CONNECTIONS TO COLLINS S-LINE PHONE PATCHES

This service information letter describes a method of connecting S-line 312B-4 and 312B-5 phone patches to the KWM-380 and HF-380 Transceivers.

A. Refer to the schematic diagram, figure 13, in the 312B-4 and 312B-5 Station Controls Instruction Book. Connector J3 (PTT) on the phone patch is connected to J9 (PTT) on the transceiver using phono plugs.

B. Connector J4 (PHONE PATCH OUT) on the phone patch is connected to a mating connector for the front panel MIC jack on the transceiver, center conductor to the ring and outer conductor to the sleeve. If the station microphone is connected at J1 (MIC) on the phone patch, the microphone output will be routed to the transmitter for normal SSB operation when phone patch switch S2 is switched to OFF.

C. A low wattage audio transformer (supplied by user) must be wired between J5 (ANTI VOX IN) and J7 (4Ω AUDIO IN) on the phone patch. Connect the 4-Ω winding between J7 and ground. Connect the 600-Ω winding between J5 and ground. This 4- to 600-Ω transformer will be permanent when used with the KWM/HF-380. To accommodate other connections to J5 and J7, the transformer should be wired under the phone patch chassis. This transformer will provide the proper level conversion to drive the telephone line.

D. A 4-Ω signal from J11 (SPKR) on the transceiver is connected to J7 (4Ω AUDIO IN) on the phone patch. The connecting cable must use a quarter-inch phono plug at J11 and a phono plug at the patch connection.

E. Since the audio transformer provides the antivox signal, no additional connections are required at J5 or J6.

F. The remaining connections (to the telephone, etc) are standard with all patches. Refer to the 312B-4 and 312B-5 Instruction book operation paragraph 3.1.2 for instructions on setting up and operating the patch with a transceiver.
To Increase SSB Talk Power, Change ALC Time Constant Capacitor C175 From 33uf To 22uf (25-35volts), "Note Polarity" Part # 184-9102-870

Change C148 from 47uf to 100uf
Improves 9 Volt Supply Regulation
Part # 184-9102-640