DMKR 008D Pro

5.8GHz FPV Goggles with DVR
User Manual



Read the entire user manual carefully before first use, especially the safety instructions in Chapter 1. Keep this manual for future reference.

Recommended age: 14 years and above. This product is not a toy.

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1. Safety Instructions

1.1 General

- Read the entire user manual before operation and become familiar with the product functions.
- **Recommended age: 14 years and above.** Use of any near-eye display by children under 14 may affect eye development. This product is not a toy.
- Do not use the product in wet or humid environments. Protect it from rain and water ingress.
- Use a standard USB charger only. The charging voltage must be 5–23 V.
- Never use the goggles while walking, driving, cycling or during any other activity that requires you to watch your surroundings.
- If you experience eye strain, headache, dizziness or nausea, remove the goggles immediately and take a break. Take regular breaks during prolonged use.
- Persons prone to epileptic seizures or loss of consciousness when watching flashing images should consult a doctor before use.
- Do not expose the lenses to direct sunlight – the lenses can focus sunlight onto the display and damage it permanently. Never put the goggles down with the lenses facing the sun.
- Do not disassemble or modify the product. There are no user-serviceable parts inside.

1.2 Built-in Battery

The goggles contain a built-in lithium-polymer (Li-Po) battery. Improper handling may cause overheating, fire or explosion.

- Always charge under supervision, on a non-flammable surface and away from flammable materials.
- Do not charge or leave the goggles in direct sunlight, in a hot car or near heat sources.
- Protect the product from drops, impacts and mechanical damage.
- If the housing deforms, or the product becomes excessively hot, smells or emits smoke, stop charging and using it immediately, disconnect the charger and move the product to a safe, non-flammable place.
- Do not use a product with a damaged battery; contact your dealer.

1.3 Flying with a Drone and Frequencies

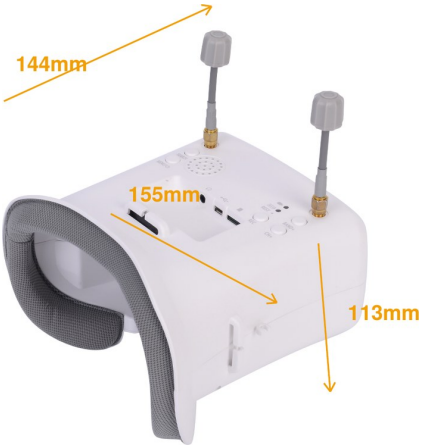
Regulations (EU) 2019/947 and 2019/945 apply in all member states of the European Union, but national implementing rules differ from country to country – registration portals, minimum pilot age, geographical zones, mandatory insurance, permitted frequency bands and maximum transmit power. The information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

- The goggles do not transmit anything – they only receive the image from the video transmitter (VTX) on the drone. The user is responsible for the channel and power settings of the video transmitter.
- In the Czech Republic, a video transmitter may be operated without an individual licence only in the **5725–5875 MHz** band at a maximum of **25 mW e.i.r.p.** (CTU general authorisation VO-R/10). Channels outside this band may only be used by holders of the relevant licence, e.g. radio amateurs (see Chapter 7.1).
- When flying with FPV goggles, the pilot cannot see the drone directly. In the “open” category, an **unmanned aircraft observer** must therefore stand next to the pilot, keep the drone in direct visual line of sight without optical aids and warn the pilot of hazards.
- Observe the drone rules applicable at the place of flight, in particular the maximum height, the prohibition on flying over assemblies of people and geographical zones.

