#### **BP25P3BC Tech Sheet**

| Customer:                | Balboa Water Group        |
|--------------------------|---------------------------|
| Part Number:             | 55963-02                  |
| Custom Box Overlay       |                           |
| Box Overlay Part Number  | N/A                       |
|                          |                           |
| UL System Model:         | BM25-BP25P3BC-AM          |
| Software Version ID:     | M100_210 V6               |
| Software Version:        | 6.0                       |
| File Name:               | BP2500_6.0_BP25P3BC_4.hex |
| Configuration Signature: | 328AA608                  |
|                          |                           |
| Eng. Project Number:     | 3735                      |
|                          |                           |
| Base PCBA:               | 55964-02                  |
| Bare Board:              | 22614_A                   |
|                          |                           |
| Control Panels:          |                           |
| TP800                    | 50261                     |
| TP900                    | 50262                     |
| Software Version         | 1.2 and later             |
|                          |                           |
| Auxiliary Panels         |                           |
| See Page 20              |                           |

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.



## **System Revision History**

| Part #   | EPN  | Date     | Originator | Changes Made   |
|----------|------|----------|------------|--|
| 55963    | 3343 | 03-15-10 | BWG        | Initial Release Generic BP2500   |
| 55963-01 | 3479 | 10-12-10 | BWG        | Add Setups for Circ and three 1-speed pumps. RMA Tester and eFAST compatibility added. Light output changed to 1A. |
| 55963-02 | 3735 | 12-01-11 | BWG        | Additional iPhone app support. Add TP800 Panel functionality.  |
|          |      |          |            |  |
|          |      |          |            |  |
|          |      |          |            |  |
|          |      |          |            |  |
|          |      |          |            |  |
|          |      |          |            |  |



# **Basic Functions Setup 1**

#### **Power Requirements:**

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

#### System Ouputs:

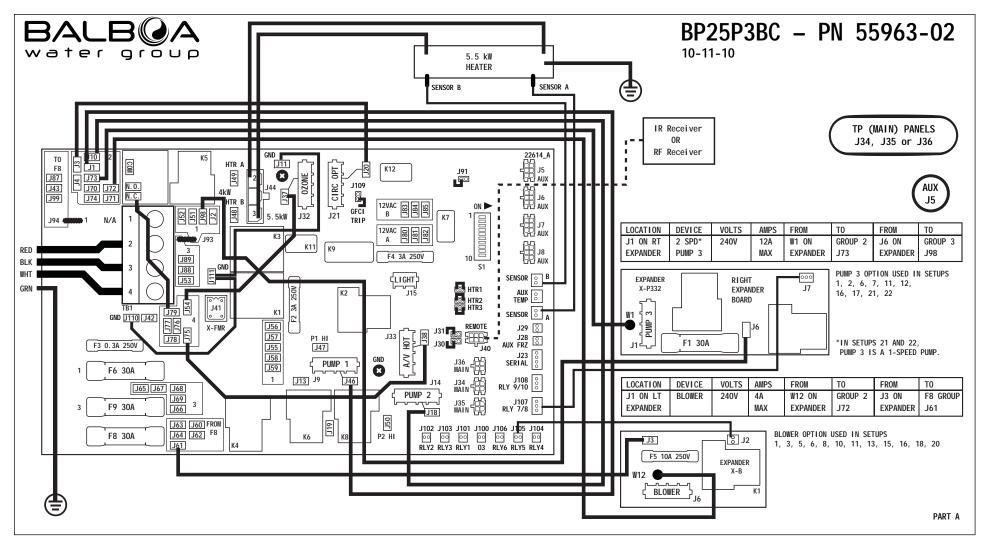
| Pump 1       | 240VAC     | 2-Speed                                 | 12A max               | 15-minute timer for High Speed, 15-Minute timer for Low Speed |
|--------------|------------|---|-----------------------|---|
| Pump 2       | 240VAC     | 2-Speed                                 | 12A max               | 15-minute timer   |
| Pump 3       | 240VAC     | 2-Speed                                 | 12A max               | 15-minute timer   |
| Blower       | 240VAC     | 1-Speed                                 | 12A max               | 15-minute timer   |
| Circ Pump    |            | 1-Speed<br>neater pump<br>r 20 GPM thro | 2A max<br>ough heater | Programmable Filtration Cycles + Polling                      |
| 0zone        | 120VAC     |   | .5A max               | Separate Relay  |
| Spa Light    | 12VAC      | 0n/0ff                                  | 1A max                | 240-minute timer.   |
| A/V (Stereo) | 120VAC     | Hot                                     | 5A max                | Always on   |
| Heater       | 5.5kW @ 24 | 40VAC max                               |                       |   |

\*A 120VAC light may allow more than 1A max.



