PowerMate³

POWERED MIXING SYSTEM

Mobile Audio | Concert Sound | Fixed Installation | Pro Entertainment

DYNACORD
GERMAN ENGINEERING EXCELLENCE

English

„Always Best to be First"

WHEN DYNACORD IN 1997 LAUNCHED THE FIRST GENERATION POWERMATE, ITS WELL THOUGHT-OUT AND UNCOMPROMISING 'ADDED VALUE' CONCEPT CAUSED A CONSIDERABLE STIR, AND AN UNUSUAL—INDEED UNPARALLELED— SUCCESS STORY BEGAN.

PowerMate 1

PowerMate 2

NOW, WITH MORE THAN 100,000 UNITS SOLD, THE POWERMATE IS THE LIVING PROOF THAT IT ISN'T THE PRICE ALONE BUT, MORE IMPORTANTLY, THE TAILORING OF FEATURES AND EQUIPMENT TO THE PRECISE NEEDS OF THE PROFESSIONAL USER THAT DETERMINES THE SUCCESS OF A PRODUCT.

PowerMate 2

Innovation as Tradition

■ **DYNACORD can draw upon a 65-year tradition in the development and manufacture of mobile mixing amplifiers.**

Its first innovatory step was the integration of signal mixing and power amplification with compact, portable devices; this was soon followed by models that brought echo and reverberation on board. DYNACORD can therefore be considered the 'inventor' of the power mixer. To this day, nothing in the fundamental concept has changed, though, of course, ever since the PowerMate was first introduced, all the functional units have conformed to the highest professional standards. Never has there been the faintest suspicion of a compromise-based 'cheap solution'. Quite the reverse, in fact.

MORE POWER • MORE EFFECTS • MORE EXTRAS was the watchword of the developers of the 'original' PowerMate, and their exemplary realization of these aims set a new standard in mixing desks with integrated effects units and power amplifiers. In the PowerMate, the professional user has a mixing desk, multi-effects unit and power amplifier that is capable of delivering concert sound performance, that is compact and portable but nonetheless a very powerful system solution, and that as a small-PA leaves nothing to be desired.

The same spirit of innovation has dominated the further development of what was already an exquisite piece of technology and finds expression in a wealth of technical details, in its user-friendliness, its reliability and safety of operation, its efficient energy management and its superb styling. The perfection of every component reflects the passion of the developers.

PERFECTION.PASSION.POWERMATE.

**THE IDEAL SOLUTION FOR
AN ENORMOUS VARIETY OF APPLICATIONS**

Whilst for a great many live music applications an
integrated solution in the shape of a powered mixer
has long been the proven and preferred alternative,
PowerMates, with their flexible performance profile,
soon found acceptance, too, in such places as hotels,
churches, halls, music schools, clubs and restaurants
as well, naturally, as in the rental business, being
convenient, compact, light and very simple to operate
systems for small to medium-sized events.

Third-generation success story:
the **Power**Mate[3]

THE CURRENT POWERMATE GENERATION FEATURES A MULTITUDE OF
INNOVATIONS AND OPTIMIZATIONS. DESPITE A CLEAR REDUCTION IN
WEIGHT, IT OFFERS CONSIDERABLE GAINS IN TERMS OF BOTH POWER
AMPLIFIER OUTPUT AND FEATURES, AS WELL AS BEING MORE COMPACT
THAN EVER BEFORE.

Professional Live Mixer with Concert Sound Performance

THE THREE MODELS DIFFER IN THE NUMBER OF MIC/LINE INPUT CHANNELS THEY OFFER BUT ARE OTHERWISE IDENTICALLY EQUIPPED.

Model	MIC/LINE inputs	Stereo MIC/LINE inputs	Total inputs
PowerMate 1000-3	6	4	10
PowerMate 1600-3	12	4	16
PowerMate 2200-3	18	4	22

FEATURES

- 2 x 1000W RMS / 4 ohms
- 6 aux busses
- 30% reduction in weight
- more compact dimensions
- more than 50% less energy consumption
- editable effects
- USB Digital Audio Interface + MIDI
- innovative transport and protection solution

MIC/LINE Input channels

■ **The XLR microphone input is equipped with an extremely high quality, ultra-low noise, discrete preamp.**

The +48V phantom power for condenser microphones can be switched in groups of six.

The Line Input and Channel Insert are implemented as jack sockets. The Gain can be controlled in the range 0-60 dB.

