Unwanted RF in your rig is a problem!

Many low-band operators have Beverages or other receive antennas that are located close to the transmit antenna. When strong RF comes into the ham shack from those receive antennas, bad things can happen!

Most modern HF radios do not switch or otherwise protect the receiver when the external antenna input is used. As a result, RF picked up by the receive antenna is connected directly to the radio circuits. We are aware of such problems as the power supply regulator shutting down, synthesizers becoming unlocked, auto-tuners going haywire, and just about anything else you can imagine. It is also quite possible to damage the receiver front-end components or other circuitry in the rig if the RF is strong enough.

What is a Receiver Isolator/Protector?

Fortunately, the answer is usually easy—disconnect the culprit antenna during transmit! That is exactly what the RIP-1 does. This product uses a DPDT relay to completely disconnect a receive-only antenna during transmit to keep RF from getting into the rig and causing problems. Both the shield and the center conductor are disconnected to keep RF that may on the shield from getting to the radio. A resistor is switched across the receiver input to assure stability. The PRE-1 is not a complicated circuit, but we have selected the right components—such as a relay with good RF characteristics and 5 amp contacts that can handle well over 100 watts. The unit uses a convenient loop-through connection that goes between your radio and amplifier, and it is housed in a compact die-cast aluminum case. All you need are cables with phono plugs and a source of 12 VDC. We provide a DC power connector to use with your shack supply, or you can use a regulated 12 VDC plug-in power supply (“wall wart”). Don’t let your rig become R.I.P. from RF — Use the RIP-1 to protect it!

RIP-1 Circuit Diagram: