



RESORT  
HOT TUBS

*Less is More*

# MANUAL

Unwind in Luxury, Built for Every Getaway

# THANK YOU FOR JOINING THE RESORT HOT TUB FAMILY, WE APPRECIATE YOUR BUSINESS!

Our design, engineering, and production team have ensured that only the finest quality materials and craftsmanship have been combined to provide you with years of enjoyment!

Please take a few minutes to read this owner's manual. It contains important SAFETY, installation, operating, and maintenance instructions.

For your home records, please fill in the purchase & delivery information. After receiving your tub, place the serial # sticker in the box below the form.

Date Purchased _____
Date Installed _____
Dealer _____
Address _____
Telephone _____

Box for serial #/model
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# SAFETY INSTRUCTIONS



## WARNING! IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS

### 1. Avoiding Risks to Children

- Extreme caution must be exercised to prevent unauthorized access by children.
- Be sure the hot tub cover is closed and securely locked when not in use. Every Celtic Hot Tub is equipped with a locking cover that meets the ASTM F1346-91 standard for safety covers. Keep cover keys out of reach of children.
- Never allow children to use the hot tub without adult supervision.

### 2. Avoiding Risk of Electrocution

- Do not permit electrical appliances within 5 feet of the hot tub.
- Test the GFCI prior to every use of the hot tub.
- Do not use the hot tub with the equipment area door open.
- Do not use an extension cord to connect the hot tub to its power source.
- Disconnect the hot tub from its power source before draining the spa or servicing electrical components.
- Do not open the electrical control box. There are no user serviceable parts inside.

### 3. Increased Side Effects of Medication

- DRUGS AND ALCOHOL CAN GREATLY INCREASE HEALTH RISKS AND HYPERTHERMIA IN A HOT TUB.
- Persons with medical conditions or taking medication should consult their doctor prior to using a hot tub. Some medications may cause drowsiness, or affect blood pressure, heart rate or circulation.

### 4. Reduce Risk of Injury

- Do not use the hot tub immediately after a strenuous workout.
- Extended immersion in a hot tub could be injurious to your health.

- Pregnant or possibly pregnant women should always consult their doctor before using a hot tub.
- Never allow anyone to dive or jump into a hot tub.



- Always enter and exit your hot tub feet first, slowly and carefully. Floors and surfaces can be slippery.
- People with medical conditions such as heart disease, high or low blood pressure, circulatory system issues, obesity, or pregnant women should consult a doctor prior to using a hot tub.
- DO NOT Remove suction or filter covers. Water suction through the drains and skimmer is very strong when pumps are operating at high speed. Damaged or missing drain and skimmer covers can be dangerous entrapping small children and people as well as long hair. Should anyone or anything become entrapped in a drain, skimmer or any other fitting, **IMMEDIATELY TURN OFF THE HOT TUB AT THE ELECTRICAL SOURCE.**
- People with infectious diseases or sores should consult their doctor prior to using a hot tub.
- Always install cartridge filters prior to filling the hot tub. If you are changing a filter when the hot tub is full of water, be sure to turn off the hot tub before removing the dirty cartridge filter and installing the clean cartridge filter.

# SAFETY INSTRUCTIONS



**WARNING! IMPORTANT SAFETY INSTRUCTIONS  
READ AND FOLLOW ALL INSTRUCTIONS**

## 5. Avoiding Risk of Hyperthermia

- Hyperthermia may occur when the internal body temperature rises several degrees above the normal body temperature of 98.6 degrees Fahrenheit.
- Always check the water temperature with a thermometer before entering the hot tub.
- Water temperatures above 100 degrees Fahrenheit may be injurious to your health. Never exceed 104 degrees Fahrenheit.
- Hot water speeds up the effect of alcohol, drugs and other medications. The use of alcohol, drugs or medication before or during hot tub use may lead to drowsiness or unconsciousness that could lead to drowning.
  - SYMPTOMS OF HYPERTHERMIA INCLUDE:
    1. Drowsiness
    2. Increased internal body temperature
  - EFFECTS OF HYPERTHERMIA:
    1. Unaware of possible dangers
    2. Failure to perceive excessive heat
    3. Failure to recognize need to leave Hot Tub
    4. Loss of ability to leave Hot Tub
    5. Fetal damage in pregnant mothers

# TUB PLACEMENT

**Proper placement of your hot tub will add to the enjoyment. Please consider the following:**

1. When viewed from the inside of the house or patio, how will the hot tub enhance the yard and landscaping?
2. Will the location provide the desired privacy?
3. When in the hot tub, will you have the desired view?
4. How will the electrician run the power line?
5. Will you have a safe walking path to the hot tub in cold weather when the ground may be slippery?
6. Check local building codes for any electrical or set back requirements.
7. When placing your hot tub indoors, it will increase the humidity in the enclosed area. A ventilation fan may be required to exhaust the steam from the hot tub. All finish materials like sheetrock and trim boards should be capable of withstanding the additional humidity.

## HOT TUB FOUNDATION

**Important for the longevity of the tub and a safe hot tub environment. Providing a solid foundation is necessary!**

1. Your hot tub requires the structural support of a flat level surface. A 3.5 in. thick concrete pad is best. There are other available options, we recommend that you consult your dealer to select the proper pad to suit your needs.
2. When installing your hot tub on a deck, make sure your deck was designed to support a minimum of 50 lbs. per square foot, however, an x-large tub can weigh 800-1,000 lbs. dry, with a water capacity of 400 gallons+ and 4-5 bathers. The total weight load could be upwards of 5,000 lbs. which would exceed the design capacity of a 50 lb. Per sq. ft. design. Adding direct support under the deck and directly below the tub by post or beam would be recommended.
3. Many cities require that the hot tub be in a fenced area with a self-closing and latching gate. Check with your local building department.
4. Make sure there is a clear path for delivery of the hot tub. You may need to adjust landscaping, remove gates, etc.

