



alpine**spas**TM

ELECTRICAL PACK

Columbus - Advanced Swim





ELECTRICAL SETUP

This document will help you wire and install the Columbus - Advanced Swim Swim Spa. Please read this and install as recommended otherwise it will not operate correctly.

ANY ELECTRICAL WIRING WORK MUST BE PERFORMED BY A LICENSED ELECTRICIAN.



The Columbus - Advanced Swim uses the SpaNET SV Mini 2 Controller with a SpaNET SV2 Touchpad (labelled SV-Smart) in the spa zone, and a SV3 controller and Touchpad in the swim zone.

By default, only 15A is required to run the controller in the spa zone and it is pre-wired with a 15A cable & plug. However, you can alter the settings and hardwire a 25A feed to avoid load shed (disabling) of the heater when the pump is turned to high speed.

In the swim zone, it needs to be hard wired (no cabling provided) so that it has a minimum of 32A. If you want the heater to run better while the jets are running, you will need to have a feed of 45A. There are some settings that need to be configured on the touch pad which is described on page 6.

This means the minimum power requirements for the swim spa as a whole is 47A (15A+32A).

AVAILABLE SETUPS

Columbus - Advanced Swim	Recommended	Minimum Setup	Maximum Setup
SV Mini 2 Controller (Spa zone)	15A	15A	25A*
SV3 Controller (Swim zone)	32A	32A	45A**

*25A requires you to disable the default load shed as per page 4.

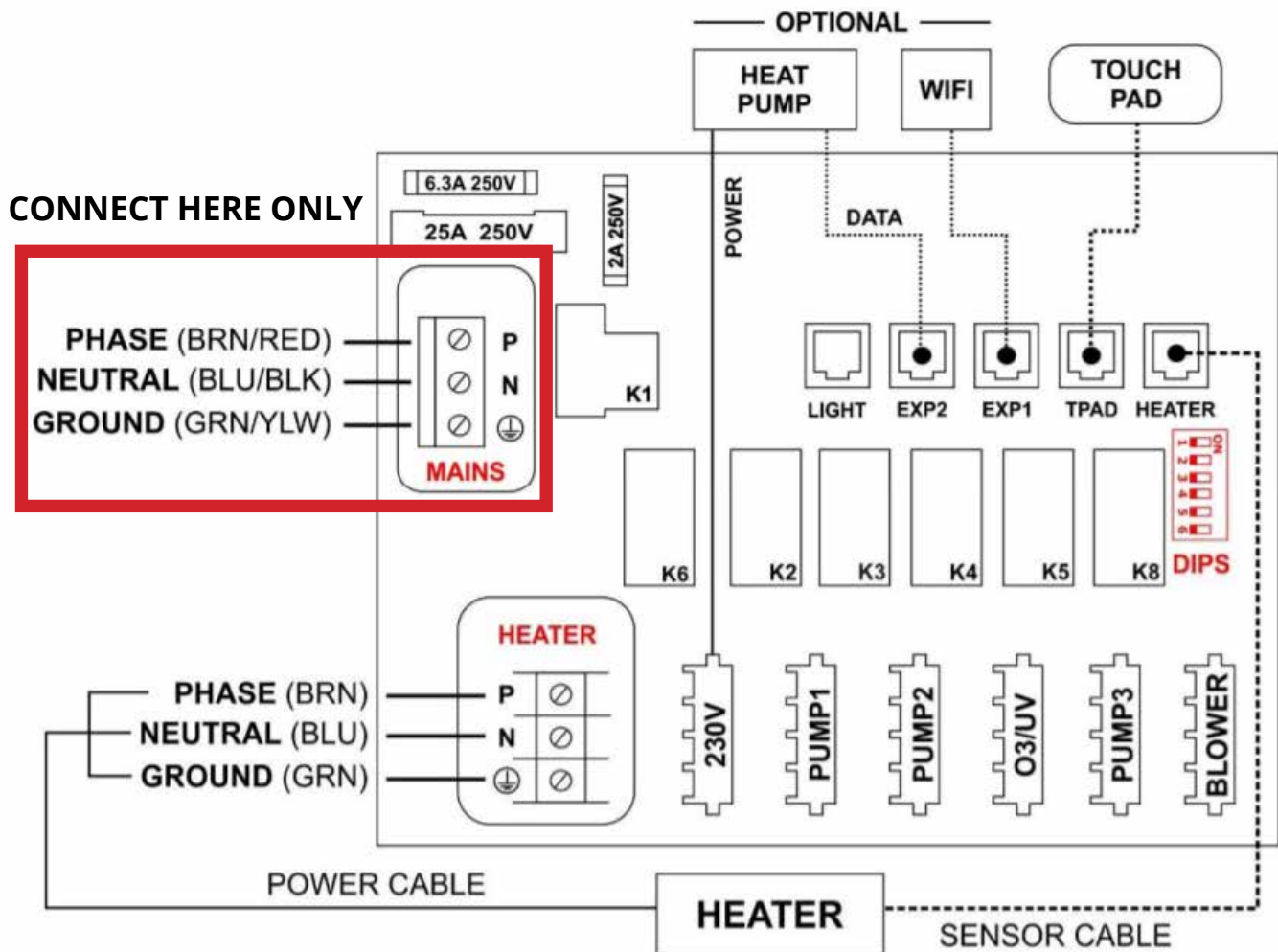
**Current limit setting needs to be altered as per page 6.

