Valete Spas

USER MANUAL FOR SPA

/ CONTROL SYSTEMS / KEYPADS / ACCESSORIES /

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INTRODUCTION

CONGRATULATIONS ON YOUR NEW PRODUCT!

Welcome to Valete Spas, where the name itself embodies our commitment to well-being. “Valete” originates from Latin meaning “I am healthy,” reflecting our mission to enhance your health and happiness through our luxurious hot tubs.

Crafted by Wellis, Europe’s foremost spa manufacturer, and distributed by Certikin, the UK’s leading wet leisure and water treatment equipment supplier, our hot tubs epitomise the perfect blend of European craftsmanship and British excellence.

Join us on a journey to rejuvenation and relaxation as we introduce you to the many benefits when you join the Valete Spas family.

SAFETY INSTRUCTIONS

FOR YOUR SAFETY PLEASE ALWAYS PERFORM THE FOLLOWING PRECAUTIONS. IF YOU DO NOT FOLLOW THE WARNINGS AND INSTRUCTIONS, ITEMS MAY GET DAMAGED, YOU MAY GET INJURED, OR YOU MAY SUFFER FATAL INJURY. IMPROPER INSTALLATION AND OPERATION INVALIDATES THE WARRANTY.

INITIAL SAFETY WARNINGS

The spa must be powered through a residual current device (RCD) with a current release not exceeding 30mA.

The devices and parts which contain active parts – except those which are powered from protective extralow voltage not exceeding 12V – must be inaccessible from the spa.

The water temperature in the spa should never exceed 40°C (104°F). The water temperature is considered safe for a healthy adult at 36 to 38°C. Lower water temperature is recommended for younger children or when the spa is used for more than 10 minutes. Children under the age of 4 are advised not to use a spa.

Spa heat can cause hyperthermia! Symptoms: drowsiness, heaviness.

Children under 14 years of age can only use and operate the products mounted with hydromassage system under adult supervision.

People with heart disease, low or high blood pressure, circulatory disorders, diabetes, and excessive weight should consult their physician prior to using the spa.

Consumption of alcohol or drugs while using the spa greatly increases the chance of fatal overheating.

A person taking medications should consult a doctor before using the spa as some medicines may cause drowsiness while others may affect the heart rate, blood pressure, and circulation.

Persons who suffer from infectious diseases should not use the spa.

Because high water temperature poses a high risk to the fetus and may cause serious fetal damage we advise that (potentially) pregnant women do not use the spa at a water temperature higher than 38°C.

Wet surfaces can be slippery. Note and warn spa user about this when entering and leaving the spa. To avoid injury carefully get into and out of the spa.

Do not use the spa if the suction cover is damaged or missing.

Never place any electric device within a 2-meter radius of the spa - it can cause electrical shock. Electric devices fallen into water may cause death, electric shock, or serious personal injuries.

It is prohibited to remove the panels while using the spa.

Water treatment should be carried out with caution. Improperly chemically treated* water may cause skin irritation.

When the spa is not in use, cover the spa with the cover to prevent ultraviolet radiation causing damage to the product.

Do not allow any person to climb on the thermo cover when it is on the water-filled spa.

Do not remove any suction sealing. Do not operate the spa if the suction sealing is broken or missing.

Warning! *The metallic parts of the pool may become hot when exposed to sunlight and can cause injury!*

Keep your clothes and jewellery away from rotating jets and moving parts.

Test the residual current device before use.

Disconnect the spa from the power supply before servicing its electrical parts. (This operation can only be performed by qualified professionals).

It is strictly prohibited to use the spa in a not completely assembled state (e.g. detached side panel)

Chemical treatment of water can only be performed by competent adults over the age of 18.

Maintenance can only be performed by trained professionals.

The user should check the electrical wiring every 3 months. It is required to perform a check by a professional every 3 years.

Mains fuses / circuit breakers may be activated because of power outages.

Installation and wiring of the spa, replacement of power cord, and any repairs must be performed by qualified professionals.

It is required to build in an isolating device to the fixed wiring.

PLUG'N'PLAY SAFETY WARNINGS

Beyond the previous warnings, please also pay attention to the undermentioned ones.

ATTENTION! *The electrical receptacle must be located at least 2.5 meters from the spa so that bathers in a sitting position cannot reach it from the water. The plug can only be connected to a receptacle* equipped with 2.5mm 2 diameter cables*

ATTENTION! *RISK OF ELECTRIC SHOCK. The connector with residual current device must be inspected before every use.*

ATTENTION! *Only place the RCD plug in a receptacle equipped with RCD.*

ATTENTION! *Before you insert the plug into the socket ensure that the current of the socket and the fixed wiring is appropriate for the properties of the spa.*

The spa must be equipped with an isolation transformer or powered through a residual current device with a release current not exceeding 30mA.

THIS PRODUCT IS EQUIPPED WITH A GROUND FAULT CIRCUIT BREAKER (GFCI) IN THE CONNECTOR. GFCI MUST BE TESTED BEFORE EACH USE.

If the power cable is damaged, it must immediately be replaced by the manufacturer or a service professional in order to minimize danger.

To minimize the risk of electric shock do not use extension leads to connect the product to the power supply.

