

## How to Change the Coin Battery on the MTR-4B V2

“The Mountain Topper”

Online video of this procedure is available [HERE](#) or at [www.LNRprecision.com](http://www.LNRprecision.com)

In the MTR4b V2 user manual (online at LNRPrecision.com), the designer references information regarding changing the Coin Battery. Those references are relisted in the appendix below. The MTR4b V2 enclosure was designed to be as small and lightweight as possible with an aluminum powder coated enclosure that can withstand field use. Over time, it may be necessary to change the Coin Battery which requires opening the enclosure and reassembling.

*Time: 5-10 Minutes*

### Items required:

- Small Phillips Screwdriver
- Non-conductive screwdriver or pick (optional)
- Replacement Coin Battery (CR2032)



### The steps to do this are as follows:

- Step 1
  - Loosen the hex nut around the BNC Connector. This can likely be done with your fingers as it is only hand tightened. If you can't do by hand, gently use pliers to loosen. Set hex nut aside.
  - Remove the locking ring from BNC Connector and set aside.
  - Remove the collar nuts for the speaker/headphone and key. Set aside.
- Step 2
  - Remove the two phillips screws on the LEFT and RIGHT side of the enclosure. Set aside screws.
- Step 3
  - Lightly push the BNC connector end which will allow the bottom of the enclosure to slide apart from the PCB and top cover. Set aside the bottom of the enclosure.
- Step 4
  - Remove the four screws located near the corners of the top of the enclosure. These are **NOT** the screws for the clear bezel covering the LCD as they should not be disturbed. The top cover will then be able to be easily removed. Set screws and top cover aside.
- Step 5
  - Remove felt dust cover from switches and set aside. Flip unit over to expose the coin battery.
  - Using a non-conductive screwdriver or pick (or fingernail), carefully remove the existing coin battery and discard.
- Step 6
  - Insert a new CR2032 coin battery into the slot (flat edge or positive polarity facing up).

Once coin battery is inserted, reassemble by following these same steps in the reverse order.

**IMPORTANT Remember to only snug up the screws in step 4 and step 2. Do not over tighten. Also, only hand tighten the collar and hex nuts in step 1. Do not overtighten here as well.**

## APPENDIX (Battery Information from User Manual)

### **Battery back up:**

A CR2032 battery is used to power the processor while main power is off. This keeps the clock running and retains the various settings stored in RAM.

Only a minuscule amount of current is used, just a few uA so the battery will last a long time. Even so, if the rig is not to be used for some time, it would be a good idea to disable the battery by slipping a piece of paper or plastic between the battery and the holder contacts.

Eventually, the battery will run down to the point the processor will not reliably run. If the rig “locks up” or otherwise behaves unreliably, it is time to change the battery.

### **SET TIME:**

This mode is used to set the Real Time Clock. The clock is not displayed until it is set. 24 hour mode is used for simplicity.

**Display:** Bottom line [ SET T 0:00 ]

- Use the **Tune Down** switch to advance the Hours
- Use the **Tune Up** switch to advance the minutes.
- Click the **Fn** switch to enable the clock and exit.

Note: The clock timer is held in reset and the seconds counter cleared until the **Fn** switch is clicked. Set the time for one minute past the current time, then watch the seconds sweep on an accurate clock and click **Fn** when it hits 12. This will make the clock the most accurate.