



SYNCFO Multi-In 1

Coffee Analyzer for
Moisture/Density/Agtron Color

versions 2.0

User Manual



Activation Instruction:

Dear customer, thank you for purchasing the SYNCFO coffee analyzer version 2.0. When you receive the product and unpack it for the first time, please follow the steps below to complete the activation and ensure that the analyzer works normally. Thank you!

1 Please remove top and bottom units out of the hand carry case:

(Figure 1)

Top Unit

Bottom Unit

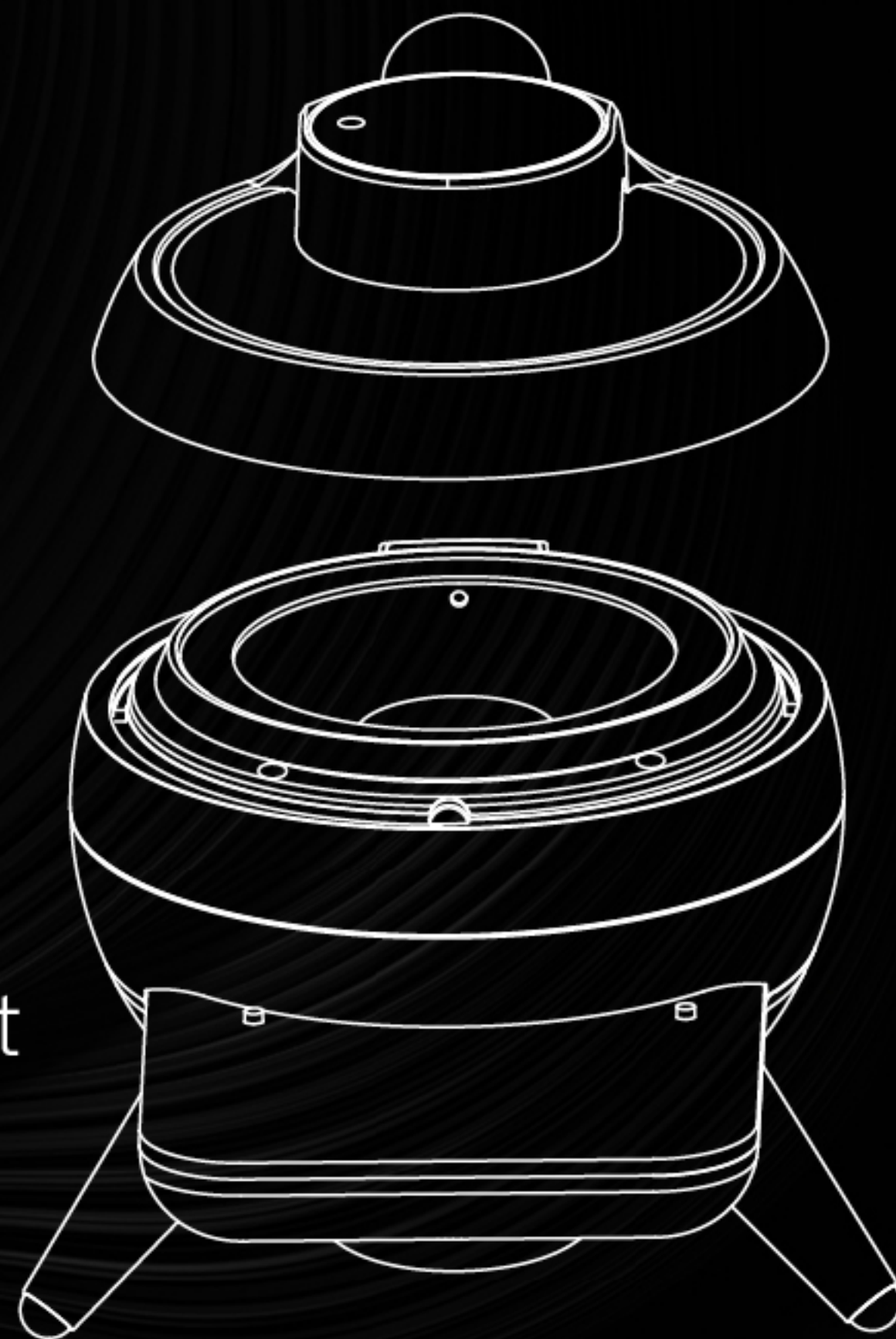


Figure 1

2 Please turn the electric switch to ON position:

Please check at the bottom of your bottom unit. You can find the electric safety switch of the bottom machine in the lower left corner. Please turn the switch to the position "ON". (Figure 2)

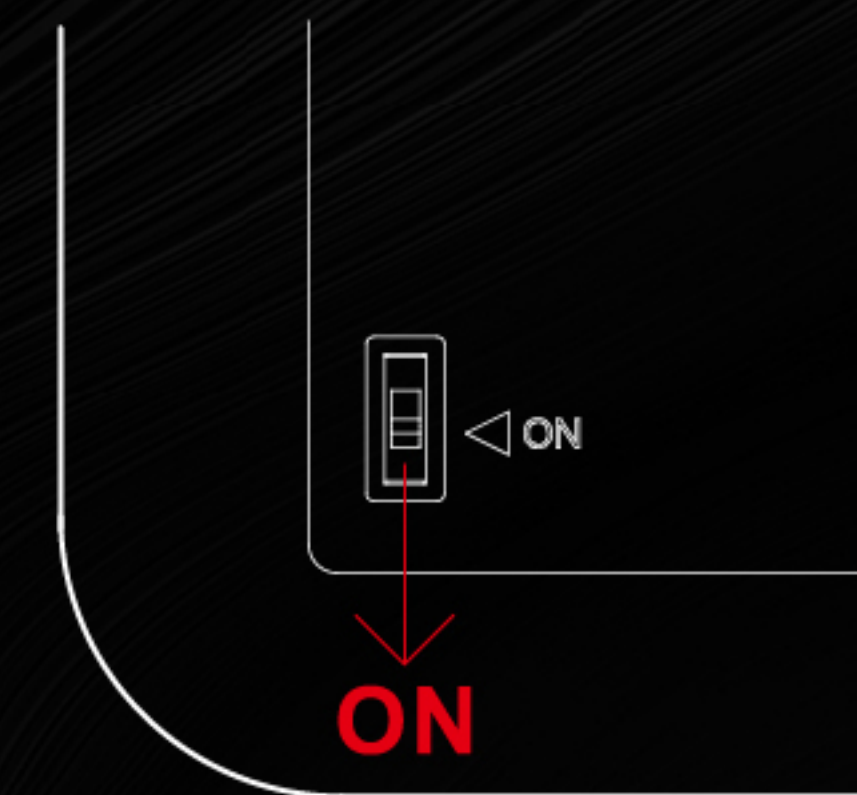
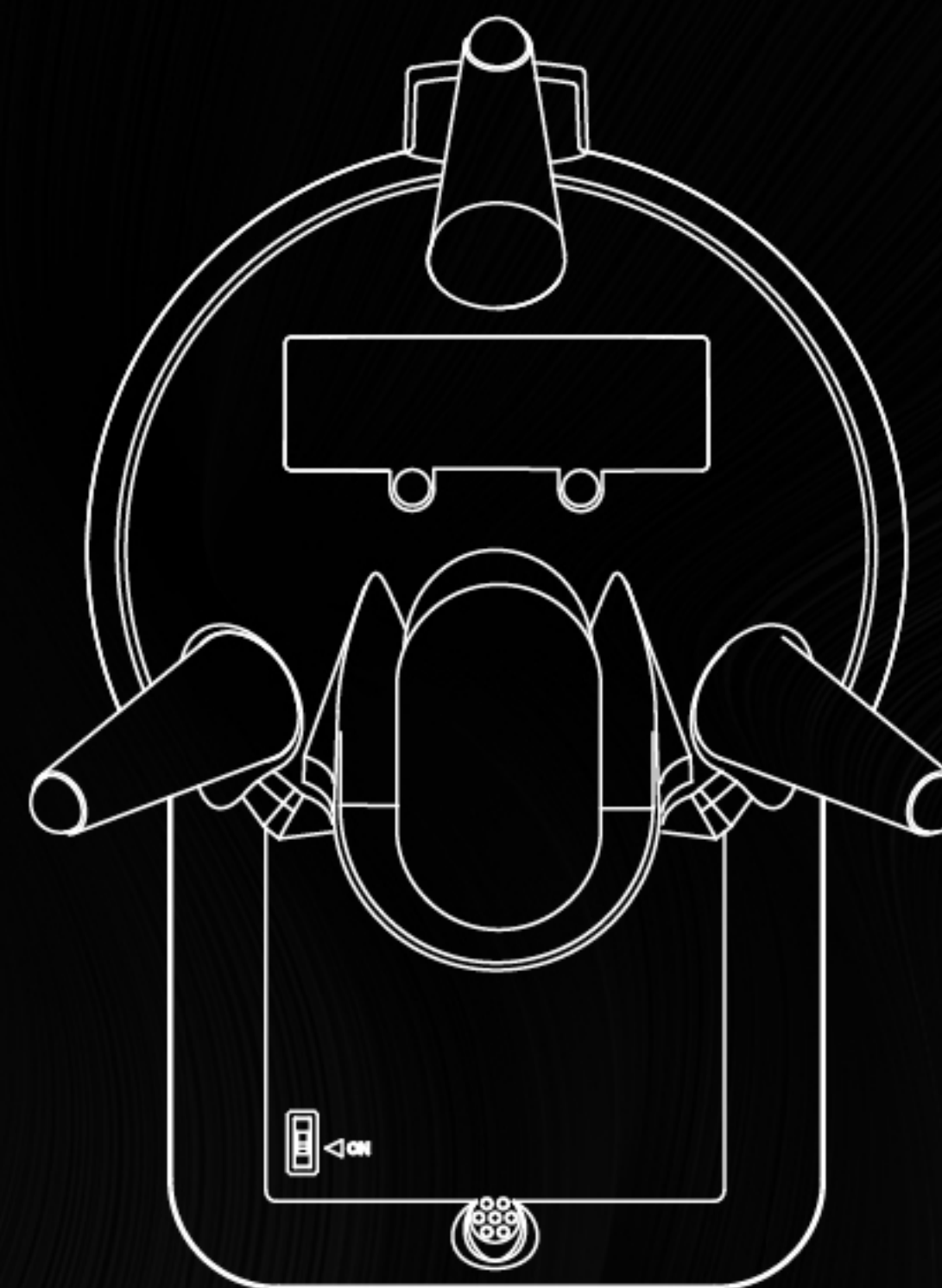


Figure 2

3 How to change batteries:

Bottom unit: Please turn the bottom unit over to the bottom to find the battery compartment, find the screw hole and unscrew it. (Figure 3)

Top Unit: Please turn the top unit to the back side to find the battery compartment, find the screw hole and unscrew it. (Figure 4)

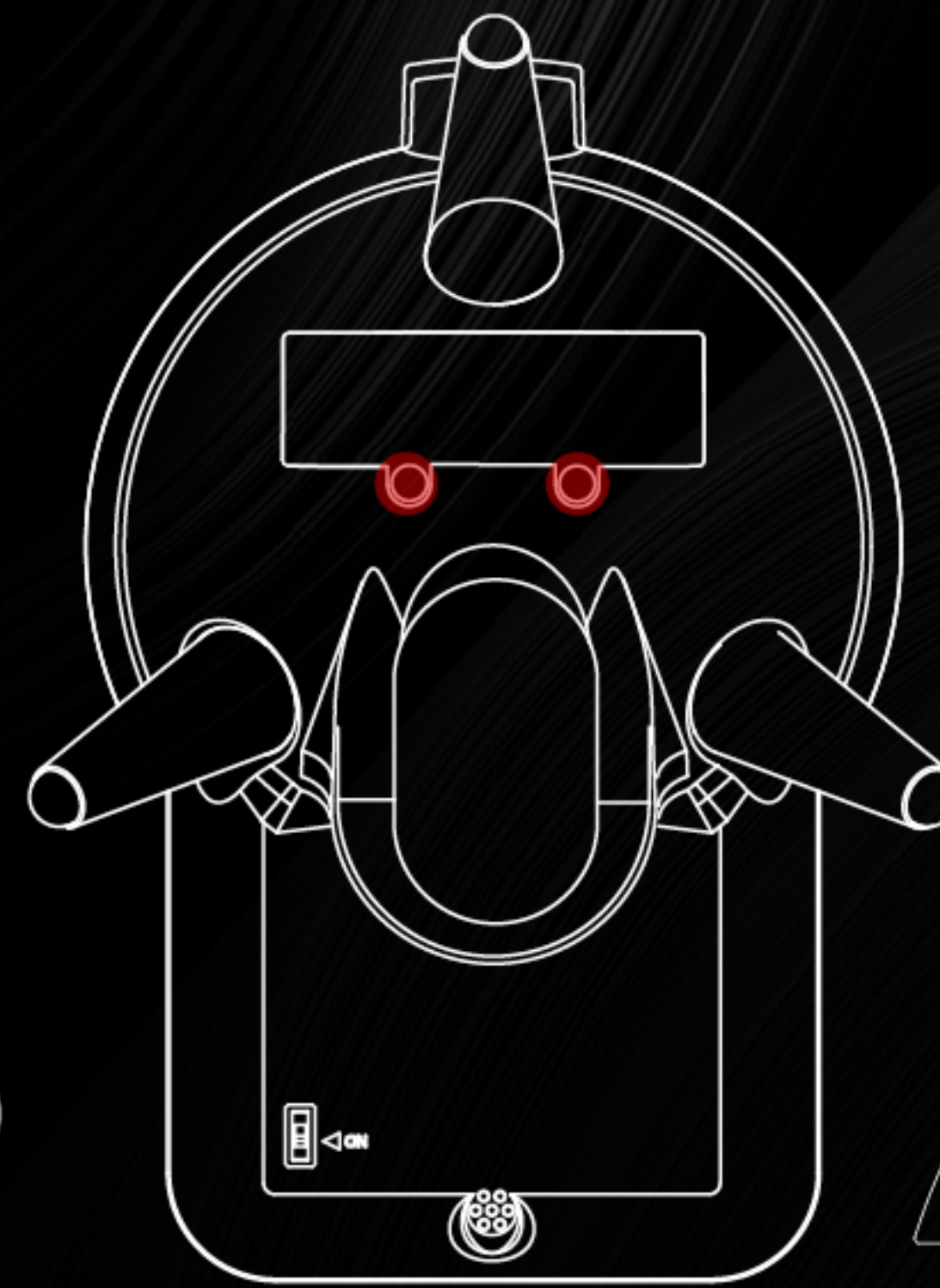


Figure 3

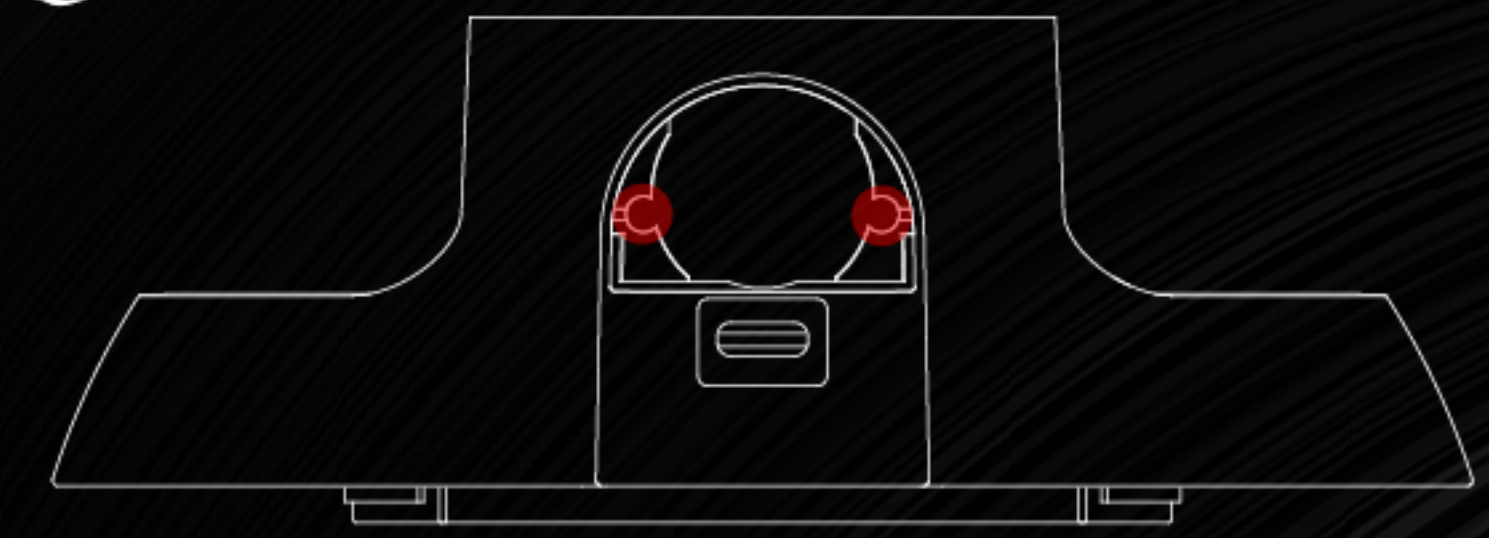


Figure 4

4 Activate Top & Bottom Unit:

Please combines the top and bottom unit into a whole unit. Then take out the dual-head magnetic charging cable. Gently remove the Micro USB magnetic adaptor from the head and insert them into the top and bottom unit Micro USB port. After charging cable is done assembled, please plug the charger into electric socket and connect the cable with the unit. The Top and Bottom unit screen will light up and starts showing charging. This means you have done with the unit activation. (Figure 5)

Under normal status, it takes 4~6 hours to fully charge the top and bottom unit.

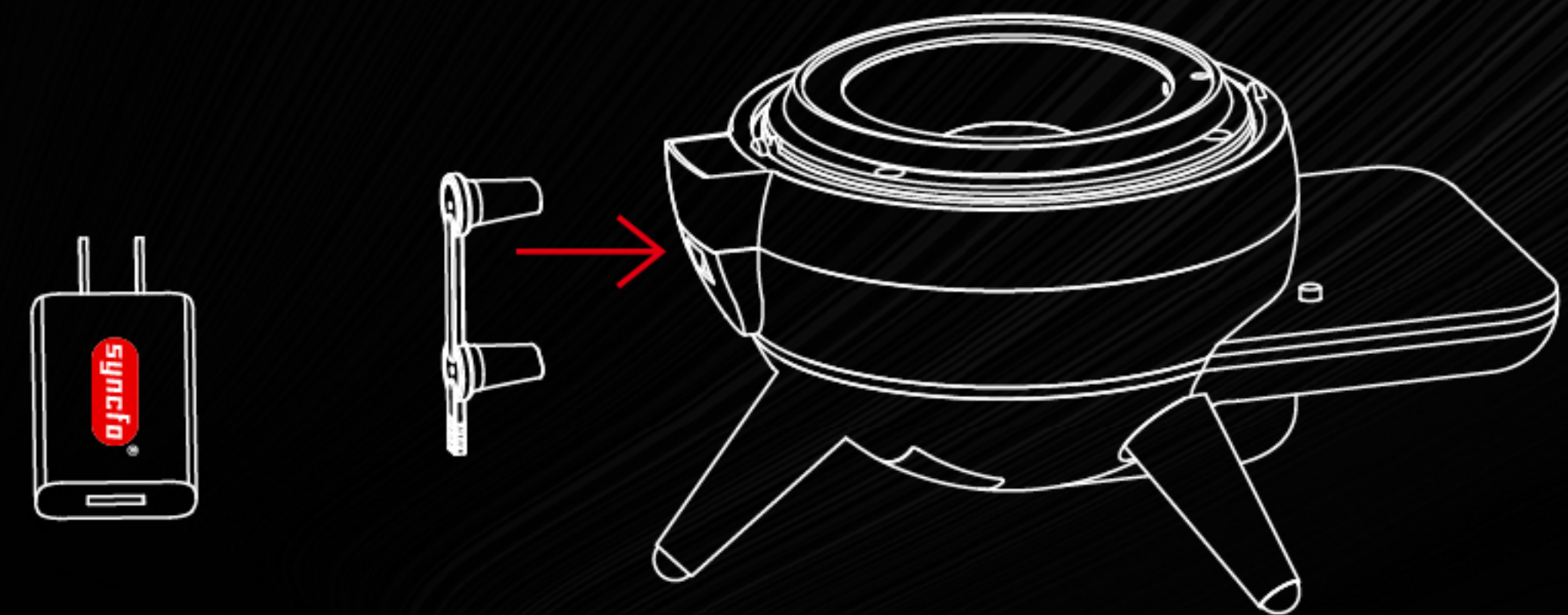


Figure 5



Dual-head magnetic charging cable

*** If remove battery under working condition and cause not able to starts the unit. Please connect to the dual-head magnetic cable line to activate the units.**

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Precaution

I . Feature of Product

Thank you for purchase SYNCFO multi-in 1 coffee analyzer. Density, Moisture, Agtron Color Score. SYNCFO coffee analyzer is the most unique multi-function analyzer in the world. It contains following unique feature.

- No warm-up is needed.
- Most 5 common analyze items: Coffee Dry Cherry, Parchment (note 1), Green, Roasted, Grounded coffee bean.
- Just 3 seconds, you can have the result of Density, Moisture, Agtron Color Score (note 2), Temperature and Environment Humidity. Total of 5 results.
- Includes a wireless Bluetooth thermal label printer and very precision electronic scale.
Note 1: Analyzing Dry Cherry and Parchment only in the Professional Version.
Note 2: The basis of Agtron color score is strictly follow with the SCA Roast Color Classification System.

II . Basic Specifications

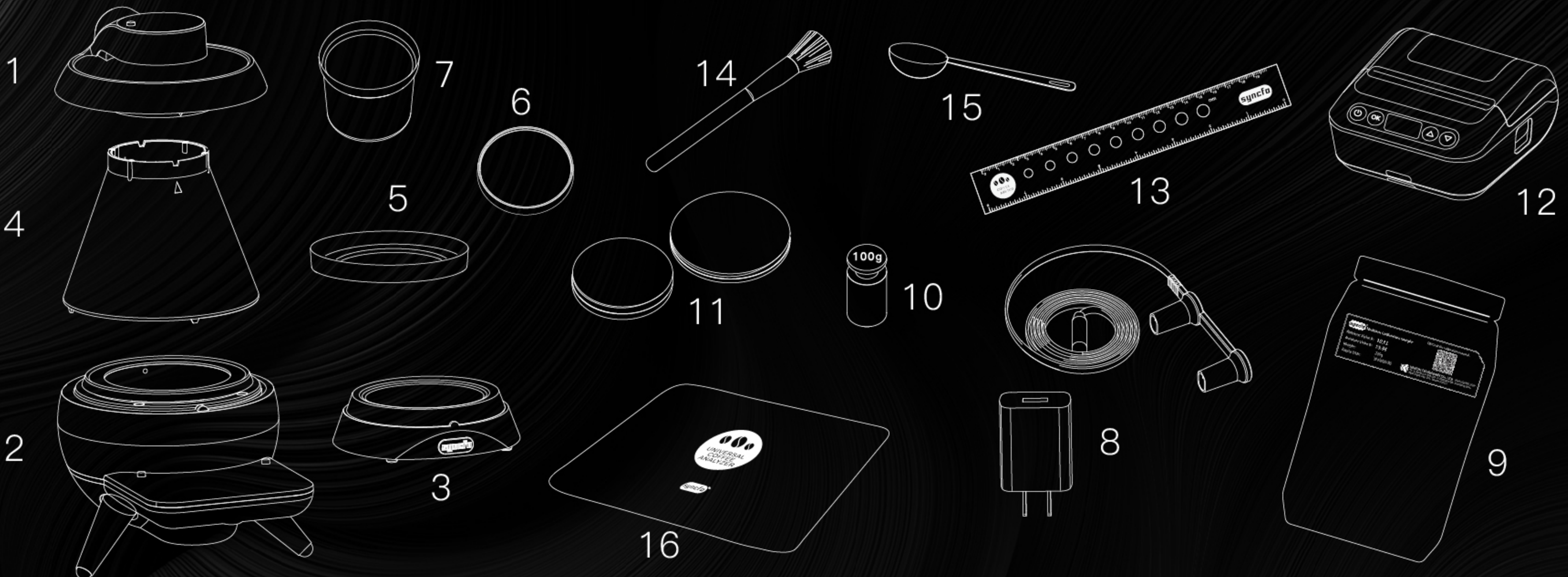
- Analyzing item: Coffee Dry Cherry, Parchment, Green, Roasted, Grounded Coffee Bean.
- Analyzing Range:
 - Green Bean: > 8.0%
 - Roasted Bean: > 1.0%
 - Grounded coffee: > 1.0%
 - Density: 100~1000 g / L
 - Agtron Color Score: 1~150
 - Electronic scale: 0~1100g
- Detection Accuracy
 - Moisture: $\pm 0.1\%$
 - Density: ± 1.0 g / L
 - Agtron Color Score: ± 0.1
 - Electronic Scale: ± 0.1 g

III. Accessories Details

A.Main Component

- 1 Top Unit
- 2 Bottom Unit
- 3 Base
- 4 Cyclone cover
- 5 Bean Plate(110ml)
- 6 Powder Plate(30ml)
- 7 Measuring Cup(200ml)
- 8 Dual-Head Magnetic Charging Cable
- 9 Moisture Calibration Sample
- 10 Weight Calibrating
- 11 Color Calibration Sample (with glove)
- 12 Bluetooth Wireless Printer (with charging cable)
- 13 Ruler
- 14 Brush
- 15 Bean Spoon
- 16 Cleaning Cloth

B.Minor Component



IV. Operating Instruction

After turning on the top and bottom unit, please make sure the bottom unit bean chamber is empty. Combine the cyclone cover with top unit, then put it on the bottom unit. Press the ok button (red dot on bottom unit) to enter the main screen to perform operating.

1. Physical Analyzing of Coffee Bean (Density & Moisture)

Please pour your analyzing sample into the SYNCFO measuring cup. Make sure the analyzing sample are fully horizontal with the edge of the measuring cup when viewed from the side (est. 200ml). Then pour the sample into the bean chamber and flatten the surface with ruler, cup or bean plate. The sample should fully cover the bean chamber, use the main screen to choose your analyzing option to start analyzing. If you want Agtron Color Score, please put on the Top Unit.

(Main Screen → Coffee Bean Analyzing → Green, Roasted, Ground, Parchment, Dry Coffee Cherry)

Note: Please make sure the surface is flattened and fully chambered.

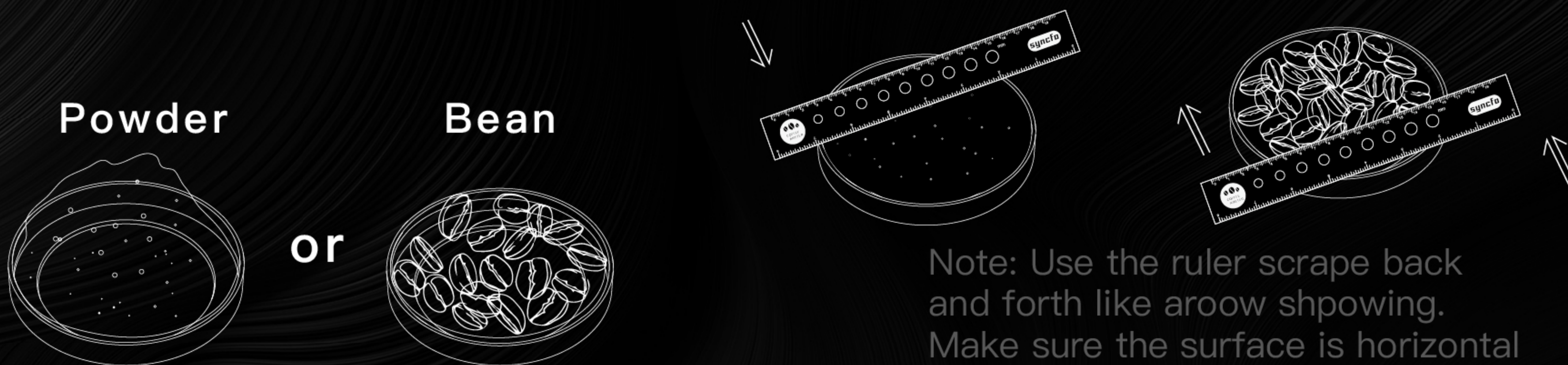


2. Agtron Color Score Analyzing (Use plate for roasted or grounded coffee bean)

Using plate for Agtron Color Score analyzing, please pour the roasted or grounded sample into the bean plate or powder plate. Use the ruler to flatten the surface, please make sure the analyzing sample is horizontal with the edge of the measuring cup when viewed from the side. There are 2 ways of operating method for Color analyzing.

