

FrSky V8 2.4GHz Radio Control System

Instruction Manual for V8HT

Thank you for purchasing our FrSky 2.4GHz RF radio control system. In order to fully utilize the performance potential of this system, please, carefully read the instruction manual and set up the devices as described below.

1. Main features

- ◆ Advanced Continuous Channel Shifting Technology (ACCST), robust frequency agility.
- ◆ Easy to bind and very fast link-up.
- ◆ Excellent reboot times.
- ◆ True antennas diversity.
- ◆ All channels are very effective and easy to set failsafe.
- ◆ Responsive and rock-solid in performance.
- ◆ Very Smooth servo movement.

2. Transmitter module specifications

Size: 43mm*34mm*7mm

Operating Voltage Range: 6.0V-13.0V

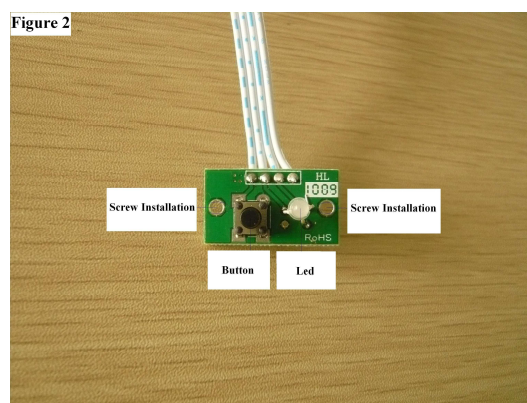
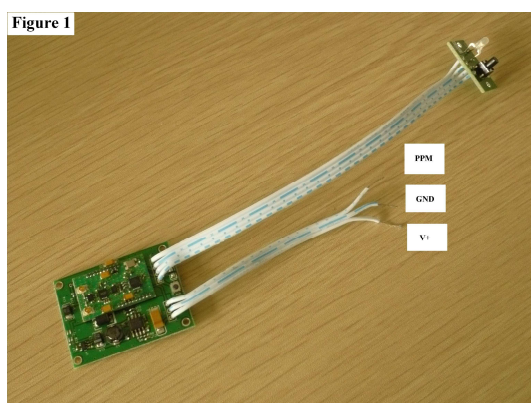
Operating Current: 50mA

Output Power: 60mW

Resolution: 3072

3. Setup and Operation process

3.1 Install process:



1. Open the transmitter, find out the Battery power supply line, PPM signal line, and the GND.
2. Take the order, solder the PPM signal line, Battery power supply line, GND to the DIY transmitting module with 3 line. (XXX →PPM; ---→GND; WHITE: V+) (see Fig. 1)
3. Drill four holes on the transmitter as the picture guided, two holes on both sides are designed for screw installation, others for green/red color LED and the button. (see Fig. 2)
4. Connect the antenna connector at the port on transmitter board.
5. Drill a hole for antenna connector at the suitable space on the transmitter. Diameter 7mm is suitable.
6. Fix the transmitter antenna on the connector. Turn the transmitter power on and check the power indicator LED of DIY extend board, the LED is normally light orange/red.

3.2 Receiver and Transmitter Setup Instructions:

- a) Turn your transmitter on and switch it to PPM mode, power off the TX.
- b) Turn the transmitter on while holding the programming button. Release it a few seconds later. The RED LED on the transmitter module will flash, indicating the transmitter is ready to bind the receivers.
- c) Connect the battery to the receiver while holding the receiver's button. The LED on the receiver will flash, indicating the binding process is completed. Turn off the receiver and transmitter.
- d) Turn on the transmitter. Connect the battery to the receiver when ORANGE/RED LED on TX is on. The LED on the receiver will indicate the receiver is receiving commands from the transmitter. In a few seconds, system is ready to work (communication is established).

After above steps are completed, both the transmitter and the receiver are ready to be used. Binding is required only to set up a new link (like new or additional receiver or transmitter module). Otherwise, just go to step d. To control multi-receivers, every receiver should be programmed with the transmitter in binding state (step b). After all receivers are binded, turn off the transmitter.

3.3 Range check:

Important: For safe operation, it is necessary to perform pre-flight range check.

Caution must be paid when flying the unit in the neighborhood of metal fences, concrete buildings, or rows of trees. If doing so, you may experience unexpected interferences.

Perform a range check as follows (Note: this is done with the receiver installed in the model):

Place the model at least two feet (60cm) above non-metal contaminated ground; for example a wooden bench.

Place the receiver's antenna horizontally. Don't let the antenna touch the ground.

Place the antenna of the transmitter in a vertical position.

Turn on the transmitter and receiver, then press and hold the "F/S Range" button of the transmitter for 4 seconds the RED LED of the transmitter module will change into GREEN, the power of the transmitter module will be reduced to ab. 1/1000th of the nominal value, and the effective distance will be shortened to ab. 1/30th of the normal value, thus effective distance will be shortened to just above 30 meters.

Walk away from the model while simultaneously operating the controls on the transmitter. Have an assistant stand to confirm that all controls are completely and correctly operational. You should be able to walk ab. 30m from the receiver without losing control.

Press the "F/S Range" button again to exit range check state.

3.4 Signal loss indicator

In some special circumstances, such as a strong interference, the signal can be lost.

When signal lost in a short period, the receiver continues to try to search for the transmitter, at the same time, keeps the last command from transmitter, until a new command is received.

Failsafe: Our receivers support failsafe function for all channels. Just do it as bellow:

When the receiver is connected to the TX, set the stick to appropriate failsafe position, press briefly the "F/S Range" button of the receiver, the GREEN LED of the receiver will flash twice, the failsafe position is remembered.

If you do not need the failsafe function any more, just re-bind the receiver.

Attention: Controlling distance is affected by the environment too. Please test it in an open field away from any obstacles. The controlling distance in the air is greater than that on the ground. Our controlling range is based on a conservative ground test.

We hope you enjoy our new 2.4GHz products. They have been designed and produced using the highest

quality control measures available. If you have any questions please do not hesitate to contact us.

FCC Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following

Measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

CE in which countries where the product may be used freely: Germany, UK, Italy, Spain, Belgium, Netherlands, Portugal, Greece, Ireland, Denmark, Luxembourg, Austria, Finland, Sweden, Norway and Iceland.

France: except the channel 10 through 13, law prohibits the use of other channels.