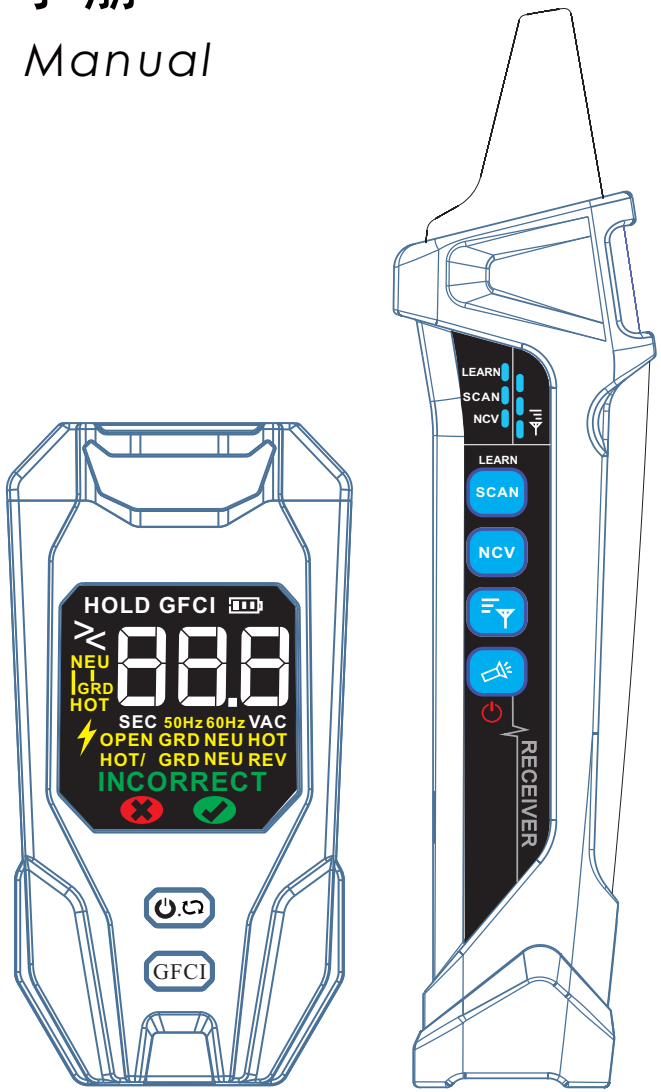
数字断路器查找仪

Digital Circuit Breaker Finder

用户手册

Users Manual



产品特性

一：配备插座延长线连接设计，适配任意位置的插座测试需求

二：先学习后扫描双模式，操作简便

三：视觉+听觉双重指示，可清晰定位对应断路器

四：提供多类插座状态提示，可全方位检测接线工况

五：支持 GFCI 设备功能检测及断开时间测试

六：搭载 NCV 非接触感应功能，检测更安全、结果更可靠

七：配备VA彩色LCD显示屏，数据展示更直观清晰

八：采用低功耗设计，经济节能更环保

产品简介

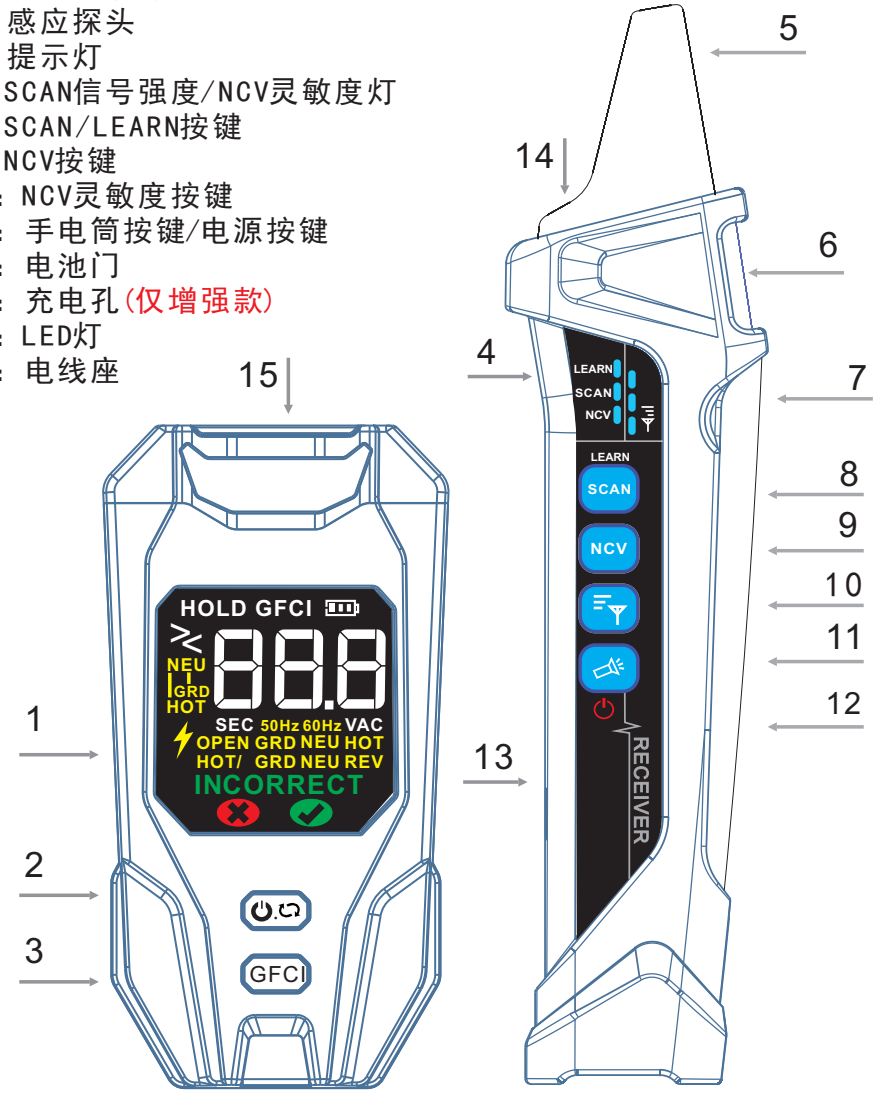
本产品为专业级数字断路器查找设备，核心用于快速定位电气面板中与插座对应的正确断路器，同时支持 GFCI 断路器断开响应时间的精准测量。

