



PC Controlled 4 Way Remote Antenna switch

By GM6DX

The switch unit is in two parts. The first part is the control unit which connects to your PC, the second part is the relay unit.

3kW PEP rating.

CONTROL UNIT

The control unit case is made from plastic.



The switch will light up (left to right as you look at it) showing port 1, 2, 3, 4 when active.

ENSURE YOU ONLY HAVE ONE ANTENNA PORT ACTIVE AT ANY ONE TIME.

At the rear of the box is a 1A glass fuse. You are provided with spare fuses should this blow. Although the fuse may seem annoying it was added after testing when shortening of a DC cable occurred. Remember to check the fuse, if your DC outlet is providing voltage and when the switch is turned no LED's emit light.

Also at the rear of the unit is a DC jack. This takes a 2.5 x 5.5 mm DC jack. The centre connection is positive and can take a voltage range of 12 - 15V DC. So running this off your radios power supply is an easy solution. Of course a DC wall adapter could be used. You will also see a on off switch this cuts power from the DC jack to the control unit.

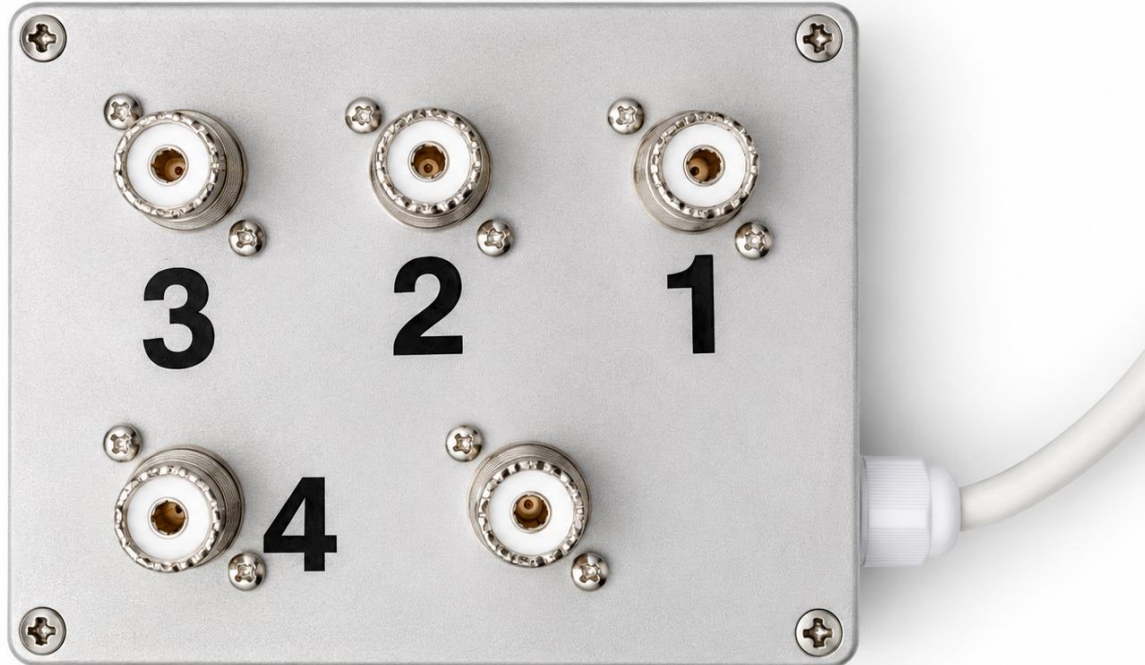
The RJ45 connection facilitates the connection of a CAT 5 / 6 cable from the control unit to the relay unit. No special cable is needed here you can use a standard cat cable, I use shielded cat cable to prevent any RFI issues.

Connect a USB - B cable between the controller and your PC. Thereafter run the provided software, port 1-4 on the software relates to port 1-4 on the switch. The controller uses a standard FTDI chip. A driver is provided but it is your responsibility to ensure your PC uses the correct driver to operate the controller.

LED COLOUR WILL VARY

RELAY UNIT

The relay unit is constructed from a cast aluminium box.

