grant

Unstirred Water Baths

JB Academy
JB Nova
SUB Aqua Pro

Operating Manual

If you have any feedback on Grant's products or services we would like to hear from you. Please send all feedback to:

Grant Instruments (Cambridge) Ltd
Shepreth
Cambridgeshire
SG8 6GB
UK

Tel: +44 (0) 1763 260 811
E-mail: support@grantinstruments.com

Representative in the European Union
Grant Instruments Europe B.V.
Strawinskylaan 411
WTC, Tower A, 4th Floor
1077 XX AMSTERDAM
THE NETHERLANDS
Email: grant@eu.grantinstruments.com

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1 Use of products

The following products are covered by this operating manual:

JB Academy range:
JBA5, JBA5 AUS, JBA5 US, JBA12, JBA12 AUS, JBA12 US, JBA18 & JBA18 AUS, JBA18 US

JB Nova range:
JBN5, JBN5 AUS, JBN5 US, JBN12, JBN12 AUS, JBN12 US, JBN18, JBN18 AUS, JBN18 US, JBN26, JBN26 AUS & JBN26 US

SUB Aqua Pro range:
SAP2, SAP2 AUS, SAP2 US, SAP2S, SAP2S AUS, SAP2S US, SAP5, SAP5 AUS, SAP5 US, SAP12, SAP12 AUS, SAP12 US, SAP18, SAP18 AUS, SAP18 US, SAP26, SAP26 AUS, SAP26 US, SAP34, SAP34 AUS, SAP34 US, SAPD, SAPD AUS & SAPD US

The products listed above are a general purpose series of thermostatically controlled unstirred water baths designed for indoor laboratory 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 water bath correctly and safely. Important safety information, symbols and warnings are listed below 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 Instruments or your local distributor who will be able to provide any additional information.

3 Product registration and warranty

The warranty for this water bath is detailed in section 10 and to register you should complete the on-line registration form at www.grantinstruments.com. **Not registering your product may affect your warranty.**

4 Safety information

4.1 Safety compliance

Grant water baths 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.

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4.2   Safety symbols

The symbols below are marked on the equipment and in this manual 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

	Read the whole of the instructions. Safety may be impaired if they are not followed.
	Surfaces and water can be hot during and after use. Before emptying a bath, allow the water temperature to fall to a safe level. For 12, 18, 26, dual & 34 litre baths, empty the bath before moving it. This bath is only intended for use with water or metallic heat transfer beads. Use of other fluids or heat transfer media may invalidate the warranty and present a risk of fire or explosion. The tray must be removed when using heat transfer beads. Place on a stable flat surface to reduce the risk of accidental spillage. No user serviceable parts. Risk of electric shock after disassembly or operation with covers removed. Not for use in environments with a risk of flammable or explosive gases. To be operated within the limits listed in this guide Only use the mains cord provided or one with an identical rating. Ensure that the mains plug and the switch are easily accessible. A clearance of >10cm around the bath is required to ensure adequate air flow. 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. 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.

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| ⚠️ | To preserve your water bath 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 first switching on the bath please 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 the bath in high ambient temperatures (> 30°C) the temperature of the water used to fill the bath should be no more than 10°C below the ambient. |
|---|---|

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5   Operating instructions

5.1   Unpacking instructions

Standard equipment includes:
- Thermostatic water bath
- Mains cord with plug
- Gabled polycarbonate lid (excludes JB Academy, no lid supplied and SAP34, stainless steel lid supplied)
- Polycarbonate base tray(s) (excludes SAP34, 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 water bath 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 when using water. The base tray must be removed when using heat transfer beads

The lid should only be lifted by the handle, as other parts can become hot during use. It also has a vent/thermometer hole – this hole should not be sealed as pressure could build up inside the bath.

5.3   Installation

Place the water bath 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.

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6 Operating procedures

6.1 Operation

6.1.1 Water level

The bath will provide optimum performance when filled to the swage line which is typically 25mm below the top of the tank.

Do not fill above the swage line.

The water level used in the tank will influence the temperature accuracy and stability. Using liquid levels below the swage line needs consideration, especially when operating at higher water temperatures (>50ºC) and without a lid. We recommend the following minimum fill levels.

Tanks size	Recommended min % fill	Approximate water depth (mm)
2LS	80%	32
2L		50
5L		50
12L		50
18L	40%	50
26L		70
34L		70

Table 1 - Recommended minimum fill levels

When using a larger bath with vessels which only require a shallow immersion, we recommend filling the bath as close to the swage line as possible and using raised shelves in the bath to elevate the vessel to the desired immersion depth.

6.1.2 Operating the bath without water (d-y, OtC)

Do not attempt to use your bath without water in the tank. The bath has an inbuilt protection mechanism known as dry start protection which will detect this condition in most circumstances and prevent the bath from continuing to heat. In this instance the bath will display d-y 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 the bath, 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.

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The bath 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 alarm is switched off (see section 6.1.5). If the cut-out is activated then the bath will stop heating, show OtC on the display and sound an alarm. The bath should be switched off, unplugged and allowed to cool for at least 30 minutes. Contact Grant at service@grantinstruments.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   Flat bottomed vessels

Do not place flat-bottomed vessels or other objects directly on the bottom of the tank. Always use the base tray. This avoids possible damage to the heater mounted under the tank. The base tray also improves temperature control.

6.1.5   Allowing the bath to run dry (dPA)

Always take care to avoid allowing the water to evaporate to the point that the bath runs dry. This can lead to the bath's internal safety cut-out operating. In this situation the display will show OtC and sound an alarm. Contact Grant at service@grantinstruments.com for information on how your bath can be reset.

The bath 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 a least one hour

- The water is not set to boiling point (>=99°C)

If the bath detects signs that the bath 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 the water level as necessary you will need to switch the bath off and on in order to resume operation.

