

BP1500 Tech Sheet

Balboa Water Group

Part Number: 56125-02 4kW 800 Incoloy Element
56126-02 With 4kW Titanium Element

Compatible Plumbing Kits (Coupling nuts and seals included)

55911 2" Tailpieces (2-Speed Pump 1)
55914 1.5" Tailpieces (2-Speed Pump 1)
55912 1" Tailpiece Inserts (Circ)
55913 One Direct Circ Pump Coupling and one 1" Tailpiece Insert

UL System Model: BP15-BP1500-BJ
Software ID: M100_200 V6
Software Version: 6.0
Hex File: BP1500_6.0_BP15TP4A.hex
Configuration Signature: 0608A20D

Eng. Project: 3767

Base PCBs / PCBA's:

Power Board: 22117_B / 56128
Logic Board: 22121_E / 56127-02

Control Panels:

TP 600 55673-05
Software Version 2.3 and later
TP400T 50260
Software Version 2.4 and later
TP400W 50259
Software Version 2.4 and later

Auxiliary Panels

AX10A2 55919



User Interface and Programming Guide:

http://service.balboa-instruments.com/zz40940_download.zip

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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. All material copyright of Balboa Water Group.

Template 40941_J 04-02-10

System Revision History

Part #	EPN	Date	Originator	Changes Made
55697 and 55700	2277	05-19-09	Balboa	Initial Generic Configuration 800 Incoloy and Titanium models Initial release
		06-09-09	Balboa	Minor corrections and clarification. Add J23 / J32 connection for Misc.
		08-01-09	BWG	Minor corrections, hardware revs and firmware update
		08-14-09	BWG	Tech Sheet update
	3297	12-01-09	BWG	Software update and configuration update (remove GFCI Test Feature)
	3333	02-09-10	BWG	Wiring Diagram Update to Rev B Power Board and Rev C Logic Board
	3333	02-17-10	BWG	Software update to Version 3.0
	3333	03-12-10	BWG	P1 Low Timeout Update. Add Setup Change Reference
	3479	10-11-10	BWG	RMA Tester and eFAST compatibility added, Transformer Update
56125-01 and 56126-01	3607	09-15-11	BWG	TP400 support, Auto Linking, Set Time moved to menu
56125-02 and 56126-02	3767	01-10-12	BWG	Add iPhone App support
56125-02 and 56126-02	N/A	04-02-12	BWG	Lo-Range Max to 80°F in Tech Sheet only. Actual Software OK.



Setup Changes with DIP Switch 1 ON

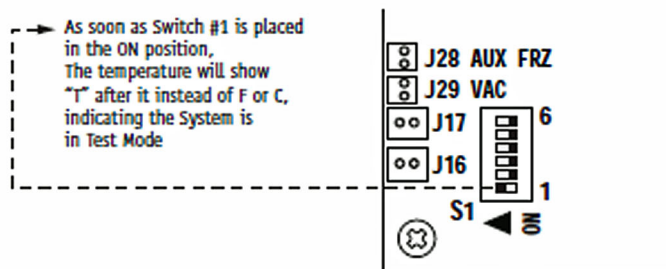
Read and understand these instructions before beginning this process.

Know the Setup Number you want before you power up the spa and wait to power up the spa until you're ready to change the Setup Number.

The system must be in Test Mode, so move Switch 1 to the ON position. The Test Menu will then be available.

Power up the spa, and press any button once to Link the panel. (Note: Switch 1 can be moved to the ON position immediately after power-up, if preferred - Danger! High Voltage will be present!)

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.)



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

Move DIP Switch 1 (on S1 on the Logic circuit board) to ON.

The system will enter Test Mode.

Moving DIP Switch 1 to OFF will exit Test Mode.



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.



Setup Changes – Continued

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

Immediately after exiting Priming Mode, press this sequence of buttons: Warm*, Light, Warm, 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.