# ELECTRICAL INSTALLATION AND REQUIREMENTS

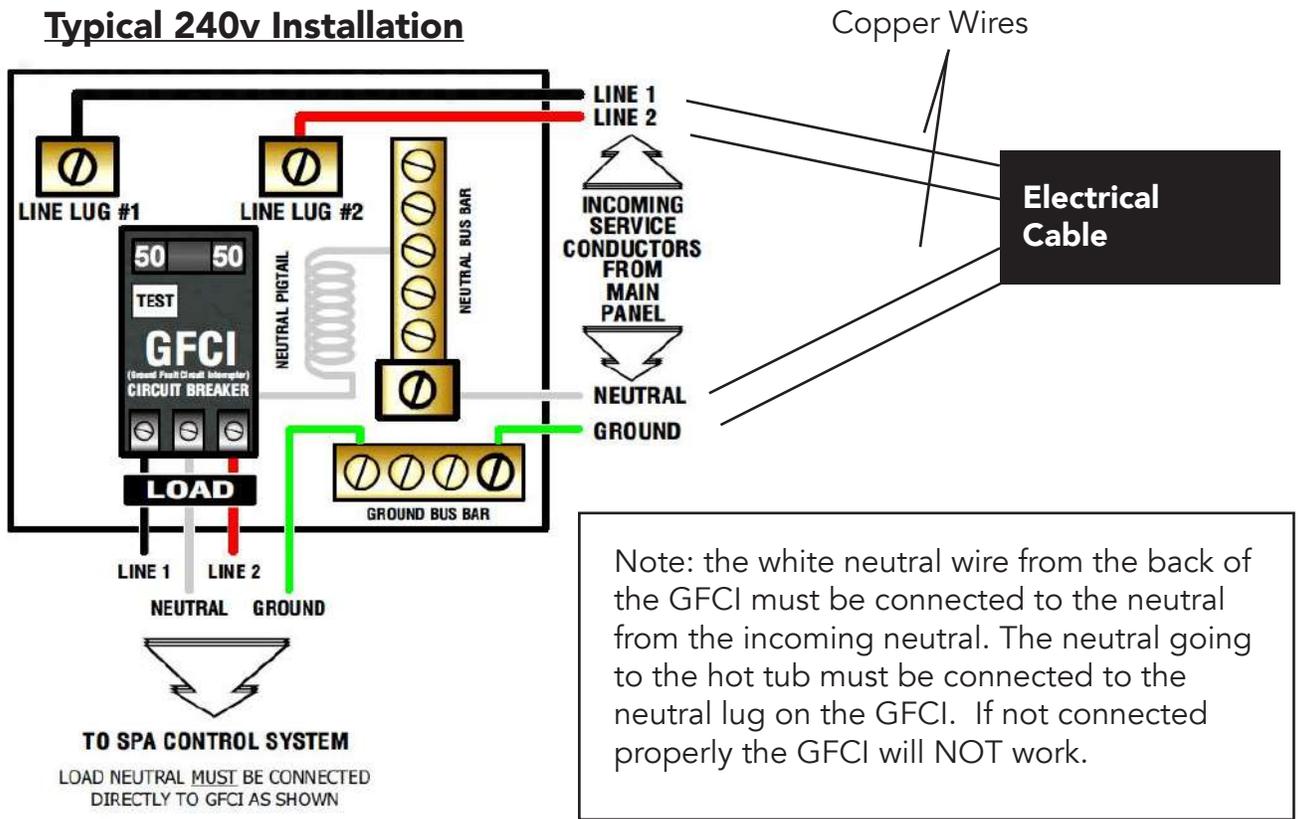
240 Volt Models Require "Hard Wire" Hook-ups

PLEASE HAVE YOUR LICENSED ELECTRICIAN READ AND FOLLOW THESE INSTRUCTIONS PRIOR TO INSTALLATION.

It is the responsibility of the hot tub owner to make sure that a qualified electrician wires your Resort Hot Tub in accordance with the National Electric Code and all applicable local electrical codes. All electrical work should be done by an experienced, licensed electrician. We recommend the use of appropriate electrical conduit, fittings, and wire for all circuits. All Resort Hot Tub models are designed to run on 60hz.

240v units require a 50 amp GFCI breaker on a dedicated circuit. The GFCI protected breaker must be installed in a dedicated sub-panel that is easily accessible to the hot tub users. Installed at a minimum of 5 feet from the hot tub, but within view of the hot tub.

Please have your electrician review these wiring diagrams to ensure the GFCI and pack are properly connected.



