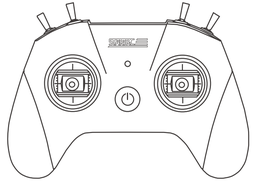
107.00 mm

140.00 mm

START DRONE



ELRS RC Remote Transmitter

1.0 Remote Control Usage Notes

(1)Users must read the manual carefully before use to ensure correct operation and avoid risks or damage caused by improper use.
(2)Keep the remote control out of children's reach. This product is not a toy. It should be stored away from children to prevent safety accidents caused by misoperation.
(3)Do not operate or fly in rainy or snowy weather. Rainwater may enter the remote control through gaps, which may cause unstable signals and even lead to loss of control.
(4)Use in crowded areas or locations forbidden by national regulations is prohibited.

1.1 Product Overview

The C8 Transmitter is a professional-grade control device designed for advanced model operation. It integrates a high-performance MCU main control system and a Low-latency wireless communication module, with an ergonomic hardware architecture. This transmitter features 8 channels independent output , including 4 core flight control channels (Throttle, Elevator, Aileron, Derection) and 4 fully programmable auxiliary channels. It is compatible with ExpressLRS (ELRS) receivers and suitable for various RC aircraft models, such as FPV drones, RC Helicopters, and RC Fixed-Wing Airplanes, meeting the precision control demands of competitive-level pilots.

1.2 Product Features

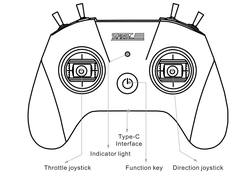
1. Supports 8 channels: Configured with 4 sets of main flight channels (pitch/roll/yaw/throttle) and 4 sets of fully proportional programmable expansion channels, compatible with the control needs of various aircraft types such as fixed-wing/helicopter/drone.
2. Supports USB driver-free direct connection and plug-and-play, compatible with mainstream competition simulators such as DRL Simulator/LiftOff/VelociDrone.
3. Equipped with a 2.4Ghz ELRS system, with a maximum power of 100mW, in line with FCC standards, the remote control distance can reach 1000 meters, and the end-to-end delay is 7ms.
4. High-precision mechanical joystick: angle repeatability accuracy ≤0.05°, mechanical life 1,000,000 times, dustproof grade IP5X.
5. Built-in 3.7V lithium battery with a nominal capacity of 650mAh, and the battery life is ≥2 hours under the default settings.

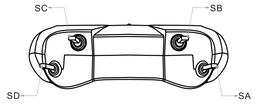
1.3 Technical Specifications

Hardware Configuration Parameters	
Weight	155g
Dimensions	162*120*66mm
Model	C8 ELRS
Material	ABS+PC
Battery Specification	3.7V, 650mAh
Throttle Hand	Mode 2/Mode 1
Channels	8 Channels
Frequency Band	2440-2475MHz
Transmit Power	100mW
Sensitivity	-132 dBm
Charging Cut-off Voltage	4.2V± 0.02 V
Low Voltage Alarm	3.4V
Operating Time	>2H
Charging Time	2H
Input Voltage	5V
Input Current	1A
Simulator Function	Supported

1.4 Remote Control Operation

Switch and button locations are shown in the diagrams below.





1.4.1 Power On/Off

•In the power-off state, long press the power button of the remote control for 3 seconds until two beeps (di - di ——) are heard and the blue LED light slowly turns on, indicating that the remote control is successfully powered on.
•In the power-on state, long press the power button of the remote control for 3 seconds until two beeps (di - di ——) are heard and the blue LED light goes out, indicating that the remote control is successfully powered off.

1.4.2 Remote Control Pairing

In the powered-on state, push the right joystick to its maximum upward travel, and quickly toggle the reset switch (SA) lever twice (one up-down motion counts as one toggle). When the blue indicator light flashes rapidly, the pairing mode is activated. After successful pairing, the blue indicator light stays on, and the buzzer emits a long beep ("di ——").

1.4.3 LED Indicator Lights and Prompt Sounds

Indicator Light Status	Status Description	Buzzer Status	Remarks
Blue Light Always On	Pairing Successful	Di ––	
Blue Light Flashing Slowly	Remote Control Return Disconnected	Di ––	
Blue Light Flashing Slowly	Remote Control Signal Not Connected		
Blue Light Flashing Quickly	Entering Pairing State	Di ––	
Red Light Flashing Slowly	Charging While Off		
Red Light Always On	Battery Fully Charged	Di––Di––Di––	Cycles every 10 minutes
Red Light Flashing Slowly	Battery Level Below 15%	Di ––	Cycles every 30 seconds

1.5 Joystick Modes

This C8 remote control provides 2 classic joystick modes, namely left-hand throttle (Mode 2) and right-hand throttle (Mode 1), as follows:

Left-hand Throttle (Mode 2)

Throttle: Controlled by the left hand for more convenient operation
Yaw (Direction): Precise control of flight direction
Aileron (Roll): Enables aircraft roll maneuver
Pitch (Elevation): Controls aircraft ascent and descent

Right-hand Throttle (Mode 1)

Yaw (Direction): First priority for direction control
Pitch (Elevation): Next step for altitude control
Aileron (Roll): Achieves roll maneuver
Throttle: Controlled by the right hand

1.6 Remote Control Protocol and Power

NOTE: The built-in ExpressLRS protocol is only compatible with receivers running firmware versions 3.0.0 ~ 3.3.2. The output power is fixed at 100mW.

1.7 Low Battery Alarm & Charging

The remote control has a built-in 650mAh battery, and no external battery is needed. When the red light flashes slowly and the buzzer cycles ("di - ") one sounds every 30 seconds, it indicates that the remote control battery level is low and needs to be recharged. The charging method is as follows:

·Power off the remote control;
·Use a USB data cable to connect the remote control to an adapter (5V output adapter is sufficient);
·When the remote control is off, the red light flashes slowly, indicating that it is charging. When the red light is always on, it indicates that the charging is complete (the buzzer sounds "di —— di —— di ——") every 10 minutes;
·If no operations are performed after powering on, the remote control will emit a beep ("di ——") every 1 minute after 10 minutes, and will automatically power off after 15 minutes;
·When the battery voltage of the remote control is lower than 3.3V, the remote control will automatically power off;
·**NOTE**:When the remote control emits an alarm when the battery level is lower than 15%, please stop using the remote control within 8 minutes and charge the remote control.

1.8 How to Use the Computer Simulator for Flight

After connecting the computer with a USB data cable, the C8 remote control can be used as a USB game controller for simulated flight practice. The specific steps are as follows:

·Power on the remote control.
·Use the equipped USB data cable to connect the remote control and the PC computer end, and the indicator light of the remote control is a blue light flashing slowly.
·After the connection, the computer will automatically recognize the model of the remote control and use it normally.

1.9.1 NOTE

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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.