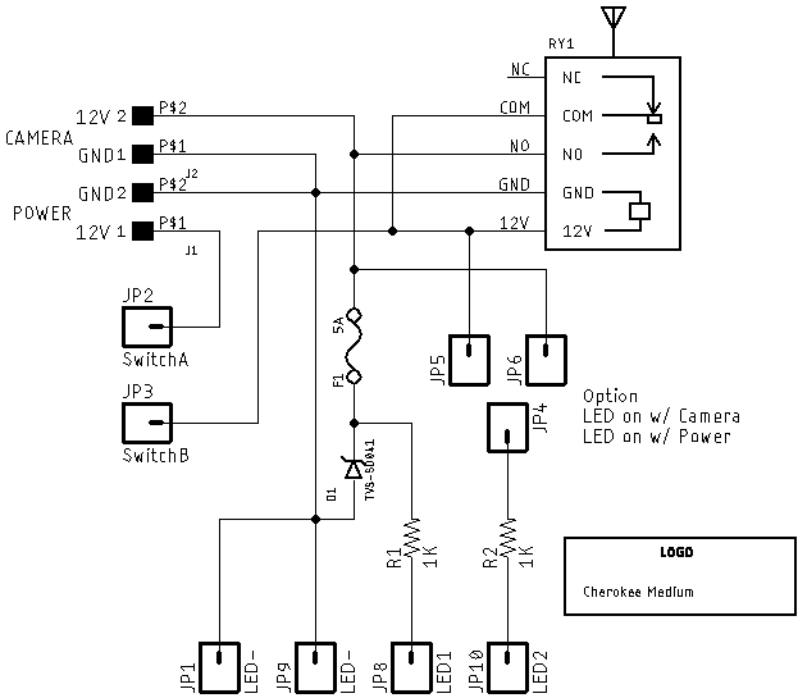
Building the RF Wireless Camera Switch



Consult www.RV-Project.Com for further information.

Build the switch using normal construction procedures. Note that no SMD components are used in this version so it should be easier for those having beginner soldering skills.

Bill of Materials

Item	Description	Part Number	Source
R1	1K 1/4W Resistor	**CFR0W4J0102A50**	Tayda.Com
R2	1K 1/4W Resistor	**CFR0W4J0102A50**	Tayda.Com
D1	TVS Diode 16V	**P4KE20A**	DigiKey.Com
F1	5A Fuse	**0251005.MRT1L**	DigiKey.Com
J1	2 position 3.96 Wafer Connector	**A776**	Tayda.Com
J2	2 position 3.96 Wafer Connector	**A776**	Tayda.Com
M1	433Mhz Wireless Relay	**R121A**	Amazon.Com

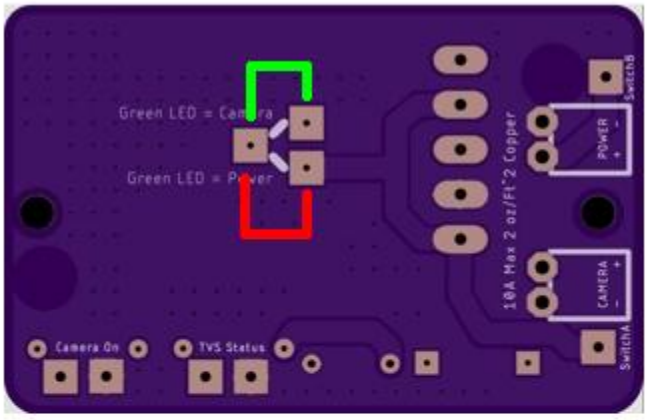
Note: Resistors from specified source can only be purchased in packs of 10. As well, it is sometimes less expensive in the long run to purchase a “kit” of different resistor values. LEDs and other components are also available via this method.

In addition to the above, you will need the mating connectors for the module above. As well, if you would like to replicate the configuration as shown in the project, you will need a switch, 2 additional LEDs, standoffs, and miscellaneous hardware. The parts list for those items is shown below:

Item	Description	Part Number	Source
Socket	2-Pin Wafer Socket	**A-794**	Tayda.Com
Contacts	Connector pins for socket	**A-803**	Tayda.Com
Rocker Switch	Carling SPST Rocker	**RA901-VB-B-9-V**	Amazon.Com
Standoff	1.5In Aluminum #8-32	**3497**	DigiKey.Com
Red LED	3mm Panel Mount	**67-1190**	DigiKey.Com
Green LED	3mm Panel Mount	**67-1191**	DigiKey.Com

Note: Connector pins are sold qty 1. It is highly recommended to purchase extra pins.

Board Bottom

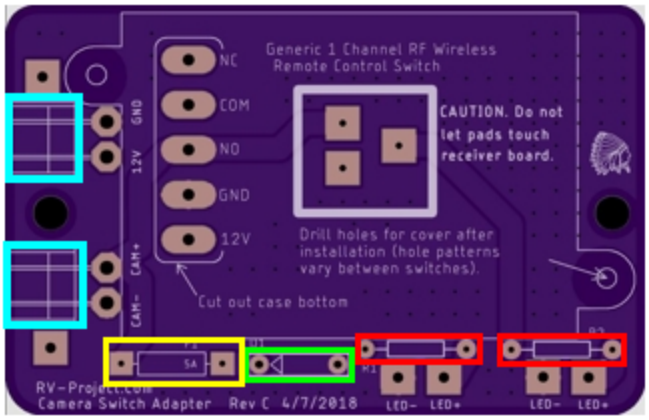


You have the option of the Green LED turning on with the Power switch or turning on when activated (i.e. Camera Turns On).

