

MS40U Tech Sheet

Customer: Master Spas

Part Number: 56350-07 800 Incoloy 4.0kW heater
59360 825 Incoloy 4.0kW "3S" heater

Custom Box Overlay
Box Overlay Part Number N/A

UL System Model: BP20-MS40U-AS
Software Version ID: M100_220 V47.0
Software Version: 47.0
File Name: BP2000_47.0_MS40U_ALTHR.hex
Configuration Signature: 346FFC17

Eng. Project Number: 5210

Control Panels:

spaTouch™2 Any generic version (version 2.0 or later required for bba™2 fully integrated functionality; version 2.19 or later required for CHROMAZON3™ support)
Icon spaTouch™ Any generic version (version 3.36 or later required for bba™2 fully integrated functionality)
Menued spaTouch™ Any generic version (version 2.8 or later required for bba™2 integrated functionality)
MP800 Version 3.1 and later (Version 3.13 or later required for bba™; version 4.11 or later required for bba™2 integrated functionality)

System Revision History

Part #	EPN	Date	Originator	Changes Made
56350	3914	11-13-12	Customer	New system
56350	3914	03-21-13	BWG	Correction to P1 Low timeout documentation
56350-01	3990	02-08-13	Customer	Add 120V demo conversion kit
56350-02	4231	03-11-14	Customer	Disable pump1 in filter cycle setting, update reminder settings, and correct various settings on Tech Sheet
56350-03	4610	10-16-15	Customer	Updated to latest software version, adding topside-intergrated bba™ support. Adds GFCI Trip (but not GFCI Automatic Test).
ZT000212	4610	10-22-15	Customer	Temporary PN for sample.
56350-03	4610	11-11-15	Customer	Approved for production.
ZT000235	4656	01-05-16	Customer	Add SW7 to enable/disable pump 1 in filter cycle.
56350-04	4656	02-01-16	Customer	Release to production.
56350-05	4779	10-13-16	BWG	Updated to latest software version, adding topside-intergrated bba™2 support. Released to production.
56350-06	4981	12-07-17	Customer	Add Setup 6, plus update software to latest version, which resolves the filter end time issue in the previous version.
56350-07	5208	03-28-19	Customer	Redesigned BP2000 board. + updated software to support CHROMAZON™ & M8. Add Alternate High Range select DIP switch.
59360	5210	09-20-19	Customer	Add 4.0kW 825 Incoloy “3S” system PN.

bba™ & bba™2 (Balboa Bluetooth Amp) connection is documented seperately.

bba™ is integrated into graphic display panels (TP800, TP900 and spaTouch™). With TP600/TP400, use the “BT” entry on the menu to toggle bba™ power On/Off.

bba™2 is integrated into graphic display panels (TP800, TP900 and spaTouch™). With TP600/TP400, use the “BT” entry on the menu to toggle bba™2 power On/Off.

Basic Functions Setups 1 - 6

Power Requirements:

240VAC, 50/60Hz*, 48A, Class A GFCI-protected service (Circuit Breaker = 60A max.),
4 wires [hot, hot, neutral, ground]

*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.

System Outputs:

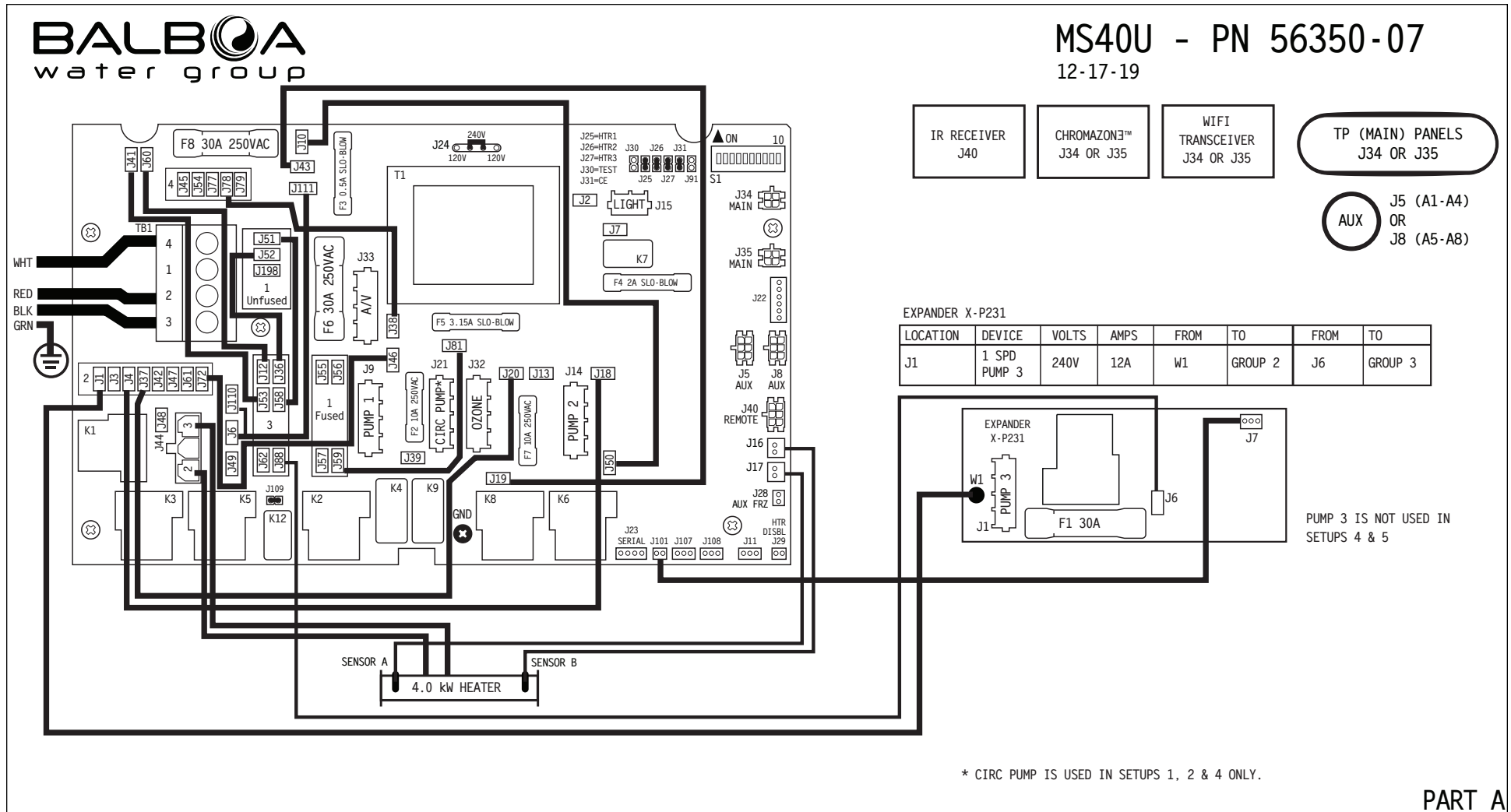
Pump 1	240VAC	2-Speed	12A max	15-minute timer for High Speed, 120-Minute timer for Low Speed in Setups 3, 5 & 6. 15-minute timer for Low Speed in Setups 1, 2, & 4.
				This is the heater pump in Setups 3, 5 & 6 only Must deliver 20 GPM through heater
Pump 2	240VAC	2-Speed	12A max	15-minute timer
		1-Speed		in Setups 2, 3, 4 & 5
Pump 3	240VAC	1-Speed	12A max	15-minute timer - NOT used in Setups 4 & 5
Circ Pump	240VAC	1-Speed	2A max	Programmable Filtration Cycles + Polling - Setups 1, 2 & 4 only
				This is the heater pump in Setups 1, 2 & 4 only Must deliver 20 GPM through heater
Ozone	240VAC		.5A max	Slaved to Circ Pump in Setup 1, 2 & 4, independent in Setups 3, 5 & 6
Spa Light	10VAC	On/Off	2A** max	240-minute timer.
A/V (Stereo)	120VAC	Hot	5A max	Always on
Heater	4.0kW @ 240VAC max			

HiPot Testing Note:
Disconnect slip terminal with green wires from J11 prior to performing HiPot test. Failure to disconnect may cause a false failure of the test. Reconnect terminal to J11 after successful completion of HiPot test.

** 2A max limit is shared by On/Off Spa Light and CHROMAZON³™.

Hardware Setup

Wiring Diagram for normal heater version



Hardware Setup

Settings for normal heater version

LOCATION	DEVICE	VOLTS	MAX AMPS	FROM	TO
J9	2-SP PUMP 1	240V	12A MAX	J46	GROUP 2
J14	2/1-SP PUMP 2	240V	12A MAX	J18	GROUP 2
	J14 LINE 1 CONNECTION			J43	J19
				J10	J50
J15	SPA LIGHT	10V	2A*		
J21	CIRC PUMP**	240V	2A MAX	J20	GROUP 2
J32	OZONE		0.5A		
	CIRC AND OZONE LINE 1 CONNECTION			J81	J59
J33	TV / AV	120V	5A	J38	GROUP 4
J44	HEATER	240V	4.0 kW		

— PUMP 2 IS 1-SPEED IN SETUPS 2, 3, 4 & 5

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

** NO CIRC PUMP IN SETUPS 3, 5 & 6

SETUP # CIRC PUMP PUMP 1 PUMP 2 PUMP 3 TEMP SCALE

1	24 HOUR WITH 3°F SHUTOFF	2-SPEED	2-SPEED	1-SPEED	°F
2	24 HOUR WITH 3°F SHUTOFF	2-SPEED	1-SPEED	1-SPEED	°F
3	N/A	2-SPEED	1-SPEED	1-SPEED	°F
4	24 HOUR WITH 3°F SHUTOFF	2-SPEED	1-SPEED	N/A	°F
5	N/A	2-SPEED	1-SPEED	N/A	°F
6	N/A	2-SPEED	2-SPEED	1-SPEED	°F

— SYSTEM IS
MANUFACTURED IN
SETUP #1

INSTEAD OF
SETUP #1,
THIS SYSTEM IS
CONFIGURED IN
SETUP #:



SWITCHBANK S1 OFF

SWITCHBANK S1 ON

TEST MODE OFF	◀ A1	TEST MODE ON
DON'T ADD 1 HS PUMP W/HTR	A2 ▶	ADD 1 HS PUMP WITH HEAT
DON'T ADD 2 HS PUMPS W/HTR	◀ A3	ADD 2 HS PUMPS WITH HEAT
DON'T ADD 4 HS PUMPS W/HTR	◀ A4	ADD 4 HS PUMPS WITH HEAT
SPECIAL AMPERAGE RULE A	◀ A5	SPECIAL AMPERAGE RULE A
STORE SETTINGS**	◀ A6	MEMORY RESET**
1 MIN HTR COOLDOWN (ELEC)	◀ A7	5 MIN HTR COOLDOWN (GAS)
REGULAR HIGH RANGE	◀ A8	ALTERNATE HIGH RANGE
NOT ASSIGNED	◀ A9	NOT ASSIGNED
NOT ASSIGNED	◀ A10	NOT ASSIGNED

** SWITCH # 6 SHOULD BE SET TO OFF UPON FINAL INSTALLATION.

USE COPPER CONDUCTORS ONLY.
EMPLOYER UNIQUEMENT DES CONDUCTEURS DE CUIVRE.
#6 AWG MIN. WIRE = 90°

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

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

CONNECT ONLY TO CIRCUITS PROTECTED BY A CLASS A GFCI.

A DISCONNECTING MEANS MUST BE INSTALLED WITHIN SIGHT FROM
THE EQUIPMENT AND AT LEAST 5 FEET (1.52 M) FROM THE
INSIDE WALLS OF THE POOL, SPA, OR HOT TUB.

TOTAL OUTPUT AMP DRAW NOT TO EXCEED MAX INPUT RATING OF SPA
USE EARTH GROUND CONNECTIONS AS INDICATED INSIDE THE SYSTEM ENCLOSURE

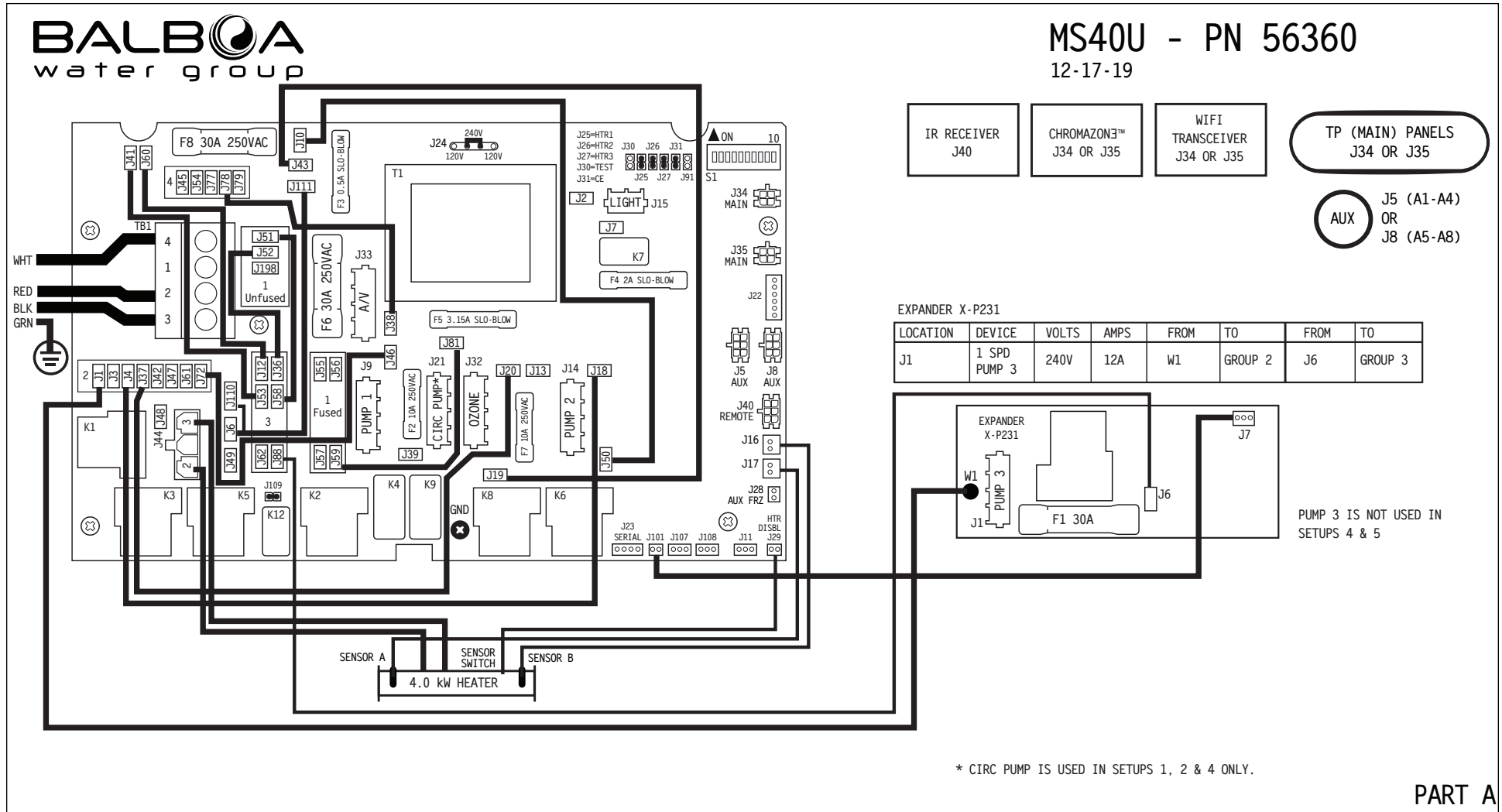
BALBOA
water group

MS40U - PN 56350-07
12-17-19

PART B

Hardware Setup

Wiring Diagram for "3S" heater version



Hardware Setup

Settings for "3S" heater version

LOCATION	DEVICE	VOLTS	MAX AMPS	FROM	TO
J9	2-SP PUMP 1	240V	12A MAX	J46	GROUP 2
J14	2/1-SP PUMP 2	240V	12A MAX	J18	GROUP 2
	J14 LINE 1 CONNECTION			J43	J19
				J10	J50
J15	SPA LIGHT	10V	2A*		
J21	CIRC PUMP**	240V	2A MAX	J20	GROUP 2
J32	OZONE		0.5A		
	CIRC AND OZONE LINE 1 CONNECTION			J81	J59
J33	TV / AV	120V	5A	J38	GROUP 4
J44	HEATER	240V	4.0 kW		

— PUMP 2 IS 1-SPEED IN SETUPS 2, 3, 4 & 5

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

** NO CIRC PUMP IN SETUPS 3, 5 & 6

SETUP # CIRC PUMP PUMP 1 PUMP 2 PUMP 3 TEMP SCALE

1	24 HOUR WITH 3°F SHUTOFF	2-SPEED	2-SPEED	1-SPEED	°F
2	24 HOUR WITH 3°F SHUTOFF	2-SPEED	1-SPEED	1-SPEED	°F
3	N/A	2-SPEED	1-SPEED	1-SPEED	°F
4	24 HOUR WITH 3°F SHUTOFF	2-SPEED	1-SPEED	N/A	°F
5	N/A	2-SPEED	1-SPEED	N/A	°F
6	N/A	2-SPEED	2-SPEED	1-SPEED	°F

— SYSTEM IS
MANUFACTURED IN
SETUP #1

INSTEAD OF
SETUP #1,
THIS SYSTEM IS
CONFIGURED IN
SETUP #:



SWITCHBANK S1 OFF

TEST MODE OFF	◀ A1
DON'T ADD 1 HS PUMP W/HTR	A2 ▶
DON'T ADD 2 HS PUMPS W/HTR	◀ A3
DON'T ADD 4 HS PUMPS W/HTR	◀ A4
SPECIAL AMPERAGE RULE A	◀ A5
STORE SETTINGS**	◀ A6
1 MIN HTR COOLDOWN (ELEC)	◀ A7
REGULAR HIGH RANGE	◀ A8
NOT ASSIGNED	◀ A9
NOT ASSIGNED	◀ A10

