

# **USER MANUAL**



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## 1. Introduction

### 1-1 Introduction

Thank you for purchasing CTcoin's products.

This instruction manual contains the operating procedure and precautions for using this product. To ensure the efficient operation of our products, please read this instruction manual thoroughly before use.

After reading this Instruction Manual, keep it handy for future reference.

- EAGLE 1000 can recognize and add banknote a maximum of 1,000note/min.
- EAGLE 1000 can do continual adding without stopping during counting.
- EAGLE 1000 can detect for the latest currency through prompt updating.
- EAGLE 1000 can extract and print serial number as speed of 1,000 notes/min, in case of EUR and USD.
- Recognition rate for spoiled banknote is even more higher then other counting machines.
- EAGLE 1000 can add and sort for mixed denomination according to kind of denomination and face orientation.



## 1-2 Specification

- Six Processing Modes; Simple & Easy to Operate
- Compact & Elegant Design for Homan Technology
  - EAGLE 1000 is so light that anyone can carry it easily.
  - EAGLE 1000's compact and elegant design is so familiar to atmosphere of office.
- Fake notes(Counterfeits) Detection: There is ability of detection to use MG,UV FL, UV, IR transmit sensor, thickness sensor.
- Non-stop Continuous Operation: Working efficiency can rise because of nonstop continuous operation.

#### • Interface

- EAGLE 1000 can be used easily through connecting external interface such as printer and computer.
- Easy of S/W Upgrade: Upgrading software can be easily.

#### • Display & Key

- Display of mart can be recognized easily.
- Convenient display and key pad.

Feed System		Roller friction type		
Dimension		321(mm)*355(mm)*334(mm)	W*L*H (mm)	
Note Size		50*100 , 100*190(mm)		
Batch Mo	- d -	Value Batch Mode		
Datch Me	oue	Count Batch Mode		
Hopper Ca	pacity	500 notes		
Output Pocket	Reject	100 notes		
Capacity	Stacker	250 notes		
Connectivity		USB, RS-232		
Sensors		MG, UV, IR, CIS, thickness sensor		
0 1 0 1		1,000 notes per min.		
Counting Speed		1,000 notes per min. (In sorting speeds)		
Weight		16.0Kg		
Power		AC 90-240V 50/60Hz		
		10 level (ATM - Fit - Unfit)		
Fitness		Thickness, Stain, Graffiti detection		
		Breakage (Dog eared, tears, hole, Size error) detection		



## 2. Precaution

### 2-1 Warning

This product is developed to provide a service of counting banknote only.

MyoungSung is not liable to any damages caused by the use of this product for other purpose than above intended purpose without our permission, or any damages caused by the modification conducted by any other person than Myoung Sung employee or authorized subcontractor.

For installation and transportation of this product, please consult an authorized distributor or sales representative.

- The contents of this manual are subject to change without notice.
- Myoung Sung makes continuous efforts to improve products.
- Therefore, the actual product may differ from the contents of this manual.
- Myoung Sung shall not be responsible for any damages to a third party's patent or other right resulting from use of the data contained in this manual.
- No part of this manual may be reproduced for commercial purpose without our permission.
- This product is developed for the use in the countries described in the specifications.

It cannot be used in other countries due to different power specifications and safety standard.

## \* warning \*

This is Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



## 2-2 Installation Space

For moving or installing this product, request our sales shop or our designated sales agent nearest to you to perform the work.

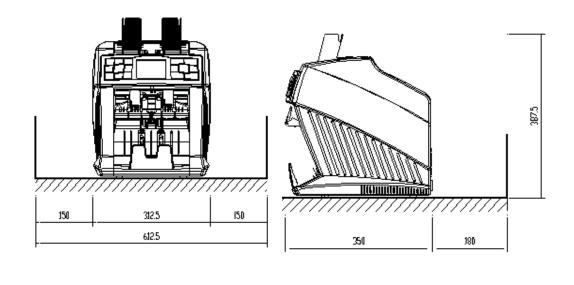
- This product is exclusively for indoor use. Do not install outdoors.
- Do not install in places where the flooring cannot support the product load or unstable places with slanting or uneven flooring.
- Install where sufficient daily administration over the product may be made.

  (Beware of intentional mischief)

#### \* Installation Space \*

Allow space from peripheral walls and the product as shown in the following Figure.

Allow sufficient operation space for filling of bills, opening and closing of doors and covers and also allow space necessary for maintenance.





