

Detection Range

The red striped area of the AC Hot Stick indicates the sensing section of the electronics circuitry. The AC Hot Stick has the unique capability to warn the user of the presence of high voltage from a safe distance. At what distance between the source and the sensing section a warning will occur depends on a number of factors.

The detection range depends primarily on:

- The setting of the mode switch on the AC Hot Stick
- The magnitude of the AC voltage: the higher the voltage the earlier the warning.
- The size of the area which carries voltages: a vehicle on AC potential will be noticed earlier than the exposed blades of an AC outlet where conduit and outlet box are metal enclosures and grounded.
- The distance of the source and/or AC Hot Stick from shielding surfaces: free hanging wires and the AC Hot Stick held above the ground will yield a greater distance than if wire and/or AC Hot Stick are on wet soil or covered by wet leaves.

See **specifications** (below) for typical detection ranges

EMERGENCY

This unit is meant for professional use only. It is an aid in detecting unshielded, live wires and dangerous AC potentials. It is not a substitute for voltage measuring devices. Treat all wires as if they are voltage carrying. The unit will not detect DC voltages or AC voltages when conductors are fully enclosed and shielded as in a grounded metal conduit or solid metal enclosures.







Specifications

Sensitivity, externally switchable:

3 settings

Detection Range:

the detection range or sensitivity is defined as the distance between the AC Hot Stick and the wire conductor with the AC Hot Stick positioned for maximum indication. Signal "detection" shall be defined as a beeping rate of at least one indication every 2 seconds. Typical Detection Distance in meters /(feet).

Typical Detection Distance in meters /(feet):

Voltage	Frequency	Setup	Mode Switch Setting		
			High Sensitivity	Low Sensitivity	Focused Setting
120 VAC	60 Hz	Single conductor	4.6m	0.9m	150mm
220 VAC	50 Hz	(6' above ground)	(<i>15′</i>)	(<i>3′</i>)	(<i>0.5′</i>)
120 VAC	60 Hz	Conductor laying on wet soil	0.9m	150mm	25mm
220 VAC	50 Hz		(<i>3′</i>)	(<i>0.5′</i>)	(0.1')
7.2 kV	60 Hz	Overhead distribution line (single insulator)	65m	21m	6m
16 kV	50 Hz		(<i>210′</i>)	(<i>70′</i>)	(<i>20′</i>)
46 kV	60 Hz	Overhead transmission line (several insulators)	>150m (<i>>500′</i>)	>60m (<i>>200'</i>)	>20m (>70')

Signal Indication

- audible (beep) and visual (LED)
- beep rate will increase (or decrease)

Frequency Range

C voltages 20 Hz to 100 Hz

Self-Test:

built-in, 3-second self-test after turn-on.

Insulation:

PVC plastic housing. (Note: Direct contact with high tension wires should be avoided)







Safety:

Designed for intrinsically safe operation

Batteries:

4× AA alkaline batteries, NEDA 15A, Duracell MN1500 or equivalent

Battery Life:

continuous use: 300 hours, typical use: 1 year

Battery Check:

built-in low voltage warning

Battery Change:

requires removal of lanyard

Water Resistance:

splashwater-proof

Temperature Range:

Operating:

-30 to +50°C (-22 to +122°F)

Storage & transport:

-40 to +70°C (-40 to +158°F)

Size:

45 mm (1 3/4") diameter × 521 mm (20 1/2") long

Weight, including batteries:

570 grams (1 lb. 4 oz.)

Shipping weight:

910 grams (2 lbs.)

Ordering information

AC Hot Stick BN 9005/02 includes padded pouch and $4\times$ AA alkaline batteries (installed)



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