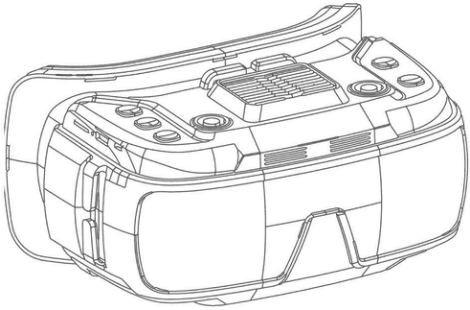
VR200

5.8 GHz FPV video glasses
Instruction Manual



Read this manual carefully before first use and keep it for future reference. This is not a toy – the product is intended for persons aged 14 and over.

Rotorama, s.r.o. · www.rotorama.cz

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1. Safety Instructions

1.1 Manufacturer's instructions

① Please read the instruction manual thoroughly before operation, and be familiar with the product features!

② Age suggestion: **over 14 years old**. Children under the age of 14 who use any monitor at close range may cause eye development problems. **This is not a children's toy!**

③ Please avoid using the product in a humid environment!

④ Please use a standard USB charger, and the charging voltage can only be **5–23 V**.

⑤ HDMI input and RF input cannot work at the same time. It is forbidden to insert external video in RF receiving mode.

⑥ Please don't use corrosive cleaner to wipe the product!

1.2 General rules for safe use

- Do not walk, drive a vehicle or operate machinery while wearing the goggles – you cannot see your surroundings.
- When flying with FPV goggles, an **observer** who watches the drone directly must stand next to you (see Chapter 7).
- Never leave the goggles with the lenses facing direct sunlight. The lenses focus the light onto the display and can damage it permanently.
- Do not cover the fan outlet [7] or the ventilation openings.
- Stop using the goggles if you feel nausea, a headache or eye strain.
- Do not disassemble or modify the product.

1.3 Built-in Li-Po battery

- The goggles contain a built-in lithium polymer (Li-Po) battery. Charge it under supervision, on a non-flammable surface and away from flammable materials.
- Do not expose the product to high temperatures, fire or direct sunlight (e.g. behind a car window).
- Protect the product from drops, impacts and mechanical damage. If the housing deforms, swells, heats up or gives off an odour, disconnect the product immediately, stop using it and contact your retailer.
- Do not store the product with a fully discharged battery; recharge it regularly during longer storage.

2. Product Description

2.1 Product features

- New refractive optical path design, small size and light weight.
- The object distance can be adjusted to match **0–700°** myopia (see the note below).
- Low power consumption, working current of 1100 mA.
- High-sensitivity dual-filtering 5.8 GHz receiving module, strong anti-interference, dual diversity reception and more stable signal.
- Universal 40 channels with automatic frequency search function.
- 3.5" 1024 × 600 resolution high-brightness IPS screen.
- Built-in 3.7 V / 2000 mAh large-capacity Li-Po battery.
- Universal USB-C charging interface, which supports 5–23 V wide voltage charging.
- Real-time video with virtually no delay.
- Menu in 8 languages.
- External HDMI signal input; HDMI input video can be recorded by the DVR.

※ The range 0–700° is given in the Chinese myopia notation (100° = 1 dioptre), i.e. approximately 0 to −7 D.

2.2 Specifications

Model	VR200
Product name	5.8 GHz FPV video glasses
Display	3.5" high-brightness IPS screen
Resolution	1024 × 600
Aspect ratio	16:9
View angle	360° (full view angle – manufacturer's data)
Backlight brightness	500 cd/m²
Video delay	less than 10 ms
Receiver	5.8 GHz, 40 channels (bands A, B, E, F, R), automatic frequency search, dual diversity reception
Antenna connectors	2× SMA with inner pin – for antennas with SMA inner hole connector
Charging port	USB-C, charging voltage 5–23 V
Video input	mini HDMI

