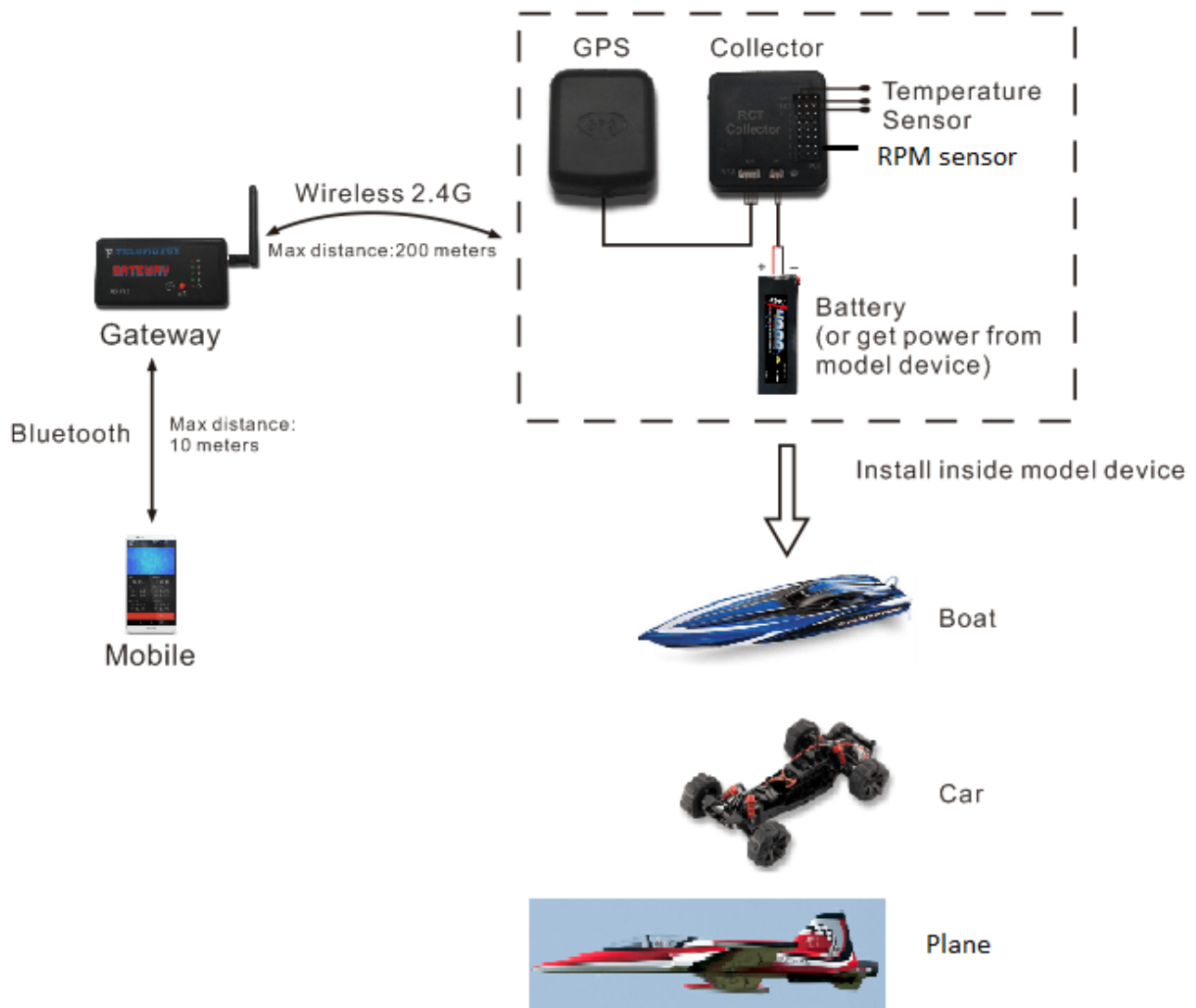


# RCM Telemetry Instructions V2.0

## Summary:

The RCM Telemetry System comprises five parts - Mobile App/Gateway/Collector/GPS/sensor. The system collects and records real-time telemetry data as you drive. When powered the collector will send real time data to your mobile device showing the RC model speed, running distance, running route, voltage ,RPM, battery/ESC/motor temps. The application automatically detects and recognizes sensors for easy setup and configuration. User can set alarm warnings for desired thresholds, add points on the map. The mobile device will sound alarm (beep beep) for low battery voltage and high motor/ESC/battery temps to protect the RC equipment. The recordings can be named and saved to compare.