产品配备 VA 彩色 LCD 显示屏，可直观展示线路通断状态、接线工况与实时电压数值，读数清晰一目了然。断路器查找操作逻辑简单易用：查找时将发射器接入电路对应的插座或固定装置，再使用接收器扫描电气面板的各个断路器，即可快速完成定位。

产品搭载专用检测芯片与 AI 智能识别模式，大幅提升检测效率与定位精度； 可适配各类复杂作业环境，带来快速、精准的使用体验，是专业电工、家庭电路维修场景的理想工具。

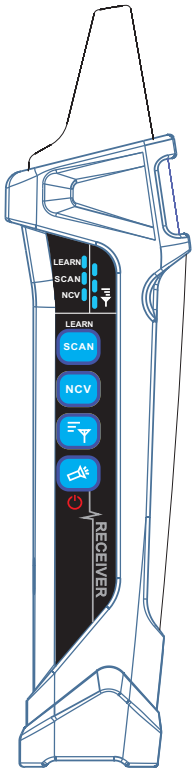
产品介绍

1：LCD
2：电源/切换按键
3：GFCI测试按键
4：功能指示灯
5：感应探头
6：提示灯
7：SCAN信号强度/NCV灵敏度灯
8：SCAN/LEARN按键
9：NCV按键
10：NCV灵敏度按键
11：手电筒按键/电源按键
12：电池门
13：充电孔(仅增强款)
14：LED灯
15：电线座



发射器　　接收器

产品介绍



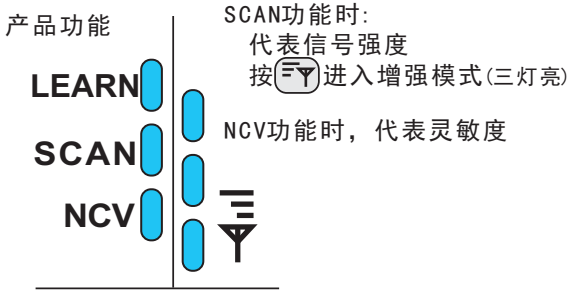
开机/LED开关键
长按2秒开机/关机
短按打开/关闭LED灯

LEARN SCAN 模式切换键
切换学习模式/扫描模式

NCV 功能键
产品选择NCV功能

NCV灵敏度设置/SCAN增强模式设置
NCV不同灵敏度/SCAN增强模式

指示灯



产品操作

一：线路状态检测

操作步骤：将发射器插入待测插座，根据 LCD 显示屏的提示判断当前接线状态（参见图1）；若显示屏提示接线错误，请立即停止操作并联系专业电工处理。

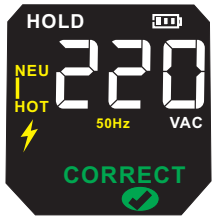
注意事项：本设备仅能检测（图1）所示的常规接线连接状态，无法检测接地阻抗异常、多火线串接、零地线反接等复杂电路缺陷。

