Three Pump
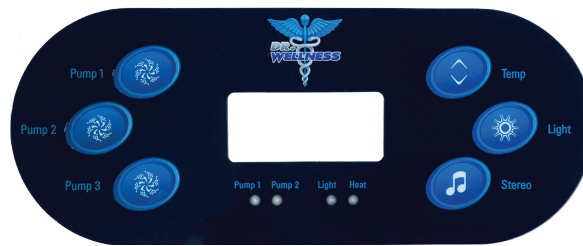# Topside Control Instructions

Please refer to the owner's manual for
important safety information, manufacturer's recommendations,
and detailed installation, use, & care instructions.

TOPSIDE CONTROL INSTRUCTIONS FOR MULTIPLE PUMP SPAS

Powering on Your Spa

After filling the spa to the correct level remove the water hose, replace the filter, the filter basket, and filter cover. Turn the GFCI on. Every time the GFCI is powered on, diagnostic tests are performed automatically and a series of messages will be displayed on the topside controls. When diagnostic testing is complete, the spa begins priming mode.

Pre-Programmed Factory Settings

Your spa will start in Ready Mode
The temperature is pre-programmed to 100°F (38°C)
The filtration cycle is pre-programmed to run once each day for 2 hours

Initial Temperature Display

To display the current pre-programmed temperature setting, press the "Temp" button once. After briefly displaying the pre-programmed temperature setting, the current water temperature will be displayed on your topside controls. The water must circulate through the heater chamber for approximately one minute before the current water temperature is displayed on the topside controls. When the display is flashing, the spa controls are in programming mode. To prevent accidentally changing pre-programmed settings, wait until the display stops flashing before pressing a different button.

Turning the Jets On and Off

Pump 1 is a two speed pump. Press the "Pump 1" button to operate pump 1 on LOW SPEED. Press the "Pump 1" button a second time to operate on HIGH SPEED. Press the "Pump 1" button a third time to turn it off. If the "Pump 1" button is not pressed to turn it off manually, it will shut down automatically after 20 minutes. Press the "Pump 1" button to turn it back on.
The Ozonator engages when pump 1 is operating on LOW SPEED.

Pump 2 is a single speed pump. Press the "Pump 2" button to turn it on. Press the "Pump 2" button a second time to turn it off. If the "Pump 2" button is not pressed to turn it off manually, it will shut down automatically after 20 minutes. Press the "Pump 2" button to turn it back on.

Pump 3 is a single speed pump. Press the "Pump 3" button to turn it on. Press the "Pump 3" button a second time to turn it off. If the "Pump 3" button is not pressed to turn it off manually, it will shut down automatically after 20 minutes. Press the "Pump 3" button to turn it back on.

If your spa is equipped with a circulation pump, it will run continuously until the water temperature is 1°F above the programmed temperature setting. When at the correct temperature it will turn off and back on every 30 minutes and circulate for 1 minute or to heat the water as needed. The ozonator engages when the circ pump is running.
To ensure your safety and for optimal performance, your spa controls will automatically perform maintenance functions and run diagnostic testing. The pump will start automatically on low speed to circulate the water for a few minutes every hour to run a system check. During heating, filtration and diagnostic testing the pump runs on low speed. When the pump starts automatically and operates on low speed to perform these maintenance functions, pressing the pump button will not turn the pump off.

Priming Mode

RUN   PMPS   PURG   AIR   ------

Priming mode safely removes air that may be trapped in the plumbing lines when your spa is filled. The heater is disabled during priming mode to prevent failure. Pumps should be observed one at a time to confirm the pump isn't surging and water is coming from all jets.

Run Pumps to Purge the Air

Each time your GFCI is turned on, this message is displayed on your topside controls. As soon as the message is displayed on the screen, press the "Pump 1" on button twice to run the pump on high speed. Press the "Pump 2" button once to run the pump on high speed. If your spa has 3 pumps, Press the "Pump 3" button once to run the pump on high speed.
Within 2 minutes water should be flowing from the jets in every seat without any surging from the pumps. If water isn't flowing from all of the jets or if you hear the pumps surging, turn them on and off up to 4 times, which can help prime the pumps. If the pumps aren't primed after turning them on and off 4 times, turn the GFCI off. Make sure the "T Stems" are locked in the UP position, the diverter valves are centered for even distribution of the water, jets without flow are fully rotated to the open position and there isn't any debris in the filter basket or on the suction drain covers. Turn the GFCI on again and repeat the process. If the pumps don't prime on the second attempt, call your dealer for assistance. *A pump that fails to prime should not be left on for more than 2 minutes under any circumstance. The heater will engage when priming mode is complete. If a pump is not properly primed when the heater engages, the spa may overheat causing serious damage.*

Changing the Water Temperature Settings & Operating Modes

Press the "Temp" button once to enter programming mode.
When the display on the topside control is flashing, the spa is in programming mode.
In most cases, pressing the light button saves the changes.
To prevent accidentally changing programmed settings, after pressing one button wait 10 seconds before pressing a different button.

