BP501UX Tech Sheet

Customer: Part Number:	Balboa Water Group 59611 4.0kW 800 Incoloy 59612 5.5kW 800 Incoloy
Custom Box Overlay	
Box Overlay Part Number	N/A Spe Control System
UL System Model For 5.5 UL System Model For 4.0 Software Version ID: Software Version: File Name: Configuration Signature:	 kW: BP501-BP501UX-BS M100_201 V65.0 65.0 BP501_65.0_BP501UX.hex F4C629C5
Eng. Project Number:	5813
Control Panels (See later	pages for more information):
spaTouch™3	Any version (version 3.2 or later required for Clim8zone™ heat pump support)
spaTouch™2	Any version (version 2.19 or later required for CHROMAZON∃™ support; version 2.36 or later required for Clim8zone™ heat pump support)
Icon spaTouch™	Any version (version 3.36 or later required for bba™2 fully integrated functionality)
Menued spaTouch™	Any version (version 2.8 or later required for bba™2 integrated functionality)
TP900	Version 3.1 and later (Version 3.13 or later required for bba™)
TP800	Version 3.1 and later (Version 3.13 or later required for bba [™] ; version 4.11 or later required for bba [™] 2 integrated functionality)
TP700/TP740	Any version (version 1.27 or later required for Clim8zone™ heat pump support)
TP600	Version 2.7 and later (Version 2.12 or later required for bba™/bba™2 On/Off control via menu)
	Any version
TP400T US*	Version 2.7 and later (TP400T CE may be used) (Version 2.12 or later required for bba [™] /bba [™] 2 On/Off control via menu)
TP400W US* TP200T*	Version 2.7 and later (TP400W CE may be used) (Version 2.12 or later required for bba™/bba™2 On/Off control via menu)
TP2001* TP200W*	Any version Any version

* The TP500, TP400T, and TP200T only work in Setups 3, 4, & 7 - 10. The TP400W and TP200W only work in Setups 9 & 10.



System Revision History

Part #	EPN	Date	Originator	Changes Made
59611 59612	5813	09-21-23	BWG	Generic BP501UX system, with an optional user-installed expander board (the expander board mounting hardware is pre- installed).

bba[™]2 / bba[™]3 (Balboa Bluetooth Amp) connection is documented separately.

bba[™]2 / bba[™]3 is integrated into graphic display panels (TP700, TP800, TP900 and spaTouch[™]). With TP600/TP500/TP400/TP200, use the "BT" entry on the menu to toggle bba[™]2 / bba[™]3 power On/Off.



Basic Functions Setup 1 - 10

Power Requirements:

240VAC, 50/60Hz*, 48A, Class A GFCI-protected service (Circuit Breaker = 60A max.), 4 wires [hot, hot, neutral, ground] 120/240VAC, 50/60Hz**, 16/40A, Class A GFCI-protected service (Circuit Breaker = 20/50A max.) - Setups 9 & 10 ONLY, 3 or 4 wires [hot, hot (optional), neutral, ground].

**<u>NOTE:</u>

The above 120V spec is <u>only</u> when using a wall-mount GFCI / breaker. If using a GFCI cord, the breaker is <u>15A</u> and so the service is limited to <u>12A</u>.

*BP systems automatically detect 50Hz vs 60Hz. However, power frequency (50Hz vs 60Hz) is just one of many differences between North American (UL) and CE power, and it is because of these other differences that different BP systems must be used for UL vs CE territories. Also, there are a few countries that use CE power but 60 Hz (such as South Korea) which need CE systems, and a few countries that use UL power but 50 Hz which need UL systems.

HiPot Testing Note:

Disconnect slip terminal with green wires from J52 prior to performing HiPot test. Failure to disconnect may cause a false failure of the test. Reconnect terminal to J52 after successful completion of HiPot test.



