

## ANENG ST212

# ANENG Clamp Meter Multimeter Tester ST212

## INSTRUCTION MANUAL

### Introduction

Thank you for choosing the ANENG Clamp Meter Multimeter Tester ST212. This versatile and accurate tool is designed for both professional electricians and DIY enthusiasts, offering a wide range of measurement capabilities and safety features. Please read this manual thoroughly before operation to ensure safe and effective use.



Figure 1: ANENG ST212 Clamp Meter and included accessories.

The ST212 features True RMS measurement, 6000 counts display, and an auto-ranging function for ease of use. Its compact size and robust design make it a reliable companion for various electrical tasks.

Video 1: Overview of the ANENG ST212 Clamp Meter's features and functions.

## Setup

1. **Battery Installation:** The ST212 requires 2 AAA batteries. To install, locate the battery compartment on the back of the device. Use a screwdriver to open the cover. Insert the batteries, ensuring correct polarity (+/-). Securely close the battery cover.

2. **Power On/Off:** Press the power button to turn the device on. The display will light up. To turn off, press and hold the power button. The device also features an automatic shut-off after 15 minutes of inactivity to conserve battery life.
3. **Connecting Test Leads:** For voltage, resistance, continuity, diode, and capacitance measurements, insert the red test lead into the VΩHz jack and the black test lead into the COM jack. For temperature measurements, connect the temperature probe to the designated ports.

## Operating Instructions

The ANENG ST212 features an intelligent auto-ranging mode, simplifying most measurements. For specific functions, manual selection may be required using the 'SEL' button.

### Measurement Modes:

- **AC/DC Current Measurement (Clamp):**

Open the clamp jaws by pressing the trigger. Enclose a single conductor (not a bundle of wires) within the jaws. The device will automatically detect and display the AC or DC current. The maximum measurable current is 400A. Ensure the conductor fits within the 1.24-inch jaw opening.



Figure 2: Measuring current using the clamp function.

- **AC/DC Voltage Measurement:**

Insert test leads into the appropriate jacks. The meter will automatically detect AC or DC voltage. Touch the probes to the circuit points to measure voltage. The large VA color reverse display screen provides clear readings.



Figure 3: The VA color reverse display screen for clear readings.

- **Resistance Measurement:**

The meter automatically detects resistance when probes are connected. Touch the probes across the component to measure its resistance. The maximum measurable resistance is 60MΩ.

- **Continuity Test:**

In auto mode, the device will beep if continuity is detected (low resistance). This is useful for checking circuits and wires.

- **Diode Test:**

Manually switch to diode mode using the 'SEL' button. Connect the probes to the diode. The display will show the forward voltage drop.

- **Capacitance Measurement:**

The meter automatically identifies the range for capacitance measurement. Connect the probes across the capacitor to read its value.

- **NCV (Non-Contact Voltage) Detection:**

Long press the NCV button to enter NCV mode. Place the clamp head near a live wire. The device will



indicate the presence of AC voltage with an audible beep and flashing red light, providing a safer way to detect live circuits.



Figure 4: Non-contact voltage detection in action.

- **Temperature Measurement:**

Connect the included temperature line to the meter. Switch to temperature mode. Touch the probe to the object whose temperature you wish to measure. The device can measure temperatures from -40°C to 1000°C (-40°F to 1832°F).

- **Live/Null Wire Identification:**

Use the live wire detection function to distinguish between live and neutral wires. A fast beep and strong signal with a flashing red light indicate a live wire. No beep or flashing light indicates a neutral wire.

### Special Functions:

- **Data Hold:** Press the 'H' button to hold the current reading on the display for easy viewing. Press again to release.
- **Backlight & Flashlight:** The LCD screen has a backlight for low-light conditions. Long press the flashlight button to turn on the integrated flashlight, assisting in dark environments.



Figure 5: The integrated flashlight illuminates the work area.

