DMKR 5803

5.8 GHz 4.3" FPV monitor with DVR
User manual



Read the entire instruction manual carefully before first use and keep it for future reference. The product is intended for persons over 14 years of age. This is not a toy.

Importer: Rotorama, s.r.o. · www.rotorama.cz

Contents

1. Safety instructions

2. Product description

2.1 Features

2.2 Dimensions

2.3 Controls and connectors

3. Power supply and charging

4. Operation

4.1 Power on and off

4.2 Band and channel selection

4.3 AV mode – video input and output

4.4 Menu

5. Recording and playback (DVR)

5.1 Memory card

5.2 Recording

5.3 Playback

6. Specifications

6.1 Specifications

6.2 Frequency table

6.3 Frequencies and operation in the Czech Republic

7. Care, maintenance and troubleshooting

8. Information for the EU and Czech Market

9. Warranty and rights arising from defective performance

1. Safety instructions

Manufacturer's instructions:

① Read the entire instruction manual to become familiar with the features of the product before operating.

② Age recommendation: over 14 years old. Using any near-eye displays on children under 14 can cause eye development problems. This is not a toy.

③ Please avoid wet or humid environments.

④ Video output and input cannot work at the same time.

▶ Built-in battery

- The monitor contains a built-in Li-ion polymer (Li-Po) battery. Charge it only under supervision, on a non-flammable surface and away from flammable materials.
- Do not expose the product to high temperatures, direct sunlight in hot weather (e.g. behind a car windscreen) or fire.
- If the product becomes excessively hot, swells, smells or emits smoke while charging or in use, disconnect the power immediately, stop using the product and contact the seller.
- Do not disassemble or puncture the product and protect it against drops and impacts. Do not remove the built-in battery – leave repairs to a service centre.

▶ Operation

- Do not watch the monitor while walking, driving a vehicle or doing anything else that requires your attention.
- When flying an FPV drone, follow the regulations of the country in which you fly. In the EU, flying by FPV image requires an observer who keeps the drone in direct sight.
- Protect the display from scratches and pressure. Do not use the product with a damaged housing or display.
- Keep the product out of the reach of small children.

2. Product description

The DMKR 5803 is a 4.3" FPV monitor with a built-in 40-channel 5.8 GHz analogue video receiver and a DVR recording module. It is used to receive and record video from the video transmitter (VTX) of an FPV drone or model. The monitor only receives – it does not transmit anything.

2.1 Features

- with DVR, you can record videos anytime and anywhere,
- low power consumption,
- double antenna reception to make the signal more stable,
- auto-searching, one-key frequency search,
- 4.3" 800 × 480 high-brightness LCD screen,
- built-in super-sensitive 5.8 GHz 40-channel receiver, especially with RaceBand,
- built-in 3.7 V / 1200 mAh high-capacity Li-ion polymer battery,
- universal USB charging interface,
- real-time video return, very low time delay,
- bilingual menu in Chinese and English,
- support for external video signal input or output,
- support for DC 5–23 V wide voltage.

2.2 Dimensions



Monitor dimensions: 146 × 80 × 13 mm

2.3 Controls and connectors



Controls (front and side view)

No.	Item	Function
①	Key 1 (Power)	Short press: enter MENU mode. Long press (more than 2 s): power ON/OFF.
②	Key 2 (Search)	Short press: auto-searching. Long press (more than 1.5 s): enter AV mode.
③	Key 3 (Rec)	Short press: start or stop recording.
④	Key 4 (Band+)	Short press: Band+ (changes bands A–B–E–F–R circularly).
⑤	Key 5 (CH+)	Short press: Channel+ (changes channels 1–2–3–4–5–6–7–8 circularly).
⑥	Antenna port A	RP-SMA male
⑦	Antenna port B	RP-SMA male
⑧	AV jack	In RF receiving mode outputs the video signal; in AV mode accepts a video signal input.
⑨	Micro-USB charging port	Supports DC 5–23 V wide voltage.
⑩	Card slot	Used for inserting a TF (microSD) memory card.
(11)	RESET	Power reset.
(12)	Charging indicator	Red while charging, green when fully charged.
(13)	REC indicator	Shows the different working states of the DVR module.

3. Power supply and charging

The monitor is powered by a built-in **3.7 V / 1200 mAh** Li-ion polymer battery. The battery is charged via the Micro-USB charging port ⑨.

① Connect the monitor to a power adapter. The manufacturer recommends a **DC 5 V / 2 A** adapter; the charging input supports DC 5–23 V.

② While charging, the charging indicator (12) lights **red**.

③ When fully charged, the indicator lights **green**. Disconnect the adapter.

Item	Value
Working time per full charge – DVR module ON	approx. 2.5 h
Working time per full charge – DVR module OFF	approx. 3.5 h
Operating current in normal mode	400 mA at 3.7 V
Operating current in record mode	400 mA at 3.7 V
Maximum charge current of the built-in battery	500 mA

※ Charge only under supervision and on a non-flammable surface. Do not use damaged cables or adapters.

If you do not use the monitor for a longer period, partially charge the battery before storage and recharge it regularly during storage. A fully discharged battery left uncharged for a long time may be permanently damaged.

4. Operation

4.1 Power on and off

① Screw both antennas onto antenna ports ⑥ and ⑦.

② Switch the monitor on or off by pressing and holding Key 1 ① (more than 2 s).

③ If the monitor does not respond to the keys, use RESET (11) (power reset).

4.2 Band and channel selection

The monitor receives 40 channels in bands A, B, E, F and R (RaceBand), see the frequency table in Chapter 6.2. The band and channel of the monitor must match the setting of the video transmitter (VTX).

- **Auto-searching:** short press Key 2 ②. The monitor searches for a channel on which it receives a signal.
- **Manual band selection:** short press Key 4 ④ to change bands circularly A–B–E–F–R.

- **Manual channel selection:** short press Key 5 ⑤ to change channels circularly 1–8.

4.3 AV mode – video input and output

- In RF receiving mode, the AV jack ⑧ **outputs** the received video signal – you can connect, for example, another monitor or a recording device.
- Long press (more than 1.5 s) Key 2 ② to enter **AV mode**. The AV jack ⑧ then serves as an external video signal **input**.
- Video output and input cannot work at the same time.



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

4.4 Menu

In normal mode, short press Key 1 ① to enter MENU mode. The menu is available in English and Chinese.

Key	Function in MENU mode
Key 1 ①	Scroll the options bar
Key 2 ②	Auto-searching
Key 3 ③	Invalid (no function)
Key 4 ④	Enter / Value +
Key 5 ⑤	Enter / Value −

5. Recording and playback (DVR)

5.1 Memory card

- For recording, insert a TF (microSD) memory card of **up to 32 GB** into slot ⑩. The manufacturer recommends **Class 10** cards.
- Insert and remove the card only with the monitor switched off.
- A memory card is not part of the product unless it is expressly listed in the package contents.

5.2 Recording

- Short press Key 3 ③ to start or stop recording.
- The REC indicator (13) shows the different working states of the DVR module.
- Recordings are saved in **AVI** format (MJPEG compression, 30 frames per second).
- Selectable options: recording resolution (VGA / D1 / HD), recording sound (ON / OFF) and *REC time* (OFF / 3 min / 5 min / 10 min).

5.3 Playback

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

Key	Function in DVR mode
Key 1 ①	Return / quit playback mode
Key 2 ②	Delete current file
Key 3 ③	Play / pause
Key 4 ④	Forward selection of video; fast forward when a video is playing
Key 5 ⑤	Backward selection of video; fast rewind when a video is playing

※ A file deleted with Key 2 cannot be restored.

6. Specifications

6.1 Specifications

Parameter	Value
Manufacturer	DMKR, 7/F, Jinma Bld, No. 4, Shihuan Road, Shiyan Street, Baoan District, Shenzhen 518104, China; ann@dmkrflight.com
Model	DMKR 5803
Name	5.8 GHz FPV monitor with DVR
Display	IPS LCD 4.3", 800 × 480 pixels, aspect ratio 16 : 9
View angle	full view
Brightness	500 cd/m², high-brightness LED backlight
Video delay	less than 20 ms
Receiver	5.8 GHz, 40 channels (bands A, B, E, F, R), receive only
Antenna connectors	2× RP-SMA male
USB	Micro-USB – battery charging
AV jack	external video signal input or output
Memory card	TF (microSD) up to 32 GB, Class 10 recommended
Recording (DVR)	resolution VGA / D1 / HD; sound ON / OFF; REC time OFF / 3 / 5 / 10 min; 30 fps; MJPEG; AVI files
Menu languages	English, Chinese
Power adapter	DC 5 V / 2 A, supports DC 5–23 V
Battery	built-in Li-ion polymer, 3.7 V / 1200 mAh
Working time	DVR module ON approx. 2.5 h; DVR module OFF approx. 3.5 h
Operating current	normal mode and record mode 400 mA at 3.7 V
Max. charge current	500 mA
Dimensions	146 × 80 × 13 mm
Weight	159 g (antennas not included)

6.2 Frequency table

Channel frequencies in 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

6.3 Frequencies and operation in the Czech Republic

The monitor is a radio receiver – it does not transmit. The operator of the **video transmitter (VTX)** used with the monitor is responsible for compliance with frequency bands and transmitting power.

- In the Czech Republic, the **5725–5875 MHz** range may be used for 5.8 GHz video transmission with a radiated power of no more than **25 mW e.i.r.p.** (CTU general authorisation VO-R/10).
- Channels **E1–E8, F8, R1, R2, R7 and R8** lie outside this range. A video transmitter must not be operated on them in the Czech Republic.
- Radio frequency regulations differ from country to country. If you use the product in another country, follow the regulations of the country in which you operate it.

7. Care, maintenance and troubleshooting

7.1 Care and maintenance

- Clean the display with a soft dry cloth; do not use solvents or abrasive cleaners.
- Unscrew the antennas before transport to avoid damaging the connectors.
- Store the product in a dry place, away from direct sunlight and heat sources.

7.2 Troubleshooting

Problem	Possible cause and solution
Monitor does not switch on	Battery discharged – charge it (Chapter 3). Hold Key 1 for more than 2 s.
Monitor does not respond	Use RESET (11).
No picture, only noise	Band and channel do not match the transmitter – use auto-searching (Key 2) or set the band and channel manually. Check that the transmitter is switched on and that the monitor is not in AV mode.
Picture is disturbed or drops out	Check that both antennas are firmly screwed on. Reduce the distance to the transmitter and remove obstacles between the antennas.
Cannot record	Insert a TF memory card of up to 32 GB, Class 10 recommended. Check that the card is not full.
No signal at the AV output	The output works only in RF receiving mode. In AV mode the jack serves as an input.
Battery does not charge	Check the cable and adapter (DC 5 V / 2 A recommended). While charging, the red indicator (12) must be lit.

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 (DMKR 5803) is given on the product or 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. Any warranty terms of the manufacturer **do not in any way limit** the buyer's rights arising from these regulations.

- 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.