

# NU-263 Thermometer Operating Instructions

The NU-263 thermometer is a non-contact infrared thermometer. Simply aim the thermometer at the target and press the measurement button to display the surface temperature. The distance to target ratio is 1:1 therefore the thermometer should be positioned as close to the target as possible.

## °C or °F Mode

To change the NU-263 from '°C' to '°F' or from '°F' to '°C', first turn the thermometer on by pressing the measurement button, then press the mode button four times. The '°C' or '°F' symbol will flash, then press the measurement key to confirm the mode.

## Minimum or Maximum mode

To use the NU-263's minimum or maximum mode, first turn the unit on by pressing the measurement button. Then press the mode button once for minimum or twice for maximum function. The 'MIN' or 'MAX' icon will flash, then press the measurement button twice to confirm the minimum or maximum mode. The NU-263 will display the minimum or maximum reading only.

## Lock Mode

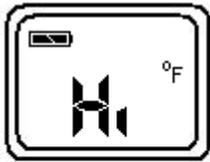
The lock mode is particularly useful for continuous monitoring of temperatures. To use the NU-263's lock mode, first turn the unit on by pressing the measurement button. Then press the mode button three times for lock mode function. The lock icon will flash, then press the measurement button to confirm the lock measurement mode. The NU-263 will continuously display the temperature for up to 60 minutes or until the measurement button is pressed.

## Emissivity

The NU-263 infrared thermometer is supplied with a default emissivity of 0.95. The emissivity of the NU-263 can be changed from 0.01 (1E) to 1(100E). Changes should only be carried out by experienced personnel. To change the NU-263 emissivity, first turn the instrument on by pressing the measurement button, then press the mode button 5 times for emissivity function. The 95E will flash on the LCD screen. Then press the measurement button to adjust the emissivity value; press the mode button again to exit the set up screen. Note: Non-contact infrared thermometers are not recommended for use in measuring the temperature of shiny or polished metals.

## LCD Error Messages

The NU-263 incorporates visual diagnostic messages as follows:



'Hi' or 'Lo' is displayed when the temperature being measured is outside of the range of the instrument. 'Hi' when higher than +428°F (220°C) and 'Lo' when lower than -27°F (-33°C)



'Er2' is displayed when the NU-263 is exposed to rapid changes in the ambient temperature. 'Er3' is displayed when the ambient temperature of the unit exceeds 14°F (-10°C) or 122°F (50°C). In both cases, you should allow plenty of time (minimum 30 minutes) for the NU-263 to stabilize to the working/room temperature 32°F (0°C) to 104°F (40°C)



For all other error messages, it is necessary to reset the NU-263. To reset the NU-263, turn the unit off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn on. If the error message remains, please contact the Service Dept. for further assistance.

## Batteries:

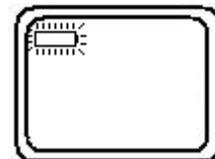
The NU-263 incorporates visual low battery indication as follows:



'Battery OK' : Measurements are possible



'Battery Low' : Battery needs to be replaced, measurements are possible



'Battery Exhausted' : Measurements are not possible

## Battery Replacement

When the 'Low Battery' icon indicates the battery is low, the battery should be replaced immediately with a CR2032 lithium cell. The battery is located under the twist cover at the rear of the NU-263. Please note: It is important to turn off the unit before replacing the battery, otherwise the NU-263 may malfunction.



Dispose of used batteries properly and keep away from children.

## Storage & Cleaning

The sensor lens is the most delicate part of the NU-263. The lens should be kept clean at all times. Care should be taken when cleaning the lens using only a soft cloth or cotton swab with water or medical alcohol, allowing the lens to dry fully before using the NU-263. Do not submerge any part of the NU-263. The NU-263 should be stored at room temperature between 50°F(10°C) and 104°F(50°C).

## Specifications:

Temperature Range	-27°F (-33°C) to 428°F (220°C)
Resolution	0.1° either C or F
Response Time	1 second
Infrared Accuracy	±2% of reading or ±2° C
Field of View	1:1 Optics Ratio
Emissivity	0.95 default – adjustable 0.01 to 1 emissivity
Battery Life	40 hours continuous use (auto power off after 15 sec)
Battery	CR2032
Display	Custom LCD
Dimensions	.7" x 1.4" x 2.7" (18 x 37 x 68 mm)
Weight	1.1 oz (32 gm)

## EMC/RFI

Reading may be affected if the unit is operated within a radio frequency electromagnetic field with a strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.

## Guarantee

The NU-263 is guaranteed for a period of one year from the date of purchase against mechanical and electrical manufacturing defects. There are no user-serviceable parts inside the instrument. Any attempted repair by unauthorized persons voids the warranty.



Avoid keeping the thermometer too close for long periods to objects that continuously generate high heat (like a hot plate, which can cause overheating of the thermometer).

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