## Hardware Setup

Wiring Diagram





#### **Hardware Setup**

#### Settings

| LOCATION | DEVICE      | VOLTS | MAX AMPS | FROM | Т0          |
|----------|-------------|-------|----------|------|-------------|
| J9       | 2-SP PUMP 1 | 240V  | 12A MAX  | J46  | J1-GROUP 2  |
| J14      | 2-SP PUMP 2 | 240V  | 12A MAX  | J18  | J10-GROUP 2 |
| J15      | SPA LIGHT   | 12V   | 1A       |      |             |
| J21      | CIRC OPTION | 240V  | 1A MAX   | J20  | J3-GROUP 2  |
| J32      | OZONE       | 120V  | 1A       | J37  | J54-GROUP 4 |
| J33      | TV / AV     | 120V  | 5A       | J38  | J75-GROUP 4 |
| J44      | HEATER      | 240V  | 5.5 kW   |      |             |
|          |             |       |          |      |             |

PUMP 1 IS 1-SPEED IN SETUP2 21 AND 22 PUMP 2 IS 1-SPEED IN SETUPS 5, 10, 15, 20, 21 AND 22

CIRC PUMP OPTION PROGRAMMABLE FILTRATION CYCLES + POLLING USED IN SETUPS 1, 2, 3, 4, 5, 11, 12, 13, 14, 15, 21, 22

SETUPS 1-10 ARE IDENTICAL TO SETUPS 11-20, EXCEPT 11-20 DISPLAY TEMPERATURE IN °C

SETUP 21 IS IDENTICAL TO SETUP 22, EXCEPT 22 DISPLAYS TEMPERATURE IN °C

| SETUP # | CIRC PUMP                         | PUMP 1  | PUMP 2  | PUMP 3  | BLOWER  | TEMP SCALE |                        |
|---------|-----------------------------------|---------|---------|---------|---------|------------|------------------------|
| 1       | PROGRAMMABLE FILTRATION + POLLING | 2-SPEED | 2-SPEED | 2-SPEED | 1-SPEED | °F         | SYSTEM WILL BE IN      |
| 2       | PROGRAMMABLE FILTRATION + POLLING | 2-SPEED | 2-SPEED | 2-SPEED |         | °F         | SETUP #1 UNLESS        |
| 3       | PROGRAMMABLE FILTRATION + POLLING | 2-SPEED | 2-SPEED |         | 1-SPEED | °F         | MARKED OTHERWISE BELOW |
| 4       | PROGRAMMABLE FILTRATION + POLLING | 2-SPEED | 2-SPEED |         |         | °F         |                        |
| 5       | PROGRAMMABLE FILTRATION + POLLING | 2-SPEED | 1-SPEED |         | 1-SPEED | °F         |                        |
| 6       |                                   | 2-SPEED | 2-SPEED | 2-SPEED | 1-SPEED | °F         |                        |
| 7       |                                   | 2-SPEED | 2-SPEED | 2-SPEED |         | °F         |                        |
| 8       |                                   | 2-SPEED | 2-SPEED |         | 1-SPEED | °F         |                        |
| 9       |                                   | 2-SPEED | 2-SPEED |         |         | °F         |                        |
| 10      |                                   | 2-SPEED | 1-SPEED |         | 1-SPEED | °F         | INCTEAD OF             |
| 11      | PROGRAMMABLE FILTRATION + POLLING | 2-SPEED | 2-SPEED | 2-SPEED | 1-SPEED | °C         | INSTEAD OF             |
| 12      | PROGRAMMABLE FILTRATION + POLLING | 2-SPEED | 2-SPEED | 2-SPEED |         | °C         | SETUP #1,              |
| 13      | PROGRAMMABLE FILTRATION + POLLING | 2-SPEED | 2-SPEED |         | 1-SPEED | °C         | THIS SYSTEM IS         |
| 14      | PROGRAMMABLE FILTRATION + POLLING | 2-SPEED | 2-SPEED |         |         | °C         | CONFIGURED IN          |
| 15      | PROGRAMMABLE FILTRATION + POLLING | 2-SPEED | 1-SPEED |         | 1-SPEED | °C         | SETUP #:               |
| 16      |                                   | 2-SPEED | 2-SPEED | 2-SPEED | 1-SPEED | °C         |                        |
| 17      |                                   | 2-SPEED | 2-SPEED | 2-SPEED |         | °C         |                        |
| 18      |                                   | 2-SPEED | 2-SPEED |         | 1-SPEED | °C         |                        |
| 19      |                                   | 2-SPEED | 2-SPEED |         |         | °C         |                        |
| 20      |                                   | 2-SPEED | 1-SPEED |         | 1-SPEED | °C         |                        |
| 21      | PROGRAMMABLE FILTRATION + POLLING | 1-SPEED | 1-SPEED | 1-SPEED |         | °F         |                        |
| 22      | PROGRAMMABLE FILTRATION + POLLING | 1-SPEED | 1-SPEED | 1-SPEED |         | °C         |                        |

