PRODUKT POLSKI

PAMEL

42-300 Myszków, Urodzajna 5e

THERMOMETER

TERMO4 TOUCH

Pb Pb-Free

CE

PLEASE READ THE MANUAL
DON'T YOU KNOW? CALL US! WE DON'T BITE
453-343-360 (OFFICE 9-14 weekdays)
453-343-360 (Technical Support 16-19 Monday-Saturday)
www.pamel.pl pamel@pamel.pl

	Do not disassemble or introduce modifications. • This may cause a malfunction • Contact if necessary authorized service We don't bite. It will be cheaper than repairing or altering it yourself
	If the appliance will not be used for a long period of time, disconnect the power supply. If you want to carry out electrical work, e.g. changing wires, disconnect the power supply. Electricity is also ticking.
	Avoid routing the power cable through the places through which they pass people. • Someone can catch on the cable and drop the device, causing damage to it or injuring the operator.
	Do not touch the device with wet hands. • Possibility of electric shock
	Do not use the device where it may be exposed to liquids. • Short circuit or shock may occur electric current.
	Do not place the device firmly in places dusty. • There is a risk of poor cooling of the device and the operation of thermals. No one likes dirt, especially fans.

https://www.youtube.com/@PAMEL_STEROWNIKI/

INTRODUCTION

Thank you for purchasing the **Termo4 TOUCH** thermometer. We are delighted that you have chosen a device designed for convenient, precise and modern temperature measurement in a wide range of applications. We hope that **Termo4 TOUCH** will meet the expectations of both home users and more demanding enthusiasts and professionals.

Termo4 TOUCH is a modern thermometer equipped with **a clear, color touch screen**, which provides convenient and intuitive operation. The device allows simultaneous temperature measurement at up to **4 measuring points**, allowing you to control several places or process steps at the same time on an ongoing basis.

The thermometer is perfect for **distillation**, **smoking**, baking, cooking and other applications that require constant temperature supervision. With the ability to observe several probes at the same time, the user can more easily control the process, react faster to changes and achieve more reproducible results.

A big advantage of the device is its **versatility of power supply**. **The Termo4 TOUCH** can be powered from a typical **5V plug-in power supply**, such as a USB charger, as well as via **a USB B** connector, making it easy to use in a variety of conditions and workplaces.

Each probe can be given **its own name of up to 10 characters**, making it much easier to identify the measuring points. This is especially useful when the measurement is carried out simultaneously in several locations, for example in different parts of a chamber, plant or product.

For increased safety and convenience of use, the device is equipped with **a temperature alarm** function. Exceeding the set values is signaled by **changing the color of the temperature indication** and **an audible signal**, so that the user can quickly notice a significant change in parameters without having to constantly observe the screen.

With a combination **of a clear interface, touch operation, multi-point measurement and practical alarm functions**, **the Termo4 TOUCH** is a convenient tool for everyday temperature control where accuracy, convenience and quick access to information are important.

HOW IT WORKS

The device **allows simultaneous temperature measurement at up to 4 measuring points. The measurement is carried out with high accuracy, and the resolution of the readings is up to 0.02°C.**

For each of the four measured temperatures, the user can individually set two alarm thresholds:

- **lower alarm (D) – informing about a drop in temperature below the set value,**
- **upper alarm (G) – informing about exceeding the maximum temperature.**

When an alarm occurs, the device signals the event in two ways:

- **sound signal,**
- **changing the color of the displayed temperature.**

The color of the temperature indication indicates the type of alarm:

- **blue – the temperature has dropped below the set minimum threshold,**
- **red – the temperature has exceeded the set maximum threshold.**

To set the alarm values for the selected measurement channel, touch the appropriate temperature indication on the screen. Once you have selected a field, it is possible to configure the lower and upper alarm thresholds for that particular probe.

When the maximum temperature is exceeded or falls below the minimum temperature, the device triggers an audible alarm and marks the temperature accordingly with color. This allows the user to quickly recognize which measuring point the alarm is about and what its nature is.

To mute the beep during an active alarm, press the speaker icon located at the correct temperature. The audible alarm mute works until you unlock this function again. However, please note that the visual alarm indicator remains active at all times, even after the sound has been muted. This means that the temperature will continue to be color-coded until the parameter returns to the correct range or the alarm settings are changed.

PROBE DAMAGE

Each measuring probe works with the device port assigned to it. This means that each temperature presented on the screen corresponds to a specific measurement input.

If the probe is damaged or is not connected, the device automatically disables the display of temperature values for the channel. The indication assigned to this probe disappears on the screen, so that the user does not receive erroneous or confusing readings.

