

# Direct Connect 8

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# 1. Introduction

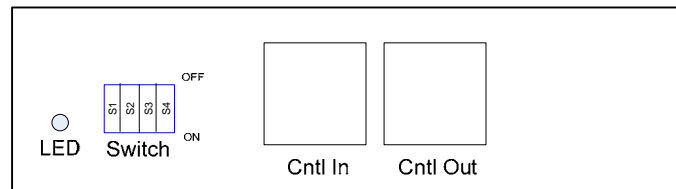
The Direct Connect 8 (DC8) allows the AquaController to directly switch up to 8 120V outlets. Each of the eight outlets in the box can switch 6 Amps at 120 V AC. The total sum of all the current draw of the DC8 must be less than 15 Amps.

# 2. Installation

The DC8 should be screwed onto a wall or cabinet in a dry location so that water damage is not possible. It is recommended that you follow these guidelines:

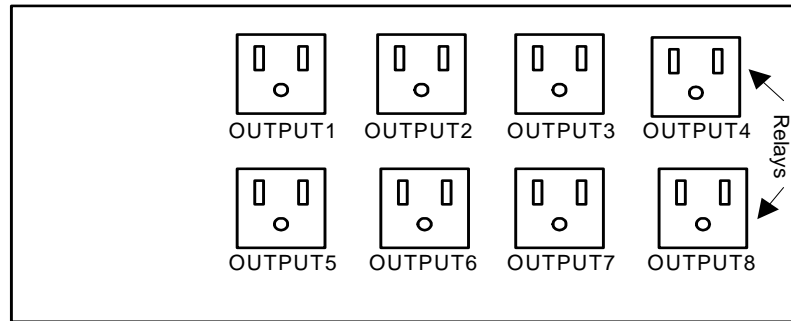
1. Mount the DC8 above the water line of your tank.
2. Be sure to have drip loops on all cords plugging to the DC8.
3. Plug the DC8 into a Ground Fault Interrupter Circuit (GFIC).

Refer to the figure below for the positions of the connectors on the digital control box:



## Outputs (Output 1-8)

The outlets are numbered as shown in the diagram on the top face of the DC8 below. Each outlet's current is limited to 6 Amps and sum of the 8 outlet's current may not exceed 15 Amps.



### Control Address selection (switch)

The first two dip switches on the left of the box allow for the setting of letter portion of the Control address of the DC8. The table below illustrates the four possible settings. Note: only Control address letter codes A-D are available.

Switch 1	Switch 2	Cntl Letter Address
Off	Off	A
On	Off	B
Off	On	C
On	On	D

The right two dip switches on the box allow for the setting of the numeric portion of the Control address. The table below illustrates the four possible settings.

Switch 3	Control Number Address
Off	1-8
On	9-16

### Sample Setting:

If Switch 1 = On, Switch 2 = Off, Switch 3 = On, then the DC8 will respond to commands sent to addresses B9 through B16. The AquaController must be configured to use the same addresses as selected on the DC8. Refer to the AquaController Owner's manual for more information on how to set up the AquaController. Note that switch 4 is unused.

### Light Emitting Diode (LED)

The LED provides a visual indication of the operating status of the DC8. When solid on, it means that power is on and the DC8 is ready to accept control commands. When blinking the DC8 is receiving control commands..

### Control Input (Cntl In)

The left RJ-11 connector (telephone plug) is the input connector for the Control signal. A telephone style cable (4 internal wires, supplied with the DC8). The telephone cord should connect between this DC8 Control In port to the AquaController. The length of this cable should be less than 10 feet.

### Control Output (Cntl Out)

The right RJ-11 connector (telephone plug) is the output connector for the Control signal. A telephone style cable (4 internal wires) should be used to connect this Control output port to another DC8 Control input port. Always connect Control inputs to Control outputs when daisy chaining multiple DC8s together. The last DC8 in the chain should either have its Control output unconnected or connected to a Power-line interface (part #IM513).

**NOTE:** Some extremely small pumps (i.e. Aqualifter), may not be shut off when plugged into the triac controlled outlets (1-3 & 5-7) of the DC8 due to their poor power factor. Instead plug this poor power factor devices into the relay outlets of the DC8 (outlets #4 & #8). The relay outlets are only available in DC8 with serial numbers greater than 9000. Do not use Icecap 430 or 660 ballasts on the relay controlled outlets due to their high inrush current. If you have an older model DC8 then work arounds for these poor power factor devices are:

- Plug an additional load (small light bulb/wall wart transformer/fan) in parallel with the load.
- Use a socket expansion box to control the device.
- Use a DC4 or DC4HD to control the device.

## Neptune Systems Limited Warranty

Neptune Systems warrants this product to be free from defects in material and workmanship for a period of 1 year from the date of purchase. If repair or adjustment is necessary and has not been the result of abuse, misuse, or accidental damage, within the 1-year period, please return the product with proof of purchase, and correction of the defect will be made without charge.

For your protection, items being returned must be carefully packed to prevent damage in shipment and insured against possible damage or loss. Neptune Systems will not be responsible for damage resulting from careless or insufficient packaging. Before returning please obtain a return authorization (RMA) number from Neptune Systems at (408) 578-3022. Returned merchandise will not be accepted without a RMA number.

Except for the warranty set forth above, Neptune Systems is not responsible for any damages including, but not limited to, consequential damage occurring out of or in connection with the delivery, use or performance of Neptune Systems' products. Buyer's remedies for breach of warranty shall be limited to repair, or replacement and full or partial adjustment to purchase price.