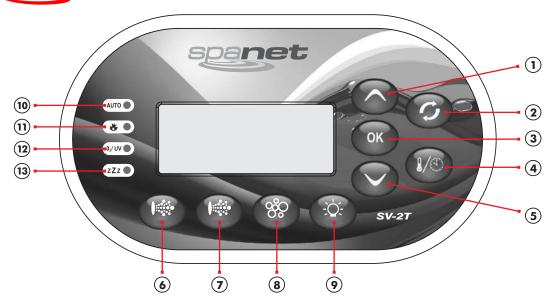
# XS-2000 Quick Reference Guide



### **Buttons:**

- 1. UP
- 2. One-Touch Sanitise
- 3. OK
- 4. Water Temp / Time

**DOWN** 

5.

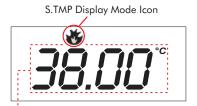
- 6. Pump A
- 7. Pump B
- 8. Air Blower
- Light (On /Off)

# **Indicator Lights**

- 10. Auto Mode LED
- Element On LED
- 12. Ozone/UV On LED
- Sleep Cycle LED

### **DISPLAY MODES**

The XS-2000 topside panel features a large LCD screen which displays three items: (1) Actual Water Temperature (2) Set Temperature Point (3) Time & Day. By default the set temperature point is displayed in the large digits (refer below).



Set Water Temperature

There are three possible items that can be displayed in the large digits: (1) Actual Water Temperature [W.TMP]; (2) Set Temperature [S.TMP]\*; (3) Time Clock [TIME]. Each display mode has a unique icon shown at the top of the screen to indicate the current item being viewed (refer below).

> W.TMP Water Temperature Set Temperature\* \* S.TMP

TIME

Clock

\* Default Display

Press the **UP** ( ) or **DOWN** ( ) button to scroll through these different display modes. As you scroll through each item a brief title screen will be shown followed by the actual display mode (note change in icon).

Note: There is a ten (10) second timeout on viewing non default display modes. If no button press is sensed after 10 seconds the screen will return to the default display.

# LED INDICATOR LIGHTS



The AUTO LED indicator turns ON when the filtration pump is in automatic mode.



The Heater LED indicator turns ON when the heater element is active.



The Ozone LED indicator turns ON when the ozonator / UV sanitiser is active.



The Sleep Cycle LED indicator turns ON when in a designated sleep cycle (if programmed).

### ADJUST SET TEMPERATURE POINT

The SpaNET intelligent software constantly monitors the spa water, automatically controlling the heater and circulation pump to ensure the desired set water temperature is maintained. The user can adjust the set temperature point from 5°C - 41°C in steps of 0.2°C increments (Default: 38°C).

# To adjust the set temperature point:

- 1) Press and hold the UP ( ) or DOWN ( ) button. The set temperature point will begin adjusting up or down in 0.2°C increments.
- 2) Once the desired set temperature is displayed press the **OK** ( **OK** ) button to confirm selection.

Notes: 1) f the standard in-heater temperature sensor is used (i.e. no optional in-pool temperature sensor fitted) the heater works off a 2°C hysteresis (thermostat). The heater will raise the water to the set temperature point but thereafter will not be re-activated until the water temperature falls by at least 2°C. Therefore if the spa user selects a set temperature point of 38°C the actual water temperature will be anywhere between 36°C - 38°C depending on when the user checks the temperature.

2) If the optional in-pool temperature sensor is fitted the heater works off a 0.5°C hysteresis (thermostat). The heater will raise the water to the set temperature point but thereafter will not be re-activated until the water temperature falls by at least 0.5°C. Therefore if the spa user selects a set temperature point of 38°C the actual water temperature will be anywhere between 37.5°C - 38°C depending on when the user checks the temperature.

# **CLOCK**

For convenient user reference and to assist in filtration & sleep time functions, your spa controller includes a built-in real time clock. The user can choose to display the time in either 12 or 24 hour format. For ease of reference the current time and day is displayed at the bottom left of the LCD screen.

### To set the clock:

- 1) Press the **UP** ( ) or **DOWN** ( ) button to toggle the screen to the TIME ( (5) ) display mode.
- 2) Press the **OK** ( **OK** ) button to enter set time adjustment.

