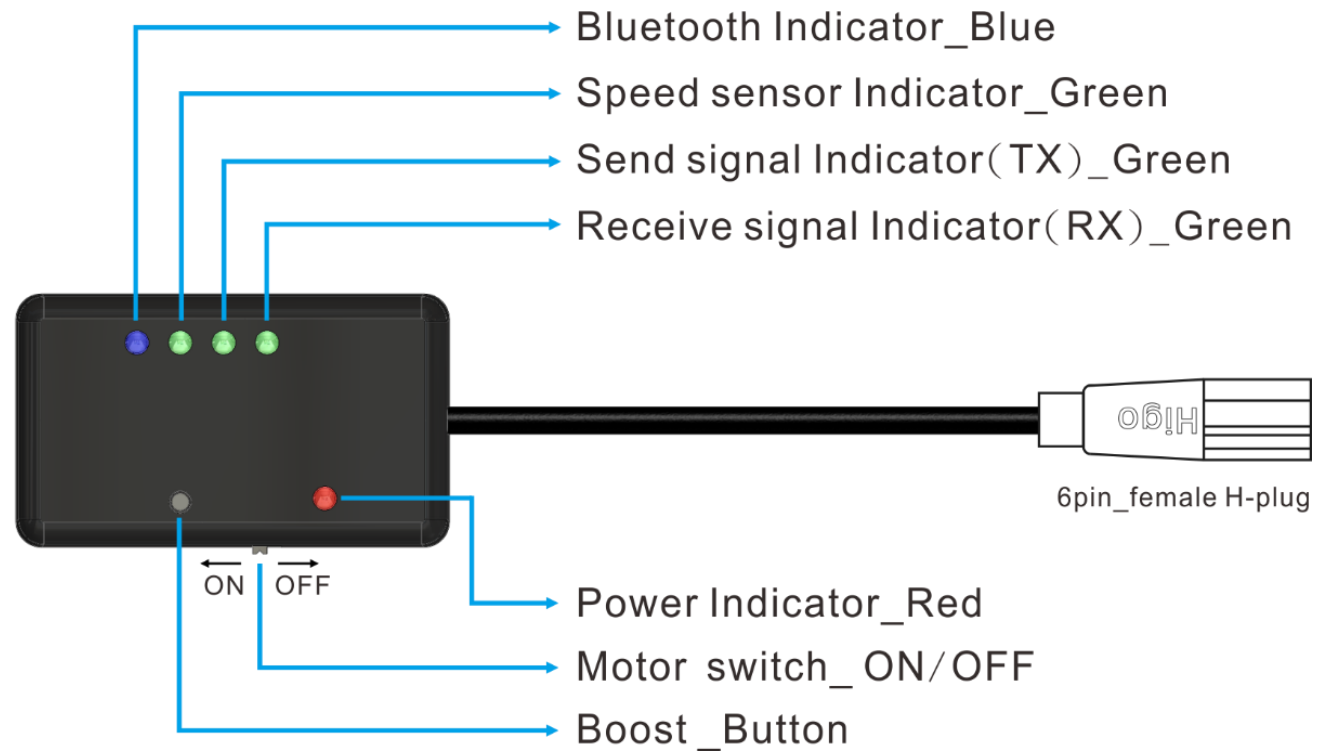


A decorative graphic on the left side of the page, consisting of a network of light blue lines and circles that resemble a circuit board or a data network. The lines are vertical and horizontal, with some diagonal connections, and the circles are small and white, acting as nodes or connection points.

