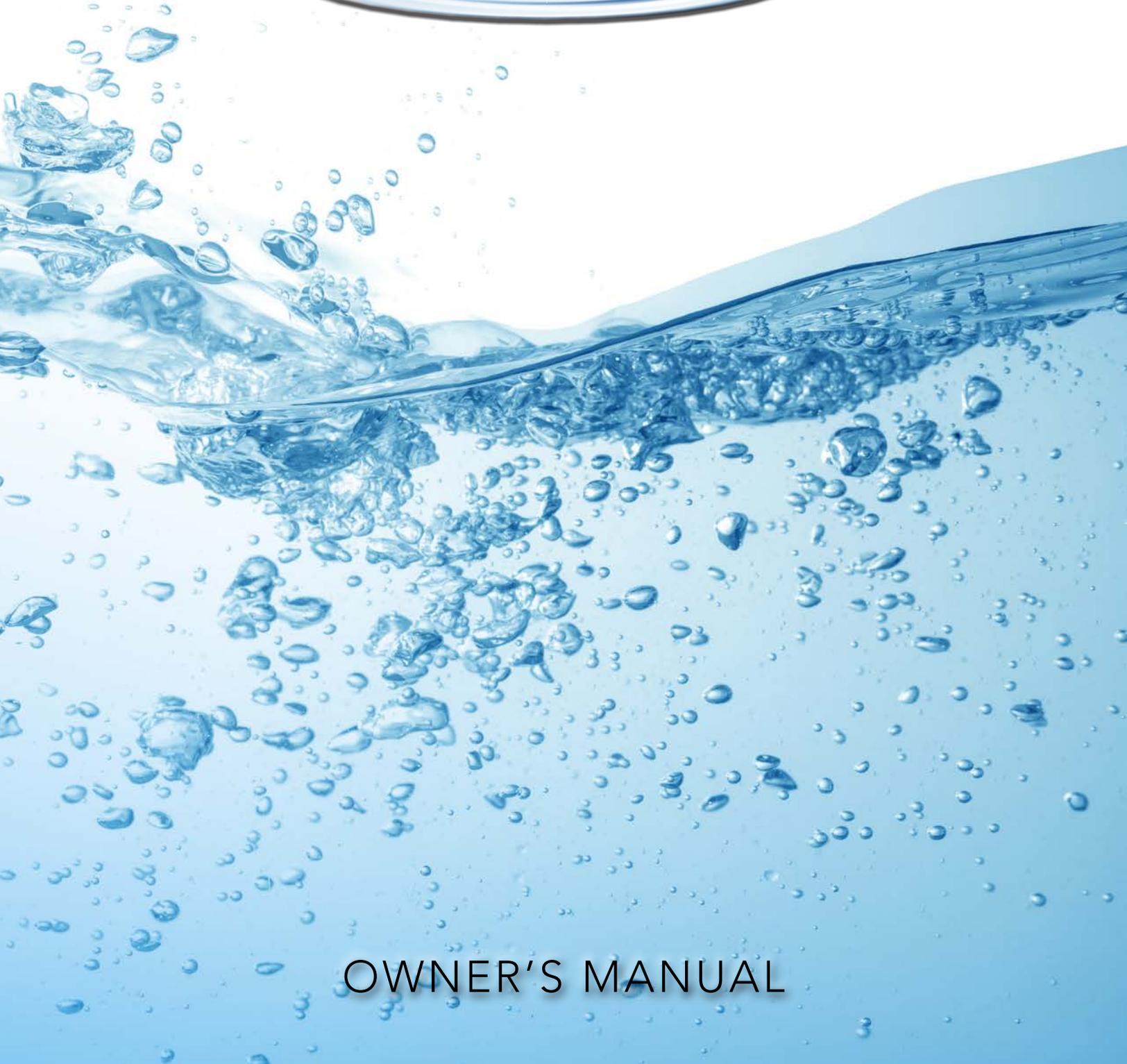


HARMONIC

H O T T U B S



OWNER'S MANUAL

THANK YOU FOR JOINING THE HARMONIC 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

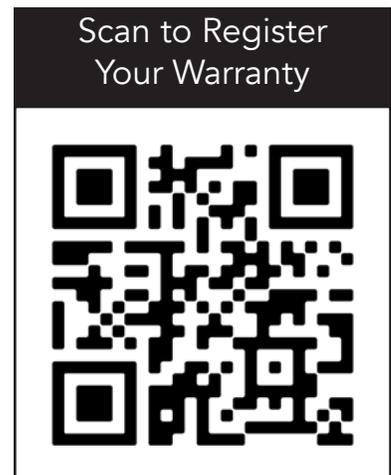


TABLE OF CONTENTS

REGISTERING YOUR HOT TUB WARRANTY.....	2
SAFETY INSTRUCTIONS.....	4-5
TUB PLACEMENT & FOUNDATION.....	6
SPA PAD.....	6
ELECTRICAL INSTALLATION & REQUIREMENTS FOR 110 MODELS.....	7
CONVERTING A 110V SYSTEM TO A 220 SYSTEM.....	7
ELECTRICAL INSTALLATION & REQUIREMENTS FOR 220 MODELS.....	8
GECKO 7-BUTTON KEYPAD.....	10
GECKO TOUCHSCREEN KEYPAD.....	11-24
HARMONIC HOT TUBS LIMITED WARRANTY.....	25-27
HOT TUB COVER & START UP PROCEDURES.....	28
HOT TUB START UP PROCEDURES.....	29
GENERAL MAINTENANCE.....	31



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.

