discriminating between to recycle and to dispose coinciding with pre-set criteria.

1. Fitness conditions

- ① Missing corner: Self-explanatory
- ② Stain: Localized concentration of dirty
- ③ Soiling (Dirty): General Distribution of dirt across the entire banknote
- ④ Tapes: Self-explanatory
- ⑤ Holes: Self-explanatory
- ⑥ Tear: Self-explanatory
- ⑦ Corner folded (Dog-ears): Self-explanatory
- ⑧ Graffiti (Including stamp): Deliberate graphical alteration of the banknote



2. FITNESS mode can be set up by 3 different Sub Modes.

The icon in below figure. Then, user can select the one of Fitness Sub-Mode in the initial screen There are 3 kind of 'fitness parameter' (ATM / FIT1 / FIT2).



For detail settings of 3 parameters (ATM / FIT1 / FIT2), you can refer '5-2. ADMIN MENU'.

■ OCR Mode (Option)



OCR mode has Sub Modes. Touch icon and user can select SERIAL, S-OCR or P-OCR.

1. SERIAL Mode (Serial Number Printing Mode): In SERIAL mode, MACHINE captures the serial No. of banknotes and prints them as an image.
2. S-OCR (SB series-Optical Character Reader Mode): In S-OCR mode, MACHINE reads & recognizes the serial No. of banknotes and prints the characters and images.
3. P-OCR (PC-Optical Character Reader Mode): In P-OCR mode, MACHINE scans serial numbers of banknotes and prints them as images and at the same time, the images are sent to the PC. By running the application program on the computer, user can store and manage the images and converted OCR data.

■ SNC (Serial Number Comparison) (Option)

Machine can read the serial number and can identify the both left and right serial numbers in the banknote.

In case the serial numbers are not match each other, the note will be sent to the reject pocket and indicated as "SNC ERROR"



■ User Define Modes (How to set User Define Mode)

'User Define Mode' means that user can set up maximum 16 modes for his/her usual or specific purpose.

1. Please choose all options in the initial screen (Red Box). And press 'Define' icon.(Blue)



2. Please check if all options are correct or not (You can change in this screen)

Then press 'START' button



3. Please choose empty number to save (There are 16 numbers of place to save)

SAVE				
 AUTO BACK NEXT	1	RUR COUNT	5	CHF COUNT
	2	EUR COUNT	6	CNY COUNT
	3	USD COUNT	7	JPY COUNT
	4	GBP COUNT	8	EMPTY



*** If you want to come out from 'user define mode', please press 'USER OFF' icon.

4. To choose this saved 'Define MODE',

Press the  button. In order to set up a new mode or edit it, touch  icon or  icon. Then set the options in 'MAKE DEFINED MODE SETTING' stage.

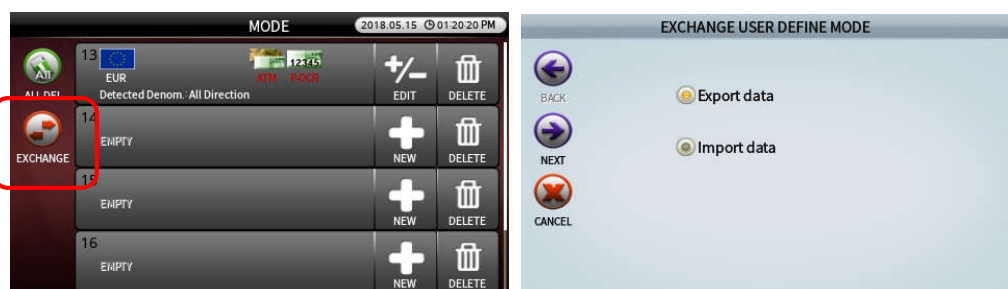


After the setting is done, press  button to save. Then, user can see the slot is reserved.

In order to delete the previous User Mode, touch  icon and touch .