MPF TOOLKIT 2.0 MANUAL SYSTEM CHECKING

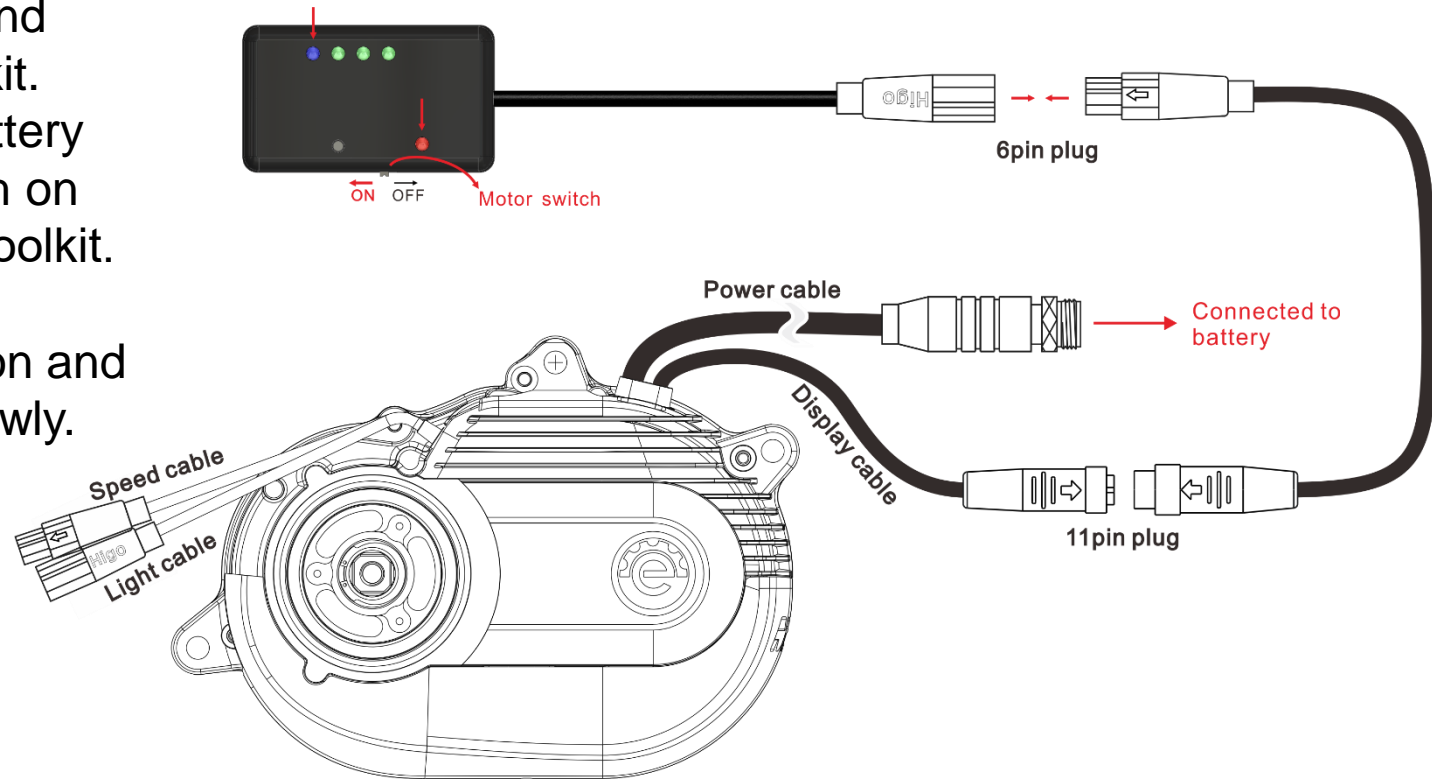
2023/07/04

STEP 1 - INSTALL THE TOOLKIT



STEP 1.1 - INSTALL THE TOOLKIT

1. First, remove display and replace it with the Toolkit. Second, turn on the battery power and finally switch on the “Motor switch” on Toolkit.
2. Make sure red light is on and blue light is flashing slowly. If not, it means the hardware failure.