Ensure that the receptacle is properly located.

Parts of the equipment cannot be placed above the spa during usage.

Parts under electrical power – except those operating with voltage not exceeding 12V - must be inaccessible for persons in the spa. The grounded device must be connected to a fixed socket with fixed wiring. Electrical parts – except remote controllers – must be positioned so as not to fall into the spa.

The electrical installation must meet the local standard requirements.

To avoid electric shock do not use the spa in rain.

Always place and lock the cover on the spa after each usage.

Do not bury cables into the ground! Place the cables so that lawnmowers, trimmers, and similar devices will not reach them.

Do not force push the control panel up nor down and do not place heavy objects on it after installation.

Keep pets away from the spa to avoid damage.

Do not use the device if there is the slightest chance of water in the spa being frozen.

Only use accessories approved by us. The use of accessories not approved by us may void the warranty.

Choking hazard. Particular attention need to be paid to children during usage. To avoid accidents only allow children to use this spa under adult supervision.

Never operate electrical devices in the spa or with wet body. Do not place electrical devices (lamp, radio, television) within a 1.5m radius of the spa.

Do not expose the spa to direct sunlight.

Only connect the spa to an earthed socket.

Risk of electric shock. Install the unit at least 1.5m (5 feet) from any metal surfaces. You can install the unit 1.5m from metal surfaces only if every metal surface is permanently connected to a solid copper conductor with a diameter of at least 6mm, which is connected to the cable connector of a junction box reserved for that purpose.

To avoid injury never pour water warmer than 40°C directly into the spa.

Effects of overheating: you cannot assess emergency situations, do not feel the temperature, do not feel the need to get out of the spa, cannot get out of the spa; risk of fetal damage in pregnant women, loss of consciousness, suffocation.

Do not use the spa alone.

Do not use the spa immediately after strenuous sport.

To prevent damage to the pump the spa can only be operated if it has been filled with water.

If you feel uncomfortable or sleepy, leave the spa immediately.

Never add water to the chemicals. Always be cautious when adding chemicals to the spa water to avoid inhaling vapors and possible effects of inhaling undiluted chemicals and splatters.

Only place the spa on a surface that can support its weight.

INSPECT THE UNIT BEFORE USE. CONTACT THE SERVICE PROVIDER STATED IN THIS MANUAL IF ANY OF THE PARTS WERE DAMAGED OR MISSING UPON PURCHASE. ENSURE THAT THE PARTS OF THE UNIT ARE THOSE WHICH YOU INTENDED TO BUY.

CONTROLS

TAP

The tap has an opened and a closed position. When it's open, it can operate the waterfall nozzle, the one-hole fountain, or the neck massage unit. The tap opens to the left, (3, 2/3 rewind) and closes to the right (3, 2/3 rewind).

ENRICHMENT:

With the enrichment tool additional air is introduced to the jets, which strengthens the effect of the massage.

Open to the right, close to the left.

WATER FLOW REVERSER

With water reversing you share the jets in each seat. If you turn the water reverser to the right, it will operate the jets on its right seats. If you turn it to the left, it will operate the jets on its left seats. In center position all the jets controlled by water reversing will operate. In this case the efficiency of the massage is reduced (it splits among the seats).

INITIAL INSTALLATION

SITE PREPARATION

When choosing a site for the spa take into account that its maintenance and repair works must be carried out behind the sidewalls, so accessibility and space to walk around the spa must be ensured.

1. INDOOR/BASEMENT INSTALLATION

If you place your spa indoors, be aware of some special requirements:

Water may accumulate around the spa, so the flooring material must have a proper runoff to avoid accumulation of water. When building a new room for the spa, constructing a floor drain is required, or damages may occur due to overflow, overfilling, or technical failure. Our company does not take responsibility for any damage in absence of floor drainage. Humidity will naturally increase in the room where the spa is located and the evaporated water condenses. For this reason ensure that the area has proper ventilation. We recommend installing a dehumidifier in the room.

2. OUTDOOR AND PATIO INSTALLATION

A solid horizontal foundation is necessary for installation of the spa. We advise using a reinforced concrete foundation at least 10-15cm thick.

Ensure that your deck or foundation will support your spa. You must know the maximal load capacity of the foundation. Consult a qualified building contractor or structural engineer.

To find out the weight of your spa, its contents and occupants please refer to the spa specification chart. This weight must not exceed the structure's rated capacity per square meter, otherwise serious structural damages could result. If you install the spa outdoors, we recommend a reinforced horizontal concrete pad at least 10-15cm thick.

Install floor drains around your spa to lead water away even in heavy rain.

When constructing the water drain it is advised to form a 10-15cm deep sloping ditch around the spa which directs water to the drain. Water from the drain must be directed to the canal or a drainage with enough capacity.

WARNING: DO NOT EXPOSE THE SPA TO DIRECT SUNLIGHT (NOT EVEN EMPTY) WITHOUT PROPER COVERAGE. THE INSULATED SPA COVER PRESERVES THE WATER TEMPERATURE AND PROVIDES PROTECTION FROM SUNLIGHT AND RAIN. WHEN EXPOSED TO SUNSHINE FOR A LONGER PERIOD IT MAY DAMAGE THE SURFACE OF THE SPA AND THE SPA EQUIPMENT.

