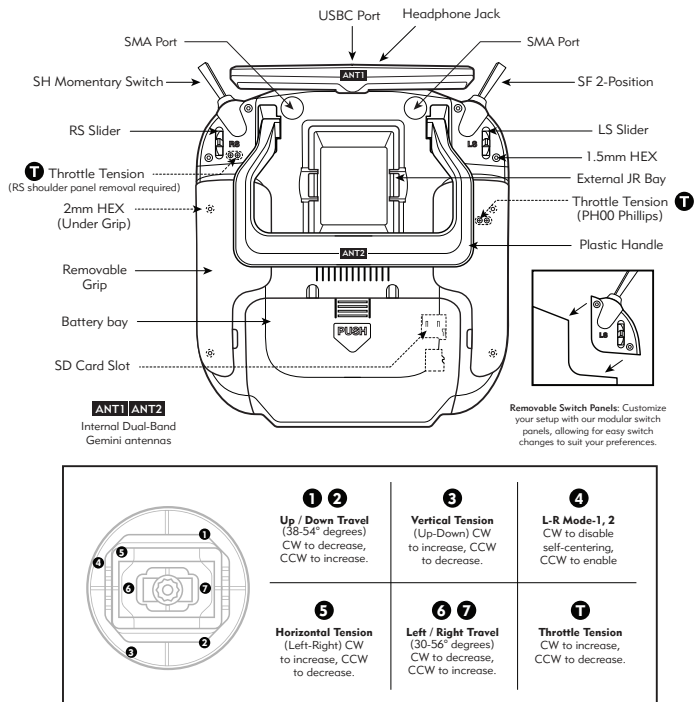




CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the applicable regulations governing a radio transmitter in the specified frequency range.

EU SIMPLE DECLARATION OF CONFORMITY

TX16S MK3 is in compliance with EU directives Directive 2014/53/EU.



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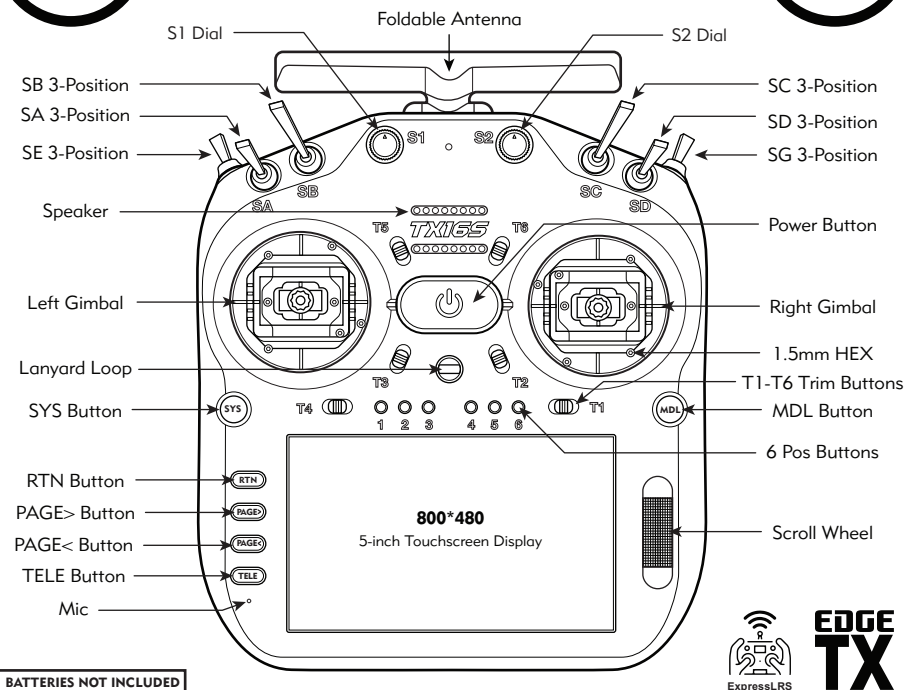
TX16S_{MK3}