WIRING DIAGRAM - SPA ZONE



CONTROLLER WIRING DIAGRAM (SV MINI 2)

A 15A cable and plug is already wired to the controller. If you are using the 15A setup you do not need to do any wiring. If you are hardwiring a 25A feed, replace the cable with your own feed as per the diagram below. Do not alter the dip switch settings.





TOUCH PAD SETTINGS - SPA ZONE

Before Powering On

Ensure that the Swim Spa is filled with water before turning on the power. If the Swim Spa still requires filling, you will need to power on and apply settings with the pump disconnected.

Swim Spa is Filled - Touch Pad & Startup



Once the Swim Spa is filled, turn on the power and locate the touch pad (seen below). If nothing shows on the display, just power off and back on again.

At first the system will go through a purge cycle which is automatic. This gives the pump a chance to expel any air left in the pipes.



Swim Spa is Empty

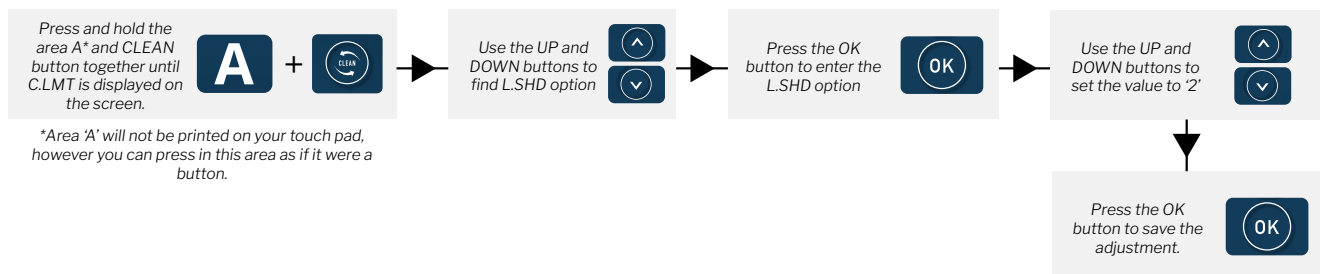
Powering on without water in the Swim Spa can damage the pump. To get around this, disconnect the pump from the controller, then power on.

The system will attempt to prime and will fail (because no pump detected). Once an error shows on the touch pad screen, demo mode must be accessed by pressing the left 'PUMP'  + 'LIGHT BUTTON'  quickly in succession (not together at once).

Note: See above panel image to locate buttons. Once in demo mode, settings below can be then be applied to the controller and will be saved for when Swim Spa is filled and powered.

Applying Load Shed 'L.SHD' Setting for 25A

To setup 25A, Load Shed must be set to the value of '2' - follow below instructions.

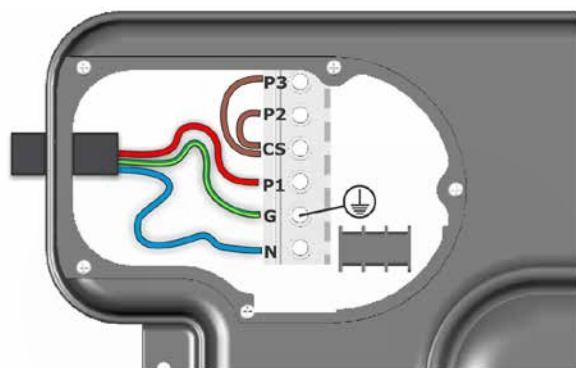




CONTROLLER WIRING DIAGRAM (SV3)

This controller can be wired single, dual or three phase. See below diagrams. Ensure DIP switches are set correctly.

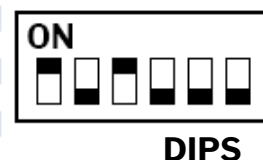
No cable and/or electrical equipment (RCD etc.) is provided.



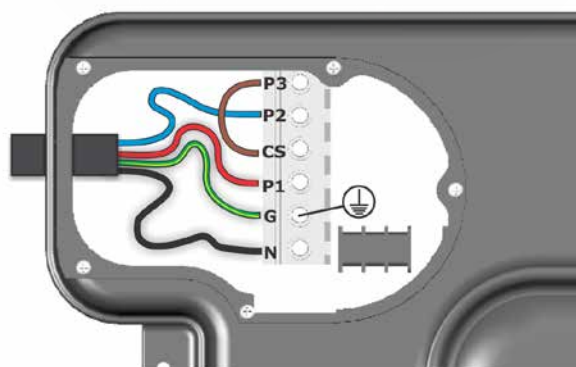
230-240V (3 wire) single phase

Terminal Wiring

P3	Link to CS
P2	Link to CS
CS	Link to P3 and P2
P1	Phase
G	Earth
N	Neutral



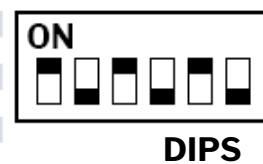
DIPS



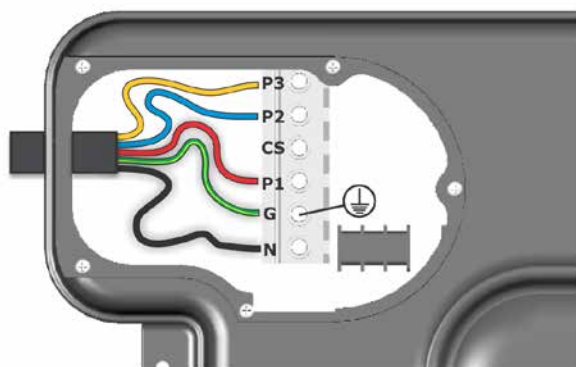
230-240V (4 wire) dual phase

Terminal Wiring

P3	Link to CS
P2	Phase 2
CS	Link to P3
P1	Phase 1
G	Earth
N	Neutral



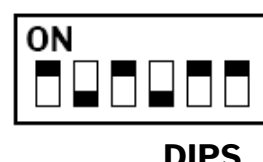
DIPS



230-240V (5 wire) three phase

Terminal Wiring

P3	Phase 3
P2	Phase 2
CS	Not used
P1	Phase 1
G	Earth
N	Neutral



DIPS

TOUCH PAD SETTINGS - SWIM ZONE



Before Powering On

Ensure that the Swim Spa is filled with water before turning on the power. If the Swim Spa still requires filling, you will need to power on and apply settings with pump disconnected.

Swim Spa is Filled - Touch Pad & Startup

Once the Swim Spa is filled, turn on the power and locate the touch pad (seen below).

If nothing shows on the display, just power off and back on again.

At first the system will go through a purge cycle which is automatic. This gives the pump a chance to expel any air left in the pipes.



Swim Spa is Empty

Powering on without water in the Swim Spa can damage the pump. To get around this, disconnect the circulation pump from the controller, then power on.

The system will attempt to prime and will fail (because no pump detected). Once an error (ER3) shows on touch pad screen, demo mode must be accessed by pressing 'PUMP A' + 'LIGHT BUTTON' quickly in succession (not together at once). Note: See above panel image to locate 'Pump A'. Once in demo mode, settings below can be then be applied to the controller and will be saved for when Swim Spa is filled and powered.

Setting the Circuit Limit

The OEM menu item C.LMT (current limit) should be set to match the rating of the circuit breaker that feeds the spa pool. In multi phase installations the C.LMT should be set to match the current limit of Phase 1. To take full advantage of the variable element and maximise heater power level when spa in manual use the circuit breaker rating must be programmed correctly. By default, C.LMT is already pre-set to 32A.

Follow the bellow instructions to set the C.LMT adjustment to match the circuit breaker rating.

