ExpressLRS Updating Firmware For The ELRS Receiver or TX Module Instructions

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Updating firmware for the ELRS Receiver or TX module

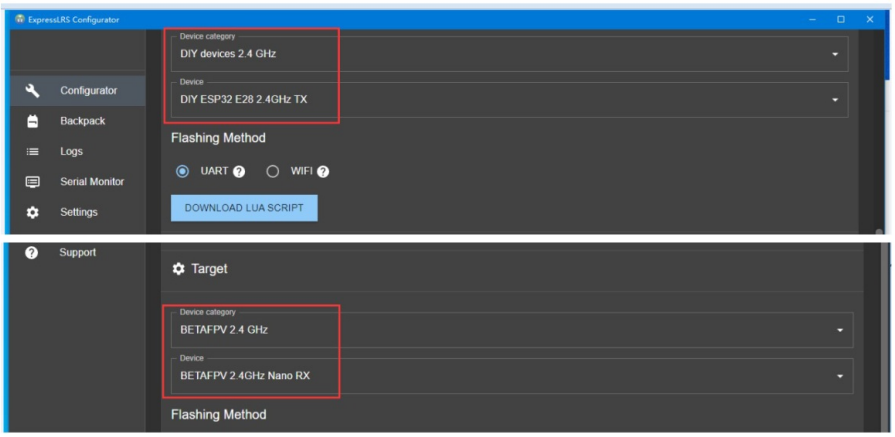
Useful links:

https://www.expresslrs.org/quick-start/getting-started/
https://www.expresslrs.org/quick-start/transmitters/updating/
https://www.expresslrs.org/quick-start/receivers/updating/

As the functionality of ELRS continues to expand, to utilize new features, you may need to upgrade the firmware of your TX module or receiver yourself. Please refer to the above links for the upgrade process.
Most of the upgrade methods are generic, but here are some important notes to consider:

First, download and install the ExpressLRS Configurator, which will allow you to download and upgrade the firmware: **https://www.expresslrs.org/quick-start/installing-configurator/**

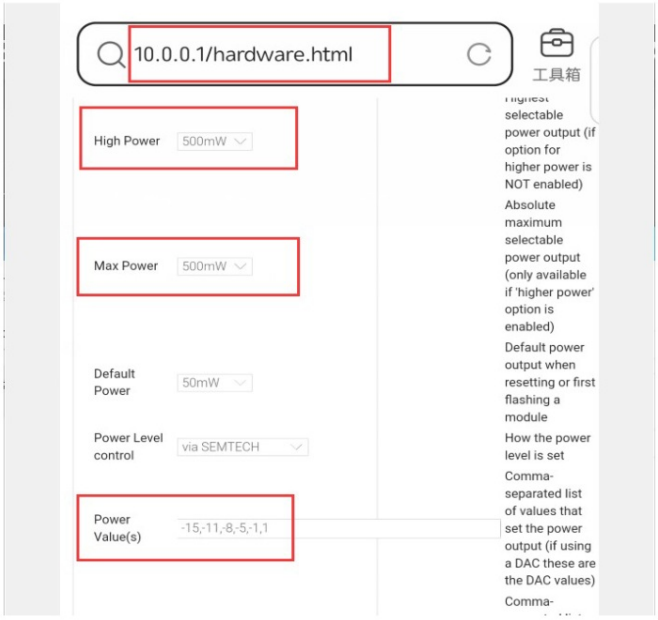
Since ExpressLRS's official repository has not yet included this module your module is not currently listed in the ExpressLRS Configurator's Target options, due to the similarity in hardware schematics, you can flash compatible firmware.
For the TX module, select DIY devices 2.4 GHz and DIY ESP32 E28 2.4GHz TX in the Target Device options.
For the RX module, select BETAFPV 2.4 GHz and BETAFPV 2.4GHz Nano RX in the Target Device options.



For the TX module, use the UART method for upgrading:
The TX module has a USB-C interface. Once connected to the computer, the ESP32 will automatically enter BootLoader mode, allowing you to upgrade the firmware via UART without the need for shorting the Boot jumper.Additionally, the module retains the Boot jumper, which can be modified to select the ESP32's working mode. In this case, the USB TYPE C interface can be used for power supply or firmware upgrade.
Download and install the UART driver:
https://www.wch-ic.com/downloads/CH341SER_EXE.html

After installation, connect the TX module to the computer via USB-C, and a new COM port will appear on the computer. Open the ExpressLRS Configurator software, select this new COM port in the Manual serial device selection box. You can then proceed with the firmware upgrade normally.

For the TX module, the default maximum power output is 500mW. After flashing a new firmware, it may only support a maximum of 250mW. If you need to change it back to 500mW, here's how:
Follow the link below to connect to the TX module's WIFI using your phone or computer:
https://www.expresslrs.org/quick-start/receivers/updating/#via-wifi
After connecting to WIFI, open this page through your browser:
http://10.0.0.1/hardware.html
Modify the option as shown in the figure below and save the changes, then you will have a maximum power of 500mW.



Contents

1 Documents / Resources
1.1 References

Documents / Resources

	ExpressLRS Updating Firmware For The ELRS Receiver or TX Module [pdf] Instructions DIY ESP32 E28 2.4GHz TX, BETAFPV 2.4GHz Nano RX, Updating Firmware For The ELRS Receiver or TX Module, ELRS Receiver or TX Module, Receiver or TX Module, TX Module, Module

References

- Getting Started - ExpressLRS
- Installing the Configurator - ExpressLRS
- Typical Updating Steps - ExpressLRS
- Typical Updating Steps - ExpressLRS
- Typical Updating Steps - ExpressLRS
- User Manual