X-1000 Currency Discriminator

Stacker w/Reject Pocket

Instructions Manual V.01

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Chapter 1. Introduction

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❒ Abbreviations and Acronyms

USB	Universal Serial Bus
IR	Infrared
MG	Magnetic
MB	Megabyte
PC	Personal Computer

This guide covers the installation, operation, troubleshooting and maintenance of X-1000 Series Currency Discriminating Counter. We recommend reading this guide thoroughly before operating the Currency Discriminator. Then, as you become more familiar with X-1000, use it as a reference guide to look up information when you need it.

FC 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 UNDESIRED 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.

❒ Safety Precautions

Please read the safety precautions below before operating X-1000 Currency Discriminator Counter. These safety precautions guideline must be observed to avoid any potential hazards that could resulted in personal injuries or damage to X-1000 Currency Discriminator Counter.

Electrical Safety!

To avoid the risk of electrical shock, fire, or damage to X-1000 Currency Counter:

1. Do not remove the side, and bottom covers in any situation.
2. Do not disassemble X-1000 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 X-1000 is between AC 90V~240V, 60 Hz.
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 X-1000 immediately. Contact an authorized X-1000 service provider for assistance.
5. Keep liquids away from X-1000. 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 X-1000 immediately. Contact our authorized X-1000 service provider for help.

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 has 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 machine.
5. Keep X-1000 away from magnets, activated cellular phones, electrical appliances, or speakers within 13 cm / 5 inch.
6. 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 machine.

Chapter 2. Overview of X-1000

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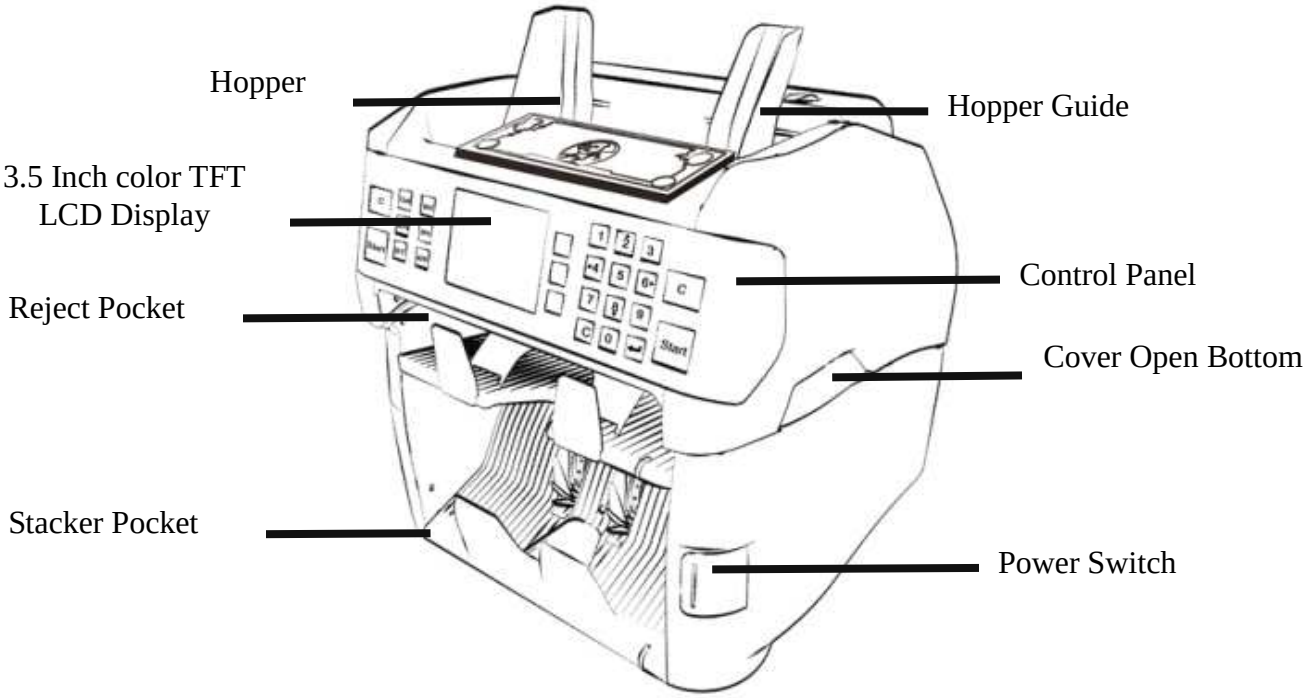
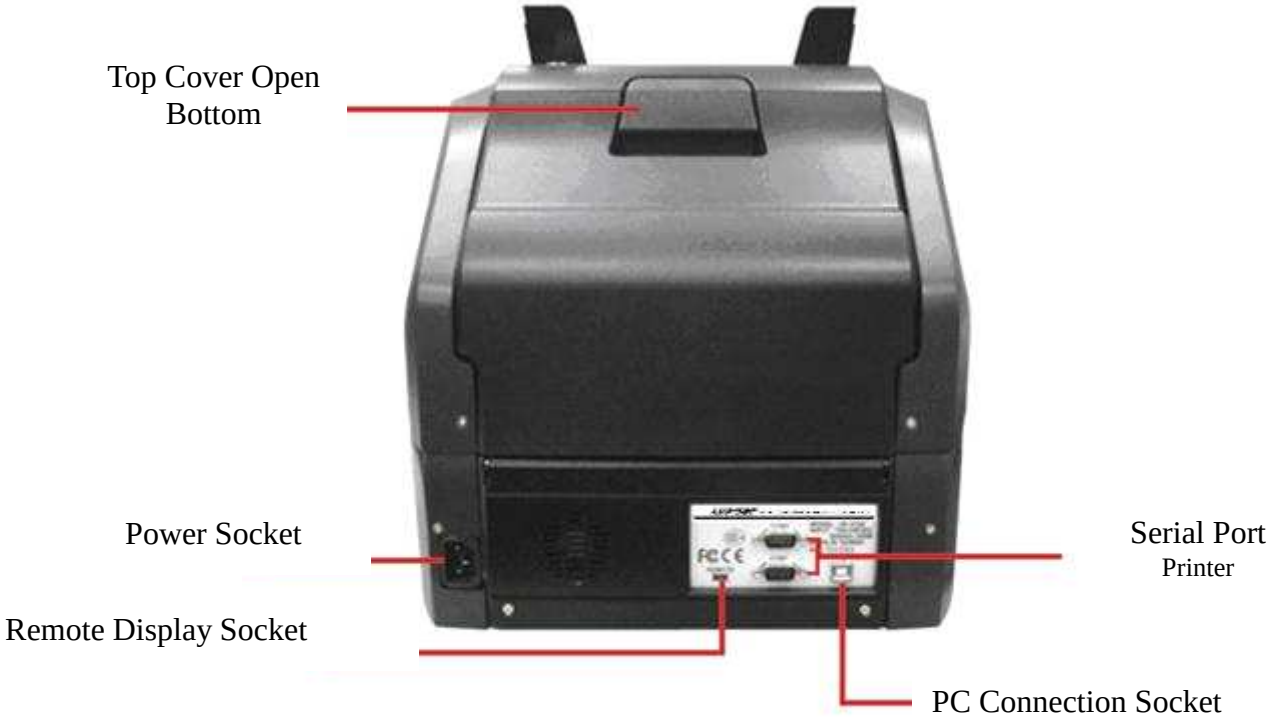
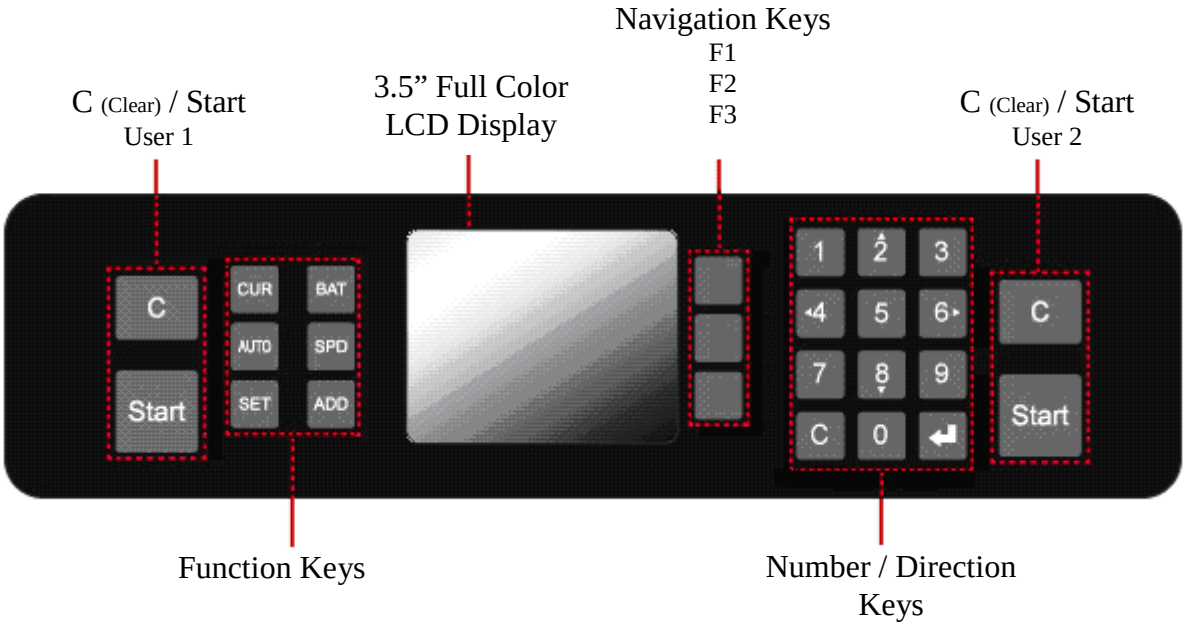
❒ X-1000 at a Glance

