

## Down East Microwave Inc. 19519 78th Ter., Live Oak FL 32060

Phone: 386-364-5529 (Voice) http://www.downeastmicrowave.com



## \*\*NEW\*\*DEM LTRS Transmit / Receive Sequencer\*\*NEW\*\*



Our new DEM LTRS Sequencer is a copy of the solid state sequencer we have utilized in our past VHF/UHF and Microwave transverter designs. It is similar to our previous design by WB5LUA but without the relays, making it a completely solid state unit. As in previous designs, this sequencer is intended to be used with any lash-up that requires separate sequenced switching circuits to control pre-amps,

TR relays, transmitters, and power amps. The LTRS is a standalone unit that is activated by either a push to talk to ground (PTT - L) or by applying a + 1.5 - 17 VDC (PTT-H). At the time of activation, (Transmit) an R/C timing circuit in combination with a voltage divider network begins to turn on each individual op-amp, (1<sup>st</sup> through 4<sup>th</sup>) in sequence. The op-amps in turn drive their respected switching transistor circuits. When the PTT circuit is released, the sequencer moves back to the resting state (or Receive) in the reverse order (4<sup>th</sup> through 1<sup>st</sup>)

Each of the 4 sequenced stages have separate outputs (13 total) that may be changed by the user to produce a voltage up to 2+ amps, a connection to ground or an open circuit in either transmit, receive or both. This provides many options of switching functions and output combinations that should fit any requirement. It operates with a standard +12 VDC supply but can switch an input voltage (if



supplied) of up to +30 VDC. All DC input and output connections are made through a DB-15 connector and has one Dual function LED. Transmit or Receive.

The LTRS is available as a Board kit that is 95% preassembled requiring minimal soldering



ready for the wire connections to be made and added to any system. The Complete kit includes the 2.5" x 2.0 x ¾" enclosure with a mounting plate and the matching DB-15 connectors. The assembled and tested version is ready to install in your system just configure the provided DB-15 connector mate. Order the following DEM part numbers on our website.

DEM LTRS--- Assembled and Tested

DEM LTRSCK ----- Complete Kit

DEM LTRSB ---- Assembled Board Only

/Kits/LTRSCK.doc 1 Rev. A 4/6/18