检测前请拔除该电路上连接的所有用电设备，避免对检测结果造成干扰。

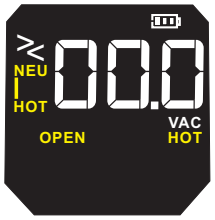
产品介绍

图1：

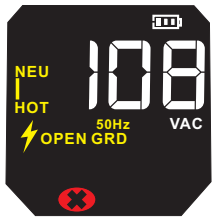
线路正常



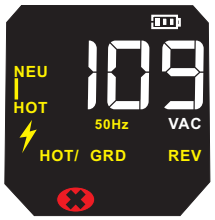
火线断路



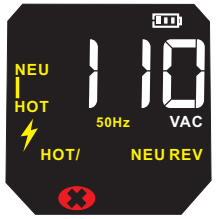
地线断路



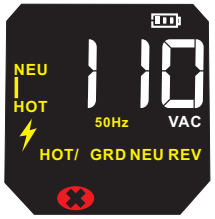
火线/地线接反



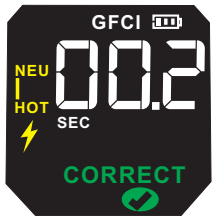
火线/零线交叉



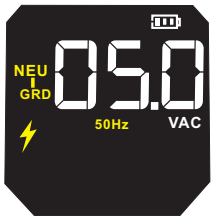
火线连接零线位



GFCI断开时间



零线/地线电压



产品操作

二、GFCI（接地故障断路器）测试

使用本产品进行 GFCI 测试前，请先阅读待测 GFCI 设备的用户手册，确认其操作规范。

⚠ 本产品测试电流参数：美规版本约 8mA，欧规 / 英规版本约 38mA。

测试流程：

若此前线路检测结果显示异常，禁止进行 GFCI 测试。

按下发射器GFCI键(3)进行测试：

⚠ **测试通过：**GFCI 正常跳闸断电，LCD 显示屏将显示 GFCI 响应时间(单位:秒)；GFCI 复位后，设备应显示「接线正确」。

⚠ **测试失败：**测试后电路仍保持通电，说明 GFCI 存在安装异常或功能故障，请联系专业人员检修。

三、断路器定位

使用本产品进行断路器定位前，请先确认待测插座通电且接线状态正常；若测试仪提示接线异常（参见图 1），请立即停止操作并联系专业电工。

操作步骤：

一：设备开机后自动进入学习模式（LEARN 指示灯点亮），使用接收器扫描所有待检测的断路器区域；

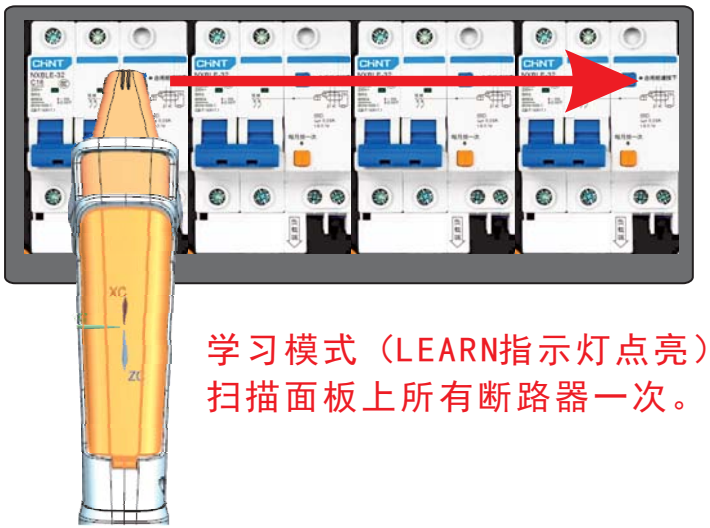
二：按下 SCAN 按键，切换至扫描定位模式（SCAN 指示灯点亮），即可开始查找目标断路器；

