

Creative Cuisine

by Grant



Pasto

Sous vide water bath

User Manual

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Contents

1	Use of products	4
2	How to use this operating manual	4
3	Product registration and warranty	4
4	Safety information	4
4.1	Safety compliance	4
4.2	Safety symbols	5
4.3	Safety warnings	5
5	Operating instructions	7
5.1	Unpacking instructions	7
5.2	Assembly of the equipment and components	7
5.3	Installation	7
5.4	Electrical supply	7
6	Operating procedures	8
6.1	Operation	8
6.1.1	Water level	8
6.1.2	Operating Pasto without water (dry, 0°C)	8
6.1.3	Operation above 60°C	8
6.1.4	Allowing the bath to run dry (run dry protection)	9
6.1.5	Emptying Pasto	9
7	Using Pasto	10
7.1	Using Pasto	10
7.1.1	Pasto controls	10
7.1.2	Setting the control temperature (°C)	10
7.1.3	Enabling the keypad lock	11
7.1.4	Setting the over temperature alarm	11
7.1.5	Configuring and running temperature presets	12
7.1.6	Setting the countdown timer (Edt)	12
8	Calibration	15
8.1	Calibration options	15
8.2	Single point calibration (LPC)	15
8.3	Dual point calibration (LPC, HPC)	17
9	Technical specifications	19
10	Warranty information	19
11	Maintenance and service	20
11.1	Cleaning	20
11.2	Fuses	20
11.2.1	Replacing the mains cord	20
11.2.2	Routine safety tests	20
11.3	Service	21

12	Troubleshooting	21
13	Compliance	22
13.1	WEEE directive	22
13.2	RoHS directive	22
13.3	Electrical safety and electromagnetic compatibility	22

1 Use of products

The following products are covered by this operating manual:

Pasto range:

PASTO 5 120 BK, PASTO 5 120 SS, PASTO 12 120 BK, PASTO 12 120 SS, PASTO 26 120 BK, PASTO 26 120 SS, PASTO 5 230 BK, PASTO 5 230 SS, PASTO 12 230 BK, PASTO 12 230 SS, PASTO 26 230 BK, PASTO 26 230 SS

The products listed above are a general purpose series of thermostatically controlled unstirred sous vide baths designed for sous vide cooking use by a professional user.

2 How to use this operating manual

This operating manual will allow you to unpack, set up and operate this sous vide bath correctly and safely. Important safety information, symbols and warnings are listed in section 4 and should be read carefully.

If there is a technical matter that this operating manual does not address, or any other questions concerning this product, please contact Grant Creative Cuisine or your local distributor who will be able to provide any additional information.

3 Product registration and warranty

The warranty for this sous vide bath is detailed in section 10 but to register you should complete the on-line registration form at www.grantcreativecuisine.com.

Not registering your product may affect your warranty.

4 Safety information

4.1 Safety compliance

Grant Pasto meet the requirements of international safety standard IEC 61010 – “Safety requirements for electrical equipment for measurement, control, and laboratory use”. They also comply with the equivalent national standards including:

EN 61010-2-010
UL 61010A-2-010
CAN/CSA-C22.2 NO. 61010-2-010-04.

4.2 Safety symbols

The symbols below are marked on the equipment to indicate:



Caution: Surfaces and water can be hot during and after use



Read this manual before using the bath



Important safety warning



**Recommended operation
Failure to follow may affect the performance of the equipment**

4.3 Safety warnings

	<p>Read the whole of the instructions. Safety may be impaired if they are not followed.</p>
 	<p>Surfaces and water can be hot during and after use. Before emptying Pasto, allow the water temperature to fall to a safe level. For 12, 26 litre baths, empty the bath before moving it.</p> <p>This bath is only intended for use with water. Use of other fluids may invalidate warranty and present a risk of fire or explosion.</p> <p>Place on a stable flat surface to reduce the risk of accidental spillage.</p> <p>No user serviceable parts. Risk of electric shock after disassembly or operation with covers removed.</p> <p>Not for use in environments with a risk of flammable or explosive gases. To be operated within the limits listed in this guide</p> <p>Only use the mains cord provided or one with an identical rating. Ensure that the mains plug and the switch are easily accessible.</p> <p>A clearance of >10cm around the bath is required to ensure adequate air flow.</p> <p>If a potentially hazardous liquid is spilt onto the equipment, disconnect it from the power supply and have it checked by a competent person. It is the user's responsibility to carry out appropriate decontamination if hazardous material is spilt on the equipment.</p> <p>Clean the outside of the equipment with a damp cloth, using water and domestic cleaning products only. The use of other chemical cleaning agents may damage the equipment. Always follow the manufacturer's instructions and any applicable legislation about the use of potentially hazardous substances.</p>



To preserve Pasto in peak condition, consult the extra guidance listed below. Failure to do so may affect your warranty. Consult online resources for additional important information.

For optimum performance prevent tray from touching bath sides.

Before switching on Pasto for the first time remember to fill the bath with water. Switching the bath on dry can damage the heater and could invalidate the product warranty.

If the equipment has been transported or stored in cold or humid conditions, condensation may form inside it. If that could have happened, allow time (at least 2 hours at room temperature) for the condensation to evaporate before using the equipment.

When operating Pasto in high ambient temperatures ($> 30^{\circ}\text{C}$) the temperature of the water used to fill the bath should be no more than 10°C below the ambient.

5 Operating instructions

5.1 Unpacking instructions

Standard equipment includes:

- Pasto sous vide bath
- Mains cord with plug
- Stainless steel lid
- Stainless steel base tray
- Short user guide

Remove packing materials carefully, and retain for future shipment or storage of the equipment.