STEP 2 - INSTALL THE APP

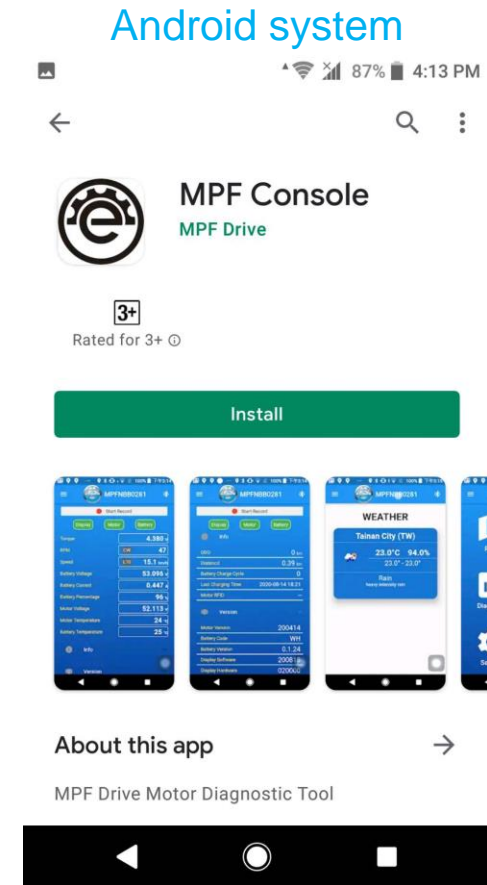
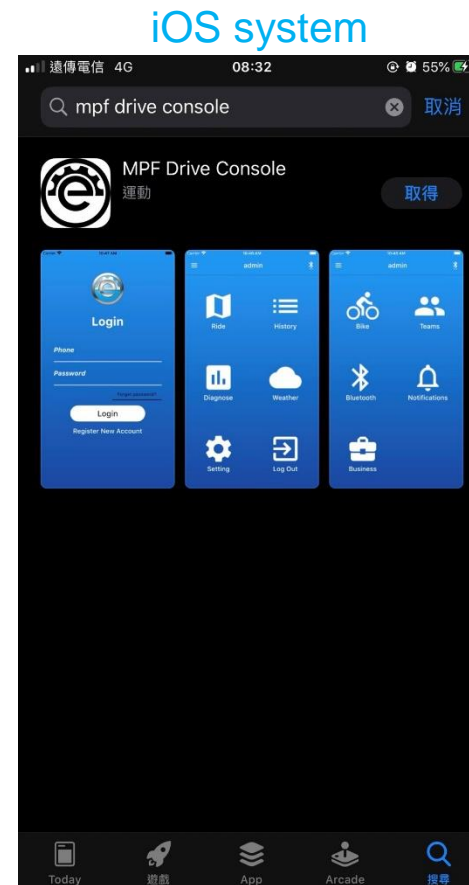
1. For iOS system, please download “MPF Drive Console” and install it.
2. For Android system, please download “MPF Console” and install it.



iOS system

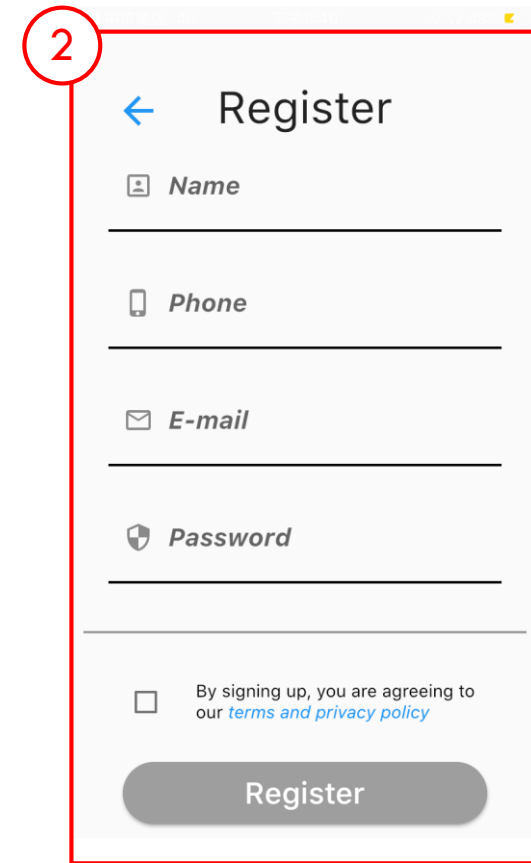
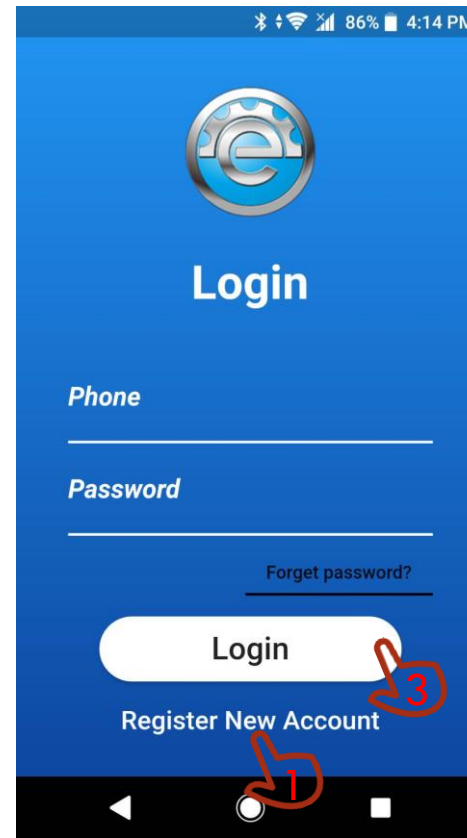