This solution increases the safety of operation and makes it easier to quickly identify a problem with a given measuring point. If the temperature is not displayed for the selected duct, check:

- whether the probe is connected correctly,
- that the probe wire has not been damaged,
- whether the probe itself is operational.

The lack of temperature indication for a given port should be treated as information about the lack of a probe or a malfunction of the measurement connection.

RENAME THE PROBE

The device allows each probe to be given its own name, which makes it easier to identify individual measurement points.

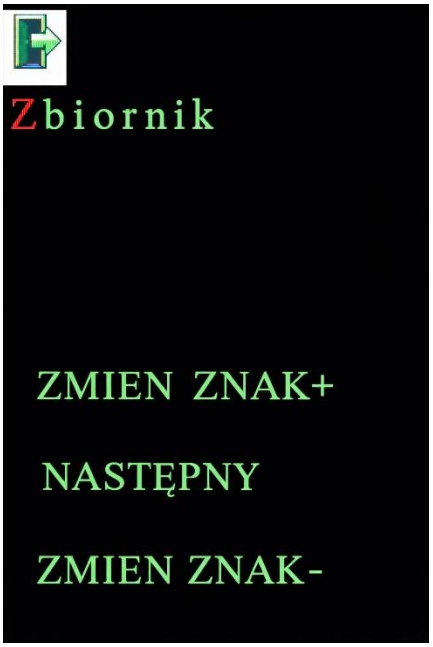
To change the name of the probe, **tap the temperature field on the home screen**. When the alarm settings window appears, press the icon located at the top of the screen, marked with **the "Aa"** symbol.

When you select this function, a window will appear to rename the probe. The edited character is **highlighted in red**, while the other characters are displayed **in green**.

The name change is done as follows:

- tapping the **"+"** or **"–" button** changes the currently selected character,
- tapping the **"Next Character"** button moves on to editing the next name item.

In this way, you can set all the probe name characters one by one. This allows each measuring channel to be assigned its own, legible marking, tailored to the place or method of measurement.



CALIBRATION

To ensure the accuracy of the process, the user can calibrate the individual probes himself.

Touch and hold the temperature field in front of the switch. Then click on the sensor calibration icon.

For each probe , the right, left buttons set the linearity coefficient "B", which causes the indication of T'=B*T, the setting is confirmed by pressing the middle button.

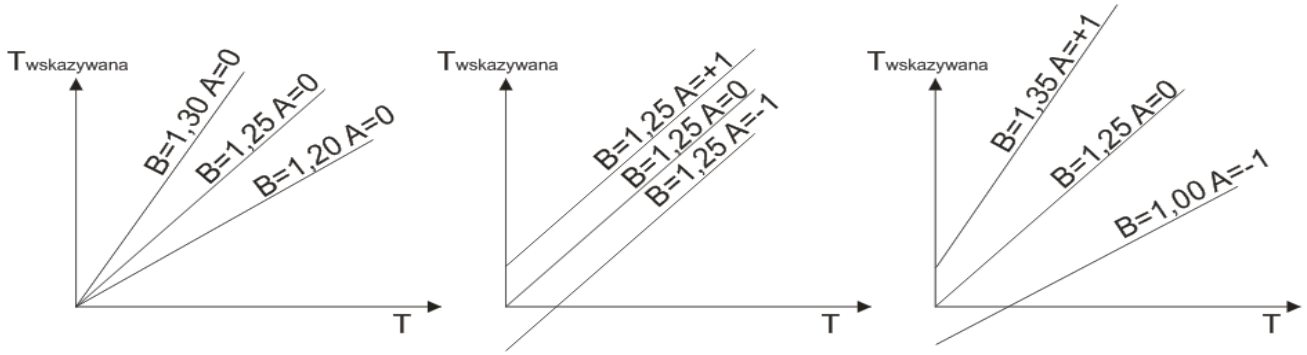
The temperature calibration window appears with an index of A.

Then the right, left buttons set the "A" offset which causes the indication of T'=A+B*T. Confirm the setting by pressing the middle button.

It is recommended to leave the default settings B=1.25 and A=0

"B" is adjusted when the difference between the temperature and the expected increases or decreases as the temperature increases. For example, at room temperature the temperature is lowered by 0.1 degrees, and at 80 degrees by 0.3 degrees.

"A" is adjusted when, with the increase in temperature, the difference between the temperature indication and the expected temperature is constant. For example, the temperature in the entire range is lowered by 2 degrees.



