Wintact WT313A

Wintact WT313A Infrared Thermometer Instruction Manual

Model: WT313A

1. Introduction

Thank you for purchasing the Wintact WT313A Infrared Thermometer. This non-contact thermal temperature gun is designed for safe and accurate surface temperature measurements across a wide range of applications, including food cooking, pizza ovens, and various industrial uses. It offers a temperature range of -50°C to 400°C (-58°F to 752°F). Please read this manual thoroughly before use to ensure proper operation and to prevent damage to the device or injury.



Image: The Wintact WT313A Infrared Thermometer, highlighting its instant reading and versatile applications in a barbecue setting.

2. Safety Information

WARNING: Failure to follow these safety instructions may result in injury or damage to the device.

- **DO NOT USE ON HUMANS OR ANIMALS:** This thermometer is an industrial-grade device designed for surface temperature measurement of objects. It is not intended for medical use and cannot provide accurate body temperature readings.
- **LASER SAFETY:** Do not point the laser directly at eyes or indirectly off reflective surfaces. The laser is for aiming

purposes only.

- **NON-CONTACT MEASUREMENT:** The device measures surface temperature. The red laser dot indicates the approximate center of the measurement area, but the actual measured surface is approximately 2 cm below the laser point.
- **AVOID MEASURING THROUGH SMOKE OR STEAM:** Ensure the measurement is taken without interference from smoke or steam to obtain accurate results.
- Keep the device away from children.
- Do not immerse the unit in water.
- Do not expose the device to extreme temperatures or direct sunlight for extended periods.



Image: Important safety warning: Do not use the infrared thermometer on humans or animals, as it is designed for surface temperature measurement of objects.



Image: Guidance on proper handling and grip of the thermometer for safe and effective use.

3. Product Overview

The Wintact WT313A Infrared Thermometer is a handheld device designed for quick and accurate non-contact temperature measurements. It features a clear LCD display and intuitive controls.

3.1 Components

- Infrared Sensor
- Laser Pointer
- LCD Display
- Measurement Trigger
- Mode Button
- Up/Down Buttons (for C/F switch, emissivity adjustment, alarm settings)
- Battery Compartment