The switchable Lo Cut filter (80Hz, 18dB/oct) serves to eliminate low-frequency noise. A very typical DYNACORD feature is the asymmetrical Voicing Filter by means of which, if desired, the voice can be powerfully emphasized in the mix.

Optimized for ease-of-use, the 3-band semi-parametric equalizer makes it possible even for unpracticed users to perform the requisite corrections swiftly and intuitively.

With its extended buss structure, the PowerMate[3] offers very flexible configuration options. In all, 6 AUX busses are available:

• 2 (FX) are assiged to the two effects sends
• 2 (AUX) can be configured either as monitor or effects sends by means of a switch in the Main section
• 2 (MON) are designed as monitor sends, each being equipped with a sweepable anti-feedback filter in the Master section.

MUTE and PFL switches, each with its own LED, make it possible to mute each input channel individually and/or listen to its pre-fader signal.

Each channel offers a Signal Present and Peak LED for level control.

The channel faders are dust-protected and offer not only excellent crosstalk attenuation but also a practice-optimized control characteristic.

All potentiometers and faders are high-quality components from ALPS.

MIC 7   MIC 8   MIC 9   MIC 10   LAMP 12V/5W   1-2 CD 3-4   DIGITAL AUDIO INTERFACE   REC SEND 2TRACK IN   FX ON/OFF   PHONES

PHANTOM POWER   MIC 7-10   FX 1   AUX 1   MASTER B   USB 2.0   OUTPUTS   MASTER A OUT

L/ MONO

STEREO 7-8   STEREO 9-10   STEREO 11-12   STEREO 13-14   FX 2   AUX 2   MASTER B   MON 1   MON 2   L POWER AMP R

SENDS   SENDS   OUTPUTS   OUTPUTS   OUTPUTS   INPUTS

GAIN MIC   GAIN MIC   GAIN MIC   GAIN MIC   FX 1 SEND   FX 2 SEND   2TRACK to MASTER   REC SEND & USB OUT   MASTER B   PRE POST   STEREO MONO   PHONES

GAIN LINE CD   GAIN LINE CD   GAIN LINE USB   GAIN LINE USB

STEREO GRAPHIC EQUALIZER   ON

CD 1-2   CD 3-4   USB 1-2   USB 3-4

+10   +3   0   -3   -10

63Hz 125Hz 250Hz 400Hz 630Hz 1kHz 1.6kHz 2.5kHz 4kHz 6.3kHz 12kHz

HI   HI   HI   HI

MID   MID   MID   MID

GRAPHIC EQ to
MASTER
MON 1
MON 2

LO   LO   LO   LO

◀MAX│LPN│HIGH│USB:▶   ◀ PARAMETER ▶

FX 1   FX 1   FX 1   FX 1

AMPLIFIER
PROTECT
LIMIT

BRIGHT HALL   MONO DELAY

5   55

MENU

FX 2   FX 2   FX 2   FX 2

Large Hall 3   232 ms 40%
▼ FX1 ▲   ▼ FX2 ▲

AUX 1   AUX 1   AUX 1   AUX 1

FX 1 to AUX   FX 2 to AUX

TAP

AUX 2   AUX 2   AUX 2   AUX 2

MON 1   MON 1   MON 1   MON 1

MON 2   MON 2   MON 2   MON 2

FX 1 to MON   FX 2 to MON

DYNACORD
PowerMate 1000
2 × 1000 WATTS POWERED MIXER

BAL   BAL   BAL   BAL

L   +15   R
+12
+9
+6
+3
0
-3
-6
-9
-15
-24
PFL   L+R

STANDBY   200 6.3Q   200 6.3Q
125   125

MUTE   MUTE   MUTE   MUTE   FX 1   FX 2   AUX 1 POST   AUX 2 POST   FEEDB. FILTER   FEEDB. FILTER

7-8   9-10   11-12   13-14   FX 1   FX 2   AUX 1   AUX 2   MON 1   MON 2   L MASTER R

PFL   PFL   PFL   PFL   ON   ON   MUTE   MUTE   MUTE   MUTE   MUTE

PFL   PFL   PFL   PFL   PFL   PFL

PK   PK   PK   PK

SIG   SIG   SIG   SIG

Stereo MIC/LINE Input channels

■ **The stereo input channels are equipped in much the same way, but optimized, naturally, to carry stereo signals.**

Two of the four stereo inputs of each model are additionally equipped with cinch (RCA) sockets switched in parallel for CD or MP3 players.

