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**Single Pocket - Currency Discriminating Counter  
w/ Multi-Currencies in a Single-Pass**

**Operator's Manual V.10**



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## Chapter 1. Introduction

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## ❑ Introduction

This guide covers the installation, operation and troubleshooting of **MIB-1** Currency Counter. We recommend reading this guide thoroughly before operating the Currency Counter. Then, as you become more familiar with **MIB-1**, use it as a reference guide to look up information when you need it.

## ❑ Compliance Statement

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

1. THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
2. THIS DEVICE 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 emits 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.

## ❑ Abbreviations and Acronyms

USB	Universal Serial Bus
IR	Infrared detector sensor
MR / MT	Magneto-Resistive sensor / Metal Thread
MG	Magnetic head sensor
MB	Megabyte
PC	Personal Computer



## □ Safety Precautions

Please read the safety precautions below before operating **MIB-1** Currency Counter device. These safety precautions guideline must be observed to avoid any potential hazards that could resulted in personal injuries or damage to **MIB-1** Currency Counter.



### **Electrical Safety!**

To avoid the risk of electrical shock, fire, or damage to the Currency Counter:

- ① Do not remove the side, and bottom covers in any situation.
- ② Do not disassemble the device by yourself.
- ③ Do not use damaged or worn power cords or plugs. Use the power cord supplied inside the original packaging carton and connect to a properly grounded power outlet or to a power strip. The power source for the device is between AC 100-240V AC,  $\pm 10\%$ , 50/60Hz, 1.8A.
- ④ Keep metal objects, such as paper clips, away from the hopper and stacker. If an object does fall into the unit, turn off the power and unplug the device immediately. Contact your authorized **MIB-1** service provider for assistance.
- ⑤ Keep liquids away from the device. Do not operate the Currency Counter if it is wet. Also, do not touch the Currency Counter if you are wet. If a spill occurs, turn off the power and unplug the device immediately. Contact our authorized **MIB-1** service provider for help.

## **WARNING**



### **Warning!**

The Currency Counter may start operating accidentally in certain circumstances as described below. Therefore, it is important to always follow these below precautions:

- ① Do not wear loose clothing or jewelry while operating the Currency Counter.
- ② Make sure that your hair does not touch the Currency Counter.
- ③ Do not touch banknotes that have been placed in the stacker while the motor is running.
- ④ Turn off the power before performing any maintenance or error corrections that require you to put your hands into the device.
- ⑤ Keep the device away from magnets, activated cellular phones, electrical appliances, or speakers within 13 cm / 5 inch.



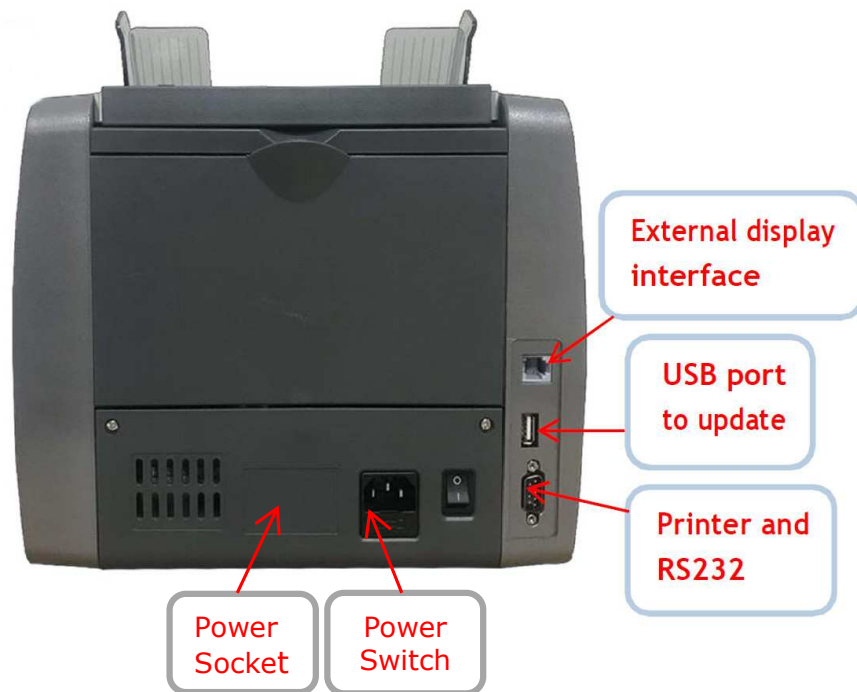
### **Cautions!**

- 
- Keep drinks, food, and other foreign objects away from the Currency Counter.
  - Placing foreign objects on or into the Currency Counter can interrupt operation of the device.
-

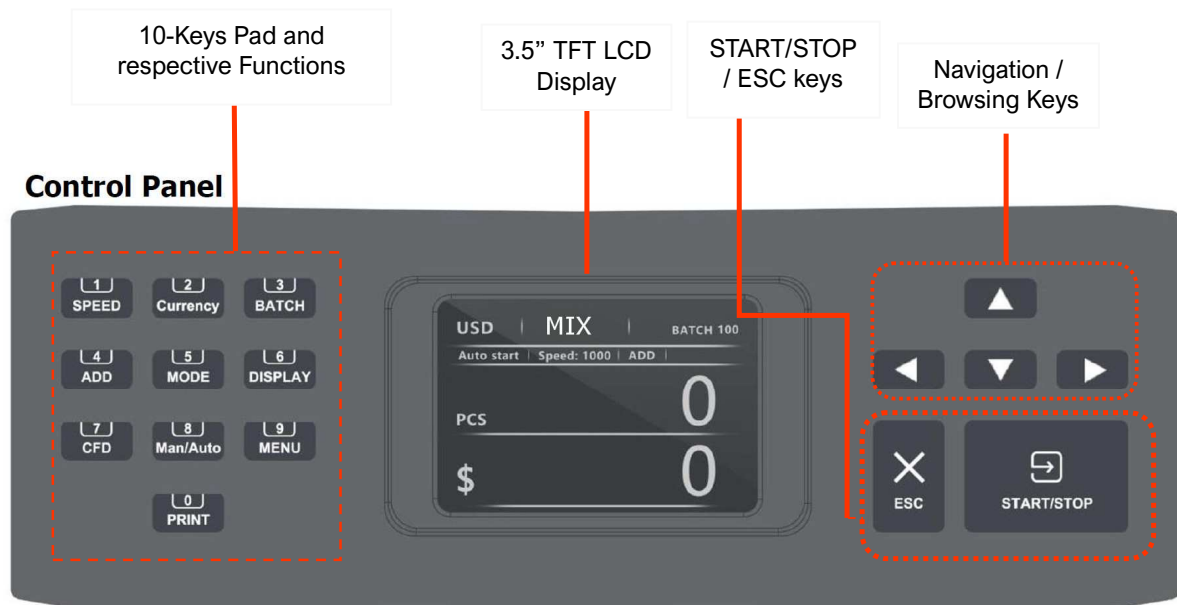
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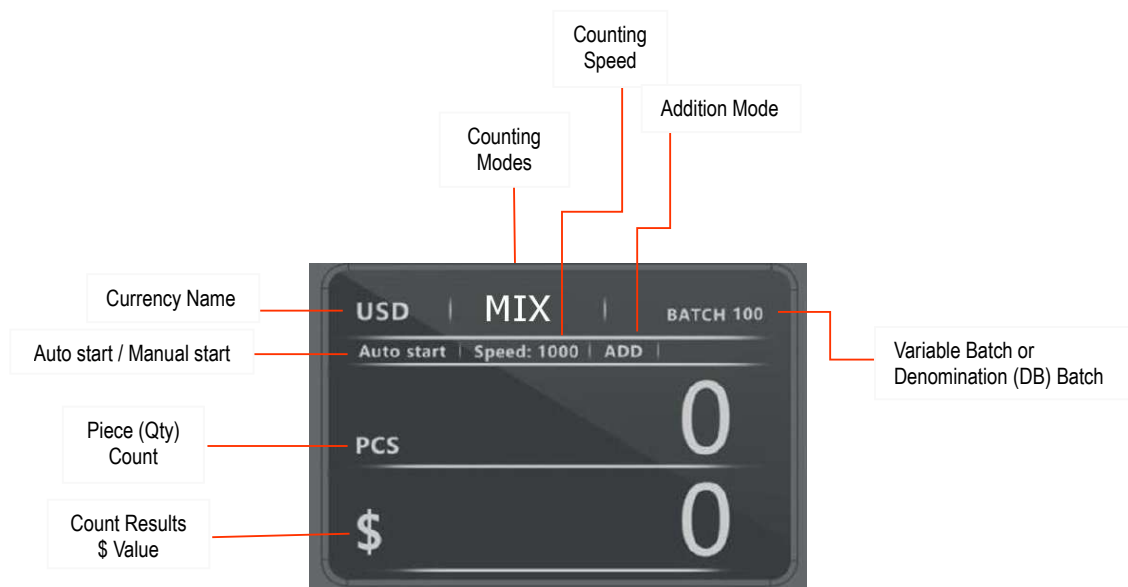
## ❑ MIB-1 at a Glance