Acrylic rapidly absorbs heat from sun rays, thus reaches a very high surface temperature which may damage the spa.

In case of sealed design, if the spa was placed between glass structures, prevent the sun rays from reaching the spa directly through the glass as the temperature may get too high.

3. IN-GROUND / SUNKEN SPA

In case of sinking the spa into the ground you must make sufficient space for walking around the spa. For completion of maintenance works a minimum of 60cm wide inspection pit must be built around the spa.

The inspection pit's bottom must be under the bearing pont of the spa so that water can flow into the pit in case of water leakage. A floor drain or sump pump should be used at the bottom of the pit to ensure continual water drainage.

In case of sinking the spa only the portion below the spa's acrylic edge can be sunk. The air of the inspection pit steams up. To prevent unpleasant odors proper ventilation must be provided (e.g. installing ventilators). The costs of pulling the spa out of the ground are borne by the user. If the aforementioned conditions are not present, setting up the spa may fail.

FIRST FILLING OF THE SPA

Proper filling of the spa is an important task both technically and chemically. We advise installation and periodic maintenance by the servicing professionals, which includes inspection and refilling of spa water. Spas do not contain water softener and hard water damages the equipment. Improper filling of the spa may bring air into the system, which damages the heating wire and engines. Pure stream WE00067 (water softener) and Pure fill WE00068 (carbon filter) are recommended for your spa. Please fill your spa exclusively through these filters. Repairs after such failures are not covered by warranty.

FILLING PROCESS

Remove the spa cover. First remove the cover staves, then remove the side covers by unscrewing the bottom screws. During transportation the flare fittings of engines may dislocate. Check these connections before installation. If necessary, tighten the flare fittings.

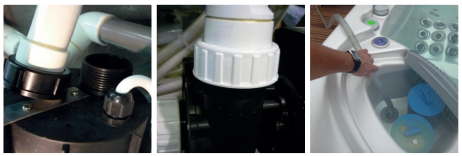
In spas equipped with air engine the flare fitting must be connected before running the spa for the first time.

Before filling the spa check that the ratchets are not in a closed state (lever is pulled out and fixed with the safety lock).

Next fill the spa with water to the sign indicated on its sidewall.

Filling must be done through the filter housing. Improper filling can damage the engines and heating element.

Insert the filter or filter cartridges when proper water level is reached. Be cautious, because when replacing the filter cartridge air bubbles may remain in the cartridge. To avoid this the filter cartridges must be tilted in the water to remove air from them, and only then fitted to their place.

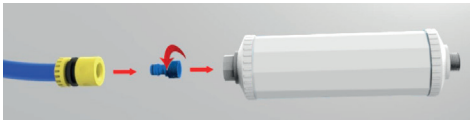


IONIC EXCHANGE WATER SOFTENER AND CARBON FILTER

For the optimal quality the following steps shall be followed during the usage:

1. Please check the required water volume in the manual of the spa or contact our customer service for help. The exact volume is needed for the precise filling.
2. Please remove the covering caps from both ends to connect the filling hose.

3. Please connect the carbon filter to the water hose via the screw thread gadget (included with the filter).

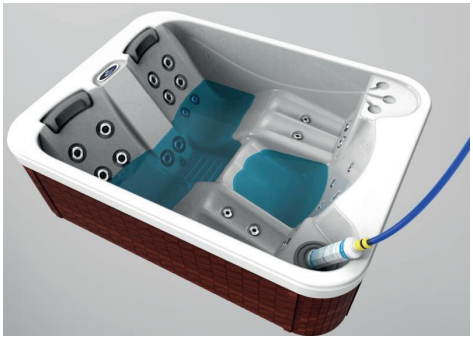


4. Please run water through the filter into a separate vessel until it becomes perfectly clear. This step allows the filter to rinse from the remaining carbon powder. The rinse cycle lasts for 30 seconds at most with approx 10 litres of water.

0'-30'

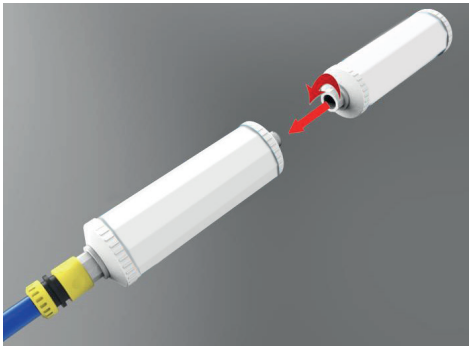
>30'

5. Through the clean filter fill up the spa with one third (1/3) of the total volume (e.g.: with 1000 litres of total volume 1/3 is 300 litres). It is important to follow the instructions of the filling for it is crutial to set the precise water hardness.



Insert the filter or filter cartridges when proper water level is reached. Be cautious, because when replacing the filter cartridge air bubbles may remain in the cartridge. To avoid this the filter cartridges must be tilted in the water to remove air from them, and only then fitted to their place.

6. After the filling please remove the caps from the water softener cartridge too and connect it with the carbon filter. With water softener the rinsing is significantly faster, so only this first 1 liter needs to be drained separately!



7. Please check the water hardness during the filling with the softener. There are multiple choice of using a hardness tester. Testers sold by Certikin are showing the hardness level on a colour scale.

