

# Coyote Spas: Europe Quick Reference Card in.k400

series of compact full-function keypads  
for in.xm spa systems



The Quick Reference Card provides a quick overview of your spa's main functions and the operations accessible with your digital control pad.

## Spa functions

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On/Off key



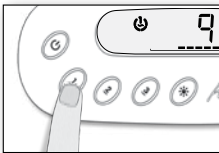
Depending on the spa manufacturer, this key may have different functions: On/Off, Standby mode or quick enable of the Economy mode.



**Standby Mode :** Use On/Off key to pause all pumps\*. Progress bar will display the remaining time before the system automatically exits Standby mode (user can also exit Standby mode at any time by pressing again on On/Off key).

In order to warn the user, the spa light will flash for a few seconds before the exit of Standby mode and restart the pumps. The "Stby" message is also displayed during Standby mode.

\* Pump will stay turned on if there is a request for more heat.



Pump 1 key

**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.



Pump 2 key

**2**

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.

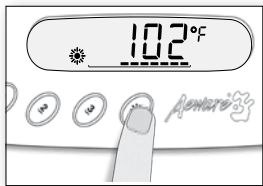


Blower key

**3**



Press Blower key to turn Blower on.

Press a second time to turn pump off. A built-in timer automatically turns pump off after 20 minutes, unless pump has been manually deactivated first.



Light key 

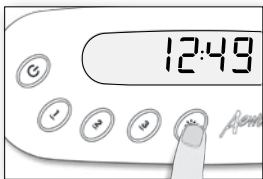
Press Light key to turn light on. A second press turns light off. A built-in timer automatically turns light off after 2 hours, unless it has been manually deactivated first.


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!

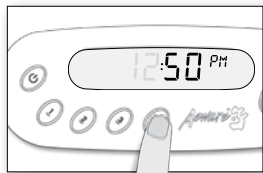
## Programming steps



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, economy start time, economy end time and temperature units.

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

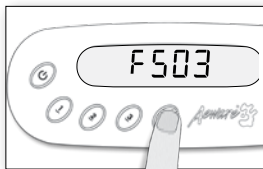


Setting the time

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

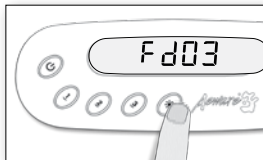
Setting the hour: Use Up or Down arrows to change hour setting (AM/PM).

Setting the minutes: Press Prog. key a second time. Use Up or Down key to change minutes setting.



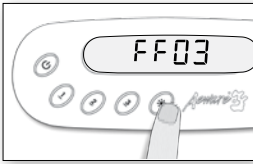
Setting filter cycle start time

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.



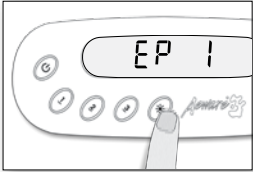
Setting filter cycle duration

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.



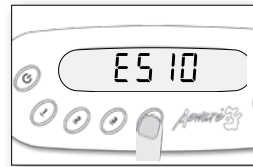
#### Filter cycle frequency

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.



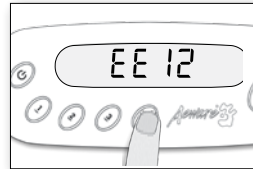
#### Setting economy mode

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. 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.



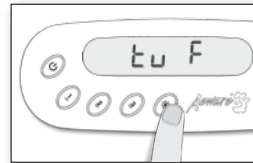
#### Setting economy start time

Press Prog. key an eighth time. The display will show ESxx, with "xx" representing the starting hour. Use Up or Down key to change setting.



#### Setting economy end time

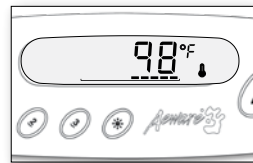
Press Prog. key a ninth time. The display will show EExx, with "xx" representing the ending time in hour. Use Up or Down key to change setting.



#### Setting temperature unit

Water temperature can be displayed in either Fahrenheit (°F) or Celsius (°C). Press Prog. key a tenth time. The display will show either °F or °C.

Use Up or Down key to change setting. Press Prog. key a last time to go back to normal mode.