Android system



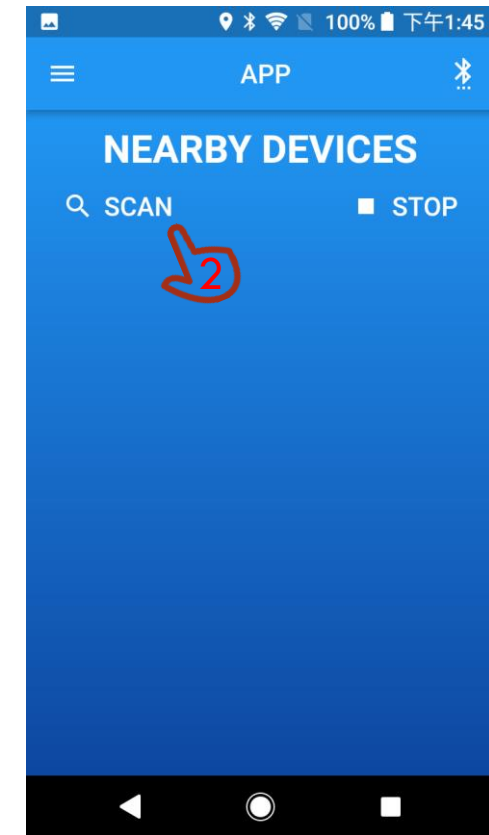
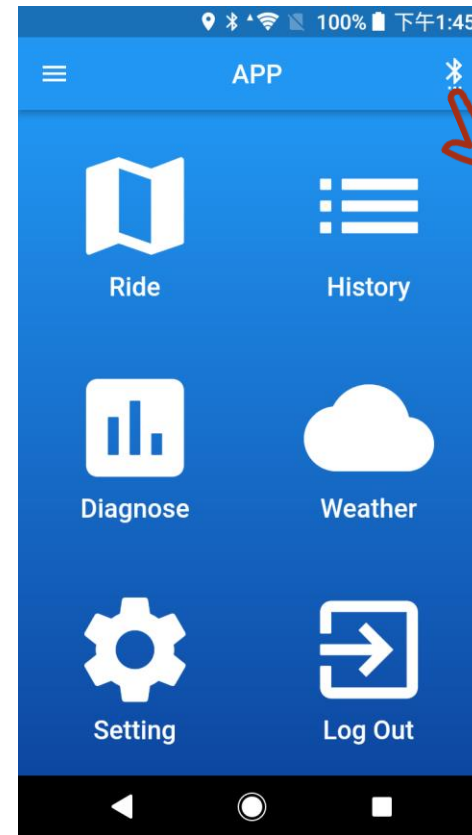
STEP 3 – REGISTER ACCOUNT AND LOGIN

