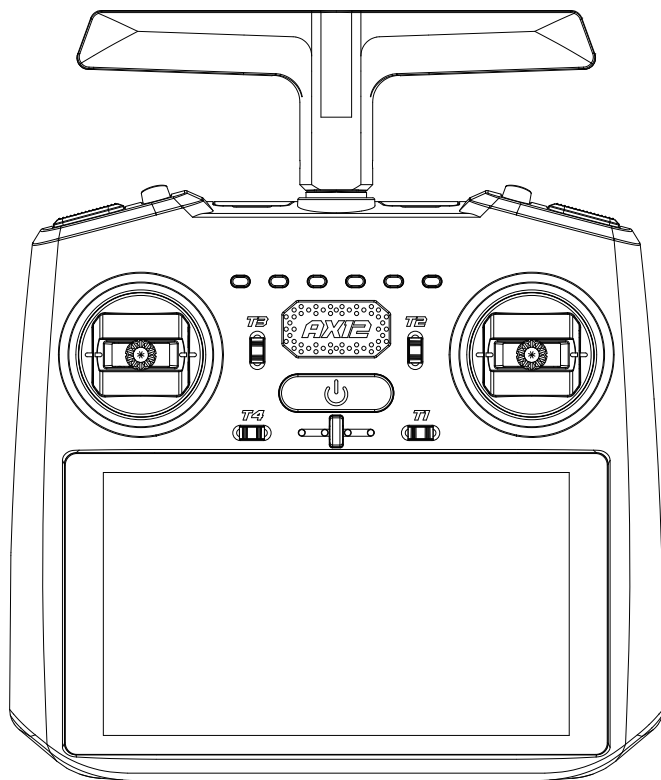


AX12

Quick start guide



Introduction

Thank you for purchasing the AX12 remote control system. This system is versatile and suitable for both beginners and experienced users. To ensure proper and safe use, please read this instruction manual carefully before operation.

Product specifications and features may change due to version updates. The information in this manual is subject to change without prior notice.

The AX12 remote control is designed for a wide range of applications and projects. Model configurations can be customized to suit different use cases, and a variety of advanced mixing and control functions are available.

➤ Safety Instructions

Many remote-controlled models are equipped with powerful motors and sharp propellers. Please exercise caution when operating the model. During assembly or maintenance, ensure that the model's power is disconnected and the propellers are removed.

-- Do not operate the AX12 remote control system under the following circumstances:

