

Link do produktu: <https://www.nobshop.pl/odbiornik-matek-expresslrs-elrs-r24-p-24ghz-pwm-receiver-p-3185.html>

## Odbiornik Matek ExpressLRS ELRS-R24-P 2.4GHz PWM Receiver



Cena brutto	<b>89,99 zł</b>
Cena netto	<b>73,16 zł</b>
Dostępność	<b>Aktualnie niedostępny</b>
Czas wysyłki	<b>1 - 3 dni</b>
Producent	<b>Matek Systems</b>

### Opis produktu

#### ELRS-R24-P Specifications

- ESP8285, SX1280/1281
- Antenna connector: IPEX MHF 1
- 5x PWM outputs
- RF Frequency: 2.4GHz (2400~2480MHz)
- Telemetry power: 12dbm
- Receiver protocol: PWM or CRSF
- Input voltage: 4~9V DC @ "+" pad
- Power dissipation: 45mA(binding), 85mA(wifi mode)
- PCB size: 25mm x 13mm
- Weight: 2g w/ antenna
- Packing: 1x ELRS-R24-P, 1x IPEX MHF1 Antennas

#### Firmwares

- **ExpressLRS MATEK\_2400\_RX\_PWM, or DIY\_2400\_RX\_PWMP**, PWM receiver via 1~5 PWM outputs
- **ExpressLRS DIY\_2400\_RX\_ESP8285\_SX1280**, CRSF Serial receiver via TX and RX
- Firmware update via UART or WIFI

#### TIPS

- ExpressLRS wiki for PWM receiver, Click [HERE](#)
- Make sure Receiver and TX module both are running ExpressLRS 2.0

#### Traditional Binding

- **Receivers have ExpressLRS fw V2.0 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.

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## Flashing with ELRS configurator

- MATEK\_2400\_RX\_PWM or DIY\_900\_RX\_PWMP
- If use it as normal Serial receiver, flash it with Target DIY\_2400\_RX\_ESP8285\_SX1280

## 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 [ELRS\\_V2.0.0\\_NoPhrase\\_ELRS-R24-P.bin](#), 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).

## Comparison in ELRS-R24 series

SKU	R24-P	R24-D	R24-S
RF Frequency	2.4GHz	2.4GHz	2.4GHz
Antenna	IPEX MHF1	2x IPEX MHF1□	SMT Antenna
PA/LNA	/	SE2431L	AT2401C
Telemetry	12dbm	23dbm	20dbm
LNA	/	12.5dB	12dB
Rx_gain			
CRSF receiver	DIY_2400_RX_ESP8285_SX1280	MATEK_2400_RX	MATEK_2400_RX
PWM receiver	MATEK_2400_RX_PWM	/	/

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

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

