BP2100G0 Tech Sheet

Customer: Balboa Water Group

Part Number: 56663-04 825 Incoloy 3kW

56664-04 Titanium 3kW

Custom Box Overlay

Box Overlay Part Number N/A

CE System Model: BP21-BP2100G0-RCA3.0K

Software Version ID: M100_225 V65.0

Software Version: 65.0

File Name: BP2100_65.0_BP2100G0_C8ZSW8.hex

Configuration Signature: 4EB7B6FE

Eng. Project Number: 5663

Control Panels:

TP900

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)

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)

TP600 Version 2.7 and later (Version 2.12 or later required for bba™/bba™2 On/Off control via menu)

Version 3.1 and later (Version 3.13 or later required for bba[™])

TP400T CE Version 2.7 and later (TP400T US should <u>not</u> be used) (Version 2.12 or later required for bba[™]/bba[™]2 On/Off control via menu)

TP400W CE Version 2.7 and later (TP400W US should <u>not</u> be used) (Version 2.12 or later required for bba[™]/bba[™]2 On/Off control via menu)





System Revision History

Part #	EPN	Date	Originator	Changes Made
ZT000114	4381	09-18-14	BWG	New generic BP2100 with <u>no</u> Expander board.
56662 56663 56664	4381	09-25-14	BWG	Release to production.
"	N/A	12-29-14	BWG	Change model name to BP2100G0.
56662-01 56663-01 56664-01	4776	10-26-16	BWG	Updated to latest software version, adding topside-intergrated bba™2 support. Released to production.
56662-02 56663-02 56664-02	4890	05-08-17	BWG	Updated to latest software version, adding bba™/bba™2 On/Off support to TP600/TP400 Menus. Released to production.
56662-03 56663-03 56664-03	5098	01-31-19	BWG	Redesigned BP2100 board. + updated software to support CHROMAZON∃™.
ıı .	"	10-21-19	BWG	Correct typos in "BP2X-WIRE kit" section of wiring diagram part B.
56663-04 56664-04	5663	09-14-22	BWG	Update to support Clim8zone™ heat pump. Update board over-voltage protection. 56662-03 was obsoleted earlier.

bba[™]2 / bba[™]3 (Balboa Bluetooth Amp) connection is documented separately. bba[™]2 / bba[™]3 is integrated into graphic display panels (including TP800, TP900, and spaTouch[™]).



Basic Functions Setups 1-14

Power Requirements:

Single Service [3 wires (line, neutral, ground)] – RESTRICTED OPERATIONS (See page 5) 230VAC, 50/60Hz*, 1b, 32A, (Circuit Breaker rating = 40A max.)

Dual Service [5 wires (line 1, neutral 1, line 2, neutral 2, ground)] 230VAC, 50/60Hz, 2b, 16A, (Circuit Breaker rating = 20A max each phase line.)

3-Service [5 wires (line 1, line 2, line 3, neutral, ground)] 230VAC line-to-neutral**, 50/60Hz*, 3þ, 16A, (Circuit Breaker rating = 20A max each phase line.)

HiPot Testing Note:

Disconnect slip terminal with green wires from J6 prior to performing HiPot test. Failure to disconnect may cause a false failure of the test. Reconnect terminal to J6 after successful completion of HiPot test.

IMPORTANT - Service must include a neutral wire, with a line to neutral voltage of 230VAC.

In 3x16A Service:

Pump 2 and Blower (if any) are on one service.

The Heater is on another service.

Everything else is on the remaining service.

In 2x16A Service:

Pump 2, Blower (if any), and the Heater are on one service.

Everything else is on the other service.



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^{*} 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.

^{** 3-}phase service measured line-to-line will read about 400V, but BP systems do not use it line-to-line.

Basic Functions Setups 1-14

System (Ouputs:				In Group 3
Pump 1	230VAC	•	11A max** Setups 6 - 9	15-minute timer for High Speed, 15-Minute timer for Low Speed	×
		heater pump r 20 GPM thr	in Setups 10 - ough heater	- 14	
Pump 2	230VAC	1-Speed in	11A max** Setups 2, 3, 6 Setups 4, 5, 8		
Blower	230VAC	'		15-minute timer , 7, 9, 10, 12 & 14	
Circ Pump		•	in Setups 1 –	Programmable Filtration Cycles + Polling 9	
0zone	230VAC		.5A max**	Slaved to Circ Pump in Setups 1 - 9 Independent in Setups 10 - 14	
Spa Light	10VAC	0n/0ff	2A* max	240-minute timer.	
AV + C8Z***	230VAC	Hot	2A+8A max	Always on	
Heater	3.0kW @ 24	40VAC max			

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

Note: When using Clim8zone™, switches A2 and A3 must be Off and switch A8 must be On. This combination of switches causes only items in Group 3 -- Pump 1 at High Speed -- to turn both the electric Heater and Clim8zone™ can continue to run while Pump 2 and/or Blower are On at any speed.



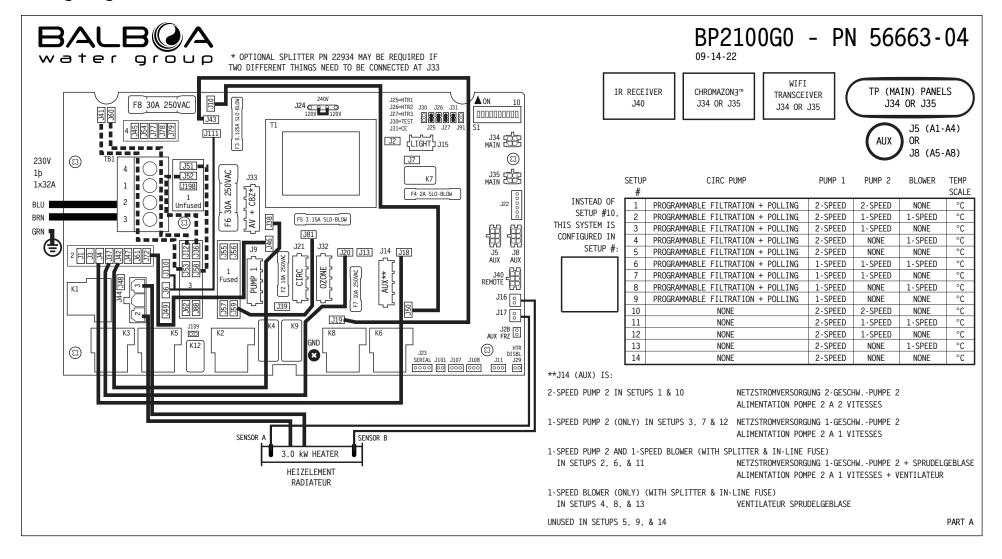
3:

^{**} These are individual maximums but depending on the electrical services they may need to be reduced.

^{***} Optional splitter PN 22934 can be used to connect two things, such as an audio device and Clim8zone™(C8Z), to J33.

Hardware Setup

Wiring Diagram



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.



Hardware Setup

Settings

SINGLE SERVICE 230V 1b / 1x32A. DUAL SERVICE 230V 2x1b / 3x16A. THREE-SERVICE 230V 3b / 3x16A LOCATION MAX AMPS NETZSTROMVERSORGUNG 2/1-GESCHW.-PUMPE 1 11A ALIMENTATION POMPE 1 A 2/1 VITESSES 2/1-SPD PUMP 1 J14 AUX**: 2/1-SPD PUMP 2 +/ BLOWER 11A+5A NETZSTROMVERSORGUNG 2/1-GESCHW.-PUMPE 2 +/ SPRUDELGEBLASE ALIMENTATION POMPE 2 A 2/1 VITESSES +/ VENTILATEUR J15 10V BELEUCHTUNG ECLAIRAGE BAIN HYDRO SPA LIGHT 2A* (@10V) J21 KREISLAUF PUMPE POMPE DE CIRCULATION CIRC PUMP 2A J32 OZONGENERATOR GENERATOROZONE OZONE GENERATOR 0.5A J33 AV + CLIM8ZONE™ (C8Z) 2A + 8A J44 HEATER 3.0kW