1. Register an account.
2. Fill in information.
3. Log in.



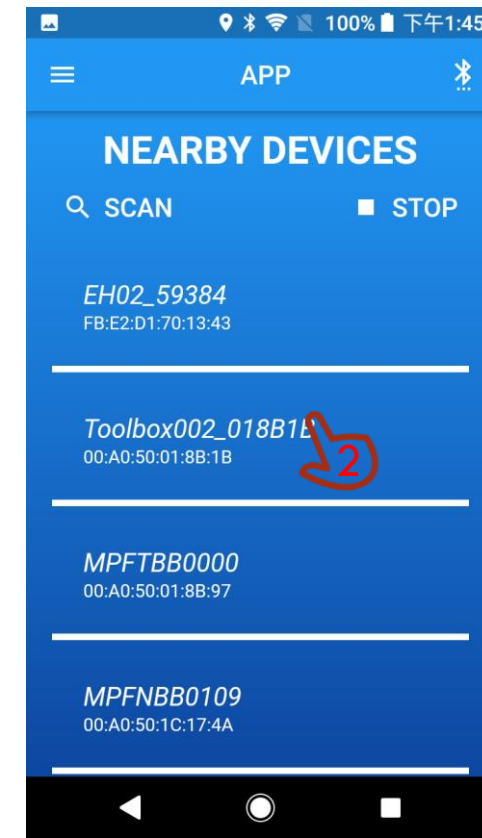
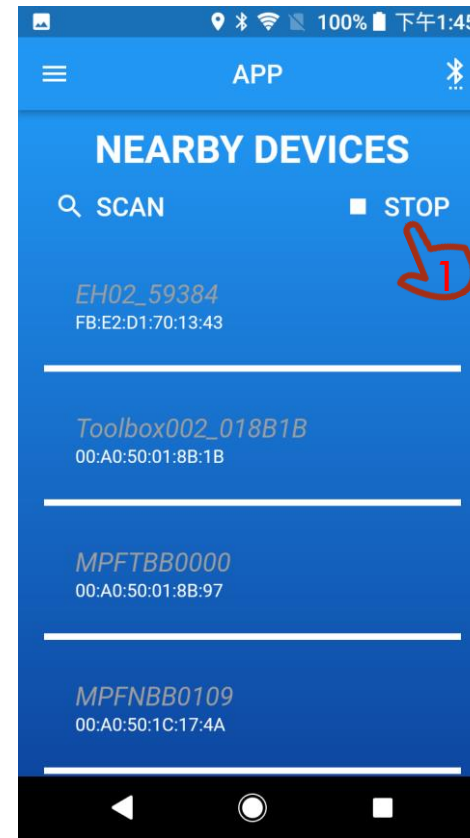
STEP 4 – CONNECT BLUETOOTH

1. Press the Bluetooth button.
2. Press “SCAN” to start scan peripheral compatible devices.



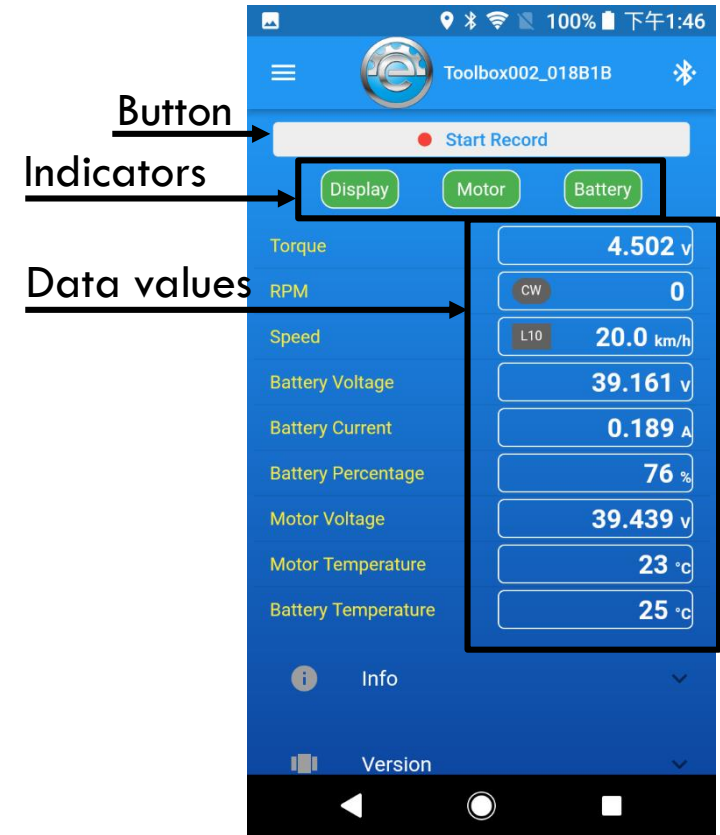
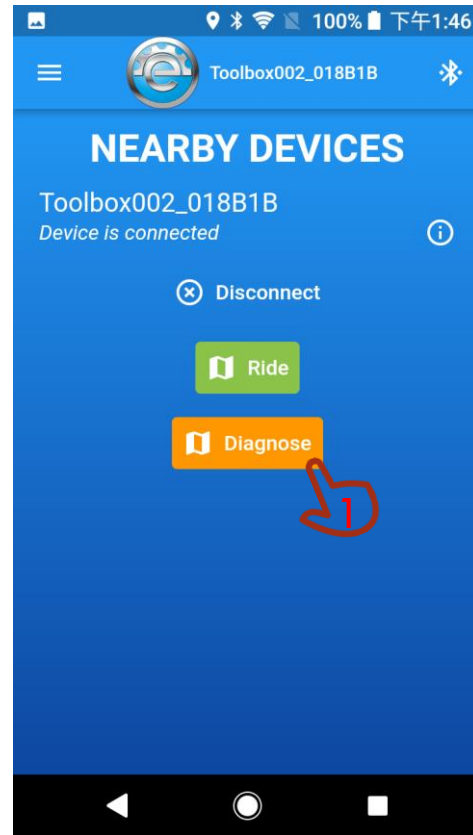
STEP 4.1 – CONNECT BLUETOOTH

1. Wait for scan procedure complete or press “STOP” to immediate stop the scan procedure.
2. Find the “ Toolbox002_XXXXXX ” Bluetooth devices.



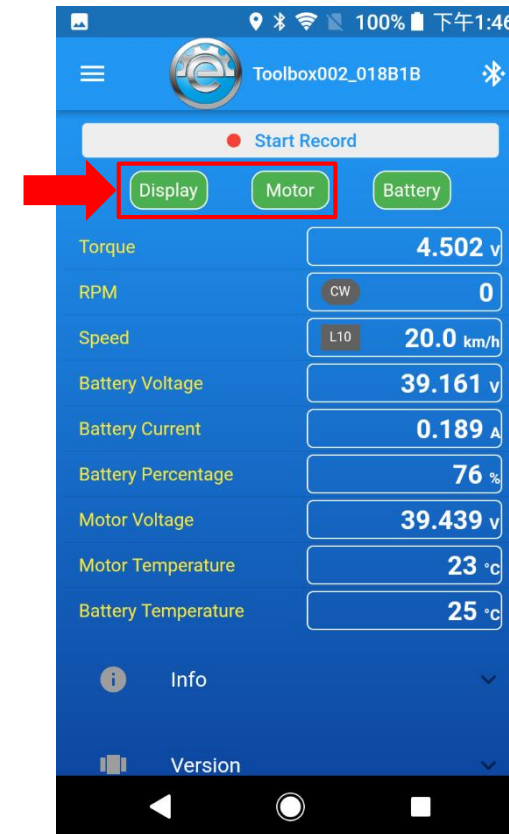
STEP 5 – ENTER DIAGNOSE MODE AND START RECORD

1. Press the "Diagnose " to enter Diagnose Mode.
2. System checking description:



STEP 5.1 – ENTER DIAGNOSE MODE AND START RECORD

1. Normally Display and Motor indicators light green. If not, it means hardware device failure.
- Battery indicator shows red.
 1. Battery CANBUS is not compatible
 2. Battery CANBUS is broken
 3. The battery CANBUS data is not recognized
 - If all indicators (Display, Motor and Battery) demonstrate in red color, it means the motor is turned off. Please turn on the display to start the motor.



