ANENG TH202, B15

ANENG TH202 Infrared Thermometer & B15 Voltage Tester User Manual

Model: TH202 (Infrared Thermometer), B15 (Voltage Tester)

1. Introduction

This user manual provides detailed instructions for the safe and effective operation of your ANENG TH202 Infrared Thermometer and ANENG B15 Voltage Tester. This 2-in-1 set is designed for various industrial, household, and electrical testing applications. Please read this manual thoroughly before use and retain it for future reference.

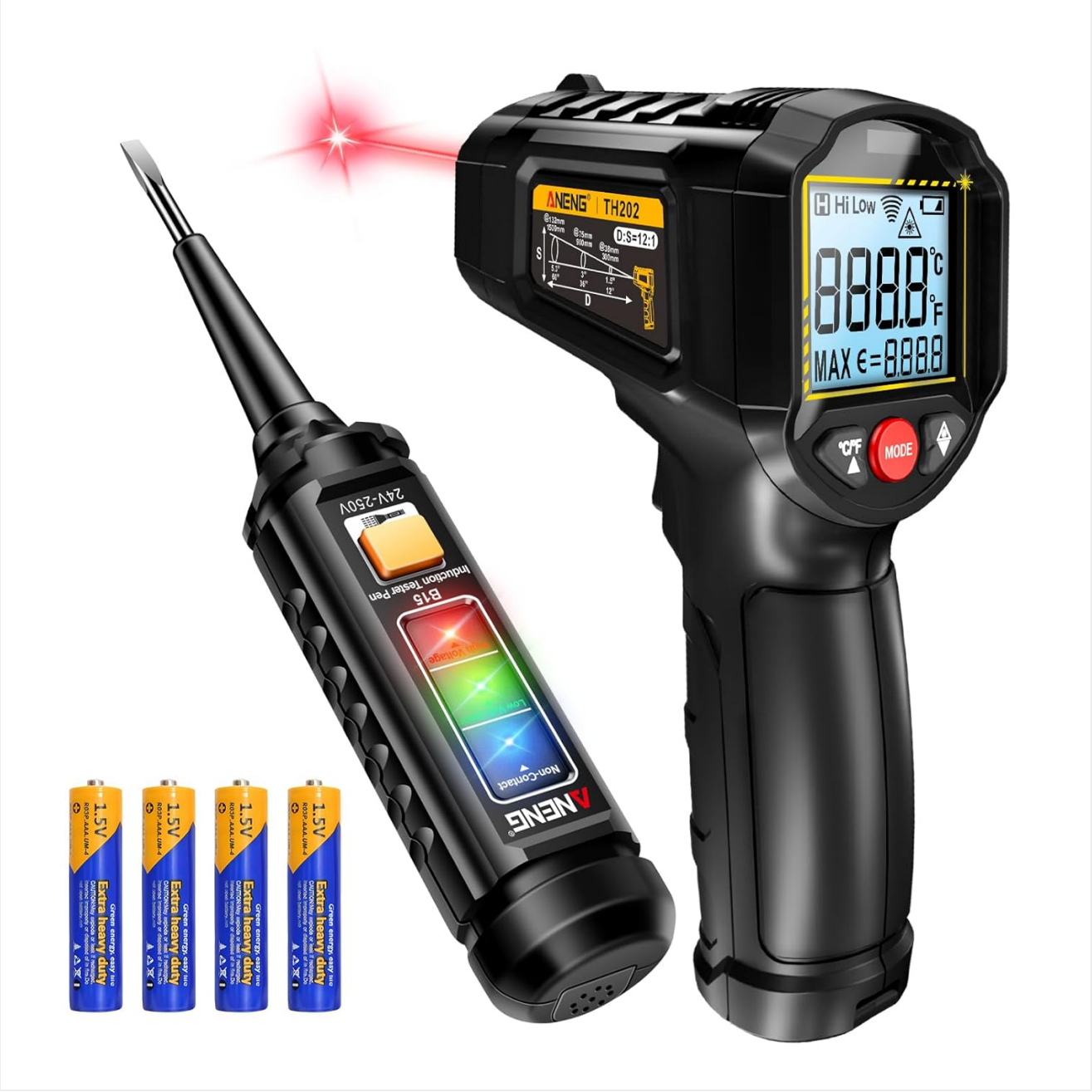

Image: The ANENG TH202 Infrared Thermometer and B15 Voltage Tester, along with AAA batteries. The thermometer is black with an orange and black display, and the voltage tester is black with a clear tip and colored indicator lights.

