

Bill Counter **with counterfeit** **bill detection**

KN-BC001



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Included in box:

- Knox Bill Counter Unit
- External Display
- 3 ft Power Cord
- Soft Bristle Cleaning Brush
- Spare Parts
- User Manual

Functions:

- Automatic Counting
- Preset (Batch) Counting
- Add Counting
- Ultraviolet (UV) Detection
- Magnetic (MG)
- Infrared (IR) Detection
- Half Notes Checking
- Chain Notes Checking
- Counterfeit Alarm
- Automatic Self Checking
- Automatic Self Cleaning

Product Description

Due to technical changes and different models, the illustrations in this chapter may differ from your model.

► MACHINE



1 Hopper

2 Handle

3 Fan

4 LED Display

5 Control Panel

6 Stacker vane

7 Stacker

8 Adjusting screw

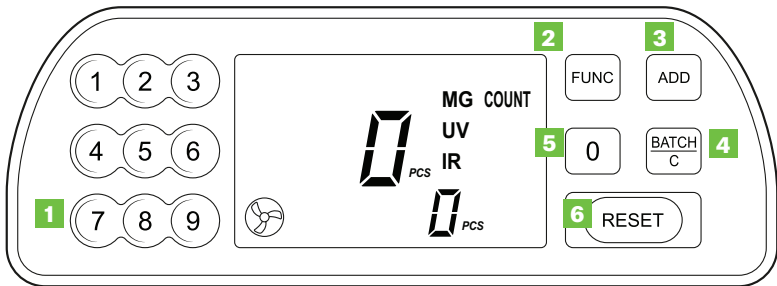
9 Power input

10 External display outlet

11 Power switch

12 Fuse

► CONTROL PANEL



1 Numbers 1-9

2 FUNC button

3 ADD button

4 BATCH/Clear button

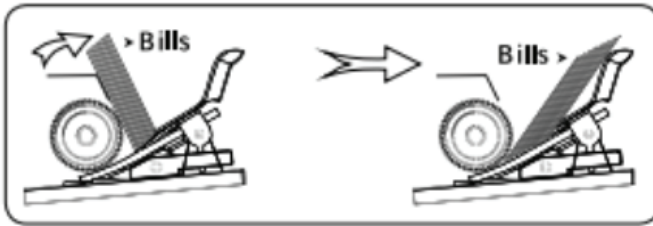
5 Number 0

6 RESET

OPERATION

▶GETTING STARTED: LOADING BILLS

Follow the steps outlined in the diagram below to load bills into the counter's hopper.



▶OPERATING MODES

COUNTING + UV, MG, IR DETECTION MODE

By default, this bill counter will count as well as detect for counterfeit bills using the UV, MG, and IR functions.

To manually cycle back to this mode:

Press [FUNC] until UV, MG, and IR indicators are lit. This means that they are active.

Place bills in the hopper and counting will automatically begin.

Please note: UV & MG will display as orange. IR will display as red. When these are showing lit on the display screen, these functions are active.

COUNTING + UV, MG DETECTION MODE

This mode both counts and simultaneously detects counterfeit bills through UV and MG scanning.

To select:

Press [FUNC] button until only the UV and MG indicators are lit. Place bills in the hopper and counting will automatically begin.

COUNTING ONLY MODE

This mode counts bills without detecting counterfeit bills.

To select:

Press [FUNC] until UV, MG, and IR LED lights are off.

Place bills in the hopper and counting will automatically begin.

ADD MODE

ADD mode allows you to count multiple stacks of bills while maintaining a grand total amount.

To select:

Press [ADD] on control pad. The ADD LED will light up on the display screen, indicating that this mode is active.

Place bills in the hopper and counting will automatically begin.

As you insert more bills, they will be added to the previous count, up to 999.

BATCH MODE

BATCH mode allows you to select how many bills to be counted.

Ex: If you set a "batch number" of 5, machine will count and separate bills in batches of 5.

To select:

Press [BATCH] on control pad.

Press the 0-9 numeric keys to set a batch number ranging from 0-999.

Load bills in the hopper and the machine will automatically begin counting. When selected number is reached, counting will stop.

Remove bills from the stacker and machine will begin counting the next batch.

MACHINE DISPLAY CODES

At times, the bill counter display may beep and show a code.

There are two categories of codes. Codes that indicate a problem with a bill, and codes that indicate a machine malfunction.

For reference, below is a list of all machine codes, their meanings, and the recommended solution for each.

