Bluetooth App Instructions V1.0 (Android)

Solar Charge Controller)

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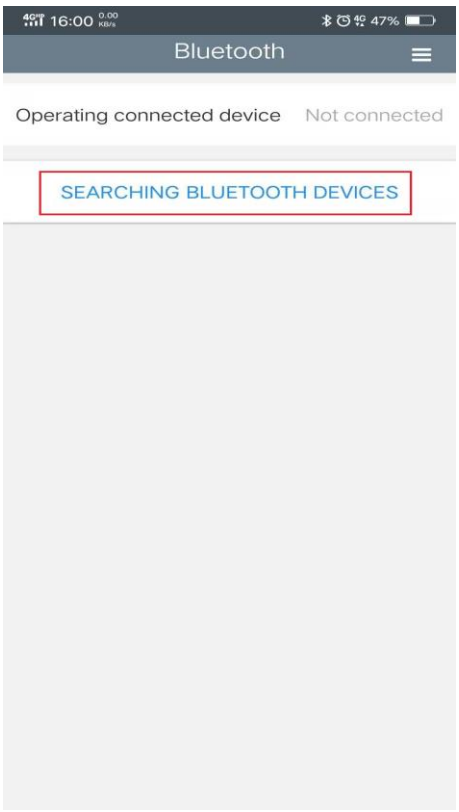
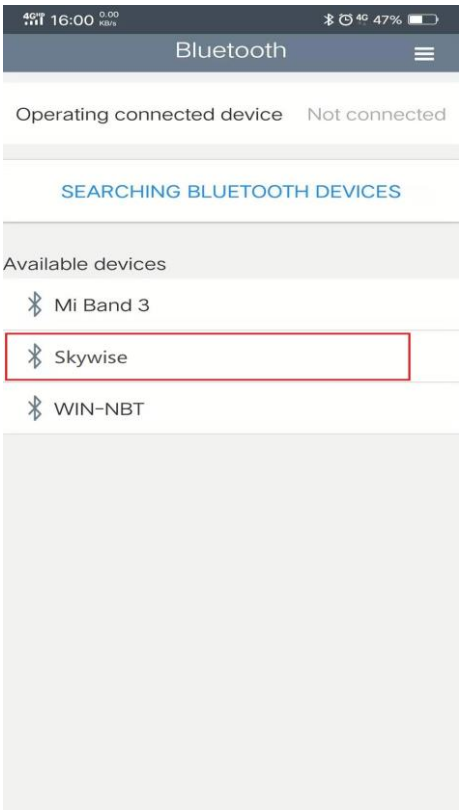
1.User manual for Android

1.1 Connection

Choosing Bluetooth communication, click "***SERCHING BLUETOOTH DEVICES***" and select the corresponding device. After successful matching, device name will show on the top of phone.





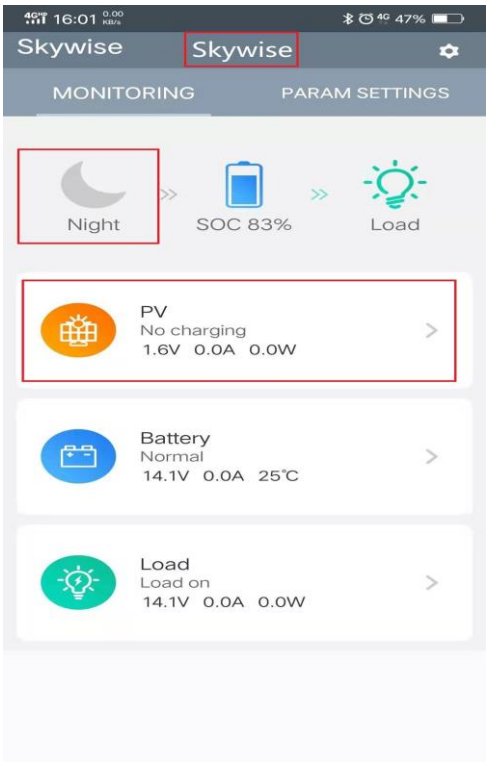
1.2 Home Page

It will transfer to the home page auto after device connection successful. The device's name shows on the top of the phone. Can check all kinds parameters of current PV, load and battery.

