

# STEVE'S LEDs

**Here are a few steps that need to be taken for specific Steve's LEDs drivers to hand off control to the ACI.**

Driver V1.0 - V6.8: The jumper bridge wire must be removed from driver ports 2&4, ACI output plugs into port #2

Driver V7.0: The Dip Switch must be turned OFF

Driver V8.0: Has auto-sensing technology, no modifications required, just plug it in.

Driver Meanwell LDD: No modifications required, just plug it in.

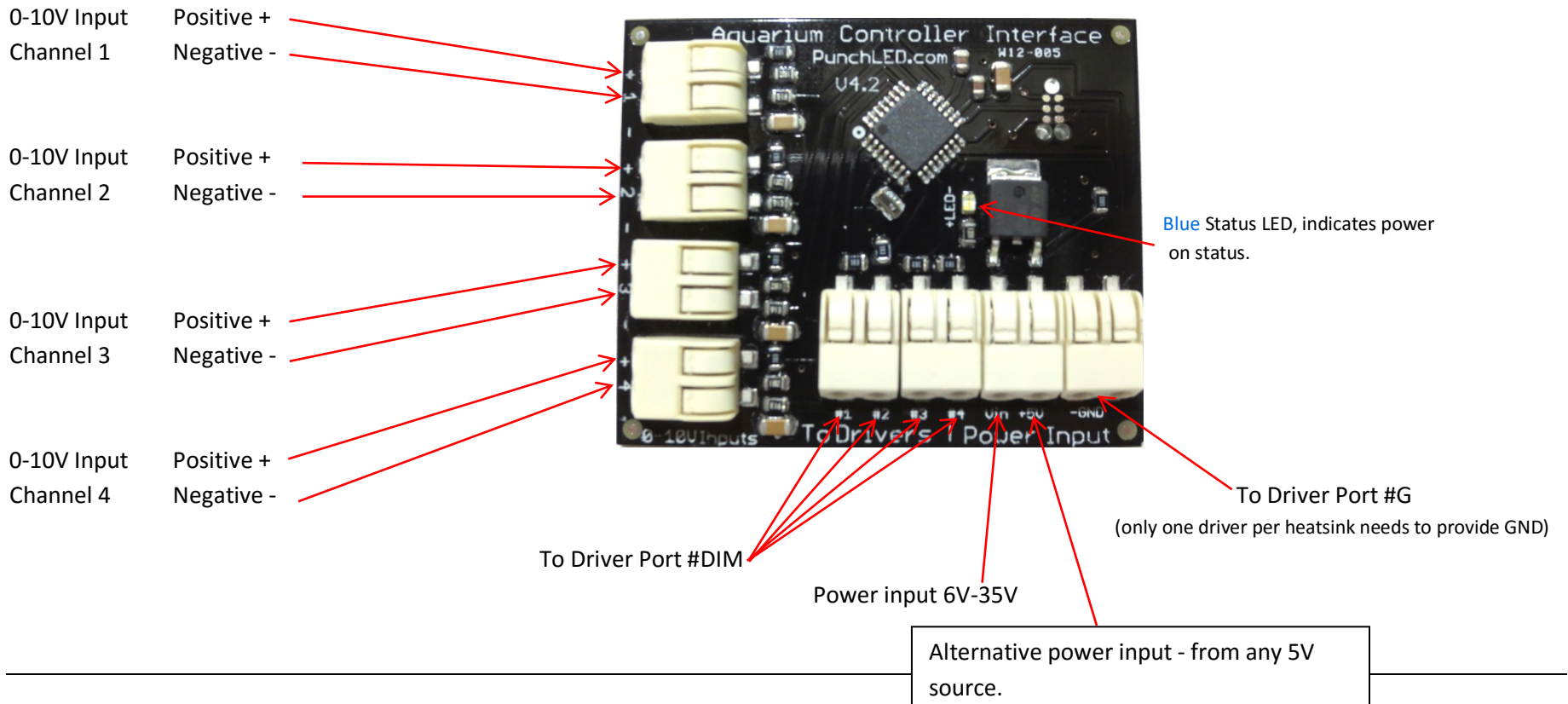
## **Aquarium Controller Interface (ACI)**

Your 0-10V Aquarium Controller Interface Harness is a very advanced, state-of-the-art computer on a chip. It uses reliable ADC and comparator features to convert that old variable analog signal into a crisp, clean digital signal so that the digital drivers can "talk" to your Aquarium Controller. It is fragile and VERY sensitive to ESD (electrostatic discharge), try to keep it away from high humidity, and do not install it in locations that put it at risk of being splashed. Remember, you are ultimately responsible for installing it properly and safely. If you feel you are unable to install it properly and safely, consult a qualified individual. It is recommended that you securely seat all wires, and use the included heat-shrink tubing to make sure those soldered joints are properly insulated.