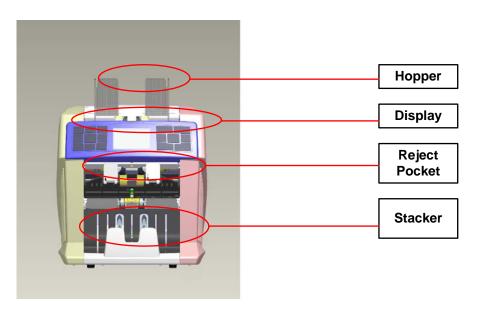
## 2-3 Observe the following steps in order to prolong the life of the product

- Avoid installing where the product will be subject to direct sunshine.
- Avoid installing near stoves or heaters by which the temperature of a part of the product may rise or places at the windy side from air conditioners or vents.
- Avoid installing in places with much dust or vibration generating.
- If a cold place in which the product is installed is suddenly heated, dew may accumulate inside the product.
- Use the product in the following temperature and humidity range.
  - Temperature 0-35°C(32-95F)
  - Humidity 20-90% (without dew condensation)
- Do not place heavy objects on top of the machine, or do not give any heavy impact to the machine.
- When opening or closing doors, covers, or inner parts, do not use undue force.
- In case of installing in places such as those mentioned below, consult our sales shop or our designated agent nearest to you.
  - Places subject to sea breezes or corrosive gas.
  - Places at the risk of swinging or vibrating.
- Do not unplug the power cord while the unit is operating.
- Do not remove the covers that ware screwed down.



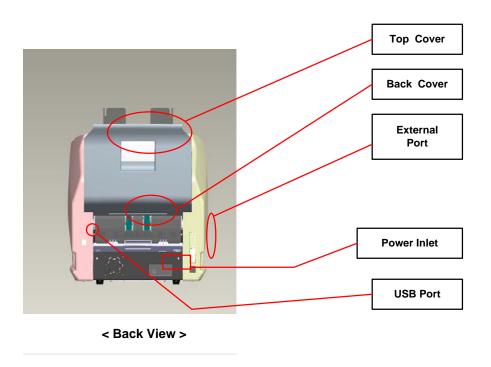
## 3. Appearance

## **3-1 Front View**



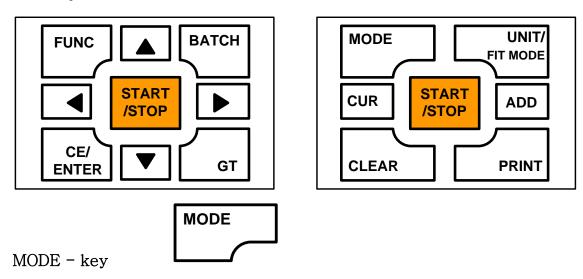
< Front View >

## 3-2 Back View





### **3-3 Key**



- Choose from MIX, DEM, ORT, FIT, SN, CNT mode.
- USD: MIX  $\rightarrow$  DEM  $\rightarrow$  ORT  $\rightarrow$  SN  $\rightarrow$  CNT
- EUR: MIX  $\rightarrow$  DEM  $\rightarrow$  ORT  $\rightarrow$  FIT  $\rightarrow$  SN  $\rightarrow$  CNT

By pressing this key, the mode changes to the next one.

- Mix: In case of mixed denomination.
- Denomination: In case of counting one kind of denomination.
- Orientation: In case of counting according to the surface of denomination.
- Fitness: In case of fitness mode(Only EUR).
- Serial number: In case of serial number mode.
- count: In case of count mode.



#### UNIT - key

- User can select certain denomination in DEM, ORT mode. And, certain denomination user wants to can be distinguished in USD, EURO.
- There are 3 kinds of mode in Fit mode.
- ① FI-UF (Fit Unfit): Fit note and Unfit note can be distinguished.
- ② UF-RE (Unfit Reject): counterfeit among Unfit note can be Rejected.
- ③ AT-FI (ATM Fit): Note for ATM among fit note can be distinguished. And, Note for ATM can be stacked in Stacker.



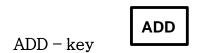
CUR - key

- Select the type of currency.
- By pressing "CUR" key, the mode changes to the next one.

$$USD \rightarrow EUR \rightarrow LOCAL$$



- In counting mode, it starts or stops the function of error clear and counting.
- In setup mode, it can be finished user setup.



- - In ADD mode, a previous counting data is added to the next counting.



- Used to change to clear menu.



- Used to change to printing mode.
- When it is connected printer, it starts to print out.





### FUNC - key

- In counting mode, used to change to setup mode.



