

Newton 3

USER MANUAL



KISAN
AMERICA, INC.

Thank you for purchasing KISAN product, NEWTON3.

- Read this operation manual thoroughly before using the product.
- Follow this operation manual to ensure the safe and proper use of the product and to prevent any physical/material damage.
- The contents of this manual could be changed without notice.
- The actual product may differ from the contents of this manual.
- Any part of our product shall not be reproduced for commercial purpose without our permission.

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When inserting banknotes

Do not insert banknotes severely damaged, wet or mixed with alien substances.
Make sure that no other foreign substances enter the product including your hands and hair, when inserting and counting banknotes.
Straighten the folds or corners of banknotes before insertion.
Banknotes should be properly arranged and put on the hopper as shown below.



To use the product safely

DO NOT place the product near heat sources such as a stove or a heater.

DO NOT try to disassemble or repair the product by yourself.
Such attempts may cause accidents.

DO NOT place heavy objects or liquid containers, such as a beverage can, on the product.

DO NOT apply excessive force to the product.

DO NOT try to open or operate the product by force.

Make sure to apply proper grounding, using the plug.

Short-circuit may cause electric shock.

Make sure to shut its power off before putting your hands inside the product for such purposes as replacing a fuse or checking the components.

DO NOT unplug the product holding its electric cord.
Such action may cause electric shock or fire.

To maximize the durability of the product

DO NOT expose the product to the direct rays of the sun for a long period.

DO NOT place the product in a dusty space make sure that the product stays free of dusts or foreign substances , also do not place the product on an unstable or shaky place.

Keep and use the product under the optimal conditions as follows

- Temperature : 10 ~ 35 °C(For use) / - 10 ~ 45°C(For storage)
- Humidity : 20 ~ 90 % RH

DO NOT press the LCD screen or control keys with sharp objects such as a pen or a pin.
For the safekeeping of a long period, lay its cover over the product.

Daily Checkup

Remember to shut off the power and unplug the product during the checkup.

DO NOT use chemicals when removing dust from the product.

The use of chemicals may cause discoloration and deterioration.

Under long-term use, such foreign substances as dust may stick to the sensor, causing errors.

To prevent this, use a brush to remove any foreign substances from the sensor.



Front Part

Hopper is an area where the banknotes to be placed

Hopper guide moves from side to side and adjustable by the size of banknotes

Reject stacker is an area where the rejected banknotes are taken out

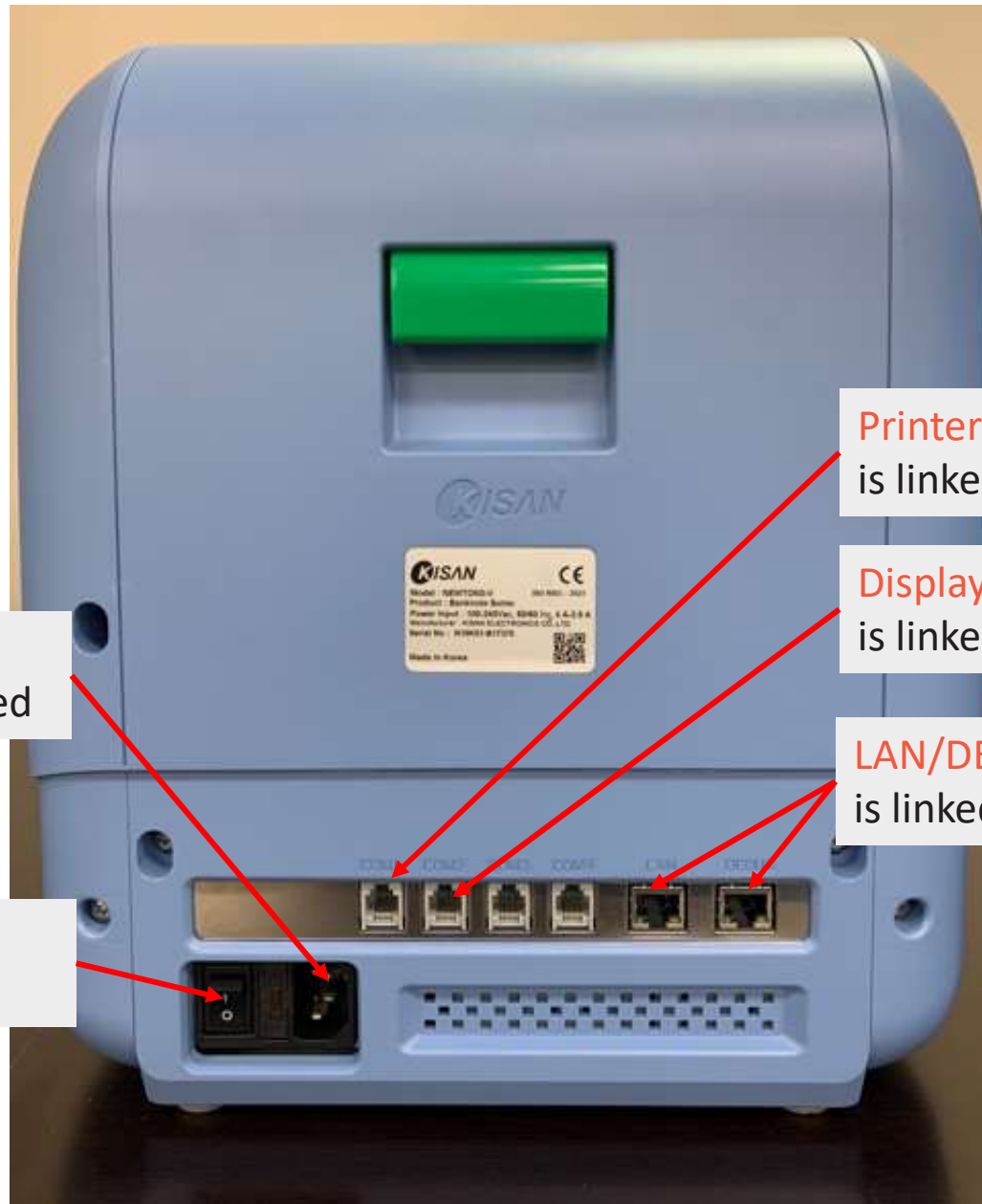
Stacker is an area where banknotes are taken out upon the operational completion