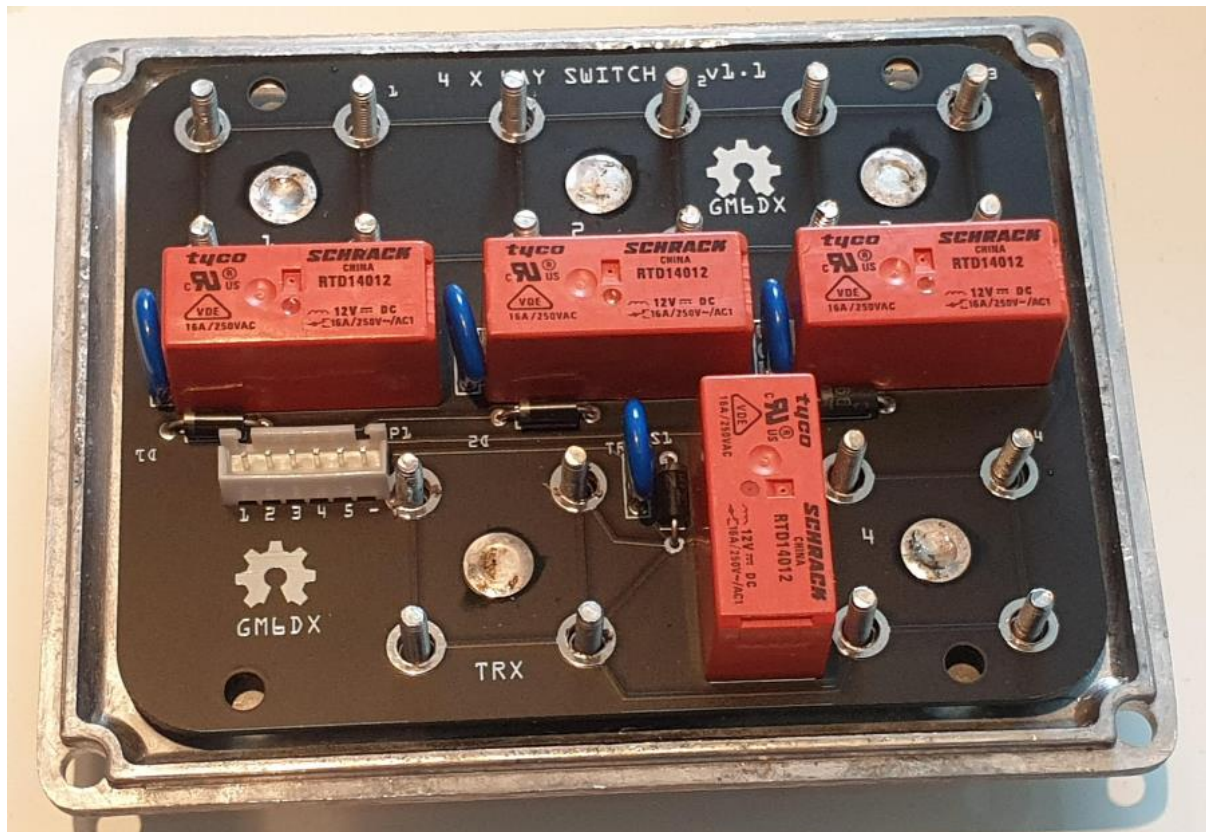


Here you can see the antenna port numbers and the port which goes to your transceiver / amplifier (TRX).

The case bottom is attached with 4 screws which has a rim in the inside to prevent water ingress. My advice is, if this is an outside install then you **WILL** need to tape up and seal the so239 connections and the RJ45 connection to prevent water ingress. A strip of tape around the lid connection and box is also a good idea.

The box has no mounting holes however, you can unscrew the lid and drill holes in the case if you want to bolt the relay unit to a bracket or to a pole etc, there's limited room inside but will facilitate a bolt head or nut. Please ensure you check prior to drilling any holes in the case.

The relay unit has a RJ45 socket for the standard Cat cable connection, please ensure this is taped / sealed for external use.



The PCB is attached to the lid (note material used on the relay board differ from this photo however the idea is the same). Short cables go from the RJ45 to the lid so please be careful if separating for drill mounting hole etc.

Any question please ask. **Billy GM6DX**