# ELECTRICAL INSTALLATION AND REQUIREMENTS

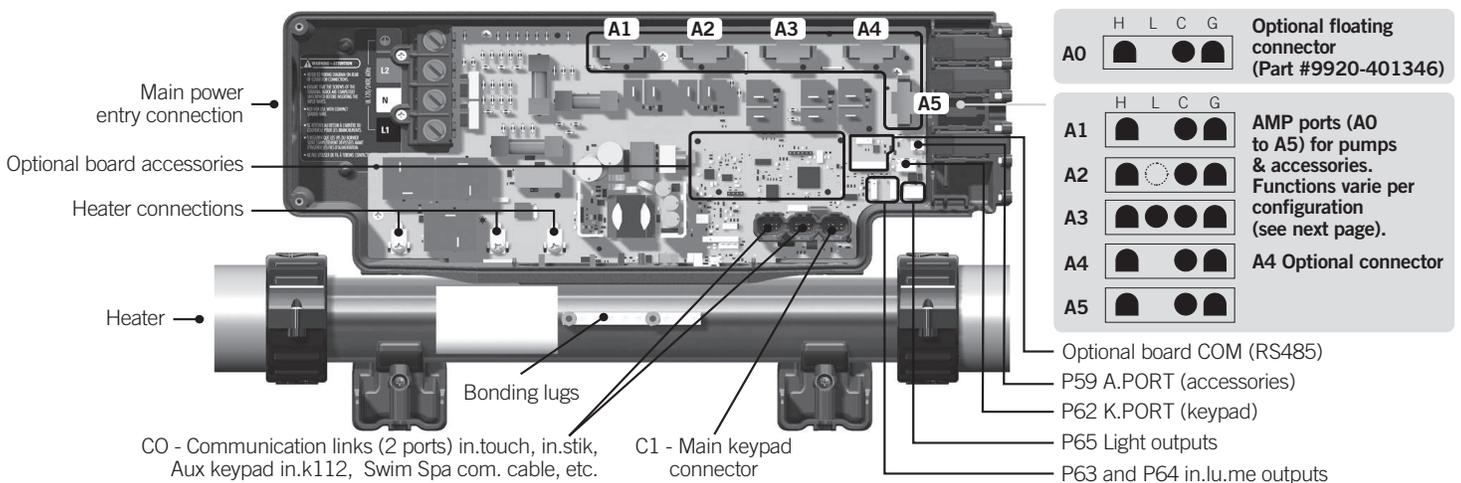
Your Resort Hot Tub is provided with a bonding lug to accommodate connection to a local ground, such as a metal cold water pipe or length of rebar staked into the ground.

IT'S IMPORTANT TO USE A LOCALLY LICENSED ELECTRICIAN, WHO WILL COMPLY TO LOCAL CODES. Electrical connections made incorrectly or using improperly sized wire can cause damage to the pumps, control pack, or other electrical components and will void the warranty and create unsafe conditions.

The GFCI should be tested frequently.

**Caution: always disconnect the electricity before servicing electrical components or removing the door or access panel**

## Connect all outputs & keypads



# QUICK REFERENCE CARD

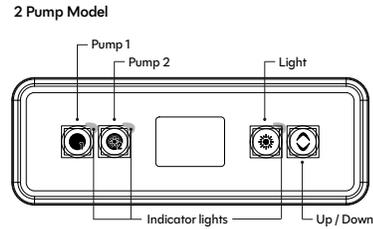
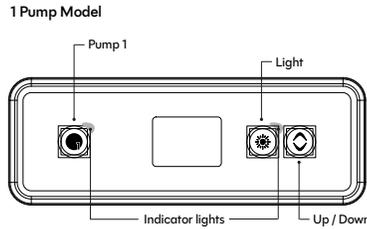
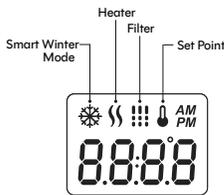
Please consult your spa user manual for complete info on the features of your spa system.



## in.k300™ Compact full-function keypad

The Quick Reference Card provides an overview of your spa's main functions and the operations accessible from your digital keypad. This QRC depicts a generic overlay, custom versions may vary.

### Description



### Spa Functions



#### Off Mode

Pressing Pump 1 for 5 seconds will enable the Off mode. This mode allows you to stop all outputs including automatic functions such as filter cycle, heat request and smart winter mode for 30 minutes to perform quick spa maintenance. When Off mode is active, the display will toggle between the "OFF" message, the clock and the water temperature. The spa light will flash for a few seconds before the end of the 30 minutes to warn you that the system is about to resume its normal operation. Press Pump 1 or Pump 2 (if available) to restart the system before the expiration of the 30 minute delay. When the system resumes its normal operation, the display shows "On" for 3 seconds.

#### Pump 1

Press Pump 1 key to turn Pump 1 on at low speed. Press a second time to turn pump to high speed (with a dual-speed pump\*). A third time turns pump off. A built-in timer automatically turns pump off after 20 minutes, unless pump has been manually deactivated first. The "Pump 1" indicator lights up when Pump 1 is on. With a dual-speed pump, the indicator will flash when pump 1 is on at low speed.

#### Pump 2 key

Not available on all models. Press Pump key to turn Pump 2 on. Press a 2nd time to turn pump off. A built in timer automatically turns pump off after 20 minutes, unless pump has been manually deactivated first.

#### Light key

Press Light key to turn light on. A second press turns light off. A built-in timer automatically turns light off after 2 hours, unless it has been manually deactivated first. The "Light" indicator lights up when light is on.

#### Up/Down keys

Use Up or Down key to set desired water temperature. The temperature setting will be displayed for 2 seconds to confirm your new selection. 2 pump spas have a combined Up/Down key. Hold the button to increase the parameter and release the button to stop. Hold the button again to decrease the parameter.   
 \* The "Set Point" icon indicates that the display shows the desired temperature, NOT the current water temperature!

