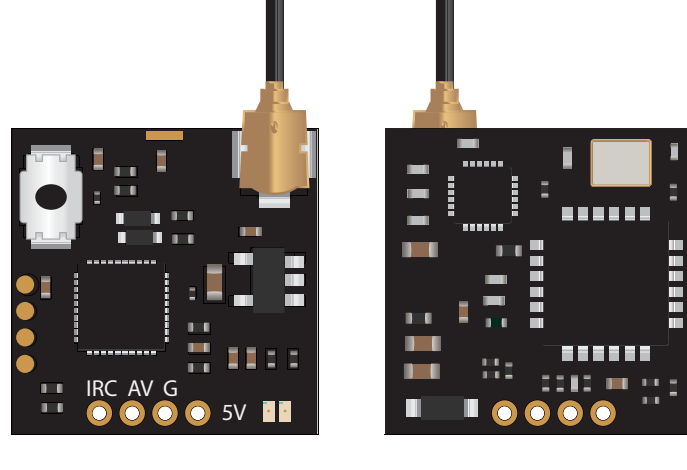


RunCam TX100 Nano

TX100 NANO Manual



Overview

TX100 Nano has three working modes:

- Info Mode (Status Information Display Mode)
- Standby Mode
- Setting Mode

Info Mode

The VTX directly enters into Info Mode after been powered up. It will go through below three procedures under this mode:

- Displaying CHANNEL:**
Blue LED flashes one time which means the channel number will be shown. Then Red LED will flash. Red LED flashes X times means the VTX is on channel X. The channel value can be 1-8.
- Displaying BAND:**
Blue LED flashes two times which means the band number will be shown. Then Red LED will flash. Red LED flashes Y times means the VTX is on band Y. The band value can be 1-5.
- Displaying POWER:**
Blue LED flashes three times which means the POWER will be shown. Then Red LED will flash. If Red LED flashes one time, the power is 25mW; If two times, 100mW.

After the above steps, the VTX will then enter into Standby Mode.

Standby Mode

TX100 NANO has three status under standby mode:

- Lock Status:**
Only Red LED is on. All the highlighted channels in the BAND & Chanel Table are not accessible under this status.
- Unlock Status:**
Both Red and Blue LED are on. Under this status, all channels in the BAND & Channel Table are accessible.

Lock-PIT Status:

Under lock status, if the switch PIT is ON, both Red and Blue LED will be OFF.

Switching between Lock and Unlock Status

By long-pressing the button for 10 seconds at any time, you can switch between the two status. The VTX is in Lock Status by default.

Setting Mode

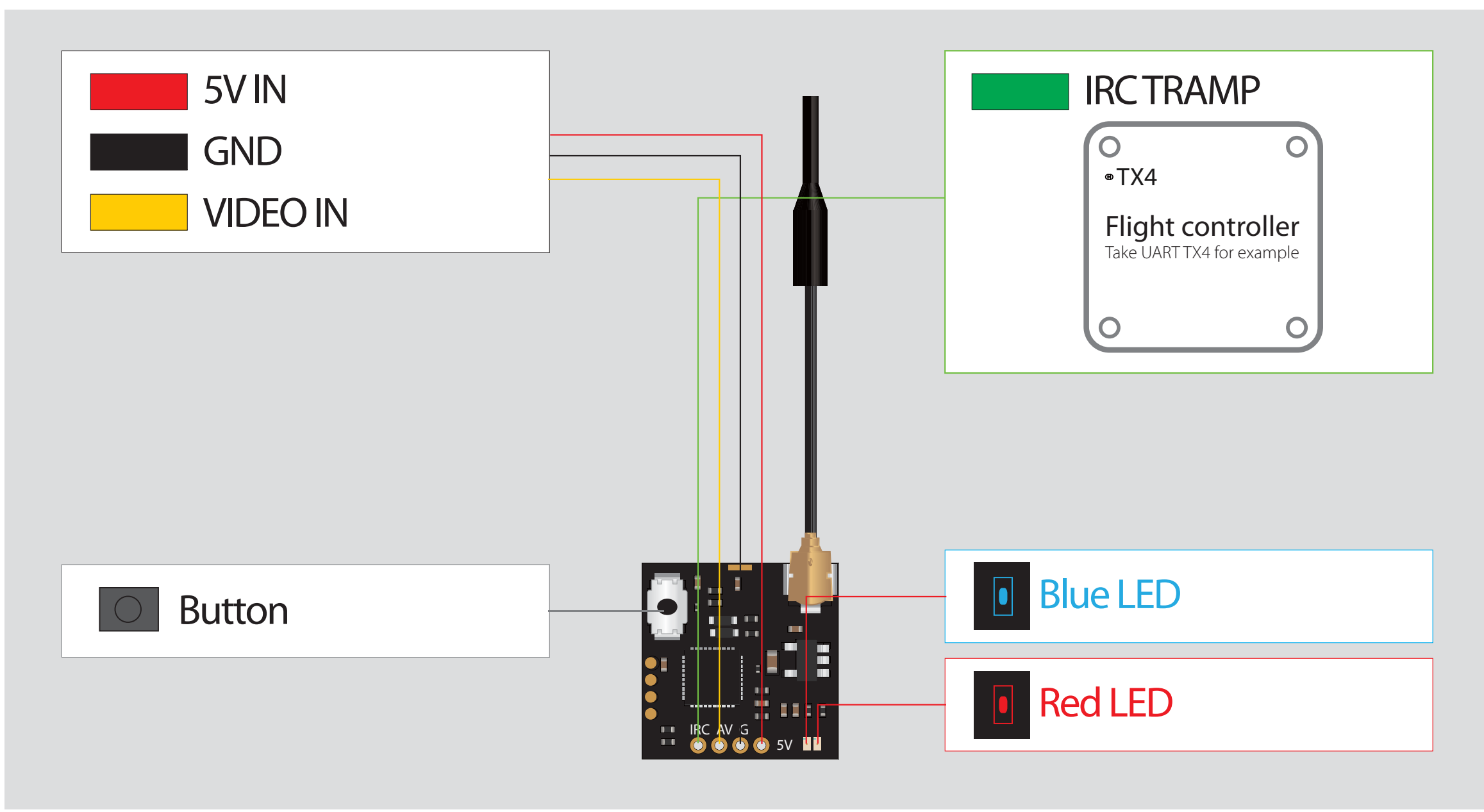
Under Standby Mode, by long-pressing the button for 3 seconds, the VTX will enter into Setting Mode. All procedures can go through as below:

