

Automatic Circuit Identifier With Digital Receiver and 120V GFCI Receptacle Tester

The task of locating AC circuits is now made quick and easy. No more guessing or trial and error when it comes to locating the correct circuit breaker supplying power to an AC outlet or lighting fixture.

WARNING: Read and understand operating instructions before using product.

WARNING: Use extreme care when working around AC circuits, severe shock hazards exist. If used on a circuit controlled by a dimmer, turn the dimmer to the highest on position. Do not use in cardiac care areas. Do not use during electrical storms or in wet weather

- Do not use around explosive gas, dust, vapor or in damp or wet environments. Do not submerge or expose the meter to water and do not use if the meter has ever been exposed to water or other fluids.
- Do not apply more than the rated voltage.
- Voltages exceeding 30VAC or 60VDC pose a shock hazard so use caution.

Features:

- Automatically and quickly indicates the correct breaker
- Non-contact voltage sensor from 80-300VAC
- Transmitter works on 120VAC Hot to Neutral circuits
- Tests GFCIs wired to 3 conductors with a continuous ground path back to the panel.
- Verifies wiring configuration
- Low battery indicator

OPERATION:

Self-Test

Depress the receiver's power switch forward to the ON position. The unit will perform a self-test to ensure proper operation.

Low Battery Detection

After performing the self-test, the receiver will verify the voltage of the 9Vdc battery. If the battery voltage is below 7.3 volts, the receiver will beep three times and turn itself off. Remove the old battery, and replace it with a standard 9Vdc battery.

Idle Mode

Provided the battery is good, the receiver will enter the idle mode. Both the receiver's LEDs will remain on and the receiver will continually check for any active signals.

Non-Contact Voltage Test

Point the receiver's nose towards a live AC receptacle or power cord. Once an AC Voltage field of > 80V is sensed, the receiver will switch to Voltage Sensor mode. The red LED remains lit and the receiver will beep. The beeping speed increases when the receiver is moved closer to the AC power source, and slows when the receiver is moved further away. Once the receiver senses a signal from the transmitter, it will switch to the circuit identifier mode. The circuit identifier mode is indicated by a steady green LED.

Note that if a steady Green light is on, then the unit is no longer in the Non-Contact Voltage (NCV) function. To re-enter NCV mode, power the unit off and then on again. Certain loads mimic the breaker mode signal and may cause the unit to exit NCV mode and enter the breaker search mode, even if the transmitter is not plugged in. Use caution if the unit indicates that no voltage is present. Always verify that the green light is not on when using the NCV function.

Locating A Circuit Breaker or Fuse:

1. Plug the transmitter into the receptacle.
2. Go to the circuit breaker panel box.
3. Turn the receiver on and allow it to complete its self-test away from power.
4. Place the flat surface of the tapered end of the receiver directly onto the circuit breaker or fuse as shown. If the receiver is held at any other angle, inaccurate readings may occur.
5. Slide the nose of the receiver down each breaker along both sides of the panel. Note that the receiver will beep frequently as it measures the relative signal strength.
6. Move the receiver down each breaker once more. On the second pass, the receiver will beep and the green LED will flash only at the circuit breaker powering the transmitter.
7. Trip the breaker off and check that the LED's of the transmitter in the outlet are off to confirm you have selected the correct breaker or fuse.

Locating a Circuit Breaker or Fuse Controlling an Incandescent Light Fixture

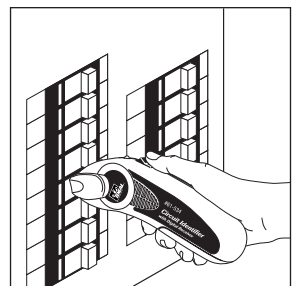
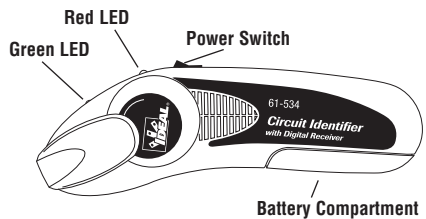
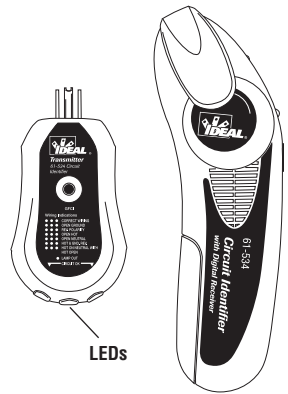
1. If the incandescent light fixture is controlled by a wall switch, make sure the wall switch is OFF.
2. Remove light bulb.
3. Install a Screw-in socket adapter (not included).
4. Plug the transmitter into the adapter. Note that a 3 prong to 2 prong adapter will be required.
5. Turn on the wall switch and follow the procedure described in Locating a Circuit Breaker or Fuse, steps 3 through 7. NEVER plug the transmitter into the output of a dimmer switch or lighting ballast. Damage to the transmitter may occur.

Receiver Auto Power Off:

If the receiver is left on and not utilized for 10 minutes (no energized AC circuit or transmitter signals are detected), it will automatically shut down to conserve its battery life.

Battery Replacement:

Unscrew and remove battery cover. Insert new 9V battery into battery compartment and re-install battery cover.



Verifying Receptacles for Correct Wiring:

Plug the transmitter into a standard 120 VAC receptacle. The three LEDs on the transmitter will indicate the wiring configuration while the label on the transmitter interprets the LED lighting combinations.

Caution: The tester is for indication purposes only and a correct indication does not guarantee the integrity of the wiring. Any incorrect or unclear indications should be referred to a licensed electrician for investigation and correction.

GFCI Testing (61-534)

1. Consult the GFCI device manufacturer's instructions to determine that the GFCI is installed in accordance with the manufacturer's specifications.
2. Check for correct wiring of the receptacle and all remotely connected receptacles on the branch circuit.
3. Operate the test button on the GFCI installed in the circuit. The test light will turn on, indicating the activation of the GFCI test. The GFCI must trip. If the GFCI does not trip, consult a qualified electrician. If it does trip, reset the GFCI.
4. Activate the test button on the GFCI tester for a minimum of 6 seconds when testing the GFCI condition. Visible indication on the GFCI tester must cease when tripped.
5. If the tester fails to trip the GFCI, it suggests: (a) a wiring problem with a totally operable GFCI, or (b) proper wiring with a faulty GFCI. Consult with an electrician to check the condition of the wiring and the GFCI.

CAUTION: When testing GFCIs installed in 2-wire systems (no ground wire available), the tester may give a false indication that the GFCI is not functioning properly. If this occurs, recheck the operation of the GFCI using the test and reset buttons. The GFCI button test function will demonstrate proper operation.

NOTE:

- All appliances or equipment on the circuit being tested should be unplugged to help avoid erroneous readings.
- Not a comprehensive diagnostic instrument but a simple instrument to detect nearly all probable common improper wiring conditions.
- Refer all indicated problems to a qualified electrician.
- Will not indicate quality of ground.
- Will not detect 2 hot wires in circuit.
- Will not detect a combination of defects.
- Will not indicate reversal of grounded and grounding conductors.



Clean with a dry cloth.

SPECIFICATIONS:

Operating Range: 100-120VAC

Operating Frequency: 47-63Hz

Maximum Load: 18A (4ms) at 120VAC, 200mW max, at 120VAC

Duty Cycle: Max: 4mS every 16.6mS (continuous), (.24%)

Weight (excluding battery): Transmitter approx 50gr., Receiver approx. 85 gr.

Power Supply: 9VDC battery

Operating Temperature: 0 to 50°C