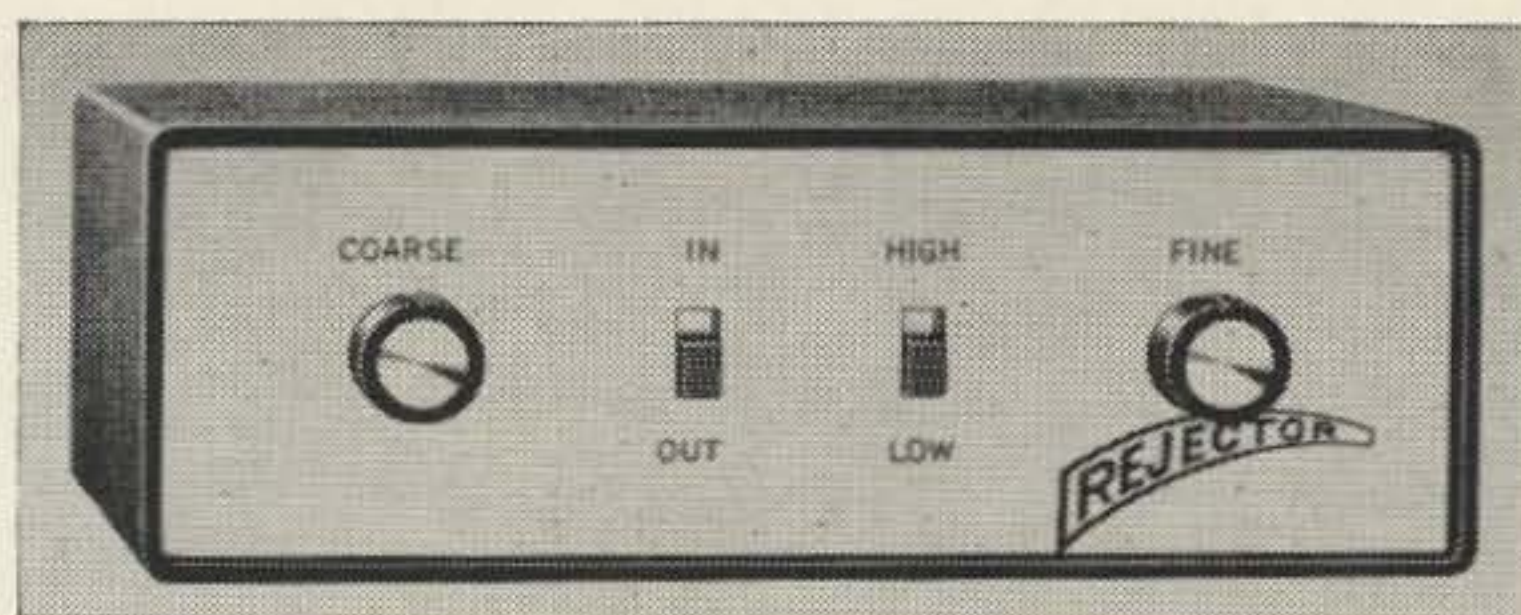




Charles Leedham WA2TDH
101 West 23rd St.
New York, N. Y., 10011

Testing the Galaxy Rejector

About the only thing that has ever made me unhappy about my nice new SSB equipment is that the receiver doesn't have a notch filter. This is by no means unusual—few receivers or transceivers do have notch filters built in. Install one? Even though this confession may reveal me to the world as a rotten appliance operator, I have never felt up to designing, building and installing one somewhere inside the guts of the little box. Tsk. But just recently, Galaxy came up with the gadget I'd been wishing all along somebody would make—a notch filter that goes into the speaker line.

The *Rejector* is an all-transistor audio filter which tunes across the audio spectrum from 300 to 5,000 cycles. Within that range, it will knock any ten-to-twenty cps segment down 40 db, effectively removing it from what you hear in your speaker. Thus when you are listening to a nice signal and the usual heterodyne starts blasting your ear, you no longer mutter and curse the schlunk who's throwing it on you. You flip the Rejector on—when off, the unit is completely out of the circuit—and tune the "Coarse" control until the notch is centered on the heterodyne. The heterodyne will disappear. If you don't hit it exactly with the "Coarse" knob, there's a "Fine" control knob for more precise adjustments, but I've hardly ever needed it.

In operation, the Rejector is a handy gadget to have on your operating table, as it can be made to do considerably more than just eliminate heterodynes. On CW, it will knock an interfering signal, if not completely out, at least far down enough to make the desired signal easy to read. And on SSB it can be a blessing for reducing interference. If, for example, you're listening to a contact, and someone else comes on a kilocycle or so away, you can edge the notch around to depress the high audio frequencies of monkey chatter, or the low audio of rumble. In one or two cases, I

have even been able to get usable copy from one station with another on essentially the same frequency—if one guy's voice is enough higher or lower than the other's, it is possible to use the notch to depress either the higher or lower voice. Obviously, nothing can completely eliminate the unwanted voice in this kind of situation, but the Rejector can make the difference between copy and confusion.

Even on single signals it can be useful. Trying to copy weak DX signals, I've been able to swing the Rejector's notch down to cut out some of the lower voice frequencies (plus at least a small hunk on the QRN) and make relatively easy copy of it by getting only the higher and more penetrating parts of the voice.

The unit is small (7½ by 5½ by 2½), attractive, and has a reversible front plate so that you can use it horizontally, sitting on top of your receiver, or vertically, standing between units or alongside. It is simplicity itself to hook up. Two cables are supplied with pin-plugs (RCA phono type) on each end. One goes from your speaker socket on the back of the receiver to the back of the Rejector, and the second cable from the Rejector to the speaker.

Power required is 12 volts at half an ampere, AC or DC, which can be taken from the auxiliary power socket of many transceivers and receivers. If yours doesn't supply 12 volts, it is easy enough to whomp up a little AC supply with a filament transformer and a switch mounted on a minibox. Or, if you like, Galaxy sells a small 12-volt supply for \$6.95.

If you've never used a notch filter, you'll be astounded at what a difference it can make in your reception. And even if you already have a notch in your receiver, by the way, the Rejector can add a second notch, to take out the interference above the signal while your internal notch is handling the stuff below. It's a good little unit, and, for \$34.95, is well worth adding to your equipment. . . . WA2TDH