ELRS Nano Receiver

User Manual

Product Introduction

GEPRC ELRS Nano receiver is a new generation remote control system developed based on the ExpressLRS open source project. ExpressLRS sets new standartds for long-range connection, low latency and Maximum refresh rate of 500Hz.

GEPRC ELRS Nano receivers are available in 915/868MHz and 2.4GHz versions with maximum refresh rate of 500Hz and can be used with GEPRC ELRS-series products or other ELRS-compatible devices.

Specifications

Size: 17mm*11mm

Weight: 0.6g(receiver only)

Chips：ESP8285，SX1276(915M)，SX1281(2.4G)

Frequency band: 915MHz FCC/868MHz EU/2.4GHz ISM
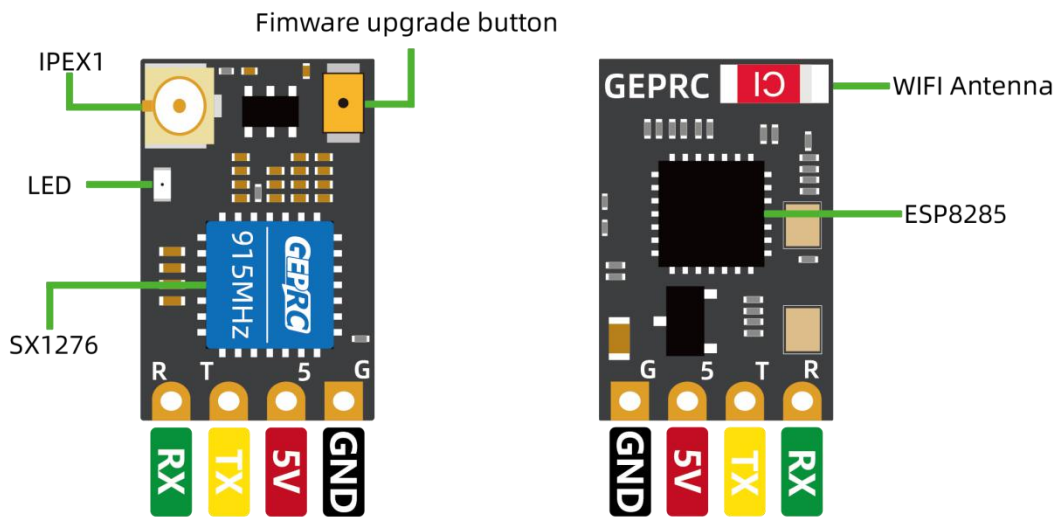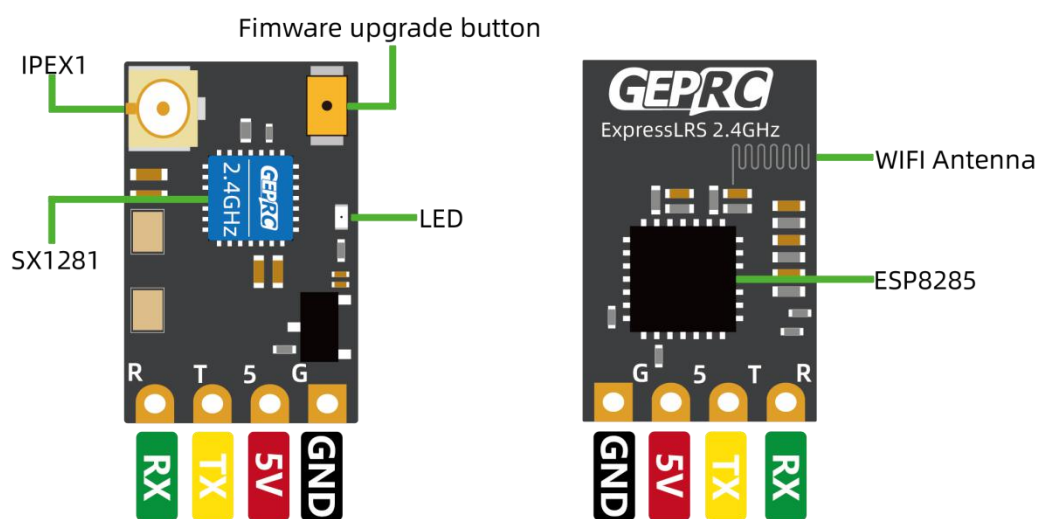
Refresh rate：25Hz-500Hz