For users with specialist applications where this feature maybe unnecessarily triggered it can be disabled. Press the set key to enter the bath menu and use the arrow keys to select dPA (Dry Protection Alarm). 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.

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6.1.6 Emptying the baths

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

Larger baths have drain taps to make emptying easier.

To empty the bath 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.

6.1.7 Using the SAPD bath

The SAPD bath provides two baths side by side that will control at different temperatures independently of each other. The difference between the temperatures of the two baths should be kept to less than 30ºC to ensure specified bath performance.

The set temperature difference between the baths can be greater than 30ºC but the following should be taken into account:

- Setting a higher temperature on the smaller bath will reduce energy use and ensure optimum bath performance

- Each bath may require additional time for temperature stabilisation (particularly the lower temperature bath)

- Each bath temperature should be verified with an independent thermometer to ensure accuracy is fit for purpose (particularly the lower temperature bath)

If only one of the baths is in use then the performance will be as specified.

6.1.8 Using the bath with heat transfer beads (Ht५)

SUB Aqua Pro and JB Nova baths excluding SAP2 and SAP2S, can be set up to operate with heat transfer beads as an alternative to water.

This feature is not available on JB Academy or older SUB Aqua Pro and JB Nova models which do not have the heat transfer beads (Ht५) selection menu.

❗	The base tray must be removed when using heat transfer beads

.

Configure the bath using the Heat transfer selection menu as follows:

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(set)	⇒	℃	Select the menu option
(down) (up)	⇒	HtS	Navigate to the Heat transfer selection menu option
(set)	⇒	H2O	Press set to select the menu. The water setting *H2O* is displayed
(up)	⇒	bdS	Press the up button to select the *bdS* option
(set)		37.0.	Press the set key to save the option. The bath with automatically return to displaying the actual temperature.

Figure 1 – Setting the bath for heat transfer beads

When operating the bath configured for heat transfer beads the temperature range is limited to 80°C maximum. The Dry Protection Alarm is no longer required so is not available on the bath menu.

Important note. Baths using heat transfer beads behave differently from water baths The performance specification of Grant baths detailed in Section 9 is for water only. Performance with heat transfer beads will be significantly different. Users should refer to the bead manufacturer's recommendations for use and performance.

Any existing protocols for sample preparation will need to be revalidated to prevent possible overheating.

It is recommended that a drain stopper be used to prevent beads entering the drain hole. These are available to purchase in a pack of five, part number UWB-DS.

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7   Using the water bath

7.1   Using the JB Academy

7.1.1   Bath controls

Alarm indicator

Display

Keypad lock

Up, down and set keys
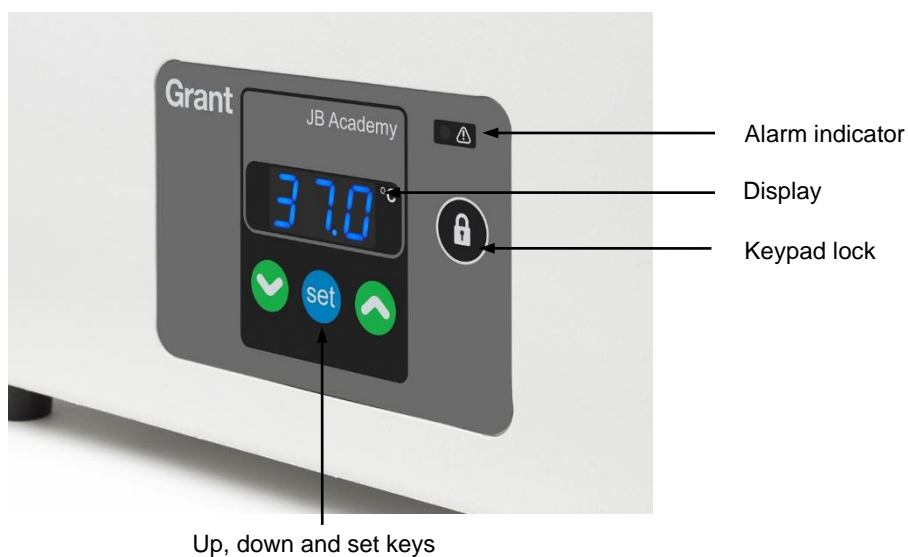
7.1.2   Indicators

There are two indicators:
- Main display – used to show temperature and short messages
- Alarm - Flashes red when activated. A buzzer also sounds.

7.1.3   Setting the control temperature (°C)

The water temperature of the bath 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 bath shows a scrolling bar display indicating the bath is heating. Once the bath is with 1°C of the set temperature this will change to displaying the actual water temperature in the bath.
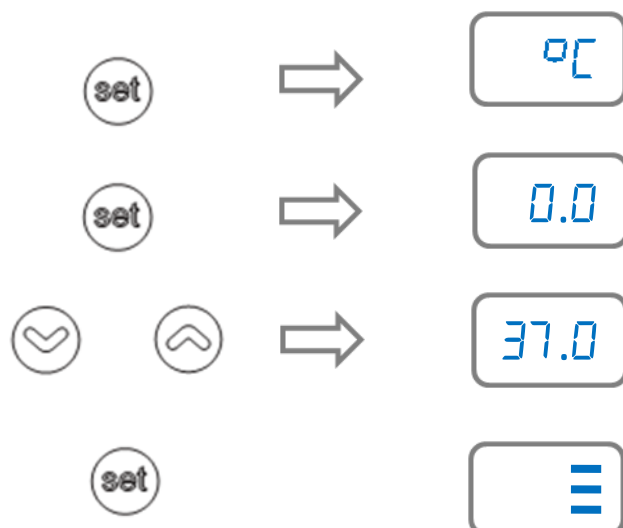
Figure 2 - Setting the bath temperature

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7.1.4 Enabling the keypad lock

The keypad lock is intended to help users avoid accidental changes to the set point temperature of the bath.

