

AMROTEC®

MIB-11F Fitness Currency Discriminator



**Operator's
Manual
Version 1.0**

Note

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This guide covers the installation, operation and troubleshooting of MIB-11F Fitness Currency Discriminating Counter. We recommend reading this guide thoroughly before operating the Currency Discriminator. Then, as you become more familiar with MIB-11F, use it as a reference guide to look up information when you need it.

Please read the safety precautions below before operating MIB-11F Currency Discriminator Counter. These safety precautions guideline must be observed to avoid any potential hazards that could resulted in personal injuries or damage to MIB-11F Currency Discriminator Counter.

**Electrical Safety Information**

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

Stability

Place the Machine on a secure and stable surface on a desk. The Machine can seriously get damaged if it falls from the desk or during movement.

Power Supply

Machine should always be connected to correct power as listed on this user manual and on the label located on the rear side of the Machine.

Grounding

Machine 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. please contact your service provider or a qualified certified electrician if you are unable to plug the Machine into your electrical outlet or power stripe.

Overload

Do not plug too many electrical Machines into a wall outlet or into a power strip. Do not use an extension cord in any situation. An overloaded outlet could be a reason of a fire and electrical shock hazard, further could damage the Machine severely.

Cleaning

Before cleaning the Machine, unplug the Machine from the power outlet. Clean external surface of Machine with a soft cloth slightly dampened with water. Do not use aerosol cleaners.

Gas Leaks

Never place the Machine close to a gas outlet nor operate the Machine around the outlet. In case of a gas leak, it could spread into electrical part of the Machine causing spark resulting in fire or explosion.

WARNING



Precaution

1. Never push any objects of any kind onto the Machine side covers or insert any object through any opening of the Machine.
2. Do not operate your Machine in any wet location, or outdoors or if you are wet. Always keep liquid away from the Machine. If water spills occur, turn off and unplug the Machine immediately and contact your service provider.
3. Do not allow anything to rest on the power cord, line cord, or PC interface cable. Do not place the Machine where power cords can be damaged or unplugged by person walking or stepping on them.
4. Do not allow pets near the Machine or 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. Make sure that the Machine is installed near an outlet and is easily accessible.
7. Never remove side covers or guards that require a tool for removal. This Machine is not designed for user or operators to service the Machine by themselves. Always 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 Machine is equipped with many sophisticated sensors. Without periodical and proper maintenance and servicing, Machine cannot perform well and last long. Please read the '**Maintenance**' section on this User manual and perform basic surface cleaning every day. Contact your service provider or sales representative to sign up with yearly maintenance plan with them.


Hazardous Safety Notes

Your Machine and related accessories included in the original packaging are designed and tested to meet strict safety requirements. 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 parts!
Keep fingers and other body parts away



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

Keep away Hazardous moving parts from moving Stacker blades.



FCC Compliance Statement

THIS MACHINE COMPLIES WITH PART 15 OF FCC RULES.
OPERATION IS SUBJECT TO THE FOLLOWING CONDITIONS:

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

FCC Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can emit radio frequency energy and, if not installed and used in accordance with the instruction manual may cause harmful interference in radio communications. Operation of this equipment in a residence area is likely to cause harmful interference in which case the users will be required to correct the interference at their own expense.

Changes or modifications of this product not expressly approved by manufacturer, could void the user's authority to operate the equipment.

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 / threat to life or body injury.
	CAUTION	This symbol is to identify safety information. Ignoring this warning can result in damage to the Machine 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

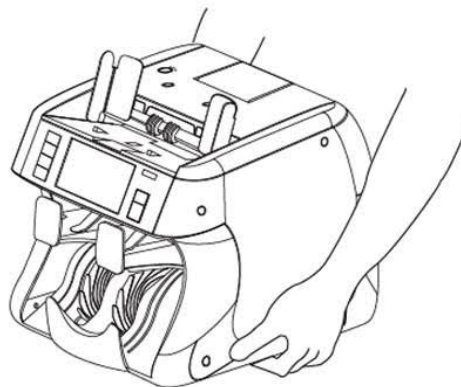
To help ensure trouble-free operation of the Machine, it is strongly recommended that you place the Machine on a flat, stable surface on your desktop or workstation.

Do not place the Machine:

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

Handling

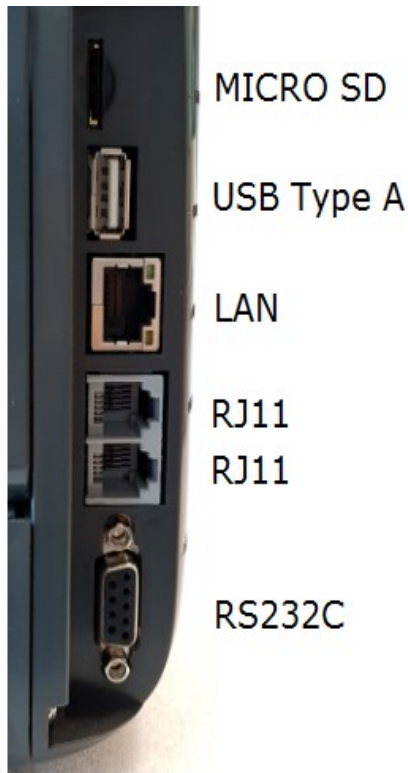
When handling or moving the Machine, do not lift the Machine with grasping the Front Area. The picture on the right illustrates how to lift the Machine correctly by holding at the bottom portion of the Machine from rear ends.

**Power On / Off**

Plug one end of the power cord into the A/C socket at the rear side of the Machine and the other end into a standard AC power wall outlet (properly grounded) or to a power strip.

Turn the Power On or Off by pressing power Switch button located at the rear side of the Machine (See section 2.1 Description of Parts at page 10). After initializing, Machine will enter into main display and ready for operation. Confirm that all of the counting results are saved prior to powering off the Machine (ignore if you decided not to save counting results).

Interface



[Micro SD]

For optional function

[USB Type A]

Machine firmware can be upgraded with USB Memory Stick (Flash drive) (Preferable method).

[LAN Port]

1. The counting results can be sent to PC though LAN.
2. PC can be connected to a third-party software via LAN port.
3. The Machine can also be upgraded through LAN.

[RJ11 Jack]

External Display for customer [optional] can be connected to these 2 ports. Two Users can attach their own External Displays to these ports to show their

individual counting results.