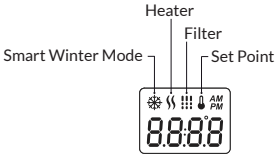
If the value shown is less than the optimal value the water will create foam during the usage, if the value is more that will cause limescaling.

8. If the water hardness is extremely low during the filling please remove the softener cartridge and continue the filling with only the carbon filter as it shown at point 5.

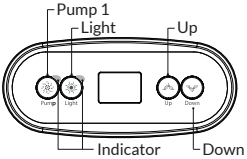
EASY 4

COMPACT FULL-FUNCTION KEYPAD

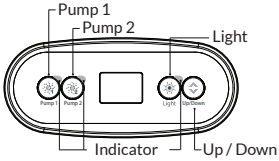
The Quick Reference Card provides an overview of your spa's main functions and the operations accessible from your digital keypad. This QRC depicts a generic overlay, custom versions may vary.



1 Pump Model



2 Pump Model



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 2 key to turn Pump 2 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 2" indicator lights up when Pump 2 is on. With a dual-speed pump, the indicator will flash when pump 2 is on at low speed.

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!

* If single speed pump: press Pump key to turn pump on. Press Pump key again to turn pump off.

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), the duration (Fd) 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 dura-tion 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.

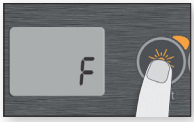
Setting economy duration

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.

USER INTERFACE - EASY 4



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.

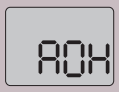
Water temperature regulation

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
	**Hr** **An internal hardware error has been detected in the in.xe.** Contact dealer or service supplier.
	**HL** **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.
	**AOH** **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.**
	**FLO** **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.
	**Prr** **A problem is detected with the temperature probe.** Call your dealer or service supplier.
	**OH** **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.

ACCESSORIES - MY MUSIC

MY MUSIC

NO EXTERNAL CONTROL UNIT

My Music preinstalled on certain spa models

1. Listening to music via Bluetooth

1.1. Pairing Bluetooth devices

1. Turn on the Bluetooth device
2. Select ProwBT/MyMusic from the available devices and pair it (no password needed). Only one Bluetooth device can be paired with the Bluetooth Media Player at a time.

1.2. Listening to music via Bluetooth device

1. The Bluetooth mode is activated as soon as it is paired with a Bluetooth device.
2. Play music on the device and the Bluetooth Media Player will provide the sounds.
3. Press the PLAY/PAUSE buttons to play or pause the music.
4. Press the FAST REWIND/FORWARD buttons to play the previous/next track.
5. The songs/tracks and volume can be set directly on your Bluetooth device.

We would like to inform you that the new 2.0 speakers require a PIN for connection. The PIN number is: 2288

OZONE DISINFECTION

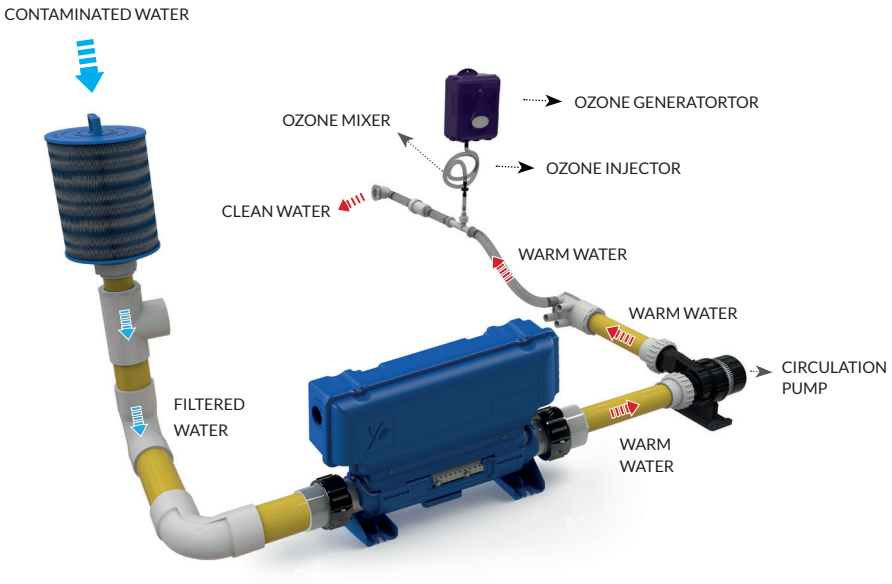
FILTRATION AND OZONE

In a system without circulation engines the low setting of the massage engine and the ozone generator will switch on during filtration. In a circulation type system ozone starts in a system with circulation engine.

The system is factory programmed for an evening filtration cycle since energy prices might be lower in the evening (assuming that the time of day is properly set). The filtration time and duration are programmable.

A second filtration cycle can be freely entered.

At the start of every filtration cycle the jets and engine start to clean the pipes and ensure proper water quality.



WATER TREATMENT BASICS

THE CHEMICAL EQUILIBRIUM OF THE WATER

The spa water will be clean and clear if its chemical components are in equilibrium.

