# Accent<sup>™</sup> Control Operation Guide



Effect. 6/2019



## Navigation

Navigating the entire menu structure is done with 2 or 3 buttons on the control panel.

The Accent control panel has separate WARM (Up) and COOL (Down) temperature buttons.

The MENU Button is used to choose the various menus and navigate each section.

The two Temperature buttons (Warm and Cool) are used to select and change the parameter.

Typical use of the Temperature buttons allows changing the Set Temperature while the numbers are flashing in the LCD.

The menus can be exited by pressing the Menu key repeatedly to return to main screen.

Waiting a few seconds in the Main Menu will allow the display to revert to the Main Screen. Most changes are not saved unless Menu/Select is pressed.

## **Sample Navigation Flow**



#### **Power-up Screens**

Each time the System powers up, a series of numbers is displayed. After the startup sequence of numbers, the system will enter Priming Mode.

#### **Preparation and Filling**

Fill the spa to its correct operating level. Be sure to open all valves and jets in the plumbing system before filling to allow as much air as possible to escape from the plumbing and the control system during the filling process.

After turning the power on at the main power panel, the top-side panel will go through specific sequences. These sequences are normal and display a variety of information regarding the configuration of the hot tub control.

#### Priming Mode – M019\*

This mode will last for 4-5 minutes or you can manually exit the priming mode after the pump has primed.



Regardless of whether the priming mode ends automatically or you manually exit the priming mode, the system will automatically return to normal heating and filtering at the end of the priming mode. During the priming mode, the heater is disabled to allow the priming process to be completed without the possibility of energizing the heater under low-flow or no-flow conditions. Nothing comes on automatically, but the pump can be energized by pushing the "Jet" buttons.

#### **Priming the Pumps**

As soon as the above display appears on the panel, push the "Jet" button once to start pump in low-speed and then again to switch to high-speed. The pump will now be running in high-speed to facilitate priming. If the pump has not primed after 2 minutes, and water is not flowing from the jets in the spa, do not allow the pump to continue to run. Turn off the pump and repeat the process. Note: Turning the power off and back on again will initiate a new pump priming session. Sometimes momentarily turning the pump off and on will help it to prime. Do not do this more than 5 times. If the pump will not prime, shut off the power to the spa and call for service.

Important: A pump should not be allowed to run without priming for more than 2 minutes. Under NO circumstances should a pump be allowed to run without priming beyond the end of the 4-5 minute priming mode. Doing so may cause damage to the pump and cause the system to energize the heater and go into an overheat condition.

#### **Exiting Priming Mode**

You can manually exit Priming Mode by pressing a "Temp" button (Up or Down). Note that if you do not manually exit the priming mode as described above, the priming mode will be automatically terminated after 4-5 minutes. Be sure that the pump has been primed by this time.

Once the system has exited Priming Mode, the top-side panel will momentarily display the set temperature but the display will not show the temperature yet, as shown below. This is because the system requires approximately 1 minute of water flowing through the heater to determine the water temperature and display it.



# Vitality Series Fitness Spas / LifeStyle Series Hot Tubs

## Pump

Press the "Jets " button once to turn pump on or off, and to shift between low and high-speeds.

If left running, the pump will turn off after a time-out period. The pump low-speed will time out after 30 minutes. The high-speed will time out after 15 minutes.

If the spa is in Ready Mode, pump low may also activate for at least 1 minute every 30 minutes to detect the spa temperature (polling) and then to heat to the set temperature if needed. When the low-speed turns on automatically, it cannot be deactivated from the panel, however the high speed may be started.

If unable to turn off low speed, note the pump will continue to operate on low speed until set temp is reached. It will automatically turn off when temp is reached.

## **Freeze Protection**

If the temperature sensors within the heater detect a low enough temperature, then the pump will automatically activate to provide freeze protection. The pump will run either continuously or periodically depending on conditions.

#### Clean-up Cycle

When a pump is turned on by a button press, a clean-up cycle begins 30 minutes after the pump is turned off or times out. The pump and the ozone generator will run for 30 minutes or more, depending on the system.

## **Temperature and Temp**

#### Adjusting the Set Temperature

The panel has Up and Down buttons (Temperature buttons), pressing Up or Down will cause the temperature to flash. Pressing a temperature button again will adjust the set temperature in the direction indicated on the button. When the LCD stops flashing, the spa will heat to the new set temperature when required. Spa temperature can be set between 80°F and 104°F.