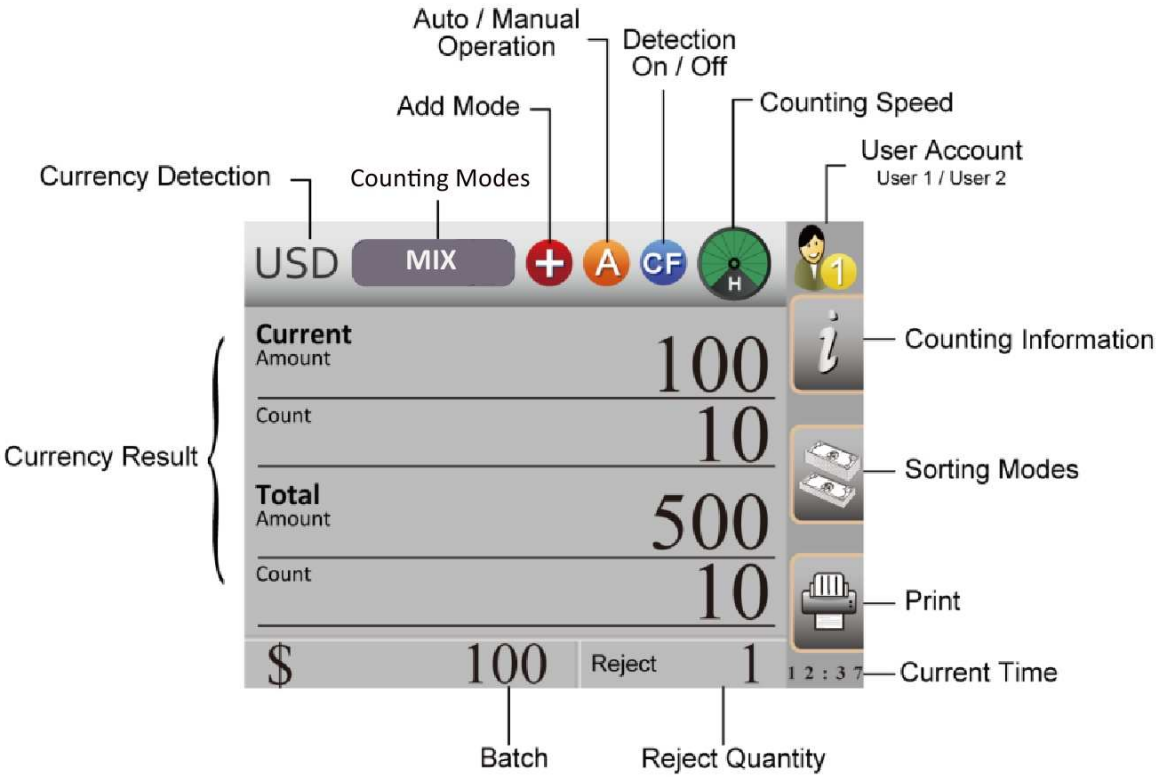




❒ Overview of Control Panel



❒ Overview of TFT Color Display



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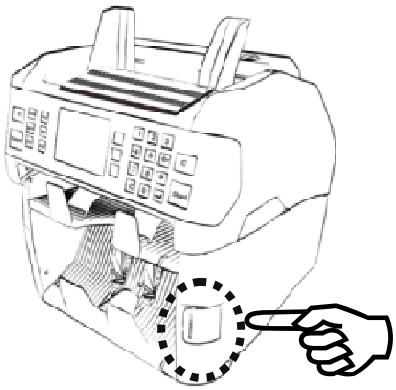
❒ Power On / Off

To Power on X-1000,

❶ Plug one end of the power cord into the A/C socket of the back of the machine and the other end into a standard AC power wall outlet (properly grounded) or to a power strip.

❷ Turn the Power on by pressing power Switch button located at the right front side of the device as illustrated below. Green indicator light will lit when power is turned on.

❸ After initializing, X-1000 will enter into main display.



To Power off X-1000,

❶ Confirm that all of the counting results are saved prior to powering off the machine (ignore if you decided not to save counting results).

❷ Turn the Power Off by pressing power Switch button off. Power indicator light will go off.

❒ Placing Bills

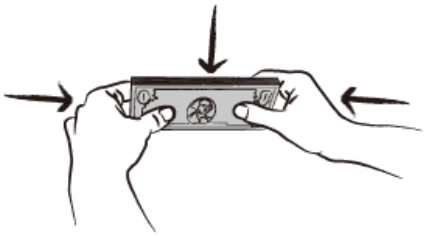
To operate the currency counter device efficiently, please follow the below instructions:

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 image 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.

❒ Dual Users Operation

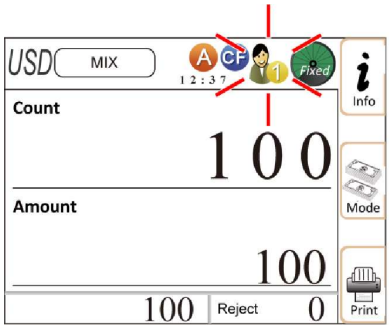
X-1000 supports simultaneous counting operation of two users. Two users and can take turn and operate X-1000 with maintaining their current preference. The results are not interfered with each other. At the end of counting operation, the counting results of the two users are saved separately. (The device has dual-RS232 ports that connect to two thermal or dot-matrix printers. Please check P.22 to see how to set thermal or dot-matrix printers for two users. To describe the Dual Users function in details,

❶ The two sets of [C] and [Start] keys on each side of the control panel are designed for handling operation of two users.

- The set of the LEFT is for (User 1).
- The set of the RIGHT is for (User 2)

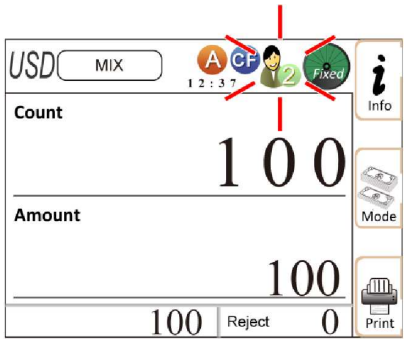
❷ (LEFT).

- Press the [Start] on the left side.
- To confirm and/or cancel an or all User-Interface functions for the device, use the [C] and [Start] of the left side.
- Press the [Start] on the right side to switch to User 2.