3.2 Display and Controls

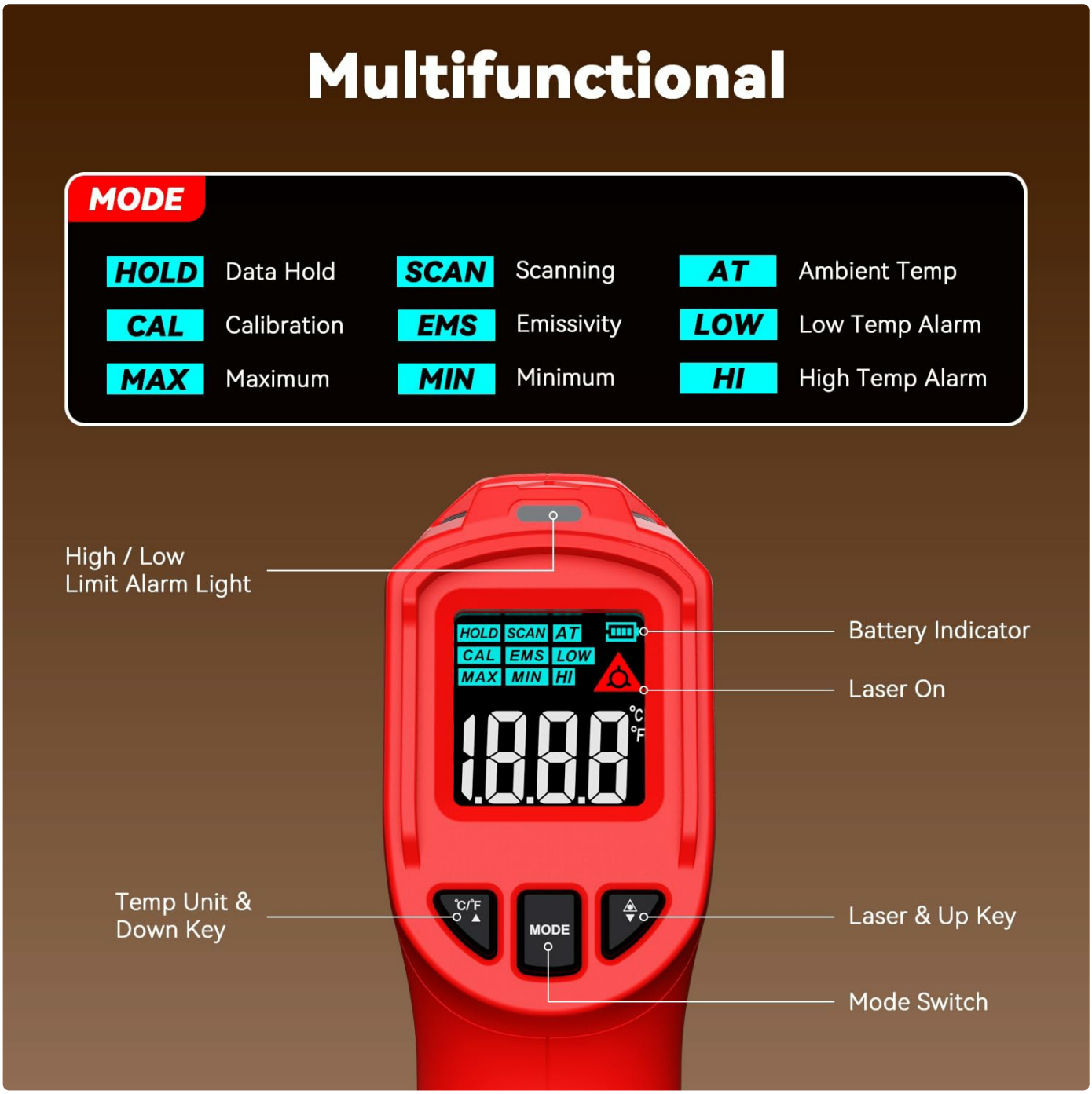


Image: A detailed view of the WT313A's display and control buttons, including indicators for Data Hold, Scan, Ambient Temperature, Low/High Temperature Alarm, Calibration, Emissivity, Maximum/Minimum readings, Battery Indicator, Laser On, Temperature Unit, and Mode Switch.

The LCD display provides real-time temperature readings, battery status, and various mode indicators. The backlit screen ensures readability in different lighting conditions.

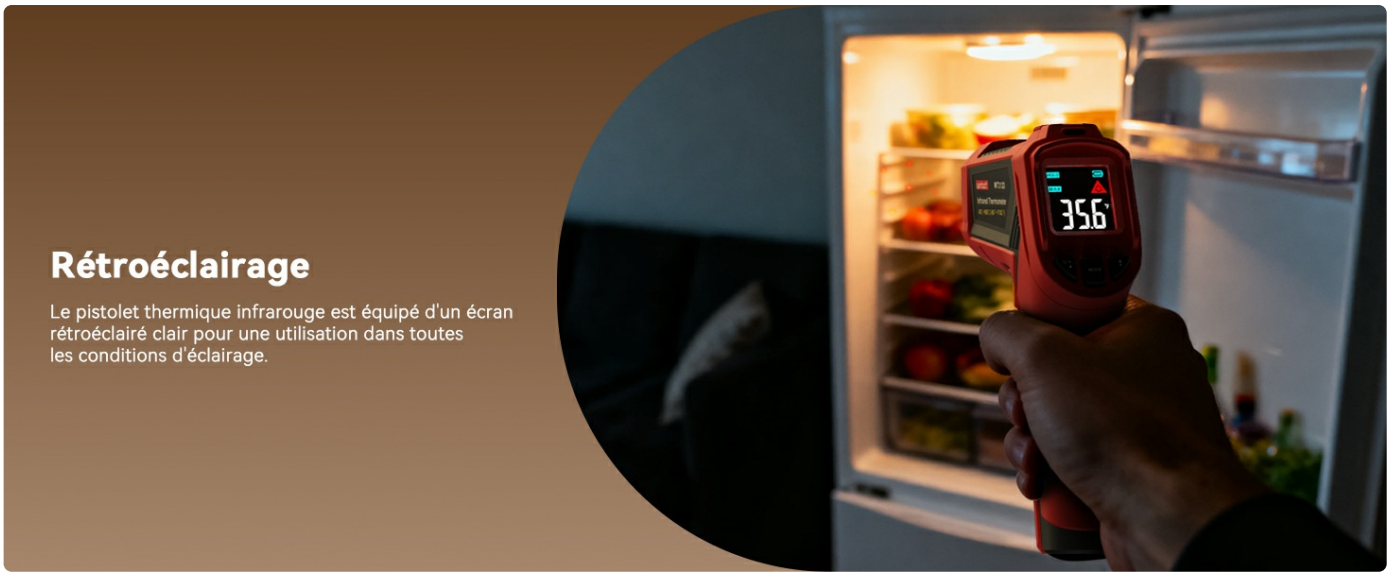


Image: The backlit display of the thermometer, ensuring clear visibility in various lighting environments, such as a dimly lit industrial area.

