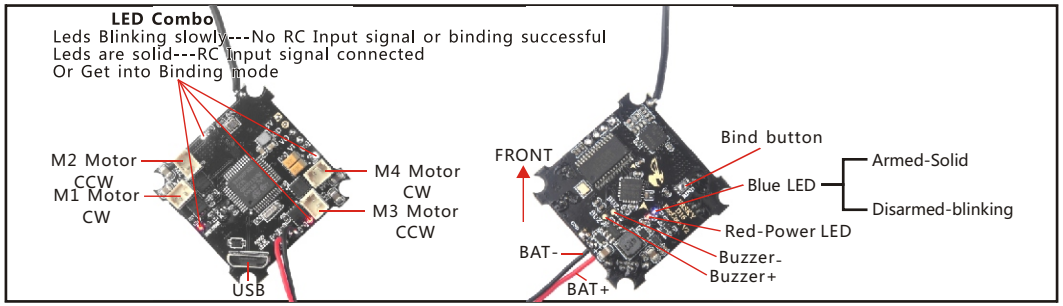
Eachine Beecore v2.0 D16 flight controller board manual

Beecore V2.0 D16 Version flight controller is a Ultimate version for 1S brushed Whoop racing drone, it's the world first Tiny whoop size brushless flight controller with D16 Receiver/Betaflight OSD/Telemetry all in one design, include all your needs for FPV racing drone..

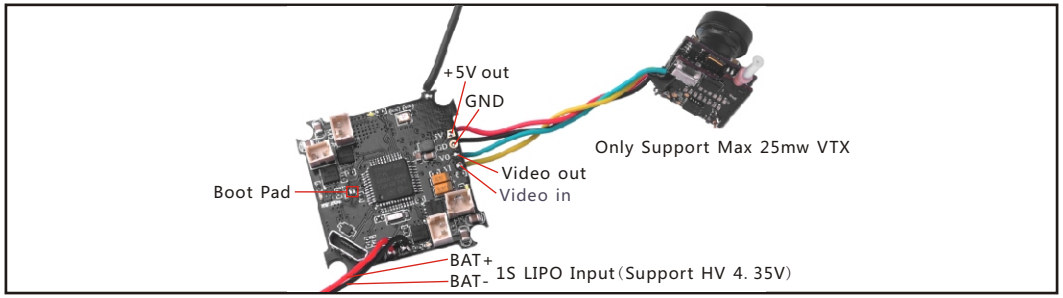
Notes:

The receiver connection will be unstable while the USB of the flight controller is plug into computer. So it can't be armed when connect to Computer, don't worry about that , disconnect the USB and then it will works normal