2. 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.

3. 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 the 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 FOR 110 VOLT PLUG-IN MODELS

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 Harmonic 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 Celtic Hot Tub models are designed to run on 60hz.

110v units using a 15 amp GFCI (Ground Fault Circuit Interrupter) cord must be plugged into a dedicated circuit. A dedicated circuit is one that has ONLY the hot tub connected to it, nothing else.



CONVERT 110V PLUG & PLAY TO 220V

Upgrading your hot tub from 110V to 220V offers key performance improvements. With a 220V setup, the heater will warm the water faster, and both the pump and heater will run simultaneously—eliminating the “Heater Suspended” message.

Important Notes

- This conversion applies only to In.YE3 control packs.
- The heater will be converted to 220V, while all other components remain at 110V
- This requires a 4-wire hookup, replacing the 110V GFCI cord (see Photo 1)

Conversion Steps

1. Wiring Adjustments

- Disconnect the heater wire from P44 and move it to P17 (see Photo 2)

2. Programming the Spa for 220V

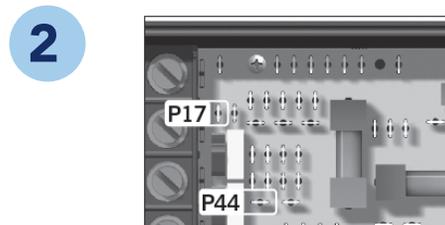
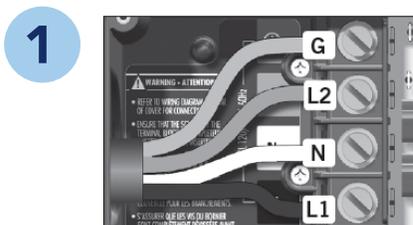
Access the topside control to change the configuration settings:

1. From the main screen, press the Menu button.
2. Scroll down to Config and select it using the Light button.
3. A yellow message will appear. Scroll to the bottom of the message and press and hold the Light button for 5 seconds to unlock configuration access.
4. In the Config menu, scroll to Current and select it using the Light button.
5. Change the current setting to 34 and confirm by pressing the Light button again.

3. System Reboot

- The spa will automatically restart and go through the initializing phase.

This completes the conversion from 110V to 220V, ensuring improved performance and eliminating interruptions caused by limited power.



ELECTRICAL INSTALLATION AND REQUIREMENTS

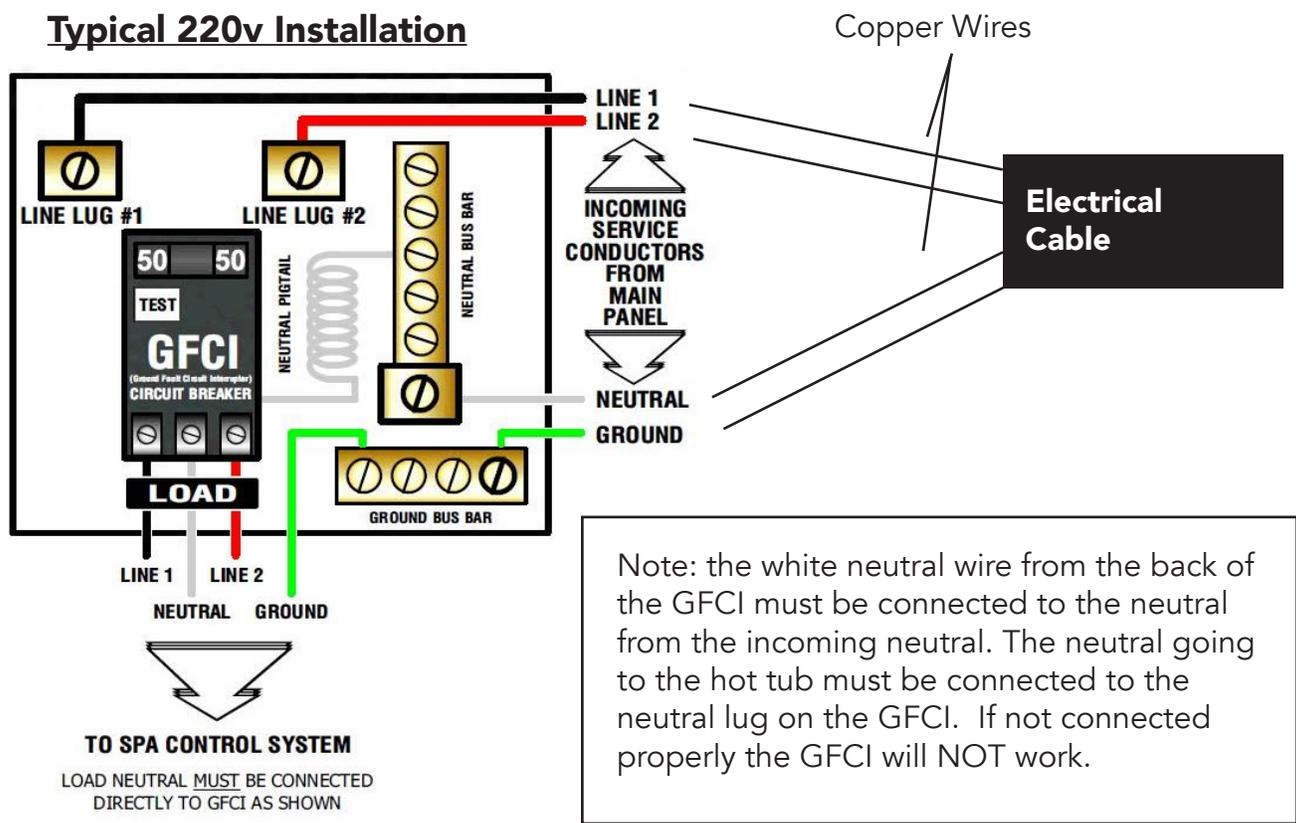
220 Volt Models Require "Hard Wire" Hook-ups

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 Harmonic 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 Harmonic Hot Tub models are designed to run on 60hz.

