SPA Installation and Directions of Use

EMPV-SPA3527



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■Warnings:

Please read the following instructions before operation and installation, which is a safety guaranty to SPA users.

1. The system must be installed by qualified technicians, switch for electricity leakage should be installed at a place convenient to be controlled or operated.
2. Reliable grounding protection for the SPA is a must, if not, we won't take responsibility for the bad grounding!
3. Taking load capacity of the wires into consideration when installed, otherwise, this will impact normal function or even occur safety accidents!
4. To ensure sanitation of bathtub, those who have skin or infectious disease should not use the SPA.
5. All the jets, and fountains cannot be shut down completely while keep water pumps working simultaneously, for this will damage the water pumps.
6. Before filling water into the SPA for the first time, please check and shut all drain valves, and all the jets, water pumps joints must be highly tightened (they might be loosen during transportation).
7. The old, kids and those with heart disease and low/high blood pressure should use the SPA cautiously and under the care of the healthy adults; without doctor's professional instruction, pregnant women cannot use the SPA.
8. Risk: when drinking alcohol, taking drugs or medicine, it will be dangerous when using the SPA.
9. Make sure that water slips out of jets regularly, or the relative components will be damaged.
10. Please check the SPA's water temperature before entering.
11. SPA input water temperature should not be over 40 Celsius degrees so as not to get hurt; 30-40 Celsius degree is the safety scope for human body. When you have been in the SPA for over 10-15 minutes, please try to lower the water temperature.
12. Before using the SPA drugs, please take the physical property into consideration, for example, granular or root-like drugs must be walled within filter bag.
13. After finishing strenuous exercise please do not use the SPA immediately.
14. If feeling uncomfortable while or after using the SPA, please stop it right away and go to see the doctor.
15. Do not move or open the lid of filter casually.
16. Excessive exposure to the sun for a long time will damage the SPA surface, when you are not using the SPA, please cover it up against the sunshine.
17. If you use the SPA daily, please clean the paper element filter once per week.
18. The heat preservation cover is formed of foam, prevent kids from playing on it.
19. When filling in water, water should be 2-3cm over the probe screw.
20. No water or water level doesn't reach the probe screw or over all the jets, do not operate the spa.
21. If the spa not to use, please tighten the screw or locks of the hem door.
22. All the maintenance must be done after electricity has been cut off.
23. After the repair work and maintenance completed, check if all the functions run well.
24. In the very cold areas or seasons, please keep the SPA connected with electricity, filled with enough water in the SPA, so as to protect SPA from being frozen or broken, or you can drain water completely and check to assure no water left inside pipes.
25. All the preservation and maintenance must be done by qualified professionals. For more service, please contact the suppliers or sales agents.
26. The product must be permanently connected to the fixed wiring.
27. Parts incorporating electrical components must be located or fixed so that they cannot fall into the SPA..
28. The product should be supplied through a residual current device (RCD), having a rated residual operated current not exceeding 30mA.
29. If your SPA is placed in direct sunlight , as possible as you can, please avoid to place it on the glass floor or near the location of the glass wall , speculate reflection effects can lead too high temperature on partial skirt which will cause skirt deformation.

30. The bearing of the water pumps may get stuck after this SPA hasn't been used for a long time, so the water pumps may not working when pressing the water-pump buttons on control panel. If the water pump not working because of water bearing get stuck, then you can notice that no water current through jets or no suction- force in the skimmer. Please shut down the power ,open the hem doors, find out the water pumps, rotate the blade inside water pumps, turn on the power again, activate the water pumps by pressing the water-pump buttons several times.
31. Sometimes, the water pumps may work or rotate slowly at the beginning and back to normal after working 2-3 seconds. If the water pumps still rotate slowly after 2-3 seconds, please press the water-pump buttons on panel to re-activate the pumps.
32. When you notice the hum of the water pumps while pumps not working (no water current through jets) and overheating water pump surface, please shut down power immediately. It results from air kept inside of water pumps or pipes be block. Please check the water pumps and pipes, fix the problem , and turn on the power again.
33. During installation of the SPA, please keep the whole construction area clean and clear .No mud or metal be left beneath the SPA tub body or near the water pumps. Keep sufficient space for dissipating heat of the working water pumps.

