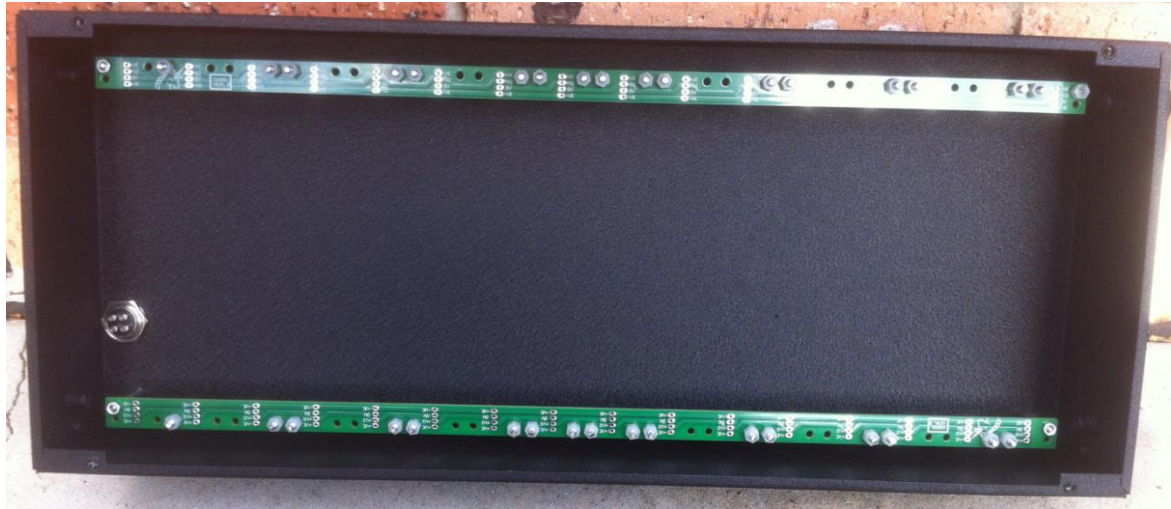


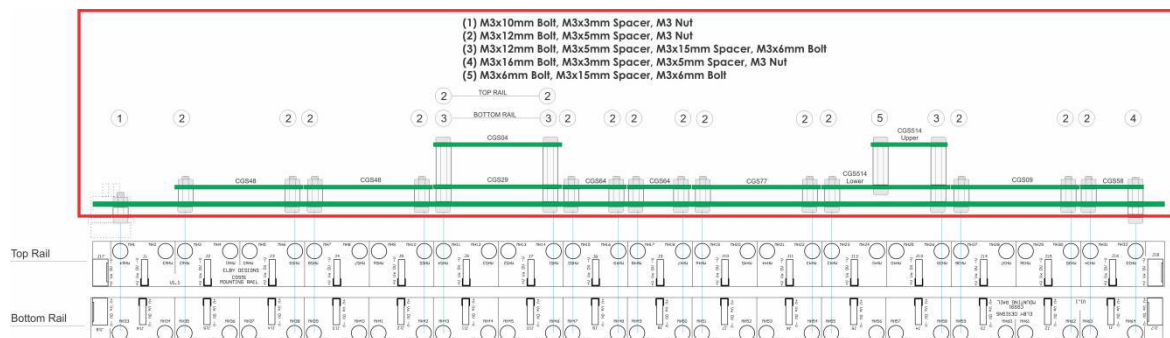
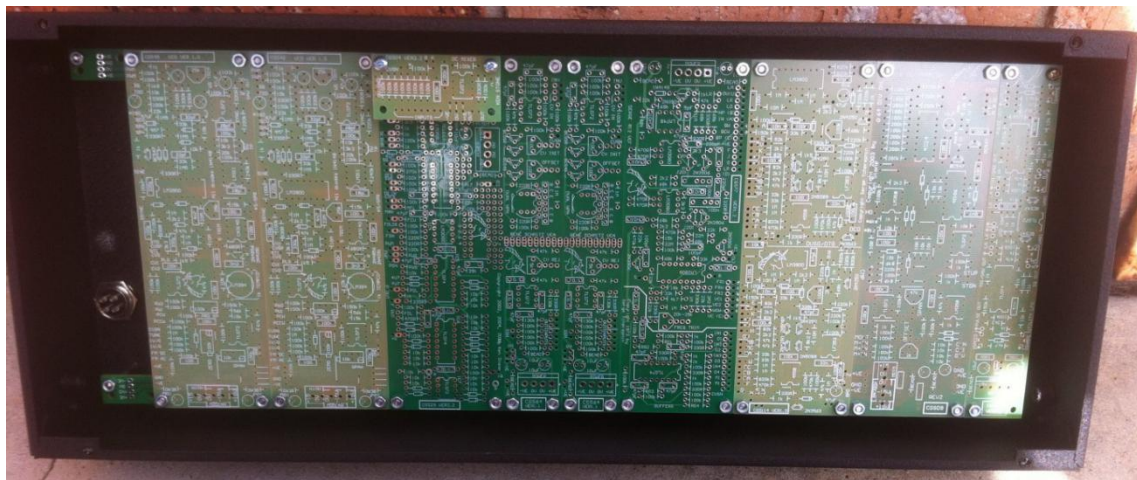


