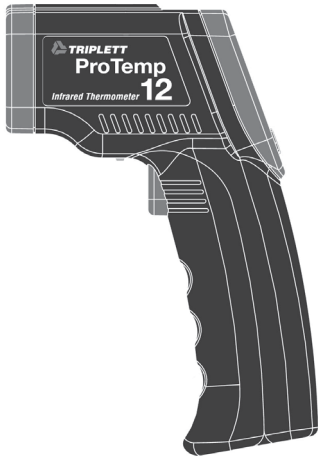


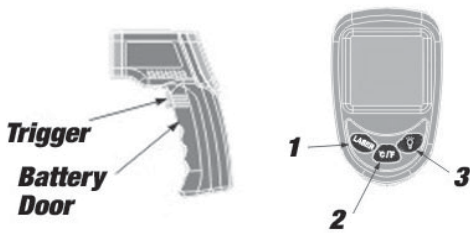


ProTemp 12

Non-Contact Infrared Thermometer Instruction Manual



How to Operate the ProTemp 12



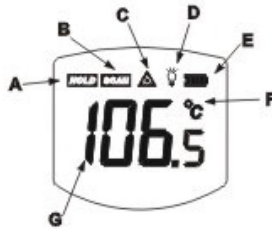
Open the battery cover and install a new 9 volt alkaline battery in the unit.

ProTemp 12 Control Buttons

- 1) LASER
- 2) C / F
- 3) Backlight Symbol

These buttons allow the user to select C or F measurement, and turn the Laser and Backlight on and off. The PT12 remembers the settings, so the next time the unit is operated, it will use the settings programmed by the previous user.

Pull and hold the 'trigger' while observing the LCD display. The PT12 will perform a self test and read-out the software version (U3.0). If the PT12 was recently used, it may not readout the software version. Note the behavior of the unit, and if desired, use the buttons to change the settings. Symbols in the LCD display indicate what settings are selected.



- A) DATA HOLD icon
- B) SCAN Icon
- C) LASER ON Icon
- D) BACKLIGHT ON Icon
- E) BATTERY Icon
- F) Temperature Units
- G) Measured Temperature

While the trigger is held in, the PT12 is in the 'live scan' mode and will display the temperature of objects as the PT12 is pointed at them. The SCAN icon in the LCD display indicates that the PT12 is in the Scan mode. If the laser is activated, it identifies the center of the area that the PT12 is measuring. The diameter of the measurement area changes with the distance from the PT12. For details, see the section on Distance and Spot Size.

When the trigger is released, the PT12 will hold the last temperature reading for about 20 seconds. The DATA HOLD icon on the LCD display will light. If the Backlight is activated, it will stay on for about 7 seconds and then go off.

If the battery is OK, the BATTERY icon will light. If the icon does not light, replace the battery.

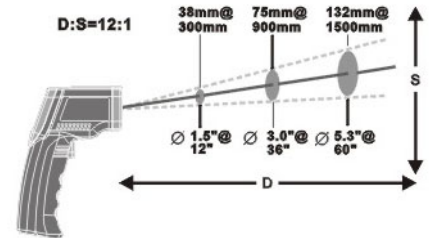
How to Accurately Measure Temperatures

1) Temperature Averaging:

The PT12 measures the temperature of an area, not a small spot. The laser is used to aim the PT12. The spot produced by the laser is much smaller than the area that the PT12 is measuring. The PT12 cannot accurately measure the temperature of something less than 1" in diameter. When the PT12 is used to measure something that is too small, the reading obtained is an average of the temperature of the small object and the surrounding surfaces. To measure small objects, get as close as possible to the object to minimize the error.

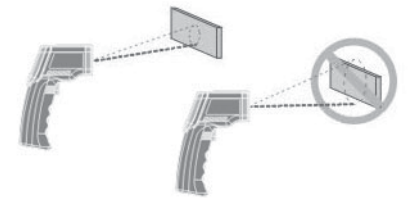
2) Distance and Spot Size

As the distance between the PT12 and the measured object or surface increases, the area that the PT12 measures increases also. For the PT12, the Distance to Spot Size Ratio is approximately 12:1. This means that the Spot Size is approximately 1/12th of the distance between the PT12 and the measured object or surface. So at 36 inches, the spot is about 3 inches in diameter. At 12 feet, the spot is about 1 foot in diameter.



