

# Batt-O-Meter™

The Musician's Battery Tester

Model # KS700-0658

## Owner's Manual

A GUIDE TO HELP YOU GET STARTED

### WELCOME!

*Thank you and congratulations on your decision to own the Batt-O-Meter: the musician's battery tester.*

#### Features

The Batt-O-Meter is a computer-controlled voltage and current measurement system.

The Batt-O-Meter is capable of testing:

- State of the battery powering musical instruments, as well as hours of use left
- State of the battery of 9V devices, as well as hours of use left
- State of standalone 9V, 1.5V (AA & AAA), and 3V batteries
- All of its internal functions
- Condition of the power probe

State of its own battery The Batt-O-Meter is able to perform this exhaustive self test because it implements precision equipment only recently available.

### IMPORTANT NOTES

#### Power

This unit requires a 9 volt battery for operation, not included.

### PRECAUTIONS

Do not subject the unit to temperature extremes (e.g., direct sunlight in an enclosed vehicle). Avoid using or storing the unit in dusty or humid areas, or areas that are subject to high levels of vibration.

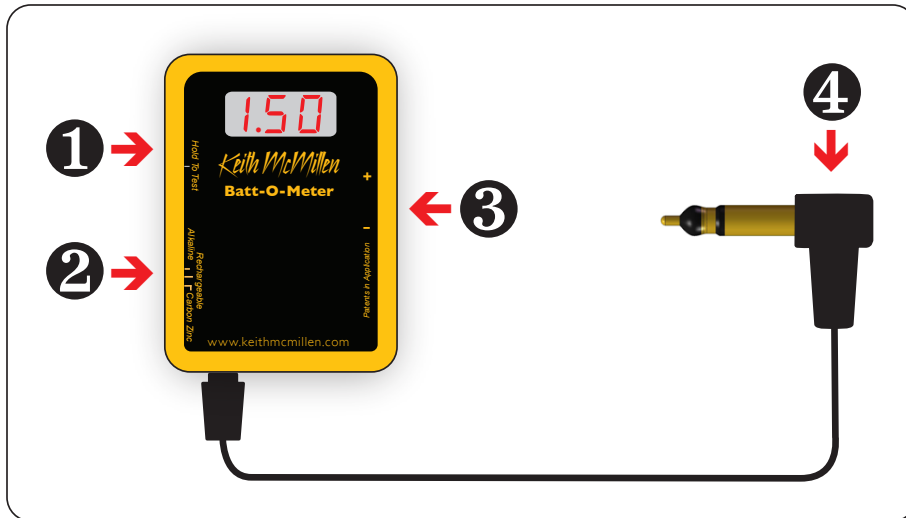
Protect the unit from strong impact.

Should a malfunction occur, or if you suspect there is a problem, discontinue use immediately. Contact qualified service personnel as soon as possible.

To avoid the risk of electric shock, do not open the unit.

#### Installing & Changing the Battery

While pressing on the tabs of the battery door in the back of the Batt-O-Meter, open the case, and insert the 9 volt battery. Battery life may differ according to the conditions of use. Remove the battery whenever the unit is to remain unused for an extended period of time.



## PARTS OF THE BATT-O-METER

1. **Hold To Test button**; hold this button down to run the battery test.
2. **Battery chemistry switch**; a three-position switch to select battery chemistry type: Alkaline, Rechargeable (ie. Lithium-ion, NiCd, NiMH), Carbon Zinc.
3. **External Battery Contacts**; touch the battery terminals to these contacts to test standalone batteries making sure polarities match. Batteries supported: 9 volt, 1.5 volt, and 3 volt.
4. **Power Probe**; gold plated detector, coupled to a highly sensitive, high impedance circuit. In order to work properly, the probe must be free of oil and other contaminants. Insert this plug into your 9 volt device to test internal battery or use it to aid in standalone battery test of 1.5 volt batteries.

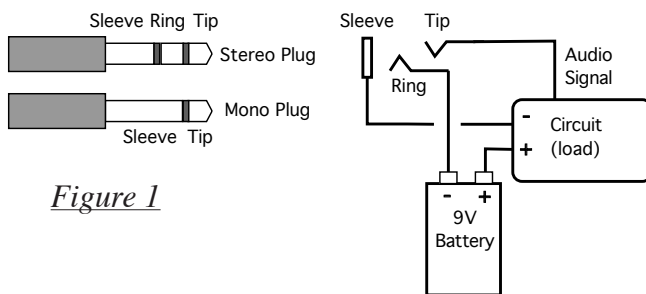


Figure 1

## How it Works

Stomp boxes and instruments use a standard stereo 1/4" diameter phone plug and jack. These instruments and devices sense the insertion of the 1/4" mono plug to turn on the power (Figure 1.) The Batt-O-Meter can measure critical information that lets you know how much longer the battery will work without making direct contact to the positive contact of the battery usually required.

## USING THE BATT-O-METER Self Test

Start by holding down the power button to activate the Batt-O-Meter in Self-Test Mode. You will see the following display:

1. Shifting Decimals (4x)
2. "SLF"
3. "YES"
4. "PrC"
5. Percentage in number indicating internal battery level

- If the Batt-O-Meter battery is below 7 volts, it will not operate.
- If you are holding the probe in your hand while attempting to run the Self-Test, the test will fail and the LED screen will flash "pL6" prompting you to check and/or clean the probe.