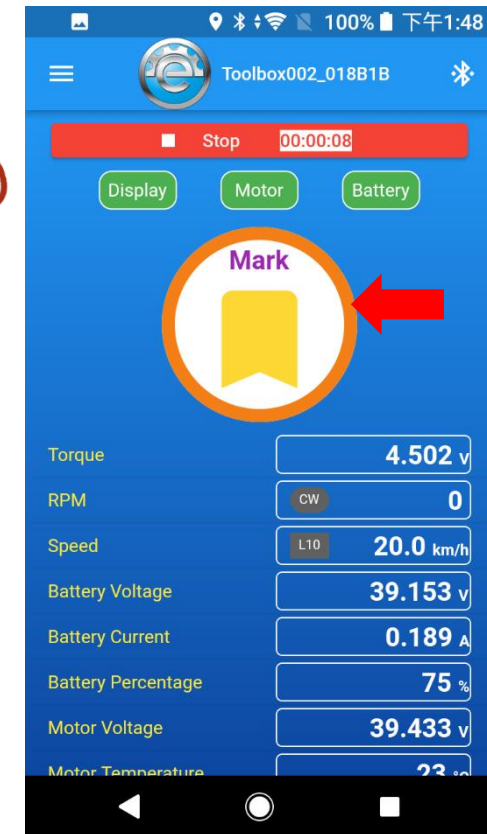
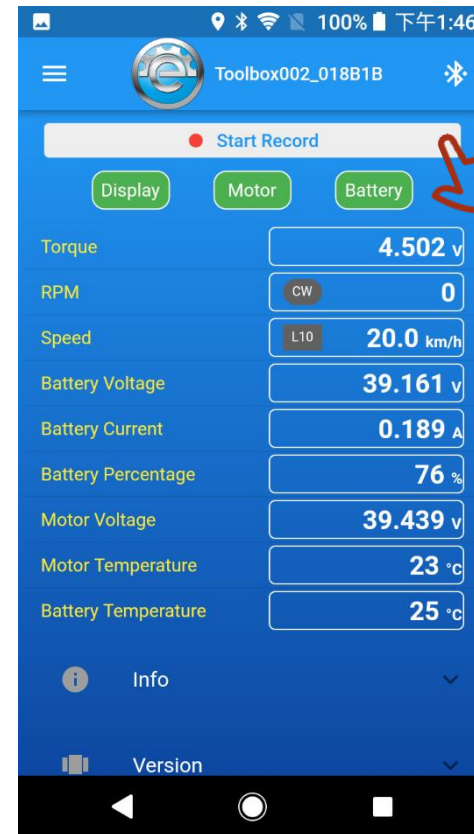
STEP 5.2 – ENTER DIAGNOSE MODE AND START RECORD

1. Click “Start record”

- The failure where the red color is showed on the screen will be recorded by system automatically.
- The failure or unexpected riding by the rider could be recorded manually by pressing button “Mark”.

CAUTION/ATTENTION

- Don't keep the phone away from the device.

