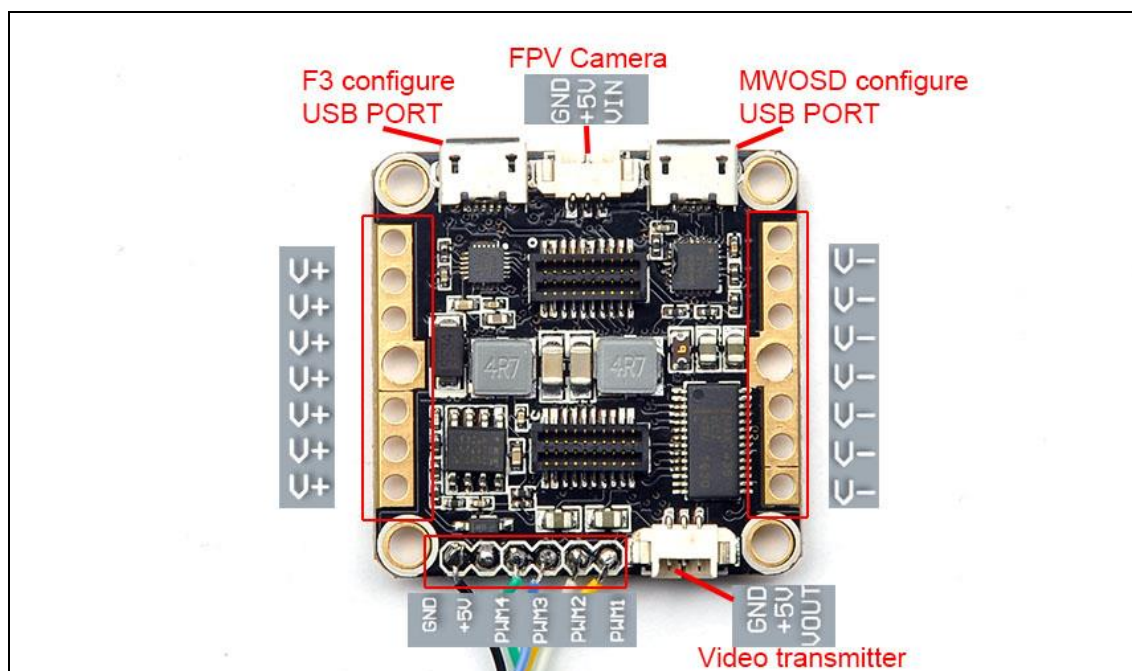
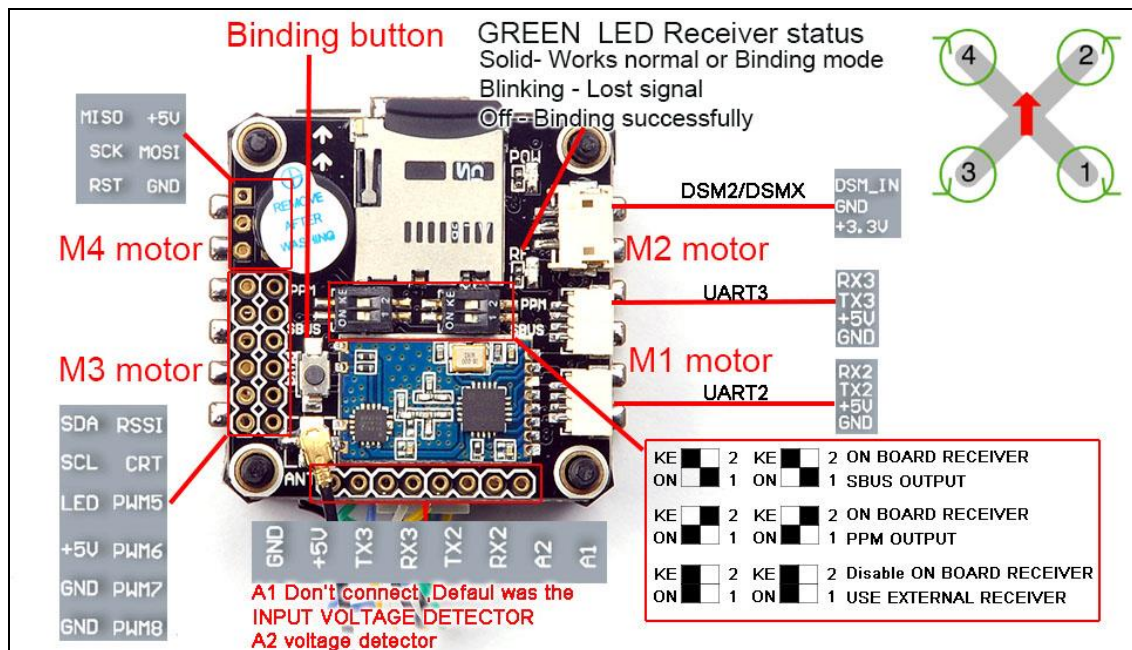