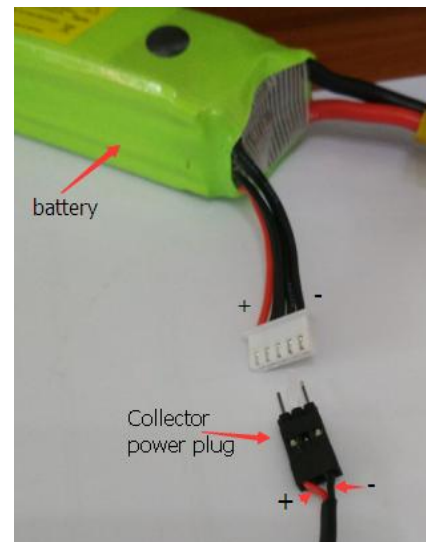
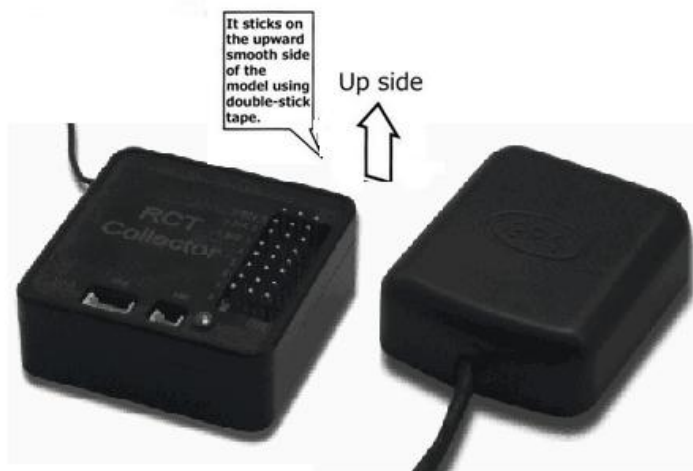


## Instructions:

**Step 1:** Scan the QR code and download the "RCM telemetry 2.0.Apk", install to mobile device, run the App, turn on the App Bluetooth *after* the gateway's bluetooth light is illuminated . *If your mobile have V1.0 App, please delete it before installing V2.0 App.*

**Step 2 :** Install collector/GPS into the RC model, attach sensors to battery/esc/motor. Power collector and gateway. The collector can be powered by either lipo balance plug or radio box battery.

**Step 3:** Before running ensure all gateway pilot lights are illuminated, the mobile device GPS icon is bright green and Bluetooth is bright blue.



**Note:** This device is designed for outdoor use in open areas. Allow 2 minutes to establish GPS connection, on cloudy or rainy days allow up to 5 minutes. On excessively cloudy days the device may fail to fix position. In order to keep Bluetooth signal operational the mobile device must stay within 10 meters of gateway at all times. The gateway and collector maximum distance is 200 meters.

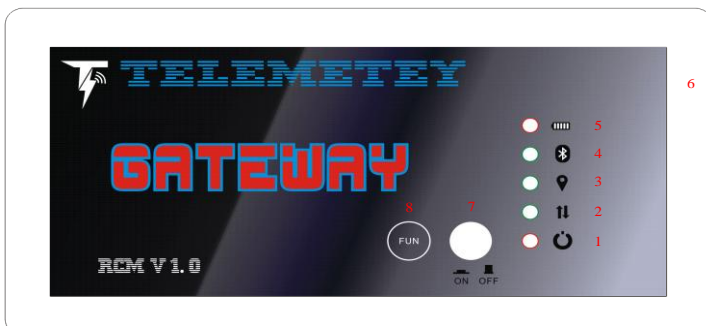
On fiberglass/ carbon fiber models the collector's antenna must be outside the hull as much as possible. On plastic models the antenna can operate inside the hull but working range will be reduced less than 200 meters.

The collector antenna wire can be installed next to the radio receiver wire.

## 1. Gateway

Input: 4.5V (AA\*3)

Size: 174mm\* 69mm\* 24mm(± 1mm)



## LED Indication

	Light on	Light off / blink
1 Red	Power on	Power off
2 Green	Receiving signal from collector	No signal reception
3 Green	GPS receiving	GPS UN-receiving
4 Green	Sending signal to mobile	Mobile no signal reception
5 Red	Normal operation	Short of power

No. 8 "FUN" Link procedure button.

**Note:** Each gateway and collector have been link procedure before delivery.

## 2. Collector

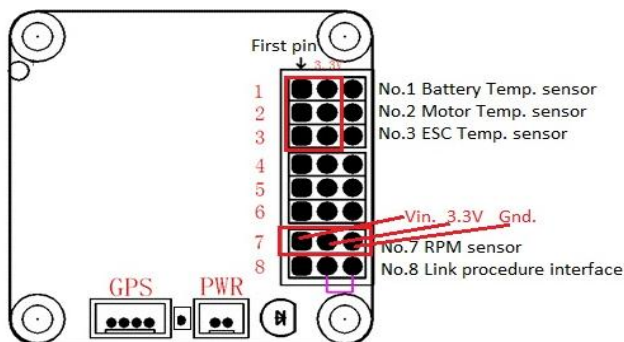
Input 5-10v (When the input power is below 5V the collector cannot operate. If the power exceeds 12V damage will occur)

Total weight: 58g (collector 27g/GPS 23g/ 3pcs sensor)