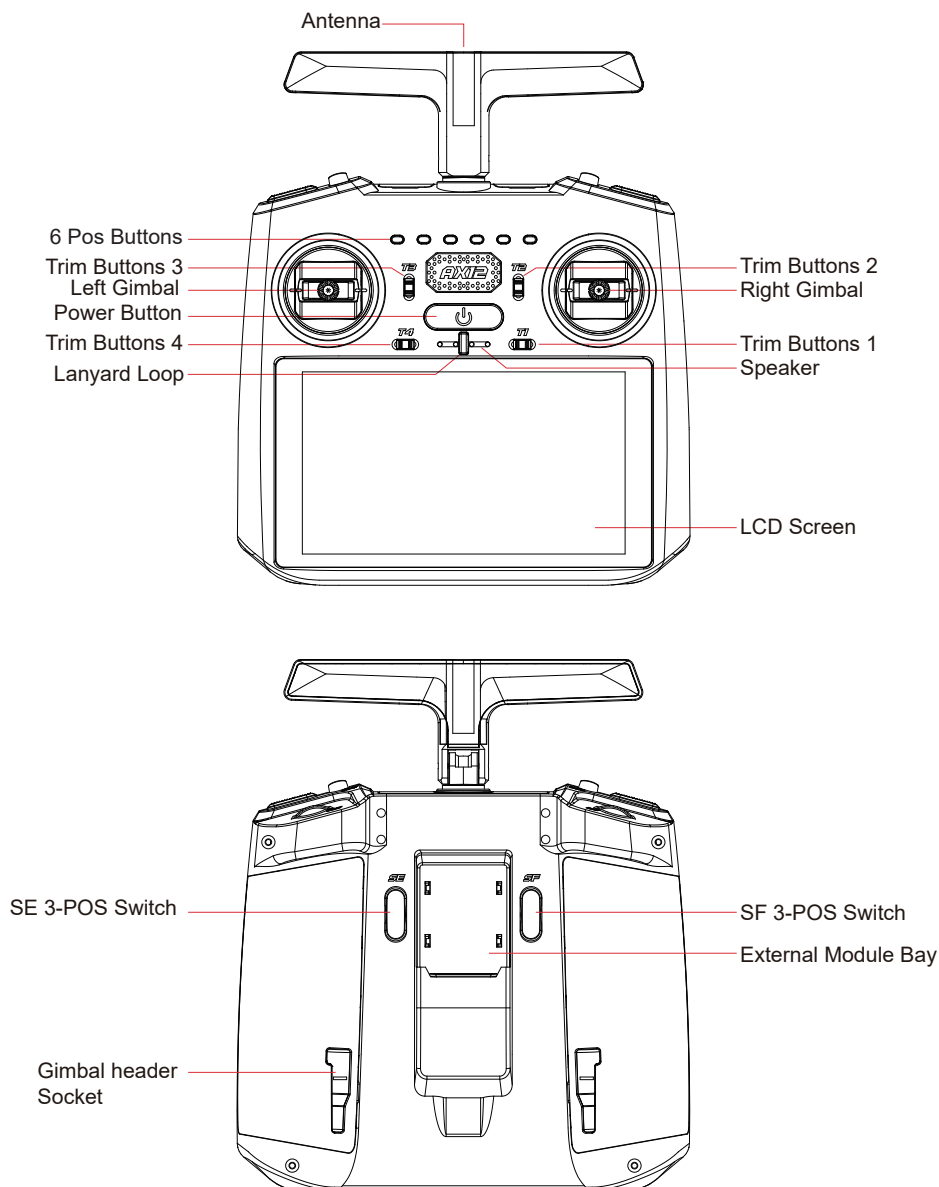
- In adverse weather or strong wind conditions, such as rain, hail, snow, storms, or electromagnetic environments.
- In any situation with limited visibility.
- In areas where people, property, high-voltage power lines, public roads, vehicles, or animals may be present.
- If you feel tired or unwell, or are under the influence of medication or alcohol.
- If the remote control or model appears damaged or is not functioning properly.
- In areas with significant radio frequency interference or where radio frequency use is prohibited.
- When the battery voltage is too low for operation.
- In areas where local regulations prohibit the use of models.

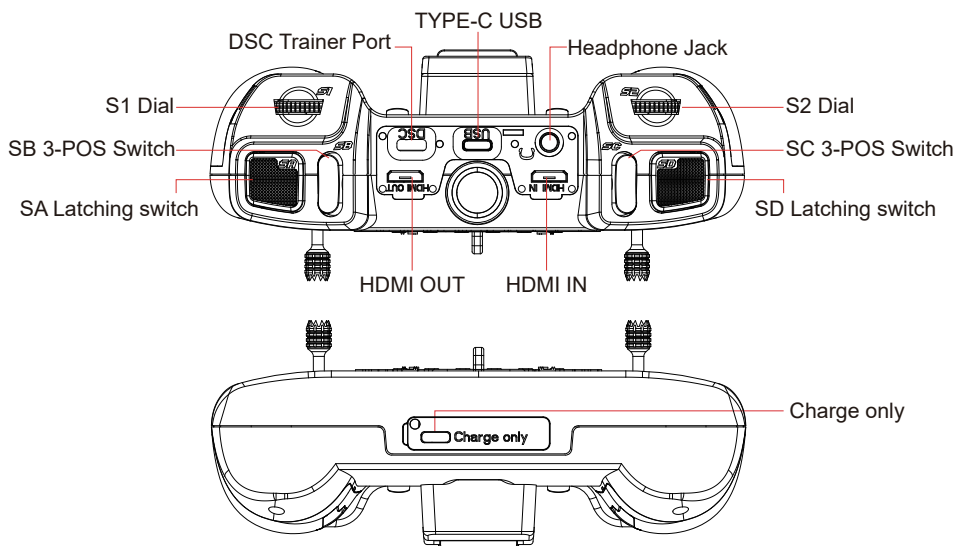
➤ Warning!

