



The block diagram is an example for how the Icom IC7000 is connected to the Bias Tee. The Bias Tee allows RF to be switched up a coaxial cable to power a preamplifier in RX mode. The preamplifier power is controlled by inputting a logic low or high (configurable) to the TX input connection on the Bias Tee.

Pin 7 (VSEND) on the 13 pin ACC connector is configured in the IC7000 menu setting to be grounded when going into transmit mode. This is connected to the TX input connector on the Bias Tee that is configured internally for a grounded TX enable, (PTT1 connection). In TX mode the output from Pin 7 on the ACC connector is grounded which then removes the +12vdc on the RF/DC connection to the preamplifier. This then turns off the preamplifier and de-energises the relays for bypass TX mode. When the IC7000 goes to RX mode, the TX input to the Bias Tee is un-grounded which then switches +12vdc power onto the RF/DC connection to the preamplifier. This then powers preamplifier and energises the relays for RX mode.

Many transceivers have a TX logic output that is a high, or (+12vdc) from the ACC connector. The Bias Tee is then configured so that the Bias Tee TX input is internally connected to the (PTT2 connection).