2. Product Description

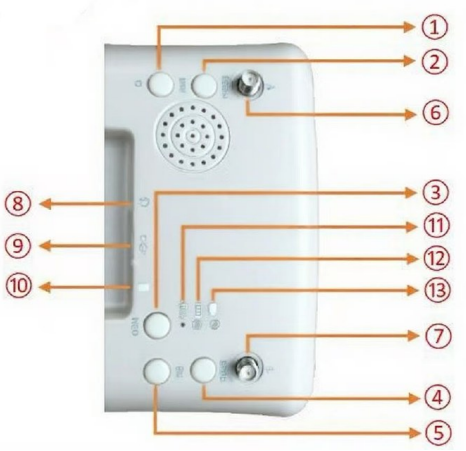
2.1 Features

- Built-in DVR for recording video anytime and anywhere.
- Low power consumption.
- Dual-antenna reception for more stable signal performance.
- One-button auto scan for fast frequency search.
- 4.3-inch 800 × 480 high-brightness LCD screen.
- Built-in high-sensitivity 5.8GHz 40-channel receiver with RaceBand support.
- Built-in 3.7 V / 2000 mAh high-capacity Li-polymer battery.
- Universal USB charging interface.
- Real-time video return with ultra-low latency.
- Bilingual menu support: Chinese and English.
- Supports external video signal input or output.



Dimensions (antennas and headband not included)

2.2 Controls and Ports



Controls and ports on the top and side of the goggles

① **Key 1:** Short press to enter MENU mode; long press for more than 2 seconds to power on/off.

② **Key 2:** Short press to start auto scan; long press for more than 1.5 seconds to enter AV mode.

③ **Key 3:** Short press to start or stop recording.

④ **Key 4:** Short press for Band+; cycles through A-B-E-F-R.

⑤ **Key 5:** Short press for Channel+; cycles through channels 1-2-3-4-5-6-7-8.

⑥ **Antenna Port A:** RP-SMA male.

⑦ **Antenna Port B:** RP-SMA male.

⑧ **AV Jack:** Outputs video signal in RF receiving mode; accepts video input in AV mode.

⑨ **Micro-USB Charging Port:** Supports DC 5–23 V wide-voltage charging.

⑩ **Card Slot:** For inserting a memory card.

(11) **RESET:** Power reset.

(12) **Charging Indicator:** Red while charging; green when fully charged.

(13) **REC Indicator:** Indicates different DVR operating states.

3. Specifications

Section	Item	Specification
General	Model	008D Pro
	Product Name	5.8G FPV Goggles
LCD Screen	Screen Size	4.3-inch
	Resolution	800 × 480
	Aspect Ratio	16:9
	Viewing Angle	Full-view
	Brightness	500 cd/m², high-brightness LED backlight
Performance	Video Latency	< 20 ms
Lens	Lens Type	2.8× Fresnel lens, 92% light transmittance with minimal image distortion
Interface	Antenna	2 × RP-SMA male
	USB	Battery charging interface
	AV Jack	External video signal input or output
	Card Slot	TF card, 32 GB (Class 10 recommended)
DVR	Recording Size	VGA / D1 / HD (selectable)
	Recording Time	OFF / 3 min / 5 min / 10 min (selectable)
	Frame Rate	30 fps
	Compression / File	MJPEG / AVI
Languages	Menu Language	Chinese / English
Power	Input Adapter	DC 5 V / 2 A, supports DC 5–23 V wide-voltage charging
	Battery	3.7 V / 2000 mAh Li-Po, built-in
	DVR ON Runtime	Approx. 2.5 hours per full charge
	DVR OFF Runtime	Approx. 3.5 hours per full charge
Power Consumption	Normal Mode	400 mA @ 3.7 V
	Recording Mode	620 mA @ 3.7 V
	Max Charging Current	500 mA
Body	Dimensions	155 × 144 × 113 mm
	Weight	300 g (with headband, antennas not included)

4. Getting Started

① **Charging the battery:** connect a standard USB charger (DC 5 V / 2 A, charging voltage 5–23 V) to the Micro-USB charging port ⑨. The charging indicator (12) lights red while charging and turns green when fully charged.

② **Antennas:** screw the antennas onto antenna ports A ⑥ and B ⑦ (RP-SMA male). Tighten the antennas by hand only, without tools.

③ **Memory card:** for recording, insert a TF (microSD) card into the card slot ⑩; Class 10 is recommended.

④ **Power on:** press and hold Key ① for more than 2 seconds. Power off the goggles the same way.