SWITCHBANK S1 ON

TEST MODE ON
ADD 1 HS PUMP WITH HEAT
ADD 2 HS PUMPS WITH HEAT
ADD 4 HS PUMPS WITH HEAT
SPECIAL AMPERAGE RULE A
MEMORY RESET**
5 MIN HTR COOLDOWN (GAS)
ALTERNATE HIGH RANGE
NOT ASSIGNED
NOT ASSIGNED

** SWITCH # 6 SHOULD BE SET TO OFF UPON FINAL INSTALLATION.

USE COPPER CONDUCTORS ONLY.
EMPLOYER UNIQUEMENT DES CONDUCTEURS DE CUIVRE.
#6 AWG MIN. WIRE = 90°

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

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

CONNECT ONLY TO CIRCUITS PROTECTED BY A CLASS A GFCI.

A DISCONNECTING MEANS MUST BE INSTALLED WITHIN SIGHT FROM
THE EQUIPMENT AND AT LEAST 5 FEET (1.52 M) FROM THE
INSIDE WALLS OF THE POOL, SPA, OR HOT TUB.

TOTAL OUTPUT AMP DRAW NOT TO EXCEED MAX INPUT RATING OF SPA
USE EARTH GROUND CONNECTIONS AS INDICATED INSIDE THE SYSTEM ENCLOSURE

BALBOA
water group

MS40U - PN 56360
12-17-19

PART B

Setup Reference Table

Setup #	Circ Pump	Pump 1	Pump 2	Pump 3	Temp Scale
1	24 Hour with 3°F Shutoff	2-Speed	2-Speed	1-Speed	°F
2	24 Hour with 3°F Shutoff	2-Speed	1-Speed	1-Speed	°F
3	N/A	2-Speed	1-Speed	1-Speed	°F
4	24 Hour with 3°F Shutoff	2-Speed	1-Speed	N/A	°F
5	N/A	2-Speed	1-Speed	N/A	°F
6	N/A	2-Speed	2-Speed	1-Speed	°F

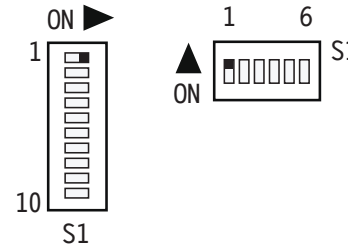
System (and any replacement board)
is shipped in Setup 1

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!

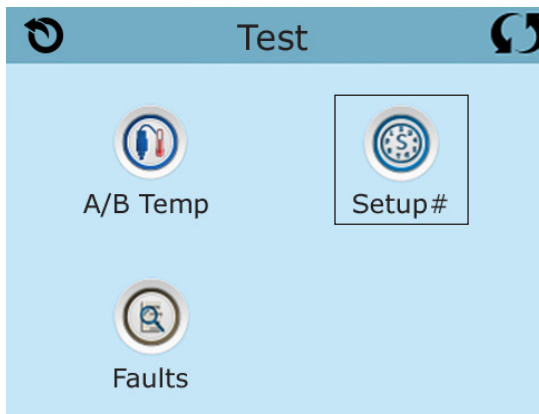
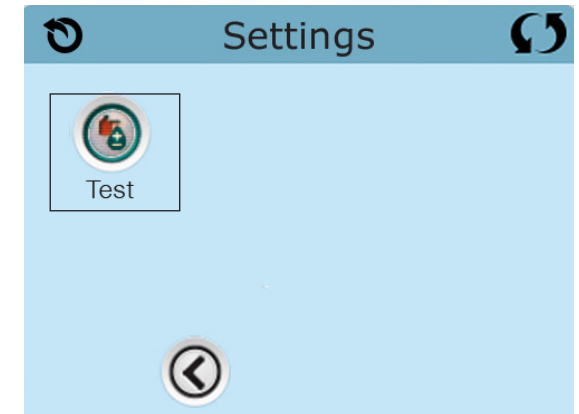
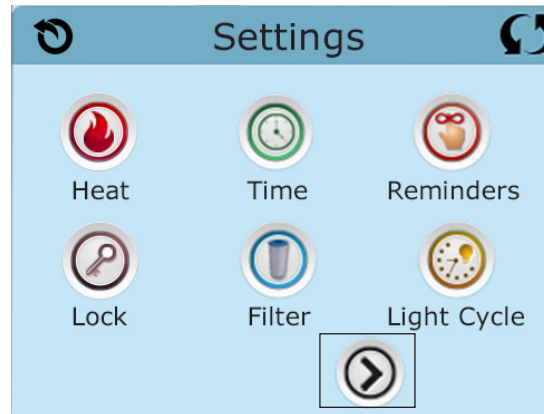
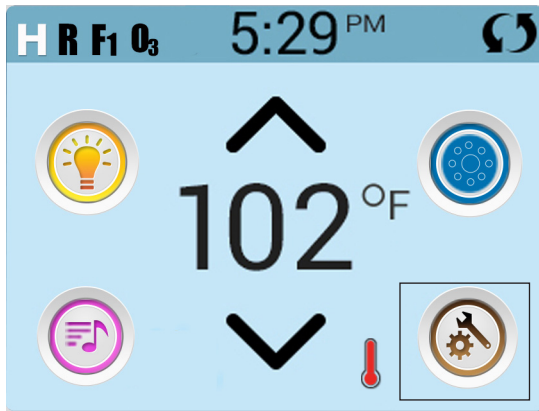
While the system is running, move DIP Switch 1 (on S1 on the Main circuit board) to ON. The system will enter Test Mode. Moving DIP Switch 1 to OFF will exit Test Mode.



