



DEM TIK2 Universal Transverter Interface for the Elecraft K2

CIRCUIT DESCRIPTION

The new DEM TIK2 transverter interface is designed to be installed in the Elecraft K2 transceiver. The kit comes complete with everything required to connect the interface to your transverter utilizing the IN XVTR OUT and the AUX I/O pre-punched holes in the K2's enclosure. All wiring , connectors, and switches are included in the kit for any possible configuration you require. You will not need to drill any extra holes in the case!

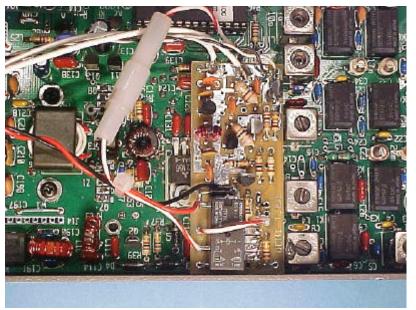


The TX drive level through delivered the XVTR OUT connector is nominally +3 dBm . The RX signal from a transverter is connected to the XVTR IN avoiding the use of the ANTENNA port. Using these IF connections (IN XVTR OUT) for transverters has many advantages. There is no need for an attenuator in the TX line to "Pad" the drive level. This in turn

saves energy which can be very helpful if using the battery pack. It also eliminates stray 10 Meter RF radiation that will occur with poor quality attenuators. It will also eliminate the need for a extra relay to separate the TX and RX lines to by-pass the attenuation on receive or the need for the separate Elecraft RCV.ANT option in the K2.

The TIK2 connects internally to the J-13 connector and may be installed with all other K2 options. It can provide any possible IF or keying configuration required by your transverter system. The interface has a manual enable/disable switch installed in the INT.BATTERY position. When enabled, the interface bypass' and removes the bias from the final amplifier in the K2, This prevents the transceiver from transmitting on 10 Meters and wasting DC power when the transverter is in use. This switch also allows instant switching from transverter operation to transceiver operation.

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There are many possible interface combinations with the TIK2 allowing it to be utilized with many different transverters. It will provide the 28 MHz TX drive level through a common TX/RX port or through separate TX and RX ports (IN XVTR OUT). The keying signals, 8T or 8R, buffered or not, may be applied during transmit or receive through any IF port or both. You may also select to use the same signals through the AUX I/O port. You may also select to use the inverted and buffered signals or both. Consult the schematic for all possibilities



DEM TIK2 PCB with all components installed