1. pH value:

The first important indicator is the pH value of the water. pH is measured on a scale of 0-14 where 7 is the neutral value. The ideal value is between 7.2 and 7.8 pH. pH values out of this range may irritate the skin.

Under this value the water is acidic, above is basic. The pH value of the human eye is around 7.5, below 7.2 and above 7.8 the water will sting the eyes. Most problems are caused by the pH value being too high. An improper value reduces the effect of the disinfectant.

A high pH value can cause the following problems:

- The disinfectant can be ineffective.
- The solution can exude solid matter.
- The water can become turbid.
- Can cause skin irritation.

A low pH value can cause the following problems:

- The water can become turbid.
- Can cause eye irritation.

Rain or adding fresh water will change the pH value of the water.

2. Disinfection:

Disinfectant is the chemical that eliminates or neutralises the microorganisms (bacteria, algae, fungi, viruses) present in the water. Microorganisms are small microscopic organisms which cannot be detected by the naked eye and are continuously getting into the water through rain, wind, and the bodies of the bathers. If they are not eliminated, they pass from one person to the other through the water (and may cause sickness, infection). Organic matter turns the spa water opaque and cloudy.

As we are dealing with warm water spas, bromine or active oxygen is most often used.

3. Preventing growth of algae:

In addition to the disinfection of water the prevention of growth of algae is another key issue. Algae can grow even if proper disinfection and filtration is performed.

Antialgae treatments only work with appropriate pH values.

4. Water hardness:

Water hardness is determined by the quantity of calcium and magnesium salts dissolved in the water. Hard waters contain too much of these dissolved salts and thus scale will form if left alone. Scale can cause significant damage to the walls of the spa, piping, filter, heating, and engineering units.

5. Frothing:

Froth is the smaller-bigger agglomeration of the bubbles and colloid contaminants found on the surface of the water. It is mostly caused by mixing of dirt, cosmetics, body lotions, etc. that soak out of the human skin and the chemicals. It endangers conservation of the aesthetic appearance and cleanliness of the water.

6. Water analysers:

There are several types of water analysers which are mostly used to measure chemical and disinfectant effect. Chemical (pH); Disinfectant (Br, O3)

To preserve the condition of the pool, we recommend the use of Certikin chemicals or a product with the same active ingredient. This will not only make your pool last longer, but you can enjoy your free time in safe, clean water that's crystal clear.

Tester types:

Box containing tablets and graduated measuring glass.

Litmus paper indicators in a box.

Chemicals should always be loaded into the filter housing.

Then proper disinfection of the spa balance if the chemical levels are not at least 48 hours below the specified value.

Even with the most accurate disinfection after 2-3 months the water quality is no longer maintainable and it is necessary to replace the entire water quantity. In this case we advise you an extensive shock-like disinfection with algae. Dissolve a tablespoonful of algae in the spa water and run the engines for 15 minutes. After switching it off for 5 minutes switch it on for another 1-2 minutes, then drain, clean, and rinse the spa.

ATTENTION!

Using alcohol- or acetate based cleaning products for cleaning the spa is PROHIBITED!

To preserve the condition of the pool, we recommend the use of Certikin chemicals or a product with the same active ingredient. This will not only make your pool last longer, but you can enjoy your free time in safe, clean water that's crystal clear.

The manufacturer is not responsible for damage resulting from the use of such chemicals.

The chemical treatment of the water should only be done by a competent, responsible adult over the age of 18.

Maintenance should only be performed by qualified professionals.

SPA MAINTENANCE

Do not expose the spa to sunlight! Without a thermal cover direct exposure to sunlight can cause discoloration in the water. Use a spa cover when you are not using the spa, whether it is filled with water or not. Do not expose the spa to rain or snow. If possible, build a covering shelter for the spa.

The side coating of the spa should be protected from high UV exposure (e.g. SPA BAG) and cedar spas should be periodically treated with UV-resistant products. The coating is lined with UV-resistant paint, but because of the previously mentioned factors there is no guarantee that it will prevent fading of color. With cedar coated spas wood treatment is recommended yearly.

1. Periodically drain, clean, and refill the spa. We recommend utilizing professional service for the refill.
2. Clean the filter once a month.
3. Shower before stepping into the spa.

Maintenance is recommended in the following periods:

- Weekly and before every use check the spa water - see the basics of water treatment
- Every 3 months change the filter cartridges or more frequently if required
- Every 3 months change the spa water or more frequently if required. See draining the water
- Yearly Inspection of the spa is recommended - call a professional for proper inspection.

FILTER CARTRIDGE REMOVAL AND CLEANING

Cleaning mechanical contaminations via continuous water circulation and chemical mixture is a basic requirement for proper cleaning of the spa water. Every spa has an engine designed for this purpose. The circulation engine circulates the water through the filter(s). The filter protects against contamination floating in the water.

Cleaning of the filter cartridges is recommended weekly.

Soaking the filter cartridges in water mixed with chlorine or antialgae agents for 24 hours is recommended monthly.

Changing the filter cartridges is necessary every 3 months.

SURFACE MAINTENANCE

Wipe the surface with a wet cloth. Always use a neutral cleaning product and a soft wiping cloth. Never scratch the acrylic surface with an abrasive tool, blade, or knife, because it may cause damage. Never use nail polish remover, acetone, or paint stripper when cleaning the surface because it may cause damage.