- In batch mode, Used to change the number by 10 and used to setup the item.



- In batch mode, Used to change the number by 10 and used to move to batch detail display in use mode.
- Value in Fit Mode can be adjusted from F0 to F 10.



#### Batch - key

- Used to change to batch number change mode(10→20→25→50→100→10...).
   If you want to change to the number bigger than 100, you may use arrow keys.
- To confirm chosen batch number, press "CE/ENTER" key.



#### CE/ENTER - key

- At setting mode to set some function, it can complete setting up some value and come back to previous mode

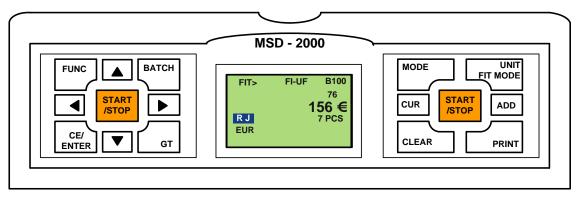


#### GT(Grand Total) – key

- Grand total number display in detail.



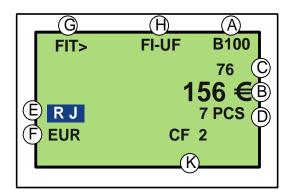
## 3-4 Key panel

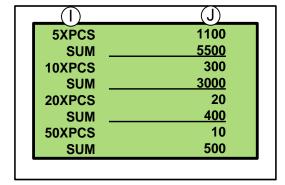


## **LCD Display**

The message description and placements are defined below.

When a guide message shows up, the screen automatically changes to Normal display from detail display.





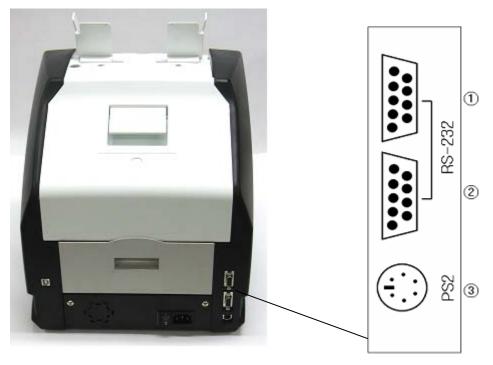
<Normal display>

<Detail display>

A	Batch quantity	G	Operating mode
В	B Value & Currency sign		Details of operating mode
С	Quantity of stacker	I	Denomination & Sum
D	D Quantity of reject pocket		Count & Value
Е	Reject pocket	17	Quantity of Counterfeits on reject pocket
F	Currency code	K	(Fitness, FI-UF mode)



### 3-5 External interface



<Back view>

### 1) Terminal Interface Connection ( ① , ② )

This product can be operated from a PC. The PC can manage the transaction data.

▶ Connect a interface cable to ① and ②.

#### 2) Printer Interface Connection (2)

This product can print out the transaction data to a external printer.

► Connect a interface cable to ②.

### 3) Customer display Connection ( ③ )

This product can display the result through Customer Display Panel.

▶ Please connect customer display to 3.



## 4. Operation

## 4-1 Power ON/OFF

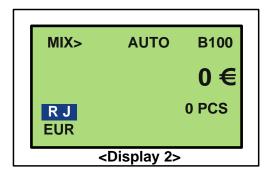


Power switch

- ① Please connect power cable to above port. When power is ON, Display like <display 1> will be in screen.
- ② After some time, when <display 2> will be on the screen, use machine.

MODEL: EAGLE - 2000
VER: 3.00 EURFIT
MADE IN DENMARK
CT coin

<Display 1>





## 4-2 Checkpoints before Counting

Avoid counting wet, excessively dirty or spoiled notes.







 Check the foreign matter (paper chips, rubber bands, clips, dust etc) mixed with notes.



- Remove folds or end from notes beforehand. Spread and separate brand new notes well for some of them are slightly adhesive.
- Align all the four corners and edges of notes. Any unevenness may cause an error.







<Wrong setting up>

## 4-3 Keys for print & clear

- Press the print key or the clear key on the right side of the key panel.
- Select the menu by the up, down key.
- After moving the cursor, press the enter key.
- Pressing the start/stop key, can end each menu.
- For print function, connect external port of / to serial printer.

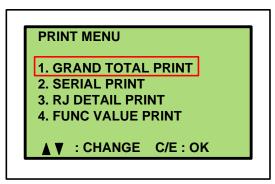


## 4-4 Print Menu

Connect external port of / to Serial Print.

