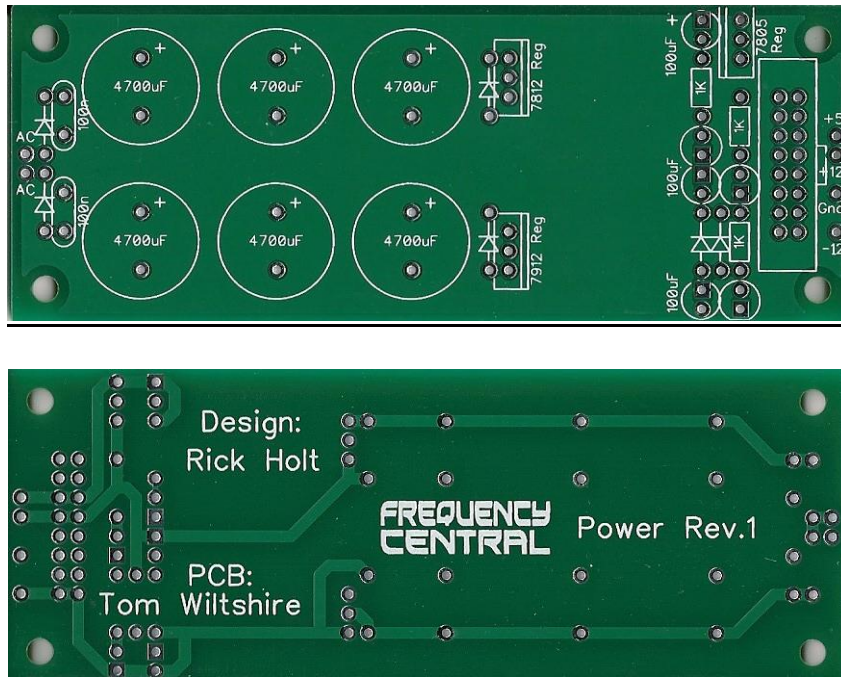


Build documentation for:

# FC POWER

## FREQUENCY CENTRAL

Rev 1 / September 2013



**FC Power** has been designed as an inexpensive solution for small Euro systems or stand-alone synths. It uses easily available parts, all of which you can source from Tayda for less than £5.00 GBP.

I recommend a 1000mA 12VAC wallwart for best results. This should give you ~500mA at +/- 12V and 100mA at +5V. Alternatively, you can get +/-15V by replacing the 7812 and 7912 with 7815 and 7915.

Please note that FC Power will not work from a DC wallwart. As the wallwart is AC, you will need to isolate it from the metalwork of your enclosure, I'd recommend [this type](#) of power input.

3mm red LEDs indicate the status of each power rail. Polarity and short circuit protection is built in.

If you don't need +5V you can leave out the 4 components associated with this (see photo below).