USB host port is linked to the A-type USB

Dust pocket removes dusts collected during the operation



Rear Part



Power connector
110-220V power inputted

Power switch
turns the power on/off

Printer Port : COM1
is linked to the printer

Display port : COM2
is linked to the external display

LAN/DEBUG port
is linked to Ethernet

Control / Screen Display

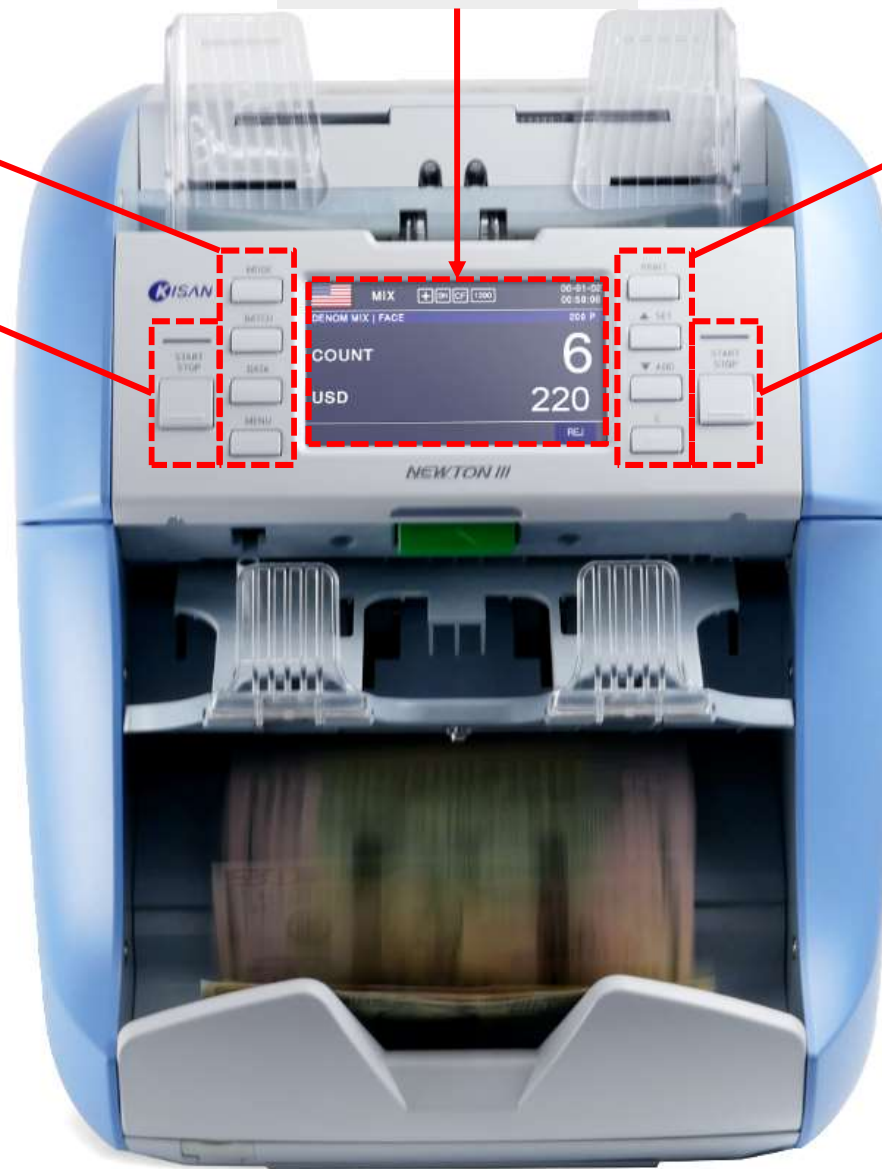
LCD Screen

Operation Button

Operation Button

START/STOP Button

START/STOP Button



A Newton3 can be operated by two users with two different settings and parameters.

Specifications

Mode : Mix/Auto , Count , Face/Orient , Denom , Serial No , etc

**Speed : 1000 ~ 1200 notes/min - Value Counting , Serial Number Detecting
1000 ~ 1500 notes/min – Free Counting**

