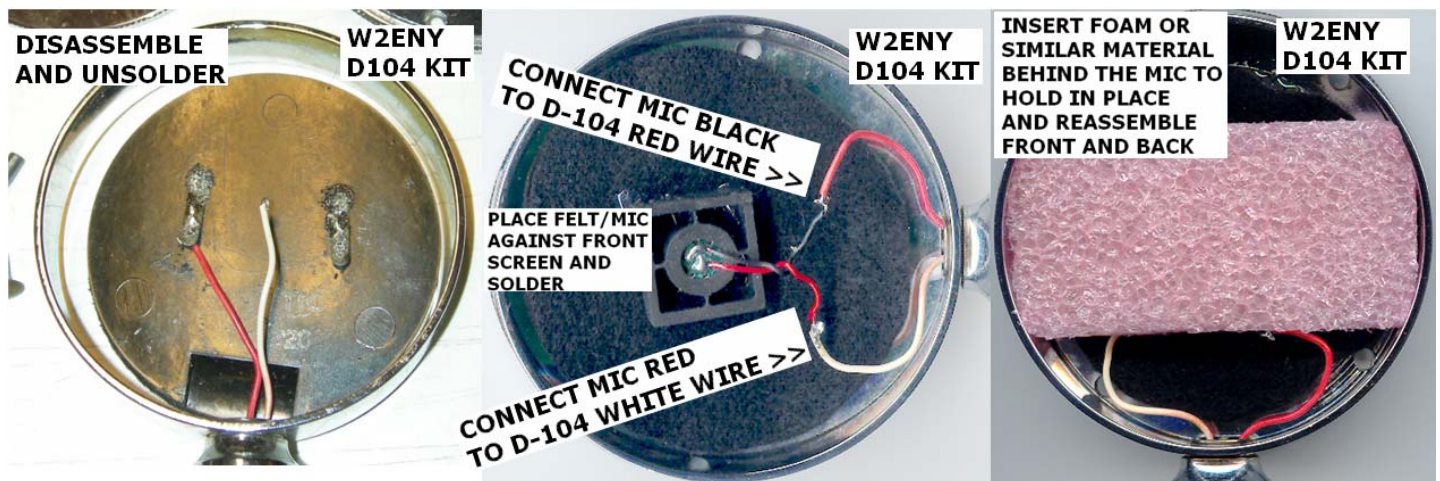


# W2ENY HiFi MIC ELEMENT

## Custom design upgrades Astatic D-104

### Mic head install (same on all models):

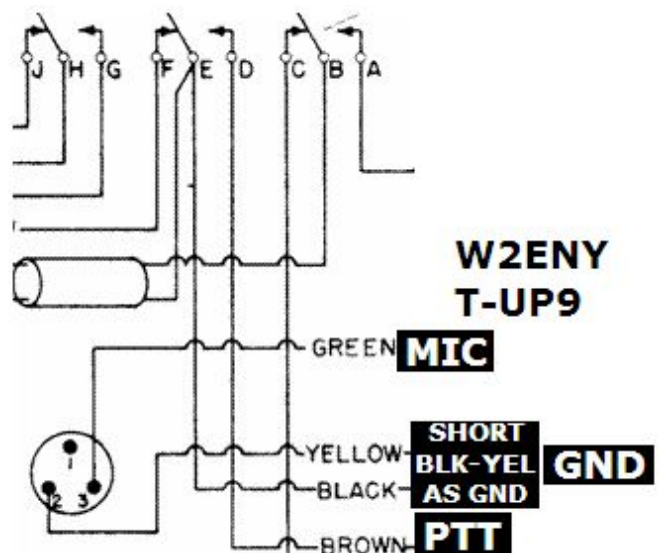
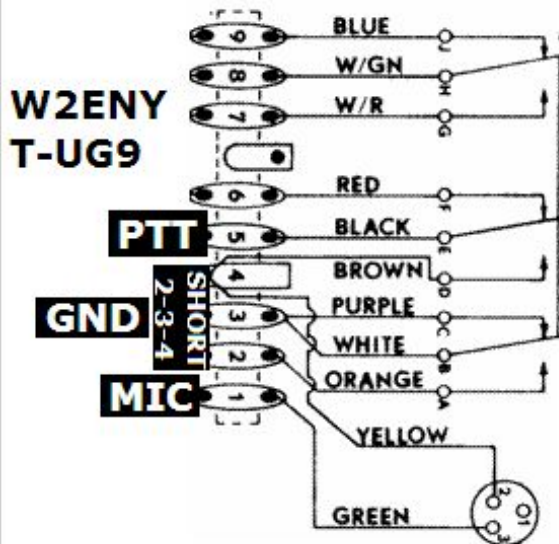
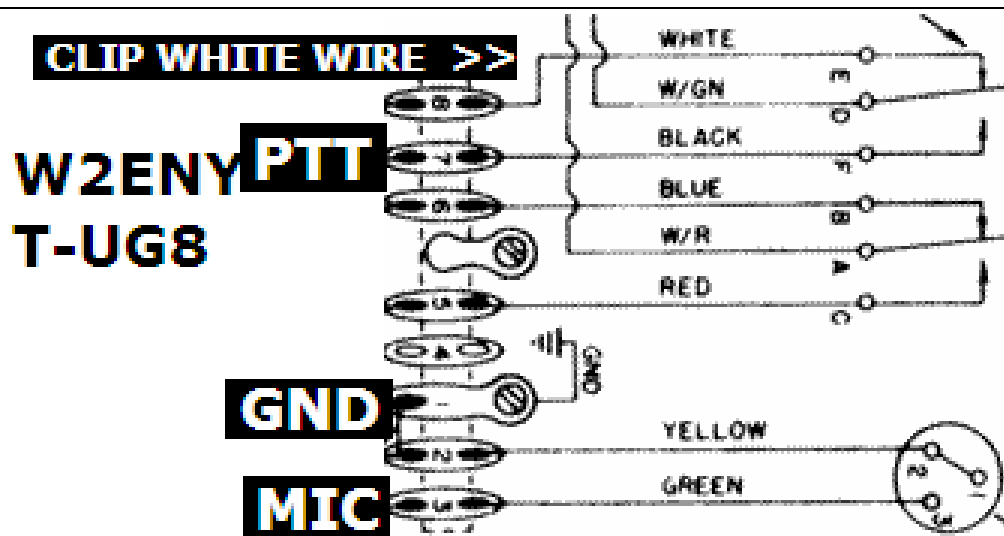
