

INSTALLATION

Fixed Stations:

Installation of the Sidewinder in any location is extremely simple since only three things are necessary: power cable, microphone and antenna. Picking a location is not critical as the heat-rise of the Sidewinder is very low due to the transistor circuitry used. To allow proper air flow past the transmitter tubes, the Sidewinder should always be operated right side up, and the ventilation holes should not be blocked.

The antenna connection, J4, is located at the rear of the unit. The antenna circuit is designed for a 50/75 ohm coaxial cable. For fixed station operation where the antenna cable is over 25 feet long, it is recommended that a good quality RG-8/U be used instead of RG-58/U or RG-59/U since power losses are appreciably lower when larger diameter cables are used. In mobile installations the smaller diameter RG-58/U is satisfactory and more practical to install.

The Sidewinder is designed to operate with a press-to-talk microphone in which the press-to-talk switch 'mutes' the microphone in the released position, and actuates the relay circuit in the 'depressed' position. Most commonly used microphones have this feature, however, if a microphone without this feature

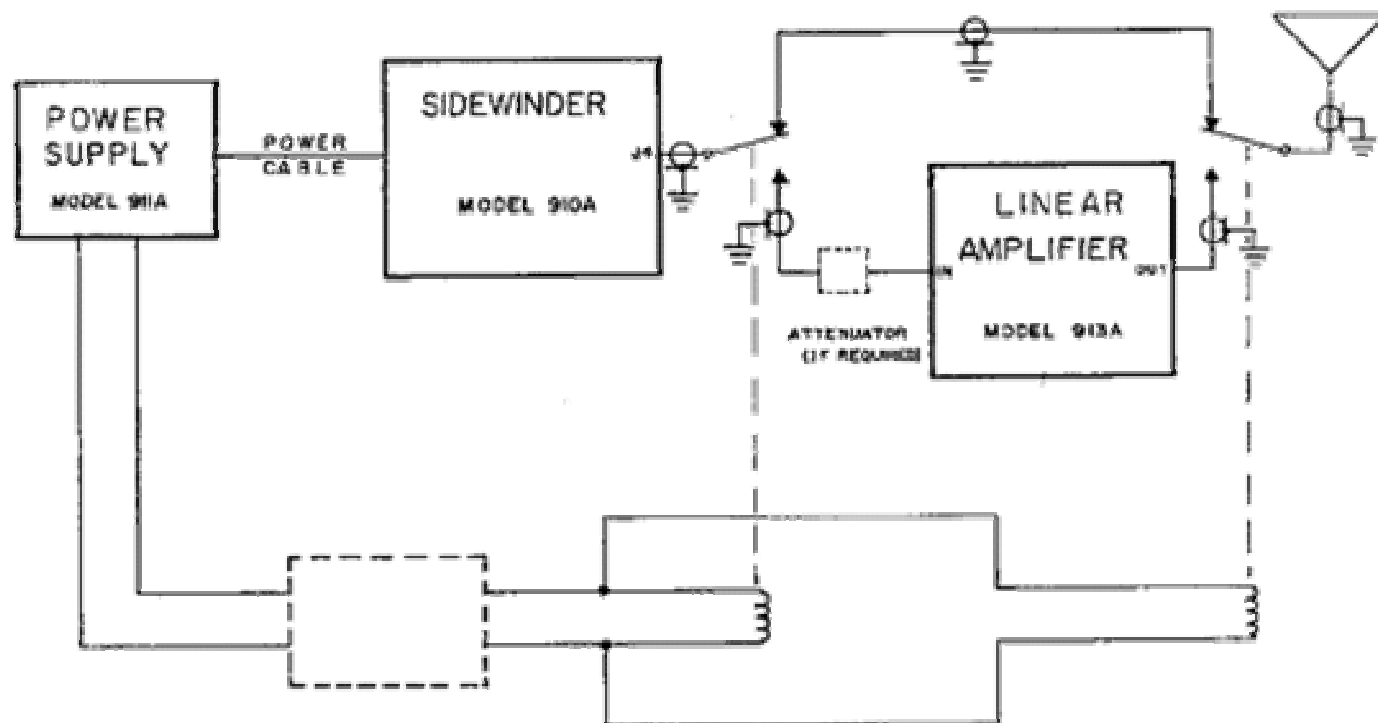
is used, it may be necessary to turn down the Mike Gain control when receiving to prevent AF feedback.

The AC power supply designed for the Sidewinder has T/R controlled contacts on the rear of the power supply in the form of an AC receptacle. The AC receptacle supplies 117 vac for use with an external coaxial relay. Figure 3 illustrates the use of the Sidewinder and the Gonset 913A six-meter linear amplifier.

Mobile Installation:

Before making any installation, check the voltage regulator of the vehicle for correct operation. Use an accurate voltmeter and suitable scale to allow readings of 0.1 volt in the 12 to 15 volt region. Connect the meter to the battery terminals and start the engine. Note the voltage with the engine operating below generator pull-in speed. If voltage is less than 12 volts, check battery connections and, if necessary, recharge or replace the battery.

Speed up the engine until the generator is operating at full output -- battery terminal voltage should not exceed 14.5 volts. With the engine idling, turn on the lights for a few minutes, then speed up the engine to full generator output. Voltage at battery terminal should remain between 14 and 14.5 volts. If not, have the regulator adjusted or replaced.



TRANSFORMER AND/OR RECTIFIERS
ARE REQUIRED IF COAX RELAY DOES
NOT HAVE A 120 VAC COIL.

NOTE:

If a two-pole coaxial relay is available, or if two single pole relays are used with their coils connected in parallel, the Sidewinder is connected to the Linear as shown in Figure 3.

If only one single-pole relay is available, connection to the Sidewinder may be made as in Figure 2. For this application, the jumper between pins 5 and 14 of the relay K1 must be cut. This jumper is easily accessible when the cover to the Sidewinder is removed, and is readily located as being the only jumper between pins on the antenna relay. Cut the jumper

in the middle and move the ends 1/4" or so apart. This provides separate inputs to the transmit and receive antenna circuits, as shown in Figure 2. When normal transceiver operation is again desired, simply cut the severed ends back together and lock with a bit of solder. This method of changing the type of antenna connection eliminates the need for the receiver input the noticeable insertion loss of the antenna patch cables which would otherwise be required.

Figure 3