5.2 Assembly of the equipment and components

The Pasto has three main components, the bath, the lid and the base tray. The base tray fits into the bath with the feet downward so that it creates a gap between the bottom of the tank and the tray.



For optimum temperature stability, avoid allowing the base tray to touch the sides of the tank.

The lid should only be lifted by the handle; this may be hot so suitable gloves should be used.

5.3 Installation

Place Pasto on a level, non-combustible surface. Ensure that the mains plug and the switch are easily accessible.

5.4 Electrical supply

Check that the supply voltage marked on the serial number label, and the type of mains plug, are correct for your mains supply outlet, which must have a ground connection.

To disconnect the equipment from the mains supply, remove the mains plug from the mains supply outlet.

6 Operating procedures

6.1 Operation

6.1.1 Water level

Pasto will provide optimum performance when filled to the swage line (25mm below the top of the tank). When filling the bath, allowance should be made for the food bags to be added.

The water level used in the tank will influence the temperature accuracy and stability. We recommend the following minimum

Tanks size	Recommended min % fill	Approximate water depth (mm)
5L	40%	50
12L		50
26L		70

Table 1 - Recommended minimum fill levels

6.1.2 Operating Pasto without water (dry, ETC)

Do not attempt to use Pasto without water in the tank. Pasto has an inbuilt protection mechanism known as dry start protection which will detect this condition in most circumstances and prevent Pasto from continuing to heat. In this instance the bath will display *dry* and sound an alarm.

	The tank internal surface can become very hot if an accidental dry start has occurred, even if the dry start cut out has operated. Avoid touching the tank until it has been left to cool for several minutes.
---	--

Once you have filled Pasto, you will need to switch the bath off and on in order to resume operation.

	Repeated dry starting of the bath stresses key components in the bath which can affect service life and the equipment's warranty.
---	---

Pasto also includes an independent safety temperature cut-out which will protect the bath in the unlikely event of a fault or if the dry protection is switched off (see section 6.1.4). If the cut-out is activated the Pasto will stop heating, show *ETC* on the display and sound an alarm. Pasto should be switched off, unplugged and allowed to cool for at least 30 minutes. Contact Grant creative cuisine at support@grantcreativecuisine.com for information on how your bath can be reset.

6.1.3 Operation above 60°C

The lid must be used above 60°C to maintain proper temperature control and to ensure that the water temperature reaches the set point.

The lid will also prevent excessive evaporation that requires the bath to be filled more often and will save energy.

6.1.4 Allowing the bath to run dry (run dry protection)

Always take care to avoid allowing the water to evaporate to the point that Pasto runs dry. This can lead to the bath's internal safety cut-out operating. In this situation the display will show $\square\text{L}$ and sound the alarm. Contact Grant Creative Cuisine for information on how your bath can be reset.

Pasto has a built-in advanced detection mechanism to greatly reduce the chances of the safety cut out occurring in most circumstances where the bath is left to accidentally run dry. This feature is only enabled automatically when the following criteria are met:

- The set temperature is >50°C
- The bath has been operating for at least one hour
- The water is not set to boiling point ($\geq 99^\circ\text{C}$)

If Pasto detects signs that the water level may be becoming low, it will alert the user by displaying *dry* and sounding an alarm

Once you have checked the water level and topped up as necessary you will need to switch Pasto off and on in order to resume operation.

This feature can be disabled. Press the set key to enter the bath menu and use the arrow keys to select *dPR* (Dry Protection Alarms). Press the set key and use the arrow keys to select off. Use the set key to confirm that the dry start and run dry protection are switched off.

6.1.5 Emptying Pasto

Before emptying any bath allow the water temperature to fall to a safe level and take reasonable precautions to prevent accidental spillage.

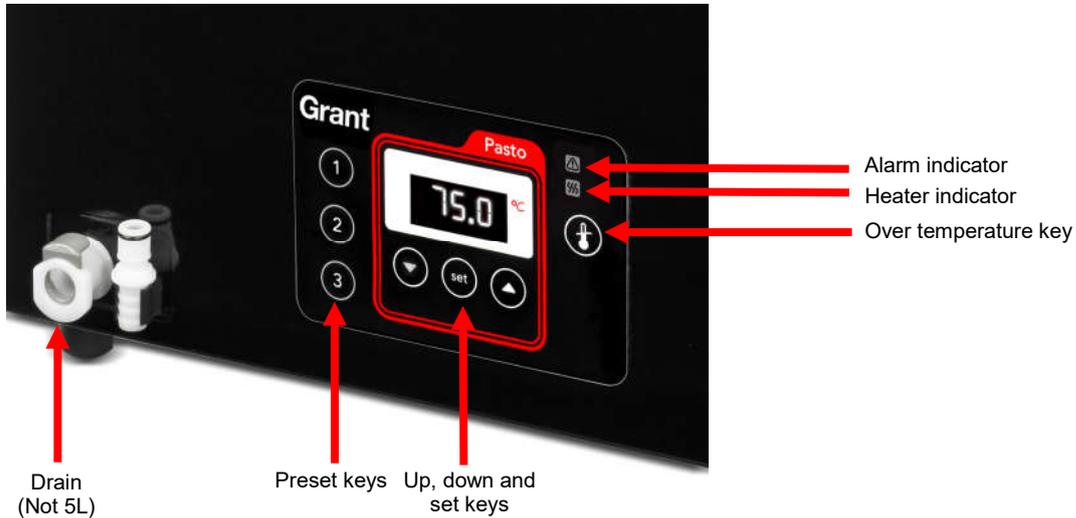
Pasto 12 & 26 have drain taps to make emptying easier.