4. Setup

4.1 Package Contents

Before proceeding, ensure all items are present in the package:

- 1 x Wintact WT313A Infrared Thermometer
- 2 x AAA Batteries
- 1 x User Manual



Image: The complete package contents: the WT313A thermometer, its user manual, and two AAA batteries.

4.2 Battery Installation

1. Locate the battery compartment cover on the handle of the thermometer.
2. Slide or open the cover to access the battery compartment.
3. Insert two AAA batteries, ensuring correct polarity (+/-) as indicated inside the compartment.
4. Close the battery compartment cover securely.

The device is now ready for use. A low battery indicator will appear on the display when the batteries need replacement.

5. Operating Instructions

5.1 Basic Measurement

1. Point the thermometer at the target surface.
2. Press and hold the measurement trigger. The laser pointer will activate to assist with aiming.
3. The display will show the surface temperature in real-time.
4. Release the trigger to hold the last measured temperature on the display (Data Hold function).

For optimal accuracy, maintain a distance-to-spot ratio of 12:1. This means for every 12 units of distance from the object, the measurement spot diameter is 1 unit. The optimal measuring distance is approximately 36 cm (14.17 inches).



Image: Non-contact measurement in action, showing the thermometer measuring the temperature of frying bacon, with an explanation of the 12:1 distance-to-spot ratio.



Image: The data hold function, which keeps the last measurement on the display after releasing the trigger, useful for recording temperatures in various areas like window frames.

5.2 Switching Temperature Units (°C/°F)

Press the **°C/°F** button (often combined with the Up/Down key) to toggle between Celsius and Fahrenheit temperature units.

5.3 Mode Functions

Press the **MODE** button to cycle through various functions:

- **SCAN:** Continuous measurement while the trigger is held.
- **HOLD:** Displays the last measured temperature after releasing the trigger.
- **MAX/MIN:** Displays the maximum or minimum temperature recorded during a continuous scan. To use, hold the trigger and slowly scan the target area.
- **AT (Ambient Temperature):** Measures the surrounding air temperature.
- **HI/LOW (High/Low Temperature Alarm):** Allows setting high and low temperature thresholds. If the measured temperature exceeds these limits, an alarm will sound, and an indicator light will flash.
- **EMS (Emissivity):** Adjusts the emissivity value for different materials.
- **CAL (Calibration):** Allows for calibration adjustment within a range of +/- 5°C to ensure measurement accuracy.



Image: Extreme value tracking, showing MAX, MIN, and Ambient Temperature readings, useful for monitoring temperature fluctuations.

Temperature Alarm

You can set high and low temperature alarm thresholds



Image: Temperature alarm function, allowing users to set high and low temperature thresholds for alerts.



Image: The ambient temperature feature, showing the thermometer measuring the surrounding environment's temperature.

