## **Dynavector HX-1.2** Stereo Power Amplifier

## **Technical Notes:**

The Dynavector HX-1.2 is a two channel (stereo) power amplifier rated at around 180 Watts per channel. The HX-1.2 uses special, very linear FET's in the output stage similar to HEXFET's ... hence Dynavector power amplifiers being commonly referred to as "HEXFET's".

The HX-1.2 provides very low "distortion\*" and tremendous dynamic current drive that to some extent renders the power output rating meaningless. The FET's and associated circuitry used in Dynavector amplifiers' exhibit none of the typical "MOSFET sound" noted in conventional FET designs, while retaining all the traditional FET advantages over the commonly used bipolar transistors.

The Dynavector amplifier circuitry is symmetrical, deceptively simple and extremely fast. The output stage can deliver very high currents, very quickly into the load allowing the HX-1.2 to outperform amplifiers many times its power rating. The amplifier is unconditionally stable into all loads and all speaker cables.

The input stage includes an input coupling capacitor to protect against any unwanted DC offset destroying the loudspeakers. (For example, when power to some pre-amplifiers is removed while it is still connected to the power amplifier. Note: This is not a problem with the Dynavector pre-amplifiers). From the input coupling capacitor the amplifier is fully DC coupled.

The high quality printed circuit board is manufactured in Australia and uses increased thickness, pure Australian copper for the conductive track. Special lead free, high silver content solder is used throughout the amplifier and the wiring is high purity, oxygen free copper with Teflon<sup>TM</sup> dielectric.

The transformer is a special toroidal design, being considerably smaller, lighter and with lower impedance than conventional transformers and other toroids. It is wound with pure Australian copper wire and is available in several voltage ranges. It supplies a linear power supply that is tightly coupled to the amplifier circuitry to minimise losses and maximise transient response & power delivery. The transformer is housed in a shielded enclosure to eliminate the effects of its electromagnetic field on sound quality.

The HX-1.2 runs cool and uses side mounted, convection chimney heatsinks. The chassis of the amplifier is non-magnetic and strong, making the whole unit solid and enduring. The amplifier is modular in construction, which allows upgrading if any significant new developments arise.

Like all the other Dynavector Amplifier products, the design emphasis is on providing outstanding musical performance with very low noise, wide dynamic range and very low distortion of the musical signal. A great deal of design effort has gone into retaining the intrinsic 3-dimensional nature of real instruments and real music. We use live natural music

as our reference and spend a great deal of time attending concerts and evaluating our amplifiers' performance against this experience. This is the standard against which our amplifiers should be judged.

## \*Distortion. Special Note:

Our definition of distortion involves any alteration of the original listening experience. That is all the conventional "harmonic distortion, intermodulation distortion" technical measurements as well as any change to the original listening experience which includes the instruments' inherent 3-dimensional spatial aspects, instrument placement, ambience, timbre and dynamics. Most aspects of distortion cannot be measured or even accurately quantified however the human ear can easily "hear" them. We believe that Dynavector Amplifiers' offer extremely low "distortion" and invite you to judge for yourself.

Finally it is worth noting that there is only one reference for an audio system and that is real, live, acoustic music. This is our reference and we continually strive to get closer and closer to the real thing.

All Dynavector amplifier products are the standard international width of 440mm. Power switch, mains fuse and connectors are on the rear panel.

## Specifications:

| Output Power                     | 180 watts per channel nom.  |
|----------------------------------|---|
| Input Sensitivity for full power | 1.5V RMS  |
| Mains Versions Available:        | 220 - 240 vac<br>110 vac<br>100 vac<br>Others available upon request. |
| Mains Fuse:                      | 4AT Time Delay  |
| Mains Connection                 | Standard IEC Connector  |
| Dimensions                       | 440 x 390 x 120 nom.  |
| Weight (packed)                  | 25kg approx.  |
| Power Consumption                | 800 Watts max.  |