

## IR THERMAL LEAK DETECTOR "IRF260-10D"

ITEM NO. 631768

### INTENDED USE

The infrared thermal leak detector is used for quick inspection of thermal leaks and thermal bridges. The measurement device warns you optically and acoustically when approaching the set limits.

A normal/rechargeable battery (9 V block) supplies the power.

The measuring instrument must not be used when it is open, i.e. with an open battery compartment or when the battery compartment cover is missing. Measuring under adverse ambient conditions such as dust and flammable gasses, vapours or solvents is not admissible.

Always observe the safety instructions and all other information included in these operating instructions.

This product complies with the applicable national and European requirements. All names of companies and products are the trademarks of the respective owners. All rights reserved.

### CONTENTS

- IR thermal leak detector
- Battery (9 V block)
- Operating instructions

### EXPLANATION OF THE SYMBOLS



In the operating manual, an exclamation mark inside a triangle indicates important instructions.



The "arrow" symbol indicates special information and advice on operating the device.

### SAFETY INSTRUCTIONS



**The warranty will be void in the event of damage caused by failure to observe these safety instructions! We do not assume any liability for any resulting damage!**

**We shall not accept liability for damage to property or personal injury caused by incorrect handling or non-compliance with the safety instructions! In such cases, the warranty will be null and void.**

- The unauthorised conversion and/or modification of the product is not permitted for safety and approval reasons (CE). Never dismantle the product.
- The product is not a toy. Therefore, be especially careful when children are around.

Use the product where it is out of the reach of children.

- Never use the product soon after taking it from a cold room to a warm one. The condensation that forms might damage the product under certain circumstances.
- Avoid the following adverse conditions at the installation location and during transport:
  - Extreme cold or heat, direct sunlight
  - Dust or flammable gases, fumes or solvents
  - Strong impacts, blows
- Do not leave packaging material carelessly lying around, since it could become a dangerous plaything for children.
- Handle the product with care; it can be damaged by impacts, blows, or accidental falls, even from a low height.
- Do not measure through transparent surfaces or plastics. This may lead to measurement tolerances.
- The product may not be subjected to electromagnetic fields and high humidity or liquids. Take appropriate protective measures when using outdoors.
- When using the laser device, make sure that the laser beam is not pointed towards people, animals or reflecting objects.
- Laser radiation can be dangerous if the laser beam or its reflection enters unprotected eyes. Therefore, before using the laser equipment, familiarise yourself with the statutory regulations and instructions for operating such a laser device.
- Never look into the laser beam and never point it at people or animals. Laser radiation can cause eye injuries.

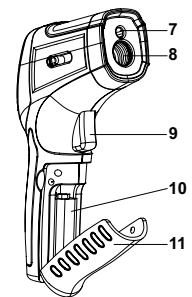
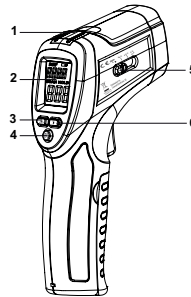
- Never open the product. Adjustment or maintenance work may be performed only by specialist staff. Improper handling could lead to dangerous laser radiation.
- This product is equipped with a Class 2 Laser. Laser signs in different languages are included in the package. If the information on the product is not written in the language of your country, please affix the appropriate sign on the product.



### GENERAL INFORMATION ON BATTERIES/RECHARGEABLE BATTERIES

- Batteries/rechargeable batteries must be kept out of the reach of children.
- Do not leave batteries/rechargeable batteries lying around; there is a risk that they could be swallowed by children or pets. If they are swallowed, consult a doctor immediately.
- Leaking or damaged normal/rechargeable batteries in contact with the skin can cause acid burns; therefore, use suitable safety gloves.
- Normal/rechargeable batteries must not be short-circuited, opened or thrown into fire. There is a risk of explosion.
- Do not recharge normal, non-rechargeable batteries; there is a risk of explosion!
- Please observe correct polarity (note plus/+ and minus/-) when inserting the normal/rechargeable battery.