设备定位到目标断路器时，会发出连续短促的提示音，同时白色 LED 灯闪烁；

设备右侧的 3 颗 LED 灯用于指示当前检测的信号强度；若相邻两个断路器同时触发提示，可按　键，切换到增强识别模式(3LED灯常亮),提高识别能力，

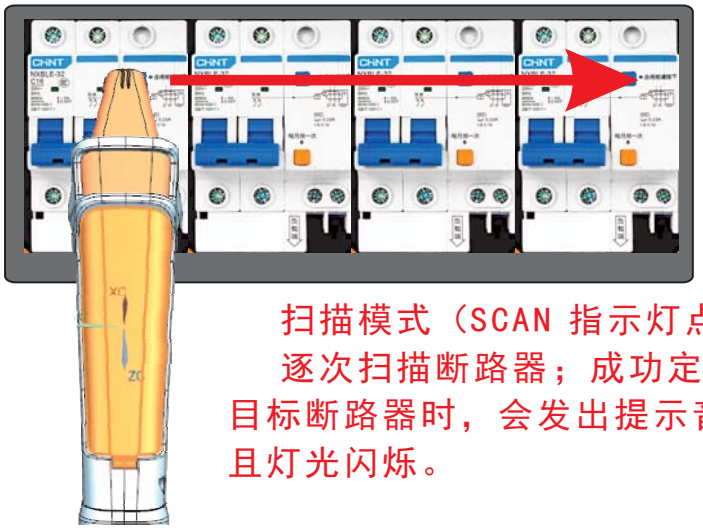
使用本产品前，请将待测线路上所有用电设备拔出插座，否则会影响定位准确性。

①



学习模式（LEARN指示灯点亮）
扫描面板上所有断路器一次。

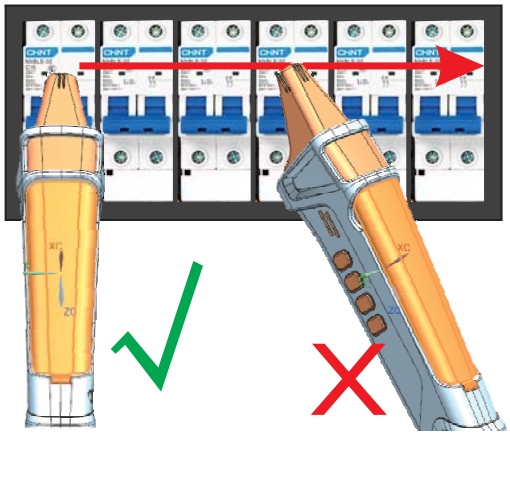
②



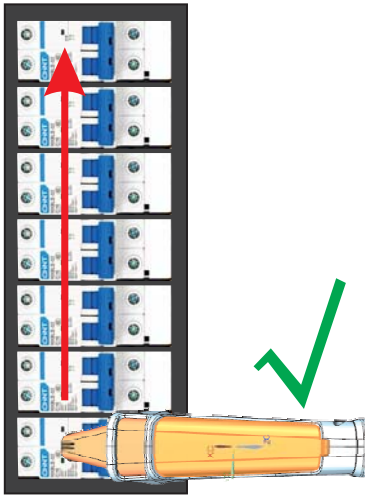
扫描模式（SCAN 指示灯点亮）
逐次扫描断路器；成功定位到目标断路器时，会发出提示音并且灯光闪烁。

正确扫描方式

产品工作时，探测器需与断路器保持平行（与断路器排列方向一致），参考下图：



横向排列断路器



纵向排列断路器

注意要点

一：查找时需保持探测器与断路器平行，倾斜扫描可能会误判相邻断路器；

二：本产品仅用于断路器定位查找，不建议用于线缆定位场景。

三：若相邻两个断路器同时触发提示：

方法A:可关闭其中一个断路器即可区分最终目标；

方法B:按 键，重新扫描(进入增强模式：三个LED全亮)；

产品操作

四、裸线检测

裸线通过鳄鱼夹连接发射器，正确夹接后插入插座。

安全警告：操作裸线前请务必先断开对应电路电源，严禁直接带电夹接裸线，避免触电风险。

五、附加功能

NCV非接触测压：按下 NCV 按键即可进入非接触电压检测模式，按(10)键调节检测灵敏度。

手电筒：按下照明按键即可控制手电筒的开启与关闭。

六、电池充电(仅增强款)

发射器：LCD显示低电压时，请及时充电或更换电池。

接收器：指示灯(7)闪烁时表示电池电压偏低，请及时为电池充电。

警　告

为确保本仪表的安全运行与正常使用寿命，请严格遵循以下安全说明：

*未严格遵守本说明可能引发触电风险,导致人身伤害甚至死亡。

* 若测试仪外壳、线材、接口出现任何破损，严禁使用。

* 本测试仪仅适用于室内、电压≤250V 的交流电气系统，严禁接入更高电压的电源。

* 待测电路上连接的其他用电设备可能会对检测结果造成干扰，请在测试前拔除该电路上的所有外接用电设备。

* 本测试仪仅可检测常规接线故障，所有接线异常问题请务必联系持证专业电工处理。

* 使用鳄鱼夹等配件连接裸线时，在夹接、检测、移除发射器的全程中，必须确保对应电路处于断电状态。

* 严禁直接接触通电裸线；在裸露带电线路、开启的断路器面板周边作业时，请全程做好绝缘防护，保持安全距离。

产品指标

基本功能	基础款	增强款
断路器量程检测范围	0~3cm	
外部电压识别 （订制电压二选一）	90-120V 50/60Hz 或 200-230V 50/60Hz	
插座标准	美规/欧规/英规/国标可选	
GFCI测试	有 / 显示断开时间	
LCD显示(彩色VA屏)	VA 彩色LCD	
线路电压	火线-零线电压/零线-地线电压	
线路检测	火线开路/地线开路 火线.零线交叉/火线.地线交叉	
线路检测结果	状态提示：正常/错误	
漏电开关查找	LEARN:学习模式/SCAN:扫描模式	
电池电量	0~3格提示	
NCV 测试	AC90V~1000V 50/60Hz	
自动关机	主机：无电压时3分钟/ 接收器：无操作时10分钟	
工作电流	发射器:约80mA/接收器:约150mA	
灵敏度可调	有	
照明灯	有	
尺寸	240*145*65mm	
工作温度	0~50 ℃	
湿度	<85%	
发射器电池	1.5AAAx2	3.7V可充电锂电池
接收器电池	9V	3.7V可充电锂电池
包装	工具包/彩盒/说明书/电池(安装在产品中) USB充电线(仅增强款)	

WARNINGS

To ensure the safe operation and normal service life of this instrument, strictly follow the safety instructions below:

• Failure to strictly comply with these instructions may result in electric shock hazards, causing personal injury or even death.

• Do not use the tester if there is any damage to its housing, wires or ports.

• This tester is only suitable for indoor AC electrical systems with voltage ≤250 V. Do not connect it to power supplies with higher voltages.

• Other electrical loads connected to the circuit under test may interfere with test results. Disconnect all external electrical devices on the circuit before testing.

• This tester can only detect conventional wiring faults. For all abnormal wiring issues, always contact a licensed professional electrician for handling.

• When connecting bare wires with accessories such as alligator clips, ensure the corresponding circuit is de-energized throughout clamping, testing and transmitter removal.

• Never touch energized bare wires directly. When working near exposed live conductors or open circuit-breaker panels, maintain full insulation protection and a safe distance at all times.

Product Features

1.Equipped with a socket extension cord for connection, suitable for socket testing at all locations.

2.Features dual Learn & Scan modes for simple operation.

3.Visual and audible dual indicators for clear identification of the corresponding circuit breaker.

4.Provides comprehensive socket status prompts to fully inspect on-site wiring conditions.

5.Supports functional inspection and trip time testing of GFCI devices.

6.Built-in NCV non-contact voltage detection function ensures safer operation and reliable test results.

7.Adopts a VA color LCD display for clear and intuitive data reading.

8.Low power consumption design achieves energy efficiency and environmental protection.

Product Overview

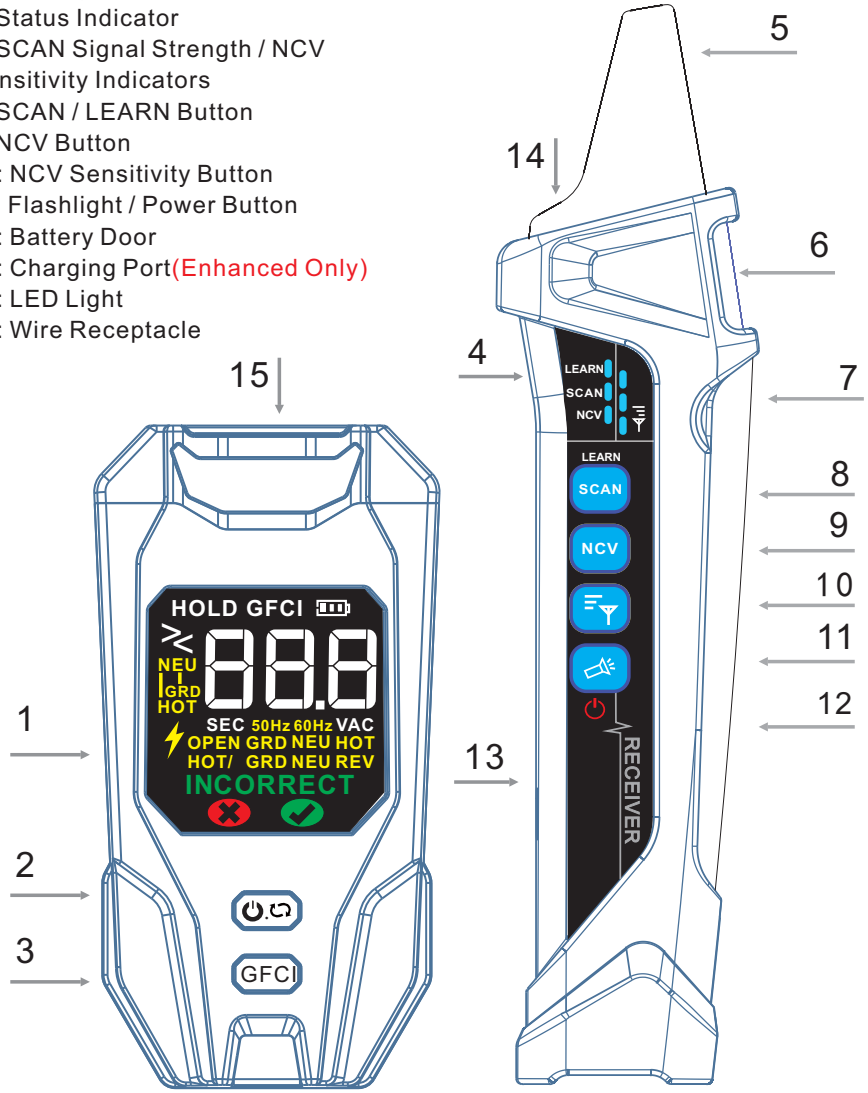
This is a professional digital circuit breaker finder. It is mainly used to quickly locate the circuit breaker corresponding to sockets in electrical panels, and can accurately measure the trip response time of GFCI circuit breakers.