Press the print key on right side of key panel and select function.

1. GRAND TOTAL PRINT: Print out total amount of counted banknotes.



* MSD-2000	) BANKNOTE I	REPORT V3.01		
OP Currence	Time : 05/23/2008, 14/00/34 OP Currency : EUR			
DENOM : G	RAND PCS :	GRAND TOTAL		
5€	20	100		
10€	10	100		
20€	10	200		
50€	10	500		
100€	10	1000		
200€	10	2000		
******	******	******		
TOTAL:	70	3900		
*******	*******	*******		

* MS- 2D Reject Detail Repor	t
LONG NOTE	0
CHAIN	0
HALF NOTE	0
ERROR CF-A	0
ERROR CF-B	0
ERROR CF-C	3
ERROR CF-D	0
ERROR CF-E	0
ERROR CF-F	0
ERROR CF-G	0
ERROR CF-H	0
DOUBLE ERROR	0
OTHER NOTE	0
RECOGNITION ERR	4
OTHER ORIENT	0
BATCH FULL	0
REJECT FULL	0
NOTE ERROR	0
DOG-EARED ERROR	0
TEARS ERROR	3
HOLES ERROR	0
TAPE ERROR	74
STAIN ERROR	0
MUTILATION ERR	0
TOTAL :	84
*********	******

*********	*******	******
ATM NOTE		
		*******
5€	10	50
10€	5	50
20 <b>€</b> 50 <b>€</b>	5 5	100 250
50€ 100€	5 5	250 500
200€	5 5	1000
*******	*******	*****
TOTAL:	35	1950
FIT NOTE F	RESULT	
*********	*********	******
5€	3	15
10€	3	30
20€	3	60
50€	3 3	150
100 <b>€</b> 200 <b>€</b>	3	300 600
200 <del>0</del>	ن *********	000 ******
TOTAL:	18	1155
UNFIT NOT		******
************	E KESULI	******
5€	7	35
10€	2	20
20€	2	40
50€	2	100
100€	2	200
200€	2	400
TOTAL :	17	795



#### 2. SERIAL PRINT: Print out total value and each S/N from banknotes.

\* MS- 2D BANKNOTE REPORT V1.00 Time: 05/23/2008, 14/00/34 OP Currency: EUR DENIM: PCS: TOTAL 5€ 10 5€ 10€ 20€ 50€ 100€ 200€ 1 10 1 20 1 50 1 100 200 TOTAL: 7 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

PRINT MENU
1. GRAND TOTAL PRINT 2. SERIAL PRINT
3. RJ DETAIL PRINT 4. FUNC VALUE PRINT
▲ ▼ : CHANGE C/E: OK



## 3. RJ DETAIL PRINT: Print out errors of rejected banknotes.

* MSD-2000	Reject	Detail	Report	
LONG NOTE			0	
CHAIN			0	
HALF NOTE			0	
ERROR CF-A			0	
ERROR CF-B			0	
ERROR CF-C			3	
ERROR CF-D			0	
ERROR CF-E			0	
ERROR CF-F			0	
ERROR CF-G			0	
ERROR CF-H			0	
DOUBLE ERR	OR		0	
OTHER NOTE 0				
RECOGNITION ERR 4				
OTHER ORIEN	IT		0	
BATCH FULL			0	
REJECT FULL			0	
NOTE ERROR			0	
DOG-FARED F	RROR		0	
TEARS ERROI			3	
HOLES ERROL			0	
TAPE ERRO			74	
STAIN ERROI	-		0	
MUTILATION F	-		0	
*******		*****	·********	
TOTAL:			84	
******	******	*****	*****	