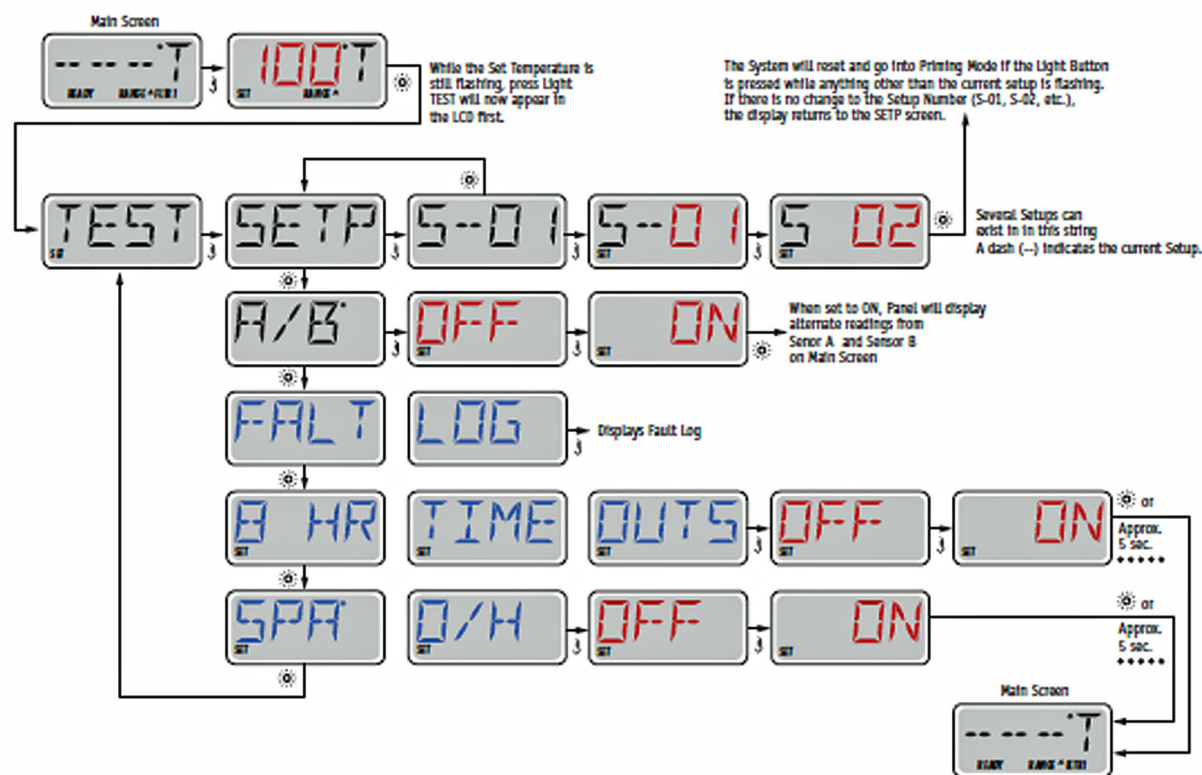
NOTE: Changing the Setup may require wiring changes as well - refer to the wiring diagram or wiring diagram addendum.

THIS SYSTEM IS
CONFIGURED AS
SETUP #



Key

- Indicates Flashing or Changing Segment
- Indicates Alternating or Progressive Message - every 1/2 second
- ⏏ A temperature button, used for "Action"
- ⦿ Light or dedicated "Choose" button, depending on control panel configuration
- Waiting time - varies depending on function



*If the Control Panel does not have a Warm (Up) button, but rather a single Temp button, use the Temp button in place of the Warm button in the instruction above. (The flow chart assumes a single Temperature Button.)

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Configuration Options

General Features

Feature	Default
Pump 1 in Filter Cycle (Circ Only)	No
Pump 1 Low Timer	30 Minutes
General Pump Timer	15 Minutes
Blower Timer	15 Minutes
Mister Timer (N/A)	15 Minutes
Light Timer	240 Minutes
Circ	Like P1 Low
Cleanup Cycle	<i>30 Minutes</i>
Cleanup as Preference setting	Yes
Ozone	With Heater Pump*
Ozone Suppression	OFF
Pump Purge	60 Seconds
Blower Purge	30 Seconds
Mister Purge (N/A)	5 Seconds

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



Blue Indicates New Custom Configuration Default (Setup 1)

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. All material copyright of Balboa Water Group.