Adjusting the Water Temperature Setting   100°F

To change the programmed temperature settings, press and release the "Temp" button. While the display is flashing, press and hold the "Temp" button until the desired temperature is reached. To move the display in the opposite direction continue holding the button. When it reaches 104°F (40°C) it will automatically begin moving in the opposite direction. Press the light button to save the change and exit programming mode. If the temperature setting is increased, pump 1 will turn on automatically to begin heating the water.

Dual Temperature Range TEMP TEMP

The spa controls allow you set two independent temperature settings. High Range settings are most commonly used to maintain "Ready to Use" temperature settings and the Low Range setting is most commonly used to "Vacation" water temperature settings. Your spa will maintain the water temperature associated with the range you select.

To set the Dual Temperature Ranges, press the "TEMP" button and the "LIGHT" button once to enter programming mode. When Temp is displayed, press the "TEMP BUTTON" to toggle between the High and Low ranges. To set the High Range, press the "LIGHT BUTTON" when the arrow is pointing UP. To set the Low Range, press the "LIGHT BUTTON" when the arrow is pointing DOWN. While the temperature is flashing on the screen, press and hold the temperature button, releasing it when the desired temperature is displayed. Press the light button to save the change and exit to the main screen.

UNDERSTANDING OPERATING MODES

Your spa controls are equipped with three operating modes to help you regulate energy consumption and reduce operating costs. How often the spa is used and the ambient temperature will help you determine which mode is best for you.

Ready Mode MODE

The water temperature is always maintained.
"Ready" is displayed on the topside controls.

When the spa is in Ready Mode, Pump 1 automatically circulates the water on low speed every half hour to check the water temperature. If heating is required, it will continue circulating to heat and sanitize the water with Ozone.

Rest Mode MODE

The water only heats during filtration cycles. When the ambient temperature is low, the water may be too cool for immediate use
"Rest" is displayed on the topside controls.
DO NOT PUT YOUR SPA IN REST MODE WHEN THE AMBIENT TEMPERATURE IS 40°F (4°C) OR LOWER!

When the spa is in Rest Mode the water is only heated during filtration cycles only to reduce energy consumption. Setting the filtration cycle to end right before use can be an effective way to reduce energy consumption. The water must circulate for approximately 1 minute before the current temperature can be displayed.

Ready-In-Rest Mode 102°F

The water only heats during filtration cycles. If the "Pump 1" button is pressed, the water will heat for one hour.

In Ready-In-Rest Mode the spa will operate in Rest Mode, heating only during filtration cycles, unless the "Pump" 1 button is pressed. When the "Pump 1" button is pressed, the system assumes it is in use and the water will circulate on low speed for one hour, heating the water if necessary. If the programmed temperature setting isn't reached within the hour, the pump and heater automatically shut off.

Changing Operating Modes

To change operating modes, press the "Temp", press the "Light" button twice. When "MODE" appears on the topside display, press the "Temp" button to toggle between operating modes. When the desired mode is displayed, press the "Light" button to save your selection. If the water temperature falls to 42°F (6°C), the spa turns on automatically and runs for 4 minutes after it reaches 46°F (8°C) to prevent freezing. Depending upon weather conditions, your spa may run for extended periods if not continuously.

Setting the Time of Day

TIME Setting the time of day establishes when filtration cycles and other functions are performed. If no time of day is stored in the memory, "SET TIME" will flash on the display. When the power to the spa is interrupted the time will not be saved.

To set the time of day, press the "Temp" button, press the "Light" button three times. When "TIME" appears on the topside display press and hold the "Temp" button until the correct hour is displayed. Press the "Light" button to save the hour and begin setting the MINUTES. When the minutes flash on the display, press and hold the "Temp" button until the correct time is displayed. Press the "Light" button to save your selection.

Flip the Display

FLIP The message on the topside display can be inverted for easy reading both inside and outside the spa.

To invert the display, press the "Temp" button once, then press the "Light" button four times. When "FLIP" is displayed press the "Temp" button to invert the display. Press the "Light" button to save the change.

Programming Filtration Cycle Settings

How long your water needs to filter varies on a number of factors including how often the spa is used, for how long, and by how many people. Under normal use, adequate filtration should be achieved in two hours. If the spa is used for longer periods by more bathers it may be necessary to increase the duration of your filtration cycle but it should never exceed 4 hours. Excessive filtration may cause overheating. You can program what time the filtration cycle will begin and how long it will last. Settings can be adjusted in 15 minute intervals.

Setting the Filter Cycle Start Time BEGN

Pay close attention to "A" or "P" in the bottom right corner of the display. The filtration cycle will run in the AM if "A" is displayed or PM if "P" is displayed. To program what time filtration cycles begin, press the "Temp" button, then press the "Light" button seven times. When "FLTR" is displayed on the topside controls press the "Temp" button. While "BEGN" is flashing on the display, press and hold the "Temp" button until the hour you want the filtration cycle to start is displayed. Press the "Light" button to save the hour and move to minutes. Press and hold the "Temp" button until the desired 1/4 hour is displayed. Press the "Light" button to save the setting and to move the duration setting.

Setting the Filter Cycle Duration RUN   HRS

To program the length of the filter cycle, when "RUN HRS" is displayed press and hold the "Temp" button until the desired number of hours is displayed. Press the "Light" button to save the selection and move to minutes. Press and hold the "Temp" button until the correct 1/4 hour is displayed. Press the "Light" button to save the selection. The time of day the filtration cycle will end will be displayed.

Turning the Lights On and Off

Press Light Button	Turns On	Press Light Button	Turns Off
Once	Red	Twice	Red
3 Times	Green	4 Times	Green
5 Times	Blue	6 Times	Blue
7 Times	All Colors Rotating	8 Times	All Lights

If the light button is not pressed to turn the lights off, they will turn off automatically after 1 hour. Press the "Light" button to turn the lights back on. If your spa is equipped with perimeter lighting or optional lighting features, all lights work in tandem.

OPERATING THE AUDIO COMPONENTS

The built in audio components must be turned on to pair your wireless device and to hear your selection playing through the speakers. Press the "Stereo" or "Speakers" button on the topside controls once to turn the audio components on. Press it a second time to turn them off. *THE AUDIO COMPONENTS ARE PROGRAMMED TO TURN OFF AUTOMATICALLY AFTER 2 HOURS, EVEN IF THE BUTTON IS NOT PRESSED. PRESS THE BUTTON ONCE TO TURN THEM BACK ON.* Use your device to make selections, play, pause, and control the volume. If you can't hear your selection, make sure your device isn't muted or paused, and that the volume setting isn't too low.

Pairing your Wireless Device
Press the Music or Speaker button to turn the built-in audio components on and listen carefully. Within 15 seconds a chime will sound, signaling the spa is discoverable and ready for paring. Open your device settings, select Bluetooth settings, verify Bluetooth is turned on and your device is scanning for available devices. If your device doesn't begin scanning automatically, turn the Bluetooth off and back on. When discoverable device SC012345 appears on your screen, tap it to connect your device. A pairing code is not required. Your spa can be paired with multiple devices but each device must be paired individually following the same process. Use your device to make your selection, press play, and adjust the volume through the speakers.

TROUBLESHOOTING BLUETOOTH CONNECTIONS
No Connection: Discovery mode for the spa may have timed out before the connection to your device was established. Press the rocker switch to turn the audio components off for 10 seconds. Repeat the process.
No Connection / Intermittent Connection: Check the signal strength on your device standing next to your spa. If the signal on your device is weak or fades in and out, the signal in your spa is also weak and wavering. Consider installing a booster to improve signal strength.
No Sound from Speakers: Check the Bluetooth settings on your device to confirm it's connected, check your device to make sure the selection hasn't been paused or the volume muted. Increase the volume setting on your device.
Multiple Device Connectivity: Multiple devices can be paired with your spa but only one device can be connected at a time. When multiple devices are paired, your spa may pick up an active signal on a different paired device. To switch between devices, turn off Bluetooth on the device with the active connection and connect the new device before turning it back on.
Duplicate SC012345 Discovered: On rare occasions, duplicate SC012345 devices are detected in discovery mode. If more than one SC012345 appears on your screen, tap the first device on the list. If that connection fails, press the audio button on the topside controls to turn the audio components off. After 10 seconds press the button to turn them back on and repeat the connection process, this time choosing the second SC012345 device.

For your safety and to protect your device from water damage, always store your device safely away from your spa. Always press the rocker switch to turn the audio components off when you exit the spa. Leaving them on causes overheating that will permanently damage the audio components. Damage to the audio components that occurs because the components were not turned off is not covered under the warranty.

TOPSIDE CONTROL QUICK START

Refer to the topside control instructions for a detailed explanation of your spa control features & functions.

TO ENTER PROGRAMMING MENUS:

Press and release the "Temp" button

Press and release the "Light Button" to move between programming menus.

Press & Release	Press	This many times	Appears on the Display

To adjust the temperature setting — 104°F

When set temperature flashes on display, press & hold or press & release the "TEMP" button repeatedly until the desired temperature is displayed. Press the "LIGHT" button to exit. The minimum temperature setting is 60°F, the maximum temperature setting is 104°F.

To set dual temperature ranges — Once — TEMP

When TEMP is on the display, press the "TEMP" button to move between High and Low Ranges. When the desired range is displayed press the "LIGHT" button to save and exit to the main menu. The arrow points up when the High Range is selected. The high range temperature can be set between 80°F to 104°F (20 to 40° C). The arrow points down when the Low Range is selected. The low range temperature can be set between 50°F to 99°F (16 to 37°C).

To select the heat mode — Twice — MODE

When MODE is on the display, press the "TEMP" button to move between Rest Mode and Ready Mode. The water temperature is maintained in Ready Mode. In Rest Mode it only heats during filtration cycles. When desired mode is displayed press the "LIGHT" button to select and exit to the main menu.

To set the time of day — 3 Times — TIME

When TIME is on the display, press & hold the "TEMP" button until the correct hour is displayed. Press the "LIGHT" button to move to the MINUTES. When the minutes flash, press and hold the "TEMP" button until the correct minutes are displayed. Press "LIGHT" button to save the time and exit to the main menu. Military time can be set in the preferences menu.

To flip your display — 4 Times — FLIP

When FLIP is on the display, press the TEMP button to flip your display. Press the LIGHT button to exit to the main menu.

To restrict operation — 5 Times — LOCK

To prevent changes to the temperature setting or to lock the control panel, when LOCK is on the display press the "TEMP" button. Press the "TEMP" button to toggle between TEMP and LOCK and OFF or ON, press the LIGHT button to save changes and exit to the main menu. Press the LIGHT button to save and exit to the main menu. To unlock. Press the LIGHT button twice while pressing and holding the TEMP button. Unlocking the controls is successful when UNLK is displayed on the LED, followed by the main menu.

To put your spa on standby — 6 Times — HOLD

When HOLD flashes on the display, press the "TEMP" button to put the spa on standby for up to 1 hour. Press the "LIGHT" button to exit standby and return to the main menu. The timer will countdown the time remaining and will exit standby automatically after 1 hour.

To set the 1st filtration cycle — 7 Times — FLTR

To select the start time and duration of your filtration cycle, when FLTR is on the display press and hold the "TEMP" button, releasing when the HOUR you want filtration to begin is displayed, paying close attention to the "A" (AM) or "P" (PM) on the display. Press the "LIGHT" button to move to the minutes field. Press the "TEMP" button to select 0, 15, 30, or 45 minutes and press the "LIGHT" button. The time of day the filtration cycle will END will be displayed. Press the "LIGHT" button to save the setting and exit to the main menu. l

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To set the 2nd filtration cycle — 8 Times — FLTR

If desired, repeat the process for the second filtration cycle. The filtration cycle will revert to factory settings if your selection is not saved. Excessive filtration causes overheating which will damage your spa. Never set your spa for continuous filtration.

To set your personal preferences — 9 Times — PREF

Press the TEMP key to move between °F and °C. Press the LIGHT button to set your preference when it is displayed. Press the TEMP key to move between a 24 hour and 12 hour clock. Press the LIGHT button to set your preference when it is displayed. Press the TEMP key to move between YES or NO to set reminders. Press the LIGHT button to set your preference when it is displayed.

TROUBLESHOOTING TOPSIDE CONTROL ERROR MESSAGES

General Messages

Too Cold - Freeze Protection `40°F` `TOO` `COLD`
A potential freeze condition has been detected and all pumps have been activated. Pumps will stay on for at least 4 minutes after the potential freeze condition has ended. Pumps may turn on and off automatically during freeze protection.

Water is too Hot `WATR` `TOO` `HOT` `------`
One of the temperature sensors has detected high temperature in the heater chamber and spa functions have been disabled. DO NOT ENTER THE WATER! The probable cause is pumps running excessively or high ambient temperatures. Remove the spa cover and add water allowing the water to cool. Reduce duration of filtration cycle. Operation will resume when the water temperature has fallen.

Heater Related Messages

Reduced Heater Flow `HTR` `FLOW` `LOSS` `------`
There may not be enough water flow away from the heater. DO NOT ENTER THE WATER! Water temperature readings in the heater chamber are too high. Heater will restart in approximately 1 minute.

Reduced Heater Flow `HTR` `FLOW` `FAIL` `------`
Not enough flow to carry water away from the heating element and the heater has been disabled. DO NOT ENTER THE WATER! Power off GFCI, make sure slice valves locked in open position, that water level is adequate and remove debris from filter, filter basket and suction cover. Press any button to resume operation. If the problem is not resolved, call your dealer for assistance.
`HTR` `MAY` `BE` `DRY` `------` `WAIT` `------`

Heater may be Dry
There is not enough water in the heater. Add water to the spa if the water level is too low, check to be sure slice valves are locked in the open position, that pumps are primed and jets are open. When the problem is resolved, press any button to resume operation.

Heater is too Hot `HTR` `TOO` `HOT` `------`
One of the temperature sensors has detected high temperature in the heater chamber and the spa is shut down. DO NOT ENTER THE WATER! Power off GFCI, make sure slice valves locked in open position, that water level is adequate and remove debris from filter, filter basket and suction drain cover. Press any button to resume operation. If the problem is not resolved, call your dealer for assistance.

Reset GFCI `PRES` `BTTN` `TO` `RSET` `------`
When this message appears with another message, the GFCI must be turned off to reset the spa controls. After 10 minutes, turn the GFCI on.

Sensor Related Messages

Sensor Balance is Poor `SNSR` `SYNC` `-----` `CALL` `FOR` `SRVC` `------`
Temperature sensors are out of balance by 2 to 3 Degrees. Call your dealer for assistance.

Sensor Balance is Poor `40°F` `SNSR` `BAL-` `ANCE`
Temperature sensors are out of balance and fault has been established for at least 1 hour. Call your dealer for assistance.

Sensor A or B Failure `SNSR` `A` `------` `CALL` `FOR` `SRVC` `------`
Message may read Sensor A or Sensor B. Temperature sensor or sensor circuit has failed. Call your dealer for assistance.

Miscellaneous Messages

No Communication `NO` `COMM`
The topside control is not communicating with the spa controls. Call your dealer for assistance.

Pre-Production Software `BETA` `VER-` `SION` `------`
The spa controls is operating with test controls. Call your dealer for assistance.

°F or °C replaced by °T `102°T`
Spa controls are operating in Test Mode. Call your dealer for assistance.

Memory Failure `MEM` `FAIL` `------`
When the spa was powered on the system failed the Program Checksum Test. There is a problem with the firmware. Call your dealer for assistance.

Memory Warning - Persistent Memory Reset `MEM` `RSET` `------`
Message appears after system set up change. If this message appears on more than one power up, or it appears after operating normally for a period of time, call your dealer for assistance.

Memory Failure - Clock Error `CLOK` `FAIL` `------`
Call your dealer for assistance.

Configuration Error - Spa will not Power On `CNFG` `FAIL` `------`
Call your dealer for assistance.

GFCI Failure - System could not Test/Trip GFCI `GFCI` `FAIL` `------`
Call your dealer for assistance.

Pump appears to be stuck on `STUK` `PUMP` `------`
Pump appears to have been stuck ON when the spa was last powered on
`HOT` `FALT` `------` `CALL` `FOR` `SRVC` `------`
DO NOT ENTER THE WATER. Turn the GFCI off and call your dealer for assistance.

If Reminders are Programmed, These Messages will Appear on a Regular Basis Alternating with Current Water Temperature

Check pH and adjust if required. `CHEK` `PH`

Check sanitizer and adjust if required. `CHEK` `CHEM`

Clean or replace the filter if necessary. `CLN` `FLTR`

Test the GFCI. `TEST` `GFCI`

Change water to maintain chemical balance and sanitary conditions. `CHNG` `WATR`

Clean and condition cover for maximum life. `CLN` `COVR`

Clean and condition cabinet for maximum life. `TRT` `WOOD`

Change filter to ensure adequate water flow and sanitary conditions. `CLN` `FLTR`

Install new mineral cartridge to ensure adequate sanitation `CHNG` `CART`

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LPI, Inc.
506 Twin Oaks Drive
Johnson City, TN 37601
LPIinc.com