Telemetry Display
Remote control model telemetry system
operating instruction
【Item include】

Transmitter

RPM sensor

Temperature sensor

【Function introduction】


【The system function menu】

3.1. Receiver: All functions of receiving information, display, process.

1). Operating voltage: 4 ~ 9V.
   - A button: Frequency hopping scanning start button.
   - B button: Obtaining and checking data button.
   - C button: LCD flip display button.
   - Signal lamp LED: It will flash when receive signal and keep long bright when can’t receive signal.
2). LCD display: (Short press C button once then flip one page)

After power on, it will show the default on the first page: Signal strength, temperature, current (I), peak current (PEAK), whole voltage (U), revolutions per minute (RPM).

The second page displays: Signal strength, temperature (T), 6 cells' voltage (U1-U6).

The third page displays: Signal strength, temperature (T), current channel frequency (F), Blades value, low voltage alarm value (warning).

Notes: The Signal strength and the temperature values wouldn't display, and the voltage current, RPM and blade value would show 0 when it doesn't receive any signals.
3). Set low voltage alarm value:
   (1). Press A button and B button at the same time for more than 3s to enter the setup Status as following picture, then short press the C button to set up the voltage value (set up range: 3.0V-3.8V).

   ![Voltage Alarm Setting](image)

   The signal strength and temperature value don't display if can't receive signal.

   (2). Short press A button to exit low voltage setting up.

4). Channel setting of the receiver:
   Press A button of the receiver for more than 3 seconds, then it will show a value on the first page of LCD which indicates the channel value (For example: 441.06 Mhz [2], indicates the current channel is 2). Then short press B button to change channel frequency, everytime short press B button once then change one channel. Press A button of the receiver for more than 3 seconds to confirm and exit the setting. (Please refer to the subsequent frequency hopping setting steps)

5). Signal frequency receiving range:
   433 MHz Frequency band receiving modules: 434.06 MHz-504.06 MHz, divided into 11 Frequency channels and the neighbouring channels differ 7 MHZ.

6). In normal work, current < 20 mA; when the buzzer alarm, current < 150 mA.

3.2. Transmit board:
   1). Functions: Voltage, current detecting test, temperature detecting, rotational speed detection and wireless data transmission.
   Specifications: ①. Voltage detection range: 2-6 cells of LiPo/LiFe/LiIo batteries, but the voltage sum of the first and second battery can not be under 4V. Average error detection+/-10 mV.
   ②. Current detection range: 0-30A, average error: +/- 0.1A.
③. Temperature detection range: \(-10 \degree C - +100 \degree C\).

④. RPM detection range: 0 - 999999 r/min.

2). Power consumption: Normal work power current < 30 mA.

3). LED working state: LED flashing time indicates the value of current transmit channel value, in the normal working state. For example, LED flashes 6 times in every 2 seconds, that means the transmit frequency is in the sixth channel.

4). Blade value setup: Press KEY 2 button for more than 3s to enter setup state, now LED long bright. Then short pressing KEY 2 once the values will add one (the current values can be seen on LCD display of the receiver), and it can set 9 blades at most. After setting up, short press KEY 1 button to exit.

5). Channel setup: Press KEY 1 button for more than 3s to enter setup state, LED start to flash quickly 7 times then change back to the slow flash, that meas it has successfully entered the set state. Then short press KEY 1 button once jump in one channel, the times of LED flashing will change, LED flashing time indicates the value of current channel. Short press KEY 2 button to exit. (Please refer to Matching Code part)

【Frequency hopping】

If the current frequency channel is occupied, then need to change another one. Operate as followed:

(1). Turn on the transmitter and receiver, pressing KEY 1 button for more than 3s to enter the setting state, at this time, LED in transmitter will return back to normal flash after it flash quickly in 7 times. Then short press KEY1 one, it will change one channel once, LED flashing time will change too. For example, the current channel is in the third, then the transmitter’s LED flashing 3 times in every 2s, if the channel jumped into the forth, then LED changed to flash 4 times in every 2s. Short press KEY 2 button to exit.

(2). After setup the transmit frequency channel. Press A button in the receiver for more than 3s, there is a value shows in the first page of LCD, indicates the current channel value. (For example F: 843.06 Mhz [08], that means the current channel is in the eight). Short press B button to change the channel, every short press B button changes one channel, until the channel of receiver has been set at the same one as the transmitter, press the A button in the receiver for more than 3s to ensure channel and exit, receiver could get the value from the transmitter, then LED in the receiver flashes.
For example: operate flow shows in the following:

LED flashes 8 times in every 2 second, after set up the receiver, (it shows the current channel is in the eighth)

Set up the receiver
Hold on A button in the receiver for more than 3s
Hold on A button for a few seconds and then exit

Set up to the eighth channel by press B button

(3). Launching frequency range:
433 MHz frequency band lanching module: 434.06 MHz - 504.06 MHz, divided into 11 Frequency channels and the neighbouring channels differ 7 MHz.

【Warranty and service】
We warrant this product for a period of one year(12 months) from the date of purchase. This warranty only applies to product quality problems after purchasing. During the period of warranty, with proof of purchase (invoice or receipt), all products have quality problems can be freely repaired or replaced. However, due to wear and tear, overloading, damage caused by the improper operation, do not be a free repair or replacement.
【产品清单】

【功能简介】
1. 无线检测； 2. 无线报警； 3. 实时转速； 4. 实时温度； 5. 实时电流； 6. 实时电压。

【系统功能菜单】
3.1. 接收机：所有信息、显示、进程的接收。

1). 工作电压：4~9V。
   A 按键：跳频扫描启动按键；
   B 按盘：调取数据查看按键；
   C 按盘：LCD翻页显示按键；
   信号灯LED：收到信号闪烁，没收到信号长亮。
2). LCD 顯示：（每短按一次C按鍵，翻一頁顯示。）

開機後進入默認第一頁顯示：
信號強度、溫度(T)、電流(I)、峰值電流(PEAK)、
總電壓(U)、轉速(RPM)，如左圖所示。

第二頁顯示：
信號強度、溫度(T)、六節電池的電壓(U1-U6)。

第三頁顯示：
信號強度、溫度(T)、當前頻道頻率(F)、漿葉值(Blade)、
低壓報警值(Warning)。

備注：在沒有收到信號的情況下，信號強度條和溫度值不顯示，其他電壓、電流、轉速值和漿葉值都是顯示0。
3). 設置低壓報警值：
   (1). 同時長按A和B按鍵3秒以上進入設置狀態如下圖所示，然後短按C按鍵進行電壓值設置，設置範圍：3.0V-3.8V。

   沒有收到信號的時候，信號強度條和溫度值不顯示。

   (2). 短按A按鍵即可退出低壓設置。

4). 接收器頻道設置：
   長按接收器的A按鍵3秒以上，此時在LCD第一頁會看到頻率值後面出現了一個數值，表示當前頻道值（例如F:441.06MHz [2]，表示的是當前頻率是第2頻道）。接着短按B按鍵切換頻率通道，每短按一次B按鍵就切換一個頻道。長按接收器A按鍵3秒以上確認並退出設置。（請參考後續切頻設置步驟）

5). 接收信號頻率範圍：
   433MHz頻段接收模塊：434.06MHz504.06MHz，劃分為11個頻率通道，相鄰通道之間頻率相差7MHz。

6). 功耗：正常工作電流<20mA，當蜂鳴器報警時電流<150mA。

3.2. 發射板：
   1). 功能：電池電壓檢測、電流檢測、溫度檢測、轉速檢測和數據無線傳輸。
       ①. 電壓檢測範圍：2-6節LiPo/LiFe/LiIo電池，且第一節與第二節電池電壓之和不能低於4V。
           平均檢測誤差+/−10 mV。
       ②. 電流檢測範圍：0-30A，平均誤差+/−0.1A；
③. 温度检测范围：-10℃ - +100℃；
④. 转速检测范围：0 - 99999r/min。

2). 功耗：正常工作电流<30mA。

3). LED工作状态表示：正常工作状态，LED闪烁的次数表示当前发射频道值。例如：LED每隔2秒钟闪烁6次，则表示当前的发送频率通道是第六通道。

4). 桨叶值设置：长按发射板“KEY2”按键3秒以上进入设置状态，此时LED长亮，之后每短按发射板“KEY2”按键一次，桨叶值加一（在接收器的LCD屏可看到当前值），最多可以设置9个桨叶。设定完后，短按发射板“KEY1”按键退出桨叶值设定状态。

5). 频道设置：长按“KEY1”按键3秒以上进入设置状态，此时LED快速闪烁7次之后变回慢闪，表示已经成功进入设置状态，之后每短按一次“KEY1”按键，就跳换一个频道，LED闪烁的次数也随之变化，LED闪烁次数表示当前频道值。短按“KEY2”按键即可退出频道设置。（请参考跳频设置部分）

【跳频设置】

如果当前频率通道已经被占用，则需要跳换频道，操作如下：
（1）. 开启发射器和接收器，长按发射器的“KEY1”按键3秒以上进入设置状态，此时发射器LED快速闪烁7次之后变回正常慢闪烁。之后每短按一次“KEY1”按键，就跳换一个频道，LED闪烁次数随之变化（例如，当前频道是第三频道，LED是每隔2秒闪烁3次，若跳换至第四频道，LED随之变化，变成每隔2秒闪烁4次，其他频道设置如此类推）。设定完后，短按“KEY2”按键即可退出。

（2）. 设置好发射频率通道后，长按接收器的A按键3秒以上，此时在LCD第一页会看到频率值后面出现了一个数值，表示当前通道值（例如F：857.06MHz [08]，表示的是当前频率是第8频道）。接着短按B按键切换频率通道，每短按一次B按键就跳换一个频道，直到把接收频道设置到和发射器同一个通道后，长按接收器A按键3秒以上确认频道并退出设置，接收器马上会收到发射器的數據，接收器LED燈開始閃爍。
例：操作流程如下圖

(3). 發射頻率範圍：

433MHz頻段發射模塊：434.06MHz~504.06MHz，劃分為11個頻率通道，相鄰通道之間頻率相差7MHz。

【保修條款】

我們對所購買的產品質量保1年（12個月），自購買之日起。這個質保祇適用於產品在購買後出現產品質量問

題。在產品保修期間，祇要你憑借購買憑證（發票或收據）一切有質量問題的產品都可以免費維修或更換。但由

于磨損，超負荷，人為操作不當或者配件的錯誤使用所造成的損壞，則不予以免費維修或替換。

-10-
G.T.POWER®

RoHS  ❀  FC  ❀  CE  ❀  Recycle