Basic Functions Setup 1 - 10

System Ouputs:

Pump 1	240VAC*	Must delive	r 20 GPM throug	15-minute timer (30-minute timer for P1 Low in non-circ setups only) is is the heater pump. gh heater be used with a 2-speed pump in this system. See the BP501G2.					
		1 Speed in	Setups in Setup	s 2, 4, 6, 8 & 10					
Pump 2	240VAC	1-Speed Used in Set	12A max ups 1, 2, 7 & 8	15-minute timer					
Pump 3	240VAC	1-Speed Used in Set	12A max ups 5 & 6	15-minute timer					
Blower	240VAC	1-Speed Used in Set	4A max ups 1 - 4	15-minute timer					
Circ Pump	240VAC*		2A max heater pump in r 20 GPM throug	Programmable Filtration Cycles + Polling Setups 2, 4, 6, 8 & 10. gh heater					
Ozone	240VAC*		.5A max	Slaved to Circ Pump in Circ Setups and to Pump 1 Low in Non-Circ Setups					
Spa Light	10VAC	0n/0ff	2A** max	240-minute timer.					
AV + C8Z***	240VAC	Hot	2A + 8A max	Always on					
Heater	4.0kW @ 24 5.5kW @ 24								

*Pump 1, Circ Pump and Ozone must be the same voltage.

With 120VAC power input (for Setups 9 & 10 only), Pump 1, Circ pump and Ozone must be set to 120VAC by moving wires attached to J50 and J51 to area 1 (Neutral).

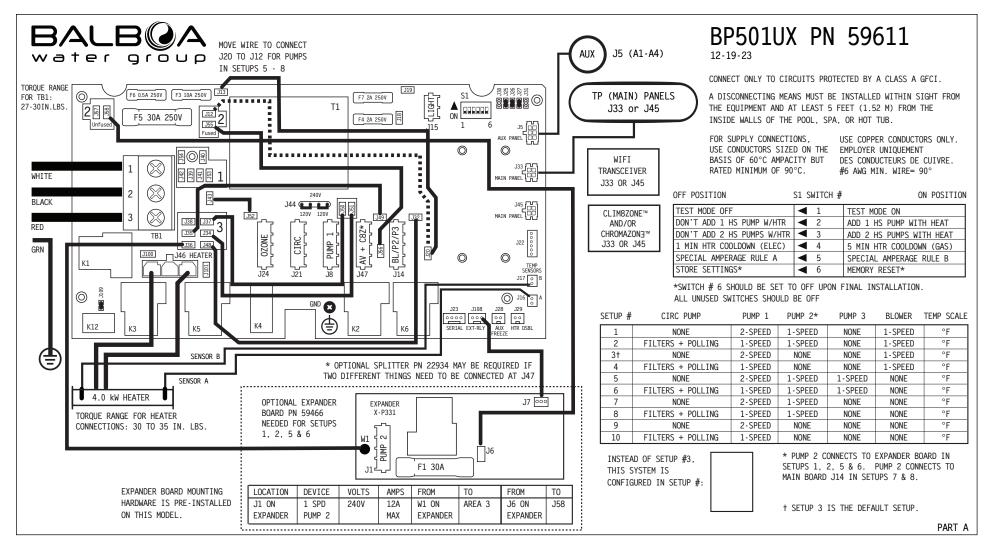
** 2A max limit is shared by On/Off Spa Light <u>and</u> CHROMAZON∃™.

*** Optional splitter PN 22934 can be used to connect two things, such as an audio device and Clim8zone™(C8Z), to J47.



Hardware Setup

Wiring Diagram



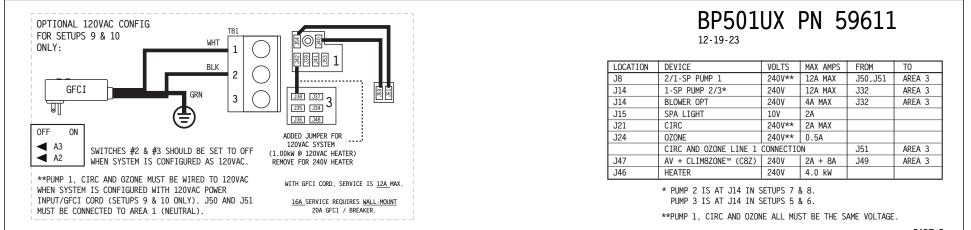


Setup Reference Table

Setup #	Circ Pump	Pump 1	Pump 2	Pump 3	Blower	Temp Scale
1	None	2-Speed	1-Speed	None	1-Speed	°F
2	Programmable Filtration + Polling	1-Speed	1-Speed	None	1-Speed	°F
3	None	2-Speed	None	None	1-Speed	°F
4	Programmable Filtration + Polling	1-Speed	None	None	1-Speed	°F
5	None	2-Speed	1-Speed	1-Speed	None	°F
6	Programmable Filtration + Polling	1-Speed	1-Speed	1-Speed	None	°F
7	None	2-Speed	1-Speed	None	None	°F
8	Programmable Filtration + Polling	1-Speed	1-Speed	None	None	°F
9	None	2-Speed	None	None	None	°F
10	Programmable Filtration + Polling	1-Speed	None	None	None	°F