I. Canada Gecko Control System Instructions

YJ-2 Control System

Introduction



in.k300

the essential spa keypad

The in.k300 brings all the features you really need to one keypad. Compact, with a big LCD screen; bright enough to be seen in day, simple enough to use in the middle of the night; affordable, yet solidly built.

Item	in.k300
Static LCD size (as measured diagonally)	1.5"
Optional mounting with wing-nuts and spacers	●
Double-sided bezel gasket	●
Icons giving instant spa status information	●
Number of pumps/blowers supported	1 or 2
Time display	●

Keypad functions

Start or stop accessories

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

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

If you have a blower it will be controlled by the **Pump 2** key. The order of actions is as follows: pump 2 on; pump 2 high speed (if applicable); blower on; pump 2 off; blower off.



Water temperature

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

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



Off Mode

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

Programming steps



Program menu

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



Setting the clock

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

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

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

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

Programming the filter/ purge cycles

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

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.

Programming steps



Setting filter or purge cycle start time

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



Setting filter cycle duration

(not available on purge systems)

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

The “Filter” indicator lights up when filter is on and flashes when suspended.



Setting economy mode*

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

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



Setting economy start time*

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

Programming steps



Setting economy duration*

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

24 = continuous economy



Setting temperature unit

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

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



Smart Winter Mode

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

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

Cooldown

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



Water temperature regulation

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

Indicator flashes when taking water temperature reading.

Error messages

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

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

Specifications

Part number

1 pump model: 0607-008036

2 pump model: 0607-008037

Model

IN.K300-CL-GE1

Environmental

Operating temperature:	-68°F (-20°C) to 149°F (65°C)
Storage temperature:	-22°F (-30°C) to 185°F (85°C)
Humidity:	Up to 70% condensing
Water ingress protection:	IPX-5

Mechanical

Weight:	0.69 lb (313 g)
Dimensions (W x H x D):	2.25" x 6.30" x 1.87" (57.15 mm x 106.02 mm x 47.45 mm)

Compatibility

in.yj, in.yt, in.ye, in.xe, or in.xm2 spa packs with appropriate software revision

II. Description on Using Parts

1. Heater/Thermostat

1) Normal starting up time is 4-8 hours

2) SPA Thermostat cannot be heated by man in the air, or there will be danger. If there is something wrong in operation, professional servant is a must to prevent the risk of electricity leakage.

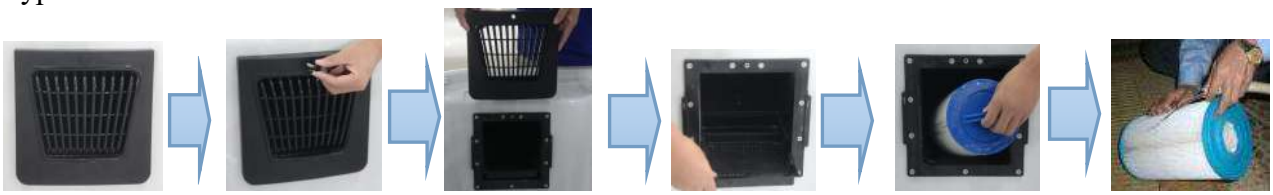
2. Air pump

Normal working time is 15-30 minutes (air pump shall not be working continuously over 120min., because it may overheated the whole part or shorten service life).

Please notice that water level should not be 7cm over the tub water level to prevent air pump being burnout by water leakage.

3. Paper element filters daily maintenance

Type one:



1) Remove the outer cover of the skimmer2) Pull out the skimmer screw;3) Take out the paper core;

4) Wash the paper core with water, reset it after cleaning and dry out;

Type two:



1) Pull apart the crystal package of the paper core; 2) Pull out the cover of filtration bucket;

3) Match the paper core inside and screw it tight, then put the cover of filtration bucket back.