Capacity : 600 notes – Hopper / 200 notes – Stacker / 100 notes - Reject pocket

OS : Linux

Display : 4.3" TFT Color Touch Screen LCD

Port : USB, LAN, Serial port

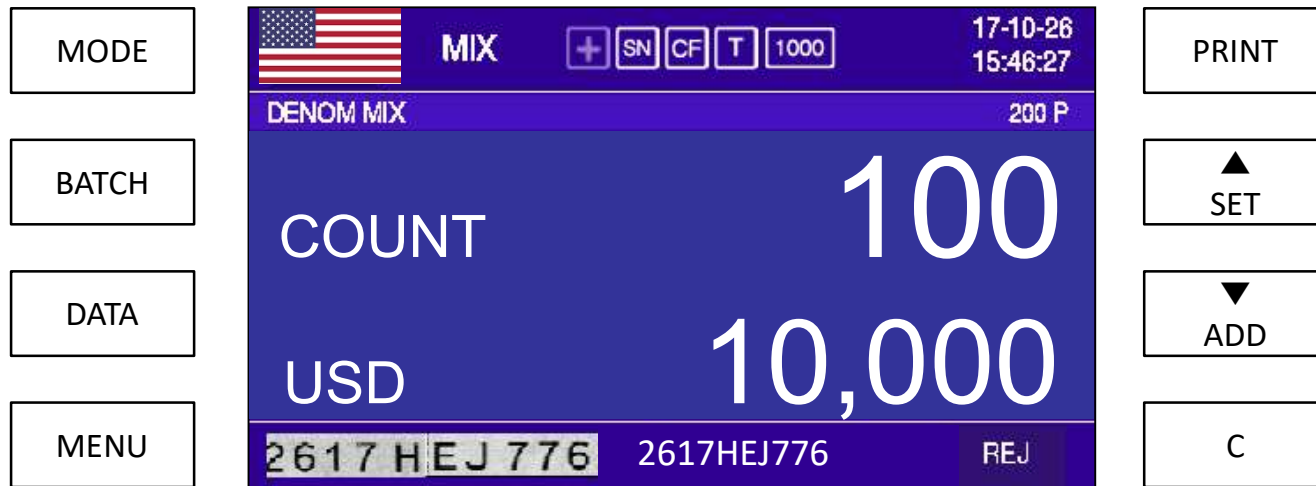
Sensor : CIS / MR / UV / IR / Ultrasonic

Dimension : 12.2" x 13.4" x 13.4" (W x D x H)

Weight : 26.5 lbs.

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

Operation of Function



When the machine is powered on, the screen will be displayed as above.
(The settings in the screen may differ from actual one.)

Touch the icon on the screen or press the button on the side of each icon to select a menu.

Do not use sharp objects such as a pen for touching the icons on the screen.

Main Menu

MODE

BATCH

DATA

MENU

MIX

+

SN

CF

T

1000

17-10-26
15:46:27

DENOM MIX
200 P

COUNT

100

USD

10,000

2617 HEJ 776
2617HEJ776
REJ

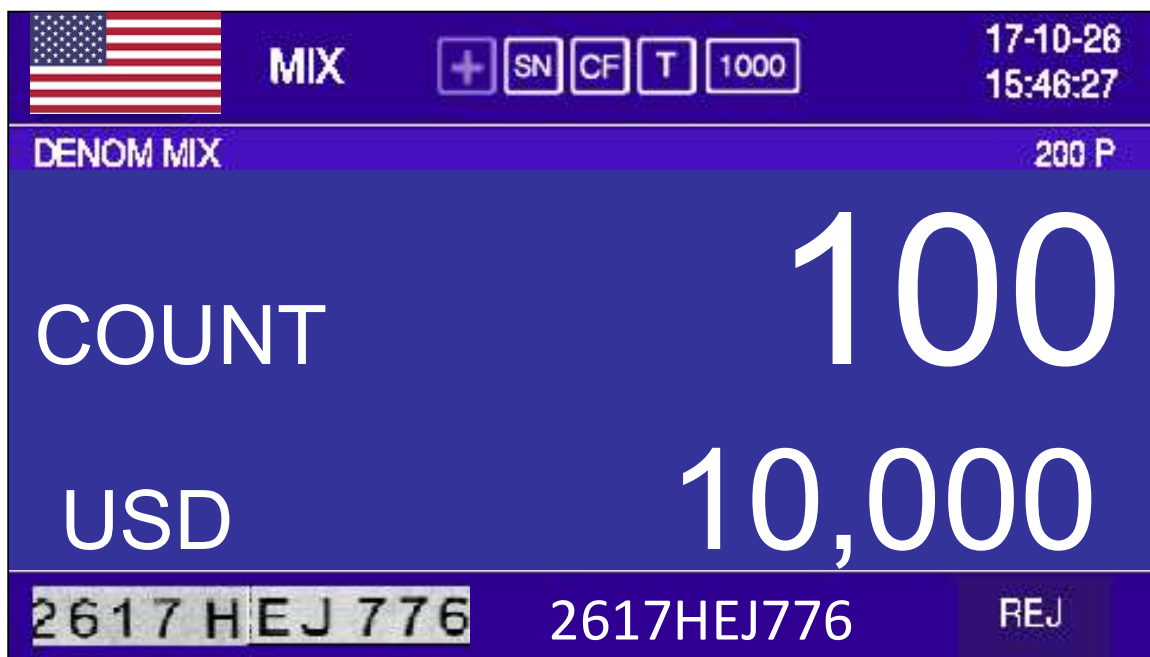
PRINT


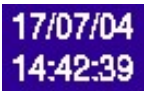


▲
SET

▼
ADD

C

Button	Short Press	Long Press
MODE	Switching Mode (Auto->Mix->Denom->Free)	Switching to the mode settings screen
BATCH	Switching batch value(10->20->50->100->150->200)	Switching to batch value setting screen
DATA	Count Result/Total/History , SerialNumber	Switching to the Check-Log screen
MENU	Counting Speed change	Switching to the SETUP screen
PRINT	Counting Print	
▲SET	Changing denomination at DENOM mode	
▼ADD	Changing ADD mode or not	
C	Count clear /Cencel	
START/STOP	Counting Start/Stop/Jam path clear	



ICON	Screen Touch
	Switching the country currency
	Switching to Time Setup Screen
	Switching to Reject Reason Screen
	Switching to detail counting result Screen

Display the Detail Counting Result

: If you want to see more detail breakdown , Touch the screen after counting .

MODE

BATCH

DATA

MENU

Count Result - Detail (KRW)		
Denom	Count	Amount
1,000	54	54,000
5,000	43	215,000
10,000	56	560,000
50,000	47	2,350,000
Total		200
		3,179,000