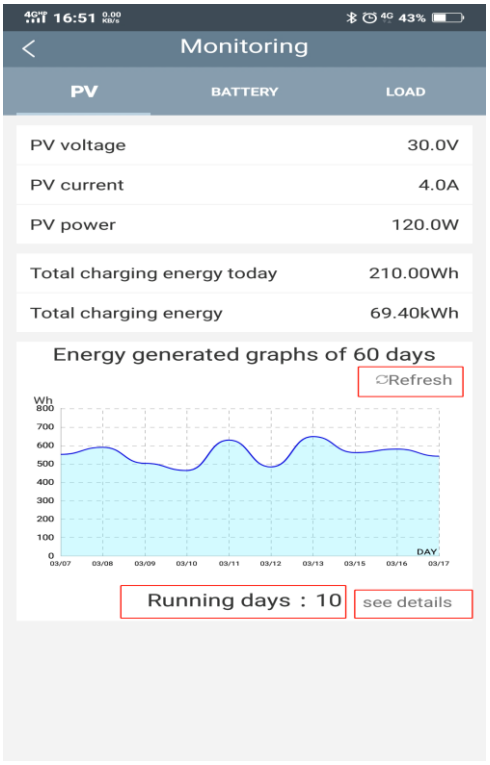
2. Real Time Monitoring

2.1 PV

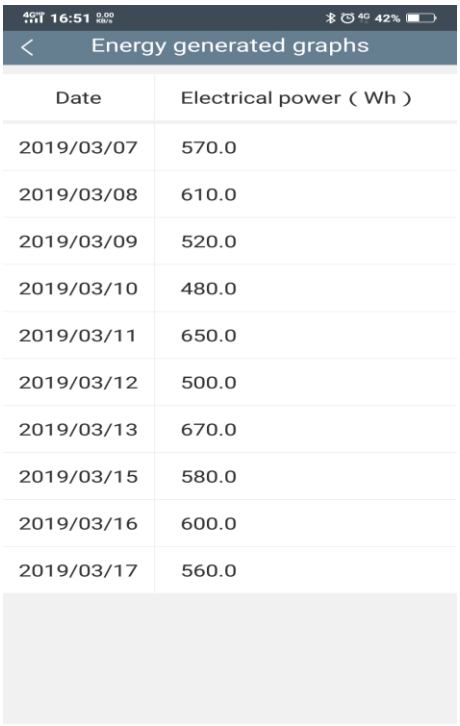
Step 1: On this page, you can see the PV working mode- Night or Daytime, charging status, as well as the parameters of current, voltage and power.



Step 2: Click "***PV***", enter the page of PV details. On this page you can read PV voltage, PV current, PV power, charging energy today, total charging energy as well as energy generated graphs of 60 days.



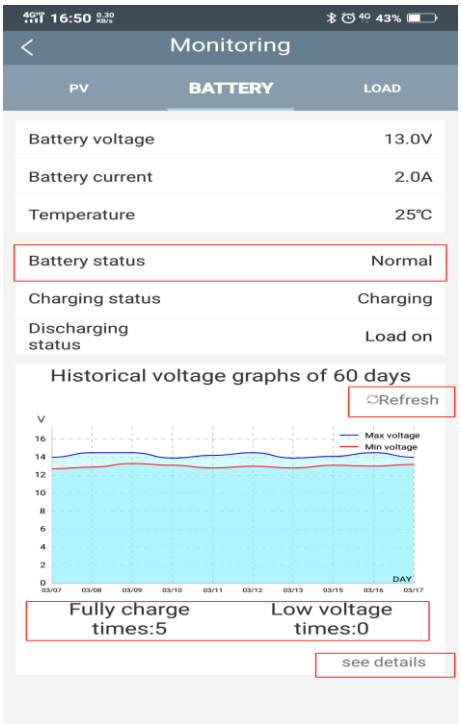
Step 3: Click "***Refresh***" can get current graph information, and click "***See details***" to check the date and corresponding electrical power (Wh)



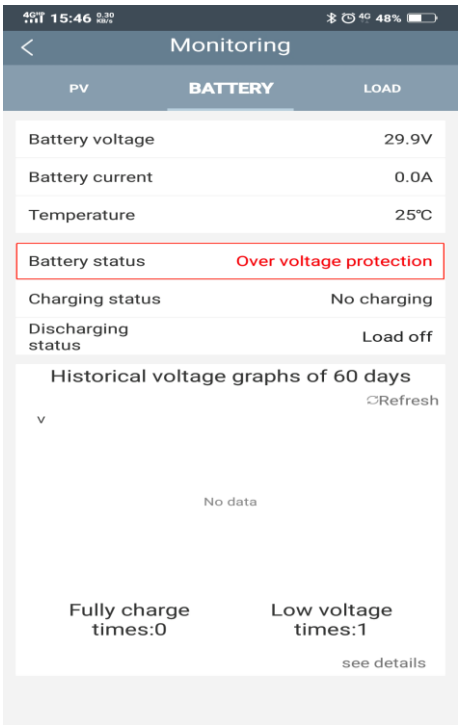
2.2 Battery

Step 1: Showing battery capacity, battery voltage, battery current and temperature.

Step 2: Click "***Battery***" to check highest and lowest historical voltage graphs of 60 days. Click "***Refresh***" to check current graph status.



Step 3: If there are wrong numbers of PV, battery or load, the warning will be marked in red color on "***Battery status***"



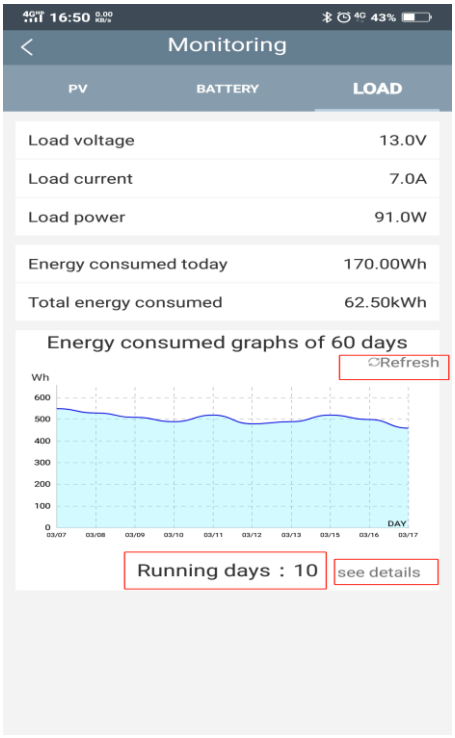
Step 4: Click "***see details***" to check the date and corresponding data.