5. To delete all preset modes, touch the  icon.

*** User can export these 'User define mode' to 'USB Stick' and import to other machines.

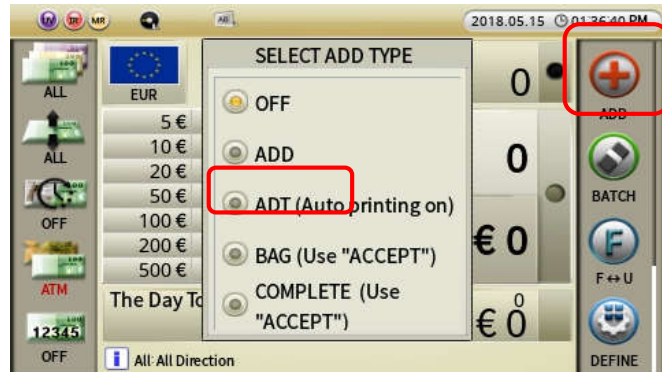


■ ADD

User can setting ADD TYPE by pressing 'ADD' icon.

1. ADD

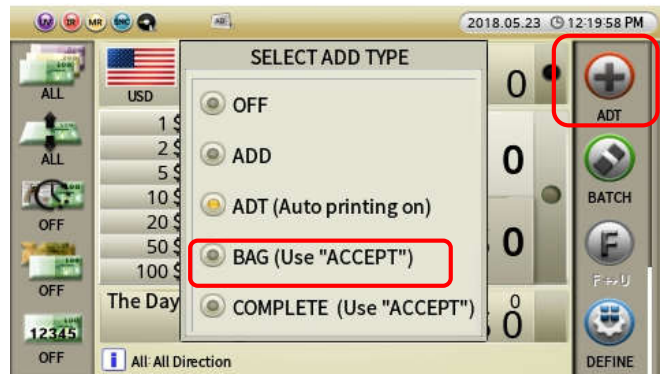
Counted amount will be added even the stacker and hopper are empty when the machine start counting.



2. ADT

In this option, 'Auto printing' option will be turned on automatically.

Every moment user remove banknotes from the stacker, machine automatically print out for current removed amount from the stacker('Report for Current Stacker'), and machine will print out 'ADD TOTAL' amount together.



```

*** REPORT CUR ST ***
2018,May.23, 11:57 Station:1
Deposit No.: 0 Count
User name : ADMIN

      UV MG IR
DENOM  UNIT  TOTAL
$1      15 $      15
$2       0 $       0
$5      17 $      85
$10     15 $     150
$20     16 $     320
$50     17 $     850
$100    20 $    2,000
-----
TOTAL    100 $    3,420
-----
ADD TOTAL
-----
TOTAL    100 $    3,420
-----

```

```

*** REPORT CUR ST ***
2018,May.23, 11:58 Station:1
Deposit No.: 0 Count
User name : ADMIN

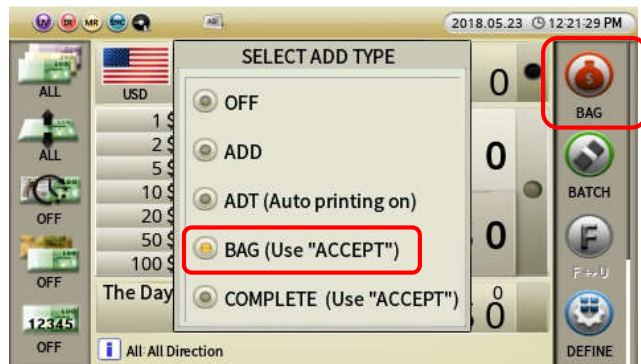
      UV MG IR
DENOM  UNIT  TOTAL
$1      15 $      15
$2       0 $       0
$5      17 $      85
$10     21 $     210
$20     16 $     320
$50     19 $     950
$100    12 $    1,200
-----
TOTAL    100 $    2,780
-----
ADD TOTAL
-----
TOTAL    200 $    6,200
-----

```

3. BAG

Usually, CIT Company use 'secure plastic packaging bag' that has its own Bar-code number to carry mass banknote from bank to their office. **(From now on 'BAG')**

User can count total amount with Bag number(Bar-code), cashier number etc. And user can print out with these information together.