### Programming Steps



#### Program menu

The program menu is accessible by holding down the Light key for 5 seconds. In the program menu the following parameters can be set: clock, the filter or purge cycles, economy mode and temperature units. While you are in the program menu, use the Up or Down key to adjust the parameters and use the Light key to jump to the next parameter. The changes will be saved after the confirmation of

the last parameter only. If there is no action taken for 10 seconds, the system will exit the program menu without saving any changes.



#### Setting the clock

Enter the program menu by holding down the Light key for 5 seconds. The display will show the current clock setting with the hour flashing.

Depending on factory settings your system may be set to 24-hour time or 12-hour time.

Setting the hour: Use the Up or Down keys to adjust the hours. Press the Light key to jump to the next parameter, the minutes.

Setting the minutes: Use the Up or Down keys to adjust the minutes. Press the Light key to jump to the next parameter, the filter or purge start time (FS).

#### Programming the filter/ purge cycles

Depending on system configuration your spa will perform either a filter or a purge cycle. The filter cycle menu consists of the following parameters: the start time (FS) and the frequency (FF). The purge cycle menu consists of the following parameters: the start time (FS) and the frequency (FF).

A filter cycle consists of starting all the pumps and blower in high speed for 1 minute (purge step) then, the pump associated with the filter will run in low speed for the remaining duration of the filter cycle (clean step).

A purge cycle is used when the spa is equipped with a 24 hour circulation pump which provides a continuous clean step. It consists of starting all the pumps and blower in high speed for 1 minute.



#### Setting filter or purge cycle start time

The display will show FSxx "xx" representing the starting hour of the cycle. Use the Up or Down key to adjust the hours. Use the Light key to jump to the next parameter, filter duration (Fd).



#### Setting filter cycle duration

(not available on purge systems)  
The display will show Fdxx "xx" representing the duration in hours of the filter cycle. Use the Up or Down key to adjust the duration. Use the Light key to jump to the next parameter, filter or purge frequency (FF).

0 = no filtration  
24 = continuous filtration

It is not recommended to set this to "0".



#### Setting filter or purge cycle frequency

The display will show FFxx "xx" representing the number of cycles per day. Use the Up or Down key to adjust the frequency. Use the Light key to jump to the next parameter, economy mode (EP).

The "Filter cycle" indicator lights up when filter is on and flashes when suspended.



#### Setting economy mode

This mode allows you to lower the temperature set point of the spa by 20 °F (11 °C) during a certain period of the day.

The display will show EPx, "x" representing the state of the programmed economy (0 = disabled, 1 = enabled). Use the arrow keys to enable or disable economy mode. Use the Light key to jump to the next parameter, economy start time (ES).



#### Setting economy start time

The display will show ESxx "xx" representing the hour at which the economy mode will become active. Use the Up or Down key to adjust the hour. Use the Light key to jump to the next parameter, economy duration (Ed).

When the Economy mode is ON, the display will toggle between the "Eco" message, the time, and the water temperature.



#### Setting economy duration

The display will show Edxx "xx" representing the duration in hour of the economy mode. Use the Up or Down key to adjust the hour. Use the Light key to jump to the next parameter, temperature unit.

24 = continuous economy

*Note that the parameters for the economy mode settings are associated to specific low level configuration of the system that are not present in all software revisions.*



#### Setting temperature unit

Water temperature can be displayed in either Fahrenheit (°F) or Celsius (°C). The display will show F or C.

Use the Up or Down key to change the setting. Use the Light key to save all the parameters.



#### Smart Winter Mode

Our Smart Winter Mode protects your system from the cold by turning pumps on several times a day to prevent water from freezing in pipes.

The "SWM" indicator lights up when freezing is detected and flashes when the purge is active.



#### Cooldown

After heating the spa water to the desired Set Point, the heater is turned off, but its associated pump (Pump 1 low-speed or CP) remains on for a predetermined period of time to ensure adequate cooling of the heating element, prolonging its useful life.



#### Water temperature regulation

Every 15 to 90 minutes the pump will run to ensure accurate water temperature readings as well as avoid heater activation in dry conditions. After verifying pump activation and taking a water temperature reading if required, the system automatically turns the heater on to reach and maintain water temperature at Set Point.

 Indicator flashes when taking water temperature reading.

### Troubleshooting section

Should an error occur, the display will show one of the following error messages toggled with the clock and the water temperature.

in.xe error codes	Description
	<b>Hr</b> An internal hardware error has been detected in the in.xe. Contact dealer or service supplier.
	<b>HL</b> The system has shut the heater down because the temperature at the heater has reached 119°F (48°C). Do not enter the water! Remove the spa cover and allow the water to cool down, then shut power off and power your spa up again to reset the system.
	<b>AOH</b> Temperature inside the spa skirt is too high, causing the internal temperature in the in.xe to increase above normal limits. Open skirt and wait until error clears.
	<b>FLO</b> The system does not detect any water flow while the primary pump is running. Check and open water valves. Check for water level. Clean filter. If the problem persists, call your dealer or service supplier.
	<b>Prr</b> A problem is detected with the temperature probe. Call your dealer or service supplier.
	<b>OH</b> The water temperature in the spa has reached 108°F (42°C). Do not enter the water! Remove the spa cover and allow the water to cool down to a lower temperature. Call your dealer or service supplier if problem persists.

# KEYPAD FUNCTIONS

## Start or stop accessories

To start or stop an accessory, press the associated button. Indicators will light up when the associated accessory is on.