To enable and disable the lock, press and hold the **lock** and **up** or **down** keys for three seconds as shown below

Locked
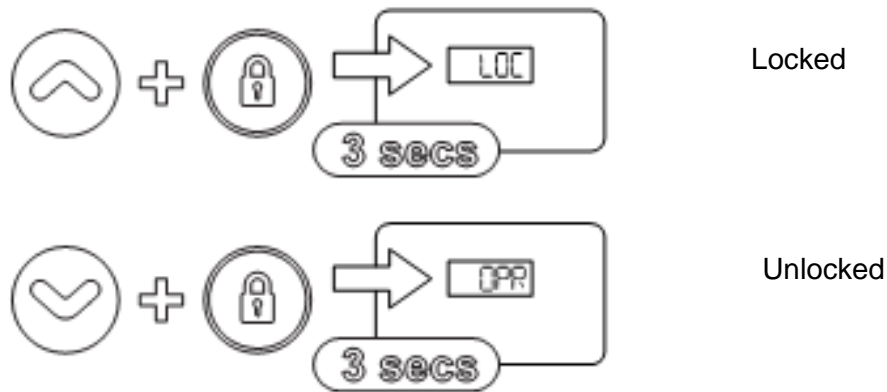
Unlocked

Figure 3 - Locking and unlocking the keypad

7.2 Using the JB Nova

7.2.1 Bath controls

Alarm indicator

Display

Keypad lock

Drain   Up, down and set keys
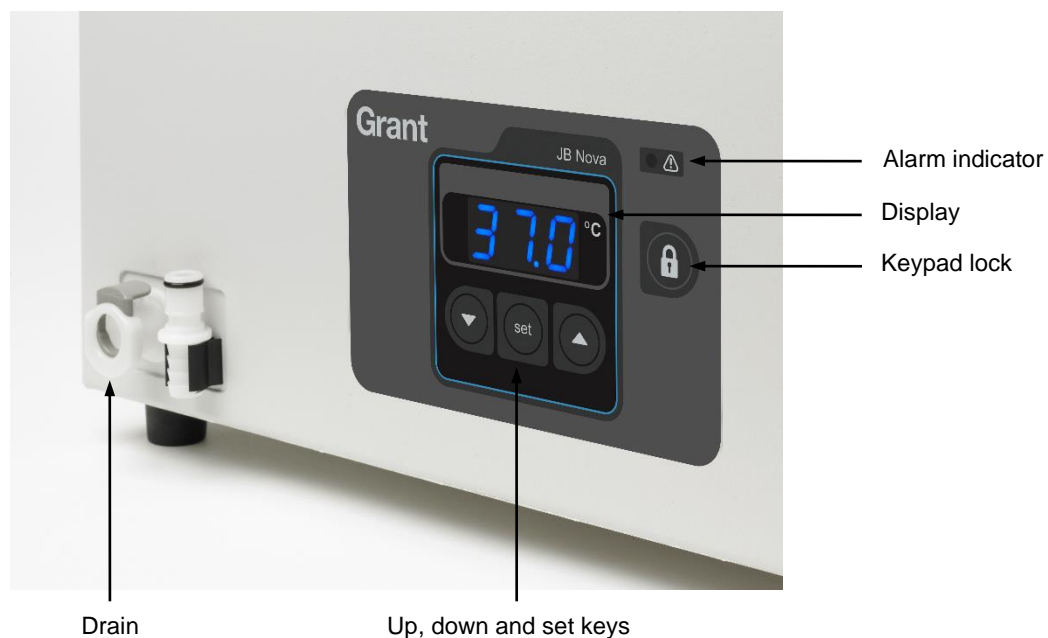
7.2.2 Setting the control temperature (℃) and keypad lock

Setting the control temperature and keypad lock features on the JB Nova uses the same method as the JB Academy model. Follow steps outlined in sections 7.2.1 and 7.2.2.

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7.3 Using the SUB Aqua Pro

7.3.1 Bath controls

Drain   Preset keys   Up, down and
                                     set keys

7.3.2 Setting the control temperature (°C)

Setting the control temperature on the SUB Aqua Pro bath uses the same method as the JB Academy model. Refer to section 7.1.3.

On SUB Aqua Pro models the heater indicator will periodically illuminate to show the bath is heating.

7.3.3 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.

7.3.4 Setting the over temperature protection (OtP)

The over temperature protection can be used to protect samples by setting a maximum temperature limit the bath is allowed to heat to. If the bath exceeds this temperature, it will stop heating, display OtA (over temperature alarm) and sound an alarm.
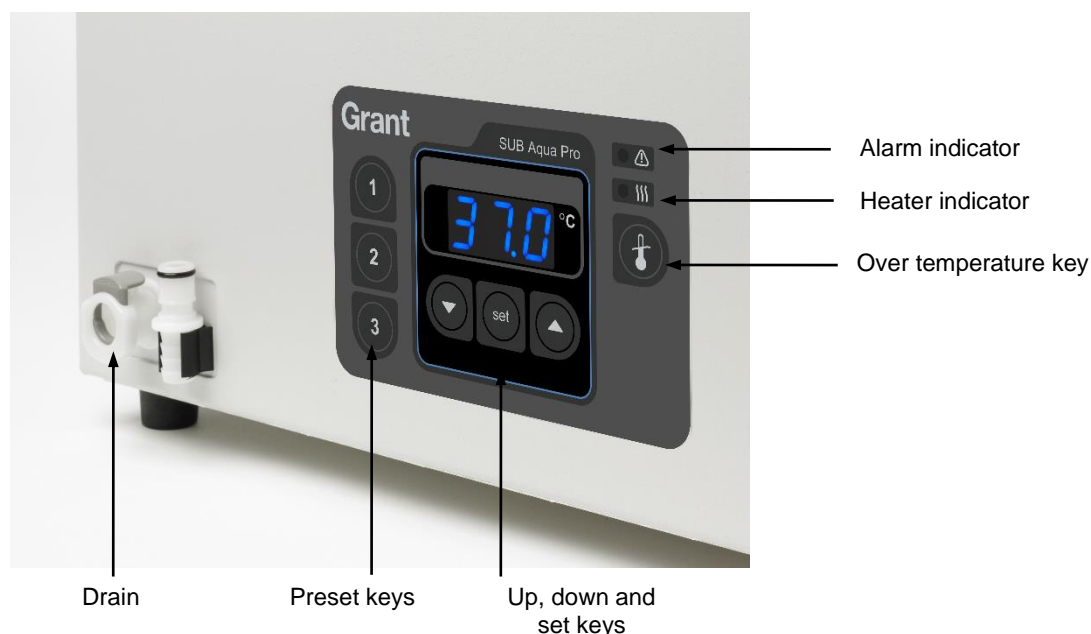
The alarm can be silenced by pressing the **set** key.

