Jumper Smart

Colour screen transmitter with built-in ExpressLRS 2.4 GHz module
User manual



Before first use, read the entire manual carefully, especially the safety instructions, and keep it for future reference.

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1. Safety instructions

1.1 General rules

The Jumper Smart transmitter is designed to control RC models and drones equipped with an ExpressLRS receiver for the 2.4 GHz band. Read this entire manual before first use and keep it for future reference.

- The product **is not a toy**. Keep it out of the reach of small children.
- Before each use, check that the transmitter, gimbals, switches and antenna are not damaged. Do not use a damaged transmitter.
- Always switch the transmitter on before connecting the model's battery. After the flight, disconnect the model's battery first and only then switch the transmitter off.
- Never switch the transmitter off while the model is powered and ready to fly – you will lose control of it.
- Set up the failsafe function (model behaviour on signal loss) in the model's receiver or flight controller (FC) and verify it before flying.
- Before flying, check the correct direction and range of all controls with the model on the ground.
- Do not use the transmitter in rain, humidity, dust or at extreme temperatures. Do not open or modify it.

1.2 Li-ion 18650 battery

The transmitter is powered by one replaceable Li-ion cell of size 18650. **The cell is not included.**

- Use a quality cell from a reputable manufacturer with undamaged wrapper insulation.
- Insert the cell with the correct polarity according to the marking in the battery compartment.
- A fully charged Li-ion cell has a voltage of 4.20 V. Do not overcharge the cell and do not let it deep-discharge.
- Charge under supervision, on a non-flammable surface and away from flammable objects.
- Do not short-circuit, puncture or disassemble the cell, and do not expose it to heat, fire or direct sunlight.
- Stop using a damaged, swollen or excessively hot cell immediately.
- Remove the cell from the transmitter before longer storage.
- Do not dispose of a used cell with mixed waste – hand it over at a battery collection point.

1.3 Radio operation

- The transmitter transmits in the 2.4 GHz band. Observe the regulations of the country in which you use the transmitter (Chapter 3).
- Unfold and position the antenna before flying. Do not touch the antenna or cover it with your hand during the flight.
- Do not use the transmitter where the operation of radio equipment is prohibited (e.g. in hospitals or on board an aircraft).
- Always fly within the range of a reliable link. Metal structures, buildings and other sources of interference can shorten the range considerably.

2. Product description

2.1 Package contents

According to the manufacturer, the package contains the following items:

1×	Jumper Smart transmitter
1×	manufacturer's quick start manual (English / Chinese)
1×	card with the manufacturer's technical support contacts
1×	USB-C cable
1×	neck strap (lanyard)
1×	Jumper sticker set and keychain
1×	manufacturer's certificate of conformity

※ The Li-ion 18650 cell and the USB power adapter are not included.

2.2 Controls – front view



Front of the transmitter (image from the manufacturer's manual)

No.	control	No.	control
1	S1 dial	8	S2 dial
2	T1 left trim	9	power button
3	left gimbal	10	T2 right trim
4	Page Up button	11	right gimbal
5	Page Left button	12	“+” button (Option +)
6	Page Down button	13	“O” button – confirm (Menu Enter)
7	Page Right button	14	“−” button (Option −)
		15	“×” button – back (Menu Exit)

2.3 Controls – top view



Top edge of the transmitter (image from the manufacturer's manual)

No.	control
16	USB-C port – charging and simulator connection
17	SC – three-position switch
18	SD – momentary button
19	SF – latching two-position switch
20	PPM simulator port (3.5 mm jack)
21	SB – three-position switch
22	SA – momentary button
23	SE – latching two-position switch
24	omnidirectional folding antenna

2.4 Technical data

parameter	value
Type designation	SMART
Firmware	JumperTX
Radio protocol	ExpressLRS (ELRS) 2.4 GHz, built-in module
Frequency band	2404–2473 MHz
Transmit power	100 mW (manufacturer's data)
Number of channels	12
Antenna	omnidirectional, rotatable and foldable
Gimbals	Hall sensors, 8-ball bearing structure
Display	2" full colour IPS, 320 × 240 px
Menu language	English, Chinese
Simulator interface	USB-C, 3.5 mm jack (PPM)
Power supply	1× Li-ion 18650 cell (not included)
Charging	USB-C, 5 V, built-in charging circuit
Dimensions	152 × 160 × 63 mm
Weight	353 g (without battery)
Colour	according to the selected variant (e.g. Space Gray, Platinum White); technical data are identical for all colours

2.5 Manufacturer

Manufacturer	Changzhou Smoothies Electronics Co., Ltd. (Jumper brand)
Address	6 Floor, Building 2, ZhiGu Tech Park, 2259# LongCheng RD, ZhongLou District, Changzhou, China
Support e-mail	support@jumper-rc.com
Web	www.jumper-rc.com

The importer and responsible person in the EU is given in Chapter 8.1.

3. Legal conditions of use

3.1 The law of the country of use applies

European Union rules on radio equipment and on the operation of unmanned aircraft (Regulations (EU) 2019/947 and 2019/945) apply in all member states, but national implementing rules differ from country to country – permitted frequency bands and maximum transmit powers, operator registration, minimum pilot age, geographical zones and compulsory insurance. The information in this chapter describes the situation in the Czech Republic. **If you operate the transmitter and model in another country, you must follow the regulations of the country in which you operate them.**

3.2 Frequencies and transmit power

The transmitter operates in the frequency band **2404–2473 MHz**; the manufacturer specifies a transmit power of **100 mW**.

In the Czech Republic, the operation of wideband data transmission equipment in the 2400–2483.5 MHz band is governed by General Authorisation No. VO-R/12 of the Czech Telecommunication Office, which sets a maximum radiated power of 100 mW e.i.r.p. for this band. The current version is available at www.ctu.cz.

The user is responsible for complying with the limits applicable in the country of use.

3.3 Operation of drones and model aircraft

If you use the transmitter to control a drone or model aircraft, its operation in the Czech Republic is governed by Regulation (EU) 2019/947 and the rules of the Civil Aviation Authority (ÚCL). Before the first flight, check in particular the operator registration obligation, the pilot competency requirements and the restrictions in geographical zones. Information is provided by the ÚCL at www.caa.gov.cz.

4. Getting started

4.1 Inserting the battery

① Switch the transmitter off.

② Open the battery compartment cover.

③ Insert the Li-ion 18650 cell with the correct polarity according to the marking in the battery compartment.

④ Close the battery compartment cover.

4.2 Charging

The cell is charged directly in the transmitter (built-in charging circuit). Connect the USB-C cable to the USB-C port (16) and to a 5 V USB power source (adapter not included). The charge level is shown by the battery indicator in the upper right corner of the display (Chapter 5.1, item 5).

※ Charge under supervision and do not leave the transmitter unattended while charging.

4.3 Switching on and off

The transmitter is switched on and off with the power button (9) in the upper centre of the front side. After switching on, the main screen is displayed (Chapter 5.1).

4.4 Link with an ExpressLRS receiver

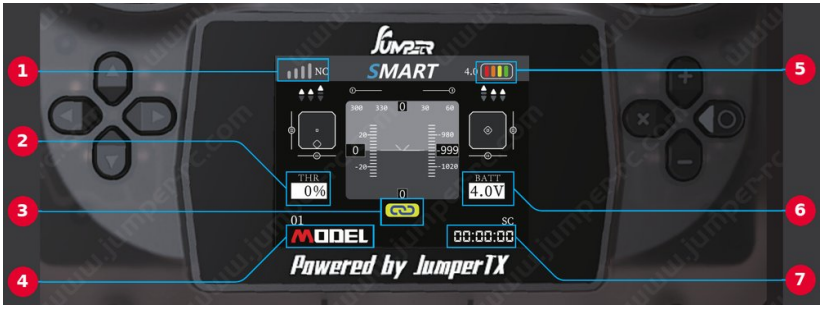
The transmitter contains a built-in ExpressLRS 2.4 GHz module and works with ExpressLRS receivers for the 2.4 GHz band.