2. Safety Information

Always observe safety precautions when using electrical testing equipment and laser devices. Failure to do so may result in injury or damage to the devices.

- **TH202 Infrared Thermometer:** This device measures surface temperature only. **It is not intended for human or animal body temperature measurement.** Do not point the laser directly at eyes or reflective surfaces. Avoid measuring through smoke or steam, as this can affect accuracy.
- **B15 Voltage Tester:** Always assume circuits are live until proven otherwise. Do not use if the device appears damaged. Ensure proper grounding when testing electric fences.
- Keep both devices away from water and extreme temperatures.
- Do not attempt to disassemble or modify the devices. Refer servicing to qualified personnel.
- Replace batteries promptly when the low battery indicator appears.

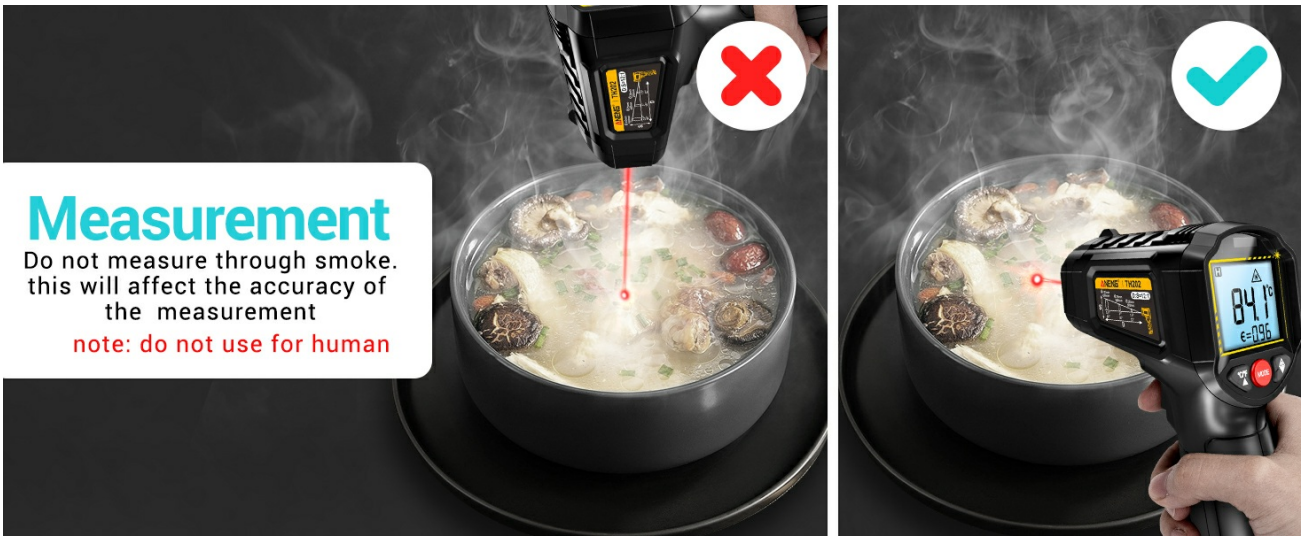

Image: An infrared thermometer being used to measure the temperature of soup. Text on the image warns against measuring through smoke and explicitly states, "do not use for human."

3. Product Overview

3.1. ANENG TH202 Infrared Thermometer

The TH202 is a non-contact infrared thermometer designed for quick and accurate surface temperature measurements. It features a laser pointer for precise targeting, a backlit LCD for clear readings, and adjustable emissivity for various surfaces.

