QUICK START GUIDE

PCAL450

Process Calibrator with Temperature

What's in the box:

- PCAL450 Calibrator
- Industrial Test Leads with Clips
- Spare Fuses
- Thermocouple Adapter
- Latch Key
- 3 × AA Batteries
- Quick Start Guide

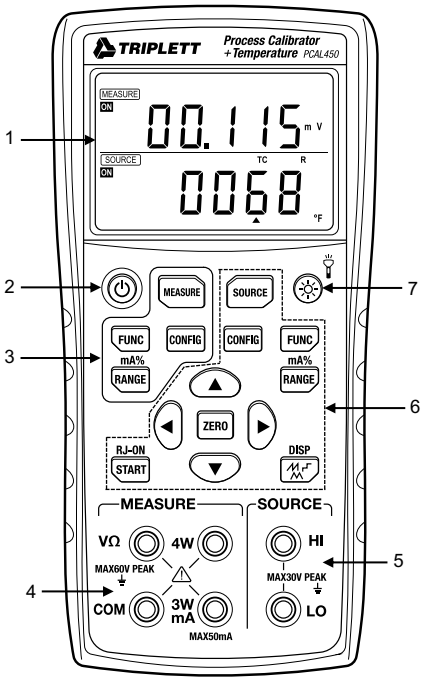
Stay updated:
Visit www.triplett.com for the latest specifications, manuals, FAQs, and product datasheets on our website, and find other test products and accessories for your measurement needs.

IMPORTANT

This Quick Start Guide covers the basic operation of the PCAL450. Before using advanced functions or making unfamiliar connections, download and review the complete User Manual at www.triplett.com/manuals.

METER DESCRIPTION

1. LCD Display
2. Power Button
3. Input Function Buttons
4. MEASURE Input Terminals
5. SOURCE Output Terminals
6. Output Function Buttons
7. Backlight/Flashlight Button



Copyright © 2026 Triplett. All rights reserved.

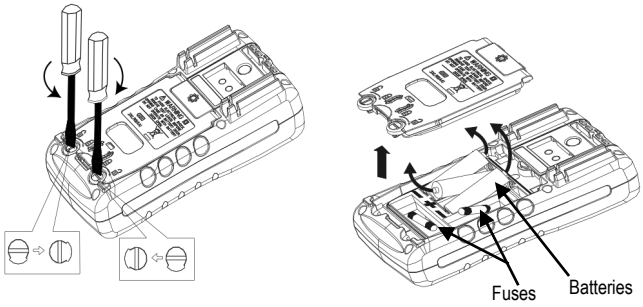
BUTTON DESCRIPTION

ICON	TITLE	FUNCTION
⏻	Power	Short press to power ON; Long press to power OFF
MEASURE	Measure	Measure (Input) Mode ON/OFF
FUNC	Function	Selects the meter function
CONFIG	Configure	Input/Output function settings
RANGE **mA%**	Range Milliamp Percent	Range selection (switches display interface during Current function)
▲▼◀▶	Arrows	Output Setting: Increase (up), Decrease (down), Left, and Right
ZERO	Zero	Resets the output value to the default and saves settings to factory setup.
START	Start	For the output current function, it serves as the start/stop button for automatic waveform output.
RJ-ON	Reference Junction	Turns on the internal thermal sensor to automatically offset ambient terminal temperatures.
☼ 🔦	Backlight Flashlight	Short press for display backlight ON/OFF; Long press for flashlight ON/OFF
SOURCE	Source	Source (Output) Mode ON/OFF
⩘	Waveform	Automatic Waveform during Current output function
DISP	Display	Configure and toggle the waveform's working parameters

DISPLAY DESCRIPTION

ICONS	DISPLAY DESCRIPTION
▮▮▮	Battery status symbol
⩥	Flashlight indicator
MEASURE	MEASURE Input Mode
ON	ON indicator for Input/output signal
OFF	OFF indicator for Input/output signal
▬	Input/output signal polarity indicator
SOURCE	SOURCE Output Mode
RUN	RUN: Automatic waveform mode for output current
⩘	Automatic sawtooth waveform for output current
⌐	Automatic step waveform for output current
⩘	Automatic triangular waveform for output current
Set10025%	Output current span indicator
mA→TEMP	Current linear conversion temperature function indicator
RTD	Thermal resistance function range indicator: PT100/200/500/1000, Cu50
TC	Thermocouple function range indicator: Type K, E, J, T, B, N, R, S, A, C, D
RJ-ON	Thermocouple cold junction compensation on indicator
HMS	Cold junction compensation mode indicator
•))	Continuity measurement indicator
LOOP mAV kΩ % °C°F	Units
234W	Input resistance wire system indicator: 2-Wire, 3-Wire, 4-Wire