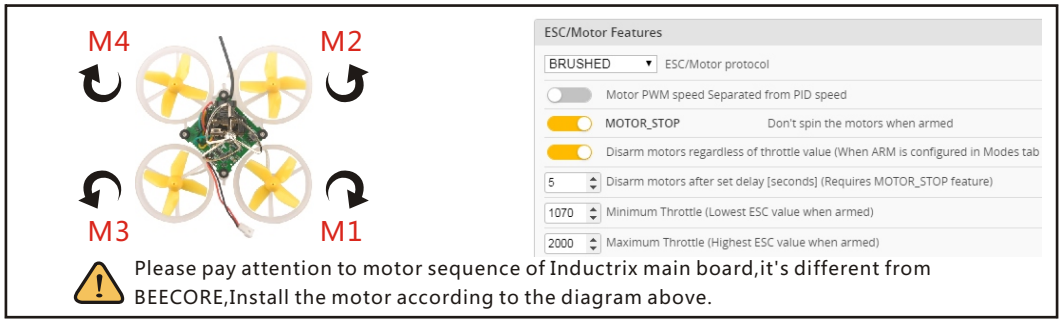
1.Connection and LED



2.Camera connection



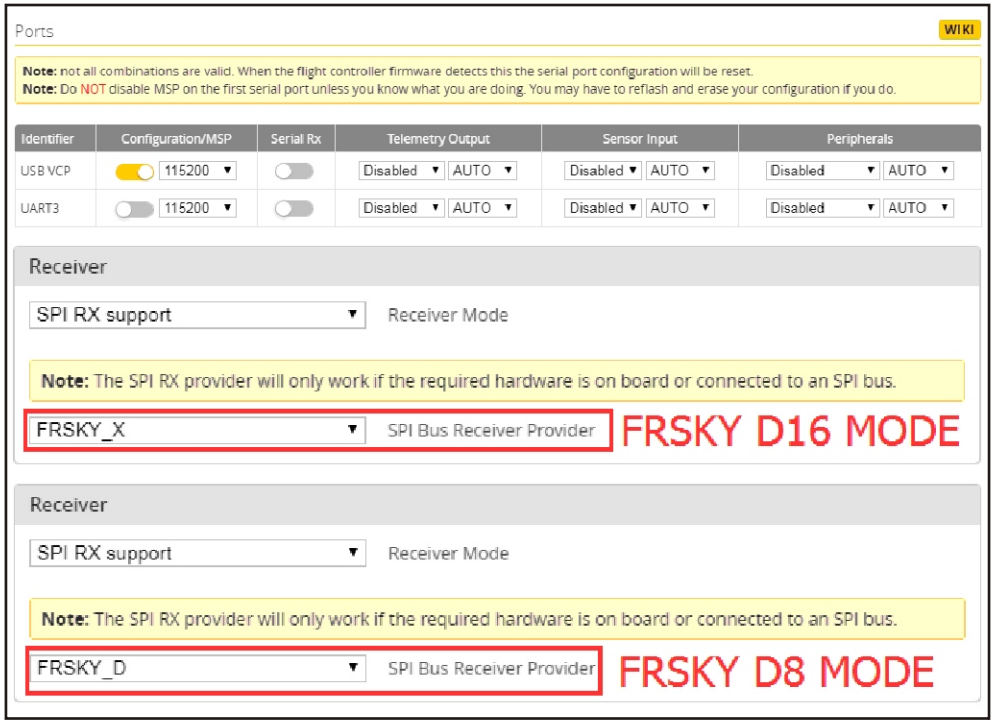
3.Mixer type and ESC/Motor protocol



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

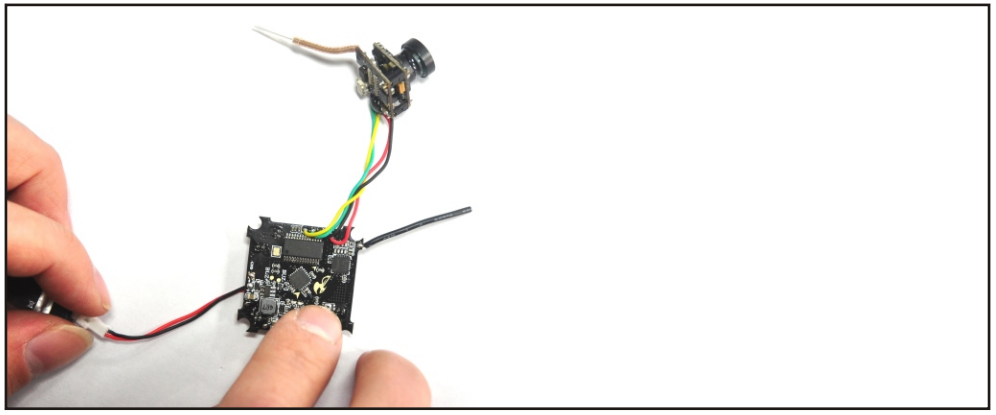
4.Receiver configuration

Please set Receiver mode to be SPI RX Support from the Configuration tab of the Betaflight Configurator, then select FRSKY_X Provider for FRSKY D16 MODE and Select FRSKY_D Provider for FRSKY D8 MODE, don't enable Serial RX since the Beecore V2.0 D16 Version Flight controller is integrated SPI BUS Receiver



5.Binding procedure:

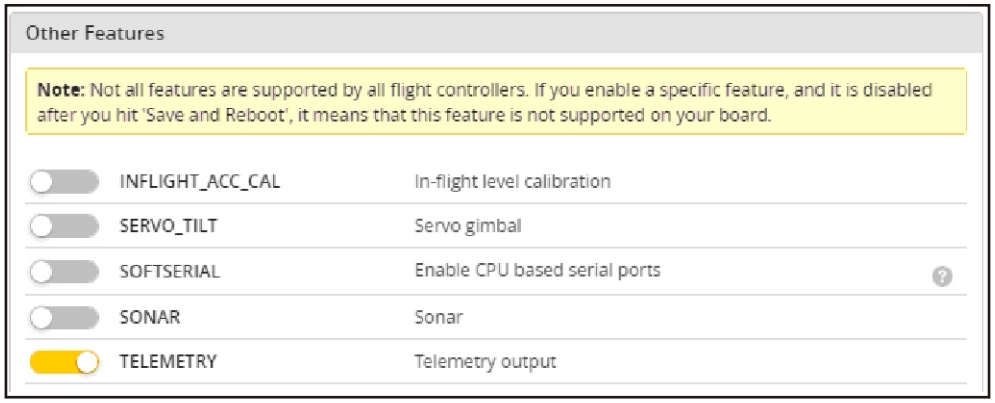
1.Power for the flight controller and the LED Combo(2 red led and 2 white led) will blinking slowly, then Press and hold the bind button for 2 seconds, the LED Combo(2 red led and 2 white led) will getting to be solid, this indicate the Beecore v2.0 D16 Flight controller is in binding mode



2.Turn on your Frsky Taranis transmitter, and move to BIND OPTION from SETUP MENU, Choose receiver mode D16 or D8 according to your Betaflight receiver configuration(Frsky_X = D16, Frsky_D=D8)
3.ENT [BND] to binding with the Beecore v2.0 D16 version Flight controller, the LED Combo(2 red led and 2 white led) will blinking slowly on the flight controller ,this indicate binding successfully, and then exist binding mode of your Frsky transmitter, the LED Combo(2 red led and 2 white led) will getting to be solid again, this indicate working normal.

6.Receiver Telemetry Configuration

1.Just enable Telemetry from the configuration of Betaflight configurator.



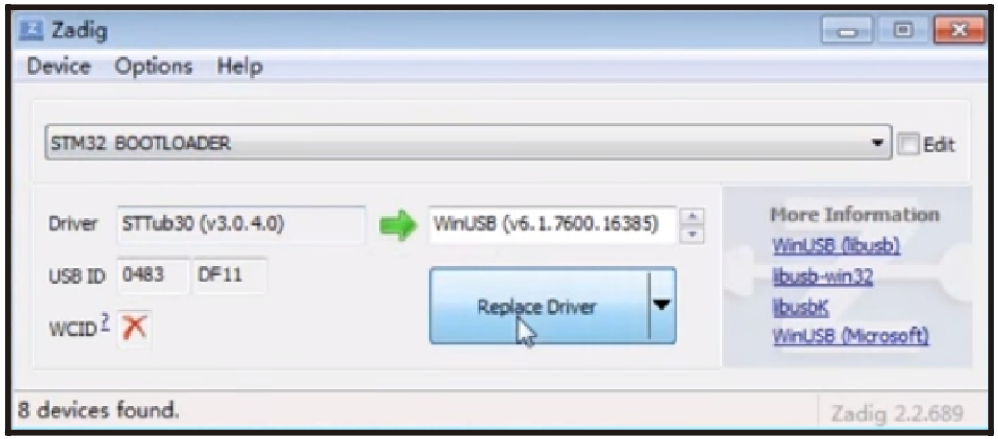
2.After binding successful, turn on the Frsky Transmitter and move to option TELEMETRY, then click "Discover new sensors"

PRODUCT SPECIFICATION

3.Move to the "DISPLAY" Option and set screen to show the telemetry info

7.Flight controller firmware update

1.Install latest STM32 Virtual COM Port Driver http://www.st.com/web/en/catalog/tools/PF257938
2.Install STM BOOTLOAD Driver (STM Device in DFU MODE)
3.Download the BETAFLIGHT FIRMWARE for Beecore V2 D16 version Flight controller from website and Open Betaflight configurator and load Local firmware
4.There are 2 ways to get in DFU Mode:
1). solder the boot pad and then plug USB to comuper
2).loading betaflight firmware and hit "flash", then it will getting into DFU Mode automatically.
5.Open Zadig tools to replace the drivers from STM32 Bootloader to WINUSB Driver.
6.Reconnect the flight controller to the computer after replace driver done , and open Betaflight configurator, loading firmware and flash.



***We will update the firmware for Beecore v2.0 D16 Version and release to our website in time**