PUMP 1 LOW TIMEOUT IS 15 MINUTES FOR CIRC SYSTEMS. PUMP 1 LOW TIMEOUT IS 120 MINUTES FOR NON-CIRC SYSTEMS.

| 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*            |
| NOT ASSIGNED               | <b>A</b> 7 | NOT ASSIGNED             |
| NOT ASSIGNED               | <b>A</b> 8 | NOT ASSIGNED             |
| 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 =  $90^{\circ}$ 

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

BALB water group

BP25P3BC - PN 55963-02

10-11-10

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. © Copyright 2009 Balboa Water Group.



55963-02\_97\_A 12-02-11

## **Setup Reference Table**

| Setup # | Circ Pump                         | Pump 1  | Pump 2  | Pump 3  | Blower  | Temp Scale |
|---------|-----------------------------------|---------|---------|---------|---------|------------|
| 1       | Programmable Filtration + Polling | 2-Speed | 2-Speed | 2-Speed | 1-Speed | °F         |
| 2       | Programmable Filtration + Polling | 2-Speed | 2-Speed | 2-Speed |         | °F         |
| 3       | Programmable Filtration + Polling | 2-Speed | 2-Speed |         | 1-Speed | °F         |
| 4       | Programmable Filtration + Polling | 2-Speed | 2-Speed |         |         | °F         |
| 5       | Programmable Filtration + Polling | 2-Speed | 1-Speed |         | 1-Speed | °F         |
| 6       |                                   | 2-Speed | 2-Speed | 2-Speed | 1-Speed | °F         |
| 7       |                                   | 2-Speed | 2-Speed | 2-Speed |         | °F         |
| 8       |                                   | 2-Speed | 2-Speed |         | 1-Speed | °F         |
| 9       |                                   | 2-Speed | 2-Speed |         |         | °F         |
| 10      |                                   | 2-Speed | 1-Speed |         | 1-Speed | °F         |
| 11      | Programmable Filtration + Polling | 2-Speed | 2-Speed | 2-Speed | 1-Speed | °C         |
| 12      | Programmable Filtration + Polling | 2-Speed | 2-Speed | 2-Speed |         | °C         |
| 13      | Programmable Filtration + Polling | 2-Speed | 2-Speed |         | 1-Speed | °C         |
| 14      | Programmable Filtration + Polling | 2-Speed | 2-Speed |         |         | °C         |
| 15      | Programmable Filtration + Polling | 2-Speed | 1-Speed |         | 1-Speed | °C         |
| 16      |                                   | 2-Speed | 2-Speed | 2-Speed | 1-Speed | °C         |
| 17      |                                   | 2-Speed | 2-Speed | 2-Speed |         | °C         |
| 18      |                                   | 2-Speed | 2-Speed |         | 1-Speed | °C         |
| 19      |                                   | 2-Speed | 2-Speed |         |         | °C         |
| 20      |                                   | 2-Speed | 1-Speed |         | 1-Speed | °C         |
| 21      | Programmable Filtration + Polling | 1-Speed | 1-Speed | 1-Speed |         | °F         |
| 22      | Programmable Filtration + Polling | 1-Speed | 1-Speed | 1-Speed |         | °C         |

System is shipped in Setup 1

Pump 1 Low timeout is 15 minutes for Circ systems. Pump 1 Low timeout is 120 minutes for Non-Circ systems.