Date	Min voltage (V)	Max voltage (V)
2019/03/07	12.7	14.0
2019/03/08	12.9	14.5
2019/03/09	13.3	14.5
2019/03/10	13.1	13.9
2019/03/11	12.8	14.2
2019/03/12	13.0	14.5
2019/03/13	12.8	13.9
2019/03/15	13.1	14.1
2019/03/16	13.0	14.5
2019/03/17	13.2	14.0

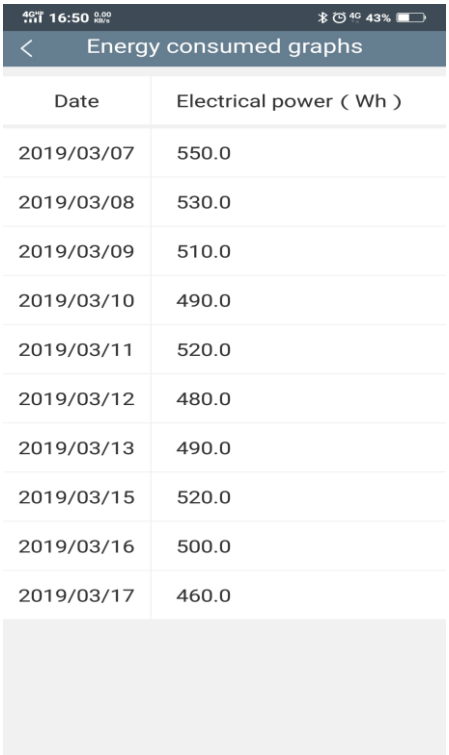
2.3 Load

Step 1: On the home page of Monitoring, if the load symbol is shining- load turn on; if the load symbol dark- load turn off. The load discharge status, as well as the load voltage, current and power will show on the below of this page.

Step 2: Click ***"Load"***, transfer to the details page of load. Showing energy consumed graphs of 60 days. Click ***"Refresh"*** to check the current data.



Step 3: Click on the bottom right of the chart to see the details, like the power and the corresponding data.

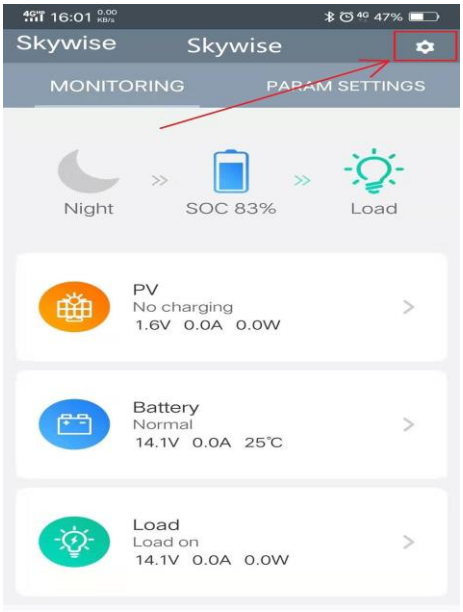


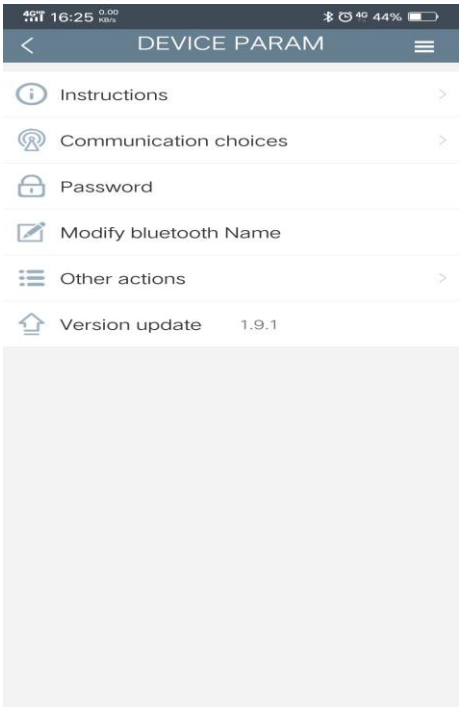
Date	Electrical power (Wh)
2019/03/07	550.0
2019/03/08	530.0
2019/03/09	510.0
2019/03/10	490.0
2019/03/11	520.0
2019/03/12	480.0
2019/03/13	490.0
2019/03/15	520.0
2019/03/16	500.0
2019/03/17	460.0

3.Setting

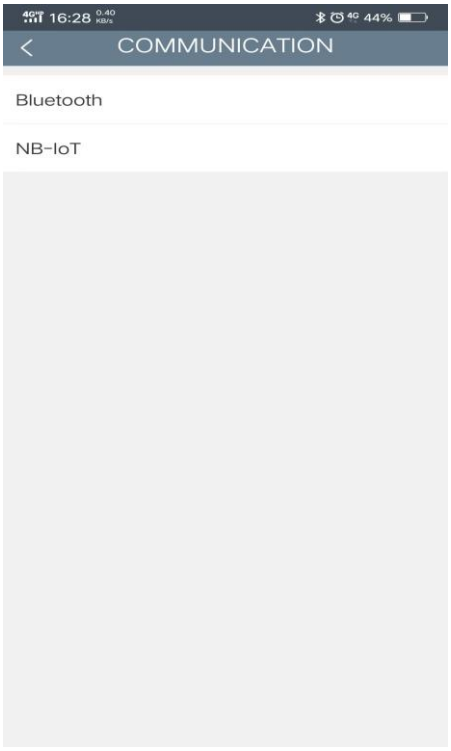
3.1 Communication Selection

Step 1: On the home page, click the ***Settings*** button in the upper right corner to enter the Settings Device Parameters page.

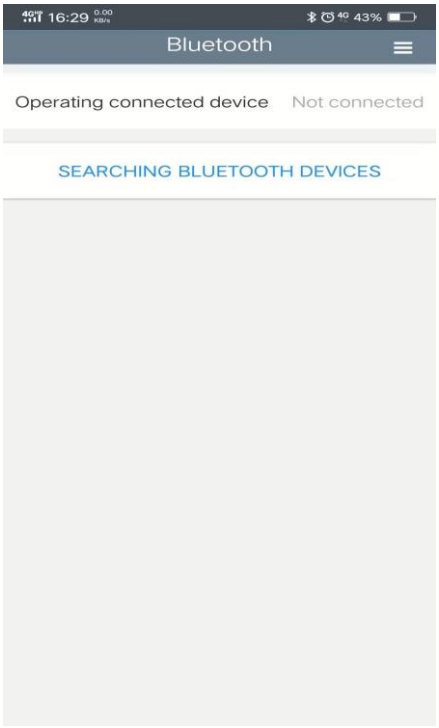




Step 2: Click ***"Communication Selection"***, select Bluetooth or NB-IoT, while now only Bluetooth is available.