To empty Pasto using the drain tap, push the supplied drain insert into the drain tap. Note that the water will begin to empty as soon as the drain insert is fully engaged. A length of hose can be added to the barbed end of the drain insert if required.

7 Using Pasto

7.1 Using Pasto

7.1.1 Pasto controls



7.1.2 Setting the control temperature (°C)

The water temperature of the Pasto can be set using the main display. The following example shows setting the water bath to 37.0°C. Note that once the set point is entered the water temperature is displayed and the heater lamp will indicate when the bath is heating.

Once at set point, the heater indicator will periodically illuminate to show the bath is controlling.

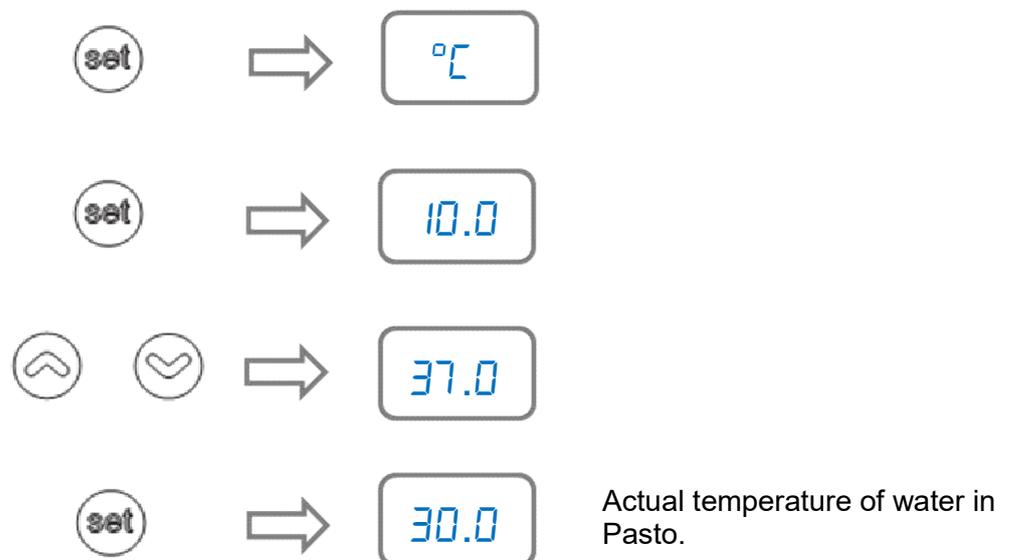


Figure 1 - Setting bath temperature

7.1.3 Enabling the keypad lock

The control panel can be locked by pressing the **set** and **up** keys simultaneously for at least 3 seconds.

The display will show `LOC` to confirm that the keypad has locked.

The control panel can be unlocked by pressing the **set** and **down** keys simultaneously for at least 3 seconds. The display will show `OPR` to confirm that the keypad is operational.

7.1.4 Setting the over temperature alarm

The over temperature can be used to protect food by setting a maximum temperature limit the bath is allowed to heat to. If the bath exceeds this temperature, it will stop heating, display `OTR` (over temperature alarm) and sound an alarm.

The alarm can be silenced by pressing the **set** key.

Allow Pasto to cool down before switching the bath off and on to resume normal operation. Note that if the cause of overheating is an incorrect set point, this will need to be corrected otherwise the alarm will operate again.

You should set the over temperature value, allowing for a safety margin to the sample maximum temperature limit if possible. Additionally, the over temperature alarm value should be greater than the Pasto set point to avoid nuisance alarms. We recommend this is at least 1°C.

To set the over temperature alarm:

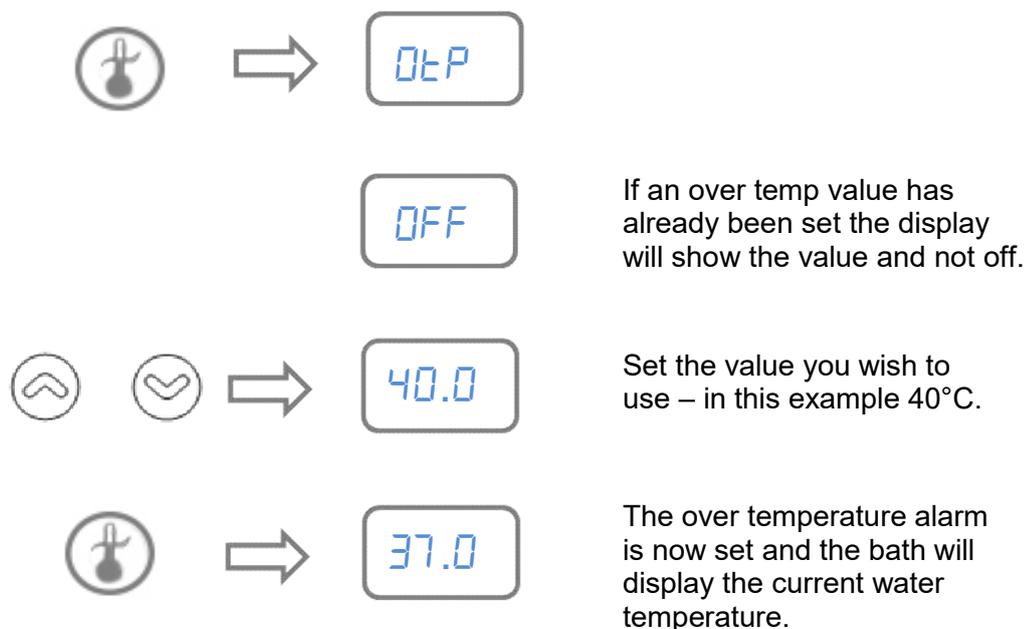


Figure 2 - Setting the over temperature alarm

To disable the alarm, set the over temperature alarm limit to 10.0°C and then press the down button one further time so the display shows *OFF*. Save this by pressing the over temperature alarm key.

