

VOLTCRAFT

® App Instruction Manual

Digital multimeter VC800 Series

Item no. 2576867(VC871),2576866(VC891)

Digital multimeter VC900 Series

Item no. 3072347(VC915),3072348(VC925 PV)

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Introduction

The mobile app enables you to control the digital multimeter using a mobile device.

Latest operating instructions

Download the latest operating instructions at

www.conrad.com/downloads

or scan the QR code shown.

Follow the instructions on the website.



Trademarks

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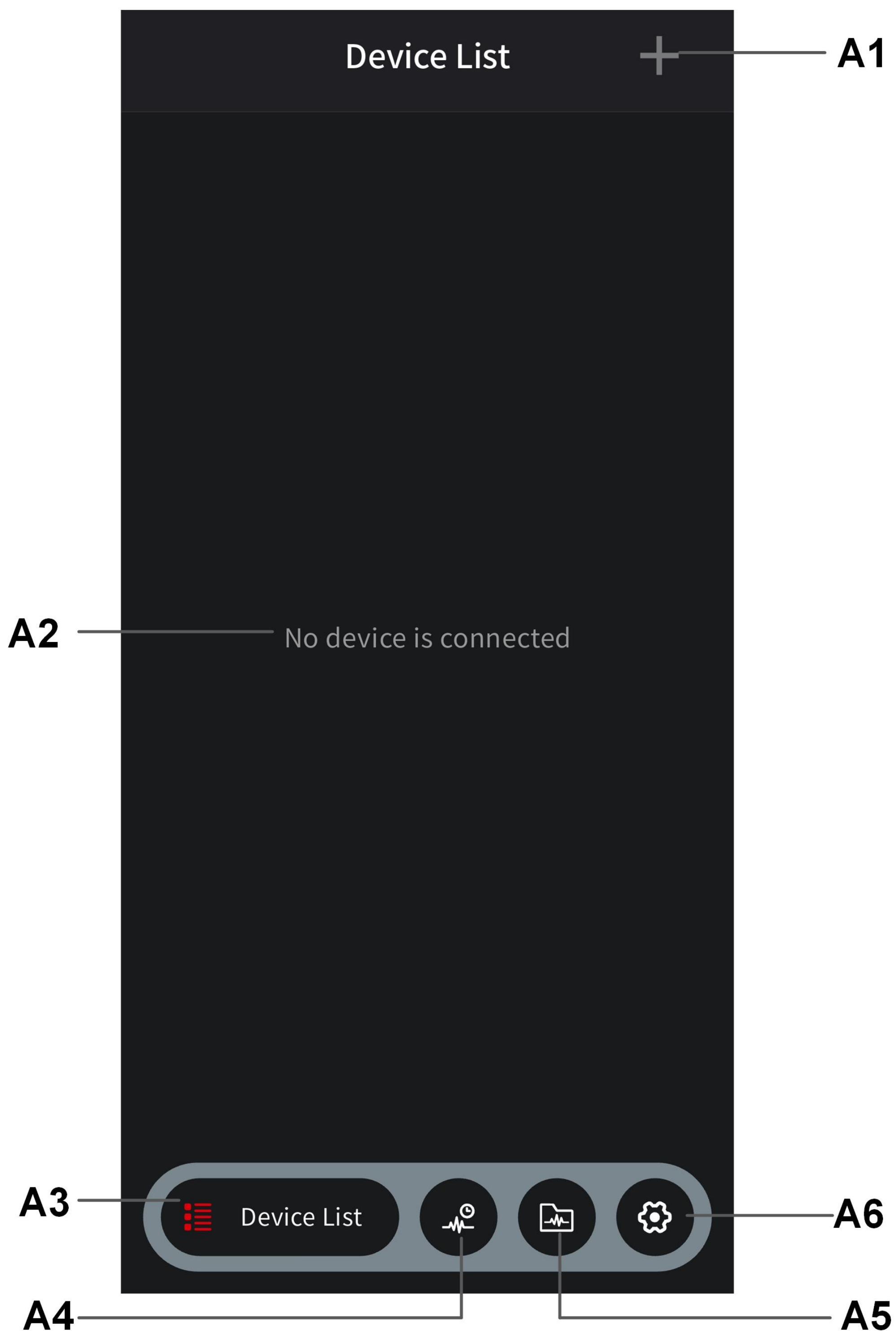
Android™ is a registered trademark of Google LLC.

Bluetooth is a registered trademark of Bluetooth SIG, Inc. worldwide.

Installing the app

Download the mobile app “**Voltcraft VC800 VC900 series**” from Google Play or the Apple App Store to your mobile device.

Main page



- A1** Connect multimeters via Bluetooth
- A2** List of connected multimeters
- A3** Access connected multimeters
- A4** Access the charting screen for online readings
- A5** Read records from file
- A6** Access mobile app settings

Managing multimeters

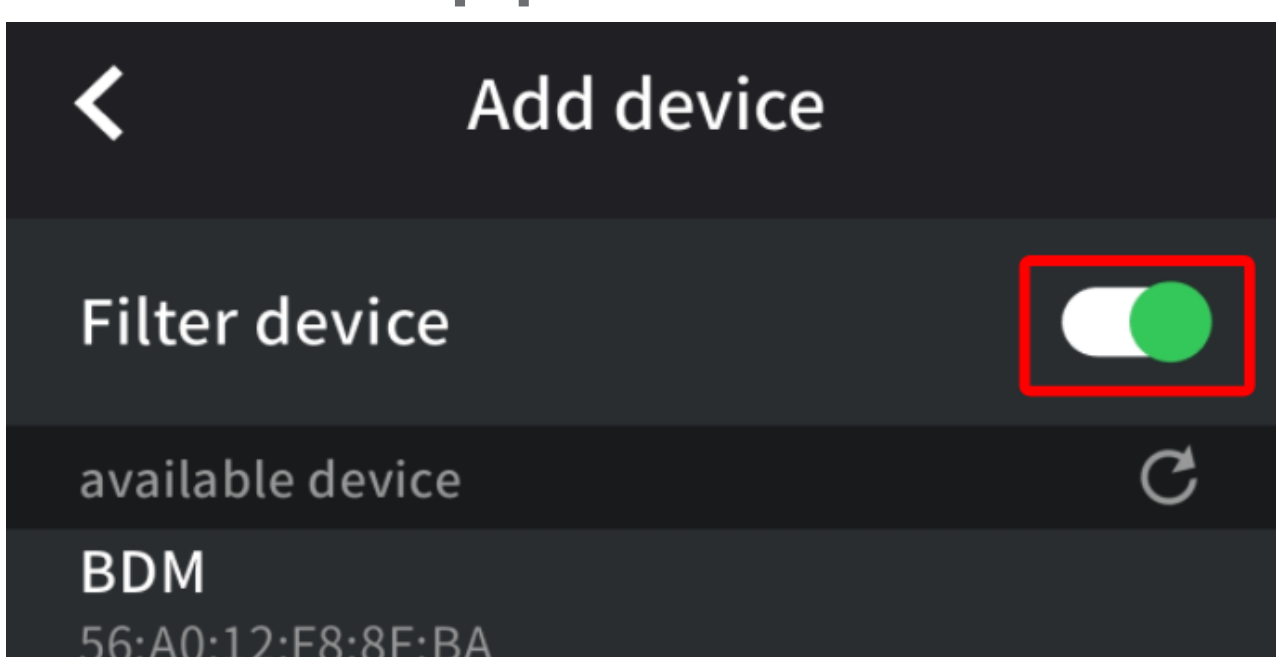
Connecting multimeters

Connect a multimeter to the mobile app to receive readings.

