

## User's Guide



## Model 401050 AC/DC Voltage Detector



### Safety Precautions

---

1. Improper use of this meter can cause damage, shock, injury or death. Read this guide before use.
2. The tester should not be used to test voltages above the stated ranges.
3. Secure the battery compartment screw before use.
4. Inspect the condition of the tester for any damage before use.
5. Remove the batteries from the meter if the meter is to be stored for long periods.
6. For Indoor use only

### International Safety Symbols



Refer to the user's guide for information.

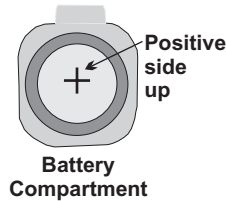


Hazardous voltages may be present

### Battery Replacement

---

1. Using a screwdriver, remove the battery compartment screw cap (end of handle) to access the batteries.
2. Remove the spring from inside the battery compartment and set it aside.
3. Remove the batteries, noting their polarity and orientation.
4. Insert the two new LR41 batteries in the same orientation and polarity. The positive + side of both batteries must be facing up toward the opening of the battery compartment. If the batteries are not replaced in this position, the instrument will not operate.
5. Replace the battery compartment spring.
6. Replace and secure the compartment screw cap.



### Specifications

---

AC Voltage (contact) test.....	70 to 250VAC
AC Voltage (non-contact) test.....	70 to 600VAC (single sheathed insulation, single conductor)
DC Voltage / Polarity test.....	1.5V to 36V
Continuity test.....	0 to 5M ohms
Batteries.....	Two (2) LR41

## ***Warranty***

---

EXTECH INSTRUMENTS CORPORATION warrants this instrument to be free of defects in parts and workmanship for one year from date of shipment (a six month limited warranty applies on sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department at (781) 890-7440 ext. 210 for authorization or visit our website at [www.extech.com](http://www.extech.com) (click on 'Contact Extech' and go to 'Service Department' to request an RA number). A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

**Copyright © 2004 Extech Instruments Corporation.**

**All rights reserved including the right of reproduction in whole or in part in any form.**

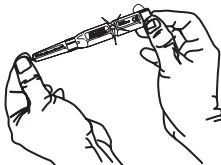
Website: [www.extech.com](http://www.extech.com); Email: [support@extech.com](mailto:support@extech.com)

## Operation

**WARNING: Risk of Electrocutation. Always verify the detector on a known live circuit first.**

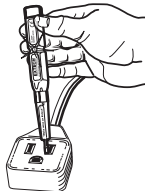
### Self Test

Touch the tip of the driver blade with one hand and the battery compartment cover with the other hand at the same time. The Red indicator should blink if the detector is operational. If the indicator does not light, check the batteries.



### AC Voltage Test – Contact Method (70 – 250VAC)

Touch the driver blade tip to the live/hot AC conductor. **Note** that some receptacle contacts are deeply recessed; be sure that good contact is being made with the conductor before completing the test. The Red indicator will blink in the presence of voltage.



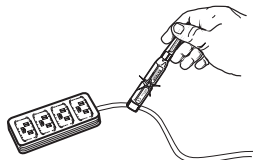
### AC Voltage Test – Non-contact Method (70 to 600V)

To locate the Hot/Live side of a wire, trace the tester along the wire. The Red indicator will flash in the presence of voltage. To increase the sensitivity, read the next section

#### Sensitivity Adjustment (Non-contact AC Voltage testing only)

**LOW SENSITIVITY:** Touch the battery compartment cover while testing

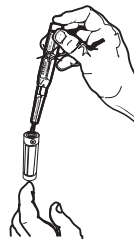
**HIGH SENSITIVITY:** Hold the driver tip and use the battery compartment cover end for testing



### DC Voltage / Polarity Test (1.5V to 36VDC)

**CAUTION:** Be sure to disconnect any AC Mains or High Voltage before proceeding.

Press the driver tip to the positive side of the device under test. Touch the battery compartment screw with one hand and, with the other hand, touch the negative side of the device under test. The Red indicator will blink to indicate the presence of DC voltage and that the polarity is positive. If the polarity of the device under test is reversed, the Red indicator will not light.



### Continuity Test

**CAUTION:** Be sure to disconnect any AC Mains or High Voltage before proceeding.

Press the driver blade to one side of the object under test. Place one hand on the battery compartment screw and the other hand on the other side of the object under test. The Red indicator will blink if there is continuity from one side of the object under test to the other.