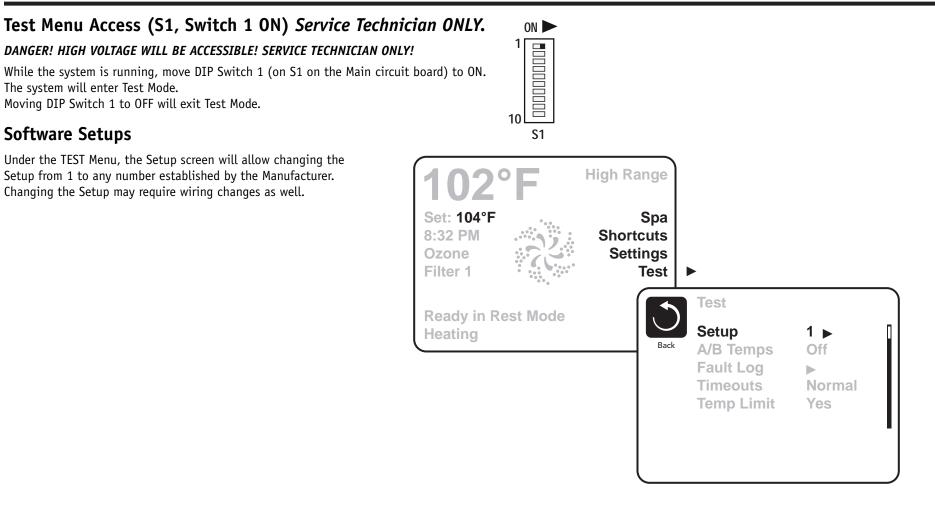
Setups 11-20 are identical to 1-10 except for °C.

Setup 21 is identical to 22 except for °C.

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.



# **Changing Software Setups**



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.



# **Equipment Expansion**

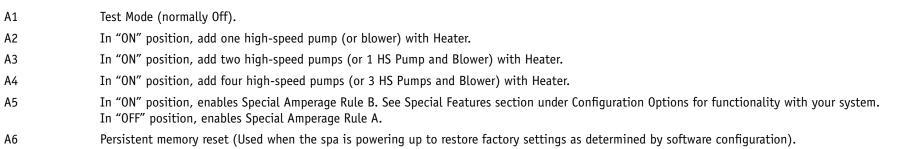
| Expansion Features        |           |      |
|---------------------------|-----------|------|
| <b>Control Connection</b> | Default   | Fuse |
| Relay 1 (J101)            | Undefined | None |
| Relay 2 (J102)            | Undefined | None |
| Relay 3 (J103)            | Undefined | None |
| Relay 4 (J104)            | Undefined | None |
| Relay 5 (J105)            | Blower    | 10A  |
| Relay 6 (J106)            | Undefined | None |
| Relay 7/8 (J107)          | Pump 3    | 30A  |
| Relay 9/10 (J108)         | Undefined | None |

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.



## **DIP Switch Functions**

#### **Fixed-fuction DIP Switches**



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.

Undesignated switches are not assigned a function.

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.



ON 🕨

**S**1

## **Jumper Definitions**

| J93 J94     | Must be sol<br><b>Note:</b>          | dered in place for UL and cUL<br>Single service, 50A or 60A.   | J94 🌑 🥌 J93 |  |  |  |  |
|-------------|--------------------------------------|--|-------------|--|--|--|--|
| J109        | GFCI Test/Tr<br><b>Note:</b>         | rip Enable<br>This feature must be enabled in software as well.  | J109        |  |  |  |  |
| J91         | Real Time C<br><i>Note:</i>          | lock Enable/Disable<br>This Jumper should NOT be shorted when the Control Panel can display time of day. | J91 🖾 🔒     |  |  |  |  |
| J30 J31     | Do Not Use                           |  |             |  |  |  |  |
| J29         | Do Not Use                           |  | J29 💍       |  |  |  |  |
| HTR 1, 2, 3 | <b>3</b> Heater Type<br><i>Note:</i> | Settings.<br>Factory Configured.   |             |  |  |  |  |

#### 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.



| General Features                   |                        |
|------------------------------------|------------------------|
| Feature                            | Default                |
| Pump 1 in Filter Cycle (Circ Only) | No                     |
| Pump 1 Low Timer                   | 15 Minutes with Circ   |
|                                    | 120 Minutes Non-Circ   |
| 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             |
| Cleaup as Preference setting       | Yes                    |
| Ozone                              | Always                 |
| Ozone Suppression                  | OFF                    |
|                                    |                        |
| Pump Purge                         | 60 Seconds             |
| Blower Purge                       | 30 Seconds             |
| Mister Purge                       | 5 Seconds              |