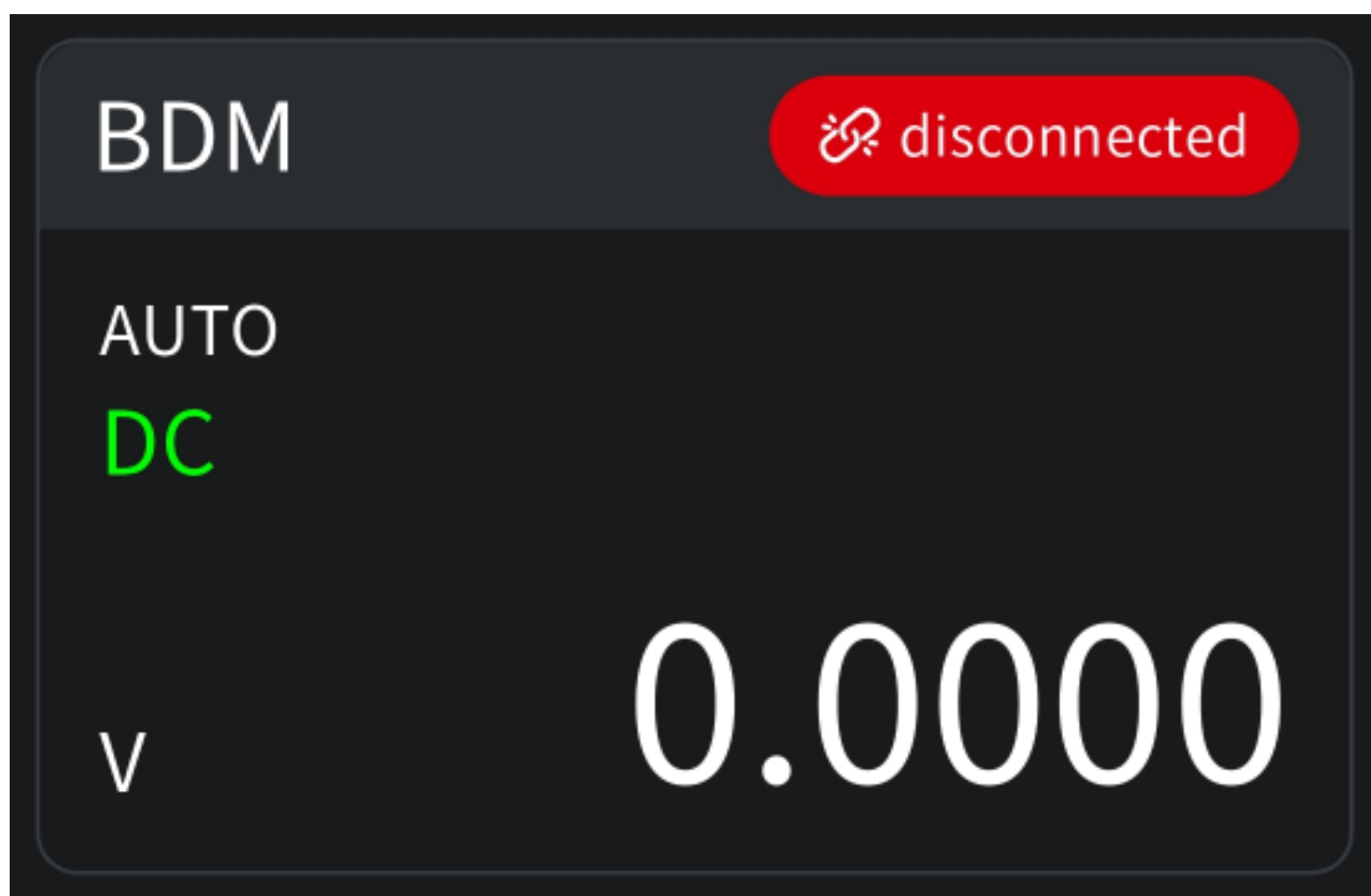
Note:

Connections are temporary. If you switch the multimeter off, you must reconnect it.

1. Enable the Bluetooth function on your mobile device.
2. Switch on the multimeter.
3. On the multimeter, press and hold the “</**BLE**” button until the Bluetooth icon shows on the display.
4. Open the mobile app.
5. Tap on “**Device List**” in the bottom navigation bar.
6. Tap on the button “+” to start a device search and list found multimeters.
7. Activate the device filter “**Filter device**” to hide incompatible multimeters.
8. Tap on a found meter to connect it to the mobile app.



- After successful connection, the meter reading appears in the mobile app.



9. (Optional) Connect other multimeters.

Naming multimeters

You can name a multimeter to personalise it. The new name is permanently stored on the multimeter.

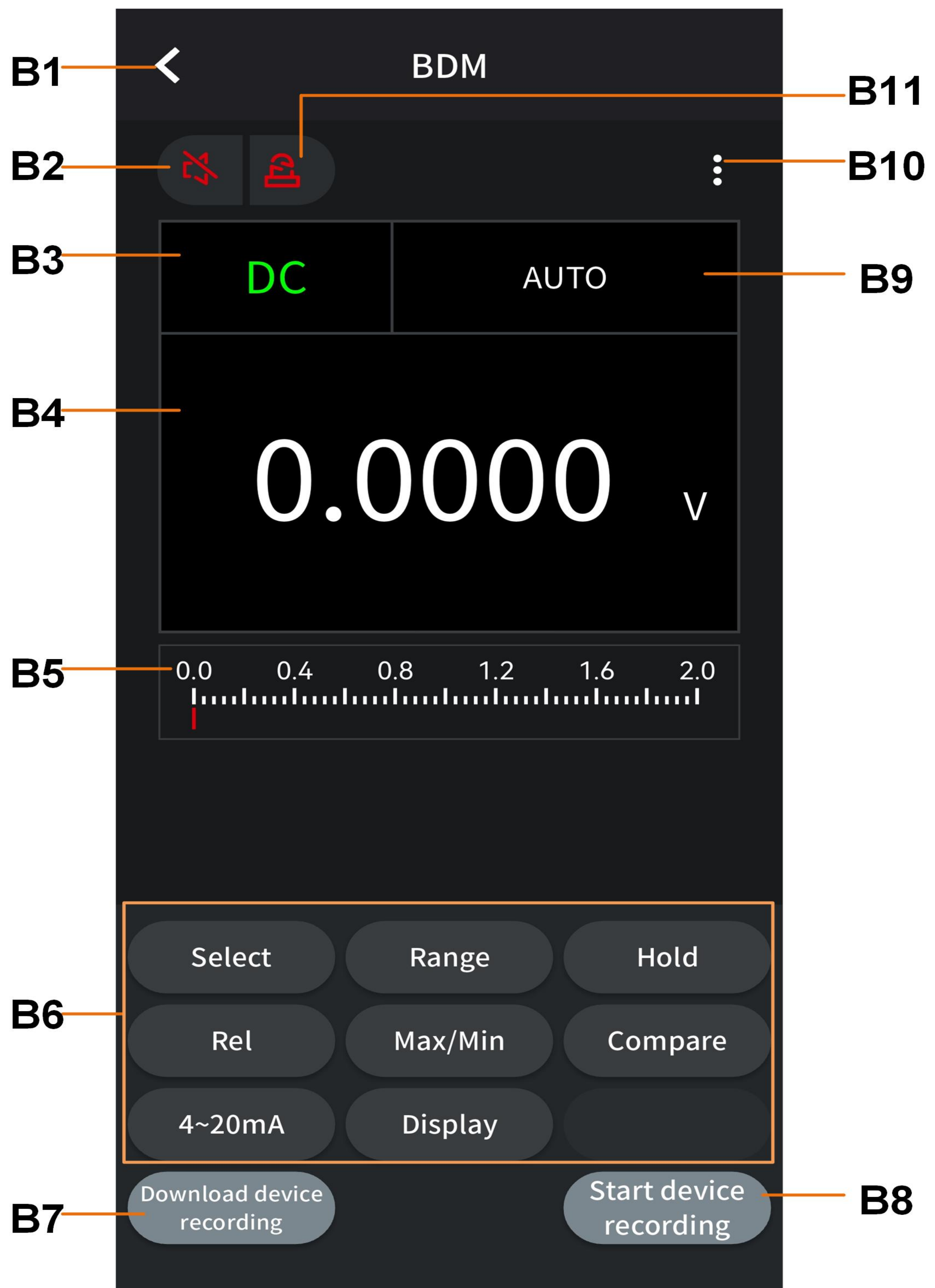
1. Tap on “**Device List**” in the bottom navigation bar.
2. Tap on the multimeter you want to name to open its controls screen.
3. Tap on the three dots on the controls screen.
4. Tap on “**Modify device name**” and enter a new name.
5. Tap on the button  to permanently assign the new name to the multimeter.

Disconnecting multimeters

1. Tap on “**Device List**” in the bottom navigation bar.
2. Swipe the multimeter you want to disconnect to the left and tap on “**Remove**”.
3. Confirm the prompt to disconnect the multimeter, you can also press "disconnected" button on the top right hand corner to disconnect the device with your APPS.