## ❑ Overview of Control Panel



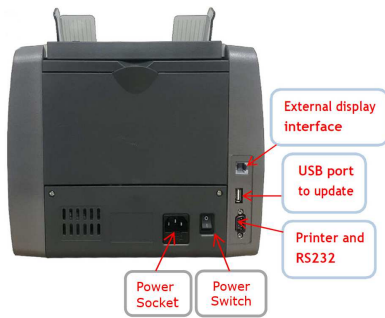
## ❑ Overview of LCD Display



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## ❑ Power On / Off



To power on **MIB-1**:

- ❶ Plug in the A/C power cord to the Power Socket.
- ❷ Press the Power Switch button (I/O) on the rear side of **MIB-1**.
- ❸ After System initialization stage is completed, **MIB-1** enters into main display screen and ready.

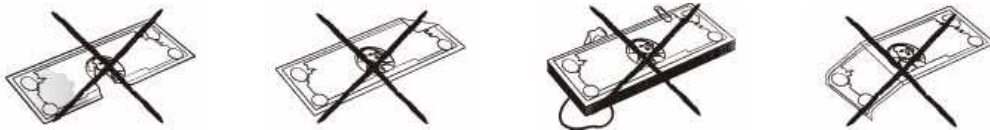
To power off **MIB-1**:

- ❶ Prior powering off, make sure that all counting results are saved to memory.
- ❷ Press the power switch button (O/I) to turn off the device.

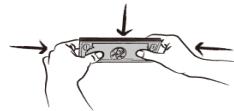
## ❑ Placing Banknotes

To operate the currency Discriminator device efficiently, please follow the below instructions:

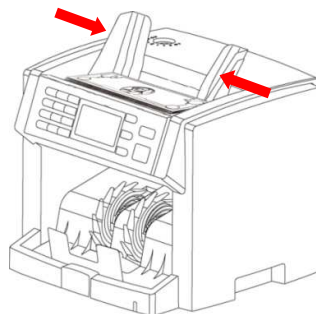
- ❶ Avoid counting wet, excessively dirty, or spoiled banknotes.
- ❷ Check for foreign object mixed with banknotes, i.e.: paper chips, rubber bands, clips, dust, etc. which will jam the bill path or even may damage the sensors.
- ❸ Prior counting, remove severely folded or curled banknotes from the stack of banknotes to be counted.



- ❹ Align all corners and edges of banknotes to avoid excessive rejection of banknotes to reject stacker for recognition errors.




- ❺ Put all banknotes in the middle of the note hopper and adjust the hopper guide for better alignment and feeding of banknotes.



## □ Counting Speed

The **MIB-1** device is defaulted from factory to count circulated banknotes at high-speed (about 1000 banknotes per minute), however, software allows user to adjust counting speed to count banknotes at even higher or lower speed if necessary.

To adjust the counting speed in various Discriminating Modes (MIX / SINGLE / SORT etc) and 'COUNT' mode:

- ① Press  key on the left side of the control panel to switch between various speed settings in any discriminating modes or COUNT mode.
- ② Three different counting speeds can be set for all discriminating modes (MIX/SINGLE/SORT/FACE/ORIENT), however, 1000 speed is default except for SORT mode (800 notes / min) and best speed for higher recognition and less jamming.


- ⊙ Under Discriminating modes
  - 800 notes / minutes (SORT mode)
  - 1000 notes / minutes
  - 1200 notes / minutes
- ⊙ Under counting (COUNT) mode
  - 800 notes / minutes.
  - 1000 notes / minutes.
  - 1200 notes / minutes
  - 1500 notes / minutes



## □ Selecting Currency, Auto and MULTI-Currency:

**MIB-1** Currency Discriminator is capable of counting and denominating of single currency or mixture of world-currencies (USA and Canada Standard) in a single-pass. To Select one of the installed currencies (USA and Canada Standard) or choose AUTO (first currency inserted and counted) or choose Multi-currencies to process in mixture. Default currency installed will be shown at the very top left corner of the display screen.



Press the  key to see all installed currencies in a separate screen and in sequence with respective numbers. Arrow ➔ will point to the current currency software.

### Single Currency:

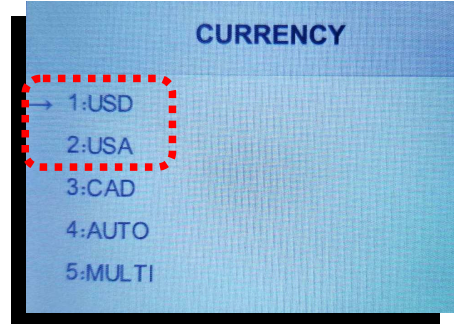
- ① Default currency (USD) installed will be shown at the very top left corner of the display screen and device will process all genuine banknotes and halts when a banknote cannot be read due to being unfit or simply strange or suspect. User to remove that banknote, either to recount or to perform Manual Entry function (See Page 14 ~15) to add to current count if found to be genuine and good bill.




