

Dynacord PowerH 2500 and 5000 Power Amplifiers



Dynacord PowerH 2500

By Mark Amundson

It is not often that Dynacord comes out with a new high-end audio power amplifier, but when it happens, it is usually a real technological marvel. The PowerH 2500 and 5000 power amplifiers are designed by the same German engineering team that produced the legendary L 2400 (P3000) concert sound amplifier. For over 60 years, amplifiers from that location have proven to be the finest and most reliable components one could possibly find.

The Gear

Starting from the obvious, the Dynacord PowerH 5000 is a “compact” but large amplifier in that the two rackspace height makes it similar to other modern touring amplifiers; however, the 20.15-inch depth makes the Dynacord PowerH 5000 a large rack beast. The good news is that each PowerH 5000 weighs in at a nice 29 pounds. Inside the chassis is a pair of three-step class-H amplifiers designed in a grounded-bridge fashion, and each driven from three-stage, floating, 70A capacity switching power supplies. Straubing’s engineers were the final holdouts on using switcher supplies — as opposed to the conventional supply L2400 amplifiers — because the switcher PSUs did not meet the performance criteria of the amplifiers they supplied.

At four ohms per channel loading (my personal measurement standard), the Dynacord PowerH 5000 amplifier puts out about 2,500 watts per channel. At 2-ohms, the output power is 3,500 watts, resembling a healthy power supply scheme to provide maximum dynamic headroom. With both channels driven, total peak output power available is stunning at over 9,200 watts! Input sensitivity is a selectable 0/+6/+9 dBu max

signal to max output voltage swing for compatibility with most systems. The frequency response is 10 Hz to 30kHz within a +/-1dB window. Damping factor is a respectable >400, and slew rate a respectable 35V/microsecond for good signal fidelity input-to-output. And at 4-ohms per channel with 1/8th power program signals, the PowerH 5000 sips only 1,450 watts from its power inlet.

Like many tour grade amplifiers, the Dynacord PowerH 5000 uses a microprocessor for managing many housekeeping functions. The optional RCM-26 DSP module allows loudspeaker preset storage and recall, an AES 3 digital input, RS 232 port for integration with media control systems, four gpio ports, onboard sample rate converter and state-of-the-art signal-processing for both channels, including digital voice coil protection and Finite Impulse Response filter technology, as well as complete amplifier and loudspeaker supervision through the IRIS-Net software suite.

The front features a modest LCD panel with three adjoining buttons for up, down and enter navigation. Along with necessary rotary level controls and signal level LED bargraphs, additional LEDs are sprinkled in for gain selection, mute and protect indications, parallel or bridge mode indications, IRIS-Net activity, standby and power-on indicators. A nice custom power switch rounds out the front panel on the PowerH 5000.

The rear panel on the Dynacord PowerH 5000 amplifier includes a 30 amp Neutrik Powercon jack for mains power input right next to a pair of NL4 Neutrik Speakon jacks for the speaker connections. Channel A NL4 output includes ch B on pins 2+/- for single cable drive of bi-amp loudspeaker systems. Additionally, four binding post connections are

provided as alternative output interfaces. Besides a large fan and a ground lift switch, four XLR jacks are provided for the dual channels in and through connections. Phoenix connector blocks are also provided for alternative input and through interfacing. Three slide switches complete the remaining rear panel interfaces for selecting sensitivity/gain, dual/parallel input signal routing and bridged mode operation. An expansion slot cover also adorns the rear panel for modular network cards, like the RCM 26.

adds substantial value at the front panel and allows user adjustable control of PSU current limiting. This can be handy when trying to run such a beast from a less than ideal power circuit. If you do have IRIS-Net up and running with modules in each amp, then the DSP horsepower can become the two-channel digital speaker processor inside each amplifier.

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The Gigs

Racking up the Dynacord PowerH 5000 brought up no major issues, and a minor note to self that this amplifier sucks cooling air from the front and exhausts it rearward. Choosing the +9dBu input sensitivity on the rear gain switch puts the amplifier into 32 dB mode, which fits in with the rest of my amplifier system. The menu system on the front is nice and easy to use, especially for monitoring amplifier status like mains Voltage, Current and amplifier temperature.

Even if you’re not a system engineer with the digital plug-ins for IRIS-Net and many PowerH 5000s, the feature

to be used on subwoofers, and meets or exceeds the need of providing prodigious energy to transparently create body-shaking bass sounds. I believe the Dynacord engineers would not have let the PowerH amps leave the factory if the power supply energy reserves were not of overkill quantity.

Using the PowerH 5000 on tops and wedges, the fast slew and quality class-H amplifiers made the mids and high similarly transparent as the lows were on the subs. I would gladly take a bunch of PowerH 2500 and PowerH 5000 out to gigs and feel confident these amps were up to the rigors of the road. **FOH**

What it is: State-of-the-art power amp

Pros: Well-built, great fidelity and powerful.

Cons: Large chassis size.

How much:

Dynacord PowerH 5000: \$4,590

Dynacord PowerH 2500: \$ 3,840

RCM-26: \$925

Web site: www.dynacord.com