

# A 117-1-1 Antenna Switch Box

As my antenna farm began to grow I decided to put together a box that would allow me to go from one antenna to another without having to disconnect the antenna from the back of my Icom R-70. It had to be cheap easy to build and effective. I came up with the idea of a box using banana jacks because they were easy to work with. Now what to mount them onto. I settled on a PVC plastic box used by electricians because they were cheap and easy to drill into. This set up would allow me to put 6 jacks into a box and bolt it down via the bolt holes already molded to the box. All you need is:

- 1- PVC box about 4 to 5 inches square and 2 inches deep
- 1- 20 foot length of wire
- 6- Banana jack (or substitute of your choice)
- 1- Banana plug ( or substitute of your choice)
- 2- screws to mount the box

## Step one:

Map out where you want to put your jacks insuring you leave enough room to mount them. Then drill the six holes in the face plate you have marked. Then drill a hole on the top of the box to be able to draw out six wires from inside the box for leads from the jacks.

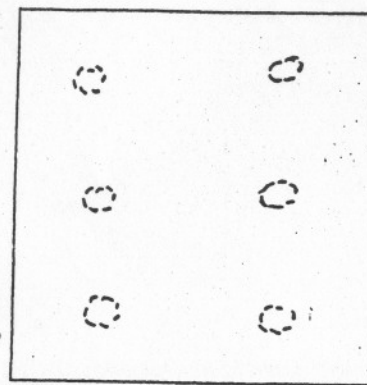
## Step two:

Mount the jacks onto the box. Make sure they are on tight. Now cut 6-2 to 2 1/2 foot long pieces of wire and strip off about one inch of coating from each end. Solder one piece of wire onto one separate jack. Repeat until you have all six wires soldered on to separate jacks. This will insure no cross-over from one antenna to another. You may wish to label each wire from 1 through 6 so when you are finished you know who belongs to who.

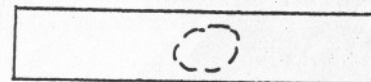
## Step three:

Feed the six wires through the large hole on the top of the box seal it back up (mine came with 4 screws that were removed to open the box up). All you have to do now is mount the box and attach your antennas one to each lead. Take the banana plug and attach it to the left over wire and fit the other end to your receiver.

You are all set to go. To switch from one antenna to another all you have to do is move the plug from one jack to another. This also allows you to keep a good match on your antennas as using a 50 Ohm coax switch with a long wire of several hundred Ohms can cause a mis-match. This gets more of the signal to your radio for less money. Like I said Cheap Easy and Effective. I hope some of you find this of use. And by the way going from one antenna to another on this is easier than going around and around on a switch that will wear out from such repeated motion. If a jack or plug wear out on this model you replace one cheap part instead of a switch in its entirety.



Drill holes spaced evenly around the face of the box for the jacks to go into



Drill a large hole on the top of the box to feed the wires out