❸ (RIGHT).

- Press the [Start] on the right side.
- To confirm and/or cancel an or all User-Interface functions for the device, use the [C] and [Start] of the right side.
- Press the [Start] key on the right side to switch to User 1.



❹ Clearing result.

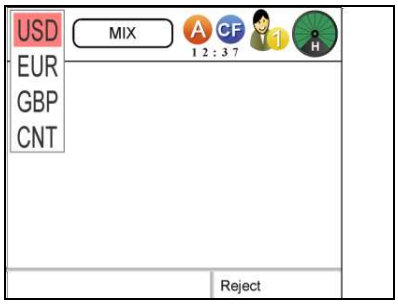
*NOTE: two users share the same setting function.

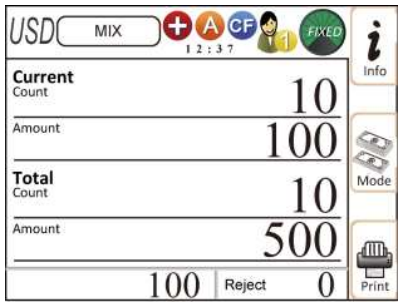
❒ Selecting Currency

CUR key is used to select your desired currency (if multiple currencies are equipped). The available currencies and CNT (Count Mode) are shown sequentially on the left top of the LCD display.

Press and hold the CUR.

- A list of all the available currencies that the machine is equipped with would be displayed on LCD display.
- Use the direction keys 2 / 8 or 4 / 6 to highlight your desired currency.
- Press the Start or ↵ to confirm the selection.

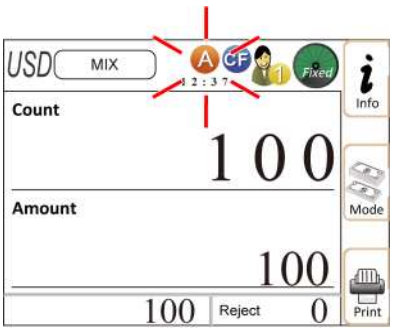


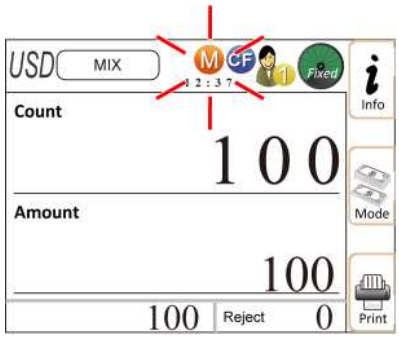


❒ Auto / Manual Start Mode

To operate X-1000 between Automatic and Manual Start counting mode, press the AUTO to switch between Auto / Manual Start Mode.

- When A (Auto Start Mode), the device starts counting operation after detecting banknotes on the hopper.
- When M (Manual Start Mode), the device starts counting operation only after the Start or ↵ key is pressed.



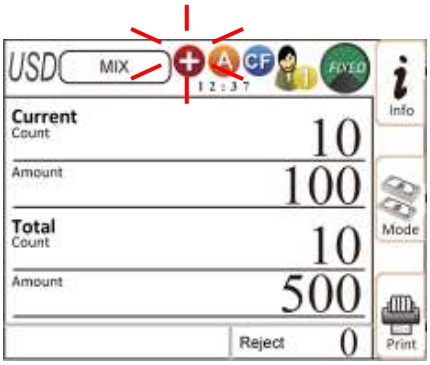


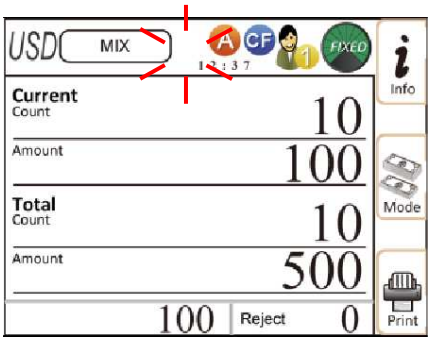
❒ Add mode

ADD function is to provide a cumulative count on CNT (Count) mode. As for discriminating modes, it will accumulate each running total in all modes and save the results into memory.

❶ Press the [ADD] to toggle between Add On / Off mode.

- When Add mode is turned on, an icon ⊕ is showed at the center top of the LCD display.





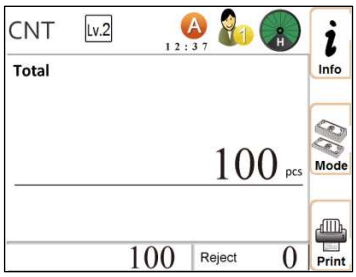
❷ After a count is completed, the current counted quantity is shown under [Count] and dollar amount of counted banknotes is shown under [Amount] column as above.

❒ Counting Speed (in Piece count)

While in CNT mode, user has the option to adjust the counting speed to count pieces of banknotes without discriminating, however, counting speed is fixed for all discriminating modes at less 800 banknotes per minute and not adjustable. To adjust variable counting speeds in CNT mode.

❶ Press the [SPD] key.

❷ Three different counting speeds (H, M and L) are shown sequentially on the right top of the LCD display as below:



- L : 600 banknotes / min.
- M: 900 banknotes / min.
- H: 1200 banknotes / min.

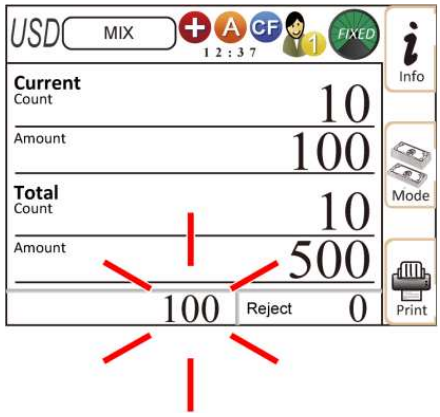
❒ Batch Counting

X-1000 allows users to select counting of banknotes by a preset number in CNT mode and in certain discriminating modes.

- The [BAT] key is used to activate Batch funtion.
- Select your present batch number (1-999) by pressing number keys (0-9) on the control panel.
- [Start] or [↵] key is used to confirm the setting and to return to menu.

❖ How to set a batch by pieces:

- Set a batch quantity by pressing number keys, allowing the device to count by the preset batch number
- The machine stops once the counted number reaches the preset quantity.



❖ How to clear a batch setting:

❶ Press the [BAT] to enter batch mode.

❷ Press the [BAT] again or press the [C] to clear the preset number.

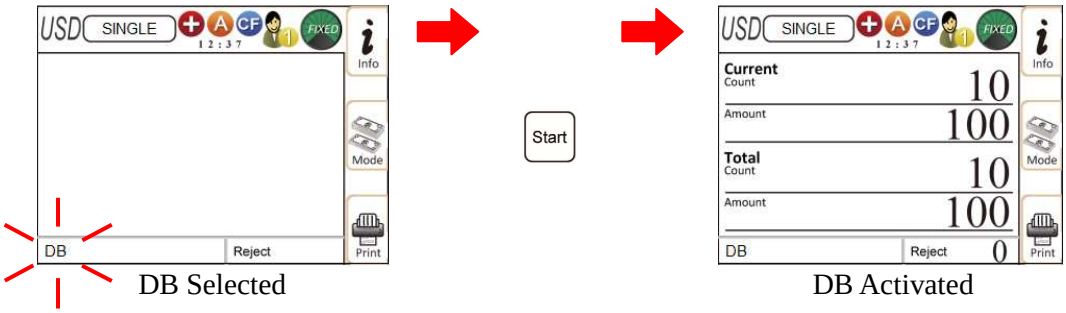
❸ Press the [Start] or [↵] to confirm the setting and return to menu.

❖ Denomination Batch Setting (DB):

Each Denomination associated Batch function (DB) is available with 'SINGLE', and 'FACE' (ALL)' modes and can be activated or deactivated by pressing [SET] and then [BAT] on batch mode. This is how they are organized: By pressing Batch key in SINGLE, or FACE(ALL), batch function will be changed recursively like below:

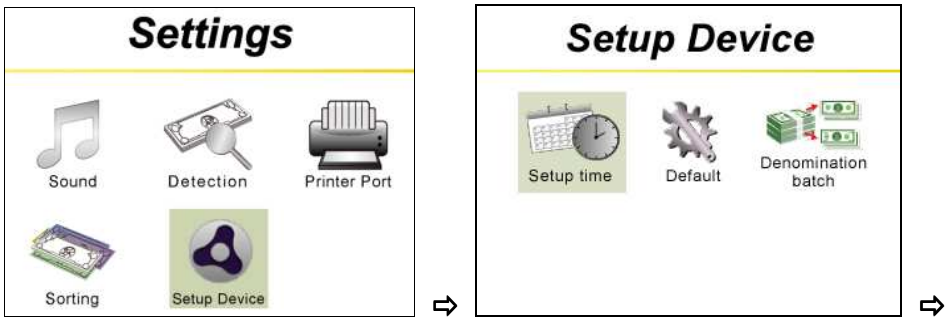
In SINGLE or FACE (ALL) mode:
Normal Batch (1-999) ON → (DB) Denomination Batch → All Batch Off (----)

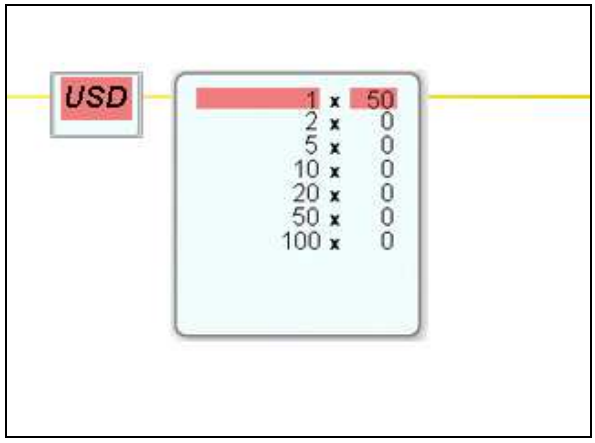
Once [SET] and then [BAT] are pressed on batch mode, "DB" message will be displayed on LCD ensuring activation of denomination batch function. If DB is selected, machine will count and batch the desired denomination by pre-set batch number.



DB Selected DB Activated

Denomination Batch Setting (DB) can be set under password protected setting menu. User can set desire batch number for each denomination and save them into memory. To set the denomination batch, enter into setting menu by pressing SET → password → Setup Device → 'Denomination Batch' and use direction keys 2 or 8 to select denomination and press Start to select denomination. Once denomination is selected, set batch number by using [0-9] keys and Start or ↵ to save the batch number into memory. See an example of DB set menu at the below:



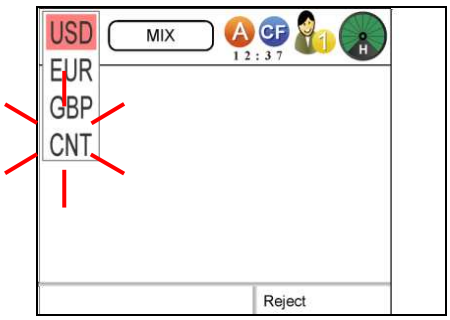


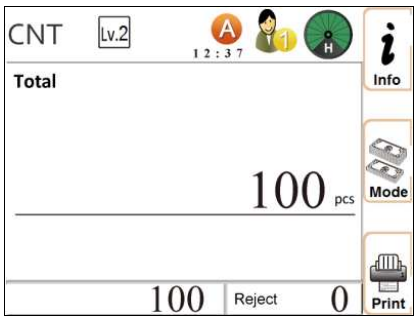
❒ Counting Mode (CNT)

❖ CNT - Count Mode

In CNT mode, X-1000 counts number of banknotes despite of denomination in a stack and at the end of the count, displays counted quantity at the center row of the LCD display. In the process, the total counted quantity is accumulated automatically and saved to memory.

CUR key is used to select CNT mode. Press and hold CUR key and the CNT (Count Mode) will be shown on the left top of the LCD display as below:





- Use the direction keys 2 / 8 or 4 / 6 to highlight CNT mode.
- Press the Start or ↵ to confirm the selection.

Density Level: (only in CNT mode)

X-1000 device is defaulted with proper density setting to count different conditions of circulated notes from factory. Software, however, does allow user to select a different density level to adjust double detection if necessary. In such case, while in CNT mode,

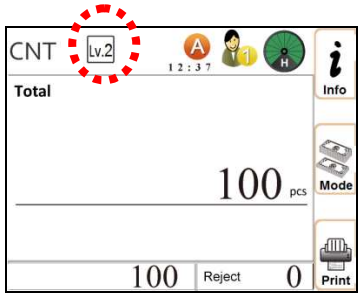
Press [F2 / Mode] key to select between four different double detection level. If the device cannot detect double feeding error correctly, then set double detection level to “Lv1” represents "LIGHT"; on the contrary if the device detects double even though banknotes are not double fed, then set double detection level to "Lv3" or "Lv4" represents DARK or VERY DARK respectively. Use the [F2 / Mode] key to set the appropriate double detection level (“LvX”).

Lv.1 : LIGHT

Lv.2 : NORMAL (Default)

Lv.3 : DARK

Lv.4 : VERY DARK



❒ Discriminating Modes

X-1000 is equipped with five main discrimination counting modes: MIX, SINGLE, FACE, ORIENT and SORT and other optional modes, if any. Further, the machine provides additional sorting modes to align single or mixture of banknotes with same face or same direction or issues. For details, please refer to the "Facing Sorting Mode" and "Orient Sorting Mode" described at P.29 - P.30. The main discriminating modes changes in sequence every time the MODE key is pressed;

MIX → SINGLE → FACE(ALL) → ORIENT (ALL) → SORT → Optional modes

Definations of Different Discriminating modes:

MIX

Mixture Denomination

- Counts and denominate mixture denomination of banknotes for individual and total valuation. If a banknote fails to denominate or determine to be a possible counterfeit / suspect (if CF mode is ON), the banknote then send to reject pocket.

SINGLE

Single or Stranger Mode

- Counts banknotes with the denomination of the first detected geniune banknotes as the standard and delivers banknotes with different denominations and suspicious banknotes to the reject pocket.

FACE

Face Sorting Mode

- Counts banknotes with the face of the first detected geniune banknotes as the standard, and delivers banknotes with different faces and suspicious banknotes to the reject pocket.
    - *NOTE: Further sorting function for FACE mode is described under Setting Mode. Please refer to P.29.

ORIENT

Orientation Sorting Mode

- Counts banknotes with the orientation of the first detected geniune banknotes as the standard, and delivers banknotes with different orientations and suspicious banknotes to the reject pocket.
    - *NOTE: Further sorting function for ORIENT mode is described under Setting Mode. Please refer to P.30.

SORT

Sorting Mode (for Organized Strap)

- Counts and sorts organized denomination strap of banknotes. Banknotes must be organized by each denomination in a strap for Sort function to be effective.

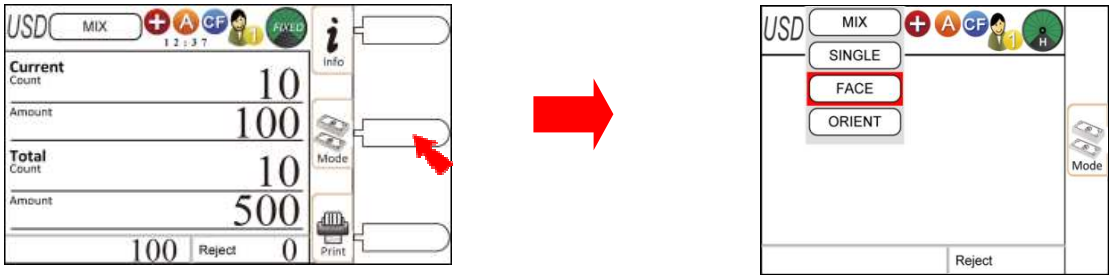
SERIAL

Serial Number Recognition Mode (Optional Feature)

- Counts and records serial numbers of banknotes. Serial numbers can be shown on a connected PC or be printed out via a connected thermal printer.