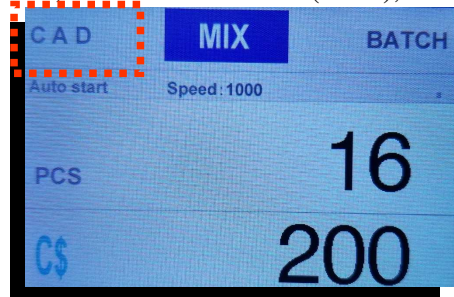


- ② During processing of banknotes, Pcs and Value will show on the LCD display screen when device is in discriminating modes (MIX / SINGLE / SORT etc.).
- ③ When device is set to COUNT Mode, only Qty (Pcs) will be displayed on the LCD screen.

➡ As default, USD currency shows on the very top left corner of the LCD display. USD currency stands for US Dollar and less restrictive as to banknote reading criteria. Operator has the option to select USA version of US Currency Software which is more restrictive as to banknote reading criteria (i.e. stop at very worn out bills) and may generate more non-read bills.



➡ If Operator decides to switch to another installed currencies, such as Canadian (CAD), use navigation down arrow ▼ on the right side of the control panel to change to other currency and press  START/STOP key to save the selection. Newly selected currency will then be displayed on the very top left corner of the LCD display screen.



#### (AUTO) Currency:

Selection of AUTO currency mode means, **MIB-1** device will standardize the first currency-type passes through and successfully read whether it is US currency or Canadian currency or any other currency-type that operator may have purchased and installed onto this device. Other than standardized currency-type, all other currency-type will then be rejected, means, device will stop for removal by operator.

➡ Selection of AUTO currency mode is same as described above.


#### MULTI-Currency:

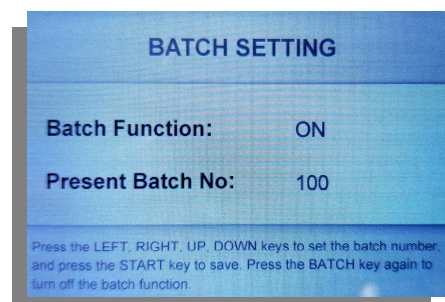
**MIB-1** Currency Discriminator device has capability of processing mixture of world-currencies in a single-pass (for example, US and Canada). Once selected, MULTI will be shown at the very left corner of the display screen and device is ready to process mixture of multiple currency-types in a single pass. During counting, device will not be showing the value of the counted currency since multiple-currencies are being processed, however, operator would be able to see processed quantity

and value for each currency by pressing  key on the left side of the control panel.

#### ❑ Batch Counting

The **MIB-1** device allows users to set counting of banknotes by a batch number from 1 - 200 (quantity) or turn it off. Pre-set batch can apply to all counting modes except SINGLE or SORT mode as



described below. To turn on BATCH, press  BATCH /3 Key on the control panel. Device will display batch setting screen where operator can turn ON or OFF batching function by using navigation ►

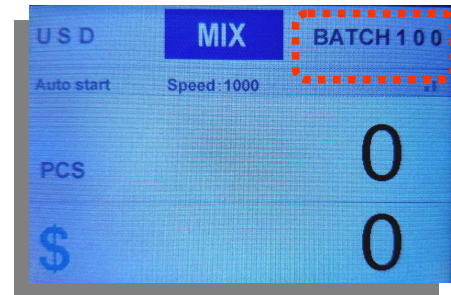





key on the right or change default pre-set batch from 100 to any number up to 200 by using numeric 10-keys pad on the control panel.

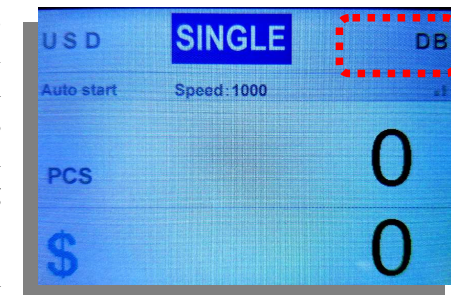
### ■ Normal batch setting (using of numeric 10-keys)

- ❶ Press ► key to reach to Present batch No: 100 and use numeric 10-keys on the control panel to change to desire batch number up to 200 (maximum Stacker capacity).
- ❷ The set batch will be shown on the right top of the LCD display.
- ❸ Place banknotes on the note hopper to start counting (Auto Start mode) or press  to start (Manual count mode) counting.
- ❹ To cancel the batch, press  key followed by ► key to turn batch off.



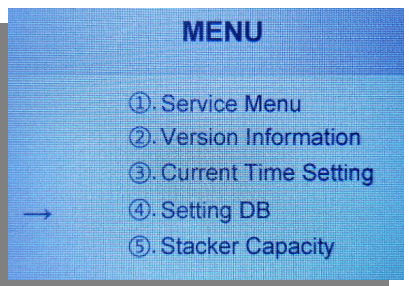


### ■ Denomination Batch Setting (DB):

**Denomination associated Pre-set Batch function [DB]** is available with ‘SINGLE’ and ‘SORT’ counting mode as well normal batch setting. Operators usually prefer to set a specific batch number for each denomination while they are separating banknotes using SINGLE or SORT mode (See below and Page 22 in additional). Therefore, **MIB-1** provides denomination batching options for operators and operators can activate or deactivate [DB] in SINGLE mode or SORT mode by pressing  key. DB will appear on the TOP right corner of the display screen. By default, 100 is set as batch qty for all banknote denomination in DB setting which operator can change to any numbers up to 200.





### How to set DB batching:

Press  key → MENU → 4. Setting DB menu item to enter into DB setting.

	<h3>How to set DB batching:</h3> <p>Press  key → MENU → 4. Setting DB menu item to enter into DB setting.</p> <ol style="list-style-type: none"> <li>❶ Once in 4. Setting DB, press  Start/ Stop key to enter into the setting screen.</li> <li>❷ Arrow will point to the first denomination, here \$ 100 and Value is set 100. To change the default 100 value, use 10-keys on the left side of the control panel.</li> <li>❸ To move to next denomination, press left navigation arrow [◀] and then, use 10-keys pad to select your desire batch number.</li> </ol>
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DENOM	VALUE
100	100
50	100
20	100
10	100
5	100
2	100
1	100

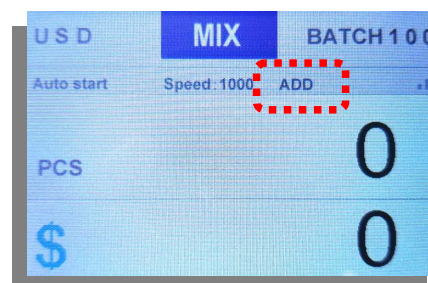
⑤ Once all denominations batches are selected, press  **Start/Stop** key to save all the newly set denomination batch qty to device memory. The preset batch number for any denomination should not exceed the stacker maximum pocket capacity of 200pc.

⑥ If operator prefers normal batch under SINGLE and SORT mode, press  **BATCH** /3 Key to reach to a separate screen where operator can choose normal Batch or stay with DB setting.

## ❑ Add mode


ADD feature is used to accumulate piece and value counting results for continuous stacks of banknote processing application.


- Press the  **ADD** key on the control panel to activate or deactivate ADD feature.
- When ADD mode is turned on, ADD text will appear on the second column as highlighted. When ADD is activated, counting results of different straps are accumulated automatically.

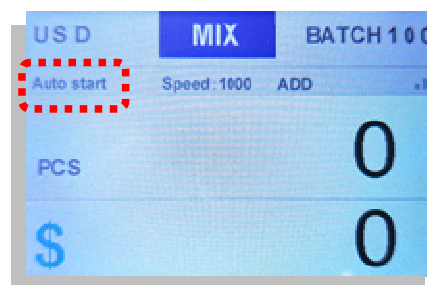


## ❑ Auto / Manual Start Mode

To operate the **MIB-1** device with Automatic start or manual start, follow the steps below:

- Press the  **Man/Auto** key to switch between Auto/Manual Start Mode.
- The LCD shows the actual status of the mode on the very right of the second column.




- ♦ **Auto start** (Auto Start Mode), the **MIB-1** device counts after detecting banknotes on the hopper.
- ♦ **Manual start** (Manual Start Mode), the **MIB-1** device counts only after pressing the  **START/STOP** key.




## ❑ Auto-Print:

This feature is reserved for trained operator or service professional. Auto-Print feature allows operators to activate automatic print of receipt (counting results) to an external printer (only to our recommended printer) once counting is completed and **banknotes are completely removed from the Hopper area.** **Hopper area must be empty before Auto-Print feature to be functional and will automatically print to a connected printer.**


### *How to activate Auto-Print Feature or deactivate:*

❶ Enter MENU Setting by pressing  key. Press (1-10 keys) on the control panel to select to a specific menu item or use ▲ ▼ key to move up or down on menu item and then press  to enter specific sub-menu item selected. Once changes are done, press  to confirm your selection and return to main screen.





❷ Select ① Service Menu →  → Password (XXXX) → Enter into Setting

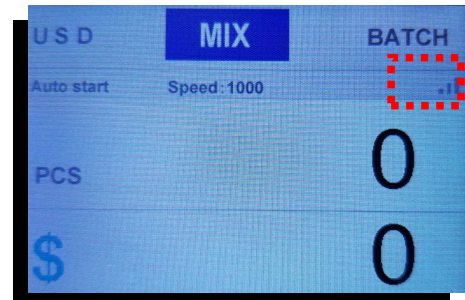
❸ Select ④ Auto Print →


❹ Select 1: ON or 2: OFF and press  to confirm your selection and return to main screen.

### **❑ Counterfeit Detection (CFD)**

**MIB-1** Currency Discriminator device is equipped with various suspect detectors, such as Magnetic (MR / Magnetor-resistive) UV and IR detector to be able to detect suspect banknotes.

To activate suspect or counterfeit detection (CFD), press  key on the control panel. Sensitivity level for CFD function includes Low → Medium → High and operator can achieve desire level by continue pressing  key.




 Number of bars displays on the second column of the top display screen represent Low (low Bar) → Medium (medium Bar) → High level (High Bar). The higher the bar is, the higher the sensitivity setting is.

## ❑ Discriminating and COUNT Modes

**MIB-1** Currency Counter is equipped with 3 main discrimination counting modes: **MIX**, **SINGLE** and **SORT** modes. Further, the device provides additional sorting modes to align single denomination of banknotes with having same face or same direction. All discriminating modes change in sequence every time

the navigation key  is pressed:

 → **MIX** → **SINGLE** → **S-FACE** → **S-ORNT** → **SORT**  
→ **COUNT**

### ■ Definition of standard Discriminating Modes:

#### **MIX**

##### **MIX Value Mode (mixture)**

- Counts and identifies mixture denomination of banknotes for individual piece, amount and total valuation. If a banknote fails to identify or determines to be a possible counterfeit / suspect (if CFD mode is ON), device then stops for manual inspection by operator. If banknote is not read for reasons other than suspect, operator has option to recount or enter qty and value for that denomination manually (See Manual Entry at Page 14-15)

#### **SINGLE**

##### **SINGLE Mode (DD)**

- Counts banknotes with the denomination of the first detected genuine banknotes as the "Standard" and stop banknote with different denominations and suspicious banknotes. Once the hopper is empty and new count starts, the denomination "Standard" will reset to the first identified banknote.

#### **S-FACE**

##### **FACE Sorting for single Denomination banknotes**

- Counts banknotes with the face of the first detected genuine banknotes as the "Standard", and stop banknotes with different faces, and suspicious banknotes. In case of different face, operator can remove the banknote, correct the face and recount.

#### **S-ORNT**

##### **ORIENTATION Sorting for single Denomination banknotes**

- Counts banknotes having same face and direction of the first detected genuine banknotes as the "Standard", and stops at banknotes with different orientations (same face, but different direction) or suspicious banknotes. In case of different orientation, operator can remove the banknote, correct the orientation and recount


#### **SORT**

##### **SORT function for Organized Banknotes**

- Counts strap of Organized banknotes by its face and denomination while accommodating change of denomination / new denomination to start a new count and continue in such manner until all banknotes are counted.



## ❑ Counting Operation in various Modes:



To enter into various currency discriminating modes or COUNT mode, first press on Currency to select your desire currency and then, continue pressing the  key until operator reaches to desire mode of counting operation:

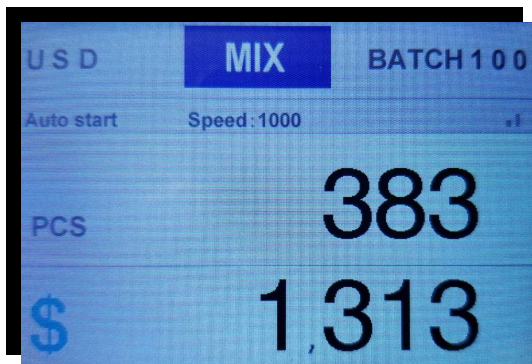


**MIX → SINGLE → S-FACE → S-ORNT → SORT  
→ COUNT**

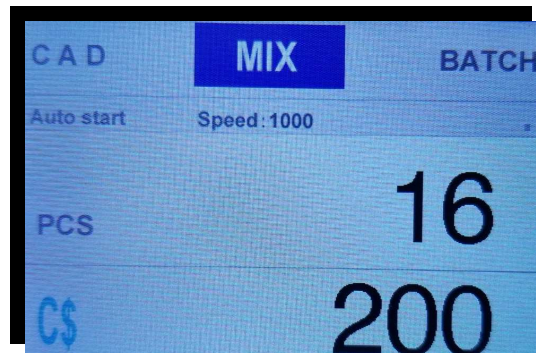
As example, select **MIX** to process mixture denomination of banknotes, or **SINGLE** for single denomination or first denomination detection, or **FACE** or **ORNT** for face and Orientation sorting.

**MIX**

- ❶ First, select your desire currency whether standard US currency or Canadian Currency (Second currency is pre-loaded as standard) by pressing . Once selected,
- ❷ Place a stack of mixture banknotes of Standard US currency or Canadian currency (second currency) on the hopper to start counting under Auto start or press key  to start counting.



