# How to Operate the Unit

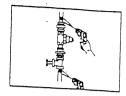
## °C/°F and Battery

Pull open the unit's handle using the linger indents near the trigger to access the C/F switch or to insert/remove the battery. To toggle between °C and °F, push the switch (A). Insert the 9v battery positive side lirst into the battery compartment. NOTE: The battery door is detachable.



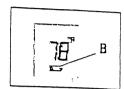
#### Operating the Unit

To measure a temperature, point unit at object and pull the trigger. Be sure to consider distance-to-spot Size ratio and fleid of view. If the unit is equipped with a laser, use the laser only for aiming. See How to Accurately Measure Temperatures.



#### Oisniau

The backlit LCD displays the current temperature in Celsius or Fahrenheit. The unit will hold the reading for 7 seconds after trigger is released; the word HOLD appears. The presence of the battery icon indicates a low battery (B).



#### 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 surface to be measured with masking tape or flat black paint. Allow time for the tape to reach the same temperature as the the material underneath it. Measure the temperature of the tape or painted surface.

### Maintenance

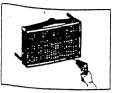
Lens Cleaning: Blow off loose particles using clean compressed air. Gently brush remaining debris away with a camel's hair brush. Carefully wipe the surface with a moist cotton swab. The swab may be moistened with water. NOTE: DO NOT use solvents to clean the plastic lens.

Case Cleaning: Use soap and water on a damp sponge or soft cloth. NOTE: DO NOT submerge the unit in water.

### Troubleshooting

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Code	Problem	Action
(on display) Ballery icon appears Blank display Laser doesn't work	Target temperature is over or under range	Select target within specifications
	Possible low battery Possible dead battery Low or dead battery	Check and/or replace battery Check and/or replace battery Replace battery

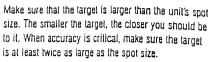
## How to Accurately Measure Temperature

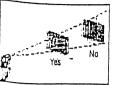


## Locating a Hot Spot

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

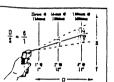
### Field of Vlew





### Distance & Spot Size

As the distance (D) from the object increases, the spot size (S) of the area measured by the unit becomes larger.



#### Reminders

- Not recommended for use in measuring shiny or polished metal surfaces (stainless steel, aluminum, etc.). See Emissivity.
- The unit cannot measure through transparent surlaces such as glass. It will measure the surface temperature of the glass instead.
- Steam, dust, smoke, etc., can prevent accurate measurement by obstructing the unit's optics.

#### **CE** Certification

This instrument conforms to the following standards:



- EN50081-1:1992, Electromagnetic Emissions
- EN50082-1:1992, Electromagnetic Susceptibility

Tests were conducted using a frequency range of 27–500 MHz with the instrument in three orientations. The average error for the three orientations is  $\pm 1.0^{\circ}$ C at 3 v/m throughout the spectrum. However, between 230 MHz and 500 MHz at 3 v/m, the instrument may not meet its stated accuracy.

### Warranty

The Supplier warrants this product for a penod of ONE YEAR from the date of original purchase to be free of deficiencies in material and workmanship under normal use and service. This LIMITED WARRANTY extends only to the ORIGINAL PURCHASER. A purchase from The Suppliers' licensed distributors is considered to be an original purchase.

This LIMITED WARRANTY is subject to the exceptions, exclusions, disclaimers and limitations described below and is in lieu of all other warranties including the implied warranty of merchantabality. This LIMITED WARRANTY gives the ORIGINAL PURCHASER specific legal rights. Some states do not allow limitations on the duration of an implied warranty, therefore, the above limitation may not apply to you.

EXCLUSIONS FROM LIMITED WARRANTY. THE SUPPLIER DOES NOT WARRANT:

- · Batteries
- Products that have been subject to misuse, neglect, accident, and abnormal conditions of operation or storage.

REMEDY. In the event of substandard performance resulting from material or workmanship, return the product to the distributor or retailer from whom it was purchased. ORIGINAL PURCHASER'S exclusive remedy under this LIMITED WARRANTY is replacement, repair, or refund of the original purchase price.

SEVERABILITY OF PROVISIONS. If any provision or part of a provision of this LIMITED WARRANTY is determined to be invalid or unenforceable, such invalidity or unenforceability will not affect the remaining provisions or parts of such provisions, all of which will remain in force.