

- (3) The PT-2 adds considerable amplification (approximately 20 db.) to the receiver section of the transceiver, which may often have sufficient gain, particularly on the lower frequency bands. This may cause overloading which can result in cross modulation or desensitization, or both. For this reason, a manual GAIN control is included on the front panel. Normally, this control should be turned fully counterclockwise. However, under strong local signal conditions, it may often be found desirable to reduce this control to a point where the local signals tune considerably sharper and therefore, occupy less space on the band. Although this will reduce the sensitivity, it will be very often found, particularly when desired signals are strong, that reduction will provide a more usable signal than when the preamplifier was not in the circuit. This is particularly true in those transceivers having considerable front-end gain without provisions for separate RF gain and IF gain controls.

When switching the PT-2 in and out of the circuit, and with the band switch or the tuning control, or both, at incorrect settings, it will be noticed that, under certain conditions, an appreciable signal will still come through, particularly with the GAIN control at maximum. This is normal.

Some transceivers, having especially good AVC action, will tend to make tuning the PT-2 difficult, particularly on strong signals. This can be overcome by watching the S meter very carefully while peaking the PT-2, or by peaking up on a weak signal, or by peaking up on the background noise in the absence of a signal. The true worth of the PT-2 will be more fully realized under extremely poor band conditions whenever signals are very weak.

USE OF DELAY SWITCH FOR SSB AND AM

A certain amount of delay is built into the preamplifier when the transceiver switches between transmit and receive. This is necessary in SSB because the transmitter's output ceases when we pause between words or sentences. When the transmitter's output ceases, the control circuit will deactivate the relay and the preamplifier will go into the receive condition. As soon as the pause ends and the talking starts, the control circuitry again activates the relay and the preamplifier goes into transmit condition. As this cycle continues, there will be excessive chattering of the relay. To prevent such annoying chattering, a delay has been built into the control circuitry. However, if an amateur is participating in a contest, he may not want a long delay. When his transceiver switches from transmit to receive, he will want his preamplifier to be on instantly so that the extra gain of the preamplifier will prevent him from missing anything. Under these circumstances, the amateur will want a short delay. To satisfy all conditions, a switch at the rear of the preamplifier has been installed. The amateur can choose between a long delay and a short delay. He would use the short delay for contests and the long delay for ordinary SSB (non-contest) or VOX.

ADDING A SECOND RECEIVER

The PT-2 has been designed so that a jack and some additional parts can be installed in order to add a second receiver.

If you wish to add a second receiver, request addendum sheet entitled "2nd RECEIVER MODIFICATION ON PT-2" from Ameco. For a speedy processing of this request, it is suggested that a stamped, self-addressed envelope be included.

A qualified technician or amateur with adequate training will be required to do this modification.

ALIGNMENT PROCEDURE

The Preamplifier section of the PT-2 has no adjustments. All tuning is done by the variable tuning capacitor on the front panel.

In order to obtain as good an impedance match as possible between the PT-2, the transceiver and the load, it may be necessary to adjust C1*. C1 is a reactance cancelling capacitor which is used to reduce the SWR. It has been adjusted at the factory