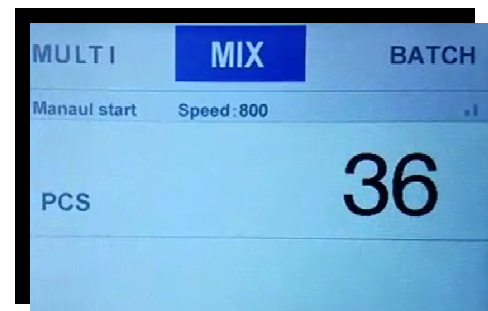
MIX Value Counting (US Currency)



MIX Value Counting (Canadian Currency)

❸ Once banknotes start to process, display will show PCs and Total value of the counting banknotes for that currency-type. If ADD function is ON, device will accumulate running total of stacks of banknotes in process.

❹ Operator also has option to choose MULTI-mode (as described on Page 8 ~9) to place both US and Canadian currency to process together and in a single-pass as one of the most unique feature of **MIB-1** Currency Discriminator device.




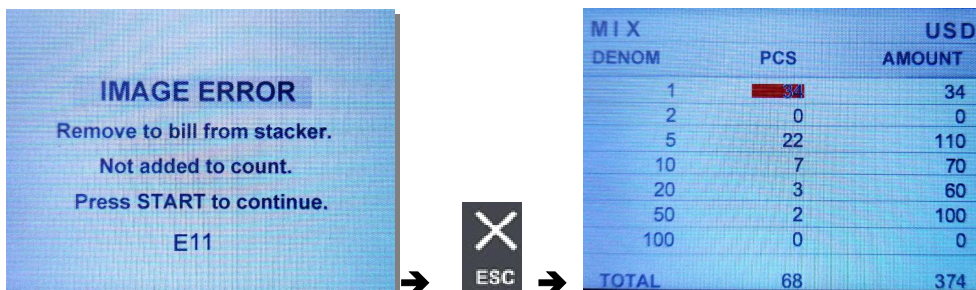
## ❑ Manual Entry Function:

Due to **MIB-1** having a single stacker pocket, it is equipped with a function to allow operators to input value (manually, using numeric keys) for genuine, but, non-read bills that is not recognized by the sensor for various reasons and add to running total of stack. **During processing of any of the**



**Discriminator modes described under this section, this Manual Entry function can be utilized.**

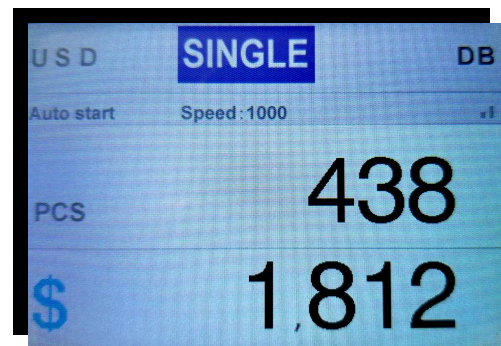
When **MIB-1** device stops at a banknote during counting, machine will show an error message as below. Operator then removes the banknote for manual inspection and either recount if genuine and fit banknotes by placing it to Note hopper or Operator can perform a Manual Entry function to add the denomination value and qty to the total.



- 1 When **MIB-1** stops at a banknote, press [ESC] key. A Denomination list screen will appear and PCS (Qty) area on the first denomination on the list will be highlighted. Use navigation 4 arrow keys [▶◀▲▼] on the right-side control panel to select the PCS area of the desired denomination to have manual entry.
- 2 Use 10-keys pad on the left-side of the control panel to enter the banknote pcs (i.e. if count qty is 10, press 11 to add a single pc entry) for that respective denomination which stopped during counting,
- 3 Press  (START / STOP) key to confirm your selection and return to main counting screen to resume counting. Process is completed.




## SINGLE

- 1 First, select your desired currency whether standard US currency or Canadian Currency (Second currency is pre-loaded as standard) by pressing . Once selected,
- 2 Place a stack of single denomination of US currency or Canadian currency (second currency) on the hopper to start counting under Auto start or press key  to start counting Manually

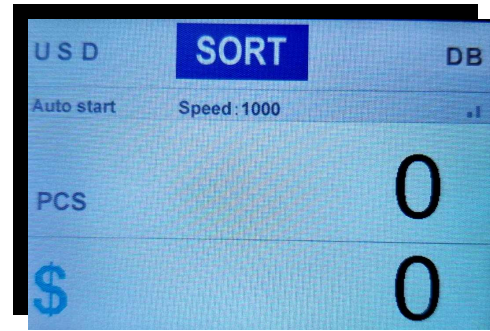


- 3 Once banknotes start to process, display will show PCs and Total value of the counting banknotes for that currency-type and device will stop if any stranger or unknown banknote denomination (other than the very first one counted) or suspect banknote for removal by operator. If ADD function is ON, device will accumulate running total of stacks of banknotes in process.
- 4 Please note that, Denomination Batch (DB) is automatically activated under SINGLE mode and device will stop when one of the denomination is reached the pre-set denomination under DB (Denomination Batch) setting. To remove DB batch from SINGLE mode, please press  key to deactivate and press  key again to reach to a separate screen to select normal batching.

## SORT

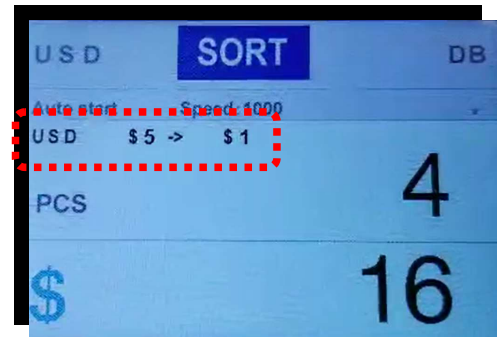
❶ First, select your desired currency whether standard US currency or Canadian Currency (Second currency is pre-loaded as standard) by pressing . Once selected,

❷ For SORT mode to be functional, stack of banknotes placed on the hopper for processing must be in organized fashion taken out from retail or bank cashier's drawers and placed each denomination on top of each other in organized way.




❸ For such stack of banknotes, place them on the hopper to start counting. Otherwise, change to SINGLE or other modes.


❹ After completion of first denomination of banknote counting and when **MIB-1** device sees a second denomination, it will stop and display will indicate change of denomination from which denomination to which denomination. In such case, remove all banknotes from the stacker and place them on your desk by denomination.




❺ **MIB-1** device will continue to process rest of the denomination of banknotes in such fashion. During counting, display will show PCs and Total value of the counting banknotes for that currency-type. If ADD function is ON, device will accumulate running total of stacks of banknotes in process.

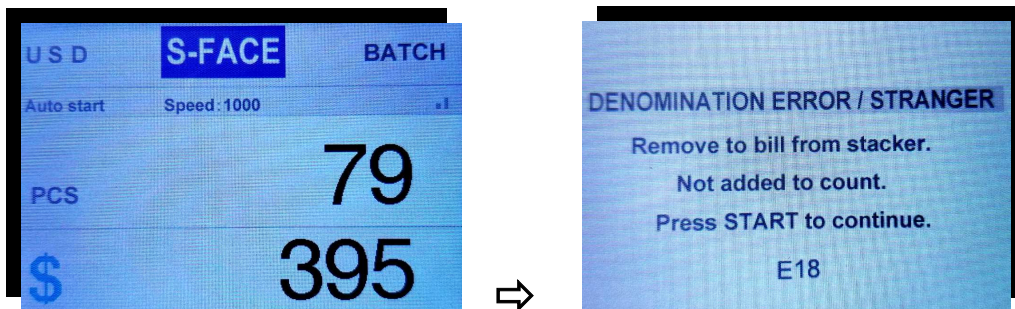
❻ Please note that, Denomination Batch (DB) is automatically activated under SORT mode and device will stop when one of the denomination is reached the pre-set denomination under DB (Denomination Batch) setting. To remove DB batch from SORT mode, please press  key to deactivate.

## S-FACE

❶ First, select your desired currency whether standard US currency or Canadian Currency (Second currency is pre-loaded as standard) by pressing . Once selected,


❷ Place a stack of single denomination of US currency or Canadian currency (second currency) on the hopper to start counting under Auto start or press key  to start counting Manually.



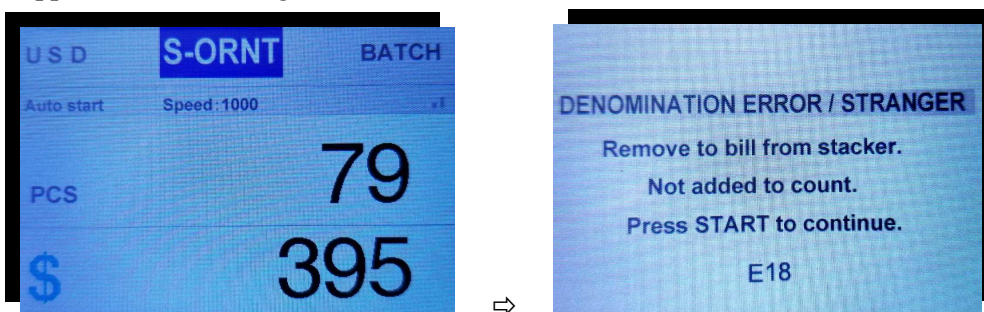


③ **MIB-1** will process banknotes which are in same face (Portrait) as the very first bill counted and will stop with an error message saying **DENOMINATION ERROR / STRANGER** if device sees a banknote in wrong face (Portrait). Operator has the option to correct the face of that banknote to same face as processed banknotes and placed it to note hopper to recount. Once all banknotes are processed, it will be resulted in all banknotes in one Face (same portrait). During counting, display will show PCs and Total value of the counting banknotes for that currency-type. If ADD function is ON, device will accumulate running total of stacks of banknotes in process.

## S-ORNT

① First, select your desire currency whether standard US currency or Canadian Currency (Second currency is pre-loaded as standard) by pressing . Once selected,

② For ORIENT mode to be functional, all banknotes must be organized in same face (portrait up). Place a stack of single denomination of US currency or Canadian currency (second currency) on the hopper to start counting.




③ **MIB-1** will process banknotes which are in same face (Portrait) and same direction as the very first bill counted and will stop with an error message saying **DENOMINATION ERROR / STRANGER** if device sees a banknote in wrong face (Portrait) or in wrong direction. Operator has the option to correct the face and direction of that banknote to same face and direction as processed banknotes and placed it to note hopper to recount.

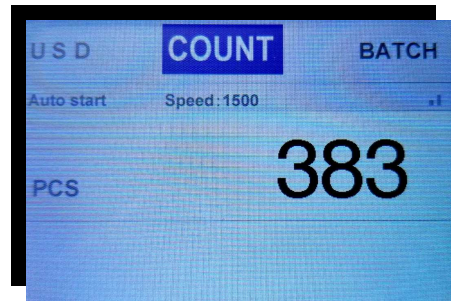
Once all banknotes are processed, it will be resulted in all banknotes in one Face (same portrait) and in same direction. During counting, display will show PCs and Total value of the counting banknotes for that currency-type. If ADD function is ON, device will accumulate running total of stacks of banknotes in process.



## COUNT

❶ In COUNT mode, **MIB-1** counts the number of banknotes (qty) without identifying denomination or valuation of banknotes in a stack. During counting of banknotes, **MIB-1** device will stop if a banknote is found to be suspicious or unfit to be in circulation.

❷ Operator to remove that banknote and press  to resume counting. It is noted that counting speed can be set to as high as 1500 banknotes, however, it is recommended to count banknotes at 1200 notes per minute for widely circulated banknotes.



❸ During and once counting is completed, **MIB-1** displays total counted quantity on the display screen. If [ADD] function is turned on, the counted quantity for the current stack is added to the running total and save into device memory. Note that, key is used to select [COUNT] mode, continue to press [MODE] key until [COUNT] appears on the display screen in the sequence below:



**MIX → SINGLE → S-FACE → S-ORNT → SORT  
→ COUNT**

## □ Counting Results and Display Content


When counting is completed, the LCD display will show the below information:

- ♦ **Amount and Quantity** – Total Value and number of banknotes counted for the selected currency.

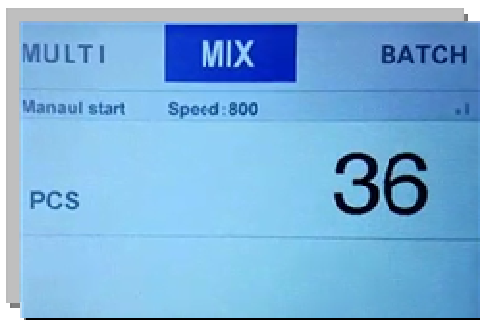
■ **Detail View** – Detail view contains quantity, and dollar amount of counted banknotes by each denomination of banknotes counted as well as total count if ADD function is activated.

MIX	DENOM	PCS	USD AMOUNT
	1	24	24
	2	0	0
	5	25	125
	10	6	60
	20	3	60
	50	3	150
	100	0	0
	<b>TOTAL</b>	<b>61</b>	<b>419</b>

❶ To view detail counting results, press the  key and detail counting results will show on the screen.

❷ Press the  key to clear the current results and prepare the device for next count.

**In case of MULTI-Currency type** is selected and operator places mixture of US and Canadian currency as standard (Options for other world-currencies if purchased and loaded into the device), device will count both currencies in a single-pass, however, during counting, only QTY will be displayed.



	PCS	AMOUNT
USD	26	42
CAD	16	200

After counting is completed, screen automatically change to detail view of total counting results for all currency-types. However, to see denomination break-down for each currency-type, operator needs to print counting results and see the break-down on the print report.

## ❑ Printing the Summary

The **MIB-1** device can be connected to our recommended “SNBC” model of Thermal or Dot-Matrix printer using RS232 serial port at the rear and to print current counting result for currency-type as selected.



**Printer and  
RS232**



❶ Connect your Dot-Matrix or Thermal Printer with the **MIB-1** device.

❷ After counting is completed, press the  key.

❸ A new screen will appear. Follow the instruction – Press



START/ STOP Key to start printing or press ESC to return to main screen.

❹ **Printing of receipt.** The printer receipt lists the "currency name", date and time, “Pcs” and amount by each denominations and total quantity and Total value of counted banknotes.

Press START to start printer  
Press ESC to return


\*\*\* CUSTOMER DEPOSIT \*\*\*  
MIB-1 Currency Discriminator  
6- 4- 2020 7:29:51  
-----  
Currency: USD  
-----

DENOM	PCS		AMOUNT
1	53	\$	53
2	0	\$	0
5	0	\$	0
10	7	\$	70
20	6	\$	120
50	1	\$	50
100	0	\$	0
-----			
TOTAL	67	\$	293



## Chapter 4. Setting MIB-1

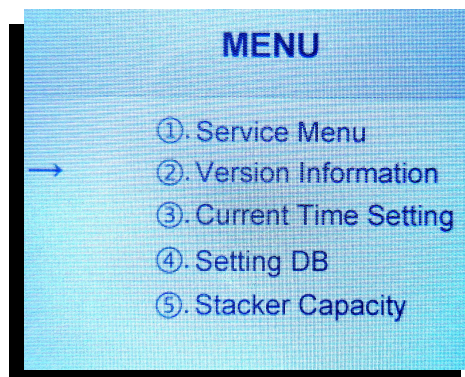
Function and Environmental Settings .....	21
Service Menu .....	21
Version Information.....	21
Current Time Setting.....	22
Setting DB (Denomination Batch).....	22
Stacker Capacity .....	22

## ❑ Function and Environmental Settings

This chapter is reserved for trained operator or service professional. To verify or to set a function and its environmental parameters settings, enter MENU Setting by pressing  key.

### *How to:*

Press (1-10 keys) on the control panel to select to a specific menu item or use ▲ ▼ key to move up or down on menu item and then press  to enter specific menu item selected. Once changes are done, press  to confirm your selection and return to main screen.



### ❶ Service Menu:

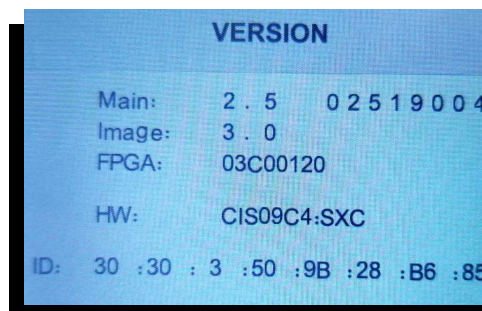
Service Menu is reserved for service professional or service provider and require a password to enter the Service Menu to make critical settings change which could significantly affect the counting results.

❶. Service Menu →  → Password (XXXX) → Enter into Setting Mode

### ❷ Version Information:

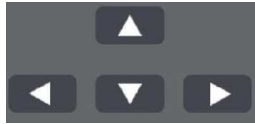
Enter ❷. Version Information to view software and hardware version of operator's **MIB-1**.

Password is not required. Once in this VERSION screen, device will display device Hardware (HW) and Software versions (Main, Image, FPGA) that are loaded into this particular **MIB-1** and are needed for your sales or service provider to trouble shoot a problem or to understand the need for a software upgrade.



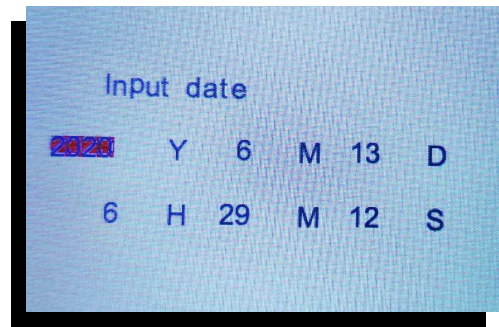
### ③ Current Time Setting:

Enter **③. Current Time Setting** to see current date and time and make changes as to date and time zone operator is located. Password is not required. Once operator entered this menu item, operator can change factory's default date and time set for US and Eastern time zone to any other zone of their need.



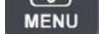
Use navigation keys to change your desire year (Y), Month (M), and Day (D) whileas operator can also change the time as to current time by follwing hour (H), Minute( M) and Seconds (S). Once process is

completed, press  and then  key to return to main screen.



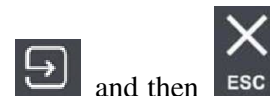
### ④ Setting DB (Denomination Batch)

**MIB-1** device allows operator to set specific batch number for each banknote denomination from default setting of 100 qty for every denomination and apply only to SINGLE and SORT counting mode.

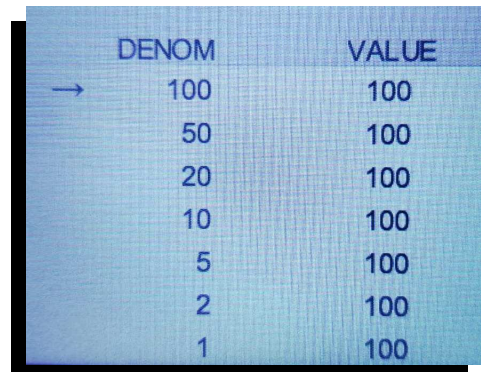
① Press  key → **MENU** → **4. Setting DB** menu item → select denomination you want to change using ◀ ▶ key.

② Once selected, operator can use ▲ key by continue pressing until achieving the desire batch number. Once completed with a denomination, move to next denomination by using ◀ ▶ keys.

③ Repeat the process. Once process is completed, press



and then  key to return to main screen. For further details, please see page 10.



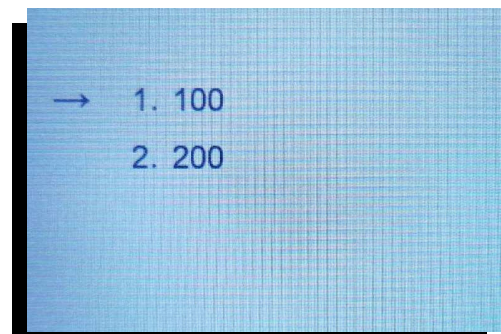
DENOM	VALUE
→ 100	100
50	100
20	100
10	100
5	100
2	100
1	100

### ⑤ Stacker Capacity:

Operator has option to set maximum stacker capacity to 100 or 200 (Maximum) and can be set by entering **⑤ Stacker Capacity**.

Enter **⑤ Stacker Capacity** → select 100 or 200 using

◀ ▶ key and confirm by  and then  key to return to main screen.



## **Chapter 5. Maintaining MIB-1**

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Cleaning (Exterior, Bill Path) of MIB-1 .....	24 – 25
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## ❑ Opening Bill Transport Path

***Cautions! Do not attempt to open the rear bill path cover while device is still in operation. Turn off the device before attempting to open the top bill path.***

- ➔ Open the rear bill path cover as illustrated below, only when banknotes are jammed in this area as prompted by the error message displayed on the LCD screen during a counting operation and device is halted.
- ① First, open the rear bill path cover during cleaning and maintaining of the MIB-1 device while power is Off.
- ② Press the Green tab (labeled as “Press”) and push it down to have access to bill path.
- ③ Once cleaning or jam removal of banknote is completed, pull it up to original location until it locked.