BOG – The Voice Panel

We recommend using our CGS91 Mounting Kit to mount all of the PCBs. This kit may be mounted on the rear of the front panel (requires that the front panel has 4 mating holes to attach the kit) or in the base of your boat. The picture below shows the BOG CGS91 Mounting Kit installed in to one of our custom BOCGS BUD enclosures and also shows the power-in socket at lower left.



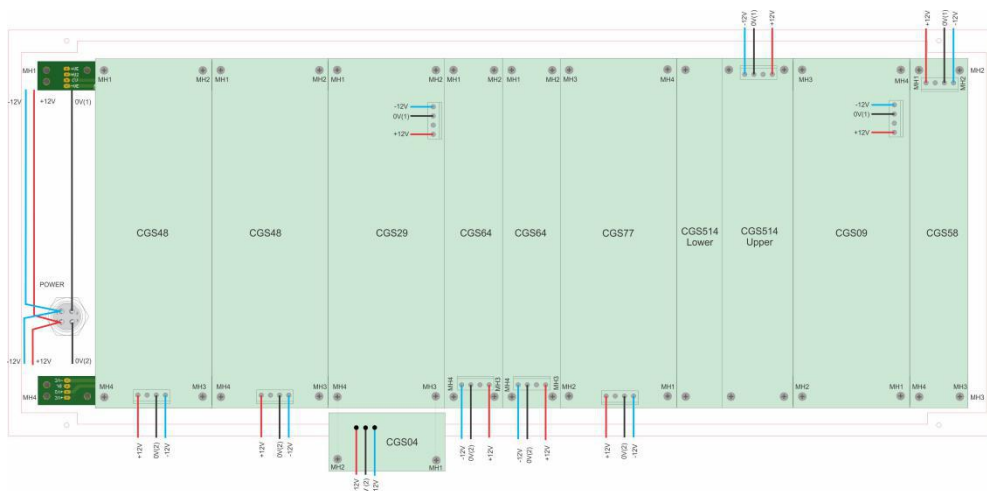
The picture below shows the BOG PCB Set installed



BOG PCB Mounting Guide

To prevent possible interference between the CGS48 VCOs and the CGS58 Utility LFO we recommend connecting these boards to different CGS91 busboards. The illustration below shows the suggested layout and power wiring details. The CGS58 will need to be mounted 'upside down' to facilitate this arrangement. We also suggest mounting the CGS09 'upside down' as well.

