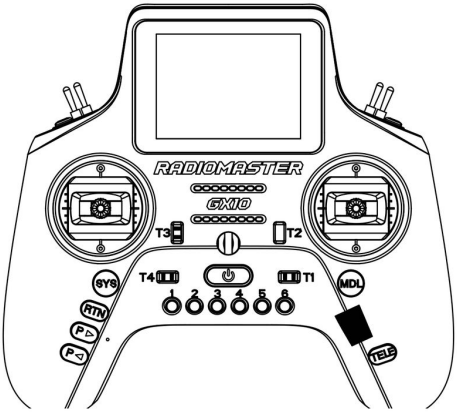
GX10 / GX10 MAX

RadioMaster – EdgeTX radio with ExpressLRS module
User manual



Always install the antenna before inserting the batteries and switching the radio on. Batteries are not included.

www.rotorama.com

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1. Safety instructions

Read this entire manual carefully before first use and keep it for future reference. The manual applies to both versions of the radio – **GX10** and **GX10 MAX**. The product is intended for persons aged 14 and over.

1.1 General rules

Many remote-control models are equipped with powerful motors and sharp propellers. When using or maintaining models, proceed with caution. When performing assembly or maintenance, make sure to disconnect the power to the model and remove the propellers.

- Before flying, always switch on the radio first and only then the model. After landing, disconnect the model battery first and only then switch off the radio.
- Before every flight, check that the correct model is selected in the radio and that the model responds correctly to all controls.
- Set up and test the receiver failsafe (the model's behaviour on signal loss).
- Protect the radio from water, moisture, dust, direct sunlight and drops.

1.2 When not to use the radio

Do not operate the GX10 remote control system under the following conditions:

- in severe weather or strong windy conditions, such as rain, hail, snow, storms, or in strong electromagnetic environments,
- in any situation where visibility is limited,
- in areas where people, property, high-voltage power lines, public roads, vehicles or animals may be present,
- if you feel tired or unwell, or are under the influence of drugs or alcohol,
- if the remote control or model seems to be damaged or not working properly,
- in areas with high 2.4 GHz interference or where 2.4 GHz radio is prohibited,
- when the radio's battery voltage is too low to be used,
- in areas where local regulations prohibit the use of models.

1.3 Antenna

Install the provided antenna in the top of the radio BEFORE installing batteries and turning on the radio. DO NOT operate the radio without the antenna installed and the internal RF module powered on. Doing so will damage the internal RF module and will not be covered under warranty.

A low-profile rotating antenna for the 2.4 GHz band only is fitted at the factory. A dual-band antenna for 2.4 GHz and Sub-GHz operation is included in the package. Use the included MMCX removal tool to change the antenna.

1.4 Antenna separation distance

When operating the radio, maintain a separation distance of at least **20 cm** between your body (excluding fingers, hands, wrists, ankles and feet) and the antenna to meet RF exposure safety requirements as determined by FCC regulations.

1.5 Modifications and liability

- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- RadioMaster does not assume any responsibility for any adverse consequences caused by the use or misuse of this product.

2. Product description

Thank you for choosing the RadioMaster GX10, a versatile remote control system with a built-in ExpressLRS module. Whether you're a beginner or a seasoned professional, the GX10 is designed to meet your needs, offering precision, flexibility, and reliability. As the manufacturer continually enhances its software and hardware, updated versions of this manual may be released.

The **GX10** has X4v2 Hall sensor gimbals; the **GX10 MAX** has all-metal AG01 mini v2 CNC Hall sensor gimbals, a CNC aluminium scroll wheel and a carbon-look finish. All other features and controls are identical.

2.1 Specifications

Parameter	Value
Item	GX10 / GX10 MAX radio
Size	180 × 165 × 83 mm
Weight (without batteries)	456 g (GX10) / 485 g (GX10 MAX)
Frequency	2.4 GHz ISM or Sub-GHz 900 MHz (depending on configuration)
Max. current	875 mA
Voltage range	6.6–8.4 V DC
Radio firmware	EdgeTX
Wireless firmware	ExpressLRS
Gimbals	X4v2 (GX10) / AG01 mini v2 (GX10 MAX), Hall sensor
Gimbal stick thread	M3
Control distance	max. 2 km
Channels	max. 16 (RX dependent)
Antenna gain	2 dB
Display	2.8" IPS touchscreen, 320 × 240 px
Memory	512 MB built-in flash; microSD slot (max. 32 GB, FAT32)
Battery options	2× 3.7 V 18650 Li-ion (not included)
External module	Nano bay
Upgrade method	USB-C
Manufacturer	ShenZhen RadioMaster Co., Ltd, 4th Floor, Yangtian Building, No. 18 Yangtian Road, Xin'an Street, Baoan District, Shenzhen, Guangdong, China; www.radiomasterrc.com

※ Inserting a microSD card disables the built-in flash memory.

