

*Technische Informationen*
*Engineering Data Sheet*

# **Power**Mate$^3$

POWERED MIXER

**Beschreibung**

Der PowerMate$^3$ ist ein leistungsfähiger Power Mixer der eine große Anzahl von Funktionen in einer sehr kompakten Form bietet.
Vergessen Sie einfach Anpassungs- und Verkabelungsprobleme von Mischpult, Verstärker, Effektteilen und Equalizern. Durch die ergonomische Pultform und die übersichtliche, strukturierte Anordnung der Bedienteile haben Sie immer alles im Blick und können schnell und problemlos auf jedes Bedienelement zugreifen. Auch beim Transport des PowerMate werden Sie bald seine Vorzüge zu schätzen wissen. Der ergonomisch im Deckel integrierte Griff (nur PowerMate 1000-3 und PowerMate 1600-3), sowie das geringe Gewicht erlauben Ihnen einen problemlosen Transport des Gerätes, wobei alle empfindlichen Teile wie Knöpfe und Regler sicher abgedeckt sind. Sollten Sie jedoch Ihren PowerMate lieber im Rack oder Einbautisch platzieren, kein Problem: die Kunststoffseitenteile können einfach durch Metall-Rackwinkel ersetzt werden.
Mit seiner großen Anzahl von Funktionen, der hohen Dynamik, seinem rauscharmen Design, dem 24bit-Dual-Stereo-Effektteil, dem 4-Kanal USB 2.0 Audio-Interface und nicht zuletzt der hocheffizienten Leistungsendstufe in Class D-Technik ist der PowerMate sehr universell einsetzbar.

**Description**

The PowerMate$^3$ is a power mixer that offers a wide range of functionality in a very compact frame.
Forget about the troubling experiences with cabling and matching mixers, amplifiers, FX units and equalizers. You now own a device with optimally matched components. The mixer's ergonomic console shape and clearly structured controls provide perfect overview for instant access at all times. Also during the transport you will quickly learn to appreciate the PowerMate's superiority: recessed handles on the sides, compact dimensions and low weight, plus the sturdy cover (PowerMate 1000-3 and PowerMate 1600-3 only) that protects the controls from being damaged. However, if you would rather like to install your PowerMate 1000 in a 19" rack shelf, no problem. The only thing you have to do is to replace the plastic side panels by a pair of metal rack mount ears.
Through its multiple functions, its high dynamic capacity, and extremely low-noise design in combination with its 24-bit Dual-Stereo effect unit, 4 channel USB 2.0 DIGITAL AUDIO INTERFACE and the high-performance power amplifier, the PowerMate is best equipped for universal use.

**Part Number**

| | | |
|---|---|---|
| **PowerMate 1000-3** | 10 channel Powered Mixer (6 x Mic/Line + 4 x Mic/Stereo-Line) | DC-PM1000-3-UNIV |
| **PowerMate 1600-3** | 16 channel Powered Mixer (12 x Mic/Line + 4 x Mic/Stereo-Line) | DC-PM1600-3-UNIV |
| **PowerMate 2200-3** | 22 channel Powered Mixer (18 x Mic/Line + 4 x Mic/Stereo-Line) | DC-PM2200-3-UNIV |

**Inhalt**

1 x PowerMate
1 x Bedienungsanleitung
1 x Schnellstart-Anleitung
1 x Netzkabel (2 Meter)
1 x Garantiekarte mit Sicherheitshinweisen
1 x DVD mit USB-Treiber, Dokumentation, Software,...

**Contents**

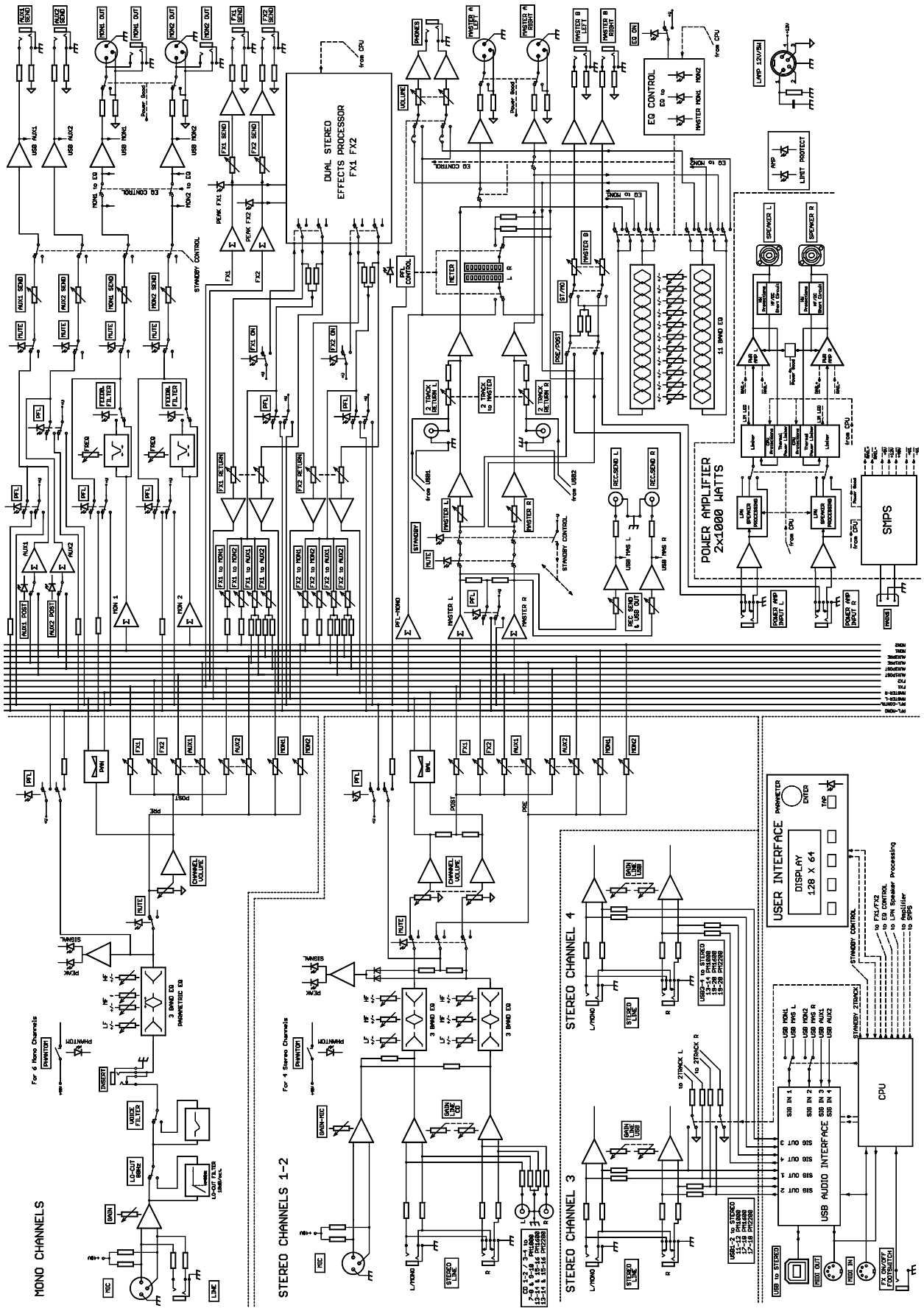
1 x PowerMate
1 x Owner's manual
1 x Quickstart manual
1 x Mains cord (2 meters)
1 x Warranty certificate including safety instructions
1 x DVD with USB driver, documentation, software,...