220v 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

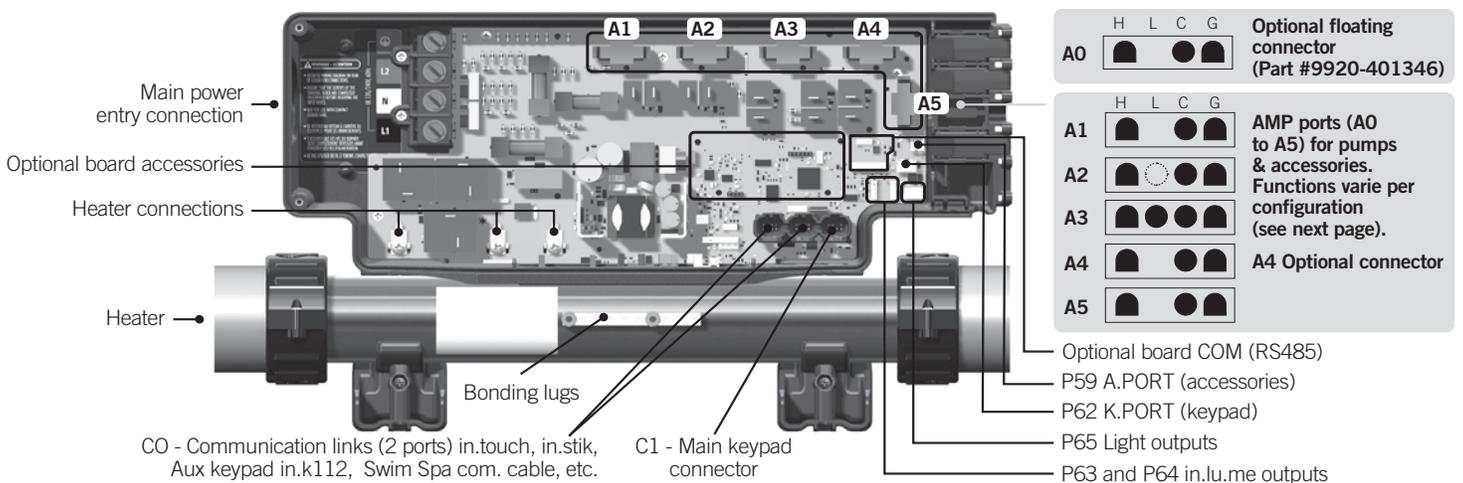
Your Harmonic Hot Tub is provided with a bonding lug to accommodate connection to a local ground, such as a metal cold water pipe or length of rebar staked into the ground.

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.

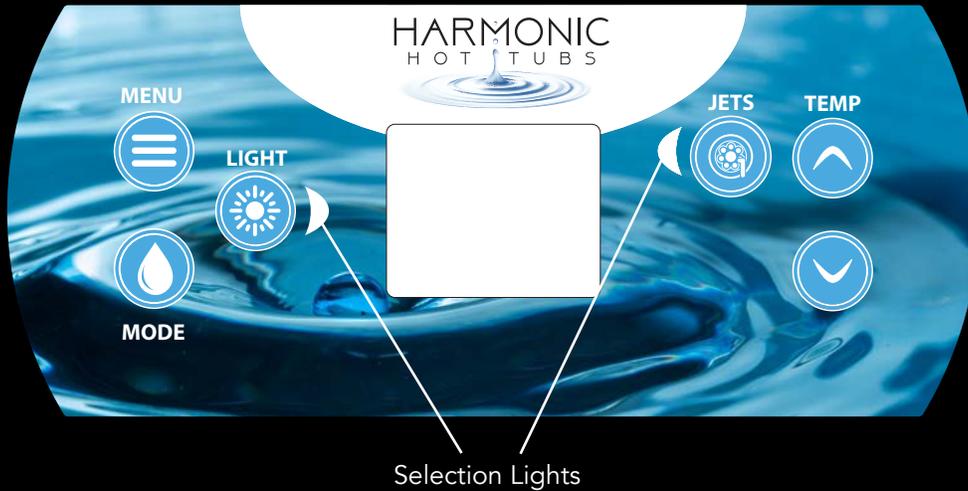
The GFCI should be tested frequently.

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

Connect all outputs & keypads



GECKO 7-BUTTON KEYPAD



Main Functions



Settings key

One press gives you access to a menu to manage the settings of your spa. Refer to the settings section for details about the settings menu.

Main screen

The main screen gives you access to your accessories and water temperature. At the bottom of the screen you will see any error or maintenance messages that are present.

Power

Press any button to turn the keypad on. After 30 minutes without activity it will shut off.

Start or stop accessories

To start or stop an accessory, press the associated button. Icons will become animated when their accessory is turned on, and inanimate when turned off. Icons on the screen will reflect the speed or state of the devices running on your spa.

When an accessory has more than two states, press the button until it reaches the desired state.

