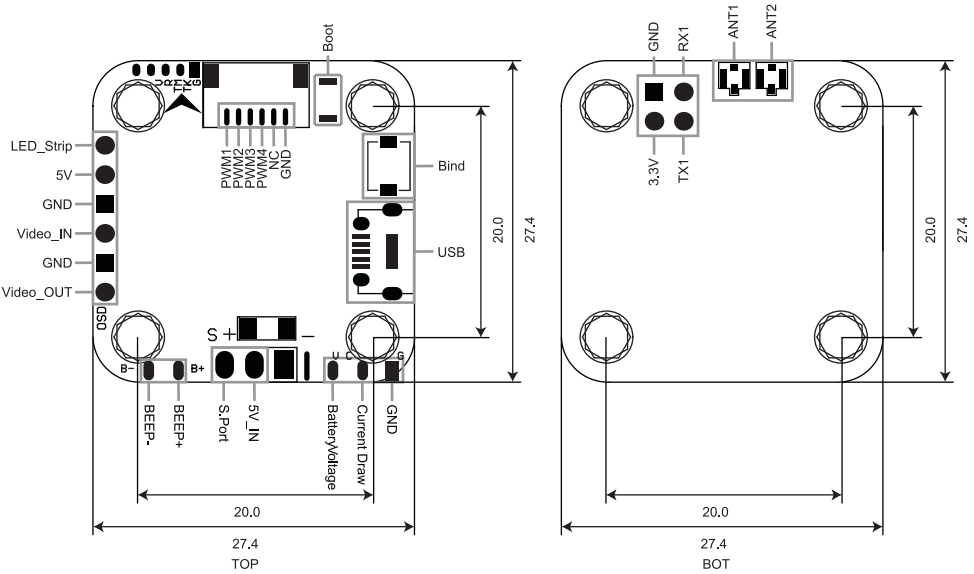
Introduction

Thank you for purchasing FrSky RXSRF3OM. The Flight Control is equipped with built-in high performance F3 and supports OSD configuration. 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



Specifications

- Dimension: 27.4×27.4×5.6mm (L×W×H)
  20mm mounting hole spacing
  2.5mm mounting hole diameter
- Weight: 4.5g
- Operating Voltage: DC 3.5~12V
- Operating Current: 150mA@5V
- Channels: 16CH SBUS output (CH8 is RSSI output)
- Hardware: STM32F303 CPU
  MPU6050 (Accelerometer/Gyro)
  R-XSR receiver module
- Compability: FrSky Taranis X9D/X9D Plus Taranis Q X7/X7S
  FrSky Horus X10/X10S/X12S
  FrSky XJT in D16 Mode

Note: The input voltage to RXSRF3OM is equal to that to Beep and LED Belt. Please make sure the operating voltage of external devices is no more than that of RXSRF3OM.

Features

- Smart Port enabled
- OSD configuration supported
- Built-in accelerometer and gyro
- Built-in F3 and R-XSR receiver module

Software

F3 runs the software developed by FrSky and based on Betaflight, please choose the board of FrSky F3 to update the software in Betaflight GUI.

R-XSR receiver runs the software developed by FrSky.

FrSky Electronic Co., Ltd www.frsky-rc.com Contact us : frsky@frsky-rc.com
Add:F-4,Building C, Zhongxiu Technology Park, No.3 Yuanxi Road, Wuxi, 214125, Jiangsu, China Technical Support: sales4tech@gmail.com

Working State

Green LED	Red LED	Status
On	Flashing	Binding
Flashing	Off	Normal
Off	Flashing	Signal Lost
Flashing Twice	Flashing once	Failsafe Set

Smart Port

All data measured by S.Port supported products could be passed back to the transmitter.

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.

Binding procedure

Binding is the process of uniquely associating a particular receiver to a transmitter. A transmitter could be bound to multiple receivers (not to be used simultaneously). A receiver could only be bound to one transmitter.
Follow the steps below to complete binding procedure.
1. Put the transmitter/transmitter module into binding mode
1.1 For Taranis X9D/ X9D Plus and Taranis Q X7/ X7S, turn on the transmitter, go to MENU—MODEL SETUP—PAGE 2, choose Internal/ External RF, then select BIND.
1.2 For Horus X10/ X10S/ X12S, turn on the transmitter, go to RF system, choose Internal/ External RF, and select BIND under State.
1.3 For transmitter module (XJT as an example), turn on the transmitter while holding the F/S button on the module. Release the button and Red LED on XJT will flash, indicating it is ready for binding.
2. Power on RXSRF3OM, the Red LED on R-XSR receiver will flash, indicating the receiver is waiting to receive commands. After 2 seconds, both Red LED and Green LED will be on, indicating the receiver is in binding mode. Then, Red LED will flash while Green LED will be on, indicating binding procedure is completed.
3. Turn off the transmitter/ transmitter module and R-XSRF3OM.
4. Put the transmitter/ transmitter module into normal operating mode first, then power on RXSRF3OM. The Green LED on R-XSR receiver is on, indicating R-XSR is receiving commands from the transmitter.

Note: Binding needn't be repeated unless the transmitter/ transmitter module/ receiver is replaced.

Configuration

F3
Because R-XSR receiver receives commands from the transmitter and send them to F3 , we need to ensure the appropriate settings with configuration tools.
- Under Ports, set the UART2 as serial Rx.
- Under Configuration, set RX_SERIAL as the receiver mode and SBUS as Serial Receiver Provider. Disable RSSI_ADC Analog RSSI input.

After configuration, you can use FrSky transmitter (wireless) to set the PID parameters for RXSRF3OM. Make sure the firmware version of the transmitter is the latest or above 2.2.0, then copy the settings script FC.lua to the SD card of the radio, bind RXSRF3OM to the transmitter, then run the FC.lua script. FrSky FC firmware needs to be flashed if parameters are set through FC.lua.

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

R-XSR receiver
The configuration of R-XSR receiver, please refer to the manual of R-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

FrSky Electronic Co., Ltd www.frsky-rc.com Contact us : frsky@frsky-rc.com
Add:F-4,Building C, Zhongxiu Technology Park, No.3 Yuanxi Road, Wuxi, 214125, Jiangsu, China Technical Support: sales4tech@gmail.com