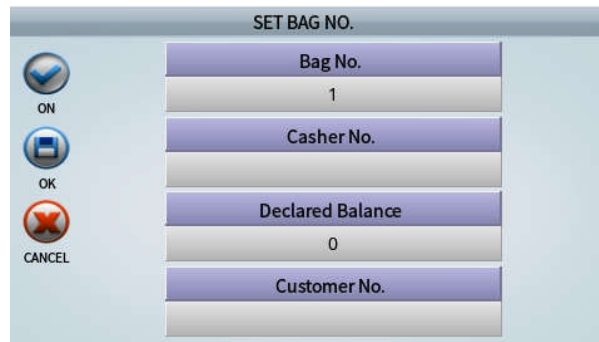


How to use 'Bag' function'?

Let's suppose there are 2 Bag form each different Branch of bank.

Choose 'BAG' mode from the display.

User can see right figure.



A) Input some information for 1st Bag.

- Input 'bag number' by 'barcode scanner' like below picture. (USB port connection as picture) or input manually.
- Cashier number.
- Declared Balance: Input the expected total amount of the 'bag'. (In order to compare the value amount before counting and after counting)
- Customer Number.

B) Press 'OK' or 'START' button.

C) Count all the banknotes from the first BAG. **(Add function will always work in this mode)**

D) Counting is done.

E) There are 2 options.

User can press 'Accept' icon or PRINT' button.



- ① **'Accept' icon:** User can use this option when he (she) wants to make each bundle (100 notes). **After count 1st Bag, user should leave remained notes in the stacker and count 2nd Bag.**

Machine will make another bundle (100 notes), it will stop. The machine will show the amount for newly counted note only. **(This special function is named 'Complete')**

- ② **Print button:** It is function for printing only('Complete' function will not work) **After printing, user should remove all banknote from the stacker**



[CAUTION]

Don't remove banknote from the stacker. Just count 2nd Bag

F) Input the information for 2nd Bag(refer upper step 'A')

Then press 'OK' or 'START' button.

Machine will print out the counting result for 1st Bag automatically. Please refer next figure.

```

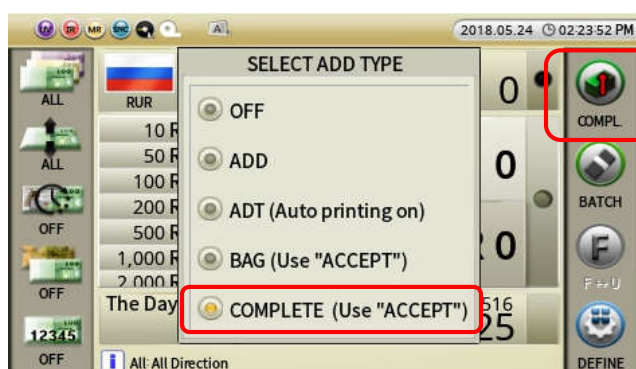
*** REPORT ***
2018,May.24, 11:35 Station:1
Deposit No.: 0 Count
User name : ADMIN
Bag No. : 6
Casher ID :

DENOM UNIT UV MG IR TOTAL
R10 0 R 0
R50 0 R 0
R100 50 R 5,000
R200 0 R 0
R500 0 R 0
R1000 50 R 50,000
R2000 0 R 0
R5000 0 R 0
-----
TOTAL(A) 100 R 55,000
-----
REF. (B) : 56,000
-----
DIFF.(A)-(B) : -1,000
    
```

4. COMPLETE

In this function, 'ADD' function will always work.

Please refer upper 'Bag' function From 'Step B' to 'Step E'.

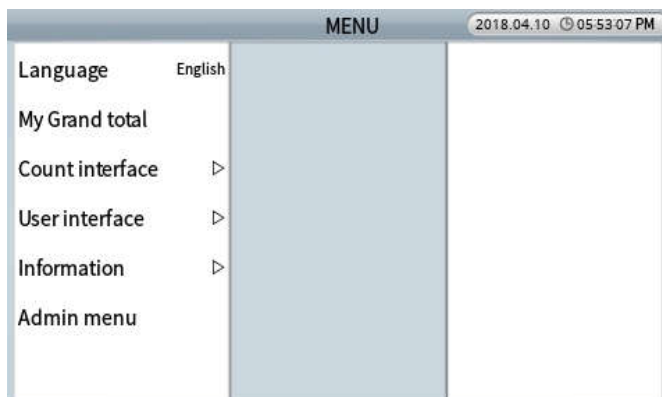


5

SET FUNCTION AND PARAMETERS

5-1 USER MENU

User can alter each function and parameter. Pushing [MENU] key, user can move to “USER MENU” and its details by touching the menu.