#### **Press-and-Hold**

If a Temperature button is pressed and held when the temperature is flashing, the temperature will continue to change until the button is released.

NOTE: Spa will not reach set temp if unit is in Low Range. Check settings to be sure unit is in High Range to reach temps above 80°F.

## **Dual Temperature Ranges**

This system incorporates two temperature range settings with independent set temperatures. The High Range designated in the display by an "up" arrow, and the Low Range designated in the display by a "down" arrow.

These ranges can be used for various reasons, with a common use being a "ready to use" setting vs. a "vacation" setting. The Ranges are chosen using the menu structure below. Each range maintains its own set temperature as programmed by the user. This way, when a range is chosen, the spa will heat to the set temperature associated with that range. For example: High range might be set between 80°F and 104°F. Low range might be set between 50°F and 99°F. Freeze protection is active in either range.

- 1) Press menu key TEMP will be displayed.
- 2) Use Up or Down arrow to change from High to Low range. A small Up arrow or Down arrow icon will be displayed on the screen.

NOTE: Spa will not reach set temp if unit is in Low Range. Check settings to be sure unit is in High Range to reach temps above 80°F.

## Mode, Ready and Rest

In order for the spa to heat, a pump needs to circulate water through the heater. The pump that performs this function is known as the "heater pump."

READY Mode will circulate water periodically, using pump Low, in order to maintain a constant water temperature, heat as needed, and refresh the temperature display. This is known as "polling."

REST Mode will only allow heating during programmed filter cycles. Since polling does not occur, the temperature display may not show a current temperature until the pump has been running for a minute or two.

#### **Ready-in-Rest Mode**

READY/REST appears in the display if the spa is in Rest Mode and Jet 1 is pressed. It is assumed that the spa is being used and will heat to set temperature. While Pump High can be turned on and off, pump Low will run until set temperature is reached, or 1 hour has passed. After 1 hour, the System will revert to Rest Mode. This mode can also be reset by entering the Mode Menu and changing the Mode.

# Show and Set Time of Day

Setting the time-of-day can be important for determining filtration times and other background features. When in the TIME menu, SET TIME will flash on the display if no time-of-day is set in the memory.

Setting Time:

- 1) Repeatedly press menu key until set time or time appears on screen.
- 2) Press up or down arrow to adjust hour.
- 3) Press menu key to switch to minutes.
- 4) Press up or down key to adjust minutes.
- 5) Press menu key to exit.

If power is interrupted to the system, Time-of-Day is not stored. The system will still operate and all other user settings will be stored. If filter cycles are required to run at a particular time of day, resetting the clock will return the filter times to the actual programmed periods.

When the system starts up, it defaults to 12:00 Noon, so another way to get filter times back to normal is to start up the spa at noon on any given day. SET TIME will still flash in the TIME Menu until the time is actually set, but since the spa started at noon, the filter cycles will run as programmed.

# Restricting

The control can be restricted to prevent unwanted use or temperature adjustments. Locking the panel prevents the controller from being used, but all automatic functions are still active.

Locking the Temperature allows Jets and other features to be used, but the Set Temperature and other programmed settings cannot be adjusted. Temperature Lock allows access to a reduced selection of menu items. These include Set Temperature, FLIP, LOCK, UTIL, INFO and FALT LOG. Unlock sequence may be used from any screen that may be displayed on a restricted panel.

## Lock Panel

- 1) Press menu key until Lock appears.
- 2) Press up key, temp will be displayed.
- 3) Press menu button, panel will be displayed.
- 4) Press up key twice, ON will be displayed.
- 5) Press menu button to lock panel.

## Lock Temp

- 1) Press menu key until Lock appears.
- 2) Press up key for temp lock.
- 3) Press temp button again.
- 4) Press temp button to ON.
- 5) Press menu button to exit.

## Unlock Panel

- 1) Press menu.
- 2) Press and hold up key.
- 3) Press menu button twice to unlock.

## **Unlock Temp**

- 1) Press temp button until Lock appears.
- 2) Press up key, temp will be displayed.
- 3) Press and hold up key button.
- 4) Press menu button twice.