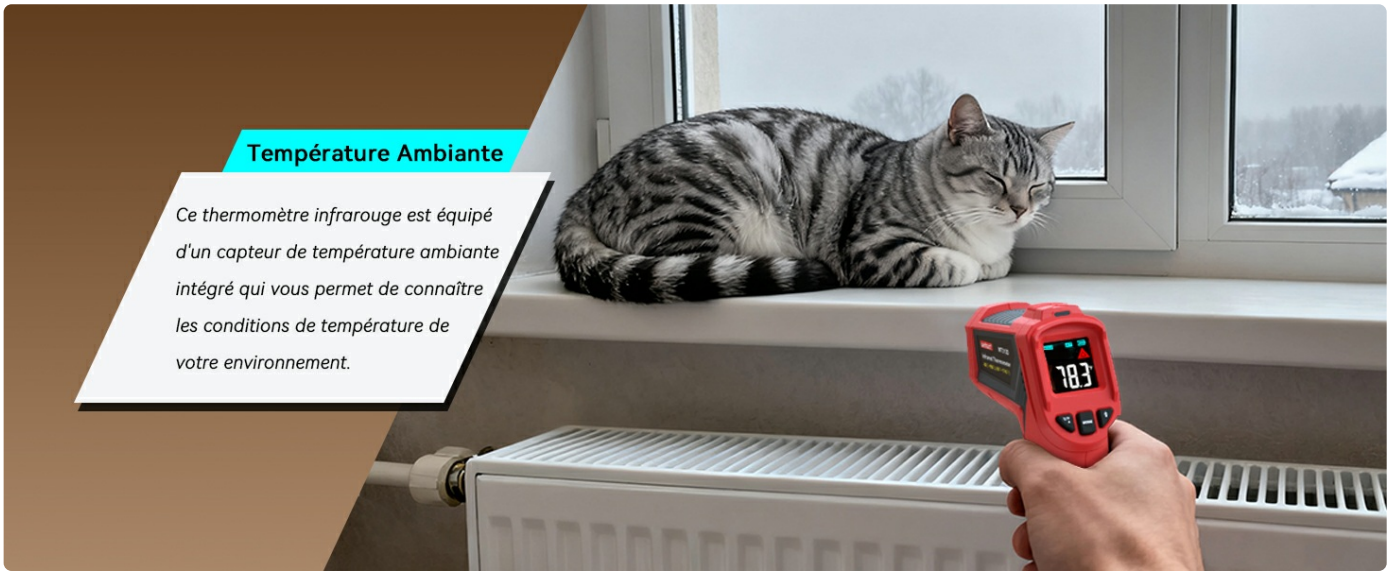


Image: The calibration function, allowing users to adjust settings for precise measurements, demonstrated by measuring ice water.

5.4 Adjustable Emissivity

Emissivity is the ability of a material to emit thermal energy. Different materials have different emissivity values. The WT313A allows you to adjust emissivity from 0.10 to 1.00 for accurate measurements on various surfaces.

- Press the **MODE** button until "EMS" appears on the display.
- Use the Up/Down buttons to adjust the emissivity value.
- Refer to a standard emissivity table for common materials if precise adjustment is needed.

Adjustable Emissivity

It’s enabling precise measurements suitable for various materials



Image: Adjustable emissivity feature, enabling precise temperature measurements on a wide range of materials and surfaces.



Image: Using adjustable emissivity to accurately measure the temperature of melting chocolate, highlighting its utility in cooking.

6. Specifications

Feature	Specification
Brand	Wintact
Model	WT313A
Temperature Range	-50°C to 400°C (-58°F to 752°F)
Accuracy	±1.5% or ±1.5°C (whichever is greater)
Response Time	0.5 seconds
Distance-to-Spot Ratio (D:S)	12:1
Emissivity	Adjustable (0.10 to 1.00)
Display Type	Digital LCD with Backlight
Power Source	2 x AAA Batteries (included)
Special Features	Max/Min display, Ambient temperature, High/Low temperature alarm, Auto-off, Calibration function, Low battery indicator, Data hold, C/F switch
Material	Plastic
Color	Red
Item Weight	145 Grams
Item Length	15.3 Centimeters
Certifications	CE, FCC, RoHS

7. Maintenance

- **Cleaning:** Wipe the device with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure the lens is clean for accurate readings.
- **Storage:** Store the thermometer in a cool, dry place when not in use. Remove batteries if storing for extended periods to prevent leakage.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display.

8. Troubleshooting

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
No display/Device won't turn on	Dead or incorrectly installed batteries	Check battery polarity; replace batteries.
Inaccurate readings	• Dirty lens • Incorrect emissivity setting • Measuring through smoke/steam • Target too far or too small	• Clean the lens carefully. • Adjust emissivity for the target material. • Ensure clear line of sight to the target. • Move closer to the target, ensuring D:S ratio is maintained.
Laser not working	Laser function disabled or malfunction	Check if the laser is enabled via the controls. If not, contact support.
Auto-off too quickly	Normal operation (7 seconds of inactivity)	This is a power-saving feature. Press the trigger to reactivate.



Image: The automatic shut-off feature, which powers down the thermometer after 7 seconds of inactivity to save battery life.

9. Warranty and Support

The Wintact WT313A Infrared Thermometer comes with a**12-month worry-free warranty**. If you encounter any issues or have questions regarding your device, please contact our friendly customer service team for assistance.
For support, please refer to the contact information provided on the product packaging or the official Wintact website.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question