**2.4
GHZ**

Quick Start Guide

Gemini-Xross Dual-Band

SUB-G



BATTERIES NOT INCLUDED



SPECIFICATIONS

- | | | | |
|------------------------|------------------------|----------------------|-------------------------------|
| • Item: | TX16S MK3 Radio | • Channels: | Max 16 channels |
| • Size: | 200*178*88mm | • MicroSD card slot: | Yes (card not included) |
| • Weight: | 813g (without battery) | • TFT Display: | 5-inch Full-color Touchscreen |
| • Frequency: | 2.400GHz & Sub-G | • Gimbals: | V6 or AG02 CNC Hall |
| • Internal RF Options: | ELRS 2.4GHz/Sub-G | • Gimbal Sticks: | M4 |
| • Firmware: | EdgeTX | • External module: | JR compatible |
| • Internal storage: | Integrated 4GB flash | • Upgrade Method: | USB |
| • Voltage Range: | 6.6-8.4V DC | | |

1

INTRODUCTION

Thank you for choosing the TX16S MK3, a versatile remote control system featuring dual-band capabilities with 2.4GHz, and Sub-G Gemini-Xrossband technology. Whether you're a beginner or a seasoned professional, the TX16S MK3 is designed to meet your needs, offering precision, flexibility, and reliability.

Please read this guide carefully before operating your new remote to ensure safe and optimal use. We may release updated versions of this manual as we continually enhance our software and hardware.

The TX16S MK3 is compatible with a wide range of applications. If you can build it, the TX16S MK3 can control it. Powered by the robust EdgeTX platform, the TX16S MK3 is ready for seamless integration with your projects.

Follow the links for more detailed guides, firmware updates, and additional resources.

SAFETY INFORMATION

Do not operate the TX16S MK3 remote control system under the following conditions:

- In severe weather or strong windy conditions, such as rain, hail, snow, storms or 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 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 2.4GHz and Sub-G interference or where these radio frequencies are prohibited.
- When the radio's battery voltage is too low to be used.
- In areas where local regulations prohibit the use of aviation models.

BATTERIES & CHARGING

TX16S MK3 has a built-in USB-C smart balance charging function designed specifically for 3.7V lithium batteries. The charging circuit is only designed to charge 2x 3.7V Li-ion 18650 or 2x 3.7V Li-Poly batteries (2s 7.4v Lipo battery pack), the nominal battery voltage is 3.7V, the charged voltage is 4.2V/Cell.

★ APPROVED FOR USE

2x 3.7v Li-ION 18650 (7.4v using supplied tray)

2x 3.7v Li-ION 21700 (Assembled as 7.4v 2s Battery pack)

2x 3.7v Lithium-polymere (Assembled as 7.4v 2s Battery pack)

● DO NOT USE

2s 6.6v LiFe battery pack, 18650 lithium-ion cells with a nominal voltage of 3.6v or LiFEP04 18650 Round cells. Using the built in USB charger with incorrect battery types and voltage may cause damage to the remote control or fire.

If using Li-ion, ensure the cells are not protected and are button-top cells.

Check the health and condition of the batteries regularly. **DO NOT** use damaged cells. Never charge your device unattended. Always charge in a safe area away from flammable materials. If the remote control gets wet or damaged in any way, **DO NOT** charge it.

WARRANTY & REPAIR

If there is any problem with your remote control hardware, please keep the proof of purchase and contact the retailer where you purchased the TX16S MK3.

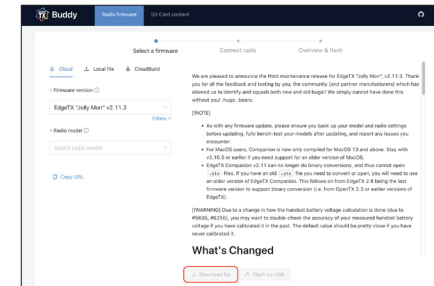
IMPORTANT

FIRMWARE: The TX16S MK3 is pre-installed with the most stable firmware at the factory at time of release. Please only attempt to update the firmware if you are confident in the process. Incorrect firmware updates may cause the remote control to become inoperable.