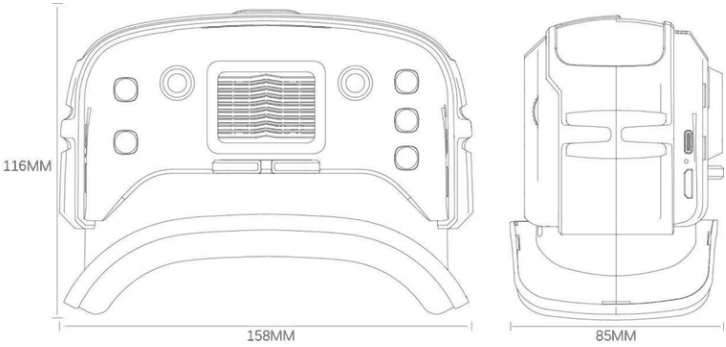
Menu languages	Chinese, English, Japanese, German, French, Spanish, Italian, Russian
Battery	built-in Li-Po 3.7 V / 2000 mAh
Working current	1100 mA
Recommended adapter	12 V / 2 A or 5 V / 2 A
Body size	158 × 116 × 85 mm
Body weight	350 g (excluding antennas)

2.3 Frequency table (MHz)

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

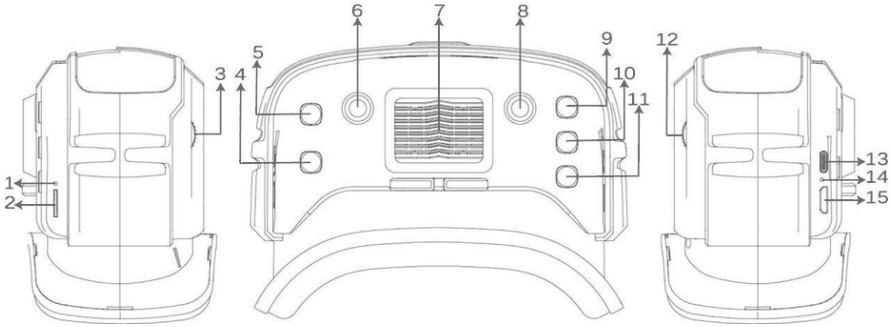
Channels outside the 5725–5875 MHz band – see Chapter 7.2.

2.4 Dimensions



Dimension drawing – antennas and headband are not shown.

3. Controls and Connectors



Left side, front and right side of the goggles

[1] **DVR indicator** – displays the different working states of the DVR.

[2] **TF card slot** – for a high-speed memory card of max. 32 GB.

[3] **Adjusting gear A** – rotating the gear pushes the inner lens and adjusts the object distance (focus).

[4] **Power button** – long press (3 s) to turn on / off; short press to enter the menu and switch to the next menu item with every press.

[5] **Search button** – short press for automatic signal search (finally locks the frequency point with the strongest signal); long press (3 s) to enter the HDMI input mode.

[6] **Antenna connector A** – SMA with inner pin, for an antenna with SMA inner hole connector.

[7] **Fan outlet**

[8] **Antenna connector B** – SMA with inner pin, for an antenna with SMA inner hole connector.

[9] **Band button** – short press to switch the frequency band (cyclically A–B–E–F–R); in the menu it changes the parameter value.

[10] **REC button (red)** – short press to start / stop recording.

[11] **CH button** – short press to switch the frequency point (cyclically 1–8); in the menu it changes the parameter value.

[12] **Adjusting gear B** – rotating the gear pushes the inner lens and adjusts the object distance (focus).

[13] **USB-C charging port** – charges the built-in battery, DC 5–23 V.

[14] **Charging indicator** – red when charging, green when fully charged.

[15] **Mini HDMI port** – external video input.

4. Getting Started

4.1 Charging the battery

- Fully charge the battery before first use.
- Connect the charger to the USB-C port [13]. A 12 V / 2 A or 5 V / 2 A charger is recommended; the charging voltage can only be 5–23 V.
- The indicator [14] is red while charging and green when fully charged.

4.2 Antennas

The goggles have two antenna connectors [6] and [8] for diversity reception. Screw 5.8 GHz antennas with SMA inner hole connectors onto both connectors and tighten them by hand. Always use both antennas for stable reception.

4.3 Switching on and focusing

① Switch the goggles on by a long press (3 s) of the power button [4].

