

CLARIFIER TRACKING CIRCUIT

by J.S.

If you don't own a frequency counter, figuring out if you're operating above or below channel center can be a real pain on rigs equipped with modified clarifiers (especially those with 10-turn pots).

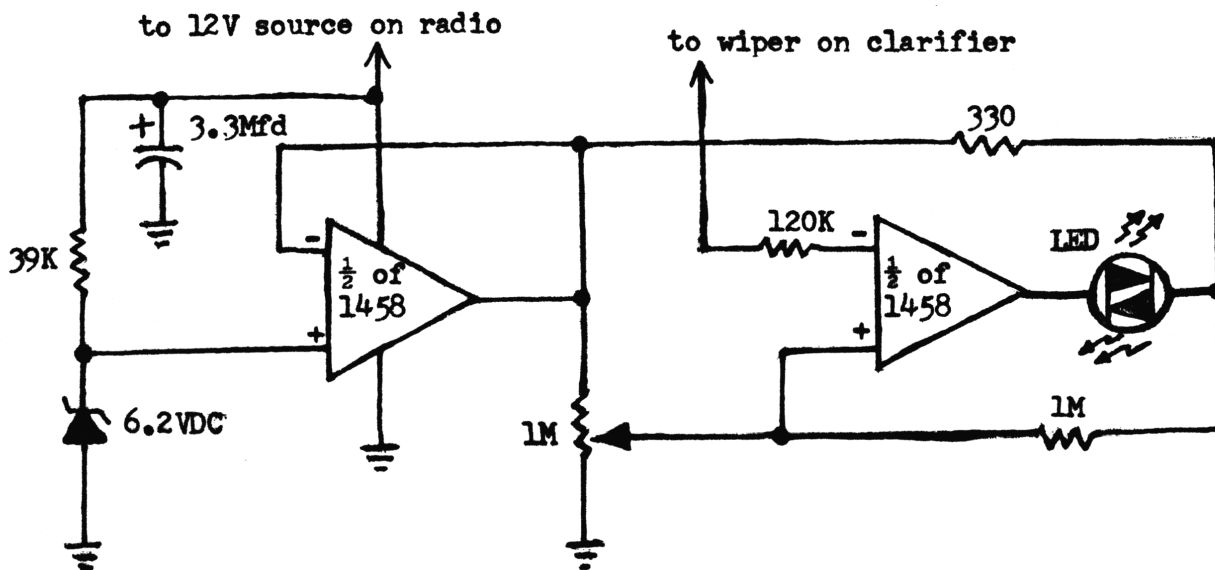
In response to many customer complaints about this, we developed the circuit shown below, which uses a dual-color LED to provide a visual indication of "Where you're at" as far as your clarifier is concerned. This circuit works so well, that we would like to share it with your readers.

PARTS REQUIRED:

1458 dual op-amp (Radio Shack 276-038)
Tri-color LED (R.S. 276-035)
1N4735 6.2 volt Zener diode (R.S. 276-561)
3.3 uf Capacitor 16 wv
330 ohm resistor 1/4 watt
39k ohm resistor 1/4 watt
39k ohm resistor 1/4 watt
120k ohm resistor 1/4 watt
1 meg ohm resistor 1/4 watt
1 meg ohm PC Pot (R.S. 271-229)
Small piece vector board
18 ga hookup wire

CONSTRUCTION

Construct circuit shown below, and wire into your rig.



CALIBRATION

Monitor output frequency with a counter, and adjust clarifier to channel center. Adjust pot on clarifier tracking circuit until LED JUST GOES OUT. As you operate your clarifier to swing above center frequency, the LED will glow green and will become increasingly brighter the farther you get above center. Below center, the LED will glow red, and will increase in brightness as output freq. goes lower. LED OUT = Channel Center.