BATTERY/FUSE INSTALLATION & REPLACEMENT

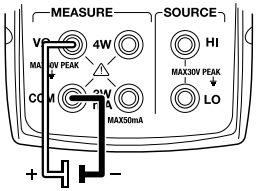
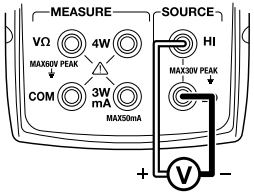
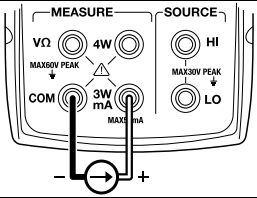
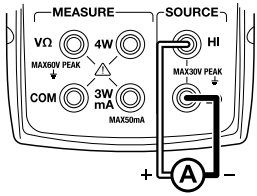
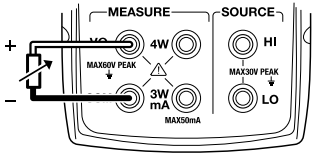
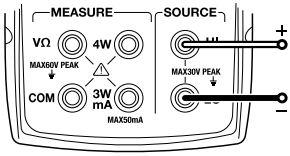


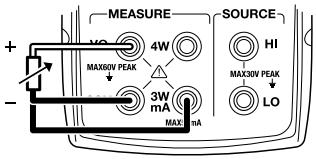
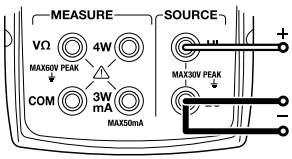
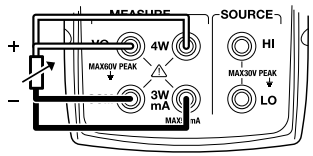
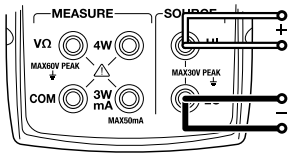
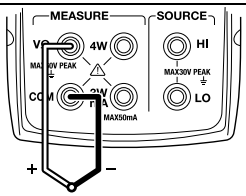
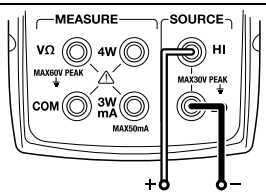
1. Turn the meter OFF and remove the test leads.
2. Unscrew and remove the battery-door cover.
3. Install 3 × AA (LR6) alkaline batteries, matching the polarity markings in the compartment, or replace the fuses.
4. Replace the battery-door cover and secure with the screws before use.

USING THE METER

Follow the instructions below and the illustrations.

1. Power ON the meter.
2. Install proper leads of probe based on the application.
3. Set calibrator in appropriate mode using the FUNCTION button.
4. Set the range as needed.
5. Use MEASURE and/or SOURCE button to activate the Input or Output.

FUNCTION	MEASURE	SOURCE
Voltage		
Current		
Resistance RTD – 2W		

FUNCTION	MEASURE	SOURCE
Resistance RTD – 3W		
Resistance RTD – 4W		
Temperature (TC)		

⚠ SAFETY — Read the manual's safety section before use.

- Never exceed the ratings marked at the terminals (MEASURE: 60V/50mA max; SOURCE: 30V peak max).
- Inspect the housing and test leads for damage before use.
- Turn off the meter and remove the test leads before opening the battery door or switching functions.
- Do not use near explosive gas, vapor, or dust.
- Operating Temperature/Humidity: 32 to 122°F (0 to 50°C)/20 to 80% (avoid condensation)

WARRANTY

Triplett offers warranty to the original purchaser of its products. We guarantee that our products will be free from defects in workmanship and materials for two (2) years from the purchase date.

This warranty does not cover:

- Products purchased from unauthorized distributors.
- Items that have been repaired or altered by unauthorized individuals.
- Damage from misuse, abuse, misapplication, negligence, or accidents.
- Products with altered, defaced, or removed serial numbers.
- Accessories, including batteries.

For product support, registration, FAQs, or to request calibration or repair services, visit www.triplett.com/support.

.

Imagery is for reference and may be enhanced for clarity. Actual product appearance and screen content may vary slightly. Specifications are subject to change without notice. For the latest information, visit www.triplett.com.

Copyright © 2026 Triplett. All rights reserved.