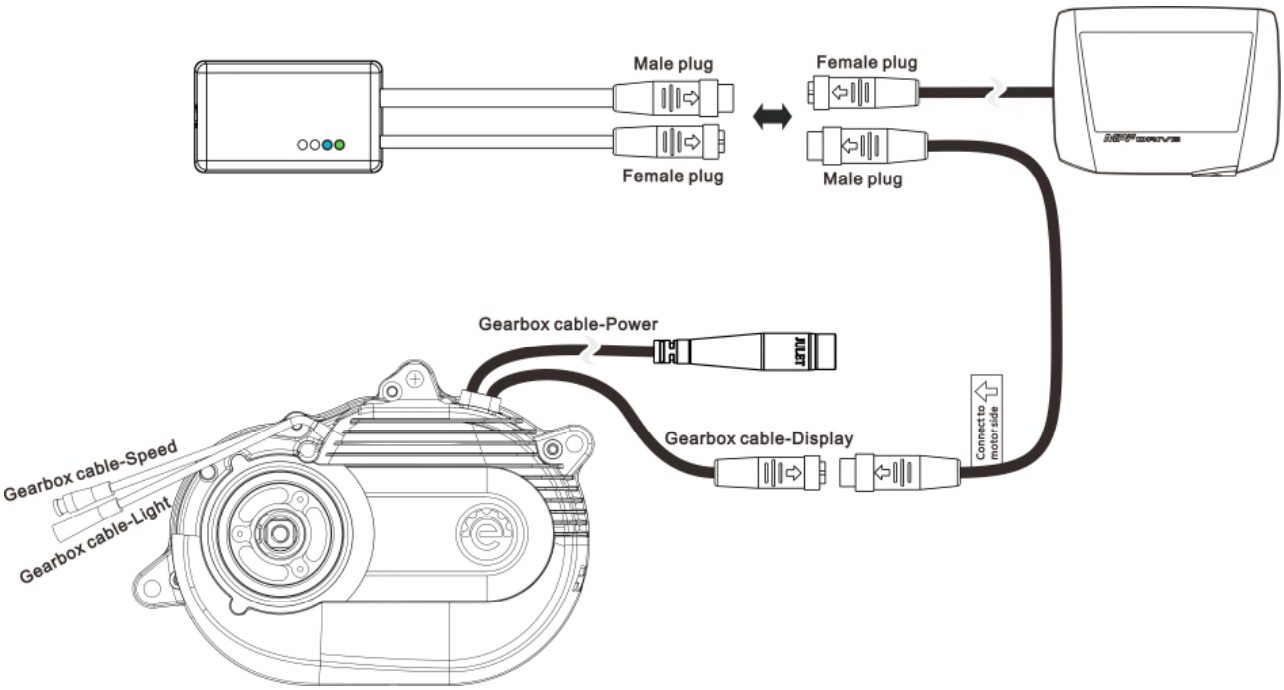
4. SYSTEM CHECKING & TROUBLESHOOTING

CHECKING FOR ISSUE: THE MOTOR CAN NOT TURN ON

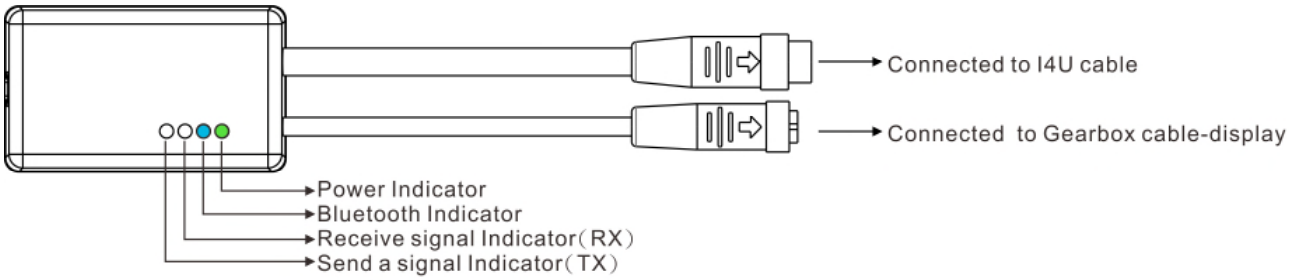
4.1 The users do the system checking directly via mobile phone with MPF toolkit.

4.2 Download APP "MPF system check" (Titled with "MPFLEA") or scan QR code on MPF toolkit to download APP (Android only)

4.3 Connect toolkit to motor as below:



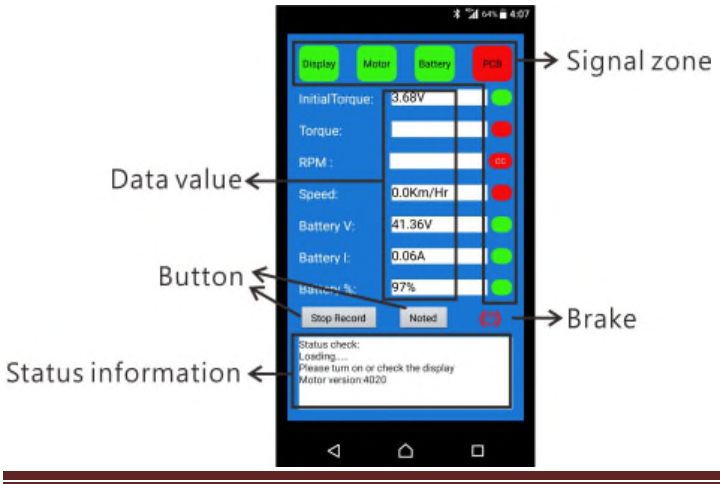
4.4 4 LED lights on MPF TOOL KIT:



LIGHT	COLOR	LIGHT STATUS
Power	Green	Eternal Light when power on
Bluetooth	Blue	Slow flash per 2 seconds – no connecting with Bluetooth Eternal light – connecting with Bluetooth
Signal RX	White	Flash when receiving the signal
Signal TX	White	Flash when sending the signal

⚠ Ensure the green and blue LED eternally light before system checking to avoid mistaken distinguishing during the riding.

4.6. System checking description:



4.6 Start checking

4.6.1 Step 1. Connect to Bluetooth

4.6.2 Step 2. Start Record

4.6.3 Step 3. Transmit data to MPF server

4.6.4 Exit

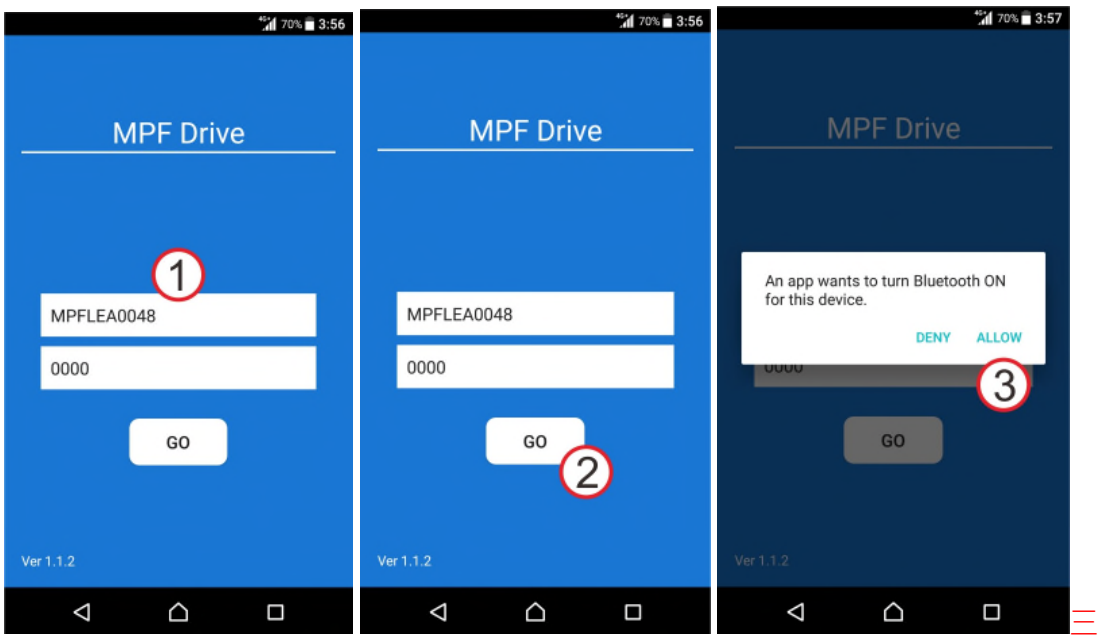
4.6.1 Step 1. Connect to Bluetooth

Ensure the phone is with Bluetooth connection function and can be operated automatically.

4.6.1.1 Enter "Bluetooth device" and "Motor serial number"

4.6.1.2 Click "Go"

4.6.1.3 Click "Allow" to open Bluetooth function



Note: find the serial number here:

4.6.2 Step 2. Data Recording

4.6.2.1 Click "Start record" to clear last record and start the new riding record. There is a remind message if the riders forget to press "start record". Press "Yes" to start a new data record.

4.6.2.2 If the " signals "Display", "Motor", "Battery" and "PCB" are showed in red color, it means the motor is turned off. Please turn on the display to start the motor.

4.6.2.3 The correct signals for motor turned on.

4.6.2.4 The failure where the red color is showed on the screen will be recorded by system automatically. The failure or unexpected riding by the riders could be recorded manually by pressing button "noted".