2.2 Front side

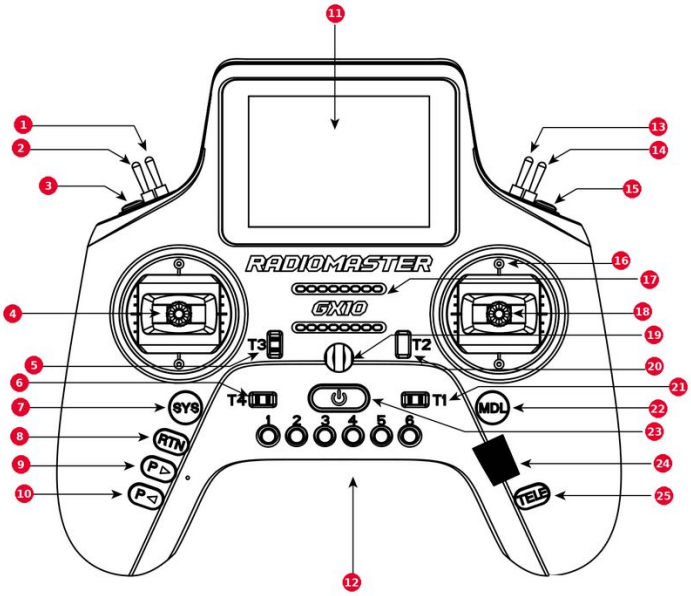


Fig. 1 – front side of the radio

No.	Element	No.	Element
1	3-position switch B	14	3-position switch F
2	3-position switch E	15	Momentary switch D
3	Momentary switch A	16	Adjustment screw E (1.5 mm hex)
4	Left gimbal	17	Speaker
5	Trim T3	18	Right gimbal
6	Trim T4	19	Lanyard loop
7	SYS button	20	Trim T2
8	RTN button	21	Trim T1
9	PAGE> button	22	MDL button
10	PAGE< button	23	Power button
11	2.8" IPS touchscreen	24	Scroll wheel
12	Buttons 1–6	25	TELE button
13	3-position switch C		

2.3 Rear and top side

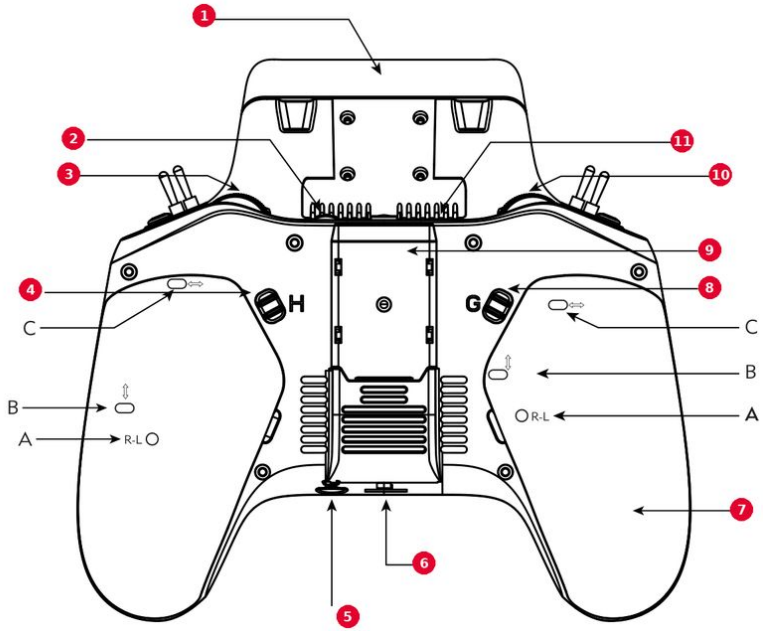


Fig. 2 – rear and top side of the radio (A, B, C – gimbal adjustment screws)

No.	Element	No.	Element
1	Antenna	7	Battery bay
2	DSC trainer port	8	Momentary switch G
3	Dial S2	9	Nano bay for external module
4	Momentary switch H	10	Dial S1
5	Headphone jack	11	USB-C port
6	MicroSD card slot		

2.4 Gimbal adjustment

The gimbals are adjusted with a 1.5 mm hex key without opening the radio. Screws A, B and C are accessible from the rear (Fig. 2), screws E are on the front of the gimbal (Fig. 3). CW = clockwise, CCW = counter-clockwise.