### CONTROLS



- |                                      |                                   |
|--------------------------------------|-----------------------------------|
| 1) Indicator light                   | 7) Laser                          |
| 2) LC display                        | 8) IR sensor                      |
| 3) Button for laser                  | 9) On/off/"HOLD" button           |
| 4) "SET/REF"/"C"/"F" button          | 10) Battery compartment           |
| 5) Slide control for indicator value | 11) Cover for battery compartment |
| 6) Button for LC display lighting    |                                   |

### DISPLAY READING

- |                                      |  |
|--------------------------------------|--|
| A) Battery symbol                    |  |
| B) Reference value display           |  |
| C) "SCAN" mode                       |  |
| D) "HOLD" mode                       |  |
| E) IR sensor for temperature display |  |
| F) Indicator value display           |  |
| G) "°C/°F" unit                      |  |

### INSERTING/REPLACING THE BATTERY/RECHARGEABLE BATTERY

1. In case of weak normal/rechargeable battery capacity, the "A" symbol appears on the display. You should replace or recharge the normal/rechargeable battery.
2. Open the battery compartment cover "11" carefully towards the front.
3. Remove the discharged battery from the battery compartment "10", if necessary, and place a new battery of the same type (see technical data) on the battery clip with the right poles. Do not use force.
4. Close the battery compartment cover "11" again carefully until you hear a click. The measurement device is ready for operation.

## OPERATION

### a) General

Briefly press button "9" to switch the meter on. Pressing button "9" again starts the measurement process. The word "SCAN" appears on the LC display. In the measurement process, the infrared sensor "8" determines the surface temperature of the fixed object. This measured value is shown on the LC display as temperature value "E".

The current measured ambient temperature is shown as reference value "B".

Hold the meter on the object to be measured steady, in order to achieve exact measurement results.

As soon as you release button "9", the current measured value is fixed and "HOLD" appears on the LC display.

A new measurement begins when you press button "9" again.

→ **To save energy, when the meter is in "HOLD" mode, it switches off automatically after 15 seconds.**

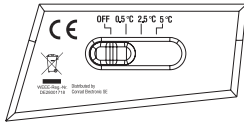
### b) Acoustic signal and indicator light

The product has an acoustic signal and a coloured display indicator light "1". The acoustic signal changes synchronously with the indicator light based on the measured temperature. This enables rapid measurement when no accurate readings are required.

There are three values that can be used as indicator values. (0.5 °C – 2.5 °C – 5 °C) Move the slide control "5" to the desired position. The currently set value "F" appears on the LC display.


If slide control "5" is in the "OFF" position, the acoustic signal and the indicator light "1" are switched off.

For a more detailed definition of the indicator values please observe the section "d" under settings.



### c) Target laser

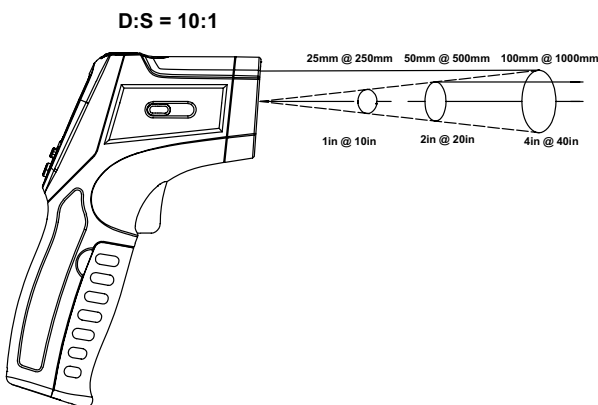
The measurement device features an integrated laser for better fixation of an object.

To activate the laser, briefly press the button "3" once. The  icon appears on the LC display. Make sure that no persons or animals are in the area of laser radiation.

To deactivate the laser, briefly press the button "3" once again.

