

1.Introduction

Thank you for purchasing this Wahl Instruments DHS85XL non-contact infrared thermometer. Features include a laser sight, 4-digit backlit LCD and a scan/hold function with 6-second auto-power off. To measure a temperature, simply point the unit at the object, pull the trigger and read the display. Releasing the trigger will put the unit into hold mode, which will display the captured reading for approximately six seconds and then power off. Make sure the target area is larger than the unit's spot size.

2.Safety Information

Read the following safety information carefully before attempting to operate or service the instrument. Repair or service should only be performed by qualified personnel.

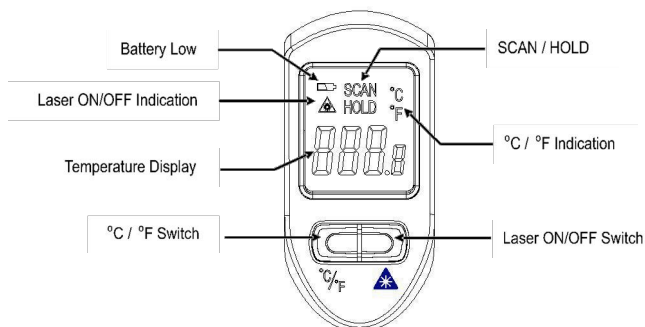
2-1 Cautions!

- DO NOT submerge the instrument in water.
- This product is not designed for use in medical evaluations. This product is intended for use in industrial, scientific and educational purposes only.
- Laser Warning - Do not point laser directly at eye. Use caution around reflective surfaces. Keep out of reach of children.


3-2 Measurement

- To measure a temperature, point the instrument at the target you want to measure and pull the trigger. Be sure the target fills the instruments field-of-view. The laser is used for aiming purposes only and is aligned approximately 1" above the center of the spot.
- When the battery low symbol appears, the battery voltage has dropped below the voltage for reliable operation and the user should replace the battery.

Figure 1



2-2 Safety symbols

 Dangerous, refer to this manual before using the meter.

 Denotes CE Certification to the following standards:

EN61326:Electrical equipment for measurement, control and laboratory use.

IEC61000-4-2:Electrostatic discharge immunity test.

IEC61000-4-3:Radiated, radio-frequency,electromagnetic field immunity test.

IEC61000-4-8: Power frequency magneticfield immunity test.

Tests were conducted using a frequency range of 80-1000MHz with the instrument in three orientations. The average error for the three orientations is $\pm 0.5^{\circ}\text{C}$ ($\pm 1.0^{\circ}\text{F}$) at 3V/m throughout the spectrum. However, between 781-1000MHz at 3V/m, the instrument may not meet its stated accuracy.

3.Operation of Instrument

3-1 Controls (see figure 1)

- Trigger - Powers the unit on and off. With the trigger depressed, instrument will be in SCAN mode and will actively read the target temperature. Upon release of the trigger the instrument will be in HOLD mode, and display the last measurement taken prior to the trigger being released.
- °C / °F switch - Toggles between °C and °F scale for readings.
- *Laser switch - Toggles the laser on and off.

4.Specifications

Model	DHS85XL
Temperature Range	-4~619°F (-20~326°C)
Accuracy	$\pm 2\%$ of reading or $\pm 2^{\circ}\text{C}$ whichever is greater
Spectral Range	5-14 μm
Repeatability	$\pm 2^{\circ}\text{F}$ ($\pm 1^{\circ}\text{C}$)
Response Time	500 ms.
Operation Temp	-32~122°F (0~50°C) 10 90% RH
Auto Power Off	Automatically after approx 6 sec
Emissivity	Fixed at 0.95
Storage Temp.	14~140°F (-10~60°C)
°C / °F Switchable	YES
Backlight	YES
Laser Sight Switchable	YES
Battery Type	9V (NEDA1604, 006P, IEC6F22)
Battery Life	16 hrs
Dimension	5.9×5.2×1.8 inch (150×133×45mm)
Weight	4.7 oz. (135g) Approx.
Accessory	9v Battery, Instruction Manual

5.Maintenance

- Lens - Clean the lens by blowing off loose particles using clean compressed air. Gently brush remaining debris away with a camelhair brush. Use a cotton swab moistened with distilled water to carefully wipe the lens surface.

NOTE:

DO NOT use solvents to clean the lens.

- Housing - Clean by wiping with a damp soft cloth. Mild detergent may be used as needed.