7.1.5 Configuring and running temperature presets

Temperature presets allow you to conveniently store Pasto's temperature settings you routinely use. The bath has 3 presets, numbered 1 to 3.

You can set Pasto to the value stored in the temperature preset by pressing the preset button you require, followed by set.

Before you can use presets you need to store the values you wish to use in at least one of the presets using the following sequence:

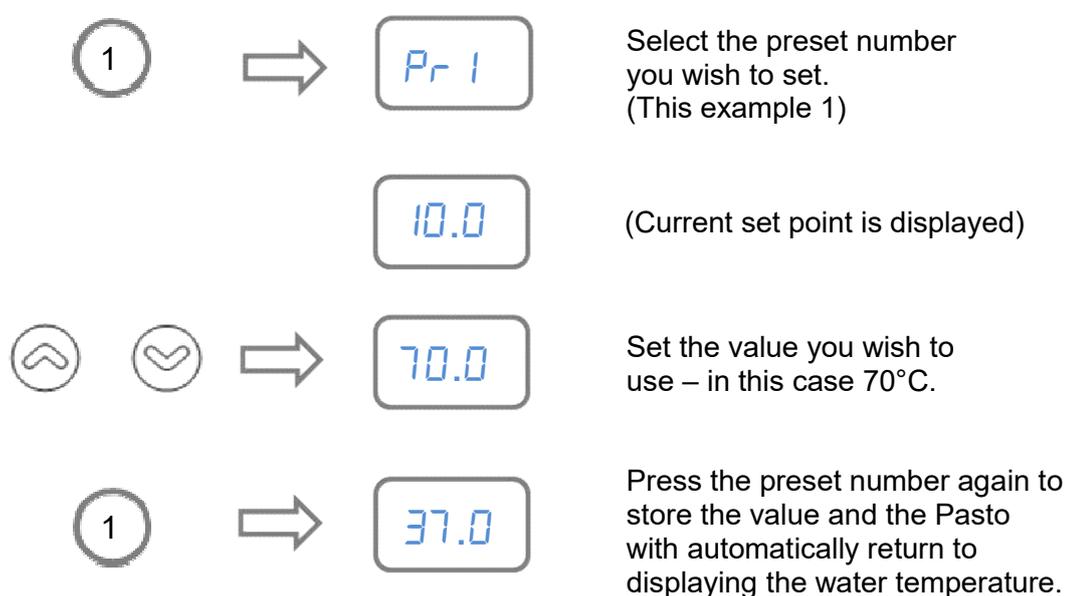


Figure 3 - Configuring a preset value

7.1.6 Setting the countdown timer (Edt)

A countdown timer can be set in the range of 1 to 999 minutes. The countdown timer will sound an alarm at the end of a countdown period. It can be used to time cooking or remind you to take a further action.

Note the countdown timer does not take into account if the Pasto has not reached the set temperature. If the Pasto has not reached the set temperature, this will need to be taken into account when starting the countdown timer.

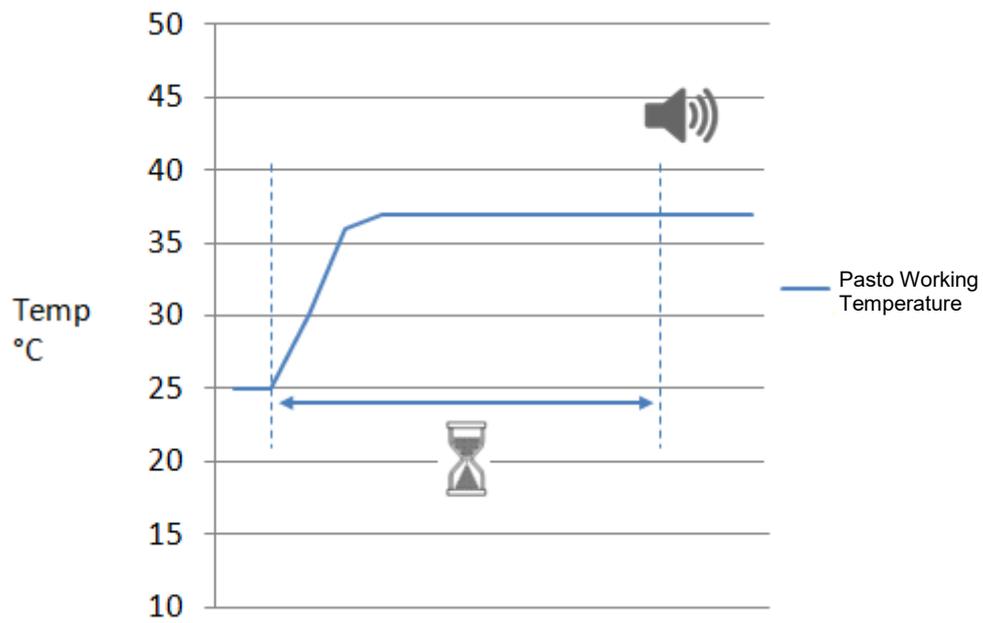


Figure 4 – Setting count down timer

When the countdown timer expires the Pasto will sound an alarm and display *End*.

Press **set** to silence the alarm.

