BTMETER BT-1500APP

BTMETER BT-1500APP Industrial Infrared Thermometer Gun User Manual

Model: BT-1500APP

1. Introduction

Thank you for choosing the BTMETER BT-1500APP Industrial Infrared Thermometer Gun. This device is designed for safe, non-contact temperature measurement across a wide range of industrial, HVAC, and culinary applications. It features dual laser targeting, adjustable emissivity, and Bluetooth connectivity for real-time monitoring and data sharing via a mobile application. This manual provides essential information for proper operation and maintenance.

Important Note: This industrial temperature pistol is not intended for measuring human or animal body temperature.

2. Safety Information

Please read all safety warnings and instructions carefully before using this product to prevent injury or damage to the device.

- Do not point the laser directly at eyes or indirectly off reflective surfaces.
- Do not use the thermometer near explosive gases, steam, or dust.
- Avoid exposing the device to extreme temperatures, humidity, or direct sunlight.
- Keep the device away from strong electromagnetic fields.
- This device is not waterproof. Avoid contact with liquids.

3. Package Contents

Verify that all items are present upon opening the package:

- BTMETER BT-1500APP Infrared Thermometer Gun
- Carrying Pouch
- 9V Battery

- Mini Screwdriver
- Carabiner Clip
- User Manual

Image 1: BTMETER BT-1500APP Infrared Thermometer Gun with included carrying pouch, 9V battery, screwdriver, and carabiner clip.

4. Setup

4.1. Battery Installation

1. Locate the battery compartment on the handle of the thermometer.
2. Use the provided mini screwdriver to open the battery compartment cover.
3. Connect the 9V battery to the battery clip, ensuring correct polarity.

4. Place the battery inside the compartment and close the cover securely with the screwdriver.

Video 1: Demonstrates the process of installing the 9V battery into the BTMETER BT-1500APP Infrared Thermometer Gun and securing the compartment cover.

5. Operating Instructions

5.1. Basic Operation

To take a temperature reading, simply point the thermometer at the target surface and pull the trigger. The temperature will be displayed on the LCD screen.

Image 2: Overview of the thermometer's components, including its dimensions, LED flashlight, dual laser pointers for targeting, and the infrared temperature sensor.

5.2. Button Functions

The BT-1500APP features several buttons for various functions:

- **Trigger:** Pull to initiate temperature measurement.
- **E/T Button:** When the product is working, press to enter the setting emissivity mode. Long press to turn the backlight/headlight on or off.
- **T/DN Button:** Used to reduce emissivity in setting mode or to switch between Celsius (°C) and Fahrenheit (°F) temperature units.
- **Backlight/UP Button:** Used to increase emissivity in setting mode or to turn the backlight on/off.
- **MODE Button:** Used to cycle through measurement options: MAX (Maximum), MIN (Minimum), DIF (Difference), AVG (Average), HAL (High Alarm), LAL (Low Alarm) modes.
- **Laser Button:** Press to turn the dual laser pointers on or off for precise targeting.

Image 3: The dual laser targeting system helps to accurately define the measurement area, especially at a 30:1 distance-to-spot ratio, ensuring precise readings from a safe distance.

Image 4: The thermometer supports multiple measurement modes including Average (AVG), Minimum (MIN), and Maximum (MAX), along with configurable high and low temperature alarms.

5.3. Adjustable Emissivity

The emissivity (ε) setting can be adjusted from 0.1 to 1.0 to accurately measure different types of surfaces. Refer to common emissivity values for various materials:

Material	Emissivity (ε)
Water	0.90-0.96
Timber	0.90
Stainless Steel	0.20-0.30
Paper	0.70-0.94
Most organic materials, painted surfaces, and plastics	0.95 (default)

Image 5: Illustrates how different materials like water, timber, stainless steel, and paper have varying emissivity values, which can be adjusted on the device for accurate readings.

5.4. Bluetooth Mobile App Connection

The BT-1500APP supports connection to a mobile application for real-time monitoring, control, and data sharing.

1. Download the "AI Link" app from the Google Play Store or Apple App Store. You can scan the QR code provided in the manual or search for "AI Link".
2. Ensure Bluetooth is enabled on your mobile device.
3. Open the AI Link app and follow the on-screen instructions to connect to your BT-1500APP thermometer.
4. Once connected, you can view real-time temperature data, adjust settings, set alarms, and transmit/share measurement data in TXT format.

Image 6: The thermometer's Bluetooth connectivity allows for remote control, real-time monitoring, and data sharing directly to a mobile application.