- The ExpressLRS protocol checks version compatibility before establishing a link. The receiver must therefore run ExpressLRS firmware compatible with the transmitter module.
- The manufacturer states that the Smart firmware **cannot be updated**; resolve any version difference by adjusting the receiver firmware.
- Put the receiver into binding mode according to its manual (general ExpressLRS procedure: Chapter 7.3).
- The link status is shown on the main screen – receiver signal indicator (item 1) and binding status (item 3).
- After the link is established, check that telemetry from the flight controller (FC) is displayed, and with the model on the ground check the direction of all channels and the failsafe function.

※ The manufacturer's manual does not describe how to start binding on the transmitter side. Questions: retailer or support@jumper-rc.com.

5. Operation and settings

5.1 Main screen and menu navigation



Main screen (image from the manufacturer's manual)

No.	item	No.	item
1	receiver signal	5	transmitter battery level
2	flight controller (FC) telemetry – throttle (THR)	6	flight controller (FC) telemetry – voltage (BATT)
3	binding	7	timer
4	model selection		

① Press and hold the “O” button (13) to enter the menu.

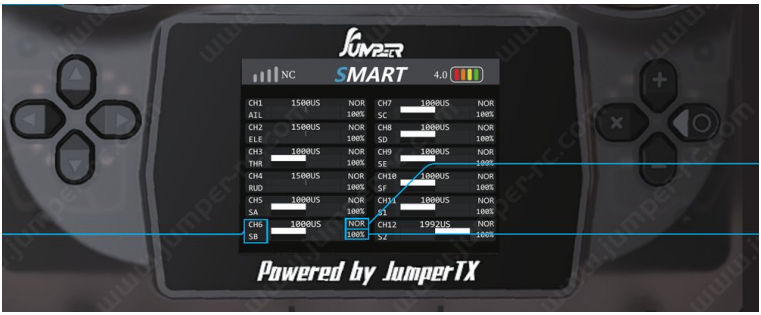
② Use the left-side directional buttons (4–7: Up, Down, Left, Right) to navigate through the menu.

③ Adjust settings using the “+” (12) and “−” (14) buttons.

④ The “O” button confirms selections, and the “×” button (15) exits.

⑤ Press and hold the “×” button to enter the flight controller switching menu.

5.2 Servo travel settings and channel mapping



Servo travel and channel mapping screen (image from the manufacturer's manual)

① Press and hold the “O” button to enter the travel adjustment settings.

② Press the “O” button again to toggle between normal (NOR) and reversed direction.

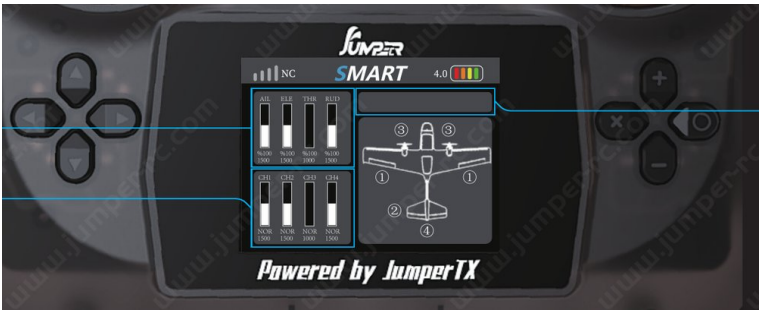
③ Use the “+” and “−” buttons to adjust the travel range (in %). The “×” button exits.

④ Press and hold the “×” button to enter the channel mapping menu. Use the left-side directional buttons to select the channel to be mapped, and the “+” and “−” buttons to change the input source. The “×” button exits.

