FAT SHARK TX5M.1 VTX Module for Shark Byte System Instructions

Contents

Shark Byte

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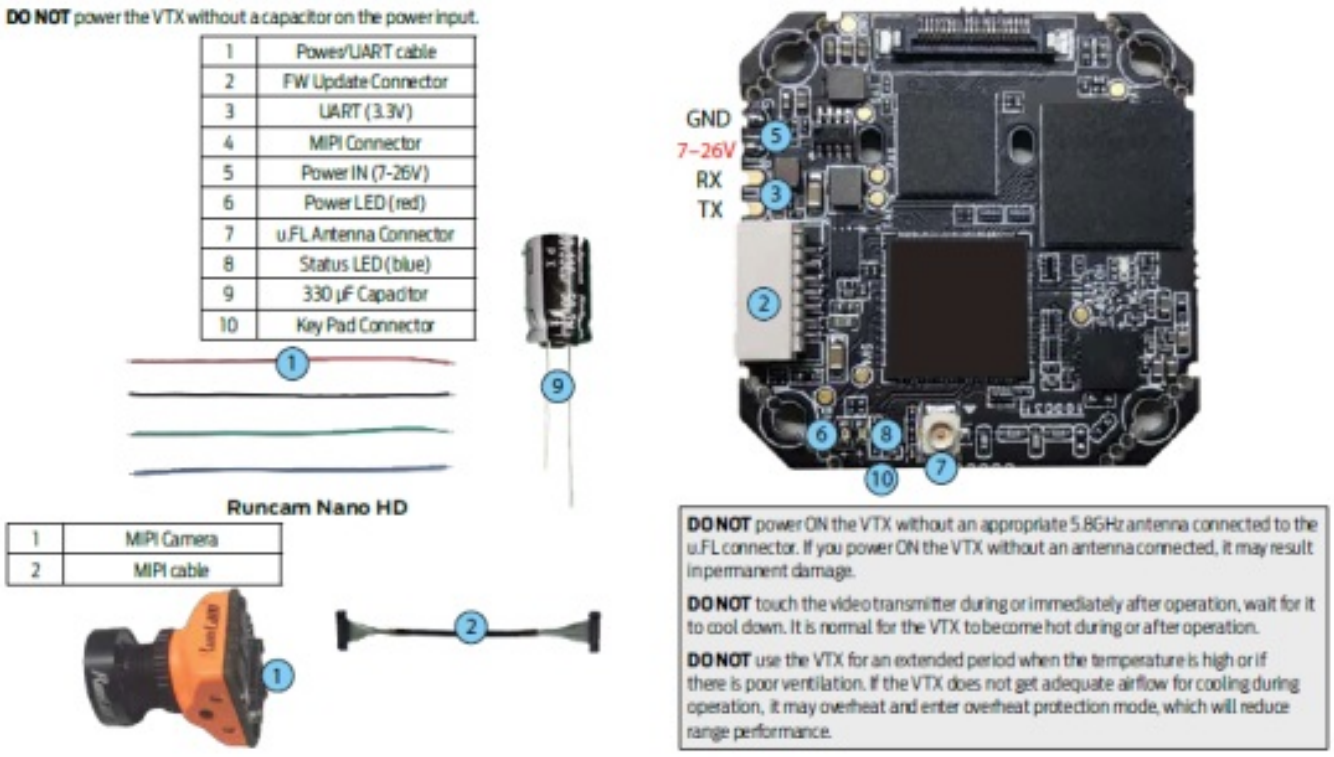
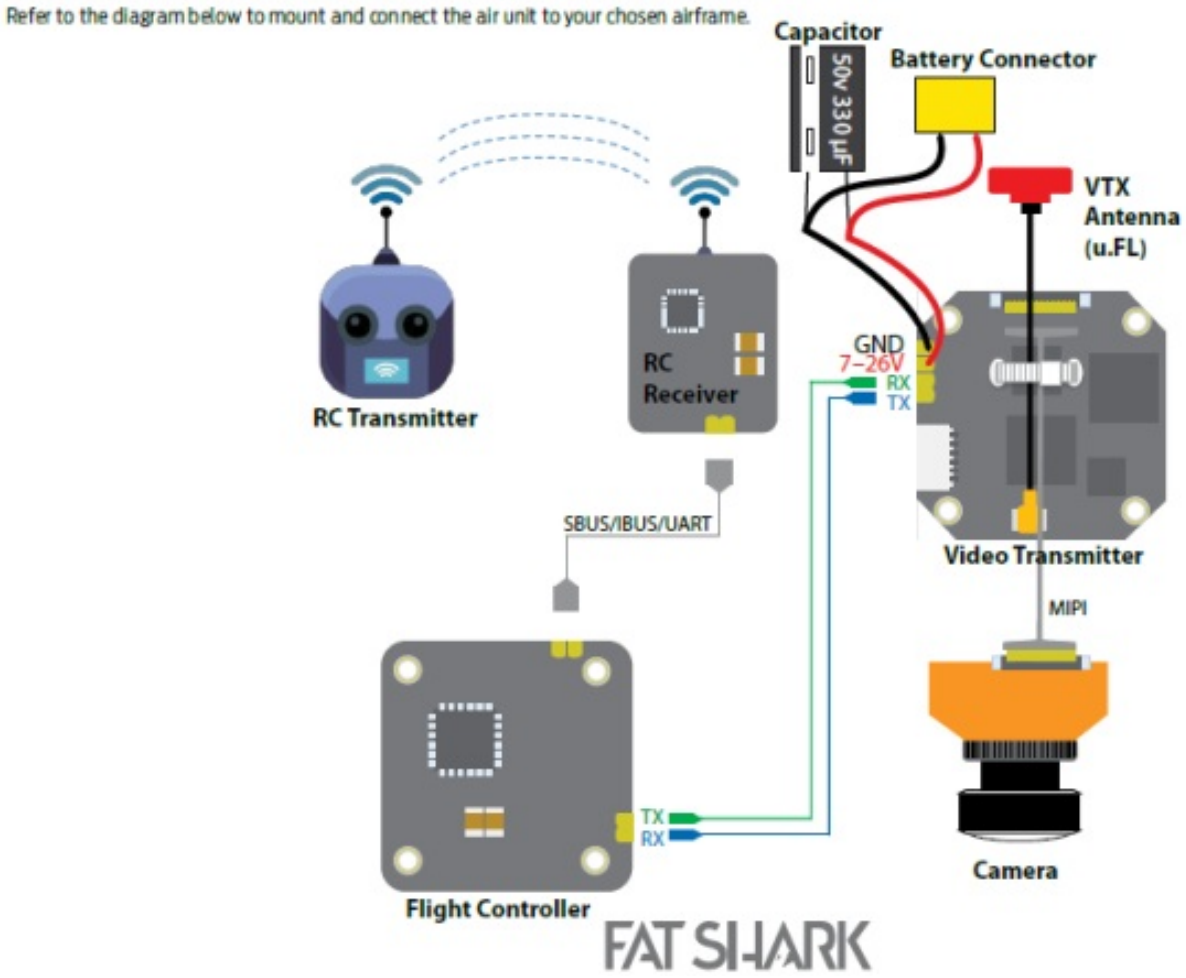
Shark Byte Video Transmitter TX5S.1