When an accessory has more than two states, press the button until it reaches the desired state. Indicators will flash when dual speed pumps are on at low speed, and will be solid at high speed.



## Water temperature

The temperature shown on screen is the current water temperature. Use the **Up** and **Down** buttons to set the desired temperature.

The set point icon will appear at the top of the screen. After 3 seconds without any change to the set temperature value, the keypad will resume the normal display.



## Off Mode

Pressing Pump 1 for 5 seconds will enable the Off mode. This mode allows you to stop all outputs including automatic functions such as filter cycle, heat request, and smart winter mode for 30 minutes to perform quick spa maintenance. When Off mode is active, the display will toggle between the "OFF" message, the clock, and the water temperature. The spa light will flash for a few seconds before the end of the 30 minutes to warn you that the system is about to resume its normal operation. Press Pump 1 or Pump 2 (if available) to restart the system before the expiration of the 30 minute delay. When the system resumes its normal operation, the display shows "On" for 3 seconds.

# PROGRAMMING STEPS



## Program menu

The program menu is accessible by holding down the Light key for 5 seconds. In the program menu, the following parameters can be set: clock, filter or purge cycles, economy mode, and temperature units. While in the program menu, use the Up or Down key to adjust the parameters and use the Light key to jump to the next parameter. The changes will be saved after the confirmation of the last parameter only. If there is no action taken for 10 seconds, the system will exit the program menu without saving any changes.



## Setting the clock

Enter the program menu by holding down the Light key for 5 seconds. The display will show the current clock setting with the hour flashing.

Depending on factory settings, your system may be set to 24-hour time or 12-hour time.

**Setting the hour:** Use the arrow keys to adjust the hour. Press the Light key to jump to the next parameter, the minutes.

**Setting the minutes:** Use the arrow keys to adjust the minutes. Press the Light key to jump to the next parameter, the filter or purge start time (FS).

## Programming the filter/ purge cycles

Depending on system configuration, your spa will perform either a filter or a purge cycle. The filter cycle menu consists of the following parameters: the start time (FS), the duration (Fd), and the frequency (FF). The purge cycle menu consists of the following parameters: the start time (FS) and the frequency (FF).

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A purge cycle is used when the spa is equipped with a 24-hour circulation pump which provides a continuous clean step. It consists of starting all the pumps and blower in high speed for 1 minute.

# PROGRAMMING STEPS



## Setting filter or purge cycle start time

The display will show FSxx, "xx" representing the starting hour of the cycle. Use the arrow keys to adjust the hours. Use the **Light** key to jump to the next parameter, filter duration (Fd).



## Setting filter cycle duration

(not available on purge systems)

The display will show Fdxx, "xx" representing the duration in hours of the filter cycle. Use the arrow keys to adjust the duration. Use the **Light** key to jump to the next parameter, filter or purge frequency (FF).

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## Setting filter or purge cycle frequency

The display will show FFxx, "xx" representing the number of cycles per day. Use the arrow keys to adjust the frequency. Use the **Light** key to jump to the next parameter, economy mode (EP).

!!! The "Filter" indicator lights up when filter is on and flashes when suspended.



## Setting economy mode\*

This mode allows you to lower the temperature set point of the spa by 20 °F (11 °C) during a certain period of the day.

The display will show EPx, "x" representing the state of the programmed economy (0 = disabled, 1 = enabled). Use the arrow keys to enable or disable economy mode. Use the **Light** key to jump to the next parameter, economy start time (ES). When the Economy mode is ON, the display will toggle between the "Eco" message, the time, and the water temperature.



## Setting economy start time\*

The display will show ESxx, "xx" representing the hour at which the economy mode will become active. Use the arrow keys to adjust the hour. Use the **Light** key to jump to the next parameter, economy duration (Ed).

\* Note that the parameters for the economy mode settings are associated to specific low level configuration of the system and not present in all software revisions.

# PROGRAMMING STEPS



## Setting economy duration\*

The display will show Edxx, "xx" representing the duration in hours of the economy mode. Use the arrow keys to adjust the hour. Use the **Light** key to jump to the next parameter, temperature unit.

24 = continuous economy



## Setting temperature unit

Water temperature can be displayed in either Fahrenheit (°F) or Celsius (°C). The display will show °F or °C.

Use the arrow keys to change the setting.  
Use the **Program** or **Light** key to save all the parameters.



## Smart Winter Mode

Our Smart Winter Mode protects your system from the cold by turning pumps on several times a day to prevent water from freezing in pipes.

 The "SWM" indicator lights up when freezing is detected and flashes when the purge is active.

## Cooldown

After heating the spa water to the desired Set Point, the heater is turned off, but its associated pump (Pump 1 low-speed or CP) remains on for a predetermined period of time to ensure adequate cooling of the heating element, prolonging its useful life.



## Water temperature regulation

Every 15 to 90 minutes the pump will run to ensure accurate water temperature readings as well as avoid heater activation in dry conditions. After verifying pump activation and taking a water temperature reading if required, the system automatically turns the heater on to reach and maintain water temperature at Set Point.

 Indicator flashes when taking water temperature reading.

\* Note that the parameters for the economy mode settings are associated to specific low level configuration of the system that are not present in all software revisions.