The device is fitted with a VA color LCD display, which clearly shows circuit continuity, wiring conditions and real-time voltage values. Operation is simple: connect the transmitter to the target socket or fixed fixture, then use the receiver to scan each circuit breaker on the electrical panel to complete positioning quickly.

Equipped with a dedicated detection chip and AI intelligent recognition mode, it greatly improves detection efficiency and positioning accuracy. Adaptable to various complex working environments, it is an ideal tool for professional electricians and household circuit maintenance.

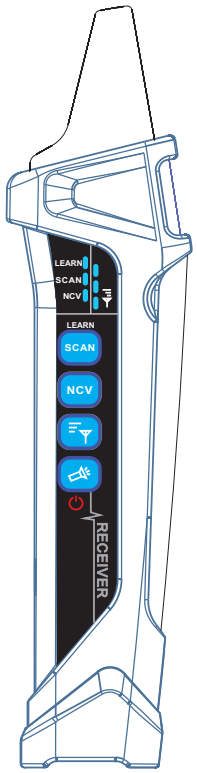
Product Introduction

1: LCD Display
2: Power / Mode Button
3: GFCI Test Button
4: Function Indicator
5: Sensing Tip
6: Status Indicator
7: SCAN Signal Strength / NCV Sensitivity Indicators
8: SCAN / LEARN Button
9: NCV Button
10: NCV Sensitivity Button
11: Flashlight / Power Button
12: Battery Door
13: Charging Port(Enhanced Only)
14: LED Light
15: Wire Receptacle



Transmitter Receiver

Product Introduction



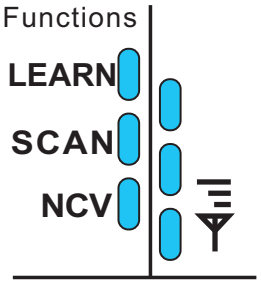
Power / LED On-Off Button
Press and hold for 2 seconds to power on/off the device. Short press to turn the LED light on or off.

LEARN / SCAN Button
Press to toggle between Learn Mode and Scan Mode.

NCV Button
Press to activate the NCV function.

NCV Sensitivity Button
Press to select different NCV sensitivity levels.

Indicator Lights



SCAN mode
Indicates signal strength
Press for Enhanced Mode (3 LEDs lit)

NCV mode
Indicates sensitivity

Product Operation

I. Circuit Status Detection

Operating Procedures

Insert the transmitter into the socket to be tested, and determine the current wiring status according to the prompts on the LCD display (see Figure 1). If the display indicates incorrect wiring, stop operation immediately and consult a qualified electrician.

Notes

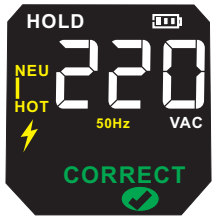
This device can only detect conventional wiring connection states shown in Figure 1. It cannot detect complex circuit defects such as abnormal grounding impedance, series-connected multiple hot wires, reversed neutral and ground wires, etc.

Unplug all electrical devices connected to the circuit before detection to avoid interference with test results.