System (and any replacement board) is shipped in Setup 1

As shown on additional wiring diagram section:



PART B

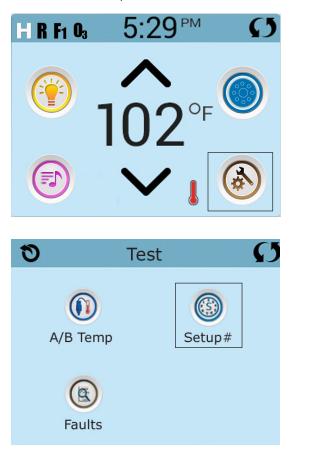


Changing Software Setups with spaTouch™ Icon-Driven Panels

Test Menu Access (S1, Switch 1 ON) Service Technician ONLY. DANGER! HIGH VOLTAGE WILL BE ACCESSIBLE! SERVICE TECHNICIAN ONLY! While the system is running, move DIP Switch 1 (on S1 on the Main circuit board) to ON. The system will enter Test Mode. Moving DIP Switch 1 to OFF will exit Test Mode. 10 **To Change Software Setups:**

While in Test Mode, press the indicated icons to move from screen to screen.

Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending.





Once on the Setup Selection screen, press the Up or Down icon to select the desired Setup Number, then press the Check Mark icon to confirm and to have the spa restart.

ON 🕨

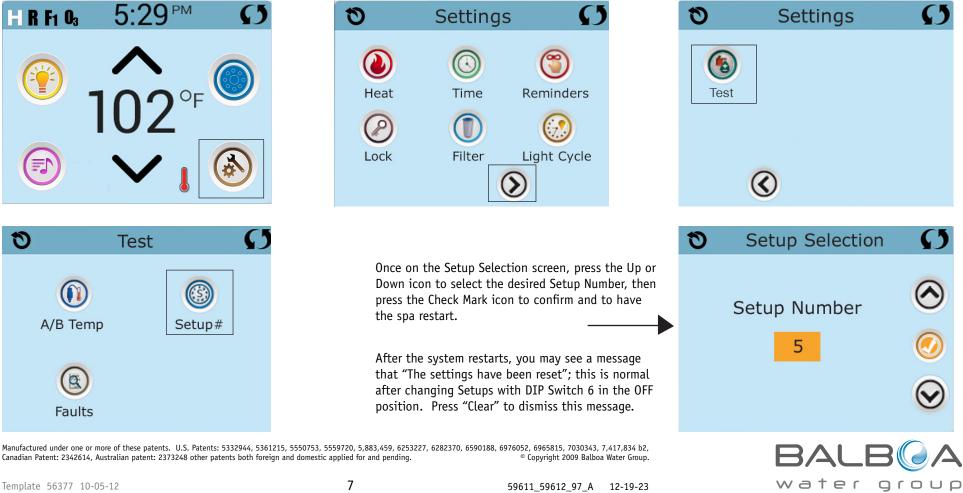
S1

ON

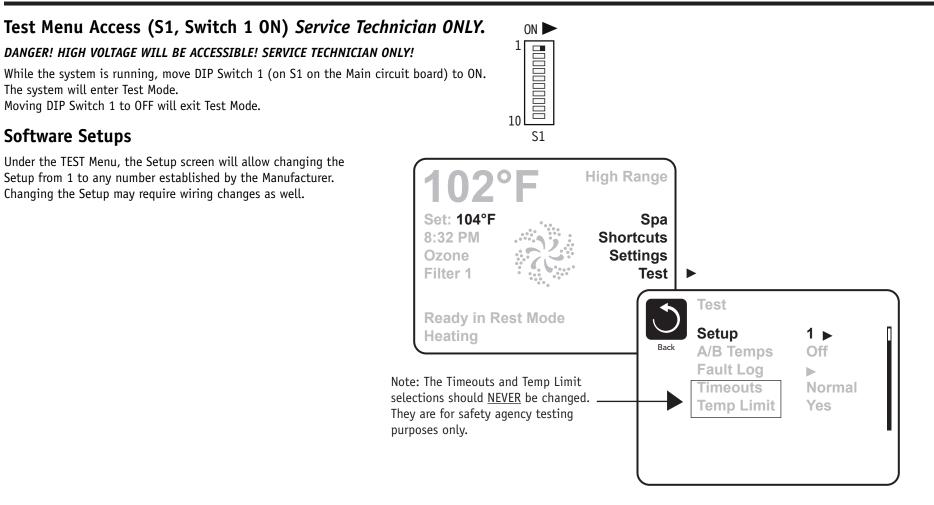
S1

After the system restarts, you may see a message that "The settings have been reset"; this is normal after changing Setups with DIP Switch 6 in the OFF position. Press "Clear" to dismiss this message.

