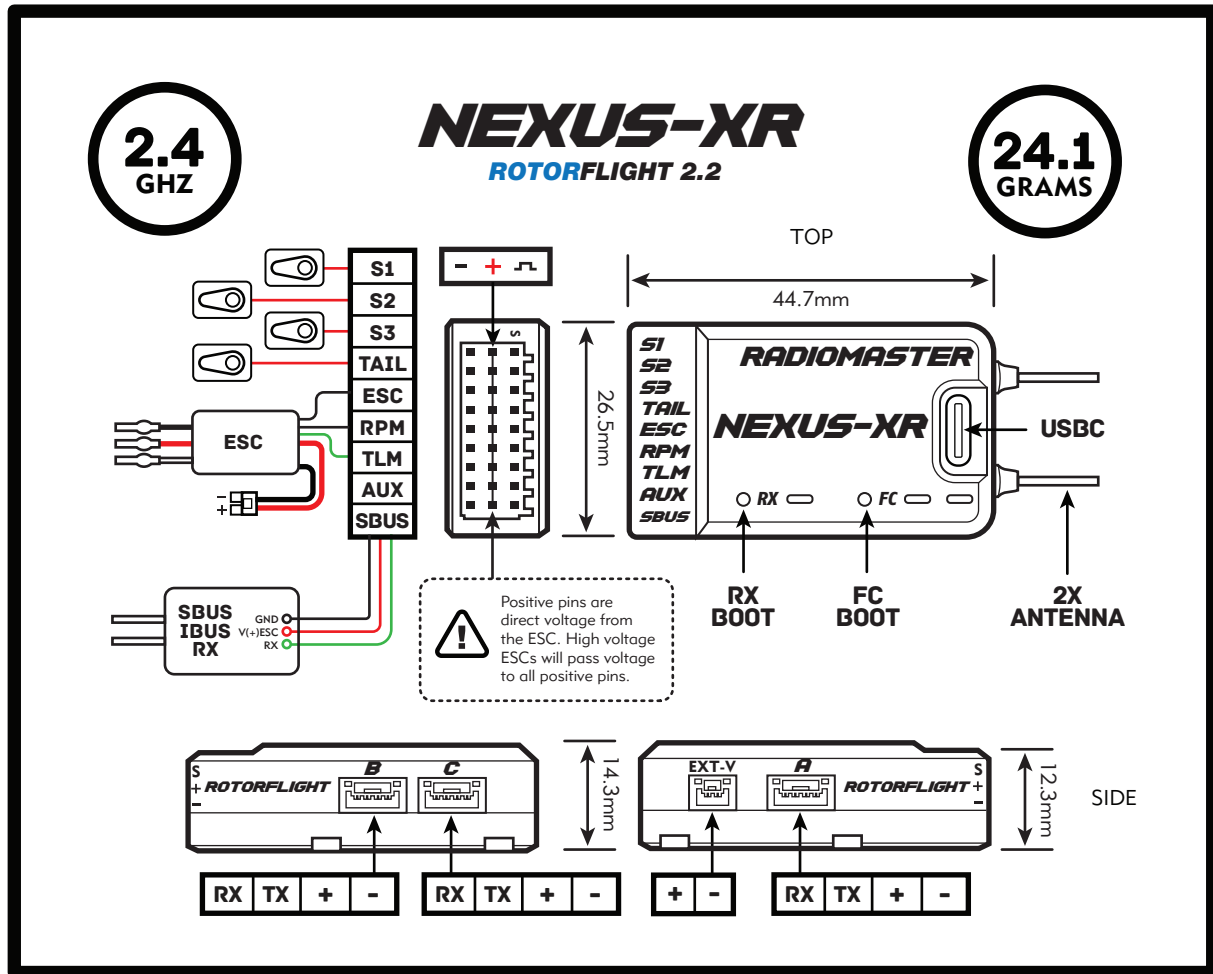




The Nexus-XR revolutionizes helicopter flight controllers by integrating a cutting-edge ExpressLRS receiver with dual Semtech SX1281 2.4GHz transceivers. This built-in receiver delivers exceptional RF performance, superior range, reliability, and effortless setup. It eliminates the need for external receivers, simplifying installation and reducing weight.

