

DEM Part Number L144-28INT

2 Meter Transverter for converting microwave transverters to 28 MHz.

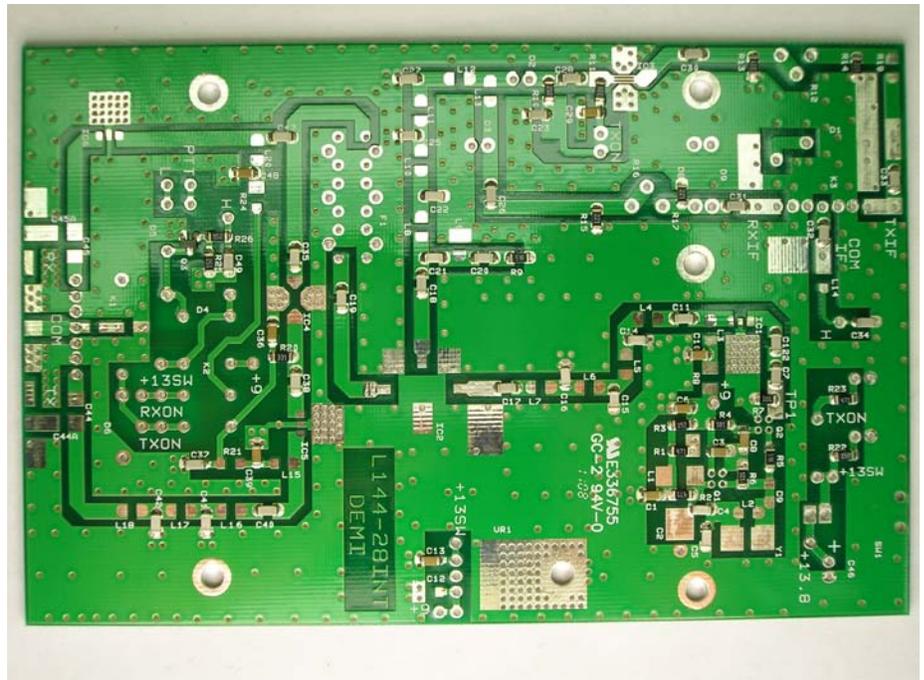
Operating Specifications:

Operating Voltage:	12.0 - 15.5 VDC, 13.8 nominal
Current Drain:	Receive / Transmit 400 mA maximum
Output Power:	50 - 100 mW nominal linear
Receive Noise Figure and gain:	3.5 dB NF maximum, 5 dB gain maximum, adjustable
TX Drive Level:	-20 dBm to 10 watts, adjustable

General:

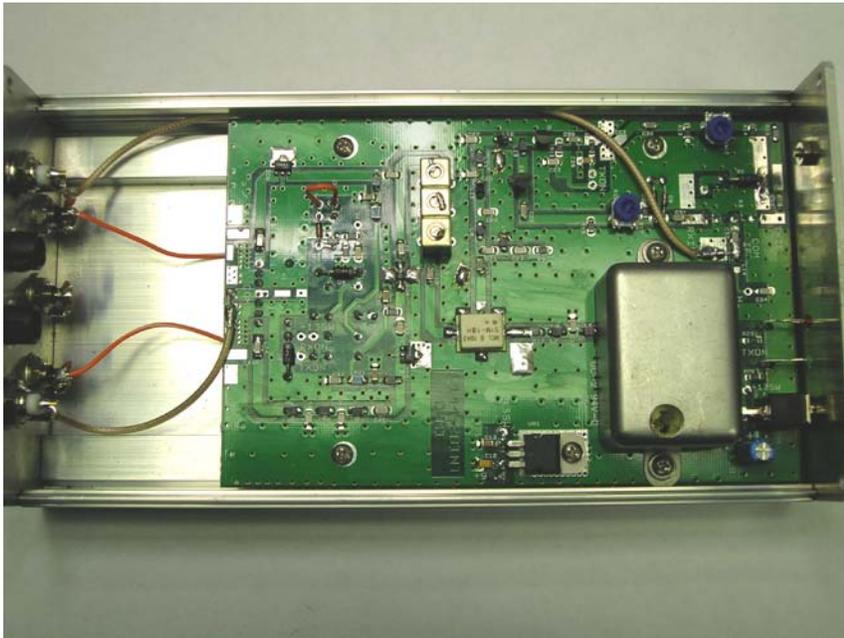
The DEM L144-28INT will be offered as a board kit, complete kit (with enclosure and connectors) or assembled and tested. This is an updated design of the original DEM 144-28INT.

The design improvements include better frequency stability, higher output power, and better RX "over load" immunity. Kit builders will find assembly easier with our supplied, partially assembled circuit board featuring all surface mount construction. This results in a circuit board size reduction (3.7" x 5.7") over the last revision. Basically, it's the same block diagram with better performing components.



Operational Overview:

The DEM L144-28INT is designed to be used as a 2nd conversion IF for microwave transverters that require a 2 Meter IF. Because of its limited RX gain and low output power, **this transverter would be difficult to use as a stand-alone 2-meter device!** The L144-28INT has a nominal linear output power of 50 - 100 mW with any 28 MHz. drive level between –



20 dBm and 10 watts.(Range settable) On the receive side, a high dynamic range amplifier, a high level double balanced mixer (+17.0 dBm), a three pole helical filter and a improved IF filtering are employed to provide a over load proof, low gain front end with superior selectivity. It is similar in design to our new high performance 2-meter transverter without the GaAs FET front end. The local oscillator is "heated" and within a separate enclosure for additional frequency stability. Future plans for the L144-28INT include a synthesized LO and connections are provided for the upgrade.

If an assembled version or complete kit version is ordered, the L144-28INT will utilize our standard microwave transverter enclosure with BNC connectors for both RF and IF. The transverter comes complete with built in relays for RF and IF switching for the common ports and for external DC/PTT switching if required. Separate TX/RX RF ports and IF ports are available. Simplified push-to-talk connections can be made through the IF coax and can be mirrored through the RF connections to the microwave transverter if desired.

The assembled board or board kit can be easily integrated into an existing multi-band microwave system providing the second conversion down to a quality 28 MHz transceiver.

Products available:

- L144-28INT----- Assembled Unit
- L144-28INTCK----Complete Kit
- L144-28INTK-----Board Kit
- L144-28INTB-----Assembled Board
- The PC board only is not available

