Notice

All instructions, warranties and other collateral documents are subject to change at the sole discretion of FrSky Electronic Co., Ltd. For up-to-date product literature, visit https://www.frsky-rc.com/ and click on the products tab for this product.

Meaning of Special Language

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

NOTICE: Procedures, which if not properly followed, create a possibility of physical property damage AND a little or no possibility of injury.

CAUTION: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

WARNING: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

This is a sophisticated hobby product. It must be operated with caution and common sense and requiressome basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by FrSky Electronic Co., Ltd. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual,prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

Age Recommendation: Not for children under 14 years. This is not a toy.

Safety Precautions and Warnings:

- Always keep a safe distance in all directions around your model to avoid collisions or injury. This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control.
- Always operate your model in open spaces away from full-size vehicles, traffic and people.
- Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
- Always keep all chemicals, small parts and any-thing electrical out of the reach of children.
- Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture causes damage to electronics.
- Never place any portion of the model in your mouth as it could cause serious injury or even death.
- Never operate your model with low transmitter batteries.
- Always keep aircraft in sight and under control.
- Always move the throttle fully down at rotor strike.
- Always use fully charged batteries.
- Always keep transmitter powered on while aircraft is powered.
- Always remove batteries before disassemble.
- Always keep moving parts clean.
- Always keep parts dry.
- Always let parts cool after use before touching.
- Always remove batteries after use.
- Never operate aircraft with damaged wiring.
- Never touch moving parts.

FrSky Rover 3 Tilting Rotors Drone Manual | Version 1.0

⚠ WARNING AGAINST COUNTERFEIT PRODUCTS:

If you ever need to replace a FrSky component found in a FrSky product, always purchase from FrSky Electronic Co., Ltd. or a FrSky authorized dealer to ensure authentic high-quality product. FrSky Electronic Co., Ltd. disclaims all support and warranty with regards, but not limited to, compatibility and performance of counterfeit products or products claiming compatibility with FrSky.

If you are operating this product in North America, you are required to have an Amateur Radio (HAM) license. Visit www.arrl.org for more information.

This product uses Betaflight Third Party Software in portions of its coding. For more information on Betaflight Software, please visit: https://github.com/betaflight/betaflight/wiki.
THIRD PARTY SOFTWARE. This product may include code developed by one or more third parties ("Third Party Software"). Some Third Party Software may be subject to other terms and conditions that may be available for download with the product documentation. Notwithstanding the terms and conditions of this Agreement, the Third Party Software is licensed to you subject to the terms and conditions of the software license agreement identified in the open source software disclosure. If the third party terms and conditions include licenses that provide for the availability of source code (such as the GNU General Public License), the open source software disclosure or the media on whichthe software may be delivered will provide instructions where a copy of such source code can be obtained.

Specifications

Length	310mm
Hight	120mm
Max Propeller Diameter	4 in
Flying Weight	320g
FC	XSRF3O
Box Contents	- Rover3 Tricopter drone - Backup propellers - Manual

Needed to Complete:

- FrSky Transmitter
- 11.1V/14.8V 800 – 1300mAh Li-Battery
- LiPo Compatible Battery Charger
- FPV Headset or Groundstation Monitor

The operating frequency of the aircraft is 2400 – 2483.5 MHz
VS600mini Analog VTX is 5.8GHz (25mW/200mW/600mW adjustable) and requires an amateur radio license in North America To receive product updates, special offers and more, register your product at www.frsky-rc.com.
NOTICE: Consult local laws and ordinances before operating FPV (first person view) equipment.
In some areas, FPV operation may be limited or prohibited. You are responsible for operating this product in a legal and responsible manner.

First Flight Preparation

- Remove and inspect contents
- Begin charging the flight battery
- Assemble the aircraft
- Program your transmitter
- Install the flight battery in the aircraft (once it has been fully charged)
- Bind your transmitter
- Familiarize yourself with the controls
- Find a suitable area for flying

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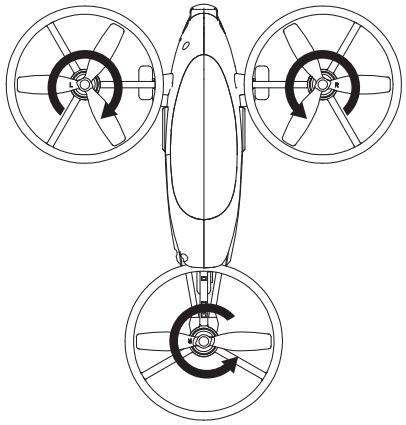
Flying Checklist

Always turn the transmitter on first
- Plug the flight battery into the lead from the ESC
- Allow the ESC to initialize and arm properly
- Fly the model
- Land the model
- Unplug the flight battery from the ESC
- Always turn the transmitter off last

Installing the Propellers

Refer to the illustration for the proper motor rotation and propeller location.
Match the propeller location to the illustration.
Secure the propellers using screw nut.
Do not overtighten the screws as damage to the propellers or motors may result.



Transmitter Setup

NOTE: Flash the flight controller with newest firmware. And diff the "DIFF" file in the CLI. (Already done in the factory, do it again if you having trobles)

Bind the radio to the Rover 3 using D16 mode.