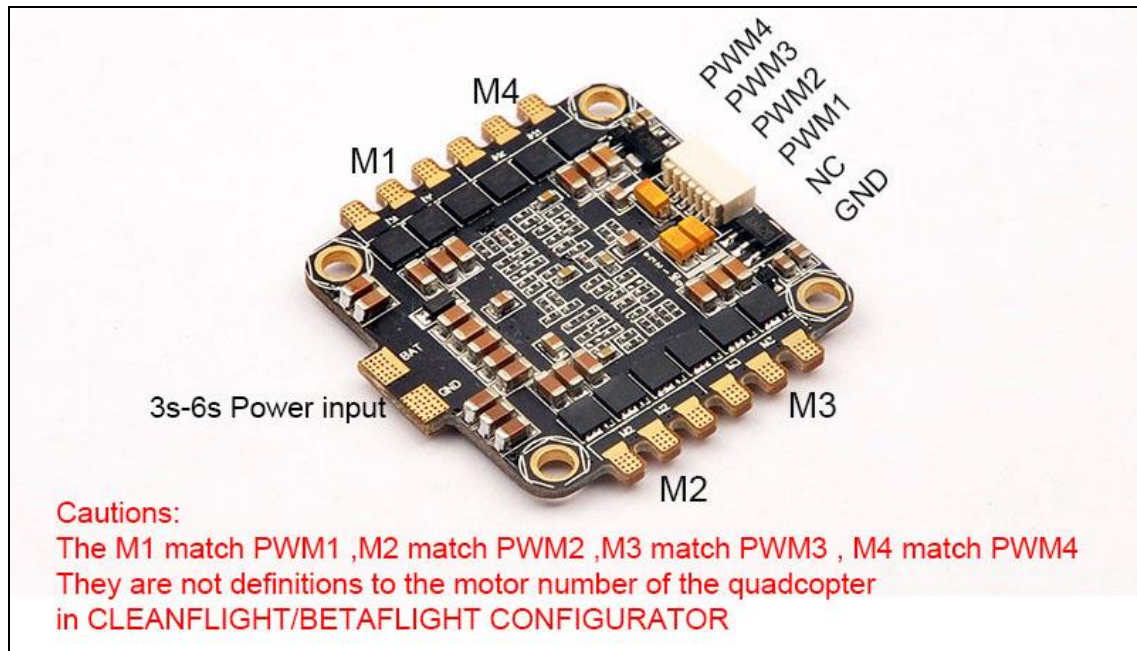
RacerCuber Manual

Connection Diagram



Racercube FEATURES

- F3_EVO FLIGHT CONTROLLER Jaw-Dropping Flight Performance
- CLEANFLIGHT/BETAFLIGHT support
- 4IN1 ESC Little BEE 20A F396 Chip ESC Ready, BLHELI Pass-through Ready
- FRSKY Compatible RX-F802 D8 MODE SBUS/PPM RECEIVER Ready
- MWOSD Ready
- RSSI/ VOLTAGE DETECOTR Ready
- BUZZER READY



SPECIFICATION:

1.Racercube Flight controller

Firmware: Cleanflight 1.13.0

Target: SP RACING F3 EVO

STM32F303 CPU, 72Mhz inc FPU

MPU9250 accelerometer/gyro/compass (connected via SPI)

BMP280 barometer

Compatible PPM/CPPM/SBUS/DSM2/DSMX Receiver

Built-in MW OSD

Integrate PDB support 2s-6s Input

2.Racercube Receiver module

Channel: 8

Working voltage: 4-6.5V

Frequency range: 2400-2483.5Mhz

Output signal: SBUS/PPM

Dual way transmission: Yes(D8 mode)

Transmit distance: > 1Km

Feedback signal: RSSI, 3S voltage (A1)

With Failsafe @Throttle 3ch

Compatible with X9D(D8 mode)/XJT (D8 mode)/DJI/DFT/DHT

Receiver configuration in Cleanflight:

Enable Serial_RX for UART2 and Set Receiver mode RX_SERIAL ,Select SBUS in Cleanflight or Betaflight Configurator.

Ports DOCUMENTATION FOR 1.13.0

Note: not all combinations are valid. When the flight controller firmware detects this the serial port configuration will be reset.
Note: Do NOT disable MSP on the first serial port unless you know what you are doing. You may have to reflash and erase your configuration if you do.

Identifier	Data	Logging	Telemetry	RX	GPS
USB VCP	<input checked="" type="checkbox"/> MSP 115200 ▼	<input type="checkbox"/> Blackbox 115200 ▼	Disabled ▼ AUTO ▼	<input type="checkbox"/> Serial RX	<input type="checkbox"/> 57600 ▼
UART1	<input checked="" type="checkbox"/> MSP 115200 ▼	<input type="checkbox"/> Blackbox 115200 ▼	Disabled ▼ AUTO ▼	<input type="checkbox"/> Serial RX	<input type="checkbox"/> 57600 ▼
UART2	<input type="checkbox"/> MSP 115200 ▼	<input type="checkbox"/> Blackbox 115200 ▼	Disabled ▼ AUTO ▼	<input checked="" type="checkbox"/> Serial RX	<input type="checkbox"/> 57600 ▼
UART3	<input type="checkbox"/> MSP 115200 ▼	<input type="checkbox"/> Blackbox 115200 ▼	Disabled ▼ AUTO ▼	<input type="checkbox"/> Serial RX	<input type="checkbox"/> 57600 ▼

Receiver Mode

- RX_PPM PPM RX input
- RX_SERIAL Serial-based receiver (SPEKSAT, SBUS, SUMD)
- RX_PARALLEL_PWM PWM RX input (one wire per channel)
- RX_MSP MSP RX input (control via MSP port)

Serial Receiver Provider

Note: Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.

- SPEKTRUM1024
- SPEKTRUM2048
- SBUS**
- SUMD
- SUMH
- XBUS_MODE_B
- XBUS_MODE_B_RJ01
- IBUS

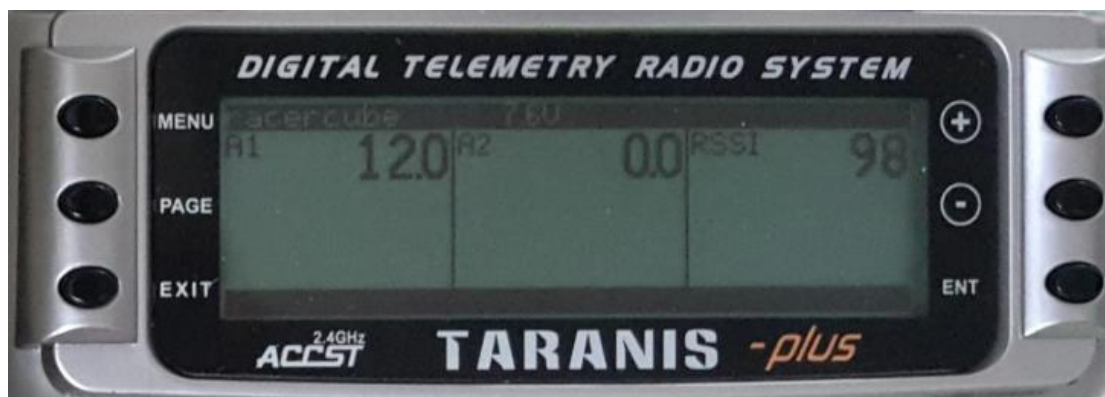
Binding procedure:

Power for the Racercube while holding the binding button, the green LED will getting to be solid, this indicate the receiver is in binding mode

Turn on the transmitter and set the receiver mode to D8 mode , then move to ENT, press it and the transmitter beeps. The green LED will turn off once the binding procedure successfully.

RSSI and Telemetry

A1/A2 Voltage detector , RSSI



After binding successful, turn on the transmitter ,move to the option TELEMTRY, then click “Discover new sensors”



Set Screen to show the Telemetry info



2.Racercube 4in1 ESC module

F396 MCU, 48Mhz Runs BLHELI LittleBee Pro 20A firmware

Support 3-6S Li-po

4PWM input,

Supports oneshot PWM

Only 35x35mm, mount holes 30x30mm (on new batch, the holes will be changed to 30.5x30.5mm)

Supports damped light

no BEC output