

## Professional Receiver Ultra Long Range RC & Telemetry

**CE 869Mhz 100Km**  
**FCC 902Mhz 200km**  
**Custom...**



**Radio Control & Telemetry**

**Powerful and Safe with control**

### New Concept

*Configuration of the mixes, button activation and assignment of encoders are performed in the RX and not in the TX XLR5 as is usual in amateur RC systems.*

### FEATURES

- Control max up to 16 CH RC.** Using the 7CH physical and the autopilot CH through SPPM in CH7.
- 8 Multifunction outputs** for RC servos.
- 1 SPPM / CPPM:** 12 RC channels in CH7.
- 1 Micro USB:** Update and configuration.
- 1 i2C:** To connect future devices, Oled display, sensors.
- 1 RCBUS:** Connect XOSD for serial communication.
- 1 MODEM port:** MAVLINK Telemetry and transparent radio modem.
- 1 Red Led:** TX RF or Transmit packets.
- 1 Blue Led:** Link RF or Received packets.
- 1 Connector antenna RC:** SMA-Female.

#### Compatible with XLR5 devices:

**TX:** BTSD1, XPAD2-2017, XPAD2 V2, XPAD3, GCSD4.  
**OSD:** XOSD, XOSDV2.

#### Hardware improvements:

Microcontroller with double memory FLASH, RAM and Eeprom.  
 Improved PCB, more protection in general.  
 Improved box, more robust, screws on inserts.  
 Internal protection against reverse polarity on + 5V servo connectors.  
 EDS protection and RF Filters in USB.  
 ESD protection (static) for all pins including servos.  
 Pins servos protection against short circuits and overloads.

#### MAVLINK protocol, compatible with autopilots:

APM, Pixhawk, PX4, etc.  
 No additional radiomodem is required.

#### Compatible with autopilots with S-BUS?

Yes, depending on the autopilot you can connect directly to CH7 (SPPM) or you can use a PPM to S-BUS converter.

#### It can be used in different RC models:

UAV, DRONES, VANT, RPAS, UUV, UGV, ROV, MULTIROTORS, CARS, HELICOPTERS, BOATS, etc.

### TECHNICAL SPECIFICATIONS

- Range RC & Telemetry:** CE 100Km, FCC 200Km.
- Frequency:** CE: 869,4-869,65Mhz +27dBm EIRP.  
 FCC: 902-927,5Mhz. +36dBm EIRP.  
 CUSTOM: Max +30dBm, 1W.
- Multi Band:** 433 or 866, 868, 902, 915, 950Mhz.
- Max RF power:** CE +22dBm. FCC +30dBm.
- Sensitivity max:** -116dBm @50kb.
- Modulation:** 50 or 100Kb. FHSS.
- Stability:** TXCO +-1ppm.
- Encryption:** AES optional.

**Voltage:** 5V. Min 4.5V. Max 6Vcc.

**Consumption:** Standby 70mA.  
 Max. TX(500mW) 540mA@12mS.

**Connectivity:** RC, Telemetry, USB, RCBUS, SPPM, COM5, MODEM.

**Upgradable and Configurable:** DMDStudio Soft.

**Compatible:** ALPHA Commands and DMD devices.

**Dimension:** 70,78 x 35,75 x 14,78mm.

**Weight:** 30g (Without ant.) / 47g (With ant. 5dBi).

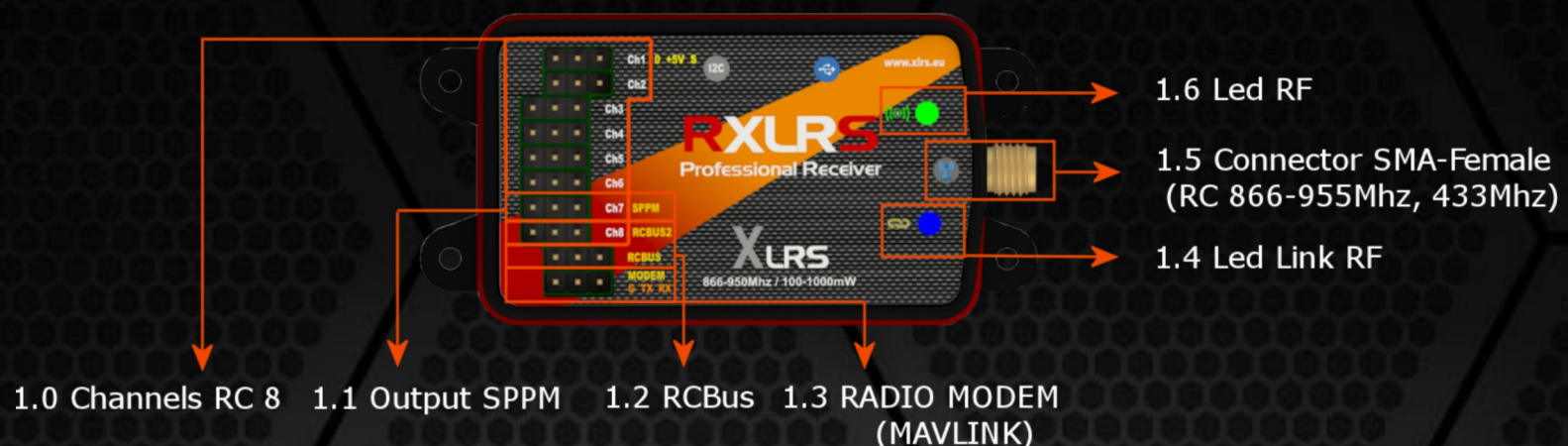
**Box:** Plastic and fiber base 2mm.

