

Stealth Ham Radio Antenna – Concealed Satellite Dish J-Pole



For several months I contemplated how to install an effective 2 meter antenna on my house. You see, I live in one of the many neighborhoods that have discriminating “covenant” rules against outside antennas. I considered sticking one out the window (horizontal), hidden in a PVC pipe “flagpole” and even running 80+ feet of coax to my parked motorcycle. While these ideas may have worked, each has it’s drawbacks. I had to get more creative.

Stealth Outdoor Antenna In A Covenant-Restricted Community

By law we are permitted to have an outside satellite dish. Looking around the neighborhood I see satellite dishes everywhere. They are on roof tops, sides of houses, some even elevated on tripods and steel masts. Well, I happened to have an unused dish screwed on the side of my back porch. The idea came to me – install the dish on a steel pole, and mount a 2-meter J-pole antenna with it? The antenna will be outside at a higher elevation, and at least partially hidden by the dish.

I used a 10 ft. galvanized steel pole, 4 clamps and 2 wall brackets. I mounted the antenna and DSS dish on the steel mast, bolted the brackets to my back porch and swung the whole thing in the air. The dish is pointed in approximately the same direction as everyone else’s

so it looks “normal”. After tossing the coax through a window I was all set!

The idea here is to have my antenna high in the air, in free space, with the dish mounted close by for concealment. To the untrained eye this should hopefully look like just another dish installation. If anyone asks me about the dish, I’ll just tell them “the dish guy put that there, what do I know about antennas?”. 😊

Below is a picture of the DSS J-Pole from about 20 feet away. I painted the J-Pole flat black primer to be as inconspicuous as possible.



I used hardline coax since I got a good deal on eBay. The connection is “flooded” with non-conductive dielectric silicon compound to exclude air and moisture. The outside of the connection is coated with several layers of “liquid tape” insulating coating. The dish is real, and could be aligned & wired for actual use.

I installed the antenna in 2004 and it stood until I moved in 2008. I still have the antenna and plan to reuse it someday.

Visitor Comments

08/25/04: Steve Uhrig WA3SWS:

Good work! Your signal into .775 is perfect, which is important because we need you. Remember, you're federally licensed, you've demonstrated your technical competence to get licensed, and are a FEMA/DHS approved member of RACES in what ultimately could be life-critical local, state or federal disaster communications. What homeowner's association would want to challenge that?

08/26/04: DOD (Dear Old Dad):

OK, I read your article. You failed to mention the most important part...Does it work, and what kind of performance do you get (if it works).

David Stansbury: It works great! I can hit the local repeaters full quieting, and simplex 6 miles away reports my signal increased from S-2 to nearly full scale, using 2 watts output. The antenna was tuned before installation and SWR tests less than 1.2 to 1 across the 2 meter ham band.