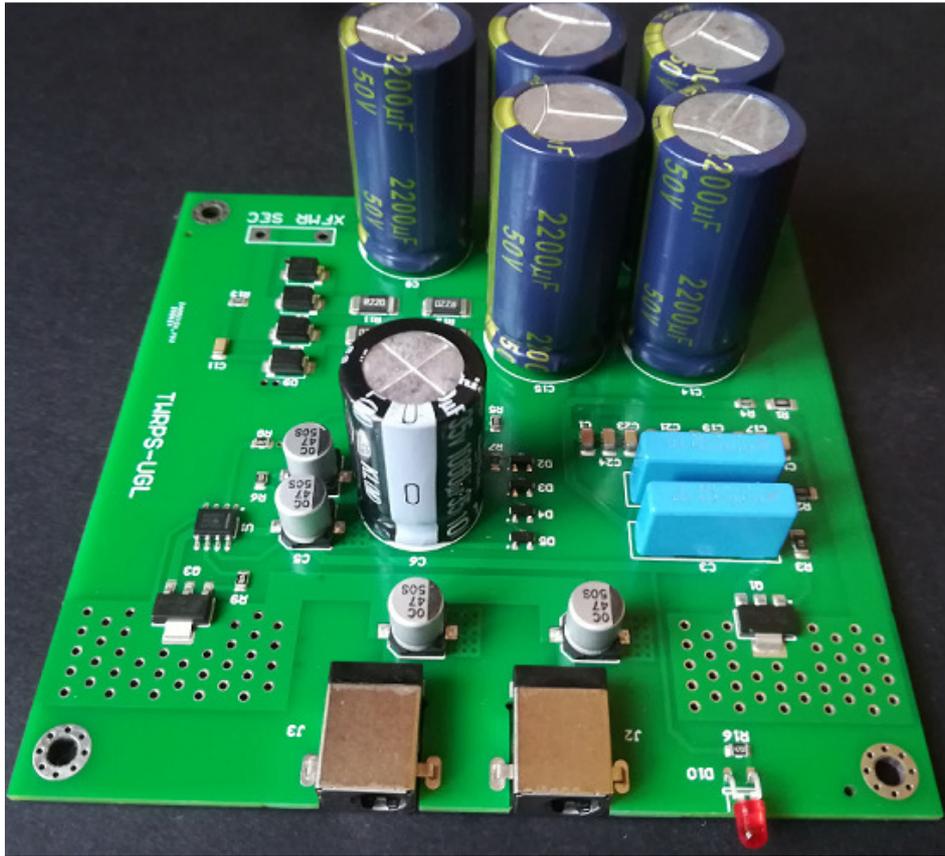


# TWRPS-UGL Low noise linear regulator



Low noise linear regulator designed to provide power supply to the oscillators and the frequency doublers.

Features:

**Input:** 18 to 20 VAC

**Output voltage:** 15 VDC

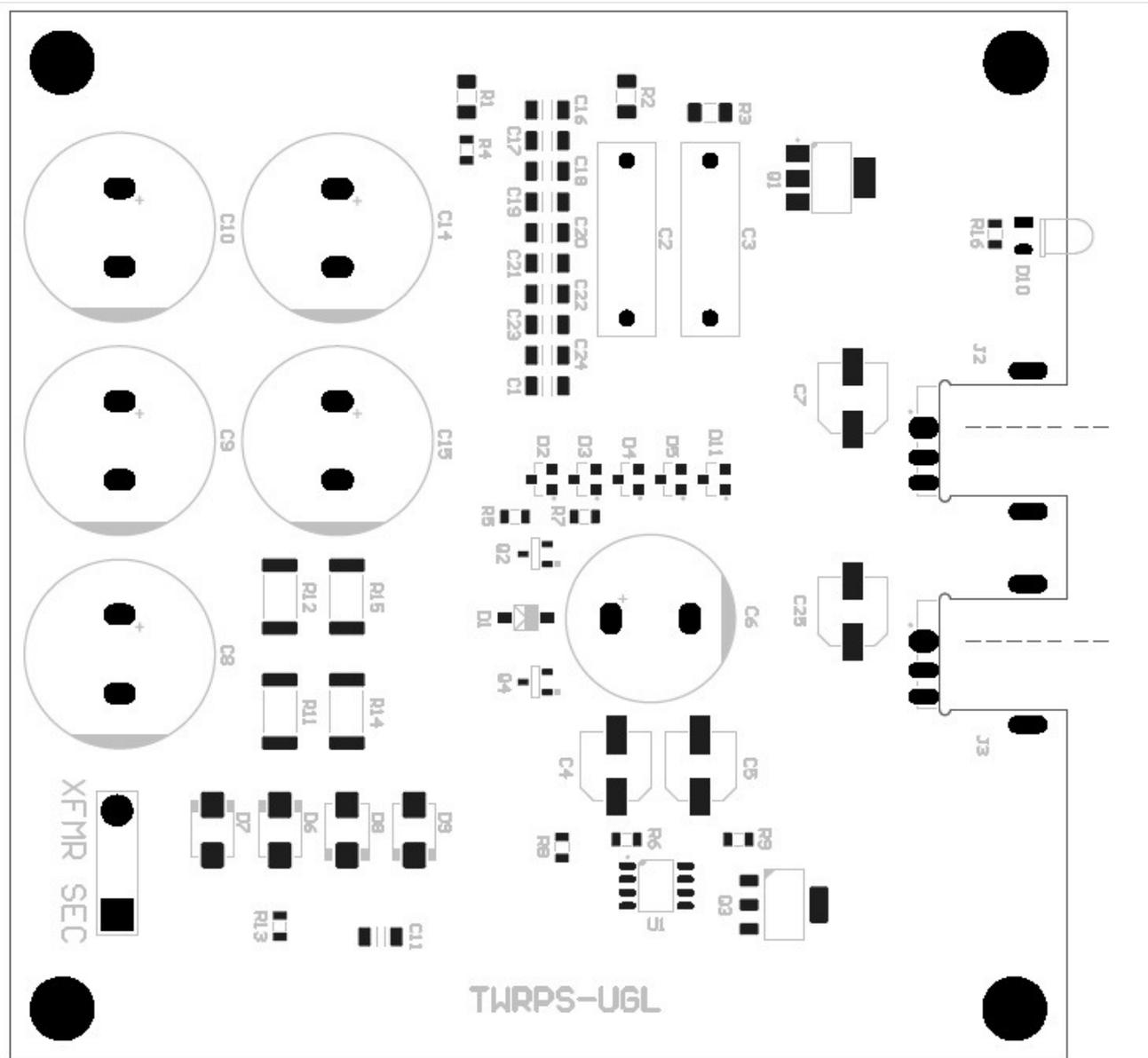
**Output current:** up to 150 mA

**Power supply for:** 1 x oscillators + 2 x frequency doublers

**Board size:** 100mm x 100mm

**Board options:** finished and semi-finished

## PCB layout



### Connectors

**J1 (XFMR SEC):** 18-20 VAC input. Suitable transformer is the Bel Signal DP-241-6-20 Mouser part 530-DP-241-6-20

**J2, J3:** 15 VDC regulated output. Suitable plug connector CUI PP3-002B Mouser part 490-PP3-002B (internal is +V, external is ground).

There are 2 available options for this board:

- finished boards (fully assembled and tested)
- semi-finished boards (users have to solder a few parts, mostly TH)

The BOM for semi-finished board is available at post #161 on the diyaudio.com thread: The Well Regulated Power Supply.

### **Notes on semi-finished board**

The semi-finished board option needs some parts to be soldered (most are through hole, a few are SMD parts).

There are two things to pay the maximum attention:

- be careful selecting the right component value (incorrect component values will get the regulator not working and it could be tricky finding the errors)
- be careful installing polarized components, the component orientation is clearly visible on the PCB overlay