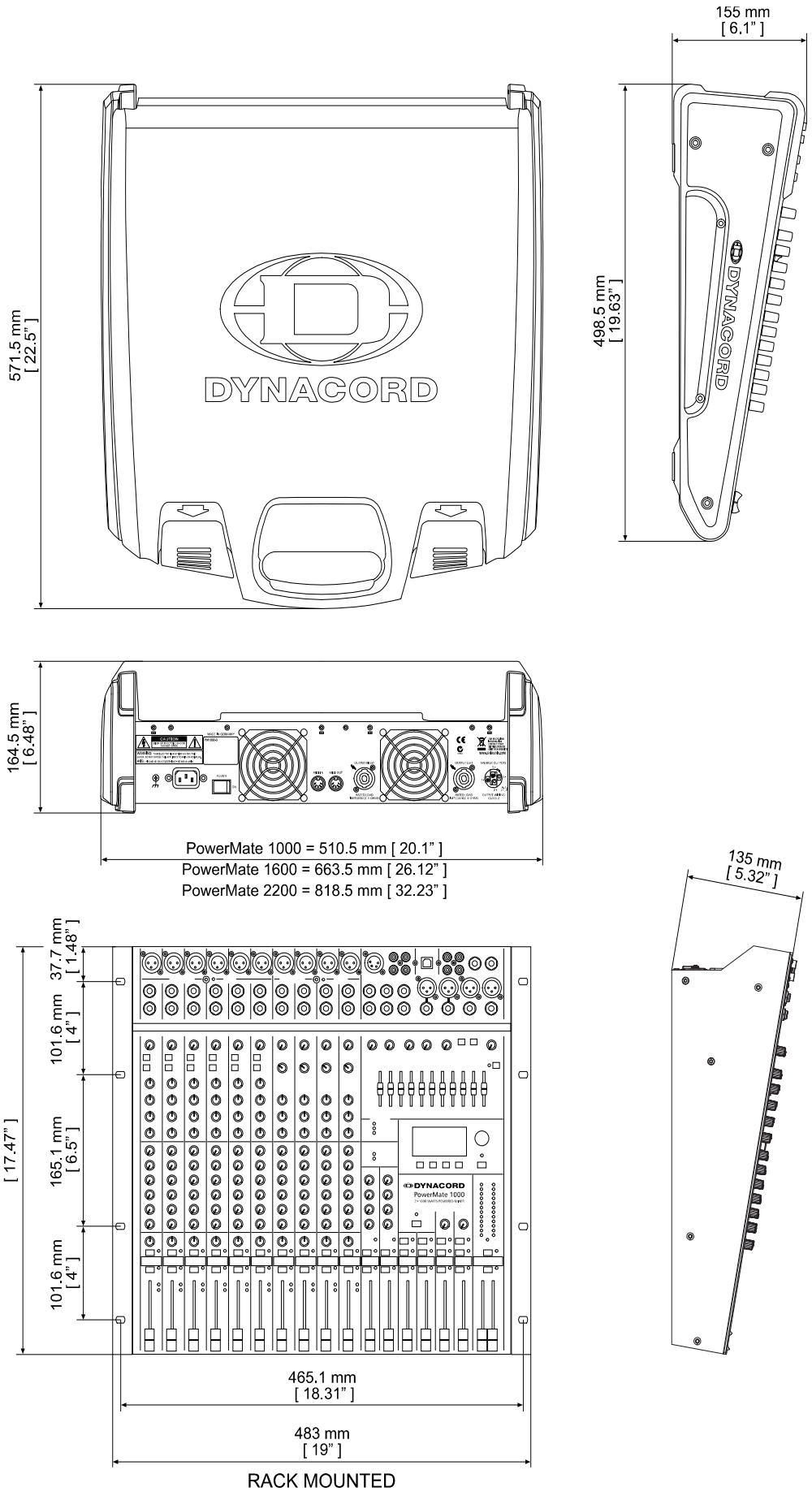
| Property | PowerMate 1000 | PowerMate 1600 | PowerMate 2200 |
|---|---|---|---|
| **Order No.** | F01U131113<br>DC-PM1000-3-UNIV | F01U131114<br>DC-PM1600-3-UNIV | F01U131115<br>DC-PM2200-3-UNIV |
| **Channels** (Mono + Stereo) | 6 + 4 | 12 + 4 | 18 + 4 |
| **Auxiliarys** (MON, FX, AUX) | 2 Pre, 2 Post, 2 Pre/Post switchable | | |
| **Max. Single Channel Output Power,** Dynamic-Headroom, IHF-A | | | |
| into 2.66 Ohms | 2 x 1600 W | | |
| into 4 Ohms | 2 x 1250 W | | |
| into 8 Ohms | 2 x 675 W | | |
| **Max. Single Channel Output Power,** Continuous, 1 kHz, THD = 1% | | | |
| into 2.66 Ohms | 2 x 1350 W | | |
| into 4 Ohms | 2 x 1150 W | | |
| into 8 Ohms | 2 x 650 W | | |
| **Maximum Midband Output Power,** 1 kHz, THD = 1%, Dual Channel | | | |
| into 2.66 Ohms | 2 x 1350 W | | |
| into 4 Ohms | 2 x 1000 W | | |
| into 8 Ohms | 2 x 600 W | | |
| **Rated Output Power,** 20 Hz to 20 kHz, THD < 0.5%, Single Channel | | | |
| into 4 Ohms | 2 x 900 W | | |
| into 8 Ohms | 2 x 450 W | | |
| **Maximum Output Voltage,** of power amplifier, 1 kHz, no load | 74 $V_{rms}$ | | |
| **THD,** at 1 kHz, MBW = 80 kHz | | | |
| MIC input to Master A L/R outputs, +16 dBu, typical | < 0.005% | | |
| POWER AMP INPUTS to Speaker L/R outputs | < 0.075% | | |
| **DIM 30,** power amplifier, 3.15 kHz, 15 kHz | < 0.05% | | |
| **IMD-SMPTE,** power amplifier, 60 Hz, 7 kHz | < 0.15% | | |
| **Frequency Response,** -3 dB, ref. 1 kHz | | | |
