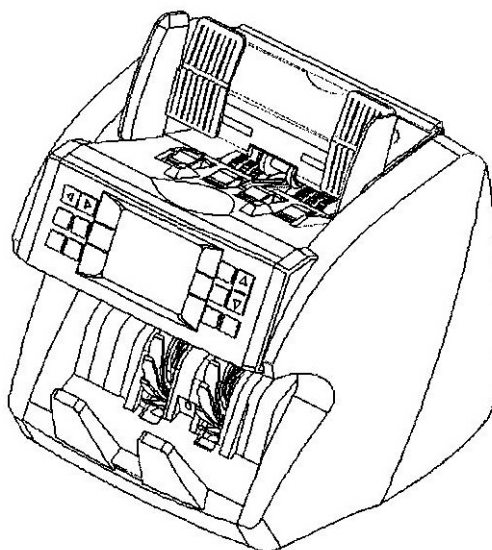
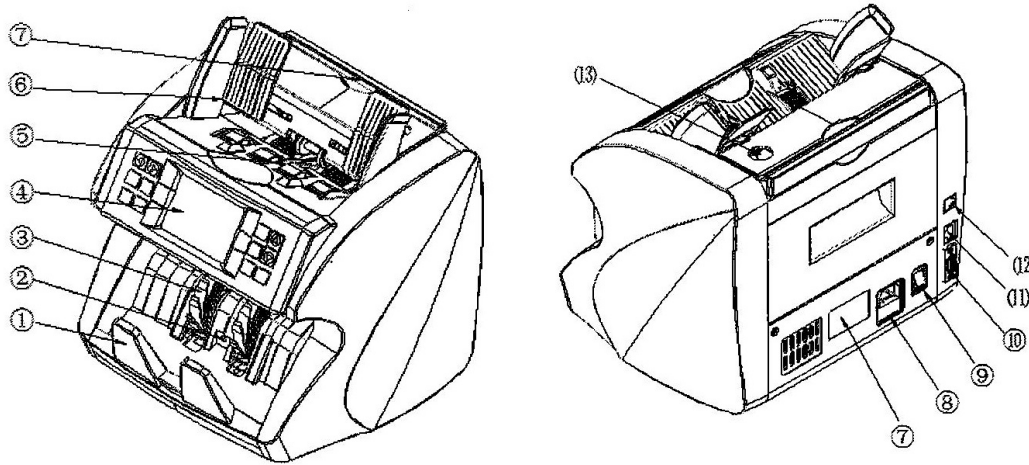


# Multi-Currency Value Counter Kobotech BT-6000

## USER MANUAL



## 1. Introduction



Item Number	Part Name
1	Block board
2	Launch OC
3	Impeller
4	LDC
5	Start sensor
6	Handle
7	Handle
8	Stacker
9	Power switch
10	Display port
11	Internet port
12	Analyzer
13	Adjust button

### 1.1 About this value counter

Thank you for choosing this professional multi-currency value counter based on CIS sensor. We hope you enjoy using it. This professional counter features its unique feeding mechanism and best performance of counting and detecting your banknotes.

### 1.2 Box Content

The box includes 1 unit of value counter, 1 piece of AC power cord, 1 copy of user manual, and 1 piece of customer display (optional).

### 1.3 Control Panel



**MODE:** This button is used to switch among CNT mode (Count), SDC mode (Single Denomination Count) & MDC mode (Mixed Denomination Count).

**Button BATCH:** This button is used to switch on/off batch mode. When BATCH is on, then use ↑→↓← buttons to input the batch number.

**Button DISP:** This button is used to report the counting details & serial numbers.

**Button CURRENCY:** This button is to show up the available currency names in your machine and press corresponding numeric button to select the currency you want.

**Button SPEED:** The default function is to select different available counting speeds.

**Button ↑:** This button is used to move up the cursor or adjust number magnitude in batch setting mode.

**Button ←:** The default function is to move the cursor left. When in batch setting mode it chooses the number digits.

**Button →:** The default function is to move the cursor right. But when in batch setting mode it chooses the number digits. And this button also supports to get in the setting menu when in the main interface.

**Button ↓:** The default function is to move cursor downwards. Adjust number magnitude in batch setting mode.

**Button +ADD/DISP:** The default function is to switch on/off ADD function.

**Button ESC:** The default function is to clear the input or back to upper level.

**Button PRINT:** The default function is to work as a OK or CONFIRMATION. When you press REPORT to check the counting detail and your value counter is connected with a printer, then in REPORT mode, press this button to print out the detail.