## IR SPOT SIZE ("DISTANCE TO SPOT RATIO – DS")

In order to obtain precise measured results, the object to be measured must be larger than the measuring IR spot (ratio of measurement distance to the measured surface) of the IR thermometer. The temperature recorded is the average temperature of the area measured. The smaller the object to be measured, the shorter the distance must be to the infrared thermometer. The precise size of the measuring spot is shown in the following diagram.



## SETTINGS

### a) Temperature units "°C/°F"

The product offers you the opportunity to display the temperature values in °C or °F.

To change the unit, press the "4" key for min. 2 seconds.

The currently set unit "G" is displayed on the LC display.

### b) Display light

For better readability the measuring device features an LC display lighting. This lighting can be switched on or off as required. Briefly press the "6" button to switch it on. The LC display lights up. To switch off the lighting, briefly press the button "6" once again.

### c) Fixing the reference value

During the measurement the current temperature reference value "B" is shown on the LC display. This value is continuously adapted. To fix the value of this measurement, briefly press the button "SET/REF/°C/°F" once. The fixed reference value "B" is shown on the LC display.

### d) Indicator values

The threshold values of the acoustic signal and the indicator light can be adjusted in three steps. The indicator values relate to 0.5 °C, 2.5 °C or 5 °C.

For this purpose, move the slide control "5" to the desired position.

Display example for a measured reference temperature of 23.1 °C.

Threshold value	Blue light	Green light	Red light
OFF			
0.5 °C	... - 22.6 °C	22.7 - 23.5 °C	23.6 - ... °C
2.5 °C	... - 20.6 °C	20.7 - 25.5 °C	25.6 - ... °C
5 °C	... - 18.1 °C	18.2 - 28 °C	28.1 - ... °C

## MAINTENANCE AND CLEANING

Apart from the occasional normal/rechargeable battery change, the measurement device is maintenance-free.


Never clean the product when it is turned on.


Use a clean, dry, soft cloth for cleaning. Do not use aggressive cleaning agents, as these can cause discolouration. Do not press too strongly on the surface when cleaning, to prevent scratch marks.

Clean the sensor disc "8" as required with only a soft, clean cloth.

## DISPOSAL


### a) General

 Dispose of an unserviceable product in accordance with the relevant statutory regulations.

 Remove the normal/rechargeable battery inserted in the measurement device and dispose of it separately from the product.

### b) Batteries and rechargeable batteries

As the end user, you are required by law (Battery Ordinance) to return all spent batteries/rechargeable batteries; disposal of them in the household waste is prohibited.

 Batteries/rechargeable batteries that contain hazardous materials are labelled with the following symbols to indicate that disposal in the household waste is forbidden. The symbols of the relevant heavy metals are: Cd = Cadmium, Hg = Mercury, Pb = Lead. You can return your used batteries/rechargeable batteries free of charge to the official collection points in your municipality, in our stores, or anywhere where batteries or rechargeable batteries are sold.

## TECHNICAL DATA

Power supply.....	Battery (9 V block)
Measuring range.....	-50 – 260 °C/-58 – 500 °F
Resolution.....	Temperature 0.1 °C
Response time.....	< 0.5 ms
Emission level.....	0.95
Optics .....	10:1
Accuracy.....	±(3 % + 3 °C/5 °F)
Dimensions.....	183.4 x 131.3 x 37 mm (H x L x W)
Weight .....	220 g

### Legal notice

These operating instructions are a publication by Voltcraft®, Lindenweg 15, D-92242 Hirschau/Germany, Phone +49 96 04 / 40 87 80 (www.voltcraft.de).

All rights including translation reserved. Reproduction by any method, e.g. photocopy, microfilming, or the capture in electronic data processing systems require the prior written approval by the editor. Reprinting, also in part, is prohibited.

These operating instructions represent the technical status at the time of printing. Changes in technology and equipment reserved.

© Copyright 2014 by Voltcraft®