PRINT

▲
SET

▼
ADD

C

Detail

Banknote

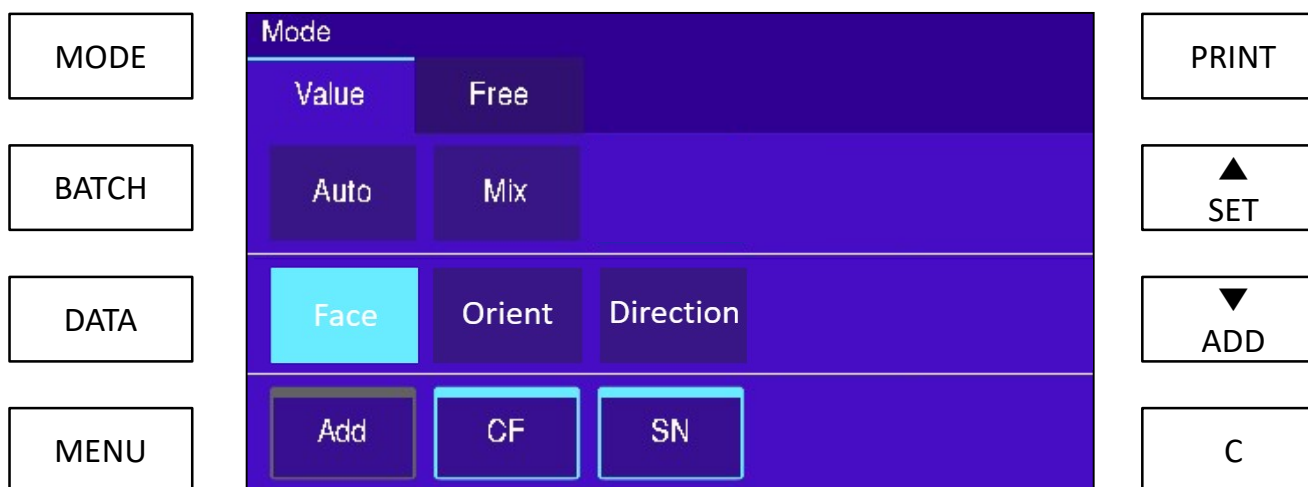
Serial No.

Button	Short Press
PRINT	Print the counting information / Serial Number
▲SET	Display Off Old & New / PAGE UP
▼ADD	Dsplay On Old & New / PAGE DOWN
C	Backward
START/STOP	Switching to Main Screen

Screen	Screen Touch
Detail	Display the counting information by denomination
Banknote	Display the information of denomination
Serial No.	Display the serial Number

Mode Setting

: If you want to change the specific mode , Long Press the “MODE” button .



Button	Short Press
C	Changing Cancel / backward
START/STOP	Apply the new mode / Switching to Main Screen

Screen	Screen Touch
Auto	Counts only one denomination initially counted
Mix	Shows total amount and number of banknotes when mixed denominations are counted together.
Free	Counts the total number of banknote without recognition of denomination
Add / CF / SN	On/Off the Add/Counterfeit/Serial Number

Batch Setting

: If you want to change the specific batch value , Long Press the “BATCH” button .

MODE

BATCH

DATA

MENU

Batch Setting

PCS

Amount

200

Add

SUB

1

5

10

50

100

7

8

9

4

5

6

1

2

3

0

Erase

PRINT

▲
SET

▼
ADD

C

Button	Short Press
C	Changing Cancel / backward
START/STOP	Apply the new mode / Switching to Main Screen

Screen	Screen Touch
All Number Key	Input the number of batch

Simple Trouble shooting guide1

Trouble. When there is a lot of Pre-processing image error

Solution 1. Remove dust on the CIS.

Solution 2. Check the GAP of insert module using Test-Note

Solution 3. Adjust the GAP for insert module.

(- direction or + direction , **P1.1 See picture below**)

Solution 4. Check the skew using Test-Note. & newton APL

Solution 5. Update the currency SW again using USB.



Trouble. When there is a lot of denomination recognizing error(Reference F1.2)

Solution 1. Remove dust on the CIS.

Solution 2. Check the image using Test-Note.

Solution 3. If the image is abnormal, Try CIS calibration

Solution 4. Update the currency SW again using USB.

Simple Trouble shooting guide 2

Trouble. When there is in case of a continuous " Check CIS " message

Solution 1. Remove dust on the CIS.

Solution 2. Update the FPGA SW again using USB

Solution 3. Update the APL SW again using USB

Solution 4. Update the DSP SW again using USB

Trouble. When alert window does not disappear after removal of JAM

Solution 1. Try again open/close Main Cover & Back Cover

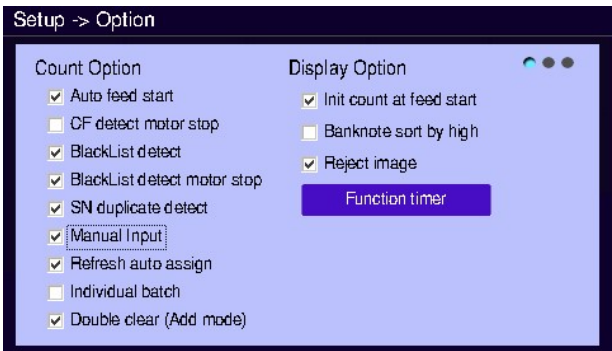
Solution 2. Update the Mecha SW again using USB

