

# INSTRUCTIONS

## AMECO PREAMPLIFIER

### MODEL PT-2

The AMECO PT-2 preamplifier may be added to most existing transceivers in the frequency range of 1.8 to 54 MHz. It improves the gain, noise figure, spurious signal and image rejection of the receiver section. This all-new PT-2 preamplifier has been designed specifically for use with a transceiver. Its sophisticated control circuitry permits it to be added to virtually any transceiver without modification. This is accomplished by the use of automatic antenna switching inside the PT-2. When the PT-2 senses transmitter RF power, it automatically switches out of the amplifier mode and connects the antenna directly to the transceiver.

The PT-2 consists of a tuned RF amplifier, covering all the amateur bands from 160 through 6 meters and, in addition, all foreign broadcasts, as well as other services within this frequency range. Model PT-2 employs a low noise dual gate FET transistor, providing a noise figure of 1.5 to 3.5 db, over the frequency range of 1.8 to 54 MHz. The preamplifier will be found especially effective with those transceivers employing the Pi-output network of the transmitter section as the receiver RF stage input. Most transceivers of this type begin to suffer a noticeable decrease in sensitivity on 15 meters, and especially on 10 meters. The PT-2 will be most beneficial on these bands. The inclusion of 6 meters makes it usable with 6-meter transceivers.

The PT-2 is designed specifically for 117-volt, 60 cycle operation.

The input and output impedances are nominally 50 ohms to match most popular types of amateur installations. The input and output impedances of the PT-2 are not critical and therefore, no adjustments or modifications are necessary with other impedances.

### INSTALLATION

**DO NOT PLUG THE PT-2 INTO THE AC OUTLET UNTIL INSTRUCTED TO DO SO IN STEP 3!**

- (1) REMOVE THE POWER PLUG OF THE TRANSCEIVER POWER SUPPLY FROM THE WALL SOCKET AND PLUG IT INTO THE AC OUTLET (MARKED TRANSCEIVER) ON THE REAR OF THE PT-2. FAILURE TO USE THIS OUTLET AS DIRECTED CAN CAUSE DAMAGE TO THE PREAMPLIFIER. An outlet marked SPARE may be used for a rotator; however, under no circumstances should a linear amplifier be plugged into this outlet socket. THE LINEAR AMPLIFIER SHOULD BE PLUGGED DIRECTLY INTO THE WALL OUTLET BECAUSE OF ITS HIGH CURRENT DRAIN.
- (2) Remove the coaxial antenna line from the transceiver and connect it to the jack marked ANTENNA on the rear of the PT-2. The coaxial cable coming out of the rear of the PT-2, terminating in a coaxial connector, should then be connected to the transceiver's antenna jack. See Figure 1. In those installations employing a linear amplifier, the PT-2 is inserted between the linear amplifier and the transceiver (NOT BETWEEN THE ANTENNA AND THE LINEAR AMPLIFIER). See Figure 2 for the installation involving a linear amplifier.
- (3) The PT-2 unit may now be plugged into the AC outlet. The switch on the front panel will control not only the power to the PT, but all items plugged into the rear outlets. This provides for simplification of station operation and insures that the relay control circuitry will be energized whenever the transceiver is in use. **FAILURE TO DO THIS WILL CAUSE EQUIPMENT DAMAGE!**