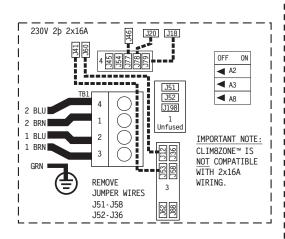
* 2A LIMIT IS SHARED BY J15 SPA LIGHT AND CHROMAZON∃™

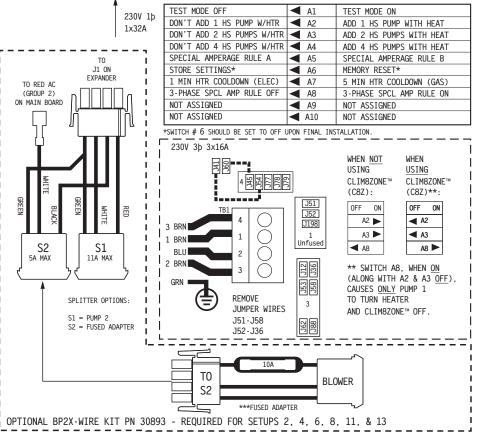
FOR SUPPLY CONNECTIONS, USE CONDUCTORS SIZED ON THE BASIS OF 60°C AMPACITY BUT RATED MINIMUM OF 90°C.

USE COPPER CONDUCTORS ONLY. EMPLOYER UNIQUEMENT DES CONDUCTEURS DE CUIVRE.

TORQUE RANGE FOR MAIN TERMINAL BLOCK (TB1): 27-30 IN. LBS. (31.1-34.5 kg cm)

Template 56377 10-05-12





SWITCHBANK S1 OFF



BP2100G0 - PN 56663-04

PART B

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.



SWITCHBANK S1 ON

Setup Reference Table

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

System (and any replacement board) is shipped in Setup 10

Color Key	Output
	J14 (Aux) and splitter and in-line Blower fuse
	J14 (Aux) on Main Board



Changing Software Setups with spaTouch™ Icon-Driven Panels

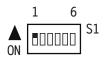
Test Menu Access (S1, Switch 1 ON) Service Technician ONLY.

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.

ON 1 10 S1

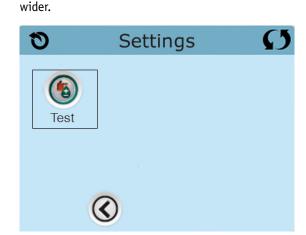


To Change Software Setups:

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



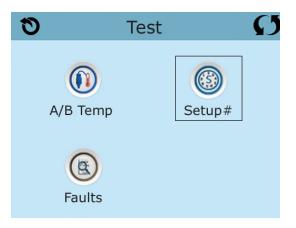




The example screens shown here are from the

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



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.

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.



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 2012 Balboa Water Group.

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

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

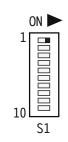
DANGER! HIGH VOLTAGE WILL BE ACCESSIBLE! SERVICE TECHNICIAN ONLY!

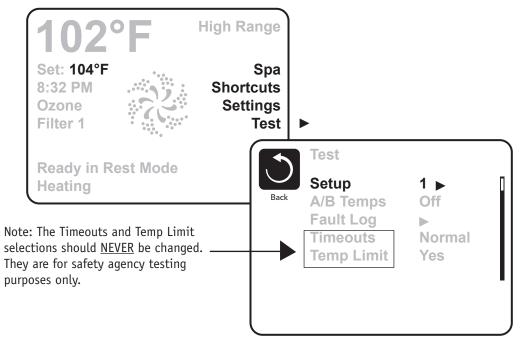
While the system is running, move DIP Switch 1 (on S1 on the Main circuit board) to ON. The system will enter Test Mode.

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.







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Equipment Expansion

Expansion Features		
Control Connection	Default	Fuse
Relay 1 (J101)	Undefined	None
Relay 7/8 (J107)	Undefined	None
Relay 9/10 (J108)	Undefined	None



DIP Switch Functions

Fixed-fuction DIP Switches

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.

A4 In "ON" position, add four high-speed pumps (or 3 HS Pumps 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, A3, and A4 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 and A4 in the OFF 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/A4 all off = No heat with any high-speed pump or blower.