Key Features:

- Temperature Range: -50°C to 600°C (-58°F to 1112°F)
- Distance-to-Spot Ratio (D:S): 12:1
- High-sensitivity sensor for 0.5-second response time
- Switchable units: Celsius (°C) and Fahrenheit (°F)
- Backlit LCD display
- Automatic power-off after 15 seconds of inactivity
- High/Low temperature alarm function
- Adjustable emissivity

Parts Identification (TH202):

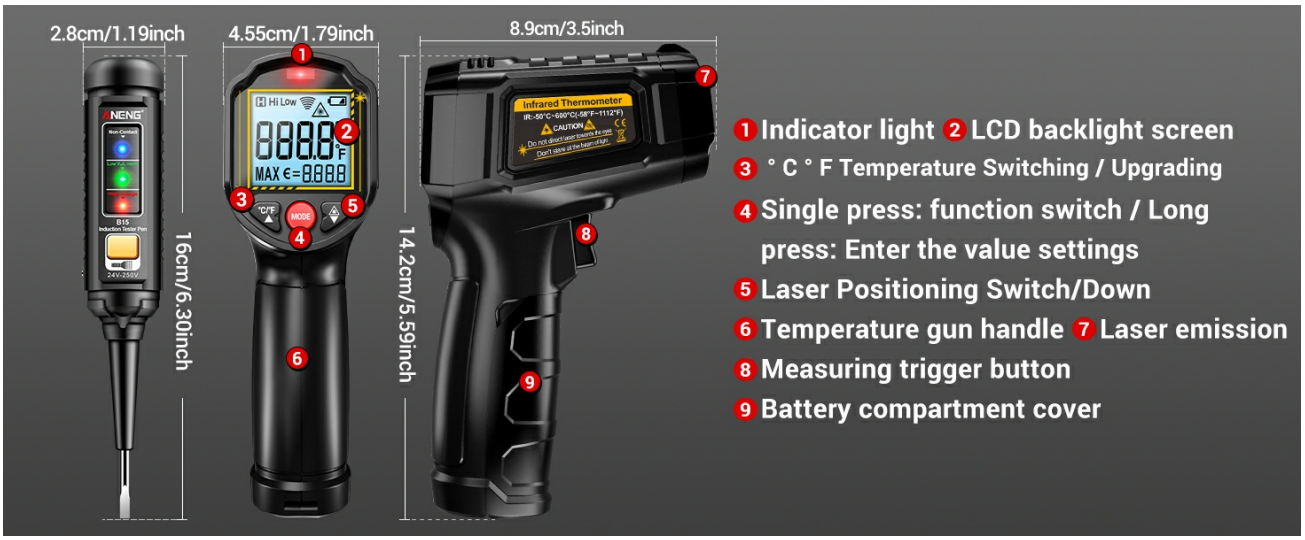

Image: A detailed diagram showing the ANENG TH202 Infrared Thermometer and B15 Voltage Tester with numbered parts. For the

TH202, labels include: 1. Indicator light, 2. LCD backlight screen, 3. °C/°F Temperature Switching / Upgrading, 4. Single press: function switch / Long press: Enter the value settings, 5. Laser Positioning Switch/Down, 6. Temperature gun handle, 7. Laser emission, 8. Measuring trigger button, 9. Battery compartment cover.

3.2. ANENG B15 Voltage Tester

The B15 is a versatile electrical tester designed to detect AC voltage in various electrical components, identify live/neutral wires, and check for line breakpoints. It features an LCD display and a built-in flashlight for convenience in dark environments.

Key Features:

- AC Voltage Detection Range: 24V to 250V
- Non-contact detection
- Zero FireWire detection
- Self-test function
- Line breakpoint lookup
- Electrical on-off detection
- Battery detection capability
- LCD display and flashlight

Parts Identification (B15):

Refer to the combined diagram above (Image: Labeled diagram of ANENG TH202 Infrared Thermometer and B15 Voltage Tester) for B15 parts identification. Key components include the probe tip, indicator lights, LCD display, and function buttons.

4. Setup

4.1. Battery Installation

Both the TH202 Infrared Thermometer and B15 Voltage Tester require AAA batteries for operation. Batteries are typically included with the product.

1. Locate the battery compartment cover on the handle of the TH202 (refer to part 9 in the diagram) and on the rear of the B15.
2. Open the cover.
3. Insert the AAA batteries, ensuring correct polarity (+ and -).
4. Close the battery compartment cover securely.