| Any input to any Mixer output | 15 Hz to 70 kHz | | |
| Any input to Speaker L/R output | 20 Hz to 30 kHz | | |
| **Crosstalk,** 1 kHz | | | |
| Amplifier L/R | < -85 dB | | |
| Channel to Channel | < -80 dB | | |
| Mute- and Standby-Switch attenuation | > 100 dB | | |
| Fader and FX/AUX/MON-Send attenuation | > 85 dB | | |
| **CMRR,** MIC input, 1 kHz | > 80 dB | | |
| **Input Sensitivity,** all level controls in max. position | | | |
| MIC | -74 dBu (155 µV) | | |
| LINE (Mono) | -54 dBu (1.55 mV) | | |
| LINE (Stereo) | -34 dBu (15.5 mV) | | |
| CD (Stereo) | -34 dBu (15.5 mV) | | |
| POWER AMP INPUTS | +8 dBu (1.95 V) | | |
| **Maximum Level,** mixing desk | | | |
| MIC inputs | +21 dBu | | |
| Mono Line inputs | +41 dBu | | |
| Stereo Line inputs | +30 dBu | | |
| All other inputs | +22 dBu | | |
| All other outputs | +22 dBu | | |
| **Input Impedances** | | | |
| MIC | 2 kOhms | | |
| Insert Return | 3.3 kOhms | | |
| 2Track Return & CD In | 10 kOhms | | |
| All other inputs | > 15 kOhms | | |
| **Output Impedances** | | | |
| Phones | 47 Ohms | | |
| All other outputs | 75 Ohms | | |
| **Equivalent Input Noise,** MIC input, A-weighted, 150 ohms | -130 dBu | | |
| **Noise,** Channel inputs to Master A L/R outputs, A-weighted | | | |
| Master fader down | -97 dBu | | |
| Master fader 0 dB, Channel fader down | -91 dBu | -89 dBu | -87 dBu |
| Master fader 0 dB, Channel fader 0 dB, Channel gain unity | -83 dBu | -82 dBu | -81 dBu |

DYNACORD

| Property | PowerMate 1000 | PowerMate 1600 | PowerMate 2200 |
|---|---|---|---|
| **Signal/Noise-Ratio,** power amplifier, A-weighted, 4 Ohms | 105 dB | | |
| **Output Stage Topology,** amplifier | Class D | | |
| **Equalization** | | | |
| LO Shelving | ±15 dB / 60 Hz | | |
| MID Peaking, mono inputs | ±15 dB / 100 Hz to 8 kHz | | |
| MID Peaking, stereo inputs | ±12 dB / 2.4 kHz | | |
| HI Shelving | ±15 dB / 12 kHz | | |
| Master EQ 11-band (63, 125, 250, 400, 630, 1k, 1.6k, 2.5k, 4k, 6.3k, 12k Hz) | ±10 dB / Q = 1.5 to 2.5 | | |
| **Filter** | | | |
| LO-CUT, mono inputs | f = 80 Hz, 18 dB/oct. | | |
| VOICE FILTER, mono inputs | switchable | | |
| FEEDBACK FILTER, MON 1/2 | 70 Hz to 7 kHz, Notch, -9 dB | | |
| Speaker Processing | LPN, switchable | | |
| **Effects** | | | |
| Type | Dual stereo 24/48-bit multi effects processors | | |
| Effects presets | 100 Factory + 20 User, Tap-Delay | | |
| Remote control | Footswitch, MIDI | | |
| **Display** | 128 x 64 pixels, OLED | | |
| **Digital Audio Interface** | | | |
| Channels | 4 In / 4 Out | | |
| AD/DA Conversion | 24-bit | | |
| Sampling Rate | 44.1 / 48 / 88.2 / 96 kHz | | |
| PC Interface | USB2.0, Female Type B | | |
| Peak Display | 6 dB before Clip | | |
| **MIDI Interface** | 5-pin DIN connector, In / Out | | |
| **Output Power Control** (Speaker Protection) | Adjustable longterm RMS Limiter | | |
| **Protection** | | | |
| Mixer Outputs (Relay controlled) | MON 1, MON 2, MASTER A | | |
| Amplifier | Audio Limiters, High Temperature, DC, HF, Short Circuit, Peak Current Limiters, Turn-on Delay, Back EMF | | |
| Switching Mode Power Supply (µC controlled) | Inrush Current Limiters, Mains Over/Undervoltage, Mains Over Current, High Temperature | | |
| **Cooling** | Continuous speed controlled Fans | | |
| **Phantom Power,** switchable in groups | 48 V DC | | |
| **Power Requirements** (SMPS with auto range mains input) | 100 V to 240 V AC, 50 Hz to 60 Hz | | |
| **Power Consumption,** at 1/8 maximum output power, 4 Ohms | 450 W | | |
| **Safety Class** | I | | |
| **Ambient Temperature Limits** | +5 °C to +40 °C (40 °F to 105 °F) | | |
| **Dimensions** (W x H x D), mm | With lid: 510.5 x 164.5 x 571.5 Rack-mount: 483.0 x 135.0 x 443.7 | With lid: 663.5 x 164.5 x 571.5 | Without lid: 818.5 x 155.0 x 498.5 |
| **Weight** | | | |
| Net Weight, without lid | 12.5 kg | 15 kg | 18 kg |
| Net Weight, with lid | 14 kg | 17 kg | - |
| Shipping Weight | 17 kg | 20 kg | 22 kg |
| **Warranty** | 36 months | | |
| **Optional Accessories** | | | |
| RMK-1000-3 (Rack Mount Kit for PowerMate 1000) | F01U161506 (DC-RMK1000-3) | - | - |
| Gooseneck Lamp, 12V/5W, 12", XLR 4 pol. | F01U118983 (DC-LITLITE-4P) | | |
| FS 11 (Footswitch with LED) | F01U100598 (DC-FS11) | | |
| Dust Cover | - | - | F01U169467 (DC-SH2200-3) |

Device in rated condition, unity gain (MIC gain 20 dB), all faders position 0 dB, all pots in mid position, master fader +8 dB, LPN HIGH, amplifier load 8 ohms, dual channel, mains voltage 230 V/50 Hz or 120 V/60 Hz, unless otherwise specified.


DUAL STEREO EFFECTS PROCESSOR FX1 FX2
POWER AMPLIFIER 2x1000 WATTS
SMPS
USER INTERFACE
DISPLAY 128 X 64
USB AUDIO INTERFACE
CPU
MONO CHANNELS
STEREO CHANNELS 1-2
STEREO CHANNEL 3
STEREO CHANNEL 4
EQ CONTROL
11 BAND EQ
3 BAND EQ
PARAMETRIC EQ
SPEAKER L
SPEAKER R
STANDBY CONTROL
METER
PHONES
MASTER A LEFT
MASTER A RIGHT
MASTER B LEFT
MASTER B RIGHT
MASTER L
MASTER R
MIDI IN
MIDI OUT
USB to STEREO


155 mm
[ 6.1" ]
571.5 mm
[ 22.5" ]
498.5 mm
[ 19.63" ]
DYNACORD
164.5 mm
[ 6.48" ]
PowerMate 1000 = 510.5 mm [ 20.1" ]
PowerMate 1600 = 663.5 mm [ 26.12" ]
PowerMate 2200 = 818.5 mm [ 32.23" ]
135 mm
[ 5.32" ]
37.7 mm
[ 1.48" ]
101.6 mm
[ 4" ]
165.1 mm
[ 6.5" ]
101.6 mm
[ 4" ]
443.7 mm
[ 17.47" ]
DYNACORD
PowerMate 1000
465.1 mm
[ 18.31" ]
483 mm
[ 19" ]
RACK MOUNTED