

INSTRUCTION MANUAL

DIGITAL CLAMP METER

MODELS 269, 269A

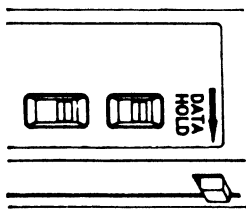


Fig. 4

5 Battery Replacement

- (1) The batteries are installed inside the case.
- (2) Remove the screw on the back of the battery cover for battery replacement (Fig. 5).

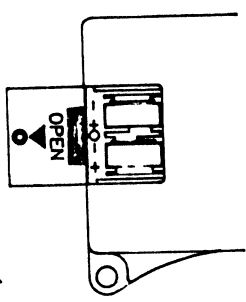


Fig. 5

- #### 1 Features
- Auto-Off, turns unit off after 40 min.
 - Electronic overload protection (Model 269A only)
 - Safety-style test leads.
 - Recessed, safety-designed, input jacks.
 - Current transformer jaws open simultaneously.
 - Small-size, light weight.
 - Data Hold Switch.
 - Instant continuity buzzer.
 - Autoranging.
- #### 2 Specifications
- Display: 3-1/2 digit LCD, maximum reading 1999
- Range Selection: Autoranging
- Overrange Indication: Most significant digit blinks
- Sampling Rate: Approx. 2 times per second
- Operating Environment: 0°C to +40°C at 80% max. relative humidity.
- Storage Environment: -20°C to +60°C at 75% max. relative humidity.
- Conductor Size: Approx. .90" (23 mm) max.
- Power Source: Two button-type battery (IEC LR-44, NEDA 1166A)
- Battery Life: 100 hours typical with LR-44. Use SR-44 for longer life.
- Battery Indicator: "BAT" symbol shows to indicate low battery.
- Dielectric Strength: 2000V AC for one minute between electrical circuit and housing case or metal section of transformer jaw
- Frequency Response: 50/60Hz
- Response Time: Approx. 1 second
- Dimensions: 6.87" (H) x 1.61" (W) x 1.1" (D)
175mm (H) x 41mm (W) x 28mm (D)
- Weight: Approx. 7 oz. (200 g) battery included.



Ranges:

AC Current (average responding, calibrated in RMS of a sinewave).		
Range	Accuracy	Overload Protection
200A / 300A	50 / 60Hz ±(1.5% rdg + 4dg)	500 Aac max. for 1 minute

AC Voltage (average responding, calibrated in RMS of a sinewave).		
Range	Accuracy	Overload Protection
200 V / 500 V	50 / 60Hz ±(1.2% rdg + 4dg)	750 Vac max. for 1 minute

Resistance (Model 269A only)

Range	Accuracy	Overload Protection
2000 Ohm	±(1.2% rdg + 4dg)	500 Vac continuous

Continuity Buzzer sounds at <600 ohms
Note: Specification accuracies specified at 13°C to 33°C, 80% maximum relative humidity.

3 Safety Precautions

1. Read these operating instructions thoroughly and completely before operating your meter. Pay particular attention to WARNINGS which will inform you of potentially dangerous procedures. The instructions in these warnings must be followed.
2. Always inspect your meter, test leads and accessories for any sign of damage or abnormality before every use. If any abnormal conditions exist (eg. broken test leads, cracked cases, display not reading, etc.), do not attempt to take any measurements. Refer to Return for Repair section.
3. Never ground yourself when taking electrical measurements. Do not touch exposed metal pipes, outlets, fixtures, etc., which might be at ground potential. Keep you body isolated from ground by using dry clothing, rubber shoes, rubber mats, or any approved insulating material.
4. To avoid electric shock, use CAUTION when working with voltages above 40 Vdc or 20 Vac. Such voltages pose a shock hazard.
5. Never exceed the maximum allowable input value of any function when taking a measurement. Refer to the specifications on page 2 for maximum inputs.
6. Never touch exposed wiring, connections or any live circuit when attempting to take measurements
7. Do not attempt to operate this instrument in an explosive atmosphere (i.e. in the presence of flammable gases or fumes, vapor or dust).
8. When testing for the presence of voltage, make sure the voltage function is operating properly by reading a known voltage in that function before assuming that a zero reading indicates a no-voltage condition. Always test your meter before and after taking measurements on a known live circuit.
9. Calibration and repair of any instrument should only be performed by qualified and trained service technicians.
10. Do not attempt calibration or service unless trained and another person, capable of rendering first aid and resuscitation is present.