Assignable DIP Switches

A7 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).

A8 In "ON" position, 3-Phase Special Amperage Rule is enabled.

In "OFF" position, 3-Phase Special Amperage Rule is disabled.

Undesignated switches are not assigned a function.



Jumper Definitions

J109	Non Applicable on CE models	J109 🏻
J91	Real Time Clock Enable/Disable	J91 © a -
120	Note: This Jumper should NOT be shorted when the Control Panel can display time of day.	
J30	Do Not Use	
J31	Jumper on 1 pin with 2.0kW or smaller heater	121 G
	Jumper on 2 pins with a 3.0kW or higher heater	J31 🚰
J29	Heater Disable Switch Connection. If J29 is shorted by any means, the heater will not run until J29 is no longer shorted.	J29 👸
	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 installe	d in conjunction with the spa.
J25, J26, J27	Heater Type Settings.	
	Note: Factory Configured do not change.	J25 2 J26
J24	Jumper on center two pins (230V) when heater is running at 240V.	230V
	Two Jumpers installed; one on left 2 pins and one on right 2 pins (115V) when heater is running at 120V.	J24 0 0 0 0 115 15V

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. Contact Balboa if you require additional configuration pages added to this tech sheet.

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.



Replacement Parts

PCBA:

Main PCBA: 59156-01 Expander PCBA: N/A

HEATER(s):

Plug + Click Heater Kit: 58107R16 3.0kW 825kW

55626R16 3.0kW Titanium

Temp Sensor Kit: 53605

CABLES: N/A

FUSES:

Part Number	Amperage*	Location
30136	30A	F6, F8
26307	2A	F4
24825	0.125A	F3
30122	10A	F2, F7
26976	3.15A	F5

^{*} 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	15 Minutes
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

Ozone With Heater Pump*

Ozone Suppression OFF

Pump Purge60 SecondsBlower Purge30 SecondsMister Purge5 Seconds

Purge Type Serial - Pumps at lowest speed



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

°C

Temperature Features

Temperature Display

Feature Default

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	<i>5</i>	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	<i>57</i>	59	61	63	64	66	68	70	72
°C	23	24	25	26	27	28	29	30	31	<i>32</i>	33	34	<i>35</i>	36	37	38	39	40	
°F	73	<i>75</i>	77	79	81	82	84	86	88	90	91	93	95	97	99	100	102	104	

Hi-Range Min. Set Temp	80°F
Hi-Range Max. Set Temp	104°
Hi-Range Default Temp*	100°
Lo-Range Min. Set Temp	50°F
Lo-Range Max. Set Temp	99°F
Lo-Range Default Temp*	70°F
Freeze Threshold	44°F

Freeze Type Rotating - Pumps at Lowest Speed

Temp Lock Type Temp + Settings



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

Time Features

Feature	Default
Time Format*	24 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
	OFF
Light Cycle Default*	UFF
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	<i>OFF</i>
Check Sanitizer	<i>OFF</i>
Clean Filter	30 Days
Test GFCI	65 Days
Drain Water	100 Days
Change Cartridge	OFF
Clean Cover	<i>OFF</i>
Treat Wood	<i>OFF</i>
Change Filter	365 Days

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

Special Features

Feature Default
Special Amperage Rule A No Limitation

Special Amperage Rule B 1 High Speed Pump Maximum, and also Blower turns off with 1 High Speed Pump

3-Phase Special Amperage Rule Pumps in Group 3 (ie, Pump 1) are the only ones which turn the Electric Heater and Clim8zone™ Off

Pumps or Blower not in Group 3 (eq. Pump 2) do not turn the Electric Heater and Clim8zone™ Off

