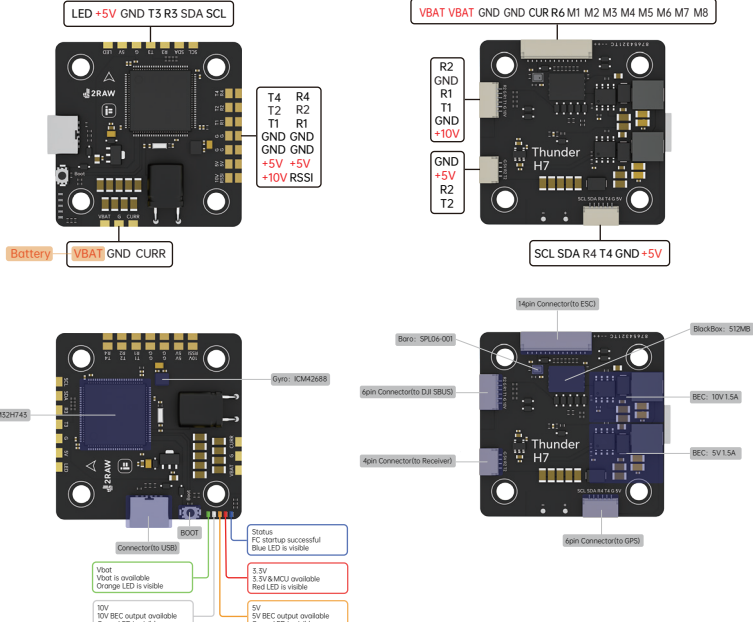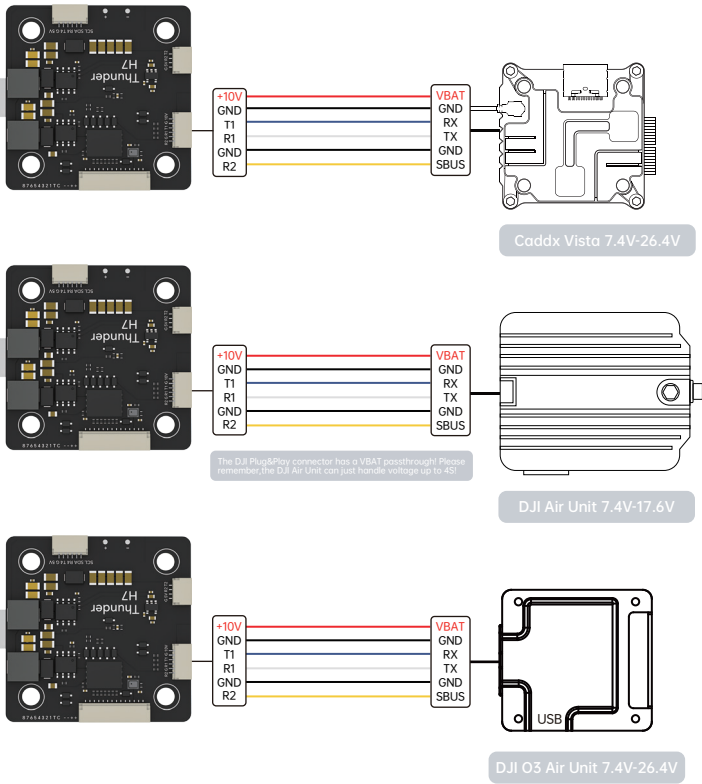# iFlight Thunder H7 Instructions

Parameters:

MCU: STM32H743
Gyro: ICM42688
Baro: SPL06-001
OSD Chip: Not support analog OSD, only supports HD UART transmission OSD
①BEC: Output 5V 1.5A continuous output current, 2A peak current (120 seconds)
②BEC: Output 10V 1.5A continuous output current, 2A peak current (120 seconds)
BlackBox: 512MB
Uart: 4*UART(UART1, UART2, UART3, UART4, UART6)
UART1 for VTX HD
UART2 for Receiver
UART3 for other devices that require serial ports
UART4 for GPS
UART6 for ESC Telemetry
8×Dshot/PWM outputs
I²2C
1×SH1.0 14pin connector for ESC (Vbat/Vbat/G/G/Cur/R6/M1/M2/M3/M4/M5/M6/M7/M8)
1×SH1.0 6pin connector for DJI (R2/G/R1/T1/G/10V)
1×SH1.0 6pin connector for GPS (SCL/SDA/R4/T4/G/5V)
1×SH1.0 4pin connector for Receiver (G/5V/R2/T2)
5×0402 LEDs for FC STATUS (Start Blue) / (3.3V Red) /(5V Red) /(10V White)/(BAT Green)
WS2812 ledStrip: Yes
Beeper: NO
Dimensions: 42*42mm
Mount pattern: 30.5*30.5mm/φ4
Weight: 14g