[RS232C Serial Port]

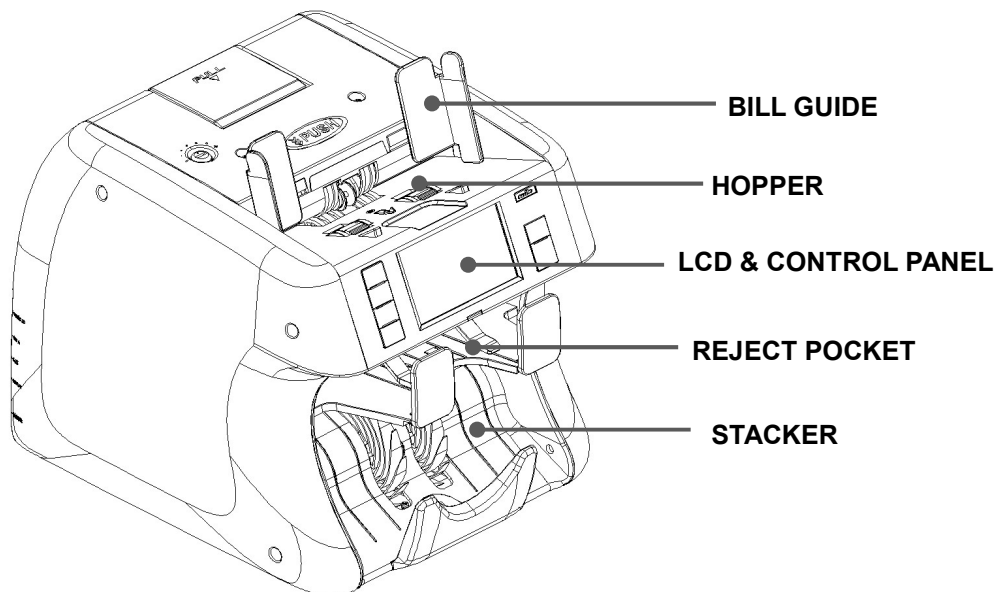
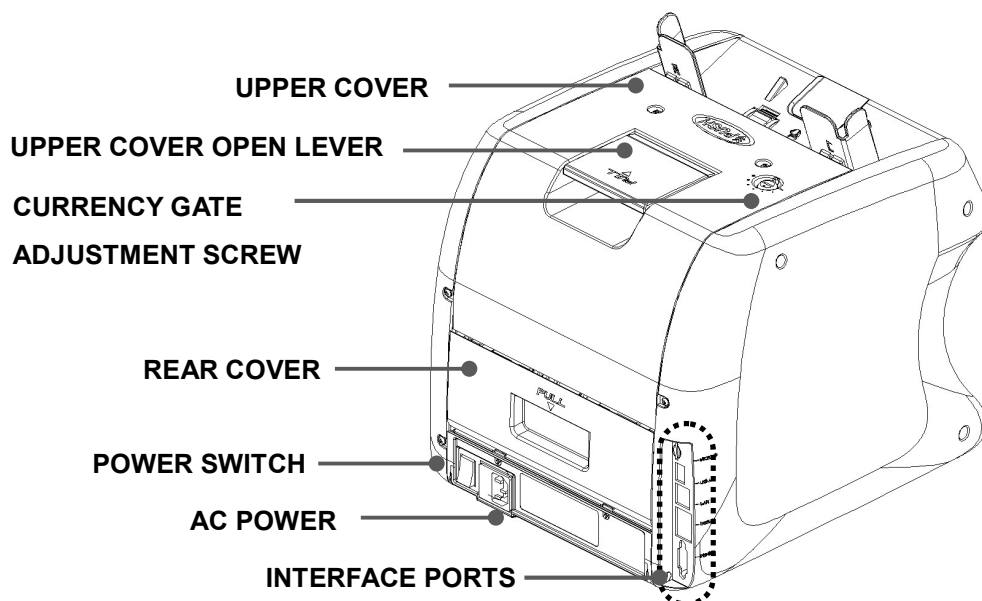
Machine has a RS232C serial interface port for connecting your Dot matrix or Thermal printer to print out counting result. To connect your printer to the Machine, follow the steps as below:

1. Make sure that both the Machine and the printer are turned off.
2. Connect the end of printer cable to the RS232C Serial port of the Machine.
3. Turn on the Machine and set parameters referring to **Chapter 5 SET FUNCTIONS AND PARAMETERS.**



[Warning]






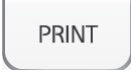
If user inserts improper cable terminal into the port, the Machine could get shut off. Please check the right port before inserting cable terminal.

2 OVERALL DESCRIPTION**2-1 Description of the Parts****[FRONT VIEW]****[REAR VIEW]**

2-2 Description of Control

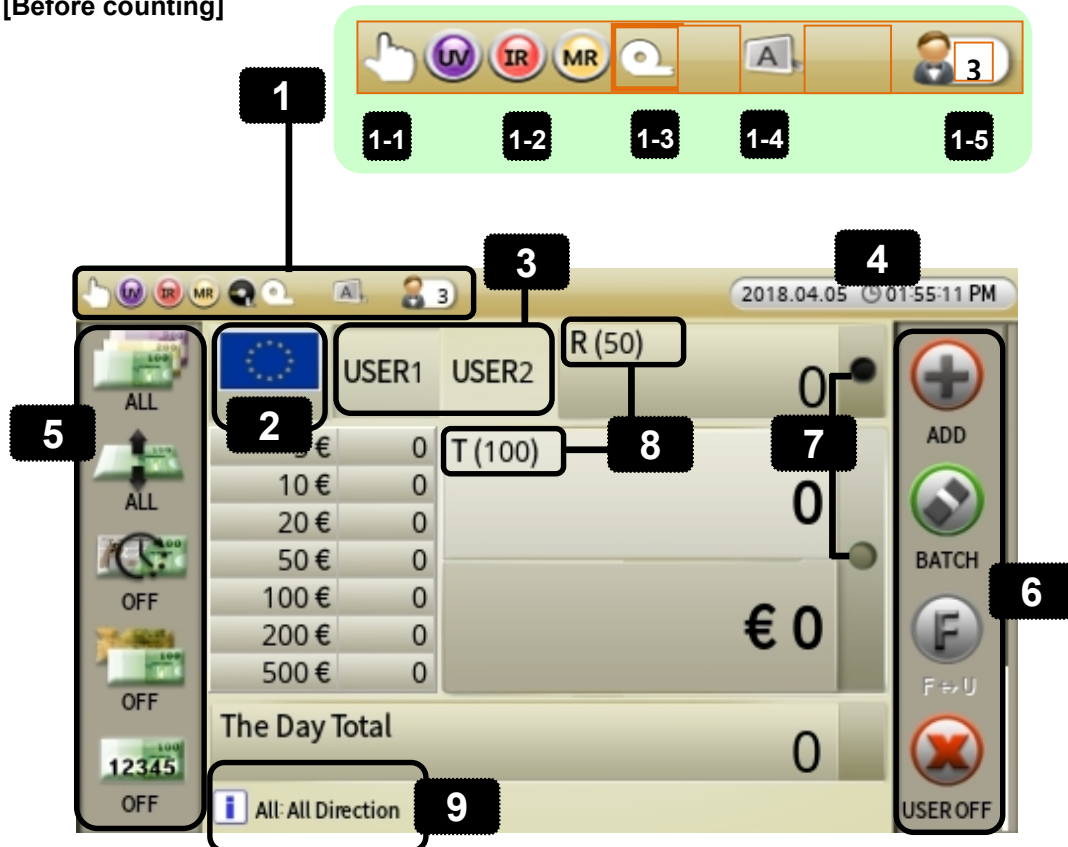
Overview of Control panel



KEYS / Buttons	Description
	<ul style="list-style-type: none"> - Manually START (when manual starting is set) - Emergency STOP & START while counting. - Save or Set the Mode - This key means 'OK' and 'YES.'
	<ul style="list-style-type: none"> - CLEAR the current Count Result or Return to previous stage. - CANCEL the Present Setting. - User can remove the jammed notes by pressing this key. - This key means 'Cancel', 'Close' and 'No.'
	<ul style="list-style-type: none"> - To change the display form of count result. - To change the activated icon one by one - This key means CHANGE something.
	<ul style="list-style-type: none"> - To change the Counting Modes.
	<ul style="list-style-type: none"> - To enter Setting Menu (User can set various Parameters). - To escape from Setting Menu.
	<ul style="list-style-type: none"> - To print the counted result to an external printer if connected (SNBC Printer) .