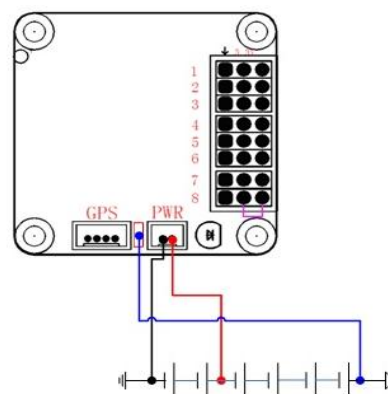
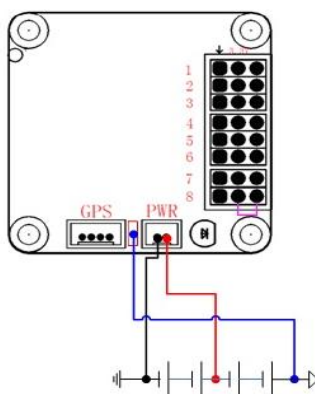
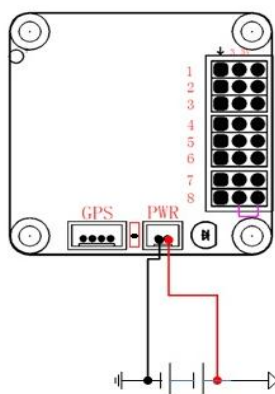
Collector size: 40\* 40\* 14mm (± 1mm)

GPS size: 38\*38\*10mm

Sensor length: 30cm Ant. Length: 9cm / 30CM



..... 2S Battery ..... 4S Battery ..... 6S Battery .....



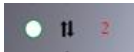
2.1: The first and second pin is sensor interface.

2.2: Get power from Model's battery. Keep both "+" power line on the same way, connect to any two phases of the Li-po balance plug as you like, **don't less 5V**. Max. test voltage 40V.

**Note:** Each gateway and collector have been linked prior to delivery. Once the link is established the code is stored and no further linking is necessary unless the collector or gateway is to be used with another one.

### Link procedure:

Step1: Power on the collector ,move the plug to second and third interface.

Step2: Power on the gateway, Press and hold the gateway's "FUN" button, until  lights illuminate.

Step3: Put the plug on the first and second interface, restart the collector and gateway.

### 3. RPM Sensor



**Magnetic RPM sensor:** Stick the magnet on the motor's shaft , fix the sensor near the magnet ,the sensor and magnet can not over 4mm, the green light illuminate means the sensor is working, if the green light off, try to change the magnet to the other side up or let the sensor nearer to the magnet until see the green light is illuminated.

**Connection: Yellow – Vin.(First pin) ; Red -3.3v/vcc (second pin) ; Black – Gnd. (third pin)**



#### Brushless RPM Sensor

(Please read the paper instruction)

### 4. Mobile APP

Scan the QR code and download the "RCM Telemetry2.0.Apk", install to mobile device, run the APP. Connect the mobile Bluetooth **After** the gateway's Bluetooth light on. Choose appropriate model mode, difference is background, only plane with altitude. **If your mobile have V1.0 App, please delete it before installing V2.0 App.**



Bluetooth icon , Press it and connect Bluetooth **after** the gateway's bluetooth light is illuminated, each gateway with different Bluetooth number, stick on the back of Gateway

GPS icon

KMH/MPH switch

Alarm/ motor pole Setting

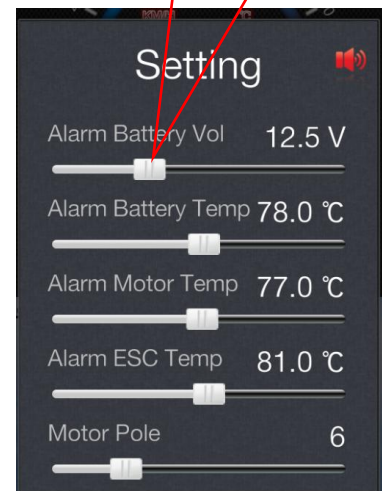
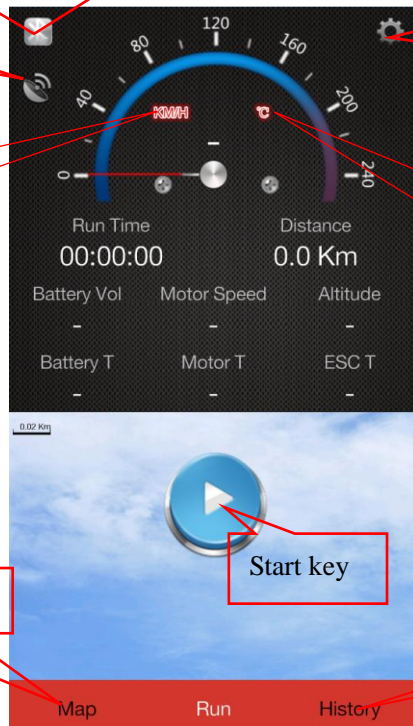
Fahrenheit/ Centigrade degree switch

Setting the number as you need, motor pole should be match the device

Start key

Add points on the map

History record



Bluetooth connected  
The icon turn bright blue

GPS connected  
The icon turn bright green



### How to add points:

The Longitude & Latitude will be changing as the model's moving, when the model move to the position , press "add", could add Max. 6 points in the map. Press "Save" after add all points, press "Run" will back to the running page, and the points will show on the map.

If do not need the point, press "Clear", the points on the map will go on .