The AX12 comes pre-installed with the most stable firmware from the factory. The system will be continuously upgraded to add more exciting features. Please use the online update function provided by the APP software.

The Android system is a completely open operating system. Please ensure that you do not install or use any apps from untrusted sources. Apps of unknown origin may cause the Android system to malfunction, preventing you from using the remote control normally.

➤ Remote Control Overview

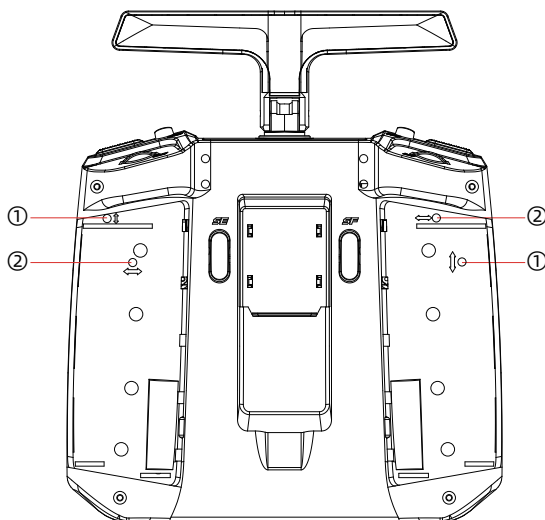




➤ Exterior adjustable

① Up and down spring tension: Turn the screw clockwise to increase the up and down spring tension. Turn the screw counter clockwise to reduce the up and down spring tension.

② Left and right spring tension: Turn the screw clockwise to increase the left and spring tension. Turn the screw counter clockwise to reduce the left and right spring tension.



➤ Power Supply and Charging Precautions

AX12 features built-in lithium battery with USB-C charging capability. The charging circuit is designed exclusively for the internal lithium-ion battery, which has a nominal voltage of 3.7V and a maximum charging voltage of 4.2V.

Please use a standard USB 5V charger with a minimum requirement of 5V/2A. You may use a USB 5V charger with an output current higher than 2A.

Note that some smartphone chargers with proprietary fast-charging protocols may not be compatible.

Regularly check the battery's voltage and condition, and never charge it unattended. Always charge in a safe area away from flammable materials. Do not charge the transmitter if it gets wet or is damaged in any way.

➤ Technical Indicators

Dimensions: 171 x 168 x 73 mm

Weight: 640g

Processor (CPU): 8 cores

4 * Cortex-A73 2.0GHz

4 * Cortex-A53 2.0GHz

Graphics Processor (GPU): ARM Mali-G72 700MHz

Internal Storage: 64GB

Memory Capacity: 4GB

Transmission Frequency: 2.400GHz-2.480GHz

Transmitter Module: Built-in ExpressLRS 2.4GHz RF module

Transmission Power: Up to 24dbm (adjustable transmission power)

Antenna Gain: 2dB

Number of Channels: Up to 16 channels

Joystick: Non-contact 3D vector Hall joystick

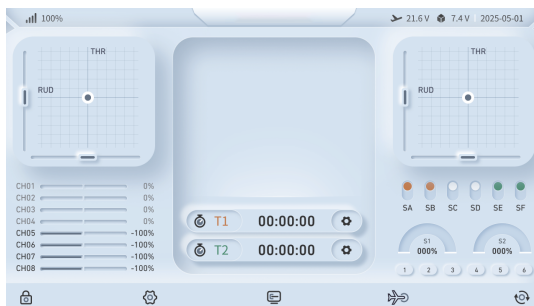
Update Method: Online updates

➤ Warranty and Repair

If there are any issues with your remote control hardware, please keep the proof of purchase and contact the retailer where you purchased the AX12.

➤ Home page

The default home page of the system, which includes basic information about the remote control.



Top bar display:

Signal Strength: After the remote controller and receiver are paired and connected, you can view the signal status and return link quality.



Device name: The middle displays the device name, which can be customized in the system settings.



Remote control voltage: Displays the real-time voltage of the remote control.