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.

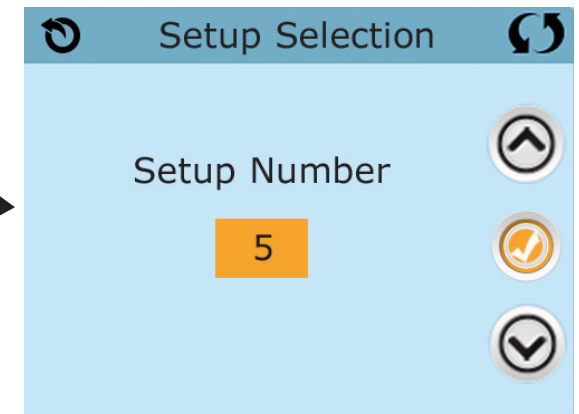
To Change Software Setups:

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



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.

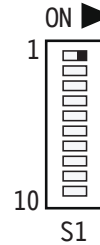


Changing Software Setups with TP800 / TP900 / spaTouch™ Menued Panel

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

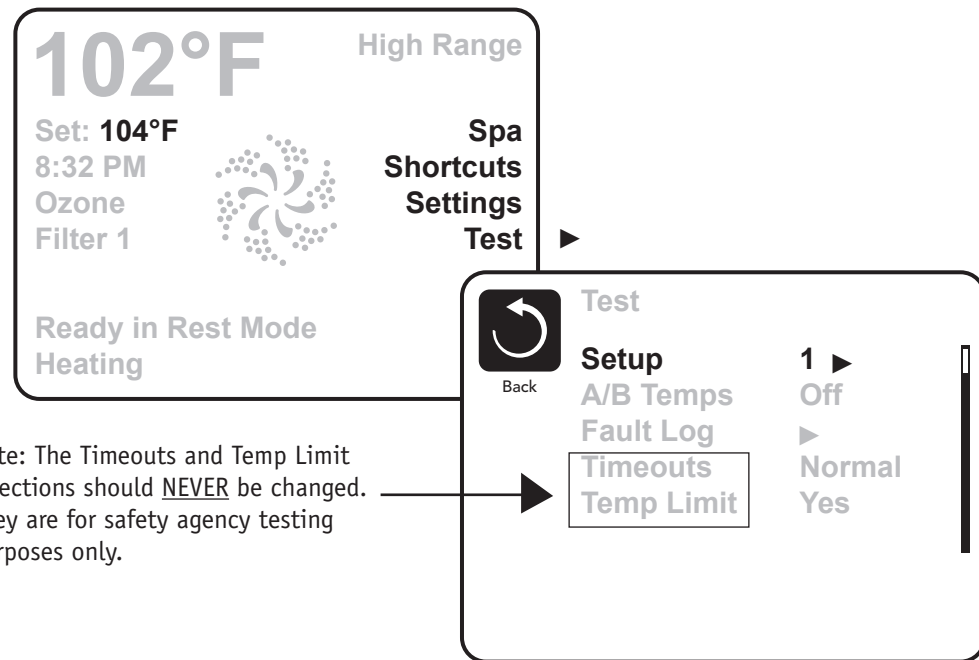
DANGER! HIGH VOLTAGE WILL BE ACCESSIBLE! SERVICE TECHNICIAN ONLY!

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.



Note: The Timeouts and Temp Limit selections should NEVER be changed. They are for safety agency testing purposes only.

Equipment Expansion

Expansion Features

Control Connection

Default

Fuse

Relay 1 (J101)

Pump 3

30A

Relay 7/8 (J107)

Undefined

None

Relay 9/10 (J108)

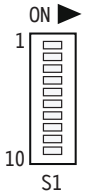
Undefined

None

DIP Switch Functions

Fixed-function 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.