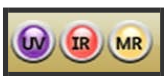



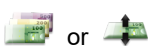


Overview of Touch Screen (an Example with EURO currency)

[Before counting]



[After counting]



No.	Name	Description
1	Indicators	
1-1	Auto or Manual Icon 	To show Auto or Manual start. Auto start is default.  Icon will appear if Manual start is activated.
1-2	Counterfeit Icons 	These icons indicate which counterfeit detectors are active (UV/ IR/ MR detectors). By Default, all CF detectors are on.
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	Currency Flag Icon 	To show which currency type is selected for counting operation.
3	Dual-Users 	To indicate if Dual-User function is ON. Names will appear.
4	Date & Time 	To show current Date & Time. Can be adjusted.
5	Mode Icons on Screen 	To change to various Counting (Discriminating or Direction) using Touch Screen Icons, MIX → SINGLE → SINGLE-Denom. → SORT → FACE → ORIENT.
6	Function Setting Icons 	These icons represent ADD, BATCH, Manual Input, and Accept count results. If greyed out, means, not activated.
7	Pocket LED	To show each pocket is empty/full
8	Batch Setting 	Icon is used for Batch setting by qty or by dollar amount or by denomination batch (DB) or Pre-set Batch.
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



When Upper or Rear Cover is opened, Machine will display alarm message

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

[Upper Cover]

Gently insert your fingers inside the tab and lift-up the Upper cover. Press hard on the "PUSH" area to close the cover. You will hear a locking sound ensuring cover is properly locked in placed and closed.



[CAUTION]



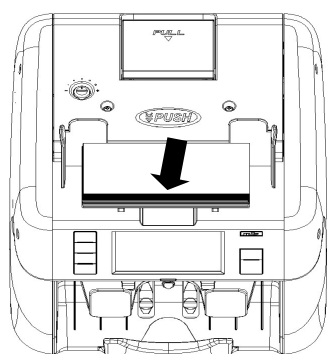
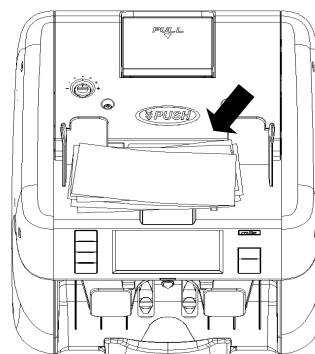
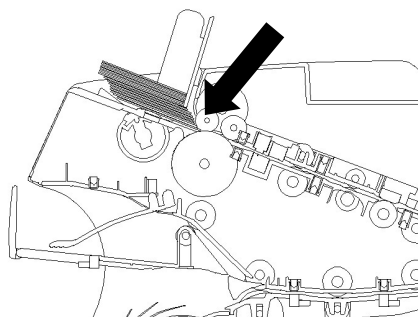
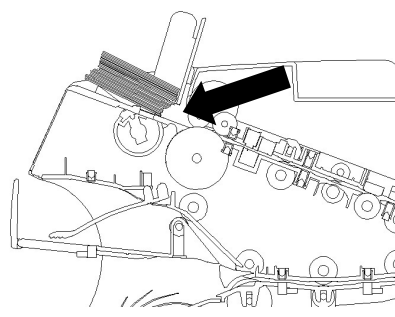
PLEASE MAKE SURE THAT UPPER COVER IS CLOSED PROPERLY. OTHERWISE, MACHINE WILL MALFUNCTION AND SEND MANY NOTES TO REJECT POCKET.

[Rear Door Cover]



How to place banknotes onto the Hopper


It is very important to place the banknotes on the hopper correctly and towards the end because recognition performance of the banknotes is highly affected by the arrangement of banknotes in a stack. Number of rejected banknotes can increase when banknotes are not placed towards the end and not aligned and arranged properly. Refer to the pictures below for the correct placement of banknotes onto the Machine Hopper.

**(Good)****(No good)****(Good)****(No good)****[CAUTION]**


PLEASE MAKE SURE THAT THERE ARE NO CLIPS, BANDS OR SIMILAR FOREIGN OBJECTS ATTACHED TO BANKNOTES. FOREIGN OBJECTS CAUSES MACHINE MALFUNCTION AND MAY DAMAGE SENSORS SEVERELY.

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 Icons



'MIX': To counts and denominates mixture denomination of banknotes for individual value, quantity and total quantity and value.



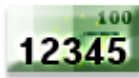
'DIRECTION' : To select the directions of the banknotes (FACE/ORIENT)



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



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

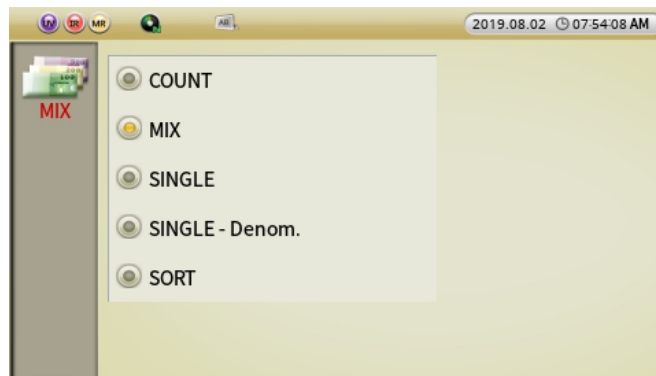


'SERIAL NUMBER' : To select Banknote serial numbers extraction (**Option**)

4-1-1 Description of Each Counting Modes:



'MIX': To denominates mixture denomination of banknotes for individual value, quantity and total quantity and value or Separation of Stranger or perform Retail Sort function. When pressing [MIX] mode, operator will be provided with a separate screen showing various discriminating modes as below. Select your desire counting mode and press [ESC] to return to Main screen.



[COUNT]: In COUNT mode, MIB-11F will only count pieces and not denominates.

[MIX]: In MIX mode, MIB-11F will denominate mixture denomination of banknotes for individual value, quantity and total quantity and value

[SINGLE]: In SINGLE mode, MIB-11F machine will separate stranger of banknotes that is not matching the first banknote recognized.

