BLITZ Whoop 5.8G 2.5W VTX

5.8 GHz analogue video transmitter (VTX)
User manual



The VTX is set to 25 mW by default. In the Czech Republic, higher power levels and frequencies outside the 5725–5875 MHz band must not be used without an individual authorisation from ČTÚ (see Chapter 3).

Manufacturer: iFlight · Importer: Rotorama, s.r.o. · www.rotorama.com

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1. Safety instructions

1.1 Before first use

- Please read the whole manual carefully before use, in particular the instructions for proper wiring.
- The video transmitter (VTX) is a radio device. The user is responsible for the frequency and power settings — in the Czech Republic only 5725–5875 MHz and 25 mW e.i.r.p. may be used without an authorisation (Chapter 3).
- This product is not a toy. Keep it out of the reach of children; small parts (screws, connectors) could be swallowed.
- Do not open or modify the product. Mechanical damage, water ingress or conductive dirt may cause a short circuit.

1.2 Power supply and wiring

- Before switching on the power, always make sure of the **correct voltage range (7–34 V)** and the **correct positive and negative polarity** to avoid burning the components.
- Always do the wiring with the battery disconnected. After wiring, check that no wire is pinched, stripped or shorted to the frame.
- Charge LiPo and LiHV batteries only under supervision, on a non-flammable surface and with a charger intended for the given cell type. Do not use a damaged, swollen or overheated battery.

1.3 Antenna and cooling

Antennas must be installed BEFORE powering on. The VTX can be damaged when used without an antenna or without proper cooling.

- Making sure the antenna has been installed before switching on the power extends the life of the module. Do not subject the MMCX connector to pulling or bending; use the supplied pigtail for mounting.
- Please keep enough space when you install the VTX to ensure air convection around the module for heat dissipation. Otherwise, the module will enable overheat protection and the transmission power will be reduced or even switched off.
- Do not cover the fan in the housing and make sure no dirt or loose wires can get into it.
- The housing gets hot during operation. After prolonged use, do not touch it until it has cooled down.

2. Product description

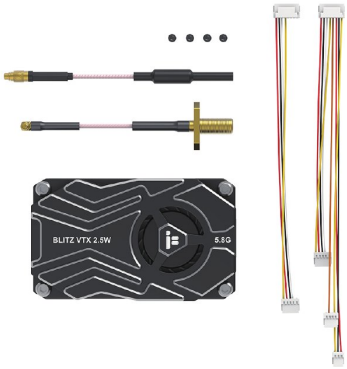
2.1 Intended use

The iFlight BLITZ Whoop 5.8G 2.5W VTX is an analogue video transmitter for FPV drones. It transmits the camera image to FPV goggles or a monitor in the 5.8 GHz band. The transmitter is housed in a CNC aluminium cooling case with an integrated fan, is powered directly from a 2–8S battery and the antenna is connected via an MMCX connector. It is set up with the buttons on its side or from the flight controller (FC) via the IRC Tramp protocol.

- built-in microphone,
- 4 power levels up to 2500 mW and PIT mode,
- 48 channels including Raceband,
- fast frequency lock, no startup interference with other pilots,
- built-in output power self-check functionality,
- 5 V output for powering the camera.

※ Units manufactured before September 2025 do not have the L band — they have 40 channels (bands A, B, E, F, R).

2.2 Packing list



Packing list

- 1× BLITZ Whoop 5.8G 2.5W VTX,
- 1× linear antenna with MMCX connector,
- 1× MMCX – SMA pigtail,
- 2× connection cable with SH1.0 8P connector,
- set of screws.

The package does **not** include a camera, flight controller (FC), battery or FPV goggles.

