## User Manual of FedPro CR1450

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## 1 Introduction

### 1.1 Important Notes and Safety Instructions

- The machine is exclusively for indoors usage, do not use it outdoors.
- Do not disassemble machine. If there are any problems with operations, please contact the authorized distributor.
- Do not expose device to liquids, extreme humidity moisture.
- Avoid operating device in environments with strong magnetic and electromagnetic fields. e.g. away from magnets, other electrical appliances, etc.
- Use the supplied power cord at a properly grounded outlet.


### 1.2 Unpacking

Please check whether the appearance of the machine is in good condition and whether all of the accessories are available. Inside the package there shall be the following.


Cleaning brush


External display (Optional)
ertay


User manual


Fuse


Cable for printer (Optional)


USB cable (Optional)

### 1.3 Figures Used

The figures in this manual are for illustrative purpose only.

## 2. Model Overview

### 2.1 Front View



### 2.2 Rear View



### 2.3 Control Panel Overview



| Key | Description |
| :---: | :--- |
| CUR | 1. Selection of desired currency. <br> 2. Used as "+1" function in the menu interface. |
| BATCH | 1. Batch function ON/OFF, and set batch number. <br> 2. Used as "-1" function in the menu interface. |
| DISPLAY | 1. View the counting detail. <br> 2. Long press to print the counting detail. |
| MODE | 1. Selection of the counting mode: Mix $\rightarrow$ Single $\rightarrow$ Face $\rightarrow$ Orient $\rightarrow$ Count <br> 2. Used as a navigate key " $\uparrow$ " in the menu interface. |
| ADD | 1. "ADD" function ON/OFF. <br> 2. Used as a navigate key " $\downarrow$ " in the menu interface. |
| MENU | 1. Press to enter the User menu. <br> 2. Press to return to the previous menu at menu interface. |
| CLEAR | 1. Clear the number of counted banknotes. <br> 2. Clear the unsaved settings. <br> 3. Press to turn the batch function OFF. |
| START | 1. Start counting. <br> 2. Confirm selection in menu interface. |

## 3. Operation

### 3.1 Power ON/OFF



## How to switch on device:

1. Connect the machine with power cable and the power outlet.
2. Press the Power Switch button on the rear side of machine.
3. After a short boot-up and self-test, machine will enter to the main counting interface.

## How to switch off device:

Press the power switch button to turn the machine OFF.

### 3.2 How to Handle and Place Banknotes

To count banknotes smoothly, please follow the following guidelines:

1. Avoid counting wet, excessively dirty or spoiled notes.
2. Check for foreign matters mixed with the notes, i.e.: paper chips, rubber bands, clips, dust, etc. which will jam the note path or even damage the sensors.
3. Remove folds or curls from the notes before placing them in the hopper.
4. Align all the corners and edges of the notes, unevenness could cause errors.
5. Put the notes in the center of hopper and adjust the hopper guides if necessary.

### 3.3 Main Screen Overview



### 3.4 Currency Selection

Press CUR key to select the desired currency. Or tap the "EUR" on the display to enter the currency selection interface.
Note: "ANY" currency means you can count any currencies when you select "ANY", it will only count the PCS without denominations or any CF detection.


### 3.5 ADD Mode

- In ADD mode (accumulative counting), machine will summarize the results of multiple counting times.
- Press ADD key or tap the ADD icon to turn the ADD function ON/OFF.
- When ADD mode is turned on, the "ADD" appears in the top line of the display.
- When ADD mode is turned off, the "ADD" get gray from the display.



### 3.6 Batch Counting \& Value Batch counting

## How to count a preset number of banknotes.

- Use Batch key to select or set banknote batch number.
- Normal batch will be cyclic switching as: ---, 100, 50, 20,10, ---.
- Value batch will be cyclic switching as: ---,500000, 400000, 300000, 200000,100000, 50000, 30000, 20000, 10000, 5000,2500, 2000, 1000, 500, 100, 50, 10, ---.


## How to perform batch counting.

- Tap Batch icon or long press Batch key to enter Batch counting \& Value Batch counting number setting interface. You can input the number via the touch keyboard. Then tap "OK" button or press START key to save the setting. (The largest batch value can be set up to 999 and Batch value can be set up to 99999999)
- Machine will now count the set number of notes \& values and then stop.


## How to turn off the batch function

- When set the value as " 0 ", the batch counting function is disabled.
- In the Main counting interface, press CLEAR to clear the preset value.
- Tap the OFF in "BATCH SETUP" interface to turn the batch function off.