Multimeter controls

1. Tap on “**Device List**” in the bottom navigation bar.
2. Tap on a multimeter to open its controls screen.



B1 Return to home screen

B2 Enable and disable voice output

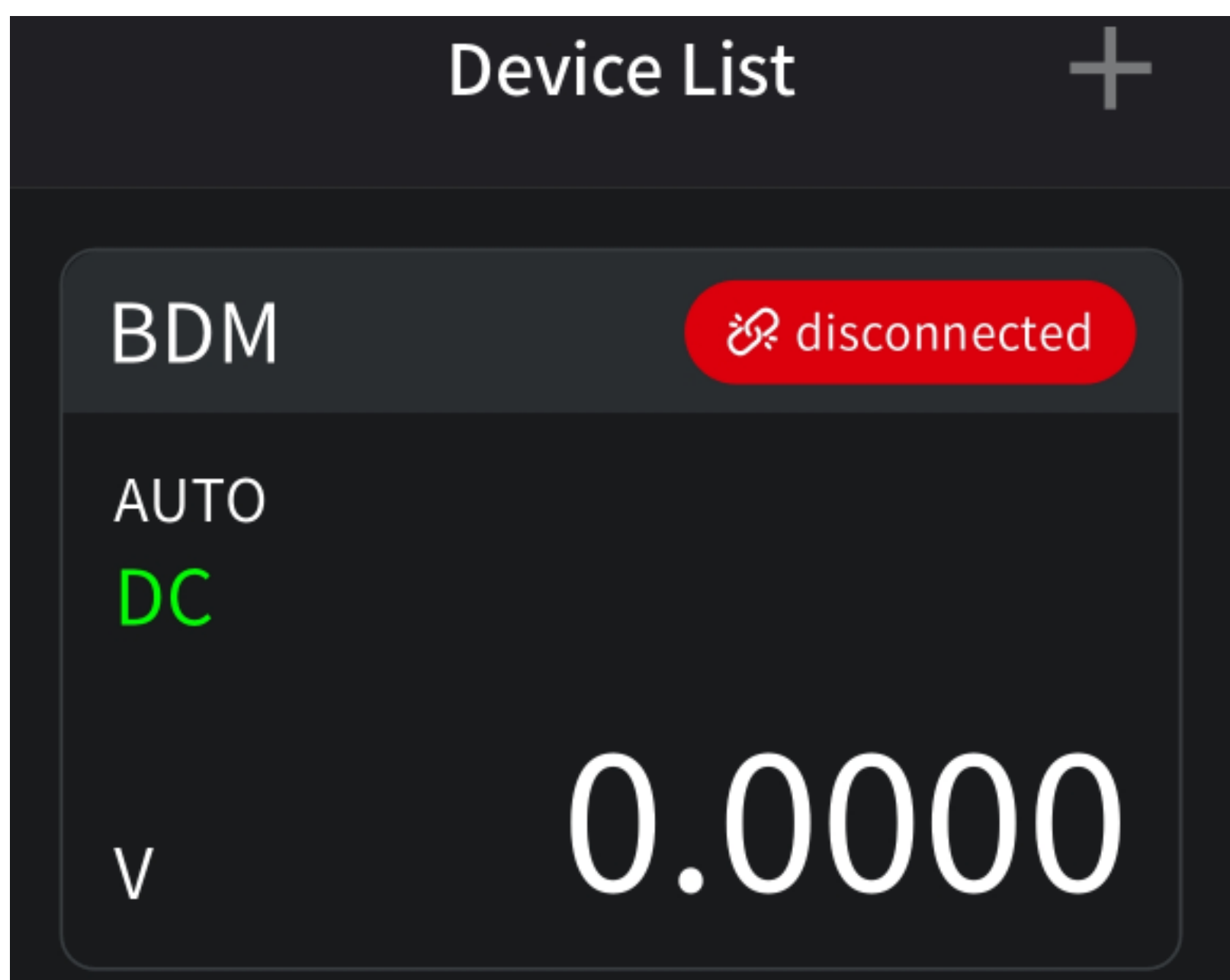
B3 Displays selected multimeter function:

Display	Function
DC	Direct voltage/current measurement
AC	Alternating voltage/current measurement
RES	Resistance measurement
CONT	Continuity testing
DIODE	Diode testing
CAP	Capacitance measurement
HZ	Frequency measurement
DUTY	Duty cycle measurement
TEMP	Temperature measurement
POWER	Power measurement
AC+DC	Direct and alternative voltage measurement
Motor	Motor measurement
LPF	Low pass filter measurement

- B4** The reading shown on the multimeter display
- B5** Bar graph of analogue reading shown on the multimeter display
- B6** Function buttons
Identical to multimeter buttons/functions;
Press or hold down buttons to perform functions
- B7** Transfer offline records from multimeter to mobile app
- B8** Start offline recording of readings
- B9** Current measurement mode
- B10** Access multimeter settings menu
- B11** Enable and disable audible warnings

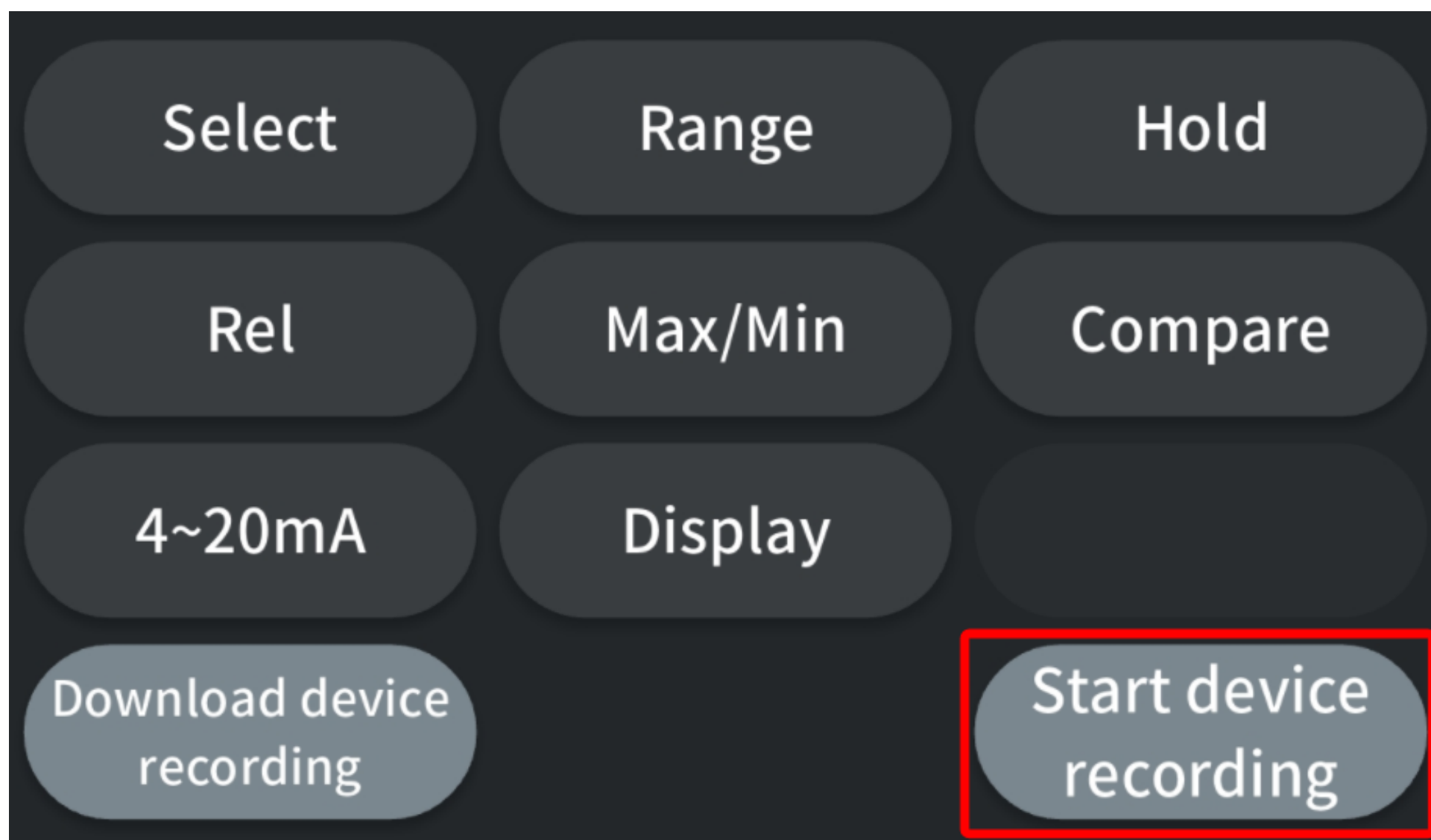
Connect with PV Adaptor

1. To carry out the offline datalogging from the PV adaptor through the setting in your mobile device, please enable the connection between the multimeter & the mobile device. Make sure the multimeter paired with the PV adaptor in advance. Now, rotate the dial to any functions except the PV mode. Press & hold the BLE button to enable the Bluetooth function. Then search for and connect the DMM with the APPS on your mobile device (a link up icon "🔗" will light up next to the Bluetooth icon in the display of the multimeter) .



2. Rotate the multimeter dial to the PV range , it'll show "Choose the connection" on the screen. Press F2(APPS) to keep on Bluetooth connection without disconnecting from the mobile device.

3. Press “Start device recording” to enter the interval & counts setting page. Press “Start to record” to start off-line recording after the settings are in place.

