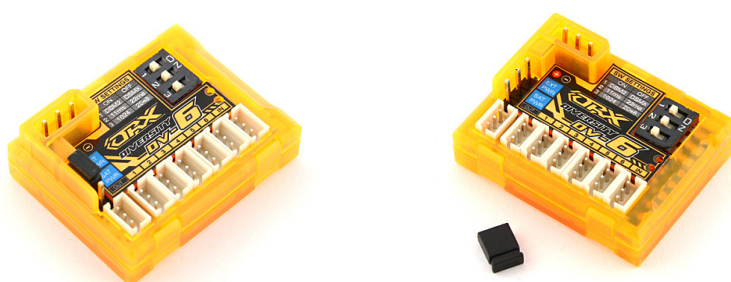




ORANGERX DSMX/DSM2 6 CHANNEL DIVERSITY

USER MANUAL



FEATURES:

- Works with Spektrum compatible satellites:
 - Spektrum SPM9545
 - Spektrum SPM9645
 - Orange R100
 - Orange R110x
 - Orange R110xl
 - Orange R111xn
- 4 modes (selected by switches during binding procedure): DSM2 1024/22ms, DSM2 2048/11ms, DSMX 22ms, DSMX 11ms
- 6 satellite inputs, 1 satellite output
- Integrated bind function
- Dual-power selection (from satellite port or from 5VDC)
- Current consumption: 30mA
- Weight 7g
- Input Voltage:
 - 4 – 8.4VDC from power connector
 - 3.3VDC from satellite port

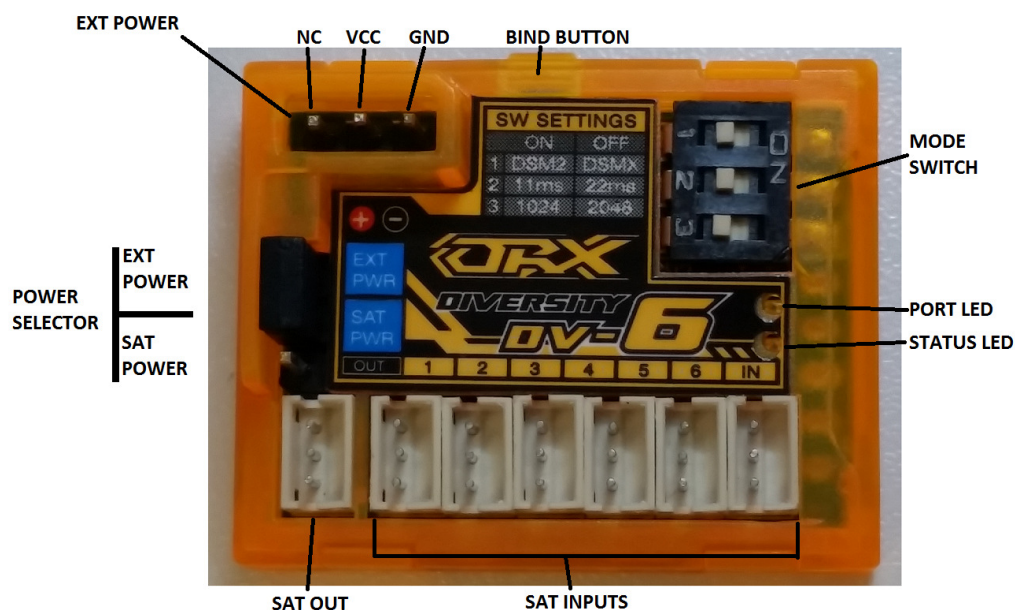
DESCRIPTION:

Increases a signal validity and reduces the probability of signal loss in carbon fiber airframes as well as long range FPV platforms. The OrangeRX DSM2/DSMx Compatible 6 Channel Diversity Module receives data from up to 6 satellite receivers, checks the signal validity and then outputs the valid signal to the DSM2/DSMx compatible receiver or via direct connection to a UAV or Flybarless Helicopter Flight Controller.

The unit can be powered from external 5V~8.4V or directly from the 3.3V satellite port and incorporates a binding function allowing satellites to be bound without using any additional receiver.

SUPPORTED PROTOCOLS:

DSM2 – 1024/22ms, 2048/11ms
DSMx – 22ms/11ms



CONNECTORS:

EXT POWER:

- PIN1 – GND
- PIN2- VCC 4 - 8.4VDC,
- PIN3 – not connected

SAT OUT:

Satellite output data to receiver, flight control or flybarless control. Connect this port to the satellite port of your receiver or flight control

SAT INPUTS:

- 1 – Satellite master port. It must be connected to satellite during binding.
- 2...6 - Secondary satellite ports. Connect up to 5 satellites here. If you have less than 6 satellites connect them starting from port 1

JUMPERS:

POWER SELECTOR

You can select where the diversity module and satellites will be powered from. They can be powered directly from satellite port of your receiver or FC (Jumper position SAT POWER).

If you use more than 2 satellites it is better to power them from external power directly since diversity module has its own voltage regulator. (Jumper position EXT POWER).

BUTTONS:

Button Bind

When the module is powered on while the button is pressed a binding procedure is initiated. You can bind up to 6 satellites to the same transmitter at the same time.

LED FUNCTIONALITY:

PORT LED – Orange

Functionality: In working mode blinks from 1 to 6 pulses in series showing which satellite is currently active. If there is no signal from satellites available blinks long pulses.

STATUS LED– Red

Functionality: Starts blinking if active satellite has been changed during operation.

SWITCH:

DIP switch SW2 has 3 dual throw switches (ON/OFF respectively).

1. DSM2/DSMx
2. 11ms/22ms
3. 1024/2048

When you bind satellites to your receiver they will be bound according to switch settings.

Switch settings take effect used ONLY during binding procedure. They don't change modes during regular working time.

Switch settings are described on the label.