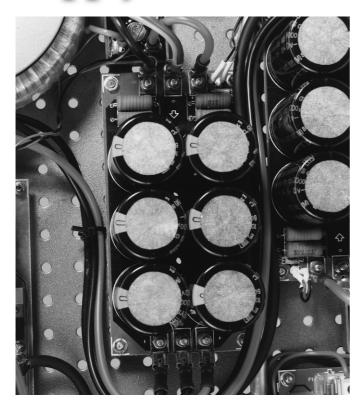
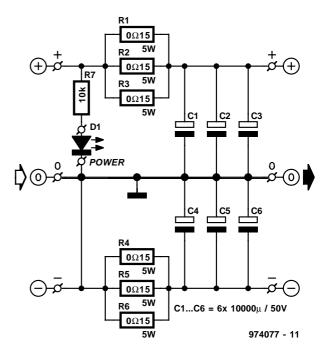
supply board for output amplifiers





Apart from their electronic configuration, all output amplifiers comprise the same elements: an amplifier board, a mains transformer, a bridge rectifier, and electrolytic smoothing capacitors. The board is normally screwed to the heat sink, while the transformer and bridge rectifier are fixed to the bottom of the enclosure. Often, there is no such defined location for the electrolytic capacitors. These are mounted on a piece of prototyping board, or to the bottom of the enclosure with suitable brackets, or ...

Since this is a recurring difficulty, many constructors will be pleased with the board design shown here. Its layout is such that it is suitable for use with almost any type of output

amplifier operating from a symmetrical power supply.

The board can accommodate six electrolytic capacitors with a value of

up to $10,000 \mu F$ and a rating of 50 V. They are assumed to have a pitch of

Parts list

Resistors:

 $R_1 - R_6 = 0.15 \Omega$, 5 W $R_7 = 10 \text{ k}\Omega$

Capacitors:

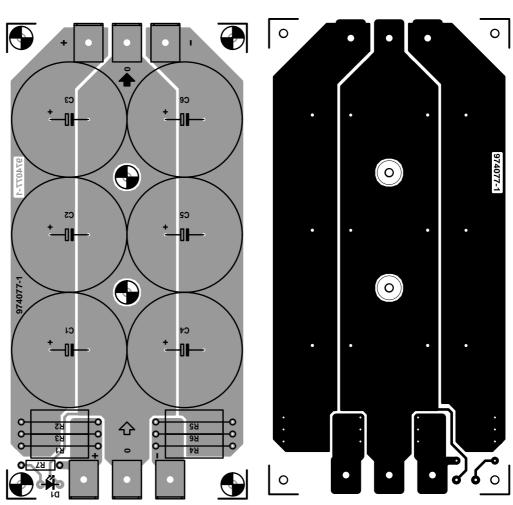
 $C_1-C_6 = 10,000 \mu F, 50 V, pitch 10 mm, max. dia. 30 mm$

Semiconductors:

 $D_1\,=\,LED,\,high\,\,efficiency$

Miscellaneous:

6 off single-pole PCB terminal block



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10 mm and a maximum diameter of 30 mm.

The board also has space for 'soft switch-on' resistors with a value of 0.15 Ω and rated at 5 W. These

resistors damp the peaks in charging current and also aid in smoothing spurious current peaks on the supply voltage.

Finally, the board has an on/off

indicator in the shape of a high-efficiency LED and requisite series resistor.

Connections to the board are via single-pole PCB terminal blocks,

which guarantee good contacts and can handle large currents.

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