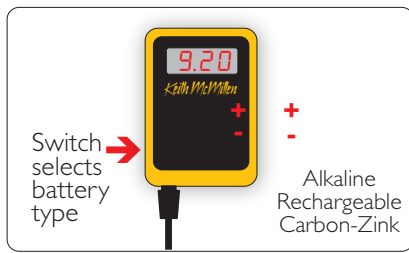


Figure 2

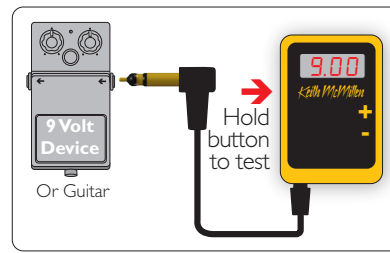


Figure 3

## Instrument Test

1. Select chemistry type of the battery to be tested using the three-position switch.
2. Plug the probe into the output of the instrument. (Figure 2.)
3. Hold the power button down to run test.

You will see the following display:

1. Chem: "AL", "rC", or "CA" (the one selected by you)
2. "UoL"
3. Voltage in number
4. "Hr"
5. Number of hours left to power device

If the battery tested is low, then you will see the following sequence:

1. Chem: "AL", "rC", or "CA" (the one selected by you)
2. "UoL"
3. Voltage in number
4. Flashing "Lo"

### DISPLAY GUIDE

- UoL - Battery voltage
- Hr - Hours remaining of normal use
- Prc - Percent battery life
- Lo - Battery low; change battery
- ... - Searching for battery; continue holding for self-test
- SLF - Self-test; device status, battery life %
- PLG - Plug error; clean/check plug connection
- YES - Batt-O-Meter OK for operation
- AL - Alkaline
- rC - Rechargeable
- CA - Carbon Zinc

## Stompbox & Effects Pedal Test

1. Select chemistry type of the battery to be tested using the three-position switch.
2. Plug the power probe into the input of the 9 Volt device you are testing. (Figure 3.)
3. Hold the power button down to run the test.

You will see the following display:

1. Chem: "AL", "rC", or "CA" (the one selected by you)
2. "UoL"
3. Voltage in number
4. "Hr"
5. Number of hours left to power device

If the battery tested is low, then you will see the following sequence:

1. Chem: "AL", "rC", or "CA" (the one selected by you)
2. "UoL"
3. Voltage in number
4. Flashing "Lo"

— If the test fails and you know the battery inside the device works, try plugging the probe into the output of the device instead of the input. If you have tried both the output and the input of the device, and the test continues to fail, it may be that you have one of the few devices that does not work with the probe. Remove the battery and place it up to the external battery contacts to test it and verify that it is charged.

## Standalone Battery Test

The Batt-O-Meter can test stand-alone batteries: 9V, 1.5V (AAA,AA), and 3V. It does this, by automatically placing the battery under an appropriate load to simulate real world usage.

The Batt-O-Meter can also test C, D, and other cells with the help of a conductor to connect the positive terminal of the battery to the positive external battery contact on the Batt-O-Meter.

To test a standalone battery follow these steps:

1. Select the chemistry type of the battery to be tested using the three-position switch.
- 2a. If you are testing a AA or AAA battery, place the positive terminal of the battery to be tested against the positive side of the external battery contact on the Batt-O-Meter. Touch the tip of the probe to the negative terminal of the battery. (Figure 4.)
- 2b. If you are testing a 9 Volt battery, make sure you fit the terminals of the battery with the external battery contacts on the Batt-O-Meter matching polarity.
3. Hold the power button down to run the test.

You will see the following display:

1. Chem: "AL", "rL", or "rR"  
(the one selected by you)
2. "UoL"
3. Voltage in number
4. "PrL"
5. Percentage in number indicating internal battery level

If the battery tested is low, then you will see the following sequence:

1. Chem: "AL", "rL", or "rR"  
(the one selected by you)
2. "UoL"
3. Voltage in number
4. Flashing "Lo"

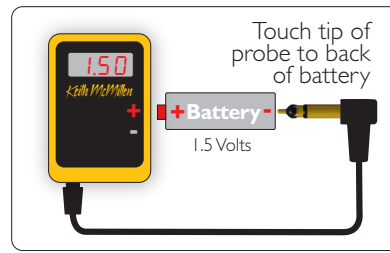


Figure 4

## Unexpected Results

There are a few circumstances under which you will get unexpected results when using the Batt-O-Meter, or the test will fail.

- If the wrong type of chemistry is selected when testing a battery or device, there will be a slight difference in voltage but the discrepancy in hours left of use of a device or percentage indicating internal battery level will be large.
- If you have plugged the probe into a device and hold a standalone battery up to the battery connector, the Batt-O-Meter will display shifting decimals.
- If the probe is used on the incorrect plug of the device you are testing, or it is dirty, the Batt-O-Meter will self-test and display a plug fail: "PLB" You can simulate this error by holding the probe in your hand and running the self-test.
- If you are testing a 9 volt battery that is low, it may appear as a good 3 volt battery.
- The highest voltage the Batt-O-Meter can test is 10.23 volts. If you have a device/ instrument that runs on two 9 volt batteries, the Batt-O-Meter will display the highest voltage it can recognize (10.23 volts), although the voltage may be higher.

## Questions or Feedback? Contact Us!

If at any time you have any questions, please contact us:

Toll Free 877-812-0408

Email: [info@keithmcmillen.com](mailto:info@keithmcmillen.com)

web: [www.Batt-O-Meter.com](http://www.Batt-O-Meter.com)