# ERROR MESSAGES

The list below shows the different error messages that can appear on the home screen  
Refer to the troubleshooting and error codes section of the TechBook for your spa pack for more details

Code	Message
HL	Warning! HL Error
FLO	No flow for more than 2 hours
FLO	No flow condition
HR	Danger! Relay stuck
OH	Warning! Spa temp high
Prr	Warning! Temp probes defective
AOH	Internal pack temp. high
FLC	Flow switch closed
SP in	Input voltage issue
FrEr	The input frequency is out of range
RH NC	Comm error in .xm2 - in.therm
RH ID	in.xm2 - in.therm incompatible
SC ER	Learning mode error
F1	in.xm2 Fuse # 1 is blown
F2	in.xm2 Fuse # 2 is blown
F3	in.xm2 Fuse # 3 is blown
Hr	Danger! Thermal fuse error
UPL	The spa pack does not have valid softwarePlease insert valid in .stick to reprogram spa pack
BL	The spa pack does not have valid softwarePlease insert valid in .stick to reprogram spa pack

# SPA COVER INSTALLATION

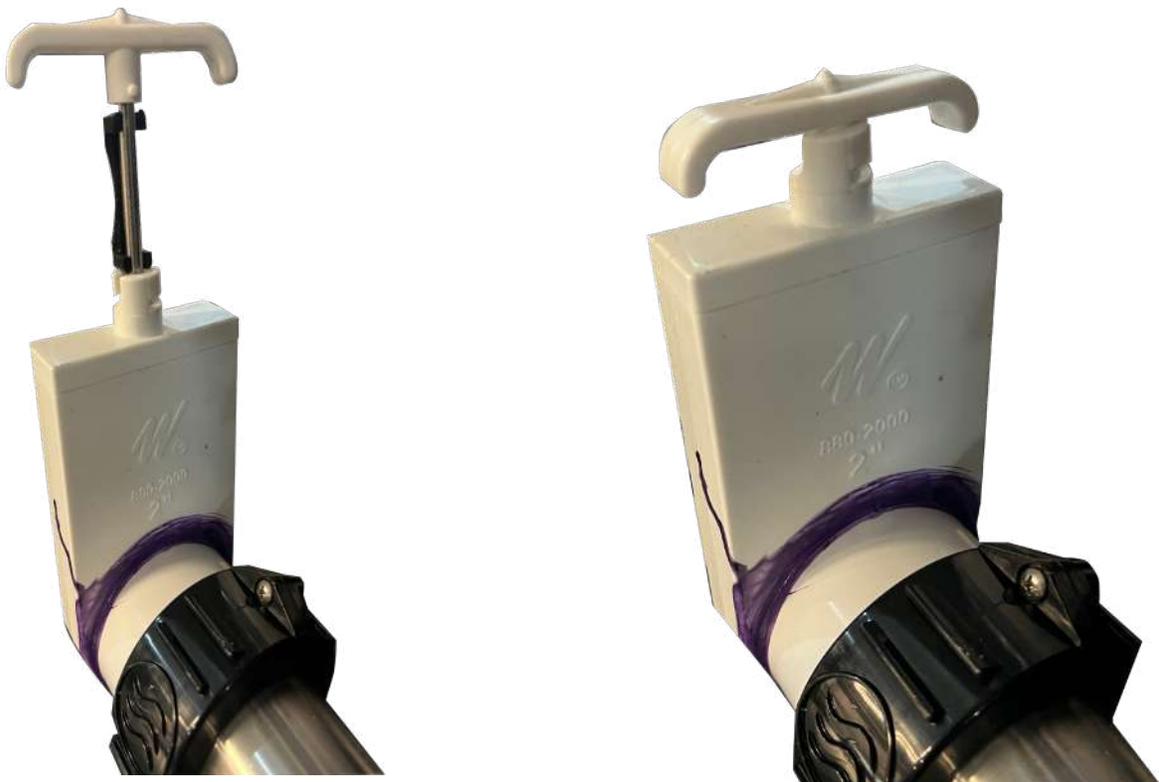
Every Resort Hot Tub is shipped with a high quality cover that meets or exceeds all safety requirements and carries the ASTM Certificate of Product Compliance. It is the responsibility of the homeowner to install the cover and lock mechanisms prior to filling the hot tub with water. The cover must be locked at all times when not in use to prevent unauthorized access.

**As stated in the warranty, your hot tub cover must remain on the tub except for when in use. Never leave the tub uncovered when tub is empty. Exposure to direct sunlight can cause permanent damage to the tub shell and will not be covered under warranty.**

## HOT TUB START UP PROCEDURES

Once your hot tub is installed on its foundation and all electrical requirements have been met, you are ready to begin the startup procedure.

1. Before filling your hot tub, all shut-off slice valves must be OPEN. There are two or four twist lock slice valves located in the equipment area that are used to isolate water from the equipment area if your pumps or packs need to be serviced. To open the gate valves, turn the valve T-handle  $\frac{1}{4}$  turn to unlock and then pull up approximately 3 inches until it stops and snaps into place. The hot tub is shipped with the gate valves open with snap locks to hold the valves in the open position.



# HOT TUB START UP PROCEDURES

2. Before turning on the power to your hot tub, you will need to fill your it with a garden hose. It is ideal to fill your hot tub through the filter area. Remove the telescoping weir (see photo #1) by pulling it directly up. Remove and unwrap the filter cartridge (see photo #2) – turn counterclockwise and pull up. Place the garden hose in the filter bucket (see photo #3) and turn on the water. Filter should be replaced every 3 to 4 months. If using a pleated filter, once a year or sooner depending on bathing load.