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Allow the bath 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 OtP limit should be greater than the bath set point to avoid nuisance alarms. Grant recommends this is at least 1°C.

To set the over temperature alarm:

 If an over temp value has already been set the display will show the value and not off.

 Set the value you wish to use – in this case 40ºC

 The OTA is now set and the bath will display the current water temperature
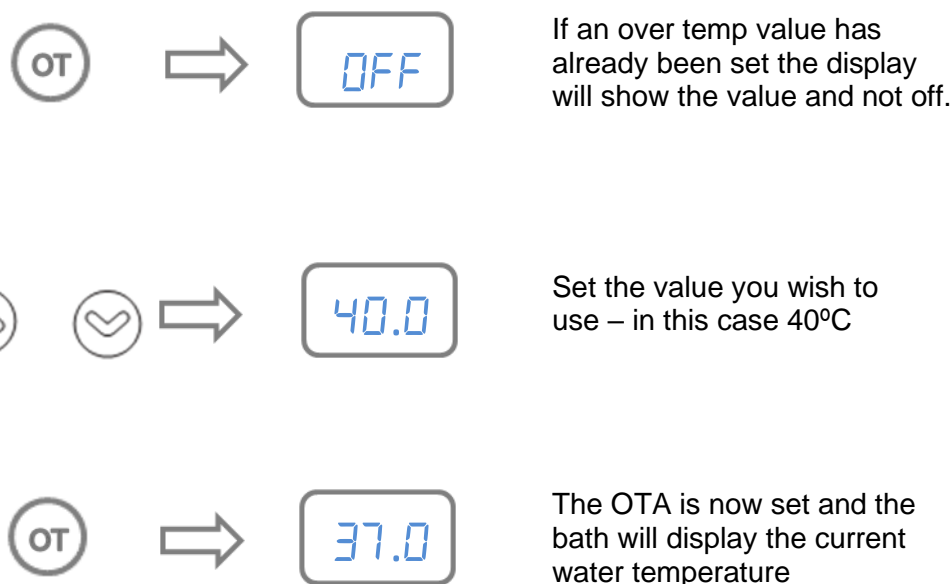
Figure 4 - Setting the over temperature alarm

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.

7.3.5   Configuring and running temperature presets ($Pr\ 1, Pr2, Pr3$)

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

You can set the bath 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:

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	Select the preset you wish to set
	Set the value you wish to use – in this case 70ºC
	Press the preset to store the value and the bath with automatically return to displaying the water temperature
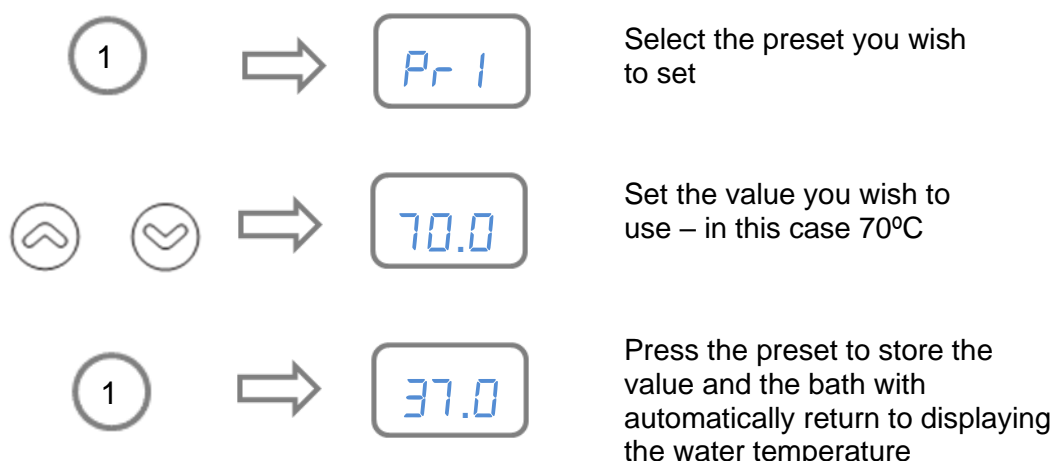
Figure 5 - Configuring a preset value

7.3.6   Setting the countdown timer (*Cdt*)

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 experiments or remind you to take a further action.