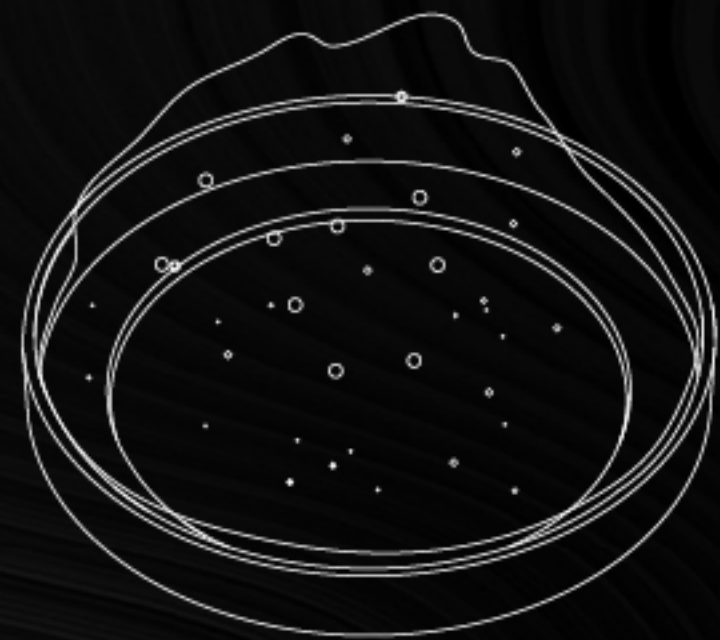
①. Put the plate on top of the base and over with the cyclone cover with top unit. Press ok button on top unit to analyze. (Make sure there is no other unit within radius 30cm for infrared influence.)

②. Put the plate on top of the bean chamber and over with the cyclone cover with top unit. Press ok button on top unit or operate the bottom unit: Coffee Bean Analyzing → Roasted or Grounded Coffee Bean → ok button to analyze. (Make sure there is no other unit within radius 30cm for infrared influence.)



Note: Use the ruler scrape back and forth like arrow showing. Make sure the surface is horizontal with the edge.

Powder



or

Bean

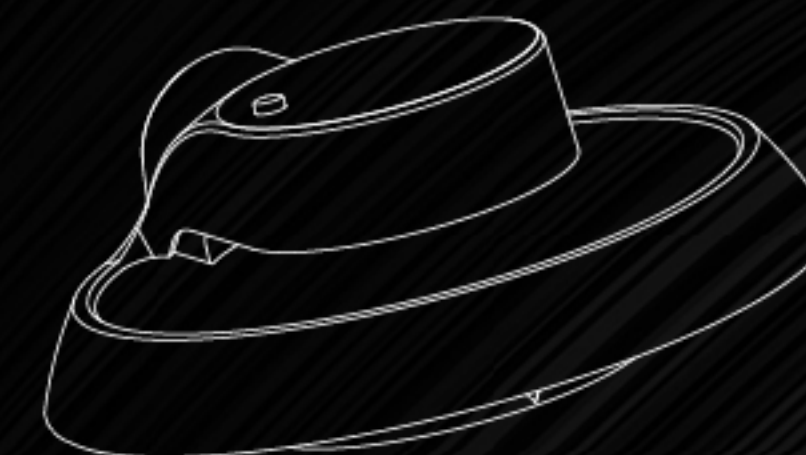


or

Note: Please make sure the surface is flattened and fully chambered.



+



Note: Please put the flattened bean plate on the base.



or



3. Electronic scale

You can use the bottom unit electronic scale for measuring weight just put the measuring object in the chamber. Max 1000gram. The scale is very precise and sensitive, so please put the unit on a flat and stable surface. Do not touch the unit or you can cover with cyclone cover for reduce wind effects. When you are doing density calibrating, please put the weight at the center of chamber.



Weight Measuring



Calibrating

4. Bottom Unit Calibration (Density/Moisture)

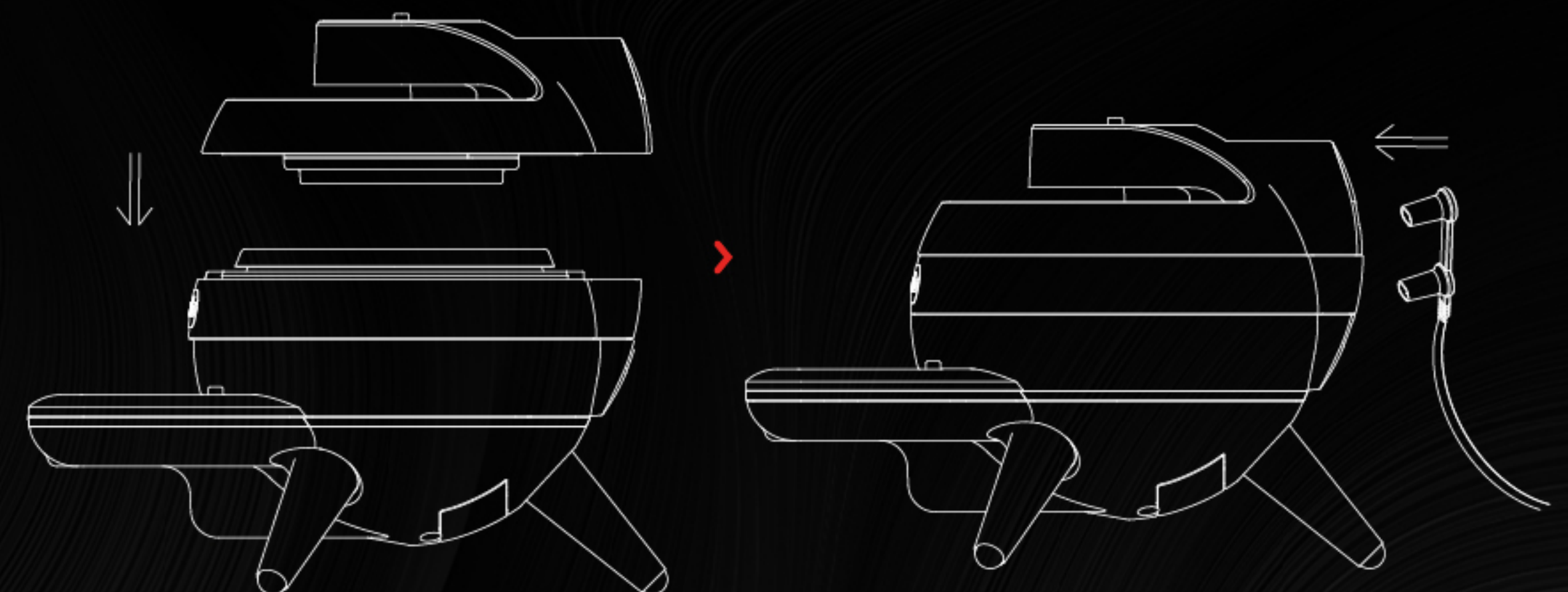
Density: Turn on the bottom and enter the main screen, please make sure the bean chamber is empty. Goto System Setting → Auto Calibration → Scale Calibration → Place weight in the center of bean chamber and press ok button to calibrate.

Moisture: Turn on the bottom and enter the main screen, please make sure the bean chamber is empty. Goto System Setting → Auto Calibration → Bottom Unit Calibration → Please match the NFC logo to scan. (Moisture calibration sample pouch & Bottom Unit) After scan should have a “Beep” sound then Pour a cup of the moisture calibrating sample into the bean chamber and press ok to calibrate. After done calibrating, please pour back the sample back to the pouch and keep it in case.



5. Electric Charging

Please put Top and Bottom unit into a ball shape. And connect the dual head magnetic charger cable to the back side for charging. If you are charging for the first time, please read the instruction at Activation Instruction #4 Activate Top & Bottom Unit:



V. Bottom Unit Function Explanation

A. Control Explanation



B. Function Description

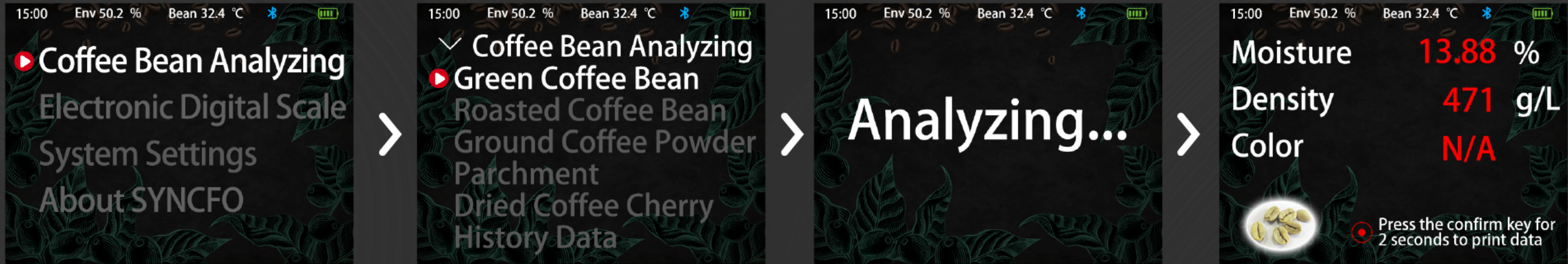
Press the "On" button to turn on the unit. The screen will display SYNCFO product model and informs to make sure bean chamber is empty and place the cover to press enter key. Once enter main screen you can start your analyzing. To turn off please press same button for 3 sec.



1.Main Manual– Coffee Bean Analyzing

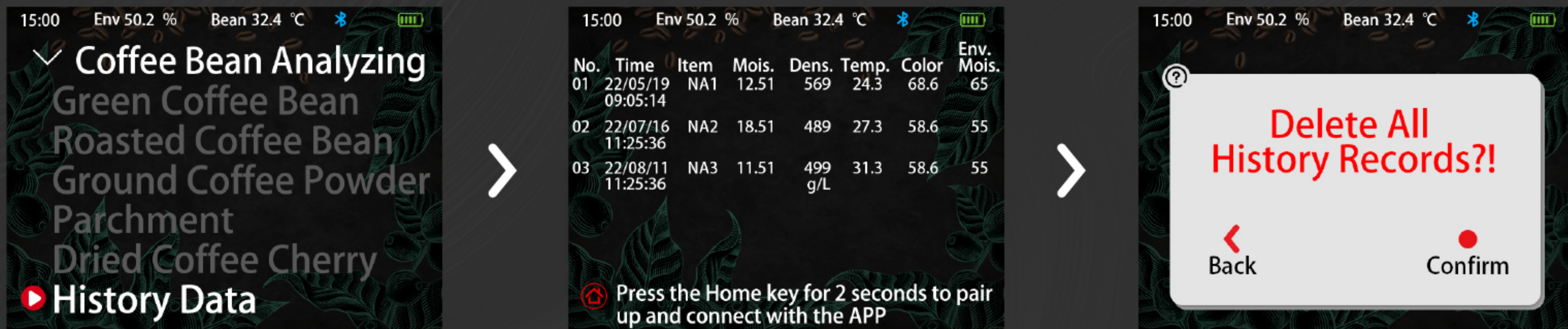
(a)Green Coffee Bean/Roasted Coffee Bean/Ground Coffee Powder/Parchment/Dry Coffee Cherry

Please choose the analyzing option according to your analyzing sample for analyzing. Analyzing result will shows after 3 sec. (Pressing Home or Right button will exit analyzing).



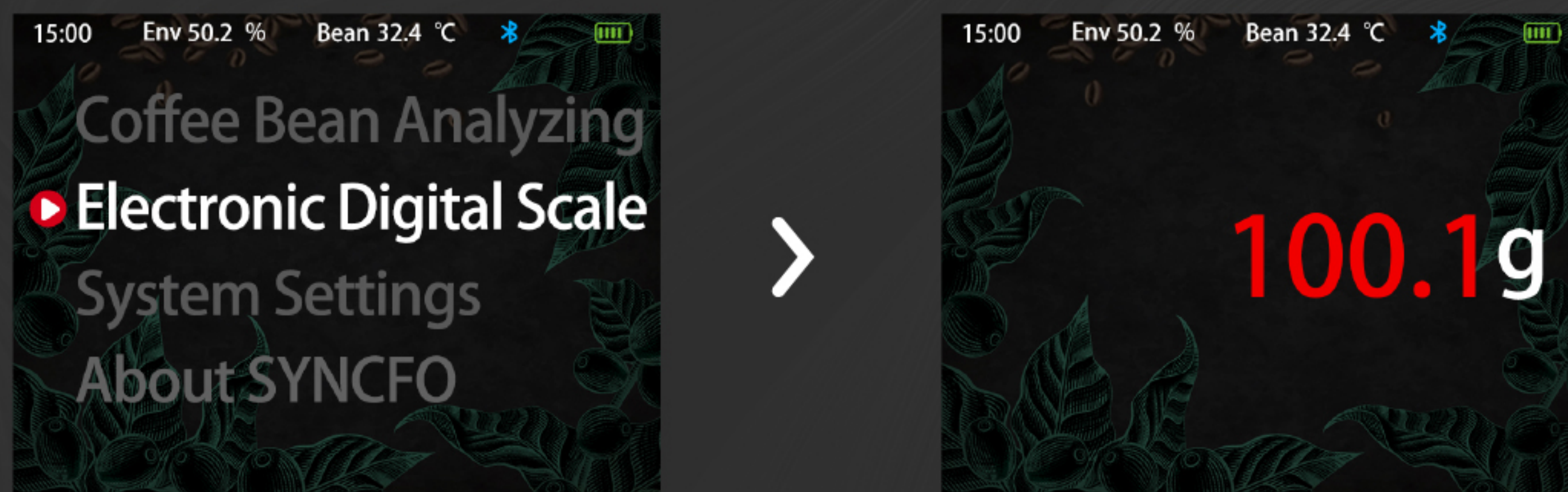
(b)History Data

Top & Bottom Unit both contain 100 analyzing history record, you can view the records and use up or down key to switch. Left key to exit and long press Right key > 2 sec to delete all history.



