AM-420
Residential Digital Multimeter

Designed for in home repair and electrical testing applications

The AM-420 Digital Multimeter accurately measures voltage in receptacles, switches, extension cords and light fixtures. Use the continuity function to easily troubleshoot light bulbs and fuses.

This compact tools is designed for in-home repair and electrical testing applications, including measuring presence of voltage in electrical sockets, extension cords, batteries and other electrical circuits up to 250 V. It is a must have tool for residential projects including installation, troubleshooting or repair of light fixtures, fans or appliances.

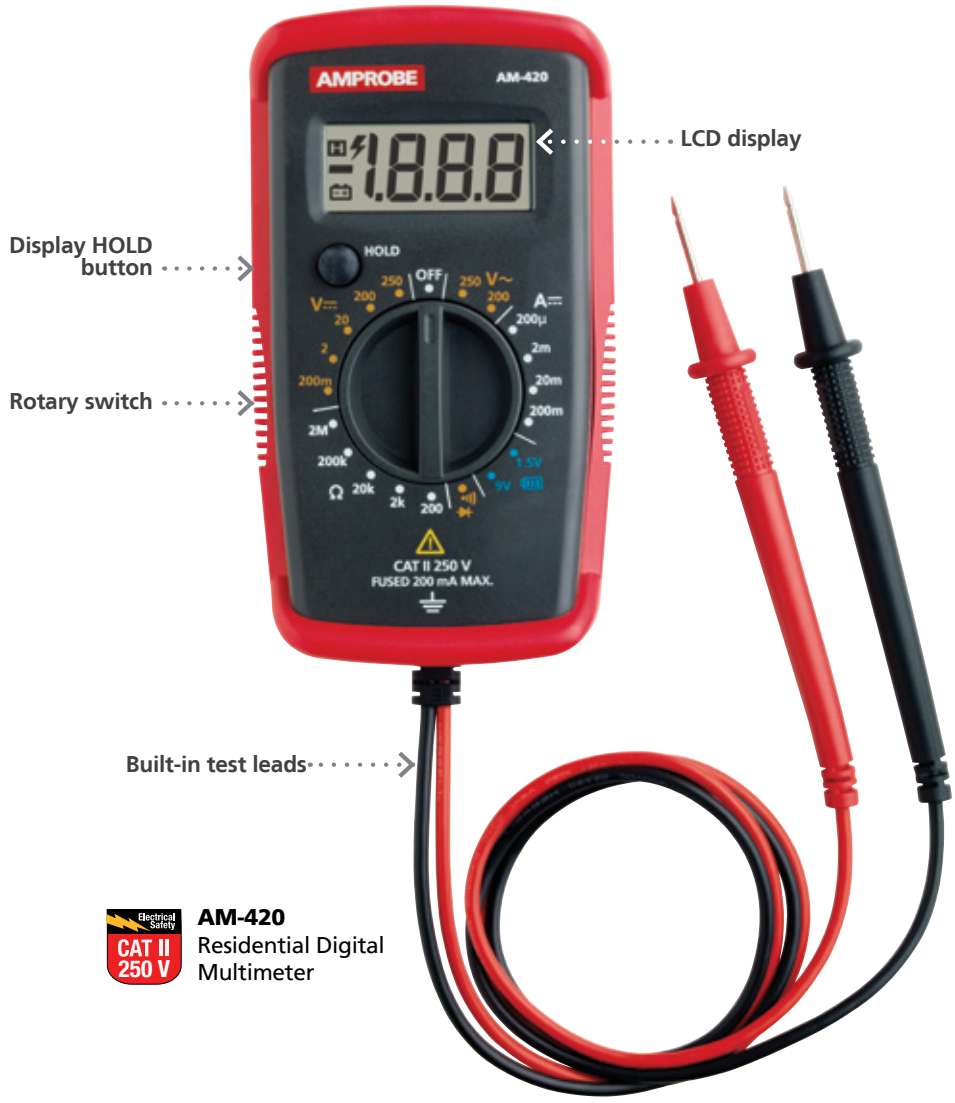
DC ranges of voltage and current are included to help with automotive diagnostics of electrical systems. The battery test feature checks the amount of charge remaining in standard 1.5 V and 9 V batteries.