[SINGLE -Denom.]: In this mode, User can select a particular denomination to be recognize and deliver to Stacker pocket and deliver rest of the denomination of banknotes to Reject Pocket.

[SORT]: This mode is useful when banknotes in a strap or bundle are in organized from taken right out from the cash register till. Machine will stop when it sees a new denomination and then, after new denomination is removed, machine resumes until next denomination appears and process continues until completed.

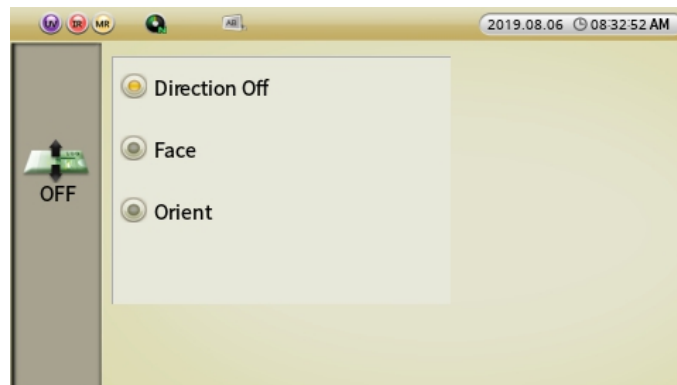


'DIRECTION' : To select the directions of the banknotes (**FACE/ORIENT**)

When this Icon is pressed, Operator will be provided with a separate screen showing various direction setting options including Direction Off. Select your desire

MIB-11F FITNESS SORTER

Direction (Banknotes must be all faced-up for Orientation to be performed). Esc to return to Main Screen.

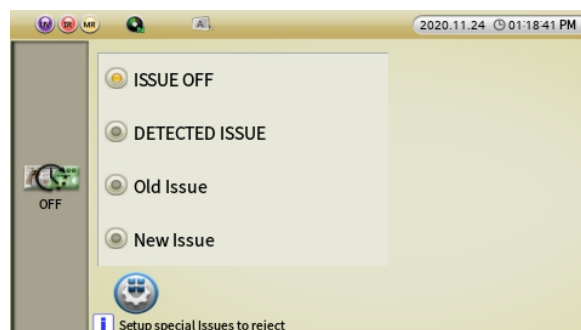


[Face]: Machine processes single or mixture denomination of banknotes and deliver first detected Face of that denomination or mixture denominations to main stacker and deliver the other Face or other denominations of banknotes or suspect banknotes to Reject pocket. Face function must be performed first before Orientation process takes place.

[Orient]: Machine processes single or mixture denominations of banknotes and deliver first detected direction (orientation) of that denomination or mixture to main Stacker and deliver other direction (orientation) or suspect banknotes to Reject pocket.



'ISSUE' : To select the issue (Banknote Version of printing) separating function. According to US Bureau of Printing and Engraving agency website (www.moneyfactory.gov), there are total 17 US banknotes issues (including Old Issues, New Issues) for 6 (Six) US currency denominations released since 1990 and still legal tender. Using this ISSUE mode, user can sort out different issues of a single denomination banknote by going through the below options.

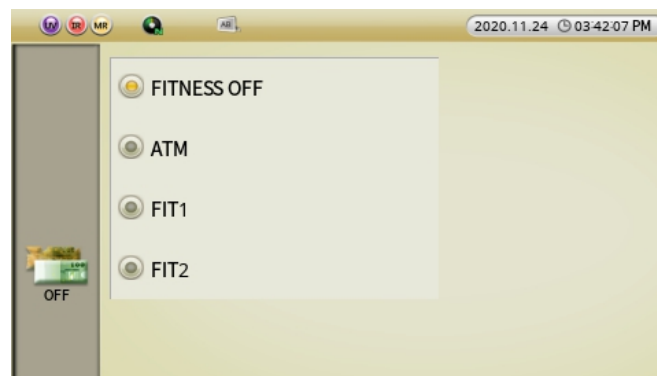


MIB-11F FITNESS SORTER



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

Using this FITNESS mode, ATM owners, CIT companies or banks who want to recycle monies within branches and need to sort out UNFIT banknotes from their deposits for ATM cassettes replenishment or prior sending deposits to Federal Reserve Bank, will be able to perform the task by selecting of correct Fitness Criteria as below:



1. **FITNESS OFF:** It means, Fitness function is turned off.
2. **ATM:** ATM level is application for users replenishing their ATM cassettes to remove unfit banknotes. The fitness criteria is set as bit sensitive per FED's Guideline. However, user can choose FIT1 for this application as well.
3. **FIT1:** FIT1 level is less restrictive as to determining unfit banknotes criteria.
4. **FIT2:** FIT2 level is further less restrictive to determining unfit banknotes criteria.



'SERIAL NUMBER' : To select Banknote serial numbers extraction (**Option**)

This function is disable on this unit as **Option** is not purchased.

4.1.3. Function Selection



'ADD'

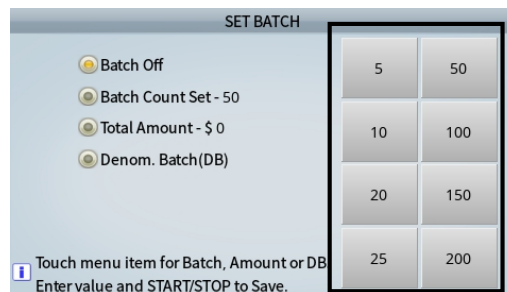
To select ADD function.

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'

Batch function is used when users want to count specific number of banknotes, particularly during strapping of banknotes. User can process banknotes by a batch number apply to all denominations or by dollar amount for single or mixtue denominations or perform batching operation by specific batch number for each banknote denomination. When Batch function is activated, the Machine operation will halt when count number reaches the preset batch number or dollar amount, even if banknotes remain on Hopper.





MIB-11F FITNESS SORTER

❑ Batch Off: By default, Batch is set to Off. Touch on Batch Off to turn off any batching settings that has been set by users.

❑ Pre-set Batch: For user's quick access and convenience, Batch function provides a pre-set qty of 5, 10, 20, 25, 50, ,100, 150 and 200. If desire is to simply add a batch to any of these number, press the number tab and batch will set to that piece qty apply to all discriminating modes as well as piece count (COUNT) mode. Simply touch  key and any of the number box to set your batch number.

❑ Batch Count Set: User can set a batch number. Machine will halt when it reaches the batch quantity set. This applies to COUNT and all other operating modes.

❑ Total Amount: User can set a batch by dollar amount and when Count total reaches the total dollar amount, Machine will halt. So, this function is meant for batching a count by a pre-set dollar amount instead of pieces (qty). The maximum amount user can set up for batching is '40,000,000'.

❑ Denom. Batch (DB): (DB) refers to denomination batch count for each denomination. Although 100 pcs as standard set for all denominations according to FRB's requirement for strap, user can modify these batch number for each denomination manually and save into Machine software by pressing START/STOP  when changes are done. To Activate this function, choose this Denom. Batch (DB) option on the Batch menu. To modify, touch any of the denomination on touch screen and modify on the next screen that appears. Save your selection by pressing START/STOP  key on the control panel.