Remove protective wrap before filling with water

3. Once your hot tub is full, do a visual check of the heater unions to make sure there are no water drips. Also, make sure the equipment area is closed and turn on power to your hot tub. To avoid damage to your pump and heater, the power must never be turned on unless the spa is filled with water.
4. Your hot tub is now ready to use.

# HOT TUB START UP PROCEDURES

Fill the tub with water up to the waterline indicated by the sticker, as shown in the image below. This marks the minimum water level needed for the tub to operate properly. Once you've found your ideal water level, feel free to remove the sticker and enjoy your soak!



# GENERAL MAINTENANCE

## Hot Water Chemistry

There are a few things that need to be checked and adjusted regularly to maintain the cleanliness of your hot tub water. Your dealer will be able to supply you with test strips and the appropriate chemicals. Keep in mind that these steps must be done in order.

When possible, it is ideal to rinse off lotions, hair products and sweat prior to entering the hot tub. The less contaminants that enter the hot tub, the easier it will be to treat the water.

### Step 1: Total Alkalinity

- Total alkalinity acts as a 'buffer' for the pH. It is a measure of the water's ability to resist changes in the pH.
- If total alkalinity is too high, the pH level will be difficult to bring down. Either add more water to your hot tub or add sodium bisulfate (alkalinity down).
- If total alkalinity is too low, the pH will fluctuate erratically and cause scaling and corrosion issues in your hot tub. Add sodium carbonate (alkalinity up) to correct.
- The ideal range for total alkalinity is between 80 and 120.

### Step 2: pH

- pH is the measure of how acidic or alkaline your water is. If the pH is out of the correct range, equipment may become damaged and the water will become uncomfortable.
- If the pH is too high (alkaline), you may experience ineffective sanitizers, scale buildup, cloudy water and a clogged filter. Add sodium bisulfate (pH down) to correct it.
- If the pH is too low (acidic), sanitizers will dissipate more quickly, equipment may corrode, and the water will be very drying to your skin. Add sodium carbonate (pH up) to correct.
- pH level between 7.2 and 7.6 is ideal.

### Step 3: Calcium Hardness

- High calcium levels or 'hard water' can cause scale build up inside the plumbing system. Add calcium reducer to correct.
- Low calcium levels can cause the hot tub water to become highly corrosive. Add calcium hardness increaser to correct.
- The proper calcium hardness level is between 150 and 250 ppm.

# GENERAL MAINTENANCE

## Step 4: Sanitizers

- DO NOT add Chlorine or Bromine until total alkalinity, pH, and calcium hardness are adjusted to the appropriate level.
- Chlorine and Bromine are measured in parts per million (ppm).
- When using an ozonator, 2-4 ppm is the ideal range. Increase by 1ppm if your hot tub does not have an ozonator.

NOTE: After adding water treatments, you must run the hot tub on high speed for approximately 15 minutes to circulate the chemicals and allow off gassing. Please leave the cover off during this time to avoid damage to the cover.

## DOs and DON'Ts

- Do use granular sodium dichlor (chlorine) only
- Do replace your disposable filter cartridge every 3 to 4 months. If using a pleated filter once a year dependent on bathing load.
- Do prevent damage by removing the hot tub cover prior to adding chemicals and leave off for 30 minutes after to allow for proper off-gassing
- Do sprinkle any chemicals on the water's surface unless it is above the filter
- Do only use sanitizers that are designed for hot tub use only
- Don't use any formed tablet or bar sanitizers
- Don't place chemicals into the filter basket, floating weir, or skimmer face
- Don't distribute chemicals using a floater
  - They have a tendency to over-sanitize or under-sanitize your water
  - Damage to the shell may occur
  - This won't be covered under warranty
- Don't splash chemicals on to the shell (if you do - clean immediately with a hose and cloth)
- Don't lower pH with swimming pool (muriatic) acid
- Don't use household bleach to clean the water
- Don't drain your tub without properly winterizing it because any remaining water can freeze and cause damage
- Do Winterize your tub if you drain it for the Winter season.

## Winterization:

Please contact your dealer for winterization. This should be handled by a spa professional.



## **RESORT HOT TUBS LIMITED WARRANTY**

GPM Manufacturing LLC, makers of Resort Hot Tubs, offers this Limited Warranty solely to the original purchaser and applies to residential use only within the United States and Canada.

Please read this entire Limited Warranty as exclusions and conditions do apply.

### **2 YEAR SHELL STRUCTURE**

We warrant the Resort Hot Tub shell not to leak for two years from the original tubs purchase date.

### **2 YEAR SHELL SURFACE**

We warrant the Resort Tub shell surface finish not to crack, wrinkle, blister, peel for two years from the original tubs purchase date.

### **2 YEAR CABINET**

We warrant the Resort Polyethylene Cabinet against degradation and cracking for two years. Bowing that can occur under some conditions is considered normal and excluded from this limited warranty. Also, normal wear and weathering that occur over time are not defects.

### **2 YEAR EQUIPMENT**

We warrant the Resort Hot Tub Equipment (pumps, heater, control pack, LED lights and topside control) for two years

### **2 YEAR PLUMBING**

We warrant the plumbing of the tub will not leak due to defects in material and workmanship for two years.