AM-420 Features

- **Test leads installed**
- **Measures AC/DC voltage**
- **Measures DC current**
- **Measures resistance**
- **Audible continuity alert**
- **Rated to CAT II 250 V**
- **Diode testing**

Safety Certification

All Amprobe tools, including the Amprobe AM-420, are rigorously tested for safety, accuracy, reliability, and ruggedness in our state-of-the-art test lab. In addition, Amprobe products that measure electricity are listed by a 3rd party safety lab, either UL or CSA. This system assures that Amprobe products meet or exceed safety regulations and will perform in a tough, professional environment for many years to come.

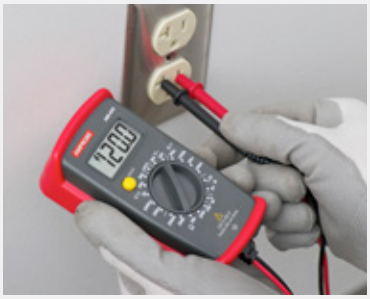


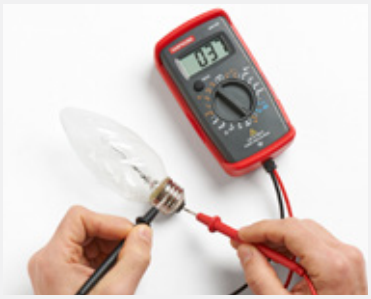
Electrical Safety CAT II 250 V

AM-420
Residential Digital Multimeter

AM-420 Applications

Accurately measure voltage up to 250 V in receptacles, switches, extension cords and light fixtures





Troubleshoot light bulbs and fuses with the continuity function

Check 1.5 V and 9 V batteries

How to measure voltage: Select 250 V~ on the dial. Insert the black and red test leads into receptacle or end of extension cord. It doesn't matter which lead goes into hot or neutral. The LCD screen will show voltage level. Voltage level should be in the range of 110-120 V for most house receptacles. Some appliances, such as dryers and stoves, may operate with higher voltage and will have special receptacles. The meter will show 220-240 V in this case.

How to check if your fuse is burned out: Select the continuity function on the dial (at bottom of dial – looks like a wifi symbol). Touch the fuse contacts with the red and black test leads. If fuse is working, the meter will produce a sound and the screen will show value close to zero (resistance of the fuse). If fuse is burned out, the meter will show "1" on the screen and no sound will be emitted.

How to check if your light bulb is burned out: Select the continuity function on the dial (at bottom of dial – looks like a WiFi symbol). Take the light bulb out of the socket. Touch the bottom contact and side contact with the red and black test leads. If the bulb is still good, the meter will produce a sound and the screen will show value close to zero. If bulb is burned out, the meter will show "1" on the screen and no sound will be emitted.

Specifications

Feature	AM-420
AC Voltage	200.0 / 300 V
DC Voltage	200 mV 2.000 / 20.00 / 200.0 / 250 V
DC Current	200.0 µA 2.000 / 20.00 / 200.0 mA
Resistance	200.0 Ω 2.000 / 20.00 / 200.0 kΩ 2.000 MΩ
Continuity	Beeps at ≤10 Ω, off at >70 Ω
Diode Test	Open-circuit voltage is around 1.5V. Normal voltage is around 0.5V to 0.8V for silicon PN junction.
Battery Test	1.5 V, 9 V
Data Hold	•

Maximum Display	1999, updates 2 to 3/sec
Range	Manual-ranging
Operating Temperature	32°F to 104°F (0°C to +40°C)
Relative Humidity	32°F to 86°F (0°C to +30°C) ≤75%; 86°F to 104°F (+30°C to +40°C) ≤50%
Operating Altitude	≤ 6561 ft (2000 m)
Storage Temperature	14°F to 122°F (-10°C to +50°C)
Electromagnetic Compatibility	In an RF filed of 1V/m = Specified accuracy ± 5%. RF field > 1V/m is not specified
Over-range Indication	"1 ", "-1" or maximum display reading
Battery	One 9V alkaline battery (6LF22, 6LR61, MN1604) or equivalent
Battery Life	Alkaline: 100 hours typical
Low Battery Indication	
Overvoltage Category	CAT II 250 V
Safety Compliance	IEC 61010-1, UL 61010-1 2nd Ed. and CAN/CSA C22.2 No. 61010-1-04 Update No.1:2008
EMC Compliance	Conforms to IEC 61326-1
Certification	
Dimensions (L x W x H)	4.5 x 2.6 x 1.6 in (115 x 65 x 40 mm)
Weight	Approximately 0.61 lb (275 g) with battery installed