#### 4. FUNC VALUE PRINT: Print out setup value of sensors of a machine.

\* MS- 2D MACHINE VALUE PRINT

1. UV TOP SENSOR SET

UVT ON/OFF: OFF

UVT FL : 130 UVT RL : 40 UVT TFL : 130

2. UV BOT SENSOR SET

UVB ON/OFF: ON

UVB FL : 130 UVB RL : 40

**UVB TFL: 130** 

3. MG SENSOR SET

MG ON/OFF: ON

MG LEFT: 30

MG CENTER: 3

MG RIGHT: 30 4. DOUBLE LEVEL

DOUBLE Value: 30

5. REJECT NUMBER

REJECT Number: 50

6. LCD CONTRAST LCD Contrast: 26

7. BAUD RATE

BAUDRATE: 115200bps

11. SPEED SETTING

SPEED SETTING: 960 12. SPOOL SETTING

SPOOL SETTING: 2 LEVEL

13. SERIAL PRINT

SN Print ON/OFF: OFF

14. BUZZER

Buzzer ON/OFF: OFF

15. AUTO START

Auto Start ON/OFF: ON

16. EXTERNAL DISPLAY

EX Display ON/OFF : ON

#### PRINT MENU

- 1. GRAND TOTAL PRINT
- 2. SERIAL PRINT
- 3. RJ DETAIL PRINT

4. FUNC VALUE PRINT

▲ ▼ : CHANGE C/E: OK

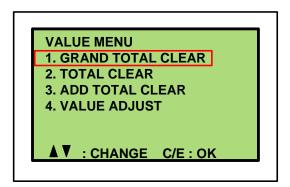


#### 4-5 Clear menu

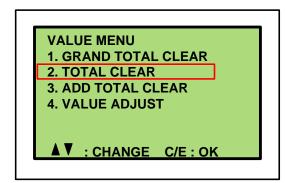
Press the clear key on right side of key panel and select function.

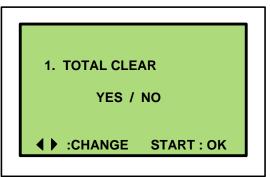
Values are not cleared before clearing values in clear menu <Screen of clear menu>

1. GRAND TOTAL CLEAR: Get to initialize grand total value.

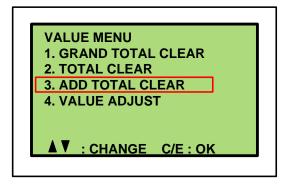


2. TOTAL CLEAR: The last result can be eliminated so that the previous result is displayed.



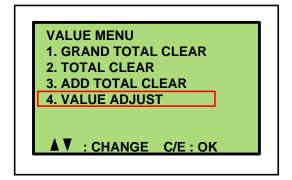


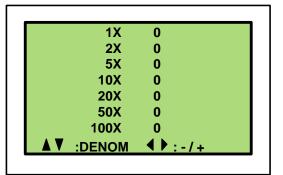
3. ADD TOTAL CLEAR: The last result in add mode can be eliminated so that the previous result in add mode in displayed.





4. VALUE ADJUST: This can be changed to a value result.





After selecting the denomination by the up, down key ,

Please use to change the number by the left, right key ,

If pressing the enter key, value is changed.



## 5. User mode

## 5-1 Keys for mode

Select a user mode among six modes by the mode key

Select details mode by the unfit/fit mode key

When pressing the batch key in MIX-BVAL mode, used to change value batch screen.

Mode		Display Screen		Desceription	
	Basic	MIX	AUTO		
Mix	ADD	MIX	ADD	Count all denomination of selected currency.	
	Value batch	MIX	BVAL		
	Basic	DEM	AUTO		
Denomination	Denomination	DEM	Selecting denomination	Count the denomination of selected.	
Denomination	Old / New	DEM	NAUTO	Count the denomination of Selected.	
	ADD	DEM	ADD		
	UP - DOWN	ORT	UP-DN		
Orientation	MIX - FACE	ORT	MIX-F	Count the orientation of denomination is selected	
Onemation	DEM - FACE	ORT	DEN-F	Count the orientation of denomination is selected	
	NEW - FACE	ORT	NEW-F		
Serial number	Basic	SN	AUTO	Print the serial number of notes.	
	ADD	SN	ADD	Find the Serial number of notes.	
CNT		CNT	AUTO	Count all currencies without detection.	



#### 5-1-1 MIX Mode



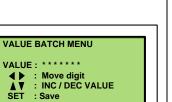
✓ Count all denomination of selected currency.



- ✓ Count all denomination of selected currency.
- ✓ Cumulate the count sum.



- ✓ Count all denomination of selected currency.
- ✓ Can count all denomination of selected currency with setting value.



START : Exit

- ✓ Value batch mode can be selected by using the unit key.
- ✓ After selecting Value batch mode, if batch key is pressed, Value batch mode screen will be displayed.
- ✓ When select Value batch mode, 'Grand total' is cleared and 'Grand total save' function is not available.

<b>◄</b> ▶	Move between digits.			
<b>▲ ▼</b>	Increase values / decrease values			
CE/ENTER	Save setting values.			
ADD	Clear setting values.			
START	Exit 'VALUE BATCH' function mode,			
SIAKI	after saved values automatically.			



