

The application below shows how the EME221-23CM band Masthead Pre-amplifier can be used with the Kenwood TS2000X, and many other 23cm band Transceivers. Unlike the Icom IC910 / 9100 Transceivers, the TS2000X does not have the ability to feed power up the coaxial cable to power a masthead pre-amplifier, so a suitable low loss bias tee is required. The EME168-70-23 bias tee was designed for low RF loss and can be easily connected to the TS2000X EXT CONT Pin 4 on the rear of the transceiver for control of the bias tee. This output has an open collector transistor that is only able to sink very low current, so some caution is required to not destroy the transistor. The PTT1 connection on the bias tee board when grounded disconnects the power to the pre-amplifier via the coaxial cable, so this should be connected to the RCA connector when using it with the TS2000X.

The RF sensing circuit on the EME221-23CM board should be used as protection when external high power RF amplifiers and a sequencer is not used.

The 70cm pre-amplifier application is similar but Pin 1 on the EXT CONT connector of the TS2000X is used. For the 2M band Pin 6 is used.

