

Fluke 123B Kit (Model 4755909)

Fluke 123B Industrial ScopeMeter User Manual

Model: 123B Kit (Part Number: 4755909)

Brand: Fluke

1. INTRODUCTION

The Fluke 123B Industrial ScopeMeter is a rugged, hand-held oscilloscope designed for comprehensive troubleshooting and maintenance of industrial electrical and electro-mechanical equipment. This device combines the functions of a dual-channel digital oscilloscope and a 5,000-count true-RMS digital multimeter, offering a versatile solution for field service technicians and industrial electricians.

Key features include a 20 MHz oscilloscope bandwidth, integrated meter and scope recorder capabilities, and shielded test leads for accurate measurements. This manual provides essential information for the safe and effective operation, setup, maintenance, and troubleshooting of your Fluke 123B ScopeMeter.

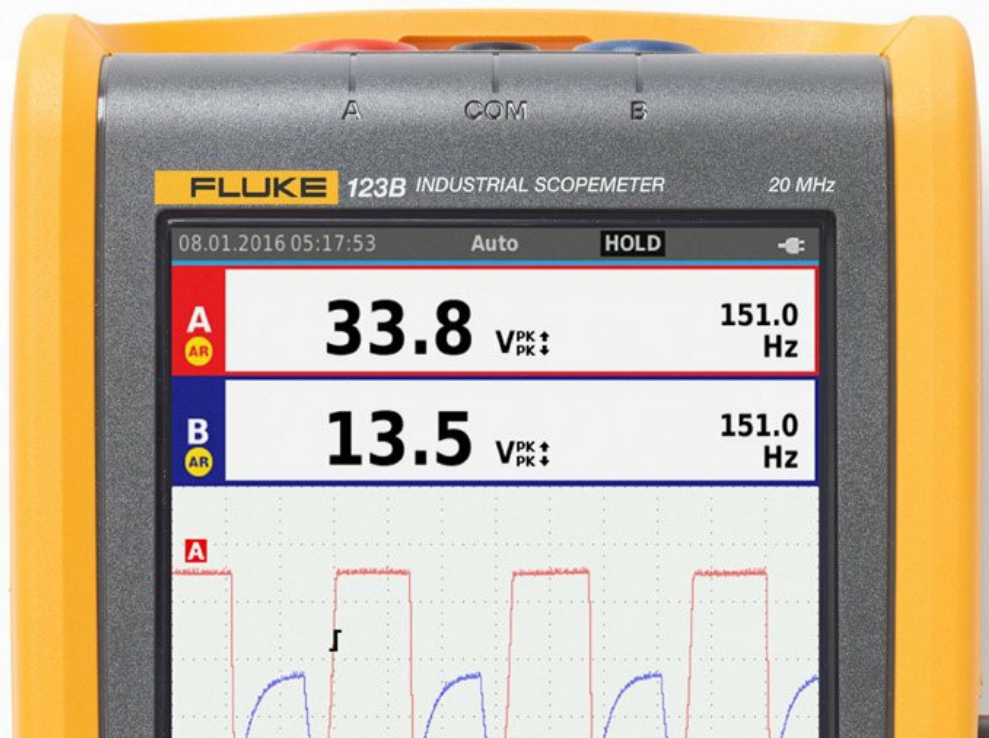




Figure 1.1: Front view of the Fluke 123B Industrial ScopeMeter, showing its display and control buttons. The screen displays waveform measurements and digital readings.



Figure 1.2: The Fluke 123B ScopeMeter held in a gloved hand, illustrating its compact and portable design for field use.

2. SAFETY INFORMATION

Always adhere to the following safety precautions to prevent personal injury and damage to the instrument or equipment under test. This device is intended for use by qualified personnel only.

- **Read all instructions:** Before using the ScopeMeter, thoroughly read and understand all operating instructions and safety warnings.
- **Use proper protective equipment:** Always wear appropriate personal protective equipment (PPE), such as safety glasses and insulated gloves, when working with electrical systems.