Maintenace manual for the control panel of the spa:

- Do not damage the control panel with anything hard. If possible,
- Avoid exposing the control panel to direct sunlight.
- When not using the spa, always use a spa cover.

WINTERIZATION

Remember to correctly maintain the spa if you are not using it in the winter. If you are not using your spa during the winter months and want to put it out of service properly, call one of our qualified professionals to winterize your spa at a prearranged date and time.

The winterization encompasses the following:

- Drainage of used water
- Cleaning of the inner surface of the spa
- Dewatering of pipe and jet system
- Dewatering and disconnecting the engine's interface
- Delivery - reception

If the spa is not winterized properly, the system can retain water that can easily freeze during the winter months. This can cause heavy irreparable damage to the pipes and the engine. This will void the warranty.

Maintenance of the out-of-service spa:

When you are not using the spa, use the thermo cover and fasten it with the buckles.Do not forget! If the spa is filled with water and you are not using it, lift the cover at least once a week to ensure proper ventilation. The thermo cover is multipurpose. Most importantly it decreases the heating time of the water to operational temperature and decreases the energy needed to maintain water temperature, decreasing the operational costs.

Using the cover you can avoid leaves, rain, snow, or other contamination entering the spa water, effectively sealing it off from environmental effects.

Fastening the cover with buckles prevents young children from using it without parental supervision.

CLEAN THE FILTER CARTRIDGES WEEKLY AS FOLLOWS:

WARNING!

Changing the filter cartridges is recommended every 3 months!

Operating the spa without a filter cartridge is PROHIBITED

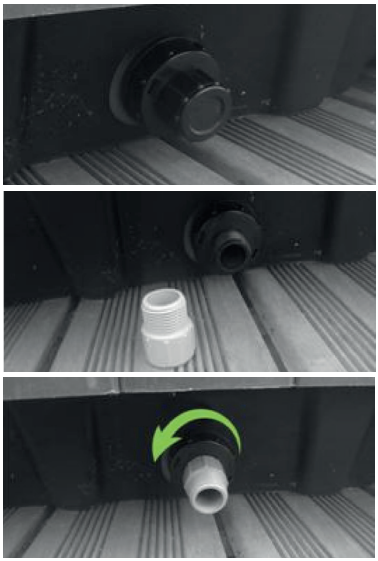
1. Remove the lid of the filter.
2. Take out the filter cartridge.
3. Clean contamination from the cartridge with water.
4. Soak the cartridge in lukewarm water mixed with chlorine or antialgae agents for 1-2 hours, then rinse it.

Never use an alkaline detergent or a high-pressure cleaner to clean the filter!

DRAINING THE WATER

You can drain the water via the drain outlet in accordance with environmental standards.

1. Find the drainage and remove the cap.
2. Screw on the metric intermediate piece that came with the spa.
3. Twist the larger receiving part anticlockwise as much as possible.
4. Pull the receiving part towards you - the water will start flowing from the spa.
5. After the water has drained from the spa go through the previous steps in a reversed order.



WIRING DIAGRAM - YE3

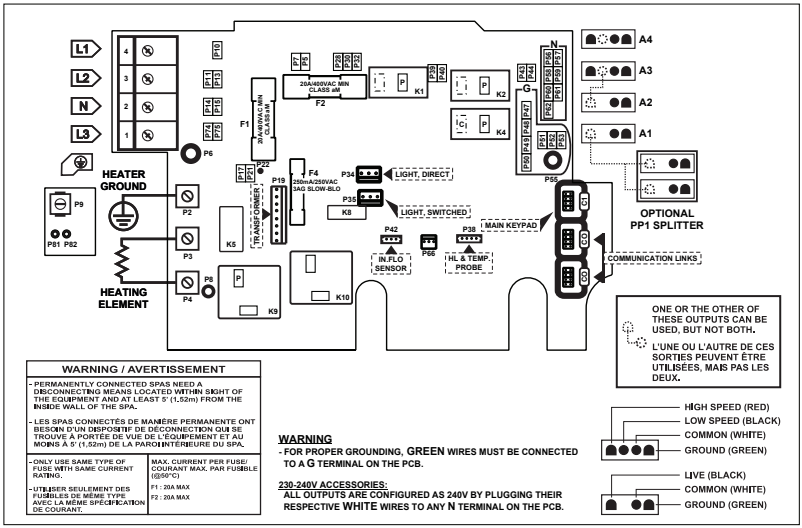
YE3

WIRING DIAGRAM - YE3

CONNECTIONS

CONNECTION HIGH VOLTAGE ACCESSORIES: YE3(EUROPEAN)

These tabs require high-voltage accessories to have straight, non-insulated, female quick-connect terminals for all connections, including ground. On -ce packs, only 230V accessories are supported. Refer to the following tables for correct connections. Note that all female terminals must be correctly and completely seated on the PCB tab for proper current ratings.