**Button START/RESET:** This button is used to start counting, or back to upper level in MENU.

## 1.4 Specifications

Unit Dimensions: 28CM(W)\*26CM(D)\*27CM(H) / 11"(W)\*10.2"(D)\*10.6"(H)

Unit Package:

N.Weight: 6.5KGS

G.Weight: 7.5KGS

Counting Speed: 800/1000/1200 notes/min for CNT mode, 800/1000 notes/min for SDC & MDC modes

Size of Countable notes: Minimum 110x60 mm, Maximum 185x90 mm

Thickness 0.08~0.12 mm

Feed system: Roller Friction System

Hopper Capacity: 400-500 notes

Stacker Capacity: 200 notes

Power Supply: AC 100~240V ±10%, 50/60 Hz

Current: Maximum 1.8A (100~240 VAC)

Power Consumption: <50 Watts

Ambient Temperature: 0°C~35°C (Operating)

Working Environment: -10°C~60°C (Stocking)

Ambient Humidity: 20%~90% (no condensation)

Connection Port: USB, RS232, LAN

## 2. Operation Modes

### 2.1 CNT mode

Press button MODE to select CNT mode. In this mode, you can switch on ADD or BATCH or ADD+BATCH.

### 2.2 SDC mode

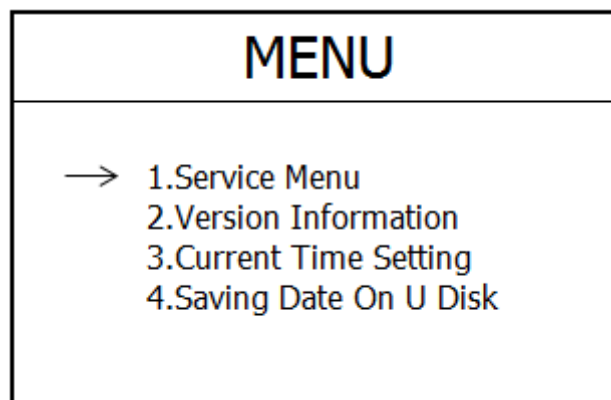
Press button MODE to select SDC mode. This mode is to count a single denomination bill. The system will take the first note as the benchmark, and will stop counting when meeting a different denomination.

### 2.3 MDC mode

Press button MODE to select MDC model. This mode is a value counting mode for mixed denominations, and press REPORT button to check the counting details.





## 3. Setting MENU

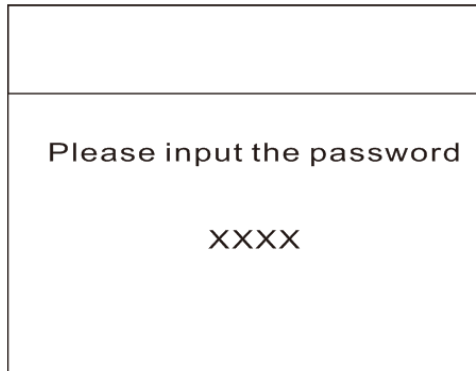
Press button ↓ for 2 seconds, you will see setting menu with the following main interface:



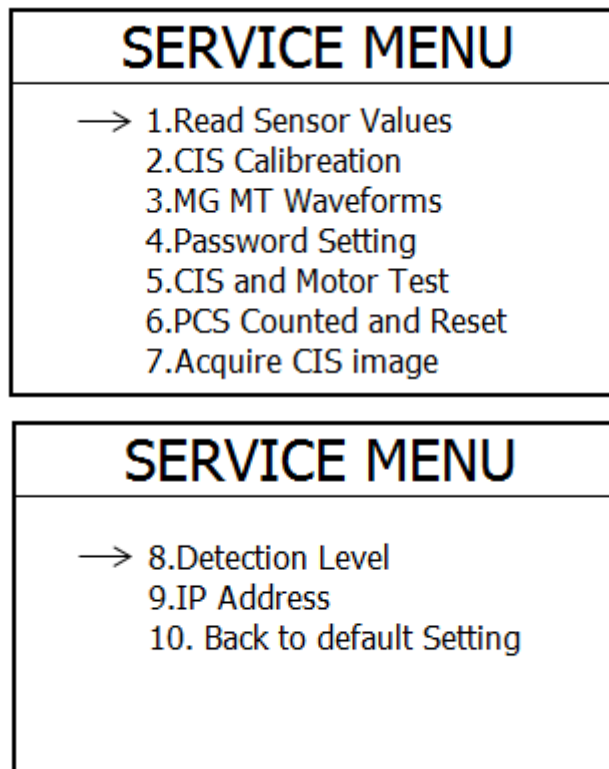
Use the cursor to select which sub-menu you want to enter, and press START/STOP button to confirm, and press button ESC to quit.

3.1 If you select to enter 'Service Menu', you will be requested to input a password with the following interface.

Please press , , ,  (it will show 2552 on the display screen) as the default passwords.



After you input the correct password, the interface will jump to the following one:



You can use cursor to select next submenu and press START/STOP button to confirm, and use button ESC to quit.

**3.1.1** If you enter 'Read Sensor Values', you will see the following interface. This interface is only for

servicing purpose to see whether any sensor has a malfunction.