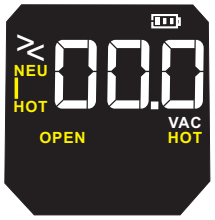
Product Introduction

Figure 1

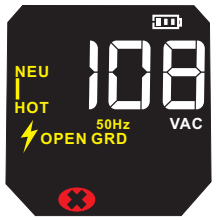
CORRECT WIRING



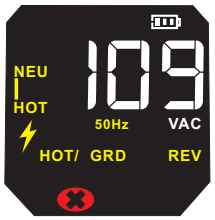
OPEN HOT



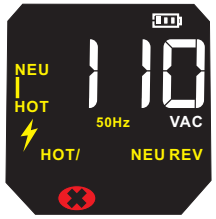
OPEN GROUND



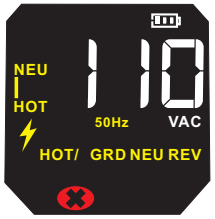
HOT & GND REV



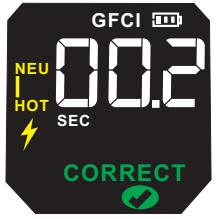
HOT & NEU REV



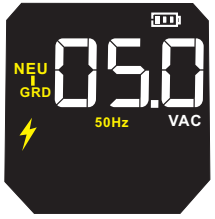
HOT ON NEU WITH HOT OPEN



GFCI TESTING IN PROGRESS



Neutral-Ground Voltage



Product Operation

II. GFCI (Ground-Fault Circuit-Interrupter) Testing

Before conducting GFCI testing with this product, read the user manual of the GFCI device under test to confirm its operating specifications.

⚠ Test current parameters of this product: Approx. 8 mA for US version; approx. 38 mA for EU/UK versions.

Test Procedure

If the circuit test result is abnormal, do not perform GFCI testing..Press the GFCI Button (3) on the transmitter to start testing:

⚠ **Test Pass:** The GFCI trips and cuts off power, and the LCD display shows the GFCI response time (Unit: Seconds). After the GFCI is reset, the device shall indicate "CORRECT WIRING".

⚠ **Test Fail:** If the circuit remains energized after testing, it indicates improper installation or functional failure of the GFCI. Contact qualified personnel for maintenance.

III. Circuit Breaker Location

Before locating circuit breakers with this product, verify that the tested socket is energized and has a normal wiring status. If the tester indicates abnormal wiring (see Figure 1), stop operation immediately and consult a qualified electrician.

Operating Procedures

1.After power-on, the device automatically enters Learn Mode (the LEARN indicator lights up). Use the receiver to scan all circuit breaker areas to be tested.

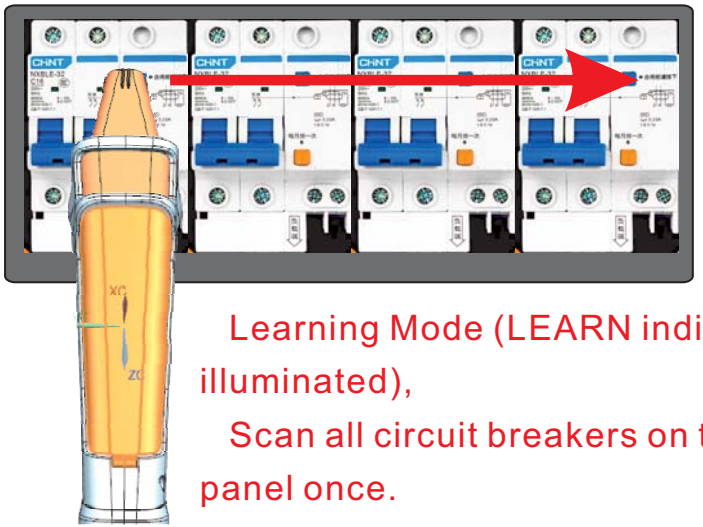
2.Press the SCAN Button to switch to Scan Location Mode (the SCAN indicator lights up), then start locating the target circuit breaker.

When the device locates the target circuit breaker, it emits continuous short beeps and the white LED flashes.

The 3 LED lights on the right side of the device indicate the real-time detected signal strength.

Before use, disconnect all electrical loads on the test circuit. Inaccurate positioning may occur otherwise.

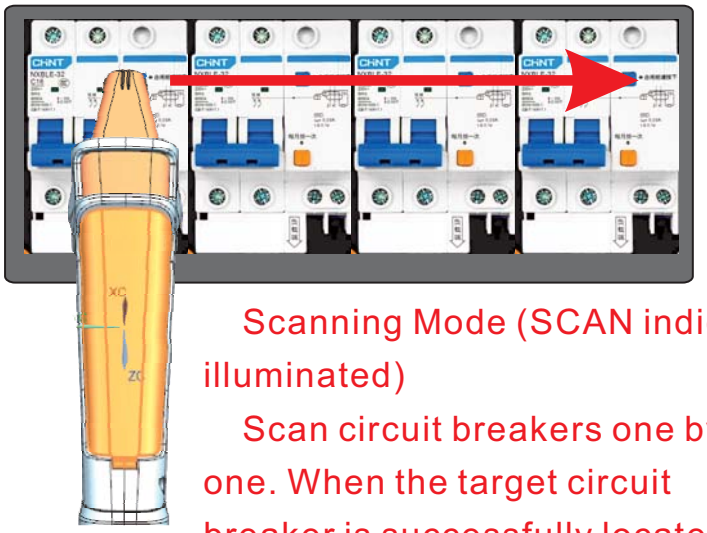
①



Learning Mode (LEARN indicator illuminated),

Scan all circuit breakers on the panel once.