Note the countdown timer does not take into account if the bath has not reached the set temperature. If the bath has not reached the set temperature, this will need to be taken into account when starting the countdown timer.
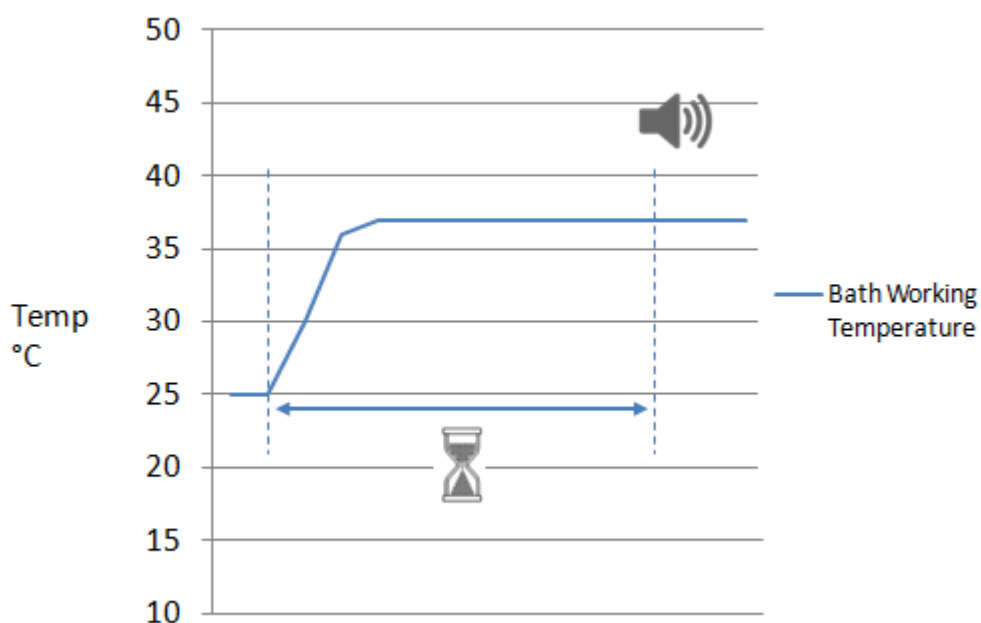
When the countdown timer expires the bath will sound an alarm and display *End*.

Press **set** to silence the alarm.

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To set the countdown timer:

(set) ⇒	ᵒC	Select the menu option
(down)(up) ⇒	Cdt	Select the countdown timer menu option
(set) ⇒	OFF	If a countdown timer value has already been set the display will show the value and not off.
(down)(up) ⇒	10.0	Set the value you require – in this case 10 minutes
(set) ⇒	9.58	Press the set key to start the timer. The remaining time will be displayed in minutes and seconds m.ss

Cdt >10 mins

(set) ⇒	37.0.	Or if the countdown period is greater than 10 minutes the bath with automatically return to displaying the water temperature. An extra dot at the end of the temperature will flash to show the timer is operating

Figure 6 - 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 Cdt menu option and pressing the down arrow button until the display shows OFF.

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8   Calibration

8.1   Calibration options

Two calibration options exist:

- Single point calibration (available on all models)
- Dual point calibration (available on SUB Aqua Pro models only)

⚠	The quality of the calibration is highly dependent on: Use of a suitable reference thermometer, ideally 10 times the accuracy you are trying to achieve. Performing a calibration in a stable ambient environment (+/-1ºC) free from draughts or cooling air currents.

8.2   Single point calibration (SPC and 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:

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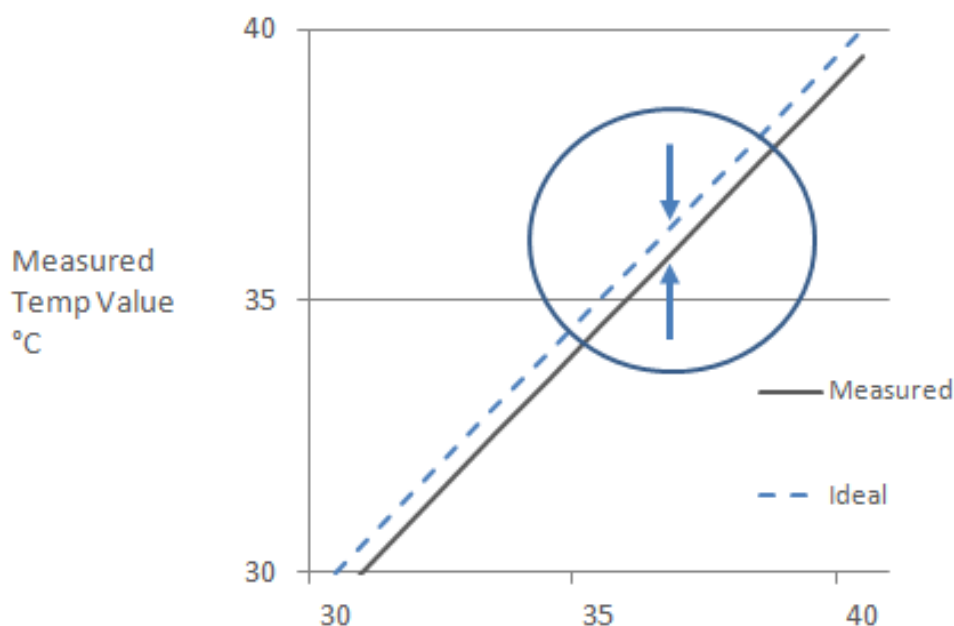
To configure a single point calibration:

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

Place the reference thermometer either in the centre of the bath, or if using a lid, through the thermometer hole. Note the temperature shown by the reference thermometer and enter it into the calibration menu by following the steps below.

Step	Display	Description
(set) ⇒	ºC	Select the menu option
⌄ ⌃ ⇒	SPC or LPC	Select single point calibration SPC for JBA & JBN baths LPC for SAP baths
(set) ⇒	OFF	Press set to enter the calibration value
⌄ ⌃ ⇒	36.8	Enter the reference thermometer value
(set)	SEt	Press set to store the calibration value
⏳		
	37.0	Leave the bath to stabilise and check the calibration

Figure 7 - Setting a single point calibration

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8.3   Dual point calibration (LPC, HPC)

Dual point calibration is typically used on baths which are 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 the bath.

