



# AquaController Apex EnergyBar 4



## Setup Guide

## WELCOME TO AQUACONTROLLER APEX

Congratulations on your purchase of the AquaController Apex EnergyBar 4! The EnergyBar 4 allows the AquaController Apex system to control up to four 120 volt items such as lights, pumps, fans, heaters, chillers and more.

## PHYSICAL INSTALLATION

The EnergyBar 4 should be securely mounted in a location free from moisture. Use wood screws through the mounting tabs or if mounting on drywall, use drywall anchors (mounting screws and anchors not included).

- Mount the EnergyBar 4 above the water line of the aquarium.
- Be sure to utilize drip loops on all power cords and AquaBus cables plugged in to the EnergyBar 4.
- Plug the EnergyBar 4 into a circuit protected by a Ground Fault Circuit Interrupter (GFCI).



**WARNING:** Water damage will void your warranty! Mount the EnergyBar in a location safe from moisture exposure.

## AQUABUS CONNECTORS

The EnergyBar 4 communicates with and provides power to the AquaController Apex base, Apex Display and Apex accessory modules through the AquaBus connector. The EnergyBar 4 has six connectors to connect AquaBus Accessories. There are no limitations on the order AquaBus accessories can be connected or to which AquaBus ports accessories must be connected. The total length of all AquaBus cables should be limited to 200 feet. Please see the AquaController Apex Installation and Getting Started Guide for more information.



**WARNING:** NEVER plug standard USB devices into any AquaBus connector or AquaBus accessories into computer USB ports. Damage to the AquaBus accessory and/or USB device may result.

## OUTLETS

The EnergyBar 4 provides four switched 120V outlets. They are numbered 1 through 4 as illustrated on the front of the device. Outlets 1, 2 and 4 are switched with smaller relays and can power items up to 8 amps each. Outlet 3 is switched with large relay and can power items up to 12 amps each. The total current draw for all active outlets must be less than 15 amps. Instantaneous as well as a historical graph of the current draw can be viewed from the AquaController Apex Display or through the AquaController web server. Please see the AquaController Installation and Getting Started Guide for more information on monitoring and programming the EnergyBar 4 outlets.

## ENERGYBAR 4 FEATURES

- 4 Independently controllable 120V outlets.
- Built-in 4 port AquaBus hub so that accessories can be easily added.
- Communicates with and powers the AquaController Apex Display, base unit and accessories through the AquaBus.
- Active electrical current monitoring and logging through the AquaController Apex.
- Fail-safe setting. If communication failure occurs between the AquaController Apex and the EnergyBar 4, each outlet can be configured to revert to a user settable default setting.
- High reliability direct wired connection to the Apex System through the AquaBus (does not use X10).
- Completely silent operation on the solid state switched outlets.
- "Soft-Start" on the solid state switched outlets for reduced pump wear.
- Two outlets with relay switching for higher power switching.
- Up to 240 EnergyBar 4 devices can be connected together for up to 960 switched outlets on a single AquaBus.
- Built-in circuit breaker protected.
- 4 Mounting Holes for easy installation.
- Compact custom aluminum enclosure (7.25" x 3.75" x 1.8").

## STATUS INDICATOR

The EnergyBar 4 has a single LED status indicator to provide the operational status of the EnergyBar 8. The table below lists the possible states of the indicator along with the indicated status.

LED State	Status
Off	The EnergyBar 4 is not powered
Blinking Yellow	The EnergyBar 4 is in boot loader mode and has not been configured by the AquaController Apex
Solid Yellow	The EnergyBar 4 is in boot loader mode and has been configured by the AquaController Apex
Blinking Green	The EnergyBar 4 is running but has not received commands from the AquaController Apex. Outlets are in Fallback mode
Solid Green	The EnergyBar is running and is receiving commands from the AquaController Apex base module

## TECHNICAL SPECIFICATIONS

Number of relay outlets	4
Maximum Current Draw per Solid State Outlet	8 Amps
Maximum Current Draw on outlet #3	12 Amps
Maximum Allowed Current Draw (total of all outlets)	15 Amps
Number of AquaBus Connectors	4

## 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. Probes carry a 90-day warranty. 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.

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EB4 Manual V2

## CE DECLARATION OF CONFORMITY

Manufacturer: Neptune Systems, LLC. 6280 San Ignacio Ave. Suite E, San Jose, CA 95119, USA. 408-578-3022  
Product: EnergyBar 4  
Model No. EB4

The undersigned hereby declares, on behalf of the Neptune Systems, LLC. of San Jose, California that the above-referenced product, to which this declaration relates, is in conformity with the provisions of:

- EN 60950-1+A1:2009
- EN 60335-1:2010

The Technical Construction File required by this Directive is maintained at the corporate headquarters of Neptune Systems, LLC, 6280 San Ignacio Ave. Suite E, San Jose, California.

Curt Pansegrau  
President



The symbol to the right means that according to local laws and regulations your product should be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Some collection points accept products for free. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

