

非接触式相序/电压测电笔  
使用说明书



警告

使用前请仔细阅读使用说明书，并严格遵守安全规则和使用说明书所列的小心、注意、警告等事项。

安全须知



警告

为避免发生触电或人身伤害：

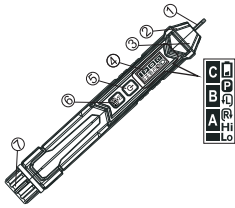
- 如未依照指示使用测电笔，则测电笔提供的保护功能可能会受到影响或失效。
- 如果测电笔显示屏无显示，请勿使用。
- 使用测电笔前，请在已知带电的电源上进行测试，以确保测电笔处于良好的工作状态。
- 在使用测电笔时，即使无显示或无声音报警，仍然可能会有电压

存在。本测电笔指示了在有电源电压产生足够强度静电场时的有效电压。如果场强很弱，则测电笔不能检测到电压的存在。电压的存在可能会受到几种因素的影响，这些因素包括但不限于：屏蔽的电线/电缆、绝缘层的厚度和类型、离电压源的距离、完全绝缘体、插座设计的差异等

- 如果产品已经损坏，或者无法正常工作，请勿使用。在使用前，要特别检查探针的尖端是否开裂或者断裂。如怀疑有问题，请及时送修。
- 请勿施加超过测电笔上标记的额定电压。
- 测试交流 30 伏以上的电压时，要格外小心，因为这样的电压有发生触电的危险。
- 遵守当地和国家的安全规范，依

照当地或国家主管当局的规定使用适当的保护设备。

外表结构



- ① 感应探头
- ② 手电筒
- ③ 信号指示灯
- ④ 显示屏
- ⑤ 电源键
- ⑥ 灵敏度/相序/手电筒键
- ⑦ 电池盖

操作说明

开机/关机

按下电源键，并保持大于 1 秒开机，蜂鸣嘀一声，显示屏点亮，进入测试状态；在开机状态下按下电源开关键关机。

NCV 高低灵敏度切换

开机默认低灵敏度测试状态，显示屏显示“Lo”字符。  
按灵敏度/相序/手电筒键(小于 1 秒)，显示屏显示“Hi”字符，此时是高灵敏度测试状态。

注：高灵敏度范围：12~1000V  
低灵敏度范围：48~1000V

手电筒

按下灵敏度/相序/手电筒键，并保持大于 2 秒，打开或关闭手电筒  
无感应信号及无任何操作 5 分钟后会自动关闭。

非接触相序检测

开机后，按灵敏度/相序/手电筒键(小于 1 秒)切换，直到显示屏显示“P”符号，进入相序检测状态。

- a) 显示屏闪烁显示“A”符号，将感应探头贴紧第一根相线，等待蜂鸣嘀一声
- b) 显示屏闪烁显示“B”符号，将

- 感应探头贴紧第二根相线，等待蜂鸣嘀一声
- c) 显示屏闪烁显示“C”符号，将感应探头贴紧第三根相线，等待蜂鸣嘀一声
- d) 检测结束，显示屏将测量结果显示在显示屏上，

注 1：请将感应探头紧贴导线

注 2：屏蔽的电线/电缆、绝缘层的厚度和类型或完全绝缘体对检测都会有影响

注 3：“L”符号表示左旋

注 4：“R”符号表示右旋

注 5：请在 1 分钟内对三根线完成测试，否则会发生检测超时错误，将亮红色背光提示，发生超时错误时，请按灵敏度/相序/手电筒键重新检测。

注 6：当三根相线靠很近时，尽可能将线分开来检测，效果更好

交流电压探测

将测电笔的感应探头放在靠近交流电压源时信号指示灯会点亮，显示屏的模拟条会随着感应到的电压信号强度变高或变低，蜂鸣的嘀嘀提示音也会随着信号强度变快或变慢。同时，感应到足够强的信号时，背光也会由绿色变成红色，更直观。一般情况下，背光亮红色时，电笔探测的是火线；亮绿色时电笔探测的是零线或地线。

注 1：由于插座的结构不同，当不能通过背光颜色变化来区分零火线时，一般可根据电笔探测到信号强弱来区分。

注 2：当要分辨零火线时，如果零火线靠很近时，尽可能将两根线分开来检测；如实在不可分开，可根据探测到信号强弱来区分，信号强的一根是火线，信号弱的一根零线

自动关机

在约 5 分钟无感应信号或无任何操作后，测电笔会自动关机，以延长电池寿命。

欠压提示

当电池电压不足时，显示屏会显示“E”符；当电池电压降到约 2.3 伏以下时，测电笔会自动关机。当出现欠压提示时，请及时更换电池。

技术参数

工作电压：

NCV 检测电压范围：

12~1000V，50/60Hz

相序检测电压范围：

90~400V，50/60Hz

使用环境：

工作温度：0~40 度

存储温度：-10~50 度

湿度：≤95%

海拔高度：≤2000 米

安全等级：

CAT.IV 600V；CAT.III 1000V

电 源：2×1.5V AAA 电池

更换电池

如下图所示旋开电池盖，然后取出旧电池，按电池正负指示装入新电池。



警告：

为避免电击，电池盖在扣好锁紧前不要使用测电笔进行电压探测。

清洁

用湿布进行清洁。

注意：清洁过后要待测电笔完全干燥后才能使用。

## Non-contact Phase&Voltage detector User manual

### Warning

Please read the instruction manual carefully before use and strictly observe the safety rules and the caution, attention and warnings listed in the instruction manual.