- CHANNEL Setting:**
Blue LED flashes one time which means you can set the channel. Then Red LED will flash. Red LED flashes X times means the VTX is on channel X. Short press the button to cycle to the next channel. The channel value can be 1-8.
- BAND Setting:**
Long press the button for 3 seconds, Blue LED will flash two times which means you can set the band. Then Red LED will flash. Red LED flashes Y times means the VTX is on band Y. Short press the button to cycle to the next band. The band value can be 1-8.
- POWER Setting:**
Long press the button for 3 seconds again, Blue LED will flash three times which means you can set the power. Then Red LED will flash. If Red LED flashes one time, it is under 25mW; If two times, 100mW. Short press the button to cycle to the next power option.

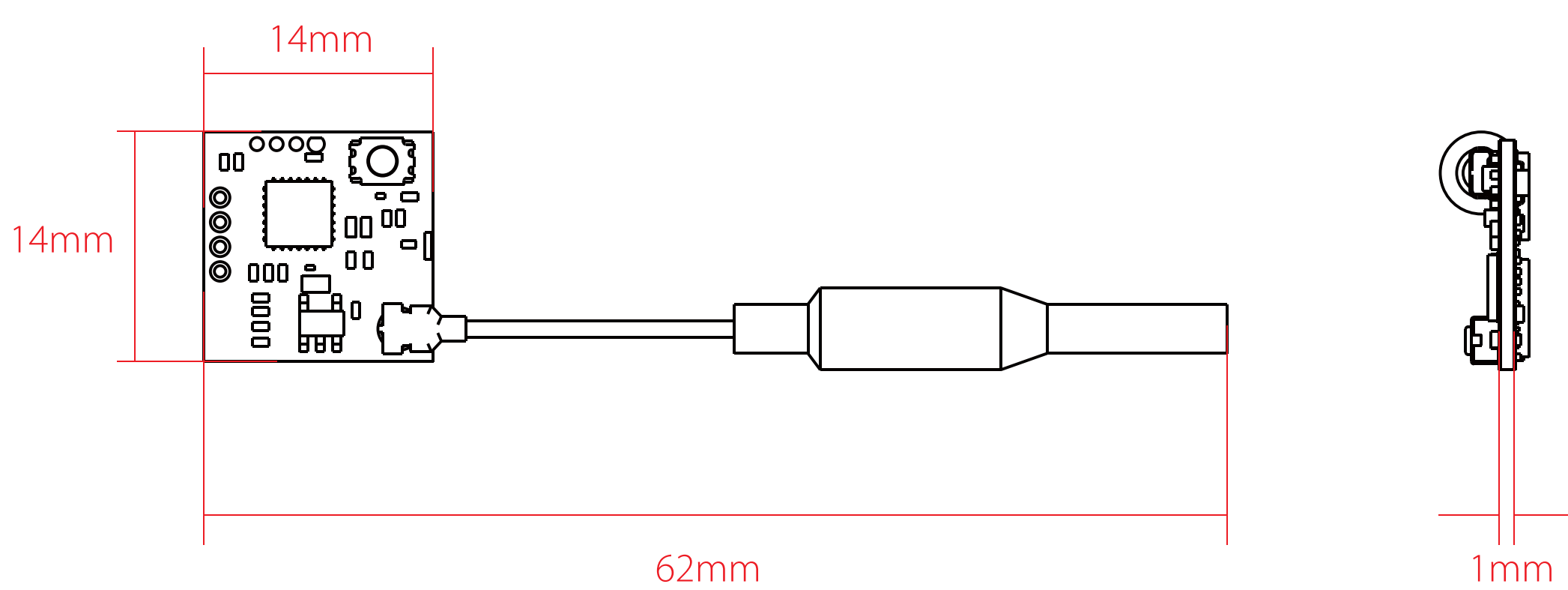
Under any of the above procedures, you can save and exit the Setting Mode by long-pressing the button for 5 seconds, the VTX will immediately enter into Info Mode (displaying CHANNEL, BAND and POWER in turn) and then stay in Standby Mode.

