

## SX-117/HT-44 STATION BUILD

A couple years ago I was contacted by several SX-117 owners. They wondered if I could write a repair manual for the 117 similar to what I had written for the HT-44 and the SR series radios ([REPAIR MANUALS | WD0GOF](#)). I said I couldn't possibly do it unless I had at least three radios for testing purposes. I was surprised when two people came forward with loaners. A week later a third one showed up at my doorstep. So, I had my three radios. Two were real dogs, the other was pristine. This worked out fine. The dogs help me wring out the test procedures. The pristine rig gave all the "what it should measure" data I needed. When the project was complete and the manual published, I returned the radios, except one. The owner (of the pristine one, K9AXN) made me a deal I could not refuse. Also, I wanted to keep one on hand in case of questions about the repair document. -- So, then I had an SX-117

Now, if I can find an HT-44 I could build a station. I put out the call, I was looking for a tech unit I could refurbish to make a station. WD0GMD came through with a deal I could not refuse. He said it was in good cosmetic condition but, operationally it was in sad condition. And that was great. I repair and refurbish it; **I do not restore**. He had no power supply. Using the HT-44 repair manual I had written several years ago. I attacked the 44 using the power supply from my SR-160 system. As a result, I made improvements to the 44 repair document and ended up with a sweet running 44.

So, checking the shelves I find a TO Keyer but no power supply. People who have PS-150's that are rust buckets want toooooo much for them. Now I am thinking, the metering scheme for the HT-44 is a bit lacking. So, the power supply became the "build" part of this project. I had a PS-150 transformer, the case from an SR-160, a speaker from an S48A and bins full of parts. I also thought let's make the station easy to set up. I would include the antenna change-over relay in the power supply. I would use the antenna relay from the SR-400, I had several. That relay is a dpdt relay which would give an extra set of contacts for adding an amp. Although the 44 has relay contacts for controlling an amp, the contacts are not as robust as the SR-400 relay contacts. Or, it could always be used to control the station "ON THE AIR" sign.

**I would call this custom power supply the PS-44, that took a lot of thought.**

For metering I decided on input AC current, B+ voltage, High Voltage and Plate current. The only problem with the meters was the unavailability of a 0-1000v meter to match the other meters I already had. So, I used a 0-100v meter and added a series resistor to scale it up. Other than the metering and the addition of the antenna relay, the rest of the power supply is a carbon copy of the PS-150-120 power supply. The bias adjustment is a bit awkward on the PS-150. I decided to put the adjustment on the front panel. The speaker is in the top of the case. I painted the front panel white. I heat cured the paint so I could use Visu-Com, PRESTO STIK vinyl stick-on lettering. I would have liked a little smaller lettering but, 1/4 inch was the smallest I had. For the stripe, I used masking tape, cut to size with an X-acto knife. I then sprayed it with RUST-OLEUM, AMERICAN ACCENTS, ULTRA MATTE SLATE. Before the paint was totally cured, I peeled off the lettering and masking tape.







I used a good quality soldered RCA plugs, with stain relief, to make the two oscillator patch cords. The coax patch cords are marked with shrink tubing labels. Thanks to W5IO for the RG62 and a couple tubes.