Note that if only one calibration point is entered then the bath will behave as described in Single point calibration above.

To configure a dual point calibration, follow the steps below.

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Firstly set the bath to the lower working temperature and allow to stabilise for at least an hour.

Place the reference thermometer either in the centre of the bath, or if using a lid, through the thermometer hole.

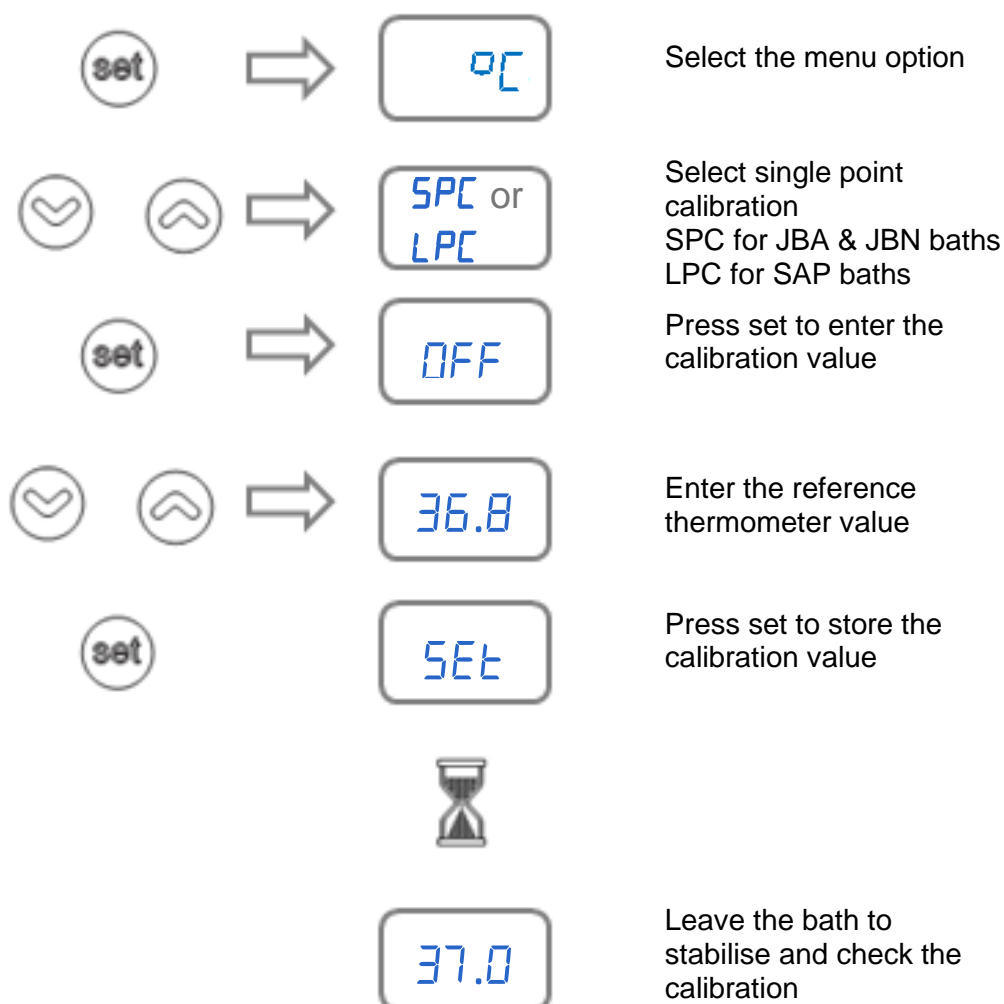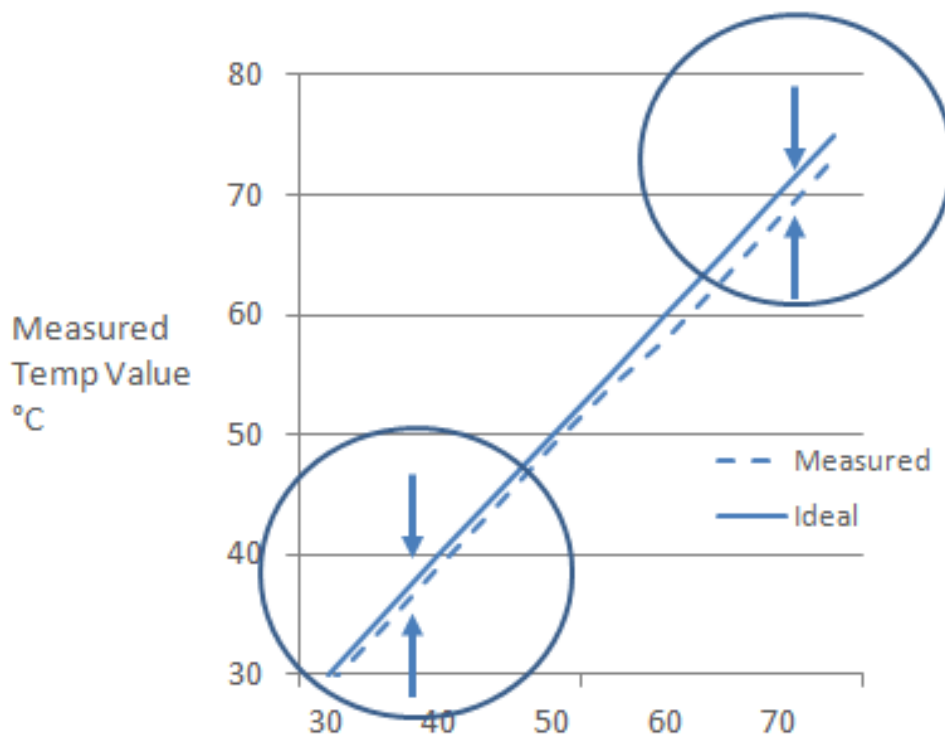Note the value of the reference thermometer and enter it into the calibration menu by following the steps below.