Screw	Function	Rotation
A	Throttle stick self-centering – Mode 1 / Mode 2 conversion	CW to disable self-centering, CCW to enable
B	Vertical tension (up–down)	CW to increase, CCW to decrease
C	Horizontal tension (left–right)	CW to increase, CCW to decrease
D	Throttle stick tension	CW to increase, CCW to decrease
E	Up–down stick travel (38–60°)	CW to decrease, CCW to increase

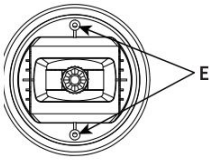


Fig. 3 – screws E on the front of the gimbal

Default: Soft Tension Springs (Low Tension Gimbal Springs included).

2.5 Package contents

- GX10 or GX10 MAX radio controller
- carry case
- gimbal protector
- dual-band antenna
- MMCX removal tool
- USB-C cable
- screen protector
- 1.5 mm hex wrench
- 2× slider delete grommet, 7× switch delete grommet
- RadioMaster sticker set
- manual, inventory card

Batteries are not included.

3. Legal requirements in CZ and the EU

3.1 The law of the country of use applies

EU regulations on radio equipment and unmanned aircraft apply in all member states, but national rules differ – permitted frequency bands, maximum transmit power, registration, geographical zones or mandatory insurance. This chapter describes the situation in the Czech Republic. In another country, you must follow the regulations of the country in which you operate the radio.

3.2 Frequency bands and transmit power

Depending on its configuration, the built-in ExpressLRS module always operates in one band – either 2.4 GHz or Sub-GHz. The following conditions apply in the Czech Republic:

Band	Limit in CZ	Regulation
2400–2483.5 MHz	100 mW e.i.r.p.	VO-R/12/11.2021-11
863–870 MHz	25 mW e.r.p.	VO-R/10/05.2025-5
902–928 MHz	operation not permitted	—

- In the Czech Republic and the EU, use only the **EU868** regulatory domain in the Sub-GHz band. The 902–928 MHz band (FCC915 domain) is reserved for other services in the Czech Republic (mobile networks, railway GSM-R) and must not be used.
- The user is responsible for the power and band settings. Use only the antenna supplied by the manufacturer, without amplifiers.
- According to the manufacturer, the radio transmitter has been tested and found compliant with the regulations for the 2.400–2.4835 GHz range.

EU simple declaration of conformity: RadioMaster declares the radio equipment GX10 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available from the importer (chapter 8.1).

3.3 Model operation

- The operation of unmanned aircraft (drones) in the EU is governed by Regulations (EU) 2019/947 and 2019/945; in the Czech Republic it is supervised by the Civil Aviation Authority (www.caa.gov.cz).
- If a drone has a camera or weighs 250 g or more, its operator must register and display the registration number on the drone.
- Fly only within visual line of sight, no higher than 120 m above ground and never over assemblies of people. When flying with FPV goggles, an observer must stand next to the pilot.
- Respect geographical zones and airspace restrictions; liability insurance is recommended.

4. Power supply and charging

4.1 Suitable batteries

Batteries are not included. The radio is powered by two **3.7 V 18650 Li-ion** cells or two 3.7 V Li-Po cells (2S 7.4 V Li-Po battery pack).

State	Per cell	2 cells (2S)
nominal voltage	3.7 V	7.4 V
fully charged	4.20 V	8.4 V

- If using Li-ion, ensure the cells are **not protected** and are button-top cells.
- Check the voltage and condition of the batteries regularly. Do not use damaged, swollen or deformed batteries.

DO NOT use LiFe battery packs or 18650 lithium-ion batteries with a nominal voltage of 3.6 V and a fully charged voltage of 4.10 V. Charging the incorrect type of battery may damage the charger or cause a fire.

4.2 Installing the batteries

① Install the antenna first (chapter 1.3).

② Make sure the radio is switched off.

③ Insert the batteries into the battery bay on the rear (Fig. 2, item 7). Observe the correct polarity.

④ Close the battery bay and switch the radio on with the Power button (Fig. 1, item 23).

4.3 Charging via USB-C

The GX10 has a built-in USB-C charging function for 3.7 V lithium batteries (Fig. 2, item 11). The charging circuit is only designed to charge 2× 3.7 V Li-ion 18650 or 2× 3.7 V Li-Poly batteries (2S 7.4 V Li-Po battery pack); the nominal battery voltage is 3.7 V, the charged voltage is 4.2 V/cell. The circuit charges the cells with balancing.