The two other stereo inputs receive in addition the four channels of the digital audio interface USB 1-2 and USB 3-4

Separate Gain controls are provided for the Stereo Line and Mic inputs to permit them to be used in parallel if desired.

Three-band tone controls are provided and a Balance control replaces the PAN control found in the mono channel strips.

MASTER

■ **In the Master Section, too, the PowerMate is lavishly equipped.**

The 11-band stereo equalizer can be routed to the Master channels or else to either or both of the Monitor Sends according to choice.

The FX1+2 Returns as well as the AUX1+2 and MON1+2 Sends are on faders just like the Master L/R signal, which makes for comfortable and intuitive operation.

The Master B signal is available pre or post Master L/R fader and can be mono-summed if desired.

The Master signal is also available on the REC SEND cinch (RCA) output with level control.

The level meters of the PowerMate comprise two LED chains of 12 LEDs each. The display range covers 40 dB; what is shown is the level in dBu at the master outputs. When the PFL switch is activated, the left-hand LED chain shows the internal level of the master buss in dBu.

The STANDBY switch mutes all channels e.g. during pauses, with only the 2TRACK-to-MASTER input remaining active for the playback of interval music.

A 4-pin XLR socket is provided for the connection of a standard 12V/5W gooseneck lamp.

DEVICE SETUP

USB RECORD ROUTING

EFFECTS

EDITABLE EFFECTS

DIGITAL USB 2.0 AUDIO INTERFACE
The USB 2.0 port serves as a digital audio interface between the PowerMate and a PC or Mac.

Four channels can be transmitted in either direction simultaneously. This interface can therefore be used either for the input of audio signals (e.g. for playback or interval music) or else for live- or studio-recording applications. It is configured by selecting the relevant setting in the menu.

For the use of the PowerMate with a PC or Mac, a free Cubase LE license as well as the requisite USB drivers are included free-of-charge on the supplied DVD.
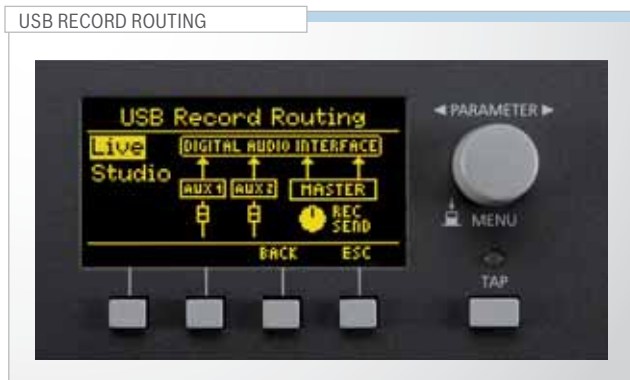
PC MIDI INTERFACE
The PowerMate also offers a fully-featured PC MIDI interface.

The MIDI input also supports the remote switching of both internal effects units using a master keyboard or MIDI footswitch.

PROFESSIONAL EFFECTS, OLED DISPLAY AND PROCESSING MENUS
The PowerMate has two integrated stereo multi-effects processors that work independently of one another, each offering 100 effects algorithms optimized for live performance, the most important parameters of which are editable.

Linear 24-bit AD/DA converters and 48-bit double-precision processing guarantee the finest studio quality based on state-of-the-art technology.

The 100 program locations of each device are packed with high-quality reverbs, halls and plates that deliver professional results in live performance on stage as well as in both studio and home recording environments. Other presets include Echo/Reverb and Chorus/Echo combinations, a variety of delay, flanger, chorus and doubling algorithms, as well as special reverb and delay programs. When a delay effect is active, the delay time can be synchronized to the beat of the music using the TAP key.
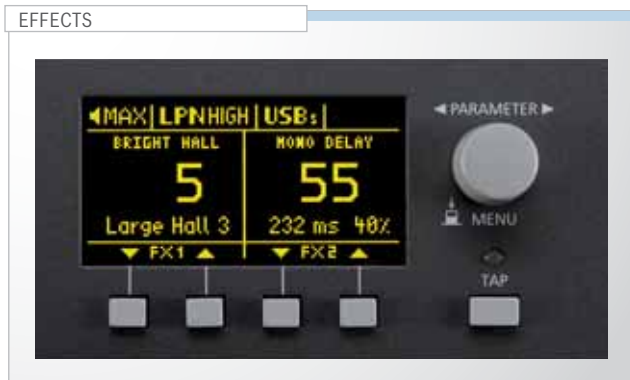
Edited effects programs can be stored in the each 20 User memories, assigned names, and later selected and used in the same way as the presets.