To set the countdown timer: -

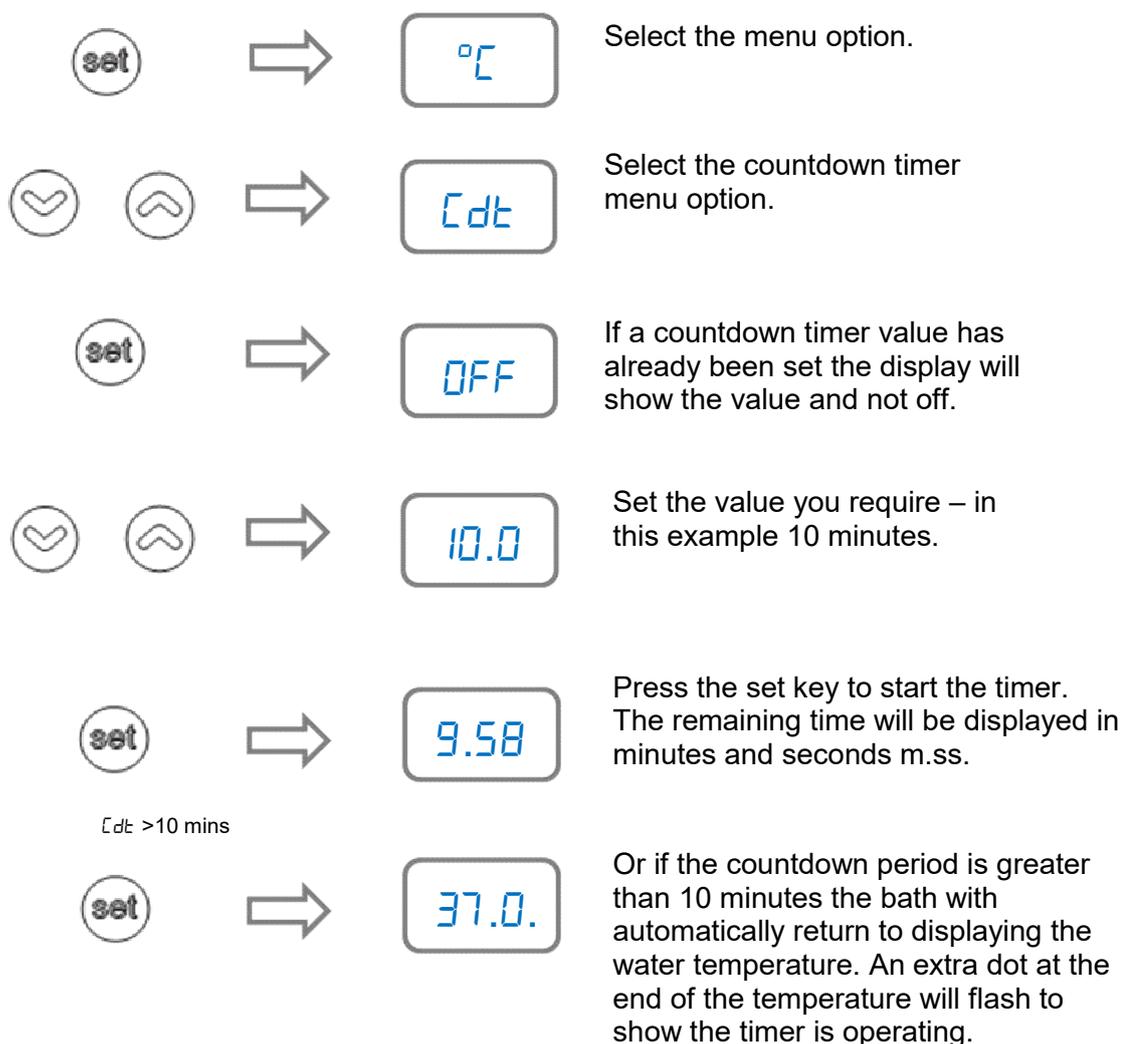


Figure 5 - Setting the countdown timer

To find out the water temperature whilst the display is showing the remaining time, press the **set** button.

To enter the configuration menus whilst the display is showing the remaining time, press the **set** button twice.

The timer can be turned off at any time by selecting the [dt] menu option and pressing the down arrow button until the display shows **OFF**.

8 Calibration

8.1 Calibration options

Two calibration options exist:

- Single point calibration
- Dual point calibration

	<p>The quality of the calibration is highly dependent on:</p> <p>Use of a suitable reference thermometer, ideally 10 times the accuracy you are trying to achieve and with the probe correctly immersed in the water.</p> <p>Performing a calibration in a stable ambient environment ($\pm 1^{\circ}\text{C}$) free from draughts or cooling air currents.</p>
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8.2 Single point calibration (LPC)

A single point calibration applies a single offset over the bath temperature curve. For this reason, the calibration temperature is usually the same as the intended working temperature for the bath or particular experiment:

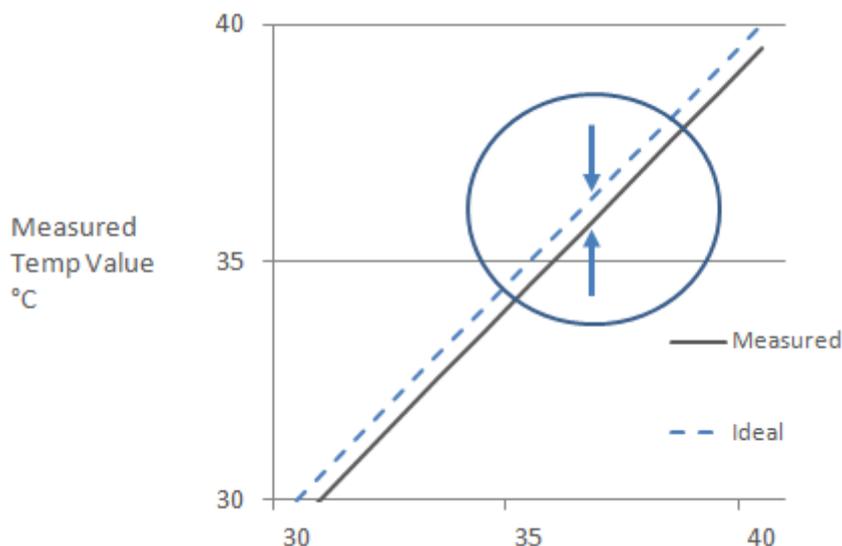


Figure 6 - Single point calibration

To configure a single point calibration:

Firstly, set the Pasto to the desired set point and leave to stabilise for at least an hour.

Place the reference thermometer in the centre of Pasto (immersed as recommended by thermometer manufacturer). Note the temperature shown by the reference thermometer and enter it into the calibration menu by following the steps below.

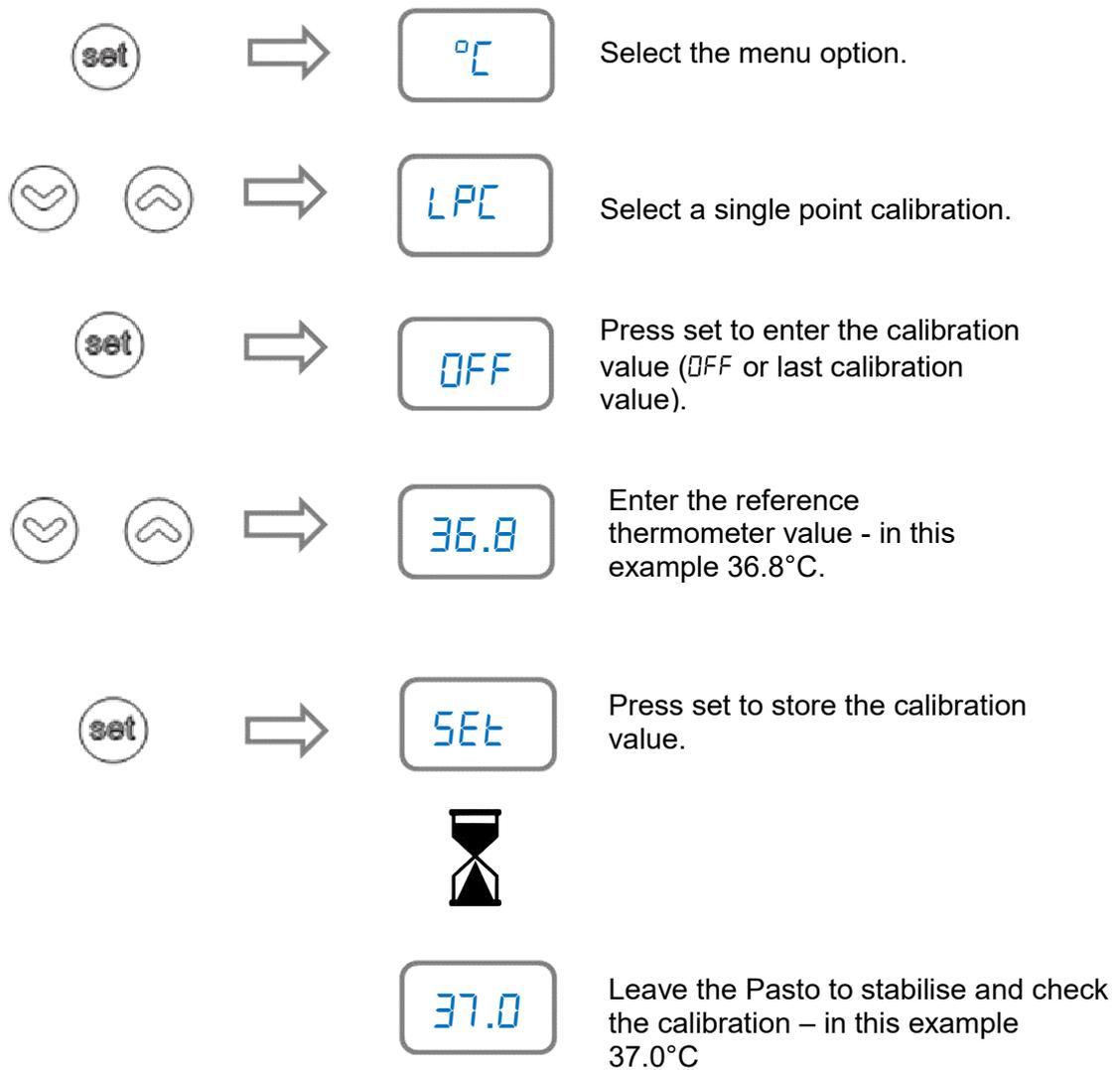


Figure 7 - Setting a single point calibration

8.3 Dual point calibration (LPC, HPC)

Dual point calibration is typically used when Pasto is to be operated over a range of temperatures.

Two calibration points are entered into the calibration menu: the low calibration point (LPC) and high calibration point (HPC). These points are typically selected as just below and above the normal working temperature range for Pasto.

