

## Infrared Thermometer

Model No.: Lasergrip 774

## **User Manual**



Questions or Concerns? support@etekcity.com • (855)-686-3835

## Thank you for purchasing the Lasergrip Infrared Thermometer by Etekcity.

This easy-to-use device lets you conveniently and accurately measure surface temperatures from a distance without the need of any direct contact. If you have any questions or concerns, please reach out to our helpful Customer Support Team at support@etekcity.com.

## READ AND SAVE THESE INSTRUCTIONS

## Safety Use & Care

# To avoid damage to the Lasergrip, please read and follow all instructions and safety guidelines in this manual.

- Do not point the Lasergrip at another person or animal.
- Do not point the Lasergrip at an aircraft.
- Avoid direct or indirect eye contact with the Lasergrip. Laser radiation may cause eye damage.
- Do not view the Lasergrip with optical instruments.
- Always make bystanders aware of dangers of making eye contact with the Lasergrip.
- Do not allow children to operate the Lasergrip.
- Always remove the battery when cleaning the Lasergrip.
  Do not use the Lasergrip to determine whether a highly reflective surface is safe to touch. Temperature measurement may be
- inaccurate, which may cause burns.
- Keep the Lasergrip away from objects that produce electromagnetic fields, such as arc welders and induction heaters.
- **Do not** expose the Lasergrip to direct sources of heat for extended periods of time.
- Do not use the Lasergrip near explosive gases or other potentially explosive areas.
- Household use only.

WARNING: THIS DEVICE PRODUCES CLASS2 LASER RADIATION. USE EXTREME CAUTION WHEN IN USE DO NOT LOOK INTO DIRECT OR REFLECTED LASER LIGHT BEAM OR VIEW BEAM WITH OPTICAL INSTRUMENTS. DO NOT AIM LASER AT ANOTHER PERSON OR ANIMAL. LASER RADIATION MAY DAMAGE YOUR EVE. DO NOT DISASSEMBLE.

#### THIS DEVICE COMPLIES WITH 21 CFR 1040.10 AND 1040.11.



THIS INFORMATION IS ALSO LISTED ON LABELS ON THE LASERGRIP, AS WELL AS UPDATES TO THE PRODUCT INFORMATION, INCLUDING THE DATE OF MANUFACTURING AND MANUFACTURER ADDRESS.

## **Package Content**

1 x Infrared Thermometer 1 x 9V DC Battery (Pre-Installed) 1 x User Manual

## Specifications

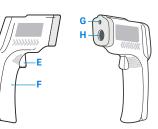
Measurement Range	-58°F ~ 716°F (-50°C ~ 380°C)
Accuracy	≥ 212°F (100°C): ± 2% ≤ 212°F (100°C): ± 3.6°F (2°C)
Resolution	0.1°F/°C
Distance-to-Spot Ratio	12:1
<b>Response Time</b>	< 500ms
Emissivity	0.95
Battery	9V DC
Auto-Off	15 seconds

**Function Diagram** 

## A. LCD Display

B. Unit Conversion (°C/°F)
C. Laser Pointer On/Off

- Display Backlight On/Off
- E. TriggerF. Battery Compartment
- G. Laser PointerH. IR Sensor



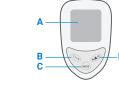
## **Function Diagram**



K. Result Lock



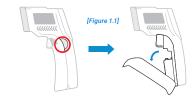




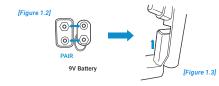
#### **Battery Installation & Replacement**

A new pre-installed 9V battery comes in protective plastic wrap inside your Lasergrip. Follow the steps below to properly install or replace the battery

- 1. Open the battery cover. For first-time use, take the battery out and remove the plastic wrapper. [Figure 1.1]
- 2. Securely connect the battery to the battery terminals, making sure the leads and terminals are connected correctly. [Figure 1.2]
- Reinsert the battery back into the compartment. 4. Close the battery cover, making sure that the wires are tucked inside the
- battery compartment. [Figure 1.3]



 The low battery indicator will appear on the display when the power is running low. Immediately replace the battery when the icon appears. Remove the battery before storing if the Lasergrip is not being used for a long time



## Operation

#### Surface Temperature Measurement

- 1. Press the trigger to turn on the Lasergrip.
- 2. Optionally, press (a) to use the laser for aiming guidance.
- 3. Point the Lasergrip towards a surface.
- 4. Press and hold the trigger.
- Note: To scan live temperature readings on a surface, keep holding the trigger as you move the Lasergrip.
- 5. Release the trigger and the LCD display will show the calculated temperature.
- 6. Press the trigger once again to take another measurement.

#### NOTE:

- The Lasergrip only measures surface temperature, and cannot accurately measure internal temperature
- The Lasergrip cannot measure the temperature of objects behind glass or other transparent materials, and may be inaccurate in areas with steam, dust, or any other particles in the air.
- The Lasergrip LCD will display "HI" when the measured temperature is higher than the measurable range, and will display "LO" when the measured temperature is lower than the measurable range.



temperature result

temperature reading

#### Unit Conversion



#### Laser Activation

Press ( while the Lasergrip is on. This will let you turn the laser on or off when you press the trigger.

### **Display Backlight Operation**

To turn the display backlight on or off, press I while the Lasergrip is on.



The distance-to-spot D:S ratio determines the accuracy of the reading taken by the Lasergrip. The smaller the surface that you want to measure, the closer you should hold the Lasergrip to the surface.

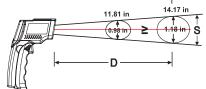
The Lasergrip's 12:1 D:S ratio means that when 12 inches from a surface, the Lasergrip measures a "spot" 1 inch in diameter. When 24 inches away. the "spot" will be 2 inches, and so on. The greater the distance, the larger the surface area measured

The Lasergrip's reading will be less accurate over a larger surface area due to increased temperature variation compared to a smaller surface

# Distance (D) to Spot (S) size D:S = 12:1

recommended

 $\bigcirc$ 



#### Emissivity

The Lasergrip has a fixed 0.95 emissivity setting, which is ideal for measuring non-reflective surfaces, non-metals, painted surfaces, and most organic materials.

Emissivity measures how well a surface emits thermal or infrared energy ranging from 0.00-1.00. Non-reflective surfaces have a higher emissivity (closer to 1) and reflective surfaces have a lower emissivity (closer to 0). The Lasergrip is meant for high-emissivity surfaces, and may not accurately measure polished, shiny, or reflective surfaces.

### Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and 2. This device must accept any interference received, including
- interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on. the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## FCC SDOC SUPPLIER'S DECLARATION OF CONFORMITY

Etekcity Corporation hereby declares that this equipment is in compliance with the FCC Part 15 Subpart B. The declaration of conformity may be consulted in the support section of our website, accessible from www.etekcity.com

## Warranty Information

#### Scan Here to Receive Exclusive News:



- Your product comes with 2 years of warranty. starting from the date of purchase.
- Scan the QR code or visit etekcity.com/warranty. 2. Enter your purchase info to receive exclusive news.
- Learn about our quality customer support and gain easy access to warranty information

## **Customer Support**

If you have any questions or concerns about your new product, please contact our helpful Customer Support Team.

Etekcity Corporation

1202 N. Miller St., Suite A Anaheim, CA 92806

#### Support Hours Mon-Fri, 9:00 am-5:00 pm PST/PDT

Email: support@etekcity.com Toll-Free: (855) 686-3835

\*Please have your invoice and order ID ready before contacting Customer Support.

A5-01.00 D 22D06 us



