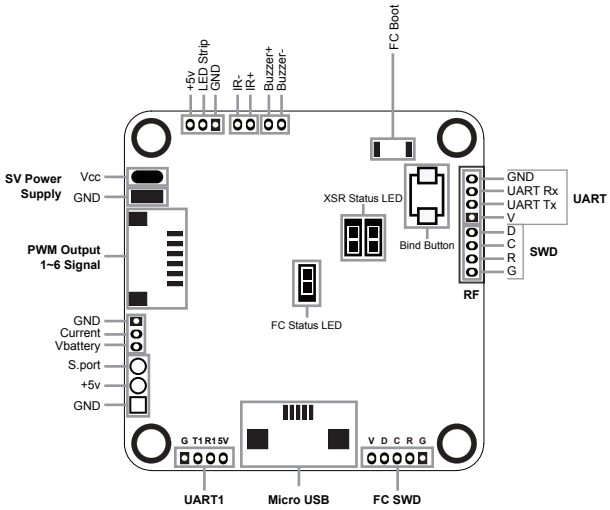
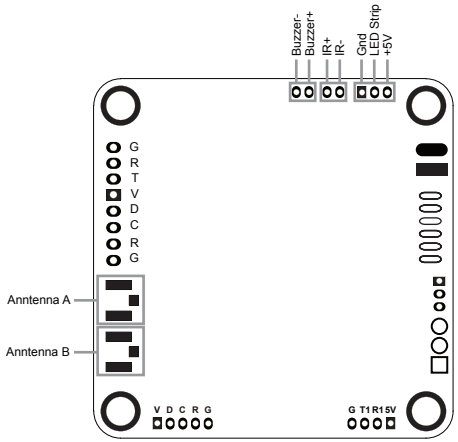
## Overview

TOP




BOTTOM




## 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 F3E Status

# Instruction Manual for FrSky XSRF3E

## Specifications

Model name: XSRF3E

Dimension: 36×36×6mm (L × W × H) with 30.5mm mounting holes

Hardware: STM32F303 CPU (72Mhz inc FPU), MPU9250 (accelerometer/gyro/compass), and BMP280 barometer for F3E

Weight: 6g

Channels: 16CH (8CH is RSSI) by SBUS to UART2 Rx of F3E, SmartPort of XSR to UART3 Tx of F3E

Operating Voltage Range: 4.0~10V

Operating Current: 200mA@5V

Compatibility: FrSky Taranis X9D/X9D-Plus/X9E/ Horus X12S/XJT in D16 mode

Firmware Upgradeable

## Features

Built-in F3E and XSR receiver module

Features the latest Accelerometer, Gyro and Compass and Baro sensor technology.

XSR receiver is a full duplex telemetry receiver, it will receive the commands of radio and send to F3E by SBUS (8CH is RSSI) to UART2 Rx of F3E, 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.

## Software

The F3E runs the open-source Cleanflight/ Betaflight flight control (FC) software and firmware upgradeable (SPRACINGF3EVO), the factory firmware is betaflight_3.0.1_XSRF3E

The XSR receiver runs the software which was developed by Frsky and firmware upgradeable.

## Configuration of F3E

Because the XSR receiver is a full duplex telemetry receiver, receive the commands of radio and send to F3E by SBUS(16CH, 8CH is RSSI) to UART2 Rx of F3E, we need set the appropriate settings on the Configurator tool.

1. In the ports, set the UART2 to be Serial RX, set the UART3 to be SmartPort.
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.
3. In the Receiver, set the RSSI Channel to be 8.

After configuration, you can use the FrSky X9D/X9D-Plus/X9E radio (wireless) to set the PID parameters for XSRF3E, make sure the firmware versions of radio is 2.2 or above, then copy the setting scrip FC.lua to the SD card of the radio, bind XSRF3E 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).

*FC.lua and this manual can be found from Frsky website download section.