Drain Mode Disabled
Demo Mode Disabled

GFCI Trip Not Applicable for CE Models

Ozone Slaved to Heater Pump

Yes in circ setups

No in non-circ setups

Dual Voltage Heater Always Input Voltage

Safety Suction Disabled

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TP900 Panel Configuration

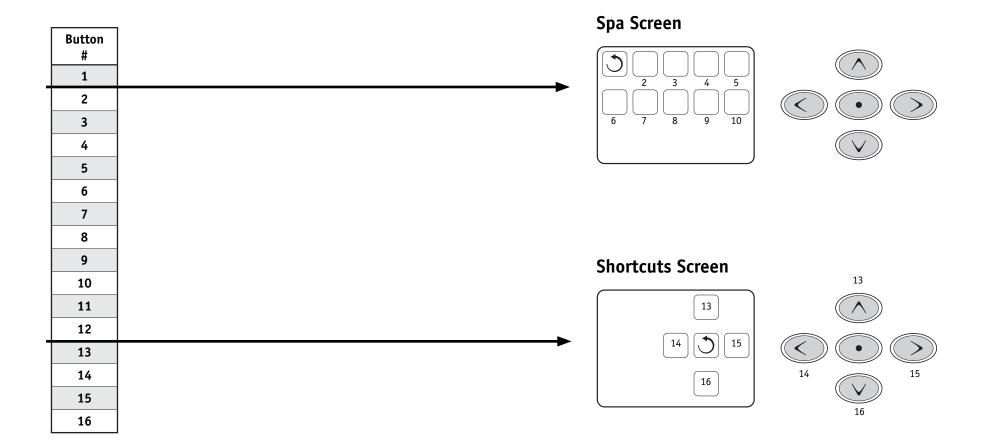
Button Layout Table

Feature #	Setups 10 & 12	Setups 1, 3 & 7	Setup 13	Setups 4 & 8	Setup 14	Setups 5 & 9	Setup 11	Setups 2 & 6
A1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A2	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1
А3	Jets 2	Jets 2	Blower	Blower	Light 1	Light 1	Jets 2	Jets 2
A4	Light 1	Light 1	Light 1	Light 1	Invert	Invert	Blower	Blower
A5	Invert	Invert	Invert	Invert	Undefined	(Circ Icon)	Light 1	Light 1
A6	Undefined	(Circ Icon)	Undefined	(Circ Icon)	Undefined	Undefined	Invert	Invert
A7	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	(Circ Icon)
A8	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
A9	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
A10	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
A11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A13	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1
A14	Jets 2	Jets 2	Blower	Blower	Undefined	Undefined	Jets 2	Jets 2
A15	Light 1	Light 1	Light 1	Light 1	Light 1	Light 1	Blower	Blower
A16	Invert	Invert	Invert	Invert	Invert	Invert	Light 1	Light 1

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



TP900 Panel Configuration



56663-04_56664-04_97_A 10-17-22

Template 56377 10-05-12

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TP800 Panel Configuration

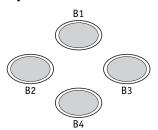
Button Layout Table

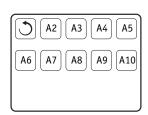
Template 56377 10-05-12

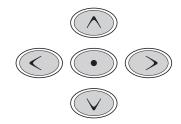
Feature #	Setups 10 & 12	Setups 1, 3 & 7	Setup 13	Setups 4 & 8	Setup 14	Setups 5 & 9	Setup 11	Setups 2 & 6
A1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A2	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1
А3	Jets 2	Jets 2	Blower	Blower	Light 1	Light 1	Jets 2	Jets 2
A4	Light 1	Light 1	Light 1	Light 1	Invert	Invert	Blower	Blower
A 5	Invert	Invert	Invert	Invert	Undefined	(Circ Icon)	Light 1	Light 1
A6	Undefined	(Circ Icon)	Undefined	(Circ Icon)	Undefined	Undefined	Invert	Invert
A7	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	(Circ Icon)
A8	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
A9	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
A10	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
A11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A13	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
A14	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
A15	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
A16	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
B1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1	Jets 1
B2	Jets 2	Jets 2	Undefined	Undefined	Undefined	Undefined	Jets 2	Jets 2
В3	Undefined	Undefined	Blower	Blower	Undefined	Undefined	Blower	Blower
В4	Light 1	Light 1	Light 1	Light 1	Light 1	Light 1	Light 1	Light 1

TP800 Panel Configuration

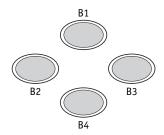
Spa Screen

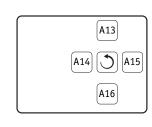


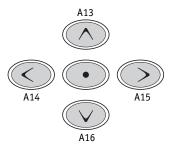




Shortcuts Screen







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

Button 1 is fixed.

