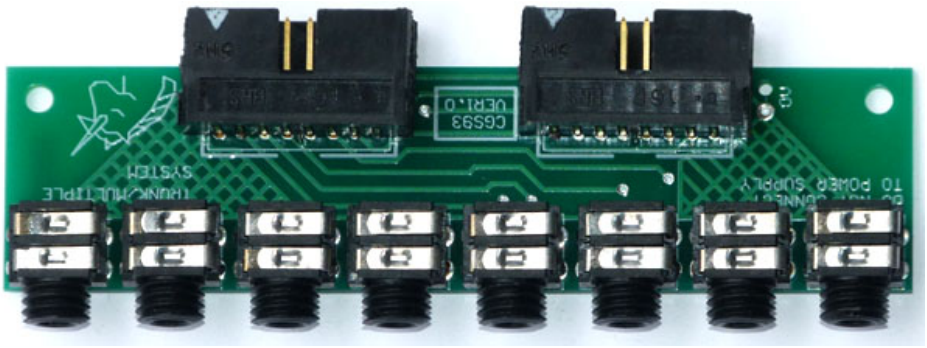
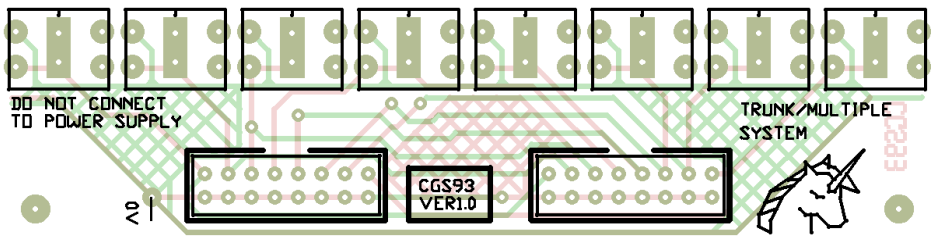
Trunk line/multiple.



These boards can be used as cascadable multiples, to create trunk lines between different cabinets, or assuming you have something else that uses the same termination, for expansion/breakout. It uses 16 way ribbon, like used in Euro power, every second wire connected to ground to form a shield between the signal wires. You can mount one of these in each cabinet of a large system, and hook them up from behind with the ribbon. If you hook just two in different cabinets together, you have 8 trunk lines between them, reducing the need for long patch cables. If you place one in each of several cabinets, and run a common ribbon between them, then you have an inter-cabinet bus. If you mount them side by side, and use a common ribbon between them, you have a multiple. As a bonus, the board is designed to work with banana jacks as well, so your bus/trunk lines can go between different types of synths (mini jacks and bananas).



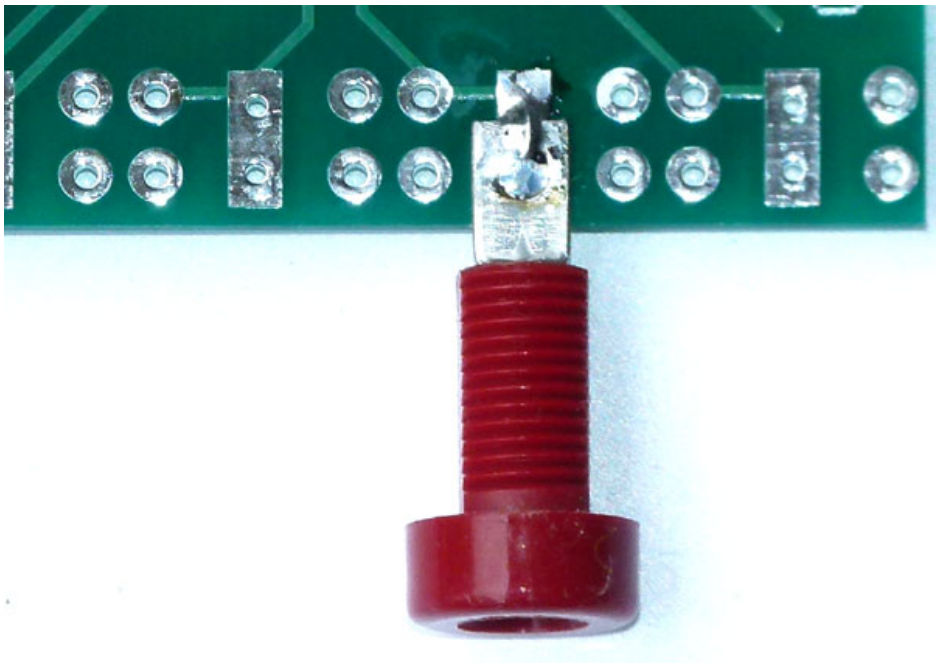
Pad identification:

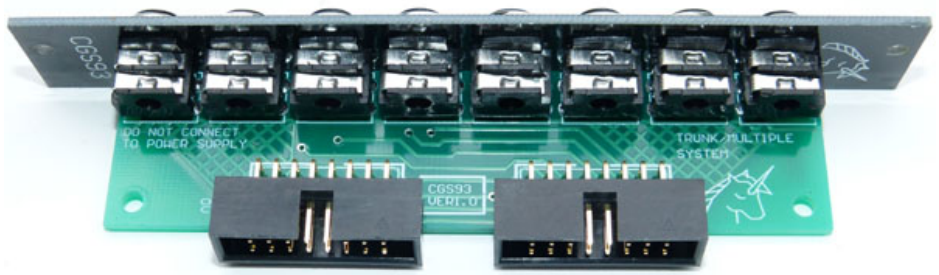
0V	0V/GND power rail for use with Banana installations

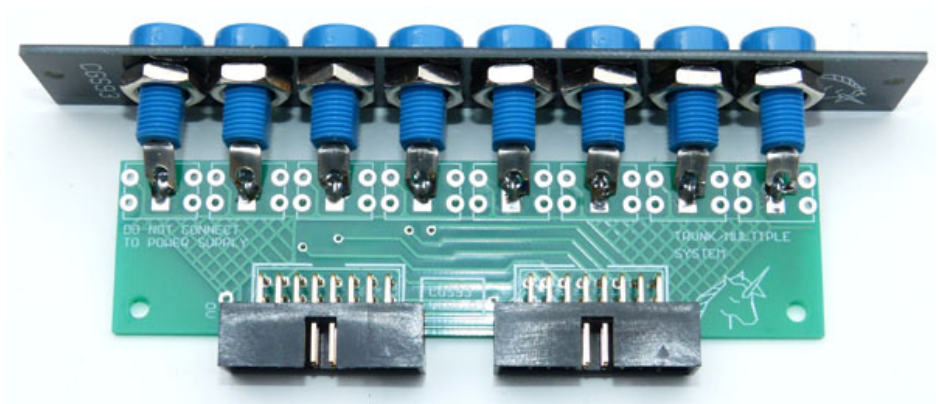
Construction

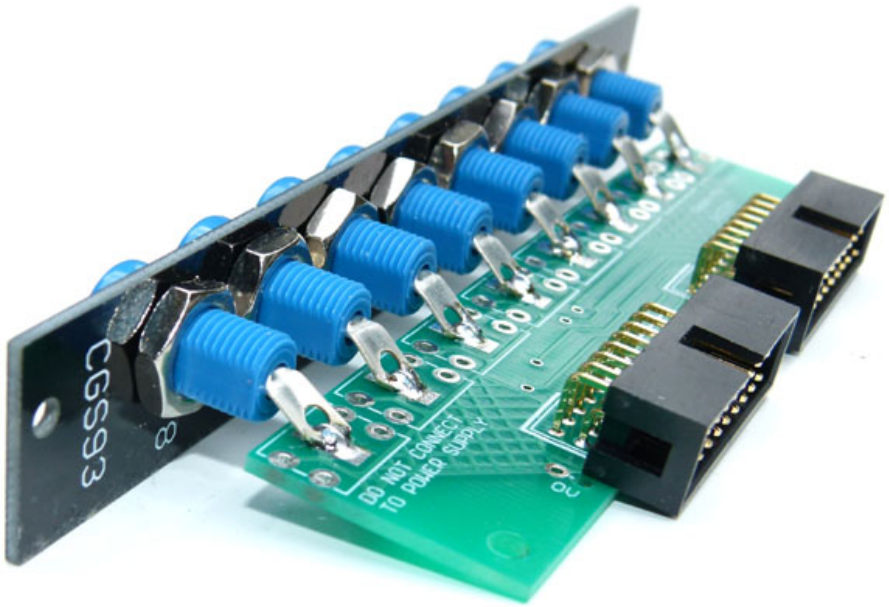
Before you start assembly, check the board for etching faults. Look for any shorts between tracks, or open circuits due to over etching. Take this opportunity to sand the edges of the board if needed, removing any splinters or rough edges.

Jack centers are at 1/2" spacing. The board will fit behind Euro and Frac rack panels.