### 3.7 Counting Modes

- Tap the MODE ICON or press MODE key to select the desired counting mode.
- The current counting mode will be shown sequentially in the middle area of the top line of the display. There are Mix, Single, Face, Orient and Count 5 modes.

- Definition of the Counting Modes

| Mix | Mixed Value Mode | Counts mixed denomination banknotes. Suspicious notes will be <br> delivered to the reject pocket. |
| :---: | :--- | :--- |
| Single | Single Value Mode | Counts banknotes with denomination of the first detected genuine <br> note. Suspicious banknotes and banknotes with a deviating <br> denomination are delivered to the reject pocket. |
| Face | Face Sorting Mode | Counts banknotes with the face of the first detected, genuine one. <br> Banknotes with different faces and suspicious notes are delivered to <br> the reject pocket. |


|  |  | face down (back side) |
| :---: | :---: | :---: |
| Orient | Orient Sorting Mode | Counts banknotes with the orientation of the first detected, genuine one. Suspicious banknotes and banknotes with deviating orientations are delivered to the reject pocket. <br> side 1 (front side upright) <br> side 2 (front side upside down) |
|  |  | side 3 (reverse side upright) <br> side 4 (reverse side upside down) |

### 3.8 Print Function

- How to print the counting result as a receipt using an external printer.

1. Connect one printer to the printer socket at the rear of machine.
2. After a counting job is finished, long press the DISPLAY key.

### 3.9 View Counting detail

- When counting finished, tap below area or press the DISPLAY key to enter to counting detail interface.

- The counting detail interface is as follows, here you can view how many PCS and values of each denomination you had counted in this batch. You can also tap the "Print" button virtual key to print the counting detail.

| Deno | PUR | Print㢄 |
| ---: | ---: | ---: |
| 5 | 1 | Value |
| 10 | 0 | 5 |
| 20 | 0 | 0 |
| 50 | 0 | 0 |
| 100 | 0 | 0 |
| 200 | 0 | 0 |
| 500 | 0 | 0 |
| Total | 1 | 0 |

## 4 Setting Up

To set up the counter, when on the main screen, press the MENU key to enter User Menu. In User Menu interface, the MODE and ADD keys become the Up and Down navigation keys.
MODE: Up
ADD: Down
CUR: +1
Batch: -1
Use the navigation keys to highlight the desired item.
Use the START key to confirm.
Use the MENU key to back to last interface.
Note: Each item in the User Menu can be set or change by touching the screen too.

### 4.1 Selecting Counting Speed

- To change counting speed:

1. Highlight the "Count Speed" option.

2. Press BATCH or CUR key to change the counting speed.
3. Press MENU key to exit and back to the previous menu.
4. Speed options: $1000 \& 1200$ notes/min

Note:
1.1200 notes/min only available in "ANY" currency mode.
2. You can also change the speed by touch the display.

### 4.2 Auto Start

To choose the counting start mode when banknotes are placed in the hopper:

- Manual: Manually start. (Press START key to start counting.)
- Auto: Automatically start-Machine will start counting automatically when it detects there are notes in the hopper.


1. Highlight the "Auto Start" option.
2. Press BATCH or CUR key to change it between Auto and Manual.
3. Press MENU key to exit and back to the previous menu.
4. You can also change this setting by touch the display.

### 4.3 Data Sampling

- To set which banknotes data will be collected before scan the notes image data:
-Accept: When "Accept" is selected, the machine will only collect the image data of the banknotes that will be accepted by the machine during the collection process into the respective image data collection tool, and it will not collect those banknotes that will be rejected by the machine.
$\bullet$ Reject: When "Reject" is selected, the machine will only collect the image data of the banknotes that will be rejected by the machine during the collection process into the respective image data collection tool, and it will not collect those banknotes that will be accepted by the machine.
-ALL: When "All" is selected, the machine will the image data of all the banknotes that counted by machine during the collection process into the respective image data collection tool.


1. Highlight the "Data Sampling" option.
2. Press BATCH or CUR key to change it between "All", "Reject" and "Accept".
3. Press MENU key to exit and back to the previous menu.
4. You can also change this setting by touch the display.
Note: This function is only available when using USB cable to collect image data.

