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quality tools



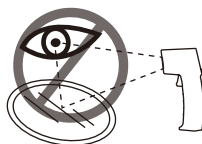
Using-Instructions

Digital infrared thermometer

2



LASER RADIATION
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT



Art. 31135



Please read these instructions carefully to ensure the safe and effective use of this tool.

Download Bedienungsanleitung / Téléchargement du mode d'emploi / Instructions download
Descarga de la instrucción de uso / Download de instruções de operação / Download del manuale



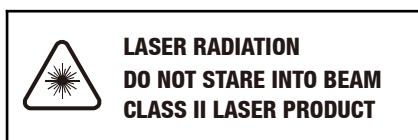
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INTRODUCTION

This thermometer is a non-contact temperature measuring thermometer using infrared technology. You can use it to measure the surface temperature of an object or find leaks along walls, molding, ductwork and more. The auto color change feature provides quick, intuitive feedback, showing you where to caulk, insulate, etc. This thermometer is a fast measuring device, it is reliable and easy to operate.

WARNING

1. When the thermometer is in use, do not look directly into the laser beam; otherwise permanent eye damage may result.
2. Use extreme caution when operating the laser.
3. Do not point the laser beam toward anyone's eye or allow the laser beam to strike the eye from a reflective surface.
4. Keep the thermometer out of reach of children.
5. Do not use the thermometer where explosive or flammable liquids, gases, or dust is present.

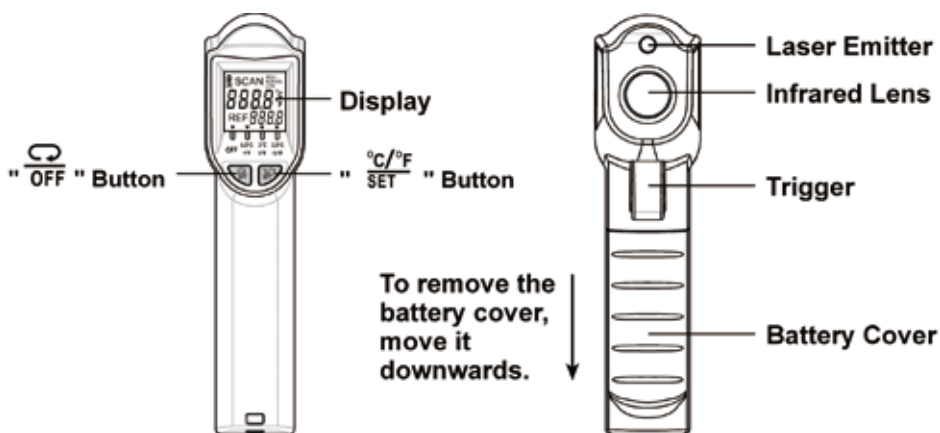


CAUTIONS

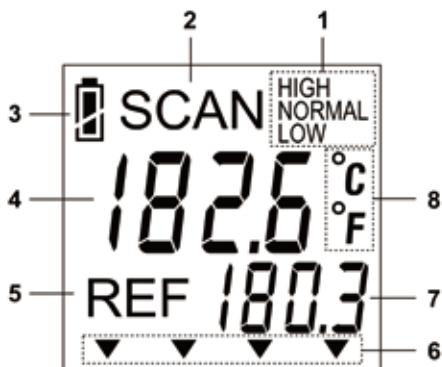
THE INFRARED THERMOMETER SHOULD BE PROTECTED FROM THE FOLLOWING:

1. Electro Magnetic Fields (created by arc welders, induction heaters and similar items.)
2. Thermal Shock (caused by large or abrupt ambient temperature changes. Allow 30 minutes for thermometer to stabilize before use.)
3. Do not leave the thermometer on or near objects of high temperature.

INSTRUCTION



UNDERSTANDING THE DISPLAY



1. Temperature Difference Indicators

HIGH (Red)-----Appears when the presently scanned temperature is higher than the reference temperature by more than the threshold you set.


NORMAL (Green)--Appears when the difference between the presently scanned temperature and the reference temperature does not exceed the threshold.

LOW (Blue)-----Appears when the presently scanned temperature is lower than the reference temperature by more than the threshold.

2. Temperature Measurement Indicator

Indicates that the thermometer is making temperature measurement.

3. Battery Charge Level Indicator

 ---Indicates that the batteries are high and measurements are possible.

 ---Indicates that the batteries are low and should be replaced immediately although measurements are still possible.

 ---Indicates that the batteries are exhausted.

4. Scanned Temperature

5. Reference Temperature Indicator

6. Arrowhead Icons for Indicating the Threshold

7. Reference Temperature

8. Units

INSTALLING BATTERY

When the battery charge level indicator shows "", the batteries are low and should be replaced immediately.

Wait until the thermometer turns off automatically, then remove the battery cover by moving it downwards. Replace the old batteries with new ones of the same type, make sure that the polarity connections are correct. Reinstall the battery cover.

OPERATING INSTRUCTION

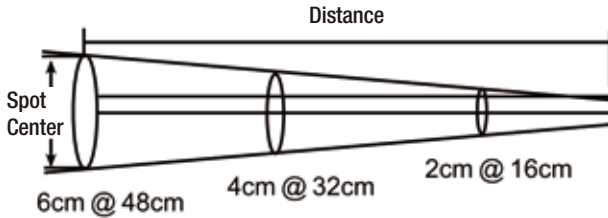
1. Hold the thermometer and point it toward the target to be measured. Pull and hold the trigger for at least 1 second to start measuring. When the thermometer is in measurement state, the backlight and the laser are on, and the screen shows the icon "SCAN". When you release the trigger, the thermometer sounds 3 beeps and the laser turns off and the last temperature reading is held on the screen. If you have not operated the thermometer for about 15 seconds, the backlight will turn off automatically, and, if you have not operated the thermometer for about 1 minute, the thermometer will turn off automatically.
2. When the thermometer is in measurement state (the trigger is pulled and held), you can press the " $\frac{C}{F}$ SET" button to set the reference temperature, which is shown on the secondary display (the lower display).
3. When the thermometer is in ON state (the trigger is not pulled), you can press the " $\frac{C}{F}$ SET" button to select desired unit: °C or °F. (The primary display and the secondary display share the same unit.)
4. When the thermometer is in ON state (the trigger is not pulled), you can press and hold down the " $\frac{OFF}{OFF}$ " button for about 3 seconds to turn off the thermometer.
5. You can press the " $\frac{OFF}{OFF}$ " button to select desired threshold (0.5°C/1°F, 3°C/5°F, or 5.5°C/10°F), the arrowhead icon (▼) on the screen will move to the corresponding position to indicate your selection. If you want to disable the threshold feature and turn off the leak detection, press the " $\frac{OFF}{OFF}$ " button until the arrowhead icon is directly above and points to the " OFF " mark.
6. After you finish setting the reference temperature and threshold, during measurement, the backlight will be green and the symbol "NORMAL" will appear on the top right corner of the screen if the difference between the presently scanned temperature and the reference temperature does not exceed the threshold you selected. The backlight will be blue and the symbol "LOW" will appear on the top right corner of the screen and the built-in buzzer will sound slow beeps (about one beep per second) if the presently scanned temperature is lower than the reference temperature by more than the threshold. The backlight will be red and the symbol "HIGH" will appear on the top right corner of the screen and the buzzer will sound fast beeps (about two beeps per second) if the presently scanned temperature is higher than the reference temperature by more than the threshold.
7. To find a leak:
After finishing setting the desired reference temperature and threshold, point the thermometer at the wall, molding, ductwork or other surface, and start measuring temperature. When the position where a leak exists is being scanned, the temperature reading is probably very different from the temperature reading of other position where there is no leak. When the difference between the present temperature reading and the preset reference temperature exceeds the threshold you set, the display backlight color will change and the built-in buzzer will give an audible alarm see step 6).
8. When the ambient temperature is lower than 0°C or higher than 40°C, the primary display will show "Err" (Error).
9. When the scanned temperature is higher than the upper limit of the thermometer's measuring range, the primary display will show "Hi"; and when the scanned temperature is lower than the lower limit of the thermometer's measuring range, the primary display will show "Lo".

NOTE:

1. Shiny or polished surfaces can give inaccurate readings. To compensate for this, cover the surface with masking tape or flat colored paint. When the tape or paint reaches the same temperature as the target underneath, measure the temperature of the item.
2. The thermometer cannot measure through transparent surfaces such as glass or plastic. It will measure the surface temperature instead.
3. Steam, dust, smoke, and other optical obstructions can prevent accurate measurement.

FIELD OF VIEW

The farther the thermometer is from the target, the larger the target area will be. This relationship between distance and target size is normally expressed as the distance to spot, or D:S ratio. At a distance of 16cm, the "target" spot would be 2 cm in diameter. The thermometer will display the average temperature across the target area.



Distance to Spot size= 8 : 1

MAINTENANCE

To clean the lens: Blow off loose particles using clean compressed air. Gently brush remaining debris away with a moist cotton cloth.

To clean the case: Wipe the case with damp, soft cloth.

Note:

Do not use solvent or abrasive to clean the lens or the case, and do not submerge the thermometer under water.

SPECIFICATION

Measuring Range	-38°C ~ +520°C (-36.4°F ~ +968°F)
Response Wavelength	7.5 ~ 13.5 μm
Measuring Precision	± 2°C (4°F) or 2% of reading, whichever is greater
Response Time	1 sec
Optical Ratio(D:S)	8 : 1
Emissivity	0.95
Display Resolution	0.1°C / 0.1°F
Backlight Shut Off	In about 15s of inactivity
Auto Power Off For Thermometer	In about 60s of inactivity
Power Supply	1.5 V battery, AAA or equivalent, 2 pieces
Operating Temperature	0°C ~ 40°C
Operating Humidity	0 ~ 75% RH, non-condensing
Storage Temperature	-20°C ~ 60°C, ≤ 85%RH
Dimensions	160×118×40 mm
Weight	About 155 g (including batteries)



NOTE: End of life electrical equipment must not be placed in household waste. Please take it to a return point. Find out about your nearest return point from your council or sales outlet.

DECLARATION OF CONFORMITY

Model: **31135**

Digital infrared thermometer

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Declares under sole responsibility that the product to which this declaration relates is in conformity with the following standard(s) or other normative document(s):

EN 61326-1: 2013 EN 61326-2-2: 2013

Emission: CISRP 16-1-1:2010+A1:2010 16-2-3:2010+A1:2010

Immunity: IEC 61000-4-2:2001 EN6100-4-3:2002

Following the provisions of Directive(s)
Machinery Directive:

2014/30/EU

Bischoffsheim, 18/01/2017

Alexander Pieper
CEO

WARRANTY

We do not take responsibility for any damage caused by misuse or any use that is not in compliance with the safety standards described herein.

Customer services

Contact your local importer of your specialized dealer to obtain address of your service department.
You find our partners under **www.KRAFTWERKtools.com**



From date of purchase receipt

2 YEARS GUARANTEE

on material- or production-defects



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