To process banknotes with different Discriminating functions:

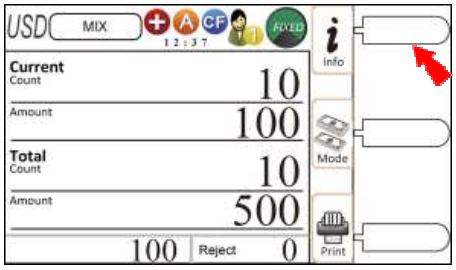
In order to enter into discriminating modes, press and hold the [F2 / Mode] button for a second. A list of all discriminating modes will be displayed in sequence next to USD Currency symbol:



- Use the direction keys [2] / [8] or [4] / [6] to highlight a discriminating function.
- Press [Start] or [↵] to confirm the selection.

❖ **Counting Results**

Once a stack of banknotes counting is completed, press navigation button [F1 / i] to view the detailed counting results of the current count.

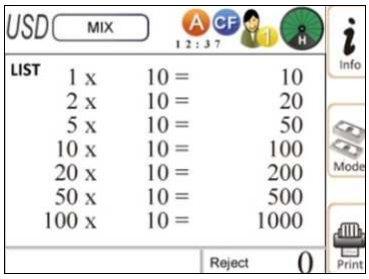


❖ **Changing Display Contents**

The X-1000 provides various information regarding counting results. Every time pressing [Info] key, the display changes sequentially. There are 4 display modes: Display Result Mode (Detail View), Grand Total mode (Grand Accumulation View), Day Total (Total View by Day), and Reject Reasons (Reasons of Rejects). There are some examples of each Display mode.

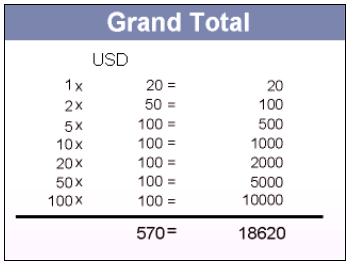
❶ Display Result Mode

- The detailed result is shown with the value, quantity and subtotal of accepted banknotes.
- Use direction keys [2] / [8] to scroll down to go to the second page to display any remaining counted denomination not appearing on the first page.



❷ Grand Total

- Grand Total feature is only available when [ADD] mode is activated.
- In Grand Total mode, all confirmed transactions are accumulated to Grand Total list.
- Press [CUR] to see Grand Total list of different counted currencies (apply to mult-currency model).



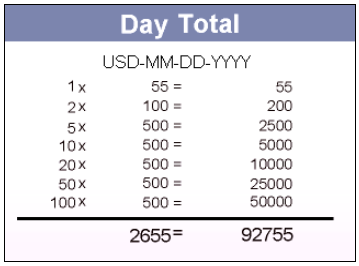
Grand Total

USD

1 x	20 =	20
2 x	50 =	100
5 x	100 =	500
10 x	100 =	1000
20 x	100 =	2000
50 x	100 =	5000
100 x	100 =	10000
	570 =	18620

❸ Day Total

- Day Total feature only available when [ADD] mode is activated.
- In Day Total mode, all confirmed transactions for the current day is accumulated to Day Total list.
- Press [CUR] to see Grand Total list of different counted currencies (for multi-currency model).
- Further, all counted results within the last 30 days are saved into X-1000 memory. Use direction keys [2] / [8] to change the counting results for a different date of your need.



Day Total

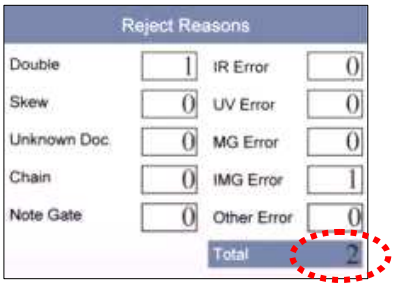
USD-MM-DD-YYYY

1 x	55 =	55
2 x	100 =	200
5 x	500 =	2500
10 x	500 =	5000
20 x	500 =	10000
50 x	500 =	25000
100 x	500 =	50000
	2655 =	92755

❹ Reject Reasons

- Numbers of all rejected banknotes are displayed under this display screen.
- Brief definition of reject reasons of banknotes as below:

  - **Double**: Double feeding of banknote.
  - **Skew**: A banknote is skewed during the count.
  - **Unknow Doc.**: An unknown image pattern.
  - **Chain**: Chain banknotes in the bill path.
  - **Note Gate**: A gap between two banknotes is too close.
  - **IR Error**: Infrared error.
  - **MG Error**: Magnetic error.
  - **IMG Error**: Image pattern error.
  - **Other Error**



Reject Reasons

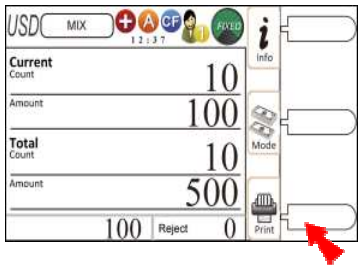
Double	1	IR Error	0
Skew	0	UV Error	0
Unknown Doc.	0	MG Error	0
Chain	0	IMG Error	1
Note Gate	0	Other Error	0
		Total	2

❒ Printing the Summary

X-1000 can be connected with a Thermal or Dot-Matrix printer to the RS232 serial port to print current counting result or grand total and day total that are saved in the memory.

❶ Connect a Dot-Matrix printer with the device.

- The upper RS232 serial port is reserved for User 2.
- The lower RS232 serial port is reserved for User 1.
- As optional, both users can use one single printer.

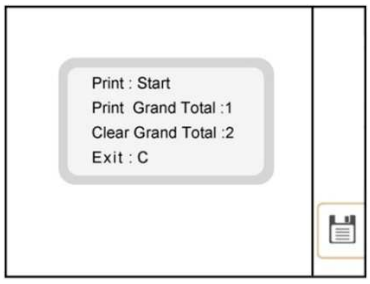


❷ Once printer is connected and counting is completed,

Press the Navigation button [F3 / Print].

❸ Follow the display message to proceed.

- / Start: Print one receipt of breakdown list.
- 2 pcs: Print two receipts of breakdown list.
- : Confirm the transaction into grand total and day total
- Press the C to cancel the operation.



❹ Receipt.
The receipt lists the "currency name", "quantity by denominations", "subtotal" and "total quantity and amount" of counted banknotes.

❒ Clear error messages

If the bill path of the device is opened intentionally or accidentally, an error message will appear on the LCD Screen as below and device will stop counting. Close the bill path securely and follow the steps below:

❶ Press the C key to clear error message.
❷ The motor will start running, thus removing all the foreign matters in the bill path to the reject pocket.
❸ The machine will resume operation in correct manner.

❒ Error Message Codes

Check Bill Path

- Please open the Top bill path and check to make sure no banknote or other foreign matter got stuck inside.

- Error with Top bill path. Please open the Top bill path to make sure no banknote or foreign matter inside got stuck inside.

- Please open the Top bill path and remove the jammed banknotes from the area and close the path.

- Error with buttom bill path. Please open the bottom bill path and check to make sure no banknote or foreign matter got stuck inside.

Open Bill Path

- Top bill path is opened. Please close it before resuming operation.

- Buttom bill path is opened. Please close it before resuming operation.

Removal of Banknotes

- Please remove all banknotes from Note hopper and replace them again to resume counting.

- Please remove all banknotes from reject pocket. After removing them, the operation resumes.

- The Reject pocket is full. Please remove all banknotes from reject pocket to resume operation.

- Please remove all banknotes from the stacker. After removing them, the oepration resumes.

- The stacker is full. Please remove all banknotes from the stacker.

- Batch not completed error. The counted quantity doesn't reach preset number. Place more banknotes on the hopper to continue the batch counting or start all over.

Motor and Solenoid Error

- Please check whether motor error is consistant when power on everytime.
- Please make sure the encorder is working correctly.
- If the error still persists, please contact your service provider or sales representative.

