





Intended use

Your Black & Decker Thermal Leak Detector has been designed to easily detect energy leaks in your home. This product is intended for consumer use only.

Safety instructions

General power tool safety warnings



Warning! When using battery-powered appliances, basic safety precautions, including the following, should always be followed to reduce the risk of fire, leaking batteries, personal injury and material damage.

- ◆ Read all of this manual carefully before using the appliance.
- ◆ The intended use is described in this manual. The use of any accessory or attachment or the performance of any operation with this appliance other than those recommended in this instruction manual may present a risk of personal injury.
- ◆ Retain this manual for future reference.

Using your appliance

Always take care when using the appliance.

- ◆ Do not immerse the appliance in water.
- ◆ Do not open body casing. There are no user-serviceable parts inside.
- ◆ Do not operate the appliance in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.
- ◆ Never look directly into the light or shine the light into another persons eyes.

Safety of others

- ◆ This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- ◆ Children should be supervised to ensure that they do not play with the appliance.

After use

- ◆ When not in use, the appliance should be stored in a dry, well ventilated place out of the reach of children.
- ◆ Children should not have access to stored appliances.
- ◆ When the appliance is stored or transported in a vehicle it should be placed in the boot or restrained to prevent movement following sudden changes in speed or direction.

- ◆ The appliance should be protected from direct sunlight, heat and moisture.

Inspection and repairs

- ◆ Before use, check the appliance for damaged or defective parts. Check for breakage of parts, damage to switches and any other conditions that may affect its operation.
- ◆ Do not use the appliance if any part is damaged or defective.
- ◆ Have any damaged or defective parts repaired or replaced by an authorised repair agent.
- ◆ Never attempt to remove or replace any parts other than those specified in this manual.

Additional safety warnings

- ◆ **If liquid crystal comes in contact with your skin:** Wash area off completely with plenty of water. Remove contaminated clothing.
- ◆ **If liquid crystal gets into your eye:** Flush the affected eye with clean water and then seek medical attention.
- ◆ **If liquid crystal is swallowed:** Flush your mouth thoroughly with water then seek medical attention.

Additional safety instructions for non-rechargeable batteries



Warning! Batteries can explode, or leak, and can cause injury or fire, to reduce this risk:

- ◆ **Make sure that the on/off switch is in the off position before inserting the battery(s).** Inserting batteries into power tools and appliances that have the switch on invites accidents.
- ◆ **Under abusive conditions, liquid may be ejected from the battery, avoid contact.** If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- ◆ Carefully follow all instructions and warnings on the battery label and package.
- ◆ Always insert batteries correctly with regard to polarity (+ and -), marked on the battery and the equipment.
- ◆ Do not short battery terminals.
- ◆ Do not charge batteries.
- ◆ Do not mix old and new batteries. Replace all of them at the same time with new batteries of the same brand and type
- ◆ Keep batteries out of the reach of children.
- ◆ Remove batteries if the device will not be used for several months.
- ◆ Never attempt to open for any reason.
- ◆ Do not store in locations where the temperature may exceed 40 °C.

- ◆ When disposing of batteries, follow the instructions given in the section "Protecting the environment".
- ◆ Do not incinerate the batteries.
- ◆ Do not expose the batteries to water.

Warning Symbols

The following symbols are found on the tool:



Warning! To reduce the risk of injury, the user must read the instruction annual.

Features

This tool includes some or all of the following features.

1. LED spot projector
2. Infrared sensor
3. Battery Compartment
4. LCD screen
5. ON/OFF button
6. Threshold setting

Fig. A

LCD Display.

7. Reference temperature
Shows the temperature of the area where the instrument was initially pointed when you turned on the power. To reset the reference, turn the power off, aim at a new reference spot, and turn the power back on.
8. Scan temperature
Shows the average temperature across the area you're aiming at.

Note: The Thermal Leak Detector compares these two temperatures. When the difference exceeds the threshold you've set, the projected LED spot will change to red or blue.

Assembly

Warning! Use 9V size (6LR61) alkaline batteries only.

Installing the battery (fig. B)

- ◆ Open the battery compartment cover (3) by pressing the tabs of the cover in towards the center and pulling the cover out.
- ◆ Insert one 9V (6LR61) alkaline battery.

Note: Always insert batteries correctly with regard to polarity (+ and -), marked on the battery and the equipment.

Note: Remove dead batteries immediately.

Changing the temperature display (fig. B)

- ◆ Open the battery compartment cover (3) by pressing the tabs of the cover in towards the center and pulling the cover out.
- ◆ Slide the temperature selection switch to the desired position.

Note: **°F** Will set your thermal leak detector to the Fahrenheit scale.

Note: **°C** Will set your thermal leak detector to the Centigrade scale.

Use

Switching On and Off

- ◆ Press the ON/OFF button to turn the unit on.
- ◆ Press the ON/OFF button to turn the unit off.

Note: The unit will automatically turn off after 10 minutes.

Setting the threshold for colour change (fig. C)

- ◆ For detecting small temperature changes of 1° F (0.5° C), move the slider to the 1° mark (9) on the back of the detector.
- ◆ For detecting medium temperature changes of 5° F (3° C), move the slider to the 5° mark (10) on the back of the detector.
- ◆ For detecting large temperature changes of more than 10° F (5.5° C), move the slider to the 10° (11) mark on the back of the detector.
- ◆ If you do not want the LED spot to change color, move the slider to the top position (12) where the color spots are X-ed out.