#### 5-1-2 DEM Mode



- ✓ Count the denomination of selected.
- ✓ Banknotes are sorted according to kind of first banknote through sensor in AUTO mode. (Different notes will be separated)



- ✓ Count the denomination of selected.
- ✓ Banknotes are sorted according to selected the denomination.



NAUTO

B100

**0 €** 0 PCS

DEM>

RJ

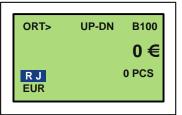
- ✓ Count the denomination of selected.
- ✓ Banknotes are sorted according to kind of first banknote through sensor.
- ✓ Banknotes are sorted according to old & new.



- ✓ Count the denomination of selected.
- ✓ Banknotes are sorted according to kind of first banknote through sensor.
- ✓ Cumulate the count sum.



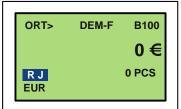
#### 5-1-3 ORT Mode



- ✓ It sorts face up or down from the mixed banknotes.
- ✓ It dosen't sort denomination.
- ✓ It's setted by the direction of the first banknote



- ✓ It's sorted by right or left direction that is already setted face up or down from the mixed notes.
- ✓ It dosen't sort denomination.
- ✓ It's setted by the direction of the first banknote



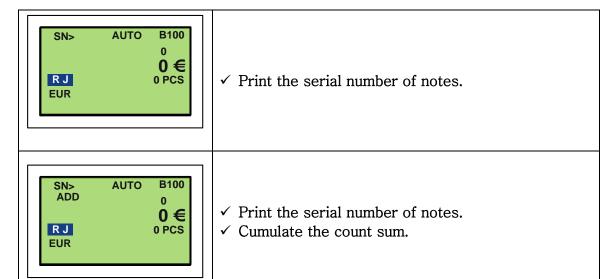
- ✓ It's sorted by a direction and a side for a denomination.
- ✓ It sorts each denomination.
- ✓ It's setted by the direction of the first banknote



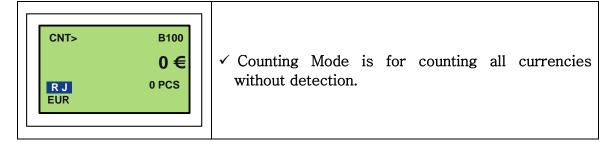
- ✓ It sorts the direction and old and new banknote.
- ✓ It's setted by the first banknote.



### 5-1-5 SN/CNT Mode



#### 5-1-6 Count Mode



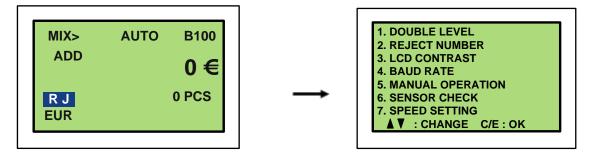


## 6. User setup

## 6-1 How to change the user setup



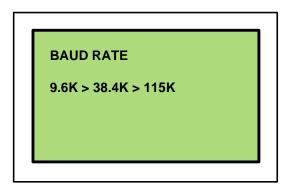
User setup screen is displayed.



<Counting screen>

<User setup screen>

② Use Key to select a parameter and press Key to confirm the selection.



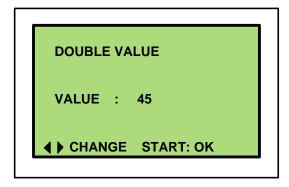
<Ex: setting up BAUD RATE>

- ③ Press the key to change the values.
- Press the key or the
  start /STOP
  key to save it.

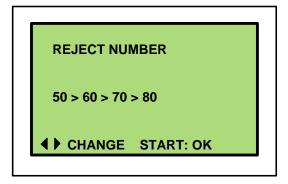


## **Description of each functions**

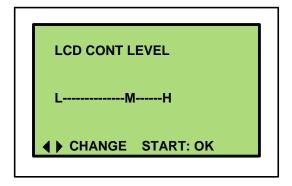
**6-1-1 DOUBLE LEVEL** - Regulate double level of notes as number.



6-1-2 REJECT NUMBER - Set the maximum number of notes to be recognized as reject full.

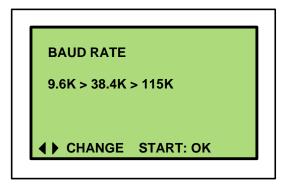


6-1-3 LCD CONTRAST - Set LCD contrast.