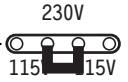
Note: A2/A3/A4 all off = No heat with any high-speed pump or blower.

Assignable DIP Switches

- | | |
|----|---|
| A7 | In "ON" position, Pump 1 (at lowest speed) assists Circ Pump in Filter Cycles (on Circs Setups only).
In "OFF" position, only the heater pump runs during Filter Cycles. |
| A8 | In "ON" position, High Range is replaced by Alternate High Range settings (see page 14)
In "OFF" position, the regular High Range settings are used |

Undesignated switches are not assigned a function.

Jumper Definitions

J109	GFCI Test/Trip Enable Note: <i>This feature must be enabled in software as well.</i>	J109 
J91	Real Time Clock Enable/Disable Note: <i>This Jumper should NOT be shorted when the Control Panel can display time of day.</i>	J91 
J30	Do Not Use	
J31	Non Applicable	
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 spa.	J29 
J25, J26, J27	Heater Type Settings. Note: <i>Factory Configured do not change.</i>	J25  J26  J27 
J24	Jumper on center two pins (230V) when heater is running at 240V. Two Jumpers installed; one on left 2 pins and one on right 2 pins (115V) when heater is running at 120V.	J24 

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.

Replacement Parts

PCBA:

Main PCBA: 59261
Expander PCBA: 59096

HEATER(s):

Plug + Click Heater Kit: 58303 4.0kW 800 Inc
58442KIT 4.0kW 825 Inc "3S" heater
Temp Sensor Kit: 53605

CABLES:

N/A

FUSES:

Part Number	Amperage	Location
30136	30A	F6, F8, F1 (Expander)
26307	2A SLO	F4
26905	0.5A SLO	F3
26904	10A	F2, F7
26976	3.15A SLO	F5

BP2000 Configuration Options

General Features

Feature	Default
Pump 1 in Filter Cycle (Circ Only)	No
Pump 1 Low Timer*	<i>120 Minutes</i>
General Pump Timer	15 Minutes
Blower Timer	15 Minutes
Mister Timer	15 Minutes
Light Timer	<i>60 Minutes</i>
Circ (when enabled)	<i>24 hr w/3°F shutoff</i>
Cleanup Cycle	<i>60 Minutes</i>
Cleanup as Preference setting	<i>Yes</i>
Ozone	With Heater Pump**
Ozone Suppression	<i>60 Minutes</i>
Pump Purge	60 Seconds
Blower Purge	30 Seconds
Mister Purge	5 Seconds
Purge Type	Serial - Pumps at lowest speed

* The Pump 1 Low Timer applies to Non Circ Setups (3, 5 & 6) only. In Circ Setups, Pump 1 Low uses the General Pump Timer.

** 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. © Copyright 2009 Balboa Water Group.

BP2000 Configuration Options

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-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

99°F

Lo-Range Default Temp*

70°F

Alternate Hi-Range Min. Set Temp

50°F

Alternate Hi-Range Max. Set Temp

99°F

Alternate Hi-Range Default Temp*

85°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)*

BP2000 Configuration Options

Time Features

Feature	Default
Time Format*	12 Hour
Filter 1 Start Hour*	20:00 (8:00 PM)
Filter 1 Duration*	<i>4 Hours</i>
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

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

BP2000 Configuration Options

Reminder Features

Feature	Default
Reminders Shown*	<i>Yes</i>
Check pH	<i>OFF</i>
Check Sanitizer	<i>OFF</i>
Clean Filter	30 Days
Test GFCI	<i>OFF</i>
Drain Water	<i>180 Days</i>
Change Cartridge	OFF
Clean Cover	<i>OFF</i>
Treat Wood	<i>OFF</i>
Change Filter	<i>180 Days</i>