This installation guide demonstrates how a typical installation may take place.

---

Please see below photo for sample installation.



Aquarium Controller Positive 0-10V Wires – ReefKeeper ALC, Apex 0-10 Variable Speed port or virtually any other 0-10V source. The 0-10V signal wire from your aquarium controller is typically Red, Black or White (non-standard / non-intuitive colors, so verify with the manufacturer of your controller). You may need to make an extension, depending on your particular installation, use at least 22GA or 20GA wire. If the extension is over 3 ft, use shielded wire.

NOTE: Do not connect to main LED power supply using the +5V port, you must use port “Vin” for any voltage higher than 5.0V.

\*All of Steve's LEDs drivers - Remember to leave dimmer knob plugged into the driver if using Steve's LEDs Digital Drivers, or, you can use a bridge wire and connect the dimmer ports together- otherwise the driver will not function.

If you experience flickering at low intensity levels, this means the wires running to and from the ACI are picking up electromagnetic interference (EMI) from nearby wires going to other devices such as fans/pumps/AC outlets. Try to isolate these wires and the flickering will go away.

Up to 12 driver chips have been tested to connect to a single PWM output. To connect more than one driver to this single wire, you will need to make a splitter by soldering several wires together to this one, branching out to all the drivers.

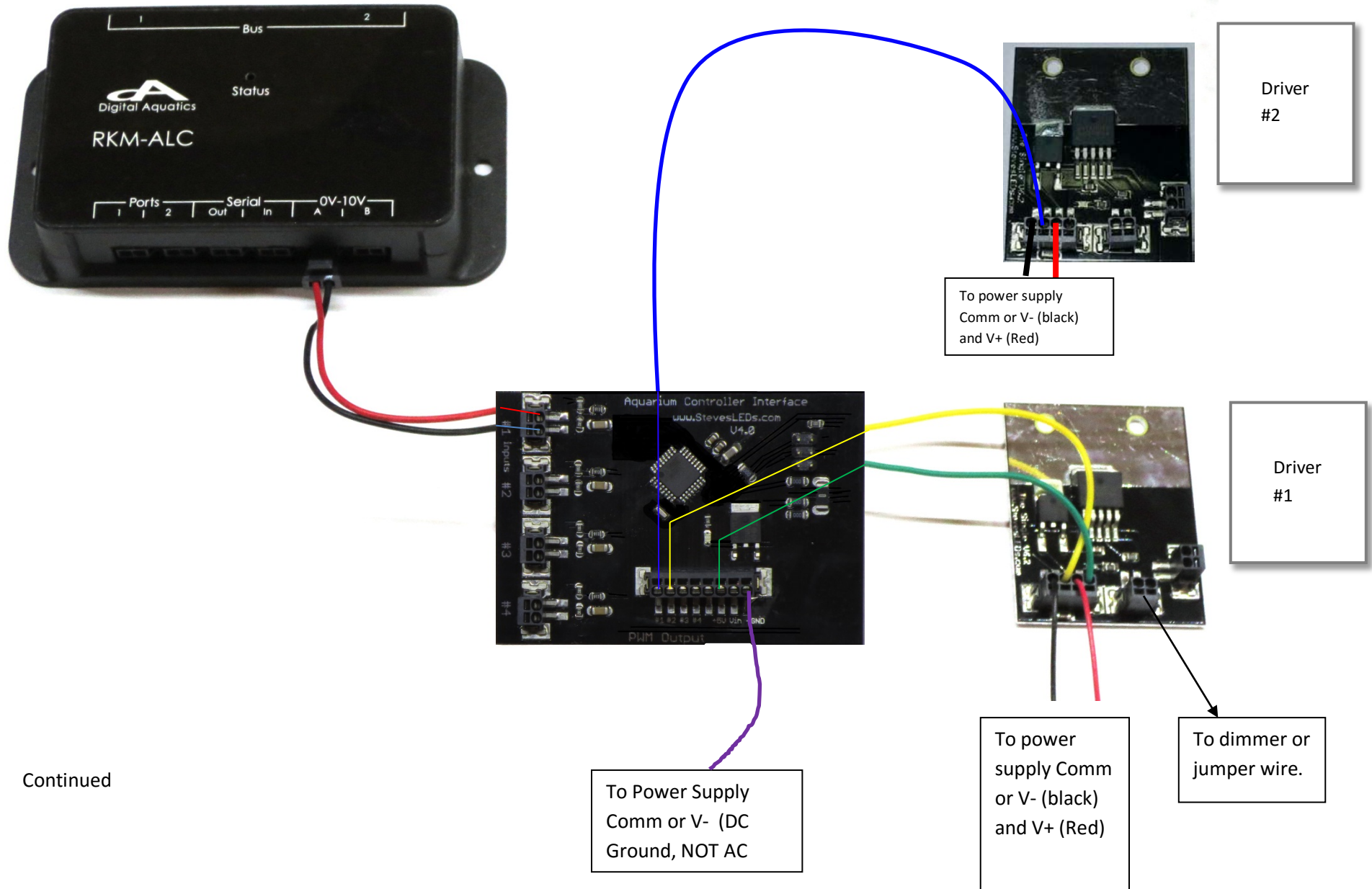
For best results, use one channel to output to all of the drivers that are running to your blue LEDs, and another channel to output to all of your white LEDs. This gives you complete control over color temperature, and also allows you to simulate sunrise, sunset, storms, etc.

