BEECORE FRSKY F3_EVO_Brushed ACRO Flight Control Board quick user guide

This board is designed to work with Inductrix / BeeDuctrix / Tiny Whoop / Eachine E010, just replace the current board with our new BEECORE main board and experience the next level of flight control.

1. Specification:

STM32 F303 processor

Six-Axis: MPU6500

Size: 2mm x 26mm

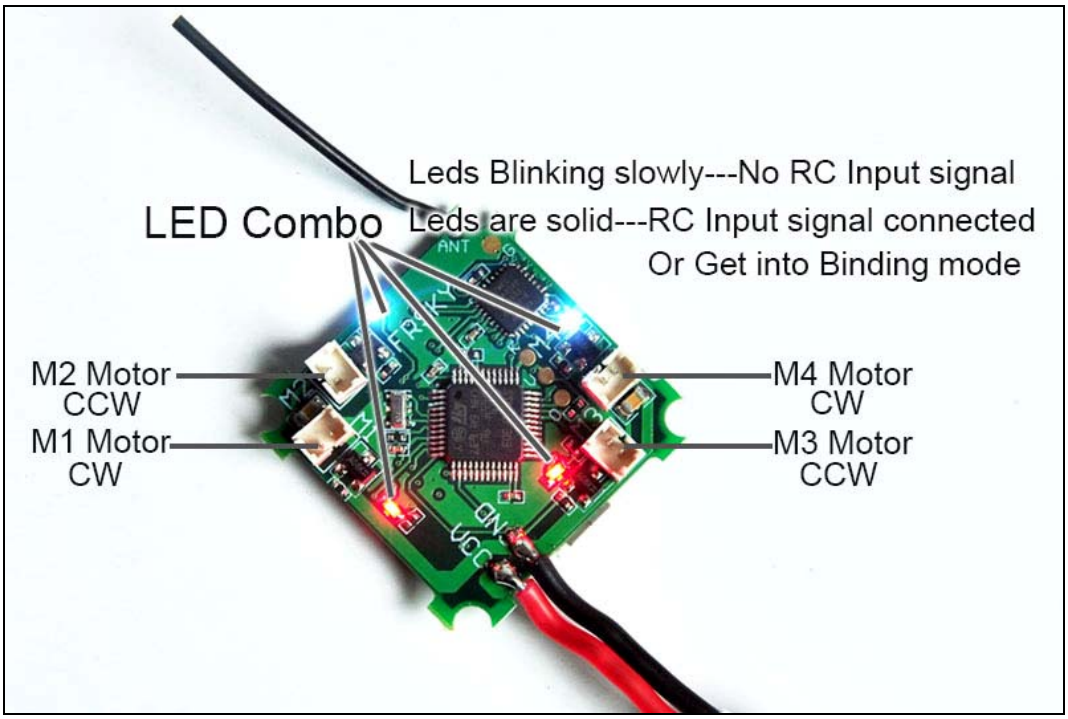
Weight: 3 grams

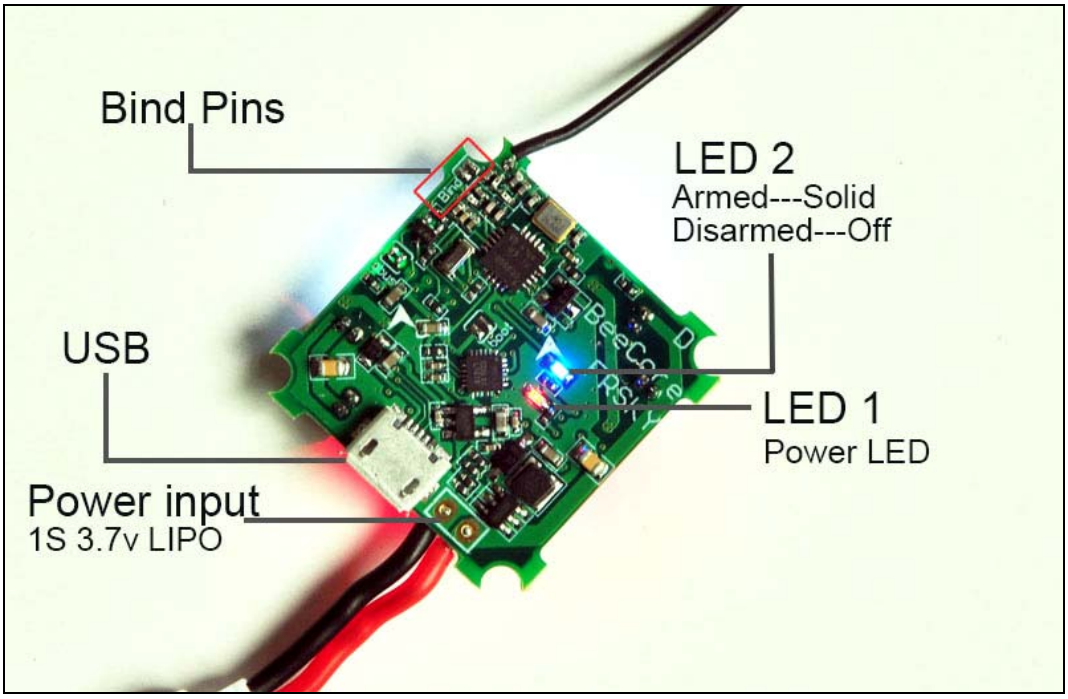
Work voltage: 3.7v-5v / 1S Lipo battery input