2.Main Manual– Electronic Digital Scale

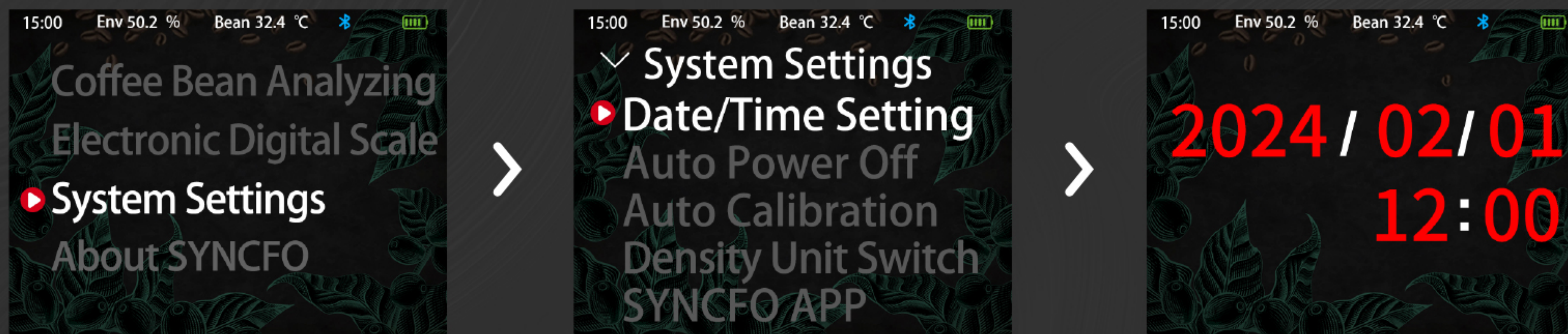
The option allows you to access the electronic scale. Max 1000–gram, precision is $\pm 0.1\text{g}$. Also, can press the Scale button for direct access at any time.



3.Main Manual– System Settings

(1)Date/Time Setting

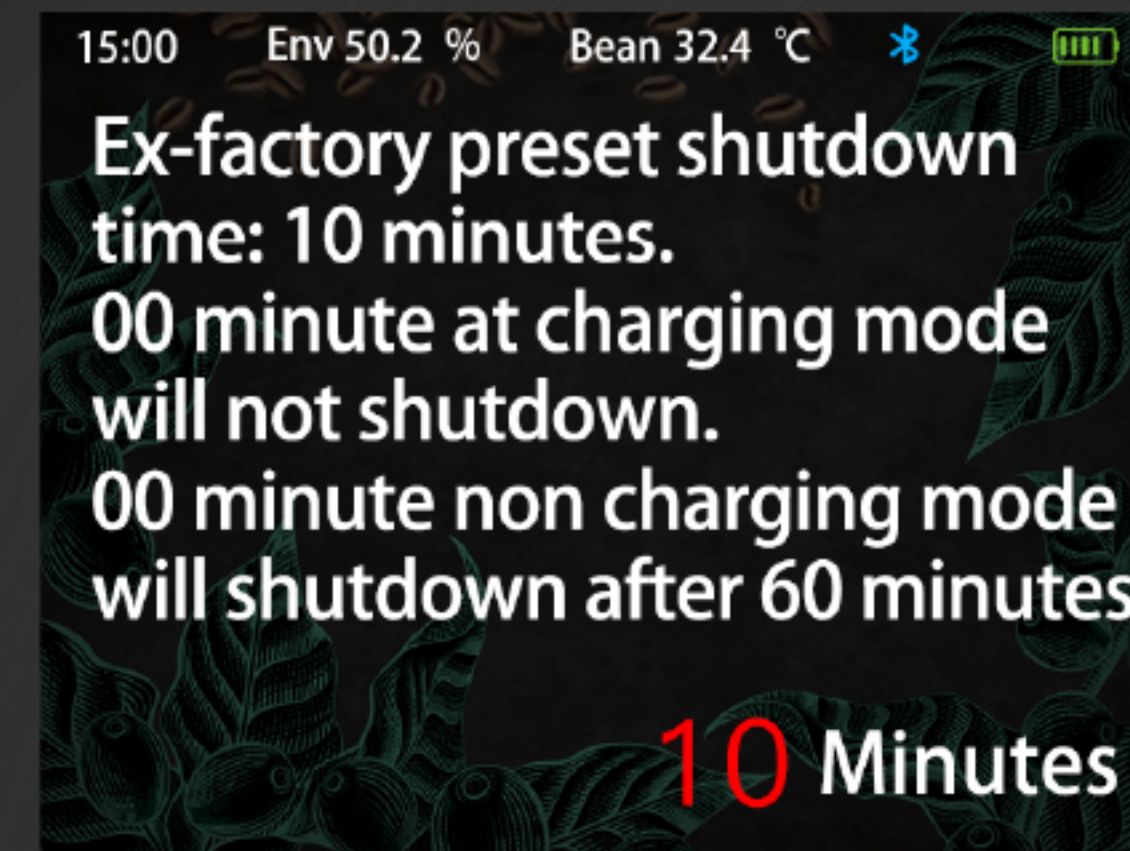
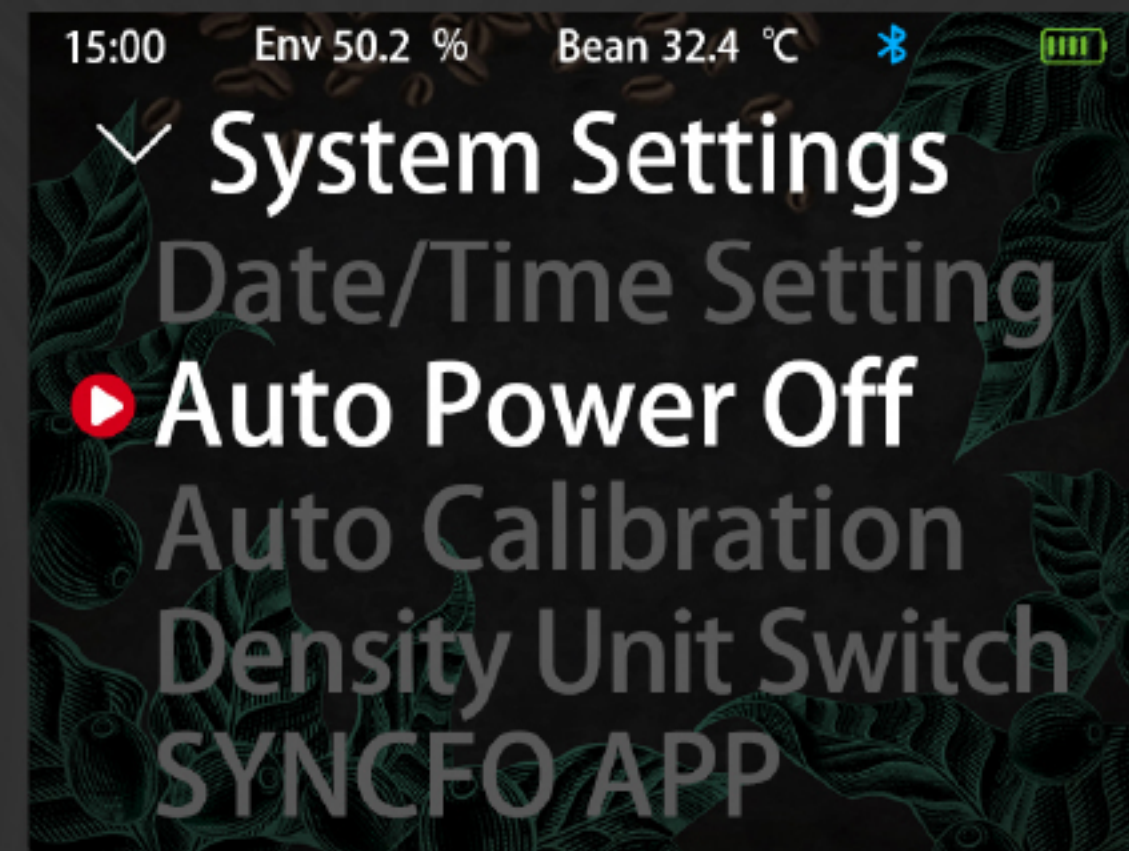
Setting the date and time(24hr) on your unit. You can just set on the Bottom Unit. After done, put the Top Unit on Bottom unit and turn on. The Top Unit will automatically sync with the setting on Bottom unit.



(2)Auto Power Off

Setting the time for auto off when you are not using the unit. Out of factory setting is 10 mins. You can set from 1~60 mins according to your needs. If you don't want to shut down the unit please set 00 min. but recommend connect the charging cable with power while you are using.

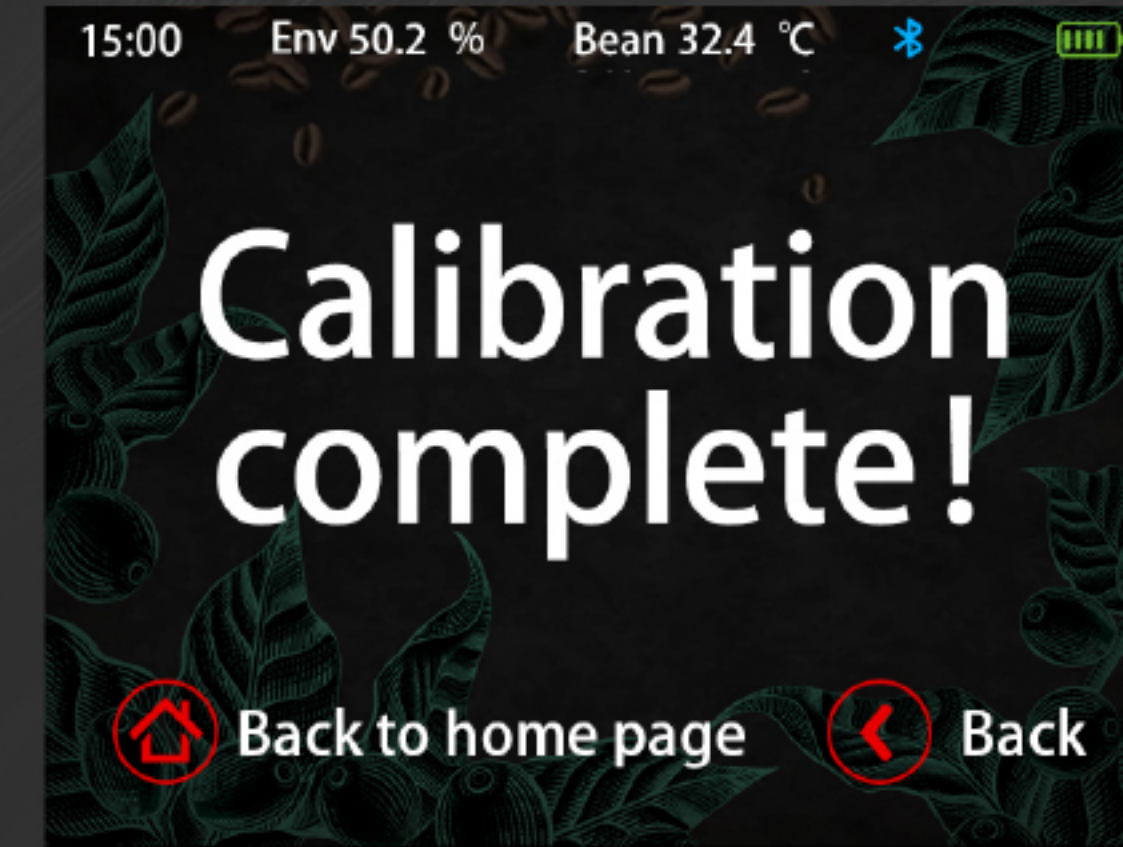
*You can put the Top Unit on the Bottom unit during setting, the system will automatically sync the date and time setting.