FIRMWARE UPDATE

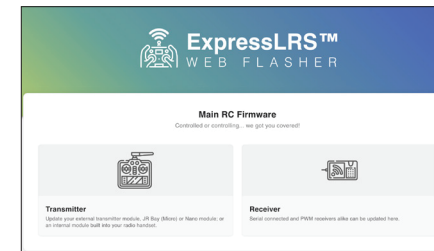
Update EdgeTX (UF2) Firmware

⚠ *Install batteries first – USB power alone is insufficient for firmware flashing.*



1. GO TO buddy.edgetx.org and download the TX16MK3 UF2 firmware.
2. ENTER Bootloader Mode: Hold T1 and T4 trims inward, then press the Power button.
3. CONNECT USB: Two drives appear. (one named UF2)
4. COPY the downloaded .uf2 file to the UF2 drive. The screen shows progress.
5. When complete, EJECT the drive, DISCONNECT the USB cable, and then REBOOT.

✅ Your EdgeTX firmware is now updated.



Update Built-in ELRS Module

1. GO TO expresslrs.github.io/web-flasher
2. SELECT Hardware: TX16S MK3.SET Flash
3. Method: EdgeTX Passthrough.
4. CONNECT the USB to the top port, and choose USB VCP mode.
5. INSTALL the STM32 VCP driver if connecting for the first time.
6. CHECK Full Chip Erase, then CLICK Flash Firmware.

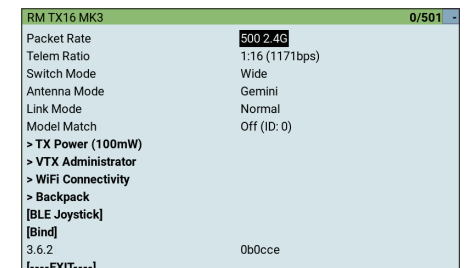
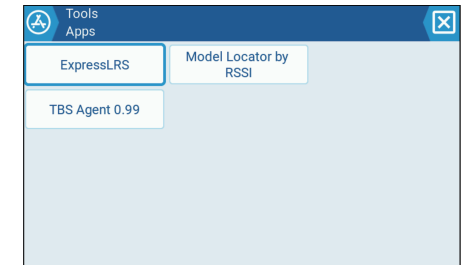
✅ The ELRS module is now updated.

MODEL & PROTOCOL SELECTION

ExpressLRS Version

TX16S MK3 ELRS units are equipped with an internal ELRS module, Transmitting power Default 100mW.

In non-extreme circumstances, 100mW output at 500Hz update rate is recommended, as higher RF output and update rates may significantly reduce battery life and generate excessive heat.



BIND INSTRUCTIONS

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, long press the SYS button and choose ExpressLRS LUA under the TOOLS menu. Scroll to [Bind] and press enter.
4. The LED on the receiver should now be solid, indicating a successful bind.

FCC Warning

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Specific Absorption Rate (SAR) information:

This product meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Model: TX16S MK3 (FCC ID: 2BUHG-TX16SMK3) has also been tested against this SAR limit. This device was tested for typical body-worn operations 0mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 0mm separation distance between the user's body.

Body-worn Operation

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 0mm must be maintained between the user's body, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

EU Warning

This product complies with the radio interference requirements of the European Community.

Product name: TX16S MK3

Product model: TX16S MK3

Manufacturer: Shenzhen Radiomaster Co.,Ltd

Frequency Range:	2402~2480MHz	Max. Transmit Power:	3.83dBm
Frequency Range:	2412~2472MHz	Max. Transmit Power:	14.99dBm
Frequency Range:	2402.4~2479.4MHz	Max. Transmit Power:	12.42dBm
Frequency Range:	863.8~869.05MHz	Max. Transmit Power:	8.40dBm

Simplified EU Declaration Of Conformity

The simplified EU declaration of conformity referred to in Article 10(9) shall be provided as follows:

Hereby, Shenzhen Radiomaster Co.,Ltd declares that radio equipment type TX16S MK3 is in compliance with Directive 2014/53/EU, and this product is allowed to be used in all EU member states.

There are no countries with restricted usage.

eVatmaster Consulting GmbH

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Tel: +496995179070