- 3) Press the **UP** ( ) or **DOWN** ( ) button to select the time format (12 or 24 HR). Press the **OK** ( **OK** ) button to confirm selection.
- 4) Press the **UP** ( ) or **DOWN** ( ) button to modify the weekday (Mon - Sun). Press the OK (OK) button to confirm selection.
- 5) Press the **UP** ( ) or **DOWN** ( ) button to modify the hour. Press the OK (OK) button to confirm selection.
- 6) Press the **UP** ( ) or **DOWN** ( ) button to modify the minutes. Press the **OK** ( **OK** ) button to confirm selection.

# WATER TEMP / TIME TOGGLE BUTTON

By default the XS-2000 will display the set temperature point on the screen. The water temp / time toggle button is a shortcut key designed to quickly switch between the actual water temperature [W.TMP] and the time clock [TIME] display modes. Press the **W.TMP / TIME** ( ) button to toggle the screen between the actual water temperature and time clock display modes (refer below).

W.TMP Display Mode



TIME Display Mode

# Safety Notes:

The appliance must be connected to a suitably rated and weather protected power supply. The supply line should be a dedicated power circuit and means for disconnection must be incorporated in the fixed wiring in accordance with your local wiring regulations. Means for disconnection from the supply mains should have a contact separation in all poles that provide full disconnection under overvoltage category III conditions. The appliance must be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30mA. This appliance is not intended for use by young children or infirm persons without supervision.

# PUMP BUTTONS (



There are two pump buttons on the bottom left hand side of the touch pad: Pump A and Pump B. The functions of the two buttons change depending on pump / controller configuration. The intention is to make best possible use of both these buttons for all possible configurations. For every press of a pump button, the display will temporarily show the selected pump state: ON / OFF / LOW / HIGH / AUTO then



revert to the default display mode. Possible pump configurations & button sequences are referenced in the table below (Please tick your spa configuration for ease of future reference).

#### Notes:

1) If left ON pumps will automatically time-out and turn off 30 minutes after the last sensed button press. 2) In some configurations if heater is ON activating multiple pumps OR turning the blower ON may cause the spa control to load shed and turn the heater OFF. This is to keep the system within its maximum power load.

Spa Configuration	Button A	Button B
No small circ pump	Jet pump 1 :	No Function
Pump 1 = 1 speed	On / Off / Auto	
No small circ pump	Jet pump 1 :	Jet pump 2:
Pump 1 & 2 = 1 speed	On / Off / Auto	On / Off
No small circ pump	Jet pump 1 :	Jet pump 1:
Pump 1 = 2 speed (P2 N/A)	Low / Off / Auto	High / Low
Small circ pump fitted	Jet pump 1:	No Function
Pump 1 = 1 speed	On / Off	
Small circ pump fitted	Jet pump 1 :	Jet pump 2:
Pump 1 & 2 = 1 speed	On / Off	On / Off
Small circ pump fitted	Small circ pump :	Jet pump 1:
Pump 1 = 2 speed (P2 N/A)	On / Off / Auto	Low / High / Off

## AIR BLOWER BUTTON

The BLOWER (%) button is used to control the air blower and allow adjustment of the blower speed. The last used speed is saved and will be restored the next time the blower is turned on, for future ON/OFF use. Note: that when the blower is first turned on it will run at maximum speed for approx three seconds before changing to your preset speed; this is normal.

# To turn the blower on/off:

- 1) Press the **BLOWER** (%) button once to turn the blower ON in variable speed mode.
- 2) The blower will turn ON (at the last used speed) and the screen will display the blower speed [B.SPD] adjustment screen (refer below).



Bargraph indicates blower speed

- 3) Use the **UP** ( ) or **DOWN** ( ) buttons to adjust the blower speed. Note: the bar graph will change indicating current blower speed.
- 4) Press the **OK** ( **OK** ) button to confirm selection.
- 5) Press the **BLOWER** (%) button again to turn the blower OFF.