(3)Auto Calibration – Bottom Unit

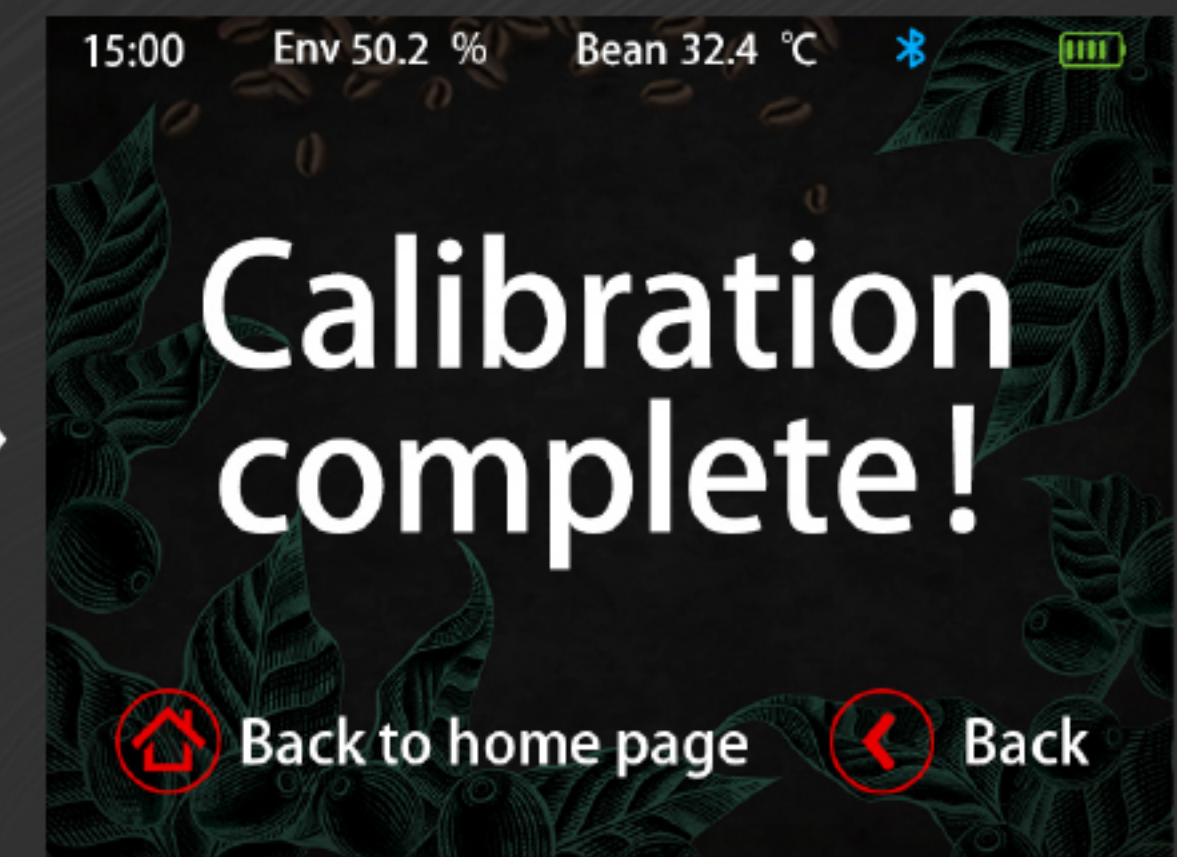
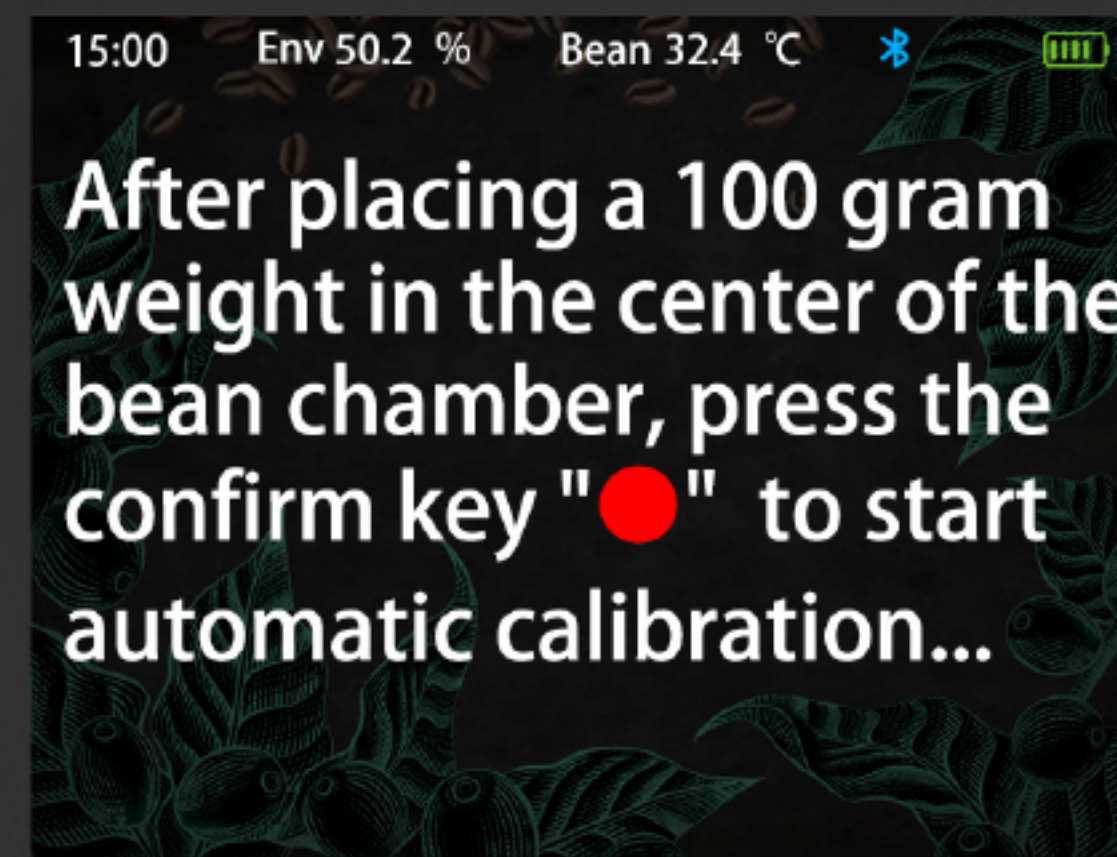
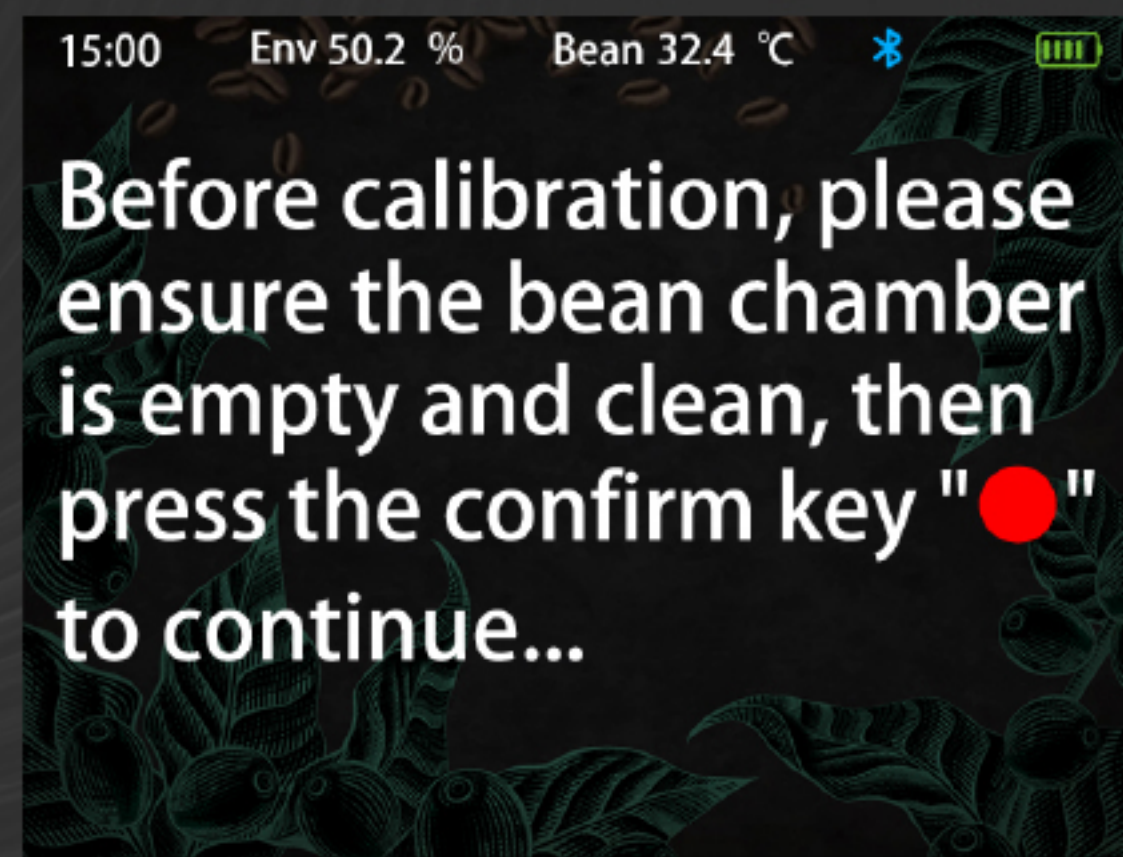
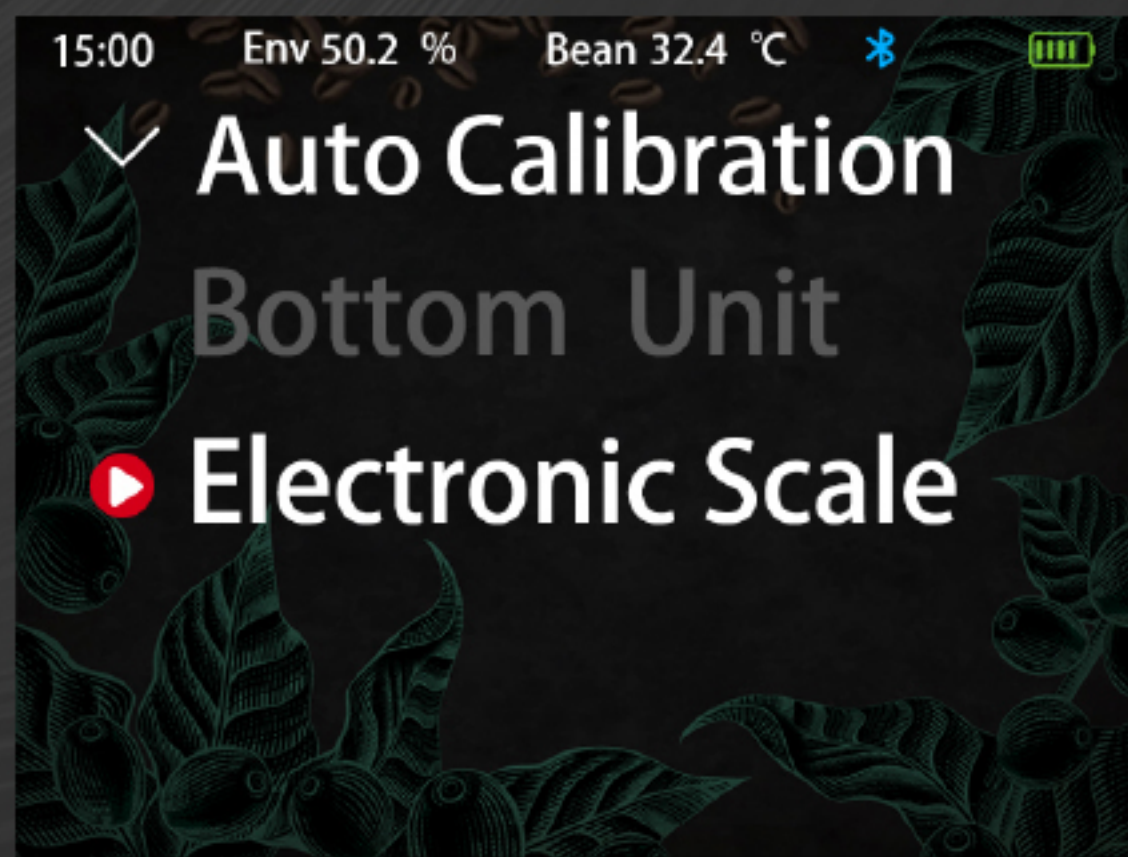
After using for half year or unit have been on travel or shaking. We will strongly recommend you do all the calibrating on your unit. Please check on calibrating instruction





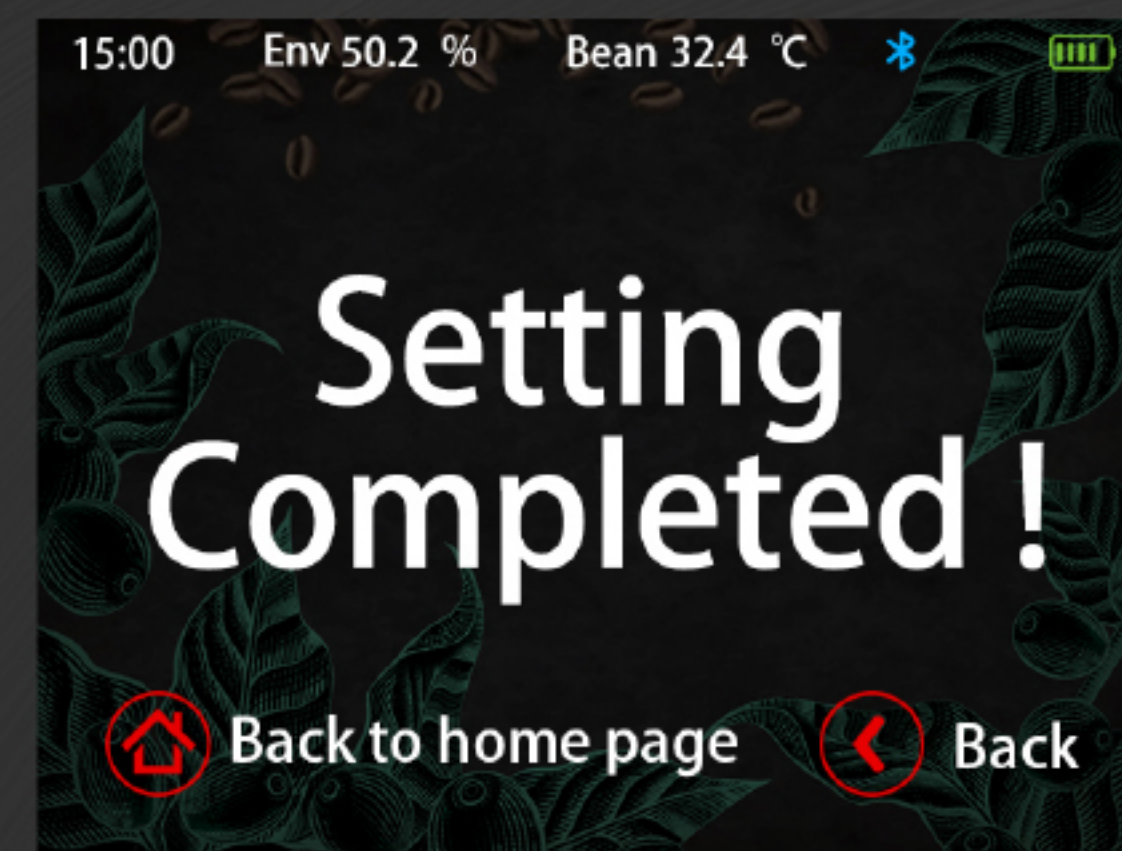
(3) Auto Calibration — Electronic Scale

Goto System Setting → Auto Calibration → Electronic Scale → Place the 100gram weight in the center of bean chamber and follow the instruction on screen to complete the calibration.



