

is considerably less interference encountered among SSB signals during reception.

Reception of SSB signals requires the reinsertion of a carrier before the signal can be demodulated. This is done by the BFO.

Start by tuning to the portion of an Amateur band containing SSB signals. While tuning, turn the volume control up until loud, but unintelligible sounds are heard. It will sound something like duck quacking. Carefully tune the BFO control until intelligible sound is heard. The BFO control may be left at its setting while the BANDSPREAD dial is tuned to other stations. However, a change in sideband transmission from "lower" to "upper" sideband or vice-versa requires a readjustment of the BFO control.

REMOTE CONTROL

The two terminals marked REMOTE at the rear of the chassis can be connected to the transmit-receive switch of a transmitter, or to the contacts of a transmit-receive relay. By operating this switch or relay, the B + voltage for the plates of the tubes can be turned on or off.

CRYSTAL CALIBRATOR (ACCESSORY)

The crystal calibrator is not supplied with this kit, but may be purchased as an accessory. It supplies a 100Kc signal for accurate frequency calibration of your receiver.

NOTE: DO NOT ADD THIS UNIT WHILE THE RECEIVER IS PLUGGED INTO A POWER OUTLET.

- ☐ Remove the cabinet from the chassis.
- ☐ Mount the Crystal Calibrator to the top of the chassis behind C-1 using two 4-40 x 3/8" screws, lockwashers and nuts.

There are four wires coming from the Crystal Calibrator. Feed these wires through the grommet containing the pilot lamp leads and connect as follows. (It is important that the leads be cut to the proper length to eliminate unnecessary slack.)

- ☐ Solder the red wire to terminal 3 of S-2.
- ☐ Solder the green wire to terminal 1 of TS-1.
- ☐ Solder the black wire to the solder lug attached to TS-2.
- ☐ Solder the brown wire to terminal 1 of TS-4.

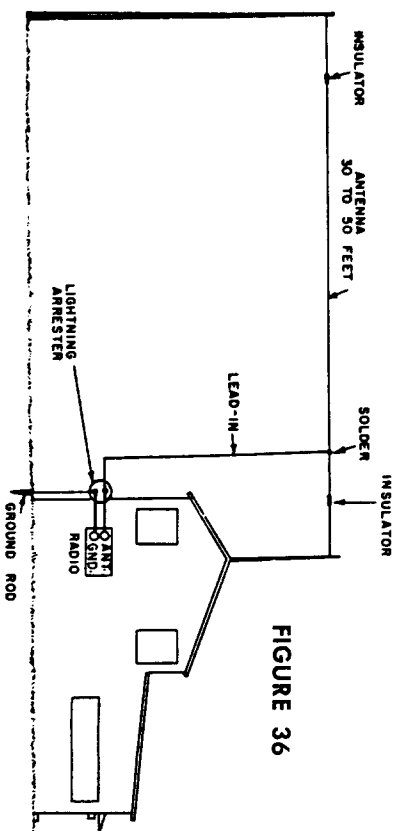
- ☐ Leave the Crystal Calibrator switch in the ON position to control the Calibrator from the front panel of the receiver.
- ☐ Remount the cabinet.

You are now ready to use the Crystal Calibrator with your receiver. Simply turn the STANDBY-MVC-AVC-CAL SWITCH to CAL and calibrate your receiver as explained in the Crystal Calibrator manual.

INSTALLING AN ANTENNA

A good antenna will enable you to obtain maximum performance from your receiver. A half-wave dipole is recommended for top performance on a particular band of frequencies such as an amateur band. A single wire antenna of between 30 to 50 feet provides the best all-round reception for short-wave listening.

If you prefer to use a single-wire antenna, see Figure 36 for suggested installation. For the exact specifications of a half-wave dipole antenna, see the section on antennas in the "Amateur Handbook," published by the ARRL.



Regardless of the type antenna used, it is always advisable to mount the antenna as high as possible. Height adds to the effectiveness of the antenna.

HEADPHONES

If you wish to use headphones instead of the loudspeaker, simply plug the phones in the jack labeled PHONES. This automatically mutes the loudspeaker. The impedance of the headphones is not critical. Headphones with impedances ranging from 30 to 2000Ω will work satisfactorily.