Solution 3. Replace the IR sensor PCB

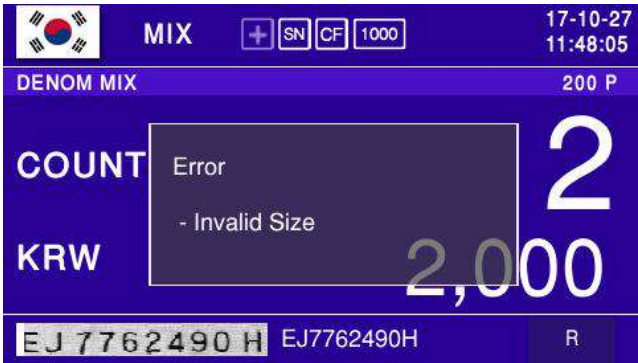
Simple Trouble shooting guide 3

Check Reject Image

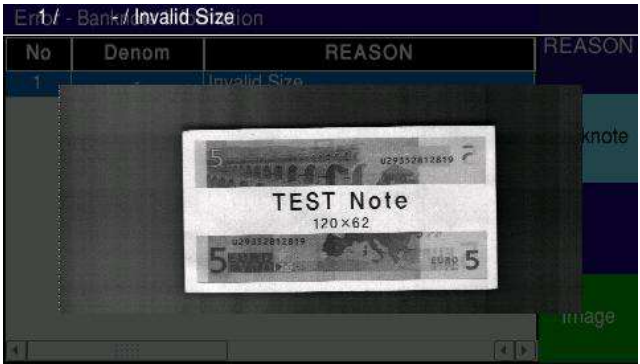
Setup -> Option -> 1st page -> Mark the Reject Image



When the error screen appears.



Screen touch “R” -> Banknote -> Image



Reject Reason List

Code	Reject Reason
R-01	Unfit (Unfit)
R-02	Unfit (Stain)
R-03	Unfit (Breakage)
R-11	Tape
R-12	Double
R-1A	Miss Denom(CIS)
R-1B	Miss Denom(Reflection)
R-1C	Miss Denom(Transmission)
R-1D	No NN Pattern
R-1E	Other Paper Size

Code	Reject Reason
R-1F	No Same Pattern
R-20	Reco Chain
R-21	Other Denom
R-22	Other Face/Orient
R-23	Over Pocket
R-24	Not Defined Denom
R-25	Insert Chain
R-26	Too Skewed MG
R-50	Recognition Double
R-60	No Serial Number Face

Reject Reason List

Code	Reject Reason
R-C1	Suspect IR
R-C2	Suspect UV_T
R-C3	Suspect IR, UV_T
R-C4	Suspect UV_R
R-C5	Suspect IR, UV_R
R-C6	Suspect UV_T, UV_R
R-C8	Suspect MG_D
R-C9	Suspect IR, MG_D
R-CA	Suspect UV_T, MG_D
R-CB	Suspect IR, UV_T, MG_D

Code	Reject Reason
R-CC	Suspect UV_R, MG_D
R-CD	Suspect IR, UV_R, MG_D
R-CF	Suspect UV_R, UV_T, MG_D
R-D0	Suspect MG_U
R-D1	Suspect IR, MG_U
R-D2	Suspect UV_T, MG_U
R-D3	Suspect IR, UV_T, MG_U
R-D4	Suspect UV_R, MG_U
R-D5	Suspect IR, UV_R, MG_U
R-D6	Suspect UV_R, UV_T, MG_U

Guide for Component

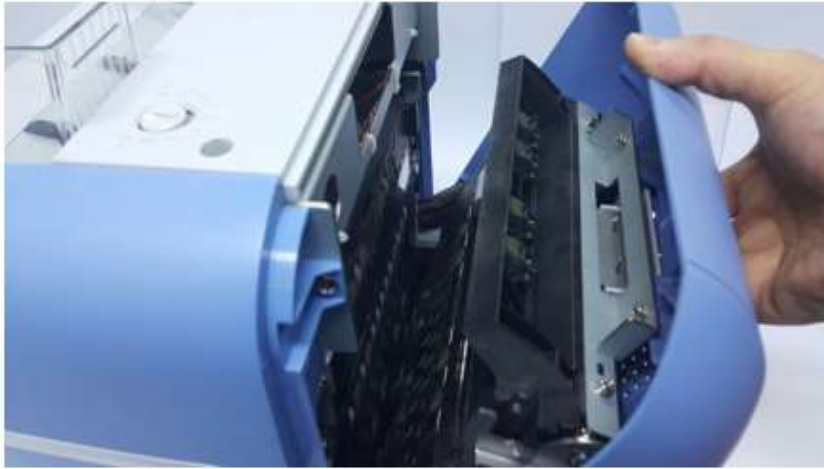
1. The Hopper sensor and rollers

Clean the hopper sensor and roller as shown in the photo below with a soft towel or a brush



