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Dynacord PowerMate3

What in the dim and distant part was known as a "mixing amplifier" is nowadays described as a "powered mixer" and used, as it was then, for a wide variety of applications. One of the most successful representatives of the breed is the Dynacord PowerMate, the third and improved generation of which is now shipping

The powered mixers of today are, of course, in no way comparable with the products of yesteryear but, rather, devices to be taken seriously. Without wanting to jump the gun, let it be said at the outset that the latest generation PowerMate is somewhat akin to the ultimate audio workstation in a compact format. It is suitable not only for musicians wanting (or obliged) to do their own mixing but also - without reservations - for sound reinforcement providers whose work sometimes takes them to smaller venues. Why for sound reinforcement providers? Because the PowerMate in fact lacks none of the equipment you would normally find tucked away in a side rack. That means less gear to lug around, less tedious cabling, and less wasted space. Furthermore, the PowerMate3 comes in three sizes (with 10, 16 or 22 channels). What all three models have in common is a power amplifier section employing Class D technology and capable of outputting 2 x 1,000 watts into 4 ohms. In this area, a considerable weight reduction has been achieved. For this product test, it was the largest model in the series that was made available to us.

Equipment

The mono channels are each equipped with both Mic and Line inputs (balanced); an

Insert loop; Low-Cut (80 Hz), and Voice filters; rotary controls for Gain, Hi, Mid (sweepable), Lo, FX 1, FX 2 (for the two integrated effects processors), Aux 1, Aux 2 (switchable pre-/post-fader in the Master section) and Pan; Mute and PFL buttons (in each case with a status LED); Peak and Signal LEDs; and a fader (Alps, like the pots). Phantom power is switchable in groups of six.

The twelve mono channels are followed by four stereo channels each of which is also equipped with a Mic input (with a separate Gain control). This is followed by the stereo input (L/R) jacks, the gain control for which is marked "GAIN LINE CD" (in the first two stereo channels) and "GAIN LINE USB" (in the third and fourth), as the two CD inputs with their RCA sockets and the USB interface are switched parallel to the jack inputs. The tone controls offer the usual fixed Mid frequency band. In other respects, the stereo and mono channels are identically equipped.

The effects section comprises two independently controllable stereo effects processors with 100 presets each. The effects are easily selected and edited using the buttons and encoder provided. You can also store 20 of your own effects programs. Anyone not satisfied with all this can connect an external effects processor (for which purpose send and level controls are provided) and reintroduce the signals via a stereo input. And as if all this wasn't enough, the FX 1 and FX 2 signals can be fed not only independently of one another to the Master section (using the faders) but also to Aux 1 / 2 and Mon 1/2 (using pots). To help you keep track, peak and status LEDs (FX On) and a PFL switch are provided for each effects processor. Another nice touch is that you can switch the effects section on and off using an optional footswitch or via MIDI as an alternative to using the On/Off buttons in the master.

Aux 1/2 are balanced, switchable pre or post fader and serve either as additional monitor sends or to implement an effects loop if an external effects device is used. Their level is controlled by a fader, and Mute and PFL functions (the status of which, I need hardly say, is indicated by LEDs...) are also provided.

The Mon 1/2 signals are available on both XLR and jack outputs (balanced), both of which can be occupied simultaneously. As a special feature, a switchable notch filter for feedback suppression is available in each of the monitor channels, which are otherwise equipped as above (Mute, PFL, Fader...).

Further on in the master section comes Master B, at the (balanced) outputs of which the Master L/R signal is present, This is switchable Pre/Post and Mono/Stereo and is recommended for subwoofers, the provision of sound reinforcement to adjacent rooms, delay lines or as an additional monitor send. Master Out A serves for the connection of additional power amplifiers or to supply a controller, the Hi/Mid signals of which can be fed back into the Power Amp L/R inputs to the PowerMate's internal power amplifiers. The subwoofer in such a configuration would be supplied by an external power amplifier.

The integrated graphic EQ with its 11 bands can be routed to the Master L/R channels or else to either or both of MON 1 & MON 2, the current selection being indicated by LEDs.

Naturally the PowerMate offers further connections: a headphones socket, 2TRACK In and RCA sockets with the requisite controls for the record function. Six of the mono channels on the model 2200-3, which is the one we tested, are located to the right of the master section.