2.3 Specifications

Power levels	PIT / 25 / 400 / 1000 / 2500 mW
Channels	48 (bands A, B, E, F, R, L)
Frequency range	5362–5945 MHz (see table in Chapter 5.4)
Input voltage	7–34 V (2–8S)
Antenna connector	MMCX
Input interface	SH1.0 8P
VTX telemetry	IRC Tramp
Mounting pattern	25.5 × 25.5 mm, holes Φ1.6 mm
Dimensions	50 × 30 × 16 mm
Weight	32 g (excluding antenna)

2.4 Ports

Port	Function
Vbat	positive input, 2–8S, 7–34 V DC
GND	negative
IRC	IRC Tramp signal input
Video in	video signal input
Camera out	camera signal output
5V out	5 V voltage output
GND	negative
Camera in	camera signal input

3. Legal conditions of use

3.1 The law of the country of use applies

Radio equipment is placed on the market throughout the European Union under Directive 2014/53/EU (RED), but the permitted frequency bands and maximum transmission power are set by each country individually. The information in this chapter describes the situation in the Czech Republic. If you use the transmitter in another country, you must comply with the regulations of the country in which you use it. The user is always responsible for the frequency and power settings.

3.2 Frequencies and output power in the Czech Republic

Without an individual authorisation, the transmitter may be used in the Czech Republic only under the ČTÚ general authorisation No. VO-R/10 (short-range devices):

Band	Max. power	Regulation
5725–5875 MHz	25 mW e.i.r.p.	VO-R/10/05.2025-5, Art. 3(k)

- The e.i.r.p. limit includes the antenna gain. Use **25 mW** and only channels whose centre frequency lies within 5725–5875 MHz: **A1–A7, B1–B8, F1–F7, R3–R6**. Use the channels at the band edge (A1, B8) only when there is no other option.
- Bands **E** and **L** lie wholly or partly outside the permitted band and must not be used in the Czech Republic without an authorisation.
- Power levels **400, 1000 and 2500 mW** are not permitted under the general authorisation.
- The device must not cause interference and is not entitled to protection from interference. Unauthorised use of frequencies is an offence under Act No. 127/2005 Coll., on electronic communications.

3.3 Higher power levels and amateur radio operation

Power levels above 25 mW may only be used by the holder of an appropriate authorisation — in the Czech Republic typically an **individual authorisation to operate an amateur radio station**, issued by ČTÚ after passing an examination. The 5650–5850 MHz amateur band is allocated on a secondary basis, transmissions must be identified with a call sign and must not serve commercial purposes. The conditions are laid down in Decree No. 156/2005 Coll. and in the individual authorisation. Outside the Czech Republic, the regulations of the country concerned apply.

4. Installation and wiring

4.1 Mounting

- The transmitter is fastened with four screws into the 25.5 × 25.5 mm (Φ1.6 mm) mounting holes on its underside.
- Position it so that air can flow around the housing and the fan and so that the buttons and LEDs remain accessible.
- Connect the antenna to the MMCX connector, or via the supplied MMCX – SMA pigtail fixed to the frame. Route the antenna as far as possible from carbon parts and wires.
- Connect the antenna before powering on for the first time.

4.2 Connecting the VTX to the flight controller (FC)

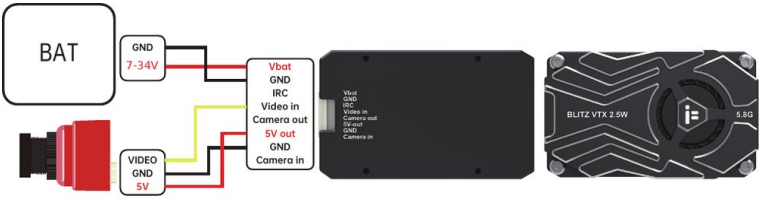


Connecting the VTX to the flight controller (FC)

FC pad	VTX port	Note
VO / VTX (video output)	Video in	image from FC (OSD)
7–34 V (battery voltage)	Vbat	2–8S
GND	GND	ground
TX (UART)	IRC	IRC Tramp control

Enable the corresponding VTX IRC Tramp on the UART port to which the IRC wire is connected (Chapter 6).