#### 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.

## Product

## Description

## Corrective action

SP	Hr	in.xm	Internal hardware error detected.	<ul style="list-style-type: none"> <li>Restart unit.</li> <li>Manually change the status of all pumps and accessories.</li> <li>Change in.xm pack error re-appears.</li> </ul>
SP	in	in.xm	Input voltage too low. Possible causes: <ul style="list-style-type: none"> <li>A problem with the terminal connections</li> <li>A problem with the incoming power line.</li> </ul>	<ul style="list-style-type: none"> <li>Check incoming power terminal connections ensuring that they are properly wired and tighten.</li> <li>Call an electrician if problem persist.</li> </ul>
SP	F1	in.xm	Fuse F1 is blown.	<ul style="list-style-type: none"> <li>Replace fuse F1 with an identically rated part (See inside panel).</li> </ul>
SP	F2	in.xm	Fuse F2 is blown.	<ul style="list-style-type: none"> <li>Replace fuse F2 with an identically rated part (See inside panel).</li> </ul>
SP	F3	in.xm	Fuse F3 is blown.	<ul style="list-style-type: none"> <li>Replace fuse F3 with an identically rated part (See inside panel).</li> </ul>
SP	br	in.xm	The input current is lower than the total current for each output.	<ul style="list-style-type: none"> <li>Increase in.xm current rating.</li> </ul>
SP	Ot	in.xm	Temperature inside the spa skirt is too high (overheat condition).	<ul style="list-style-type: none"> <li>Reset main breaker.</li> </ul>
SP	OH	in.xm	The system detects spa temperature exceeding normal limits (overheat condition).	<ul style="list-style-type: none"> <li>Remove spa cover.</li> <li>Add cold water to spa and let system cool down.</li> <li>Lower filter cycle's duration.</li> </ul>
ch	nf	in.therm	No water flow detected.	<ul style="list-style-type: none"> <li>Verify if something is obstructing the water (air locks, closed valves or dirty filters).</li> <li>Check and clean filters.</li> <li>Ensure adequate water level.</li> </ul>
ch	nH	in.therm	No heat. This error occurs if the in.therm is trying to heat the water but no increase in water temperature is detected.	<ul style="list-style-type: none"> <li>Disconnect and reconnect* heater cable (big orange cable).</li> <li>Restart the spa pack.</li> <li>If error code is still appearing replace in.therm.</li> </ul>
ch	nC	in.therm	Communication error between the in.xm and in.therm has been detected. Possible causes: <ul style="list-style-type: none"> <li>Bad connection between the in.xm and the in.therm (cable not connected).</li> <li>Male connector pins that may be bent or internal</li> <li>Failure in the in.xm or in.therm.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure heater cable (small orange cable) is properly connected*.</li> <li>Restart unit.</li> </ul>

\*A latch mechanism in the in.link connector will produce a clicking sound when properly connected.

ch	HL	Accessories	Potential problem in the High Limit circuit detected. Possible causes: <ul style="list-style-type: none"> <li>Heater stored in a hot location prior to installation and there is no water flowing through to cool it down</li> <li>Ambient temperature is hot enough to heat the spa water even though pumps are off.</li> </ul>	<ul style="list-style-type: none"> <li>Add cold water to spa.</li> <li>Allow heater to cooldown by starting Pump 1.</li> <li>Reset spa pack.</li> </ul>
ch	Hr	in.therm	Internal hardware error detected.	<ul style="list-style-type: none"> <li>Restart unit.</li> <li>Restart heater by changing set point.</li> <li>Replace in.xm if problem persist.</li> </ul>
P1	Er	Accessories	The system does not detect current variation when turning the device on/off.	<ul style="list-style-type: none"> <li>Ensure that the device is properly connected.</li> <li>Manually turn device on/off.</li> <li>Turn device at high/low speed.</li> <li>Restart unit.</li> <li>Replace device if problem persist.</li> </ul>
P2	Er	Accessories	Same as P1 Er error code	Same as P1 Er error code
O3	Er	Accessories	Same as P1 Er error code	Same as P1 Er error code
bl	Er	Accessories	Same as P1 Er error code	Same as P1 Er error code