- Please check if there is any banknote jammed around the bottom (Reject) bill path area. If not, please contact your service provider or sales representative.

Chapter 4. Setting X-1000

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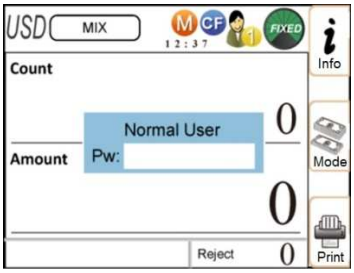
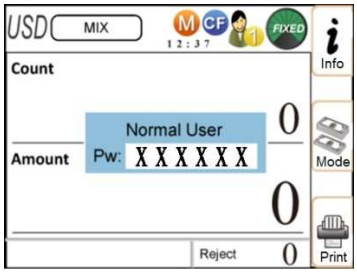
❒ Set Function and its Parameter Settings

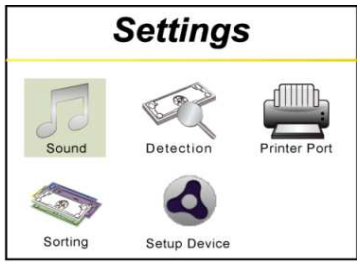
To set a function and its parameters, firstly, enter into Setting Mode by pressing [SET] key. After pressing [SET] key, a password requirement will prompt on the screen; Enter password provided to you by your sales representative and press [Start] key to confirm.

[[SET] → Password (XXXXXX) → [Start] / [↵] → enter into Setting Mode]

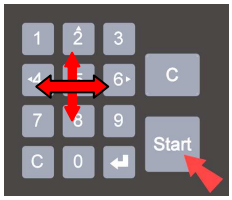




Once in Setting mode, the Settings screen will appear for user to select its desired function and settings. Follow the below steps to scroll through the Settings menu:



❶ Browsing menu with direction keys.
Under the Setting Mode, the below 4 numeric keys represent as direction keys:



[2] / [8] / [◂4] / [6▸]

❷ After highlighting an icon / sub menu, press the [Start] or [↵] key to confirm the selection.

❸ Return to main screen.

- Press the [C].

This chapter will now describe each of the below function settings and its parameters in great length:

Sound Setting

Alarm On/Off

Detection On/Off

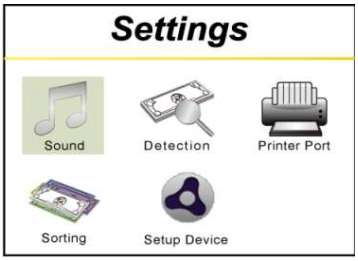
Printer Options

Sorting Mode Setting

Setup Device Mode

❒ Sound Settings

To set different parameters of Sound Setting, first,

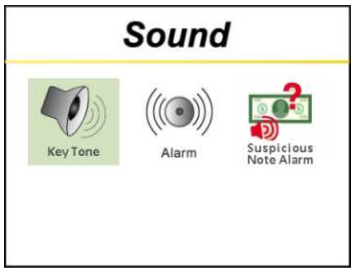


- Highlight the icon .
- Confirm selection with the Start or ↵.

The Sound Setting menu will enter into a sub-menu:

❖ Setting Key Tone

Under this menu, user has the option to turn on or off the sound appear from pressing keys (Default: ON). See below:



❶ Highlight the icon .

❷ Confirm selection with the Start or ↵.

❸ To turn key sound on or off.

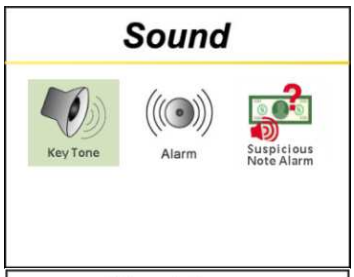
- Use the direction keys 2 / 8 or 4 / 6 to highlight your selection.

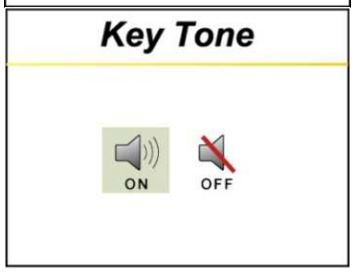
❹ Confirm setting.

Press the Start or ↵ to confirm setting and return to sub-menu.

❖ Setting Alarm

Under this menu, user has the option to turn ON / OFF warming alarm in the event of error messages (Default setting: OFF). In order to turn ON / OFF Alarm,





❶ Highlight the icon .

❷ Confirm Selection with the Start or ↵ key.

❸ Turn alarm on or off.

- When alarm is turned on, the device sounds with a message code shown on the LCD display.
- Press the Start to confirm setting and to exit.

❹ Selecting a user desired mode.

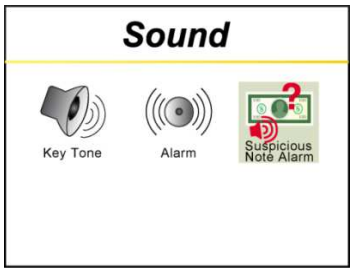
- Use the direction keys 2 / 8 or 4 / 6 for highlighting.

❺ Confirm setting.

- Press the Start or ↵ to confirm setting and return to previous screen.

❖ Suspicious Note Alarm

Under Suspicious Note Alarm icon, user has the option to turn ON / OFF warning alarm (beep sound) in the event of suspect or counterfeit banknotes. (Default setting: OFF). In order to turn ON / OFF Suspicious Alarm sound,

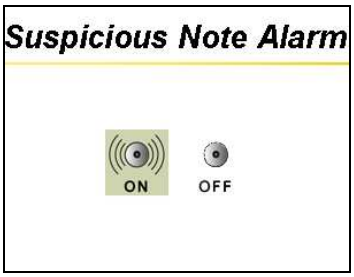


❶ Highlight the icon [Suspicious Note Alarm.]

❷ Confirm Selection with the Start or ↵ key.

❸ Turn alarm on or off.

- When alarm is turned ON, the device sounds with a message code shown on the LCD display when there is a suspect or counterfeit banknote is detected.



❹ Selecting a desired mode.

- Use the direction keys 2 / 8 or 4 / 6 for highlighting.

❺ Confirm setting.

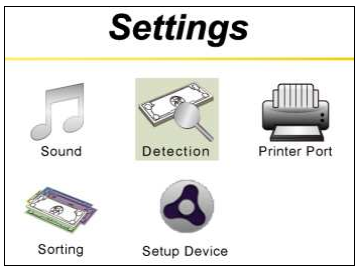
Press the Start or ↵ key to confirm setting and return screen.

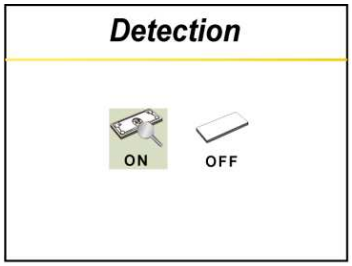
❒ Detection On / Off

User can turn ON or OFF counterfeit detection function while in Discriminating Modes (Default: On). In order to enter into the Setting Menu,

❶ Highlight the icon .

❷ Confirm selection with the Start or ↵ key.





❸ Setting detection

- : The device counts with counterfeit detection ON and delivers suspicious banknotes to the reject pocket.

- : The device discriminates banknotes without further checking counterfeit security features.

❹ Selecting a desired mode.

- Use the direction keys 2 / 8 or 4 / 6 for highlighting your selection.

❺ Confirm setting.

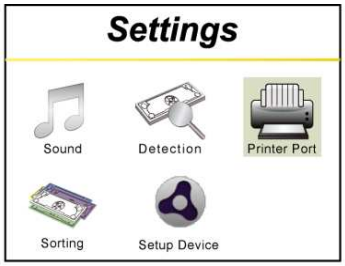
- Press the Start or ↵ to confirm setting and exit.

❻ When the Counterfeit Dection is turned ON, an icon CF is shown on the main display.

