



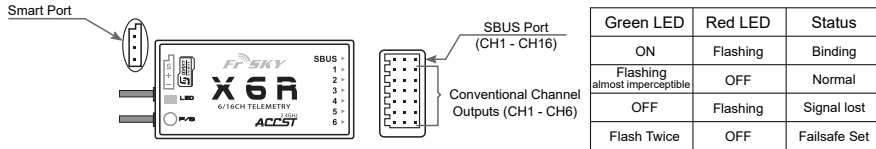
Manuel du X6R FrSky 2.4GHz ACCST



Introduction

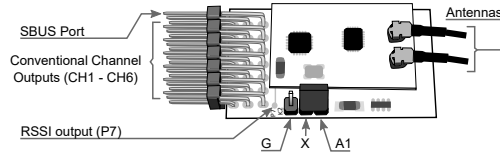
Thank you for purchasing FrSky X6R 6/16ch full duplex telemetry receiver. In order to fully enjoy benefits of this system, please read the instruction manual carefully and set up the device as described below.

Overview



Specifications

Dimension : 47.42 x 23.84 x 14.7mm (L x W x H)
Weight : 15.4g
Number of Channels : 16 CH (1-6ch available from conventionnal channel outputs, 1~16ch available from SBUS port)
With RSSI output on PCB : PWM output (0~3.3V)
Operating Voltage Range : 4.0 ~ 10V
Operating Current : 100mA@5V
Operating Range : full range in open field >1,5km
Firmware Upgradeable
Compatibility : FrSky DFT/DJT/DHT/DHT-U in D8 mode
FrSky Taranis X9D Plus/XJT in D8 mode
FrSky Taranis X9D Plus/XJT in D16 mode
the X8R-EU version only works with the EU version of the FrSky Taranis X9D Plus or the EU version of the XJT module in the D16-EU-LBT mode.



Note : The receiver's drawing that is in this paragraph is not in the official documentation.

The source of this information is at <https://www.rcgroups.com/forums/showpost.php?p=27541261&postcount=85>

Features

- With analog input to connect external telemetry information (A1)
When pins A1 and X (center pin) are connected via a jumper, A1 no longer returns the external telemetry information and instead returns the voltage of the receiving battery.
- More number of channel : 1~6ch available from conventionnal channel outputs, 1~16ch available from SBUS port
- With RSSI output on Printed Circuit Board : PWM output (0~3.3V)
- Smart Port enabled, realizing two-way full duplex transmission.



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, 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 module.

A transmitter module can be bound to multiple receivers (in this case, each receiver will be bound one after the other, simultaneous binding is impossible). A receiver can only be bound to one transmitter module.

Follow the steps below to perform the binding procedure with the internal transmitter module of a FrSky radio of the **Taranis** or **Horus** series running on **OPEN-TX** :

- Turn on the transmitter and select the "Model Setup" menu of your current model. In the section "Internal RF" :
 - Select D8 or D16 "Mode".
 - Only for D16 mode**, you can assign a number to the receiver to be bound. This allows you to link model programming with a specific receiver, and ensures that later only this receiver will work with the model selected on the radio.
 - Select and confirm "Bind". The cursor blinks and the radio beeps indicating that the "bind" mode is in progress.
- Set X8R receiver in "bind" mode (**see below chart for details**). The RED LED on the receiver will flash, indicating the binding process is completed.
- On the radio, quit the "Bind" mode by pressing the (Exit) or (RTN) key and leave the transmitter on. Turn off the receiver.
- Plug the receiver battery to turn it on. On the receiver, the green LED on (flashing almost imperceptible) and the red LED off indicate that the receiver is receiving commands from the transmitter. The receiver / transmitter module binding will not have to be repeated unless one of the two elements is replaced **or** if you want to change the assignment of the receiver number.



Note : After binding procedure is completed, recycle the power and check if the receiver is really under control by linked transmitter.

Receiver mode and Binding Operation :

Mode of X6R	Telemetry	Channel Output	Jumped before Bind (signal pins)	F / S Button
D8	✓	CH1 ~ CH6	CH5 & CH6	Connect the battery to any available channel output (no need to hold F/S button on X8R)
D16	x	CH1 ~ CH6	CH3 & CH4	Connect the battery to any available channel output while holding the F/S button on X8R
D16	x	CH9 ~ CH14	CH1 & CH2	
D16	✓	CH9 ~ CH14	CH1 & CH2, CH3 & CH4	
D16	✓	CH1 ~ CH6	No Jumper	

The X6R-EU version only works with the EU version of the FrSky Taranis X9D Plus or the EU version of the XJT module in the D16-EU-LBT mode.

Range Check

For safety, a pre-flight range check should be done before each flying session. Reflections from nearby metal fences, concrete buildings or trees can cause loss of signal both during range check and during the flight.

Follow the steps below to perform the range check procedure with the internal transmitter module of a FrSky radio of the **Taranis** or **Horus** series running with **OPEN-TX** :

- Place the model at least 60cm (two feet) above non-metal contaminated ground (e.g. on a wooden bench).
- Position the antennas of the receiver at an angle close to 90 °. Antennas must not be in contact with the ground.
- Position the antenna of the transmitter vertically.
- Turn on the transmitter and select the "Model Setup" menu of your current model. In the section "Internal RF", select "Range". The radio emits beeps indicating that the range check mode is enabled. The effective range is then decreased by a ratio 1/30 (1m in reduced range mode = 30m in normal range mode).
- Walk away from the model while simultaneously operating the controls on the transmitter to confirm all controls' normal operation. You should be able to move about 30m away from the receiver.
- To exit the range check mode and return to normal range mode, press the (Exit) or (RTN) key. The radio is no longer beeping.

Failsafe

Failsafe is a security feature that takes control of the channels to assign them a predetermined position each time the command signal is lost for a period of time. The X6R supports failsafe function for all channels.

The Failsafe configuration remains in memory, even if the receiver has been turned off.

To disable the failsafe feature, re-bind the receiver.

It is recommended to configure the Failsafe when using the system for the first time, or when the receiver has been re-bound.

Follow the steps below to set Failsafe feature.

Option 1 - Configure Failsafe to assign a custom channel position when the signal is lost.

- Bind the receiver with the transmitter module and turn on the transmitter and receiver;
- Move the controls to desired failsafe position for all channels;
- Press briefly the F/S button on the receiver (less than 1 second). The Green LED will flash twice, indicating the failsafe position has been set in the receiver.

Option 2 - Configure Failsafe to get no signal (no pulses) on the channels when the signal is lost.

- Turn off the transmitter module first, power on the receiver, and then press briefly the F/S button on the receiver.

Option 3 - Configure Failsafe using the internal transmitter module in D16 mode of a Frsky radio of the **Taranis** or **Horus** series running on **OPEN-TX** :

- Bind the receiver with the transmitter module and turn on the transmitter and receiver;
- On the transmitter, select the "Model Setup" menu of your current model. In the section "Internal RF" choose your custom "Failsafe Mode" setting and possibly the corresponding parameters.

CAUTION: Option 3 overrides option 1 or option 2 except for the failsafe type "Receiver" !

Note : If failsafe is not set, failsafe default will hold last position before signal is lost. In this case, there exists risk that your model will fly away or cause injury.

For more details, please check the complete manual for X8R from www.frsky-rc.com - Download - Manual.
Should you have other questions, please send e-mails to FrSky technical support sales4tech@gmail.com.