

Link do produktu: <https://www.nobshop.pl/odbiornik-matek-expresslrs-elrs-r24-s-24ghz-receiver-ceramiczna-antena-p-3186.html>

## Odbiornik Matek ExpressLRS ELRS-R24-S 2.4GHz Receiver Ceramiczna Antena



Cena brutto	<b>99,99 zł</b>
Cena netto	<b>81,29 zł</b>
Dostępność	<b>Dostępny</b>
Czas wysyłki	<b>1 - 3 dni</b>
Producent	<b>Matek Systems</b>

### Opis produktu

#### ELRS-R24-S Specifications

- ESP8285, SX1280/1281IMLTRT
- PA/LNA: AT2401C
- molex 479480001 SMT antenna
- RF Frequency: 2.4GHz ISM
- Telemetry power: 20dbm
- AT2401C Rx\_gain: 12dB
- Receiver protocol: CRSF
- Input voltage: 4~9V DC @ 5V pad
- Power dissipation: 40~45mA(before binding), 60~65mA(binding), 90~95mA(wifi mode)
- PCB size: 21mm x 15mm
- Weight: 1.2g
- Packing: 1x ELRS-R24-S

#### Firmwares

- **ExpressLRS MATEK\_2400\_RX** <http://www.mateksys.com/?portfolio=elrs-r24#tab-id-4>
- Firmware update via UART or WIFI
- ELRS-R24-S: disable “USE\_DIVERSITY” (unchecked) when flashing in ExpressLRS configurator

#### TIPS

- **“Any ELRS 2.4Ghz receivers can work with any ELRS 2.4Ghz TX Modules, from any manufacturer and even the DIY ones. This is as long as they have the same binding phrase and configuration options (Regulatory Domain, Performance Options and Extra Data).”**
- *More details about ExpressLRS, pls check out [ExpressLRS wiki](#)*

#### Wiring with FC

- Receiver RX — FC UART\_TX for Telemetry
- Receiver TX — FC UART\_RX for Control
- Receiver 5V — FC 5V or 4v5

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- Receiver G — FC GND
  - Receiver protocol: Serial-based receiver – CRSF

## Traditional Binding

- **Receivers have ExpressLRS fw preloaded without BINDING\_PHRASE**
1. Power on and off your receiver three times
  2. Make sure the LED is doing a quick double blink, which indicates the receiver is in bind mode
  3. Use the [BIND] button on the Transmitter Lua script, which sends out a binding pulse
  4. Receiver will switch to slow blink once it has received binding pulse.
  5. Power off and power on receiver again. If the receiver LED switch to solid on from slow blink, it's bound with your transmitter.
- **Important: If the RX firmware has a bind phrase, the RX will never enter binding mode using the above procedure. It must be flashed without a binding phrase to do traditional binding.**

## Flashing with ESP\_NodeMCU-PyFlasher

1. Connect receiver to USB-TTL module(RX-TX, TX-RX, 5V-5V, G-GND)
2. Connect USB to PC while pressing and holding the boot button in.
3. open ESP\_NodeMCU-PyFlasher
4. select **Serial port** of USB-TTL module, load firmware, select “**Dual Output(DOUT)**” and “**Yes.wipes all data**”
5. click “**Flash NodeMCU**”
6. after flashing, Power off and power on your receiver, receiver will enter binding mode(quick double blink).

## Flashing with ELRS configurator

- MATEK\_2400\_RX target is supported by ELRS configurator 1.1.0 with fw release 1.2.0 or newer.

## Comparison in ELRS-R24 series

SKU	<b>R24-P</b>	R24-D	R24-S
RF Frequency	2.4GHz	2.4GHz	2.4GHz
Antenna	IPEX MHF1	2x IPEX MHF1 Diversify	SMT Antenna
PA/LNA	/	SE2431L	AT2401C
Telemetry	12dbm	23dbm	20dbm
LNA	/	12.5dB	12dB
Rx_gain			
CRSF	DIY_2400_RX_ESP828	MATEK_2400_RX	MATEK_2400
Serial receiver	5_SX1280		_RX
PWM receiver	MATEK_2400_RX_PWM	/	/

## Comparison between ELRS-R24-P and CRSF-PWM converter

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SKU	<b>R24-P</b>	CRSF-PWM-6	CRSF-PWM-C
PWM outputs	Receiver with ELRS direct PWM output	CRSF to PWM Converter/Decoder	
RF Frequency	5	6	10
PWM frequency	2.4GHz	compatible with any CRSF protocol receivers (including 433MHz, 868MHz, 915MHz, 2.4GHz)	
Telemetry ID	50Hz	50, 100, 160, 330, 400Hz	
CH remapping	RSS, Qly SNR	RSSI, Qly SNR RxBt, Curr, Capa, Bat%, GPS, GSpd, Hdg, Alt, Sats	No
	support		