### Safety instruction

#### Warning

To avoid possible electric shock or personal injury:

- If the voltage detector is not used according to the instruction, the protection function provided by the electric pencil may be affected or invalidation.
- Do not use if the display is not displayed.
- Before using the voltage detector, please test the known power supply to ensure that the voltage detector is in good working condition.
- When using voltage detector, even if there is no indication or no

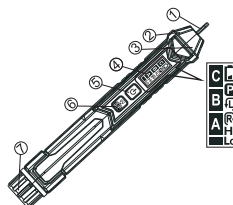
sound alarm, there may still be voltage. Voltage detector indicates the effective voltage when a supply voltage generates enough intensity electrostatic field. If the field strength is very weak, voltage detector can't detect the existence of voltage. The existence of voltage may be affected by several factors, including but not limited to: shielded wires/cables, thickness and type of insulation, distance from voltage sources, differences in complete insulators, socket design, etc.

- Do not use voltage detector if it is damaged or unable to work properly. Before using, check whether the tip of the probe is cracked or broken. If there is a question, please send it to repair in time.
- Do not apply the rated voltage exceeding the marking on the voltage detector.
- When testing voltages above 30 volts, be extra careful, because such a voltage is at risk of electric

shock.

- Comply with local and national safety regulations and use appropriate protective equipment in accordance with local or national authorities.

### The Meter Structure



- ① Probe
- ② Flashlight
- ③ Signal indicator
- ④ Display
- ⑤ Power key
- ⑥ sensitivity/Phase/Flashlight key
- ⑦ Battery cover

### Operation description

#### Power on/off

Press the power key and keep up for more than 1 second. The bee buzzed, the screen lit up and entered the test state. When the power on, power key was pressed and the bee turned to shut down

#### NCV High/low sensitivity

The default low sensitivity test state is when the meter is started, and the display shows "Lo" character

Press the sensitivity / phase / flashlight key (less than 1 second), the display shows the "Hi" character, which is the high sensitivity test status

#### Notes:

High sensitivity: 12~1000V

Low sensitivity: 48~1000V

#### Flashlight

Press the sensitivity / phase / flashlight key and hold for more than 2 seconds. The flashlight is opened; The flashlight is closed by pressing the sensitivity / phase / flashlight key and holding for more than 2 seconds.

No signal and no operation will be automatically power off after 5 minutes.

#### Non-contact phase sequence detection

After power on, press the sensitivity / phase / flashlight key (less than 1 second) to switch until the display

shows the "P" symbol, and enter the phase sequence detection state

- a) the display flashes the "A" symbol, and sticks the sensing probe to the first phase line, waiting for a beep
- b) The display flashes with "B" symbol. Stick the sensing probe to the second phase line and wait for a beep
- c) The display flashes with "C" symbol. Stick the sensing probe to the third phase line and wait for a long beep
- d) At the end of the test, the display will display the measurement results on the display.

**Note1 :** Please connect the probe to the wire.

**Note2:** The thickness and type of shielded wires / cables, insulation, or complete insulation will affect the test

**Note3:** "L" symbol indicates left rotation.

**Note4:** "R" symbol indicates right rotation.

**Note5:** Please complete the test

**on the three wires within 1 minute, otherwise the detection timeout error will occur, and the red backlight will be illuminated. In case of timeout error, please press the sensitivity / phase / flashlight key to redetect.**

**Note6:** When the three wires are close to each other, separate the wires as much as possible for better detection

#### AC voltage detection

The voltage detector probe is placed near the AC voltage. When the voltage is induced, the signal light will be lit. The bargraph of the screen will become higher or lower as the voltage signal intensity is induced, and the beep hint will become faster or slower with the signal intensity.

**Note 1:** because the socket structure is different, when not by the backlight color change to distinguish the Live and neutral, generally according to the detected signal intensity to distinguish.

**Note 2:** Distinguish Live and

neutral, if Live and neutral is near, the two lines can be separated as far as possible; it is true that it is not separable and can be distinguished according to the intensity of the signal. One of the strong signals is live wire and neutral wire with weak signal.

#### Auto power off

After about 5 minutes without any operation and No signal detection, the voltage detector will be automatically shut down to extend the battery life.

#### Low battery indicate

When the battery voltage drops to less than 2.5 volts, the display will display " " symbol. When the battery voltage drops to less than 2.3 volts, the voltage detector will automatically turn off. When low battery tip, please replace the battery.

### Technical specifications

operating voltage:

NCV detection voltage range :

12~1000V, 50/60Hz

Phase detection voltage range :

90~400V, 50/60Hz

application environment:

operating temperature: 0~40℃

Storage temperature: -10~50℃

Humidity: ≤95%

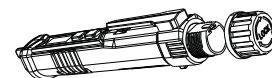
Altitude: ≤2000m

Safety Compliance:

CAT.IV 600VCAT.III 1000V

### Replace the battery

Rotate the battery cover as shown below, then remove the old battery and install the new battery according to the positive and negative instructions of the battery.



#### Warning:

To avoid electric shock, the battery cover should not be tested with voltage probe before locking.

### Clean

Clean with a wet cloth.

Notes : After cleaning, the voltage detector must be dried before it can be used.