- **Inspect leads and accessories:** Before each use, inspect all test leads, probes, and accessories for damage. Do not use if insulation is cracked or if the conductor is exposed.
- **Verify voltage ratings:** Ensure the ScopeMeter and its accessories are rated for the voltage and current levels of the circuit being tested.
- **Avoid wet conditions:** Do not operate the ScopeMeter in wet or damp environments.
- **Do not operate if damaged:** If the ScopeMeter appears damaged or is not operating properly, discontinue use immediately and contact authorized service personnel.
- **Battery safety:** Use only the specified battery type and charger. Do not expose batteries to extreme temperatures or dispose of them in fire.

3. WHAT'S IN THE BOX

Upon unpacking your Fluke 123B Industrial ScopeMeter Kit, verify that all the following components are present:

- Li-Ion battery pack
- Charger power adapter
- 2 shielded test leads with ground leads
- Black test lead
- Red and blue hook clips
- Banana to BNC adapter
- Safety information plus CD-ROM
- USB angled adapter
- WiFi USB adaptor
- Soft carry case
- FlukeView™ for Windows® software
- Magnetic hanger
- Screen protector



Figure 3.1: All components included in the Fluke 123B Industrial ScopeMeter Kit, including the device, various test leads, adapters, power supply, and carrying case.

4. SETUP

4.1. Charging the Battery

Before initial use, fully charge the Li-Ion battery pack. Connect the charger power adapter to the ScopeMeter's charging port and plug it into a suitable AC power outlet. The charging indicator on the device will show the charging status.

4.2. Initial Power On

Press and hold the power button (usually marked with a circle and a vertical line) until the display illuminates. The device will perform a self-test and then display the main measurement screen.

4.3. Attaching Test Leads

For oscilloscope measurements, connect the shielded test leads to the input channels (A and B) on the top of the ScopeMeter. Ensure the ground leads are securely attached to the appropriate ground terminals. For multimeter functions, use the black test lead and the red/blue hook clips as needed.



Figure 4.1: The Fluke 123B ScopeMeter shown with its integrated kickstand extended, allowing for hands-free viewing during setup or operation.

5. OPERATING INSTRUCTIONS

5.1. Navigating the Interface

The Fluke 123B features a clear display and intuitive button layout. Use the directional arrows to navigate menus and adjust settings. The **ENTER** button confirms selections, and the **BACK** button returns to the previous screen.

5.2. Oscilloscope Function

Press the **SCOPE METER** button to enter oscilloscope mode. You can adjust vertical sensitivity (V/div) and horizontal time base (s/div) using the dedicated **mV/V** and **TIME** buttons. The **AUTO** button can automatically set optimal display parameters for the input signal.

5.3. Multimeter Function

The ScopeMeter integrates a 5,000-count true-RMS digital multimeter. Access multimeter functions through the main menu or dedicated buttons, allowing for measurements of voltage, current, resistance, and continuity.

5.4. Recording Measurements

The **RECORD** button initiates data logging for both meter and scope readings. This feature is useful for capturing intermittent events or monitoring trends over time. Data can be reviewed on the device or transferred to a computer using the included FlukeView™ software and USB/WiFi adapters.



Figure 5.1: A technician actively using the Fluke 123B ScopeMeter to perform measurements within an electrical control panel, demonstrating its application in industrial environments.

6. MAINTENANCE

6.1. Cleaning

Clean the ScopeMeter's casing with a damp cloth and mild detergent. Do not use abrasive cleaners or solvents. Ensure the device is powered off and disconnected from all power sources before cleaning. The screen protector should be replaced if it becomes scratched or damaged to maintain display clarity.

6.2. Battery Care

To maximize battery life, avoid fully discharging the battery frequently. Store the device with a partial charge if it will not be used for extended periods. Replace the battery when its capacity significantly diminishes.

6.3. Calibration

For optimal accuracy, it is recommended to have your Fluke 123B ScopeMeter calibrated periodically by an authorized Fluke service center. Refer to the safety information CD-ROM for recommended calibration intervals.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your Fluke 123B ScopeMeter. If the problem persists, contact Fluke customer support.