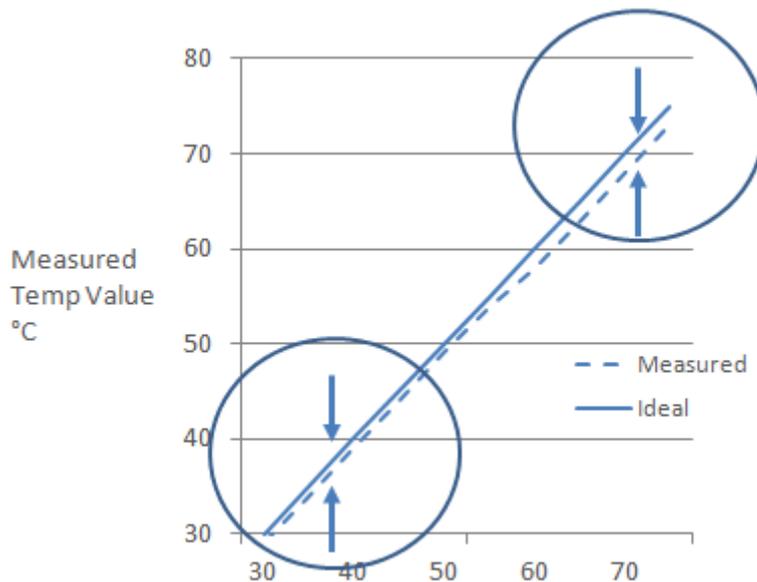


Figure 8 - Dual point calibration

Note that if only one calibration point is entered then the bath will behave as described in single point calibration as section 8.2.

To configure a dual point calibration, set the bath to the lower temperature and then follow the procedure as in 8.2 for the single or low point calibration.

Set Pasto to the upper working temperature and allow to stabilise for at least an hour.

Place the reference thermometer either in the centre of the Pasto, the thermometer hole.

Note the value of the reference thermometer and enter it into the calibration menu by following the steps below.

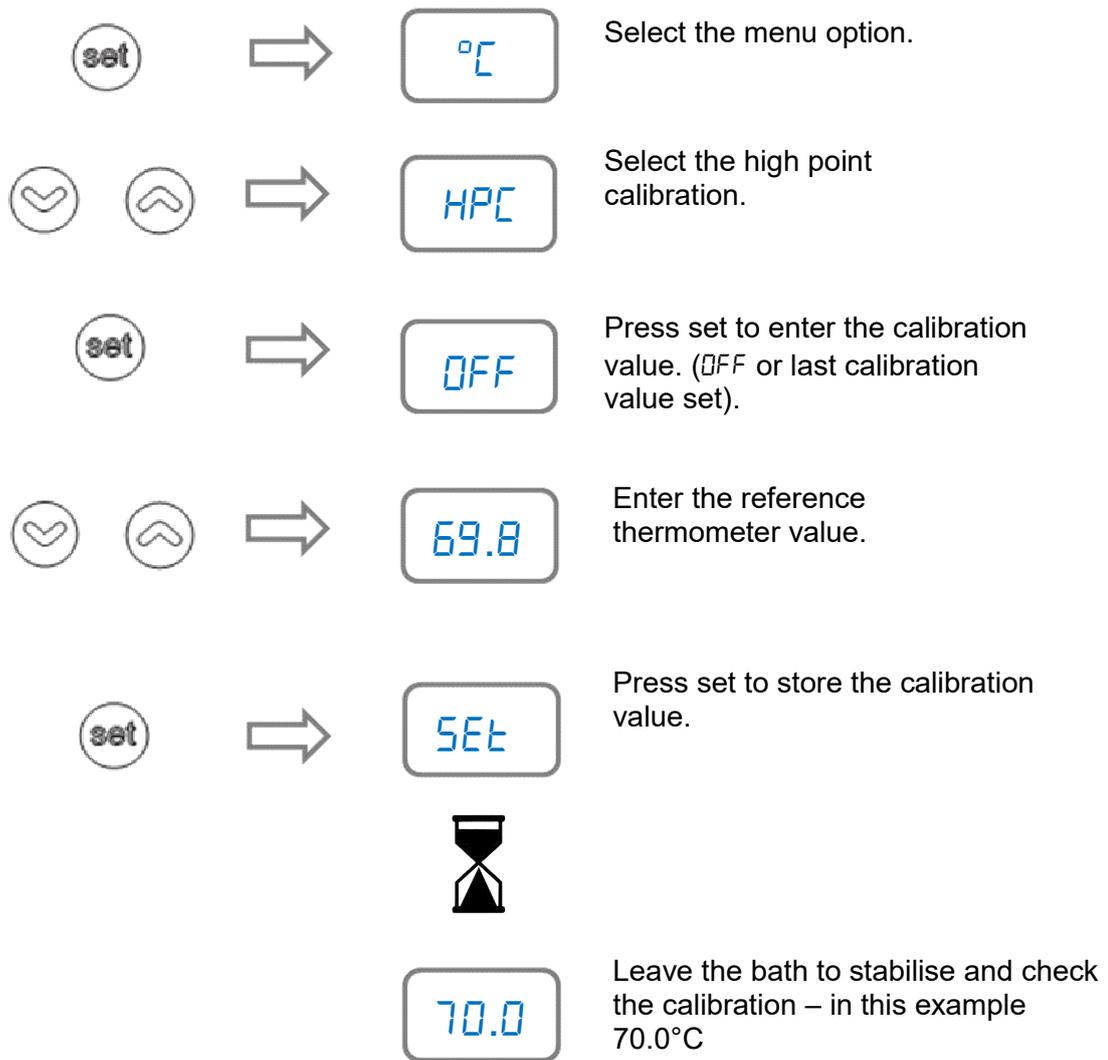


Figure 9 - Setting the high calibration point

9 Technical specifications

Operating conditions

Ambient Temperature	5 to 40°C
Maximum relative humidity	80% R.H. in room temperatures up to 31°C decreasing linearly to 50 % R.H. at 40°C
Altitude above sea level	Up to 2,000 m (6,500 ft)
Operating Environment	Indoor use only