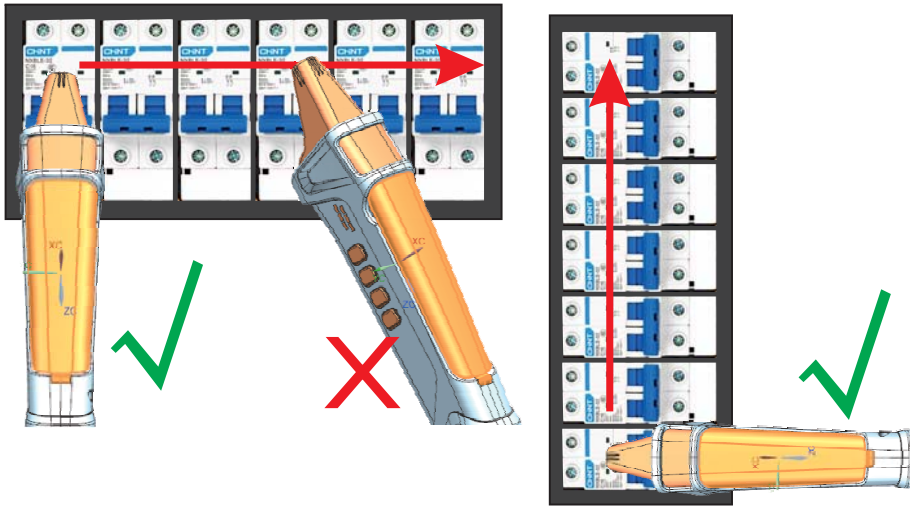
②



Scanning Mode (SCAN indicator illuminated)

Scan circuit breakers one by one. When the target circuit breaker is successfully located, a prompt tone will be emitted and the light will flash.

Correct Scanning Method



Horizontally arranged circuit breakers

Vertically arranged circuit breakers

Notes

1.During detection, keep the detector parallel to the circuit breakers. Slanted scanning may result in misidentification of adjacent circuit breakers.

2.This product is intended solely for locating circuit breakers and is not recommended for cable-locating applications.

3.If two adjacent circuit breakers trigger alerts simultaneously:

Method A: Turn off one of them to identify the target breaker.

Method B: Press to rescan (Enhanced Mode: 3 LEDs fully lit).

Product Operation

IV. Bare Wire Detection

Connect the transmitter to the bare wire via the alligator clip, and plug it into the socket after proper clamping.

Safety Warning: Always disconnect the power supply of the corresponding circuit before handling bare wires. Never clamp bare wires directly when energized to avoid electric shock hazards.

V. Additional Functions

NCV Non-Contact Voltage Detection: Press the NCV button to activate this mode. Press Button (10) to adjust detection sensitivity.

Flashlight: Press the flashlight button to turn the light on or off.

VI. Battery Charging(Enhanced Only)

Transmitter: When low voltage is displayed on the LCD, charge or replace the battery in a timely manner.

Receiver: When Indicator Light (7) flashes, it indicates low battery voltage. Charge the battery promptly.

Specifications

Function	Basic	Enhanced
Detection Range	0~3cm	
Operating Voltage	90-120V 50/60Hz Or 200-230V 50/60Hz	
Applicable Standards	US / EU / UK / CN standards	
GFCI Test	Supports trip time measurement	
LCD Display	Color VA LCD	
Line voltage	Hot-to-Neutral, Neutral-to-Ground	
Line Status Detection	Open Hot Wire, Open Ground Wire, Hot Ground Reversed, Hot/Neutral Reversed	
Line detection results	Correct Wiring / Incorrect Wiring	
Leakage Switch Detection	Learn Mode & Scan Mode	
Battery Level	0 ~ 3 level display	
NCV Detection Range	90 ~ 1000 V AC, 50/60 Hz	
Operating current	Transmitter: approx. 80 mA; Receiver: approx. 150 mA	
Adjustable sensitivity	√	
Lighting	√	
Dimensions	240 × 145 × 65 mm	
Operating Temperature	0~50 ℃	
Relative Humidity:	<85%	
Transmitter/Battery	1.5v AAAx2	3.7 V Li-ion Battery;
Receiver/Battery	9v	3.7 V Li-ion Battery
Package	Tool kit/color box/manual/ battery (installed in the product) USB charging cable(Enhanced-Only)	