The large, high-contrast OLED display is easily read from a wide range of viewing angles—even in very bright surroundings. The operation of the effects units and processing menus is intuitive and made easier still through the use of soft keys and a rotary encoder.

OLED Display

THE LARGE, HIGH-CONTRAST OLED DISPLAY IS EASILY READ FROM A WIDE RANGE OF VIEWING ANGLES—EVEN IN VERY BRIGHT SURROUNDINGS.
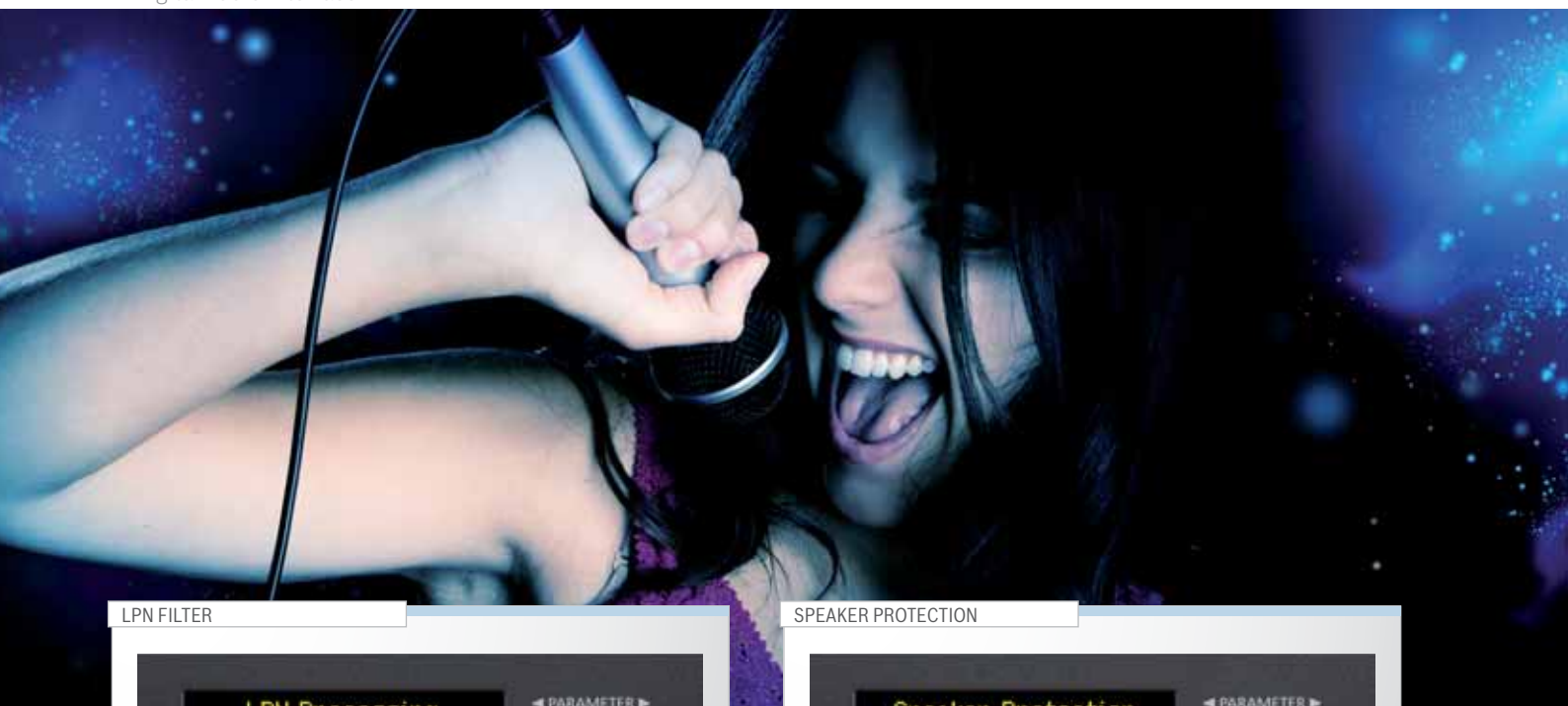
LPN FILTER

SPEAKER PROTECTION

PROCESSING MENUS
For the basic settings, configuration, use of the effects and special functions, a wide variety of editing options can be selected from a multitude of menus.