MENU	Sub Menu	Description
Language		Set a menu language
My Grand total		Shows The Day Total & Grand Total
Count interface	Start counting	Manual/automatic counting start
	Pocket capacity	Set “pockets’ capacity”
	Accept result	Set “Accept result”
	Report result	Set “Printing result”
	Counting Report	Shows count report & error report
User interface	Set date/time	Set up date/time
	Selection way	Set up selection method
	Sorting order	Set up sorting order
	LCD brightness	Set up LCD brightness.
	Beep	Set up warning & button beep
	Power saving	Set up power saving mode
Information	About machine	Provided Program & Currencies
	A/S call number	Shows service call number.
Admin menu		Access to administration menu

In order to move on lower menu section, it's available with "Touch Screen" or press



■ **Language: Set up the language for Menu.**

■ **My grand total: displays "THE DAY TOTAL & GRAND TOTAL" of current user.**

1. At "MY TOTAL RECORD", pressing  consecutively, or touching each section of "total result", user can see 2 types of display.

① Press  button once or Touch "THE DAY TOTAL" area, and you will see "MY TOTAL RECORD _ THE DAY TOTAL"

② Press  button twice or Touch "GRAND TOTAL" area, and you will see "MY TOTAL RECORD _ GRAND TOTAL"

2. Can print out with pressing  or touching  icon at each screen.

■ **Count Interface**

1. Start counting: User can set manual or automatic start. Default is Automatic Counting Start.

In case of Manual Counting Start, indicator shows .

2. Pocket capacity: User can set up stacker capacity of each pocket.

3. Accept result: User can set whether automatic "Accept" or manual "Accept" after counting.

4. Report result : User can set up the interface for printing out.

■ **User Interface**

1. Setting of date/ time

2. Selection method of items: User can set up the Selection method of items

3. Sorting order: shows the denominations by descending or ascending order

4. LCD brightness: user can adjust the brightness of color LCD

5. Beep: user can turn on/off warning and button beep

6. Power saving: can select Waiting time and Saving type

■ **Information**

1. About machine: shows program version and provided currencies

2. A/S call number: After Service call number

The Factory default settings are like below.

Function		Default Value
Speed (NPM)		Approx. 1200 (With all functions) MAX. 1500 (Piece count)
[Count interface]		
Starting counting		Auto
Pocket capacity	Stacker Pocket	100
	Reject Pocket	50
Accept result	Auto-accept	off
	After accept	Only add count-result to grand-total
Report result	Auto-print	off
	Printing Target	Select in printing
[User interface]		
Selection way		In list (On a pop-up menu.)
Sorting order		Ascendant
LCD brightness		90
Beep	Warning on/off	On
	Button on/off	On
Power saving	Waiting time	10 min.
	Saving type	Make the back-light of LCD darker

5-2. ADMIN MENU (Administrator Menu)

Administrator can alter each function and parameter at this menu. Press   and put

[12345] in Password screen. Or touch **Admin menu** in the MENU.

MENU	SUB MENU	Description
Loading default		
Change password		
Machine setting	Station ID	Set the ID number of machine
	Ethernet	Set up Ethernet
	FTP Information	Set up FTP information
	Black list	Manage the black list
	Handling SRL Error	Manage the acceptable range of OCR error
	Printer	Set up Printer
	Custom display	Set up customer display
Value setting	CF level	Set up sensitivity level of CF detection
	Fitness	Set up Fitness function and import & export Saved fitness level
Function on/off	CF items	Turn on/off CF sensors
	Tape in count mode	Turn on/off the Tape Detection function in other modes than Fitness mode.
	SNC Setting	Turn on/off SNC function and set up the acceptable range of banknote serial numbers (SNC : Serial Number Comparison between both serial numbers)
User setting	Concurrent User	Set up concurrent user function
Grand Total	Auto clear	Set up GT saving period
	Clear Target	Select which total shall be cleared
	Initialize all	Initialize all total data
	Summary	The summary of Day/Grand Total
	Each user	Check GT for each user
Log data	Export log data	Log data can be exported
	Fitness Report	Fitness counting report

- Loading default: All of parameters get back to initial setting of factory
- Change passwords
- Machine setting

1. Station ID: The ID number of the machine will be displayed out after setting the ID number
2. Ethernet: Administrator can set up Dynamic / Static IP address in LAN setting.
3. FTP Information: Administrator can set FTP address, User ID, Password and Path
4. Black list: Administrator can register the serial numbers of counterfeit banknotes and catch them when they are counted by MACHINE
5. Handling SRL Error: Administrator can set how many unrecognized serial numbers shall be ignored
6. Printer: Set up Print.