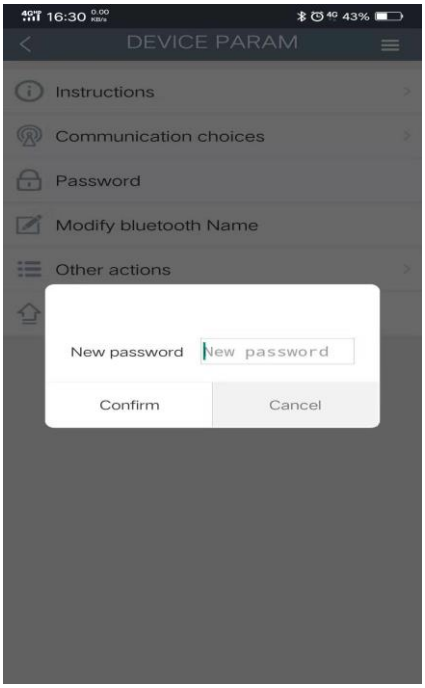
Step 3: Take Bluetooth as an example, select Bluetooth to enter into the Bluetooth connection page. Click "***searching Bluetooth device"*** to switch Bluetooth devices or click "***disconnect"*** to disconnect the currently connected device.

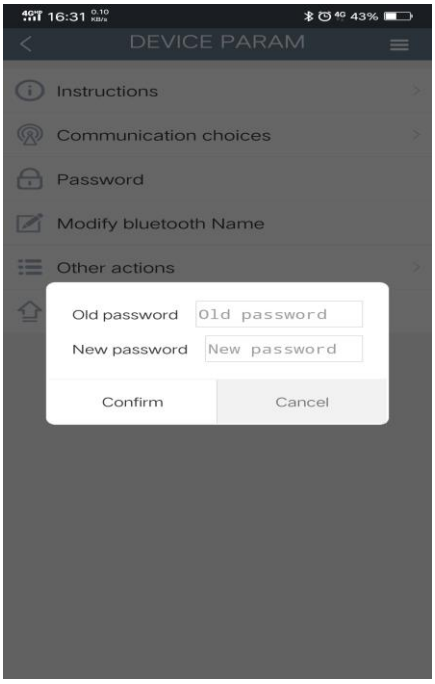


3.2 Device Password

Click on the ***"device password"*** to set the password for the device.

Note: After setting the password, when entering the APP for the first time to send instructions, you need to enter the password. Password digit: 4 digits

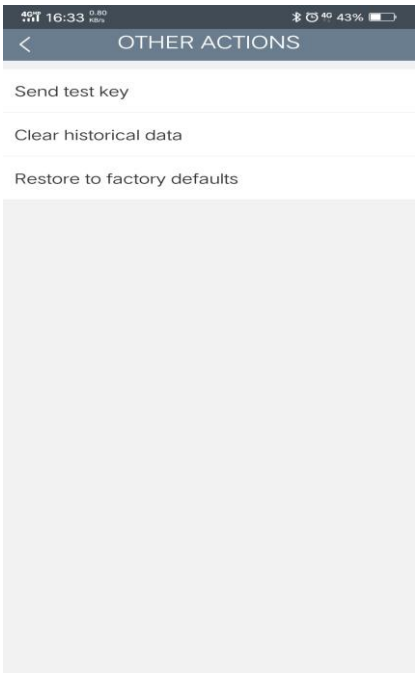




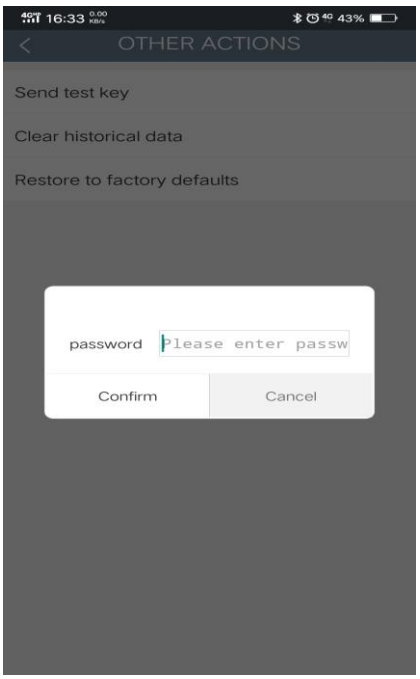
3.3 Other operations

Step 1: Click ***"Other operations"*** as below,

Sending test button, clear historical data, parameters recovery to factory default.



Step 2: Click ***"sending test button"***, the load is turned on if the condition is permitted (Load is not protected)；Click ***"clear historical data",*** if you send paramters at the first time after entering the APP, you need to enter the password to operate it.

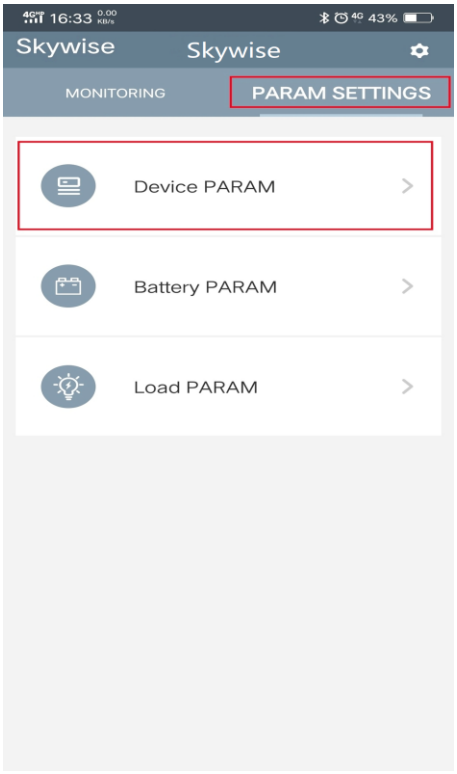


Step 3: Click ***"paramters recovery to factory default"***, if you send paramters at the first time after entering the APP, you need to enter the password to operate it.