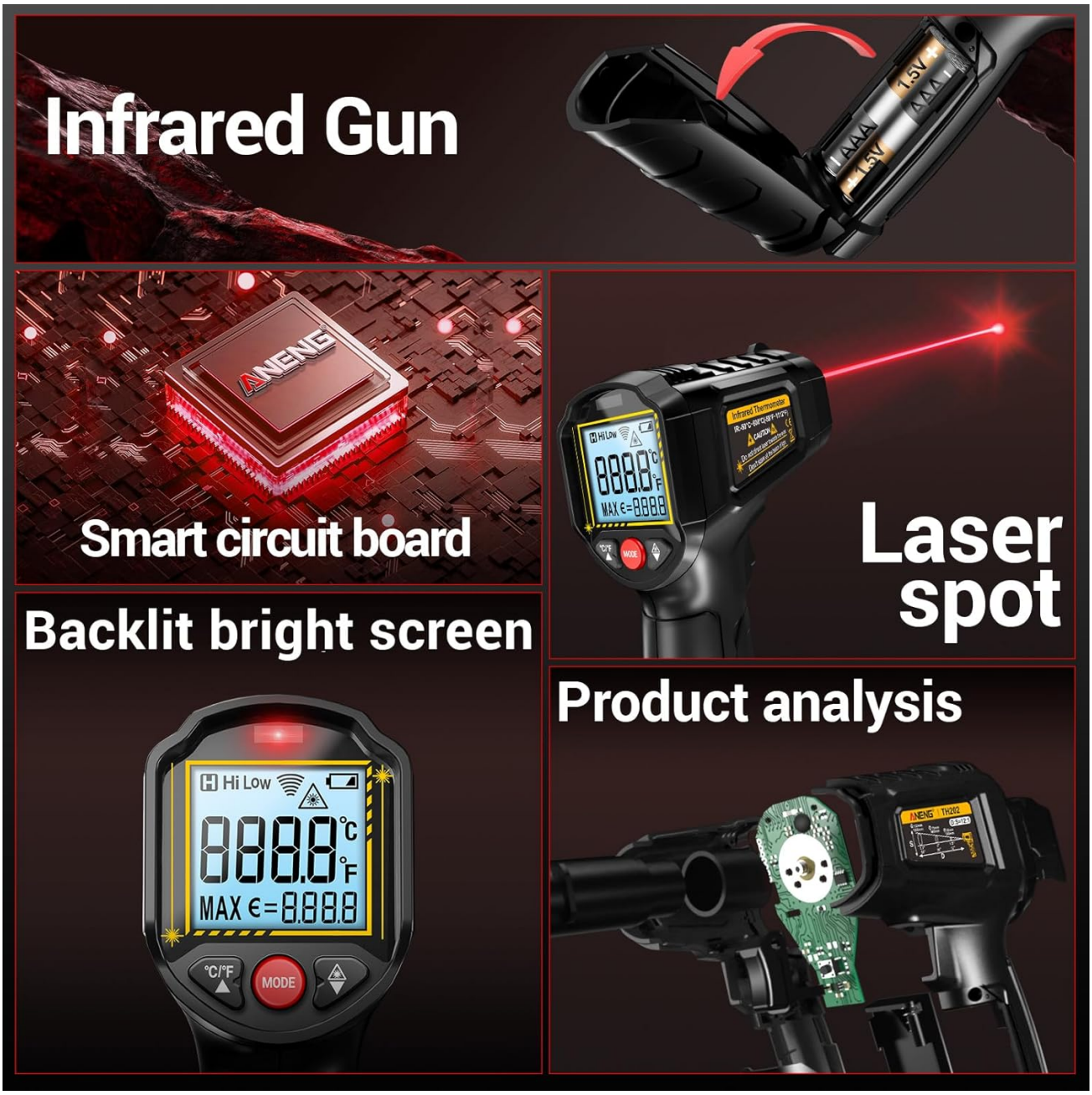

Image: A close-up view of the ANENG TH202 Infrared Thermometer, highlighting the battery compartment on the handle, which is open to show battery insertion.