- Never charge unattended.
- Always charge in a safe area away from combustible materials.
- Refrain from charging if the radio gets wet or damaged in any way.
- DO NOT charge with the polarity reversed.

5. EdgeTX and ExpressLRS firmware

5.1 Firmware

The GX10 is pre-installed with factory-approved **EdgeTX** firmware, the most stable firmware at the time of release; the built-in RF module runs **ExpressLRS**. Only update the firmware if you are confident in the process – incorrect updates may make the radio inoperable.

Latest manual: www.radiomasterrc.com. Further firmware information: EdgeTX www.edgetx.org, ExpressLRS www.expresslrs.org.

5.2 EdgeTX and ExpressLRS guides

EdgeTX
Official documentation of the EdgeTX radio firmware: menus, model setup, mixes, switches, telemetry. www.edgetx.org.

ExpressLRS
Official ExpressLRS documentation: binding, packet rate, power, failsafe and module updates. www.expresslrs.org.

5.3 ExpressLRS module and packet rate selection

The GX10 is equipped with a built-in dual-band ExpressLRS RF module, offering compatibility with a wide range of ExpressLRS receivers. The module (band, packet rate, power) is set up in the ExpressLRS script: press **SYS** and choose *ExpressLRS* under the *TOOLS* menu. Packet rate **50–500 Hz (2.4 GHz)** is for binding with any ExpressLRS 2.4 GHz receiver.

※ The transmitter and receiver must run a compatible ExpressLRS version and the same regulatory domain. For Sub-GHz, use the dual-band antenna and observe chapter 3.2.

5.4 Binding with a receiver

① TURN OFF the transmitter.

② Cycle power to the receiver 3 times; the receiver LED will flash twice – indicating bind mode.

③ TURN ON the transmitter, press the **SYS** button and choose the *ExpressLRS* LUA script under the *TOOLS* menu. Scroll to *[Bind]* and press enter.

④ The LED on the receiver should now be solid, indicating a successful bind.

6. Operation

6.1 Switching on and off

- Switch the radio on and off with the Power button (Fig. 1, item 23).
- Before switching on, check that the antenna is installed (chapter 1.3).
- After switching on, check that the correct model is selected and that the switches are in a safe position (motors disarmed).

6.2 Pre-flight check

- The radio and model batteries are charged and in good condition.
- The antenna is firmly installed and undamaged.
- The correct model is selected in the radio, the model is bound and responds correctly to the sticks and switches.
- The receiver failsafe is set up and tested.
- The module band and power comply with the regulations of the country of use (chapter 3.2).

6.3 Other connectors

- **DSC trainer port** (Fig. 2, item 2) – connecting two radios for training.
- **Nano bay** (Fig. 2, item 9) – for an external transmitter module in Nano format.
- **USB-C** (Fig. 2, item 11) – charging, firmware updates and connection to a computer.
- **Headphone jack** (Fig. 2, item 5) and **microSD slot** (Fig. 2, item 6).

7. Maintenance and troubleshooting

7.1 Maintenance and storage

- Clean the radio with a dry or slightly damp cloth. Do not use solvents or aggressive cleaning agents.
- Use the carry case and gimbal protector for transport.
- Remove the batteries from the radio before long-term storage. Store the radio in a dry place out of the reach of children.
- Do not damage the antenna or its connector; replace a damaged antenna before further use.

7.2 Troubleshooting

Problem	Possible cause and solution
The radio does not switch on	The batteries are discharged or inserted with incorrect polarity. Charge or insert the batteries correctly.
The batteries do not charge	Unsuitable cell type (chapter 4.1) or faulty USB-C cable. Check the cells and the cable.
The receiver does not bind	The receiver is not in bind mode, does not have a compatible ExpressLRS version or the same regulatory domain, or operates in a different band. Repeat the procedure in chapter 5.4.
Short range, signal dropouts	Check the radio and receiver antennas and the selected band and packet rate.

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 (GX10 or GX10 MAX) is marked on the product; the EdgeTX firmware version is shown in the radio's system menu (SYS button).

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

9.1 Rights of the buyer under Czech law

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 manufacturer's warranty terms set out below (Chapter 9.2) **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.

9.2 Manufacturer's warranty terms

❊ The following text is the manufacturer's original warranty statement.

If you experience any issues with your GX10 hardware, please retain your proof of purchase for warranty purposes. To initiate a warranty claim or seek repair assistance, follow these steps:

1. Contact your retailer: contact the retailer where you purchased your GX10 for warranty support.
2. Visit the RadioMaster Warranty Support page for additional assistance or to contact the support team: www.radiomasterrc.com/contact.