4. Parameters Setting

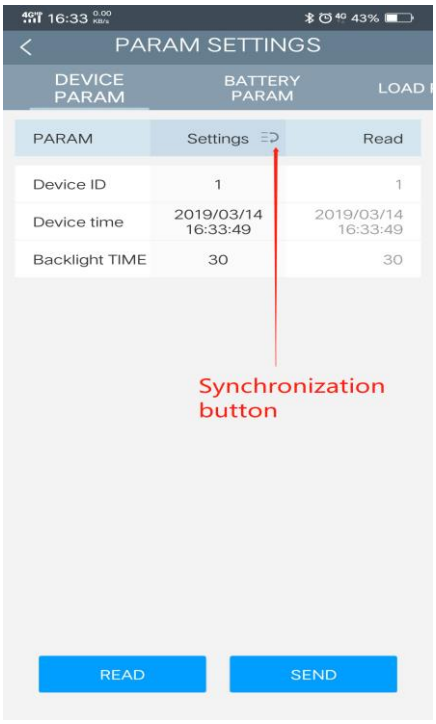
4.1 Device parameters

Step 1: Enter into the Parameters Setting page, click ***"Device Parameters"***.



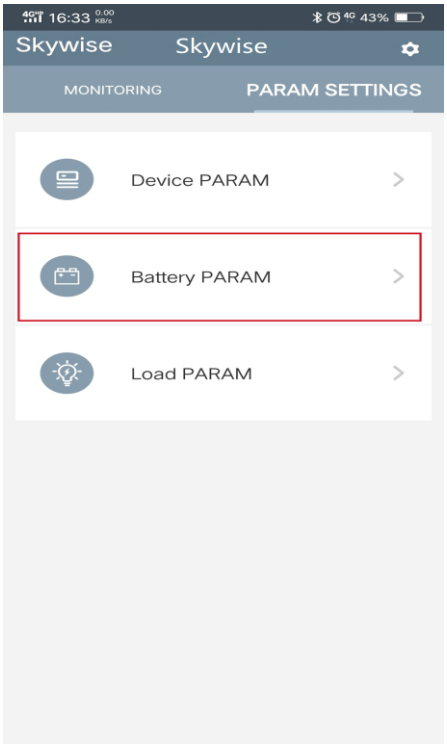
Step 2: Enter Device Parameters page, click ***"Read"*** to read current device paramters information and display in the column of read values.

Click ***"Send"*** to send data in the column of setting values to the device. Click ***"Synchronize"*** to synchronize read values to set values.