Note (version 14.00 and higher): A special buttons and icons mapping may be used when the spa configuration has 4 accessories (3 pumps and a blower or 4 pumps and no blower). In this case only, buttons and icons are divided in 2 sets of accessories. Button #1 starts or stops pump #1 and pump #2. Button #2 starts or stops Pump #3 and Pump #4/blower. Corresponding icons will be animated when one or more accessories are on.*

** Only Pump #1 can have a dual speed.*

Mode key

Successive presses on the Mode key will give access to control different optional accessories of your spa such as Audio and others. Note that if an accessory is not present in your spa configuration, its menu will not appear. Refer to the following section to get details about the possible accessories and their detailed functionalities. The screen will revert back to the spa mode if no key is pressed for 60 seconds. If you don't have any accessories, Mode key can be used to change your display orientation



Water temperature

The temperature shown at the top of the screen gives the actual water temperature.

Use the Up and Down buttons to set the desired temperature. The set point will appear in blue at the bottom. After 3 seconds without any change to the set temperature value, the keypad will resume the normal display of messages.

GECKO TOUCHSCREEN KEYPAD



Keypad functions

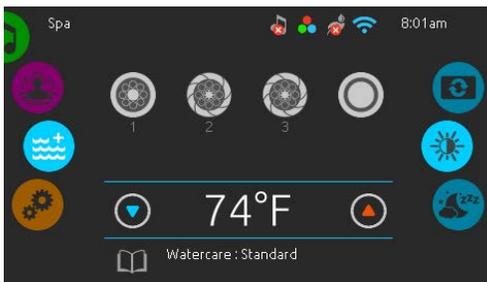
in.k1000+ keypad layout



Sleep mode

Touch the screen to exit sleep mode. 3 minutes after the last pump is turned off, the screen will shut off if there is no touch activity.

Then Follow the instructions on the screen to access the main screen.



Main screen

The main screen gives you access to accessories and water temperature. Error messages or maintenance notifications will be displayed at the bottom of the screen.

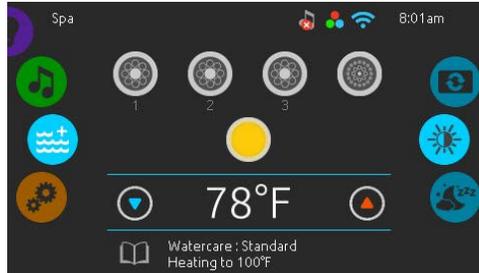
When the variable speed pump option is activated, the icon on the main page is different from a standard pump. In the example below:

- Pump #1 is a standard pump,
- Pumps #2 and #3 are variable speed pumps with the status closed.

GECKO TOUCHSCREEN KEYPAD

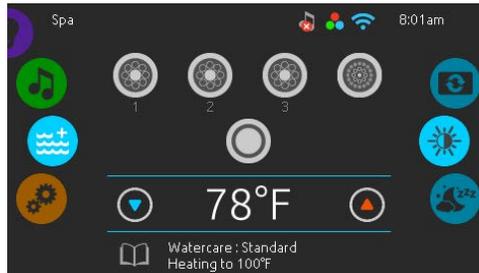


Keypad functions



Start or stop accessories

To start or stop an accessory, touch the associated icon. Icons will become animated when their accessory is turned on and animation will stop when turned off. Icons on the screen will reflect the speed or state of the devices running on your spa. When an accessory has more than one speed press the button until it reaches the desired speed.



Notifications

A notification area at the top right-hand side of the screen shows the state of certain installed accessories.

Notification icons

in.touch:

- Indicates that the in.touch module is detected and connected to a Wi-Fi network.
- A red cross indicates that the in.touch module is detected but is not connected to a Wi-Fi network.
- An animated icon indicates that the in.touch module is connecting to a Wi-Fi network.

For more information about the in.touch, refer to the Wi-Fi section.

in.clear:

- The icon is green when the in.clear is generating bromine.
- The icon is grey when the in.clear is not generating bromine.
- A red cross indicates that the in.clear is turned off.

For more information about the in.clear, refer to the in.clear functions section.

in.stream 2:

- The icon is green when the in.stream 2 is on.
- A red cross indicates that the in.stream 2 is turned off.

For more information about the in.stream 2, refer to the in.stream 2 functions section.

in.mix:

- Indicates that an in.mix system is detected.

For more information about the in.mix system, refer

GECKO TOUCHSCREEN KEYPAD



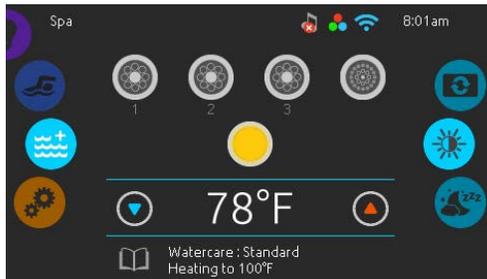
Keypad functions



Water temperature

The temperature shown at the bottom of the screen indicates the current water temperature. Use the Up and Down icons to set the desired temperature. The set point will appear in blue. After 3 seconds without any change to the set temperature value the current water temperature will reappear in white.

When the set value is lower than the current temperature *Cooling to xx.x* will appear below. When the set value is higher than the current temperature, *Heating to xx.x* will be indicated under the value.