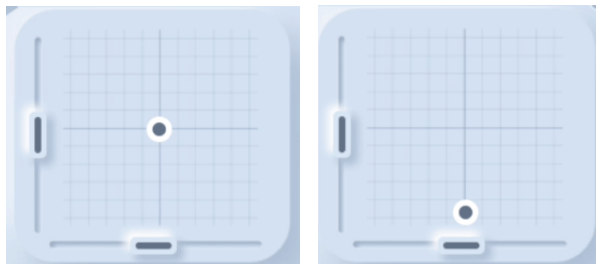


Date: Display the current date.

2025-04-08

Main screen display:

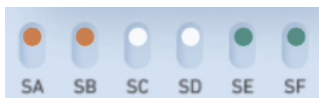
Joystick Position: Graphical real-time display of joystick position, as well as fine-tuning position display.



Channel Output: Real-time display of CH01-CH08 channel output.



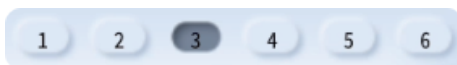
Switchs: Displays all switch positions in real time.



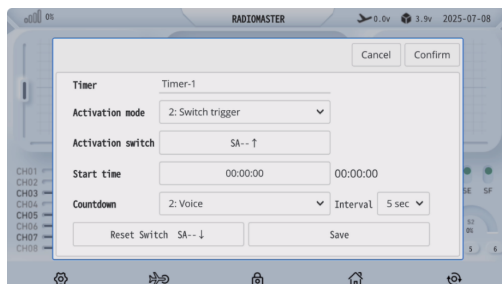
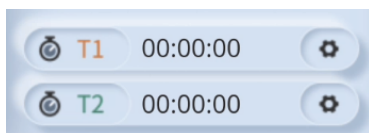
Pots: Displays the knob position in real time.



6-position buttons: Real-time display of 6 button positions.



Timer T1/T2: Display T1/T2 timer time, tap the gear icon to enter T1/T2 timer settings.



Activation mode: Options include always-on, switch-triggered functions, and more.

Activation switch: Set timer activation switch.

Start time: When the start time is 00:00:00, it functions as a count-up timer. When any other time is set, it will switch to countdown mode.

Countdown: Optional countdown announcement methods include mute, beep, or voice prompts.

Interval: Countdown notification interval.

Reset Switch: Set the timer reset switch.

Bottom bar display:

System Settings: Enter System Settings.



Model settings: Enter model settings.



Lock screen: Lock the screen to prevent accidental touches.



Main interface: Tap to return to the main interface.



Channel Monitor: Tap to display the channel monitor.



➤ ExpressLRS

The ELRS page allows you to view and configure all ELRS functions, turn the ELRS RF module (transmitter) on/off, and select between the built-in or external ELRS module. Additionally, you can update the built-in ELRS RF module via the USB port on top of the transmitter.

Model
Template
System
ELRS

RM AX12

Transmitter
Internal

Packet Rate
333Hz Full(-105dBm)

Telem Ratio
1:2

Switch Mode
16ch Rate/2

Link Mode
MAVLink

Model Match
Off

TX Power (250mW Dyn)

VTX Administrator

Model
Template
System
ELRS

RM AX12

Transmitter

Internal
External
OFF-ALL

Packet Rate
333Hz Full(-105dBm)

Telem Ratio
1:2

Switch Mode
16ch Rate/2

Link Mode
MAVLink

Model Match
Off

TX Power (250mW Dyn)

VTX Administrator



➤ Instruction manual and firmware download

The AX12 supports online updates for both the Android app and firmware. Ensure you connect to a WiFi network during the first use, allowing you to update the app and firmware anytime, anywhere via the internet.

➤ Disclaimer

This disclaimer does not affect any statutory rights that cannot be excluded under applicable law. To the fullest extent permitted by law, the manufacturer disclaims all warranties, express or implied, beyond those explicitly stated in the product documentation. By using this radio transmitter, the user acknowledges and agrees to indemnify and hold harmless the manufacturer, its affiliates, and representatives from any claims, liabilities, or expenses arising from the use or misuse of the product. Users are encouraged to regularly review regulatory updates and maintain the product in accordance with the manufacturer's recommendations to minimize risks.

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.

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.

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: AX12 (FCC ID: 2BUHG-AX12) 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.