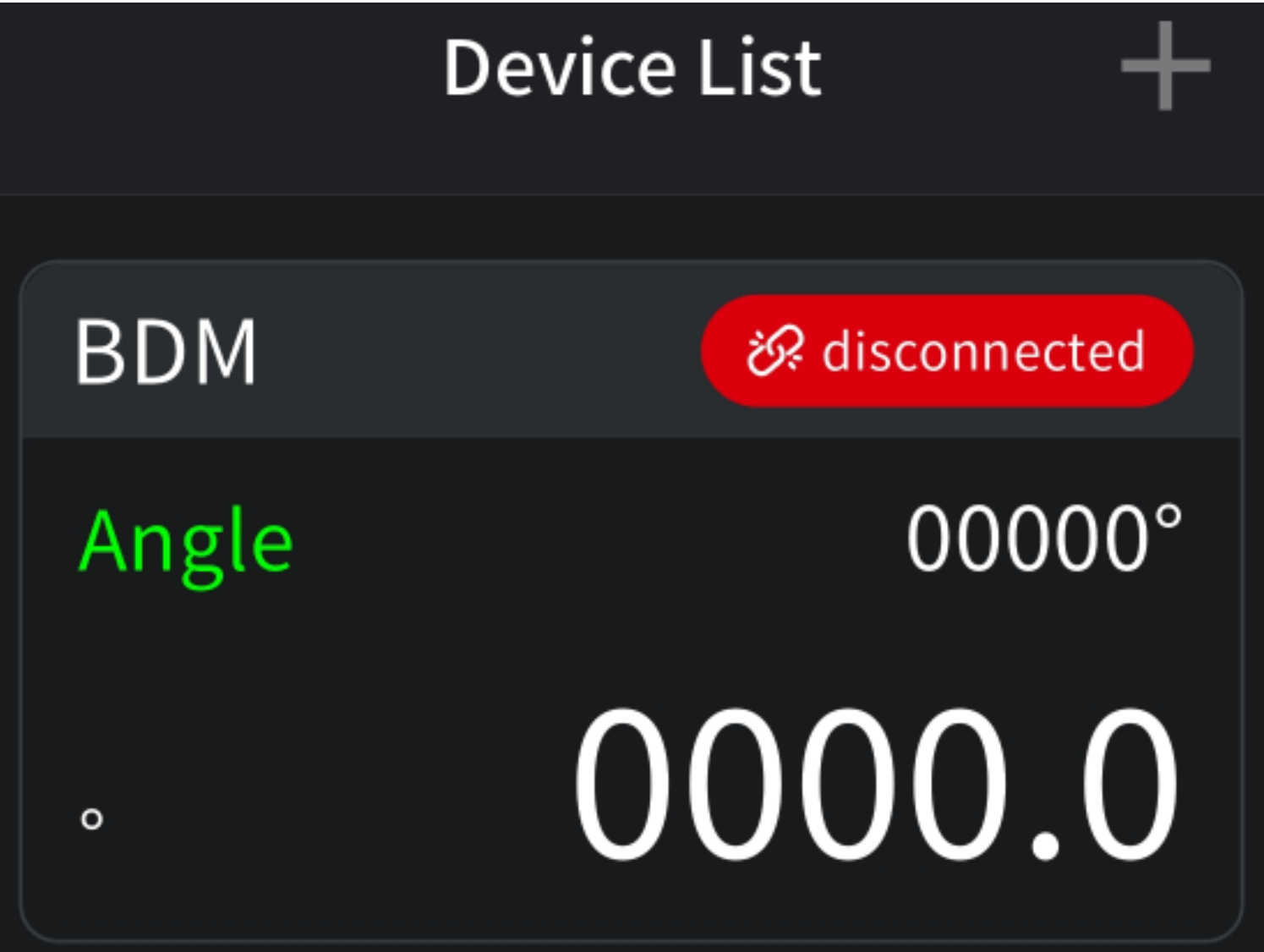


4. At this point, the multimeter will automatically disconnect from the mobile device and search for paired PV adaptor to reconnect.

5. When offline recording starts, the multimeter interface will display the REC offline recording icon. The device will record data from the PV adaptor based on the set interval and number of entries.

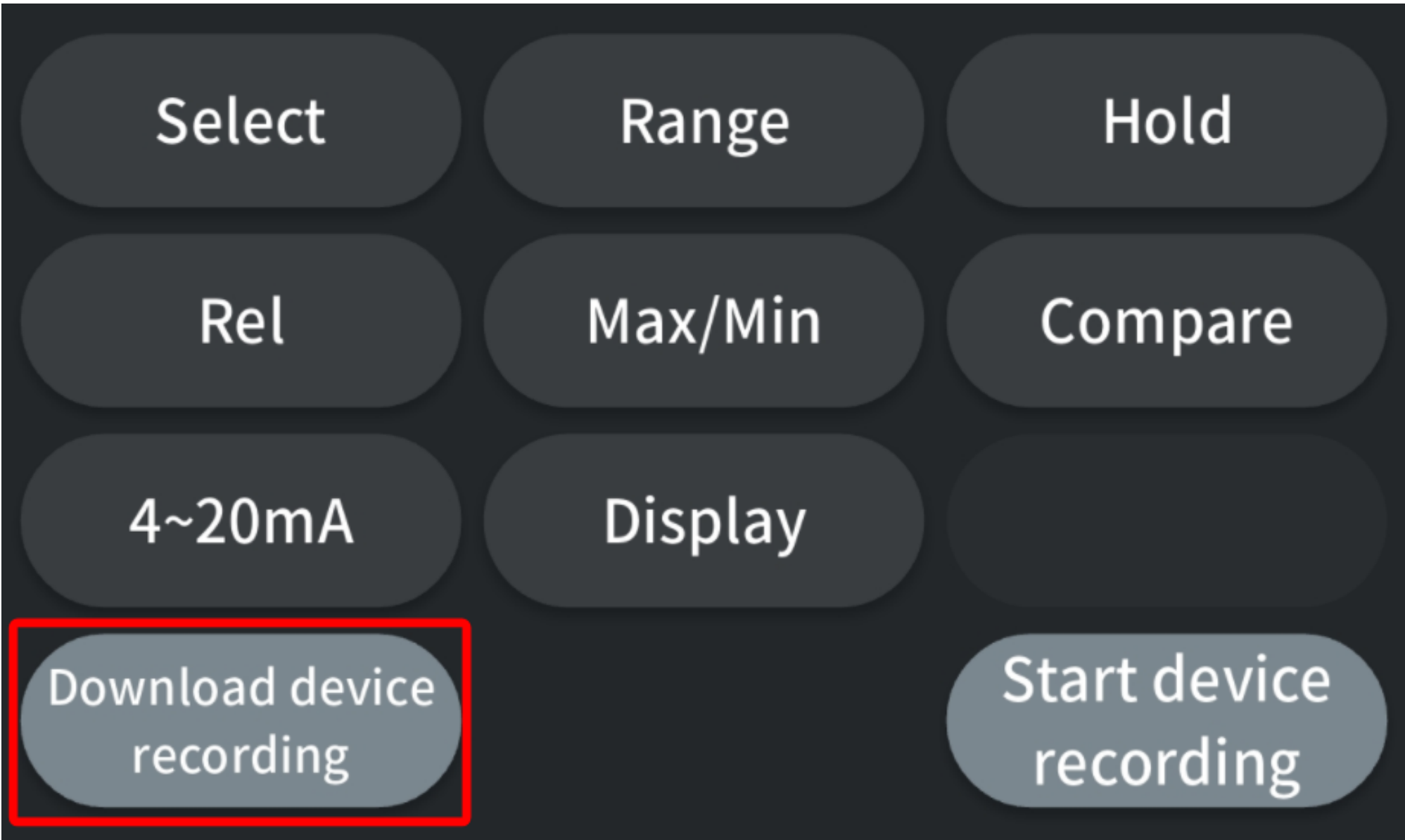
6. After the offline recording is complete, the REC icon on the multimeter will automatically turn off.

7. If you want to read the offline records at this point, you need to press & hold the BLE button to disconnect from the PV adaptor(the link icon will be off), then use the mobile device to search for and connect to the multimeter's Bluetooth.



Display	Function
Solar Power	Solar power measurement
Compass	Compass measurement
Angle	Angle measurement

8. After establishing a connection between the multimeter and the mobile device, click "Download device recording" and then "Display Data" to obtain the offline data of the PV adaptor.



