Extech PRC30

Extech PRC30 Multifunction Process Calibrator Instruction Manual

INTRODUCTION

The Extech PRC30 is a handheld multifunction process calibrator designed for verifying the operation of various industrial instruments. It is suitable for use with sensors, thermocouple probes, controllers, panel meters, and other testing tools, particularly in temperature control and process troubleshooting applications.

Figure 1: Front view of the Extech PRC30 Multifunction Process Calibrator, highlighting its display and control panel.

PRODUCT FEATURES

- Multifunction capability for various process calibration tasks.
- Handheld design for portability and ease of use.
- Dot matrix LCD for clear display of readings and settings.
- Intuitive button layout for operation.

SETUP

Battery Installation

1. Locate the battery compartment cover on the rear of the device.
2. Open the cover by sliding or unscrewing it as indicated.
3. Insert the required batteries (type not specified, but typically AA or AAA) ensuring correct polarity.
4. Replace the battery compartment cover securely.

OPERATING INSTRUCTIONS

Controls and Display Overview

The Extech PRC30 features a clear dot matrix LCD and a user-friendly control panel. Refer to Figure 1 for button locations.

- **Power Button (Orange, circular with power symbol):** Press to turn the calibrator ON or OFF.
- **Arrow Buttons (Up, Down, Left, Right):** Used for navigation, adjusting values, and selecting options.
- **SET Button:** Confirms selections or enters settings menus.
- **UNIT Button (under TYPE):** Changes the measurement unit (e.g., °F, °C).
- **I/O Button (under MODE):** Toggles between input and output modes.
- **MEM Button (under STEP):** Accesses memory functions, such as saving or recalling data.
- **ZERO Button (under ZERO, with lightbulb symbol):** Performs zero adjustment or backlight control.
- **CJC (Cold Junction Compensation) Indicator:** Indicates the status of cold junction compensation.
- **APO (Auto Power Off) Indicator:** Shows if the auto power off function is active.
- **SOURCE Indicator:** Indicates the device is in source mode.
- **MEM.25 Indicator:** Likely indicates a memory location or a specific memory function.

Basic Operation

1. **Power On:** Press the orange power button. The display will illuminate.
2. **Selecting Mode:** Use the MODE (I/O) button to switch between input and output functions as required for your calibration task.
3. **Adjusting Values:** Use the Up/Down arrow buttons to adjust output values or navigate through menu options. The Left/Right arrow buttons may be used for digit selection or fine-tuning.
4. **Changing Units:** Press the UNIT button to cycle through available measurement units (e.g., °F, °C).
5. **Zero Adjustment:** Use the ZERO button to perform a zero adjustment for current measurements or to activate the display backlight.
6. **Memory Functions:** Press the MEM button to save current readings or recall previously stored data.
7. **Power Off:** Press and hold the orange power button until the display turns off. The Auto Power Off (APO) function will also turn off the device after a period of inactivity.

MAINTENANCE

- **Cleaning:** Wipe the device with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the calibrator in a dry, cool environment when not in use. Remove batteries if storing for extended periods to prevent leakage.
- **Battery Replacement:** Replace batteries promptly when the low battery indicator appears on the display to ensure accurate operation.
- **Calibration:** Regular calibration by qualified personnel is recommended to maintain measurement accuracy.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Dead or incorrectly installed batteries.	Check battery polarity and replace with fresh batteries.
Inaccurate readings.	Needs calibration; environmental interference; incorrect settings.	Perform zero adjustment; ensure stable environment; verify measurement settings; consider professional calibration.
Display is blank or dim.	Low battery; backlight off.	Replace batteries; press the ZERO button to activate backlight.

SPECIFICATIONS

- **Model:** PRC30
- **Description:** Multifunction Process Calibrator
- **Display Type:** Dot matrix LCD
- **Dimensions (Length x Width x Height):** 6.375 in (15.9 cm) x 3.25 in (8 cm) x 1.75 in (4.4 cm)
- **Operating Temperature Range:** 41 to 104°F (5 to 40°C)
- **Operating Humidity Range:** <80%RH
- **Power Source:** Batteries
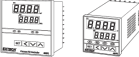- **Origin:** Made in Taiwan

WARRANTY AND SUPPORT

The Extech PRC30 Multifunction Process Calibrator comes with a **1-Year Universal Guarantee**.

For technical support, service, or warranty claims, please refer to the contact information provided with your purchase documentation or visit the official Extech Instruments website.

Related Documents - PRC30

[Extech 412355A Current/Voltage Calibrator User Manual](#)
Official user manual for the Extech 412355A Current/Voltage Calibrator. Learn how to measure and source current and voltage, use memory functions, and understand specifications, warranty, and support information.

Extech PRC10 Current Calibrator User Guide

Comprehensive user guide for the Extech PRC10 Current Calibrator. Learn about its features, operation modes (Measure, Source), safety guidelines, specifications, and calibration services from Extech Instruments, a FLIR Systems company.

Extech VFL Series Process PID Controllers User Manual (96VFL, 48VFL)

User manual for Extech VFL Series Process PID Controllers, models 96VFL and 48VFL. This guide covers installation, wiring, programming, operation, and specifications for precise process control applications.

Extech Comprehensive Catalog: Environmental Meters, Anemometers, and Test Equipment

Explore Extech's extensive range of high-quality environmental meters, thermo-anemometers, gas detectors, water quality testers, sound meters, light meters, and other precision test and measurement instruments designed for industrial, HVAC/R, and professional applications.

Extech TH10 Temperature Datalogger User Manual

User manual for the Extech TH10 Temperature Datalogger, detailing its features, operation, specifications, battery replacement, and software interface. Includes information on warranty and customer support.

Extech CO220 User Manual: CO2 Monitor and Datalogger Guide

Comprehensive user manual for the Extech CO220 Carbon Dioxide Monitor and Datalogger. Learn about features, operation, specifications, troubleshooting, and CO2 guidelines for indoor air quality monitoring.