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

BP2000 Configuration Options

Special Features

Feature

Default

Special Amperage Rule A

No Limitation

Special Amperage Rule B

No Limitation

Drain Mode

Disabled

Demo Mode

Disabled

Automatic GFCI Test

Disabled

Ozone Slaved to Heater Pump

Yes in Circ Setups
No in Non-Circ Setups

Dual Voltage Heater

N/A

Safety Suction

Disabled

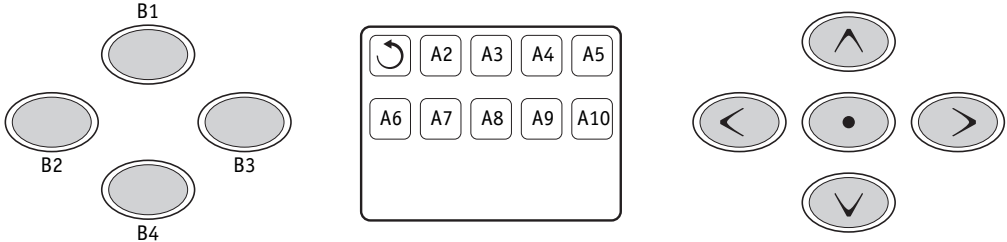
TP800 Panel Configuration

Button Layout Table

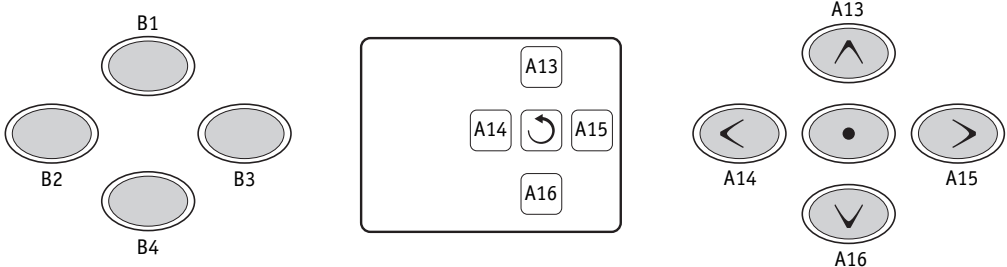
Feature #	3 Pumps & Circ Setup 1 & 2	3 Pumps & NO Circ Setups 3 & 6	2 Pumps & Circ Setup 4	2 Pumps & NO Circ Setup 5
A1	N/A	N/A	N/A	N/A
A2	Jets 1	Jets 1	Jets 1	Jets 1
A3	Jets 2	Jets 2	Jets 2	Jets 2
A4	Jets 3	Jets 3	Light 1	Light 1
A5	Light 1	Light 1	Invert	Invert
A6	Invert	Invert	(Circ Icon)	Undefined
A7	(Circ Icon)	Undefined	Undefined	Undefined
A8	Undefined	Undefined	Undefined	Undefined
A9	Undefined	Undefined	Undefined	Undefined
A10	Undefined	Undefined	Undefined	Undefined
A11	N/A	N/A	N/A	N/A
A12	N/A	N/A	N/A	N/A
A13	Undefined	Undefined	Undefined	Undefined
A14	Undefined	Undefined	Undefined	Undefined
A15	Undefined	Undefined	Undefined	Undefined
A16	Undefined	Undefined	Undefined	Undefined
B1	Jets 1	Jets 1	Jets 1	Jets 1
B2	Jets 2	Jets 2	Jets 2	Jets 2
B3	Jets 3	Jets 3	Undefined	Undefined
B4	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.

Panel Part Number **58305-XX**
No Overlay

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

BP2000 Configuration Options

Auxiliary Panel Features on Bank 1*

Feature	Default
Aux Button A1	Jets 1
Aux Button A2	Jets 2
Aux Button A3	Jets 3
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	Jets 3
Aux Button A8	Light

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

Bank 2 consists of J8 on the Main Circuit Board.

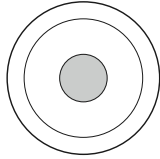
Aux Connection Splitter PN 25257 may be required.

BP2000 Configuration Options

Auxiliary Panel Features

AX10 Panels on Bank 1*

A1, AX10A1	No O/L	52803
A2, AX10A2	No O/L	52804
A3, AX10A3	No O/L	52805
A4, AX10A4	No O/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.

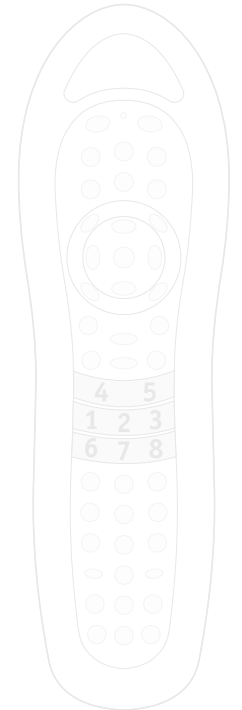
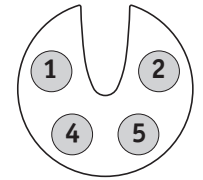
AX40 Auxiliary Panel plugged into Bank 1 will operate A1 + A2, A3 and A4.

AX40 Auxiliary Panel plugged into Bank 2 will operate A5 + A6, A7 and A8.

BP2000 Configuration Options

Remote Panel Features

Feature	Default
Remote Button A1	Jets 1
Remote Button A2	Jets 2
Remote Button A3	Jets 3
Remote Button A4	Undefined
Remote Button A5	Light
Remote Button A6	Undefined
Remote Button A7	Undefined
Remote Button A8	Undefined



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 2009 Balboa Water Group.