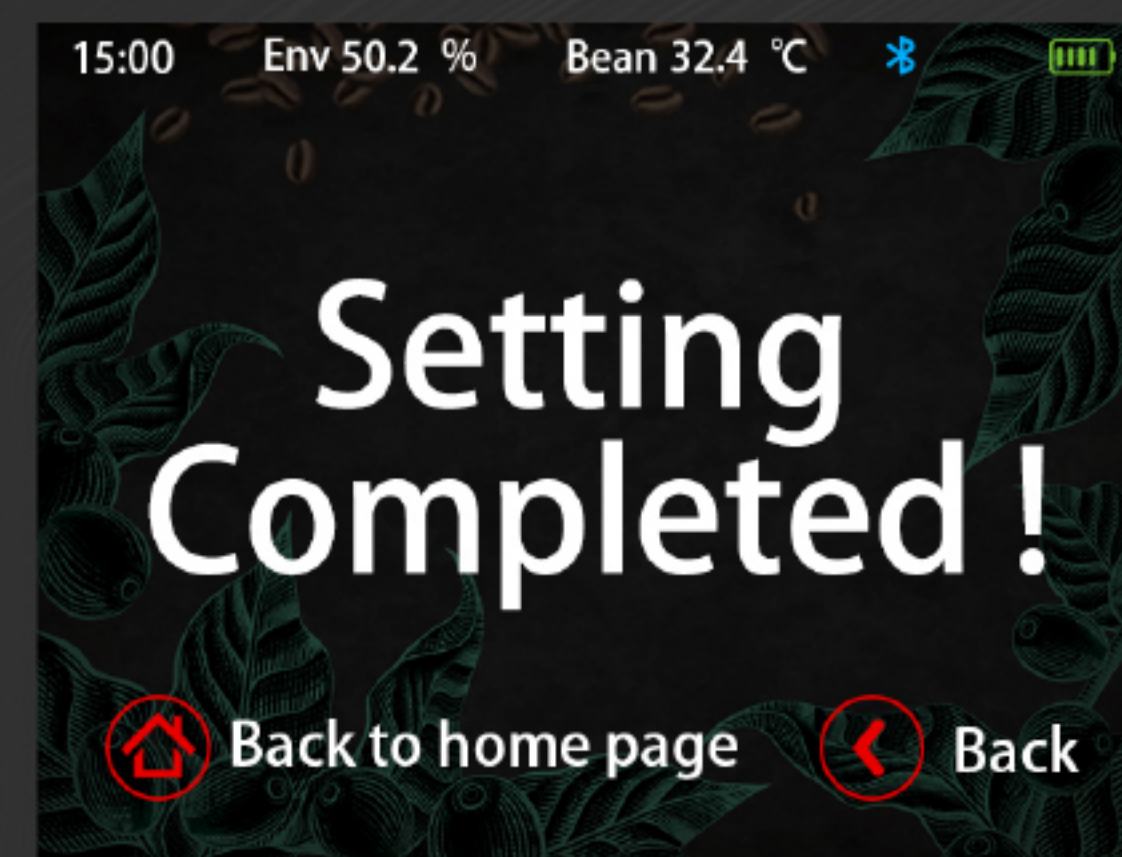
(4)Density Unit Switch – SYNCFO Mode

Main Manual → System Settings→ Density Unit Switch → SYNCFO Mode (Original SYNCFO analyzing result)



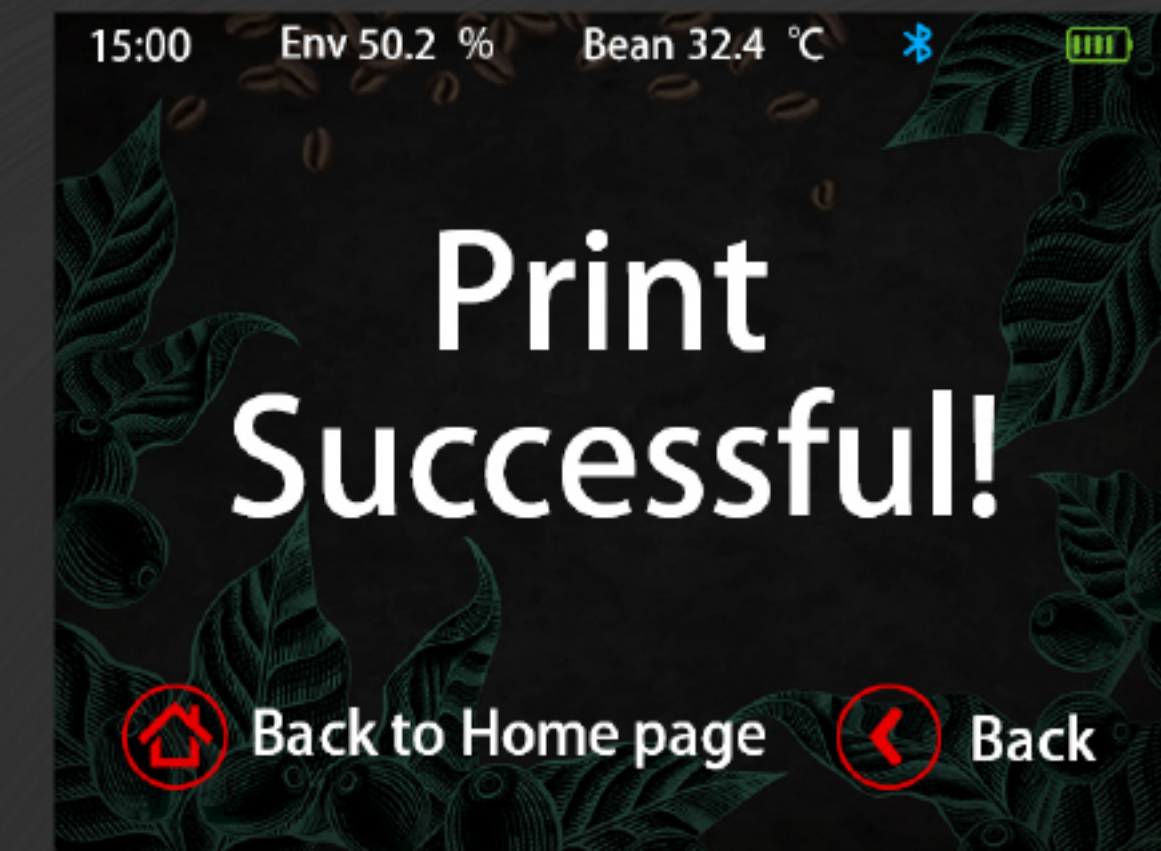
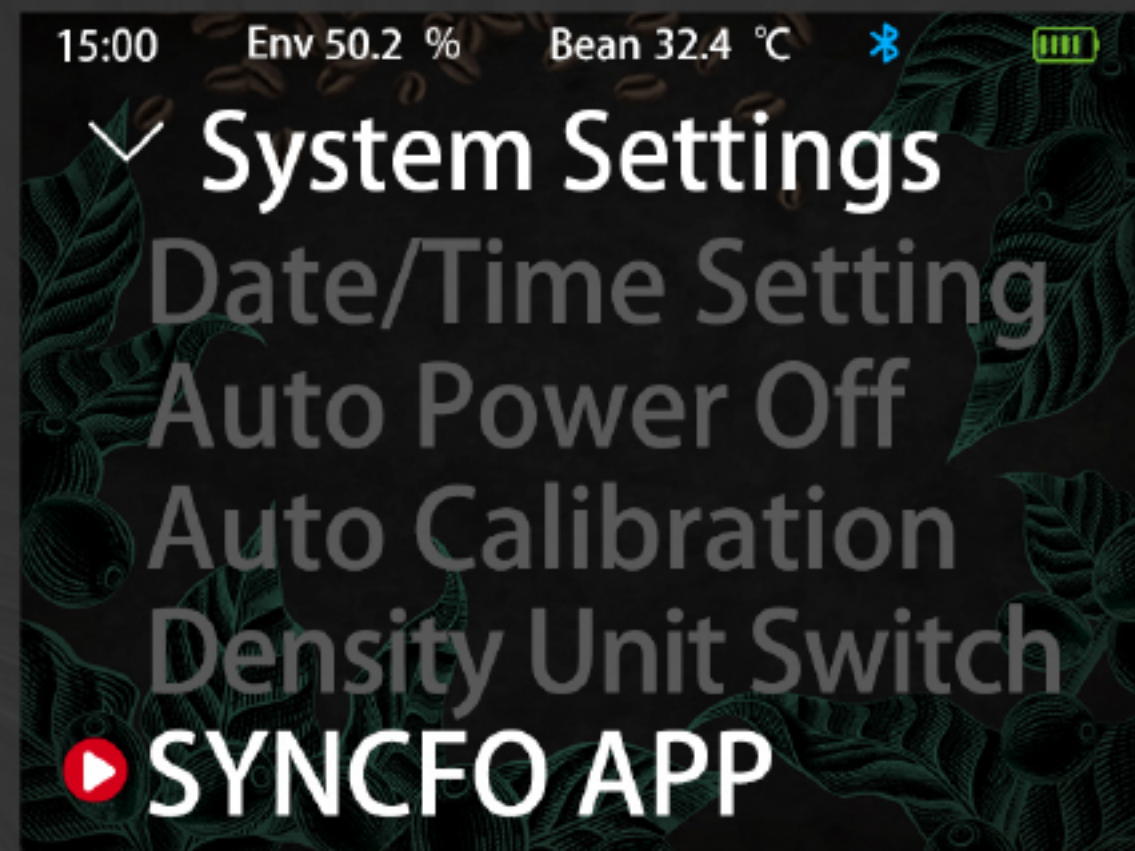
(4)Density Unit Switch – Gram/Liter Mode

Main Manual → System Settings→ Density Unit Switch → Gram/Liter Mode (Traditional analyzing result)



(5) Main Manual–SYNCFO APP

Enter the main menu SYSTEM SETTINGS → SYNCFO APP in sequence and select the device to be paired for data printing.



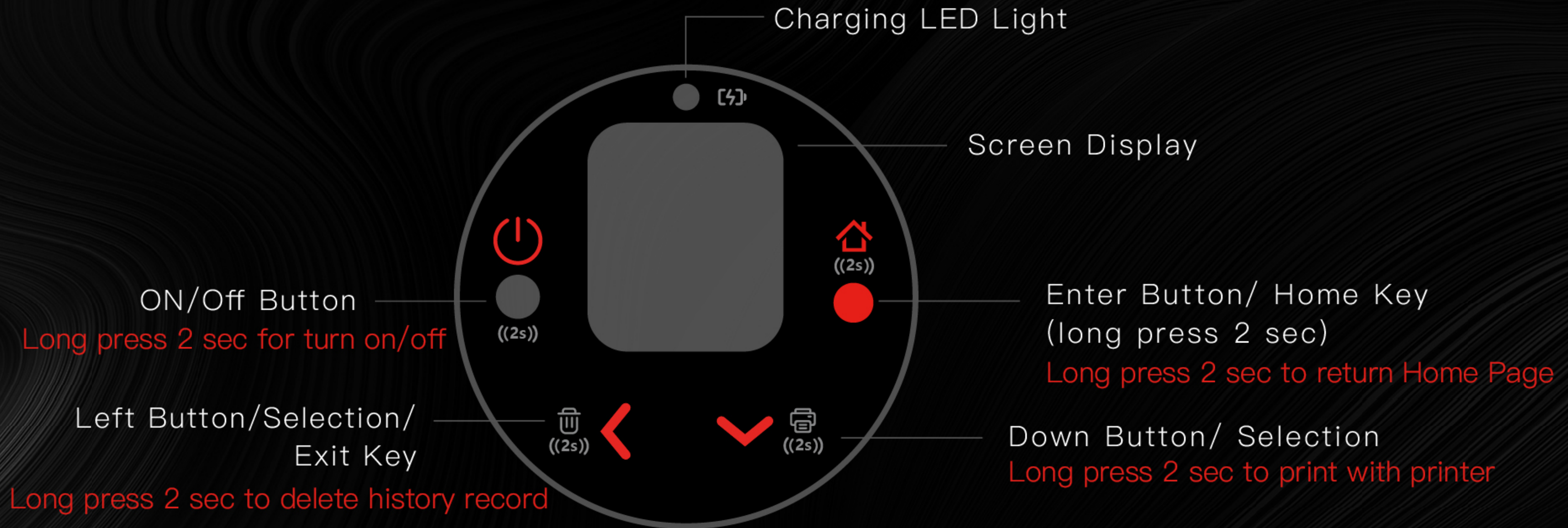
5. Main Manual– About SYNCFO

This show SYNCFO web site, Firmware detail, Activation and Warranty dates. These information are needed for better communicating during after service.



VI. Top Unit Function Explanation

A. Control Explanation



B. Function Description

On/Off

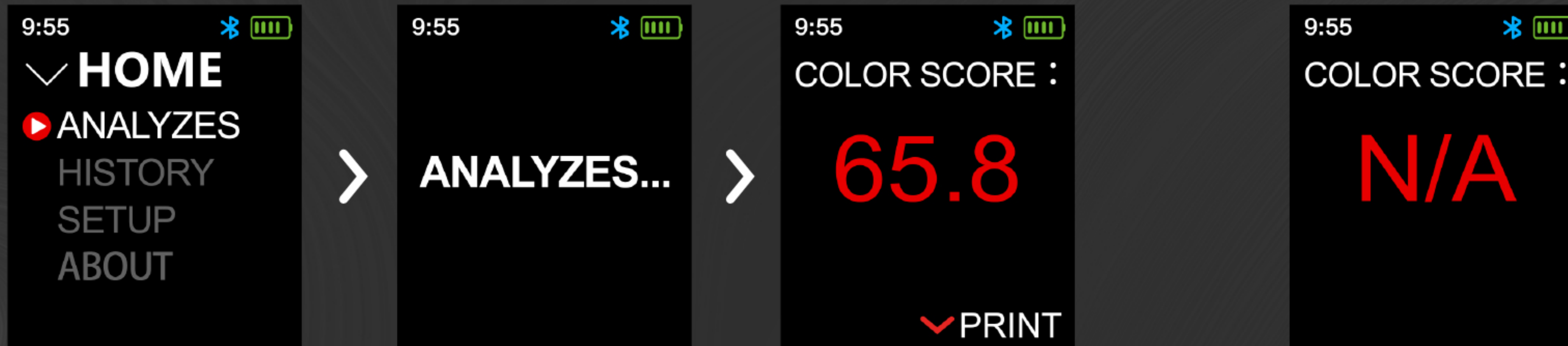
Press the on button to start the unit without warm up, you can start operating the unit once the main manual shows up. Long press 2 sec to turn off.



