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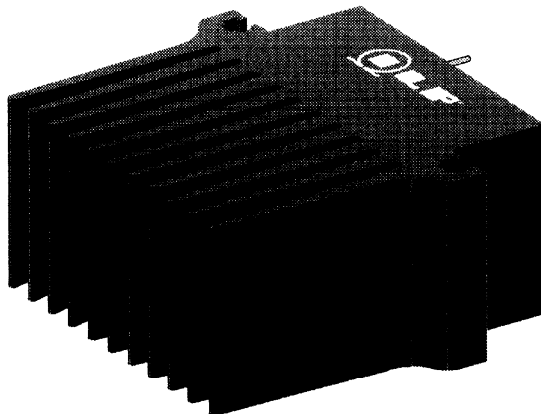
DATA SHEET

HY6000 POWER AMPLIFIER

The **ILP HY Power Amplifier Module** is a block for constructing high quality audio amplifiers with the minimum of additional components.

This modular hybrid amplifier has been designed using Bipolar technology to provide high fidelity performance. Encapsulation to an integral heatsink together with internal safeguards to ensure full protection make them extremely rugged, both electrically and mechanically, and therefore suitable for all audio applications.

The module has only five electrical connections, and should be mounted to allow a vertical flow of air through the fins. 'T' slots in the heatsink facilitate mounting using the nuts and screws provided.



HY6000	
Output Power Into 4 Ω (rms)	30w
Power Supply Voltage (DC)	± 25v
Loudspeaker Fuse Rating	1.5A

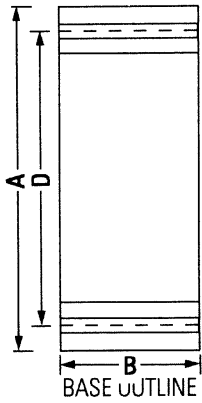
TYPICAL SPECIFICATION (All amplifiers)

Parameter	Value
Frequency Response (-3dB)	15Hz - 50kHz
Total Harmonic Distortion @ 1kHz	< 0.004%
Signal to Noise Ratio (DIN AUDIO)	100dB
Slew Rate	15V/μS.
Rise Time	5μS
Input Sensitivity	500mV rms
Input Impedance	100KΩ
Load Impedance	4 - ∞Ω
Damping Factor (8Ω @100 Hz)	> 400

INSTALLATION NOTES

1. For normal usage and conditions the amplifier needs no supplementary heatsink; it must be mounted to allow a vertical flow of air through the fins.
2. The amplifier must be powered from a true splitline (symmetrical) supply and under no circumstances should any attempt be made to use a single line.
3. No input capacitor is required. An internal 100V working capacitor is fitted.
4. For loudspeaker protection it is recommended that a quickblow fuse is mounted between the output and the speaker. The fuse ratings in the table have been calculated to ensure fast rupture in the event of DC being presented to the speaker. It is advised not to use higher rated fuses.
5. Star earthing techniques should be employed to prevent hum loops. i.e. all 0 volt connections, including speaker return leads should be made at the power supply.
6. Connecting leads between power supply smoothing capacitors and the module should be less than 300mm long. Longer leads may cause instability and module failure.

MECHANICAL DETAILS AND DIMENSIONS

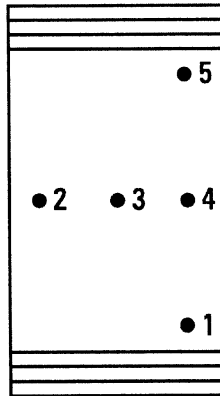


A	76
B	40
C	68
D	66
Panel Cut out	57x41
Weight	240g

All dimensions are nominal and in mm, unless stated.

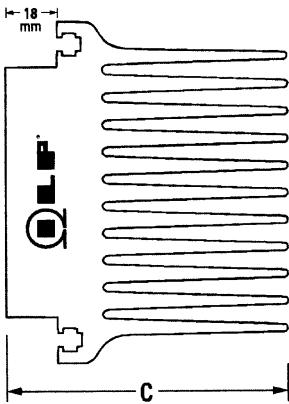
CONNECTION DETAILS

(not to scale)



PIN

1. Positive Supply
2. Output
3. Input
4. 0 volt
5. Negative supply

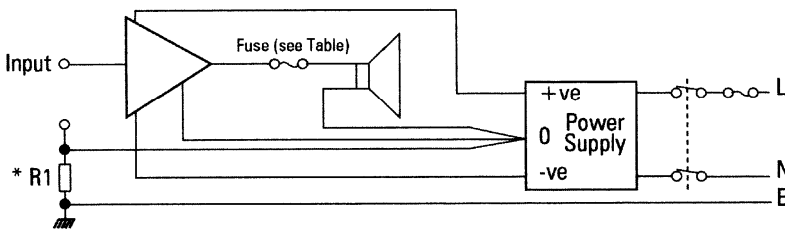


SIDE OUTLINE

FIXING

The 'T' slots in the heatsink extrusion allow easy mounting. Nuts and bolts are supplied.

APPLICATION CIRCUIT



* In order to prevent earthloop problems when a pre-amplifier is connected we recommend the fitting of a resistor (R1) in the position shown. The value of R1 should be between 82 and 270Ω, 1/2 watt power rating.