Full Remote Control of OpenHPSDR v3.2.24 Via the Internet,

Including a Remote DJ Panel

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April 19, 2015

This is a description of an implementation that works for full remote control of my ham station via internet. No claim is made that it is the best or cheapest possible solution, just that it works.

The Basic Connection:

Windows 7 on both the Home and Remote computers, Windows Remote Desktop on the Remote computer. I use the Ultimate version on both, which allows multiple remote monitors, but the Pro version could be used with a single remote monitor.

A remote DJ Panel is supported by Installing Fabula Tech "USB for Remote Desktop Server" ($199) on the Home computer, and their Client on the Remote computer.

Audio and keying is handled by a pair (set) of RemoteRig RRC-1258 MKII(s) units (HRO, $490). They are set up in Transparent Mode (Mode 0).

At the Home end a piece of shielded Cat 5 is used to make a connection to the Line Audio In and Key In on the rear DB-25 connector of the Anan radio, connecting the Cat 5 shield to the DB-25 shell, and using ferrite beads effective at HF on the cable. The Speaker Input (100 ohms, stereo) is driven from the Headphone Output of the Anan, using a 1/8" Stereo Phone Plug splitter. Local 13.8V power is applied to the RRC-1258.

At the Remote end I used a Heil RJ-45 to dual Phone adapter to bring in a headset electret mic and keyswitch, and the Speaker Output drives the headset earphones or a powered stereo speaker set.

Controlling Power:

I normally operate the 120V portion of my Home station from a large UPS, to prevent sudden shutdowns from summer and ice storm power glitches. This presents a problem is that the UPS output is heavily isolated and filtered, and so not suitable for X-10 control. The solution was a USB-controlled Power Switch, which I found on Amazon. Now the station could be kept off when I am away, and brought up when required.

The linear is left with the Power Switch ON and the Standby Switch in OPERATE, so that an X-10 controlled 240V outlet with Windows control can turn it on when desired.

The multiple CAT outputs from OpenHPSDR are used to provide frequency information to the linear and antenna auto-tuner, and the auto-tuner selects antennas by band, so they are always ready. Rotor control is via PstRotatorAz.

Operation:

To use a Remote DJ Panel it is important that the Home DJ Panel be set to Midi Channel 2, and the Remote DJ Panel to Midi Channel 1.

When connecting with Remote Desktop you need to disconnect the Remote DJ Panel before starting OpenHPSDR, via the agent that appears in the Tray area. After OpenHPSDR is started you may connect the Remote DJ Panel via the agent, an both panels will be operative.

Transmit audio is enabled by going into OpenHPSDR Setup/Transmit and switching from Mic to Line Audio.