Type three:



Filter	Remove filter cover	Paper cores	Unscrew the paper core counterclockwise	Put the cover back

Type four:



1) Remove the cover on the filter, and screw the core paper filter out.
2) Repeatedly Clean the core paper filter with water.
3) Put the core paper filter back to use after dry out.

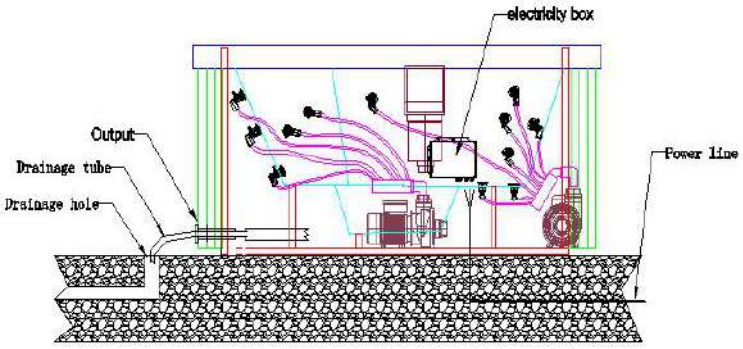
4) Change the core paper filter half a year once, depends on the high quality of water, lifetime of paper filter can be properly extended.
5) Change a new paper filter, take out a new one and tear out the package of the paper core and put it inside the filtration bucket.
6) Match the paper core correctly inside and screw it down in sequence, then put the cover of filtration bucket on top.
Notice: Different spa model with standard configuration will be equipped with one of these two filtration, please install and clean the paper core in accord with the proper filtration system you purchase.

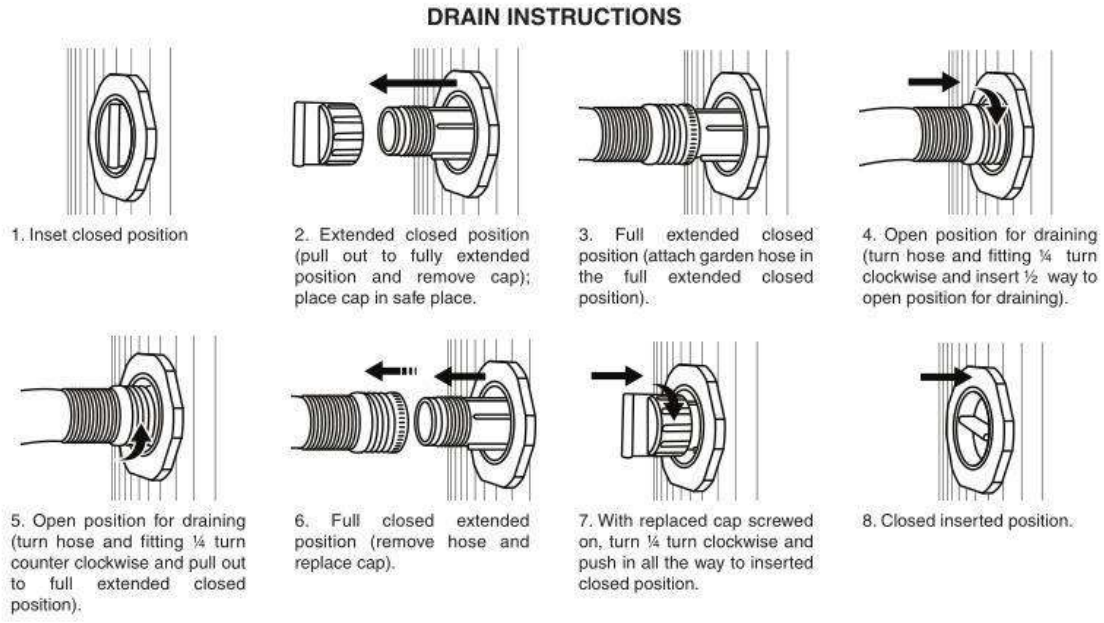
Ⅲ.Water pipes connection of SPA

Drain of SPA in hem side



sketch map of connection





Ⅳ. Care and Maintenance

1) Please clean the massage bathtub with neutral detergent and soft fabric. Do not clean it with acetone, solution, ammonia water and organic solvent, otherwise, it may possibly damage the surface of the bathtub. Mildly wipe off the adhesive stains on the bathtub with soft fabric and gasoline.
2) If there's scratches on the bathtub, please grind with 2000# grinding paper with water, and then polish with toothpaste and soft fabric.
3) Please wipe off the water scale on the bathtub with light acid detergent such as citric acid and vinegar.

