

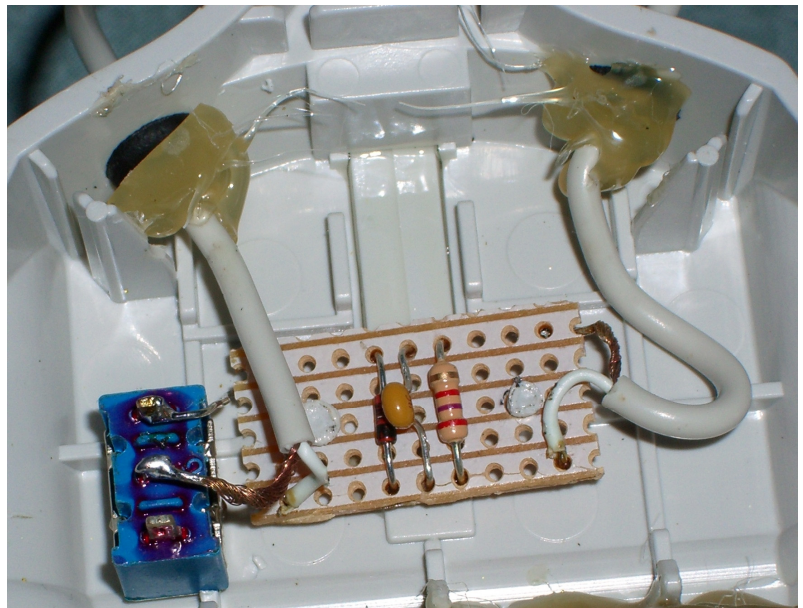
November 25, 2010

## A Desktop Microphone for Your HT (Tabletop Base Station)

This project started when I thought it would be a good idea to have a simple and neat method of mounting my Alinco DJ-296T (220mHz) upright on the kitchen table, and also to keep the battery charged while monitoring or scanning. I found that the Alinco EDC-97T desktop “quick-charger” was ideal for this purpose. The same charger can also be used with the DJ-596 vhf/uhf dual-band HT as well. Figure 1 shows the completed unit.



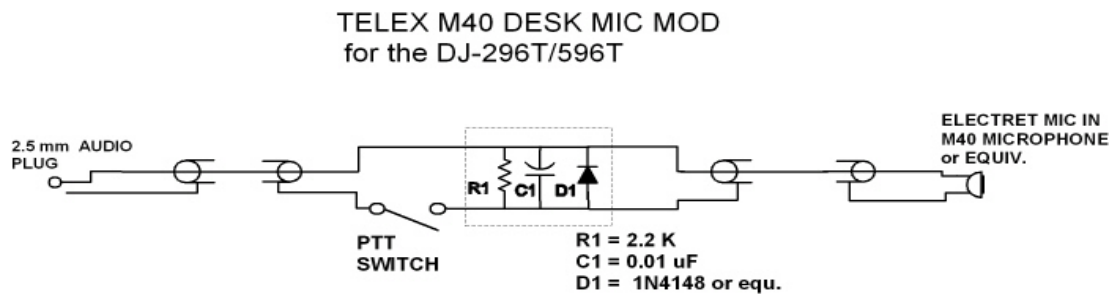
Initially, I used the setup with an external hand-held speaker-microphone, plugged into the HT. However, several problems were immediately evident. First the audio quality of the small speaker-mic was quite poor, and secondly I found if I transmitted while the HT was still in the charger base, a nasty audio hum went along with my audio signal, which was coming from the built-in charger circuit.



My solution to the audio quality issue was simple. Since the original speaker in the HT itself was actually pretty good, all I needed was a different microphone, and preferably a desk type. In the junk box I found an inexpensive computer microphone, a Telex model M40, which uses an electret element. (note that Labtec and others offer similar low-cost computer microphones) .

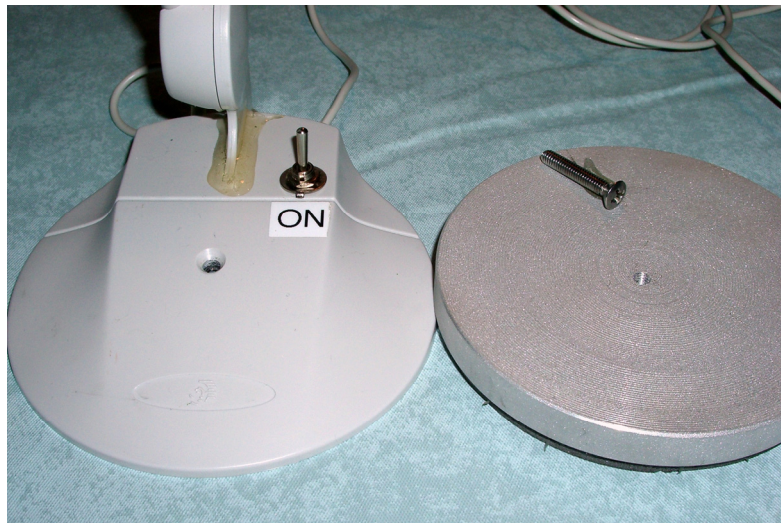
Figure 2 above shows the modification to the M40 microphone, with a small perforated circuit board for the components and a mini-toggle switch used for push-to-talk. Of course a push-button could be used instead. The schematic is shown in Figure 3.

MARCH 16, 2009



Since the Telex microphone is pretty light-weight, I added a weighted base as shown in Figure 4.

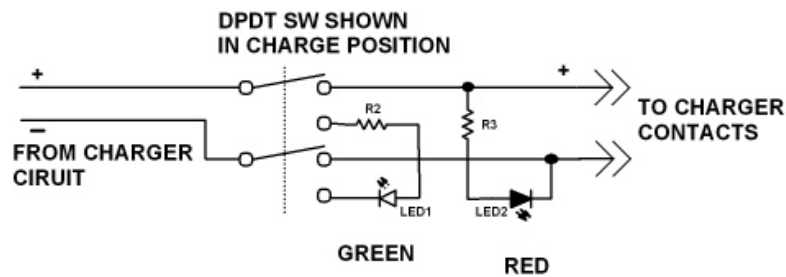
I used a piece of 3/8" aluminum for the base because I had it, but I am sure that many substitutes could be found. The base is held in place with a single screw.



As for the AC ripple coming from the charger, I added a switch and 2 indicator LED's on the charger stand. The schematic is shown in Figure 5.

MARCH 16, 2009

### QUICK-CHARGER MOD FOR CHARGE or OPERATE



Normally the switch is left in the charge position, so the battery in the HT is always kept fully charged.

When I want to use the rig, I flip the switch which disconnects the charger portion.

Don Dorward  
VA3DDN