3) Field of View

To get the most accurate measurement, the object or surface being measured should completely fill the Spot Size of the PT12. Consider the Distance to Spot Size Ratio, and position the PT12 accordingly.



4) Emissivity

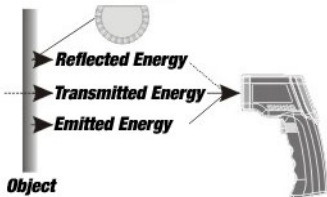
The PT12 is calibrated for an Emissivity of 0.95. Most organic materials and painted or oxidized surfaces have an emissivity of 0.95. Inaccurate readings will result from measuring shiny or polished metal surfaces. To compensate, cover the surface to be measured with masking tape or flat black paint. Allow time for the tape to reach the same temperature as the material underneath it. Measure the temperature of the tape or painted surface.

Introduction

The Triplett ProTemp 12 (PT12) is a compact, rugged, easy to use non-contact thermometer. It uses state of the art infrared measurement technology to provide a convenient method of measuring from a distance, temperatures of hot, hazardous, or hard-to-reach objects or surfaces. With a quick press of the trigger, a built-in laser identifies the measurement area, and the backlit LCD display shows the temperature of the target. You will find the PT12 so convenient and easy to use that you will find numerous uses for this innovative thermometer.

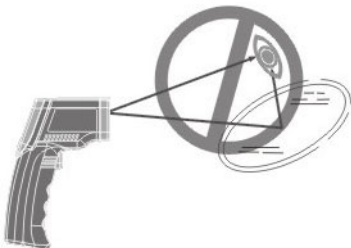
How It Works

Infrared thermometers measure the surface temperature of an object. The unit's optics sense energy emitted, reflected, and transmitted energy, which is collected and focused onto a detector. The unit's electronics translate the information into a temperature reading which is displayed on the unit. The built in laser aids in pointing the thermometer by identifying the center of the measurement area.



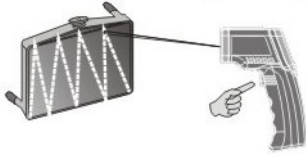
Warning

Never point the laser directly into anyone's eyes, or at reflective surfaces that may reflect into someone's eyes.



5) Finding a Hot or Cold Spot

Holding the trigger of the PT12, slowly move the laser back and forth across the object or surface of interest while observing the temperature reading on the LCD display. The hot or cold spot is identified by producing a maximum or minimum reading on the display.



6) Maintenance

Lens Cleaning: Blow off loose particles using clean compressed air. Gently brush remaining debris away with a camel's hair brush. Carefully wipe the surface with a moist cotton swab. The swab may be moistened with water.

NOTE: DO NOT use solvents to clean the plastic lens.

Case Cleaning: Use soap and water on a damp sponge or soft cloth.

NOTE: DO NOT submerge the unit in water.

Applications for the ProTemp 12

1. Industrial/Electrical

Check for hot spots in electrical panels and circuit breakers, generators and gearboxes.

2. Heating and Air Conditioning

Check and monitor supply and return registers, air stratification and duct leakage

3. Automotive

Check cylinder heads, heating & cooling systems, and scan radiators for blockage

4. Food Safety

Monitor temperatures during receiving, storage and preparation

Use the ProTemp 12 to instantly measure the temperature of:

- Heating and Air Conditioning
- Hot and Cold food products
- Ballasts in Electric Lights
- Electrical Connections
- Windows and Doors
- Cooking Surfaces
- Hot Engine Parts
- Swimming Pools
- Hot Water Pipes
- Electric Motors
- Motor Bearings
- Wine Coolers
- Transformers
- Fuse Panels
- Hot Asphalt
- Fish Tanks
- Insulation
- Hot Tubs
- Ovens

