TITAN®

INSTRUCTION AND SAFETY MANUAL

Original instructions

I.R. THERMAL DETECTOR DEVICE WITH LASER POINTER

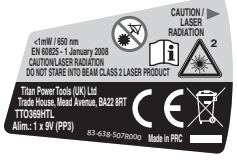
Thank you for choosing a TITAN. product. You will find it is very useful for your installation works or measurements.
In order to correctly use your thermal detector device with laser pointer, it is essential that you take the time to read these instructions carefully. They will provide you with essential information about the device's functions and how to maintain the product correctly.
Please retain this manual in case you need to refer to it at a later date.

WARRANTY

This product is guaranteed for 2 years from the date of purchase.
The warranty covers device breakdown and malfunctions when the device is used in compliance with the manner intended and the instructions for use contained in the manual.
To be covered by the warranty, proof of purchase is required (till receipt or invoice) and the product must be complete.
The warranty does not cover wear and tear through normal use, lack of maintenance, negligence, immersion or inappropriate use (impact damage, non-respect for electrical supply recommendations, storage, usage conditions, etc).
Also excluded from the warranty are harmful consequences due to dismantling or modifying the device.

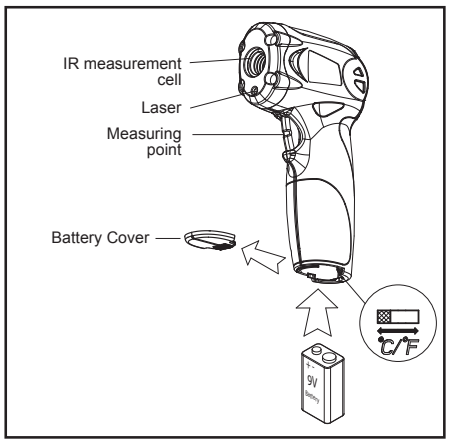
⚠ WARNING

This infrared thermometer is equipped with a class 2 laser cell, manufactured in compliance with international standards EN60825 – 1 January 2008.
Only qualified operators can install, adjust and test this laser equipment.
Using the laser with magnifying-type optical equipment or a telescope can be dangerous.
Children should not be allowed to use this device and it should not be left such that they are able to.
The laser should be turned off at the same time the measurement is taken.
Do not direct the laser beam towards the eyes.

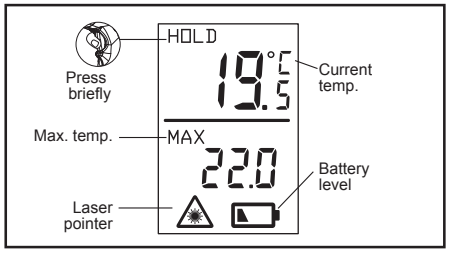


PREPARATION FOR USE :

- Open the battery cover and insert a 9V – PP3 battery (not included).
- Use the switch inside the battery compartment to switch the display from ˚C to ˚F
- Close the compartment again.

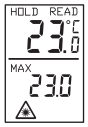


SCREEN DISPLAY



TAKING MEASUREMENTS

1. Single measurement (HOLD mode)
   - Point at the target to be measured, if possible from a distance of 60cm in order to reduce the diameter of the area, then press the trigger once and release again.
   - The temperature will be displayed on screen for 7 seconds.



2. Continual measurement (READ mode)
   - Point at an area and press the trigger, then move to another area while keeping the trigger pressed down. Move again if necessary.
   - The maximum temperature measured while scanning the areas is displayed on the lower section of the screen. If no difference in temperature is recorded, the two temperatures displayed will be identical.
   - The displays will be automatically cleared after 7 seconds.

Note:
From around a 5°C difference between ambient temperature and the temperature of a wall or opening there is over-consumption of energy. Openings should therefore be isolated or equipped with appropriate products.