The example screens shown here are from the spaTouch 1 Icon-Driven Panel, but the screens on the spaTouch 2 Panel are similar. The main difference is that the spaTouch 2 display is wider.



Changing Software Setups with TP800 / TP900 / spaTouch™ Menued Panel



Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending. © Copyright 2009 Balboa Water Group.



Changing Software Setups with TP600/TP500/TP400/TP200

Test Menu Access (S1, Switch 1 ON) Service Technician ONLY.

DANGER! HIGH VOLTAGE WILL BE ACCESSIBLE! SERVICE TECHNICIAN ONLY!

While the system is running, move DIP Switch 1 (on S1 on the Main circuit board) to ON. The system will enter Test Mode. Moving DIP Switch 1 to OFF will exit Test Mode.

Software Setups

Under the TEST Menu, the Setup screen will allow changing the Setup from 1 to any number established by the Manufacturer. Changing the Setup may require wiring changes as well.

You will have 1 minute to complete the Setup change after you manually exit Priming Mode. (Once familiar with the process, the Setup change should take less than 15 seconds.)



When the panel displays RUN PMPS PURG AIR, press any Temperature button ONCE to exit Priming Mode. You should see "---T" where the T indicates the system is in Test Mode.



Continued on Next Page.

Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending.



As soon as Switch #1 is placed in the ON position, the temperature will show "T" after it instead of F or C, indicating the System is in Test Mode

Changing Software Setups with TP600/TP500/TP400/TP200 Continued

Again, You will have 1 minute to complete the setup change after you manually exit Priming Mode.

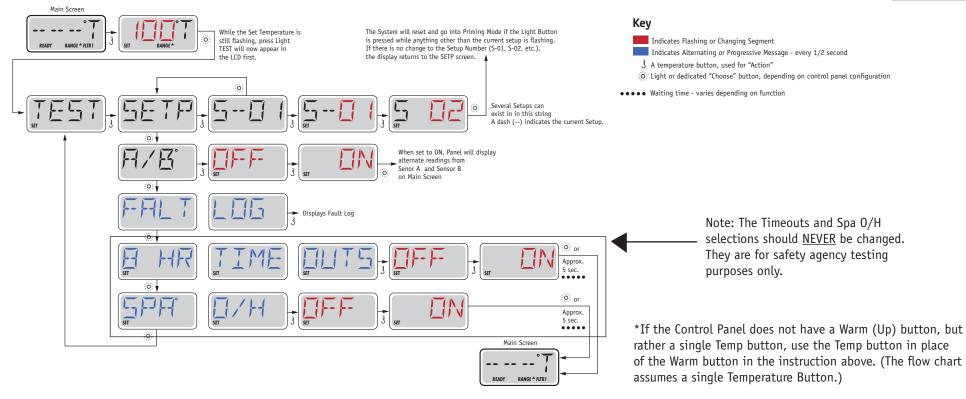
NOTE: Wherever the below says Warm or Temp folowed by Light, on the TP500 press Menu instead of Warm or Temp followed by Light. And whenever the chart below says Light, on the TP500 press Menu insead of Light.

Immediately after exiting Priming Mode, press this sequence of buttons: Warm*, Light, Warm, Warm, Warm. Continue to press Warm until the display shows the Setup Number (S-01, S-02, etc.) you want to switch to. When the correct Setup Number is showing, press Light once, and the system will reset, using the newly-selected Setup from that point on.

Move DIP Switch 1 to the OFF position to take the spa out of Test Mode. °F or °C will replace °T.

Using a permanent marker, write the Setup number on the Setup label mounted inside the system lid (right). This is very important to any service person in the future who may need to replace a circuit board or system and needs to change the Setup on a replacement part while in the field.

NOTE: Changing the Setup may require wiring changes as well - refer to the wiring diagram or wiring diagram addendum.



Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending.



THIS SYSTEM IS

CONFIGURED AS

59611_59612_97_A 12-19-23

Equipment Expansion

Expansion Features

Control Connection Default Fuse Relay 1/2 (J108) in Setups 3, 4, & 7 - 10 None (As Manufactured) N/A Relay 1/2 (J108) in Setups 1, 2, 5 & 6 1-Speed Pump 2 30A

Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending. © Copyright 2009 Balboa Water Group.



DIP Switch Functions

Fixed-fuction DIP Switches

	1	6	
A ON]000	S1

- A1 Test Mode (normally Off).
- A2 In "ON" position, add one high-speed pump (or blower) with Heater.
- A3 In "ON" position, add two high-speed pumps (or 1 HS Pump and Blower) with Heater.
- A5 In "ON" position, enables Special Amperage Rule B. See Special Features section under Configuration Options for functionality with your system. In "OFF" position, enables Special Amperage Rule A.
- A6 Persistent memory reset (Used when the spa is powering up to restore factory settings as determined by software configuration).

A2 and A3 work in combination to determine the number of high-speed devices and blowers that can run before the heat is disabled. i.e. A2 and A3 in the ON position will allow the heater to operate with up to 3 high-speed pumps (or two HS Pumps and Blower) running at the same time. Heat is disabled when the fourth high-speed pump or blower is turned on.

Note: A2/A3 all off = No heat with any high-speed pump or blower.

Assignable DIP Switches

A4 In "ON" position, enables a 5-minute cooldown for some gas heaters (Cooling Time B). In "OFF" position, enables a 1-minute cooldown for electric heaters (Cooling Time A).

Undesignated switches are not assigned a function.



Jumper Definitions

Note: This feature must be enabled in software as well. J109 J30 Do Not Use J31 Non Applicable on UL models (Used on CE models only) J31 J29 Heater Disable Switch Connection. If J29 is shorted by any means, the heater will not run until J29 is no longer shorted. If J29 is shorted during power-up "J29" will appear on the panel. The message can be dismissed with a button press, and is the only control panel notification of J29 being shorted. No message is displayed if J29 is shorted after power-up, but the heater will not run until J29 is no longer shorted. J29 expects a switch closure (not a voltage) as the command signal. In some areas, a local power company may offer discounts based on voluntary "power shedding" devices that may be installed in conjunction with the sp J25, J26, J27 J24 Jumper on center two pins (230V) when no neutral wire is used (240V-dedicated). Two Jumpers installed; one on left 2 pins and one on right 2 pins (115V) when neutral wire is used. J44	
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Two Jumpers installed; one on left 2 pins and one on right 2 pins (115V) when neutral wire is used. J44 150 115V Warning! Setting DIP switches or jumpers incorrectly may cause abnormal system behavior and/or damage to system components. Refer to Switchbank illustration on Wiring Configuration page for correct settings for this system.	
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Refer to Switchbank illustration on Wiring Configuration page for correct settings for this system.	115V 115V
Refer to Switchbank illustration on Wiring Configuration page for correct settings for this system.	115V 115V
	115V 115V
	115V 115V
	11

Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending.



59611_59612_97_A 12-19-23

Replacement Parts

PCBA:

Main PCBA: 59613 Expander PCBA (user-installed): 59466

HEATER(s):

Plug + Click Heater Kit:	58104R16 4.0kW 800Inc
	58083R16 5.5kW 800Inc
Temp Sensor Kit:	53605
CABLES:	21302 Jumper 120V Heate

21302 Jumper 120V Heater

FUSES:

Part Number	Amperage*	Location
30136	30A	F5
26307	2A	F4, F7
26905	0.5A	F6
26904	10A	F3

* The amperages shown above are only intended for identifying fuses on our boards. They are not complete descriptions of those fuses. Please use the part numbers at the left to order fuses directly from Balboa.



General Features		
Feature	Default	
Pump 1 in Filter Cycle (Circ Only)	No	
Pump 1 Low Timer	30 Minutes	Applies in non-circ Setups (configurations) only
General Pump Timer	15 Minutes	
Blower Timer	15 Minutes	
Mister Timer	15 Minutes	
Light Timer	240 Minutes	
Circ (when enabled)	Programmable + Polling	
Cleanup Cycle	30 Minutes	
Cleanup as Preference setting	Yes	
Ozone	With Heater Pump*	
Ozone Suppression	OFF	
Pump Purge	60 Seconds	
Blower Purge	30 Seconds	
Mister Purge	5 Seconds	
Purge Type	Serial - Pumps at lowes	t speed

* The heater Pump can be either a Circ Pump or Pump 1 Low.

Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending.



Temperature Features

Feature	Default
Temperature Display	°F

All temperatures must be specified in °F. The system converts °F to °C dynamically. If Celsius is required for default settings, choose a desired °C value that (after rounding) corresponds to a Fahrenheit value.

°C	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
°F	39	41	43	45	46	48	50	52	54	55	57	59	61	63	64	66	68	70	72
°C	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
°F	73	75	77	79	81	82	84	86	88	90	91	93	95	97	99	100	102	104	
Hi-R	ange l	Min. S	et Ter	np				80°F											
Hi-R	ange l	Max. S	Set Te	mp				104°	F										
Hi-Range Default Temp* 100°F																			
Lo-Range Min. Set Temp						50°F													
Lo-R	ange l	Max. S	Set Te	mp				99°F											
Lo-R	ange l	Defaul	lt Tem	ıp*				70°F											
Free	ze Thr	esholo	1					44°F											
Free	ze Typ	e						Rota	ting -	Pump	s at L	owest	: Spee	d					
Tem	b Lock	Туре						Temp) + Set	tings									

*May be changed by end-user (if enabled)

Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending.



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Time Features

Feature	Default
Time Format*	12 Hour
Filter 1 Start Hour*	20:00 (8:00 PM)
Filter 1 Duration*	2 Hours
Filter Cycle 2 Default*	OFF
Filter 2 Start Hour*	08:00 (8:00 AM)
Filter 2 Duration*	15 Minutes
Light Cycle	Disabled
Light Cycle Default*	OFF
Light Cycle Start Hour*	21:00 (9:00 PM)
Light Cycle Duration*	15 Minutes
Cooling Time A	1 Minute
Cooling Time B	5 Minutes

*May be changed by end-user (if enabled)



Reminder Features

Feature	Default
Reminders Shown*	Yes
Check pH	OFF
Check Sanitizer	OFF
Clean Filter	30 Days
Test GFCI	65 Days
Drain Water	100 Days
Change Cartridge	OFF
Clean Cover	OFF
Treat Wood	OFF
Change Filter	365 Days

*May be changed by end-user (if enabled)

Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending.



Default

No Limitation

2 high-speed pumps max. Blower turns off with 2 high speed pumps.

Drain Mode	Disabled
Demo Mode	Disabled
GFCI Trip	Enabled
Automatic GFCI Test	Disabled
Ozone Slaved to Heater Pump	Yes
Dual Voltage Heater	Always Input Voltage
Safety Suction	Disabled

Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending. © Copyright 2009 Balboa Water Group.