❒ Printer Options

Under this menu, user has the option to select printer Port, Paper size and Baud Rate. To enter into this menu, follow the below:

❖ Printer Port

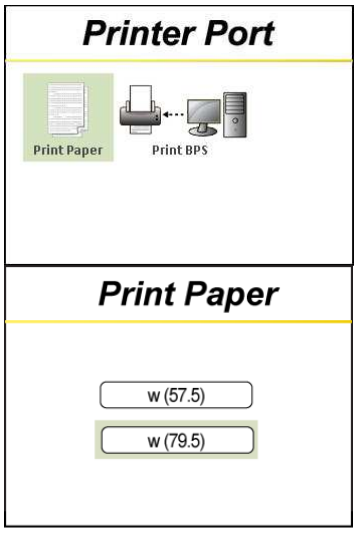


❶ Highlight the icon .

❷ Confirm Selection with the Start or .

❒ Print Paper

To setup a paper size of the connected printer (Default: W(79.5))



❶ Highlight the icon .

❷ Confirm Selection with the Start or .

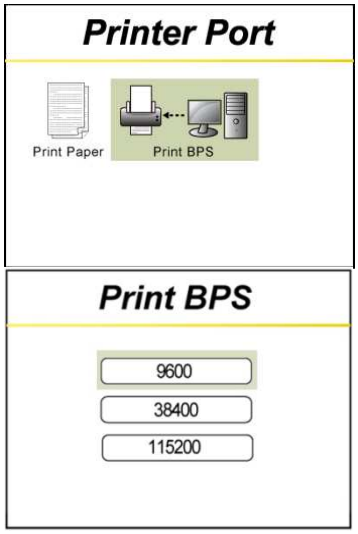
❸ Check the paper size of the connected thermal printer.
- W(57.5): 2 inches paper.
- W(79.5): 3 inches paper.

❹ Select the paper size of the connected thermal printer.
- Use the direction keys 2 / 8 or 4 / 6 for highlighting.

❺ Confirm setting.
- Press the Start or to confirm setting and exit.

❒ Printer Baud Rate (BPS)

To setup baud rate for printer (Default: 9600bps)



❶ Highlight the icon

❷ Confirm Selection with the Start or .

❸ Find the proper baud rate.
- 9600:9600bps (Default for Dot Matrix)
- 38400:38400bps
- 115200:115200bps (for Thermal printer)

❹ Select the baud rate of the connected printer.
- Use the direction keys 2 / 8 or 4 / 6 for highlighting.

❺ Confirm setting.
- Press the Start or to confirm setting and exit.

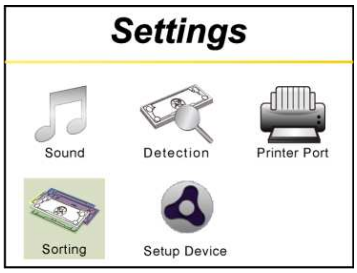
❒ Printer Type:

Dot Matrix printer is set default for X-1000 device. In order to switch from Dot Matrix printer to Thermal and Vice-versa, service professional must enter into maintenance mode (password protected) to make the change. Contact AMROTEC for password to enter into Maintenance mode.

❒ Sorting Mode Setting

X-1000 is equipped with two main sorting modes for currency sorting need. These sorting modes are: FACE Sorting and ORIENT Sorting which are then divided into two sub-sorting features as describes below:

To enter into Sorting Mode Settings menu

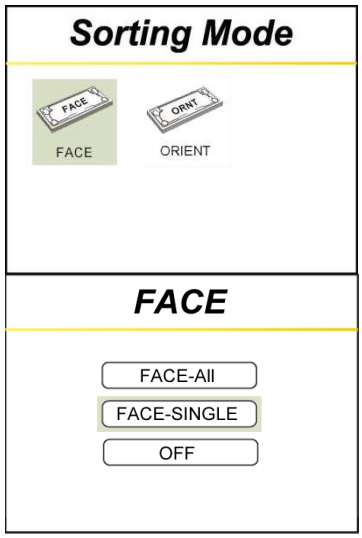


❶ Highlight the icon .

❷ Confirm Selection with the Start or .

❖ FACE Sorting Mode

Choose your desire mode for Face sorting. (Default: **FACE-SINGLE)**



❶ Highlight the icon .

❷ Confirm Selection with the Start or .

❸ Locate your desired function for face sorting.

- FACE-SINGLE: *Face sorting for single denomination*
  [Face sorting by face and single denomination]

➲ In this mode, X-1000 allows you to sort mixed banknotes by face and a certain denomination. The device reads the first note to find out the face and denomination information.

- FACE-All: *Face sorting for mixture of denominations*
  [Face sorting by face and Mixture of denominations]

➲ In this mode, X-1000 allows you to sort mixed banknotes by face. The device reads the first note to find out the face information despite of denomination.

- OFF: *Face sorting function is turned off.*

➲ If turned off, X-1000 device turns off face sorting function and the option does not appear on the list of sorting mode.

❹ Select the desire function.

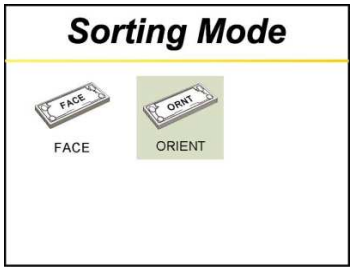
- Use the direction keys 2 / 8 or 4 / 6 for highlighting.

❺ Confirm setting.

Press the Start or to confirm setting and exit.

❖ ORIENT Sorting Mode (ORIENT)

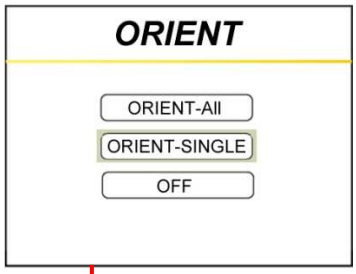
Choose your desire mode for Orientation sorting. (Default: **ORIENT-SINGLE)**



❶ Highlight the icon .

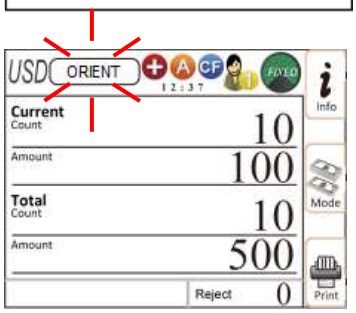
❷ Confirm Selection with the Start or ↵.

❸ Locate your desire function for face sorting.



◆ ORIENT-SINGLE: *Orientation sorting for single denomination*
[Orient sorting by face, direction & single denomination]
➲ In this mode, X-1000 arranges banknotes by direction, face and denomination. The device reads the first note and find out information regarding direction, face and denomination.

◆ ORIENT-All: *Orientation sorting for mixture banknotes*
[Orient sorting by face, direction & mixture banknotes]
➲ In this mode, X-1000 allows you to sort mixture of banknotes by certain orientation. The device reads the first note to find out the face and direction information despite of denomination.



◆ OFF: *Orient sorting function is turned off.*
➲ If turned off, X-1000 device turns off face sorting function and the option does not appear on the list of sorting mode.

❹ Select your desire function.
◆ Use the direction keys 2 / 8 or 4 / 6 for highlighting.

❺ Confirm setting.
◆ Press the Start or ↵ to confirm setting and exit.

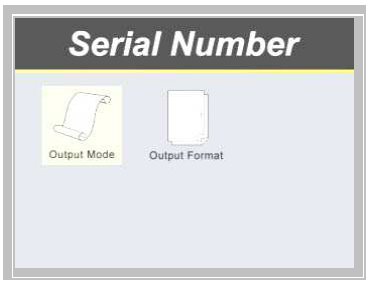
❖ SN Mode (Optional)

Output Mode

❶ Highlight the icon SN Mode.

❷ Confirm Selection with the Start.

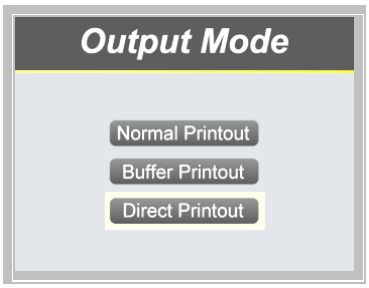
Choose a desired output mode for printing out serial number of notes.
(Default: Normal Printout)



❶ Highlight the icon SN Mode.