<

Read record

Offline data bytes: 297 bytes

Save as: BDM_Offline_0702091137 >

Offline data will be saved locally after being read

Display data

<

BDM_Offline_0702091137.zip

FS: 2000.0°

FS

1200.00

400.00

0

-400.00

-1200.00

-FS

T

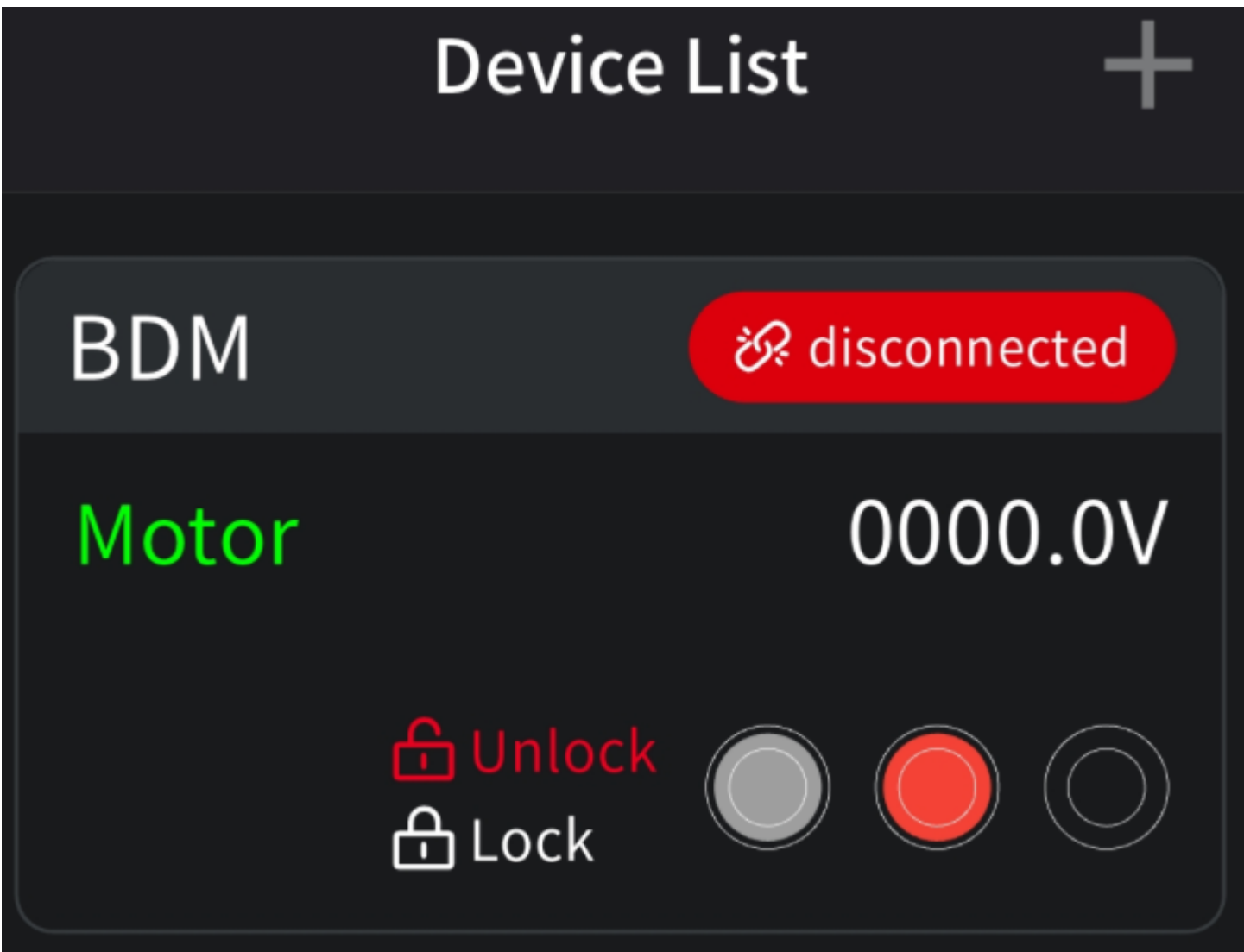
BDM_Offline_0702091137.csv

NO.	Function	Value	Unit	Time
1	Angle	0023.6	°	22.06.16 07:52:25
2	Angle	0035.9	°	22.06.16 07:52:26
3	Angle	0037.3	°	22.06.16 07:52:27
4	Angle	0037.3	°	22.06.16 07:52:28
5	Angle	0035.1	°	22.06.16 07:52:29
6	Angle	0033.9	°	22.06.16 07:52:30
7	Angle	0032.3	°	22.06.16 07:52:31
8	Angle	0031.8	°	22.06.16 07:52:32
9	Angle	0031.5	°	22.06.16 07:52:33
10	Angle	0031.4	°	22.06.16 07:52:34
11	Angle	0031.4	°	22.06.16 07:52:35

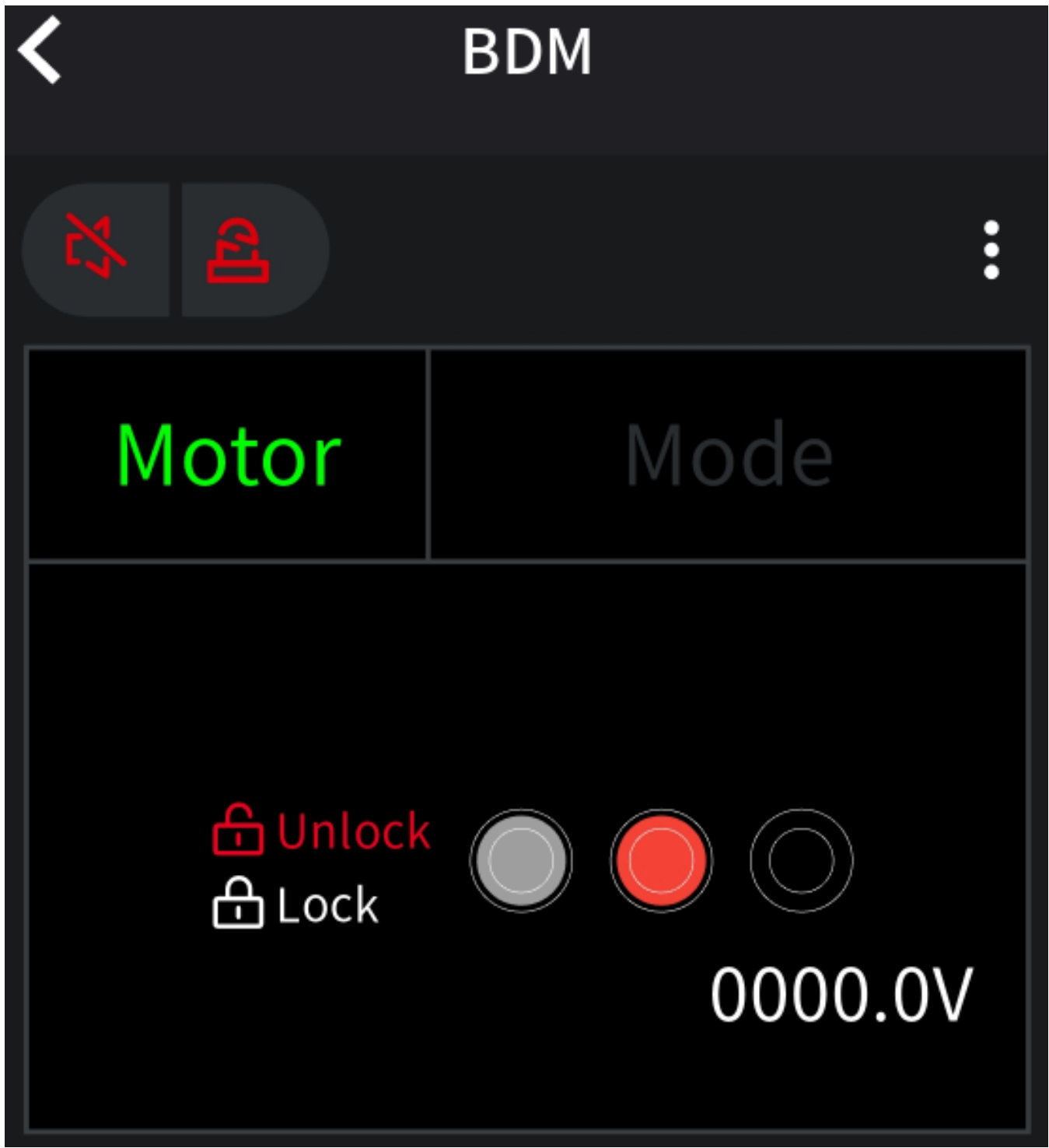
8. To carry out another offline datalogging, just repeat the steps in point 3.

Motor measurements

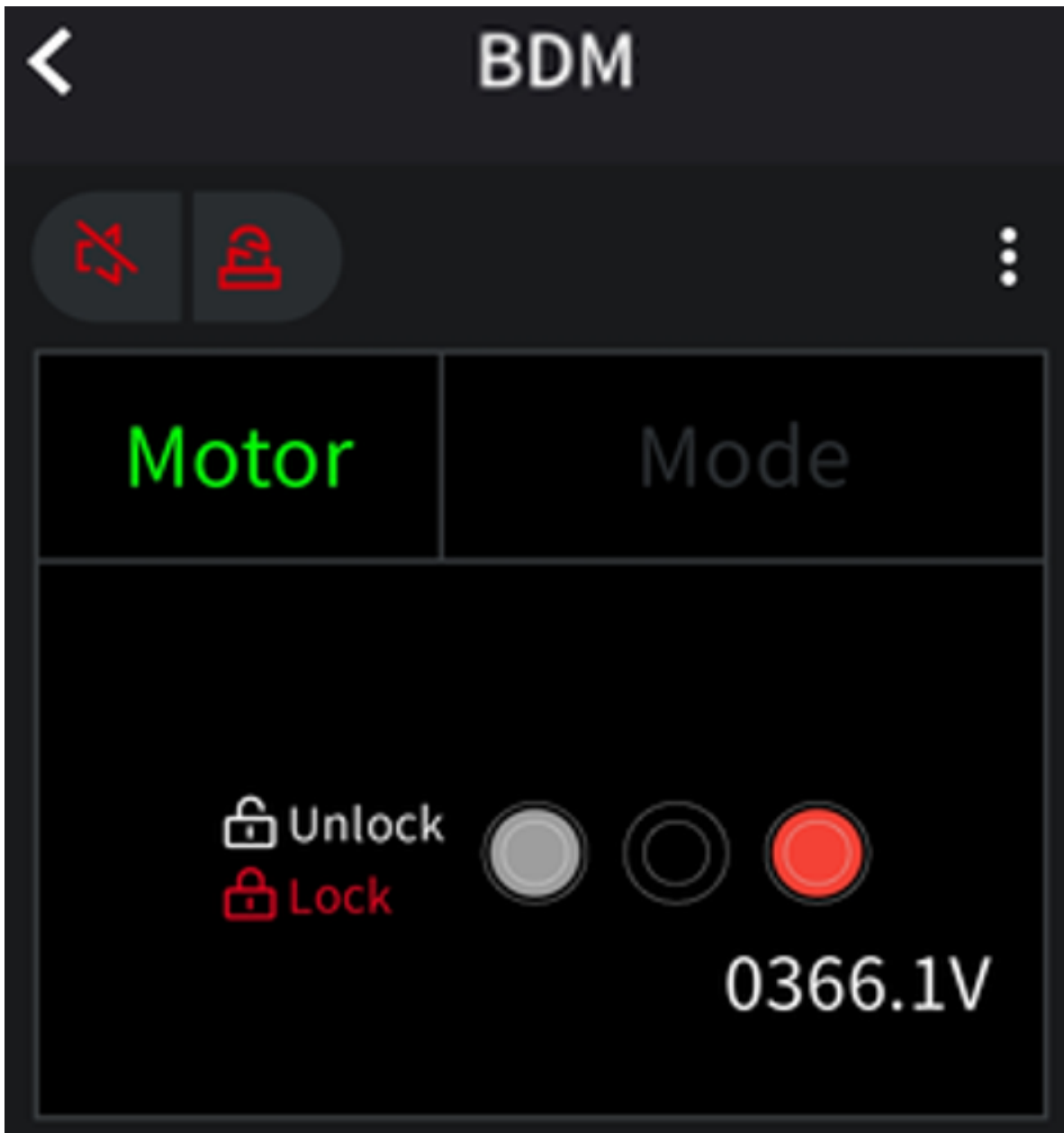
1. Rotate the dial to ACV function, press > button to next page and press F3 to select Motor. Press & hold the BLE button to enable the Bluetooth function. Then search for and connect the DMM with the APPS on your mobile device (a link up icon "📶" will light up next to the Bluetooth icon in the display of the multimeter) .