1. PS1L VALUE:	0.000V
2. PS1R VALUE:	0.000V
3. STACKER VALUE:	0.078V
4. HOPPERH VALUE:	0.040V
5. HOPPERL VALUE:	0.039V

**3.1.2** If you enter 'CIS Calibration', you will see the following interface to instruct you how to do color balancing for CIS sensors.

1. Clear CIS
2. Put the white paper
3. Press the START Button

**3.1.3** If you enter 'MG/MT waveforms', you will see the following interface

→ MT    MG1    MG2    UV
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**3.1.4** If you enter 'Password Setting', you will see the following interface to set a new password. After inputting new password (4 digits), press START button to confirm and save.

Input the password please:
XXXX

**3.1.5** If you enter 'Motor and CIS Test', you will see the following interface. This mode is to be used for production and professional servicing purpose.

Use the START button to  
run the motor

- 3.1.6** If you enter 'PCS counted and reset', you will see the following interface. This interface is to tell the total quantity of counted bills in this counter since last clearing to zero. We provide a hidden setting for distributors to clear this number for after-sales service.

The total count PCS  
11022  
Press START button to clear

- 3.1.7** If you enter 'Acquire CIS Image', you will see the following interface. This mode is for servicing purpose.

Press UP arrow button to get:  
white light image  
Press DOWN arrow button to get:  
IR light image

- 3.1.8** If you select to enter '8.Detection Level', you will see the following interface. You can use LEFT and RIGHT cursor buttons to select, and UP and DOWN buttons to change the sensitivity levels. The currency code in the right part is indicating for which currency you are operating. **(Please do not change without communicating with the manufacturer or your local distributor.)**

CF LEVEL			
→	MT	5	USD
	UV	5	
	MG	4	
	IR	5	
	DB	5	
	CIS IR	5	

- 3.1.9** IP Address mode is reserved for servicing purpose. It's not open to the users.

- 3.1.10** If you select to enter 'Back to default setting', you will see the following interface.

Press START to restore factory defaults  
Press ESC to return

- 3.2 If you select to enter 'Version Information' under the main menu, you will see the following interface.

VERSION	
Main:	1:0
Image:	2:0
FPGA:	03C00110
HW:	CIS07C3: SXU
ID:	0 : 0 : 87 : 20 : 1C : 97 : 86 : 57

- 3.3 If you select to enter 'Current Time Setting' under the main menu, you will see the following interface.

Input date:

2016 Y 3 M 13 D  
5 H 3 M 12 S

- 3.4 If you select to enter 'Save Image' under the main menu, you will see the following interface. This mode is used to scan a banknote and output the data file into a USB flash drive.

➡ 1. Save Image  
2. Save MT  
3. Save OCR

- 3.4.1** Press START button to go to Image saving mode. It will generate 4 images from single CIS model, and 5 images from dual CIS model from a single insert direction.



**3.4.2** Move the cursor and selecting 'Save MT' will generate a .bin format file.

**3.4.3** Move the cursor and select 'Save OCR' will generate a file for OCR processing purpose.

#### **4. Detections**

This counter incorporates various detections including UV(ultraviolet), MG(magnetic), MT(magnetic thread), Reflected IR mapping, and Penetrating IR mapping.

#### **5. Maintenance and troubleshooting**

After start, the machine will go on self-check automatically. If preset window show the following error code, generally speaking, it is because of dust on the surface or sensor blocked by notes. So please clear the dust on the surface of sensor with brush or soft cloth, or take the notes away. Then restart the machine.

Error code	Trouble position
E1	Bill UV sensor error
E2	Bill double error
E3	Chain notes error
E4	Half notes error
E10	Bill CIS sensor signal lose
E11	Denomination error
E12	Bill denomination error
E13	Bill facing recognize error
E14	Bill size recognize error
E15	Bill towards recognize error
E20	MT error
E21	MG1 error
E22	MG2 error
E23	MG3 error
E24	MG4 error
E30	IR transmission area1 error
E31	IR transmission area2 error
E32	IR transmission area3 error
E33	IR transmission area4 error
E34	IR transmission area5 error
E35	IR transmission area6 error
E36	IR transmission area7 error
E37	IR transmission area8 error
E38	IR reflect area 1 error
E39	IR reflect area 2 error

E40	IR reflect area 3 error
E41	IR reflect area 4 error
E42	IR reflect area 5 error
E43	IR reflect area 6 error
E44	IR reflect area 7 error
E45	IR reflect area 8 error

## **6. Maintenance and notice**

6.1 In order to make sure count display and person safety, you must install good grounding when to use. Safe pipe rated value is "2A" , not too much.

6.2 Please turn off the machine and unplug the power cord when close every day. To clean the sensors (note-feeding sensor, note-receiving sensor and counting sensors) softly with brush, If meet with trouble, please ask for repairman to check and repair.

6.3 The time between open and close should be over 5 seconds, to avoid the number of display window being disturbed.