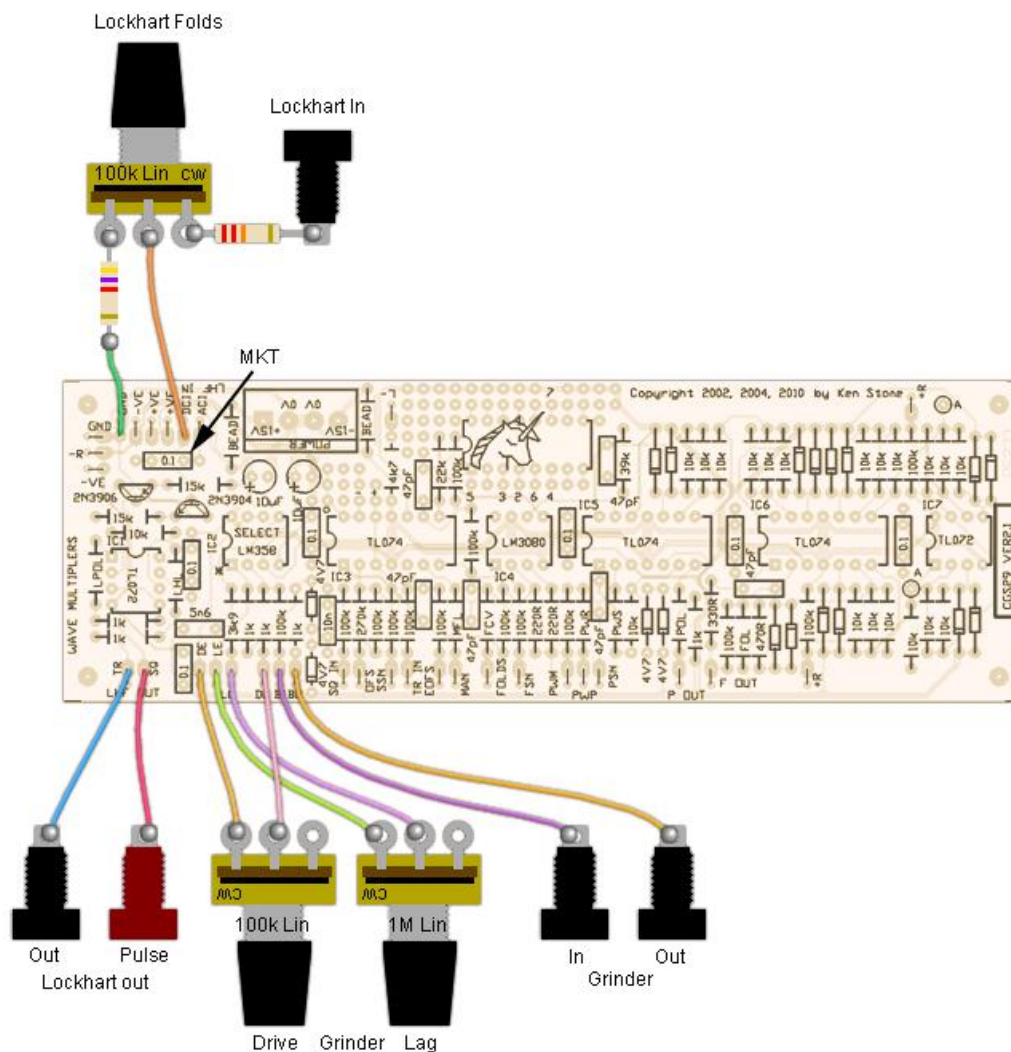
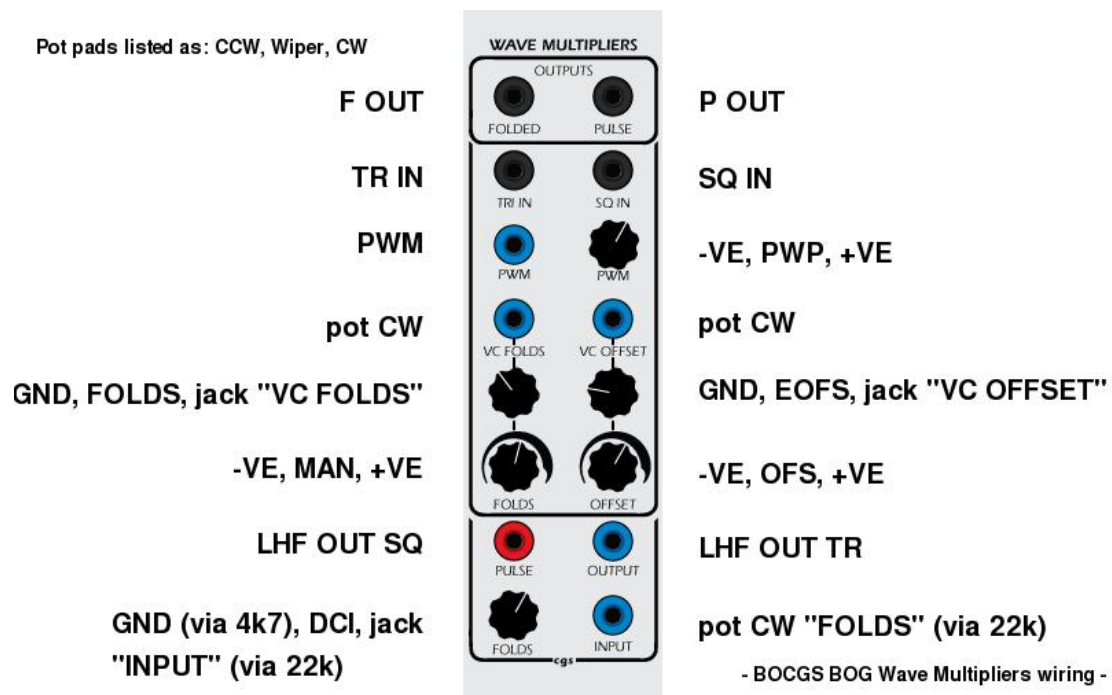
A simple filter should, ideally, be added to the upper CGS91 rail (the inductors can be wired in series with the incoming power leads while the capacitors will need to be strapped to the CGS91 at a convenient point. Using the recommended 4-pin power connector and mating 4-wire DC cables, will allow the 0V connection to be only 'commoned' at the main power supply.