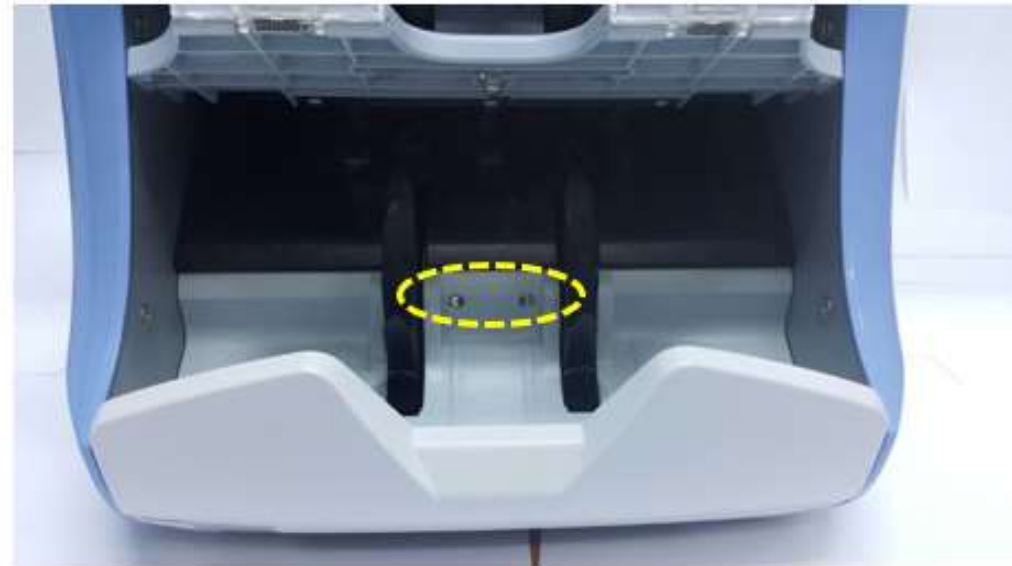
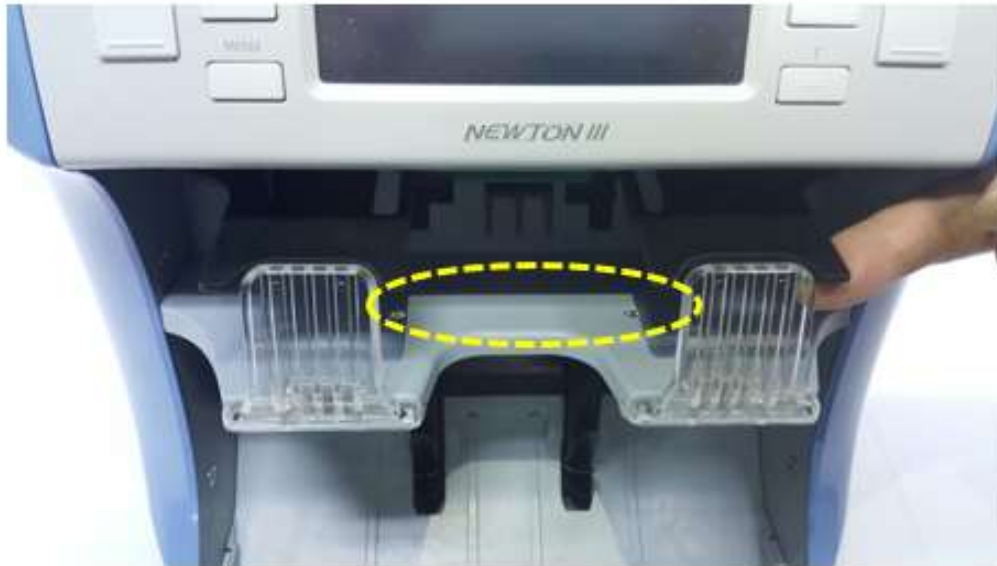
2. Recognize Detector Sensor

