

# NCV-1020, NCV-1030, NCV-1040 Non-Contact Voltage Probe Series

**Check voltage, find cable breaks, identify polarity, and magnetic detection**

The Amprobe NCV-1000 Non-Contact Voltage (NCV) tester series provides maximum safety and convenience for detecting AC voltage without interrupting electrical systems. Designed to conveniently fit in your shirt pocket, the NCV-1000 series performs in indoor and outdoor settings. Safety tested to the highest category measurement, CAT IV 1000 V, as well as IP65 water and dust resistant, the NCV-1000 series is fit for the toughest industrial applications.



**NCV-1000 Series**  
Non-Contact Voltage Probe



**Non-contact voltage detection . . . . .**  
Default: 50-1000 V  
High Sensitivity: 12-50 V  
(NCV-1030 and NCV-1040 only)

Audible (buzzer) and visual (LED) . . . . .  
voltage indication

**Magnetic solenoid testing**  
(NCV-1040 only)

**On/Off switch**

**Built-in work light**  
(NCV-1030 and NCV-1040 only)

## Additional Features

- **Low battery indication**  
(NCV-1030 and NCV-1040 only)
- **Auto power off**  
(NCV-1030 and NCV-1040 only)
- **IP65 rated water and dust resistant**

**NCV-1040**  
Non-Contact  
Voltage Probe

### Safety Certification



All Amprobe tools, including the Amprobe NCV-1000 Series 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.



Test wires for AC voltage



Breaker scanning



Test wall sockets for AC voltage



Built-in worklight  
(NCV-1030, NCV-1040)

## Applications:

- **Detect the presence of AC voltage** in cables, circuit breakers, wall sockets, junction boxes, fuses, extension cords
- **Test voltage** through wire insulation
- **Identify cable breaks** in wires, cords and lightning systems connected in series
- **Identify polarity** (line vs. neutral) of receptacles and cables
- **Detect magnetic solenoid** to diagnose electromagnets and relays (NCV-1040 only)



## Specifications

| Features                                             | NCV-1020                                                                                                                                                                                                                                                                                                                                           | NCV-1030                          | NCV-1040                          |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------|
| Voltage detection from 50 to 1000 V AC               | •                                                                                                                                                                                                                                                                                                                                                  | •                                 | •                                 |
| Audible (buzzer) and visual (LED) voltage indication | •                                                                                                                                                                                                                                                                                                                                                  | •                                 | •                                 |
| On/Off switch                                        | •                                                                                                                                                                                                                                                                                                                                                  | •                                 | •                                 |
| IP65 rated water/dust resistant                      | •                                                                                                                                                                                                                                                                                                                                                  | •                                 | •                                 |
| CAT IV 1000 V safety rated                           | •                                                                                                                                                                                                                                                                                                                                                  | •                                 | •                                 |
| Built-in work light                                  | —                                                                                                                                                                                                                                                                                                                                                  | •                                 | •                                 |
| NCV high sensitivity range (12 V to 50 V AC)         | —                                                                                                                                                                                                                                                                                                                                                  | •                                 | •                                 |
| Low battery indication                               | —                                                                                                                                                                                                                                                                                                                                                  | •                                 | •                                 |
| Auto power off                                       | —                                                                                                                                                                                                                                                                                                                                                  | •                                 | •                                 |
| Magnetic solenoid testing                            | —                                                                                                                                                                                                                                                                                                                                                  | —                                 | •                                 |
| Detailed Specifications                              |                                                                                                                                                                                                                                                                                                                                                    |                                   |                                   |
| Operating Voltage Range                              | 50-1000 Vac, 50-400 Hz                                                                                                                                                                                                                                                                                                                             | 12-50 Vac, 50-1000 Vac, 50-400 Hz | 12-50 Vac, 50-1000 Vac, 50-400 Hz |
| Voltage Indication                                   |                                                                                                                                                                                                                                                                                                                                                    | Bright red LED, buzzer            |                                   |
| Magnetic Field Indication                            | —                                                                                                                                                                                                                                                                                                                                                  | —                                 | Yellow LED                        |
| Detection of Magnetic Field                          | —                                                                                                                                                                                                                                                                                                                                                  | —                                 | >2.5 mT                           |
| Detection                                            | Illuminates at approximately 0.39 in (10 mm) distance from a wire carrying 120 Vac                                                                                                                                                                                                                                                                 |                                   |                                   |
| Temperature Range                                    | 32 °F to 104 °F (0 °C to 40 °C), ≤ 80% RH                                                                                                                                                                                                                                                                                                          |                                   |                                   |
| Storage Conditions                                   | 14 °F to 104 °F (-10 °C to 40 °C), ≤ 85% RH                                                                                                                                                                                                                                                                                                        |                                   |                                   |
| Operating Altitude                                   | ≤ 6561 ft (2000 m)                                                                                                                                                                                                                                                                                                                                 |                                   |                                   |
| Power Supply                                         | 2 1.5 V LR03 AAA batteries                                                                                                                                                                                                                                                                                                                         |                                   |                                   |
| Duty Cycle                                           | Continuous                                                                                                                                                                                                                                                                                                                                         |                                   |                                   |
| Current Consumption                                  | Approx. 80 mA                                                                                                                                                                                                                                                                                                                                      |                                   |                                   |
| Dimensions (L x W x H)                               | 6.14 x 0.92 x 1.08 in (156.2 x 23.5 x 27.5 mm)                                                                                                                                                                                                                                                                                                     |                                   |                                   |
| Weight (with batteries installed)                    | Approx. 0.12 lb (58 g)                                                                                                                                                                                                                                                                                                                             | Approx. 0.13 lb (60 g)            | Approx. 0.133 lb (62 g)           |
| Safety Compliance                                    | IEC 61010-1 3rd Ed., UL61010-1 2nd Ed. and CAN/CSA-C22.2 No. 61010-1-04 +Update No. 1:2008 to CAT IV 1000 V, Pollution degree 2, IP65                                                                                                                                                                                                              |                                   |                                   |
| EMC Compliance                                       | IEC 61326-1                                                                                                                                                                                                                                                                                                                                        |                                   |                                   |
| Certifications                                       |     |                                   |                                   |

Included: 2 x 1.5 V Batteries (installed), User Manual