If you have any questions, please [Contact Us](#) with your questions or comments.

See below wiring diagrams for connecting popular drivers.

Continued

Diagram 1: Reefkeeper ALC to Steve's Drivers. Any 0-10V source will work in place of the ALC.



Continued

Diagram 2: Neptune Systems VDM to Steve's LEDs Versa Driver. Please find instructions for making your own cable using a standard Cat5 cable at the bottom of the page. Note: Only wires used to connect the VDM are shown in the photo.

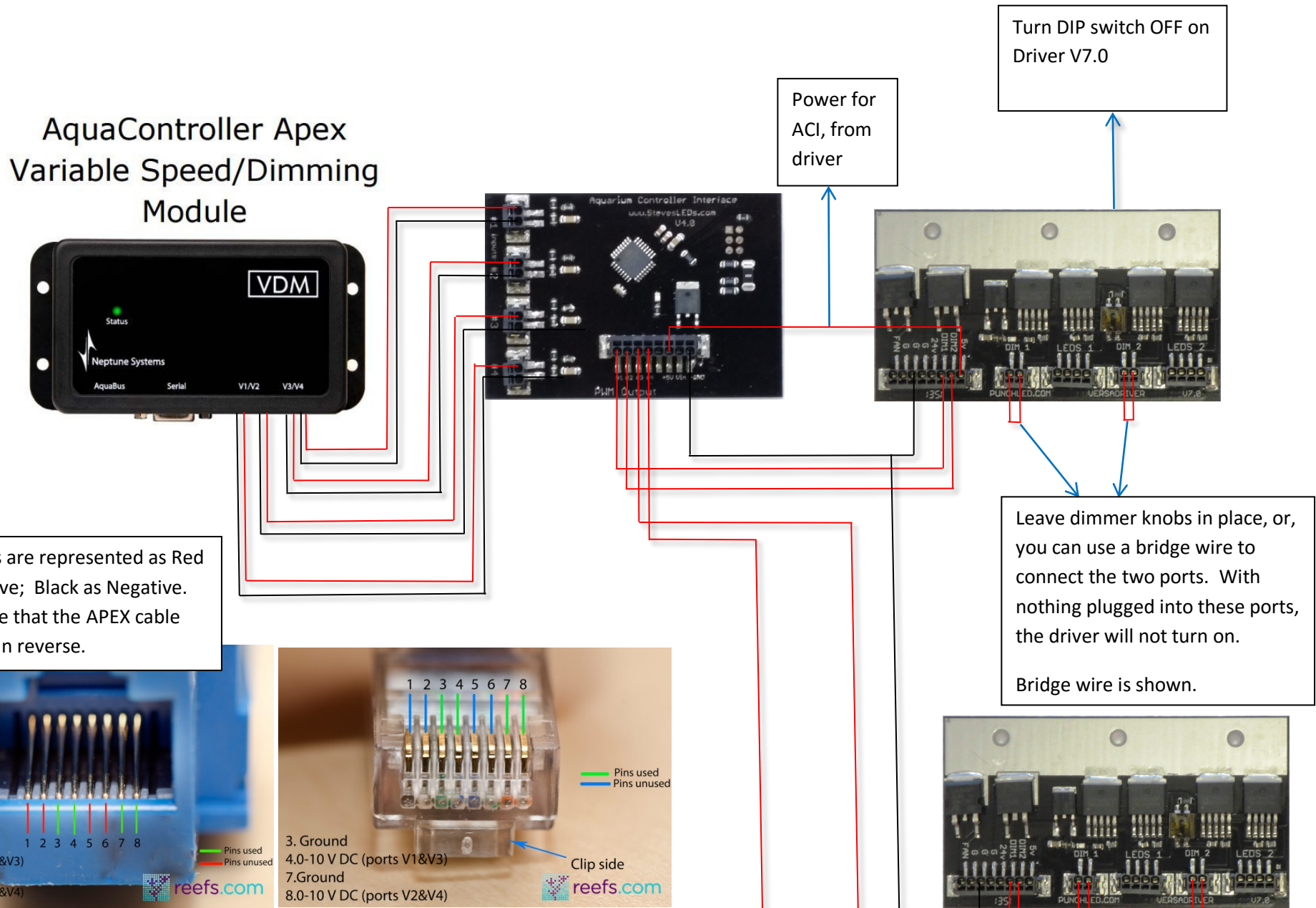


Diagram 3 – ACI to 8X LDD Driver Arrays

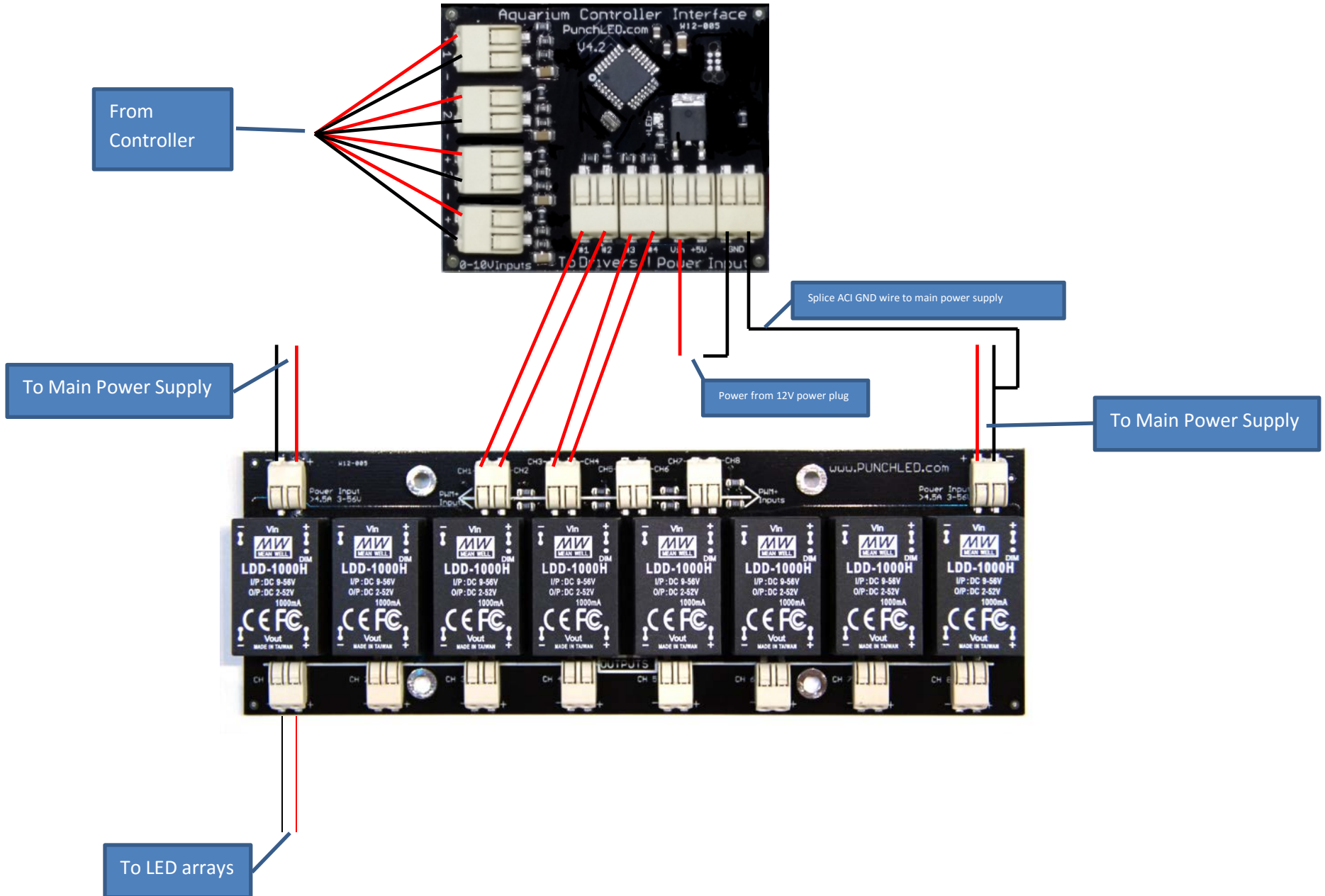


Diagram 3 – ACI to 3X LDD Driver Array