Open the cover by pulling the lever and clean the sensor as shown in the photo with a soft towel or a brush



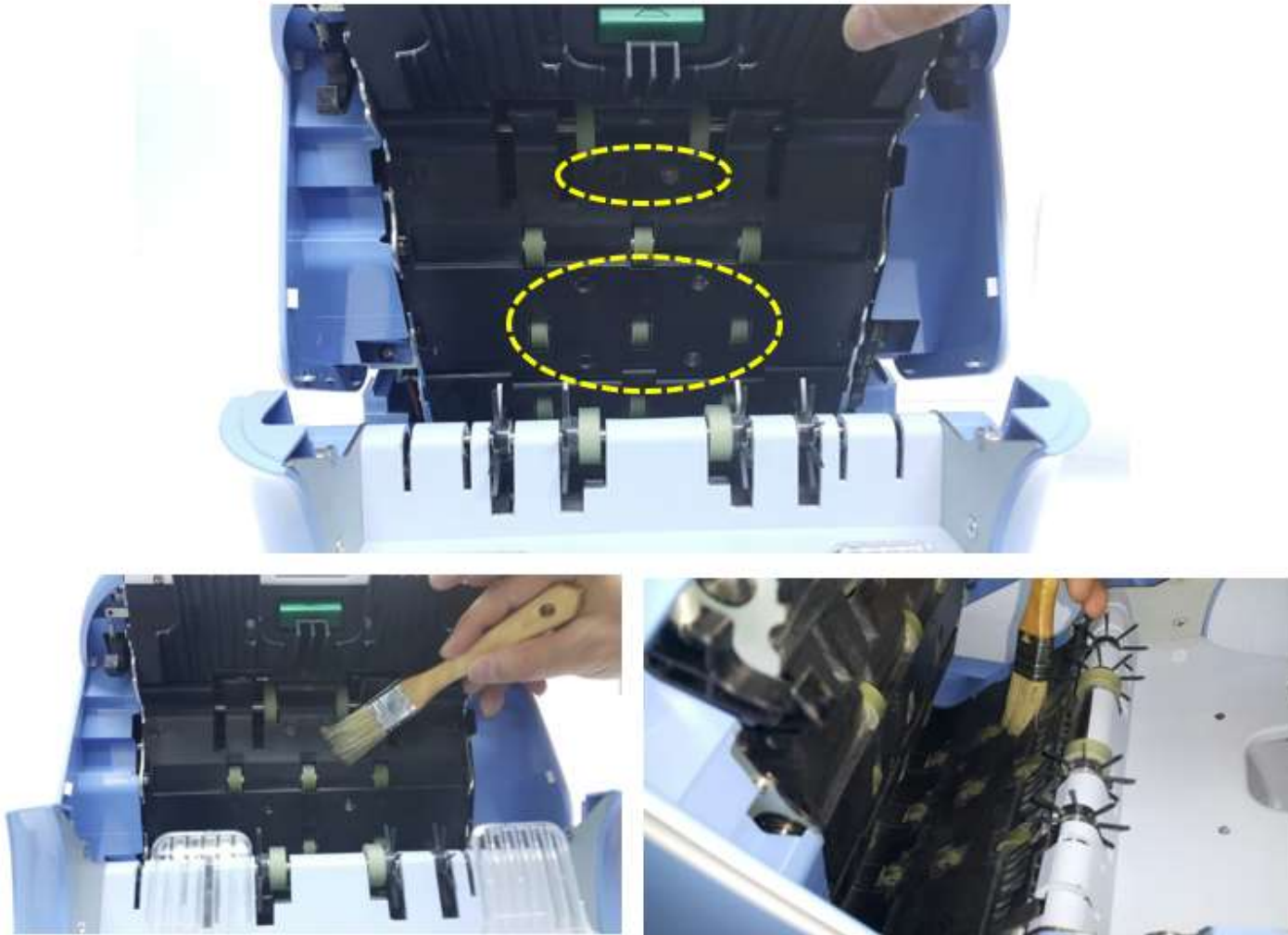
3. Stack and Reject Sensor

Clean the sensor as shown in the photo with a soft towel or a brush



4. The Reject count and separate sensor

Open the fore panel by pushing “Open Lever” and clean the sensor as shown in the photo with a soft towel or a brush



5. The dust pocket

Pull out a dust tray and clean



KISAN will make continuous efforts to improve our products.



Thank you