## Hold

## Hold-M037\*

Hold Mode is used to disable the pumps during service functions like cleaning or replacing the filter. Hold Mode will last for 1 hour unless the mode is exited manually.

Set Hold:

- 1) Press menu key repeatedly until hold is displayed.
- 2) Press up arrow to enter hold.
- 3) Press down arrow to exit hold.

# Adjusting

## **Main Filtration**

Filter cycles are set using a start time and a duration. Start time is indicated by an "A" (AM) or "P" (PM) in the bottom right corner of

the display. Duration has no "A" or "P" indication. Each setting can be adjusted in 15-minute increments. The panel calculates the end time and displays it automatically.

## Set Filter Cycle 1:

- 1) Repeatedly press menu key until FLTR appears.
- 2) Press up arrow and BEGN will be displayed.
- 3) Press up arrow again and then use up or down arrow to select filter cycle start time.
- 4) Press menu key twice to exit beginning time.
- 5) Press up menu to select run hours then press up arrow or down arrow to adjust hour.
- 6) Press menu key twice to exit.

## Filter Cycle 2

It is possible to overlap Filter Cycle 1 and Filter Cycle 2, which will shorten overall filtration by the overlap amount. Filter Cycle 2 is OFF by default.

Set Filter Cycle 2:

- 1) Repeatedly press menu until FLTR2 appears
- 2) Press up arrow.
- 3) Press up arrow again to turn on.
- 4) Repeat step for setting filter 1.

# **Purge Cycles**

In order to maintain sanitary conditions, pump will purge water from plumbing by running briefly at the beginning of each filter cycle.

If Filter Cycle 1 is set for 24 hours, enabling Filter Cycle 2 will initiate a purge when Filter Cycle 2 is programmed to begin.

## Preference

## F/C (Temp Display)

Change the temperature between Fahrenheit and Celsius.

## 12/24 (Time Display)

Change the clock between 12 hr. and 24 hr. display.

## **RE-MIN-DERS (Reminders)**

Turn the reminder messages (like "Clean Filter") On or Off.

## **CLN-UP** (Cleanup)

Cleanup Cycle Duration is not always enabled, so it may not appear. When it is available, set the length of time Pump will run after each use. 0-4 hours are available.

## Utilities

A utilities menu selection may be accessed and is intended for qualified service techs only.

# **GFCI** Test

The Ground Fault Circuit Interrupter (GFCI) or Residual Current Detector (RCD) is an important safety device and is required equipment on a hot tub installation. (The GFCI Test Feature is not available on CE rated systems.)

Once the GFCI is tripped manually, reset the GFCI and the spa will operate normally from that point.

Warning: The end-user must be trained how to properly reset the GFCI or RCD. If freezing conditions exist, the GFCI or RCD should be reset immediately or spa damage could result.

# General

## Priming Mode-M019

Each time the spa is powered up, it will enter Priming Mode. The purpose of Priming Mode is to allow the user to run each pump and manually verify that the pump is primed (air is purged) and water is flowing. This typically requires observing the output of the pump and is generally not possible in normal operation. Priming Mode lasts 4 minutes, but you can exit it earlier by pressing any Temp button. The heater is not allowed to run during Priming Mode.



## Water Temperature is Unknown

After the pump has been running for 1 minute, the temperature will be displayed



## **Too Cold – Freeze Protection**

A potential freeze condition has been detected, or the Aux Freeze Switch has closed, and pump is activated. The pump is ON for at least 4 minutes after the potential freeze condition has ended, or when the aux freeze switch opens. In some cases, pumps may turn on and off and the heater may operate during Freeze Protection. This is an operational message, not an error indication.



## Water is too Hot (OHS) – M029

The system has detected a spa water temp of 110°F (43.3°C) or more, and spa functions are disabled. System will auto reset when the spa water temp is below 108°F (42.2°C). Check for extended pump operation or high ambient temp.



## Heater-Related

#### Heater Flow is Reduced (HFL) - M016

There may not be enough water flow through the heater to carry the heat away from the heating element. Heater start up will begin again after about 1 min. See "Flow Related Checks" below.



#### Heater Flow is Reduced (LF)\* - M017

There is not enough water flow through the heater to carry the heat away from the heating element and the heater has been disabled. See "Flow Related Checks" below. After the problem has been resolved, you must press any button to reset and begin heater start up.