### 4.4 Checking Firmware Version Information of Machine

- To view the firmware version information:



### 4.5 Setting R-P Capacity

## - To set R-P(Reject Pocket) capacity:



1. Highlight the "Version" option.
2. Press START key to confirm and enter version interface.
3. The version information will show on the screen.
4. Press CUR to change to currency database version information interface.
5. Press MODE\&ADD to page up \& page down.
6. Press MENU key to exit and back to the previous menu.
7. You can also view this information by touch the display.
8. Highlight the "System Option".
9. Press START key to confirm and enter System Option interface.
10. Highlight the "R-P Capacity" option.
11. Press BATCH or CUR key to change the reject pocket capacity. $(50,40,30,20)$
12. Press MENU key to exit and back to the previous menu.
13. You can also do above by touch the display.


### 4.6 Time \& Date

- To set date and time:


1. Highlight the "System Option".
2. Press START key to confirm and enter System Option interface.
3. Highlight the "Time \& Date" option.
4. Press START key to confirm and enter Time \& Date interface.
5. Date Format: Use BATCH key to change the date format. ("YY-MM-DD" / "DD-MM-YY" / "MM-DD-YY")
6. Date Setup: Double click to enter to time setup interface.
7. Time Setup: Double click to enter to time setup interface.
8. Press MENU key to exit.
9. You can also do above by touch the display.

### 4.7 Beep Setup

- To change beep setup:


1. Highlight the "System Option".
2. Press START key to confirm and enter System Option interface.
3. Highlight the "Beep Setup" option.
4. Press START key to confirm and enter Beep Setup interface.
5. Press MODE or $\operatorname{ADD}$ key to select the desired item needed to be changed.
6. Press BATCH or CUR key to change it between Mute and Normal.
7. Press MENU key to exit.
8. You can also change this setting by touch the display.

### 4.8 External Display Setting

- To change external display type, you need to select your external display model when you work with a external display:

| ش | User Menu |  |
| :--- | :--- | ---: |
| 1 | Count Speed | 1000 |
| 2 | Auto/Manual | Auto |
| 3 | Capture Image option | All |
| 4 | Version |  |
| 5 | System Option | $>$ |
| $<$ |  | $>$ |

1. Highlight the "System Option".
2. Press START key to confirm and enter System Option interface.
3. Highlight the "External Display" option.
4. Press BATCH or CUR key to change it to what you need.
5. Press MENU key to exit.
6. You can also change this setting by touch the display.


### 4.9 Batch Add Mode

- When you enable this function, then you count notes, after that when machine shows "batch reached" the machine now will check below 2 situations;

1. If the hopper now is empty, then the counting result in the main counting interface will be cleared to " 0 " when you clear the stacker.
2. If there are any notes in the hopper, then the counting result in the main counting interface will accumulate when you clear the stacker.

3. Highlight the "System Option".
4. Press START key to confirm and enter System Option interface.
5. Highlight the "Batch Add Mode" option.
6. Press BATCH or CUR key to change it between


## 5 Technical Specifications

| Number of Pockets | 1+1 |
| :---: | :---: |
| Hopper | 500 |
| Capacity $\begin{array}{ll}\text { S } \\ & \\ & \text { F } \\ & \\ & \end{array}$ | 200 |
|  | 50 |
|  | 1200 |
|  | 1000 |
| Speed $\begin{array}{ll}\text { S } \\ & \text { F } \\ & \text { S } \\ & \end{array}$ | N/A |
|  | N/A |
|  |  |
|  | 40 |
| Currencies | 40 |
|  | 128 |
| S/N Reading | No |
| Fitness | No |
|  | Dual CIS |
| Sensor | MG |
|  | Multi-IR |
|  | UV |
| Certification | ECB |
|  | BOE (Gold) |
|  | RJ9 $\times 1$ |
| Connectivity/Interface | DB9 $\times 1$ (RS-232) |
|  | USB $\times 2$ |
| OS | No |
| Screen | 3.5" Touch Display |
| Dimensions(W/H/D) | 271(W)X260(H)X264(D)mm |
| Net Weight | 8.3 kg |
|  | Bluetooth |
| Options | LAN |
|  | Printer |
|  | External Display |
| Special Features | XML file |
| Working Noise | $\leq 76 \mathrm{~dB}$ |
| Power Supply | AC100-240V 50/60Hz |
|  | Update software via U-disk, USB cable or LAN. |
| Software update \& DPRMS (DP <br> Remote management system) | DPRMS supports uploading machine count data, monitoring or checking machine status information, and updating software. |

