

## IMPORTANT ADDENDUM TO PT-2 OPERATING INSTRUCTIONS

### PLEASE READ CAREFULLY BEFORE USING THE PT-2

The AMECO Model PT-2 preamplifier can be used with a transceiver because it has a built-in automatic sensing and switching circuit. As soon as this circuit senses transmitter power from the transceiver, it switches the preamplifier into its "TRANSMIT" mode. In this mode, the red light on the front panel is on and the transmitter power bypasses the preamplifier and goes directly to the antenna. As soon as the transmitter power from the transceiver ceases, the preamplifier sensing circuit switches the preamplifier into its "RECEIVE" mode. In this mode, the green light is on and the preamplifier is in a condition to receive and amplify an incoming signal.

If amplitude modulation (AM) is used, the preamplifier is continuously in its "TRANSMIT" mode when the transceiver is in its "TRANSMIT" mode. This is because, in AM, the carrier power is on all the time, regardless of whether the transmitter is being modulated.

In Single Sideband, the situation is different. When the transceiver is in the transmit mode, output power is fed to the antenna only when modulation is present. When the operator ceases talking into the microphone, the output power drops to almost zero. The preamplifier senses this condition of "low or no transmitter power" and goes into its "RECEIVE" mode. This causes the preamplifier's relay to switch over, causing the red light to go off and the green light to come on. As soon as the operator speaks into the microphone, the preamplifier senses this and immediately goes into its "TRANSMIT" mode and the red light will come on again. **THIS SWITCHING OF THE PREAMPLIFIER RELAY AND PANEL LIGHTS, IN THE SSB TRANSMIT MODE, IS THEREFORE PERFECTLY NORMAL, AND SHOULD NOT ALARM THE OPERATOR!**

In some cases, the red light may stay on or tend to stay on in the SSB transmit mode, even though no one is speaking into the microphone. This is because the transmitter may still be putting out a slight amount of power, or the background noise may be modulating the transmitter enough to cause a slight amount of output power which will activate the sensing circuit in the preamplifier. To minimize the switching of the relay and the lights, during the SSB transmitting mode, a delay has been incorporated into the preamplifier sensing circuit. During normal speaking conditions, the delay will prevent the preamplifier from switching back and forth. However, if the operator stops talking for a period of time, the preamplifier will, of course, try to switch into its receive mode, which is perfectly normal.

The delay switch on the back of the PT-2 must be in long delay when transmitting in CW mode. At no time is the short delay to be used with CW operation; OTHERWISE DAMAGE WILL RESULT. The short delay should ONLY be used for AM or SSB CONTEST operation (see instructions).

The power outlet on the back of the PT-2 is used for the purpose of plugging in the transceiver's power cable. The AC power cable of the transceiver MUST BE PLUGGED INTO OUTLET ON BACK OF THE PT-2. FAILURE TO DO SO WILL DAMAGE THE PT-2.

The PT-2 can be used directly with transceivers with a maximum output of 350 W. PEP. Power levels greater than 350 W. PEP WILL DAMAGE THE PT-2. For higher power levels, a linear amplifier must be used and placed in the line between the PT-2 and the antenna. At no time must the linear amplifier be fed into the PT-2, otherwise damage will *result*