Firmware:
Betaflight: 2RAW_THUNDER_H7
INAV: 2RAW_THUNDER_H7

DJI Digital Transmiters

Firmware Target: 2RAW,THUNDER H7

- To enable the air unit OSD under Betaflight 4.4 version, you need to select VTX (MSP+Displayport) in the peripheral port where the air unit signal is connected to the port interface.
- note : DJI FPV Remote Controller2 is for DJI O3 Air Unit
  DJI FPV Remote Controller is for DJI Air Unit and Vista
- Please check your protocols, otherwise your DJI Radio won't input signals!
  DJI Goggle protocol and Betaflight protocol has to match!
  For lower signallatency use the SBUS BAUD,FAST protocol option on both ends.
- For Betaflight Copy Paste"set sbus_baud_fast=on"into your Beataflight Configurator CLI then hit enter.
  Use"save"and hit enter to save the changes.
  Default: sbus_baud_fast=off, Goggle protocol set to NORMAL

Any other Receiver

Firmware Target: 2RAW,THUNDER H7
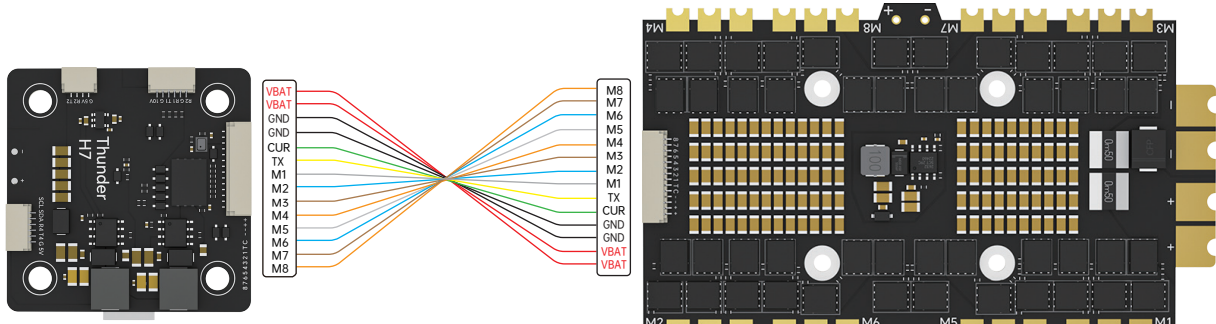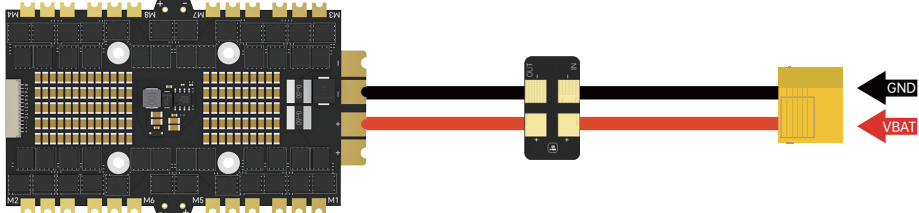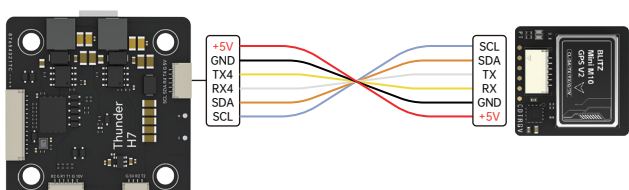

LED

ESC

Note: If not using iFlight electronics,please make sure the plug pinout is identical or the wire harness needs to be reordered.

Anti-Spark filter

GPS

SDA/SCL pads can not be remapped to UARTs

Dimensions/Mounting pattern