5. Operating Instructions

5.1. ANENG TH202 Infrared Thermometer Operation

1. **Power On:** Press the measuring trigger button (part 8) to turn on the device. The backlit LCD will illuminate.
2. **Select Temperature Unit:** Press the °C/°F button (part 3) to switch between Celsius and Fahrenheit.
3. **Laser Positioning:** Press the Laser Positioning Switch (part 5) to activate or deactivate the laser pointer for precise targeting.
4. **Taking a Measurement:** Point the thermometer at the target object. Ensure the distance-to-spot ratio (12:1) is considered for accurate readings. For example, at 12 inches distance, the measurement spot diameter is 1 inch. Press and hold the measuring trigger button (part 8). The temperature reading will appear on the LCD. Release the button to hold the reading.
5. **Temperature Alarm:** The device features high and low temperature alarms. These can be configured via the MODE button (part 4). A long press on the MODE button allows entry into value settings for these alarms.

6. **Emissivity Adjustment:** The TH202 allows for emissivity adjustment, which is crucial for accurate readings on different surface types. Consult the full manual for specific emissivity values for common materials. This setting is typically accessed via the MODE button.
7. **Auto-Off:** The device will automatically power off after 15 seconds of inactivity to conserve battery life.

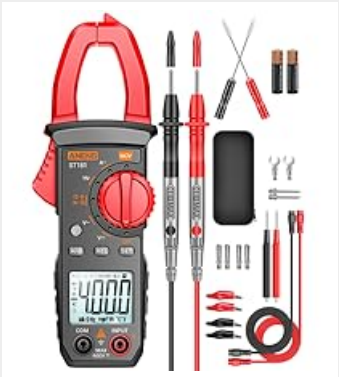

Image: A close-up of the ANENG TH202 Infrared Thermometer's digital display showing temperature readings and the control buttons for Celsius/Fahrenheit, Mode, and Laser positioning.

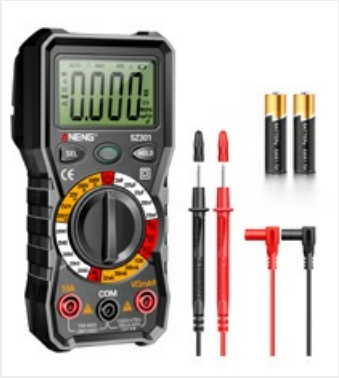

Image: An ANENG TH202 Infrared Thermometer being used to measure the surface temperature of a pizza inside an oven, demonstrating a practical application.

5.2. ANENG B15 Voltage Tester Operation

The B15 offers multiple testing functions for electrical circuits and components.

1. **Non-Contact AC Voltage Detection:** Hold the tester near a wire, outlet, or electrical component. If AC voltage is present, the indicator lights will illuminate, and an audible alert may sound.
2. **Zero FireWire Detection:** Insert the probe into the live (fire) wire. The tester will indicate the presence of a live connection.
3. **Self-Test Function:** Activate the self-test function (usually by pressing a button or specific sequence) to ensure the tester is working correctly before use.
4. **Line Breakpoint Lookup:** Move the tester along an insulated wire. The indicator will change or cease to indicate voltage at the point of a break in the line.
5. **Electrical On-Off Detection:** Use the tester to determine if a circuit or device is receiving power.
6. **Battery Detection:** The B15 can be used to check the voltage of small batteries.
7. **Flashlight:** Press the flashlight button to illuminate dark work areas.