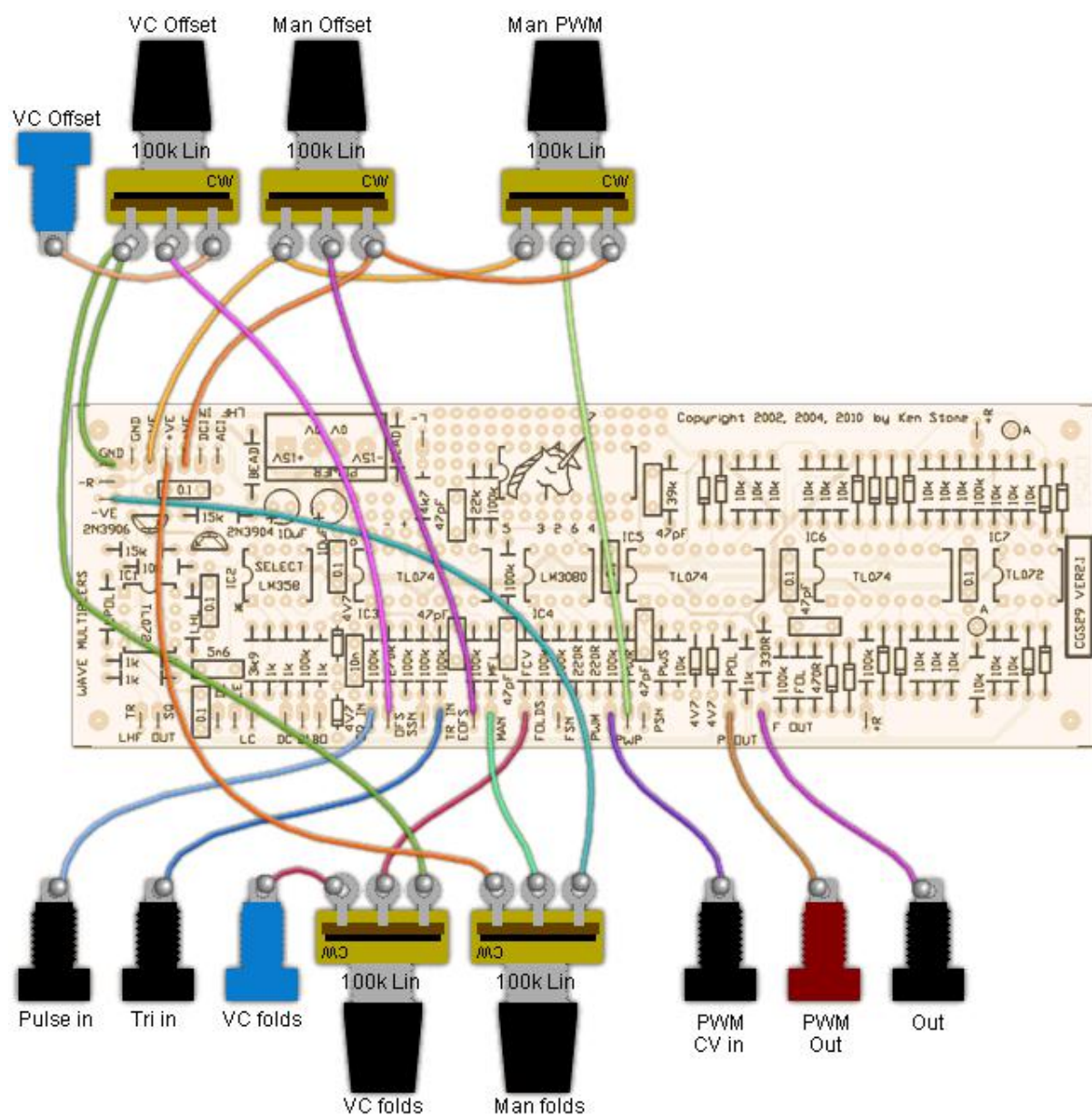


[Suggested power wiring for the BOG \(click for larger image\)](#)

Build Guides for the following modules currently do not exist so the following BOG diagrams for these modules (created by Diophantine - (presented in the Best of CGS Build thread on Muff's Modules and More) have been included. Constructors are advised to visit this thread for latest updates and advice from other BoCGS builders) and show the PCB labels associated with each panel component.