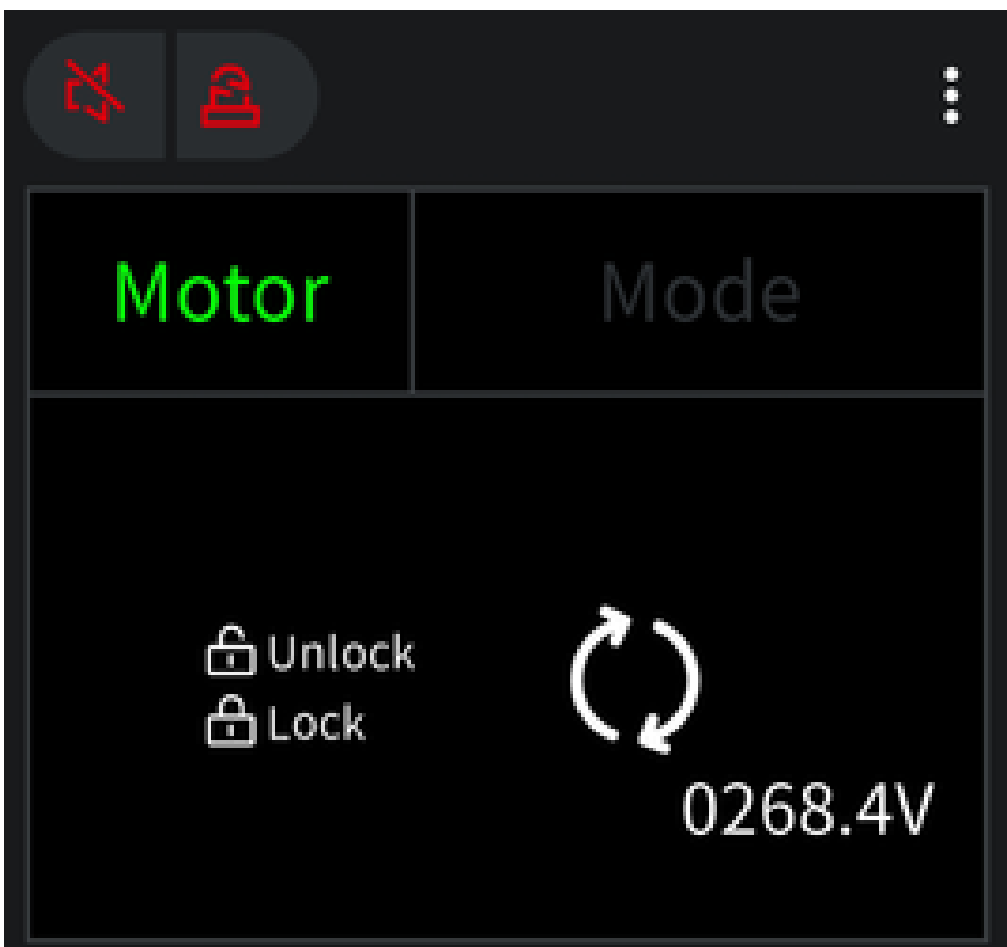
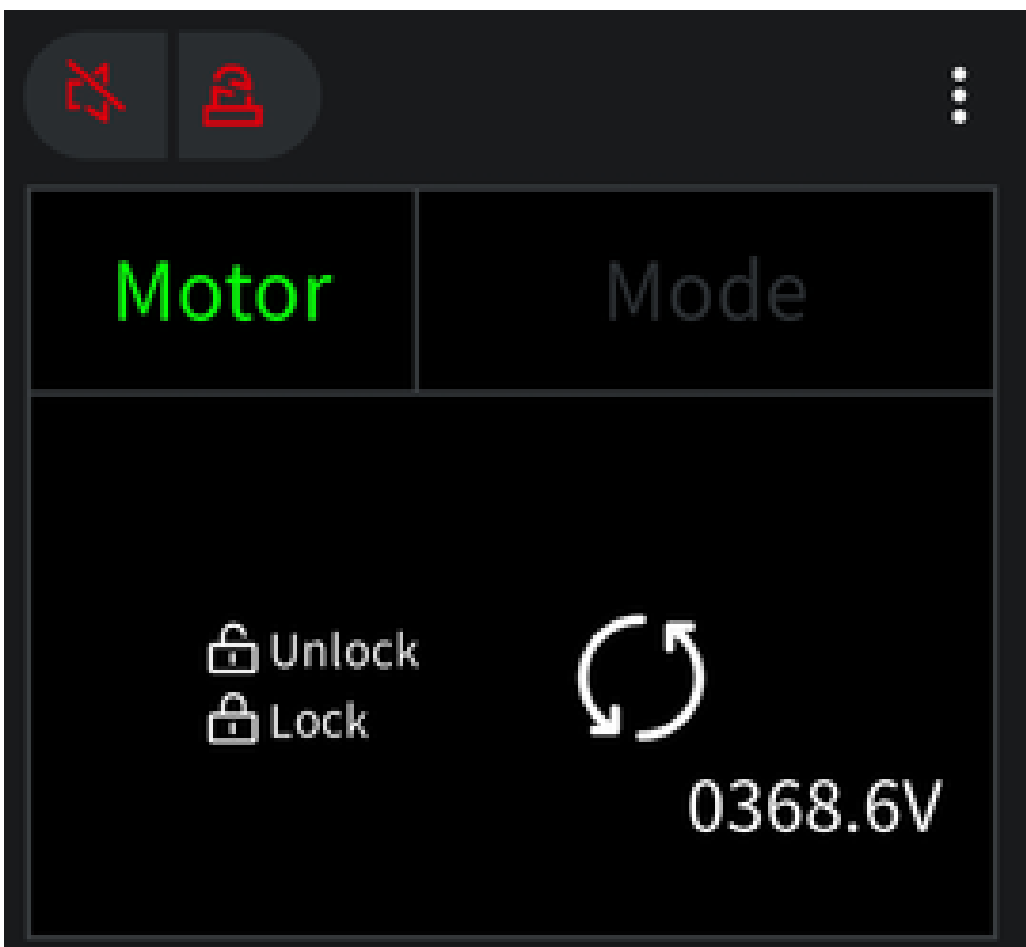
2. When the test leads are not connected to anything, it displays the "Unlock" status.



3. When the test leads are connected to phases 1 and 3, wait for approximately 3 seconds until the "Lock" status and measurement value are displayed.



4. At this moment, place the red test lead on phase 2 wire and wait for about 3 seconds. The measured three-phase result will be displayed as either sequence or reverse sequence.

