

## Fluke FLUKE-117/323 KIT

# Fluke 117/323 Multimeter and Clamp Meter Combo Kit Instruction Manual

Model: FLUKE-117/323 KIT | Brand: Fluke

## 1. INTRODUCTION

This manual provides essential information for the safe and effective use of your Fluke 117 Digital Multimeter and Fluke 323 True-RMS Clamp Meter combo kit. This kit is designed for residential and commercial electricians, offering productive and effective troubleshooting capabilities.

## 2. INCLUDED COMPONENTS

Your Fluke 117/323 KIT includes the following items:

- Fluke 117 Digital Multimeter
- Fluke 323 True-RMS Clamp Meter
- Test Leads (Red and Black)
- TPAK Magnetic Hanging Strap
- C115 Durable Soft Carrying Case
- 9V Batteries (2 included, pre-installed)



Figure 1: Fluke 117 Digital Multimeter. This image shows the front view of the yellow and black Fluke 117 multimeter with its display and rotary dial.



Figure 2: Fluke 323 True-RMS Clamp Meter. This image displays the yellow and black Fluke 323 clamp meter with its red clamp jaws open, showing the display and function dial.

### 3. SETUP

#### 3.1. Battery Installation

The Fluke 117 and 323 meters come with 9V batteries pre-installed. If replacement is needed, refer to the detailed instructions in the full user manual for safe battery compartment access.

### 3.2. Connecting Test Leads

Insert the red test lead into the V $\Omega$ mA jack and the black test lead into the COM jack for voltage, resistance, and continuity measurements. For current measurements with the Fluke 117, insert the red lead into the 10A FUSED jack and the black lead into the COM jack.

### 3.3. TPAK Magnetic Hanging Strap Assembly

The TPAK magnetic hanging strap allows for hands-free operation. Attach the strap to the back of your multimeter by sliding it into the designated slot until it clicks securely. The magnetic end can then be used to hang the meter on metal surfaces, pipes, or electrical boxes.



Figure 3: Fluke 117 Multimeter in use. The multimeter is shown attached to an electrical panel, displaying a voltage reading, with test leads connected.

### 3.4. Kit Overview Video

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Video 1: This video provides an overview of the contents included in the Fluke 117/323 combo kit, demonstrating each component and its basic function.

## 4. OPERATING INSTRUCTIONS

### 4.1. Fluke 117 Digital Multimeter

The Fluke 117 measures AC and DC voltage, as well as AC and DC amps. It features True RMS for accurate measurements on non-linear loads and low input impedance to prevent false readings due to ghost voltage. The VoltAlert™ non-contact voltage detection feature enhances safety by indicating the

presence of voltage without direct contact.



Figure 4: Fluke 117 Digital Multimeter. A close-up of the Fluke 117 multimeter, highlighting its display and function selection dial.

#### **4.2. Fluke 323 True-RMS Clamp Meter**

The Fluke 323 clamp meter measures 400 A AC current and 600 VAC and DC voltage. It provides True RMS AC voltage and current for accurate measurements on non-linear signals. Use the clamp jaw to measure AC current by clamping it around a single conductor.



Figure 5: Hand using Fluke 323 Clamp Meter. A gloved hand is shown using the Fluke 323 clamp meter to measure current on a wire within an electrical box.

#### 4.3. Multimeter Features Video

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Video 2: This video highlights key features and functionalities of the Fluke 117 True-RMS Multimeter, including its automatic AC/DC voltage detection and non-contact voltage alert.

#### 4.4. Clamp Meter Features Video

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Video 3: This video details the features of the Fluke 323 Clamp Meter, including its one-handed operation, test lead connections, and AC current measurement capabilities.

## 5. MAINTENANCE

### 5.1. Cleaning

Wipe the meter case with a damp cloth and mild detergent. Do not use abrasives or solvents. Clean the test leads by wiping them with a damp cloth.

### 5.2. Battery Replacement

When the battery indicator appears on the display, replace the 9V battery. To replace, open the battery compartment cover on the back of the meter using a screwdriver. Replace with new 9V alkaline batteries, ensuring correct polarity, then secure the cover.

### 5.3. Test Lead Inspection

Regularly inspect test leads for damaged insulation or exposed metal. Replace damaged leads immediately to ensure safety and accurate measurements.

## 6. TROUBLESHOOTING

If your Fluke 117/323 kit is not functioning as expected, consider the following:

- **No Display/Low Battery:** Check battery level. Replace batteries if low.
- **Inaccurate Readings:** Ensure test leads are properly connected and undamaged. Verify the correct function is selected on the rotary dial. For clamp meter current measurements, ensure the clamp is around a single conductor.
- **False Voltage Readings (Fluke 117):** The low input impedance feature helps prevent ghost voltage readings. If readings are still suspect, ensure proper grounding.
- **No Continuity Beep:** Check if the continuity function is selected and test leads are making good contact.

For further assistance, refer to the detailed troubleshooting section in the comprehensive user manual or contact Fluke customer support.

## 7. SPECIFICATIONS

Feature	Specification
Brand	Fluke

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Model Number	FLUKE-117/323 KIT
Power Source	Alkaline (2 x 9V batteries included)
Item Weight	1.76 pounds (800 Grams)
Product Dimensions	9 x 30.48 x 3.5 inches
Measurement Type	Multimeter, Clamp Meter
Measurement Accuracy	0.5% + 2
Upper Temperature Rating	752 Degrees Fahrenheit
Safety Rating	UL, CSA (Canada and US), ANSI/ISA, CAN/CSA, CE, C-Tick, TUV, VDE
Usage	Professional

## 8. WARRANTY INFORMATION

The Fluke 117/323 Kit comes with a **2-year warranty** on material and workmanship. Please retain your proof of purchase for warranty claims. For detailed terms and conditions, refer to the warranty card included in your kit or visit the official Fluke website.

## 9. CUSTOMER SUPPORT

For technical assistance, product inquiries, or service requests, please visit the official Fluke website or contact their customer support line. Contact information can typically be found on the Fluke website or in the documentation provided with your product.