⑤ **Channel setting:** switch on the video transmitter on the drone and tune to its channel – automatically with Key ② or manually with Keys ④ and ⑤ (Chapter 5.1).

※ If the goggles stop responding to the keys, use the RESET button (11).

5. Operation

5.1 Band and Channel Selection

- **Auto scan:** short press Key ②. The goggles scan the channels and tune to the received signal.
- **Manual band selection:** Key ④ (Band+) cycles through bands A-B-E-F-R. Band R is RaceBand.
- **Manual channel selection:** Key ⑤ (Channel+) cycles through channels 1-2-3-4-5-6-7-8 within the selected band.
- The frequencies of all 40 channels are listed in Chapter 7.1.

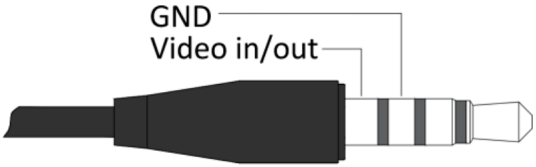
5.2 Menu

In normal mode, press Key ① to enter menu mode. In MENU mode, the keys have the following functions:

Key	Function in MENU mode
①	Scroll through menu options
②	Auto scan
③	Invalid
④	Enter / Value +
⑤	Enter / Value −

5.3 AV Mode and AV Port

In RF receiving mode, the AV jack ⑧ outputs the received video signal, e.g. for an external monitor or recorder. Long press Key ② for more than 1.5 seconds to enter AV mode – the jack then accepts an external video input.



AV port pinout: GND = ground, Video in/out = video signal input / output

- Video output and video input cannot operate at the same time.
- Video input from the AV port cannot be recorded.

6. Recording and Playback (DVR)

6.1 Recording

- Before recording, insert a TF (microSD) memory card into the card slot ⑩; Class 10 is recommended.
- Short press Key ③ to start or stop recording. The REC indicator (13) indicates the DVR operating state.
- Video is saved as AVI files (MJPEG compression, 30 fps). The recording size (VGA / D1 / HD) and recording time (OFF / 3 / 5 / 10 min) are selectable.
- Runtime per full charge is approx. 2.5 hours with DVR on and approx. 3.5 hours with DVR off.

6.2 Playback

In menu mode, select the **DVR** option to enter DVR mode. In DVR mode, the keys have the following functions:

Key	Function in DVR mode
①	Return / exit playback mode
②	Delete current file
③	Play / pause
④	Select next video / fast forward during playback
⑤	Select previous video / fast rewind during playback

※ Deleting a file with Key ② cannot be undone.

7. Frequency Table and Maintenance

7.1 Frequency Table (MHz)

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*

※ Frequencies in *italics* lie outside the 5725–5875 MHz band. In the Czech Republic, a video transmitter may be operated on these channels only by a holder of the relevant licence (Chapter 1.3). Reception on the goggles is not restricted.

7.2 Maintenance and Storage

- Clean the lenses with a soft microfibre cloth intended for optics. Do not use solvents, alcohol or abrasive materials.
- Wipe the housing with a dry or slightly damp cloth. Never immerse the product in water.
- Store the goggles in a dry place, away from direct sunlight and heat sources, with the antennas removed or positioned so that the antennas and ports cannot be bent.
- During long-term storage, do not let the battery discharge completely and recharge it every few months.

7.3 Troubleshooting

Problem	Possible cause and solution
Goggles do not power on	Battery is flat – charge it. Hold Key ① for more than 2 seconds.
No image, only noise	The goggles and the video transmitter are not on the same channel – use auto scan ② or set the channel manually. Check that the video transmitter is switched on and the antennas are fitted. The goggles must not be in AV mode.
Interference, short range	Check that the antennas are tight and undamaged. Try another channel with less interference.
Recording does not work	The memory card is missing, full or damaged. Insert a Class 10 TF (microSD) card. Video from the AV input cannot be recorded.
Goggles do not respond to the keys	Press the RESET button (11).

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 (008D Pro) is shown on the product and on its packaging.

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.