



Operating Instructions

MINI-MBT & MINI-MBT9R



ZTS Mini Multi-Battery Tester Operating Instructions

Product Description

The ZTS Mini Multi-Battery Tester is a microprocessor-controlled instrument designed to test many popular batteries including NiMH, lithium, and alkaline. This tester computes the battery's remaining power capacity using a patented, high accuracy pulse load test. U.S. Patents 6,823,274 and D515,444.

A fully automatic load test begins when a battery is placed in contact with the tester's terminals. After the timed test cycle (2-seconds), percentage of remaining battery power capacity is indicated on the LED bar display. Batteries will not be harmed by repeated testing or by holding contact after a test cycle.

Getting Ready to Test Batteries

Install 4 AAA alkaline batteries into your tester's battery compartment, carefully noting their orientation. Replace the battery compartment cover and your Calumet Battery Tester is ready to use.

Battery types are clearly labeled next to appropriate contacts. Each single terminal is for the battery's positive (+) side and the built-in probe for battery negative (-). Twin terminal sets are for 9-volt batteries.

Testing Batteries

There are no settings to make prior to testing. To begin, turn your tester on using the power button located on the right side. Select the proper terminal for the battery you plan to test, then follow these simple steps:

1. Place the battery's positive terminal firmly on the tester terminal you selected.
2. Hold the built-in probe tip against the battery's negative terminal. If you are using the twin terminals, for example 9-volt, the built-in probe is not used.
3. Hold contact firmly while LEDs blink, then continue to hold contact to display test results.
4. Lift the probe or battery to end a test. Repeat test for best accuracy.
5. The tester will **turn off automatically** after 2 minutes of no test activity.

To test 9-volt batteries, note the polarity then hold the battery against the appropriate twin terminal set.

The display will remain lit until the battery is removed from the tester's terminals. This does not drain the battery being tested.

NOTE: This tester has a self-test low battery power indicator. Replace the tester's 4 AAA batteries (internal) if the green power LED blinks for 5 seconds when turning the tester on or when making test.

Tips for Better Testing

- Verify that the battery's terminals and the tester's contact terminals are clean before making a test. We recommend periodic cleaning with 91% isopropyl alcohol and soft cloth. This is especially important when testing rechargeable batteries (NiMH) since they are generally handled more frequently which results in contamination on terminal surfaces.
- If a battery slips off the terminal during the test cycle (‘running’ LEDs), start a new test
- Used batteries may “recover” when rested. For best accuracy, always make two or more consecutive tests. Wait several seconds between each test.
- Certain new batteries may test less than full capacity new out of the package. This may be due to the battery's chemistry not fully activating. Try several tests or warm the battery in your hand for several seconds.

In Case of Problems

If there is no operation, that is, no LED activity or indication of test cycle, try the following:

- Remove then reinsert one of the tester's internal (AAA) batteries. Verify that all batteries are installed correctly.
- Verify that the battery you are testing is positioned correctly and its terminals are clean.
- Check a known good battery. If the battery you are testing is completely discharged (less than 1% of capacity), the tester will not start a test cycle.

Warranty Period: One (1) year from date of purchase.

Specifications

P/N: MINI-MBT & MINI-MBT9R

Testing capability (battery list):

1.2v NiMH / NiCd rechargeable [AA, AAA, C, D]

1.5v alkaline [AA, AAA, C, D, N]

3v photo lithium [CR123, CR2] - (MINI-MBT only)

3.6v Li-Ion rechargeable [18500, 17650, 18650, RCR123A] (MINI-MBT only)

9v alkaline & carbon zinc

9v NiMH (MINI-MBT9R only)

Power (internal) 4 x AAA

Display: 5 LEDs - colors green, yellow, red

Pulse Load: magnitude varies according to battery type

Operation: microprocessor-controlled test cycle

Test duration: approx. 2 seconds

Contact terminals: solid brass, nickel-plated

Dimensions: 4 x 2.5 x 0.75 inches

Weight: approx. 3 oz. (85g)

UPC: 856777000121 (MINI-MBT)

UPC: 856777000138 (MINI-MBT9R)

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