Spa Quick Start Guide
Balboa BP501G System for TP600 Topside Control
For use with Four Winds Spas Cyclone Series: Two pump. Wifi-Ready Topside.

Start Up

Your spa will enter **Priming Mode** (Pr) after initial start-up sequence. During Priming Mode, press **Jets Button(s)** repeatedly to ensure all pumps are free of air. Priming Mode will end automatically in 4 minutes. Press a Temperature Button to exit Priming Mode manually. When Priming Mode ends, Pump 1 will start and the water temperature will appear after about a minute. If the water temperature is below the Set Temperature, the heater will begin.

Basic Operation

Press a **Temperature Button** once to see the current temperature flash on the LCD (Note that the Set Temperature and actual temperature are often different). While the numbers are flashing, press a Temperature Button again to change the Set Temperature. Press-and-hold for faster adjustment. After the new Set Temperature stops flashing (about 10 seconds) the actual temperature is displayed and the new Set Temperature is programmed. The spa will now adjust to the new Set Temperature.

The **Light Button** turns the Spa Light on and off and is also used in conjunction with the Temperature Button(s) to navigate the system menus.

Automatic Polling (Standard Mode)

The pump activates for one minute to check the temperature: every 30 minutes, if another pump is on, when set temperature is raised.

Filtration

To program the filtration cycle, press a "Temperature Button" and enter Set Temp Mode. While the Set Temperature is flashing, press "Light" repeatedly until "FLTR1" appears. Press a "Temp. Button" to select Filter One and again to program the Start Time. Press "Light" to move onto the "RUN" Time and use the "Temp Buttons" to program filter cycle duration. Press "Light" to set the Filter Cycle. Press "Light" again to move into "FLTR2" and press a "Temp. Button" to select and program the second filter cycle in the same way.

The two filtration cycles should be programed 12 hours apart for 2 hours each. It is important to set filter cycles on a pattern. We recommend programming cycles at 7am/7 pm and avoiding the hours between 10am-5pm.

Programming

Navigating the deeper menu structure is done with only 2 or 3 buttons. Press a "Temperature" Button once to see the temperature flash. Pressing the "Light" Button while the Set Temperature is flashing enters the menu. Continually pressing "Light" to proceed through the Menu Choices (TEMP, MODE, TIME, FLIP, LOCK, HOLD, FLTR1, FLTR2, PREF, UTIL). Pressing a "Temperature" Button while any menu item is showing will edit it directly or begin an editing sequence. After editing, allow 10-30 seconds to return the panel to normal operation and display the spa status.

Ready and Rest Modes

READY Mode will circulate water every 1/2 hour using Pump 1 Low to maintain a constant water temperature, heat as needed, and refresh the temperature display (polling).

REST Mode will only allow heating during programed filter cycles. Since polling does not occur, the temperature display may not show a current temperature until the filtration pump has been running for a minute or two. READY/REST Mode may appear when Jet 1 is activated.

Dual Temperature Ranges

This system incorporates two temperature range settings with independent set temperatures. The High Range is indicated by the display **RANGE▲** and can be set from 80*F-104*F. The Low Range is indicated by the display **RANGE▼** and can be set from 50*F-99*F. Low Range is economical during non-use periods. More specific Temperature ranges may be determined by the manufacturer.

General Messages

| RUN | PMPS | PURG | AIR | - - - - - - |

| HTR | DRY | - - - - - - |

Priming Mode – MO19

Each time the spa is powered up, it enters Priming Mode, which allows the user to manually run each pump and verify they are primed (air purged) and water is flowing. This typically requires observing the output of each pump separately, and is generally not possible in normal operation. Priming Mode lasts 4 minutes, but can be exited manually by pressing a Temperature Button. The heater will not run during Priming Mode.

| - - - - - - °F | or | - - - - - - °C |

Water Temperature is Unknown: After the pump has been running for 1 minute, the temperature will be displayed.

| 42°F | TOO | COLD |

Too Cold – Freeze Protection

A potential freeze condition has been detected, or the Aux Freeze Switch has closed, and all pumps and blower are activated. All pumps and blowers are ON for at least 4 minutes after the potential freeze condition has ended, or when the aux freeze switch opens. In some cases, pumps may turn on and off and heater may operate during Freeze Protection. This is an operational message, not an error indication.

| WATR | TOO | HOT | - - - - - - |

Water is too Hot (OHS) – MO29

One of the water temp sensors has detected spa water temp 110*F (43.3*C) and the spa functions are disabled. System will auto reset when the spa water temp is below 108*F (42.2*C). Check for extended pump operation or high ambient temp.

| SF-TY | TRIP | - - - - - - |

Safety Tip – Pump Suction Blockage* - MO33

The Safety Tip error message indicates that the vacuum switch has closed. This occurs when there has been a suction problem or a possible entrapment situation avoided. (Note: Not all spas have this feature). *This message can be reset with any button press.

| HTR | MAY | BE | DRY | - - - - - - | WAIT | - - - - - - |

Heater may be Dry (dr)* - MO28

Possible dry heater, or not enough water in the heater to start it. The spa is shut down for 15 min. Press any button to reset the heater start-up. *See "Flow Related Checks" below.

Heater is Dry* –MO27

There is not enough water in the heater to start it. The spa is shut down. After the problem has been resolved, you must press any button to reset and restart heater start up. *See "Flow Related Checks" below.

| HTR | TOO | HOT | - - - - - - |

Heater is too Hot (OHH)*

One of the water temp sensors has detected 118*F (47.8*C) in the heater and the spa is shut down. You must press any button to reset when water is below 108*F (42.2*C). *See "Flow Related Checks" below.

*Flow-Related Checks: Check for low water level, suction flow restrictions, closed valves, trapped air, too many closed jets and pump prime. On some systems even when spa is shut down, some equipment may occasionally turn on to continue monitoring temperature or if freeze protection is needed. (This message can be reset with any button press).

General Maintenance Helps

Reminder messages can be suppressed by using the PREF Menu (see page 11 of User Guide). Reminder messages and message frequency can be chosen individually by the manufacturer. Press a Temperature Button to reset a displayed reminder message.

Check pH with a test kit and adjust pH with the appropriate chemicals. Appears on regular

| CHEK | PH |

schedule (e.g. every 7 days). **Check sanitizer level** and other water chemistry with test kit and adjust with appropriate

| CHEK | CHEM |

chemicals. Appears on regular schedule (e.g. every 7 days).

Clean the filter media as instructed by manufacturer. Appears on regular schedule. (e.g. every 30 days).

| CLN | FLTR |

| TEST | GFCI |

The Ground Fault Circuit Interrupted (GFCI) or Residual Current Device (RCD) is an important safety device and must be tested on a regular basis to verify its reliability. Every user should be trained to safely test the GFCI or RCD associated with the hut tub installation. A GFCI or RCD will have a TEST and RESET button on it that allows a user to verify proper function.

Warning: If freezing conditions exist, a GFCI or RCD should be rest immediately or spa damage could result. This end user should always be trained to test and reset the GFCI or RCD on a regular basis.

Warning! Do not attempt service of control system. Contact your dealer or service organization for assistance. Follow all owner's manual power connection instructions. Installation must be performed by a licensed electrician and all grounding connections must be properly installed.