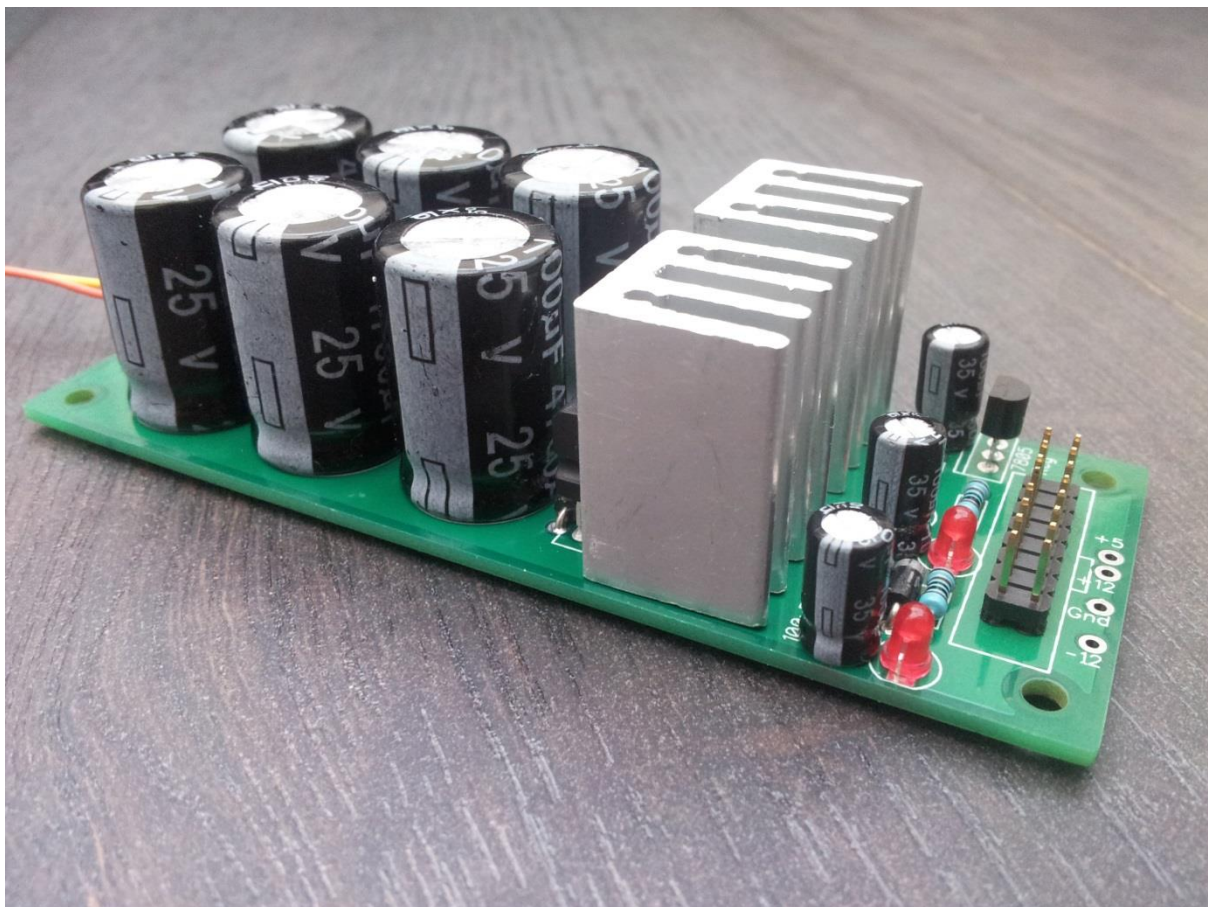
You can use FC Power's header to run a single module for testing, or you can hook it up to a flying bus board, Doepfer bus board or DIY stripboard bus board. Pads are also provided for direct hookup to the bus board of your choice without the need for a header.

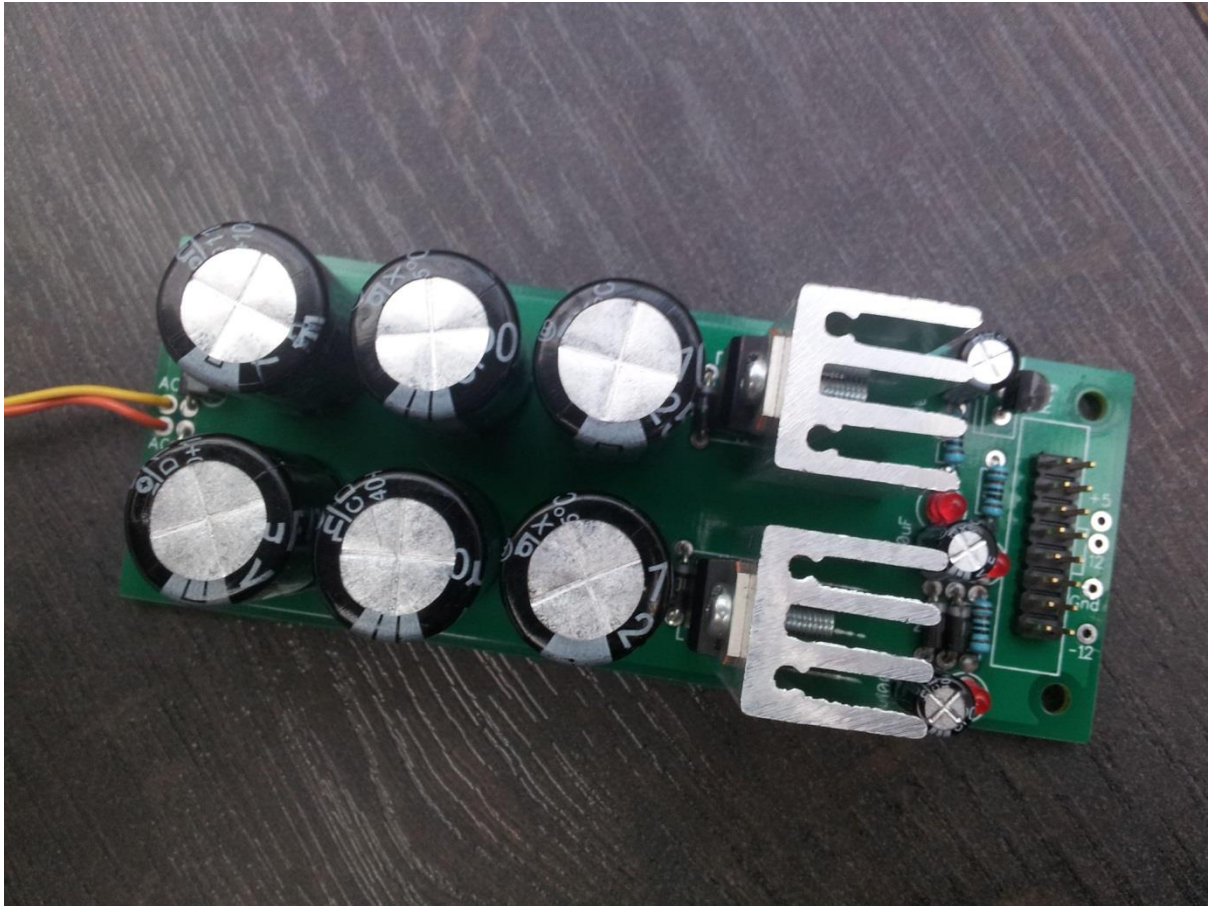
Please observe the correct polarity for all voltage regulators, diodes and electrolytic capacitors:

- 4700uF caps polarity are indicated by a + next to the +ve pad.
- 100uF caps polarity are indicated by a square pad for +ve.
- [1N4004](#) polarity are clearly shown on the PCB.
- 3mm red LEDs polarity are indicated by a square [cathode](#) pad.
- ...see photos for 7812, 7912 and 78L05.

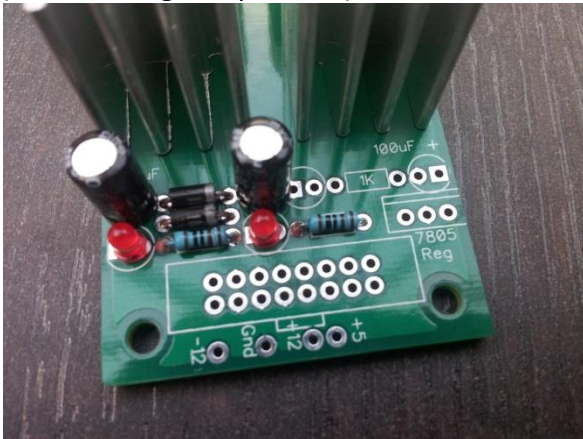
**Bill of materials**  
(click the links!)

<a href="#">1K</a> x 3	<a href="#">100nF</a> x 2 <a href="#">100uF 35V</a> x 3 <a href="#">4700uF 25V</a> x 6	<a href="#">7812</a> x 1 <a href="#">7912</a> x 1 <a href="#">78L05</a> x 1 <a href="#">1N4004</a> x 6 <a href="#">3mm red LED</a> x 3	<a href="#">Heatsink</a> x 2 <a href="#">Power header</a> M3 bolt x 2
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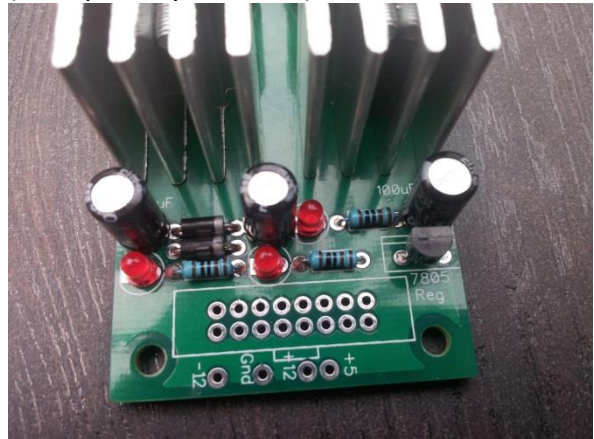




**+/-12V only**  
(note missing components):



**+/-12V plus addition of 5V supply**  
(note polarity of 78L05):



RDH 15<sup>th</sup> September 2013

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