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SET BATCH		
DENOM	COUNT	AMOUNT
\$ 1	100	100
\$ 2	100	200
\$ 5	100	500
\$ 10	100	1,000
\$ 20	100	2,000
\$ 50	100	5,000

SET BATCH				
				100.
1	2	3	+10	-10
4	5	6	+100	-100
7	8	9	+1,000	-1,000
←	CLEAR	0	00	000
THE RANGE STACKER (MIN : 1 MAX : 100)				

Denomination Batch (DB) Setting Menu Keypad to enter a batch number

The status for stacker

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



‘FIT On’ : Fit notes will deliver to the stacker pocket.



‘UNFIT On’ : Unfit notes will deliver to the stacker pocket.




‘Fitness Off’ : Fitness function off.



‘CUSTOM’ Mode (also known as “User Define” Mode in this Manual)


To select CUSTOM mode:


“CUSTOM” or ‘User Define Mode’ means that user can set up Max 16 modes to perform daily routes or for a specific purpose during cash processing. See section 4-2

Special Mode & Functions for setting instructions. User can set and save own mode with various options and quickly access the mode by touching the CUSTOM  button on the Touch screen.

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 the top layer of the 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.



MANUAL 'INPUT'

[INPUT] function is designed for trained operator to add quantity and value of non-recognize genuine banknotes (those are rejected to Reject Pocket) to running total during a count operation. User can add the quantity and dollar amount of uncounted banknotes or U.S coins manually for deposit verification from a customer's deposit. While banknotes are still in the Stacker Pocket (not removed) after a count operation is completed, by touching **[INPUT]** icon on the Touch Screen, user can see INPUT VALUE screen where user can add those uncounted banknotes to total count result

instantly. Once Manual Entry is completed, press  to Save the Input and press **"YES"** to confirm on the next display prompt. Press **[C]** to verify if manually entered banknotes qty and value are added to running total.

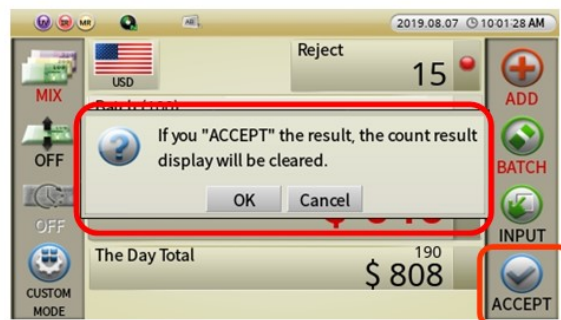


INPUT VALUE				
DENOM.	ST	PCS.	AMOUNT	
\$ 1	0	0	0	0
\$ 2	0	0	0	0
\$ 5	0	0	0	0
\$ 10	0	0	0	0
\$ 20	1	0	20	20
\$ 50	0	0	0	0
TOTAL	1	0	20	20



'ACCEPT'

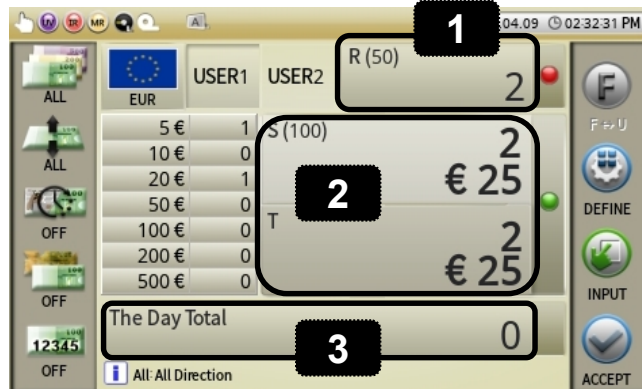
[ACCEPT] function is to confirm and add current counting result manually to "The Day Total" during a counting process. Once a counting is completed and Manual INPUT / Entry function is not required, user can press **[ACCEPT]** to add current count to Day Total manually. Touch "OK" on the display Prompt to confirm the addition to "The Day Total" and "Grand Total" and count will reset to 0 ready for next count.



4.1.4 Counting Result Confirmation



By pressing [CHANGE] button, user can view the below three screens with detail counting information including reject Reasons as illustrated below:



COUNTING DETAILS			
DENOM.	ST	AMOUNT	
\$ 1	130		130
\$ 2	0		0
\$ 5	48		240
\$ 10	7		70
\$ 20	9		180
\$ 50	5		250
\$ 100	1		100
Sum	200		970
Reject	0	Coin	0
Total	200		970

REJECT REASON (4)		
NO.	REASON	DETAIL
1	CHAIN	CHAIN
2	CHAIN	CHAIN
3	CHAIN	CHAIN
4	OVER RUN	OVER RUN

If user press 'CHANGE' button or touch the section of result in touch screen, machine will display the below screen in sequence:

- 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 then be added in 'The day total' and 'Grand total' field.

4.1.5 Grand Total (GT)

Grand Total means, the accumulation of counted banknotes that user accepted. Basically, if you touch [ACCEPT] icon after a counting is completed, the result will be added to 'GRAND TOTAL'. MIB-11F machine can show 'Total,' 'The Day Total', and 'Grand Total'. User can access 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 Touch Screen can be different with the actual number of banknotes in the reject pocket.

4-2 Special Mode & Functions

■ FITNESS Mode

'FITNESS Function' discriminates circulated bank notes between FIT or UNFIT for circulation by following USA Federal Reserve Bank Guideline. Therefore, UNFIT banknotes which are stained, have holes and graffiti etc. are deliver to the designated pocket. There are 8 parameter of items under Fitness standard discriminating between FIT and UNFIT coinciding with pre-set criteria according to USA Federal Reserve Bank guideline (2008).

1. Fitness conditions (These settings are pre-set under different fitness modes in the software and pre-set at the factory)

- 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 is divided into 3 different Fitness Criteria / Sub-Modes.

As explained under 4-1-2 Section, the below screen illustrates three different Fitness sorting criteria which user can choose from based on their need. User can select one of Fitness Sub-Mode in Fitness sub-screen. There are 3 types of 'fitness parameter' (ATM / FIT1 / FIT2).



For detail settings of 3 parameters (ATM / FIT1 / FIT2) and make adjustment to levels, you can **contact your sales representative or service personal for further adjustment to already pre-setting adjustment from factory.**

■ OCR Mode (Optional feature)

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 image.
- 2. S-OCR (MIB-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 executing factory developed application program on User's computer (if purchased), user can store and manage the images and converted OCR data.

■ SNC (Serial Number Comparison) (Optional feature)

MIB-11F machine can read the serial number and can identify both left and right serial numbers appear on passing banknotes.