RECOMMENDATIONS

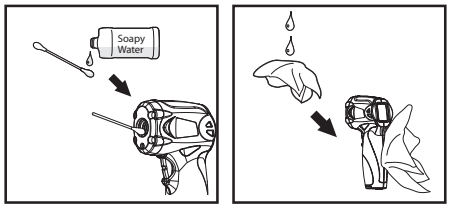
For optimal precision, the device should be at least 60cm away from the target. Measurement precision for greater distances could be affected by external factors such as currents of hot or cold air, or temperature variations from the same area, due to an increase in the diameter of the long distance target.

However, the area to be measured should be greater than the diameter of the spot. If the target is frosty, greasy or dirty, clean it before measuring.

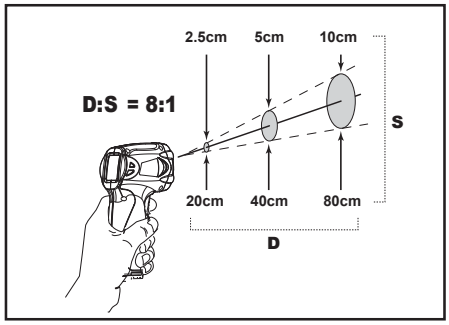
In the event that ambient temperature measurements are out of range (0°C - 50°C), a fifteen minute period of stabilisation may be required.

IMPORTANT:

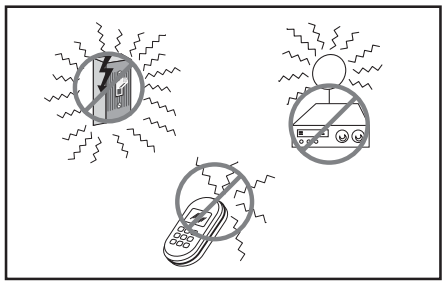
- Do not immerse the device. Clean only the device exterior, using a soft cloth moistened with soapy water.



- The ratio – target dimensions/measuring distance is set at 8:1. This means that an area measured at 80cm distance will have a diameter of 10cm.



- Do not use the device near radio-frequency sources.



- The normal function of the product may be disturbed by Strong Electro Magnetic Interference. If so, simply reset the product to resume normal operation by following the instruction manual.

SPECIFICATIONS

• Measuring type	:	Infrared transmitter
• Distance to spot ratio	:	8:1
• Temperature range	:	-20°C to +315°C
• Accuracy	:	± 1,5°C (between 10° and 60°C) or ± 2˚C or 2% ≤ 10° and ≥ 60°C ± 3˚C from -20˚C to 0˚C
• Laser pointer:		Red spot –ClassII laser product
• Ambient Operating temperature	:	0°C - 50°C
• Response time (95%)	:	< 0,5sec.
• Spectral response	:	7-18 µm
• Emissivity	:	preset to 0,95
• Re-actualisation	:	2 times/sec.
• Relative humidity	:	90% ± 5% RH non condensing at 30°C
• Display resolution	:	4 digits – 8mm- (0,1°C)
• Optical resolution	:	0,1°C
• Display old	:	7 seconds
• Battery icon	:	2h before out of use
• Power	:	1x 9V dry battery (not supplied)

DECLARATION OF CONFORMITY

We, Titan Power Tools (UK) Ltd
Trade house, Mead Avenue, BA22 8RT

Declare, under our own responsibility, that the following device:
Product designation: I.R. THERMAL DETECTOR DEVICE WITH LASER POINTER
TITAN model number TT0369HTL

Meets all the necessary requirements of the directives listed below:

Directive on electromagnetic compatibility, **2004/108/CE**

EN 61000-6-3: 2007
EN 61000-6-1: 2007

Laser classification
EN 60825-1 January 2008

Authorised signatory and technical file holder
Date: 07/07/2010

Signature: P.C.Harries

CE

Name / title: Peter Harries / Quality Manager
Titan Power Tools (UK)Ltd. Trade House , Mead Avenue ,BA22 8RT