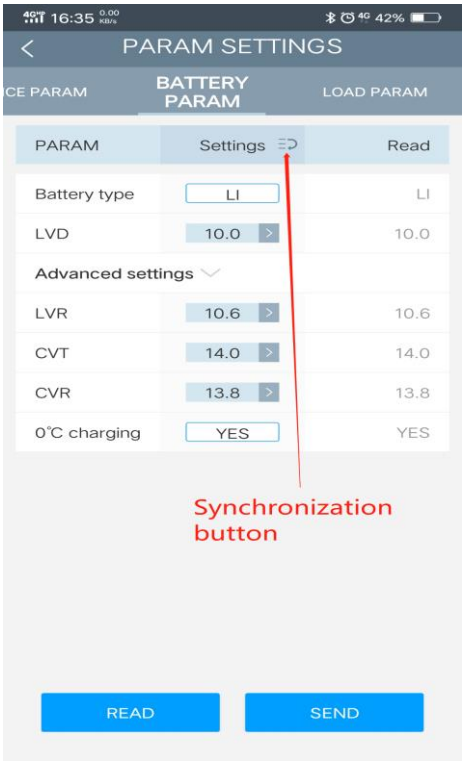


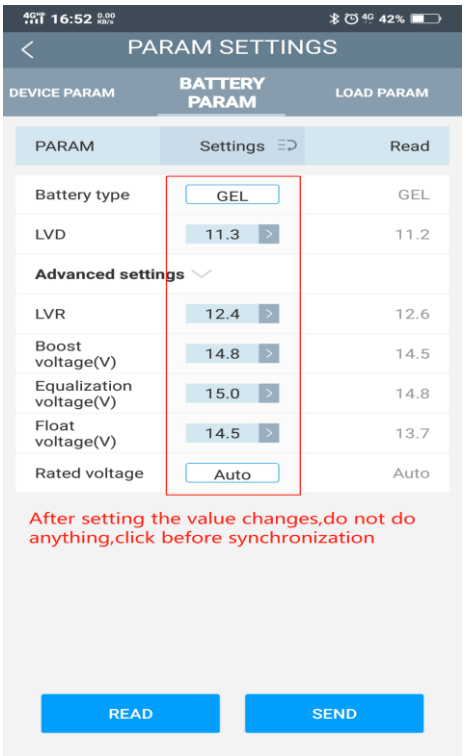
4.2 BATTERY PARAM

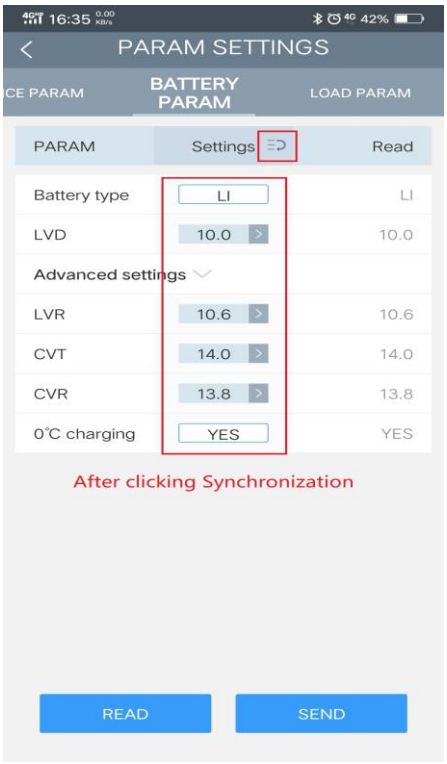
Step 1: Enter the ***"BATTERY SETTINGS"*** page, and click on the ***"BATTERY PARAM"***



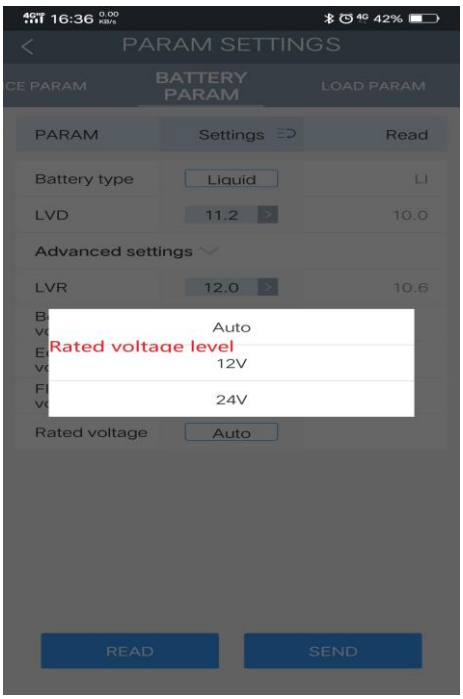
Step 2: Enter the ***"Settings"*** page and click ***"READ"*** to read the current battery parameter information, it will be displayed in the Read Value column. Then click ***"SEND"*** to send the data to the device. Click , you can Synchronize the ***"read value"*** to the ***"setting value"***.

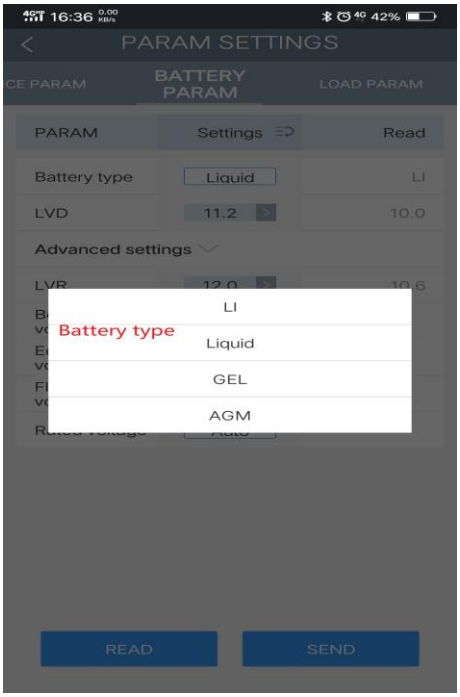






Step 3: The battery type includes lithium, Liquid, GEL and AGM battery. Liquid, GEL and AGM battery types and rated voltage levels are optional.



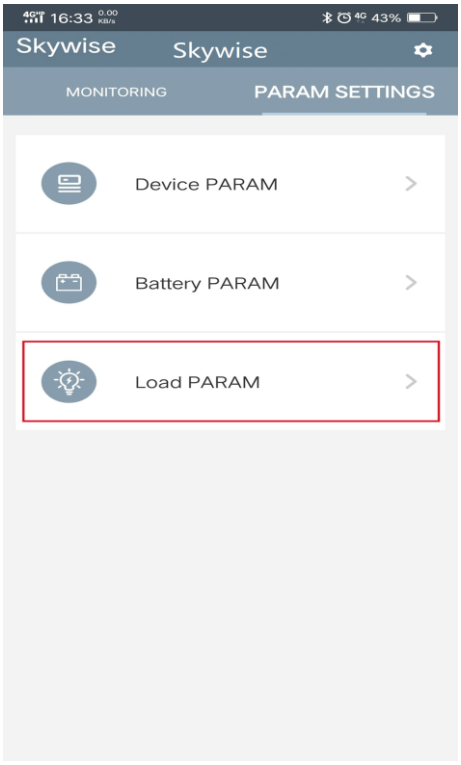


Step 4: you can adjust the voltage value according to your needs.

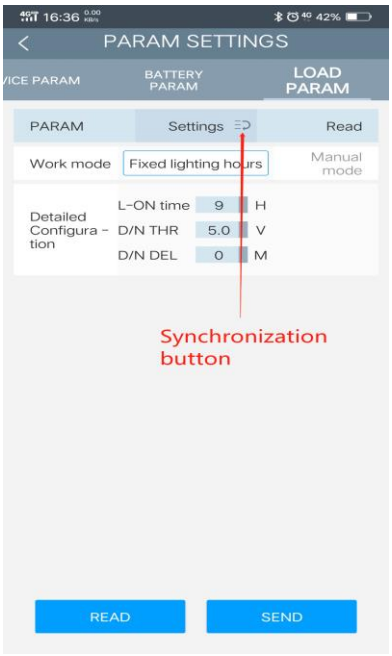
Step 5: Relationship between rated voltage level and real voltage - When the rated voltage level is self-identified, the real voltage display value is displayed at the current equipment level. When the rated voltage level is 12V, the real voltage display value is displayed on the 12V level. When the rated voltage level is 24V, the real voltage display value is doubled on the basis of 12V. (The corresponding D/N threshold voltage will also be doubled on 12V basis).