In case the serial numbers are not match each other, the banknote then deliver to reject pocket and indicated as "SNC ERROR"



■ “CUSTOM” or “User Define” Modes (How to set User Define Mode)

“CUSTOM” mode also known as ‘User Define Mode’ in this User manual and it means that user can set up maximum 16 modes for his/her usual or specific purpose.

Steps to set up Custom Modes:

1. Please press ‘CUSTOM’ icon .



2. To set up a new mode or edit it, touch




icon or  icon.


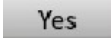
Then set the options in ‘MAKE DEFINED MODE SETTING’ stage.




Please check if all options appear on the left and right side of the screen starting with standard (those standard and those optional features user may purchase). If some do not appear, you can select or deselect on this menu. Once selection is

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



To delete the previous User Mode, touch  icon and touch .

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



*** If user wishes to exit from “CUSTOM” or ‘User define mode’, please press

‘USER OFF’  icon.

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

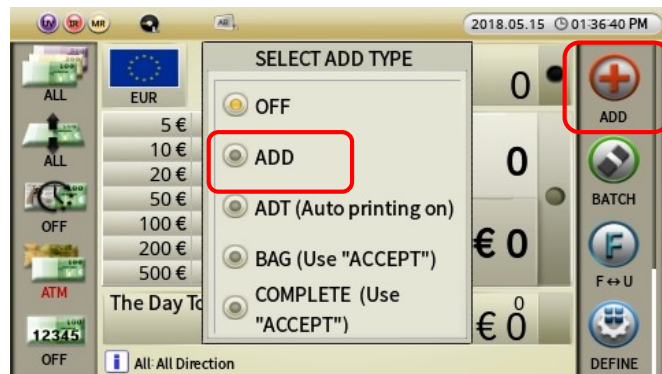


■ ADD

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

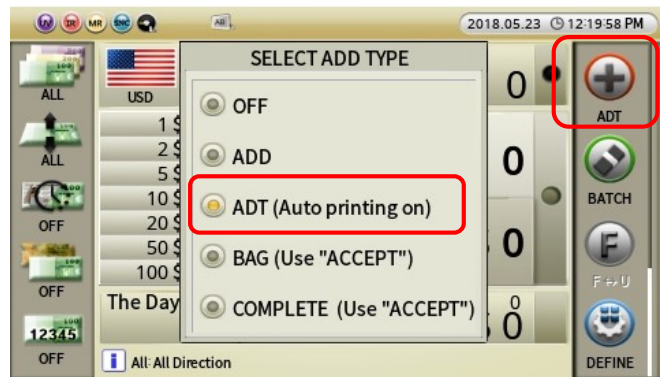
1. ADD

When ADD option is selected, machine is prepared to add the next count amount even when the Stacker and Hopper are empty. Touch [ACCEPT] Icon to save that count results to The Day Total and Grand Total.



2. ADT (Auto printing on)

If ADT option is selected, 'Auto printing' option will be turned on automatically. If an external printer is connected, Machine will send data to printer to print every time banknotes are removed from the Stacker. Printer will print out instant count for banknotes on the Stacker before removal.



Printer will consequently print 'Report for Current Stacker' as well as '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
    
```


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3. BAG

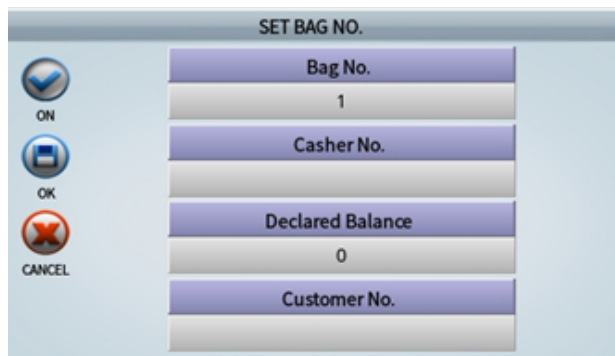
Usually Cash-in-Transit (CIT) companies use 'secure plastic packaging bag' to pick up their customers' deposits and such bags labeled with unique Bar-code number for identification. If BAG option is selected, CIT companies can count each customer's deposit with Bag number (Bar-code), cashier number etc. and able to print out receipt with this information displayed.



How to use 'Bag' function'?

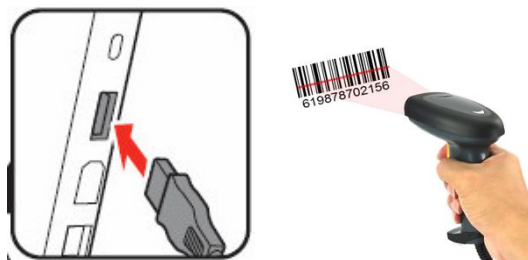
Let's assume CIT company picks up 2 Cash Bags each from two different bank branches. During processing of those bags, CIT user press and choose "BAG" mode from the touch screen display.

Once pressed, Machine will display the input screen as illustrated on the right ➡



A) Input information for 1st Bag.

- Input 'bag number' from a barcode scanner by connecting it to the machine using USB port located at the rear side (as illustrated at the below) or input bag number manually.
- Input Cashier number. Under "Declared Balance", input expected total amount of the 'bag' that were declared by customers. (verification of result)
- Input Customer Number.



- B) Press 'OK' or 'START/STOP' button to confirm input.
- C) Count all banknotes from the first BAG. **(Add function is activated in this BAG Mode)**
- D) Machine completed the bag count. Once count is completed by machine, follow step E.
- E) There are 2 options for users to choose from: ① Press 'Accept' icon or ② press PRINT' button.

- ① **'Accept' icon:** User can use this option when user wants to strap by 100 banknotes. **After counting of 1st Bag, user should leave remaining unstrapped banknotes in the stacker and start counting the 2nd Bag.** During counting of 2nd Bag, machine will stop when a strap of 100 banknotes count is completed. Resume operation by pressing START key after removing the banknotes from stacker. Once count is completed, the Machine will only display the amount for newly counted banknote from 2nd Bag. **(This function is known as 'Complete')**
- ② **Print button:** If Print button is pressed, printer will print the count results ('Complete' function will not work). **After printing is completed, user should remove all banknote from the Stacker Pocket.**

F) Input the information for 2nd Bag (repeat steps described in section 'A'). Then press 'OK' or 'START/STOP' button on the Control Panel to confirm. Machine will process the count for bag 2nd and print out the counting result for bag 2nd as well as bag 1st and show the differences in any amount from expected amount from these 2 bags.

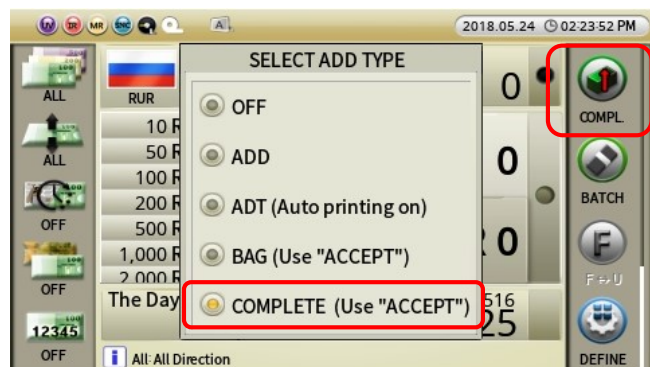
```

