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Instructions for use of the measuring device set

Contents of the measuring device set

1x Measuring instrument case
1x 4-channel temperature measuring device
4x Thermocouple approx. 1 m
4x Thermocouple approx. 4 m
1x Microwave residual potential measuring device
1x Infrared thermometer

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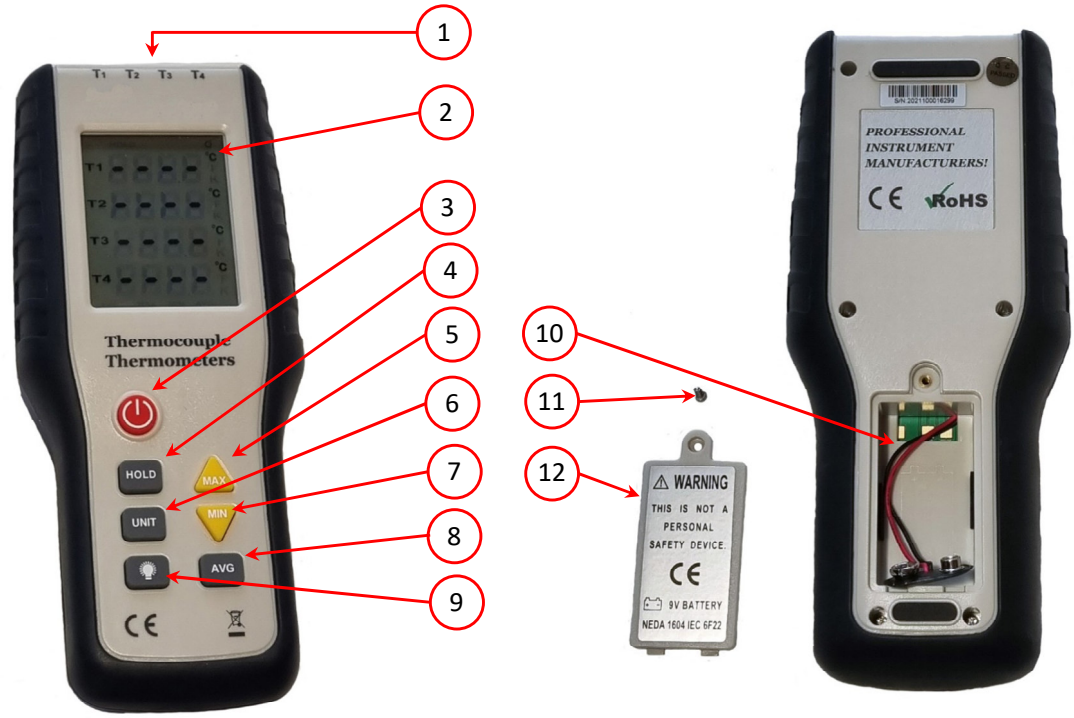
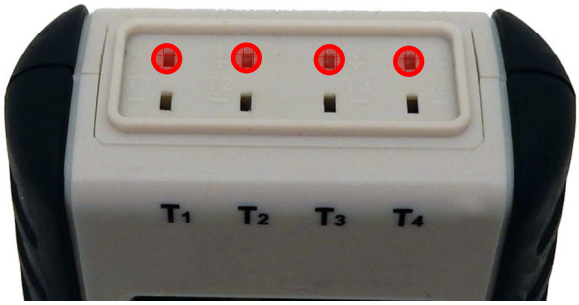
4 channel temperature measuring device



1 4x probe socket
2 Display
3 On / Off
4 Hold button: Interrupt measurement, hold Data
5 Max button: Switch maximum value on/off
6 Change button °C / °F / K
7 Min button: Minimum value on/off
8 AVG button: Average value on/off
9 Lighting on/off
10 Battery Case for 9V block (not included)
11 Battery cover screw
12 Battery cover

	Specification
Area	-200°C to 1372°C (-328°F to 2501°F)
Accuracy	>100°C (-148°F): +/-1°C (+/-1°F) <100°C (-148°F): +/-2°C (+/-3,6°F)
K Temperature resolution	<1000 °C: 0,1°C/ °F/ K >1000 °C: 1°C/ °F/ K

A probe (sensor) must be inserted into the device to measure.
There are 4 probe socket at the top of the device (T1, T2, T3; T4).
Install the probes before switching on the device, be sure to pay attention to the polarity of the thermocouples, the narrow plug contact (red dot) is plus (+).