Note: The B.SPD adjustment screen is displayed for 10 seconds when the blower is first turned ON. If no adjustment is made the blower will run at the last used speed setting, and the screen will time-out and revert to the default display mode. If you wish to adjust the blower speed once the blower has been running for a period of time, the blower must be turned OFF and back ON again to restore the B.SPD adjustment screen.

# RAMPING BLOWER MODE

The spa controller features a ramping blower mode, were the blower speed gradually fluctuates between high and low in a ramping manner.

# To turn the blower on in ramping mode:

- 1) Press the **BLOWER** (%) button twice to start the blower in ramping mode. The blower will turn ON and the screen will display [RAMP] to indicate ramping mode.
- 2) Press the **BLOWER** (%) button again to turn the blower OFF.

# **ONE-TOUCH SANITISE BUTTON**

A sanitise cycle runs the filtration pump and ozone / uv (if fitted) to filter the spa water to restore and refresh water quality after use.

In addition, at the start and end of the cycle, the controller will sequentially run any additional pumps and the blower (if fitted) for one minute each to purge the plumbing and clear any unfiltered water trapped in those lines.

# To activate a 20 minute water clean-up cycle:

1) Press the **SANITISE** ( ) button once after spa use to activate the water clean [W.CLN] cycle.

Note: If cycle running, cycle can be cancelled by pressing the SANITISE button again.

### **LIGHT BUTTONS**

The light button is used to control the many features of the multi colour LED spa light.

# ( -O- ) LIGHT ON / OFF BUTTON

Press to toggle light **ON** and **OFF**. The button is backlit green to indicate when the light has been turned ON.

When the light is first turned on the light mode menu will be displayed. The current light mode in use will be shown. Use the **UP** ( ) or **DOWN** ( ) button to step through the four colour modes:

(1) White [WHTE]

(2) User Colour [U.CLR]

(3) Fade Effect [FADE]

(4) Step Effect [STEP]

Press **OK** ( **OK** ) to confirm selection of desired light mode or wait for the 10 second idle menu timeout where the screen steps to the light speed [L.SPD] or user colour [CL:xx] adjustment screens. If FADE or STEP effect modes are selected the current light speed [L.SPD] will be displayed. If the user colour [U.CLR] light mode is selected the current colour number will be displayed (refer below).





User colour screen

Press the **UP** ( ) or **DOWN** ( ) button to adjust the light effect transition speed OR select from 20 colour choices. Press OK (OK) to confirm selection or wait for the 10 second idle menu timeout where the screen steps to the light brightness [L.BRT] screen.

Note: If White [WHTE] colour mode is selected the Light Speed / Colour adjustment screens will NOT be displayed.

### [L.BRT] LIGHT BRIGHTNESS

When the [L.BRT] adjustment screen is displayed press the **UP** ( ) or **DOWN** ( ) button to adjust the light brightness.

# **ERROR CODES / DIAGNOSTICS**

Note: most error conditions require mains power to be turned OFF and back ON before the error is cleared.

ER2 - HEATER PLUG: Heater sensor cable fault. Check the "Heater" sensor lead is plugged firmly into the spa control.

ER3 - WATER PRIME: Heater tube failed to fill with water. Press Pump A button to retry water prime. Check spa water level, cleanand soak filters, bleed potential air locks from pipework.

ER4 - THERMAL TRIP: Low or NO water flow over element whilst heating has activated thermal cut-out device on heater. Turn mains power OFF and wait 20~30 minutes for heater to cool and thermal cut-out to reset. Check spa water level, clean & soak filters, check all shut-off valves are open, bleed potential air locks from pipework.

ER5 - POOL TOO HOT: Temperature sensor has reported a temperature reading in excess of 45°C. Remove spa cover & allow spa to cool. Check daily filtration time & reduce setting if required.

ER6 - HEATER SENSOR: Communication between spa control and heater has been lost. Turn mains power OFF and unplug and reconnect "Heater" sensor lead from spa control.

ER7 - IN POOL SENSOR: In Pool Temperature Sensor has faulted. Contact your local dealer. Disconnect "In Pool Sensor" lead from spa control to continue spa operation.

ER8 - CTRL FAULT: An internal controller fault has been detected. Reset mains power. Contact your local dealer if problem persists.