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



TP600 Panel Configuration

Button Layout Table

Button #	Setups 1, 3, 7, 10 & 12	Setups 4, 8 & 13	Setups 5, 9 & 14	Setups 2, 6 & 11
1	Jets 1	Jets 1	Jets 1	Jets 1
2	Jets 2	Blower	Undefined	Jets 2
3	Invert	Invert	Invert	Blower
4	Up	Up	Up	Up
5	Light 1	Light 1	Light 1	Light 1
6	Down	Down	Down	Down
LED 1	Jets 1	Jets 1	Jets 1	Jets 1
LED 2	Jets 2	Blower	Undefined	Jets 2
LED 3	Light 1	Light 1	Light 1	Light 1
LED 4	Heat On	Heat On	Heat On	Heat On



TP600

55676-XX

No Overlay



TP400 Panel Configuration

Button Layout Table for TP400T

Button #	Setups 1, 3, 7, 10 & 12	Setups 4, 8 & 13	Setups 5, 9 & 14
1	Temperature	Temperature	Temperature
2	Jets 1	Jets 1	Jets 1
3	Light 1	Light 1	Light 1
4	Jets 2	Blower	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	Jets 2 ON	Blower ON	Undefined



TP400T is not supported in Setups 2, 6 & 11.

Button Layout Table for TP400W

Button #	All Setups	
1	Up	
2	Down	
3	Light 1	
4	Jets 1	
LED 1	Heater ON	
LED 2	Undefined	
LED 3	Light ON	
LED 4	Jets 1 ON	

Use the TP400W for setups that only have one pump (No Blower or Pump 2).

TP400W CE

50259-XX

Includes overlay PN 12510.

TP400T CE

50260-XX

Includes overlay PN 12511.



Auxiliary Panel Features on Bank 1*

Feature	Default
Aux Button A1	Jets 1
Aux Button A2	Jets 2
Aux Button A3	Blower
Aux Button A4	Light

Auxiliary Panel Features on Bank 2*

Feature	Default
Aux Button A5	Jets 1
Aux Button A6	Jets 2
Aux Button A7	Blower
Aux Button A8	Light

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

*Bank 1 consists of J5 on the Main Circuit Board. Bank 2 consists of J8 on the Main Circuit Board.

Aux Connection Splitter PN 25257 may be required.



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.

AX10 Panels on Bank 2*

A5, AX10A1	No O/L	52803
A6, AX10A2	No O/L	52804
A7, AX10A3	No O/L	52805
A8, AX10A4	No O/L	52806

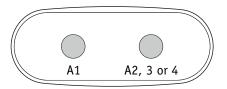
*Bank 1 consists of J5 on the Main Circuit Board.

Bank 2 consists of J8 on the Main Circuit Board.

Aux Connection Splitter PN 25257 may be required.

AX20

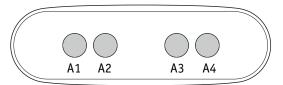
AX20 A1A2 No 0/L 52800 AX20 A1A3 No 0/L 52801 AX20 A1A4 No 0/L 52802



AX20 Auxiliary Panel plugged into Bank 1 will operate A1 + A2, A3 or A4. AX20 Auxiliary Panel plugged into Bank 2 will operate A5 + A6, A7 or A8.

AX40

AX40 No 0/L 52799

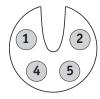


AX40 Auxiliary Panel plugged into Bank 1 will operate A1 + A2, A3 and A4. AX40 Auxiliary Panel plugged into Bank 2 will operate A5 + A6, A7 and A8.



Remote Panel Features

Feature	Default
Remote Button A1	Jets 1
Remote Button A2	Jets 2
Remote Button A3	Undefined
Remote Button A4	Blower
Remote Button A5	Light
Remote Button A6	Undefined
Remote Button A7	Undefined
Remote Button A8	Undefined



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

Remote Panel Part Number

Overlay Part Number

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 2012 Balboa Water Group.