Set radio outputs order as:

Chanel 1: Throttle
Chanel 2: Aileron
Chanel 3: Elevator
Chanel 4: Rudder
Chanel 5: Aux 1 is arm/disarm. This can be changed to any other method of arm/disarm except AUX 3.
Chanel 6: Aux 2 is the mode setting. Assign to a three position switch.
Set position 1 to no mode.
Set position 2 to Angle mode.
Set position 3 to Horizon mode.
Chanel 7: Aux 3 is the tilt slider. Assign to a slider on radio. (only works when Horizion mode)

Modes:
Aux 2 position 1 is acro mode. This works just like a quad's acro mode. The tilt slider does nothing.
Aux 2 position 2 (Angle Mode) sets the Rover 3's pitch to always be level with the horizon.
Aux 2 position 3 (Horizion Mode) works just the Angle Mode, except the Aux 3 slider will change the level of the Rover 3.

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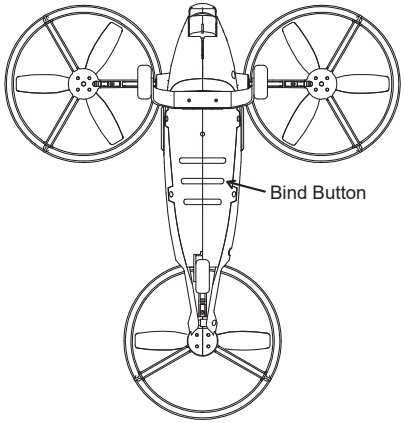
Binding Transmitter to Rover 3 (OPENTX User)

To bind or re-bind your copter to your chosen transmitter, follow the directions below.
1: Disconnect the flight battery from the copter.
2: Center all trims on your transmitter.
3.1: For Taranis X9D/X9D Plus/X9E and Taranis Q X7, turn on the radio, go to the MENU – MODEL SETUP – PAGE 2, choose Internal or External RF, select the ACCST D16 Mode and select BIND.
3.2 : For Horus X12S/X10, turn on the radio, go to the RF SYSTEM, choose Internal or External RF, select the ACCST D16 Mode and select BIND under STATE.
4: Connect battery to the receiver while holding the F/S button on the receiver, the RED LED flashing indicates binding successfully.
5: Reboot the receiver and go back to normal Mode of transmitter RF. Green LED constant on indicates linking normally. The receiver/transmitter module binding will not have to be repeated, unless one of the two is replaced.



After setup the transmitter and complete the binding.
You can connect the power and check the rotors and motors.
Feel free to gentle push the throttle and take off.

NOTICE

If you like to have More advanced settings ,you can gently pull the flight controller out from the bottom of the drone,remove the under cover first, and connect it to the Betaflight App on computer, you can find more detail about betaflight on web.

We will keep update on our web , please come and check from time to time.

Thanks again for purchasing the Rover 3 Drone . Have a fun flight!

Using the Video Transmitter

All video transmitter setup are done through lua script on raido.
Please see the details on www.Frsky-rc.com Rover 3 page.

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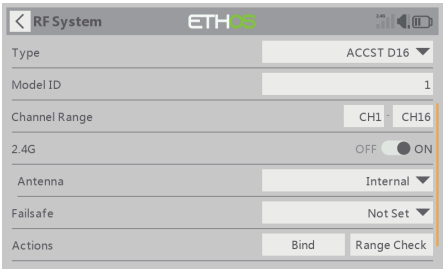
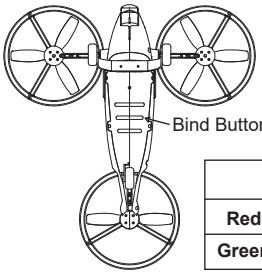
Binding Transmitter to Rover 3 (ETHOS User)

1. Taking the ETHOS radio as an example, enter the【Model】menu and select the【RF system】, open the internal module, set the **State** to ON, and select the RF protocol as ACCST D16. Then decide the internal or external antenna according to your needs.

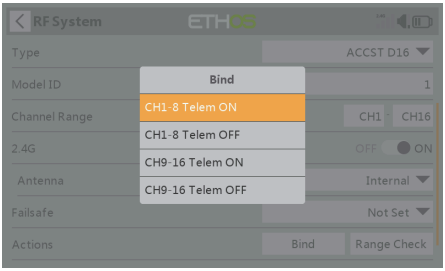


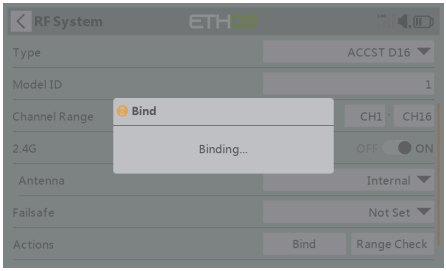
2. Hold the binding button on the XSRF3O and power on Rover3 then. When the Red and Green indicators on the receiver are always on, it means that XSRF3O enters Bind mode.



	Bind in Ready
Red	Steady lit
Green	Steady lit

3. Click Bind under the **【RF System】** menu and select the required Channel/Telemetry working mode, then the radio will enter the Bind mode.





4. When the Red and Green indicators of the XSRF3O change as the table below, have the radio exit the Bind mode and power off the Rover 3.

	Bind in Progress
Red	Flash
Green	Steady lit

5. Repower on Rover 3 and the XSRF3O has the Green indicator steady lit, indicating that the Rover3 is bound to the radio successfully.

	Bound in Success
Red	Off
Green	Steady lit only

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