## 6. Appendix Error Message

- Part 1 Self-test error message display and solutions

If the following error message is displayed on the display while turning on, you can handle them as per the following solutions.

| Error message | Solutions |
| :--- | :--- |
| UV Fault | 1. Put the machine to a suitable place to avoid strong light on the top <br> cover. <br> 2. Remove the banknote from the machine and/or remove dust from UV <br> sensor. |
| Right Counting Fault <br> Middle Counting Fault <br> Left Counting Fault | Remove the banknote and/or remove dust from group B IR sensor. |
| Right CIS IR Fault <br> Left CIS IR Fault | Remove the banknote from the machine and/or remove dust from A IR <br> sensor. |
| CIS\#1 Fault | Remove the banknote and/or remove dust from the CIS. |
| Receiving Fault | Remove the banknote from the stacker and/or remove dust from receiving <br> sensor. |
| Rejector Fault | Remove the banknote from the reject pocket and/or remove dust from <br> reject sensor. |
| Feeding Fault | Remove the banknote from the hopper and/or remove dust from feeding <br> sensor. |
| Rotate\#1 Speed Fault <br> Rotate\#2 Speed Fault | Remove dust from rotate speed sensor. |
| C1 IR Fault <br> C2 IR Fault <br> D1 IR Fault | Remove the banknote from the C\&D IR sensor and/or remove dust from <br> C\&D IR sensor. |

## - Part 2 Detective error message display and solutions

If the following error message is displayed on the display during counting, you can handle them as per the following solutions after the machine is stopped.

| Deno Diff | The denomination of this banknote is different with the first <br> detected denomination of this counting batch. |
| :---: | :--- |
| Ver Diff | The issued version of this banknote is different with the first <br> detected issued version of this counting batch. |
| Face Diff | The face direction of this banknote is different with the first <br> detected face direction of this counting batch. |
| Orient Diff | The orient of this banknote is different with the first detected orient <br> of this counting batch. |


| Image\#3 | 1. Count again. <br> 2. Do a sensor calibration. <br> 3. If problem persists, capture the image data to your sales for <br> further check. |
| :---: | :--- |
| IR image error | 1. Count again. <br> 2. Do a sensor calibration. <br> 3. If problem persists, capture the image data to your sales for <br> further check. |
| UV-Error | 1. Count again. <br> 2. Do a sensor calibration. <br> 3. If problem persists, capture the image data to your sales for <br> further check. |
| MG-Error | 1. Count again. <br> 2. If problem persists, capture the image data to your sales for <br> further check. |
| MG1-Error | 1. Count again. <br> 2. If problem persists, capture the image data to your sales for <br> further check. |
| IR-Error | 1. Count again. <br> 2. Check and adjust the feeding gap. <br> 3. If problem persists, capture the image data to your sales for |
| MG2-Error | 1. Count again. <br> 2. If problem persists, capture the image data to your sales for <br> further check. |
| further check. |  |


|  | further check. |
| :---: | :--- |
| Half | Check if the banknote got damaged. |
| Length | 1. Count again. <br> 2. Do a sensor calibration. <br> 3. If problem persists, capture the image data to your sales for <br> further check. |
| Old Ver | Check if the banknote already out of circulation. |
| Others | 1. Count again. <br> 2. If problem persists, record the operational details before and after <br> the problem occurred, then capture the image data to your sales for <br> further check. |

## - Part 3 Alarm message display and solutions

If the following error message is displayed on the display when operating the machine, you can handle them as per the following solutions.

| Error message | Solutions |
| :--- | :--- |
| Batch Reached | Counting result reaches preset batch value. Remove the banknotes from <br> the stacker. |
| Stacker Full | Capacity of stacker is full. Remove the banknotes from the stacker. |
| Rejector Full | Capacity of reject pocket is full. Remove the banknotes from the reject <br> pocket. |
| Cover Open | 1. Close the top cover. <br> 2. If the top cover is not open, there may be notes inside the machine, <br> remove it. |
| Back Drawer Open | Close the back drawer. |
| JAM | Some foreign substance falls inside the machine or notes are blocked, open <br> the back cover to remove them. |
| Main loop Broken | Turn off the machine and restart it. |
| Check Stacker | Remove the banknotes from the stacker. |
| Clean IR Sensor A1 <br> Clean IR Sensor A2 <br> Clean IR Sensor B1 <br> Clean IR Sensor B2 | Remove the dust or banknotes from the A\&B IR sensors. |

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