►ALARM CODES

CODE	CAUSE	SOLUTION
EE1	Fake Bill - UV detection has found a bill reflecting falsely under fluorescence.	Remove the first bill in the stacker. This is the fake bill. Press [reset] to continue counting and detecting.
EE2	Fake Bill - MG detection has found a bill without magnetic ink.	Remove the first bill in the stacker. This is the fake bill. Press [reset] to continue counting and detecting.
EE4	Option 1: Half Bill - Machine has detected a ripped, torn, or half bill.	Remove the half bill from the staker, then press [reset] to continue counting and detecting
	Option 2: The counting sensor is broken or dirty	Clean or replace counting sensor.
EE6	Fake Bill - MG detection has found a bill with magnets in the wrong location.	Remove the first bill in the stacker. This is the fake bill. Press [reset] to continue counting and detecting.
EE8	Bill size is not within range for this machine (110-180mm)	Remove bill and press [reset] to continue.
EE9	Two bills have been counted as one, or an inaccurate count has occurred.	Tighten the machine's adjustable screw clockwise.
EEA	Chain Note - two or more bills have adhered together, or have been folded together.	Remove the first bill in the stacker and press [reset] to continue.

► ERROR CODES

CODE	CAUSE	SOLUTION
E01	The left counting sensor is dirty or broken	Clean or replace counting sensor
E02	The right counting sensor is dirty or broken	Clean or replace it
E03	The code disc is dirty or loose	Clean it or tighten it
E04	The hopper sensor is dirty or broken	Clean or replace the sensor.
E05	The stacker sensor is dirty or broken	Clean or replace it
E10	Ambient light is too high	Lower the ambient light
	UV sensitivity light is too high	Lower the UV light
E11	The connector of front display is loose	Tighten the connector

CLEANING & MAINTAINING MACHINE



BEFORE CLEANING, TURN OFF THE POWER SWITCH AND DISCONNECT THE POWER CORD FROM THE MACHINE.

► CLEANING THE OPTICAL SENSORS

Regularly clean optical sensors with a soft brush to prevent prevent paper particles and dust from sticking to the light-transmitter or light-receiver sensors.

If necessary, you may wipe the glass surfaces of the detectors with a soft cloth soaked with alcohol.

► CLEANING INSIDE THE MACHINE

We recommend you periodically clean the inside of the counter. Unplug the machine and lift the top cover to gain access to the interior.



CAUTION: DO NOT CHANGE THE POSITION OF THE DETECTOR AND/OR OPTICAL SENSORS

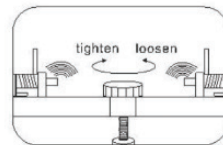
TROUBLESHOOTING & REPAIR

In case of an operating problem, troubleshoot by following the suggestions below:

PROBLEM	SOLUTIONS		
No Power	Ensure the power line is connected properly.	Check if fuse is worn out.	Check if machine's power switch is on.
Power On, Not Working	Hopper sensor may be dirty. Clean with soft brush.	Check that hopper's sensor line is connected properly to the main board.	Belt tension may be too loose or tight. Adjust.
Incorrect Counting	Turn up/down screw clockwise to increase the friction. (see next page)	Counting sensor may be dirty. Clean with soft brush.	The rubber tongue be worn out. Change to other side or replace with new one.
Incorrect Detecting	Adjust the MG sensor.	MG sensor may be dirty. Clean with soft brush.	UV sensor may be broken or dirty. Clean or replace with new one.

HOW TO ADJUST THE UP/DOWN SCREW

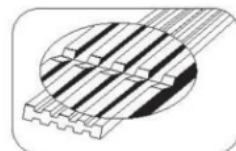
With prolonged use, this screw may become loose, which could affect counting accuracy. To tighten, turn the screw clockwise.



Adjust the up/down screw

HOW TO CHANGE WORN OR TORN MACHINE PARTS

When rubber tongue is worn out, flip and use the other side.



Safety/Warnings

- Always ensure the counter is properly connected to the power source.
- Turn off the product or pull out the power plug before moving it.
- Keep machine in a dry, well ventilated area. Keep away from direct sunlight and strong magnetic fields. Avoid operating in a dusty or dirty room.
- Do not put tools, hands, hair or clothes close to the rotating parts of the machine.
- Avoid loading the machine with damp or badly stained notes.
- Make sure paper clips, rubber bands and other miscellaneous bindings are removed from the bills prior to counting.
- Do not apply oil to machine parts, as it may cause the counter to malfunction.
- Effective power scope is 110V+/-10%. If outside this range, it may cause the counter to malfunction.
- Fuse rating: 2A/250V. Do not increase or decrease.
- 80% of all operational issues are caused by dust or dirt in the machine. Periodically clean machine to ensure effective use.

Specifications

Dimensions: 10.63" x 9.84" x 7.67"

Weight: 15.43 lbs

Counting Speed: 1,000 bills/min

Counting Range: 1-999

Preset Range: 1-100

Hopper Capacity: 130 bills

Stacker Capacity: 130 bills

Banknote Size Range: Length 4.33" - 7.48" ; Width 1.97" - 3.54" ;
Thickness .003" - .006"

Noise: >60dB

Power Consumption: 75W

Power Source: 110V±10% 50Hz

Ambient Temperature: 32° F – 104° F

Ambient Humidity: 60%h-90%h

Warranty

Knox offers a 1-year **Guaranteed good: Works as it should™** warranty, covering both parts and labor to ensure that you enjoy the full use of this product with peace-of-mind. For service requests, please contact cs@knoxgear.com.

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