If no operation for 20 seconds under any of the above procedures, the VTX will exit Setting Mode directly without saving changes and enter back into Standby Mode.

Connection Diagram



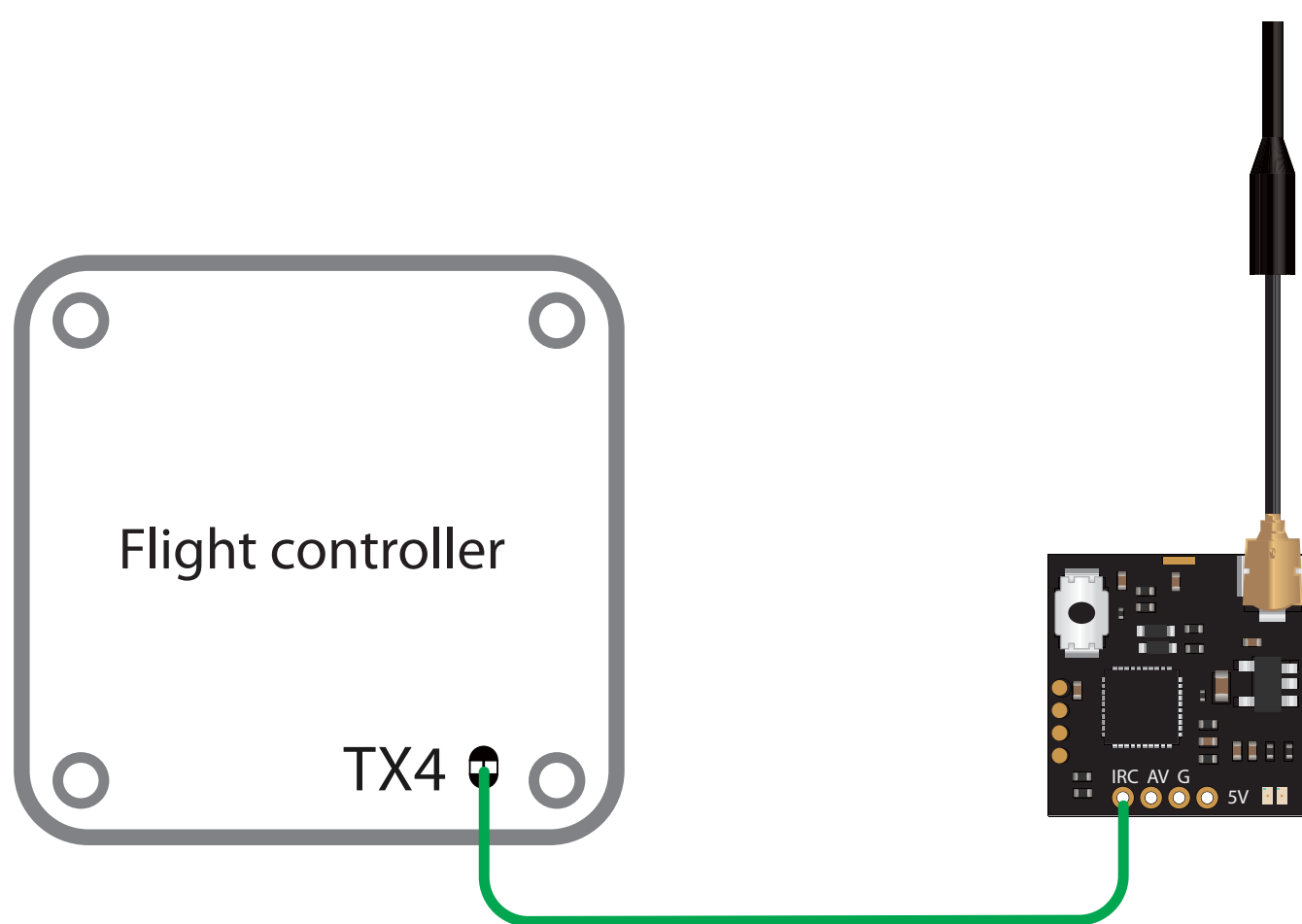
Dimensions



UART Control

TX100 NANO supports IRC Tramp protocol, the setting-up procedure is as below:

1. Connect the IRC TRAMP pin on the VTX end to an available TX pad (eg. TX4) on the flight controller as below:

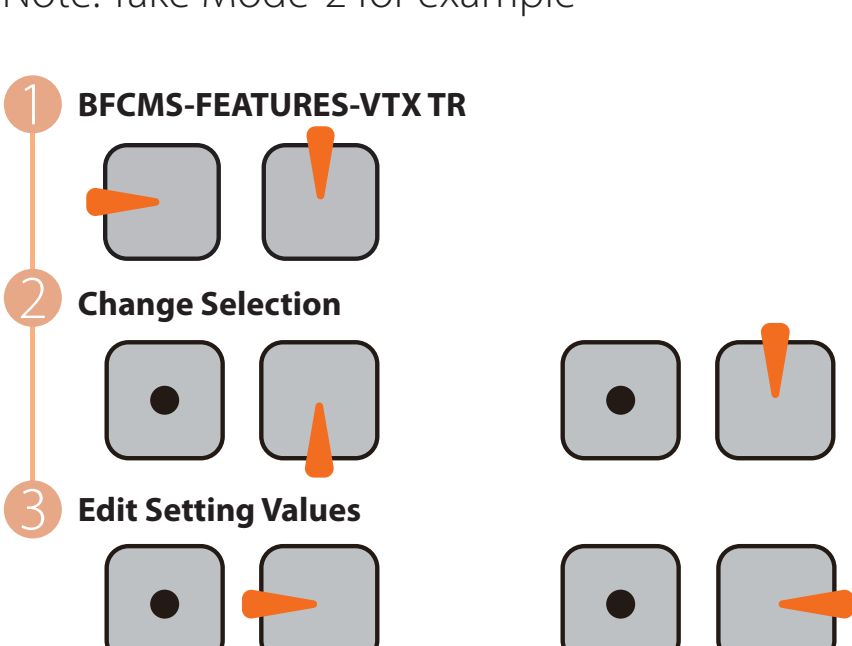


2. Configure UART port as IRC Tramp on a Betaflight 3.3 or above as below:

Identifier	Configuration/MS	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART3	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	IRC Tramp AUTO
UART5	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO

3. Use your transmitter to do Remote Control.

Note: Take Mode-2 for example



• If you connect the VTX to the flight controller (Betaflight 3.3 or above), the VTX will be controlled by the flight controller and its frequency will be changed to F1 5740 and the button on the VTX will give no more reaction.

• If you need to get 100mW & all 37 channels unlocked, please long press the button on the VTX for 10 seconds till both Blue & Red LED are constantly on.

BFOSD 25mW	VTX 25mw
BFOSD 100mW	VTX 100mw
BFOSD 200mW	VTX 100mw
BFOSD 400mW	VTX 100mw
BFOSD 600mW	VTX 100mw

Note: When using the transmitter to do remote control, both Red and Blue LED will give no more reaction.

BAND & CHANNEL Table

Channel	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
A(1)	5865	5845	5825	5805	5785	5765	5745	5725
B(2)	5733	5752	5771	5790	5809	5828	5847	5866
E(3)	5705	5685	5665		5885	5905		
Airwave(4)	5740	5760	5780	5800	5820	5840	5860	5880
Race BAND(5)	5658	5695	5732	5769	5806	5843	5880	5917

Parameters

Model	RunCam TX100 Nano
Frequency Channel	5.8G 37CH
Output Power	25mW / 100mW
Working Current	5V@ 150~300mA
Voltage in	4.5-5.5V
Video Input Impedance	75 Ohm
Antenna	U.FL 5.8G 2dB Omni antenna
Weight	1.5g (with antenna)
PCB Size	14mm*14mm