Remote Radio Operation While Camping

Mike WA8BXN July, 2017

Over the years I have taken ham radio with me camping in tents and Rvs using a variety of radios and antennas. My current mode of camping uses a Roadtrek 210 Popular model which is a Class B motorhome perhaps better known as a Conversion Van. Although compact this one has all the modern conveniences of a self-contained RV. My plan was to avoid the setup time required by my previous pop-up tent trailer.

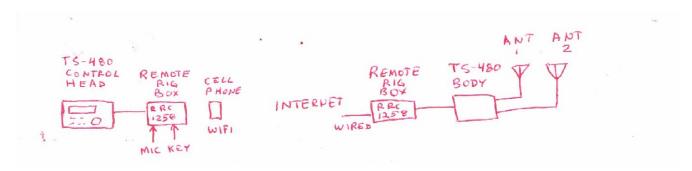


My original plan was to operate a rig inside the van. To that end, I installed a nice Tarheel screwdriver antenna seen in the photo above at the left of the spare tire again with the plan to avoid any setup time needed to put up a wire antenna. As expected it tunes nicely from inside and should be reasonably efficient as a mobile antenna. But things don't always go as expected.

When I fired up an IC-706 inside to see how it worked to check into ECARS with 100 watts strange things happened with the air conditioner. RF was getting into it turning it on and off independent of thermostat settings. I tried all I could with RF chokes and bypass capacitors on the thermostat to keep out the RF with no success. I did find that QRP power levels were OK as was use of an external dipole at 100 watts. I had a similar problem in a trailer a couple decades ago at which time I replaced the control board in the air conditioner with brute force relays which did solve the problem.

Plan B evolved into operating remotely (much easier than solving EMI) taking advantage of my my home QTH radio and good antennas (a 43

foot vertical with a lot of radials and an 80 meter dipole both with autotuners near the feedpoint of the antenna). The radio is a TS-480 which is ideal for this use. The control head is separate from the body of the radio and among other things allows switching between two antennas from the control head. I had used this radio for remote operation from a fixed location in the past, connecting the control head to the body of the radio using a pair of RRC-1258 boxes from remoterig.com.



These use the internet to provide the connection to the pair of boxes allowing full use of the control head to remotely operate the radio. In the camper I use a cell phone as a WIFI access point, at home a wired internet connection is used with the Remoterig RRC-1258 box there. No more problems with RF in the camper and really good antennas to use instead of the compromise mobile antenna.



I mounted the control head on the Remoterig box along with paddles and a digital voltmeter. This package can operate using 12 V from the camper or a small rechargeable battery out on a picnic table or in a tent.

I do also have a KX2 and 40/20 trap dipole with me should I really want to get on the air with a local rig or if I don't have internet access via the cell phone. So far I have always had internet access. There is also a 33 foot fiberglass mast on the bumper hitch of the Roadtrek should there not be any way to hang the dipole to which an end fed wire could be used as an antenna with the tuner in the KX2 using the RV as a ground counterpoise.