(set) ⇨	°C	Select the menu option
⌄ ⌃ ⇨	LPC	Select the low point calibration
(set) ⇨	OFF	Press set to enter the calibration value
⌄ ⌃ ⇨	36.8	Enter the reference thermometer value
(set)	SEt	Press set to store the calibration value
⧗		
	37.0	Leave the bath to stabilise and check the calibration

Figure 8 - Setting the low point calibration

Secondly set the bath to the upper working temperature and allow to stabilise for at least an hour.

Place the reference thermometer either in the centre of the bath, or if using a lid, through the thermometer hole.

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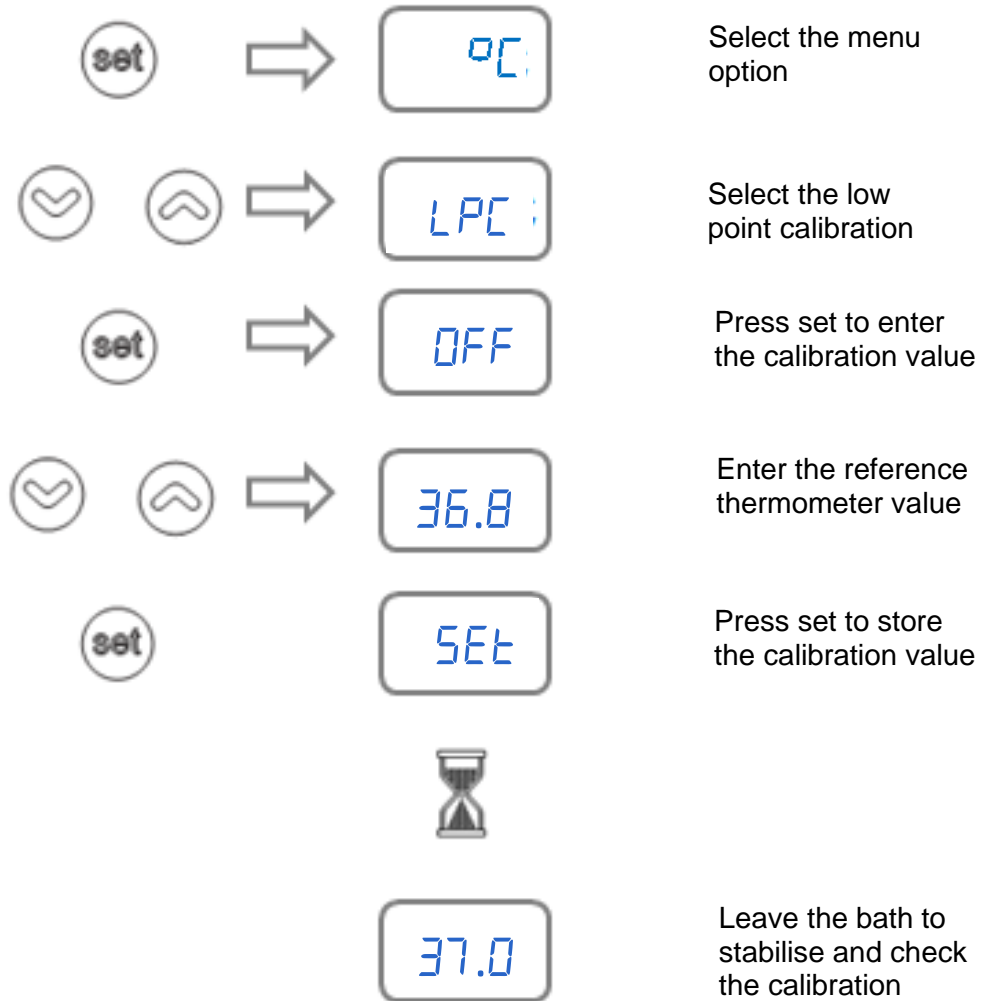.
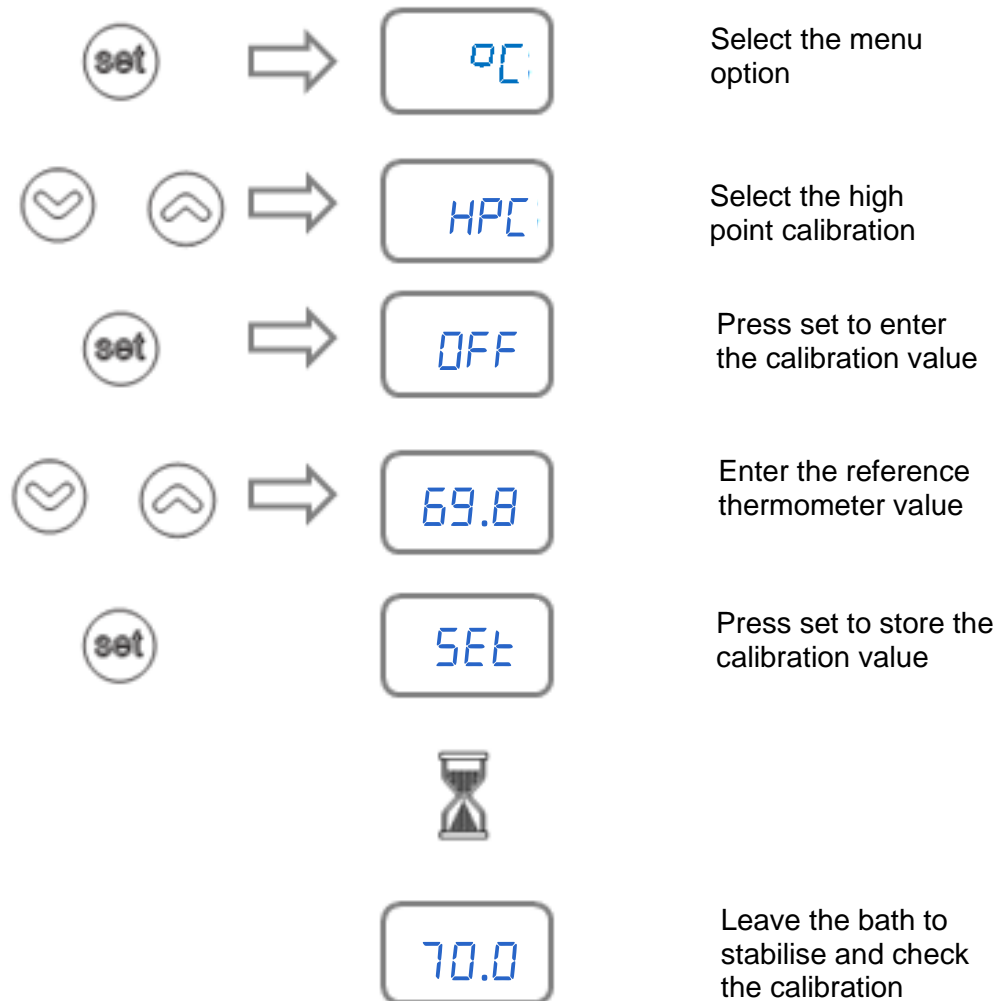