4.3 LOAD PARAM

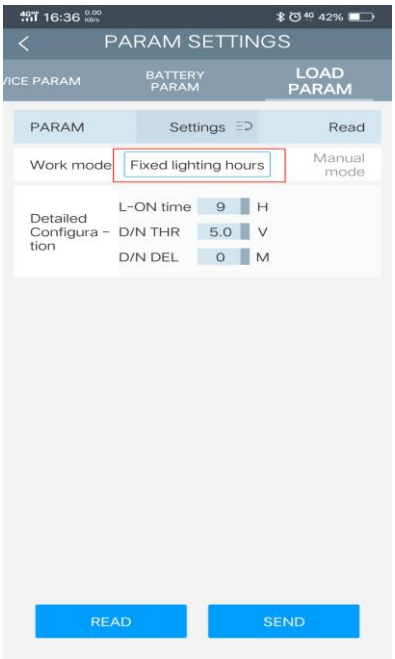
Step 1: Enter the ***"PARAM SETTINGS"*** page, and click on the ***"LOAD PARAM"***.

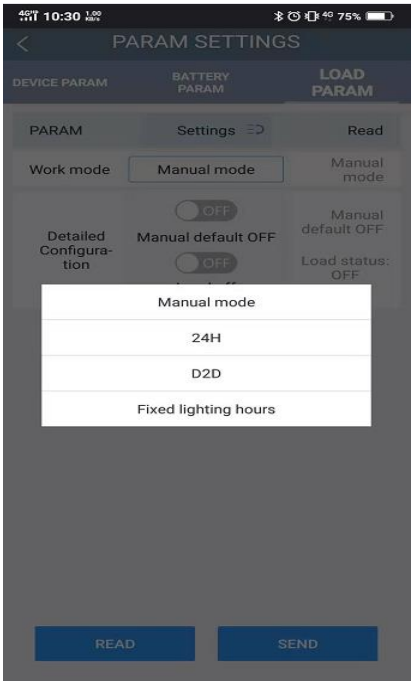


Step 2: Enter the ***"LOAD PARAM"*** page and click ***"READ"*** to read the current load parameter information, it will be displayed in the ***"Read Value"*** column. Then click ***"Send"*** to send the data to the device. Click , you can Synchronize the ***"read value"*** to the ***"set value"***.



Step 3: Click ***"work mode"*** to select the working mode. (optional mode option is determined by the current device)





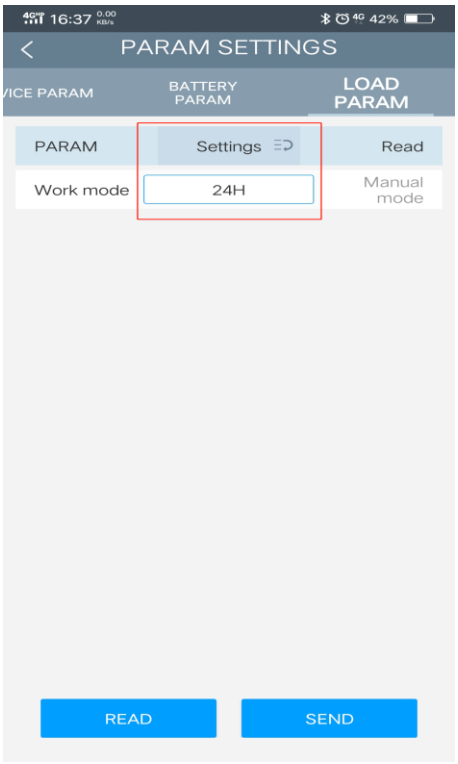
Step 4: Load mode - ***manual mode***.

"Manual default ON", that is, when the device is turned on, the load is open.

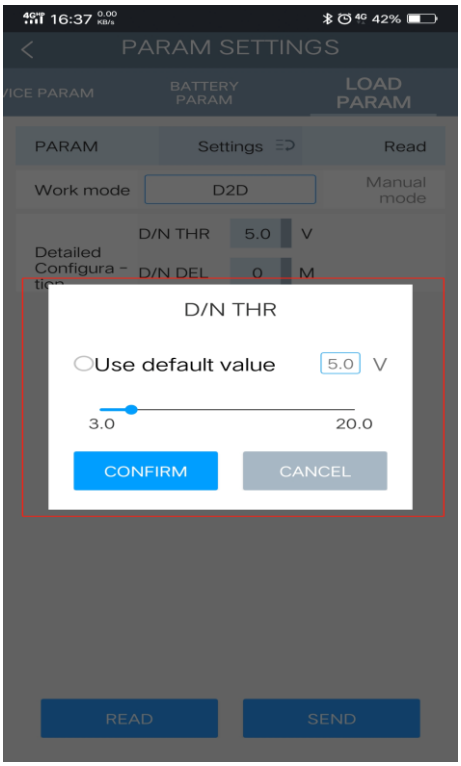
"Manual default OFF", that is, when the device is turned on, the load is close.

