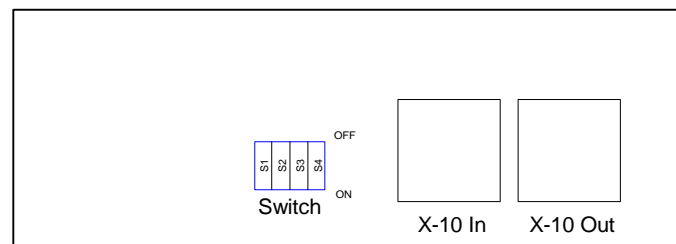# Direct Connect 4

1. Introduction

The Direct Connect 4 (DC4) allows the AquaController to directly switch up to 4 120V outlets. Each of the four outlets in the box can switch 8 Amps at 120 V AC. The total sum of all the current draw of the DC4 must be less than 10 Amps.

2. Installation

The DC4 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:
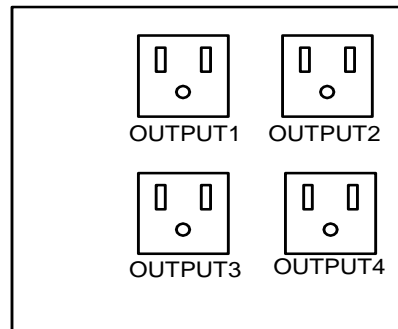
1. Mount the DC4 above the water line of your tank.
2. Be sure to have drip loops on all cords plugging to the DC4.
3. Plug the DC4 into a Ground Fault Interrupter Circuit (GFIC).

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

Outputs (Output 1-4)

The outlets are numbered as shown in the diagram on the top face of the DC4 below. Each outlet's current is limited to 8 Amps and sum of the 4 outlet's current may not exceed 10 Amps.

X-10 Address selection (switch)

The first two dip switches on the left of the box allow for the setting of letter portion of the X-10 address of the DC4. The table below illustrates the four possible settings. Note: only X-10 address letter codes A-D are available.

Switch 1	Switch 2	X-10 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 X-10 address. The table below illustrates the four possible settings.

Switch 3	Switch 4	X-10 Number Address
Off	Off	1-4
On	Off	5-8
Off	On	9-12
On	On	13-16

Sample Setting:

If Switch 1 = On, Switch 2 = Off, Switch 3 = On, and Switch 4 = Off then the DC4 will respond to commands sent to addresses B5 through B8. The AquaController must be configured to use the same addresses as selected on the DC4. Refer to the AquaController Owner's manual for more information on how to set up the AquaController.

X-10 Input (X-10 In)

The left RJ-11 connector (telephone plug) is the input connector for the X10 signal. A telephone style cable (supplied with the DC4 is used to connect this DC4 X-10 port to the AquaController. The length of this cable should be less than 10 feet.

X-10 Output (X-10 Out)

The right RJ-11 connector (telephone plug) is the output connector for the X10 signal. A telephone style cable (4 internal wires) should be used to connect this X-10 output port to another DC4 X-10 input port. Always connect X-10 inputs to X-10 outputs when daisy chaining multiple DC4s together. The last DC4 in the chain should either have its X-10 output unconnected or connected to an X10 power-line interface. The total length of all X-10 cables should be less than 20 feet.

Internal Fuse

Inside the DC4 there is a fast-blow 10-amp fuse. In the event of an overload or short circuit this internal fuse will blow. **Only replace with a 10-amp or smaller fuse**. Replacement fuses may be purchased directly from Neptune Systems. **Always disconnect all power before opening the DC4 case, and never apply power when the DC4 case is open.**

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