## Maintenance

- **Cleaning:** Use a soft, damp cloth to clean the meter's casing. Do not use abrasive cleaners or solvents.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display to ensure accurate readings. Refer to the 'Setup' section for installation steps.
- **Storage:** When not in use for extended periods, remove the batteries to prevent leakage. Store the device in a cool, dry place, away from direct sunlight and extreme temperatures. The included storage bag is ideal for protection.

## Troubleshooting

- **No Display/Power On:** Check battery installation and ensure batteries are not depleted. Replace if necessary.
- **Inaccurate Readings:** Ensure test leads are properly connected and not damaged. Verify the correct measurement mode is selected (though auto-ranging handles most). Check for external interference.
- **Auto Shut-off:** This is a power-saving feature. The device will turn off after 15 minutes of inactivity. Press

any button to reactivate.

- **No NCV Indication:** Ensure the NCV button is long-pressed to activate the mode. The sensor is located at the top of the clamp head.

Specifications


Feature	Specification
Product Dimensions	3.94 x 3.94 x 0.79 inches; 0.02 ounces
Batteries	2 AAA batteries required
Manufacturer	ANENG
Power Source	Battery Powered
Color	Red, Black
Item Weight	0.6 Grams
Max Display	6000 counts
AC Current	0.2A~400A
DC Current	0.2A~400A
Jaws Open To	31.5mm/1.24in
Auto Shut-down	Yes (15 minutes)

Warranty & Support

ANENG products are manufactured to high-quality standards and are warranted against defects in materials and workmanship. For specific warranty terms and conditions, please refer to the warranty card included with your product or contact ANENG customer support.

For technical assistance, troubleshooting, or service inquiries, please contact ANENG customer support through the contact information provided on the product packaging or the official ANENG website. Please have your product model number (ST212) and purchase details ready when contacting support.

Related Documents - ST212

	<p><a href="#">ANENG ST183 Digital Clamp Meter User Manual - Specifications and Instructions</a></p> <p>Comprehensive user manual for the ANENG ST183 Digital Clamp Meter, detailing its specifications, safety precautions, operating instructions for various measurements (voltage, current, resistance, capacitance, frequency, NCV), maintenance, and troubleshooting.</p>
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 <p>Large screen digital intelligent multimeter Operating instruction</p> <p>AS rights reserved. Specifications are subject to change without notice.</p>	<p><a href="#">ANENG 616 Digital Intelligent Multimeter: Operating Instructions and Specifications</a></p> <p>Comprehensive operating instructions and detailed specifications for the ANENG 616 digital intelligent multimeter. Learn how to measure voltage, current, resistance, capacitance, frequency, and temperature safely and effectively.</p>
 <p>Touch Meter User Manual</p>	<p><a href="#">ANENG 683 Touch Meter User Manual: Features, Specs &amp; Operation Guide</a></p> <p>Comprehensive user manual for the ANENG 683 digital multimeter. Covers safety, specifications, measurement functions (voltage, current, resistance, etc.), and operational guidance for electrical testing.</p>
	<p><a href="#">ANENG ST181 Digital Clamp-On Multimeter Operation Manual and Specifications</a></p> <p>Detailed operation manual and technical specifications for the ANENG ST181 digital clamp-on multimeter. Covers safety, features, panel description, measurement procedures for AC/DC voltage, current, resistance, capacitance, frequency, temperature, and NCV detection.</p>
	<p><a href="#">ANENG ST180 Digital Clamp-On Multimeter Operating Manual</a></p> <p>This comprehensive operating manual details the ANENG ST180 Digital Clamp-On Multimeter. It covers essential safety information, step-by-step operating instructions for various measurements (AC/DC Voltage, Current, Resistance, Frequency, Capacitance, Temperature, NCV), general characteristics, and detailed specifications. Essential for safe and effective use of the device.</p>
	<p><a href="#">Mini Digital Clamp-On Multimeter Operating Instructions</a></p> <p>This document provides operating instructions, safety information, and specifications for the Mini Digital Clamp-On Multimeter. It covers measurements for AC/DC voltage, DC/AC current, resistance, audible continuity, diode, temperature, and Non-Contact ACV detection.</p>