4 Operation

Before making any measurements always inspect the instrument and all accessories being used for any signs of damage or defects. Do not attempt to take any measurements if abnormal conditions exist.

CAUTION!
Before attempting to use this meter, be certain to read this operating instruction thoroughly and completely. Failure to follow these instructions may result in electrical shock, instrument damage and/or damage to equipment under test.

4.1 AC Current Measurements

WARNING!
This instrument is designed to take current readings on circuits with a maximum voltage above ground not exceeding 500 Vac. Using it on circuits above 500 Vac poses a shock hazard to the user.

- (1) Turn the instrument on by sliding the OFF/ON switch to the ON position.
- (2) Set the range switch to the Amp "A" position.
- (3) Press the trigger to open the transformer jaws and clamp onto one conductor only (Fig. 1). Read the current directly on the display. It is recommended that the conductor be placed at the center of the closed jaws for maximum accuracy.

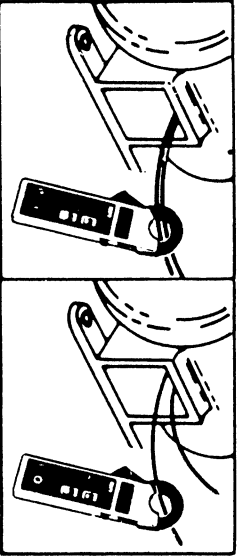


Fig. 1

4.2 AC Voltage Measurements

WARNING!
This instrument is designed to take voltage readings up to a maximum of 500 Vac. The "COM" terminal voltage should not exceed 500 V measured to ground potential. Do not exceed these maximums.

- (1) Insert the red test lead into the "VOLT" terminal of the instrument and the black test lead into the "COM" terminal.
- (2) Set the range switch to the Voltage "V" position.
- (3) Connect the prod tips to the circuit under test (Fig. 2) and read the voltage directly on the display.

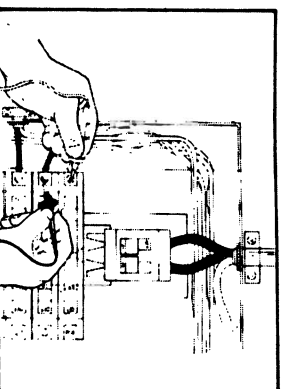


Fig. 2

4.3 Resistance/Continuity Measurements

WARNING!
Attempting resistance or continuity measurements on live circuits can cause electrical shock, damage to the instrument and damage to the equipment under test. Resistance measurements must be made on de-energized (DEAD) circuits only for maximum personal safety. The electronic overload protection installed in this instrument will reduce the possibility of damage to the instrument but not necessarily avoid all damage or shock hazard.

- (1) Test the circuit to make sure it is de-energized. Refer to section 4.2 on how to test for voltage.
- (2) Set the range switch to the ohm range position. Insert the red test lead into the "OHM" terminal and the black test lead into the "COM" terminal.
- (3) With the test leads open the most significant digit will blink **1.000** with the test leads shorted, the buzzer will sound.
- (4) Connect the prod tips to the circuit under test and read the resistance directly on the display (Fig. 3).

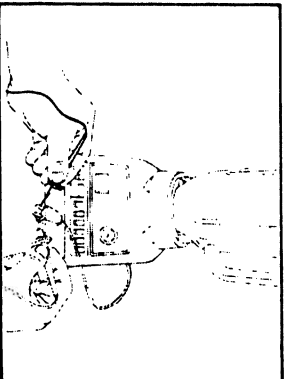


Fig. 3

4.4 How to Use Data Hold

- (1) Simply press the Data Hold Switch. This allows easy readings in dimly lit or crowded cable areas (Fig. 4). Press again to resume readings.