



DEM TIB850, TIBK850 and TIBCK850 Transverter Interface Board for Kenwood TS-850

Operation & Description

The Kenwood TS-850 is a popular transceiver to use as an IF for transverters. But can be a difficult rig to interface. After interfacing the 850 with a transverter it becomes a problem if you expect to still be able to keep using the 850 on the "Low Bands". The problem lies in the 850's configuration. To use it as an IF for transverters, it requires you to manufacture a "Bias Tee" to supply bias voltage to the "Drive Out" port (the low level TX port). This voltage disables the final amplifier in the 850 and because the main Antenna port is used as the receive port for a transverter, it prevents the user from transmitting into a transverter's receive section. Once this is all configured it works well. But to change back to "Low Band" operation, the user needs to disable the bias voltage, disconnect the transverter's IF cables and re-connect the Low Band antenna system. This becomes a task if you wish to change often and a problem if you just connect the receive cable and inadvertently transmit into the transverter's receive port!

The DEM TIB 850 allows the user to change from the low bands to your transverter system by simply flipping a switch. It can be kept in line at all times with an HF antenna connected to it. When the TIB850 is switch off it allows normal use on the Low bands. When it is switch on it by-passes the HF antenna, applies a bias voltage to the "Drive Out" port and connects a transverter to the TS-850 in the correct fashion. Then when a transmission is made the antenna port is disconnected from the transverter's receive port. This is an extra safety feature that if the bias voltage fails or the "Drive Out" cable becomes disconnected, the TS-850 will transmit into a small load that will burn until the VSWR protection circuit kicks in or the user determines that there is a problem. If the DC power becomes disconnected from the TIB850, it will then be by-passed and the TS-850 will transmit into the HF antenna system. If the remote connector becomes disconnected it just won't transmit.

Specifications

Operation voltage:	+10 to +16VDC.
Keying Circuit:	Supplied by Pin 7 of remote connector on TS-850
By-pass Power Limit:	150 Watts, CW, 3:1 VSWR