At the core of the Nexus-XR is the powerful STM32F722 MCU, paired with the ICM42688P 6-axis MEMS motion-tracking device. This device provides excellent vibration resistance and enhanced signal rejection, making it ideal for electric and nitro helicopters.

The Nexus-XR features several key upgrades. An improved BEC delivers more stable power to electronics, enhancing reliability, while the external voltage input now supports a range of 3.6V to 70V. Memory has been upgraded to 256MB, enabling longer flight logs. The CNC-machined aluminum case is sleeker yet still serves as a protective shield and heat sink, keeping the system cool during intense flights.

Designed for ultimate convenience, the Nexus-XR's compact, rugged build fits a wide range of helicopter sizes, from 250- to 700-class models, and delivers top performance in demanding conditions.

INCLUDES

- 1x NEXUS-XR
- 3x JST-GH 4 Wire pigtail cables
- 1x JST-GH to Servo Plug (dupont 3 pin connector)
- 1x JST-ZH to Servo Plug (dupont 2 pin connector)
- 1x Ultra light-weight and flexible USB-C extender
- 1x Type C extension cable
- 3x 3M double-sided mounting tape
- 2x Heat shrink tubing

SPECIFICATIONS

• Item:	NEXUS-XR
• Firmware:	Rotorflight 2.2
• MCU:	STM32F722RET6
• Gyro (IMU):	ICM42688P
• Flash Memory:	256Mb (W25N02KVZEIR)
• Barometer:	SPL06-001
• UART (5):	S.BUS[UART1], TELEM[UART2], PORT-A[UART4], PORT-B[UART6], PORT-C[UART3]
• Servo (4):	S1, S2, S3, TAIL
• RPM Sensor (1):	(From ESC Frequency Sensor)
• AUX:	1
• Receiver Support:	CRSF, ELRS, GHOST, S.BUS, SUMD, IBUS, XBUS, EXBUS, PPM, MSP
• Voltage Supply (DC):	6 - 16.8V
• A-B-C Power Output:	5V @1.5A
• Telemetry:	S.BUS, HoTT, S.Port, MSP, EDGETX, ELRS
• ESC:	PWM, Oneshot, Multishot, Dshot
• Support Tail ESC:	760us / 1520us Servo
• Support Tail Motor:	Yes
• Internal Receiver:	RP4TD-M ExpressLRS 2.4GHz Mini True Diversity Receiver
• MCU:	ESP32
• Type:	ISM
• RF Chip:	SX1281 x 2
• Antenna:	65mm 2.4GHz Wire Antenna x2
• Frequency Range:	2.4GHz
• Max Refresh Rate:	500Hz / F1000Hz
• Telemetry RF Power:	Max 2x 10mW
• Wifi Updates:	Yes
• FW Target:	RadioMaster RP4TD-M 2400 RX
• Bus interface:	CRSF
• Dimensions:	44.70*26.50*14.30mm
• Weight:	24.1g

For more information, please visit the website: <https://www.radiomasterrc.com>, <https://www.rotorflight.org/docs/Tutorial-Quickstart/Introduction>

FCC Warning

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.

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.

FCC RF Exposure Information and Statement

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Model: NEXUS-XR (FCC ID: 2BBP3-NEXUS-XR) 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 product complies with the radio interference requirements of the European Community.

Product name: NEXUS-XR

Product model: NEXUS-XR

Applicant: Shenzhen Radiomaster Co.,Ltd

Address: 4F Yangtian Building,Xin'an Street, Bao'an DistrictShenzhen,Guangdong, China 518101

Operation Mode	:	BT BDR	BT EDR
Operation Frequency	:	2402~2480MHz	
Max. output Power	:	1.35dBm	

Antenna Type	:	ANT1,ANT2
Operation Frequency	:	2402.4MHz to 2479.4MHz
Max. output Power	:	ANT1:11.99dBm,ANT2:11.86dBm

Operation Mode	:	WIFI
Operation Frequency	:	2412MHz to 2472MHz
Max. output Power	:	13.43dBm

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 NEXUS-XR is in compliance with Directive 2014/53/EU.

This product can be used across EU member states.

eVatmaster Consulting GmbH

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