Problem	Possible Cause	Solution
Device does not power on.	Battery is discharged or faulty; power button not pressed correctly.	Charge the battery. Ensure the power button is pressed firmly for a few seconds.
No waveform displayed in oscilloscope mode.	Test leads not connected properly; signal too small or too large; incorrect settings.	Check lead connections. Adjust V/div and s/div settings. Use the AUTO button.
Inaccurate readings.	Uncalibrated device; damaged test leads; environmental interference.	Perform a self-test. Inspect test leads for damage. Consider professional calibration.
Cannot transfer data to PC.	Incorrect USB/WiFi adapter connection; software not installed or outdated.	Ensure adapters are correctly inserted. Install or update FlukeView™ software. Check PC's USB ports.

8. SPECIFICATIONS

Feature	Detail
Model Number	4755909
Oscilloscope Bandwidth	20 MHz
Input Channels	2
Multimeter	Two 5,000-count true-RMS digital multimeters
Power Source	1 Lithium Ion battery (included)
Product Dimensions	15.75 x 12.75 x 9.5 inches
Weight	3.06 Pounds
First Available	February 25, 2016
Manufacturer	Fluke

9. WARRANTY AND SUPPORT

Fluke products are known for their quality and reliability. For specific warranty terms and conditions applicable to your

Fluke 123B ScopeMeter, please refer to the warranty information provided on the included CD-ROM or visit the official Fluke website. It is recommended to register your product upon purchase.

For technical support, service, or to inquire about authorized service centers, please contact Fluke customer support directly. Contact information can typically be found on the Fluke website or in the documentation accompanying your product.

Purchasing from authorized distributors ensures you receive a genuine Fluke product with a valid warranty. Always verify the seller's authorization when acquiring Fluke tools and accessories.



Protect your purchase



Source from local authorized distributors.

Authorized distributors may sell **genuine Fluke** test tools and accessories online. **Double check** that the seller listed is an authorized Fluke distributor to ensure the product is genuine and comes with a valid **warranty**.

Figure 9.1: Fluke's emphasis on purchasing from authorized distributors to ensure product authenticity and valid warranty coverage.



Related Documents - Fluke 123B Kit (Model 4755909)

	<p>Fluke FEV100 Adapter Kit for Electric Vehicle Charging Stations: Technical Data and Specifications</p> <p>Explore the technical specifications, features, and testing procedures for the Fluke FEV100 Adapter Kit, designed to safely and efficiently test electric vehicle charging stations (EVSEs). Includes safety information, compatibility, and ordering details.</p>
	<p>Fluke Process Tools 2025-2026 Selection Guide for Industrial Instrumentation and Electrical Technicians</p> <p>Explore the Fluke Process Tools 2025-2026 Selection Guide, featuring a comprehensive range of calibrators, pressure gauges, and accessories for industrial instrumentation and electrical technicians. Discover loop calibrators, pressure calibrators, temperature calibrators, multifunction calibrators, documenting calibrators, and more.</p>



[Fluke 2024 Test Tools Catalog: Comprehensive Guide to Electrical and Industrial Measurement Equipment](#)

Explore the Fluke 2024 Test Tools Catalog, featuring a comprehensive range of electrical testers, industrial imaging solutions, power quality analyzers, digital multimeters, and specialized tools for solar PV, EV charging, and industrial maintenance. Discover Fluke's latest innovations and trusted measurement solutions.



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Discover the Fluke 179 True-rms Digital Multimeter, designed for efficient electrical and HVAC maintenance. Learn about its features, specifications, and recommended accessories for reliable field service.



[Popular Electronics - November 1996 Issue: DIY Electronics Projects, Reviews, and Technology](#)

The November 1996 issue of Popular Electronics magazine features DIY electronics projects like the Easyscope oscilloscope, reviews of test equipment and consumer gadgets, and advice on pursuing a career in electronics engineering.