Template 56377 10-05-12

Special Features

Special Amperage Rule A

Special Amperage Rule B

Feature

TP900 Panel Configuration

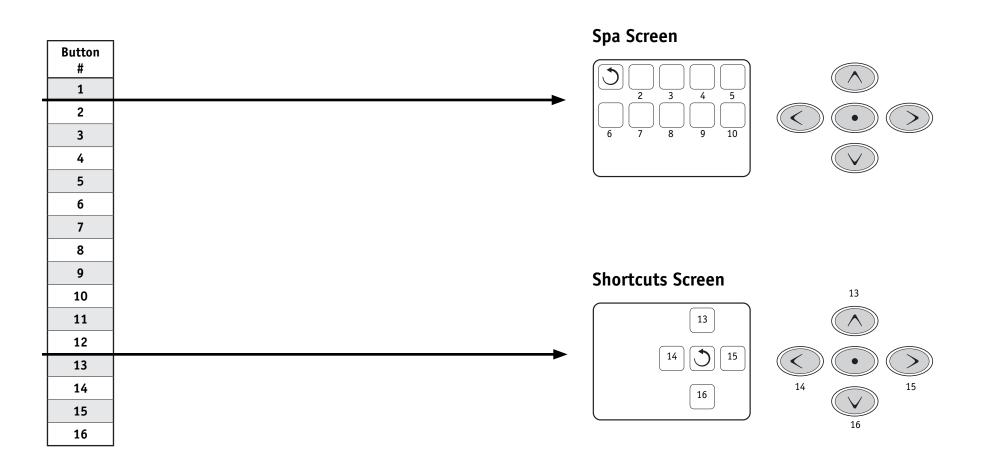
Button Layout Table

Feature #	Setup 1	Setup 2	Setup 3	Setup 4	Setup 5	Setup 6	Setup 7	Setup 8	Setup 9	Setup 10
# A1	N/A	N/A								
A2	Jets 1	Jets 1								
A3	Jets 2	Jets 2	Blower	Blower	Jets 2	Jets 2	Jets 2	Jets 2	Light 1	Light 1
A4	Blower	Blower	Light 1	Light 1	Jets 3	Jets 3	Light 1	Light 1	Invert	Invert
A5	Light 1	Light 1	Invert	Invert	Light 1	Light 1	Invert	Invert	Undefined	(Circ Icon)
A6	Invert	Invert	Undefined	(Circ Icon)	Invert	Invert	Undefined	(Circ Icon)	Undefined	Undefined
A7	Undefined	(Circ Icon)	Undefined	Undefined	Undefined	(Circ Icon)	Undefined	Undefined	Undefined	Undefined
A8	Undefined	Undefined								
A9	Undefined	Undefined								
A10	Undefined	Undefined								
A11	N/A	N/A								
A12	N/A	N/A								
A13	Jets 1	Jets 1								
A14	Jets 2	Jets 2	Blower	Blower	Jets 2	Jets 2	Jets 2	Jets 2	Undefined	Undefined
A15	Blower	Blower	Light 1	Light 1	Jets 3	Jets 3	Light 1	Light 1	Light 1	Light 1
A16	Light 1	Light 1	Invert	Invert	Light 1	Light 1	Invert	Invert	Invert	Invert

A Circ Icon will appear when a Circ Pump is configured.



TP900 Panel Configuration





TP800 Panel Configuration

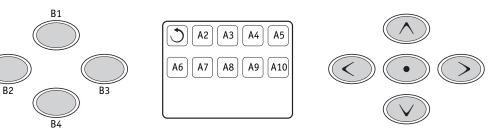
Button Layout Table

Feature #	Setup 1	Setup 2	Setup 3	Setup 4	Setup 5	Setup 6	Setup 7	Setup 8	Setup 9	Setup 10
A1	N/A	N/A								
A2	Jets 1	Jets 1								
A3	Jets 2	Jets 2	Blower	Blower	Jets 2	Jets 2	Jets 2	Jets 2	Light 1	Light 1
A4	Blower	Blower	Light 1	Light 1	Jets 3	Jets 3	Light 1	Light 1	Invert	Invert
A5	Light 1	Light 1	Invert	Invert	Light 1	Light 1	Invert	Invert	Undefined	(Circ Icon)
A6	Invert	Invert	Undefined	(Circ Icon)	Invert	Invert	Undefined	(Circ Icon)	Undefined	Undefined
A7	Undefined	(Circ Icon)	Undefined	Undefined	Undefined	(Circ Icon)	Undefined	Undefined	Undefined	Undefined
A8	Undefined	Undefined								
A9	Undefined	Undefined								
A10	Undefined	Undefined								
A11	N/A	N/A								
A12	N/A	N/A								
A13	Undefined	Undefined								
A14	Undefined	Undefined								
A15	Undefined	Undefined								
A16	Undefined	Undefined								
B1	Jets 1	Jets 1								
B2	Jets 2	Jets 2	Blower	Blower	Jets 2	Jets 2	Jets 2	Jets 2	Undefined	Undefined
B3	Blower	Blower	Undefined	Undefined	Jets 3	Jets 3	Undefined	Undefined	Undefined	Undefined
B4	Light 1	Light 1								



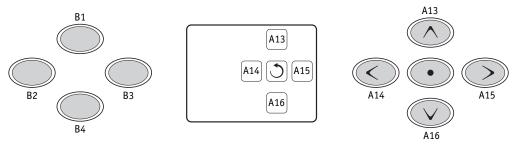
TP800 Panel Configuration

Spa Screen



Note: Button B2 is ALWAYS unused on TP800 when used with this sytsem. A custom overlay will be required.

Shortcuts Screen



Note: Buttons 11 and 12 are not used in this configuration.

Button 1 is fixed.

Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending. © Copyright 2009 Balboa Water Group.