ON/Off Button
Long press 2 sec
for turn on/off



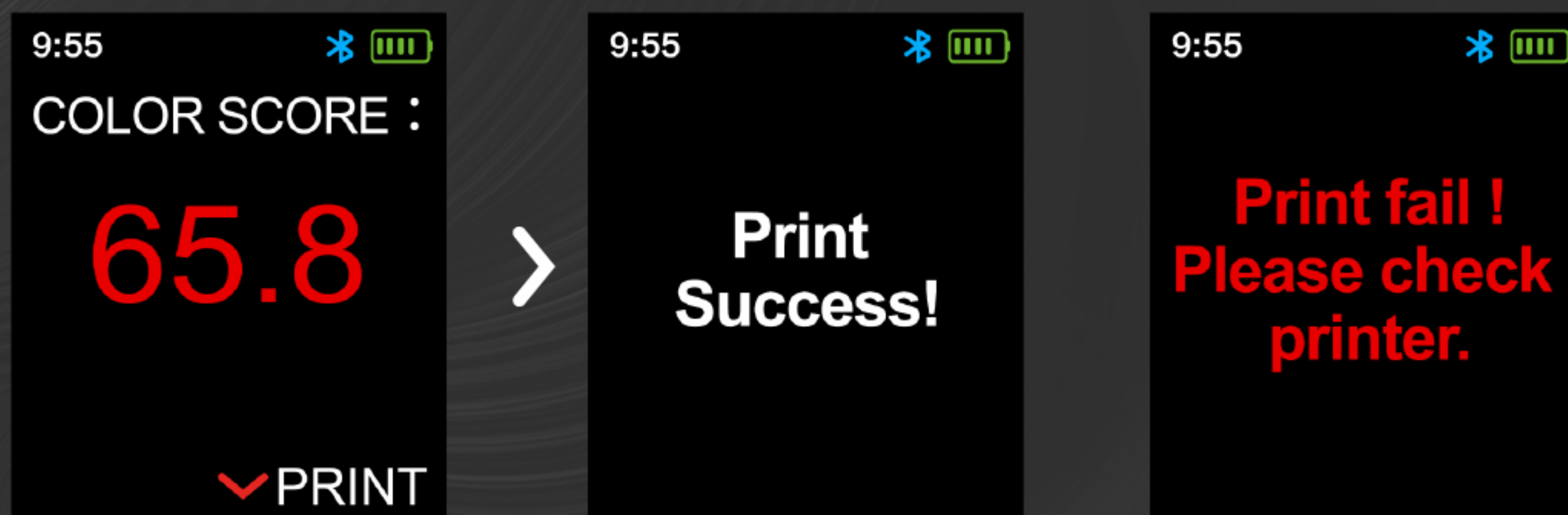
1. ANALYZES

This option only allows you to analyze the Agtron Color Score for roasted or grounded coffee. Please put your analyzing sample into the plate and put on the base, then cover with the cyclone cover with Top Unit to analyze.



Press  to select and press  to enter

*The result will show N/A when analyzing result is out of range 0~150.

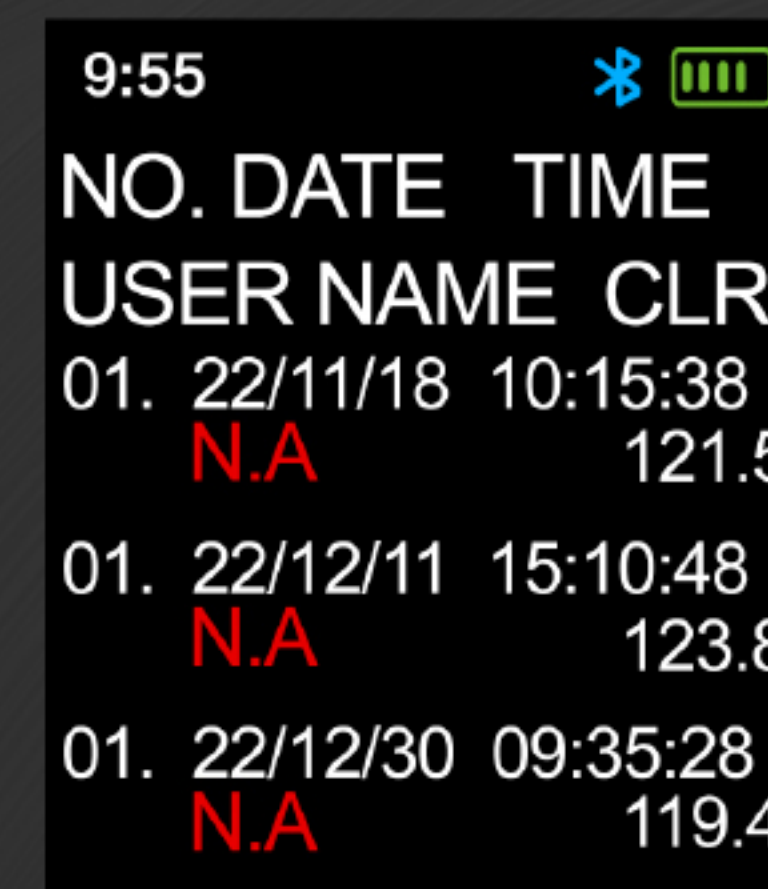
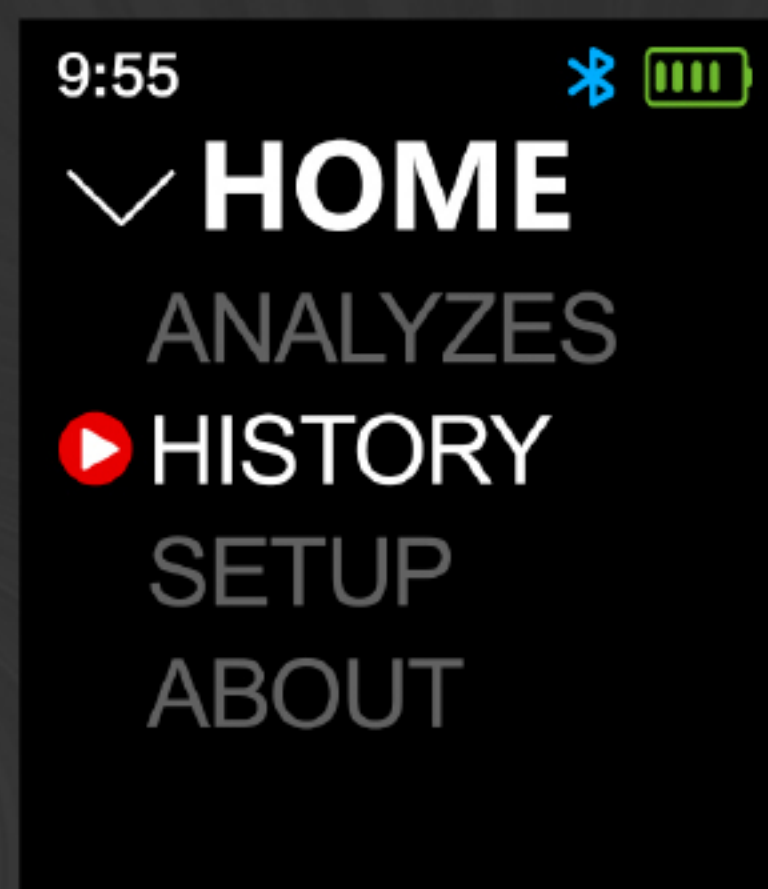




Press  PRINT to print out analyzing result

- * When print fail, Please check the following:
1. Make sure the printer is turn on ?
 2. Please make sure Bluetooth is connected ?
 3. Please check printer has any error ?
 4. Make sure printer still has printing label ?

2. HISTORY

You can check the previous history up to 100 records. Long press 3 sec to delete all the history record.



Press  to select and press  to enter

Press  go to next page

*When not connect with APP, the username will show as N/A



Left Button/Selection/
Exit Key

next page

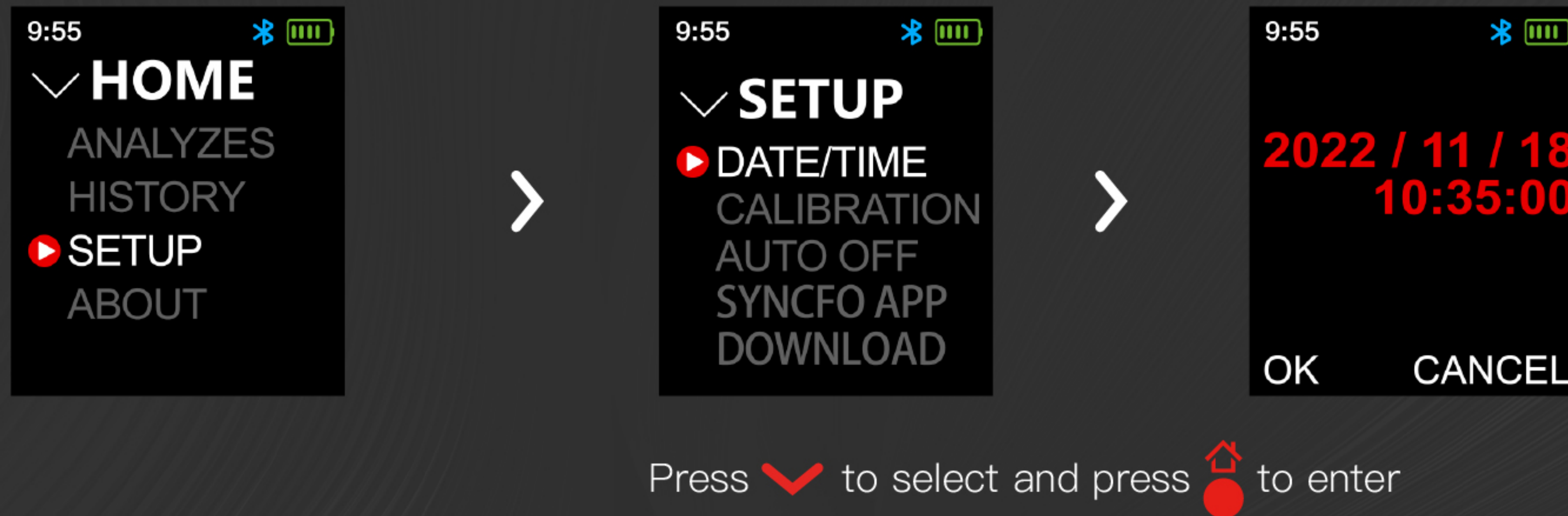
Long press 2 sec to delete history record

3. SETUP

This option allows you to set the date/time, Calibration, Auto Off, SYNCFO APP, Download.

(a) DATE/TIME ((Date and Time setting)

You can set the date and time on this unit. Use left button to jump and down button the change the number. Once done please press left button to “OK” and press red dot (Home Key) to confirm setting.



(b) CALIBRATION (Auto Calibration)

Agtron Color score calibrating are divides into 3 parts. (Bean Plate. Figure A), Bean Chamber (Figure B.) Base (Figure C) Please do not direct touch the color calibrating plate, it might affects on your calibrating and result, please wear glove during this calibrating. Please use Top unit to enter calibrating. Match the NFC logo of calibrating plate (Logo face up) and top unit. Put side A and press ok first, then flip to side B and press ok to complete calibration.

Note: Each plate has 2 sides (A&B) Please wear glove during calibrating do not direct touch the color calibrating plate, it might affects on your calibrating and result.

① CALIBRATION (Auto Calibration) – Bean Plate. Use big color plate

Please take the big plate, match the NFC logo (NFC logo face up) with Top Unit NFC logo. Once you hear the “Beep” sound. As picture showing, put the side A first and press red dot to calibrate, then do the same on side B.

② CALIBRATION (Auto Calibration) – Bean Chamber. Use small color plate.

Please take the small plate, match the NFC logo (NFC logo face up) with Top Unit NFC logo. Once you hear the “Beep” sound. As picture showing, put the side A first and press red dot to calibrate, then do the same on side B.

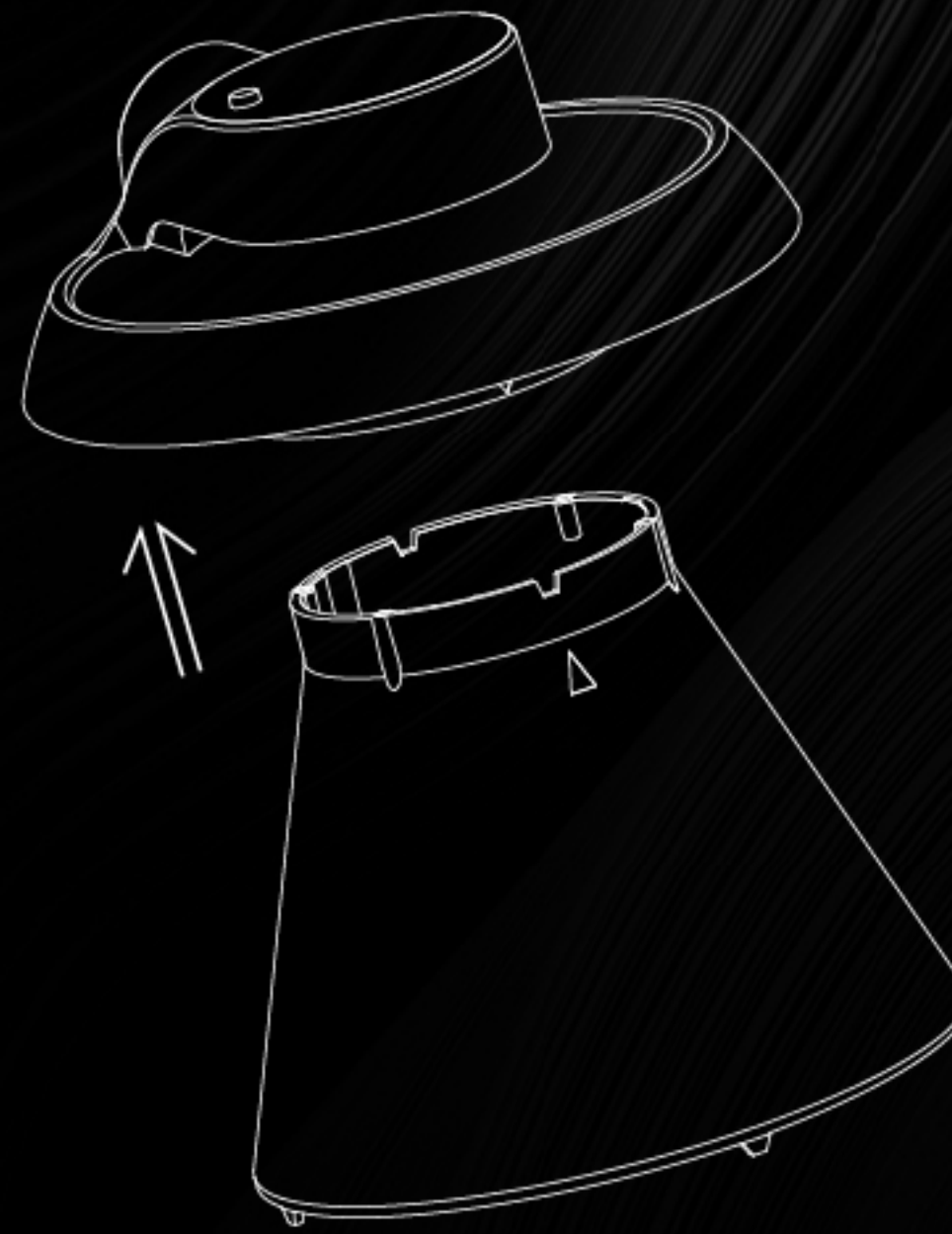
③ CALIBRATION (Auto Calibration) – Base Unit. Use big color plate

Please take the big plate, match the NFC logo (NFC logo face up) with Top Unit NFC logo. Once you hear the “Beep” sound. As picture showing, put the side A first and press red dot to calibrate, then do the same on side B.

