



# DATA SHEET

## HY2004 120 WATTS



The ILP HY2004 Power Amplifier is a fully encapsulated high quality power amplifier with Integral heatsink.

By selecting the appropriate mains transformer and programming link the amplifier can be used with 4 or 8Ω loads with the automatic adjustment of input sensitivity.

Mounting can be achieved by the use of T-slots in the heatsink and the nuts and bolts provided.

### TYPICAL SPECIFICATIONS

| Parameter                           | Value         |
|-------------------------------------|---------------|
| Output Power                        | 150W rms. Max |
| Frequency Response (-3dB)           | 15Hz - 50kHz  |
| Total Harmonic Distortion @ 1kHz    | 0.005%        |
| Signal to Noise Ratio (DIN AUDIO)   | 100dB         |
| Slew Rate typical                   | 20V/μS        |
| Rise Time                           | 5μS           |
| Input Sensitivity                   | 500mV rms.    |
| Input Impedance                     | 100KΩ         |
| Damping Factor(8Ω @ 100Hz)          | >400          |
| Load Impedance (programmable)       | 4 or 8Ω       |
| Maximum D.C. rails (8Ω load)        | ±55V          |
| Size Width x Height x Extrusion Cut | 120x75x80mm   |
| Weight                              | 835g          |

### FEATURES

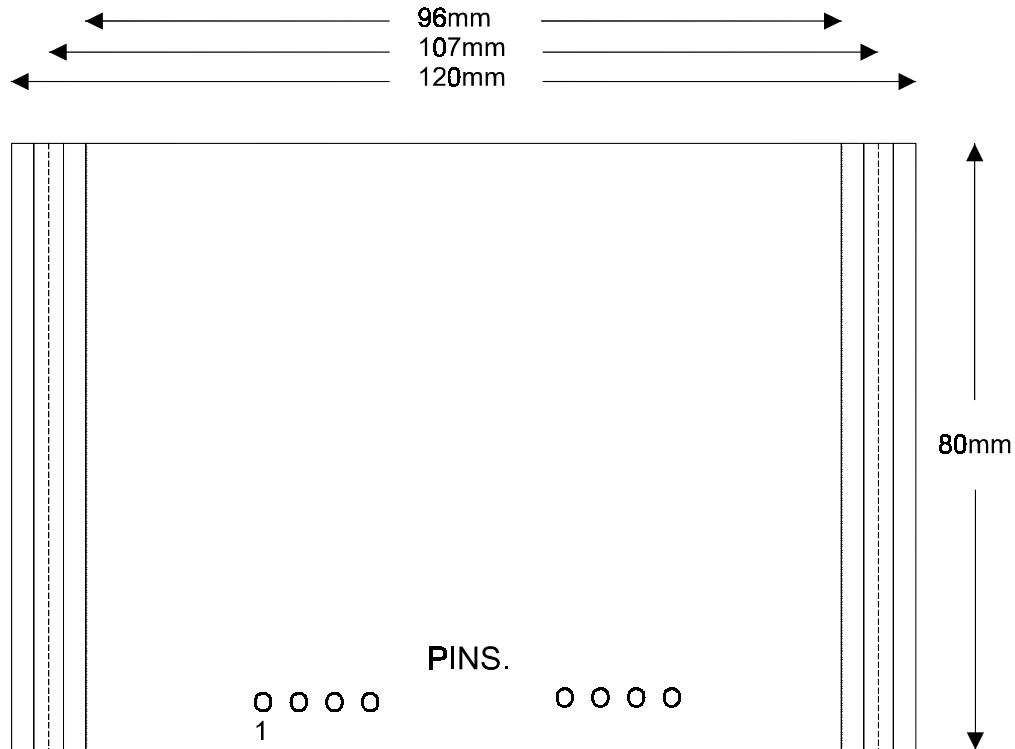
- Programmable 4 or 8Ω operation
- Enhanced specifications
- Anti-thump Circuitry
- Integral heatsink
- Thermal Protection
- PTH Circuit Board
- Encapsulated

### POWER SUPPLY REQUIREMENTS

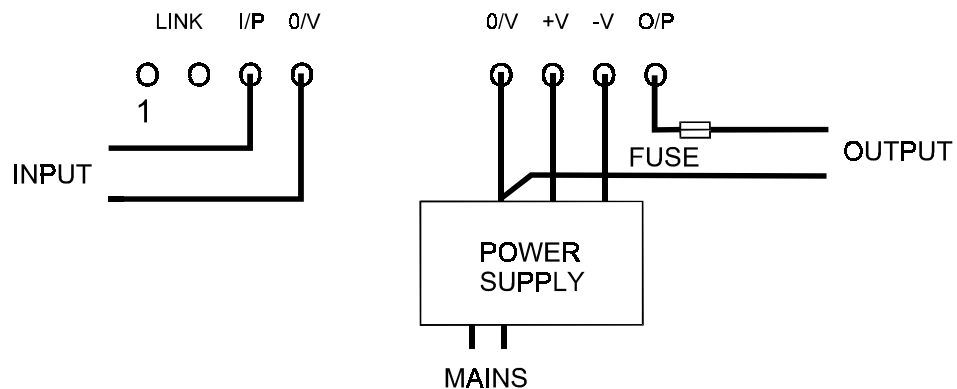
ILP have developed a range of Hi-Fi quality Low noise Audio Power Toroidal Transformers for the HY2004 they are Low Profile with Resin filled centres for maximum noise absorption and ease of mounting. Finished in black to match the amplifiers these transformers are the ideal choice to power the HY2004.

| Mode | Transformer | RMS Supply Voltage | Size     | Weight |
|------|-------------|--------------------|----------|--------|
| 4Ω   | AT1204      | 32 - 0 - 32v       | 110x50mm | 2.1Kg  |
| 8Ω   | AT1208      | 40 - 0 - 40v       | 110x50mm | 2.1Kg  |

# ELECTRICAL / MECHANICAL DETAILS AND DIMENSIONS INSTALLATION NOTES



## PIN TERMINATIONS



1. For normal usage and conditions the amplifier needs no supplementary heatsink.
2. It must be mounted to allow a vertical flow of air through the fins.
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 rating specified has been calculated to ensure fast rupture in the event of DC being presented to the speaker. It is advised not to use a higher rated fuse.
5. The amplifier module is supplied in 4Ω mode. To set 8Ω mode simply make a link between the two pads marked 'link'.
6. For 4Ω mode use a 3.15A quickblow fuse and for 8Ω a 2.5A quickblow fuse.