Receiver: 8CH Frsky protocol SBUS output D8 Mode

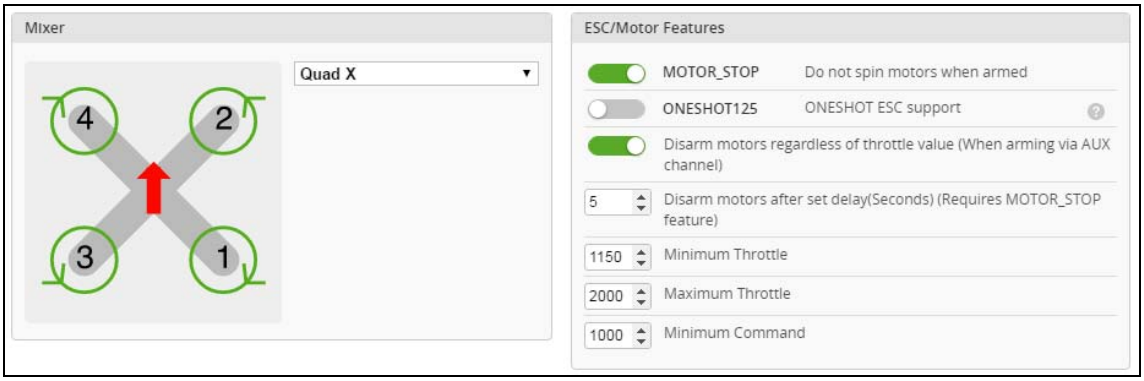
Firmware Version: Cleanflight 1.13.0

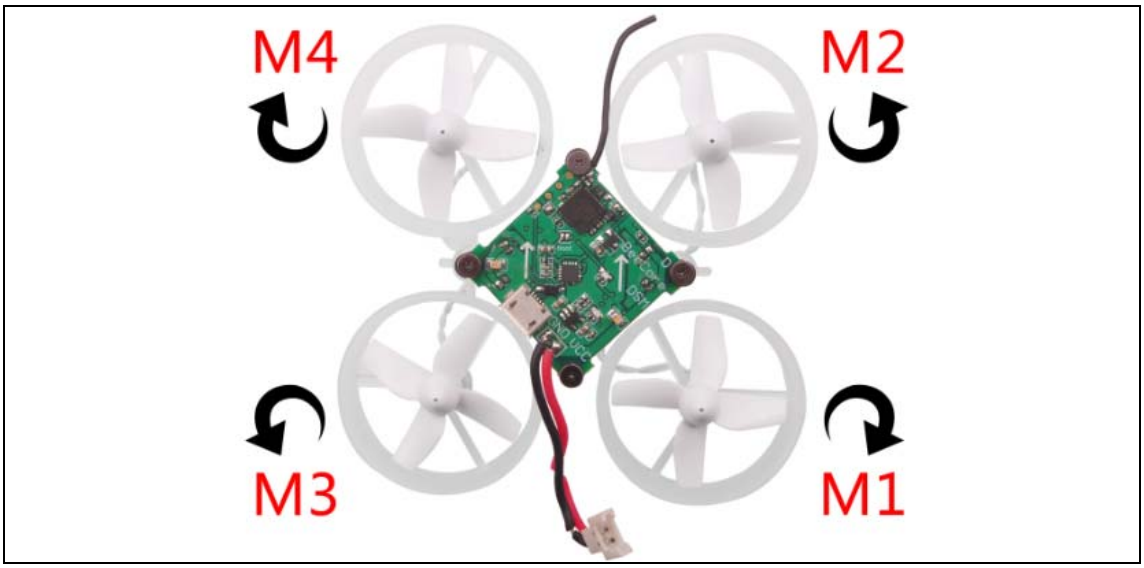
2. Connector and LED Definition:





3. Installation and Connection diagram：





Please pay attention to the motor sequence of Inductrix main board , it's different from BEECORE, Install the motor according to the diagram above.

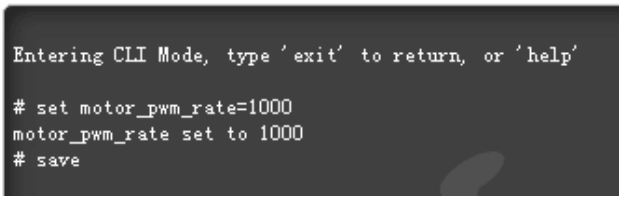
4. Cleanflight / Betaflight configuration：

All the configuration was set up before shipping, if you need to flash firmware and select Full chip erase, you should reconfigure for the BEECORE Flight controller board according to the bellowing diagram.

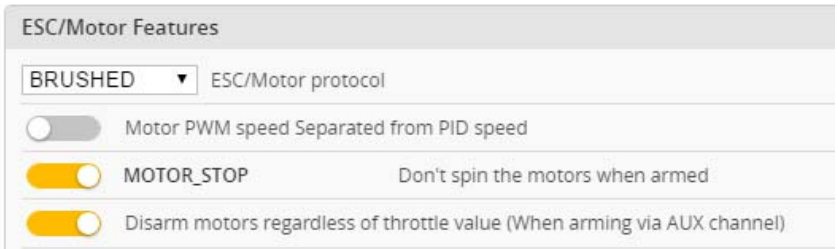
Please unplug the motor from the BEECORE when you need to flash firmware and "Full chip erase", otherwise it will can't connect to the Clenflight configurator.

Reconfigure steps:

1. Cleanflight: Go to the CLI tab, type "Set motor_pwm_rate=1000" ,then enter save

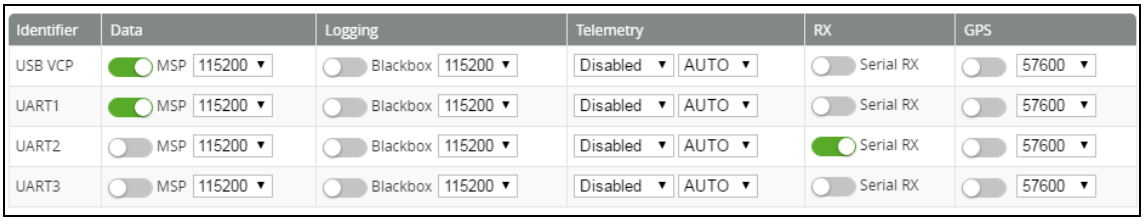


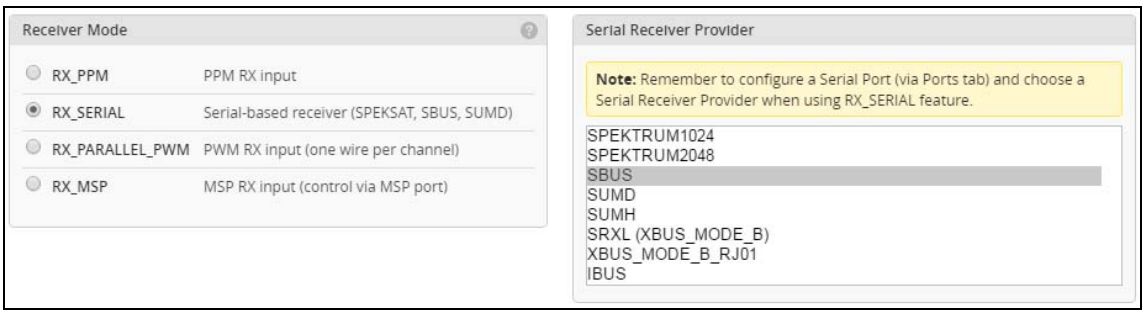
Betaflight: Go to Configure Tab and set ESC/Motor protocol to BRUSHED



*This step is in order to avoid motor auto-spinning when connect the battery

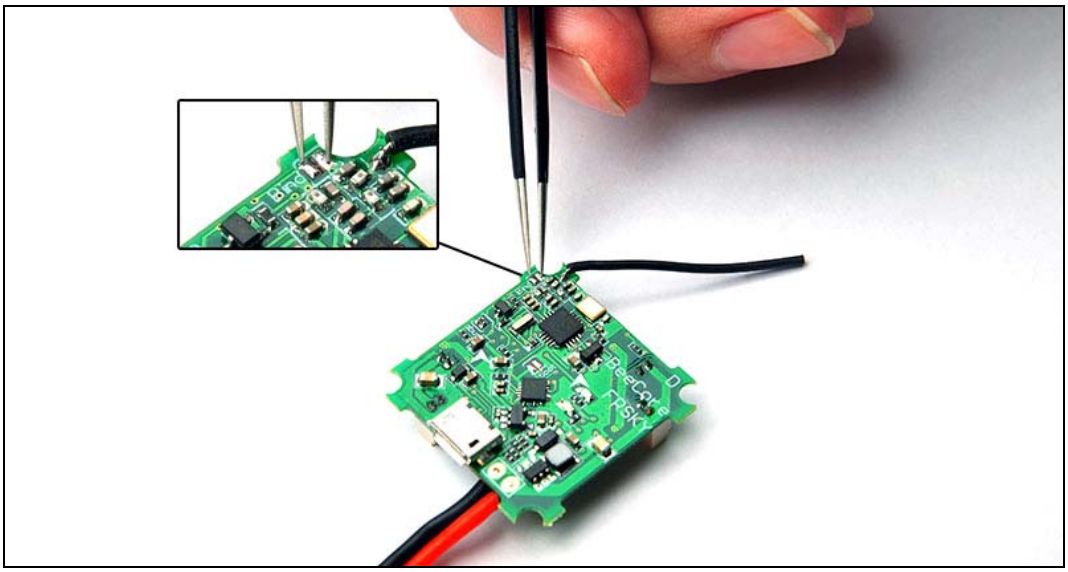
2. Ports and receiver mode sets like the bellowing diagram: First Enable Seria_RX for uart2 and Set Receiver mode RX_SERIAL , Select SBUS signal in Cleanflight configurator.