①



②



③

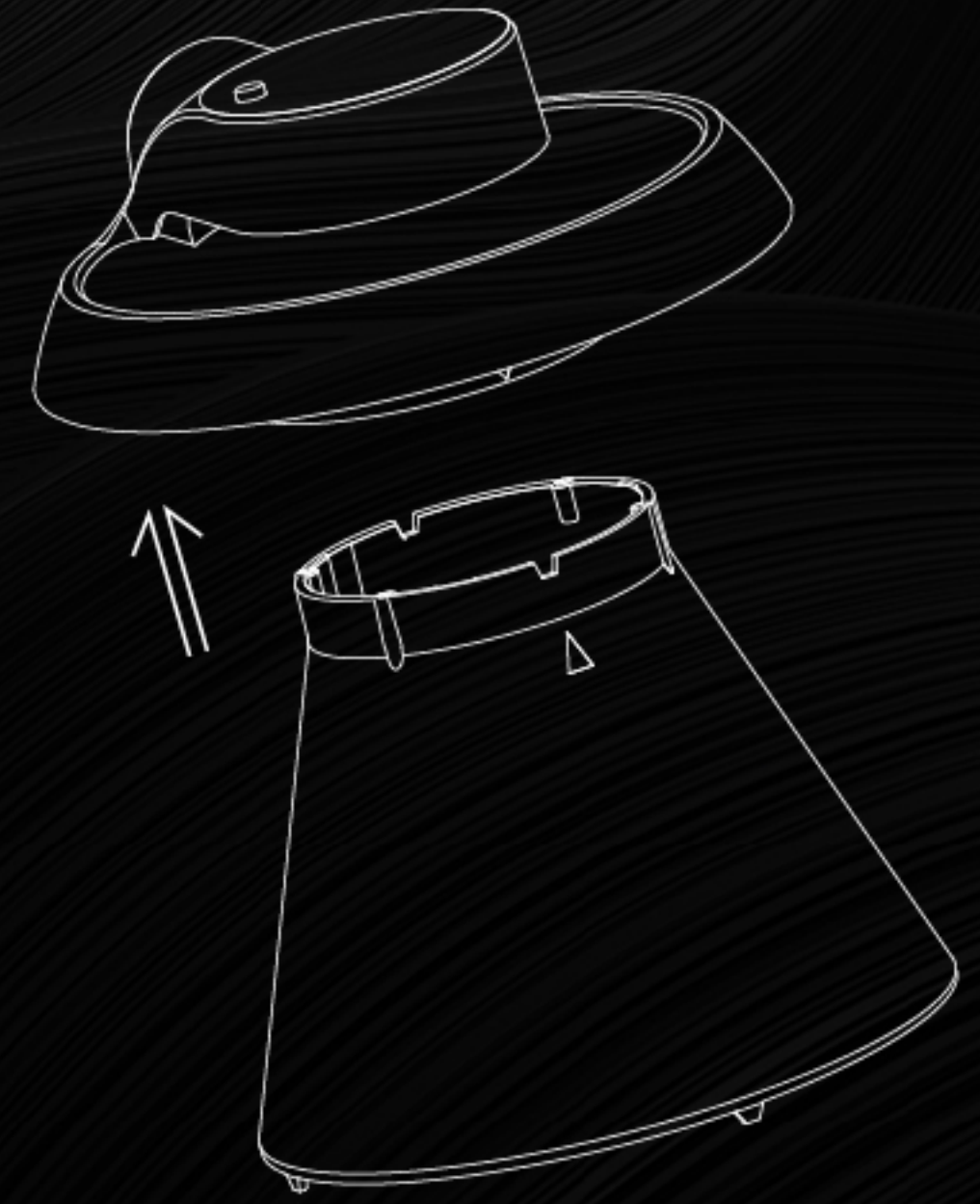


Figure A
 Bean Plate Usage
 (Please use big color plate)

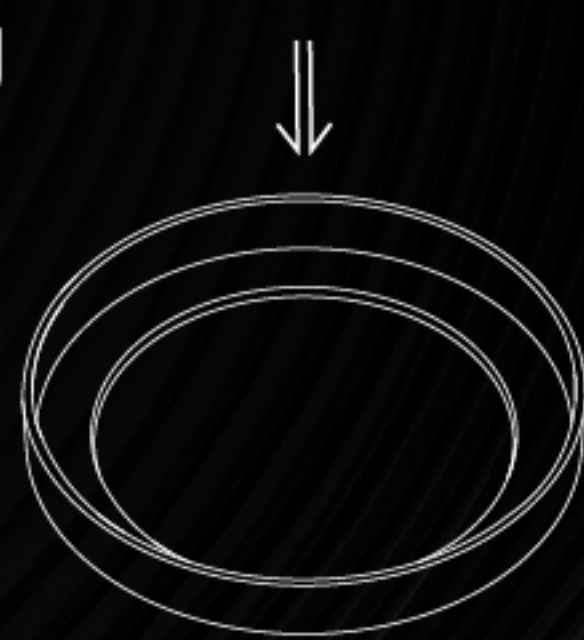


Figure B
 Bean Chamber Usage
 (Please use small color plate)

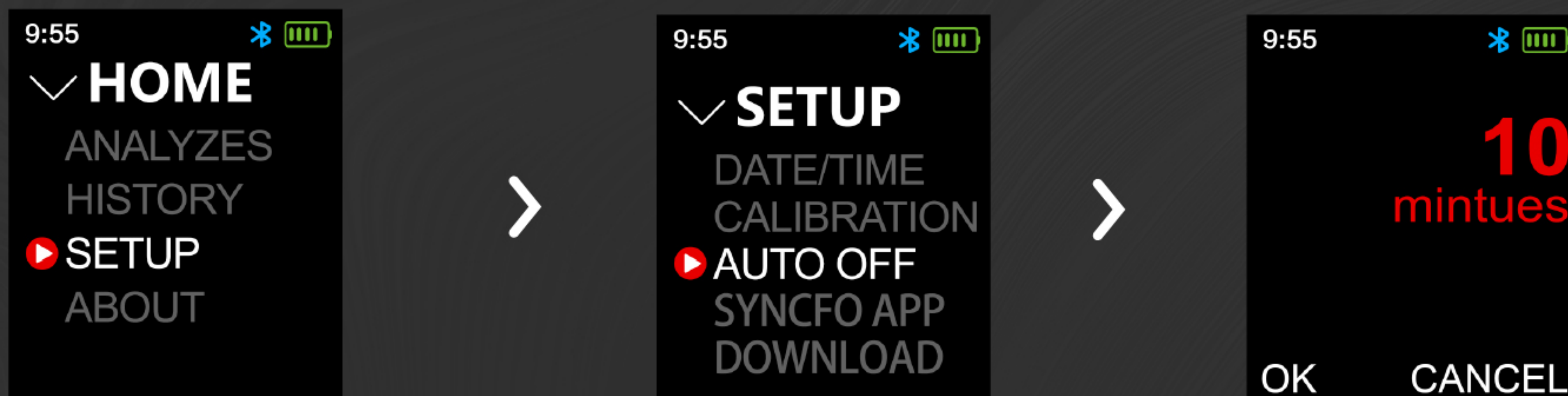




Figure C
 Base Unit Usage
 (Please use big color plate)



(c) AUTO OFF

Setting the time for Auto Off.



Press  to select and press  to enter

VII. Battery Charging

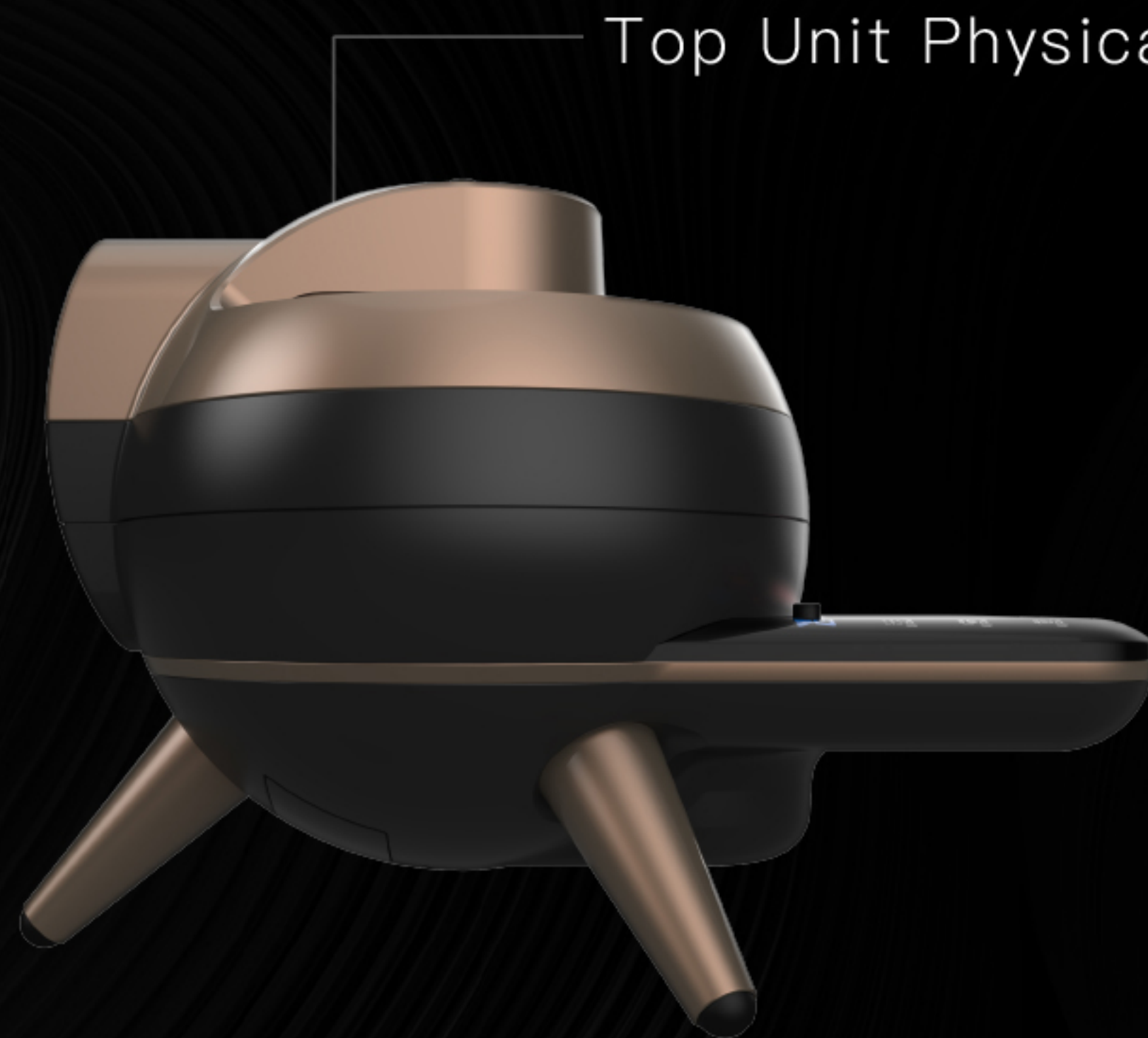
First time of using charging cable, please use the dual head magnetic charging cable. LED light meaning as follow:

Top Unit: During charging the red LED light will flash, when fully charged will show constant red light.

Bottom Unit: During charging the LED light will shows in red, when fully charged, the light will change to green. (During charging, if no sign of light, please contact your local distributor. You can charge by using Micro USB cable for charging, but you must remove the magnetic USD adaptor head off the Micro USB port.)

When power below 10 % will show “Battery Low” when below 5% will shut down. To prevent short life usage of battery, please charge the battery when it low.

- When battery is totally empty, due to its protection. It is normal that charging will be slow at the beginning.
- If you plan not to use the unit in long time, please switch the power switch to off. Preventing the battery totally drain and not able to charge again.



Top Unit Physical Power Switch



Bottom unit Physical Power Switch

VIII. N/A Explanation

- Moisture N/A: Make sure there is analyzing object in the bean chamber
- Density N/A: : Make sure there is analyzing object in the bean chamber
- Color Score N/A: Top Unit is not turn on or not been put at the correct location
- Temperature N/A: Please turn off the Bottom Unit Physical Power Switch for more than 10 sec. then turn on.

- Sensory button no reaction or too sensitive. Please turn off the Bottom Unit Physical Power Switch for more than 10 sec. then turn on.
- When Color Score result is incorrect, please do the color calibration.
- Not able to turn on the unit. Please check the Bottom Unit Physical Power Switch is “On” or not.
- Not able to turn off (hang). Please turn off the Physical Power Switch to off for more than 10 sec than restart.
- Electronic scale is in correct. Please use the 100g weight do the calibration.

Please contact with your local distributor if your error cannot be solved. We will provides you with best service.

Important Notice.

Color Calibrating Plate: Please do not clean the plate with any type of cleaning solution that contains alcohol and avoid direct sun light contact. Which will effects calibrating results.

Note: all accessories only can be clean with neutral cleaning solution (pH 6~8) to prevent incorrect analyzing or calibrating result.