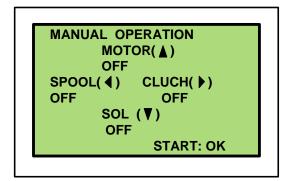




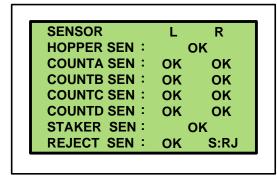
#### 6-1-4 BAUD RATE - Set baud rate for communication.



6-1-5 MANUAL OPERATION - Check the condition of Main, Spool, Solenoid and Clutch motors.



6-1-6 SENSOR CHECK - Check real time condition of each part of sensor.





## 6-1-7 SPEED SETTING - Set the speed of Main motor

MAIN MOTOR SPEED

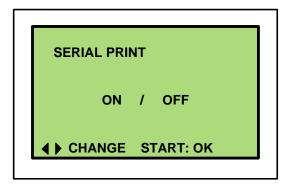
FIXED: 960 N/M

### 6-1-8 SPOOL SETTING - Set the speed of Spool motor.

SPOOL MOTOR SPEED

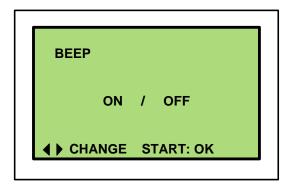
LOW >MID >HIGH

## 6-1-9 AUTO PRINT - Print serial number of notes automatically.

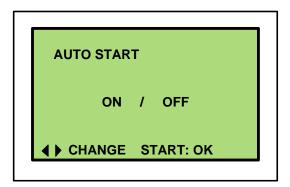




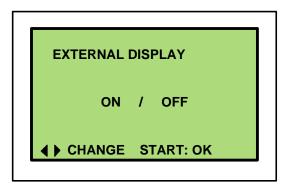
6-1-10 KEY BEEP SETTING - Turn on or off the key deep.



6-1-11 AUTO START — Switch automatic or manual count. (On=Auto/ Off=Manual by pressing (START).



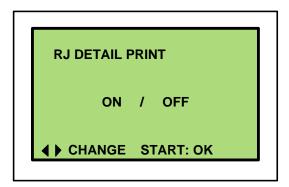
6-1-12 EXTERNAL DISPLAY - Show the result of counting through external display panel for customer.



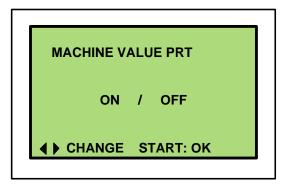


6-1-13 REJECT DETAIL PRT -Turn on or off the function to print the detail when notes are rejected.

-When turned ON, print automatically.



6-1-14 MACHINE VALUE PRINT - Print out the information of machine value.



6-1-15 TIME SETTING — Set up present time.

TIME SETTING
YEAR : 0
MONTH : 10
DATE : 14
HOUR : 15
MINUTES : 51

A V : CHANGE START: OK



6-1-16 MSD TOTAL COUNT - Show machine's age and total counting volume except rejecting volume.

-Even though the machine is turned off, data is not eliminated. The digit of 1<sup>st</sup> and 2<sup>nd</sup> is 20 totally.

MACHINE TOTAL CNT

XFFFF 1ST: 0

XFFFF 2ND: 0

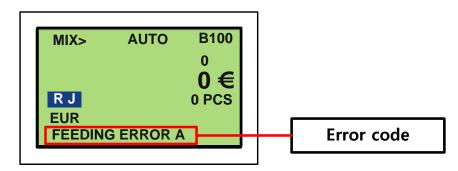
#### 6-1-17 VERSION INFO – It indicates a soft

#### **VERSION INFO**

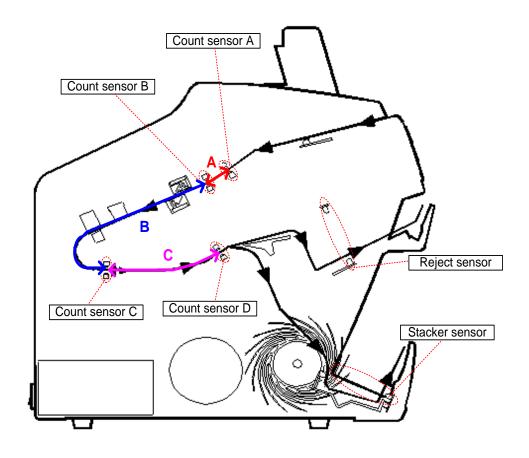
H/W VER: 1.03 FIT VER: 2.10 MAIN VER: 2.07 DISP VER: 3.05



## 7. Error codes



An error code is displayed when the machine has a problem or notes go into the reject pocket.