- 1) Interface: Administrator has to select a printer type before connecting the printer.



Caution)

Needs to be discussed with the dealer about available printer

- 2) Cutting code

- 3) Set Print Text: Administrator can select 'TEXT' or 'HEX code' for both Header and Footer in this menu.

7. Customer display: Administrator can select the kind of Customer Displays and connecting Port.



Caution) In case of concurrent user, Display A is for the user in the left and Display B is for the user in the right.

■ Value setting

1. CF level: Administrator can set the levels of UV (Ultra-Violet) Sensor, MR (Magnetic Reader) Sensor and IR (Infrared) Sensor which are required to discriminate each currency.

[How to set]

- 1) Select Currency & Denomination.

- 2) Move each circle  or  to set the levels.

- 3) Press  and save the level.

The lower level means the less sensitive. If the machine recognizes CF note as real notes, increase the level. If the machine takes real note as CF note, decrease the level.
If the level is '0' (Zero), the sensor will not work.

2. Fitness setting

- 1) Fitness parameter

In this menu, administrator can set fitness sorting level for each currency and each denomination.

- ①  : Set Fitness value to the Default
- ②  : Decide whether the said data are also applied to other denominations or not
- ③  : Save current setting (Currency, Fitness Sub-mode, Denomination)

2) Import fitness level & Export fitness level

Administrator can transfer the fitness level value from one machine into another by using 'Import fitness level' and 'Export fitness level'.

- ① Insert USB Flash Drive (or Stick) to USB port in MACHINE.



Caution)

The format of Flash Drive(or Stick) must be FAT32.

- ② Select 'Export fitness level'
- ③ Touch the  Icon. Then a file will be created in USB Flash Drive (or Stick): (File folder name: MIB-11_Fitness_Level)
- ④ Insert USB Flash Drive (or Stick), which has 'MIB-11_Fitness_Level' folder to another MACHINE that administrator wants to write previously fitness level over.
- ⑤ Select 'Import fitness level' in the menu⑥ After checking the file which administrator wishes to apply to another MACHINE, touch  Icon.
- ⑥ Select the currencies and fitness Sub-Mode which administrator wants to apply to another MACHINE, and touch  Icon.

■ Function on/off

1. CF Items: Administrator can turn on/off CF detection or can make sensors(UV, MR, IR) on/off

individually. The indicators show their status.



2. Tape in count mode: Administrator can set Tape Sensor ON/Off here, except for Fitness Mode. In the Fitness Mode, administrator should turn on/off Tape sensor in Fitness setting. When the Tape

function is On, Tape indicator will be shown like  .

3. SNC Setting: Administrator can set how many unrecognized serial numbers shall be ignored (Type1), or how many recognized serial numbers shall be accepted (Type2). Administrator can Select Currency, SNC Type and Number of digits should be ignored/accepted.

■ User setting

Concurrent User: 2 users can use MACHINE at the same time. Setting 2 Concurrent User, the

initial screen will show



1. User can select one of Concurrent User and can set modes and functions individually.
2. One of Concurrent User can use the allocated Print Port. **(MENU-Count interface-Report result-Printing Port #1,#2))** and Customer Display. **(ADMIN MENU-Machine setting-Customer display)**
If Concurrent User was set, the allocated Print Port and Customer Display will be shown in upper

indicator as



■ Grand Total

1. Auto clear: Administrator can set manual or auto Grand total clear.
2. Clear Target: Administrator can clear The Day Total or Grand total or all.
3. Initialize all: Administrator can delete the record and make The Day Total and Grand total zero.
4. Summary: Administrator can check, delete and print the summary of The Day Total and Grand Total by the user and currency.

