TRIPLETT SNIFF-IT™ JR Instruction Manual PN: 9604

Features

- Detects AC Voltage without making contact
- Sensitivity, from 50 to 600 Volts AC
- Light flashes & beeper chirps when AC voltage is present
- Economical, Non-Contact probe is safe and simple to use
- Pocket-Sized with Pocket Clip Uses 2 AAA Batteries
- Built-in Flashlight
- Ruggedized impact resistant case
- 1 year warranty
- **Uses for the Triplett Sniff-It:**

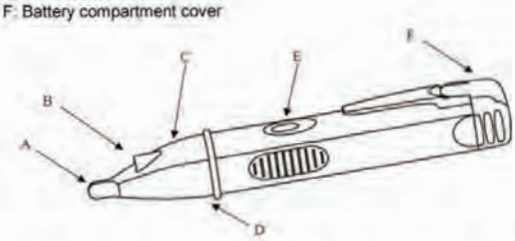
Tests for AC voltage on:

- Outlets
- Light Bulb Sockets
- Extension Cords
- Appliances
- Siding Power Tools
- Circuit Breakers
- AC Motors
- Telephone and Cablevision
- Light Switches
- House Trailer
- Many, many more .

- Find electrically "live" wires or objects inside walls
- Determine if metal surfaces are "live" or "ground"
- Detect presence of high voltage electric fields
- Detect "ringing" telephone lines
- Test fuses (axial type)

Controls and Indicators

A: Sensing tip
B: Flashlight
C: Detection light
D: Beeper
E: Mode button
F: Battery compartment cover



⚠ CAUTION: The Triplett Sniff-It does NOT detect DC Voltage

Safety Precautions and Warnings

1) Always test the Sniff-It using a known AC voltage source, before using it to determine if a circuit or object is "live". Failure to observe this precaution may result in user injury.
2) The Sniff-It may not detect the presence of AC voltage in all situations. In particular, a twisted 3 phase cable tends to cancel out its electrostatic field, which can make the cable appear to be "dead". Use caution and good work practices at all times, even when the Sniff-It indicates that AC voltage is not present. Failure to observe this precaution may result in user injury.
3) The Sniff-It may detect the presence of AC voltage when none appears to be present. If testing for potentially dangerous AC voltages (like 120VAC, 240VAC, 480VAC,etc), and the Sniff-It seems to be indicating that a circuit or object that should be grounded is "live", use extreme caution. Its possible that the user is "live", and coming in contact with a ground may cause user injury. This situation most often occurs in house trailers or construction site trailers.
4) Do not place your finger, or any other object that you are holding, near the tip when trying to use the Sniff-It. Doing so can interfere with the sensing ability of the Sniff-It, making a "live" circuit seem "dead". Failure to observe this precaution may result in user injury.
5) The Sniff-It may not detect voltage if it is wet, or if a surface between the Sniff-It and the voltage source is wet. Water is conductive and acts like a "shield", preventing the detection of voltage. For example, the Sniff-It will not detect live wires in walls if the wall is wet. The Sniff-It will not detect voltage in a wire that is wet. Keep in mind that the wire may not be wet on its exterior surface, but wet inside. For example, "Romex" wire that has been allowed to get wet will soak the water into the paper separator. The wet paper acts like a shield preventing the Sniff-It from detecting any voltage on the wire.... even though the exterior of the Romex may be dry. Failure to observe this precaution may result in user injury.
6) The Sniff-It does not detect DC voltages. There may be dangerous high voltage DC present that the Sniff-It will not detect. Use caution and good work practices at all times, even when the Sniff-It indicates that AC voltage is not present.
   Other dangerous voltages or currents, undetectable by the Sniff-It, may be present. Failure to observe this precaution may result in user injury.
7) Do not assume that a wire or conductor that does not have a voltage on it is harmless. The wire may be a Neutral or Ground wire, and significant current could be flowing. Opening the circuit could cause dangerous voltages to appear, and may result in user injury.
8) The Power Up Beep feature is provided to indicate that the Sniff-It is turned on. It DOES NOT indicate that the Sniff-It is fully operational and waiting to detect a voltage. The user must verify that the Sniff-It is operational by testing it on a known AC voltage source.

Installing Batteries

Battery cover removes from the back of the Sniff-It Jr. Slide thumbnail under release at top of pocket clip, then pull cover with other hand to remove. Install 2

General Operation

The Sniff-It Jr has 2 mode settings. In the 1st mode, the white LED flashes periodically to indicate the unit is turned on and waiting to detect AC voltage. In the 2nd mode, the white LED remains on constantly and can be used as a flashlight, while the unit waits to detect AC voltage. To enter the 1st mode, press and release the power button. To enter the 2nd mode, press and release the button again. To turn the unit off, press and release the button a final time.

When the Sniff-It Jr detects a weak AC voltage, the tip will flash green and the beeper will sound. When a stronger voltage is detected, the tip will flash red and the beeper will sound.