Channel assignment shown in the manufacturer's manual:

channel	source	channel	source
CH1	AIL (aileron)	CH7	SC
CH2	ELE (elevator)	CH8	SD
CH3	THR (throttle)	CH9	SE
CH4	RUD (rudder)	CH10	SF
CH5	SA	CH11	S1
CH6	SB	CH12	S2

5.3 Mixer selection



Mixer screen (image from the manufacturer's manual)

The screen shows input monitoring (AIL, ELE, THR, RUD) at the top left, output monitoring of channels CH1–CH4 at the bottom left and mixing mode switching with a model diagram on the right.

① Press and hold the “O” button to enter the mixing settings.

② Use the left-side directional buttons to select channel CH1–CH4 for which you want to set the direction (normal / reversed) and travel range.

③ Press the “O” button again to toggle between normal and reversed direction; use the “+” and “−” buttons to adjust the travel range.

④ The “×” button exits.

5.4 System menu



System menu (image from the manufacturer's manual)

Configure the system menu settings as needed. The bottom of the screen shows the transmitter name, firmware version and identification number (ID).

item	meaning
BEEPER	sound signals (on / off)
VIBE	vibration (on / off)

item	meaning
LANGUAGE	menu language
THEME	colour theme
FACTORY	restore factory settings
IDLE, IDLE T	idle alarm and the time after which the transmitter switches itself off
RC ALARM, VOLTAGE	transmitter low voltage alarm and the voltage below which the transmitter switches itself off
RC TYPE, MODL RST, AUTO BLK, BLK TIME, HUD-COLR, FC ALARM, VOLTAGE (FC)	items shown in the menu that the manufacturer does not describe in detail in the manual

※ If the idle alarm is enabled, the transmitter will automatically shut down after the set alarm time is reached. If the low voltage alarm is enabled, the transmitter will automatically shut down when the voltage drops below the alarm voltage. Therefore check the settings of both alarms and the cell charge before flying.

For further updates, please follow the manufacturer's official announcements at www.jumper-rc.com.

6. Maintenance and troubleshooting

6.1 Maintenance and storage

- Clean the transmitter with a dry or slightly damp soft cloth. Do not use solvents or aggressive cleaning agents.
- For transport, fold the antenna and protect the transmitter from impacts, e.g. in a case or bag.
- Store in a dry place, at room temperature and out of direct sunlight.
- Remove the 18650 cell from the transmitter before longer storage.
- Regularly check the condition of the gimbals, switches, USB-C port and antenna.

6.2 Troubleshooting

problem	possible cause and solution
Transmitter does not switch on	The cell is discharged, inserted the wrong way round or missing. Charge it and check the polarity.
Transmitter switches itself off	The idle alarm or the low voltage alarm is enabled. Charge the cell or adjust the settings in the system menu (Chapter 5.4).
Receiver does not link	The receiver is not in binding mode, is not designed for ExpressLRS 2.4 GHz or has an incompatible firmware version (Chapter 4.4).
Short range, dropouts	The antenna is folded, damaged or covered; there is strong interference nearby. Unfold the antenna and fly within the range of a reliable link.
Channel responds in reverse or to another control	Check the channel direction and channel mapping (Chapter 5.2).
Simulator does not detect the transmitter	The USB-C cable used is charge-only. Use a data cable or the PPM port (Chapter 7.2).

7. Firmware, simulator and further guides

7.1 Firmware

The transmitter uses **JumperTX** firmware. The manufacturer states on its website that the firmware of the Smart transmitter does not support updates. The firmware version is shown at the bottom of the system menu (Chapter 5.4).

7.2 Connecting to a simulator

Connect the transmitter to the computer running the simulator with a USB-C data cable to the USB-C port (16), or with a 3.5 mm jack cable to the PPM port (20). The controller set-up procedure differs between simulators – follow the simulator's instructions.

7.3 Further guides

Detailed information about the ExpressLRS system – binding, settings and updating receivers – can be found on the official website of the ExpressLRS project:

Official ExpressLRS website

www.expresslrs.org

Manufacturer's technical support: support@jumper-rc.com

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 (SMART) is given on the product or its packaging; the firmware version and the identification number (ID) of the transmitter are shown at the bottom of the system menu (Chapter 5.4).

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

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 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.