[1] [2] [3] [4] THE DAY TOTAL by currency, GRAND TOTAL by currency, THE DAY TOTAL by

user, GRAND TOTAL by user: Press  button, then the currency and user will be changed.

5. Each user:

Administrator can read, delete and print the present & previous THE DAY TOTAL and GRAND

TOTAL by each user. After selecting the user and press  button, then 'Administrator' can see the details of 'The day total' and 'Grand total'.

■ Log data

1. Export log data: Administrator can export all Log DATA

e.g., Count Detail in Currency / Count Detail in User / ETC. by the format of EXCEL file.

- ① Insert USB flash drive (memory stick) into the USB Port.
- ② Select 'Export log data' in this menu

- ③ Select the period and touch  icon.

- ④ Select CURRENCY & USER and touch  icon.

- ⑤ In USB flash drive(memory stick), Log DATA file will be created as right screen.

2. Fitness Report: Administrator can check 'Fitness counting report'

6 TROUBLESHOOTING

This chapter shows how to solve errors when the messages are on the operational window.

■ Error on counting

It shows following figure [MACHINE STATUS], when any error occurs on counting



Error Messages	Action to be taken
Jam Occurred!! Remove banknotes from path. -Detected sensor ID of Jam: '1' ~ '5'	1 Jam 1~3 , open upper cover and remove the banknotes in the path. 2 Press  button
	1 Jam 4~5 , open rear cover and remove the banknotes in the path. 2 Press  button
Cover Opened! Please Close Cover - Upper cover - Rear cover	1 Close The Cover 2 Press  button
Feeding error!! Remove notes from the hopper	1 Press  button
Main motor error!! Press 'Cancel' button	
Feed motor error!! Press 'Cancel' button	
Solenoid Error!! Please Empty pocket.	1 Press  button

Notes: Please refer to the figures on 'Chapter 7' to see the position of the sensors and jam

7 MAINTENANCE

1. Sensor cleaning.

MACHINE is built in various sensors to detect the malfunction of the machine the status of the notes in the machine and to recognize the denominations of the notes. The sensors are very delicate and if they are not cleaned correctly everyday, this may take negative effect on the performance of the machine as well as cause the machine to malfunction

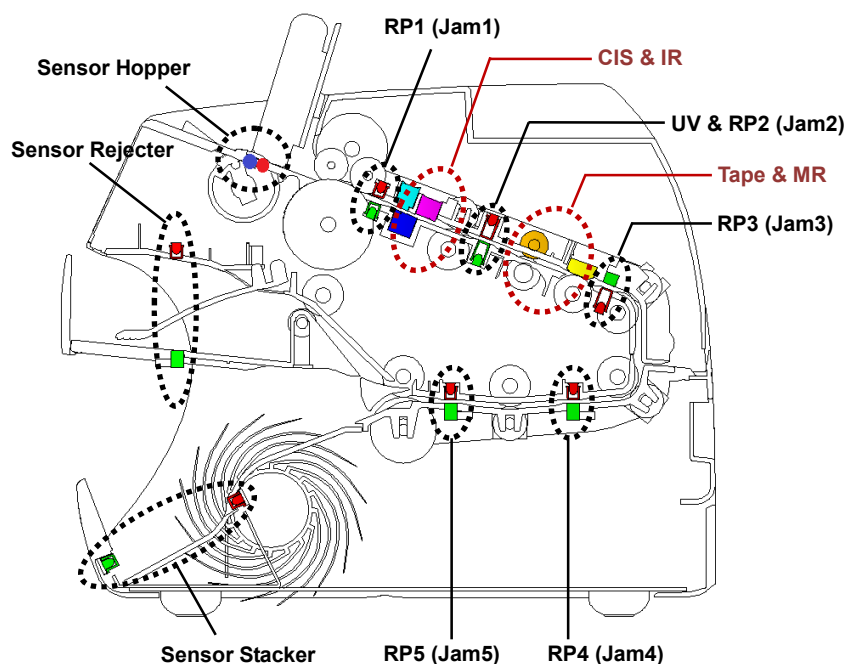
Clean the sensors as described below everyday after working.



