

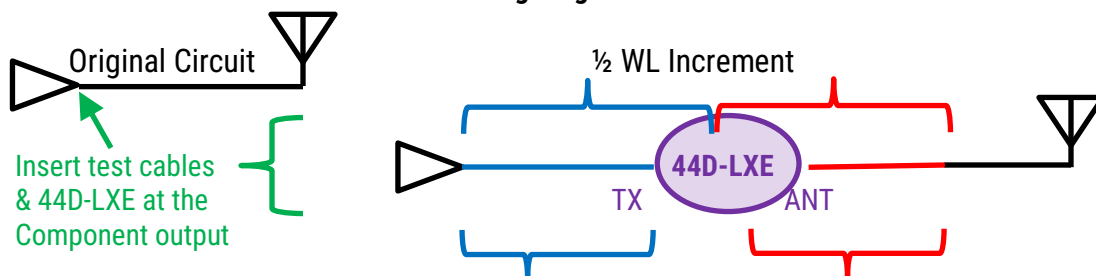


## Quick Start Guide

The complete 44D-LXE User Manual is available for download at [www.telewave.com](http://www.telewave.com).

- Unpack the 44D-LXE and accessories (12V DC charger)
- Check the box and contents for any damage immediately after it arrives
- In case of damage or missing items, contact Telewave.io immediately at 408-929-4400 Opt 1.
- Charge the Batteries (See Page 5)
  - Connect the supplied USB cable to the 44D-LXE (connector on the back) and into the supplied AC power supply. Plug the power supply into a 90 to 250 VAC (50 or 60 Hz) wall socket (Charging will begin automatically - when the 44D-LXE is turned off the display will flash on for a moment & then go dark, the blue power ring will remain on.)
  - The 44D-LXE must be fully charged before turning on for first use.
  - The 44D-LXE cannot be switched ON or OFF while charging via the USB. Disconnect the USB cable, toggle the power button, and then re-connect the USB to continue charging.
  - See the section "[Lithium Battery Management](#)" for battery management details.
- Build or procure "Primary Cables" (see "Appendix - Connecting the 44D-LXE to the Circuit")
- Press and release the power button. The blue power indication in the switch will illuminate.
- The 44D-LXE will be functional in three to five seconds as indicated by:
  - The backlight will be illuminated
  - Frequency and battery indicators are displayed
- The HOME screen & menu tree:
  - Freq Range > Set operating frequency range\*
  - Modulation > Selects the modulation type\*
  - Settings > Select dB, watts, backlight Adj.
  - Info & Help > Show Version, Telewave.io contact
- \*Set the Frequency Range and Modulation before use or measurement will be inaccurate, other settings are optional
- When in any MENU screen other than the HOME Screen, the function buttons will be UP, SELECT/EXIT, and DOWN.  
Press SELECT implements the selection & returns HOME
- Once the 44D-LXE has been configured, the cables can be connected.
- Connect the primary cable to the port labeled TX on the left side of the 44D-LXE (RF input)
- Connect the cable leading to the antenna to the port on the right side of the 44D-LXE (RF output)
- The RF Sample port can be connected to any monitor or source test equipment. The sample port is bi-directional, with connectivity to both the Thru Line TX and Thru Line ANT ports.

### Wiring Diagram



Primary Cable (1/2 WL increment minus 3") Secondary Cable (Optional = 1/2 WL incr. - 3")



## Lithium Battery Management

Lithium-ion batteries are used in the 44D-LXE to supply power. The behavior of the 44D-LXE batteries is like other devices that use the same battery technology (cell phones, iPads, etc.). Please carefully read this section regarding battery safety and operation details.

### Battery charging and discharging

The battery can be charged when the 44D-LXE is on or off. The 44D-LXE can be charged from any USB source that can support a 2.4-amp load, though we recommend using the supplied power supply and cable (do not charge via a laptop USB port). Charging begins automatically when power is applied to the USB port.

 **NOTE: Two Power Management Rules**

1. Always make sure that there is at least one bar (2 hours) of battery life before using the 44D.
  2. Unplug the charger before operating the power switch (turning the power on or off) and then plug the charger back in if needed for charging or operation.
- When the 44D-LXE is powered off, the power switch ring will be blue, and the display will be dark.
  - When the 44D-LXE is on, the battery life indicator turns yellow indicating that the batteries are charging.
  - Depleted batteries will require 2-3 hours of charging time to reach a full charge.
  - Fully charged batteries will support about 6 hours of active operation.

**NOTE:** The 44D-LXE can be used when charging, but when the charger is in trickle mode (less than 1-hour battery life) there is not enough current provided to operate the 44D-LXE; the batteries will eventually be depleted.

 **WARNING**

- The batteries must be discharged to 1/3 or less capacity before the meter can be shipped by Air. This is a legal and safety requirement for all lithium batteries.
- The 44D-LXE can be carried into the cabin of any passenger flight (at any charge level), but it cannot be checked into luggage on any passenger flight.
- The internal batteries are not user-serviceable. The 44D-LXEm must be returned to Telewave.io for service if the batteries no longer accept or retain a sufficient charge.
- Excessive cold or hot temperatures can damage the batteries or create a fire hazard.

 **CAUTION**

- Fully charge the batteries upon initial receipt, as well as before and after long-term storage.
- Fully charge the batteries at least once a month during long-term storage.
- The batteries may self-deplete and malfunction unless they are periodically re-charged.
- The 44D-LXE can be left on the charger for longer than 24 hours, but this is not recommended.
- The 44D-LXE is protected by internal fuses. If the USB charging port is shorted, the fuses may blow, requiring factory replacement.