

# DRAPER®

INSTRUCTIONS FOR

# Infrared Thermometer

Stock No.15101 Part No.IT12:1B

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS PRODUCT.



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DRAPER®

## GENERAL INFORMATION

These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself. All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product. Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

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### 2.1 CONTENTS

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# 1. TITLE PAGE

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## **1.1 INTRODUCTION:**

USER MANUAL FOR:

## **INFRARED THERMOMETER**

Stock no. 15101

Part no. IT12:1B

## **1.2 REVISIONS:**

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Date first published March 2016

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As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: <http://www.drapertools.com/manuals>

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## **1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:**

**WARNING!** Information that draws attention to the risk of injury or death.

**CAUTION!** Information that draws attention to the risk of damage to the product or surroundings.

## **1.4 COPYRIGHT © NOTICE:**

Copyright © Draper Tools Limited.

Permission is granted to reproduce this publication for personal & educational use only.

Commercial copying, redistribution, hiring or lending is prohibited.

No part of this publication may be stored in a retrieval system or transmitted in any other form or means without written permission from Draper Tools Limited.

In all cases this copyright notice must remain intact.

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## 3. GUARANTEE

### 3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF, England. Telephone Sales Desk: (023) 8049 4333 or Product Helpline (023) 8049 4344.

A proof of purchase must be provided with the tool.

If upon inspection it is found that a fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. The guarantee period covering parts/labour is 12 months from the date of purchase. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agents.

Note: If the tool is found not to be within the Terms of Warranty, repair and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights. Draper Tools Limited.

## 4. INTRODUCTION

### 4.1 SCOPE

This infrared thermometer is used for measuring the temperature of the object's surface, which is applicable for various hot, cold, hazardous or hard-to-reach objects

without contact safely and quickly. This unit consists of Optics, Temperature Sensor Signal amplifier, Laser pointer, Processing circuit and LCD Display.

### 4.2 SPECIFICATION

Stock no. ....	15101
Part no. ....	IT12:1B
Distance to spot size .....	12:1
Accuracy 0°C (32°F) to 550°C (1022°F) .....	±1.5°C (±2.7°F)
-50°C (-58°F) to 0°C (32°F) .....	±3.0°C (±5.0°F)
Dimensions .....	153mm x 101mm x 43mm
Power supply .....	9V battery
Typical battery life (Alkaline) Non-laser pointer mode: .....	22hrs
Laser pointer mode: .....	12hrs
Operating temp. ....	-0°C ~ 40°C (32°F ~ 104°F)
Storage temp. ....	-20°C ~ 60°C (-4°F ~ 140°F)
Weight including batteries .....	0.148kg
Laser classification .....	class 2

## 5. HEALTH & SAFETY INFORMATION

### 5.1 HEALTH & SAFETY INFORMATION

- Laser pointer. Do NOT stare into beam. Class 2 laser product.
- Viewing the laser pointer output with certain optical instruments (for example, eye loupes, magnifiers and microscopes) with a distance of 100mm may pose an eye hazard.
- Viewing the laser pointer output with certain optical instruments designed for use at a distance (for example, telescopes and binoculars) may pose an eye hazard.
- CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- Do NOT direct the beam towards a person's eyes.
- Avoid positioning the laser pointer such that it may lead to unintentional eye exposure to any potential passing pedestrians/traffic.
- Do NOT direct the beam towards animals.
- Do NOT use in the vicinity of children.
- Do NOT direct the beam onto reflective surfaces.
- Always switch off when not in use and do not leave unattended. Remove the batteries before storing the infrared thermometer away.
- Store the level in a dry location, out of the reach of children.
- Care must be taken to ensure that the infrared thermometer is not dropped, knocked or damaged during use or storage.
- This infrared thermometer product has no serviceable parts. Do not attempt to disassemble or repair.

## 6. TECHNICAL DESCRIPTION



- ① Trigger
- ② Battery compartment
- ③ Laser pointer on/off button
- ④ Celsius / Fahrenheit switch button
- ⑤ Back light on/off button
- ⑥ Data hold icon
- ⑦ Scanning icon
- ⑧ Laser pointer on icon
- ⑨ Back light on icon
- ⑩ Temperature unit
- ⑪ Temperature reading

## 7. UNPACKING & CHECKING

### 7.1 PACKAGING

Carefully remove the thermometer from the packaging and examine it for any sign of damage that may have happened during shipping. Lay the contents out and check them against the parts shown below. If any part is damaged or missing; please contact the Draper Helpline (the telephone number appears on the title page) and do not attempt to use the thermometer.