#### 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. © Copyright 2009 Balboa Water Group.



| Ten                                    | nper   | ratu   | re F   | eatı               | ıres |         |        |         |       |         |         |      |       |         |      |        |        |       |  |
|--|--------|--------|--------|--------------------|------|---------|--------|---------|-------|---------|---------|------|-------|---------|------|--------|--------|-------|--|
| Fea                                    | ture   | 9      |        |                    |      |         |        | Def     | ault  |         |         |      |       |         |      |        |        |       |  |
| Temperature Display °F in S<br>°C in S |        |        |        |                    |      |         |        |         |       |         |         |      |       |         |      |        |        |       |  |
|  |        |        |        | t be sµ<br>heit va | -    | ed in ' | °F. Th | ne syst | ет со | onverts | s °F to | °C a | lynam | ically. | If C | elsius | is req | uired | for default settings, choose a desired °C value that (after rounding) cor- |
| °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   | Min. S | Set Te | mp                 |      |         |        | 80°F    |       |         |         |      |       |         |      |        |        |       |  |
| Hi-R                                   | ange   | Max. S | Set Te | mp                 |      |         |        | 104°    | F     |         |         |      |       |         |      |        |        |       |  |
| Hi-R                                   | ange   | Defau  | lt Ten | ıp*                |      |         |        | 100°    | F     |         |         |      |       |         |      |        |        |       |  |
| Lo-R                                   | ange   | Min. S | Set Te | mp                 |      |         |        | 50°F    |       |         |         |      |       |         |      |        |        |       |  |
| Lo-R                                   | ange   | Max.   | Set Te | emp                |      |         |        | 99°F    |       |         |         |      |       |         |      |        |        |       |  |
| Lo-R                                   | ange   | Defau  | lt Ten | np*                |      |         |        | 70°F    |       |         |         |      |       |         |      |        |        |       |  |
| Freez                                  | ze Thr | eshol  | d      |                    |      |         |        | 44°F    |       |         |         |      |       |         |      |        |        |       |  |
| Temp                                   | ) Lock | : Туре |        |                    |      |         |        | Temp    | + Set | ttings  |         |      |       |         |      |        |        |       |  |

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

Blue Indicates New Custom Configuration Default (Setup 1)



#### **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      |

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

Blue Indicates New Custom Configuration Default (Setup 1)



#### **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)

Blue Indicates New Custom Configuration Default (Setup 1)



| 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 | No                   |
| Dual Voltage Heater         | Always Input Voltage |
| Safety Suction              | Disabled             |



## **TP800 Panel Configuration**

#### **Button Layout Table**

| Feature<br># | Pump 3 &<br>Blower     | Pump 3 &<br>NO Blower   | NO Pump 3 &<br>Blower                 | NO Pump 3 &<br>NO Blower |
|--------------|------------------------|-------------------------|---------------------------------------|--------------------------|
|              | Setups 1, 6,<br>11, 16 | Setups 2, 12,<br>21, 22 | Setups 3, 5, 8,<br>10, 13, 15, 18, 20 | Setups 4, 9,<br>14, 19   |
| 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                  | Blower                                | Light 1                  |
| A5           | Blower                 | Light 1                 | Light 1                               | Invert                   |
| A6           | Light 1                | Invert                  | Invert                                | (Circ Icon)              |
| A7           | Invert                 | (Circ Icon)             | (Circ Icon)                           | Undefined                |
| A8           | (Circ Icon)            | 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          | Jets 1                 | Jets 1                  | Jets 1                                | Jets 1                   |
| A14          | Jets 2                 | Jets 2                  | Jets 2                                | Jets 2                   |
| A15          | Blower                 | Jets 3                  | Blower                                | Undefined                |
| A16          | Light 1                | Light 1                 | Light 1                               | Light 1                  |
| B1           | Jets 1                 | Jets 1                  | Jets 1                                | Jets 1                   |
| B2           | Jets 2                 | Jets 2                  | Jets 2                                | Jets 2                   |
| B3           | Blower                 | Jets 3                  | Blower                                | Undefined                |
| B4           | Light 1                | Light 1                 | Light 1                               | Light 1                  |

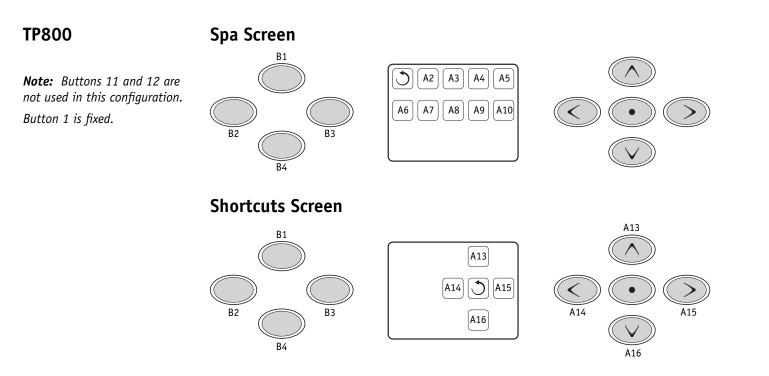
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Template 40981\_C 02-17-10

A Circ Icon will appear when a Circ Pump is configured using Setups 1, 2, 3, 4, 5, 11, 12, 13, 14, 15, 21, 22

#### **BP2500 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.



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## **TP900 Panel Configuration**

#### **Button Layout Table**

| eature<br># | Pump 3 &<br>Blower     | Pump 3 &<br>NO Blower   | NO Pump 3 &<br>Blower                 | NO Pump 3 &<br>NO Blower |
|-------------|------------------------|-------------------------|---------------------------------------|--------------------------|
|             | Setups 1, 6,<br>11, 16 | Setups 2, 12,<br>21, 22 | Setups 3, 5, 8,<br>10, 13, 15, 18, 20 | Setups 4, 9,<br>14, 19   |
| 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                  | Blower                                | Light 1                  |
| A5          | Blower                 | Light 1                 | Light 1                               | Invert                   |
| A6          | Light 1                | Invert                  | Invert                                | (Circ Icon)              |
| A7          | Invert                 | (Circ Icon)             | (Circ Icon)                           | Undefined                |
| A8          | (Circ Icon)            | 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         | Jets 1                 | Jets 1                  | Jets 1                                | Jets 1                   |
| A14         | Jets 2                 | Jets 2                  | Jets 2                                | Jets 2                   |
| A15         | Blower                 | Jets 3                  | Blower                                | Undefined                |
| A16         | Light 1                | Light 1                 | Light 1                               | Light 1                  |

A Circ Icon will appear when a Circ Pump is configured using Setups 1, 2, 3, 4, 5, 11, 12, 13, 14, 15, 21, 22

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.



A15

Light

#### Auxilliary 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   |

# Auxilliary Panel Features on Bank 2\*FeatureDefaultAux Button A5Jets 1Aux Button A6Jets 2Aux Button A7Blower

\*Bank 1 consists on J5 and J6 on the Main Circuit Board. Bank 2 consists on J7 and J8 on the Main Circuit Board. Aux Connection Splitter PN4XXXX may be required.

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.



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Aux Button A8

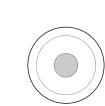
#### **Auxilliary Panel Features**

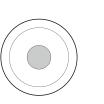
#### AX10 Panels on Bank 1\*

A1, AX10A1 No 0/L 52803 A2, AX10A2 No 0/L 52804 A3, AX10A3 No 0/L 55805 A4, AX10A4 No 0/L 52806



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





**Call Customer Service for** additional information about Auxiliary Panels.

Auxiliary Panel Part Number **Overlay Part Number** 

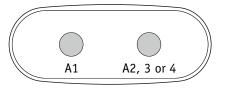
\*Bank 1 consists on J5 and J6 on the Main Circuit Board. Bank 2 consists on J7 and J8 on the Main Circuit Board. Aux Connection Splitter PN4XXXX may be required.

#### **AX20**

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

No 0/L

52799



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

A1 A2 Α3 Α4

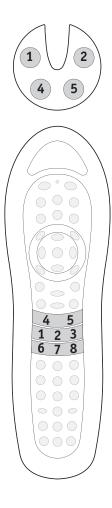
AX40 Auxiliary Panel plugged into Bank 1 will operate A1 + A2, A3 and A4. AX40 Auxiliary Panel plugged into Bank 2 will operate A5 + A6, A7 and A8.

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.



#### **Remote Panel Features**

| Feature          | Default   |
|------------------|-----------|
| Remote Button A1 | Jets 1    |
| Remote Button A2 | Jets 2    |
| Remote Button A3 | Jets 3    |
| Remote Button A4 | Blower    |
| 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.



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