



TRIDENT SWIM SPA - ELECTRICAL INSTALLATION

OVERVIEW

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

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

The Trident uses the SpaNet SV4 control system. It can be setup in different ways depending on how much power supply is available and also if a heat pump is being used.

AVAILABLE SETUPS

AMPS Setups	Conditions / Limitations
45A no heat pump	No heating available when all four pumps are running. This is okay as heating of water not usually required while exercising.
45A w/ heat pump	No heating available when all four pumps are running. This is okay as heating of water not usually required while exercising.
55A no heat pump	When running all four pumps there is roughly 10A leftover for heating so about 1/3 the power of the 6kW variable heater will engage.
55A w/ heat pump	Enough power available to run the heat pump simultaneously with all four pumps.

SETTINGS

The 'Circuit Breaker Limit' (C.LMT) value needs to be set to match the rating of the circuit breaker that feeds the pool (it is already set to 40A by default). To update this value, see 'Touch Panel Input Settings' on page 3 of this document.

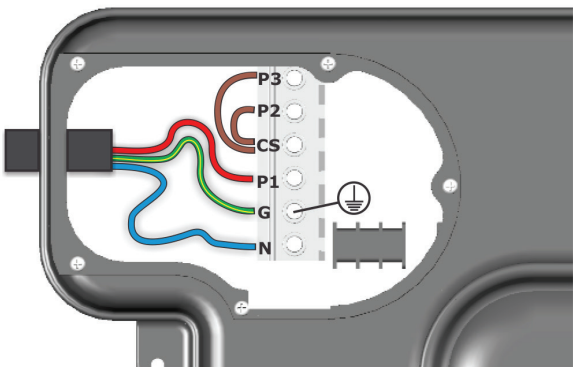
CONTROLLER LOCATION

The below diagrams shows exactly where the SpaNet system controller is located within the swim spa (marked X).



CONTROLLER WIRING DIAGRAM

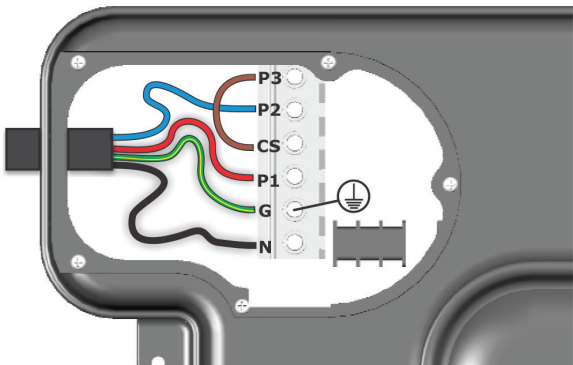
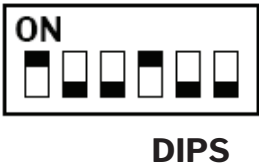
This Swim Spa can be wired single, dual or three phase. See below diagrams. Ensure dips are set correctly.



230-240V (3 wire) single phase

Terminal Wiring

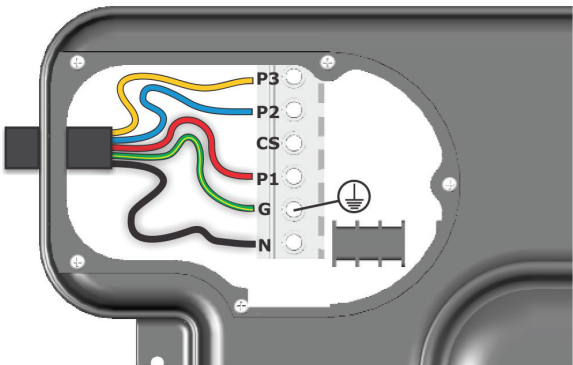
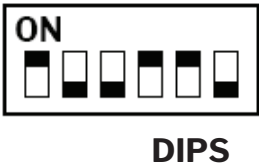
P3	Link to CS
P2	Link to CS
CS	Link to P3 and P2
P1	Phase
G	Earth
N	Neutral



230-240V (4 wire) dual phase

Terminal Wiring

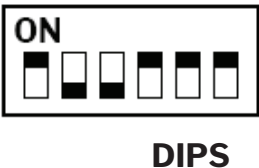
P3	Link to CS
P2	Phase 2
CS	Link to P3
P1	Phase 1
G	Earth
N	Neutral



230-240V (5 wire) three phase

Terminal Wiring

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



TOUCH PANEL INPUT SETTINGS (MUST BE COMPLETED BEFORE USE)

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 Panel & Startup

Once the Swim Spa is filled, locate the touch panel (seen below) and turn power on. If nothing shows on the display, just power off and back on again (data relay error). 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 panel 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 40A.

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

