

Wiring a Yaesu/Kenpro (standard)

The wiring with most Yaesu/Kenpro controllers will be very similar. If your controller is not ready for a computer interface, you must open the control unit. Locate the 2 switches used for the manual control (CCW/Left and CW/Right).

In the image bellow (picture 1) you will see the colors used by a Yaesu G450.

Note: Those colors could be changed, but the wiring method will be the same.

Now you must connect the ARS-USB relays (CCW/Left and CW/Right) in parallel with the Yaesu switches. In this way, when the ARS-USB activate any of the relays, will act as if the associated switch was pressed.

Note: Each relay has 2 contacts so there are 4 wires; however as one of the 4 wires is common to both switches, so we really need only 3 wires.

The wiring is as follows:

- Green (Right/CW Control)
- Red or common (Normally is 20-24V)
- Yellow (CCW/Left Control)

You must route each of those wires to the ARS-USB PCB (J1 connector), and remember to double the Red wire to J1-2 and J1-8

J1 – Relay Connector

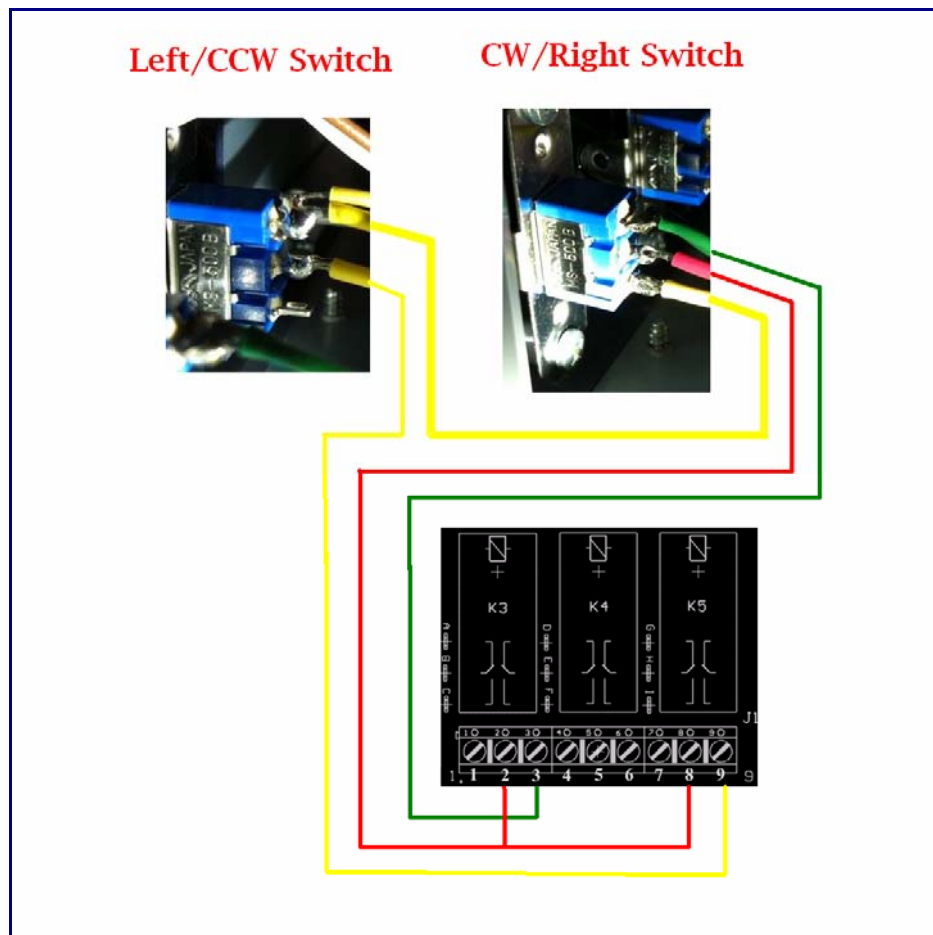
J1-1: unused	J1-7: unused
J1-2: Red	J1-8: Red
J1-3: Green	J1-9: Yellow

The antenna position is detected by the ARS-USB with 2 wires connected into the controller. Those 2 wires comes from the external potentiometer inside the external rotator. One of the points is the ground (potentiometer ground) the other is the potentiometer common, that provides a voltage feedback. In some Yaesu rotatos this voltage is around 3.5V when the rotator is at the CW/Right limit, and around 0V at the CCW/Left limit.

Note: In all cases, the voltage must be positive.

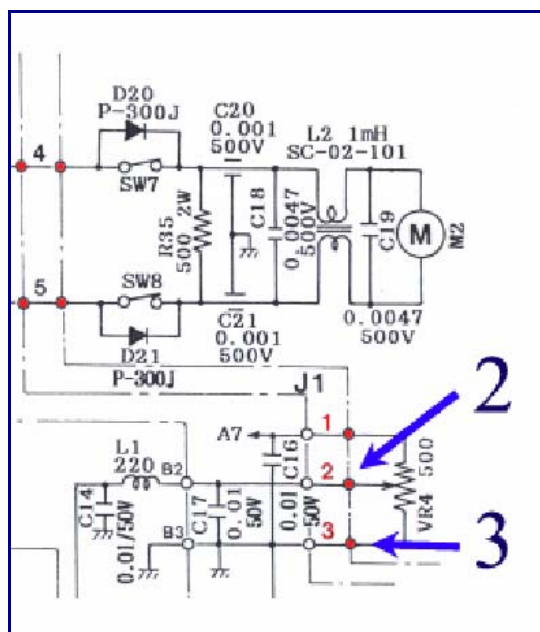
J4 – Antenna Position

J4-3 & J4-4: to Point **3**
J4-5: to Point **2**



Picture 1: Switches connection

This is the wiring view between the switches and the J1 connection @ ARS-USB



Picture 2: Antenna position

Those points are located at the connector used to connect the controller with the rotator