

MANUAL

Display Balboa

HOW TO START UP YOUR BATH

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A - Värme	F - Belysning	K - Extern utgång
B - Redoläge	G - Rengöringscykel	L - Temperaturläge (Hög / Låg)
C - Viloläge	H - Jet 1	M - Välja (Programmering)
D - BBA (Musik)	I - Jet 2	N - Filtercykel (1 el. 2 eller båda)
E - WiFi	J - Luftkompressor	O - Tidsinställning (AM / PM)



-Before turning on the power to the bath, there must be water in the entire bath and the heating system!

-Always check the water temperature before you or anyone else jumps into the bath.

- To be able to manage your bath in the best way, we recommend reading pages 3-6 when starting your bath.

Mount the display on the tray

Remove the protective plastic on the plate and the protective plastic on the display. Mount the display on the mounting plate. Then screw the mounting plate with a screw in the hole on the tray. Place the display protected from rain, snow and sun.

Set up the filter

Before filling the bath, it is important to make sure that the filter is set to "Filter". This is done with the large handle on top of the filter.

Push down the spring-loaded handle and then turn to the "Filter" setting. This is the only setting that is used, if the handle is set to any of the other options you risk water pouring out of your filter into your technology box.

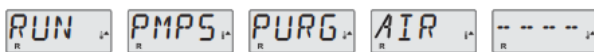
Fill the bath

Start by making sure that the valves are open so that water can be filled in the entire system. Fill the bath with water to the desired level. At a minimum, the water level needs to be above both connections and the bubble nozzles.

Now turn on the power.

PRIMING MODE - M019

The system will start up and enter priming mode which lasts for about 4-5 minutes.



You can turn off priming mode manually with the warm or cool button. We recommend letting the system complete the entire priming program.

Set the Celsius and temperature

To choose Celsius instead of Fahrenheit

Browse with the menu button until the **PREF** option appears. Select with the warm button. Browse with the warm button until C appears in the window to get Celsius, if you want Fahrenheit you should have F in the window. Press the menu button to select the one you want.



Set the temperature mode you want

There are two temperature modes: "High" and "Low". High ranges from 26.5 to 40.0 degrees, while Low ranges from 10.0 to 37.0 degrees. To select the mode, press the menu button until **TEMP** option appears in the window. Select the 'High' mode with the warm button (a small thermometer appears in the window with an upward pointing arrow, with the text 'set' above it). Select the 'Low' mode with the cool button (a small thermometer appears in the window with a downward pointing arrow, with the text 'set' above it)

Once you have selected the temperature mode, you can easily select the temperature with the 'Warm' and 'Cool' buttons. Always check that the water temperature matches what the display shows before you or anyone else bathes.

When the display has not been touched, the current temperature in the bath will be displayed on the display. Pressing the warm or cool buttons displays the set mode

Time

Press the menu button until the **SET TIME** option appears in the window. Then press the warm button. Now the hours will blink. Browse until the correct hour appears in the window using the cool and warm buttons. Press the menu button to save. Then the minutes will blink. Browse until the correct minutes appear in the window using the warm and cool buttons. Press menu to save. It is important to set the time in order for the filter cycles to be set correctly.

Set filter cycles

Browse to **FLTR** option appears in the window using the menu button. Select with the cool button.

BEGN will appear in the window. Press the cool button. Now you will set the time when the first filter cycle should start. Browse with the cool and warm buttons and then save with the menu button. Now you set the minutes with the cool and warm buttons and then save with the menu.

Now the **RUN HRS** option will appear in the window. Press the cool button and set how many hours you want the filter cycle to run by pressing the cool and warm buttons. Press menu when you have set the hours and the stop time for the filter cycle will appear in the window. Press menu again and you have set filter cycle 1 (F1).

Now you will set filter cycle 2. Press the menu button again and 2 will appear. Press the cool button to select, press again to get 'on' in the window. Press the menu button and **BEGN** option will appear in the window. Now set it in the same way as filter cycle 1.

We recommend setting up two filter cycles of 3 hours each at the beginning. The water quality, how often and how long you bathe will affect how much circulation you need in your bath. Depending on how you use your bath, you will need to adjust the filter times.

Lock the display

To lock the entire display:

Scroll with the menu button until **LOCK** is visible in the window. Scroll with the menu button until **TEMP** is visible in the window. Press the menu button and **PANL** will appear in the window. Press the cool button to select it. "Off" will appear in the window. Press cool again to show "on". Press the menu button to select it. The entire display is now locked.

To lock the ability to adjust the temperature:

Scroll with the menu button until **LOCK** is visible, press the cool button to select it. **TEMP** will appear in the window, press cool to select it. "Off" will appear in the window, press cool again to show "on". Press the menu button to select it. The temperature can no longer be adjusted.


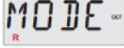

Unlock the display

Hold down the warm button and press the menu button twice in a row. **UNLK** will appear and the display will be unlocked. This also applies to unlocking the ability to adjust the temperature again. If you have locked both the ability to adjust the temperature and the entire display, you will need to unlock twice to unlock both.

To pause the system

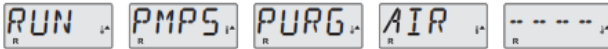
Scroll with the menu button until **HOLD** is visible in the window. Select with the cool button and the system will be paused for one hour. You can cancel the pause earlier by pressing the menu button.

Ready and Rest mode

When you start up the bath, the bath is automatically in Ready mode.  To switch between Ready and Rest mode, press the menu button until  is visible. Press the warm button to scroll between Ready and Rest. Press the menu button to select. In Rest mode, only the heaters will be active during the filter cycles you have set. In Ready mode, the bath will regularly start up and detect the water temperature, the heaters will turn on when needed to maintain the temperature you have set. If both Ready and Rest are visible in the display,  you have accidentally pressed a hidden button located to the right of the light button on the display while the bath was in Rest mode. Press the hidden button again and then go to mode to choose between Ready or Rest.

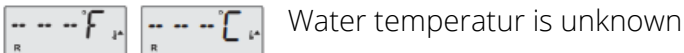
Messages and error codes

-General messages:

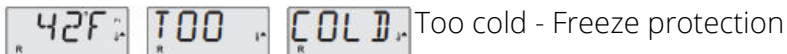


Priming mode - M019

When the power is turned on to the system, the priming mode will start. This is to clear the pump and system of air. Press the light button to start the pump in priming mode. Priming mode lasts for 4 minutes. You can turn off priming mode earlier by pressing one of the up or down arrows.



After the pump has run for 1 minute, this message will appear.



The system has detected a low water temperature and will start a program and run the pump for at least 4 minutes or until the temperature has been restored to a safe level. If you fill the bath with very cold water, this message may appear.



This message appears if J29 shorts during startup.

-Heat-related messages



Water is too Hot (OHS) - M029

One of the water temperature sensors has detected that the water temperature is 110°F (43.3°C) and the spa functions are disabled. The system will automatically restart when the spa water temperature is below 108°F (42.2°C). Check for extended pump operation or if the outdoor temperature is very high. This can happen on a hot summer day when the lid is on.



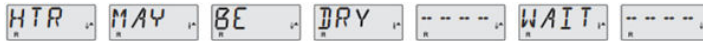
Heater flow is reduced (HFL) - M016

The water flow through the heater/heaters may be too low for the heated water to be pumped away from the heater. The heater will automatically start again after one minute. Read more under "low flow control" on the next page.



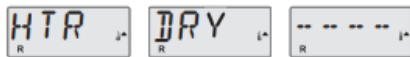
Heater flow is reduced (LF) - M017

There is not enough water flowing through the heater/heaters, causing the heated water to not flow properly. The heater has been turned off. Read more under "low flow control" on the next page. Once the problem has been found and fixed, press any button on the display and the heater/heaters will start again.



Heater may be dry (dr) - M028

There may be too little water in the heater. The bath will be shut off for 15 minutes. Press any button to start again. Read more under "low flow control".



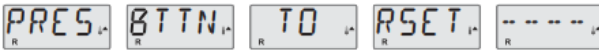
Heater is dry (dr) - M027

The heater/heaters do not have enough water to start up. The heaters are turned off. Fix the cause of the low water and then start the bath with any button on the display. Read more under "low flow control".



Heater is too hot (OHH) - M030

One of the heat sensors has detected a temperature of 118°F (47.8°C) and the bath has been turned off. Press any button on the display to start the bath when the water temperature is below 108°F (42.2°C). Read more under "low flow control". This can happen on a hot summer day when the lid is on.



A reset message may appear with other message

Some errors require the power to be turned off and on again to disappear and restart.

Low flow control

1. Check the water level. The water should be above both connections and bubble nozzles.
2. Check that both valves are open. The handle should be extended, then it is open.
3. What do the filter balls look like? If they are too dirty, the water flow can decrease drastically. This can also happen if there are too many filter balls in the filter. You check this by changing the knob on the filter head to circulation (make sure the pump is not running when this is changed). If the system works as it should in circulation mode, something is blocking the water in the filter container. In that case, change the filter balls and clean the filter container.
4. Check all hoses, there should be no wrinkles or hanging hoses.
5. Has anything gotten stuck in the hoses or pump? Check that no bath toys, filter balls or similar have gotten stuck in the hoses, heater or pump. You need to close the lid valves and remove all hose clamps and hoses to check this.
6. The pump must not be too far from the bath (max 3 meters). If it is too far away, the pressure can become low due to the pump not being able to circulate the water.

-Sensor-related messages



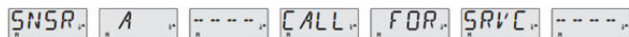
Sensor balance is poor - M015

The heat sensor may be malfunctioning. Troubleshooting: Read more under flow control. The pump may be incorrectly connected if this message appears. Contact us at info@svenskabadtunnor.se if the error does not disappear.



Sensor balance is poor - M026

The heat sensor is no longer functioning. The "Sensor balance is poor" message has been displayed in the window for an hour before. The message can be removed by pressing any of the buttons. Contact us at info@svenskabadtunnor.se if this message appears.



Sensor failure - Sensor A: M031, Sensor B: M032

One of the sensors is no longer functioning. Contact us at info@svenskabadtunnor.se if this message appears.

-Miscellaneous messages



No communications

The display is not receiving any information from the system. Check that everything is properly connected. Then try removing the splitter cable from the display and plugging directly into the heater, trying both the J34 and J35 inputs. If it still doesn't work, you need to make a claim to us.



Pre-production software

The system is being controlled by a test system. Contact us at info@svenskabadtunnor.se if this message appears.



F or C is replaced by T

The system is in test mode. Dipswitch no. 1, furthest to the left, has been changed by you or your electrician to on. Set it to off.

-System-related messages



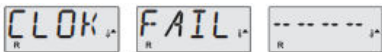
Memory failure - Checksum Error - M022

During startup, the system failed to test the program. This indicates a problem with the fixed program code. The message can be removed by pressing any button on the display. Contact us at info@svenskabadtunnor.se if this message appears.



Memory warning - persistent memory reset - M021

If any system settings have been changed, this message will appear. Contact us at info@svenskabadtunnor.se if this message appears more than once during startup, or if it appears after the system has been running normally for a while. The message can be removed by pressing any button on the display.



Memory failure - Clock error - M020

Please contact us at info@svenskabadtunnor.se if this message appears. The message can be removed by pressing any button on the display.



Configuration error - spa will not start up

Please contact us at info@svenskabadtunnor.se if this message appears.



A pump appears to be stuck ON - M034

The water may be overheated. Turn off the spa and **DO NOT GET IN THE WATER**. Contact us at info@svenskabadtunnor.se if this message appears.

The image shows a sequence of six LCD display segments. The first segment shows 'HOT', the second 'FALT', the third 'CALL', the fourth 'FOR', the fifth 'SRVC', and the sixth is blank. Each segment has a small 'R' icon at the bottom left.

A pump appears to have been stuck ON when spa was last powered - M035

Turn off the bath and DO NOT step into the water. Contact us at info@svenskabadtunnor.se if this message appears.

The image shows two LCD display segments. The first segment shows 'WATR' and the second shows 'LEVL'. Each segment has a small 'R' icon at the bottom left.

The water level is too low

Some baths have a water level sensor. This message appears if the water level is too low.

-Reminder message.

The image shows two LCD display segments. The first segment shows 'CHNG' and the second shows 'WATR'. Each segment has a small 'R' icon at the bottom left.

Change the water

Reminder message that it may be time to change the water. Comes every 90th day. Remove the message with any button on the display.

The image shows two LCD display segments. The first segment shows 'CLN' and the second shows 'FLTR'. Each segment has a small 'R' icon at the bottom left.

Clean filter

Reminder message about it may be time to change the filter. Comes every 30th day. Remove the message with any button on the display.

The image shows two LCD display segments. The first segment shows 'TEST' and the second shows 'GFCI'. Each segment has a small 'R' icon at the bottom left.

Reminder message about testing your ground fault circuit interrupter. Comes every 90 days. Remove the message with any button on the display.

Other reminder messages may appear. You can dismiss the reminder message by pressing any button on the display.