*\*Some product features are optional.*

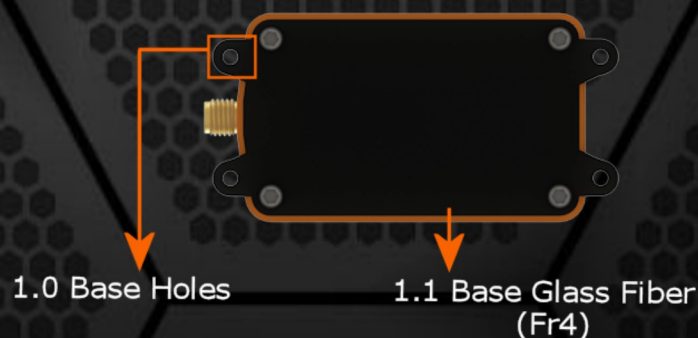
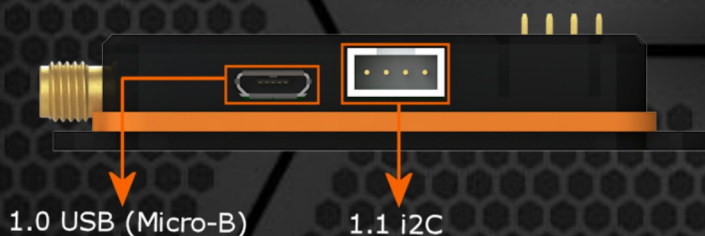
**XLR5**  
 EXTENDED

www.xlrs.eu





- 1.0- Channels RC: 8 Multifunction outputs for RC servos.
- 1.1- Output SPPM / CPPM: 12 RC Channels in CH7.
- 1.2- RCBUS: Serial communication XOSD or others XLRS devices.
- 1.3- MODEM port: MAVLINK Telemetry and radio modem transparent.
- 1.4- Led Blue: Link RF or Received packets.
- 1.5- Connector Antenna: SMA-Female for RC.
- 1.6- Led Red: TX RF or Transmit packets.

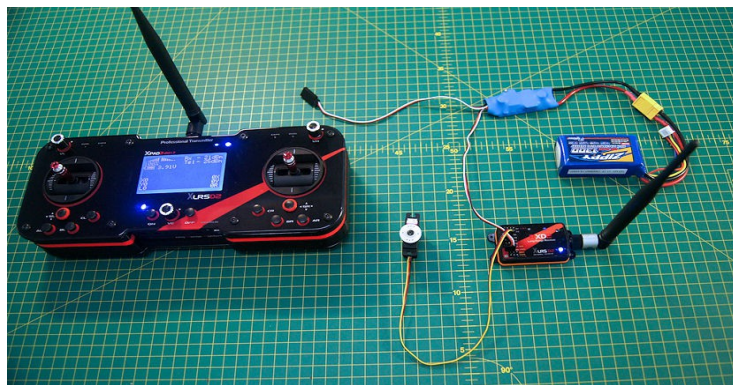


- 1.0- USB (Micro-B): Update and configuration RX.
- 1.1- i2C: To connect future devices, OLED displays, IMU, etc.

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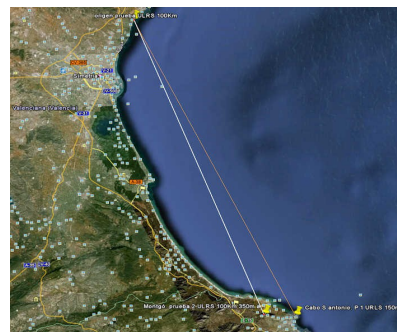
- **RXLRS Manual:**
  - Introduction RXLRS.
  - First steps (Quick guide).
  - XLRS connection diagrams.
  - New concept Radio Control.
  - Link with XLRS Transmitter.



- **DMDStudio Manual.**



- **Learn more about:**
  - Servos XLRS.
  - XLRS objects.
  - Range, Rssi, Noise in environments UAV – Drones.
  - [Range Test XLRS](#).
  - RF Band RF ISM-ICM.



- **More information here:**
  - Manuals XLRS.

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