

Ham Radio 101
The Anatomy of a Restoration
Where do You Get the Stuff
Part 5

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For this article, I continued to concentrate on an HW22A Heathkit single band transceiver. It covers the 40M band from 7.2MHz to 7.3MHz. This was the phone band when it was originally designed.



Figure 1
Front of the HW22A

I had lunch the another day with Dave Ishmael (WA6VVL). Dave got me interested in restoring old radios. The exception is that Dave does a much better job when he is done; the radio looks like it came out of the box.

One of the things that came up in conversation is where do you get the parts needed to restore the radios. I have concentrated on single band Heathkit transceivers. I have also dabbled in HW 100 and HW 101.

I have told Dave that I will not buy used crystals. International Crystal has been around for years. They know what case size and what amount of case capacitance.

For crystals less than 5MHz, they are more expensive. I would rather pay a bit more and then get a good crystal. We might have to wait a bit longer but it is worth the wait.

In the HW single band radio there is an electrolytic capacitor. It is 20ufd at 350Vdc. If you have been around this type of radio you know that electrolytic capacitors dry out and the capacitance value or the voltage is not accurate. I have found some on E Bay. They are smaller but, they will solder in quite nicely.

The Heathkit single band radios use quite a lot of .022ufd capacitors. They are also available on line at E Bay. They are shipped from the Far East.

If you are just starting out, there is a place in New Jersey that has put kits of parts together. The company is Electronix Express. They have kitted up various selections of component parts. They accept most credit cards and are available on line.

If you look through the Electronix Express equipment, there is also selection of test equipment. I have bought most of my test equipment from them.

The most important piece of test equipment is the oscilloscope. My oscilloscope is a dual band 100MHz band width. It has an LED display and the display is bright all the way to 100MHz. One trace is blue and the other trace is yellow.

As you start to expand your inventory, look at E Bay. There are many parts that come from overseas.

I have added a full complement of tubes for all of the single band Heathkit radios. These are readily available on E Bay. You can find some that are NOS (New Old Stocks) and NIB (New in the Box)

I want to acknowledge John White VA7JW for the help provided in sorting the S Meter circuit. It appears that there are errors in the Heathkit schematic.

I left this in the article to show that a small portion of the schematic can require many parts.

ACTUAL CIRCUIT

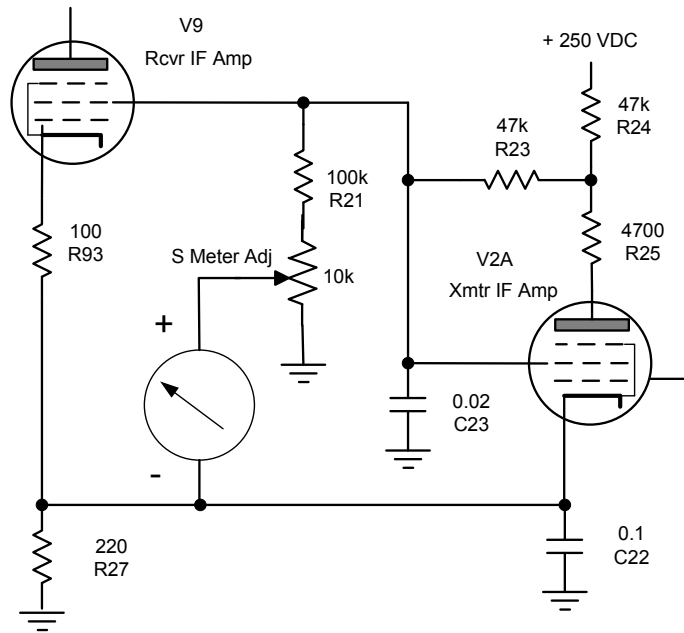


Figure 2
Simplified S Meter Circuit

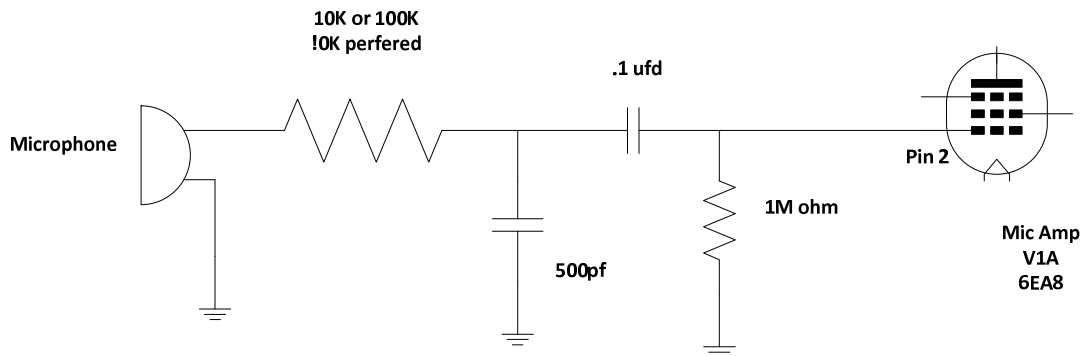


Figure 3
Microphone Amplifier Circuit

As time goes on and you collect large amounts and varieties of parts where do you store them? I have taken part of my garage and have installed storage cabinets and plastic containers. Here are a few examples



Figure 4
Storage Cabinet

Figure 5
Plastic Storage Containers

If there are any questions or comments, please contact me at WB6WXO@SOARA.org.