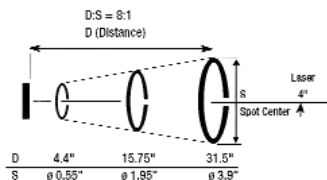


Congratulations on your purchase of the Mannix Infrared Thermometer, model IRT6. The compact size lets you get into tight places while its convenient laser targeting and high distance-to-spot ratio give you accurate readings on distant targets .

- Precise non-contact Measurements
- Automatic Data Hold
- Laser Target Pointer



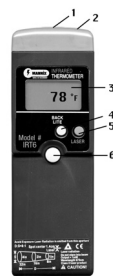
- The meter provides simple one hand operation and time saving temperature measurement. Be sure the measured object fills the "spot" seen by the aperture.
- There will be a delay of approximately one second between the time you initially press the button and the time the display comes on.
- Not recommended for measuring on shiny surfaces. The smaller the target, the closer the unit should be to it. To avoid thermal shock, do not store the meter below freezing.

- The meter is pre-set to measure objects with an emissivity of 0.95. This will accommodate the majority of items measured without compensating for higher or lower value. In most cases there will be little difference in measurements, even if an object's emissivity is higher or lower than this pre-set value. Compare and confirm with known values if in doubt.

### CAUTION

- ! Use extreme caution when the laser beam is turned on.
- ! Do not point the laser toward the eyes or face of a person or animal. Laser's potential to cause damage is retained for hundreds of feet.
- ! Be careful not to let the beam on a reflective surface strike your eye.
- ! Do not use near any flammable items or gases.

### FRONT PANEL DESCRIPTION



1. IR Sensor
2. Laser Pointer Beam
3. LCD Display
4. Backlight Select Key
5. Laser Key
6. Measure Key

### SPECIFICATIONS

**Measuring Range:** -4 to 788°F (-20 to 420°C)

**Resolution:** 1°F (1°C)

**Accuracy:**  $\pm 3^{\circ}\text{C}$  or  $\pm 3\%$

(whichever is greater)

#### Accuracy Notes:

- 1) Accuracy stated is for ambient temperature
- 2) Accuracy stated is for emissivity of 0.95

**Emissivity:** 0.95 fixed

**Distance Factor:** D:S = Approx. 8:1

**Sampling Rate:** 500 m/sec.

**Display:** LCD display with backlight

**Power Off:** Automatic shut off after 8 seconds

**Operating Temp.:** 32 to 122°F (0 to 50°C)

**Operating Humidity:** Maximum of 80% RH

**Power Supply:** 9-Volt Battery

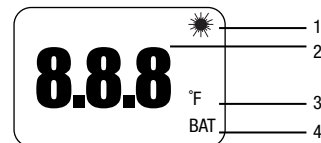
**Power Current:** Approx. 12mA DC

**Display Size:** 0.75" x 1.375"

**Weight:** 6.3 oz. (178g)

**Dimensions:** 6.14" x 2.1" x 1.3"

### INDICATOR



1. Laser Icon
2. Digital Readout
3. °C (Celsius)
4. °F (Fahrenheit)
5. BAT (battery indicator)

### MEASUREMENT OPERATION

#### A. Power ON/OFF

The meter automatically powers up when the MEASURE key is pressed. Press the MEASURE key to read the measured temperature on the LCD. The meter powers off automatically approximately 8 seconds after the MEASURE key is released.

#### B. Backlight LCD

Select backlight by first pressing the MEASURE key and then pressing the BACKLIGHT key. Repeat the procedure to turn the backlight off.

#### C. Laser Pointer

To turn the laser pointer on, press the LASER key while pressing the MEASURE key. Repeat the procedure to turn the laser OFF

### D. Measurement Considerations

While holding the meter, point the IR Sensor toward the object whose temperature is to be measured. The meter automatically compensates for temperature deviations from ambient temperature.

Keep in mind that it will take up to 30 minutes to adjust to wide ambient temperature changes. When low temperatures are to be measured followed by high temperature measurements, some time (several minutes) is required after the low (and before the high) temperature measurements are made. This is a result of the cooling process which must take place for the IR sensor.

### BATTERY REPLACEMENT

A flashing display is the indication that the battery voltage has fallen into the critical region (6.5 to 7.5 V). Reliable readings can be obtained for several hours after the first appearance of the low battery indication.

Open the Battery Compartment and remove the battery, then install a new battery and replace the cover.

### TROUBLESHOOTING

? **Meter does not turn on** - Check voltage and relace low battery. Or check time delay which is allowed 1 second for data to appear on-screen.

? **Data flashing or laser comes on but no data appears** - Check battery voltage and then replace low battery.

? **Dashes appear on-screen** - Check extreme temperature, measure surrounding area to see if the target exceeds the limit.

### MAINTENANCE

#### Case cleaning:

Clean the exterior housing of the unit with a damp cloth (use caution). Ensure no water or soap is allowed inside the meter or on the infrared lens.

#### Lens cleaning:

**WARNING:** We recommend cleaning the lens periodically to ensure the reading accuracy. To remove any particles on the lens use low pressure compressed. If the contamination cannot be removed with air, use a soft cotton swab. The swab should be slightly damp and very light pressure should be applied. Do not use solvents to clean the lens.

### MATERIALS SUPPLIED

This standard package contains:

- IRT6 infrared thermometer
- Battery (9.0 volt)
- Operation manual
- Carry pouch
- Wrist strap

### WARRANTY

The meter is warranted to be free from defects in material and workmanship for a period of one year from the date of purchase. This warranty covers normal operation and does not cover battery, misuse, abuse, alteration, tampering, neglect, improper maintenance, or damage resulting from leaking batteries. Proof of purchase is required for warranty repairs. Warranty is void if the meter has been opened.

### RETURN AUTHORIZATION

Verbal or written authorization must be obtained from the supplier before returning items for any reason. When requesting an RA (Return Authorization) number, please include data regarding the reason for return. The meter must be returned along with original packing (including all accessories). To prevent any damage in shipment, one should insure the parcel against possible damage or loss.

### CE CERTIFICATION

The meter conforms to the following standards:

- \* EN 50081-1/1992: EN 55022
- \* EN 50082-1/1997: EN 55024  
(EN 61000-4-2/-3/-8,ENV 50204)

The meter complies with the essential protection requirements of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.



Mannix Testing & Measurement is a leader in the field of temperature, humidity, air flow and digital technology. We offer a wide variety of instruments including:

- Digital Thermometers
- Analog Thermometers
- Temperature & Humidity Monitors
- Digital Anemometers
- Digital Timers
- Stopwatch
- Weather Stations
- Rain Gauges

Please visit our website for additional information or to request a product catalog.

[www.mannix-inst.com](http://www.mannix-inst.com)

## OPERATION MANUAL MODEL IRT6

### Infrared Thermometer



Mannix Testing & Measurement  
PO Box 866, Lynbrook NY 11563  
[www.mannix-inst.com](http://www.mannix-inst.com)