DO NOT CONNECT
TO POWER SUPPLY
TRUNK/MULTIPLE
SYSTEM
CGS93
VER1.0


DO NOT CONNECT
TO POWER SUPPLY
TRUNK/MULTIPLE
SYSTEM


CGS93
DO NOT CONNECT
TO POWER SUPPLY

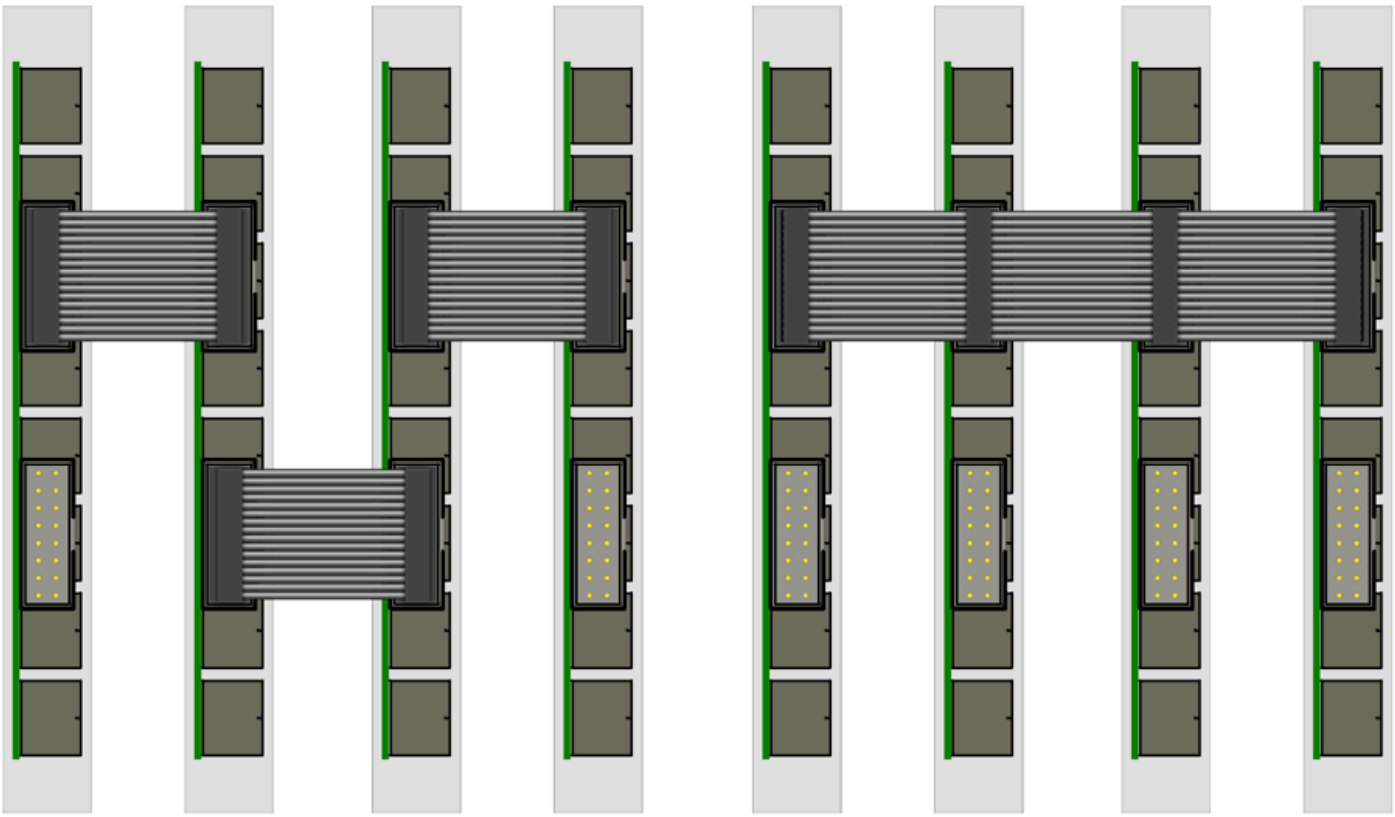
Between each set of pads for the mounting of the Cliff jacks, there is a large pad with two holes. This is so banana jacks can easily be mounted on the side of the board without the overlay. A short length of wire can be folded, looped through the banana jack's hole, then through the holes on the PCB, where it can be twisted to hold the jack in place while you solder it. The twist can then be trimmed back. As banana jacks have no earth connection, one has been provided on the PCB itself. Hook this to the nearest convenient power supply 0V/GND point on your panel. This will ensure the shield wires in the ribbon cable(s) are earthed.

If using banana jacks with the Euro panel, the jacks need to be mounted on the other side. A small portion needs to be trimmed from the tab of the jack to prevent it shorting against other tracks. See the photos above.

The panel has two sides, one labeled 1-8 the other A-H.

Note that you may need to open the holes out to 8mm to get your jacks to fit.

To use the boards as multiples, several need to be mounted side by side, and linked with a cable such as the one shown above, or using short, two-plug cables alternating between the top and bottom sockets. In this configuration, the multiples will be horizontal. While the extra expense of doing this way may not seem logical, consider if you were to interleave these modules with others in your system, or if you were to have one on each row in a cabinet. It can then be used as a distribution bus, rather than just a multiple. Using just two of these modules situated in different cabinets, with a ribbon cable between them creates eight trunk lines. That allows you to use short patch cables within a cabinet, and the trunk line to ferry any signals to the other cabinet where, again, short cables can be used for patching. This eliminates the need for long cables to be strung between cabinets, where invariably they get in the way.



Both of these methods of interconnection are valid. The box headers have identical pinouts and are in parallel.

Parts list

Part	Quantity
16pin (2 x 8 pin) 90° box headers	2
Cliff CL1384 (S6) 3.5mm Jack Sockets	8
CGS93 V1.0 PCB set	2

Notes:

- Please e-mail me if you find any errors.

Parts list

This is a guide only. Parts needed will vary with individual constructor's needs.

Check the PCBs for Sale page to see if I have any in stock.

Can't find the parts? See the parts FAQ to see if I've already answered the question. Also see the CGS Synth discussion group.

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