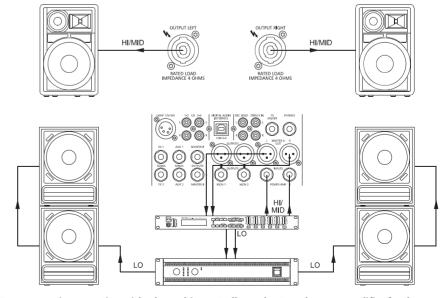
USB interface and MIDI

Rec Send and USB Out? The PowerMate is equipped with a USB 2.0 interface for computers (Mac or PC) capable of transferring four channels simultaneously in either direction. Here, too, nothing has been left to chance as all the necessary drivers and software, including Cubase LE, are to be found on the accompanying DVD. It is possible, therefore, to play back opening or interval music from a laptop and transfer it via the USB cable to the PowerMate. DJs prefer to lug as little as possible around with them and often these days perform from laptops, which, in that case, they simply connect to the USB port (assuming they have on their persons a USB cable...). It works, too, in the other direction: when recording using the USB interface, a choice of two configurations is offered: "Live" or "Studio". When "Live" is selected, the four channels output are Aux 1 & 2 and Master L & R; in "Studio" mode, on the other hand, the four channels are Aux 1 & 2 and Mon 1 & 2.

As has already been mentioned, the effects section is accessible via MIDI, but for keyboard players further possibilities exist, such as using the MIDI and USB interfaces to exchange data with the computer, ... But there we must leave it for now.

The display and miscellaneous features

Normally, you will see on the OLED display the settings of the effects section. Effects are selected using the four buttons below the display. The Menu/Enter rotary encoder nearby is assigned to other tasks such as effects editing, USB record routing, equalizer routing, setting the MIDI channels etc.. The settings for the LPN (Low Pass Notch filter) processing, however, which helps the connected boxes achieve punchier reproduction, are also edited using the rotary encoder and menu. "Speaker Protection" is another menu item, as the integrated power amplifiers are not only equipped with all the familiar protective circuits but also a processor-controlled thermo-limiter, which,



Two-way active operation with a looped-in controller and external power amplifier for the subs





An extensive range of peripherals increases the versatility of the PowerMate

Boxes with a lower power handling capacity can be connected without fear thanks to Power Control

if the worst should happen, prevents the power amplifier shutting down. The speaker protection dialog enables you to match the maximum continuous output power of the integrated power amplifiers to the connected loudspeakers, which you do by selecting between several discrete levels. This makes it possible to drive even quite small boxes sensibly, without having to pull down the master faders too far to do so.

The rear panel of the PowerMate, compared with the mixer interface, has a somewhat sparse look to it: mains power socket, power switch, MIDI In/Out, loudspeaker outputs on Speakons, and two fans that conduct themselves for the most part in a commendably subdued manner.

One could say more about the features, but the other possibilities are mainly of interest to the musicians themselves, explained very clearly in the excellent Owner's Manual, and capable of mastery even by those who are less than gifted when it comes to technology. In a nutshell, the PowerMate 2200-3 constitutes a thoroughly well thought-out solution measuring 81.8 \times 15 \times 49.8 cm (W \times H \times D) and weighing 18 kg.

Practice

We tested the sound and handling of the PowerMate at an appearance by a band in a medium-sized hall. Since the kick-drum and bass rig could fend for themselves and required very little support, we decided to use only full-range boxes for the sound reinforcement. An external power amplifier was naturally also needed to drive the four wedges. The setting up and cabling of the PowerMate are completely intuitive, so after tuning the monitors, we could begin the sound check right away. Everything went superbly: the equalizers intervened effectively but not too aggressively, and the feedback filters for the monitoring proved extremely useful in practice. Setting the effects section to optimize the vocals took very little time and the gig could begin. We found that having features integrated into the console that are usually accommodated in an effects rack brings many advantages. In short, the PowerMate impressed us in every respect at this concert and the power amplifiers provided all the power we could have wished for.

Summary

The third generation of the PowerMate shows that however good and successful a device may be, it can always be made more attractive, and, by listing to the wishes of users and finding exactly the right formula to appeal not only to sound reinforcement providers but also musicians without their own FOH men, the designers in Straubing have done just that. The key points to note about the PowerMate are that it requires very little space, is very light, is easy to operate and transport, is lavishly equipped, boasts features of real practical value, and delivers substantial output from its power amplifier section. The PowerMate 2200-3 has a recommended retail price of q3,370.

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