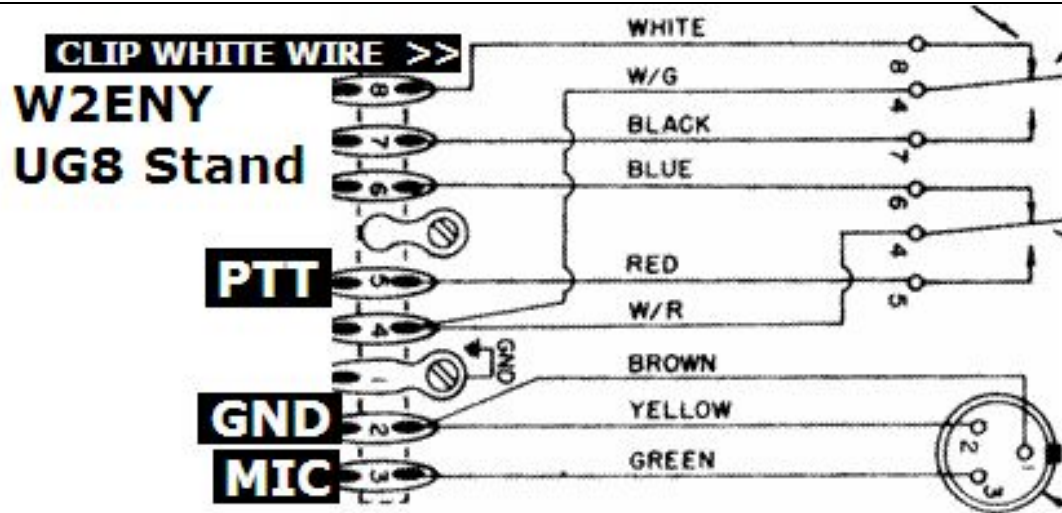
- Disassemble the microphone head
- Insert the felt and mic behind the front screen.
- Solder the leads from the neck to the mic.
- Insert foam padding behind, hold the element in place
- Reassemble the microphone head.

