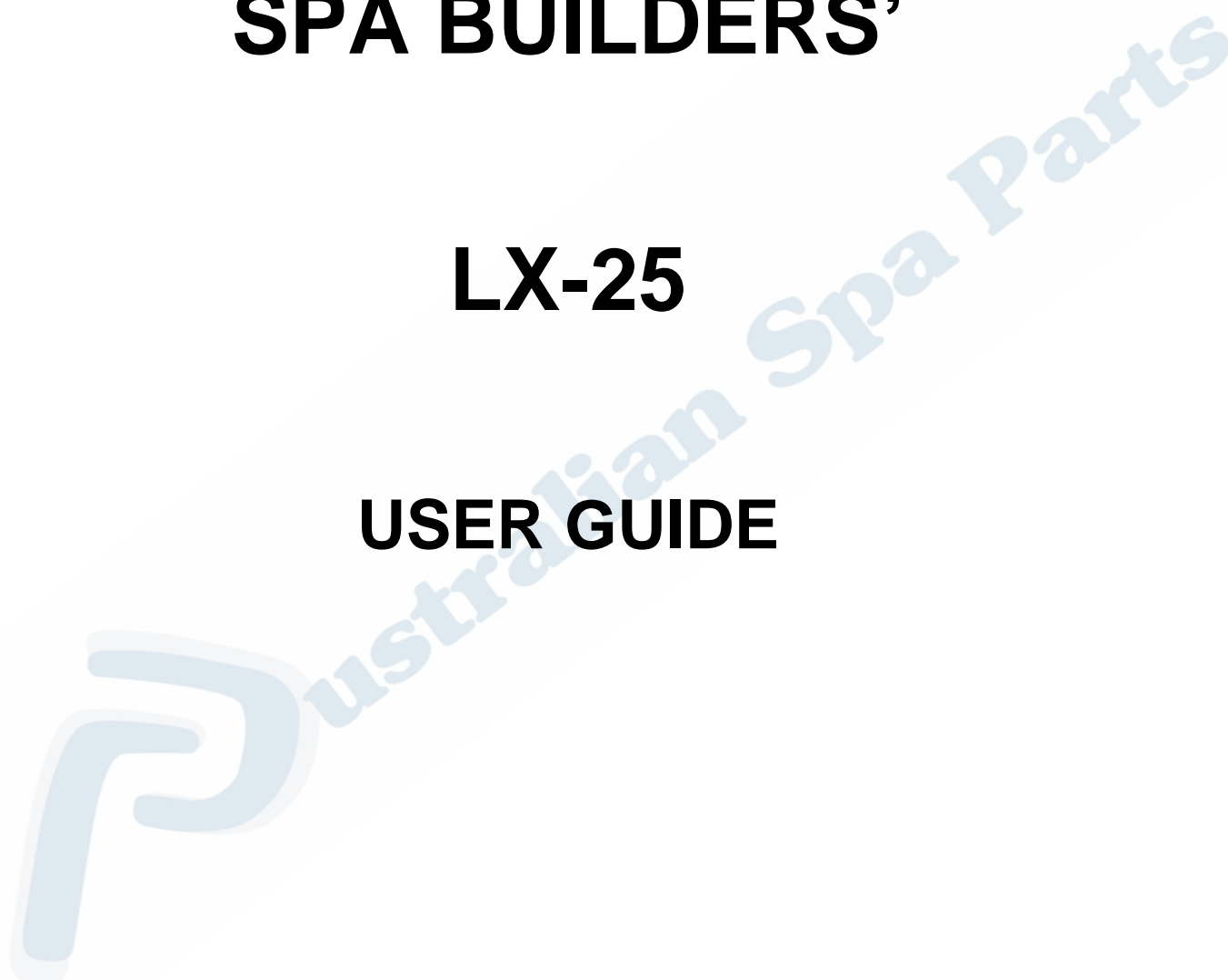


**SPA BUILDERS'**

**LX-25**

**USER GUIDE**



## CONTROL PANEL FUNCTIONS

**SET TEMPERATURE:** Press WARMER or COOLER once to enter set temperature mode. Each subsequent pressing within three seconds will increase or decrease the set point by one degree. After three seconds of no buttons being pressed, the display will return to the actual water temperature and the newly set temperature will be maintained.

**MODE:** The spa is either in the Timer or the Thermostat mode. Whichever mode it is in, pressing and holding the WARMER and the COOLER buttons for two seconds will change it to the other mode.