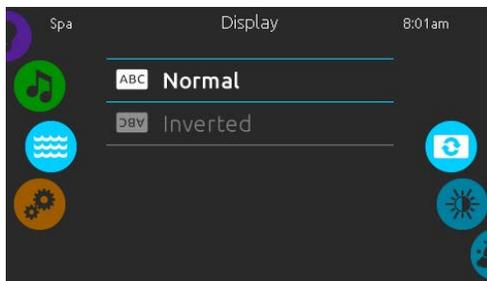
Spa menu

From the home page you can access the following:

- *swim (if configured)*
- *in.clear (if installed)*
- *in.stream 2 (if installed)*
- *in.mix (if installed)*
- *Spa menu*
- *Settings*

To select an option, slide the left wheel up or down until the desired icon menu is highlighted in the middle.

On the right side is a menu for access to the Display and Contrast pages.



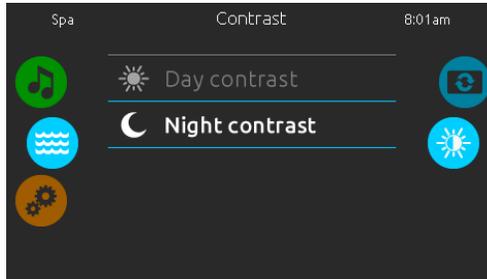
Display page

Use this page to change the display orientation.

GECKO TOUCHSCREEN KEYPAD

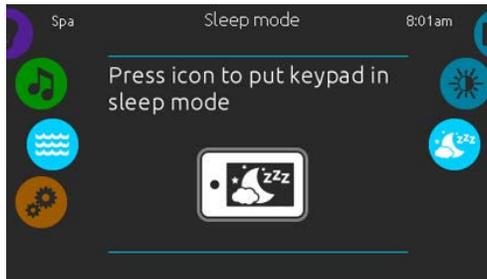


Keypad functions



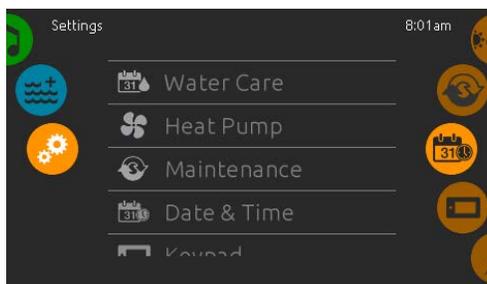
Contrast page

Use this page to change the display contrast.



Sleep

Press key to go directly into the sleep mode. In sleep mode, water splashing on the keypad can't inadvertently start/stop a pump.



Settings

In the Settings page you can access the following:

- *Water Care*
- *Heat Pump (if installed)*
- *Maintenance*
- *Date & Time*
- *Keypad*
- *Electrical Config*
- *Wi-Fi*
- *Miscellaneous*
- *About*

To select an item, slide the right wheel until the desired icon is highlighted in the middle or press on the menu name.

GECKO TOUCHSCREEN KEYPAD



Keypad functions



Water Care

The Water Care page will help you set up your ideal filtration and heating settings. Choose between *Away from Home*, *Standard*, *Energy Savings*, *Super Energy* and *Weekender*, depending on your need. Touch the Water Care name to choose your setting. A green checkmark will appear on the selected icon to confirm your choice.

When you select another water care setting, a confirmation window appears to prevent inadvertent selection that could result in a setup modification for your spa.

In Economy mode, the set point will be reduced by 20°F*, which means that the heating system will not be engaged unless the temperature falls to 20°F below the spa's set temperature.

The filtration schedule shown on the in.k1000+ screen will apply to the main filtration pump, most likely pump 1. If your spa uses a circulation pump configured to run 24 hours, the screen will show you the purge setting instead of filtration. The purges are pre-programmed for a fixed number of minutes, therefore the duration will be set to N/A on the screen and only the start time can be modified.

* Default pack value

Water care modes



Away from home:

In this mode the spa will always be in economy mode; the set point will be reduced by 20° F.



Standard:

The spa will never be in economy mode and will be filtering according to the pack's low level configuration.



Energy Savings:

The spa will be in economy mode during the peak hours of the day and resume normal mode on the weekend.



Super Energy Savings:

The spa will always be in economy mode during peak hours, every day of the week.



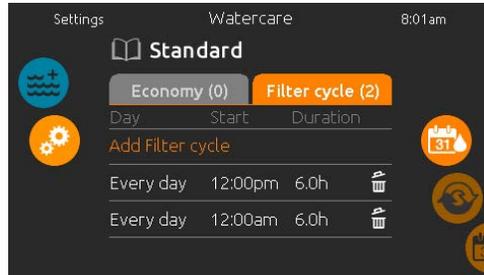
Weekender:

The spa will be in economy mode from Monday to Friday, and will run normally on the weekend.

GECKO TOUCHSCREEN KEYPAD



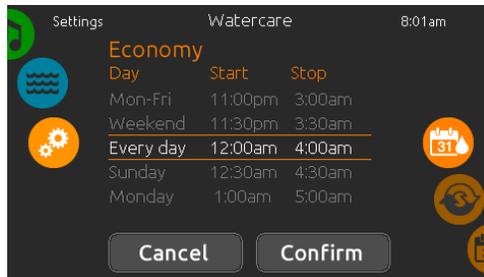
Keypad functions



Modifying schedules

To modify a Water Care category, touch the pencil icon at the right end of the desired Water Care to open the selected Water Care menu.

Touch the Economy tab to change the economy setting and Filter cycle tab for the filtration settings (or schedules). You can add economy or filtration schedules by touching the orange line labelled « Add Filter cycle » or "Add Economy cycle".



To delete a schedule, touch the garbage can icon at the right end of the desired line. Confirm your action when prompted.