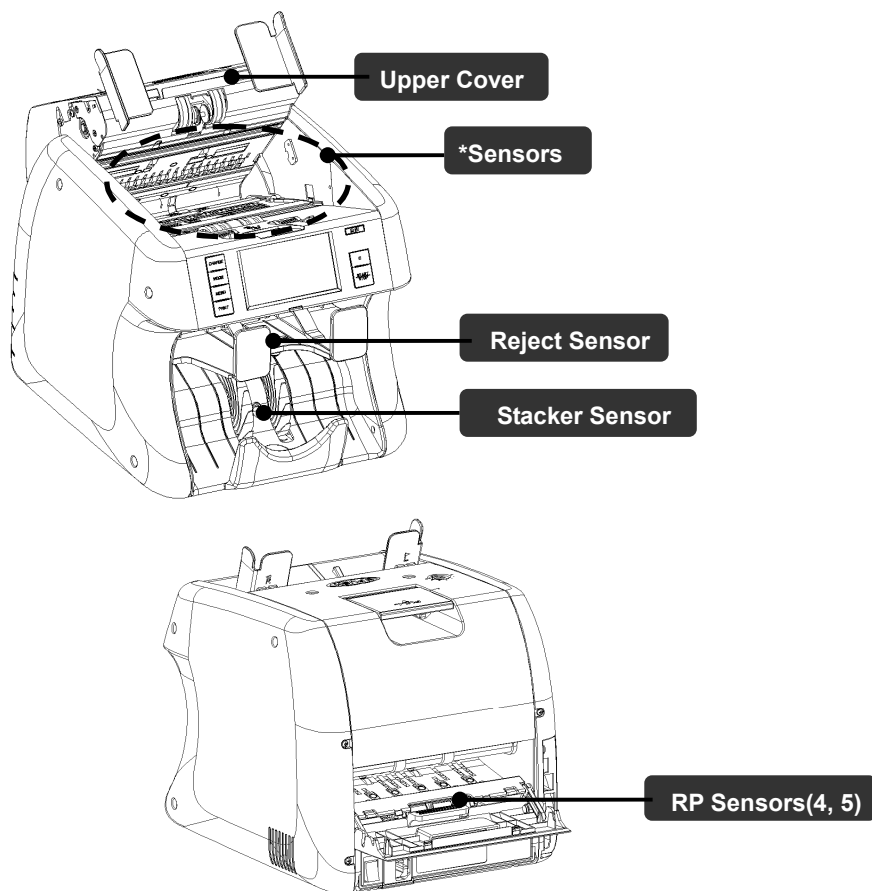
[WARNING] Turn the power off and unplug the power cord before cleaning.

Do not use a volatile solvent for cleaning

1) Appellation and location of each Sensor



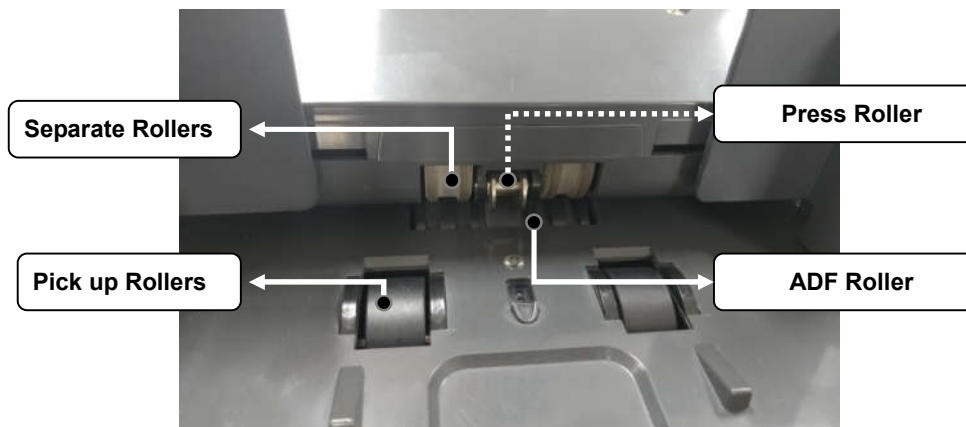
2) Clean all sensors



2. Roller Cleaning

In case of feed roller, wipe with slightly dampened cloth with alcohol. While rotating one side of the roller manually, stick the cloth into the other side of the roller.