4.3 Connecting a camera without a flight controller



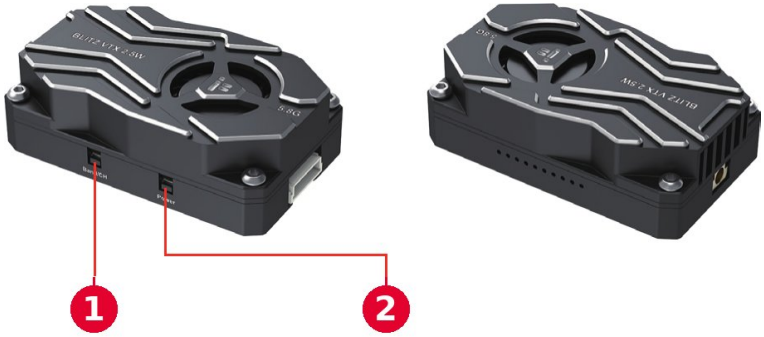
Connecting the camera and battery directly to the VTX

- battery: + to Vbat, − to GND (7–34 V),
- camera: VIDEO to Video in, GND to GND, 5 V supply from the 5V out port.

Without a flight controller, band, channel and power can be set with the buttons only (Chapter 5).

5. Button operation

5.1 Buttons and LEDs



① frequency and channel button (Band/CH) · ② power button (Power)

5.2 Band and channel — button ①

Frequency (red light): long press for 2 seconds, the LED blinks to indicate the frequency band A to L. Long press for 2 seconds again to switch the frequency band.

Channel (blue light): short press the button once, the LED blinks to indicate the channel CH1 to CH8 (sorted from left to right in table 5.4). Short press to switch the channel.

5.3 Output power and PIT mode — button ②

PIT mode (green light): long press for 2 seconds to enter or exit PIT mode. A solid green LED indicates that the VTX is in PIT mode. PIT mode is used for setting up without interfering with other pilots.

Power (green light): short press the button once, the LED blinks to indicate the output power of the video transmission. Short press to change the output power.

Green LED blinks	Output power
1×	25 mW
2×	400 mW
3×	1000 mW
4×	2500 mW

In the Czech Republic, only 25 mW (1 blink) is permitted without an authorisation.

5.4 Frequency table

Frequencies in MHz. Channels whose centre frequency lies within the 5725–5875 MHz band permitted in the Czech Republic under VO-R/10 are shown in bold.

Band	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
A	**5865**	**5845**	**5825**	**5805**	**5785**	**5765**	**5745**	5725
B	**5733**	**5752**	**5771**	**5790**	**5809**	**5828**	**5847**	**5866**
E	5705	5685	5665	5645	5885	5905	5925	5945
F	**5740**	**5760**	**5780**	**5800**	**5820**	**5840**	**5860**	5880
R	5658	5695	**5732**	**5769**	**5806**	**5843**	5880	5917
L	5362	5399	5436	5473	5510	5547	5584	5621

Band R is Raceband. Only units manufactured from September 2025 have the L band.

6. Betaflight configuration

6.1 UART port and IRC Tramp

If the IRC wire is connected to the TX pad of one of the FC's UART ports, band, channel and power can be changed from the radio via the OSD or in Betaflight Configurator.

① Connect the flight controller to a computer and start Betaflight Configurator.

② On the *Ports* tab, for the UART to which the IRC wire is connected, select *VTX (IRC Tramp)* in the *Peripherals* column.

③ Save the settings with *Save and Reboot*.

6.2 VTX table

So that the flight controller knows the frequencies and power levels of the transmitter, load a VTX table (JSON file) into it. The manufacturer offers it for download on the product page at shop.iflight.com in an **EU** and a **US** version. For use in Europe, use the EU version.

① Download the EU version of the VTX table file.

② In Betaflight Configurator, open the *Video Transmitter* tab and choose *Load from file*.

③ Select the downloaded file and save with *Save*.

④ On the *Video Transmitter* tab, set band, channel and power **25 mW**.

The manufacturer's EU table contains only channels A1–A7, B1–B8, F1–F7 and R3–R6; the other frequencies are disabled in it. It does, however, contain the 400, 1000 and 2500 mW power levels — in the Czech Republic their use requires an authorisation (Chapter 3).

7. Maintenance and troubleshooting

7.1 Maintenance

- Regularly check the antenna, pigtail and MMCX connector. Replace a damaged antenna before switching the transmitter on again.
- Keep the fan and the cooling fins free of dust, grass and dirt.
- Check the insulation and solder joints of the power and signal wires.
- After a crash, check the housing, connector and cables for damage.