❷ Confirm Selection with the Start.

❸ Find a desired output mode for printing serial number.



- Normal Printout: Print out the serial number of counted notes to a printer and save the counting record in the temporary buffer memory. The record can be printed out in 2 receipts. Limitation up to 500 notes.
- Direct Printout: Real time printing out receipt with serial number in a printer. No limitation to numbers of banknote, but the machine doesn't save counting result in the buffer memory.

❹ Select the desire mode.

- Use the direction keys 2 / 8 or 4 / 6 for highlighting.

❺ Confirm setting.

- Press the Start to confirm setting and go back to upper layer.

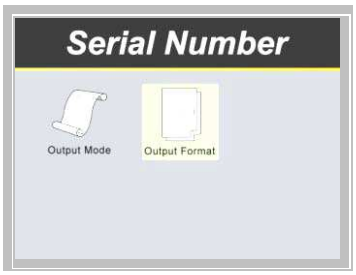
Output Format

Warning alarm when messages and/or errors occur. (Default: Image)

❶ Highlight the icon SN Mode.

❷ Confirm Selection with the Start.

Choose a desired output mode for printing out serial number of notes.
(Default: Normal Printout)

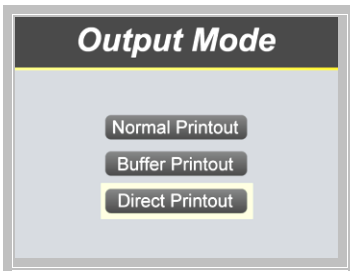


❶ Highlight the icon SN Mode.

❷ Confirm Selection with the Start.

❸ Find a desired output format for printing serial number.

- Image: With image of serial number.
- String: With string of serial number.
- Image & String: With image and string of serial number.



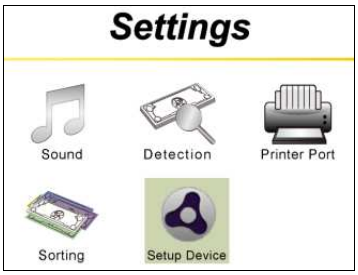
❹ Select the desire mode.

- Use the direction keys 2 / 8 or 4 / 6 for highlighting.

❺ Confirm setting.

Press the Start to confirm setting and go back to upper layer.

❒ Setup Device

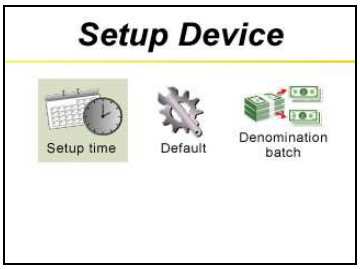


❶ Highlight the icon .

❷ Confirm selection with the Start or ↵.

❖ Setup Time

To setup information of date and time.

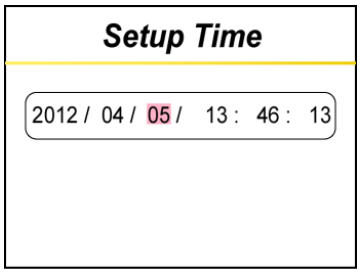


❶ Highlight the icon .

❷ Confirm selection with the Start or ↵.

❸ Change date and time setting.

- Use the direction keys 2 / 8 or 4 / 6 to highlight a desire zone to modify.



❹ Press Start or ↵ to select and confirm the modified zone.

- The color of the selected zone will change from pink to red.

❺ Use number keys to change settings.

❻ Press C to Return to previous menu.

Chapter 5. Maintaining X-1000

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❒ Accessing of Bill Paths

Open top bill path

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

➲ Open the Top bill path only when banknotes are jammed in this area as prompted by the error message displayed on the TFT screen during a counting operation and only when device is halted.

➲ Open the Top bill path during cleaning and maintaining of the X-1000 device while power is Off.

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

Open bottom bill path

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

➲ Open the reject bill path only when banknotes are jammed in this area as prompted by the error message displayed on the TFT screen during a counting operation and only when device is jammed / halted.

➲ Open the reject bill path during cleaning and maintaining of the X-1000 device while power is Off.

❒ Cleaning and Preventative Maintenance of X-1000

Weekly Surface Cleaning of X-1000 Machine
(Turn off the device first!)

⇐ Gently wipe or dust off exterior body surface, Hopper, Stacker and Reject Pocket area of X-1000 device with a dry, soft lint-free cloth or brush provided with the machine.
⇐ You may also use Can Air duster to clean up debris (make sure machine is taken out from your working area to a cleaning room / area.
⇐ It is advisable to use currency counter cleaning card to run through the machine once in a week for low-uses and frequently for high-volume uses. Please follow all instructions provided by clean card manufacturer.

Quarterly Preventative cleaning of X-1000 exterior / surface:

❶ 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.
❷ Soak the sponge with the mixture of diluted detergent for couple of minutes.
❸ Squeeze excess liquid out from the sponge.
❹ 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.
❺ Wipe the exterior surface of the device to remove the detergent.
❻ Rinse the sponge with clean running water.
❼ Wipe the over with the clean sponge.
❽ Wipe the surface again with a dry, soft lint-free cloth.
❾ Wait for the surface to dry completely and remove any fibers.

Quarterly Cleaning of the bill path of X-1000 device (Service Provider only)

❶ Open the upper bill path.
❷ Gently wipe it or dust the bill path with a brush or a dry, soft lint-free cloth.
❸ If stains or debris remain, moisten a soft lint-free cloth with water or a 50-50 mixture of isopropyl alcohol and water that does not contain impurities.
❹ Squeeze out as much of the liquid as you can.
❺ Wipe the bill path and the sensor surface again; do not let any liquid drip into the device.
❻ 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.**

❒ Appendix. Specification

Feed System	Roller friction system	
Counterfeit Detection	IR, MG, MR & UV	
Counting Speed	Piece Count Denomination Count	600 / 900 / 1200 notes/min. less 800 notes/min fixed.
Available Currencies	1 Standard. Up to 5 currencies (optional)	
Denomination Detection	Single CIS sensor	
Hopper Capacity	500 notes (circulated notes)	
Pocket Capacity	Main Pocket Capacity Reject Pocket Capacity	250 notes (circulated notes) Max. 100 notes (circulated notes)
Countable Note Size	60 X 85 X 0.08mm ~ 100 X 190 X 0.12mm	
Display	3.5 Inch color TFT	
Power supply	100 ~ 240V AC, 50/60Hz	
Power consumption	Max. 150W	
Dimensions (inch / mm)	13” (W) x 13” (D) x 13.8” (H) 330(W) X 330 (D) X 350 (H)	
Weight (lbs / Kgs)	Approx. 33lbs / 15Kgs	
Interface Ports	RS232 and USB. SD card Slot built-in.	
Options	Remote Display Thermal Printer	

Limited Warranty, Disclaimer, Service:

Limited Warranty:

Congratulations on your purchase of our X-1000 Series Currency Discriminator Counter. The manufacturer warrants this unit for a period of 90 days 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 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 your sales representative of X-1000 Currency Discriminator Counter.

Disclaimer:

Warranty remedies limited to only parts repair or replacement of this product. Manufacturer, distributor, dealer or sales representatives of X-1000 Series Currency Discriminator Counter shall not be liable for any incidental or consequential damages for breach of any express or limited warranty on this products or any part thereof. Except to the extent prohibited by applicable law, manufacturer, distributor, dealers, sales representatives of X-1000 series Counter Discriminator Counter disclaims any implied warranty or merchantability or fitness for a particular purpose of this product 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 our X-1000 Currency Discriminator Counter, contact your sales representative or your Service Provider you have maintenance contract with. Cost of the repair as well as any applicable shipping charges will be provided to you.

All product returned for service must contain a RMA number that will be supplied to you by your Sales Representative or your Service Provider you have maintenance contract with. NO PRODUCT WILL BE SERVICED WITHOUT A RMA NUMBER CLEARLY PLACED ON THE OUTSIDE OF THE SHIPPING CARTON. It is recommended that all products returned for service must be returned to our authorized Service Provider in the original packaging.

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