



## INTERFACING THE INOVONICS ACTIVE AM ANTENNA WITH EQUIPMENT OTHER THAN THE MODEL 520 AM MOD-MONITOR

Circuitry shown within the dashed box is located inside the active antenna assembly. It requires a phantom-power source of about +9 volts DC to supply the amplifier stages. Phantom power is applied through a choke coil and 'picked off' with a coupling capacitor. This will maintain the low characteristic impedance of the circuit, which can drive either a 50-ohm or 75-ohm antenna input with relative impunity. If the antenna input of the radio or monitor has a high-impedance "bridging" characteristic, the optional 100-ohm terminating resistor should be connected.

The additional circuitry may be enclosed in a small metal box, such as a Digi-Key HM150-ND or Mouser 546-1590A. Alternatively, components may be added inside the radio/monitor and power taken from the existing supply. The fuse is optional to protect the power supply and series resistor against a short across the antenna connector.

The choke is not critical; Digi-Key part M8651-ND, Mouser 434-22-470, or similar.

The radio/monitor power supply, or even a 9-volt "wall wart," may deliver a good deal more than 9 volts with the small load that the antenna represents. The 100-ohm resistor in series with the DC feed should be increased in value to maintain the phantom power somewhere between 8 and 10 volts with the antenna connected.

ACTIVE ANTENNA INTERFACE	
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