#### Heater may be Dry (dr)\* – M028

Possible dry heater, or not enough water in the heater to start it. The spa is shut down for 15 min. Press any button to reset the heater start-up. See "Flow Related Checks" below.



## Heater is Dry\* – M027

There is not enough water in the heater to start it. The spa is shut down. After the problem has been resolved, you must press any button to reset and restart heater start up. See "Flow Related Checks" below.



#### Heater is too Hot (OHH)\* – M030

One of the water temp sensors has detected 118°f (47.8°C) in the heater and the spa is shut down. You must clear the message when water is below 108°f (42.2°C). See "Flow Related Checks" below.



#### A Reset Message may appear with other Messages

Some errors may require power to be removed and restored.



## **Flow-Related Checks**

Check for low water level, suction flow restrictions, closed valves, trapped air, too many closed jets and pump prime. On some systems, even when spa is shut down by an error condition, some equipment may occasionally turn on to continue monitoring temperature or if freeze protection is needed.

## **Sensor-Related**

#### Sensors Balance is Poor – M015

The temperature sensors MAY be out of sync by 2°F or 3°F. Call for Service.



#### Sensors Balance is Poor\* - M026

The temperature sensors ARE out of sync. The fault above has been established for at least 1 hour. Call for Service.



#### Sensor A Fault, Sensor B Fault – Sensor A: M031, Sensor B: M032

A temperature sensor or sensor circuit has failed. Call for Service.



#### **Miscellaneous Messages**

#### **Communications error**

The control panel is not receiving communication from the System. Call for Service.



# System-Related

## Memory Failure—Checksum Error\* – M022

At Power-Up, the system has failed the Program Checksum Test. This indicates a problem with the firmware (operation program) and requires a service call.



#### Memory Warning—Persistent Memory Reset (Persistent Memory Error)\* - M021

Contact your dealer or service organization if this message appears on more than one power-up.



#### Memory Failure—Clock Error\* – M020

Contact your dealer or service organization.



Configuration Error (Spa will not Start Up)

Contact your dealer or service organization.



The GFCI Failure (System Could Not Test the GFCI) - M036

(North America Only) May indicate an unsafe installation. Contact your dealer or service organization.



## A Pump Appears to be Stuck ON – M034

Water may be overheated. POWER DOWN THE SPA. DO NOT ENTER THE WATER. Contact your dealer or service organization.



#### Hot Fault – M035

A Pump Appears to have been Stuck ON when spa was last powered. POWER DOWN THE SPA. DO NOT ENTER THE WATER. Contact your dealer or service organization.



## Reminder

#### General maintenance helps.

Reminder Messages can be suppressed by using the Preferences Menu. Press a temp button to reset a reminder message.

#### **Clean the filter**

May appear on a regular schedule, i.e. every 30 days. Clean the filter cartridge as instructed in the owner's manual.



## Test the GFCI (or RCD)

May appear on a regular schedule, i.e. every 65 days.

The GFCI or RCD is an important safety device and must be tested on a regular basis to verify its reliability. Every user should be trained to safely test the GFCI or RCD associated with the hot tub installation. A GFCI or RCD (European) will have a TEST and RESET button on it that allows a user to verify proper function.

WARNING: If freezing conditions exist, a GFCI or RCD should be reset immediately or spa damage could result. The end user should always be trained to test and reset the GFCI or RCD on a regular basis.



#### Change the water

May appear on a regular schedule, i.e. every 90 days. Change the water in the spa on regular basis to maintain proper chemical balance and sanitary conditions.



## Change the Filter

May appear on a regular schedule, i.e. every 30 days. Filters should be replaced regularly to maintain proper spa function and sanitary conditions.



#### **Check Ozone**

May appear on a regular schedule, i.e. every 365 days. Check your ozone/UV generator to assure properly sanitized water.



#### Service Check

May appear on a regular schedule, i.e. every 365 days. Have a service tech do a check-up on your spa.



## Warning! Qualified Technician Required for Service and Installation

Do not attempt service of this control system. Contact your dealer or service organization for assistance. Follow all owner's manual power connection instructions. Installation must be performed by a licensed electrician and all grounding connections must be properly installed.