**JET1:** First press - low speed pump  
Second press - high speed pump  
Third press - pump off  
(Jets time out - 20 minutes, unless filter cycle is on)

**JET2:** First press - low speed pump  
Second press - high speed pump  
Third press - pump off  
(Jets time out - 20 minutes)

**AIR:** First press - high speed air blower  
Second press - low speed air blower  
Third press - air blower off  
(Blower time out - 20 minutes)

**LIGHT:** First press - spa light on  
Second press - spa light off  
(Light time out – 1 hour)

**TIME:** Displays time of day. Also used in programming the time of day and programming the filtration cycles (See the appropriate section for programming instructions.)

**FILTER:** Used in programming the filtration cycles (see the programming filter cycle section for programming instructions.)

## PROGRAMMING TIME OF DAY

Programming is done through the main control panel. The programming mode is entered by pressing TIME and holding it, while holding adjust the time with the WARMER and COOLER buttons. Pressing the WARMER or the COOLER button will allow you to change the time, one minute at a time, holding either the WARMER or the COOLER button will allow you to scroll through the time. After setting the time, release the TIME button. Three seconds after releasing, the time of day is set and the display will default to the water temperature.

## PROGRAMMING FILTER CYCLE

Programming is done through the main control panel. Pressing FILTER button enters the filter cycle programming mode.

1. Display reads: (F1) this means you are ready to program filter cycle #1. Press TIME button.
2. Start time - filter cycle #1: (24 hour time clock) Adjust with WARMER and COOLER buttons. Press TIME button.
3. Duration - filter cycle #1: Adjust in 15-minute increments with WARMER and COOLER buttons (from zero to fifteen hours, forty-five minutes.) Press FILTER button, then press the WARMER button.
4. Display reads: (F2) this means you are ready to program filter cycle #2. Repeat steps 1, 2, and 3.
5. Display reads: (F3) this means you are ready to program filter cycle #3. Repeat steps 1, 2, and 3.
6. Display reads: (F4) this means you are ready to program filter cycle #4. Repeat steps 1, 2, and 3.
7. Three seconds after changes are made the control system will save any changes that were made and return the panel to the default display.

## THERMOSTAT AND TIMER MODES

Thermostat and Timer modes are mutually exclusive, one or the other will be active.

**THERMOSTAT MODE:** Spa maintains the water temperature at the set temperature. Low speed pump and heater come on automatically as needed to keep water temperature within two degrees of the set temperature. When the set temperature is reached, the heater will turn off followed by the low speed pump turning off thirty seconds later. The filter cycles will proceed as programmed. In the THERMOSTAT MODE the "THERMOSTAT" icon will be lit.

**TIMER MODE:** If there is no manual operation of the jets or air, the spa turns on automatically only during filter cycles. If any combination of the jets or air (except if both jets are on high speed) is manually operated, the spa control acts as if it is in the THERMOSTAT MODE, i.e. if the thermostat calls for heat, the spa will heat. In the TIMER MODE, the "TIMER" icon will be lit.

**BOTH JETS ON HIGH SPEED:** In either mode, with both jets on high speed, no heat is allowed (for 60A service see jumper positions.)

## DISPLAY MESSAGES

**ILOC** - Spa is deactivated. Sensor plug is not fully into its socket. Push sensor plug (J6) till it snaps.

**HOLD** - Command center is temporarily deactivated. Panel buttons have been pressed too often in too short of a time frame. Do not press any panel buttons for thirty seconds. The command center will automatically return to normal operation.

**HOT** - The thermistor on the circuit board has detected an extreme high temperature. The air blower comes on, pulling air through the equipment bay to help cool.

**FLO** - Heater and pump are deactivated. Either the proper flow of water is inhibited or the pressure switch has malfunctioned. The pressure switch is monitored for correct action each time the pump is started and stopped. For example, if the pump is started in low speed, the switch must come on and remain on. If the pump is switched to high speed, the low speed pump stops, water stops flowing, and the flow switch must open. After the flow switch opens, the high-speed pump comes on and the flow switch must close again. The owner's manual suggest checking all conditions which could inhibit water flow such as flow valves, water level, and clogged filters. The technician should check the pressure switch after verifying that no physical obstruction to the water flow exists.

**ICE** - Potential freeze condition (45 degrees) detected. Low speed pump stays on until danger of freezing passes (65 degrees.) Heater comes in extreme conditions (40 degrees.)

**Sn1** - Heater is deactivated. High-limit sensor non-functional.

**Sn3** - Heater is deactivated. Main temperature sensor is non-functional.

**OH** - Heater is deactivated. Overheat condition exists. Consult "Troubleshooting" section of Owners Manual.

**- - - - (Dashed line)** - Spa is deactivated. Problem detected which can cause damage to components (watchdog.)

**Pnl** - Faulty communication between command center and circuit board. Broken cable or connector not properly plugged into circuit board.