### **2 YEAR JETS**

Jet internals are warranted against malfunctions due to defects in material for two years. Jet internals are considered to be Easily Removed Components. After initial delivery and startup, discoloring or fading of the plastics, corrosion of any stainless steel components are specifically excluded from these warranty terms. Defective components that are easily removed from the spa and that can be readily replaced by the customer and do not require specialized tools or knowledge or create personal safety issues all of which are considered Easily Removed Components, will be repaired or replaced free of charge at your Resort Hot Tub Dealer or by sending the effective components to GPM Manufacturing.



## WARRANTY REGISTRATION AND WARRANTY CLAIM PROCEDURE

The original retail purchaser should register their hot tub purchase within 10 days from the date of original retail purchase to establish proof of purchase with GPM Manufacturing LLC.

Failure to register does not void this limited warranty but, upon any warranty claim, proof of purchase must first be provided to confirm original purchase date to the original retail purchaser. Hot tub registration can be submitted online at [www.celtichottubs.com](http://www.celtichottubs.com).

In the event of a warranty claim of a defect or malfunction covered under the provisions of this limited warranty, the original retail purchaser must first notify in writing the retail dealer who sold the hot tub within ten days of the initial malfunction or discovery of defect. If the retail dealer does not provide service, then the purchaser should contact Resort Hot Tubs customer service department, at (270) 306-6220, or provide written notice of the malfunction or defect at the address below. Upon notice of the warranty claim, the retail dealer or an approved independent service center representative will arrange inspection of the hot tub with the retail purchaser to determine if the claimed malfunction or defect is a covered malfunction or defect under this limited warranty. If it is determined that the malfunction is not covered by this limited warranty, the cost of the service call is the sole responsibility of the purchaser. If it is determined that the malfunction or defect is covered under this limited warranty, we, through the retail dealer, or approved independent service center will repair or replace the covered item. In the event of hot tub replacement, the replacement hot tub will carry the balance of the original hot tub warranty from the original retail purchase date.

We reserve the right for its dealers or approved service centers to collect from the retail purchaser reasonable travel expenses. In addition, access charges will be assessed if the hot tub is not reasonably accessible for inspection, repair or replacement. This limited warranty is extended to the original retail purchaser and is not transferable. This limited warranty becomes void upon the transfer of ownership of the hot tub or moving of the hot tub to a different location, if not moved by an authorized Resort Hot Tub dealer.

## EXCLUSIONS

This limited warranty is enforceable by the original retail purchaser from the date of the original retail purchase. Hot tub pillows, cover or any dealer installed accessories are specifically excluded from this limited warranty. All warranties are void if the hot tub is placed in commercial service. Normal wear and weathering of finishes and components are not defects and specifically excluded from this limited warranty. In the event it is necessary to move the hot tub from the residential premises to repair or replace any warrantable item, any and all cost of hot tub removal, transportation of the replacement hot tub, damages to landscaping, decking, fencing or other structural alteration, or any cost to obtaining access to the hot tub are the sole responsibility of the purchaser.

## LIMITATIONS

This limited warranty is voidable if the hot tub has been subject to misuse, alteration or attempted alteration, repairs or attempted repairs by a non-approved service center or if a failure or malfunction is due to improper water chemistry, improper maintenance or lack of normal maintenance as prescribed in the Resort Hot Tub Owners Manual, an act of God, weather conditions, animals, rodents, pests, or any damage from causes beyond the control of GPM Manufacturing LLC. Misuse or abuse shall mean operation of the hot tub other than in conformity with the Celtic Hot Tub Owners Manual. Such misuse and abuse shall include but not be limited to the following:

- The spa must be on a uniformly firm, continuous and level surface. The recommended foundation is a concrete pad with a minimum thickness of four inches with steel reinforcement bars crossed throughout the pad.
- Damage of the hot tub surface and components caused by leaving the hot tub uncovered or due to covering the hot tub with plastic film of any kind.
- Damage to the hot tub surface and components caused by use of a non-insulated cover or unapproved cover not provided by Resort Hot Tubs when the hot tub is subject to weather conditions and sun.
- Damage to the hot tub surface and components caused by contact with unapproved cleaners or solvents.
- Damage caused by the operation of the hot tub at water temperatures outside the range of 34 degrees F to 104 degrees F.
- Freeze damage.
- Damage caused by unapproved sanitizers such as calcium hypochlorite , sodium hydroxide, tri-chlor type chlorines or any sanitizing chemical that may remain undissolved on the hot tub surface.
- Damages or malfunction due to dirty, clogged, calcified filters out use of an unapproved filter cartridge.
- Damages or malfunction caused by failure to provide even, proper support to the hot tub.
- Damages or malfunction caused during installation of the hot tub.

## DISCLAIMERS

GPM Manufacturing LLC and it's authorized agents shall not be liable for any injury, loss, cost or other damage, whether incidental, consequential, special or punitive, arising out of any defect covered by this limited warranty, including without limitation, loss of use of the hot tub and cost of removal of defective product, even if GPM Manufacturing LLC has been advised of the possibility of such damage. The liability of GPM Manufacturing LLC under this limited warranty, if any, shall not exceed the original amount paid for the defective product. Coverage under this limited warranty shall commence as of the original date of purchase and the duration of such coverage shall not extend for any reason whatsoever beyond the stated time period. These disclaimers shall be equally applicable to any service provided by GPM Manufacturing LLC or its authorized agents.

## LEGAL RIGHTS

This Limited Warranty gives you specific legal rights. You may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you. Prompt return of a completed warranty registration form protects your warranty rights.



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3100 Bowling Green Rd, Franklin, KY 42134 •