Note: Explanation for RPM light

In normal forward pedal: RPM showed CC in green color

In normal backward pedal: RPM showed CW in red color

Riders needs to distinguish the failure of forward / backward by themselves

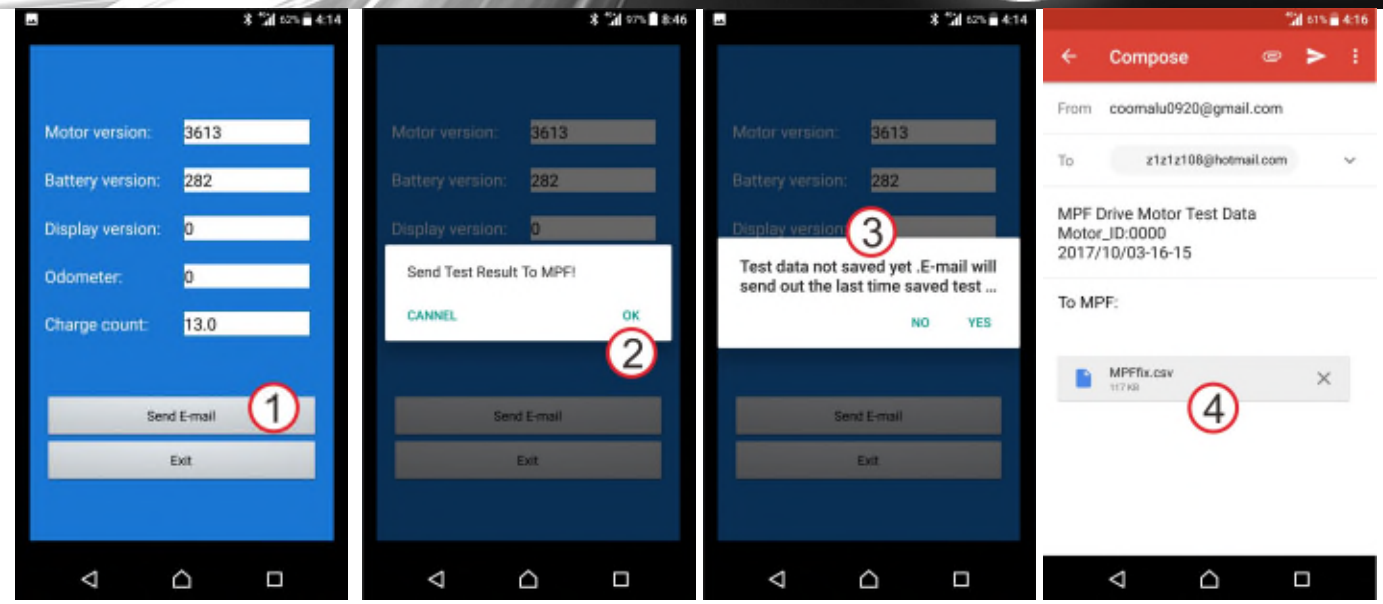
4.6.3 Step 3. Transmit data to MPF server

4.6.3.1 Click "Transmitting" to transmit the recorded data.

4.6.3.2 Click "OK" to confirm transmitting.

4.6.3.3 There is a remind message when the riders forget to press "start record". Press "Yes" to send out the last record, or press "No" to go back "**Start Record**" and re-start a new testing.

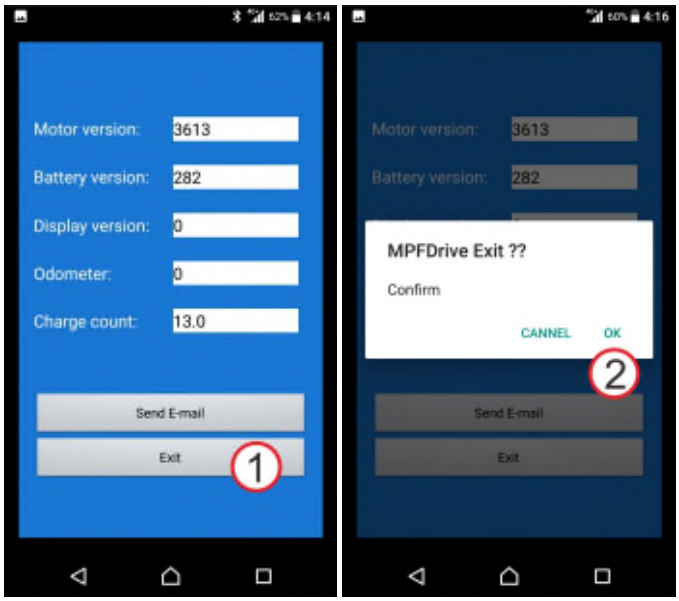
4.6.3.4 Select transmitting way, for example, Gmail. The file with extension .csv will be sent out to MPF service center directly.



4.6.4 Exit

4.6.4.1 Click "Exit" to quit MPF APP.

4.6.4.2 Click "OK" to confirm the exit.



5. EXPLANATION FOR RED LIGHT SIGNAL

Signal	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.
PCB	PCB defect	
Intial Torque	Exceeding allowance value	
Real time Torque	<3.3V or < initial value-0.2V	
RPM	Distinguish the abnormal by riders. Ex: It is regarded as abnormal if by cc red light when pedalling forward.	Normal forward pedal: cc green light Normal backward pedal: cw red light
Speed	Speed sensor or magnet in wrong position.	
Battery V	<33V	
Battery I	Multiple reasons.	
Battery %	Jumping remaining distance	
Brake	Distinguish the abnormal by riders. Ex: It is regarded as abnormal if there is no brake symbol when pressing the brake.	It's normal with symbol when pressing the brake. It's normal without symbol when releasing the brake. Note: This funtion is available only for bike with e-brake.