Specifications

Temperature Range:	-26F to 572F (-32C to 300C)
Accuracy:	-26F to 32F (-32C to 0C) +/- 5F 32F to 77F (0C to 25C) +/- 3F 77F to 572F (25C to 300C) +/- 4F or 2% (whichever is greater)
Distance to Spot Size Ratio:	12:1
Repeatability:	1% of reading or 2F (whichever is greater)
Response Time:	500mS for 95% response
Spectral Response:	8-14um
Emissivity:	0.95 (fixed)
Ambient Operating Range:	32F to 104F (0C to 40C)
Relative Humidity:	0 to 95% RH non-condensing up to 86F (30C)
Storage Temperature:	-4F to 140F (-20 to 60C) without battery
Battery:	1 - 9 Volt Alkaline battery
Battery Life:	12 hours with laser operating
Dimensions:	5 3/4" x 4" x 1 1/2" (146mm x 102mm x 38mm)
Weight (including battery):	0.39 lbs (0.18 kg)

Triplett One Year Limited Warranty

Triplett / Jewell Instruments warrants instruments and test equipment manufactured by it to be free from defective material or workmanship and agrees to repair or replace such products which, under normal use and service, disclose the defect to be the fault of our manufacturing, with no charge within one year of the date of original purchase for parts and labor. If we are unable to repair or replace the product, we will make a refund of the purchase price. Consult the Instruction Manual for instructions regarding the proper use and servicing of instruments and test equipment. Our obligation under this warranty is limited to repairing, replacing, or making refund on any instrument or test equipment which proves to be defective within three years from the date of original purchase.

This warranty does not apply to any of our products which have been repaired or altered by unauthorized persons in any way so as, in our sole judgment, to injure their stability or reliability, or which have been subject to misuse, abuse, misapplication, negligence, accident or which have had the serial numbers altered, defaced, or removed. Accessories, including batteries and fuses, not of our manufacture used with this product are not covered by this warranty.

To register a claim under the provisions of this warranty, contact Triplett / Jewell Instruments Customer Service Department for a Return Authorization Number (RMA) and return instructions. **No returned product will be accepted without an RMA number.** Upon our inspection of the product, we will advise you as to the disposition of your claim.

ALL WARRANTIES IMPLIED BY LAW ARE HEREBY LIMITED TO A PERIOD OF ONE YEAR FROM DATE OF PURCHASE, AND THE PROVISIONS OF THE WARRANTY ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES EXPRESSED OR IMPLIED.

The purchaser agrees to assume all liability for any damages and bodily injury which may result from the use or misuse of the product by the purchaser, his employees, or others, and the remedies provided for in this warranty are expressly in lieu of any other liability Triplett / Jewell Instruments may have, including incidental or consequential damages.

Some states (USA ONLY) do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. No representative of Triplett / Jewell Instruments or any other person is authorized to extend the liability of Triplett / Jewell Instruments in connection with the sale of its products beyond the terms hereof.

Triplett / Jewell Instruments reserves the right to discontinue models at any time, or change specifications, price or design, without notice and without incurring any obligation.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

TRIPLETT PRODUCT RETURN INSTRUCTIONS

In the unlikely event that you must return your ProTemp 12 for repair, the following steps must be taken.

- 1) Call 1-800-TRIPLETT to obtain a Return Material Authorization (RMA) number from Customer Service.
- 2) Enclose a copy of the original sales receipt showing date of purchase.
- 3) Print the RMA number on the outside of the shipping container.
- 4) Return to: Triplett / Jewell Instruments
850 Perimeter Road
Manchester, NH 03103
ATTN: Repair Dept.

Be sure to include a full description of the problem, and a telephone number, street address, or email address, where you can be contacted, and a return address where the meter can be shipped to upon repair.

Triplett Model ProTemp 12

Cat. No.: PT12

Made in China

The logo for Triplett Jewell Instruments features a stylized 'T' symbol to the left of the word 'TRIPLETT' in a bold, sans-serif font. Below 'TRIPLETT' is the word 'Jewell' in a larger, bold, serif font. At the bottom, the word 'Instruments' is written in a bold, sans-serif font, enclosed within a black rectangular box.