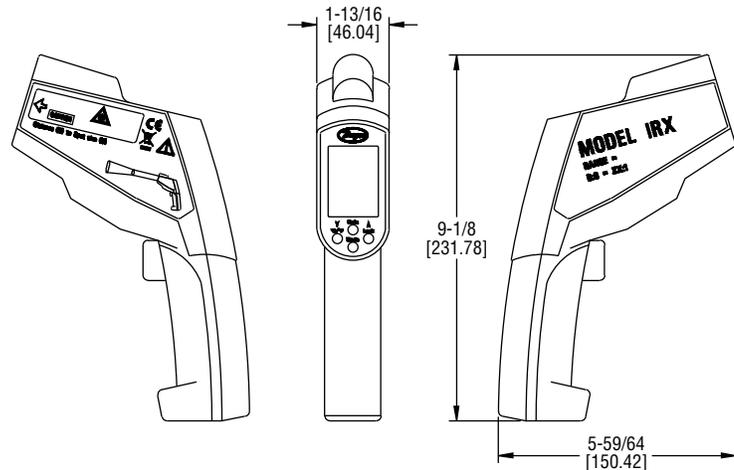




Series IR6/IR7 Dual Laser Infrared Thermometer

Specifications - Installation and Operating Instructions



The **Series IR6/IR7 Dual Laser Extended Range Infrared Thermometer** is ideal for accurately measuring surface temperatures from long distances. This feature packed handheld device allows the user to read the maximum, minimum, average, and differential readings. The high and low alarms give audible and visual indication of the process temperature. When taking measurements in dark areas, a built-in white light can be used to illuminate the measurement area. For long term measurements, the unit includes a dual magnetic base attachment that allows hands-free measurements.

Operating Instructions

Aim the thermometer at the target and pull the trigger to initiate the laser sighting. Align the two laser points on the target to be measured. The surface temperature between the two laser point will appear on the screen.

Upon releasing the trigger, the "Hold" icon will appear in the top left of the screen and the last measurement will appear for 60 seconds (followed by an automatic shut off to conserve battery life).

Minimum, Maximum, Average, or Difference Readings

The thermometer will display the minimum, maximum, average, or differential (difference between the min and max) readings for the period in which the measurements were taken. Press the "Mode" key, during or after scanning, to display these values.

High or Low Alarm

The thermometer allows the user to set a high and low alarm. When the temperature reading is above the high or below the low alarm, and audible alarm will sound.

To adjust the high and low alarm functions, pull the trigger once to turn on the unit. Press the "Mode" key until "HAL" or "LAL" appear on the lower section of the screen. Press the up or down key to adjust the alarms in 1.00 increments.

Continuous Monitoring

The lock mode is used for continuously measuring temperatures for up to 60 minutes or until the "Lock" key is pressed.

To enter lock mode, pull the trigger once to turn on the unit. Press the "Lock" key once so that lock appears on the screen (not in High alarm or Low alarm mode).

SPECIFICATIONS

Measurement Range: IR6: -76 to 1600°F (-60 to 900°C); IR7: -76 to 1832°F (-60 to 1000°C).

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

Accuracy: ±2% of readings or 4°F (2°C) whichever is greater.

Resolution: 0.1°F (0.1°C).

Response Time: 1 second.

Distance to Target: IR6: 30:1, IR7: 50:1.

Emissivity: 0.95 Default – adjustable 0.10 to 1.00 in 0.01 steps.

Battery: 2 AAA, 180 hours continuous use.

Units: User selectable F or C.

Weight: 13.62 oz (386.1 g).

Agency Approvals: CE.

Engineering Units

The thermometer can measure °F or °C. To change the units, pull the trigger once to turn on the unit. Press the °F/°C key to switch the units.

Emissivity

The emissivity is preset at the factory at 0.95. It can be adjusted from 0.10 to 1.00. Changes should only be carried out by experienced personnel.

To change the emissivity, pull the trigger once to turn on the unit. Press "EMIS" key once. Press the up key or down key to adjust emissivity in 0.01 increments. Press the "EMIS" key to accept the new emissivity reading.

Laser and Light Functions

The built-in white light and back-lit LCD screen are present for low-light conditions and the DUAL lasers are utilized to accurately define the measurement area.

To turn on or off the backlight function, hold the trigger down and press the "Lock" key.

The Dual laser (and flashlight) can be turned on or off simultaneously by holding down the trigger and pushing the °F/°C key.

LCD Error Messages

The thermometer incorporates visual diagnostic messages as follows.

H iLo: H i or **Lo** is displayed when the temperature being measured is outside of the settings of HAL and LAL.

Err2: Displays when the thermometer is exposed to rapid changes in the ambient temperature.

Err3: Displays when the ambient temperature exceeds 32°F (0°C) or 122°F (50°C). The thermometer should be allowed plenty of time (minimum 30 minutes) to stabilize to the working/room temperature.

For all other error messages it is necessary to reset the thermometer. To reset it, wait for the instrument to turn off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn it on. If the error message remains please contact the Dwyer Customer Service department for further assistance.

Batteries

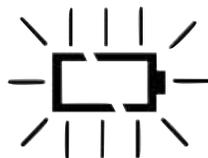
The thermometer incorporates visual low battery indication as follows.



Battery OK: Measurements are possible.



Battery Low: Battery needs to be replaced, measurements are still possible.



Battery Exhausted: measurements are not possible. When the low battery icon indicates the battery is low, the batteries should be replaced immediately with AAA, 1.5V batteries using the below steps.

To Replace Batteries

Fold down the front rubber grip on the handle of the device and remove the old batteries.

Insert 2 AAA batteries according to the diagram located below the trigger.

NOTICE

It is important to turn the thermometer off before replacing the battery otherwise the thermometer may malfunction. Dispose of used battery promptly and keep away from children.

Installing Magnetic Base

Align the bolt hole in the base to the bolt hold on the handles of the thermometer with the magnets facing down. Insert the included bolt from under the base and tighten to the handle.



1. When device is in use, do not look directly into the laser beam - Permanent eye damage may result.
2. Use extreme caution when operating the laser.
3. Never point the device towards anyone's eyes.
4. Keep out of reach of all children.

NOTICE

The readings may be affected if the unit is operated within radio frequency electromagnetic field strengths of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.

Storage and Cleaning

The sensor lens is the most delicate part of the thermometer. The lens should be kept clean at all times, care should be taken when cleaning the lens using only a soft cloth or cotton swab with water or medical alcohol. Allowing the lens to fully dry before using the thermometer. Do not submerge any part of the thermometer. The thermometer should be stored at room temperature between -4 and 149°F (-20 to 65°C).

MAINTENANCE

A periodic check of the system calibration is recommended. The Series IR6/IR7 is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping.