

Power
Mate

POWER MATE 1000
DYNACORD®
POWER MATE 1600



POWER
EFFECTS
EXTRAS
MORE
MORE
MORE



ADDED VALUE

A higher VALUE for less money!

The PowerMate 1000 and the PowerMate 1600 incorporate advanced technology, leading the way into the next millennium by offering more power, more effects, and more extras. Providing 6 (12) Mic/Line channels and 4 Mic/Stereo Line inputs, the PowerMate 1000 (1600) stay ahead of the increasing demand for more inputs. The two separate, built-in 18 bit stereo FX sections with 99 presets each, provide extraordinary studio-quality sound. Despite their high output power capacity and their extensive range of features, the PowerMate mixers' dimensions are very compact and their weight of 20 kg (respectively 24 kg) makes them easy to transport. Their price-performance-ratio is simply unbelievable, since their added value comes sensationally low priced.

MOREPOWER



The two PowerMates provide 2 x 500 W at 4 ohms, offering, in comparison to conventional power mixers, decisive higher output power and dynamic potential combined with outstanding low distortion and intermodulation. The power amplifiers derived from Linear Precision Technology, featuring additional protection and processor functions. Special-pole zero compensators - **the patented DYNACORD LPN-Filter** - eliminate faults in the transient response of typical PA-speaker systems, providing unmatched impact and punch in the low frequency range. The power amplifiers' internal operational condition is monitored by extremely fast operating audio processors, that activate the limiter circuits on the occurrence of non-linear conditions. Additional protection circuitry prevents the amplifiers from being damaged by short-circuit and thermal overload and against the occurrence of DC voltages in the output signal, guaranteeing operational stability and reliability. Speaker connections - up to three speaker systems with 8 ohms per channel are possible - are carried out through modern Speakon® connectors.



The PowerMate 1000 and the PowerMate

MOREEFFECTS

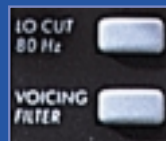
1600 are equipped with two separately operating 18 bit Stereo Digital Effect Processor units, providing the sound quality and performance of High-End studio equipment. This has been established through revolutionary, newly developed, and highly sophisticated algorithms, including - amongst others - the following effects: Room, Plate, Echo Reverb, Chorus Reverb, Monaural/Stereo Delay, as well as modulated delay effects such as Chorus and Flanger. The 2 x 99 presets are conveniently selected through Up/Down keys, while the momentary selection appears on the display. The effect return signal is merged with the master mix via faders. The FX-signal can also be routed to the AUX-3-Monitor mix, providing the artist on stage with an optimal mix. If necessary, it is possible to switch off the effect signal via buttons with accompanying LED indicators or foot switches (optional accessory FS 11). Through their outstanding sound quality and their convenient handling under LIVE conditions, the effect units of the PowerMate mixers represent a long awaited feature.



The MIC/LINE CHANNELS are best

MOREEXTRAS

equipped, offering a multitude of additional features. When used with phantom powered condenser microphones, phantom power is switched on centralized. External signal processing equipment can be linked through the inserts. The input audio levels get optimally adjusted via gain controls and two signal present/peak LEDs next to the corresponding fader allow easy checking. The 3-band tone control section consists of a semi-parametric ± 15 dB mid-band filter with a variable center-frequency between 100 Hz and 8 kHz, a Lo-shelving filter with ± 15 dB at 60 Hz and a Hi-shelving filter with ± 15 dB at 12 kHz. In addition, a switchable **LO-CUT FILTER** at 80 Hz provides the possibility to cut off unwanted sub-sonic parts of the audio signal. Level adjustment of the internal effect devices is taken care of by the post fader AUX 1 and AUX 2 volume controls. The AUX 3 bus is pre fader. It is meant mainly for the monitor mix but can also be used to feed for instance an external FX-unit. Therefore it can be switched to post fader operation. PAN controls and PFL keys are as well supported as another special feature of the PowerMate mixers: the vocal voicing filter.



VOCAL VOICING FILTER

With its special asymmetrical structure, this filter enhances the fundamental frequencies of the human voice, so that it is clearly audible and intelligible above the rest of the mix. This shaping method solves all problems especially with "thin" voices to a degree, that cannot be achieved or imitated by conventional equalizers.

The features of the **MIC/STEREO LINE** channels differ from the Mic/Line channels through their separate gain controls for Mic and Line levels instead of the Lo-cut filter and vocal voicing filter switches. They are also equipped with a 3-band tone control and balance controls instead of the PAN controls.

FEEDBACK FILTER

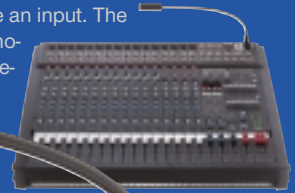
The AUX 3 monitor bus incorporates a switchable anti-feedback filter with variable center frequencies between 80 Hz and 7.7 kHz. This filter lets you conveniently and precisely eliminate the often heard feedback noise, that arises between the microphone and the stage monitor speaker signals.



MASTER SECTION

The PowerMates' master section also incorporates a wide selection of useful features. Effect returns, AUX 3 send, stereo master, and monaural master are provided on fader controls. The 2 x 7-band equalizer allows to match the PowerMate mixers sound to acoustical characteristics of the environment. The 2 x 10 LED master display provides easy level metering. Via the additional stereo return bus it is possible to integrate the signal of an external sub-mixer into the main mix. The 2-Track return bus allows to separately include the signal of a tape recorder into the main and the

monitor mixes, without the need to waste an input. The provided standby switch and the headphone volume control conclude the list of useful details.



STAGELIGHT

An optionally available XLR-gooseneck stagelight (12V/2.4W) can be fitted onto the PowerMates to ensure easy and quick operation even with dimmed ambient lights.



PROTECTIVE COVER

Included in the shipment is a rigid metal protective cover to provide trouble-free transport even without a flightcase.

RECESSED HANDLES

Additional ease and handling comfort is gained through the recessed, ergonomically shaped carrying handles on both sides.



POWER MATE 1000

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Technical Specifications

Rated Output Power,

20 Hz ... 20 kHz, THD≤0.2%
 into 4 Ω 2 x 500 W
 into 8 Ω 2 x 250 W

Maximum Midband Output Power,

1 kHz, THD≤1%
 into 4 Ω 2 x 570 W
 into 8 Ω 2 x 340 W

Maximum Output Voltage

of power amplifier, no load 58 Vrms

THD at 1kHz, MBW=80kHz

MIC input to Main L/R output, +16 dBu < 0.006%

Power amplifier input to Speaker L/R output < 0.05%

DIM 30, power amplifier < 0.015%

IMD-SMPTE, power amplifier, 60Hz, 7 kHz < 0.015%

Frequency Response, -3dB ref. 1kHz

Any input to any Mixer output 15Hz ... 60kHz

Any input to Speaker L/R output 30Hz ... 40kHz

Crosstalk Damping, 1kHz

Fader and AUX-Send attenuation > 80 dB

Power amplifier L-R > 100 dB

Channel to channel > 70 dB

CMRR, MIC input, 1kHz > 80 dB

Maximum Level, mixing desk

MIC inputs + 11 dBu

Line inputs + 30 dBu

All other inputs + 20 dBu

Record Send output + 16 dBu

All other outputs + 20 dBu

Input Impedances

MIC 1.8 kΩ

Insert Return 2.2 kΩ

EQ Input and 2 Track Return 8 kΩ

All other inputs > 15 kΩ

Output Impedances

Record Send 1 kΩ

Phones 47 Ω

All other outputs 75 Ω

Equivalent Input Noise,

MIC Input, A-weighted, 150 Ω -130 dBu

Noise,

Channel inputs to

Main L/R outputs, A-weighted **PM1000** **PM1600**

Master fader down -92 dBu -92 dBu

Master fader 0 dB, Channel fader down -89 dBu -87 dBu

Master fader 0 dB, Channel fader 0 dB, -83 dBu -81 dBu

Channel gain unity

Signal/Noise-Ratio,

power amplifier, A-weighted 104 dB

Equalization

LO Shelving ± 15 dB / 60 Hz

MID Peaking, mono inputs ± 15 dB / 100 Hz ... 8 kHz

MID Peaking, stereo inputs ± 12 dB / 2.4 kHz

HI Shelving ± 15 dB / 12 kHz

Master EQ, 2x7-band ± 10 dB

Power Consumption

at 1/8 maximum output power, 4 W 600 W

Dimensions, (WxHxD), mm

PM1000 508.5 x 210.3 x 478.7

PM1600 667.5 x 210.3 x 478.7

Weight, including lid

PM1000 20 kg

PM1600 24 kg

Optional

Rack-Mount-Kit PM1000, (NRS90220) 112 698

Gooseneck Lamp, 12V/2.4W, 12", XLR 112 700

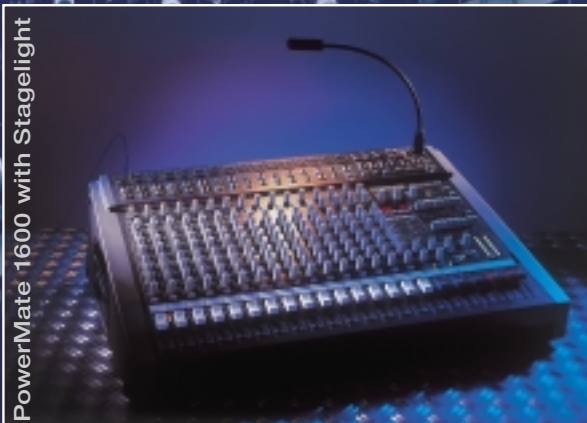
Footswitch FS11 110 693

Technical Specifications PM1000/PM1600 Mixing Section in rated condition, Unity Gain (MIC Gain 20 dB), all faders position 0 dB, all pots in mid position, Master fader +6dB, amplifier rated output power into 8 ohms, one channel driven, unless otherwise specified.



19" RACK INSTALLATION

The PowerMate 1000 can also be fitted into a 19" rack system, using the optionally available Rack-Mount-Kit NRS 90220.



PowerMate 1600 with Stagelight

3 Years Warranty!



GmbH · Hirschberger Ring 45

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