



Technische Informationen  
Engineering Data Sheet

## PowerMate<sup>3</sup>

POWERED MIXER

### Beschreibung

Der PowerMate<sup>3</sup> 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 Leistungsstufe in Class D-Technik ist der PowerMate sehr universell einsetzbar.

### Description

The PowerMate<sup>3</sup> 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

<b>PowerMate 1000-3</b>	10 channel Powered Mixer (6 x Mic/Line + 4 x Mic/Stereo-Line)	DC-PM1000-3-UNIV
<b>PowerMate 1600-3</b>	16 channel Powered Mixer (12 x Mic/Line + 4 x Mic/Stereo-Line)	DC-PM1600-3-UNIV
<b>PowerMate 2200-3</b>	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
<b>Order No.</b>	F01U131113 DC-PM1000-3-UNIV	F01U131114 DC-PM1600-3-UNIV	F01U131115 DC-PM2200-3-UNIV
<b>Channels (Mono + Stereo)</b>	6 + 4	12 + 4	18 + 4
<b>Auxiliaries (MON, FX, AUX)</b>	2 Pre, 2 Post, 2 Pre/Post switchable		
<b>Max. Single Channel Output Power, Dynamic-Headroom, IHF-A</b>			
into 2.66 Ohms		2 x 1600 W	
into 4 Ohms		2 x 1250 W	
into 8 Ohms		2 x 675 W	
<b>Max. Single Channel Output Power, Continuous, 1 kHz, THD = 1%</b>			
into 2.66 Ohms		2 x 1350 W	
into 4 Ohms		2 x 1150 W	
into 8 Ohms		2 x 650 W	
<b>Maximum Midband Output Power, 1 kHz, THD = 1%, Dual Channel</b>			
into 2.66 Ohms		2 x 1350 W	
into 4 Ohms		2 x 1000 W	
into 8 Ohms		2 x 600 W	
<b>Rated Output Power, 20 Hz to 20 kHz, THD &lt; 0.5%, Single Channel</b>			
into 4 Ohms		2 x 900 W	
into 8 Ohms		2 x 450 W	
<b>Maximum Output Voltage, of power amplifier, 1 kHz, no load</b>			
		74 V <sub>rms</sub>	
<b>THD, at 1 kHz, MBW = 80 kHz</b>			
MIC input to Master A L/R outputs, +16 dBu, typical		< 0.005%	
POWER AMP INPUTS to Speaker L/R outputs		< 0.075%	
<b>DIM 30</b> , power amplifier, 3.15 kHz, 15 kHz		< 0.05%	
<b>IMD-SMPTE</b> , power amplifier, 60 Hz, 7 kHz		< 0.15%	
<b>Frequency Response, -3 dB, ref. 1 kHz</b>			
Any input to any Mixer output		15 Hz to 70 kHz	
Any input to Speaker L/R output		20 Hz to 30 kHz	
<b>Crosstalk, 1 kHz</b>			
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	
<b>CMRR, MIC input, 1 kHz</b>			
		> 80 dB	
<b>Input Sensitivity, all level controls in max. position</b>			
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)	
<b>Maximum Level, mixing desk</b>			
MIC inputs		+21 dBu	
Mono Line inputs		+41 dBu	
Stereo Line inputs		+30 dBu	
All other inputs		+22 dBu	
All other outputs		+22 dBu	
<b>Input Impedances</b>			
MIC		2 kOhms	
Insert Return		3.3 kOhms	
2Track Return & CD In		10 kOhms	
All other inputs		> 15 kOhms	
<b>Output Impedances</b>			
Phones		47 Ohms	
All other outputs		75 Ohms	
<b>Equivalent Input Noise, MIC input, A-weighted, 150 ohms</b>			
		-130 dBu	
<b>Noise, Channel inputs to Master A L/R outputs, A-weighted</b>			
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



Property	PowerMate 1000	PowerMate 1600	PowerMate 2200
<b>Signal/Noise-Ratio</b> , power amplifier, A-weighted, 4 Ohms		105 dB	
<b>Output Stage Topology</b> , amplifier		Class D	
<b>Equalization</b>			
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	
<b>Filter</b>			
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	
<b>Effects</b>			
Type		Dual stereo 24/48-bit multi effects processors	
Effects presets		100 Factory + 20 User, Tap-Delay	
Remote control		Footswitch, MIDI	
<b>Display</b>		128 x 64 pixels, OLED	
<b>Digital Audio Interface</b>			
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	
<b>MIDI Interface</b>		5-pin DIN connector, In / Out	
<b>Output Power Control</b> (Speaker Protection)		Adjustable longterm RMS Limiter	
<b>Protection</b>			
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 ( $\mu$ C controlled)		Inrush Current Limiters, Mains Over/Undervoltage, Mains Over Current, High Temperature	
<b>Cooling</b>			
		Continuous speed controlled Fans	
<b>Phantom Power</b> , switchable in groups		48 V DC	
<b>Power Requirements</b> (SMPS with auto range mains input)		100 V to 240 V AC, 50 Hz to 60 Hz	
<b>Power Consumption</b> , at 1/8 maximum output power, 4 Ohms		450 W	
<b>Safety Class</b>		I	
<b>Ambient Temperature Limits</b>		+5 °C to +40 °C (40 °F to 105 °F)	
<b>Dimensions</b> (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
<b>Weight</b>			
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
<b>Warranty</b>		36 months	
<b>Optional Accessories</b>			
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.