SYMPTOM	ACTION
The thermostat lowers the indicated temperature by a constant value, e.g. 2 degrees	Set the adjustment value A from "0" to "-2"
The thermostat inflates the indicated temperature by a constant value, e.g. 2 degrees	Set the adjustment value A from "0" to "2"
The thermostat lowers the indicated temperature, e.g. 10 percent	Increase the value of correction B, e.g. by "0.1", e.g. from "1.4" to "1.5"
The thermostat inflates the indicated temperature, e.g. 10 percent	Decrease the value of correction B, e.g. by "0.1", e.g. from "1.4" to "1.3"
A combination of the above	A combination of the above

The indicated temperature is A+B*T and depends on the adjustments set.
Default :
B=0
A=1.25

The device is delivered pre-calibrated. If your thermometer shows 19 degrees, it does not mean that this temperature prevails throughout the room. The temperature difference mainly depends on the height and place where the sensor is mounted, e.g. a different temperature is in a room closer to the radiator, near the floor, ceiling, wooden or metal element or by a window.

An analogous temperature behavior is in the device (distiller, smokehouse). The temperature may vary depending on the installation location, mounting method, thermal conductivity, etc. That's why we left you the option of manually calibrating the probes.

Calibration of the probes is not necessary.

TECHNICAL PARAMETERS

Supply Voltage: 5V (Charger, Power Adapter, USB)
Operating temperature: -10 to +50°C
Measurement Resolution: 0.02 degree
Probe Connector: 5.5/2.1 PT1000
Temperature setting range: -30 to +150°C
Dimensions: L-120mm, W,.-110mm, H-40mm
Housing: Self-extinguishing plastic
Protection Grade: IP20
Compliance with standards: PN- EN 60529
Lead-free **(**Pb-Free**)**

Communication interface.

TERMO4 TOUCH **thermometers** can be equipped with **an RS485** or **USB** interface, which allows them to work with a PC. The type of interface is selected **when purchasing the device**.
Depending on the version chosen, it is possible to communicate:

- via **RS485 interface** – in two-wire transmission, at a distance of up to **1000 m**,
- via **USB interface** – designed for connections over a shorter distance, usually up to **a few meters**.

When connected to a computer, the user can conveniently observe the temperature indications and use the additional functions of the program that cooperates with the device. Both in the thermometer itself and in the computer software, **there is an under-** and **over-temperature alarm function**, which facilitates ongoing process control and quick response to changes in parameters.
PC cooperation is particularly useful for applications that require convenient supervision, a greater distance from the measuring point, or constant temperature control from a single location.
Detailed information on available versions, how to connect and how to work with the software can be found on the manufacturer's website or by phone at **the technical support number**.

Remote Panel

TERMO 4 Touch **thermometers** can be equipped with **a UART, RS485** or **RF interface**, thanks to which it is possible to cooperate with **a remote panel** and other reading devices.

This solution allows you to conveniently view temperatures from another place, without the need for direct access to the main device. This is particularly useful in installations where the measuring point is located in a remote location, difficult to access, or requires constant supervision.

Both in the main unit and in the remote panel, the user can use **the under-** and **over-temperature alarm function**. Thanks to this, it is possible to control the parameters locally and remotely, which increases the convenience of operation and the safety of the process.

Up to 30 reading devices **can work in one system**, such as:

- computers,
- remote panels,

This allows for the construction of an extensive temperature monitoring system, tailored to the needs of the user and the nature of the installation.

Built-in rechargeable battery.

Selected versions of **TERMO4 Touch thermometers** can be equipped with a **built-in battery**, which allows the device to operate without an external power source for up **to 100 hours**.

The battery used is made in **Li-Ion technology**, which ensures comfortable and modern use. The most important advantages of this solution include:

- the ability **to recharge at any time**,
- **lack of memory effect**, typical of older battery technologies,
- **High efficiency** and long operation of the device without the need for frequent charging.

In addition to the battery itself, the device is also equipped with **a built-in charging system**, which allows it to be charged efficiently and safely. This allows the thermometer to work as both a mobile and a stationary device, depending on the user's needs.

The built-in battery increases the convenience of use, especially where constant access to mains power is difficult or where the ability to move the device freely is important.

The probes are additional accessories and are subject to natural wear and tear. Therefore, these elements are covered by a standard warranty (not extended)

In addition, it should be remembered that threaded probes are a whole. Do not tear the sensors out of the metal covers.

This will void the warranty.

From 09.2021, all probes have a warranty seal indicating the date of manufacture. Destruction of the seal is considered to be erasure of the marks identifying the product

Dear User,

First of all, we would like to thank you for choosing a PAMEL product. We are sure that you will be satisfied with this choice. We design our devices to meet your requirements and guarantee future trouble-free use.

Before using the equipment, carefully read the installation procedures and operating conditions described in the Owner's Manual.

If you have any doubts, please contact us.

453-343-360 (OFFICE 9-14 weekdays)
453-343-360 (Technical Support 16-19 Monday-Saturday)

TERMS AND CONDITIONS OF THE WARRANTY.

1. **PAMEL provides a warranty in the Republic of Poland for a period of 60 months counting from the date of sale, but not longer than 80 months from the date of production placed on the Product for which the warranty card is issued, provided that the equipment is used in accordance with the intended purpose and technical and operational conditions described in the User Manual.**
2. The warranty does not cover movable elements of the product's equipment (accessories) intended for self-assembly by the user, e.g.: antennas, sensors, holders, heaters, cables, power batteries.
3. The Guarantor undertakes to remove physical defects free of charge if these defects are revealed during the warranty period or to deliver a defect-free item if within the warranty, at least 4 repairs of the item have been made, and the object of sale is still defective.

In the event of a replacement, the product will be replaced with a new one, the same model or with similar, not worse technical parameters. If such an exchange is not possible, the Buyer will receive a refund.

3. The warranty period provided for in point 1 is extended by the duration of the repair.
4. The duration of the repair is counted from the day of delivery of the item to the service point until the date of delivery of the item to the carrier in order to deliver it to the Buyer.
5. **In the event of a defect, the Buyer shall report this fact to the Guarantor by post online (pamel@pamel.pl) or by phone, then the Guarantor first tries to solve the problem remotely and indicates the further path of the complaint procedure.**
6. At the request of the Guarantor, the Buyer is obliged to reliably fill in the Complaint Protocol made available by the Guarantor.
7. The guarantor is liable only for defects arising from reasons inherent in the subject of the sale.
8. The warranty does not cover damage to the equipment resulting from improper or incompatible with the installation and assembly of use, in particular, storage, maintenance, inconsistent with the intended use, use of improper consumables, arbitrarily carrying out repairs or improvements, mechanical damage, due to the fault of of the user, due to external causes such as pollution, flooding, condensation of water vapour, atmospheric phenomena, random events. Damage to electronic components resulting from exceeding the rated parameters is also not covered by the warranty.
9. The warranty does not cover claims for the technical characteristics of the devices, as long as they are in accordance with those specified by the manufacturer.
10. **The condition for the Buyer to retain the rights under the warranty is the delivery of equipment to the service point specified in point 5, in complete condition, in packaging to reduce the risk of damage, with documentation, cables and all other elements issued in connection with the performance of the sales contract, without the seals or stickers with the warranty card being broken.**
11. The warranty does not cover materials and activities that are part of normal operating operations, e.g. installing equipment, programming, cleaning and maintenance, replacing bulbs and fuses, checking operation. The services mentioned above are paid.

12. In addition to the situations referred to in points 7-11, the service point may refuse to warranty repair also in the case of:

- finding that the data contained in the sales documentation is inconsistent with the device data

- amendments to documents by unauthorized persons
13. Physical defects of the device revealed during the warranty period will be removed within 21 days counted from the day following the day of delivery of the device to the service. If you need to import spare parts from abroad
The Guarantor reserves the right to extend the warranty period for the time necessary to repair, of which the Buyer will be informed each time using the e-mail.
14. The device should be installed in accordance with the required standards, technical requirements included in the manual. If there is a legal requirement, the installation of the device must be carried out by a person with the appropriate authorization in this regard.
15. The rights and obligations of the parties with respect to the warranty shall be governed solely by the content of the provisions in the this document.
16. Equipment not collected from the service within 3 months of the completion of the repair will be forfeited to the service.
17.In the event that the warranty repair requires the replacement of a part, the replaced element remains the property of the Guarantor.
18.The warrantor is not responsible for damages resulting from the loss of user data stored in the device, we also inform you that the device will be returned in accordance with the production condition.
19. **By signing the Buyer, the Buyer declares that he has read the terms of the warranty and accepts them.**
A warranty card without the signature of the Buyer will be considered invalid.
ATTENTION!
The number of repairs does not include, in particular: cleaning, maintenance, replacement bulbs, filaments or fuses, repairs resulting from wear and tear due to operation, e.g. wear of potentiometers, etc.

BEGINNING OF THE PERIOD WARRANTY	SELLER STAMP	CUSTOMER SIGNATURE

19.04.2026