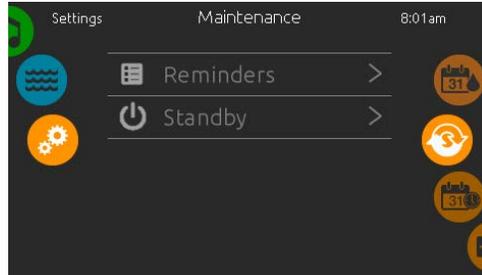
You can modify the programmed schedules by selecting one and adjusting the schedule.

You have several possibilities for the schedule (Mon-Fri, weekend, every day, or single days). The schedules will be repeated every week. The time and duration are set in 30 minute increments. When changes are done, press "confirm". If you don't want to keep any changes, press "cancel" or use the calendar icon to go back. Ensure that you have selected the desired Water Care mode in the main Water Care menu.

GECKO TOUCHSCREEN KEYPAD



Keypad functions

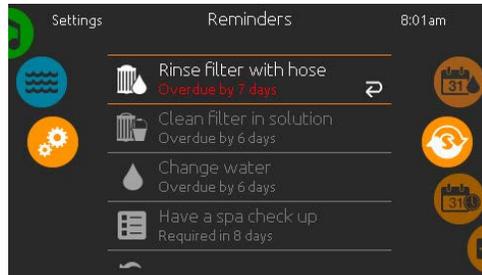


Maintenance

From the Maintenance page you can access the following:

- *Reminders*
- *Standby*

To access the desired option simply touch the corresponding menu item.



Reminders

The in.k1000+ keypad will provide reminders about maintenance required on your spa, like rinsing or cleaning the filter. Every task has its own duration based on normal use.

The Reminders menu allows you to check the time left before maintenance is required, as well as to reset the time once a task has been completed.

To reset a task, select it by pressing the curved arrow, then confirm when prompted. Once you have confirmed, the task will be reset.

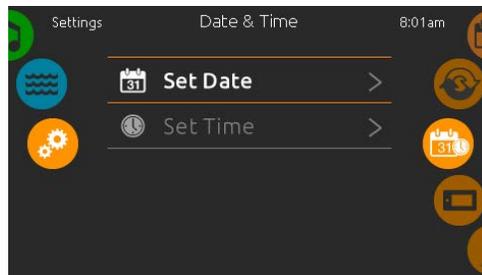
You can also use the option *Reset Reminders* to reset all the reminders.



Standby

The Standby mode allows you to service your spa. Pumps will stop for 30 minutes and will automatically restart after.

The normal page will return at the end, once the pumps will be restarted.



Date and Time

Use this page to change Date/Time settings.

GECKO TOUCHSCREEN KEYPAD



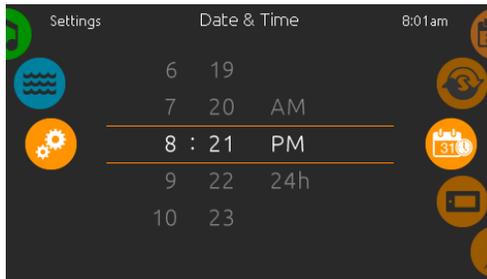
Keypad functions



Set date

Here you can adjust the year, month and day.

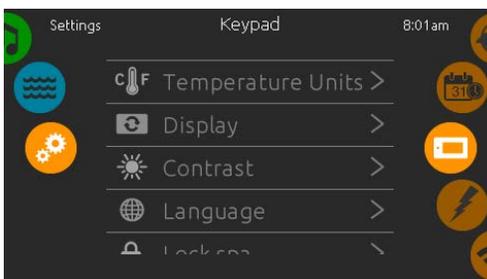
Simply swipe up and down the column you want to change and select the desired value. When you are done, touch the calendar icon at the right of the screen.



Set time

Here you can change the hour, minute and time format.

Simply swipe up and down the column you want to change and select the desired value. When done, touch the calendar icon at the right of the screen.



Keypad settings

In the keypads page you can access the following:

- *Temperature units*
- *Display*
- *Contrast*
- *Language*
- *Lock spa (optional)*
- *Keypad color (optional)*

To select an item, slide the right wheel until the desired icon is highlighted in the middle or press on the menu name.

GECKO TOUCHSCREEN KEYPAD

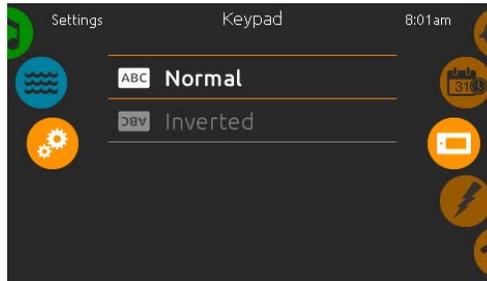


Keypad functions



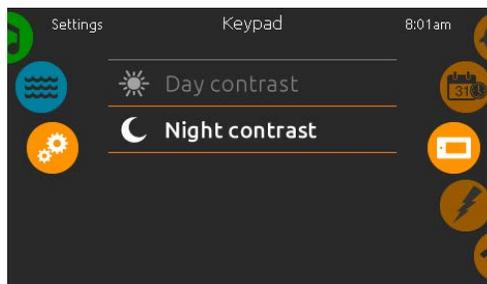
Temperature units

Choose the desired units to display temperatures.



Display page

Use this page to change the display orientation.



Contrast page

Use this page to change the keypad contrast.