4) Remove the water-return unit and nozzle for cleaning and removing dirt.
5) Do not frequently wipe the gold and chrome plated parts (do not contact it with organic solvent).
6) Please keep blunt and knife away from the surface, and butt or the things over 60 degree should be away from that too.
7) One time to check button of electricity leakage every month.
8) Make frequent checks on the electrical wires, buttons, connectors always to see if they are bitten by rats or worms.
9) Make frequent checks on the feed pipe and drain pipe always to see if there is some parts broken or hand make sure it is smooth.
10) When storing the products, do not put converted and overlapped, make sure they are far away from formic acid and methanal as well as any other organic solvent.
11) If they are needed to be carried, do take those actions lightly, in case of high pressure, mechanical impact strength and succession.
12) If the bathtub are not to be used for a long time, dry inside the bathtub and make the circumstance dry and ventilated as well as no corrosive gas.

V. Instructions on Maintenance

1) Replace the massage water pump: cut off power supply, open the bathtub side plate, drain empty the SPA water, remove the wires and open the water pump, loosen the fixed bolts and take out the water pump, after replacing the pump, install power wire, fix the bolts, put into small amount of water into the bathtub, check if there's leakage at the pump, and then install the side plate of the bathtub.
2) Replace the filter water pump: cut off power supply, open the bathtub side plate, turn off the valves on both ends of water pump, remove the wires and open the water pump, loosen the fixed bolts and take out the water pump, after replacing the pump, install power wire, fix the bolts, put into small amount of water into the bathtub, turn on the valve, check if there's leakage at the pump, and then install the side plate of SPA.
3) Replace the thermostat: cut off power supply, open the bathtub side plate, turn off the valves on both ends of thermostat, remove the wires, loosen the fixed bolts and take out the thermostat, after replacement, install power wire, fix the bolts, put into small amount of water into the bathtub, turn on the valve, check if there's leakage at the pump, and then install the side plate of the bathtub.
4) Replace the filter core: cut off power supply, open the bathtub side plate, turn off the valves, loosen the bolts on top of the filter, take out the filter, remove dirt on bottom of the filter.
5) Anti-frozen of filter: In some area, water may be frozen in winter, under this case, please stop using filter, to remove it and clean the core, store it in safe place or move the filter core to interior. Or keep the SPA at standby state.

VI. Troubleshooting

Faults	**Reason**	**Solution**
No reaction for panel Key	1. Panel was locked 2. Panel is broken	Unlock the panel Change panel
No power supply	1. There's problem for the power circuit; 2. Protective switch is cut off.	Check the circuit; Check and remove short circuit,Connect the protective switch
Nozzle doesn't spray water	1. There's problem for power supply of water pump; 2. Water pump is not started. 3. Massage water pump is damaged 4. There is air in pipe	Check and connect the power wire Check the massage water pump Replace the massage water pump Purify pipe by taking the loose joint part
Bottom lamp doesn't light on	1. Bulb is broken; 2. Fuse is damaged.	Replace the bulb Replace the fuse
Poor filtering effect	1. Filter water pump is not started; 2. Filter is not cleaned;	Start the filter water pump Clean the filter

	3. Filter water pump is damaged.	Replace the filter water pump
Constant temperature effect is unavailable	1. Thermostat is damaged; 2. Power supply is unavailable. 3. Filter is jammed.	Repair or replace the thermostat Check the power supply Clean or replace the filter paper core
Bathtub is scratched		Grind with 2000# grinding paper with water, and then polish with toothpaste and soft fabric

NOTICE: The usage manual is only for reference, and all data subject to the actual product, any update without notice.

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