6. Maintenance

6.1. Cleaning

- Wipe the device clean with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- Keep the lens clean to ensure accurate readings. Use a soft cloth or cotton swab with a small amount of isopropyl alcohol if necessary.

6.2. Storage

- When not in use for extended periods, remove the battery to prevent leakage.
- Store the thermometer in its carrying pouch in a cool, dry place, away from direct sunlight and extreme temperatures.

7. Troubleshooting

Problem	Possible Cause	Solution
No display/Device won't turn on	Low or dead battery; Incorrect battery installation	Replace battery; Reinstall battery with correct polarity
Inaccurate readings	Incorrect emissivity setting; Dirty lens; Distance to spot ratio too large	Adjust emissivity for the target material; Clean the lens; Move closer to the target within the D:S ratio
Cannot connect to mobile app	Bluetooth not enabled; App not installed; Device out of range	Enable Bluetooth on phone; Install "AI Link" app; Ensure device is within 80m range
Laser not working	Laser function turned off	Press the Laser button to activate

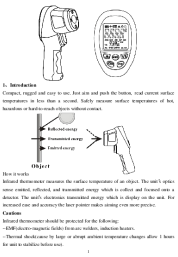
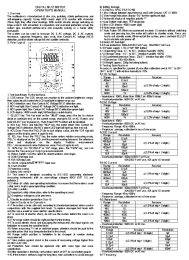
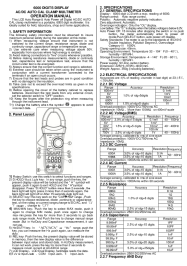
8. Specifications

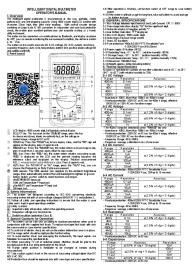
- **Model:** BT-1500APP
- **Temperature Range:** -58°F to 2732°F (-50°C to 1500°C)
- **Accuracy:** ±2% of reading or ±4°F (±2°C)
- **Distance Spot Ratio (D:S):** 30:1
- **Emissivity:** Adjustable 0.1~1.0
- **Response Time:** 0.25 seconds
- **Laser Type:** Dual Laser
- **Display Type:** Backlit LCD
- **Special Features:** Max/Min/AVG/DIF modes, High/Low Temperature Alarms, Data Hold, LED Flashlight, Bluetooth Connectivity
- **Power:** 9V Battery
- **Auto Power Off:** Yes
- **Material:** Plastic
- **Dimensions:** Approximately 9.33 x 6.42 x 3.31 inches
- **Weight:** Approximately 5.64 ounces

9. Warranty and Support

The BTMETER BT-1500APP Infrared Thermometer Gun comes with a **365-day warranty** and **lifetime technical support**. For any questions, technical assistance, or warranty claims, please contact BTMETER customer support through their official website or the contact information provided with your purchase. Please have your model number (BT-1500APP) and purchase details ready when contacting support.

Related Documents - BT-1500APP

	BTMETER BT-1500 Quick Start Guide A quick start guide for the BTMETER BT-1500 infrared thermometer, covering battery installation, basic operation, and display interpretation.
	BTMETER BT-1500 Non-Contact Infrared Thermometer User Manual User manual for the BTMETER BT-1500 non-contact infrared thermometer, covering its introduction, how it works, safety warnings, quick start guide, maintenance procedures, and detailed specifications.
	BTMETER BT-570CAPP Bluetooth Connection Guide Step-by-step instructions for connecting the BTMETER BT-570CAPP clamp meter to your smartphone via Bluetooth.
	Digital Multimeter Operator's Manual - BTMETER BT-39K Operator's manual for the BTMETER BT-39K Digital Multimeter, detailing its features, specifications, operating instructions, safety precautions, and maintenance.
	6000 Digits Clamp Multimeter Operation Manual Operation manual for the 6000 Digits AC/DC Auto Cal Clamp Multimeter, detailing safety information, specifications, measuring instructions, and maintenance.



[Intelligent Digital Multimeter Operator's Manual - BTMETER BT-90EPD]

Comprehensive operator's manual for the BTMETER BT-90EPD Intelligent Digital Multimeter. Covers detailed specifications, safety guidelines, operating instructions for measuring voltage, current, resistance, capacitance, frequency, duty cycle, temperature, and battery testing. Features include a 4000-count LCD, auto/manual ranging, auto backlight, and Bluetooth connectivity for mobile app data logging and analysis.