INSTRUCTION MANUAL

“TruTemp” Infrared Thermometer

INTRODUCTION

Thank you for purchasing the ProTek R/C TruTemp Infrared Thermometer. This is a non-contact infrared thermometer specifically designed for use with R/C engines, motors, battery packs, battery chargers, electronic speed controllers and hundreds of other applications.

To use, simply aim the infrared thermometer at the target and press the measurement button to quickly and easily display the surface temperature.

FEATURES

- High-speed and high-accuracy infrared sensor
- Four modes: Quick Mode / Scan Mode / Max. Value / Min. Value
- Fahrenheit and Celsius scale selectable
- Test temperatures from -40°F – 716°F (-40°C – 380°C)
- Adjustable infrared emissivity coefficient
- Large easy-to-read LCD display, with backlight
- Minimal battery consumption with 2 x “AAA” batteries
- 1 minute auto-off timer conserves battery life

MEASURING TEMPERATURES

Your ProTek R/C TruTemp Infrared Thermometer is equipped with four modes of measurement. Select the appropriate mode for your application and follow the instructions below.

1) QUICK MODE
Press the “MEASURE” button once for an instantaneous temperature reading to be shown on the screen.

2) SCAN MODE
Move the aluminum cup as close to the target as possible. Now press and hold the “MEASURE” button to read temperatures continually. The temperature on screen will be updated continually. Releasing the “MEASURE” button will cause the last reading to remain locked on the screen.

MINIMUM & MAXIMUM TEMPERATURE MODE
This thermometer can temporarily store maximum or minimum temperatures. Turn the unit on by pressing the “MEASURE” button. Then, press the “MODE” button once for the maximum function or twice for the minimum. The appropriate MAX or MIN icon will display on the screen.

3) MAXIMUM TEMPERATURE MODE
Point the aluminum cup to the object being measured and press and hold the “MEASURE” button. The thermometer will lock onto and display the hottest (i.e., MAX) temperature measured while pressing the “MEASURE” button.

4) MINIMUM TEMPERATURE MODE
Point the aluminum cup to the object being measured and press and hold the “MEASURE” button. The thermometer will lock onto and display the coolest (i.e., MIN) temperature measured while pressing the “MEASURE” button.
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EMISSIVITY COEFFICIENTS OF COMMON R/C MATERIALS

<table>
<thead>
<tr>
<th>Surface Material</th>
<th>Emissivity Coefficient</th>
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</thead>
<tbody>
<tr>
<td>Aluminum Anodized</td>
<td>0.77</td>
</tr>
<tr>
<td>Plastics</td>
<td>0.91</td>
</tr>
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<td>Rubber, Hard Glossy Plate</td>
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In general, if you are not comfortable changing the emissivity value, it is best NOT to change it. The default emissivity value is 0.95, which will provide accurate temperature measurements for most materials.

To change the emissivity setting, first turn on the thermometer by pressing the “MEASURE” button, and hold “MODE” + “°F/°C” buttons simultaneously. The emissivity value on the screen will blink. Push the “MODE” button to increase emissivity value and push “°F/°C” button to decrease emissivity value.

SPECIFICATIONS

- **POWER SOURCE:** 2 × “AAA” Batteries (not included)
- **OPERATING CURRENT:** ≤40mA @ 2.0V
- **OPERATING TEMPERATURE:** 32°F - 104°F (0°C - 40°C)
- **CURRENT DRAIN:** ≤25ua @ 3V
- **TEMPERATURE RANGE TOLERANCE:**
  - -40°F–32°F = ±1.8°F
  - 32°F–140°F = ±0.9°F
  - 140°F–248°F = ±1.8°F
  - 248°F–356°F = ±3.6°F
  - 356°F–464°F = ±5.4°F
  - 464°F–680°F = ±7.2°F
- **ADJUSTABLE RANGE FOR INFRARED EMISSIVITY COEFFICIENT:** 0.01–1
- **DIMENSIONS:** 121 × 40 × 39.6mm (4.8 × 1.6 × 1.6in)
- **Weight:** 75g (2.6oz)

WARRANTY & SERVICE

ProTek R/C guarantees this item to be free of defects in materials and workmanship for 90 days after original purchase date. Warranty will not cover items that have been modified, disassembled, or otherwise misused according to the item’s instructions. Proof of purchase is required to submit a warranty claim. ProTek R/C is not responsible for bodily injury and/or property damage that may occur from the use of, or caused by, this item.

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<td>356°F - 464°F: ±5.4°F</td>
<td>180°C - 240°C: ±3°C</td>
</tr>
<tr>
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<td>240°C - 360°C: ±4°C</td>
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