Configuration Options

Temperature Features

Feature	Default
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Temperature Display	°F
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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-Range Min. Set Temp	80°F
Hi-Range Max. Set Temp	104°F
Hi-Range Default Temp*	100°F
Lo-Range Min. Set Temp	50°F
Lo-Range Max. Set Temp	80°F
Lo-Range Default Temp*	70°F
Freeze Threshold	44°F
Temp Lock Type	Temp + Settings

Time Features

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

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



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Configuration Options

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

Special Features

Feature	Default
Special Amperage Rule 1	No Limitation
Special Amperage Rule 2	No Limitation

Drain Mode	Disabled
Demo Mode	Disabled
Automatic GFCI Test	Disabled
Ozone Slaved to Heater Pump	Yes

**Editable by end-user*



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Configuration Options

TP400 Control Panel Features

Feature	TP400T	TP400W
Button 1	Temperature	Up
Button 2	Jets 1	Down
Button 3	Light 1	Light 1
Button 4	Jets 2	Jets 1
LED B1	Heat ON	Heat ON
LED B2	Jets 1	Unused
LED B3	Light 1	Light 1
LED B4	Jets 2	Jets 1

TP400T

50260 ►

Includes Overlay PN 12511



TP400W

50259 ►

Includes Overlay PN 12510

TP400W requires the use of an AX10A2 in Setups 1 - 4.



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Configuration Options

TP600 Control Panel Features

Feature	Default
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Button 1	<i>Jets 1</i>
Button 2	<i>Jets 2</i>
Button 3	<i>Flip</i>
Button 4	<i>Up</i>
Button 5	<i>Light 1</i>
Button 6	<i>Down</i>

LED 1	<i>Jets 1</i>
LED 2	<i>Jets 2</i>
LED 3	<i>Light 1</i>
LED 4	<i>Heat ON</i>

TP600

55673-05 ►

Includes overlay PN12511



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Configuration Options

Auxilliary Panel Features

Feature

Aux Button A1

Aux Button A2

Aux Button A3

Aux Button A4

Default

Jets 1

Jets 2

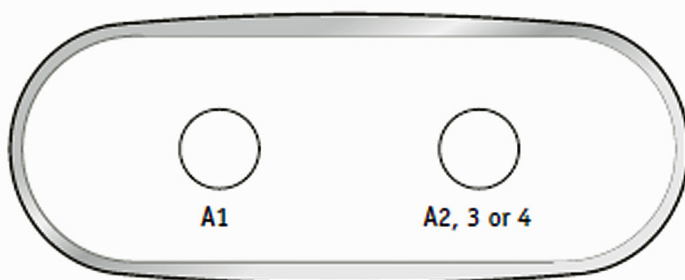
Unused

Light

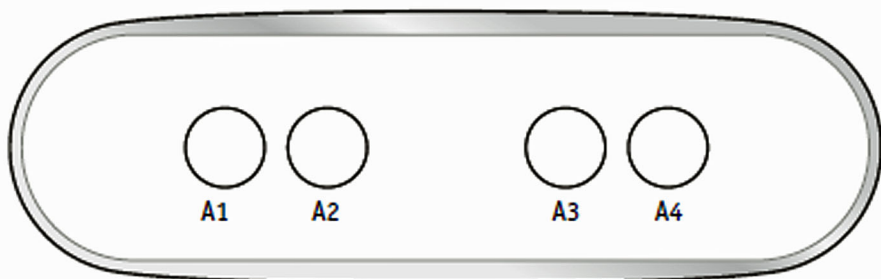
AX10 A1	No O/L	52803
AX10 A2	AUX O/L	55919
AX10 A3	No O/L	52805
AX10 A4	No O/L	52806



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



AX40	No O/L	52799
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