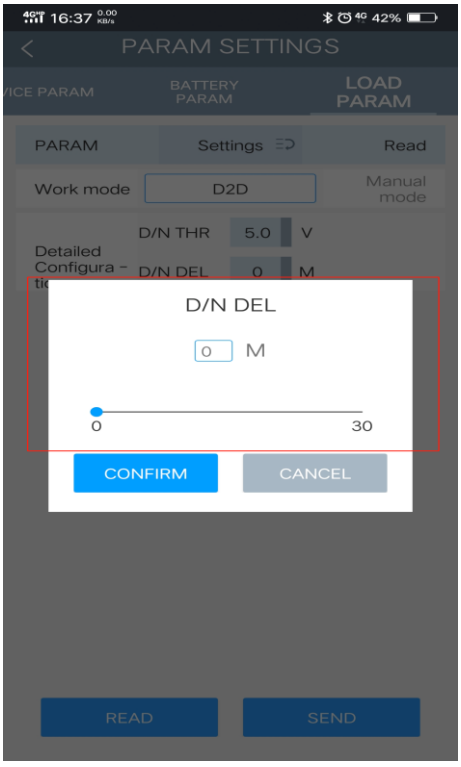
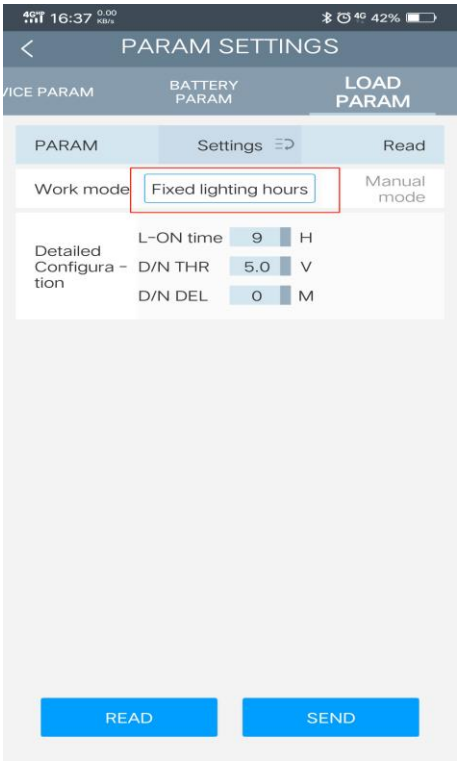
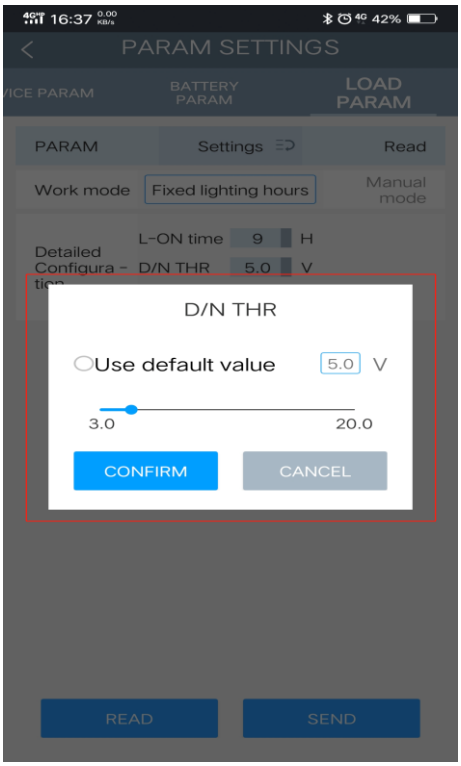
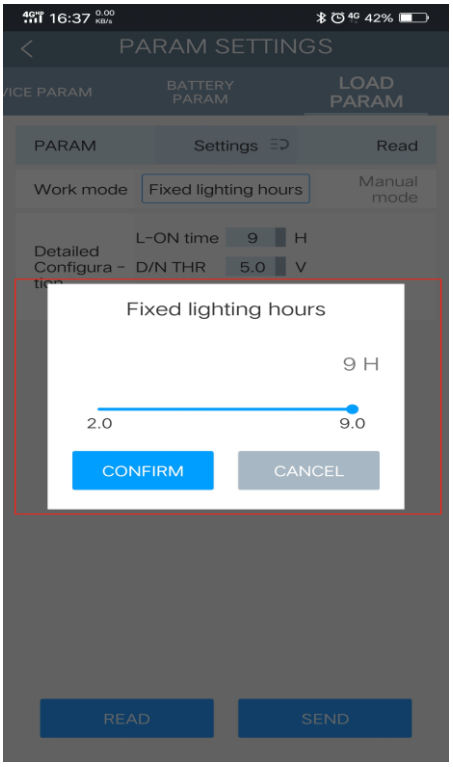
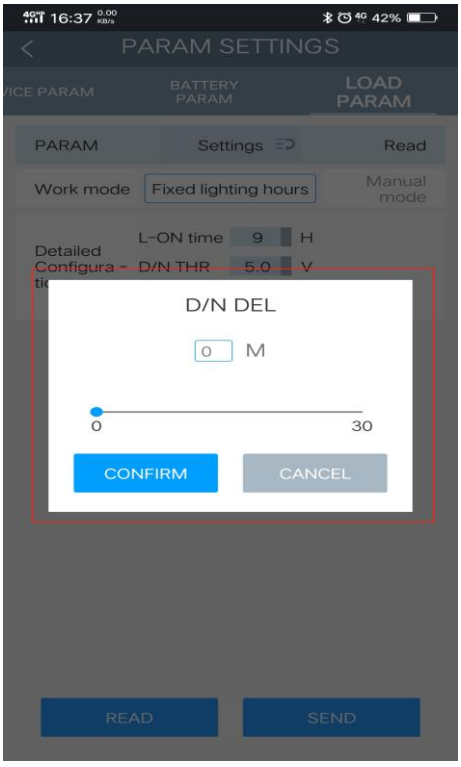
The second button can open the load manually.

Step 5: Work mode - ***24H***, that is, the load is always on mode.



Step 6: Work mode - ***D2D*** (Dusk to Dawn, mostly for solar street lamps), slide to setup D/N voltage, D/N delay range is 0-30M





Step 7: Work Mode - ***Fixed lighting hours***. It can set the light on time, Day/Night Threshold voltage and Day/Night delay time