***Make sure to close the Rear Bill path cover securely after jammed banknotes are removed or after cleaning and maintaining task is completed.***

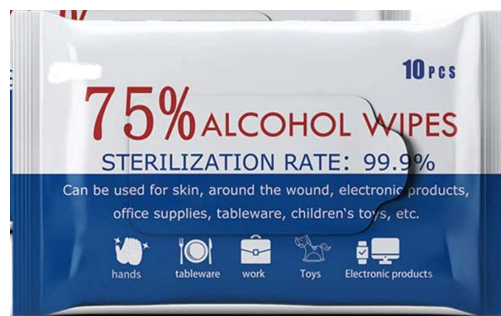


## ❑ Cleaning Exterior Surface of MIB-1 (Recommended Weekly)

### ☉ Cleaning the cover of MIB-1

Periodically clean the external surface of **MIB-1** as follows:

- ❶ Use Alcohol contained Disinfectant wet cleaning Wipes designed for electronic products to gently wipe the exterior body cover of the **MIB-1**. Wipe the surface again with a dry, soft lint-free cloth. Wait for the surface to dry completely and remove any fibers.



- ② or, prepare a mixture of a gentle kitchen-use detergent (one that does not contain abrasive powder or strong chemicals such as acid or alkaline). Mix with 5 cup water with 1 cup detergent.
- ① Soak the sponge with the mixture of diluted detergent for couple of minutes.
- ② Squeeze excess liquid out from the sponge.
- ③ Wipe the cover with the sponge in a circular motion and make sure not to let any excess liquid drips into the interior of the device.
- ④ Wipe the exterior surface of the device to remove the detergent.
- ⑤ Rinse the sponge with clean running water.
- ⑥ Wipe the cover with the clean sponge.
- ⑦ Wipe the surface again with a dry, soft lint-free cloth.
- ⑧ Wait for the surface to dry completely and remove any fibers.

### ❑ Cleaning Bill Transport Path of MIB-1 (Recommended weekly)

Use cleaning card designed for currency counters or check reader to clean the transport rollers and bill path as recommended and instructed by the cleaning card manufacturer (follow the instructions as they appear on the product packaging). Typically, such cleaning cards are design to clean debris and dirt on transport rollers as it transports through the bill path. Please note that, using of cleaning card on equipment is not an alternative to periodical preventative maintenance offers by your service provider, but provides additional benefits, such as dirt removal, reduction of errors and manual cleaning of the bill path.



In absence of such cleaning cards, follow the instructions below:

- ① Open the rear bill path cover. See above illustration as to how to get access to bill path.
- ② Gently wipe it or dust the bill path with a brush or a dry, soft lint-free cloth.
- ③ If stain or debris remains, moisten a soft lint-free cloth with water or a 50-50 mixture of isopropyl alcohol and water that does not contain impurities.
- ④ Squeeze out as much of the liquid as you can.
- ⑤ Wipe the bill path and the sensor surface again; do not let any liquid drip into the device.
- ⑥ Repeat 1-5 to clean the lower bill path.

\*NOTE: Avoid spraying cleaner directly on the device and be sure to dry the bill path before closing it.



## ❑ Error Codes

ERROR CODE	REASONS
<b>E1</b>	UV sensor error (Possible suspect banknote)
<b>E2</b>	Bill double error (Passing banknote thickness equal to 2 banknotes)
<b>E3</b>	Chain notes error (multiple banknotes attempted to feed)
<b>E4</b>	Half notes error (Passing banknote is shorter in length)
<b>E10</b>	Bill CIS sensor signal lose
<b>E11/18</b>	Denomination error (Mismatch denomination)
<b>E12</b>	Bill denomination error (Mismatch denomination)
<b>E13</b>	Bill facing recognize error (Mismatch denomination)
<b>E14</b>	Bill size recognize error (Mismatch denomination)
<b>E15</b>	Bill towards recognize error (Not-read Banknote)
<b>E20</b>	MT error (Possible suspect banknote)
<b>E21</b>	MG1 error (Possible suspect banknote)
<b>E22</b>	MG2 error (Possible suspect banknote)
<b>E23</b>	MG3 error (Possible suspect banknote)
<b>E24</b>	MG4 error (Possible suspect banknote)
<b>E30</b>	IR transmission area 1 error (Possible suspect banknote)
<b>E31</b>	IR transmission area 2 error (Possible suspect banknote)
<b>E32</b>	IR transmission area 3 error (Possible suspect banknote)
<b>E33</b>	IR transmission area 4 error (Possible suspect banknote)
<b>E34</b>	IR transmission area 5 error (Possible suspect banknote)
<b>E35</b>	IR transmission area 6 error (Possible suspect banknote)
<b>E36</b>	IR transmission area 7 error (Possible suspect banknote)
<b>E37</b>	IR transmission area 8 error (Possible suspect banknote)
<b>E38</b>	IR reflect area 1 error (Possible suspect banknote)

## □ Appendix. Specification

<b>Feed System</b>	Roller friction system
<b>Counterfeit Detection</b>	IR, MR-array (MT), Dual MG head, UV
<b>Denominating sensor</b>	CIS (Contact Image Sensor) sensor
<b>Counting Speed</b>	Count Mode (Piece): 800, 1000, 1200, 1500 notes/minute Discriminating Mode: 800, 1000, 1200 notes/minute
<b>Available Currencies</b>	USD and Canadian currency (Standard). Can be loaded up to 5 currencies as option.
<b>Hopper Capacity</b>	400 - 500 notes (Circulated banknotes)
<b>Pocket Capacity</b>	Max. 200 notes (Circulated banknotes)
<b>Countable Note Size</b>	60 x 85 x 0.08 mm - 100 x 190 x 0.12 mm
<b>Display</b>	3.5 Inch Graphic LCD
<b>Power supply</b>	100-240V AC, $\pm 10\%$ , 50/60Hz, 1.8A
<b>Ambient Temperature / Humidity</b>	0°C ~ 35°C (95° F); Ambient Humidity: 20% ~ 90% (no condensation)
<b>Power consumption</b>	< 50W
<b>Dimensions (inch) (W x D x H)</b>	11" (W) x 10.2" (D) x 10.6" (H)
<b>Weight (lbs. / kgs)</b>	Net: 14.3lbs / 6.5kg      Gross (packaging): 16.5lbs / 7.5 Kgs
<b>Interface</b>	RS-232 USB for PC
<b>Options</b>	Remote Display Thermal Printer

\* Specifications are subject to change without further notice.

## ❑ Limited Warranty, Disclaimer, Service:

### Limited Warranty:

Congratulations on your purchase of our **MIB-1** 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 of parts or damages resulting from any of the following: negligent use or misuse of the product, use on improper voltage or current, use 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-1** Currency Discriminator Counter.

### Disclaimer:

Warranty remedies limited to only parts repair or replacement of this equipment. Manufacturer, distributor, dealer, or sales representatives of **MIB-1** Currency 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-1** currency 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-1** 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.



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June 10, 2020

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