Quick Reference Card
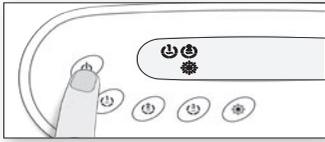## in.k450 keypads for in.xe spa systems

in.k450
Compact full-function keypads for in.xe spa systems

Aeware's new series of keypads features a large LCD display and raised keys that let users control all in.xe functions and programming directly from spa side. In.k450 comes in an easy to install waterproof plastic enclosure and is designed to maximize user experience.
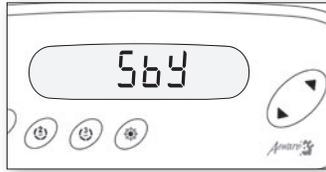
Spa Functions

On/Off key

Depending on the spa manufacturer, this key may have different functions: On/Off, Standby mode or quick enable of the Economy mode.

On/Off Mode

By default, the system is always on. Press and hold the **On/Off** key for 5 secs. (or Press and hold **Pump 1** key for 5 secs.) to shut the system down for 30 minutes.
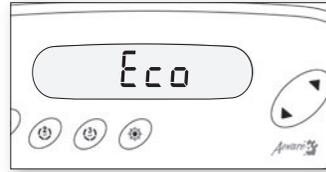
The display will toggle between the "OFF" message and water temperature. Press the On/Off key to restart the system before the expiration of the 30 minutes delay.

Standby Mode

Quick press and release the **On/Off** key to shut the system down (i.e. to set it to Standby mode) for 30 minutes. The display will toggle between the "SBY" message and water temperature. All keys are then disabled, unless you press **On/Off** key again to reactivate the system before the expiration of the 30 minutes delay.

In order to warn the user, the spa light will flash for a few seconds before the exit of Standby mode.
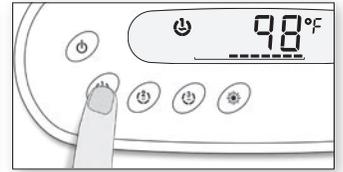
Economy Mode

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.

Press and hold the **On/Off** key for 10 secs.

While the Economy mode is enabled the display will toggle between "Eco" and the water temperature. Once the system goes back to nomal mode, the display will show "noE".
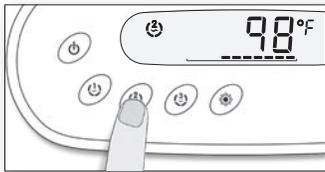
Pump 1 key

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 a predetermined period of time, unless pump has been manually deactivated first.

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

Pump 2 key

Press **Pump 2** key to turn Pump 2 on. Press a second time to turn pump off.

A built-in timer automatically turns pump off after a predetermined period of time, unless pump has been manually deactivated first.
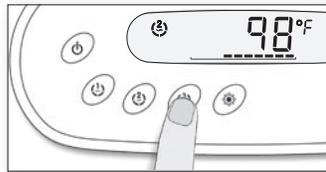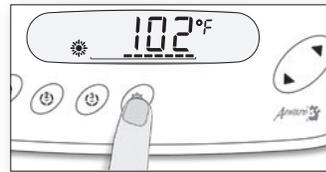
Blower key

Press **Blower** key to turn blower on. Press a second time to turn blower off.
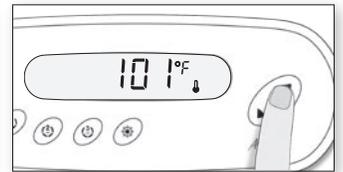
A built-in timer automatically turns blower off after a predetermined period of time, unless blower has been manually deactivated first

Light key

Press **Light** key to turn light on at high intensity. Subsequent presses change light intensity. A last press turns light off.

A built-in timer automatically turns light off after 2 hours, unless it has been manually deactivated first.

Up/Down keys

Use **Up** or **Down** key to set desired water temperature. The temperature setting will be displayed for 5 seconds to confirm your new selection.

The "Set Point" icon indicates that the display shows the desired temperature, NOT the current water temperature!

Programming Steps

Program key

Use **Program** key to display time or enter Programming menu by pressing and holding key. In Programming mode, the following parameters can be set: time, filter cycle start time, filter cycle duration, filter cycle frequency, and temperature unit.

Note: Light key is used as Program key if this key is not present.

Setting the time

Enter Programming mode by holding **Prog.** key pressed down for 3 sec. The display will show the current time setting.

Setting the hour: Use **Up** or **Down** arrows to change hour setting (**AM/PM**).

Setting the minutes: Press **Prog.** key a second time.

Use **Up** or **Down** key to change hour setting.

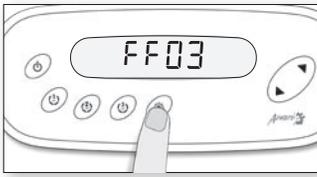### Setting filter cycle start time

To program the filter cycle, you must enter these parameters: the start time, duration and frequency. During a filter cycle, pumps run for one minute to purge the plumbing, then Pump 1 runs for the programmed number of hours. Press **Prog.** key a third time. The display will show **FSxx**, with "xx" representing the starting hour. Use **Up** or **Down** key to change setting.

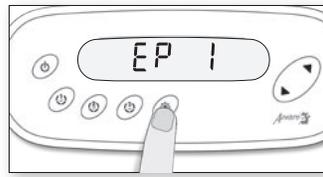### Setting filter cycle duration

Press **Prog.** key a fourth time. The display will show **Fdxx**, with "xx" representing the duration in hours.

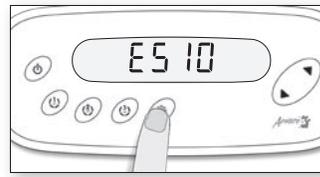Use **Up** or **Down** key to change setting.

FF03

Filter cycle frequency

Press **Prog.** key a fifth time. The display will show **FFxx**, with "xx" representing the number of filter cycles per day (up to 4).
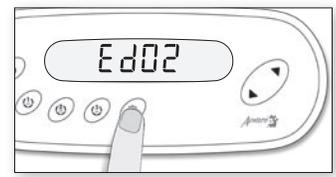
Use **Up** or **Down** key to change setting.

EP 1

Setting economy mode

Press **Prog.** key a sixth time. Use **Up** key to enable the economy mode, the display will show **EP 1** or use **Down** key to disable economy mode, the display will show **EP 0**.

ES 10

Setting economy start time

Press **Prog.** key an seventh time. The display will show **ESxx**, with "xx" representing the starting hour.

Use **Up** or **Down** key to change setting.
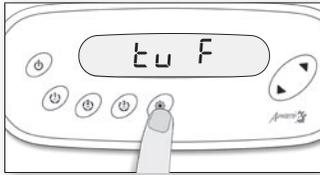
Ed02

Setting economy duration

Press and hold **Light** key until the display shows Edxx, with "xx" representing the duration in hours. (Default: 2 hours).

Use **Up** or **Down** key to change setting.

0 = no filtration[1]
24 = continuous filtration
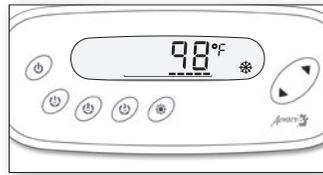
[1] It's not recommended to set this to "0".

tu F

Setting temperature unit

Water temperature can be displayed in either Fahrenheit (°**F**) or Celsius (°**C**). Press **Prog.** key a ninth time. The display will show either °F or °C.
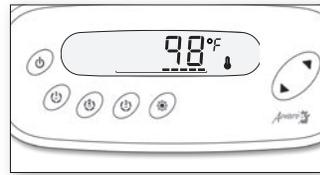
Use Up or Down key to change setting.

Press Prog. key once more to go back to normal mode.

Note: "**F**" will be displayed in in.xe Spa Packs.

98°F ❄

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.

98°F

Water temperature regulation

In a regulation cycle, the system first generates water flow through the heater housing and the plumbing, in order to ensure accurate water temperature readings as well as avoiding 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.

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, this prolongs its useful life. The heater icon flashes during this time.

Troubleshooting section

in.xe error codes	Description
Hr	**An internal hardware error has been detected.** Note the error message and contact dealer or service supplier for Tech Support.
AOH	**Temperature inside the spa skirt is too high, causing the internal temperature in the Spa Pack to increase above normal limits.** Open skirt and wait until error clears. If error persist, note the error message and contact dealer or service supplier for Tech Support.
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. If problem persists, Note the error message and contact dealer or service supplier for Tech Support.
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. If problem persists, note the error message and contact dealer or service supplier for Tech Support.
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.** Note the error message and contact dealer or service supplier for Tech Support.

Aeware by gecko

GECKO