

# RECEIVING LOOP ANTENNA EXPERIMENTING

## Part One

Dave, NF2G

As an apartment dweller, I need good indoor antennae in order to hear or talk to anyone on the radio. I have been in my current apartment for just over one year as of this writing. Up until now, my HF antennae have been a pair of Slinky dipoles mounted on my walls perpendicular to each other. This gives me omnidirectional coverage (more or less).

I have had a couple of loop antennas in my storage and decided to get them out and try using them. Having taken up 3D printing recently, I also noticed some designs for homebrew loops. All of my loops so far are designed only for receiving. Transmit loops are more complicated and require more parts. I might experiment in that area in the future.

I also obtained a NanoVNA analyzer, which can tell me many things about my antennae. I will share those experiences in another installment. For now, I will show my current assortment of receive loops. Part Two will show the construction of my Hula Loop. Part Three will cover the testing and operation.

Here are the photos. If they seem large, it's because they are 4 times this size when sent from my iPhone. I haven't figured out how far I can reduce them for insertion into a document like this one.

Scanner  
Antennae

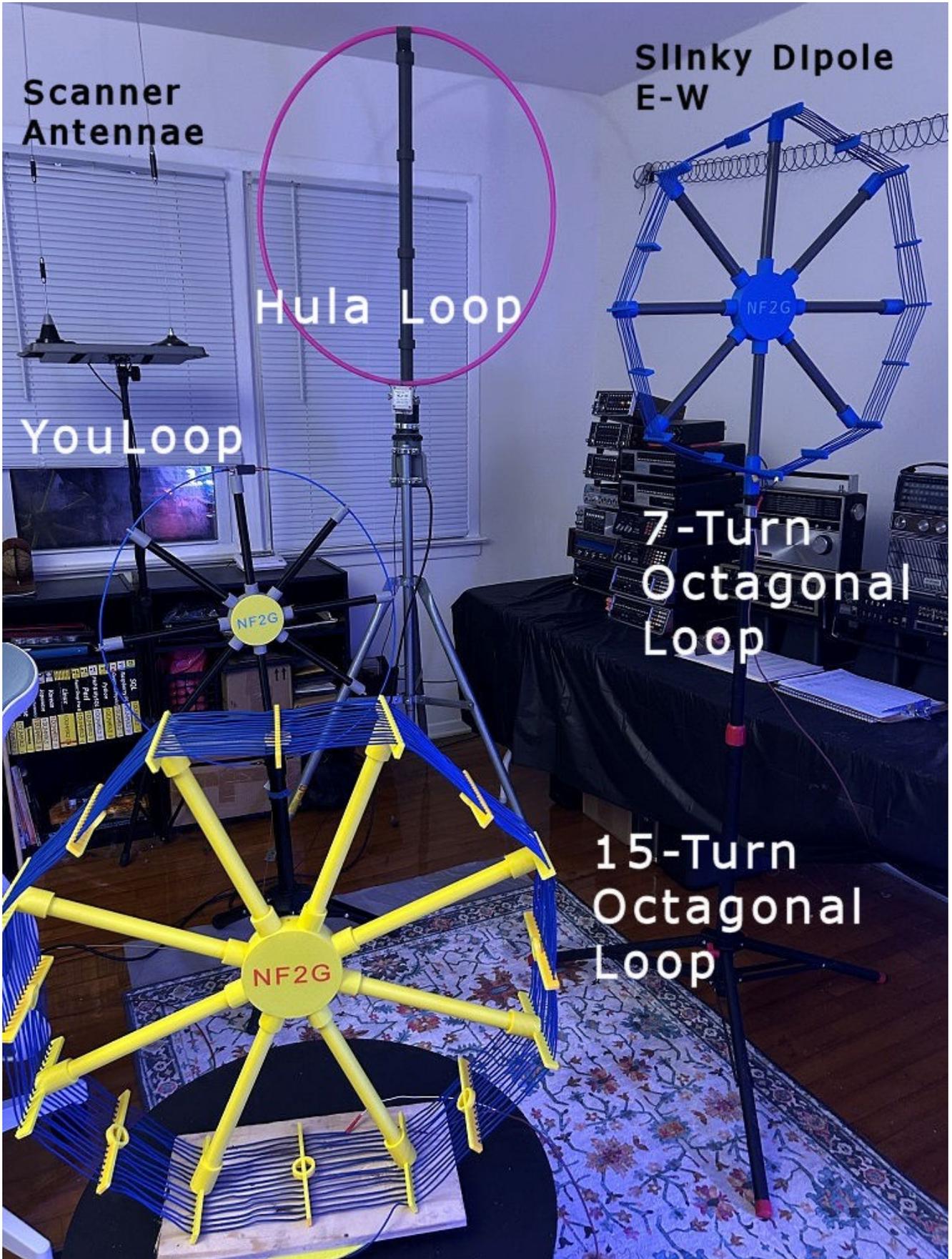
Slinky Dipole  
E-W

Hula Loop

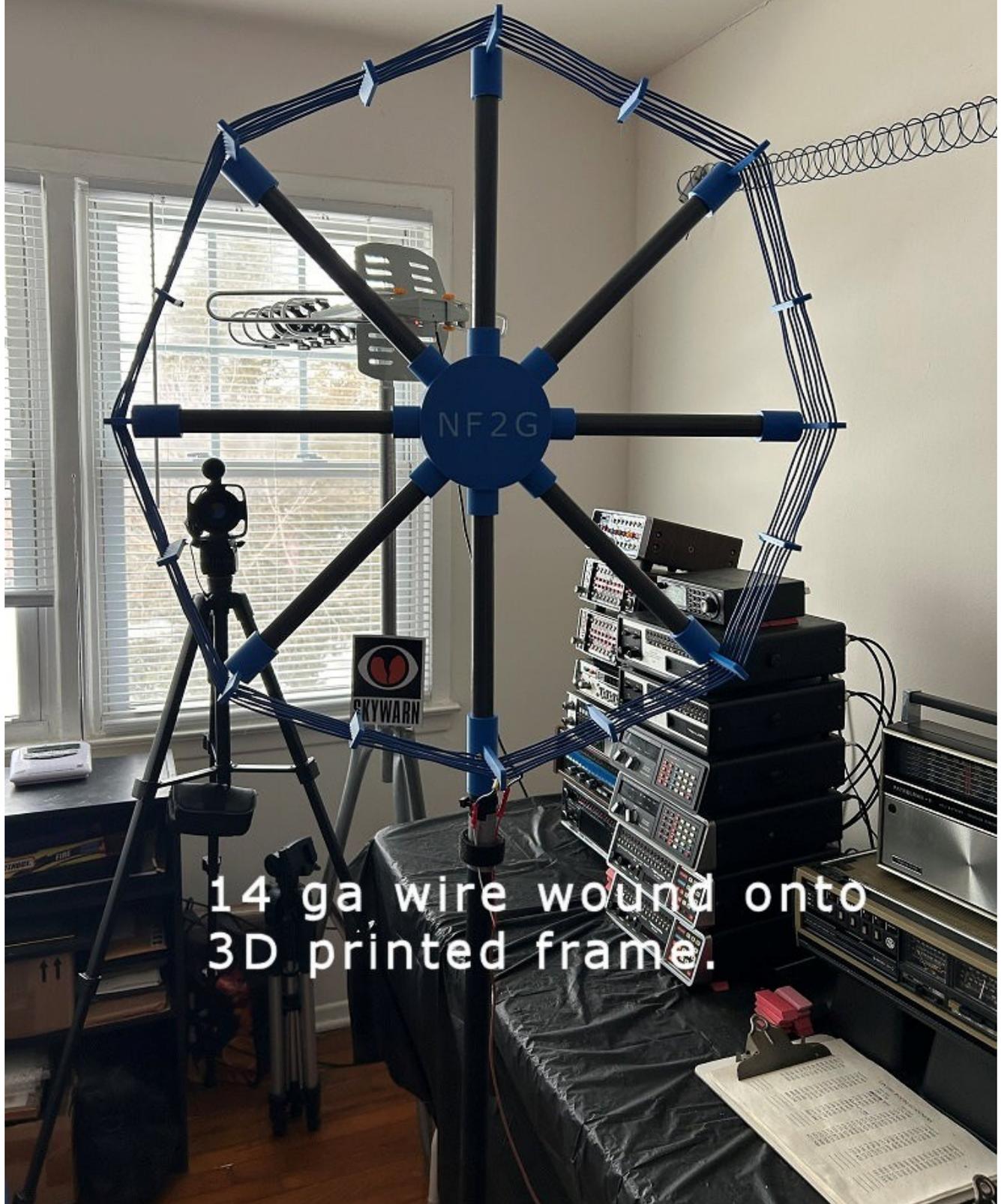
YouLoop

7-Turn  
Octagonal  
Loop

15-Turn  
Octagonal  
Loop

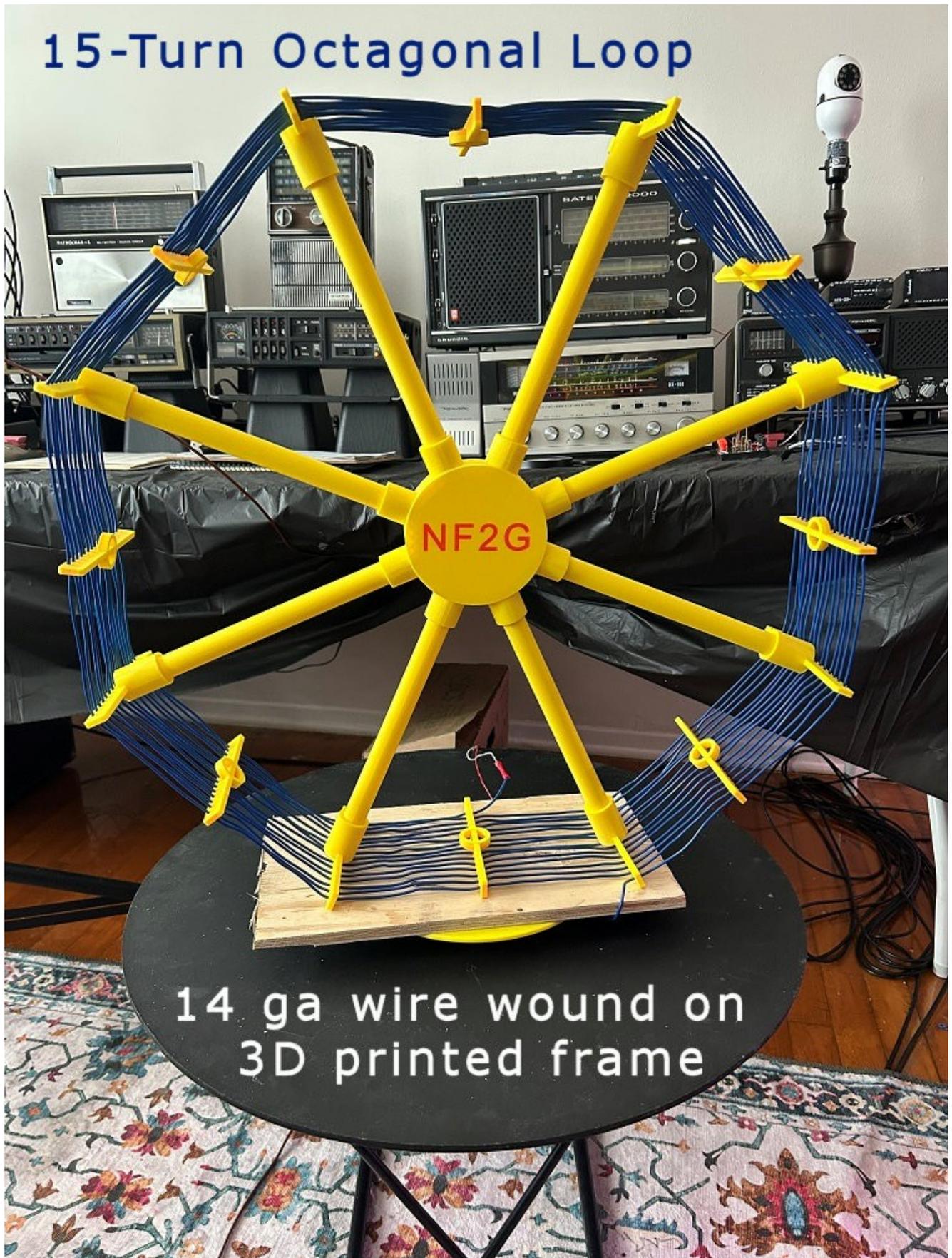


# 7-Turn Octagonal Loop



14 ga wire wound onto  
3D printed frame.