TP600 Panel Configuration

Button Layout Table

Button #	Setups 1 & 2	Setups 3 & 4	Setups 5 & 6	Setups 7 & 8	Setups 9 & 10
1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1
2	Jets 2	Blower	Jets 2	Jets 2	Undefined
3	Blower	Invert	Jets 3	Invert	Invert
4	Up	Up	Up	Up	Up
5	Light 1				
6	Down	Down	Down	Down	Down
LED 1	Jets 1				
LED 2	Jets 2	Blower	Jets 2	Jets 2	Undefined
LED 3	Light 1				
LED 4	Heat On				



Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending.

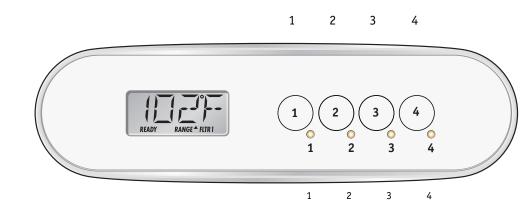


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TP400/TP200 Panel Configuration

Button #	Setups 3 & 4	Setups 7 & 8	Setups 9 & 10				
1	Temperature	Temperature	Temperature				
2	Jets 1	Jets 1	Jets 1				
3	Light 1	Light 1	Light 1				
4	Blower	Jets 2	Undefined				
LED 1	Heater ON	Heater ON	Heater ON				
LED 2	Jets 1 ON	Jets 1 ON	Jets 1 ON				
LED 3	Light ON	Light ON	Light ON				
LED 4	Blower ON	Jets 2 ON	Undefined				

Button Layout Table for TP400T/TP200T



TP400T/TP200T is not supported in Setups 1, 2, 5 & 6 (that have either Pump 3 or both Pump 2 and Blower).

TP400T US

50380-XX includes overlay PN 12511

	- J	
Button #	All Setups	
1	Up	Use the TP40 only have or
2	Down	2), ie, Setup
3	Light 1	

Jets 1

Heater ON Undefined

Light ON

Jets 1 ON

Button Layout Table for TP400W/TP200W

Use the TP400W/TP200W for Setups that only have one pump (No Blower or Pump 2), ie, Setups 9 & 10 only.



TP200T

57281-XX with no overlay 57282-XX includes overlay PN 17325

TP200W

TP400W US

4

LED 1

LED 2

LED 4

57290-XX with no overlay

50384-XX includes overlay PN 12510

57290-XX with no overlay 57283-XX includes overlay PN 17374

Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending.



Auxiliary Panel Features on Bank 1*

Feature	Default
Aux Button A1	Jets 1
Aux Button A2	Jets 2 in Setups 1, 2 & 5 - 8 Undefined in Setups 3, 4, 9 & 10
Aux Button A3	Blower in Setups 1 - 4 Jets 3 in Setups 5 & 6 Undefined in Setups 7 - 10
Aux Button A4	Light

*Bank 1 consists of J5 on the Main Circuit Board. Aux Connection Splitter PN 25257 may be required.

Buttons that are assigned to equipment that is not defined in a Setup will not do anything in that Setup.



Auxiliary Panel Features

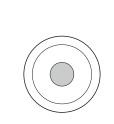
AX10 Panels on Bank 1*

 A1, AX10A1
 No 0/L
 52803

 A2, AX10A2
 No 0/L
 52804

 A3, AX10A3
 No 0/L
 52805

 A4, AX10A4
 No 0/L
 52806



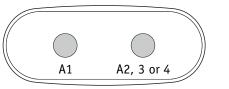
Call Customer Service for additional information about Auxiliary Panels.

*Bank 1 consists of J5 on the Main Circuit Board. Aux Connection Splitter PN 25257 may be required.

AX20

AX20 A1A2No 0/L52800AX20 A1A3No 0/L52801AX20 A1A4No 0/L52802

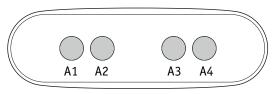
52799



AX20 Auxiliary Panel plugged into Bank 1 will operate A1 + A2, A3 or A4.

AX40

AX40 No 0/L



AX40 Auxiliary Panel plugged into Bank 1 will operate A1 + A2, A3 and A4.

Manufactured under one or more of these patents. U.S. Patents: 5332944, 5361215, 5550753, 5559720, 5,883,459, 6253227, 6282370, 6590188, 6976052, 6965815, 7030343, 7,417,834 b2, Canadian Patent: 2342614, Australian patent: 2373248 other patents both foreign and domestic applied for and pending.



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