The Shark Byte TX5S.1 is a digital HD 720p 60fps short range video transmitter capable of delivering up to 200mw on 5.8GHz. The TX5S.1 works with the Shark Byte RX5.1
goggle module to transmit video, and a remote controller to control the parameters for transmitter and camera wirelessly.
The Shark Byte TX5S.1 consists of a Runcam Nano HD camera and a video transmitter (VTX) made up of a single PCBs.
Power input range is 7V – 26V (2S – 6S). A large capacitor (220+µF) is required to be mounted in parallel with the power input connector to avoid voltage spikes (and subsequent
damage) to the VTX.



TX5S.1 CONNECTION DIAGRAM

Refer to the diagram below to mount and connect the air unit to your chosen airframe.



TX5S.1 SPECIFICATION

Weight:
10.3g including camera and cable (without antenna), 5.2g for VTX only

Dimensions:

- Camera: 14 x 14mm with 19 x 19 adaptor
- VTX: 32.5 x 32.5 x 5 mm
- Coaxial cable: 85mm

Mounting Pattern:

- VTX: 20 x 20mm, M2

Operating Frequencies:

CH	FCC (MHz)	CE (MHz)
1	5660	5735
2	5695	5770
3	5735	5805
4	5770	5839
5	5805	NA
6	5839	NA
7	5878	NA
8	5914	NA

Transmitting Power/ Power Consumption:

- 25mW: 5.1W
- 200mW: 6.7W

IO Interface:

- u.FL
- UART: 3.3V
- Update Port: 7-pin SH 1.0

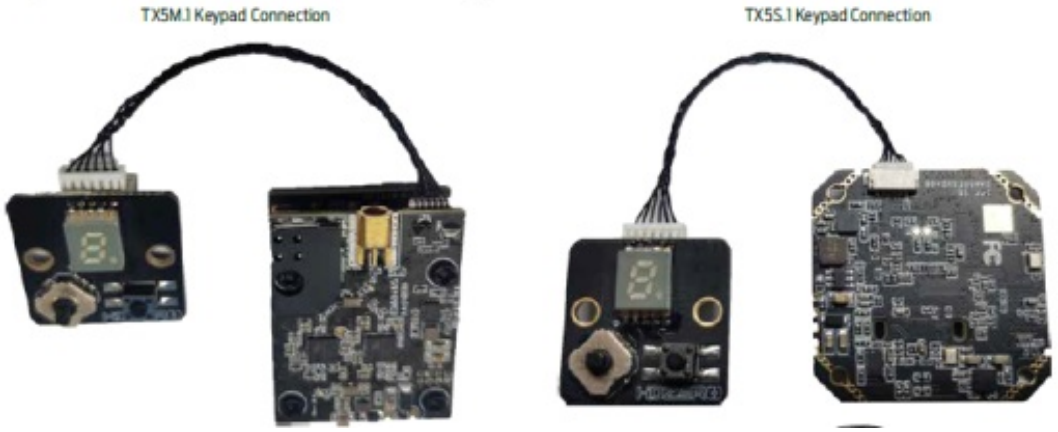
Supported Flight Control System:

BetaFlight: 4.1 or above (MultiWii API version 1.41)
iNav 2.3 or above

Input Power:

- 7-26V
- Operating temperature:
- 32°-104°F (0°-40°C)

Adjusting VTX and Camera Parameters with the Keypad



The VTX or Camera parameters can also be set with the attached keypad.

Camera:

The 5-way joystick button (1) is used exclusively for camera settings. Settings and options are displayed on-screen on the live video for this configuration mode.

- Press Middle: Enter
- Press Up: Up
- Press Down: Down
- Press Left: Left
- Press Right: Right

VTX:
The select button (2) and 7 segment LED display (3) are used exclusively for setting VTX parameters.

To change channel:

- Short press the select button (2), the 7 segments LED display (3) will show the current channel number (1-8), another short press will cause it will change to next channel. If no changes are made after 15 seconds, the 7 segments LED display (3) will turn off and the setting will be saved.

To change power level:

- Press and hold the select button (2) for 3 seconds, the 7 segment LED display (3) will blink ‘P’ then show current power level (1.=25mW, 2.=200mW,3.=500mW). To make a change, short press the select button (2) to cycle to the next power level. If no changes are made after 15 seconds, the 7 segments LED display (3) will turn off and the setting will be saved.

To select Low Power (LP) mode:

- Press and hold the select button (2) for 10 seconds, the 7 segment LED display (3) will blink ‘P’ then ‘L’, show “O” (ON) or ‘F’ (OFF). If no changes are made after 15 seconds, the 7 segment LED display (3) will turn off and the setting will be saved.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

The distance between user and device should be no less than 20cm.

Documents / Resources

	FAT SHARK TX5M.1 VTX Module for Shark Byte System [pdf] Instructions FSV2480, 2AN5RFSV2480, TX5M.1, VTX Module for Shark Byte System