Fit 47pF across LHL





CGS58 – Utility LFO

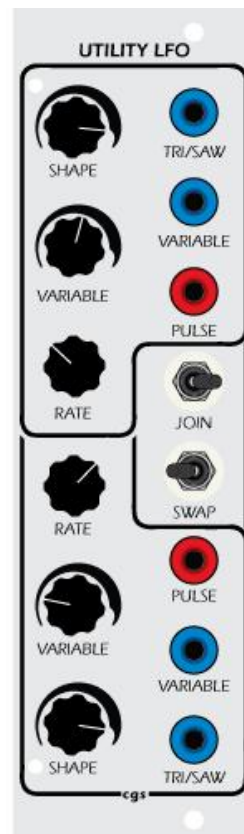
Pot pads listed as: CCW, Wiper, CW

SHAPE: CCW, W, CW

**VARI CCW, VARI W,
switch "JOIN" C1**

SPEED: CCW, W, CW

**switch "JOIN" C2, VARI W,
switch "SWAP" C2**



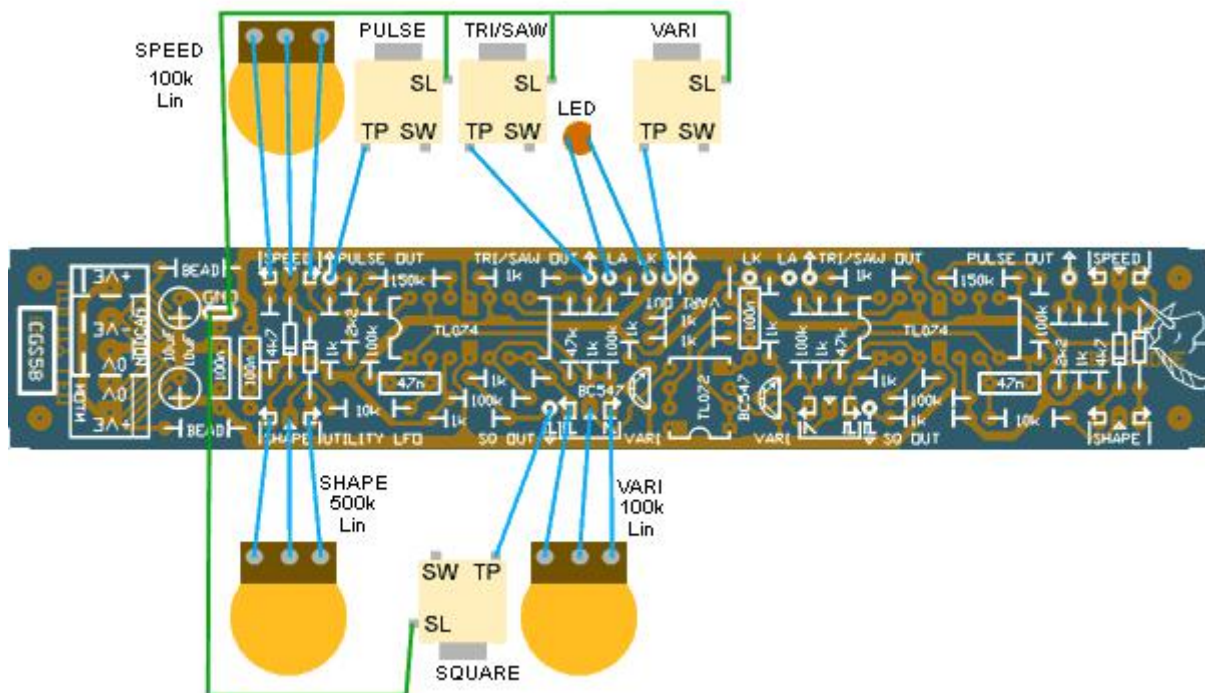
TRI/SAW OUT

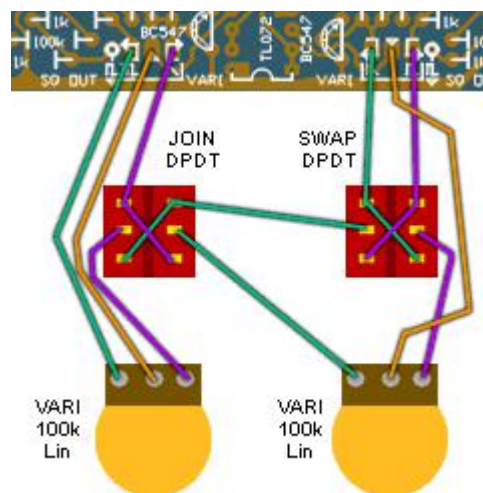
VARI OUT

PULSE OUT

**see switch connections on
Ken's website!**

- BOCGS BOG LFO wiring -





CGS04 – DC Mixer



Pot pads listed as: CCW, Wiper, CW

OUT

INPUT #4

pot CW "LEVEL 3"

pot CW "LEVEL 2"

pot CW "LEVEL 1"

GND, INPUT #3, jack "IN 3"

GND, INPUT #2, jack "IN 2"

GND, INPUT #1, jack "IN 1"

- BOCGS BOG Mixer wiring -

CGS09 – VC Divider



Pot pads listed as: CCW, Wiper, CW

HO

Note: may want to increase 1k resistor
at CVN jack to 100k. (speculative!)

LO

STUP (or STDN)

pot CW & CVN

GND, CVI, jack "VC IN"

CMP CCW, CMP W, CMP CW

M-IN

M+IN

- BOCGS BOG VC Divider wiring -