Figure 9 - Setting the high point calibration

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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 ±10% of the nominal supply voltage

Models	Capacity (L)	Current rating (A)	
		120V	230V
SAP2	2	2.0	1.0
SAP2S	2	3.0	1.5
SAP5	5	3.0	1.5
SAP12	12	6.5	3.5
SAP18	18	8.5	6.0
SAP26	26	8.5	6.0
SAPD	5 & 12	9.5	5.0
SAP34	34	10.5	8.0
JBN5	5	3.0	1.5
JBN12	12	6.5	3.5
JBN18	18	8.5	6.0
JBN26	26	8.5	6.0
JBA5	5	3.0	1.5
JBA12	12	6.5	3.5
JBA18	18	8.5	6.0

SUB Aqua Pro bath performance

Temperature range	5°C above ambient to 99°C
Display (also used for setting)	10.0 to 99.0°C in 0.1°C steps
Temperature stability	± 0.2°C

JB Academy & JB Nova bath performance

Temperature range	5°C above ambient to 95°C
Setting scale	10 to 95°C in 0.5°C steps
Temperature stability	± 0.5°C

All performance data specified tested in accordance with DIN12876.

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Technical tips

9.1   Which water should you use in your bath?

- Use tap water with care. Water with a high lime content will cause scale build up and should be avoided.

- Distilled water and some types de-ionised water may be used. Avoid ultra high purity de-ionised waters.

- Avoid using water with high levels of salts or iron. These will reduce the life of your bath

- Regular water changing and frequent cleaning of your bath is needed to preserve the baths corrosion resistance

- Ensure you bath is stored dry.

- Use care in placing other metallic items in the bath. Some metals (e.g. ferrous materials such as iron filings and swarf) can cause an electro-chemical reaction leading to corrosion.

- The product warranty may be affected by the use of inappropriate or corrosive liquids

- Refer to www.grantinstruments.com for more additional information on corrosion prevention and cleaning guidance.

10 Warranty information

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

Extended warranty for years four and five can be purchased by contacting our sales department at salesdesk@grantinstruments.com.

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11 Maintenance and service

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

11.1 Cleaning

Clean the outside of the equipment with a damp cloth. Domestic detergents may be used to remove stubborn dirt. Scale on immersed parts can be removed using chemical de-scaling products designed for use on kitchen equipment that have metal parts. De-scaling products may be toxic and manufacturer's instructions should always be followed.

Before using any other cleaning or decontamination method, check with Grant Instruments 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.

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11.3 Service

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

Service Department
Grant Instruments (Cambridge) Ltd
Shepreth
Cambridgeshire
SG8 6GB
UK

Tel: +44 (0) 1763 260 811
E-mail: service@grantinstruments.com

12 Troubleshooting

Symptom	Possible cause	Action required
Temperature does not rise when expected	Set temp is lower than liquid temp	Check that the bath 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 temp is higher than liquid temp	Check that the bath 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.
Display shows OtA	Water temperature has gone above the OTP alarm temperature	Let water cool. Check OTP is set above the required water operating temperature (see section 7.3.4).
Display shows dry	Bath has been heated with no water	Fill the bath with water. Switch the bath off and on to restart
	Bath has run out of water	Refill the bath with water. Switch the bath off and on to restart
Display shows OtC	Bath has overheated due to lack of water	The over temperature cut-out needs to be reset. Contact Grant Instruments for instructions on how to do this.
	Objects have been placed directly on the base of the bath	After reset has been completed, use a tray on the bath base
Display shows OPEn	Faulty temperature probe	Have a competent person check the probe for an open circuit fault or contact Grant.

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Display shows Shrt	Faulty temperature probe	Have a competent person check the probe for a short circuit fault or contact Grant.
Display shows dEF	Bath is running on its default settings	Contact Grant Instruments' 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/EU).

13.3 Electrical safety and electromagnetic compatibility

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

13.4 REACH Regulation

This product does not contain any SVHCs at greater than 0.1% that must be identified in accordance with Regulation (EC) No 1907/2006 and therefore does not have an entry in the SCIP database.

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Grant Instruments (Cambridge) Ltd
Shepreth
Cambridgeshire
SG8 6GB
UK

Tel: +44 (0) 1763 260811
salesdesk@grantinstruments.com
www.grantinstruments.com

Grant Instruments Europe B.V
Strawinskylaan 411
WTC, Tower A, 4th Floor
1077 XX Amsterdam
The Netherlands

grant@eu.grantinstruments.com

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