The packaging material should be retained at least during the guarantee period: in case the machine needs to be returned for repair.

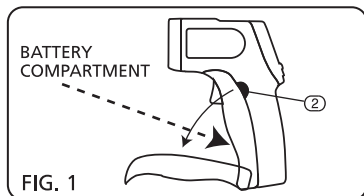
**Warning!** Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.

If any of the packaging is to be thrown away, make sure they are disposed of correctly; according to local regulations.

## 8. PREPARING THE INFRARED THERMOMETER

### 8.1 BATTERY INSTALLATION - FIG. 1

1. Open battery cover, pull out cover using finger indents (2).



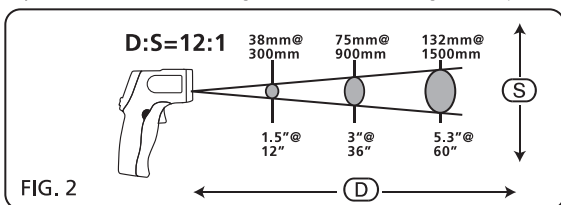
## 9. OPERATION

### 9.1 DISTANCE TO SPOT SIZE

1. When taking measurements, pay attention to the Distance to Spot Size. As the Distance (D) from the target surface increases, the spot size (S) of the area measured by the unit becomes larger. The Distance to Spot size of the unit is 12:1. This unit is equipped with a laser pointer, which is used for aiming.

2. Field of view:

Make sure the target is larger than the unit's spot size. The smaller the target the closer measure distance. When accuracy is critical, make sure the target is at least twice as large as the spot size.



### 9.2 EMISSIVITY

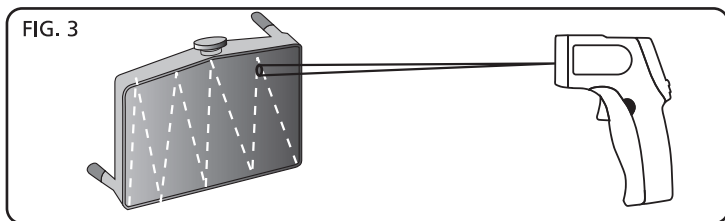
Most organic materials and painted or oxidized surfaces have an emissivity of 0.95 (pre-set in the unit). Inaccurate readings will result from measuring shiny or polished metal surfaces. To compensate, cover the target surface with masking tape or flat black paint. Measure the tape or painted surface when the tape or painted area reach the same temperature as the material underneath.

### 9.3 OPERATING THE UNIT

- Pull the trigger to turn on the unit;
- Aim at the target surface and pull the trigger, the temperature will be shown on the LCD.
- This unit is equipped with a laser pointer, which is only used for aiming.

### 9.4 LOCATING A HOT SPOT - FIG. 3

To find a hot spot, aim the thermometer outside of interest, then scan across with an up and down motion until you locate the hot or cold spot.



## 10. PREVENTATIVE MAINTENANCE

### 10.1 PREVENTATIVE MAINTENANCE

- Store in a clean dry place, between -20°C to 50°C (-4°F to 122°F)
- Do not attempt to dry the thermometer by fire or with an electric dryer.
- Do not drop the thermometer, avoid rough treatment, and avoid constant vibration.
- Clean with a soft cloth, slightly dampened with a soap and water solution. Do not use harsh chemicals, cleaning solvents or strong detergents.
- Keep the laser pointer aperture of the thermometer clean by wiping it gently with a soft lint-free cloth.

- Remove batteries from the thermometer during lengthy periods of non-use, and store in carrying case.
- Ensure that the thermometer is turned off before removing batteries.

### 10.2 REPAIRS

- See the warranty section of this manual.
- Do not take the thermometer apart or permit any unqualified person to take the thermometer apart. Unauthorised servicing may irreparably damage the thermometer and invalidate the warranty.

## 11. EXPLANATION OF SYMBOLS

### 11.1 EXPLANATION



Laser radiation.  
Do not stare into beam  
Class 2 laser product



WEEE  
Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish

## 12. DISPOSAL

### 12.1 DISPOSAL

- At the end of the products working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE\* as unsorted municipal waste.

\* Waste Electrical & Electronic Equipment.

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- **General Enquiries:** (023) 8026 6355
- **Service/Warranty Repair Agent**  
For aftersales servicing or warranty repairs, please contact the Draper Tools Helpline for details of an agent in your local area.

YOUR DRAPER STOCKIST

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