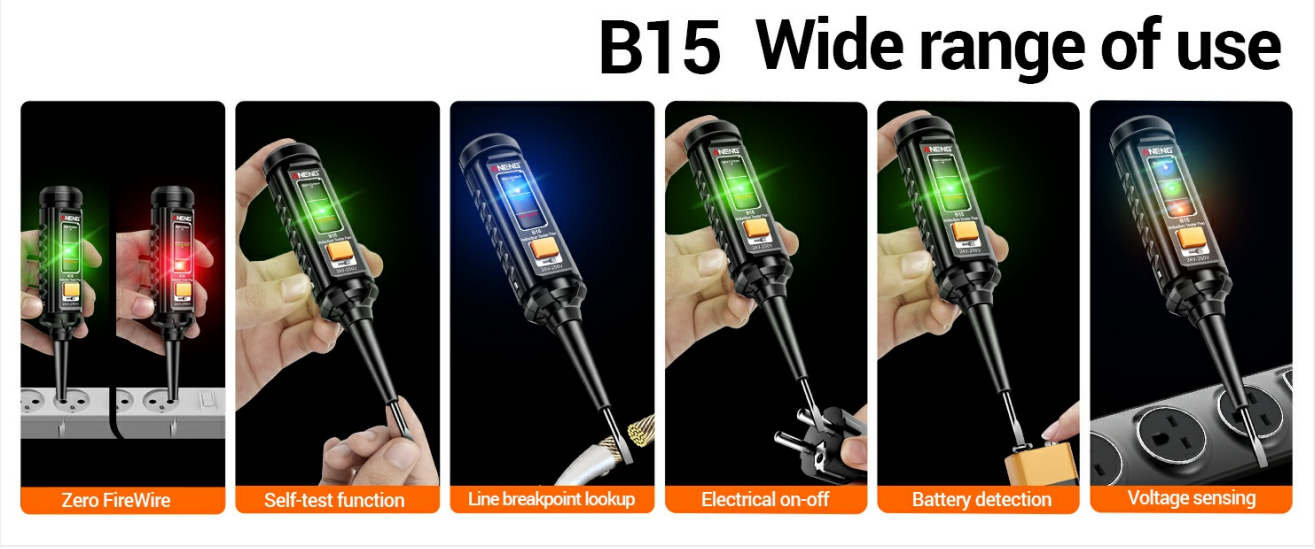

Image: A collage showing the ANENG B15 Voltage Tester in six different use scenarios: Zero FireWire detection, Self-test function, Line breakpoint lookup, Electrical on-off detection, Battery detection, and Voltage sensing.

6. Maintenance

Proper maintenance ensures the longevity and accuracy of your ANENG devices.

- **Cleaning:** Wipe the devices with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure the devices are completely dry before storage or next use.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display. Remove batteries if the devices will not be used for an extended period to prevent leakage.
- **Storage:** Store the devices in a cool, dry place, away from direct sunlight and extreme temperatures. Keep them in their original packaging or a protective case to prevent damage.
- **Calibration:** The TH202 Infrared Thermometer is factory calibrated. If you suspect a calibration issue, contact ANENG customer support.

7. Troubleshooting

If you encounter issues with your ANENG devices, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
TH202: No display/Device won't turn on	Dead or incorrectly installed batteries	Check battery polarity; replace with fresh AAA batteries.
TH202: Inaccurate temperature readings	Incorrect distance-to-spot ratio; measuring through smoke/steam; incorrect emissivity setting; dirty lens	Ensure proper distance; avoid obstructions; adjust emissivity; clean the lens gently.
B15: No indication when testing live wire	Dead batteries; device malfunction	Replace batteries; perform self-test. If issue persists, contact support.
B15: Flashlight not working	Dead batteries	Replace batteries.

For issues not listed here, please contact ANENG customer support.

8. Specifications

8.1. ANENG TH202 Infrared Thermometer

Feature	Specification
Model Name	TH202
Temperature Range	-50°C to 600°C (-58°F to 1112°F)
Distance-to-Spot Ratio (D:S)	12:1
Response Time	0.5 seconds
Display Type	Digital, Backlit LCD
Power Source	Battery Powered (AAA)
Auto-Off	15 seconds
Special Feature	High Accuracy, Non-Contact, Temperature Alarm, Adjustable Emissivity
Outer Material	Plastic
Color	Black

8.2. ANENG B15 Voltage Tester

Feature	Specification
Model Name	B15
Voltage Detection Range	24V to 250V AC
Detection Type	Non-Contact
Display	LCD with Flashlight
Power Source	Battery Powered (AAA)

9. Warranty and Support

ANENG products are manufactured to high-quality standards. For warranty information or technical support, please refer to the warranty card included with your product or visit the official ANENG website. You can also contact ANENG customer service through the retailer where the product was purchased.

ANENG Store: Visit the ANENG Store on Amazon