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

          UV MG IR
DENOM  UNIT  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

If this option is selected, 'ADD' function will automatically be turned on. Please refer to 'Bag' function from 3. **Bag Type** and 'Step 'B' to Step 'E' as described on the above



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

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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 MIB-11F machine: shows program version and provided currencies

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

The Factory default settings are as below:

Function		Default Value
Speed (NPM)		Approx. 1200 (With all functions) MAX. 1500 (Piece count)
[Count interface]		
Starting counting		Auto
Pocket capacity	Stacker Pocket	200
	Reject Pocket	100
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 backlight of LCD darker

5-2. ADMIN MENU (Administrator Menu / for Trained Service Professional)

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
	Printer	Set up Printer
	Custom display	Set up customer display
	Way of Motor stop	Self-explanatory
Function on/off	CF items	Turn on/off CF sensors
	Mode Setting	Activate or Deactivate modes
	Tape in count mode	Turn on/off the Tape Detection function in other modes than Fitness mode.
	Auto default loading	Self-explanatory
	Piece count on.off	Self-explanatory
	Reject image display	User can check Rejected banknote Scanned image by pressing 'CHANGE' button.
User setting	Concurrent User	Set up concurrent user function
	Set user info	Editing user name and password is available
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

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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. 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.
6. 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.

■ 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. Mede Setting
3. 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



4. Auto default loading
5. Piece counting on/off
6. Reject image display
- 7.

■ User setting

Dual Users: 2 users can use MIB-11F machine at the same time. Setting 2 Users (Dual-Users), 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-**

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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 verify and review 'Fitness counting report'

■ Value setting (Only for Service Professional)

1. **CF level:** Service Professional 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 (Only for Service Professional)

1) Fitness parameter : In this menu, Service Professional 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 menu⑤ 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.






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

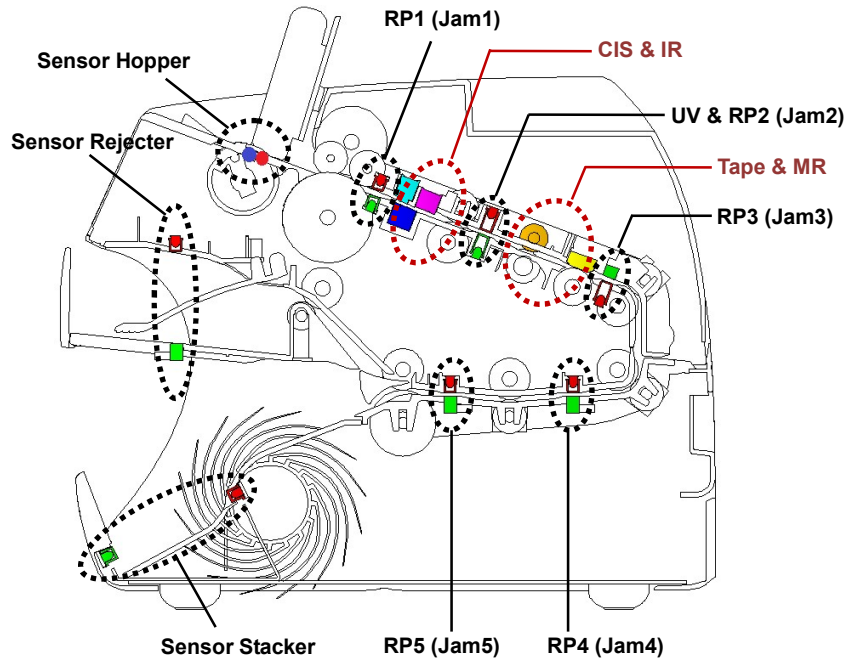
1. Sensor cleaning.

MiB-11F Machine is designed with various sensors to detect the malfunction of the Machine and show the status of the banknotes in the Machine and to recognize the denominations of the banknotes. The sensors are very delicate and if they are not cleaned correctly and regularly, this may have negative effect on the performance of the Machine as well as cause the Machine to malfunction. Clean the sensors as described below everyday after operation completed for the day.

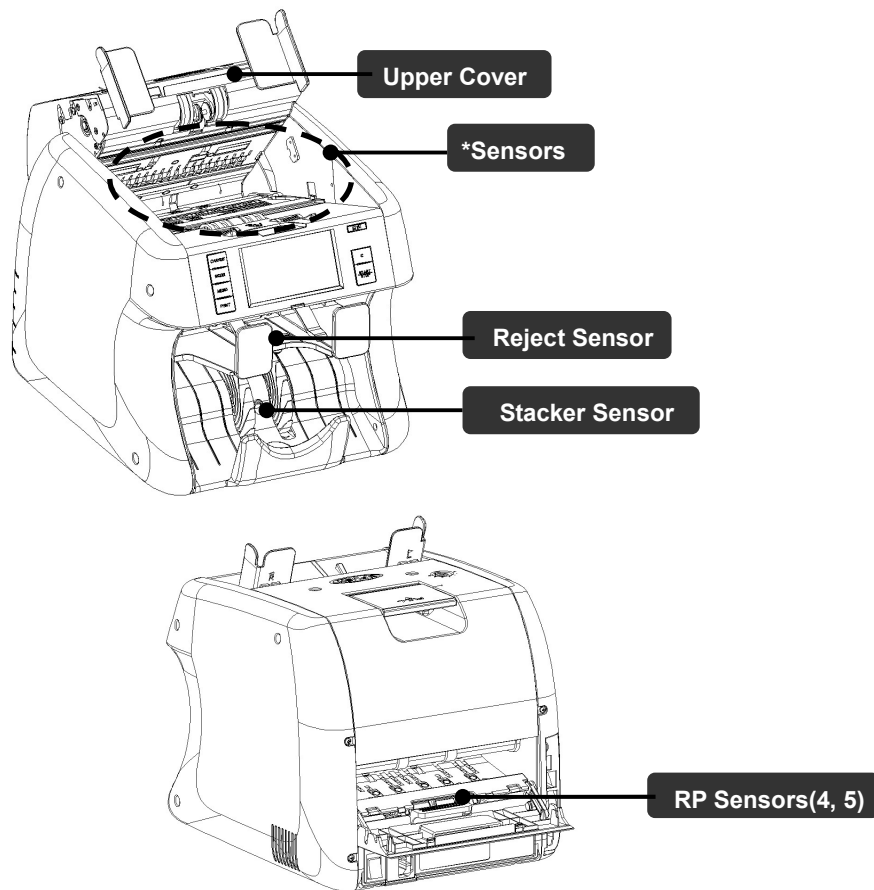


[WARNING] Turn the power off and unplug the power cord before cleaning.

Do not use any harmful solvent for cleaning.