② Put on the goggles and focus the image by rotating the adjusting gears [3] and [12]. Short-sighted users can set a correction of 0–700° in this way.

③ Switching off: long press (3 s) of the button [4] again.

4.4 Tuning a channel

- **Automatically:** short press the search button [5]. The goggles scan the channels and lock onto the frequency with the strongest signal.
- **Manually:** select the band (A–B–E–F–R) with the Band button [9] and the channel (1–8) with the CH button [11]. The channel frequencies are listed in the table in Chapter 2.3.

The selected channel must match the channel set on the drone's video transmitter (VTX).

4.5 HDMI input

- Long press (3 s) the search button [5] to enter the HDMI input mode.
- Connect the external video source to the mini HDMI port [15].
- Video from the HDMI input can be recorded by the DVR.

※ HDMI input and RF input cannot work at the same time. Do not connect external video in RF receiving mode.

5. Menu

With the goggles switched on, short press the power button [4] to enter the menu.

▶ **Button functions in the menu**

Button	Function
[4] Power	scroll to the next menu item
[5] Search	automatic channel search
[9] Band	parameter adjustment
[10] REC	no function
[11] CH	parameter adjustment

6. Recording and Playback (DVR)

6.1 DVR specifications

Memory card	TF (microSD), max. 32 GB, high-speed
Video size	VGA / D1 / HD (optional)
Recording time	off / 3 min / 5 min / 10 min (optional)
Frame rate	30 fps
Compression format	MJPEG
Video file format	AVI

6.2 Recording

- Insert a high-speed TF (microSD) card of max. 32 GB into the slot [2].
- Short press the REC button [10] to start / stop recording. The DVR indicator [1] shows the recording status.
- The video size (VGA / D1 / HD) and recording time (off / 3 / 5 / 10 min) are set in the menu.

6.3 Playback

Button	Function in playback mode
[4] Power	return / exit playback mode
[5] Search	delete the current file
[9] Band	select next video; fast forward while playing
[10] REC	play / pause
[11] CH	select previous video; rewind while playing

To enter the DVR playback mode, select the *DVR* option in the menu.

7. Operation and Regulations

7.1 Law of the country of operation

Regulations (EU) 2019/947 and 2019/945 apply in all member states of the European Union, but national implementing rules differ from country to country – registration portals, minimum pilot age, geographical zones, compulsory insurance, permitted frequency bands and maximum transmitting power. The information in this chapter describes the situation in the Czech Republic. If you operate the product in another country, you must comply with the regulations of the country in which you use it.

7.2 Frequency bands in the Czech Republic

The goggles are a receiver only – they do not transmit. They receive frequencies of 5645–5945 MHz. In the Czech Republic, however, video transmission by short-range devices (VTX) is permitted only in the band under the general authorisation of the Czech Telecommunication Office (ČTÚ):

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

The centre frequency of these channels lies outside the permitted band: band E – all channels; band F – channel 8; band R – channels 1, 2, 7, 8. A video transmitter must not be operated on these channels in the Czech Republic without an individual licence.

❖ The user is responsible for setting the channel and power of the video transmitter. Outside the Czech Republic, the bands and limits of the respective country apply.

7.3 Flying with FPV goggles

- Under Regulation (EU) 2019/947, a pilot flying a drone with FPV goggles must have an **observer** next to him who watches the drone directly without optical aids.
- Observe the rules for drone operation in the relevant category and subcategory, in particular the maximum flight height and the prohibition of flying over assemblies of people.
- DVR recordings may contain personal data of third parties – observe the rules on privacy and personal data protection when recording and publishing them.

7.4 Care and storage

- Clean the lenses with a dry, soft lens cloth.
- Wipe the housing with a dry or slightly damp cloth; do not use corrosive cleaners.
- Store the goggles in a dry place, away from direct sunlight and heat sources.

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.cz

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 (VR200) and the serial number or batch number are given on the product's rating label.

8.3 Disposal of electrical equipment and batteries



- 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 product contains a built-in rechargeable battery. Where possible, hand it over together with the device – do not dispose of the battery in mixed waste or in fire.
- 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.