Direct (A4)	
Voltage	230 V
Green / ground	P47
Black / line	P32
White / common	P56

Pump 1 (A3)	
Voltage	230 V
Green / ground	P49
Black / low speed	K2-P
Red / high-speed	K1-P
White / common	P59

PUMP 2 / BLOWER / 03 / ABG* (A1)	
Voltage	230 V
Green / ground	P52
Black / line	K4-P
White / common	P62

PUMP 2 / BLOWER / 03 / CP / ABG* (A2)	
Voltage	230 V
Green / ground	P51
Black / low speed	K2-P
White / common	P60

Circ. pump** (A1)	
Voltage	230 V
Green / ground	P52
Black / line	K4-P
White / common	P62

Light (12 V AC, 1A Max.)	
Voltage	
Always on	P34
Relay	P35

* ABG: Auxiliary Bubble Generator

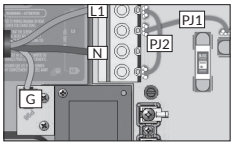
* * Ozonator and circ pump can be combined on the same output via the optional slitter PP1.

This table shows typical connections. OEMs may have a different connection scheme.

ELECTRICAL WIRING

ELECTRICAL WIRING: YE3 (EUROPEAN)

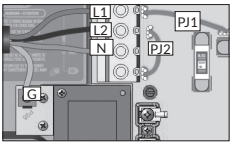
Refer to wiring diagram in the enclosure box lid for more information.



1-phase

L1 current returns through neutral

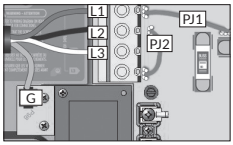
Connect PJ1 between P7 and P13. Connect PJ2 between P10 and P74.



2-phase

with single neutral L1+L2 currents return through neutral

Connect PJ1 between P7 and P10. Connect PJ2 between P13 and P74.



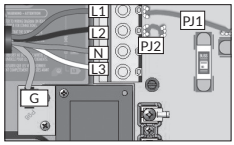
2-phase used from 3-phase

Delta – no neutral

Use 2-phase setting

L1+L2 currents return through L3

Connect PJ1 between P7 and P10. Connect PJ2 between P13 and P74.



3-phase

with single neutral

L1, L2+L3 currents return through neutral

Connect PJ1 between P7 and P10. Connect PJ2 between P11 and P13.

YE3 230/400 V

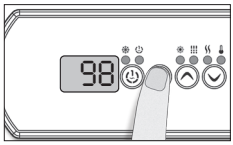
Correct wiring of the electrical service box, RCD, and pack terminal block is essential! Call an electrician if necessary.

Warning!

This model must always be connected to a circuit protected by a Residual-Current Device (RCD) having a rated operating residual-current not exceeding 30 mA.

BREAKER SETTING

POWER UP AND BREAKER SETTING

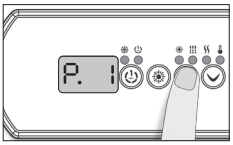


It is important to specify the current rating of the GFCI/RCD used to ensure a safe and efficient current management (and reduce nuissance GFCI/RCD trippings).

Press and hold the Prog. button until you access the breaker setting menu. (the programming menu will appear first). If your control system is equipped with the phase configuration menu, it will appear before the breaker setting menu.

Note: *if the keypad does not have the Prog. Key, use the Light key.*

For color display keypad go in setting menu.



Choose the number of phases supplying your spa (1 to 3). Use the **Up** or **Down** keys to select the number of phases and press on the **Prog**. key to confirm your selection.

YE3

Selecting number of phases	
CE	1, 2 or 3

The values displayed by the system correspond to 80% of the maximum amperage capacity of the GFCI.

Use the Up or Down keys to choose the desired value.

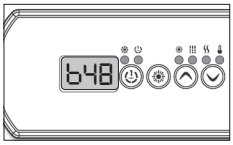
The value can typically be modified from 10 to 48 A.

Press on the Prog. key to set the breaker rating.

The tables below indicate the typical value of b for different GFCI/RCD ratings.

Choose the one that corresponds to your breaker.

Note: *Every OEM has its own pre-established configurations.*



YE3

GFCI/RCD	b
60A	48A
50A	40A
40A	32A
30A	24A
20A	16A

POWER UP AND BREAKER SETTING

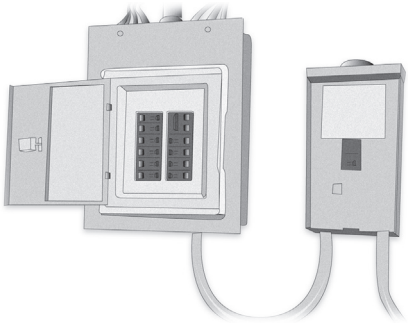
IMPORTANT

Please read the following before starting the device.

Verify that all accessories are linked to the ground lug and connected to the to the control system.

A minimum flow of 68 LPM (18 GPM) is required. Make sure that all valves are open in the spa plumbing and that the water flow is sufficient between the main pump and the water heater.

Turn on the breaker.



IN.FLO DRY-FIRE PROTECTION

At start up, the in.flo's detector verifies the water flow according to the following sequence:

The Pump 1 or the circulation pump runs for a period of 2 to 5 minutes.

The display will show "- - -" during the flow verification. After this time, the system confirms if flow is adequate or not.