1) Appellation and location of each Sensor

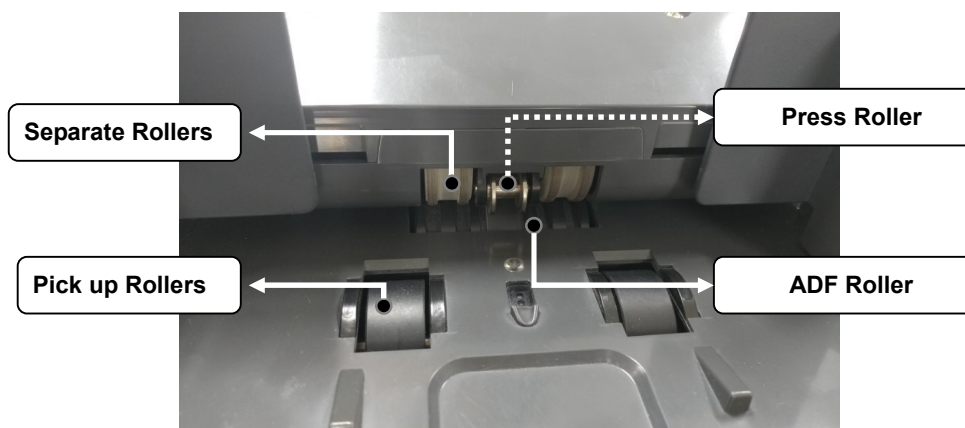
2) Clean all sensors



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

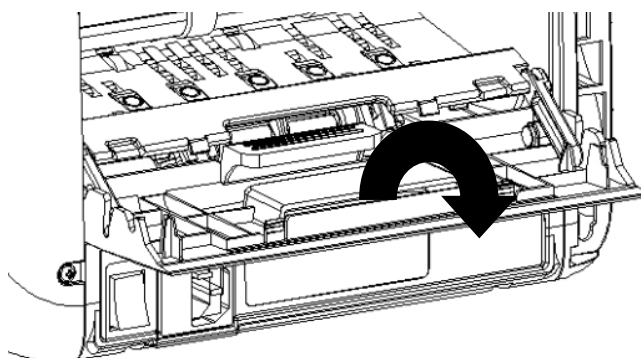


3. Dust tray Cleaning

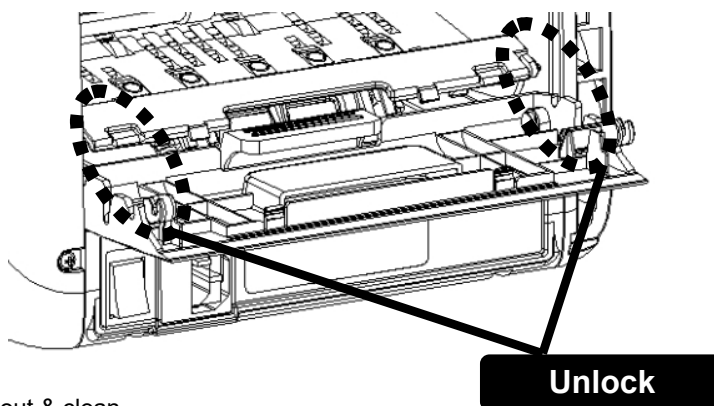
Machine has "Dust tray" at the locations on below figure. it collects dust when the machine is running.

How to clean

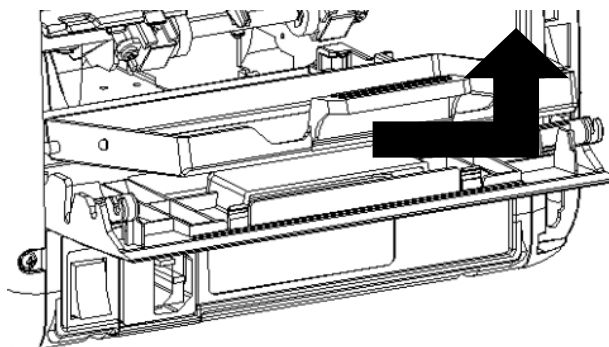
[1] Open the rear cover



[2] Unlock the door link



[3] Take the tray out & clean



8
SPECIFICATION

Item	Unit	Specification
Image Sensor	Dual	DUAL – CIS (Image Processing Sensor)
Counterfeit Detection		MR-Array, IR-Array, Multi-UV-Channels
Fitness Detector		Thickness and Tape Detector mechanism
Hopper capacity	Notes	MAX. 500 (optional 1,000)
Stacker capacity	Notes	200 [Max.300]
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 (USA Fitness Standard)
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)
Operating Modes		FITNESS / MIXED / FACE/ ORIENT/ ISSUE/ DISPENSE/ OCR (Optional) / SNC(Optional)
Preset Batch Number		1 – 200
Power Requirements		100-240V~, 50~60Hz
Power Consumption	W	Approx. Standby: 12, Operation: 100
Operational requirements		10~40deg/ 0~85%RH (Non-Condensing)
Size (W x D x H)	Mm inch	287[W] x 348[D] x 312[H] 11.3" [W] x 13.8" [D] x 12.4" [H]
Weight	Lbs. / KG	Approx. 26.4 lbs. or 12 Kgs

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.

Limited Warranty, Disclaimer, Service:**Limited Warranty:**

Congratulations on your purchase of our MIB-1F Fitness Currency Discriminator Counter. The manufacturer warrants this equipment for a period of 1(One) Year after the date of purchase against defects due to faulty workmanship or materials. This warranty does not cover normal wear and tear of parts or damages resulting from any of the following: negligent use or misuse of the product, use on improper voltage or current, power outage due to non-power surge protector power-strip uses and any other uses contrary to operating instructions or disassembly, repair or alteration by any person other than an authorized and trained AMROTEC® technician or Service Provider.

Parts repair or replacement under this warranty is only provided upon presentation of reasonable evidence that the date of the claim is within the warranty period and warranty guideline has been satisfied. To obtain warranty support, repair, servicing, you may contact sales representative of your MIB-11F Fitness Currency Discriminator Counter.

Disclaimer:

Warranty remedies limited to only parts repair or replacement of this equipment. Manufacturer, distributor, dealer or sales representatives of MIB-11F Fitness Currency Discriminator Counter shall not be liable for any incidental or consequential damages for breach of any express or limited warranty on this equipment or any part thereof. Except to the extent prohibited by applicable law, manufacturer, distributor, dealers, and sales representatives of Mib-11 Series Counter Discriminator Counter disclaims any implied warranty or merchantability or fitness for a particular purpose of this equipment or any part thereof. This warranty gives you specific legal rights, and you may also have other rights which vary from state or state of United States of America. This warranty is valid only in the United States of America.

Service:

To obtain out of warranty repair or service on your MIB-11F Fitness Currency Discriminator Counter, contact your sales representative or your Service Provider you have signed maintenance contract with.

It is recommended that all equipment returned for service and repair must be returned to your Service Provider in the original packaging.

AMROTEC®

MIB-11F FITNESS SORTER

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