GECKO TOUCHSCREEN KEYPAD

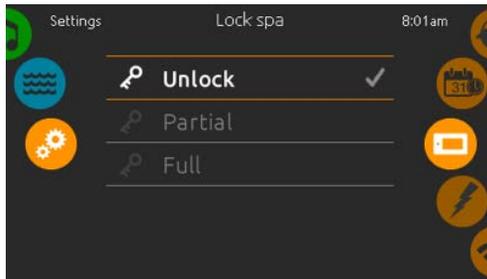


Keypad functions



Language select

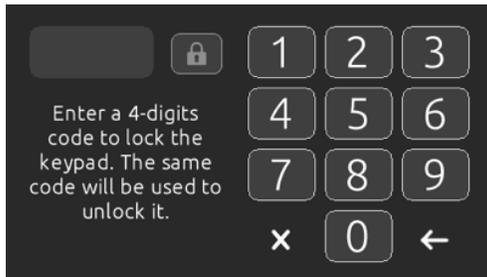
Use this page to select the display language of the in.k1000+ keypad.



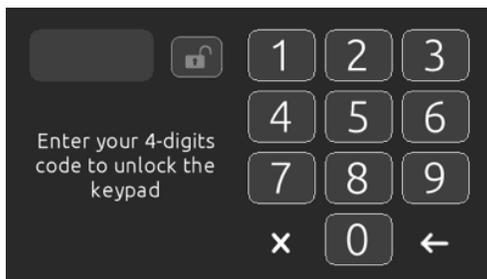
Keypad lock/unlock (optional)

When this option is enabled, the user can partially or completely lock the keypad. When the user wants to lock the keypad he is asked to select a 4-digit code. The same code will be needed to unlock the keypad. Next time he wants to lock the keypad, he will be prompted again to select a 4-digit code (same functionality as a Safe in a hotel room).

The keypad can be unlocked with a universal unlock code (3732) or by a reset of the keypad.



When Full Lock is selected, all functions are locked.

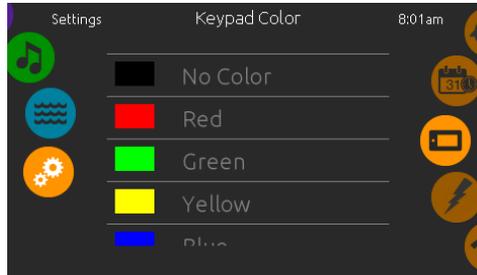


In Partial Lock, you may only activate accessories. Settings may not be changed in this mode.

GECKO TOUCHSCREEN KEYPAD

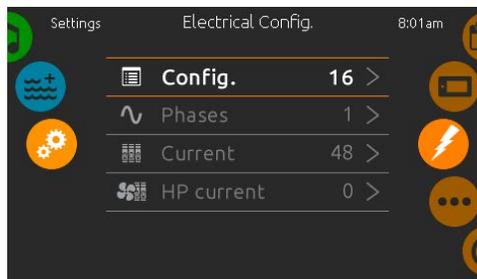


Keypad functions



Keypad Color (optional)

If this option is available (depending on the spa configuration), the keypad rim color can be changed. 8 pre-defined colors are available. If the in.mix is installed, the keypad rim color can also be associated to an in.mix zone.



Electrical Configuration

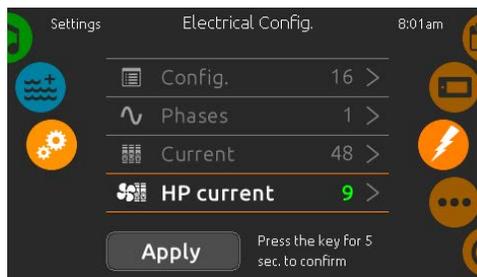
Please do not make any changes in this section unless you are a qualified electrician.

In this section, you can change the low-level configuration, modify the number of phases, change the input current value as well as change the Heat Pump current. Once the modification is done, hold the Apply button for five seconds.



Please note that if there are two spa packs in the system (i.e. a SwimSpa installation), the master's unit's chosen unit configuration must support a slave unit. If after rebooting the chosen configuration does not support SwimSpa installations, the in.k1000+ will return (after approximately 45 seconds) to this configuration menu and prompt the user to select a configuration number again.

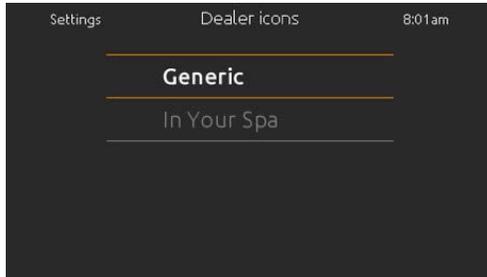
* Depending on the pack configuration, a code may be required to modify these settings. This code is 5555.



GECKO TOUCHSCREEN KEYPAD

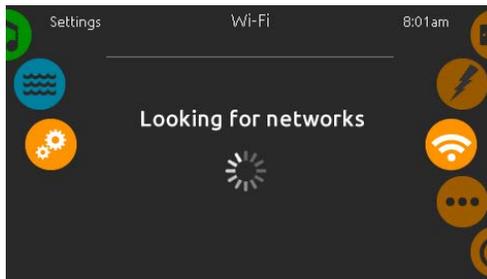


Keypad functions



Select logo

After confirmation, the keypad will reset to reconfigure the system. You will be asked to select the custom icons used in the sleep mode.



Wi-Fi (in.touch only)

This page allows you to connect your in.touch module to a Wi-Fi network or to change its network.

For more details about other in.touch connection methods, please see the in.touch techbook.

After a few seconds the available networks will appear on the screen, as well as their signal strength.