Electrical details

Mains supply: 220-230V @ 50/60 Hz or 110-120V @ 50/60 Hz

Pollution degree: 2

Installation Category: II

Note: Mains supply voltage fluctuations are not to exceed $\pm 10\%$ of the nominal supply voltage

Models	Capacity (L)	Current rating (A)	
		120V	230V
PASTO 5	5	3.0	1.5
PASTO 12	12	6.5	3.5
PASTO 26	26	8.5	6.0

Pasto Performance

Temperature range	5°C above ambient to 90°C
Display (also used for setting)	10.0 to 99.9°C in 0.1°C steps
Temperature stability	$\pm 0.2^\circ\text{C}$

All performance data specified tested in accordance with DIN12876.

10 Warranty information

When used in kitchen conditions according to this manual, this product is guaranteed for TWO YEARS against faulty materials or workmanship.

11 Maintenance and service

No routine maintenance is required except for cleaning. There are no user serviceable parts inside the unit.

11.1 Cleaning

Do not immerse or attempt to clean Pasto in a Dishwasher. Clean the outside of the equipment with a damp cloth. Do not use chemical cleaning agents.

Scale on immersed parts can be removed using chemical descaling products designed for kitchen equipment which has metal parts. Warning, de-scaling products may be toxic – follow manufacturer instructions.

Before using any other cleaning or decontamination method, check with Grant Creative Cuisine or your local representative to make sure that the proposed method will not damage the equipment.

11.2 Fuses

The fuses are internal and should not need to be replaced.

11.2.1 Replacing the mains cord

Any replacement mains cord-set used with the water baths must meet the same specification as the one originally supplied with the unit to maintain safety of the unit.

For Europe (including the UK), the cable must have the following markings; <HAR>, HO5VV-F 3Gx1mm² and be rated to carry 10A. The mains plug and IEC connector must carry approvals from a European certification body (e.g. BSI, VDE or equivalent).

For Australia the cable must have the following markings; HO5VV-F 3Gx1mm² and be rated to carry 10A. The mains plug, lead and IEC connector must carry approvals from an Australian regional authority (e.g. N, NSW or equivalent).

For North America, the cable must have the following markings; SVT, 3x 18AWG, VW-1, 75°C, 300V, FT2 and be rated to carry 10A. The mains plug, lead and IEC connector must carry 3rd party approval marks for Canada and the US (e.g. CSA and UL marks/file numbers).

11.2.2 Routine safety tests

If routine tests are to be made, we recommend a test of the integrity of the protective earth conductor and an insulation test at 500 V DC. Routine flash tests are not recommended for any electrical equipment, because repeated high voltage tests degrade insulation materials.

11.3 Service

If service is required, switch off the unit and contact Grant Creative Cuisine or your local representative for repairs.

Service Department
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12 Troubleshooting

Symptom	Possible cause	Action Required
Temperature does not rise when expected	Set temperature is lower than liquid temp.	Check that Pasto set temperature is correct (see section 7).
	Set temperature is too close to ambient.	Increase the set temperature (see section 7). Minimum temp is 5°C above ambient.
Temperature continues to rise when not expected	Set temperature is higher than liquid temperature.	Check that the set temperature is correct (see section 7).
	Set temperature is too close to ambient.	Increase the set temperature (see section 7). Minimum temperature is 5°C above ambient.
Display shows <i>oE</i>	Water temperature has gone above the over temperature alarm temperature.	Let water cool. Check over temperature alarm is set above the required water operating temperature (see section 7.1.4).
Display shows <i>dry</i>	Pasto has been heated with no water.	Fill with water. Switch the bath off and on to restart.
	Pasto has run out of water.	Refill with water. Switch the bath off and on to restart.
Display shows <i>oE</i>	Pasto has overheated due to lack of water.	The temperature cut-out needs to be reset. Contact Grant Creative Cuisine for instructions on how to do this.
	Product has been placed directly on the base of the bath.	After reset has been completed, use a tray on the bath base.
Display shows <i>oPE</i>	Faulty temperature probe	Contact Grant Creative Cuisine Service Department for assistance.
Display shows <i>ShrE</i>	Faulty temperature probe	Contact Grant Creative Cuisine Service Department for assistance.
Display shows <i>dEF</i>	Pasto is running on its default settings	Contact Grant Creative Cuisine Service Department for assistance.

13 Compliance

13.1 WEEE directive

Grant Instruments complies fully with the Waste Electrical & Electronic Equipment (WEEE) regulations 2013. We are a member of the B2B compliance scheme (Scheme Approval Number WEE/MP3338PT/SCH), which handle our WEEE obligations on our behalf. Grant Instruments have been issued with a unique registration number by the Environmental Agency, this reference number is WEE/GA0048TZ.

For information regarding WEEE collections in the UK please contact our B2B Compliance Scheme directly on 01691 676 124.
For other countries please contact your equipment supplier.

For General WEEE information please visit: www.b2bcompliance.org.uk

13.2 RoHS directive

All the products covered by this manual comply with the requirements of the RoHS Directive (Directive 2011/65/EC).

13.3 Electrical safety and electromagnetic compatibility

All the products covered by this manual comply with the requirements of the Low Voltage Directive (2014/30/EU) for electrical safety and the EMC directive (2014/35/EU) for electromagnetic compatibility.

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