

VTX1.6W

Video Transmitter

User Manual



V1.0

1. Basic Parameters

Transmission Power:	1.6W
Mounting Holes:	20*20, 25.5*25.5
Antenna Connector:	UFL
Video Transmission Protocol:	IRC
Weight:	23g (without adapter) , 27g (with adapter)

2. Port Description

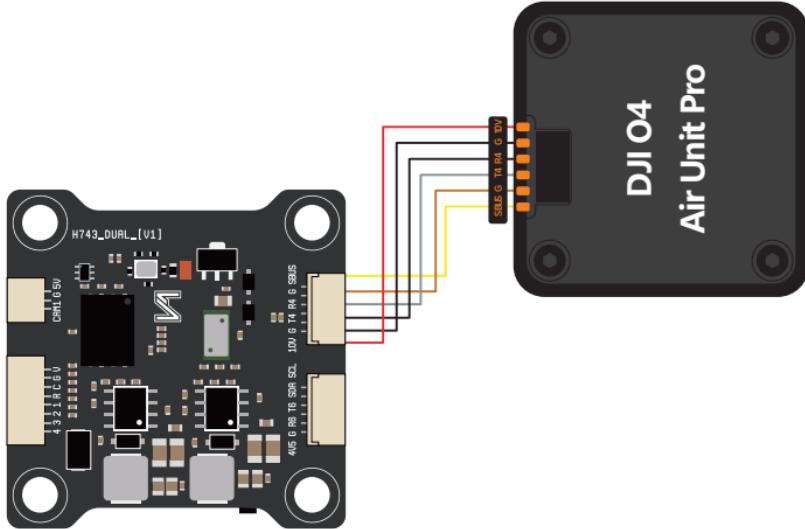
VBAT:	2S-6S, 7-24VDC positive input
GND:	Negative terminal
RX:	IRC Tramp signal input
5VOUT:	5V power output
GND:	Negative terminal
VIDEO:	Video signal input

3. Usage Notes

- (1) Ensure adequate space around the video transmitter module during installation to allow proper air circulation for heat dissipation. Insufficient cooling may trigger the overheat protection, resulting in reduced transmission power or complete shutdown.
- (2) Before powering on, verify the input voltage is within the specified range and polarity is correct to prevent component damage.
- (3) We strongly recommend installing the antenna to the RF port before applying power to extend module lifespan.
- (4) Please read the user manual thoroughly before operation to ensure proper wiring and maximize product longevity.

Flight Controller to Video Transmitter (VTX) Connection

1. HD VTX



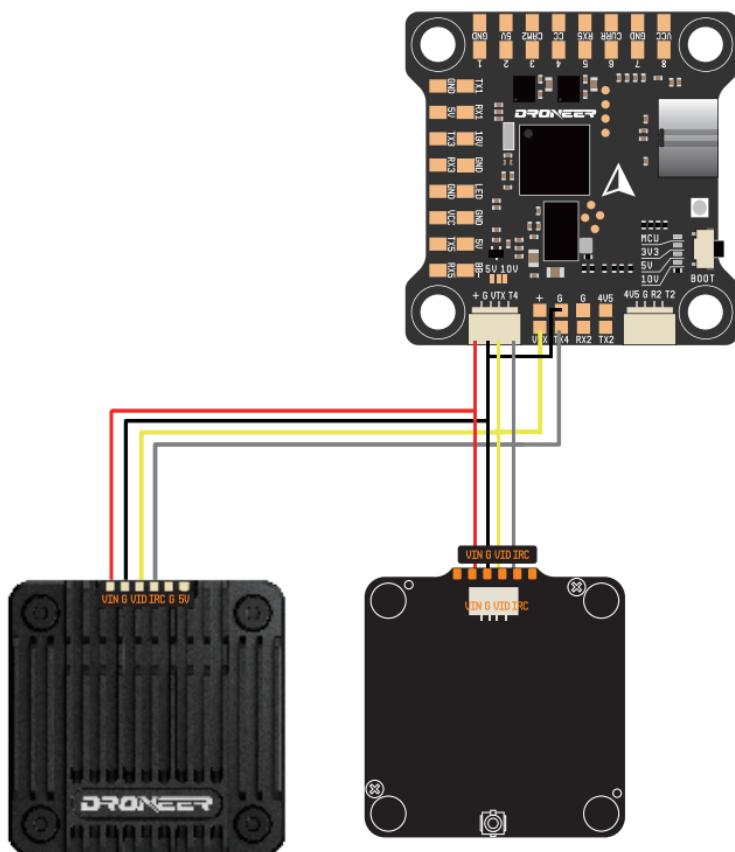
Ports

Note: not all combinations are valid. When the flight controller firmware detects this the serial port configuration will be reset.

Note: Not all command words are valid. In certain circumstances, 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	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200 <input type="button" value="▼"/>	<input type="checkbox"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>
UART1	<input type="checkbox"/> 115200 <input type="button" value="▼"/>	<input type="checkbox"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>
UART2	<input type="checkbox"/> 115200 <input type="button" value="▼"/>	<input checked="" type="checkbox"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>
UART3	<input type="checkbox"/> 115200 <input type="button" value="▼"/>	<input type="checkbox"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>
UART4	<input checked="" type="checkbox"/> 115200 <input type="button" value="▼"/>	<input type="checkbox"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	VTX (MSP + Displayport) <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>
UART5	<input type="checkbox"/> 115200 <input type="button" value="▼"/>	<input type="checkbox"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	ESC <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>
UART6	<input type="checkbox"/> 115200 <input type="button" value="▼"/>	<input type="checkbox"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>	GPS <input type="button" value="▼"/> 37600 <input type="button" value="▼"/>	Disabled <input type="button" value="▼"/> AUTO <input type="button" value="▼"/>

2. Analog VTX



Ports

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.

WARNING: The VTX table has not been set up correctly and without it VTX control will not be possible. Please set up the VTX table in Video Transmitter tab.

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200	<input checked="" type="radio"/>	Disabled <input type="button" value=""/>	Disabled <input type="button" value=""/>	Disabled <input type="button" value=""/>
UART1	115200	<input type="radio"/>	Disabled <input type="button" value=""/>	Disabled <input type="button" value=""/>	Disabled <input type="button" value=""/>
UART2	115200	<input checked="" type="radio"/>	Disabled <input type="button" value=""/>	Disabled <input type="button" value=""/>	Disabled <input type="button" value=""/>
UART3	115200	<input type="radio"/>	Disabled <input type="button" value=""/>	Disabled <input type="button" value=""/>	Disabled <input type="button" value=""/>
UART4	115200	<input type="radio"/>	Disabled <input type="button" value=""/>	Disabled <input type="button" value=""/>	VTX (IRC Tramp) <input type="button" value=""/>
UART5	115200	<input type="radio"/>	Disabled <input type="button" value=""/>	ESC <input type="button" value=""/>	Disabled <input type="button" value=""/>
UART6	115200	<input type="radio"/>	Disabled <input type="button" value=""/>	GPS <input type="button" value=""/>	Disabled <input type="button" value=""/>

3.RF Transmission Frequency

BAND ^④	CHANNEL ^④							
	CH1 ^④	CH2 ^④	CH3 ^④	CH4 ^④	CH5 ^④	CH6 ^④	CH7 ^④	CH8 ^④
A ^④	5745 ^④	5755 ^④	5765 ^④	5775 ^④	5785 ^④	5795 ^④	5805 ^④	5825 ^④

Note:Antenna must be installed before power-on. Ensure proper heat dissipation during operation. Lack of cooling may cause video transmitter damage.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this 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.

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

NOTE:

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.