< Sensor's Location>

- \*When an error occurs, please remove all the notes from stacker, press the START key, and recount the bundle.
- \*When a note is stuck in a sensor, remove the note, and recount the bundle.



## 7.1. Operation

Error Code	Description	Action
FEEDING ERROR A	Delivery delay in A section	Check the rollers around main motor or feeder. Replace the sensors if sensor A or B is defective
FEEDING ERROR B	Delivery delay in B section	Check Discrimination Part Roller Replace the sensors if sensor B or C is defective
FEEDING ERROR C	Delivery delay in C section	Check Transfer plate Part Roller Replace the sensors if sensor C or D is defective
SENSOR JAM A	Note is jammed in counter sensor A	Clean the count sensor A Replace the sensor if it is defective
SENSOR JAM B	Note is jammed in counter sensor B	Clean the count sensor B Replace the sensor if it is defective
SENSOR JAM C	Note is jammed in counter sensor C	Clean the count sensor C Replace the sensor if it is defective
SENSOR JAM D	Note is jammed in counter sensor D	Clean the count sensor D Replace the sensor if it is defective
STACKER ERROR	Note is jammed in stacker sensor	Clean the stacker sensor Replace the sensor if it is defective
REJECT ERROR	Note is jammed in reject sensor	Clean the reject sensor Replace the sensor if it is defective
CHAIN ERROR	Narrow gap between note and sensor	Recount bundle Check condition of count sensors

## 7.2 Information

Error Code	Description	Action
OTHER NOTE	Different denomination from first	
OTHER ORIENT	Different orientation from first	Remove suspect note and recount bundle
UNFIT	Unfit level note	Remove suspect note and recount bundle
CHANGE LV2 RECNT FAKENOTE IN RJ	Counterfeit and unfit level note	Recount the counterfeit and unfit note after selecting UF-RE mode
BATCH FULL	Loaded maximum quantity of notes on the stacker.	Remove the notes from the stacker
REJECT FULL	Loaded maximum quantity of notes on the reject pocket	Remove the notes from the reject pocket
A-BATCH ERROR	Picked out banknote in Stacker during counting	Recount



## 7.3 Defective note

Error Code	Description	Action	
RECO ERROR	Non banknote		
LONG NOTE	Longer note		
HALF NOTE	Half size note	Check the note Recount bundle if the note is ok Call A/S center if same error message is received	
NOTE ERROR	Low quality note		
DOG EARED ERROR	Dog eared note		
TEARS ERROR	Tear note		
HOLES ERROR	Holed note		
TAPE ERROR	Taped note		
STAIN ERROR	Stained note		
MUTILATION ERROR	Mutilated note		

## 7.4 Counterfeit

Error Code	Description	Action
CF-A ERROR	Counterfeit note detected by UV FL sensor	If banknote is genuine, clean UV sensor Check UV FL sensor setting Replace the sensor if UV sensor is defective
CF-B ERROR	Counterfeit note detected by UV RL sensor	If banknote is genuine, clean UV sensor Check UV RL sensor setting Replace the sensor if UV sensor is defective
CF-C ERROR	Counterfeit note detected by MG Center sensor	If banknote is genuine, clean roller Ass'y Check MG center sensor setting Replace the sensor if UV center sensor is defective
CF-D ERROR	Counterfeit note detected by MG Left, Right Sensor	If banknote is genuine, clean roller Ass'y Check MG Left, Right setting Replace the sensor if MG Left, Right sensor is defective
CF-E ERROR	Counterfeit note detected by IR Sensor(IRA)	If banknote is genuine, adjust image sensor setup Check IRA setting
CF-F ERROR	Counterfeit note detected by IR Sensor(IRS)	If banknote is genuine, adjust transmit image sensor setup Check IRS setting
CF-G ERROR	Counterfeit note detected by IR Sensor(IRH)	If banknote is genuine, adjust transmit image sensor setup Check IRH setting
CF-H ERROR	Counterfeit note detected by IR Sensor	If banknote is genuine, adjust transmit image sensor setup



## 8. Daily Care

All parts of UNIXCAM 2020F need daily care and clean.

Especially sensors of this are very sensitive and delicate components. If any dust or other foreign matter adheres to the sensor, it may cause various problems during operating the machine.

To avoid malfunction caused by foreign subjects, please clean your machine everyday.

- Clean sensors of the machine using a soft, dry cloth.
- Clean rubbers and rollers using a dust brush.

Do not use any chemicals to clean this machine.