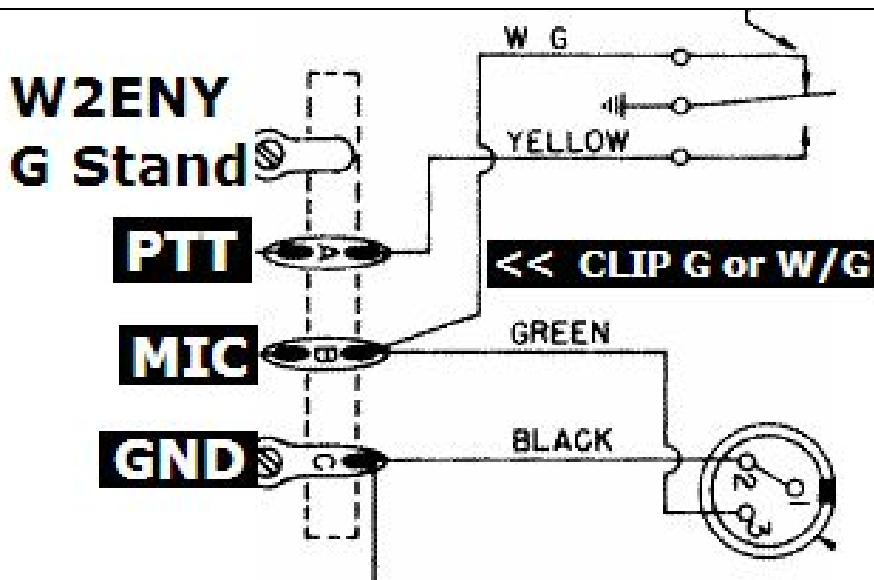


### Wiring of the base

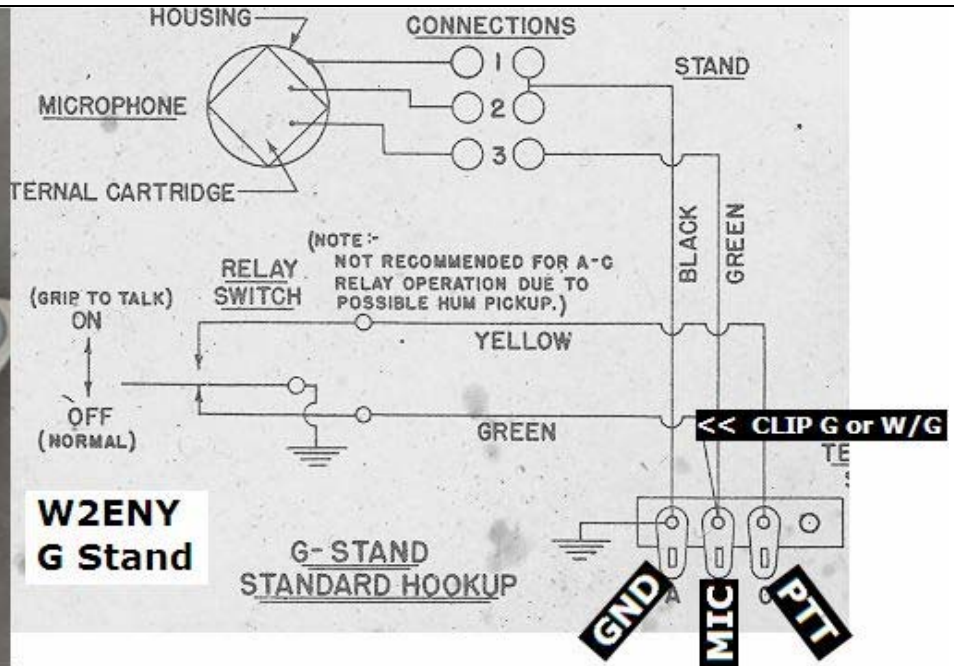
I've designed these for a three wire cable, using a common ground for PTT and MIC connections. These wiring diagrams are the same regardless of your radio. Radio wiring will be covered in the next section, including phantom powering the element.

Depending on which base you have, the table to follow shows the MIC, PTT and Ground connections. It is important to note the clipping of the white (and other) - this allows vox but if left attached, it shorts your radios voltage on receive (not good).





The "G Stand" came in several versions. Above is a stock schematic, below is a scan of one I rebuilt a while back. You will have to compare these to what you have. The bottom line is MIC, PTT, GND connectivity and clipping the grounding wire that will prevent use on VOX (some are green, others are white/green).



This is an FET amplified electret element, please see the wiring below. The resistor connects to the voltage available on your radio's mic jack. On Icom there's no need for the resistor, there's already voltage on the correct pin.

Pin out connections are shown below, each for (referencing the Icom picture below) MIC (1), MIC Ground (7), PTT (5) and PTT Ground (6).

For those radios that have voltage on the radio's mic connector, you will need to add the resistor as follows when wiring the plug. Other pins not listed below can be removed from your connector to make things easier.

Icom – No resistor needed, voltage is already on pin 1

Kenwood – Add resistor from pin 5 to Pin 1

Yaesu – Add resistor from pin 2 to Pin 8

Elecraft – Add resistor from pin 6 to pin 1

*(Elecraft radios are configurable, your radio may be configured different)*

TenTec 4 pin -Add resistor from pin 4 to Pin 1

TenTec 8 pin - Add resistor from pin 2 to Pin 8

