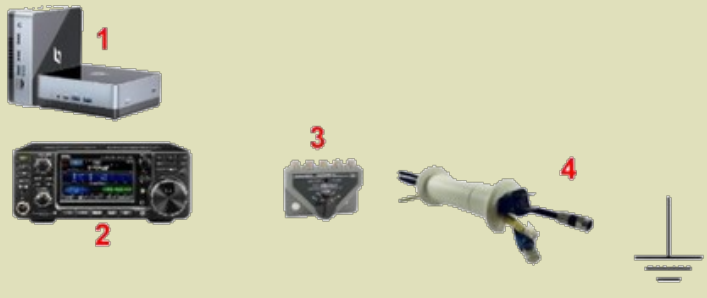
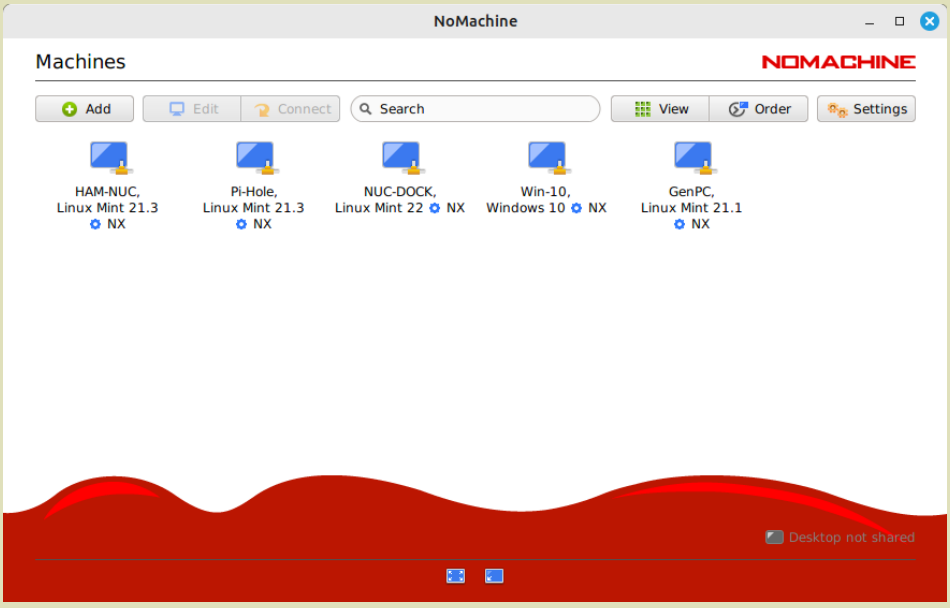
KD7YOX Rig Schematic



1. Computer
I run Linux Mint on all of my computers. It provides you with a desktop that's at least as good as Windows. Further, I have my Radio computer on a different PC that the one I use for normal computer tasks. You can now buy a full-fledged PC at Amazon for the price of a Raspberry Pi. As of this writing, I am using this computer from Amazon. It uses WSJTx and Gridtracker2.

An important note. It is to your advantage to put specialized programs, like those for your radio, on a separate computer. If you do this, you can utilize the radio and still get work done on your main PC. You do not need a separate keyboard, mouse, or monitor. Your radio PC's only wires would be a power cable, the USB cable to the radio,and a network cable if you don't connect with WiFi. You can use it from your main computer with free software called NoMachine, It will work with Window, Mac or Linux. It's easy to set up. Just download it to a computer and the computers will find each other. This is my setup. To operate another computer, just double-click its icon. **You should try this!**



2. Icom-7300
You need to run version 1.41 to get the presets on the radio for FT8 and WSJTx. Only 1 A/B USB cable connects it to the Radio Computer. There are lots of videos on the web on how to connect it.

3. Antenna Switch
I have 4 position Delta antenna switch from DXEngineering that connects one of 3 antennas to the radio.

Wall Pass-Thru and Ground.
The wall pass-thru conveys the 3 feed-lines from the antenna switch out to the ground rod and lightning arrestors.

Antennas
The Buddistick Pro is an excellent antenna for FT8. I have a confirmed QSO with Reunion Island, 11,000 miles away. I chose it because I live in a HOA and it was not restricted because it is portable. I have 3 antennas because it facilitates switching between bands. I typically operate on 10m, 20m and 40m and they are tuned accordingly.

I have modified these antennas by replacing the whip on the 10m & 20m antennnas with a CHAMELEON ANTENNA CHA SS17 because the coil is not necessary for those bands and gives them a wider band range with the IC-7300's tuner. The 40m antenna is original because it needs the coil to work on that band.

I have replaced the elevated radial on all 3 with a Tape Measure, only because the thin wire was hard to notice and my groundskeepers kept running into it. Electrically, it makes no difference. Use a pipe clamp to fasten the tape measure to its support post.
See the antennas Live

Replacing the Tripods

The VersaHub is the heart of this antenna. It makes it easy to manage. You just screw the whip onto the top and connect the feed-line and elevated radial. I wanted to replace the tripods with a movable mast that I could position anywhere in my backyard. A patio umbrella base was the perfect solution.

It will hold up to 5 gallons of water which is 40 pounds and more than sufficient. Slide a 5 foot piece of 1.5” PVC pipe into it and you’ve got your movable mast.

Attaching the VersaHub to the top of the mast

I purchased some half inch thick wooden disks and PVC table caps from Amazon.

Now, you just need to screw the table cap to one side of the wooden disk and the VersaHub to the other side. See more detailed instructions.

Here is a picture of the completed antenna.