# 15-Turn Octagonal Loop

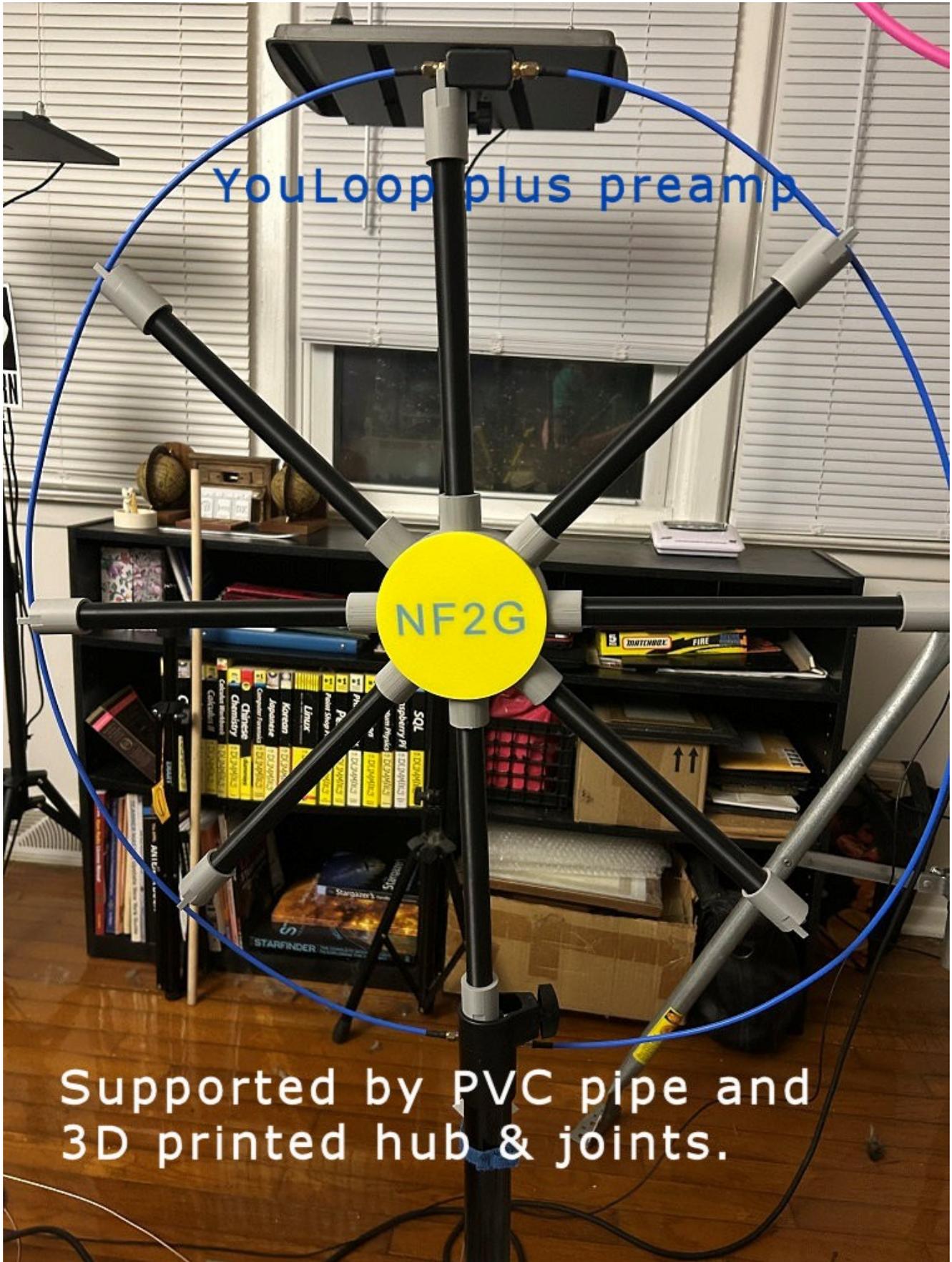


14 ga wire wound on  
3D printed frame

YouLoop plus preamp

NF2G

Supported by PVC pipe and 3D printed hub & joints.



# Hula Loop on TV rotator

MLA-30+ amplifier  
mounted at feedpoint.

