

# LED & POWER HUB 5 in 1

**SKU: HUB5in1**

It is a 5in1 HUB with PDB(Power Distribution Board), BEC 3A 5V/12V Adj., LED Light Controller, Lost Plane Finder & Low Voltage Alarm functions. It is specially made for the Multi-Rotors, mini FPV Quad. Built-in 5V BEC can be connected to receiver or flight controller with Aux pins directly. simplify wiring. If the battery is 4~6cells LiPo, the BEC can be set to 12V output, to power the Gimbals, Video Transmitters,ect. Inbuilt LED light controller, three flash modes can be choosed with the toggle switch of transmitter. And the buzzer can also be triggered with the toggle switch, which can help you find the models in tall grass or trees. the 5in1 also acts as a battery voltage monitor. Once voltage gets below the threshold you set, the buzzer & LED light will remind you.

## Features

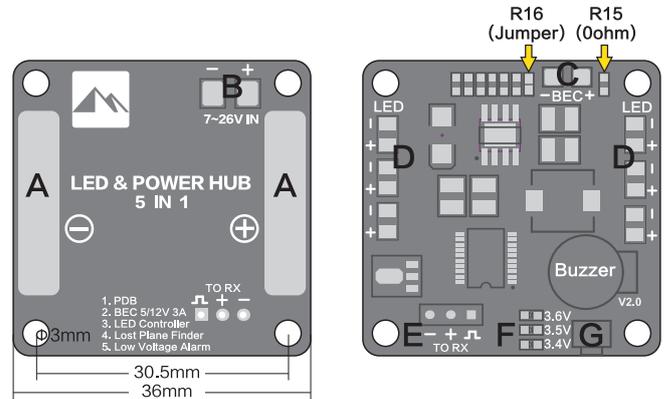
- Built-in 5 functions, small size & light weight

## Specifications

- Input voltage range: 7~26V DC, 2~6Cells LiPo
- Size & Weight: 36x36x6mm, 7g
- Mounting: 30.5mm, Φ3mm

## Layout

- A. PDB, twin bonding pads
  - B. 7~26V DC input pads
  - C. BEC 3A 5V or 12V (Default is 5V)
  - D. LED light pads, Total 6 pairs
  - E. Connect to RX Aux channel or Flight controller
  - F. Low voltage alarm value ( 3.4V, 3.5V, 3.6V, OFF )
  - G. Button
- ➔ R15 & R16 for adjusting the BEC to 12V



## How to Use

### F1. PDB

- Twin pads A, one side is positive plate, another side is negative plate.
- If the PDB pads in use, the Pads B can be idle.

### F2. BEC

- Input voltage range: 7~26V DC, 2~6 cells LiPo.
- Output: 5V or 12V (Default is 5V), 3A.
- DC/DC synchronous buck regulator, Efficiency is up to 95%.
- BEC default is 5V, 5V is on the Aux pins + & -.
- If other BEC in use, Pls remove the R15 or disconnect the red wire on Aux pins.

- **Setting the BEC output 12V:** Remove the R15(0ohm) & connect the R16(Jumper)
- If the BEC is set to 12V, No voltage on the Aux pins. The BEC pads C should be used to power the Gimbals, Video Transmitters,ect.

### F3. LED Light Controller

- Total 6 pairs LED light pads, All the LED lights have the same status.
- LED light voltage specification should be the same as BEC voltage. e.g. BEC is 5V, the 5V LED light should be used. BEC is 12V, the 12V LED light should be used.
- Pls use the Aux channel with toggle switch of three positions. Middle position is OFF (Value=1400~1600). Side position is LED ON (Value=1700~2000)
- Three LED modes: Constant light, Slow flash(1Hz), Fast flash(3Hz)
- **Choose the modes:** Tune on the LED first(move the switch to value 1700-2000), then move the switch to middle position & side position within 0.5s. Beep once. If no cable is connected to RX Aux channel, the button can be used to change the modes.

### F4. Lost Plane Finder

- Use the same Aux channel with F3 function. Middle position is OFF (Value=1400~1600).
- Move the switch to value=1000~1300, the buzzer & LED light can be triggered. Beep & Flash(2Hz), which can help you search the models in tall grass or trees.
- Set the "SERVO REVERSE" in transmitter to change the switch position of F3 & F4.

### F5. Low Voltage Alarm

- The 5in1 can monitor 2~6S LiPo voltage status & notify you once the cells reach the defined voltage.
- If the Input voltage is in the range of following, The 5in1 will detect the cell numbers automatically when the LiPo is connected. Beep once & show the the voltage threshold.
- If the input voltage is out of the range. The 5in1 will alarm 1 short beep + 1 long beep & 3 red LEDs light. Pls check if the battery total voltage is below 3.7V\*cells  
7.4~8.6V: 2cells LiPo 11.1~12.9V: 3cells LiPo 14.8~17.2V: 4cells LiPo 18.5~21.5V: 5cells LiPo 22.2~25.8V: 6cells LiPo
- Hold the button 3 seconds to enter the setting. Press the button to set the alarm threshold within 3.4V, 3.5V, 3.6V & OFF. The value will be saved if no action within 5 seconds.
- During the using of LiPo, 5in1 will detect the voltage always. If the input voltage is below "threshold \* cells", the Beep & Flash will be triggered(1Hz)
- Input voltage rise again, the alarm will be suspended.
- **The Buzzer & LED light status of F5 has priority over F3 & F4.**

## Connections