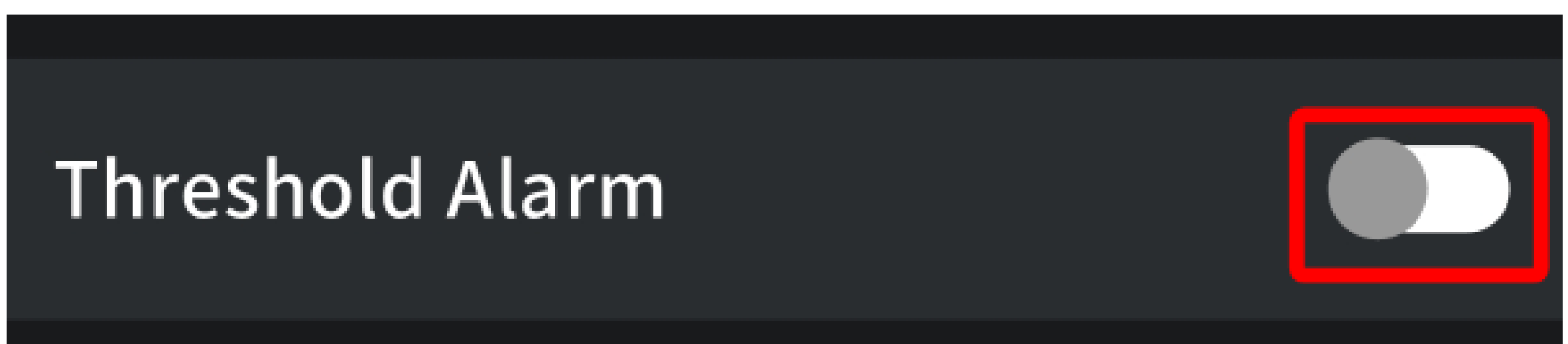


Setting range alarms

Set a range alarm if you want to be alerted of readings that fall in or outside the defined measuring range.

When an alarm is triggered, the display of the controls page flashes and an audible alarm sounds (if enabled).

1. Tap on “**Device List**” in the bottom navigation bar.
2. Tap on a multimeter for which you want to set the range alarm to open its controls screen.
3. Tap on the three dots (B10) on the controls screen.
4. Activate “**Threshold Alarm**”.



5. Set the upper and lower range limits. For each unit, enter the limit value and set the same unit. Tap the button  to save entries.
6. Tap on “**Alarm Mode**” and select a range condition:
 - “**Within**”: sound alarm if reading falls within the lower and upper limit.
 - “**Without**”: sound alarm if reading falls outside the upper or lower limit.

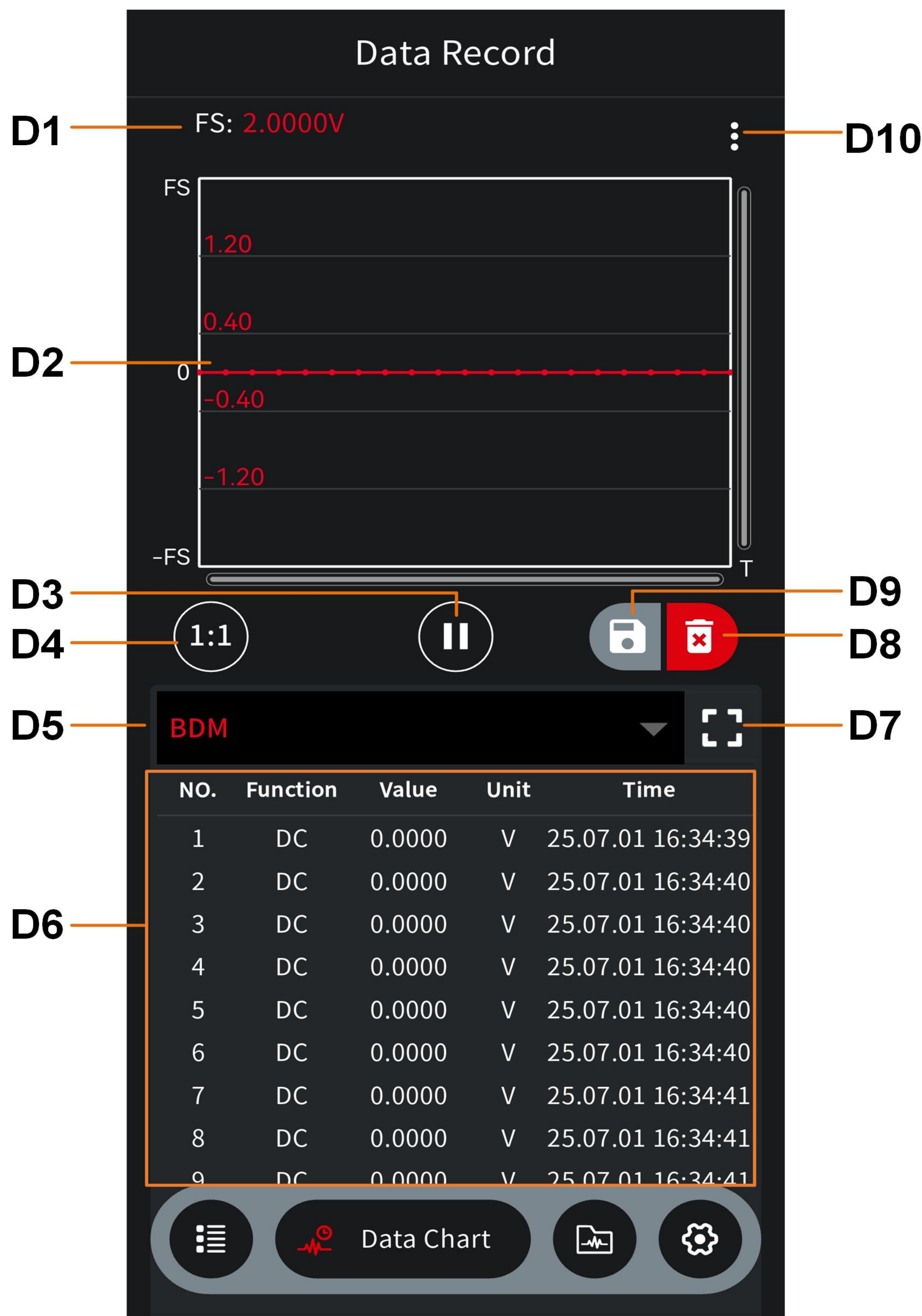
You have set and enabled the range alarm and it remains activated until you disable it.

Charting measurements

With the charting function, you can chart and tabulate readings. You can chart online readings (under “**Data Chart**”) or recorded readings (under “**Read File**”).

Charting screen

1. Tap on “**Data Chart**” in the bottom navigation bar to open the online charting screen.



D1 Range of multimeter

D2 Chart

Pinch chart on horizontal axis to contract /expand x-axis of chart

Pinch chart on vertical axis to contract/ expand y-axis of chart

D3 (Online readings only)

Pause and start charting

D4 Reset chart scaling to default

D5 Online readings: select multimeter for which to display readings

D6 Readings: swipe up or down to display more values

D7 Hide chart

D8 Online readings: clear readings

Saved readings: unload file

D9 (Online readings only)

Save current readings to file

D10 (Online readings only)

Select multimeters whose readings you want to chart

Setting record interval and record count

1. Tap on “**Setting**” in the bottom navigation bar to open the mobile app settings.

Setting	
Data Chart record interval	<0.5s >
Data Chart record count	100 >

2. Under “**Data Chart record interval**”, set the time in seconds between two consecutive measurements. Tap on “**Save**” to save the entry.
3. Under “**Data Chart record count**” set the total number of measurements to be taken. Tap on “**Save**” to save the entry.

Note: If there is any lag in real-time data operation, you can try adjusting the number of Data Chart record count entries to ≤ 3000

Recording online readings

You can record online readings by outputting them to a file while the multimeter is connected (online) to the mobile app.

Recording online readings manually

1. Tap on “**Data Chart**” in the bottom navigation bar.
2. Tap on the button  to start outputting the readings of all connected multimeters to a single file.
3. Control the recording:
 - Tap on the button **Start/Pause** to pause/start recording.
 - Tap on the button  to save measurements to a new file and delete the on-screen data already saved.

Recording online readings automatically

To record online readings automatically, set and configure the auto-save function.

1. Tap on “**Setting**” in the bottom navigation bar.
2. Tap on “**Period**” and set a time period during which readings are saved to file.
3. Tap on “**Save**” to save changes.
4. Enable the slider “**Auto save**”.

You have enabled the auto-save function and online readings will automatically be saved to file for the set time interval.

