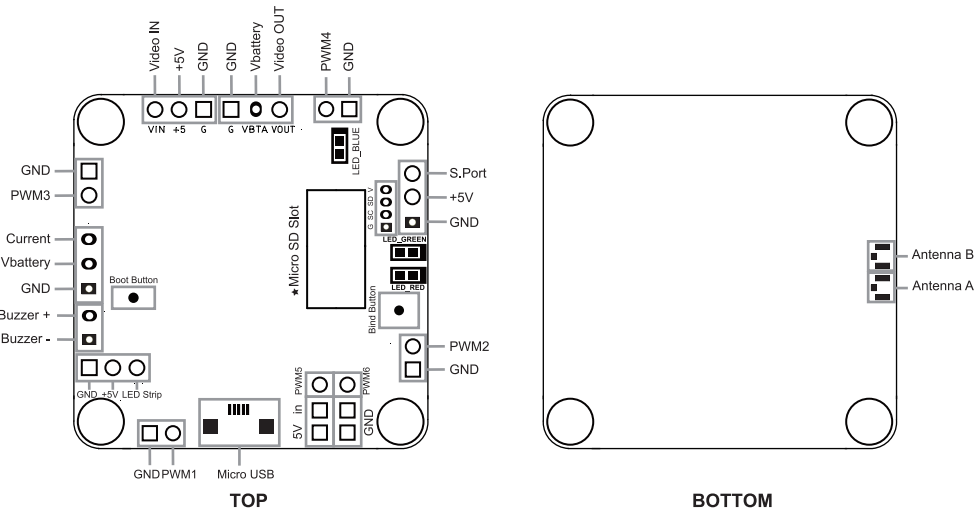


Introduction

Thank you for purchasing FrSky XSRF40. In order to fully enjoy the benefits of this system, please read the instruction manual carefully and set up the device as described below.

Overview



*** Note: Please leave your plastic sheeting (or Micro SD card) in the Micro SD slot for safety in the process of using flight controller.**

For XSR receiver status

Green LED	Red LED	Status
ON	Flashing	Binding
Flashing	OFF	Normal
OFF	Flashing	Signal lost
Flash Twice	Flash Once	Failsafe Set

Blue LED for F4 status

Specifications

- Model Name: XSRF40
- Dimension: 36x36x6mm (LxWxH) with 30.5mm mounting holes
- Hardware: STM32F405 MCU, SPI Sensor, MPU6000, OSD, SD.
- Weight: 7.7g
- Channels: 16CH (8CH is RSSI) by SBUS to UART1 of F4, Smart Port of XSR to UART6 of F4
- Operating Voltage Range: 4.0-10V (recommend 5V)
- Operating Current: 200mA@5V
- Compatibility: FrSky Taranis X9D/ X9D Plus/ X9E/ Horus X12S/ XJT in D16 mode
- Firmware Upgradable

Features

- Built-in F4 and XSR receiver module
- Built-in BARO BMP280
- Features the latest Accelerometer and Gyro technology.
- XSR receiver is a full duplex telemetry receiver, it will receive the commands of radios and send to F4 by SBUS (8CH is RSSI) to UART1 of F4, it can also send telemetry information back to radio by Smart Port.
- 6 PWM output signal lines for ESCs and Servos. Arranged for easy wiring on standard pin headers.
- OSD configuration has been included in Betaflight GUI.



Smart Port (S. Port) is a signal wire full duplex digital transmission interface developed by FrSky Electronic Co., Ltd. All products enabled with Smart Port (including XJT module, XSR, X6R and X8R receiver, new hub-less sensors, new Smart Dashboard, etc), serial port user data and other user input/output devices can be connected without limitations for numbers or sequences at a high transmission speed.

Software

- The F4 runs the software which was developed by FrSky and base on the BTFL, please choose the board of FRISKY F4 to update the software in Betaflight GUI.
- The XSR receiver runs the software which was developed by FrSky.

Configuration of F4

Because the XSR receiver is a full duplex telemetry receiver, receive the commands of radio and send to F4 by SBUS (16CH, 8CH is RSSI) to UART1 Rx of F4, we need set the appropriate settings on the Configurator tool.

1. In the ports, set the UART1 to be Serial Rx, set the UART6 to be Smart Port.
2. In the Configuration, set the Receiver Mode to be RX_SERIAL and Serial Receiver Provider to be SBUS, and disable the RSSI_ADC Analog RSSI input.

After configuration, you can use the FrSky radio (wireless) to set the PID parameters for XSRF40, make sure the firmware versions of radio is the latest, then copy the settings script FC.lua to the SD card of the radio, bind XSRF40 to the radio, and run the FC.lua scrip. FrSky FC firmware needs to be flashed if parameters are set through FC.lua.

For other configurations, please refer to the Cleanflight/ Betaflight.

Configuration of XSR receiver

The configuration of XSR receiver please refer to the manual of XSR (www.frsky-rc.com).

FrSky is continuously adding features and improvements to our products. To get the most from your product, please check the download section of the FrSky website www.frsky-rc.com for the latest update firmware and manuals