7.2 Troubleshooting

Problem	Possible cause and solution
No image in the goggles	The goggles and transmitter are not on the same band and channel — compare the settings using the LEDs and table 5.4. Check the antenna connection and the Video in wire.
Very weak image even at short range	The transmitter is in PIT mode (solid green LED) — exit it by pressing button ② for 2 s. Check the antenna and pigtail.
Image degrades or drops out during operation	Overheating — the overheat protection has been activated. Ensure air flow around the module and check that the fan is spinning.
Transmitter does not respond to FC settings	The IRC wire is not connected to the TX pad of a UART, *VTX (IRC Tramp)* is not enabled on the port or the VTX table is missing (Chapter 6).
Transmitter does not power on	Check the supply voltage (7–34 V), polarity and the Vbat and GND wires.
Image interference from motors	Check the ground wires and route the video wires as far from the power wires as possible.

8. Information for the EU and Czech Market

8.1 Importer and responsible person in the EU

The product is placed on the European Union market by the importer stated below, who is at the same time the responsible person within the meaning of Article 16 of Regulation (EU) 2023/988 of the European Parliament and of the Council on general product safety (GPSR).

Importer / responsible person in the EU	Rotorama, s.r.o.
Company ID (IČO)	051 57 692
VAT ID (DIČ)	CZ05157692
Registered office	Okrajová 1351, 674 01 Třebíč, Czech Republic
E-mail	info@rotorama.cz
Phone	+420 252 252 098
Website	www.rotorama.com

8.2 Product conformity

CE

- The product bears the **CE** marking and complies with the requirements of the applicable European Union harmonisation legislation.
- A copy of the **EU Declaration of Conformity** is available from the importer at the address stated above or at the e-mail address info@rotorama.cz.
- **Product identification:** the type designation (BLITZ Whoop 5.8G 2.5W VTX) is given on the product packaging; the transmitter housing is marked BLITZ VTX 2.5W.

8.3 Disposal of electrical equipment



- The crossed-out wheeled bin symbol on the product, its packaging or in the documentation means that at the end of its service life the product **must not be disposed of together with mixed municipal waste**.
- Hand it over at a take-back point for electrical equipment – at a collection yard, at a take-back point of a collective system, or at the retailer when purchasing a new equivalent product. Take-back is free of charge for the end user.
- The obligations under Act No. 542/2020 Coll., on end-of-life products, are fulfilled by the importer through a collective take-back system.
- Proper disposal helps prevent negative impacts on the environment and human health and contributes to the reuse of secondary raw materials.

Through its contractual partner **ASEKOL a.s.**, the company ensures the take-back of waste electrical equipment from households and the separate collection of waste electrical equipment, batteries and accumulators in accordance with the applicable legislation. The customer is entitled to hand over old electrical equipment or a battery or accumulator at any collection point of the above contractual partner. The addresses of these take-back points are listed at www.asekol.cz, www.ecobat.cz and also https://visoh2.mzp.cz/RegistrMistZO/RegistrMistZOPublic/MapaMistZpetOdberu.

9. Warranty and rights arising from defective performance

The rights and obligations of the contracting parties are governed by Czech law, in particular by Act No. 89/2012 Coll., the Civil Code, and Act No. 634/1992 Coll., on consumer protection.

- The seller is liable to the buyer for the product being free of defects on receipt. If the buyer is a consumer, a defect may be notified **within two years of receipt** of the product (Section 2165 of the Civil Code).
- If a defect appears within **one year** of receipt, the product is deemed to have been defective already at the time of receipt (Section 2161(5) of the Civil Code).
- When purchasing online, a consumer has the right to **withdraw from the contract within 14 days** of receiving the goods without giving a reason (Section 1829 of the Civil Code).
- Claims should be made with the retailer from whom you purchased the product. The importer's contact details are given in Chapter 8.1.
- The competent body for out-of-court settlement of consumer disputes is the **Czech Trade Inspection Authority**, Štěpánská 796/44, 110 00 Prague 1, www.coi.cz.