Maintenance:
Clean the device with a damp cloth and mild cleaning agent. Do not use abrasive cleaners or solvents
Remove the batteries if you don‘t use the device for a long period of time.

Don‘t dispose of the device and the battery with household waste.

Microwave residual potential measering device

1 Display
2 ZERO / Lighting
3 LED
4 MAX
5 On / Off
6 Battery case for 9V block (not included)
7 Battery cover

Specification	
Area	0 to 9.99mW/cm²
Calibrated at	2450MHz
Accuracy	+/- 1db
Warning signal (red LED and Beep)	Activated at 5.0mW/cm²

The device allows digital reading of the microwave potential on the built in LED screen.
When a high strenght potential is detected, the device will beep and leave a red flashing LED lights up.
The device does not require re-calibrations.
The device offers high sensitivity to ensure that even minor Changes in potential can be detected.
The current international standards for microwaves state that this is safe Level for humans is from 0 to 5mW/cm².
To start the device, insert a 9V block battery and press the on/off button (5).
Before use, press the Zero (2) button for 3 seconds to zero the device. This process is finished as soon as „0“appears on the display.

Maintenance:

Clean the device with a damp cloth and mild cleaning agent. Don't use any Abrasives or solvents
Remove the batteries if you do not intend to use the device for a long period of time.

Do not dispose of the device and the battery with household waste

Infrarot thermometer for contactless measurement of surface temperature

Batteriy case closed

Specification	
Area	-50 to +550 °C
Resolution	0,1 °C
Accuracy	<0°C or >25°C: +/- 1,5°C or 1,5% (which is bigger) 0°C - 25°C: +/-3,0°C
Environmental conditions	
Operation	Temperature 0°C to 50°C
	Moisture < 80%
Storage	Temperature -10°C bis +60°C
	moisture < 80%

Display

Not EMIT mode: on/off lighting or laser In EMIT mode the emission value increases; this can be increased continuously if the button is pressed

EMIT: Press this button briefly to display next to the radiance ▲▼. This is an adjustible state.
Press ▲ or ▼ to adjust.
Press this key after adjusting to exit the adjustment state.

If non EIT mode, press switching °C / °F
The value decreases in EMIT Mode. Keep holding down can be constantly reduced.

SELECT
Press this button will toggle between the following functions:

1. MAX: the maximum value. Due to the uneven temperature of an aobject's surface, the measurement you get in the middle of the display will fluctuate because the laser target is pointing to different points; by entering Max Functions, the lower right corner of the display will show the maximum value you get during the whole measuring process.
2. AVG: the average value; measure the same way as above
3. MIN: the minimum value; measure the same way as above
4. DIF: the difference between the maximum value and the minimum value; measure the same way as above
5. LAL: low temperature alarm; press ▲ or ▼ after entering this function so set the alarm value; once the temperature you are measuring is lower than the alarm value, the top left corner will show „LOW" and the built in beeper will beep continuously
6. HAL: high temperature alarm; set the same way as above and the top left corner will show „HIGH"
7. offset: calibrate temperature; when you are measuring a known temperature and find the result you get through the product is not the same as what you know, you can enter this function and press ▲ or ▼ to calibrate the product
8. ε : current emissivity

Safety Information:

1. Do not use the product around explosive gas, vapor, or in damp or wet environments
2. Do not use the product while the microwave is in operation
3. Do not look directly into the laser indirectly at person‘s eyes
4. Do not look directly into the laser with optical tools such as binoculars or microscopes
5. Do not put the product near heat or fire

Maintenance:

Clean the device with a damp cloth and mild cleaning agent. Don't use any Abrasives or solvents
Remove the batteries if you do not intend to use the device for a long period of time

Instructions:

1. Aim at the object you want to measure and press the shutter button. The device switches on automatically
2. Use the Laser to aim for the right point
3. Release the trigger when a temperture is displayed. The device will beep once, the measurement on the display will be locked and a „HOLD“ will be displayed in the lower left corner
4. Repeat these steps to measure another object

Do not dispose of the device and the battery with household waste.