Clean the rollers as described below everyday after working

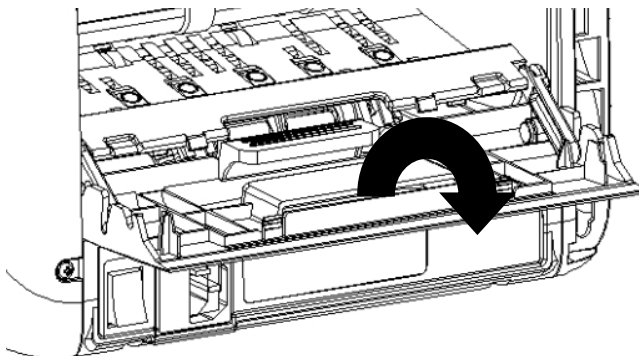


3. Dust tray Cleaning

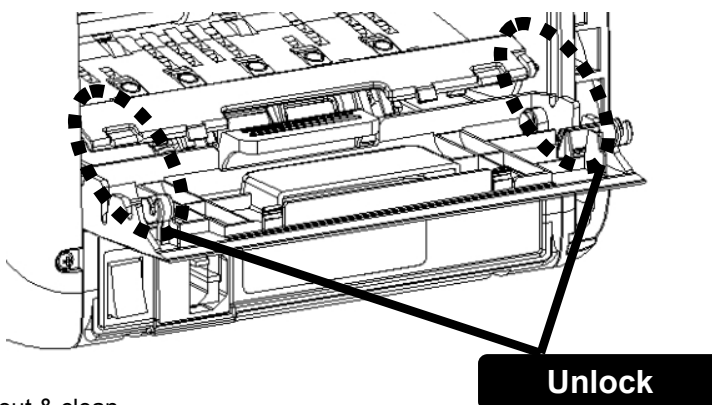
Machine has "Dust tray" at the locations on below figure. it collects dust when the machine is running.

How to clean

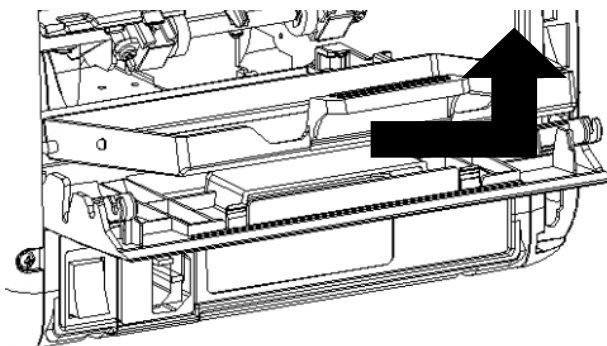
[1] Open the rear cover



[2] Unlock the door link



[3] Take the tray out & clean



8

SPECIFICATION

Item	Unit	Specification
Size (W x D x H)	mm	287[W] x 348[D] x 312[H]
Weight	Kg	Approx. 12 (Net)
Hopper capacity	Notes	MAX. 500 (optional 1,000)
Stacker capacity	Notes	100 [Max.200]
Reject pocket capacity	Notes	100 [Max. 100]
Display Type	Dot	4.3" Color TFT (Touch Screen)
Connectivity interfaces		3 RS232C Port(9 Pin D-SUB & 2 Modular Jack), 1 USB(Type A), LAN, Micro SD
Currencies available		Up to 40
Banknote size range	mm	W: 100 ~ 185, H: 60 ~ 90
Banknote thickness range	mm	0.08 ~ 0.12
Counting Speed	Notes/min	Approx. 1200 (With all functions) MAX. 1500 (Piece count)
Working Mode		FITNESS / COUNT/ FACE/ ORIENT/ ISSUE/ DISPENSE/ OCR / SNC
Preset Batch Number		1 – 200
Counterfeit Detection		MR-Array, IR, UV
Power Requirements		100-240V~, 50~60Hz
Power Consumption	W	Approx. Standby: 12, Operation: 100
Operational requirements		10~40deg/ 0~85%RH (Non Condensing)

Notes:

- This machine specification can be changed without further notice to improve its reliability, function or design.
- The contents of this user's guide can also be changed.