Input voltage：5V

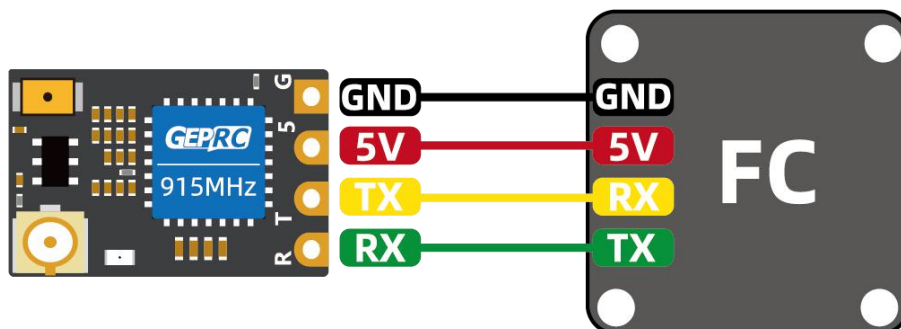Antenna connector: ipex1

Nano Receiver diagram

915/868MHz

IPEX1

Fimware upgrade button

LED

SX1276

GEPRC

WIFI Antenna

ESP8285

R T 5 G

RX TX 5V GND

G 5 T R

GND 5V TX RX

2.4GHz

IPEX1

Fimware upgrade button

SX1281

LED

GEPRC

ExpressLRS 2.4GHz

WIFI Antenna

ESP8285

R T 5 G

RX TX 5V GND

G 5 T R

GND 5V TX RX

LED Status indication

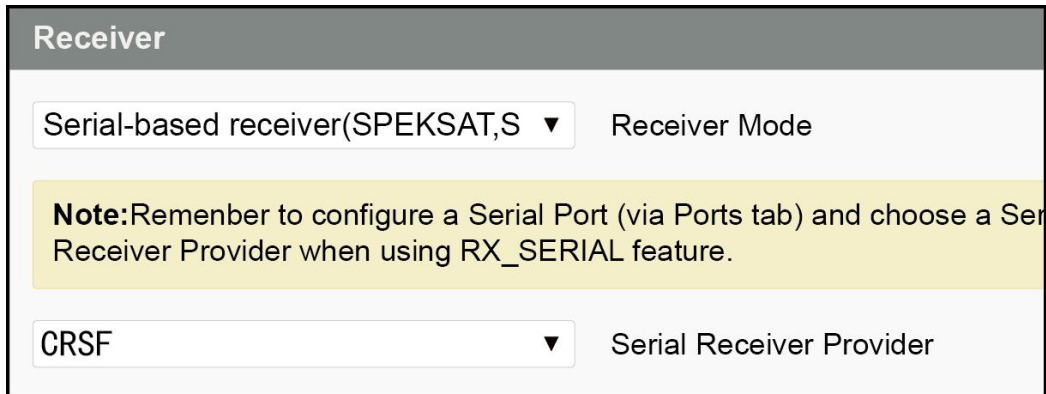| LED Status	Meaning
Solide on	Connection established
Flash slowly	No Tx signal
Flash qucikly	WIFI mode
Flash double quickly	Binding status

Instructions

ELRS Nano receiver and FC connection diagram:

Open Betaflight Configurator, go to "Ports" tab and enable the corresponding UART as a Serial Rx (e.g. UART2 as shown below). Save and restart.

Identifier	Configuration/MSP		Serial RX
USB VCP	⬤ on	115200 ▼	⬤ off
UART1	⬤ off	115200 ▼	⬤ off
UART2	⬤ off	115200 ▼	⬤ on

On the "Configuration" tab, click on "Serial-based receiver" on the "Receiver" panel, and select "CRSF".

Binding

1. The receiver is powered on and off for three consecutive times (within an interval of 1 second);
2. Receiver's LED doing double flashing, indicating that the receiver has entered the binding mode;
3. Make the RF Tx module or radio transmitter enter binding status. Once the LED status changes to solid light, the binding is successful.

About ELRS

ExpressLRS project is being constantly updated - the contents of this manual cannot be kept up-to-date in time. For more information, please visit the ELRS Project official.

github page:

https://github.com/ExpressLRS/ExpressLRS

Product list

1 x Nano receiver

1 x T antenna

2 x heat shrink tube

4 x silicone cable（black, red, yellow, green）

1 x pin (4pin)

1 x Instruction manual

Contact

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