Swipe Up or Down the list to select your network. If the Wi-Fi network is password protected, enter it when prompted.



If no password is required, the in.touch will connect automatically.

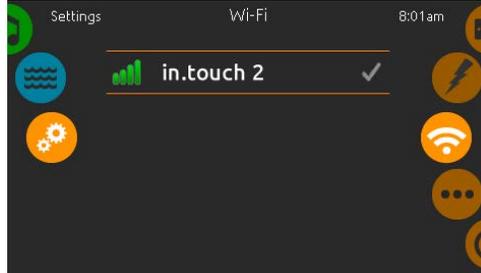
Once the in.touch module is connected to a Wi-Fi network, a green check mark will appear in the Wi-Fi menu and the network name will appear in the *Settings* menu.



GECKO TOUCHSCREEN KEYPAD

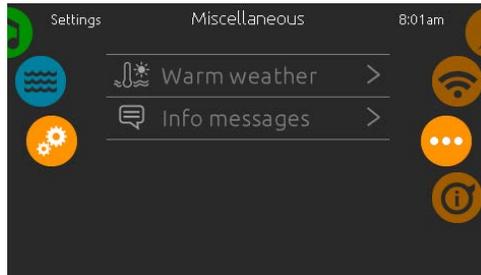


Keypad functions



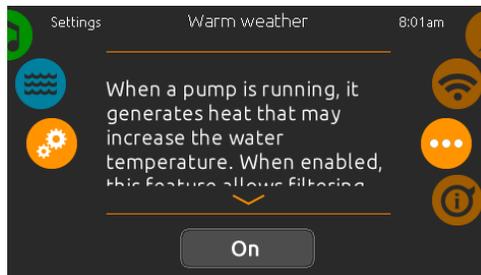
Wi-Fi (in.touch 2)

When a in.touch 2 is detected, this network will appear (in.k1000+ version 12 and older).



Miscellaneous

This menu gives access to modify the Warm Weather option and info messages in the media center.



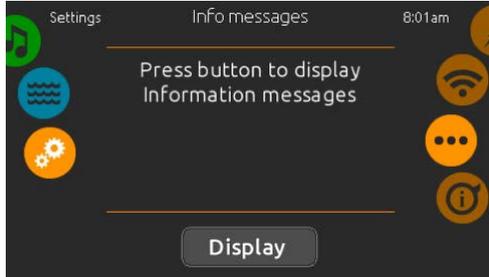
Warm weather

When pumps are running, they produce heat that may increase your water temperature. "Warm Weather" option gives you the option to bypass the pack filtration over-temperature feature. When Warm Weather is "OFF" the filtration over-temperature is disabled and your spa filtering will continue even if the water temperature is high.

GECKO TOUCHSCREEN KEYPAD

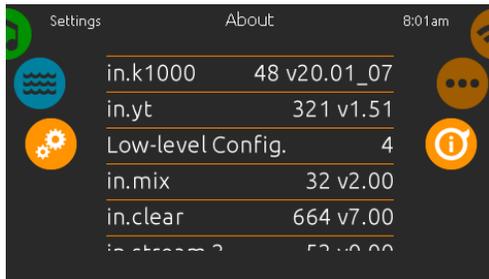


Keypad functions



Info messages

Press display/hide key to modify message display: If hide option is selected, smart winter mode message will only appear when a SWM purge is in action. Otherwise the message will always appear when the spa is in a SWM condition. If hide option is selected, heating suspended and filtering suspended messages will not appear.



About

This section shows information about the in.k1000+ software number and the revision numbers of the different components of your system.



Wipe screen

This message appears when too much water is detected on the touch screen. Simply wipe away excess water.

SPA COVER INSTALLATION

Every Harmonic 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 disposable 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.



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.

Ozone:

Your Harmonic Hot Tub is equipped with our Harmonic Clean ozone generator that will reduce your dependence on chemicals like bromine and chlorine. Please replace every two years for best results.

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.
- 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.





HARMONIC HOT TUBS LIMITED WARRANTY

GPM Manufacturing LLC, makers of Harmonic 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.

10 YEAR SHELL STRUCTURE

We warrant the Harmonic Hot Tub shell not to leak for 10 years from the original tubs purchase date.

10 YEAR CABINET

We warrant the Harmonic Polyethylene Cabinet against degradation and cracking for 10 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.

7 YEAR SHELL SURFACE

We warrant the Harmonic Hot Tub shell surface finish not to crack, wrinkle, blister, peel for 7 years from the original tubs purchase date.

3 YEAR EQUIPMENT

We warrant the Harmonic Hot Tub Equipment (pumps, heater, control pack, and topside control) for 3 years.

3 YEAR PLUMBING

We warrant the plumbing of the tub will not leak due to defects in material and workmanship for 3 years.

3 YEAR JETS

Jet internals are warranted against malfunctions due to defects in material for a period of 3 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 Harmonic Hot Tub Dealer or by sending the effective components to GPM Manufacturing.

3 YEAR CABINET (OPTIONAL SELECT CABINETS)

We warrant the Harmonic Hot Tub Cabinet against degradation and cracking for 3 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 Harmonic Hot Tub Equipment (Ozonator and LED Lights) for 2 years.



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 orders@harmonichottubs.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 Harmonic Hot Tubs customer service department, via the website (www.harmonichottubs.com), 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 Harmonic 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 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 Harmonic 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.





HARMONIC

H O T T U B S



3100 Bowling Green Rd, Franklin, KY 42134 • 270.306.6220 • harmonichottubs.com