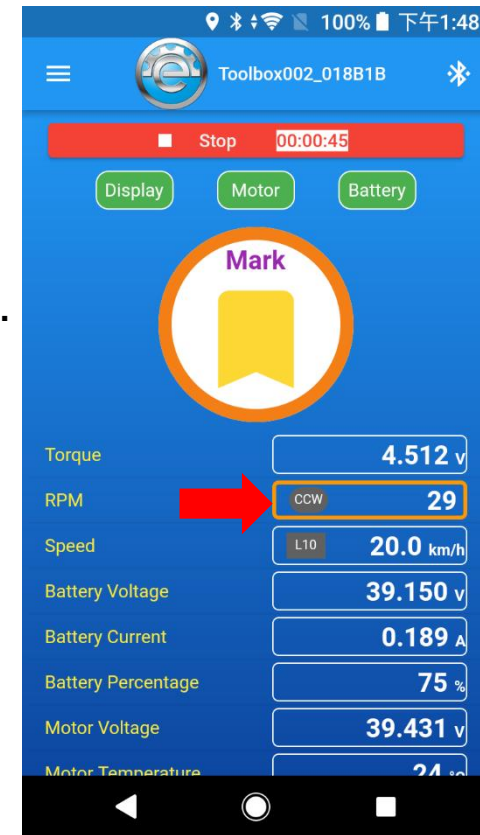


STEP 5.3 – ENTER DIAGNOSE MODE AND START RECORD

Explanation for RPM light

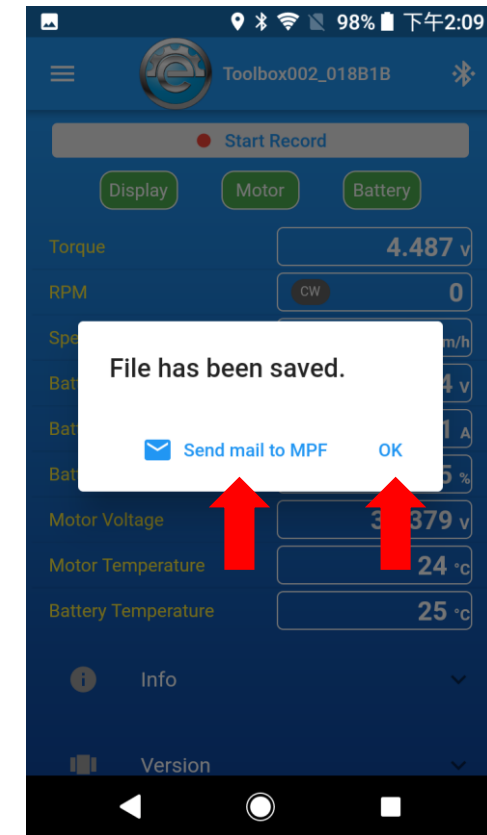
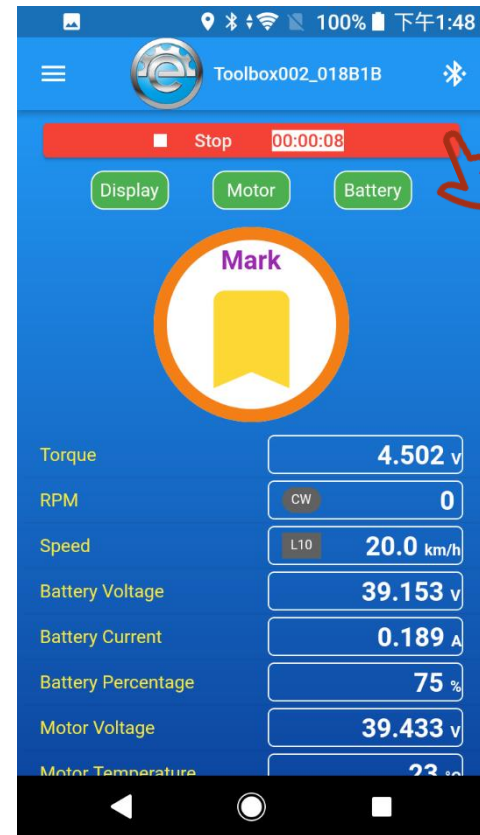
- In normal forward pedal: RPM showed CW
In normal backward pedal: RPM showed CCW (with red outline).

When rider's pedaling direction is different with RPM indicator, please press "Mark".



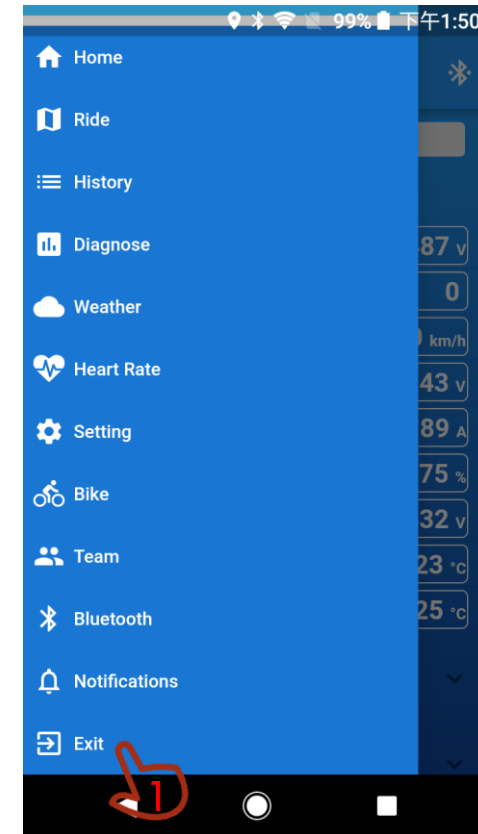
STEP 5.4 – ENTER DIAGNOSE MODE AND START RECORD

1. Press “Stop” to terminate the record.
2. Send mail to MPF, or press “OK” to close the alert window.



STEP 5.5 – ENTER DIAGNOSE MODE AND START RECORD

1. Press “Exit” to quit MPF APP.



STEP 6 – EXPLANATION FOR RED LIGHT SIGNAL

Indicator	Red light	Note
Display	No CAN BUS	
Motor	No CAN BUS	
Battery	No CAN BUS	Please ensure if the battery is with CAN BUS system if not using MPF battery.
Torque	N/A	Abnormal (MPF6.0) : <3.3V or < initial torque-0.2V (Initial torque under Diagnose/Motor setting)
RPM	Distinguish the abnormal by rider. Ex: It is regarded as abnormal if by CC when pedaling forward.	Normal forward pedal: CW Normal backward pedal: CCW with red outline.
Speed	Speed indicator with red outline when pressing the brake.	Speed value always shows 0 during riding, when speed sensor or magnet in wrong position.
Battery Voltage	N/A	Multiple reasons
Battery Current	N/A	Multiple reasons