The ability of the Sniff-It Jr to detect AC voltage is affected by both distance and the magnitude of the voltage. That is, to detect a low voltage, it is generally necessary for the tip of the Sniff-It Jr to be close to the voltage. A high voltage can be detected at a distance. A low voltage is indicated by the tip of the Sniff-It Jr flashing green, or if the tip flashes green while still some distance away from the AC voltage source, the source is a higher voltage and the Sniff-It is detecting its radiated field. As the tip approaches the source, it may turn from a green color to a red color. This indicates a higher voltage is present, usually 120VAC or more.

Note: Due to the high sensitivity of the Sniff-It's circuitry, it may appear to detect voltage when the tip is rubbed or bumped, or when the tip is moved around against a surface or in the air. Carpeted floors are notorious for generating static charges. When walking on carpeted floors, the Sniff-It may beep erratically, or may fail to beep in the presence of voltage, until the static charge dissipates (usually takes only a few seconds).

Replace the batteries when the LED stops flashing or the flashlight becomes dim!

⚠ WARNING!!! ⚠

If using the Sniff-It without testing on a known voltage source, the Sniff-It may fail to beep or flash when a "live" circuit or object is tested. Take precautions to prevent user injury in the event that the tested circuit or object is unexpectedly "live".

⚠ WARNING!!! ⚠

The Sniff-It, like all similar products, may not detect AC voltage under all circumstances. This is rare, but possible. To reduce the possibility of this occurring, move the tip of the Sniff-It back and forth, or up and down, between any suspect circuits or objects when no voltage is detected. This may move the tip outside of the "null field" and may allow detection of the voltage.

⚠ WARNING!!! ⚠

The Sniff-It, like all similar products, may detect a GROUND instead of AC voltage. This is rare, but possible. If the Sniff-It appears to detecting a ground instead of a "live" circuit or object, use extreme caution. The user may be "live", and touching a grounded circuit or object may result in user injury.

Checking light bulb sockets for unexpected voltage

Light bulb sockets are sometimes wired incorrectly. While the light may turn on and off when the wall switch is operated, there may be dangerous voltage at the socket even when the switch is off. This can happen when the light bulb circuit is incorrectly wired, or when the circuit is an old "3 way" type (new 3 way wiring should not allow a "live" bulb when the light is off). This can pose a danger to someone changing a light bulb, who may be accidentally shocked and injured by this unexpected voltage.

Test the Sniff-It on a 120VAC source (like an outlet) prior to performing this test.

Turn off the light switch. Remove the light bulb from its socket. Turn on the Sniff-It and place its tip into the socket. If it begins beeping and flashing, AC voltage is present. Use caution. A shock hazard is present.

Checking Appliances for Ground

The metal housings of appliances like washing machines and dryers are supposed to be grounded. When they are properly grounded, any dangerous voltage that might appear on the metal housing is diverted to ground. An ungrounded appliance may work correctly, but a shock hazard may be present. The Sniff-It may be used to detect any dangerous AC voltage that might appear on the housing of the appliance. Tap water conducts electricity. It may be found that voltage is only present when the appliance is wet.

Test the Sniff-It on a 120VAC source (like an outlet) prior to performing this test. Turn on the Sniff-It and hold its tip against the metal housing of the appliance. If it begins to beep and flash, it may be that your body is charged with AC voltage. Using your other hand, touch a grounded object (a metal water pipe, the concrete floor, the screw on an outlet cover, etc) while holding the Sniff-It up to the appliance housing (do not touch the appliance until it is certain that no dangerous voltage exists). If the Sniff-It still begins to beep and flash, dangerous voltage may be present. Check the appliance's ground connections, or, if ungrounded, add a ground wire to the appliance to eliminate a possible shock hazard.

Note: Fluorescent lights emit a lot of electrostatic fields that the Sniff-It will detect. This is because the bulb is often operating at hundreds or thousands of volts (generated by the light's ballast transformer). Do not confuse the pickup from a fluorescent light with the voltage you are testing for. It may help to turn the fluorescent light off while performing tests.

Checking Telephone and Cablevison Wires for Unexpected Voltage

Telephone and cablevision wires normally do not have dangerous voltages on them. However, under certain circumstances, hazardous voltages may appear on the wires, even though the telephone or cablevision works correctly. The voltages

When telephone and cablevision wires are connected to equipment, the stray voltages are generally not a problem. But when handling the connectors while connecting or disconnecting the wires, an unexpected voltage may cause an electrical shock.

Test the Sniff-It on a known AC voltage source (like a fluorescent light or an outlet), to make sure it detects the voltage. Now place the tip of the Sniff-It against the telephone or cablevision wire or connector. If it begins beeping and flashing, AC voltage is present. Use caution. A shock hazard may be present.

Note: Many stray voltages "collapse" when they are connected to a load, rendering them harmless. The Sniff-It does not load the voltage, so it cannot determine if an actual shock hazard is present. However, if the Sniff-It detects AC voltage, use caution until the degree of the hazard is determined.

Mobile Home Safety

Mobile homes are sometimes built with metal frames and aluminum siding. This sometimes leads to an electrical shock hazard. If the frame is not properly grounded, a surprisingly common occurrence, it can become "live" with hazardous voltage. The occupants of the mobile home may be shocked when entering or leaving the home, but are relatively safe from shock hazard once inside.

An accidental short in the home's electrical system can make the frame "live". One known cause is a defective or improperly installed electric baseboard heater. If the heater is shorted to the frame, the heater may work OK, but the frame of the home will become "live" whenever the thermostat calls for heat. Hence the shock hazard comes and goes, and it only seen in colder months.

Test the Sniff-It on a known AC voltage source (like a fluorescent light or an outlet), to make sure it detects the voltage.

To test the mobile home for hazardous voltage, while outside the home standing on the earth, bring the tip close to the siding. If the Sniff-It begins beeping and flashing, the siding may be "live". Do not touch the siding! It could be that the Sniff-It is detecting a "live" circuit inside of the wall instead of "live" siding. Move the Sniff-It around and try different locations to try to verify if the siding is "live", or a circuit in the wall is "live".

Testing Fuses

Fuses connected in AC circuits can be tested. The fuse must be the "cartridge" or "axial leaded" type. Cartridge fuses are cylindrical with metal caps on the ends, and range in size from small 5 x 20mm fuses used in electronics, to 6" or longer fuses used in electrical distribution systems. Axial leaded fuses are generally small cylindrical fuses with wires attached to the ends. To test, apply AC power to the circuit with the fuse and touch the Sniff-It's probe, alternately, close to the ends of the fuse. If the fuse is good, the Sniff-It should have the same response when positioned over either end of the fuse. If the fuse is bad, the Sniff-It will indicate differently on each end of the fuse.

Notes: Because of the Sniff-It's high sensitivity, it may be able to pick up a signal on both ends of a fuse, even though the fuse is blown. This is particularly a concern when testing small fuses. To reduce the possibility of a false reading, position the probe of the Sniff-It as close as possible to the ends of the fuse when testing. If wires or circuitry are in close proximity to the fuse being tested, the Sniff-It may pick up a signal from them instead of the fuse, resulting in a false reading.

Some circuits may have AC power on both sides of a fuse, even though the fuse blown. For example, a 220VAC circuit without a neutral (such as used on electric baseboard heaters) may have a fuse on both lines to the heater. One of the fuses can be blown, but both ends of both fuses will cause a Sniff-It to flash and beep. Also, 3 phase Delta wired power circuitry will have voltage on both sides of a blown fuse installed in one leg of the Delta. However, the voltage will be different on the ends of the fuse, so depending on the circumstances, it still may be possible to identify the blown fuse

Note: The preceding scenarios assume the power wire is connected to a grounded power distribution panel on one end, with 120VAC applied, and with a load connected to the other end.

Specifications

Range:	50 to 600 volts AC, 60Hz
Indicators:	Audible beeper and flashing LED
Battery:	2 AAA
Body Size:	6" (L) x .65" (W) x .98" (H)
Weight:	Approx. 1.6 oz.

Triplett One Year Limited Warranty

Triplett warrants instruments and test equipment manufactured by it to be free from defective material or workmanship and agrees to repair or replace such products which, under normal use and service, disclose the defect to be the fault of our manufacturing, with no charge within one year of the date of original purchase for parts and labor. If we are unable to repair or replace the product, we will make a refund of the purchase price. Consult the Instruction Manual for instructions regarding the proper use and servicing of instruments and test equipment. Our obligation under this warranty is limited to repairing, replacing, or making refund on any instrument or test equipment which proves to be defective within one year from the date of original purchase.

This warranty does not apply to any of our products which have been repaired or altered by unauthorized persons in any way so as, in our sole judgment, to injure their stability or reliability, or which have been subject to misuse, abuse, misapplication, negligence, accident or which have had the serial numbers altered, defaced, or removed. Accessories, including batteries and fuses, not of our manufacture used with this product are not covered by this warranty.

To register a claim under the provisions of this warranty, contact Triplett's Customer Service Department for a Return Authorization Number (RMA) and return instructions. No returned product will be accepted without an RMA number. Upon our inspection of the product, we will advise you as to the disposition of your claim.

ALL WARRANTIES IMPLIED BY LAW ARE HEREBY LIMITED TO A PERIOD OF ONE YEAR FROM DATE OF PURCHASE, AND THE PROVISIONS OF THE WARRANTYARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES EXPRESSED OR IMPLIED.

The purchaser agrees to assume all liability for any damages and bodily injury which may result from the use or misuse of the product by the purchaser, his employees, or others, and the remedies provided for in this warranty are expressly in lieu of any other liability Triplett may have, including incidental or consequential damages.

Some states (USA ONLY) do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. No representative of Triplett / Jewell Instruments or any other person is authorized to extend the liability of Triplett in connection with the sale of its products beyond the terms hereof.

Triplett reserves the right to discontinue models at any time, or change specifications, price or design, without notice and without incurring any obligation.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

SNIFF-IT™ JR.

PN: 9604

Made in China

TRIPLETT
Test Equipment & Tools

Manchester, NH USA