Recording offline readings

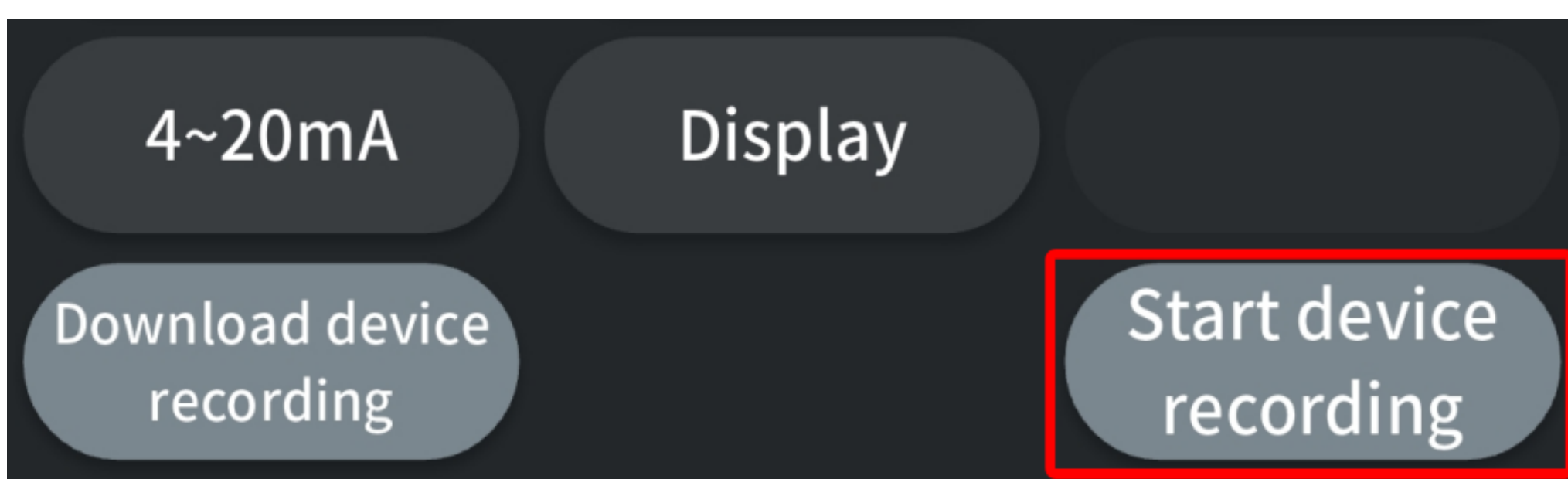
You can record offline readings on the multimeter while the multimeter is disconnected from the mobile app. After recording, you can import records into the mobile app.

Note:

If recording is in progress, you cannot connect the multimeter to the mobile app until recording stops.

Recording offline readings

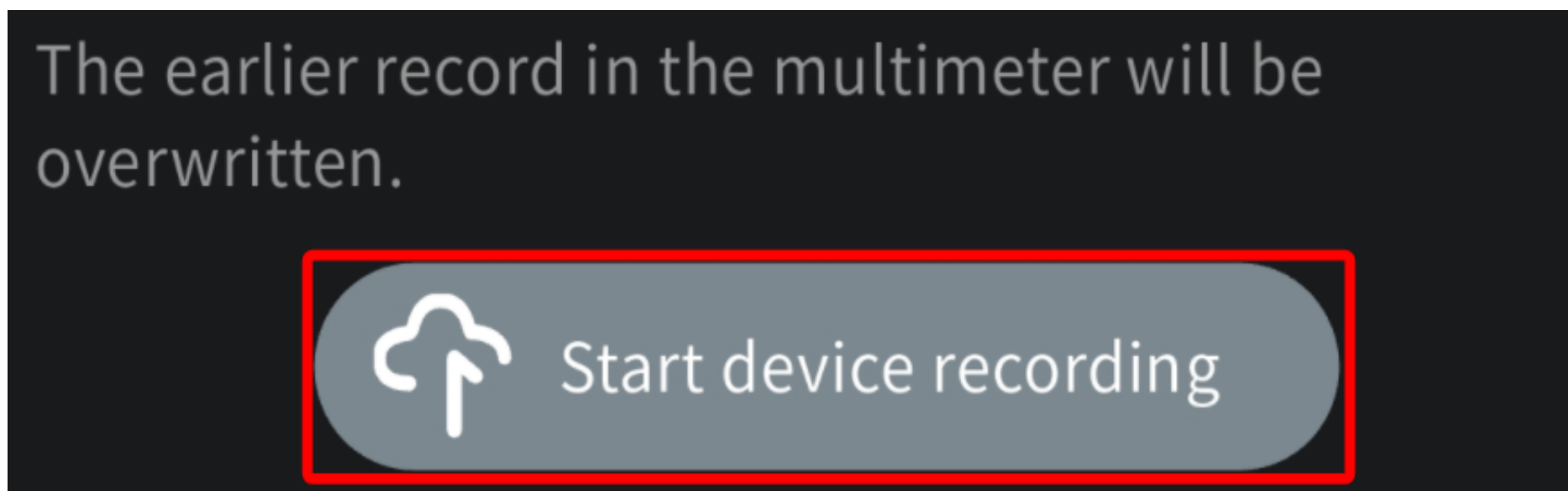
1. Tap on “**Device List**” in the bottom navigation bar.
2. Select the multimeter with which you want to record offline readings.
3. Tap on “**Start device recording**” to open the offline configuration screen.



4. Tap on “**Record interval(s)**”.
5. Enter into the field a record interval in seconds. Touch the back arrow < to save the entry.
6. Tap on “**Record counts(<=10000)**”.
7. Enter into the field the total number of records to be written. Touch the back arrow

< to save the entry.

8. Tap on “**Start device recording**” to start recording offline measurements.



- The multimeter will be disconnected.
- Offline recording will be indicated on the multimeter screen.

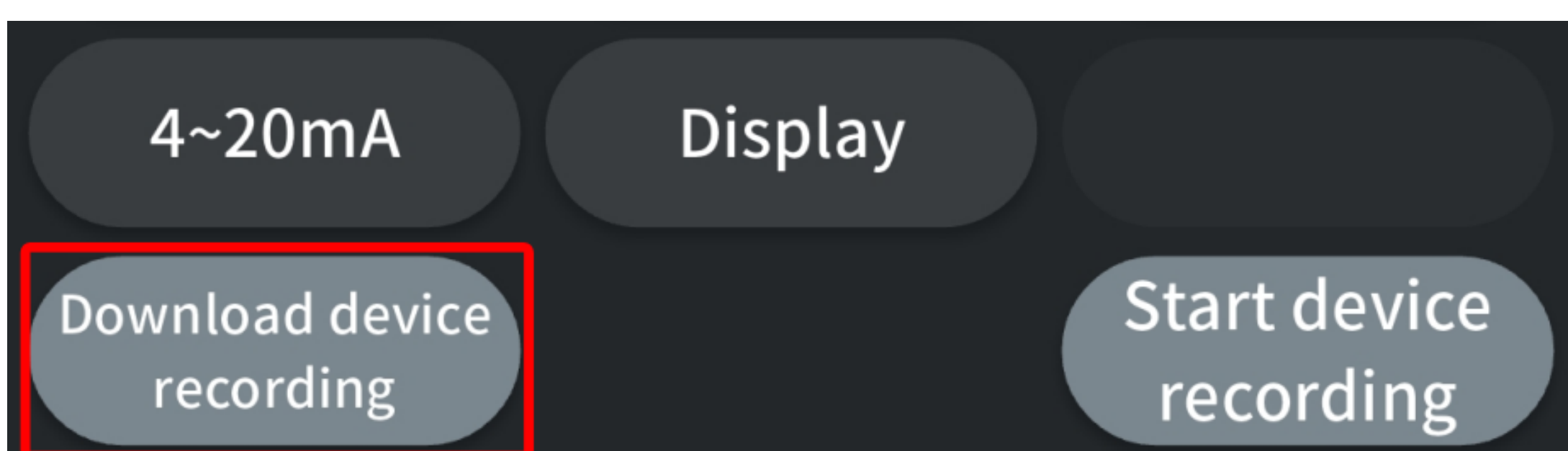
Aborting offline recording

You can abort offline recording by switching the multimeter off.

Transferring offline records to mobile app

After offline recording completes, you can transfer the readings from the multimeter to the mobile app for viewing and storage.

1. Connect the multimeter with which you have recorded offline measurements to the mobile app.
2. On the screen “**Device List**”, tap on the multimeter to open its controls screen.
3. Tap on “**Download device recording**” to open the records transfer screen.



4. (Optional) On the records transfer screen, tap on “**Save as:**” and change the file name. Tap on the symbol  to save the new name.
5. At the bottom of the records transfer screen, tap on “**Read data**” to transfer the records to the mobile app.
6. (Optional) At the bottom of the records transfer screen, tap on “**Display data**” to chart the readings.

Managing records

Loading records from file

After recording and saving readings to file, you can load and chart them. You can load files produced from online and offline readings.

1. Disable the Bluetooth function on your mobile device to disconnect all multimeters.
2. Tap on “**Read File**” in the bottom navigation bar.
3. Tap on “**Open File**”.
4. Select an offline or online file and tap on “**Load data**” in the file menu.
 - The measurements are displayed.

Sharing records

1. Disable the Bluetooth function on your mobile device to disconnect all multimeters.
2. Tap on “**Read File**” in the bottom navigation bar.
3. Tap on “**Open File**”.
4. Select an offline or online file and tap on “**Share**” in the file menu. --OR-- Tap on “**Edit**”, select multiple files, and tap on “**Share**”.
5. Share the file(s) through a communication app installed on the mobile device.

Deleting records

1. Disable the Bluetooth function on your mobile device to disconnect all multimeters.
2. Tap on “**Read File**” in the bottom navigation bar.
3. Tap on “**Open File**”.
4. Select an offline or online file and tap on “**Remove**” in the file menu. --OR-- Tap on “**Edit**”, select multiple files, and tap on “**Remove**”.
5. Confirm the prompt to delete the file(s).

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