Note: You can change the threshold setting while you are scanning. If the color is changing erratically, try increasing the threshold. If you see a temperature difference on the screen, but the light is not changing color, try reducing the threshold.

Using the thermal leak detector (fig. D)

- ◆ Hold the unit as shown. Aim near the location you want to scan for a draft or thermal leak. This initial aim point will be your reference target.
- ◆ Turn on the power.
- ◆ Keep the unit aimed at the reference target until the green light shines on the target and a Reference Temperature appears on the screen.
- ◆ Slowly scan the Thermal Leak Detector across the area of interest. If the scanned temperature is hotter than the reference temperature by more than the threshold, the light will turn from green to red. If the scanned temperature is colder than the reference temperature by more than the threshold, the light will turn from green to blue.

Examples of Use:

- ◆ Scan around a light fixture to determine if ceiling insulation was removed during installation.
- ◆ Scan along window and door sills to see where to add weather-stripping.
- ◆ Scan where a wall and the floor meet to find drafts that should be caulked.
- ◆ Scan an attic door to see if you need to add insulation.

Note: 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.

Note: The thermometer cannot measure through transparent surfaces such as glass or plastic. It will measure the surface temperature instead.

Note: Steam, dust, smoke, and other optical obstructions can prevent accurate measurement. Hold the thermometer back and at an angle for an accurate measurement.

Field of View (fig. E)

The Thermal Leak Detector measures temperature over an area that may be larger than the LED spot, especially if you are far away from the surface you are measuring. The diameter of the measured area is 1/6 the distance from the Detector. In other words, if you are 6 inches (152 mm) from the target, the Detector will measure the average temperature over a circle 1 inch (25mm) in diameter. As shown in the table below, the farther the distance from the target, the larger the measured area.

Position (fig. E)	13	14	15	16
Distance to target (mm)	152	305	457	610
Diameter of measurement area (mm)	25	51	76	102

If you are just looking for hot and cold areas, it's OK if the scanned area is larger than your target. However, if you want to accurately measure the temperature of an object, move the Detector close so that the scanned area is about half the size of the object you want to measure.

Maintenance

Your Black & Decker corded/cordless appliance/tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper appliance/tool care and regular cleaning.

Warning! Before performing any maintenance on corded/cordless appliance/tool:

- ◆ Switch off and remove the battery from the appliance.
- ◆ Regularly clean the appliance using a soft cloth. For stubborn marks the cloth may be made damp using mild soapy water.
- ◆ Do not use abrasive cleaners.

Protecting the environment



Separate collection. This product must not be disposed of with normal household waste.

Should you find one day that your Black & Decker product needs replacement, or if it is of no further use to you, do not dispose of it with household waste. Make this product available for separate collection.



Separate collection of used products and packaging allows materials to be recycled and used again.

Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household, at municipal waste sites or by the retailer when you purchase a new product.

Black & Decker provides a facility for the collection and recycling of Black & Decker products once they have reached the end of their working life. To take advantage of this service please return your product to any authorised repair agent who will collect them on our behalf.

You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our after-sales service and contacts are available on the Internet at: www.2helpU.com

Batteries



At the end of their useful life, discard batteries with due care for our environment:

- ◆ Do not short-circuit the battery terminals.
- ◆ Do not dispose of the battery(s) in fire, as this may result in a risk of personal injury or an explosion.
- ◆ Run the battery down completely, then remove it from the appliance/tool.

- ◆ Batteries are recyclable. Place the battery in suitable packaging to ensure that the terminals cannot be short-circuited. Take them to any authorised repair agent or a local recycling station.

Technical data

TLD100 (H1)		
Voltage	V_{dc}	9
Battery required		1 x 9V (6LR61) Alkaline

Guarantee

Black & Decker is confident of the quality of its products and offers an outstanding guarantee. This guarantee statement is in addition to and in no way prejudices your statutory rights. The guarantee is valid within the territories of the Member States of the European Union and the European Free Trade Area.

If a Black & Decker product becomes defective due to faulty materials, workmanship or lack of conformity, within 24 months from the date of purchase, Black & Decker guarantees to replace defective parts, repair products subjected to fair wear and tear or replace such products to ensure minimum inconvenience to the customer unless:

- ◆ The product has been used for trade, professional or hire purposes;
- ◆ The product has been subjected to misuse or neglect;
- ◆ The product has sustained damage through foreign objects, substances or accidents;
- ◆ Repairs have been attempted by persons other than authorised repair agents or Black & Decker service staff.

To claim on the guarantee, you will need to submit proof of purchase to the seller or an authorised repair agent. You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our after-sales service and contacts are available on the Internet at: www.2helpU.com

Please visit our website www.blackanddecker.co.uk to register your new Black & Decker product and to be kept up to date on new products and special offers. Further information on the Black & Decker brand and our range of products is available at www.blackanddecker.co.uk

ENGLISH

Do not forget to register your product!

www.blackanddecker.co.uk/productregistration

Register your product online at www.blackanddecker.co.uk/productregistration or send your name, surname and product code to Black & Decker in your country.

Australia

Black & Decker (Australia) Pty. Ltd.
20 Fletcher Road, Mooroolbark,
Victoria, 3138

Tel. 03-8720 5100
Fax 03-9727 5940

New Zealand

Black & Decker
5 Te Apunga Place
Mt Wellington
Auckland 1060

Tel. +64 9 259 1133
Fax +64 9 259 1122

United Kingdom

Black & Decker
210 Bath Road
Slough, Berkshire SL1 3YD

Tel. 01753 511234
Fax 01753 551155
Helpline 01753 574277