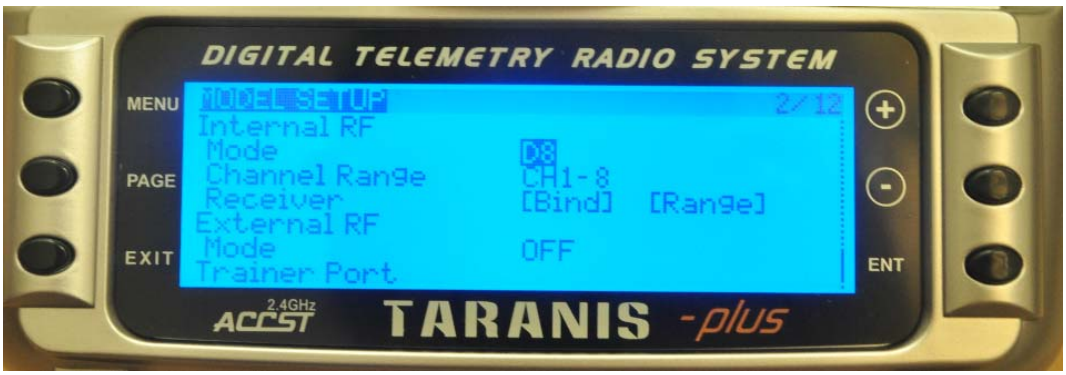


3. Binding Procedure:

a)Power for the BEECORE while Jumped the two “Bind” Pins, the LED Combo (2 Red and 2 White) will getting to be solid, this means the BEECORE is in binding mode.

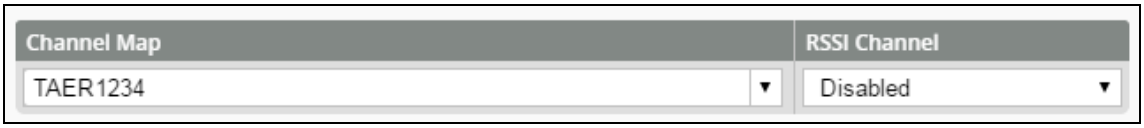


b)Turn on your Radio and select D8 mode for the Receiver. Then Go to the Receiver [Bind] option, and ENT to Binding with the BEECORE. The LED Combo (2 Red and 2 White) will turning off and then get to be solid if binding successfully. Reconnect the battery to the BEECORE after Binding successfully.

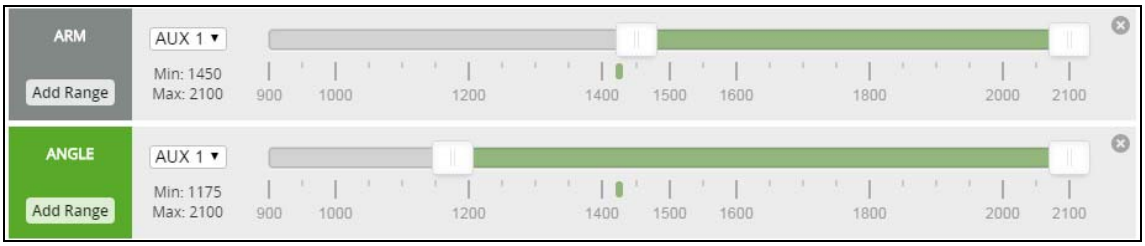


c)You should Disconnect the two “Bind” Pins after binding successfully. Please repeat the above operation if binding not success.

4. The default receiver channel map is TAER1234, please ensure your transmitter is matched with it, otherwise it can't be armed.



5. The Default Arm/Disarm switch is AUX1(Channel 5),and you can also customize it with Cleanflight Configurator or Betaflight Configurator.



6. Set Arm/Disarm switch for your TARANIS X9D: Move to the MIXER interface, Set “SA” or “SB” switch etc. for Ch5 to ARM/DISARM the motor.

7. Toggle the AUX1 Switch and the blue LED on the BEECORE will get be solid, this indicate the motor was armed. Be careful and enjoy your flight now!