☐ *For the Power switch, jumper as shown in RED.*

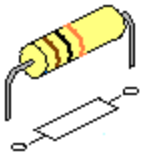
☐ *For the Camera, jumper as shown in GREEN*

Board Top

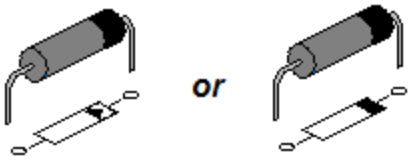


- ☐ ***R1-R2 1K Resistor (Brown-Black-Red) shown in Red.***
- ☐ ***D1 P4KE20A TVS Diode shown in Green.***
- ☐ ***F1 - 5A Pico Fuse shown in Yellow. (Note: if fuse blows, it must be desoldered from the board).***
- ☐ ***Install two 2-pin wafer connectors as shown in Blue.***

5% Carbon-Film Resistors

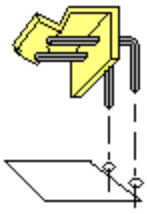


Note: Diodes have a band on one end. That band goes on the board as shown.

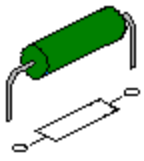


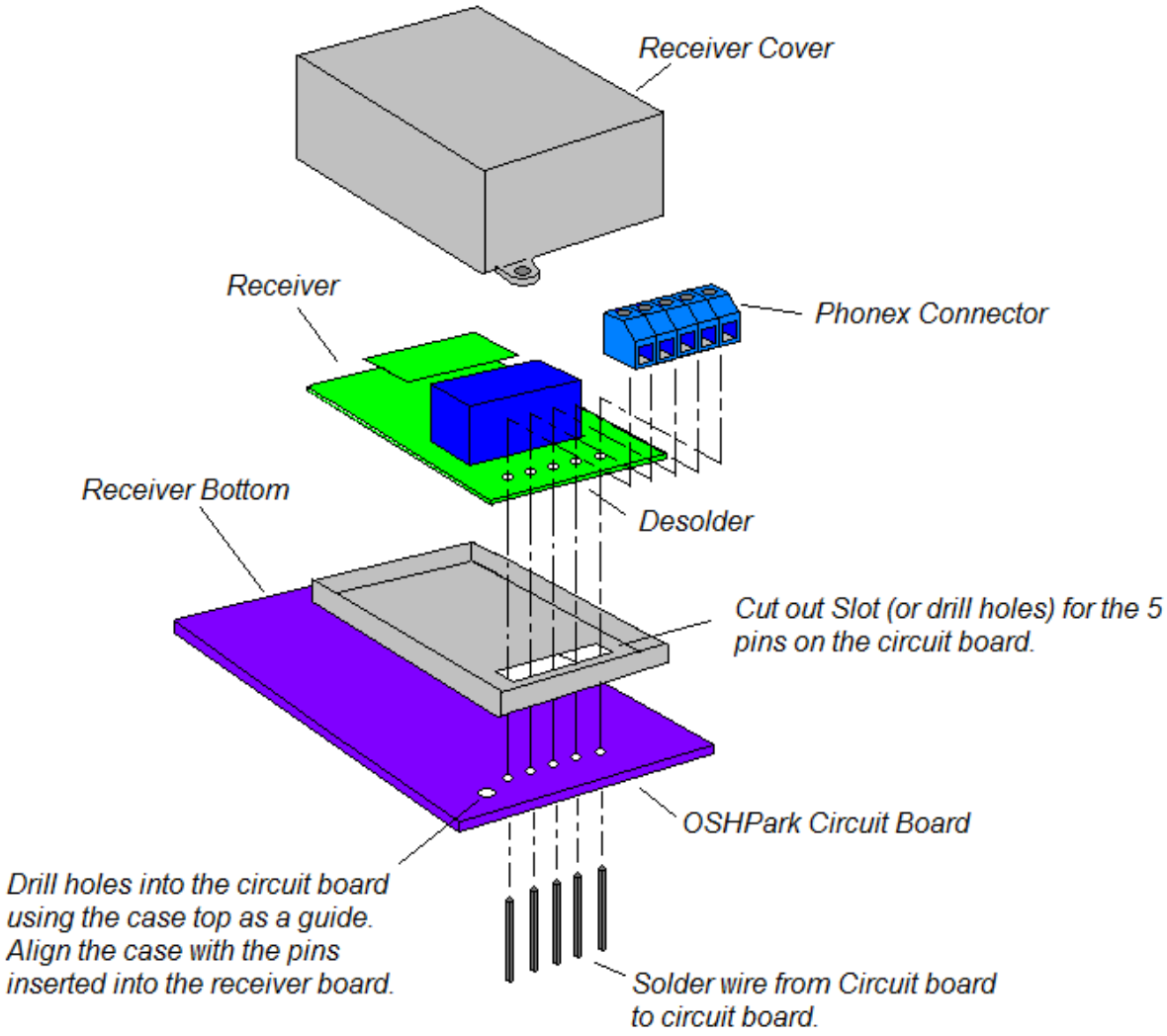
Arrow ***or*** ***Band***

Wafer Connector



Pico Fuse





Assemble the 433Mhz Wireless Receiver as shown. This requires removing the Phoenix connectors, then drilling or cutting out a slot in the bottom of the receiver case and using pieces of wire, solder the receiver board to the OSHPark circuit board. You will be “sandwiching the plastic receiver case bottom between the two boards.

Hint: solder the wires to the receiver board, then assemble the receiver case; drill holes into the OSHPark circuit board from the receiver top, then attach with screws. Then solder the wires to the OSHPark board.

When finished, the receiver case top will still be removable.