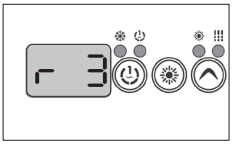
If the flow is sufficient, the temperature of the water is displayed on the keypad screen. When the water has reached the consigned temperature plus 0.45°C (0.8°F), the water heater turns off.

DISPLAY SEQUENCE AT START UP (EVERY PARAMETER IS DISPLAYED FOR 2 SECONDS)

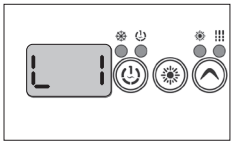
Lamp test

All segments and LEDs light up.

Software number



Software revision



Low-level selected

Low-level selected from the low-level menu.

FREQUENTLY ASKED QUESTIONS

QUESTIONS CONCERNING CLEANING, WATER TREATMENT, AND MAINTENANCE

What should I do if the filter of the spa is polluted?

Clean the filter every week or two weeks with a jet of water. Periodically, depending on usage, soak the filter in water mixed with an antialgae agent for 1-2 hours, then rinse it.

Should I shower before using the spa?

Yes, thoroughly.

Should the side cover of the spa be treated?

The side cover is made from weather resistant plastic. It does not require treatment or maintenance (except if it is a cedar cover).

What kind of water treatment do you recommend in case of communal use?

In case of communal use we recommend the optional sand filtration device that comes in place of the standard anti-bacterial filter. In case of heavy usage we recommend the automated monitoring-, regulating-, and chemical dispenser device.

I cannot stop the heavy foaming. Before using the spa we shower without using soap and I use the necessary chemicals. Did I use too little?

As descriped in the user guide of the products, apply 1-2 cups of antifoaming agent to the spa water. Wait for the chemical to thoroughly mix with the water. Repeat if necessary. If the problem is still present, check and readjust the pH value. If foaming still occurs, disinfect the spa with an antialgae chemical containing free active chlorine, then drain, clean, rinse, and refill the spa.

PREPARATION OF THE INSTALLATION SITE

What are the most important concerns when selecting theinstallation site?

The installation site should be prepared in accordance with the installation guide by a professional. The devices can only be installed and set up at appropriate installation sites. Make sure there is an appropriate cable length, electric supply, a 30mA protective relay, and with certain products a floor drain.

Is a floor drain necessary for an indoor spa?

Building a floor drain is mandatory!

TECHNICAL DATE OF THE PRODUCT, USAGE

What type of water circulation engine is used for massage spas?

Our massage spas are equipped with Laing low power (110W) energy saving, silent circulating motor pumps.

What is the maximal temperature that does not damage the spa?

The water temperature can be adjusted to between 26 and 40 degrees Celsius.

What is the recommended optimal water temperature?

32-38 degrees Celsius. If young children are using the spa, lower temperature is recommended. Always check the water temperature before the child steps into the spa and make sure that the temperature is suitable for the child.

Can the system freeze? Is there a sensor that starts emergency heating in case of freezing?

In the winter the unused spa should be winterized. After draining the spa we will defrost the system as necessary, meaning that we will remove the water retained by the engine and the pipes. For details and pricing please call our customer service. If the spa remains in use during the winter, the engines start if there is a danger of freezing and heat the water to 8°C

Can the system be programmed to start heating at certain time?

There is no way of setting a time and date for automatic heating. Because of concerns of energy efficiency heating the water to greater temperatures is not recommended in case of multiple weekly usage.

The jet of the spa shuts down automatically after 15 minutes of operation. Can I restart it immediately, or do I have to wait? Can I restart it as many time as I want without a break? How does this affect the jets?

The hydromassage system shuts down every 15 minutes for security reasons - to avoid possible muscle soreness. It can be restarted for any amount of times and without a break.

Is this the same for the bubble massage function?

Yes, it is the same for the bubble massage function.

When we do not use the spa often, mostly in the winter (around 3 times a week), which is the most energy efficient setting, taking into account the energy necessary for reheating? We only use it a couple of times a week, 37 degrees Celsius is our favourite temperature. Should it be in Sleep or Economy mode? Should I switch to the Standard setting only when heating the spa? Or should it always stay on Standard?

If you only use it 2-3 times a week, the most efficient way is to keep the water at operational temperature (38 degrees Celsius). Thanks to the excellent insulation and the thermo cover this setting requires less energy than letting the water cool down and reheating it before usage. The heating system automatically switches on in case the water temperature drops more than half a degree Celsius. In the summer the Economy setting is recommended as the external temperature is usually high. Only use the Sleep setting if you are not using the spa for a longer period of time (3-4 weeks).

Does the spa switch back to the last used setting if there is a power outage?

When connecting the spa to the power supply it switches to charging mode. Push the "Temp" button to set it to the Standard setting and it will display the water temperature. The spa will switch back to the last used setting after a power outage.

Can the filtration cycle only be programmed to 1-8 hour periods? Is there something like a 3-hour period? What is ideal and what is adequate?

The filtration cycle can be set to 1-8 hour or continuous settings. If you have a spa equipped with the in.clear automatic water management system, a daily 8-hour circulation period is recommended to produce necessary amounts of bromine. The 8-hour (2x4 hour) setting is ideal.

Can the operating device for our spa be placed in an external location where only the staff can access it?

The operating device can only be placed 5 meters cable length away from the spa.