Particularly valuable in making it possible to adjust the PowerMate perfectly to the selected loudspeaker cabinets, thereby optimizing the audio performance and maximizing the operating safety and reliability of the system, are the LPN Processing and Speaker Protection menus.

LPN PROCESSING
Typical small to medium-sized loudspeaker cabinets, for physical reasons that have nothing to do with their make or quality, exhibit distortion in the transient response of the woofer.

Since neither graphic nor parametric equalizers can do anything to alleviate this problem, the PowerMate offers a configurable LPN (low-pass notch) filter.

Depending upon the size of the loudspeaker cabinet being used and also to adjust to problematic acoustics (such as those of bassy, boom-ridden rooms), the LPN filter can be set to either High or Medium. The result is considerably greater punch (e.g. from the bass drum), an extension downwards of the frequency response, and improved transparency in the bass and midrange.

SPEAKER PROTECTION
This menu allows you to match perfectly the continuous power output of the PowerMate's power amplifiers to the connected loudspeakers in the interests of greater operational safety and reliability.

Through dynamic limiting of the maximum power at the output, loudspeaker damage due to thermal over-load can be avoided, without the wide dynamic range of the power amplifiers being sacrificed. Once the maximum permissible power handling of the connected loudspeaker cabinet has been selected from the menu—the actual peak dynamic power handling capacity in audio applications of almost all loudspeaker cabinets is many times this nominal value—the speaker protection supervises permanently the amount of energy being fed to the loudspeakers, only limiting it in the event of a threatened overload, and even then, doing so softly and inaudibly. For peak levels of short duration, the full output of the power amplifier remains available, even when relatively small cabinets are being used. As a result, not only is the maximum dynamic range of the system maintained but also, and at all times, the highest degree of operational safety and reliability.

PROFESSIONAL DIGITAL HIGH-PERFORMANCE POWER AMPLIFIERS

The PowerMate is equipped with a professional, extremely powerful, stereo power amplifier that uses modern and highly efficient Class-D technology.

What this means is that at a nominal output of 2 x 1,000 watts RMS into 4 ohms (or 2 x 1,350 watts RMS into 2.7 ohms), comparatively little dissipation is generated within the device, and the power consumption is thereby dramatically reduced—by more than 55% compared with conventional power amplifiers! The minimal load impedance at the output is 2.7 ohms, making operation with up to three 8-ohm loudspeaker cabinets per channel, connected in parallel, possible with no problems.

The audio performance is on the highest professional level, as is shown by the PowerMate's exemplary figures for freedom from distortion, slew rate, and freedom from intermodulation.

The overall power supply is handled by an extremely stable, microprocessor-controlled, switching power supply, bringing massive gains in terms of weight-saving over a conventional toroidal transformer. Another advantage is the automatic mains voltage switching, which makes it possible to use the PowerMate virtually anywhere in the world without reconfiguration. Voltage surge protection is also integrated, whilst a 'soft start' function prevents the mains fuse tripping when the device is switched on.

The PowerMate is equipped, naturally, with all the protective circuitry familiar from DYNACORD power amplifiers and satisfies even the extreme demands of hard tour use. The power amplifiers are protected against thermal overload, short-circuit, back EMF and no-load operation as well as high-frequencies or DC at the output. Both outputs, here, are supervised independently so that, should a fault occur, only the channel affected is shut down. When the device is powered up, there is a delay before the power outputs are connected, to obviate the risk of noise.

The thermal stability of the PowerMate is assured by two very quiet fans the speed of which is continuously variable. The front-to-rear airflow allows the device to be used in large or small racks; furthermore, the PowerMate is equipped with a processor-controlled thermo-limiter, so if ever the threat of overheating does arise, the clip limiter intervenes in a highly musical way, acting only upon the peaks. In this way, a total shutdown of the power amplifiers is effectively prevented, as is any obtrusive fall in the overall volume level. The PROTECT and LIMIT LEDs on the front panel indicate the current operating state of the power amplifiers.

Innovative Solution for Protection and Transportation

■ **The PowerMate 1000 and 1600 are supplied with a very robust plastic lid with an integrated handle— a highly innovative solution that offers optimal protection for the device as well as greater carrying comfort.**

For the larger PowerMate 2200, due to its greater size, a flight-case solution is recommended (available as a further option is a dust cover: the DC-PM2200-COVER).

Accessories

■ **For rack installation of the PowerMate 1000 (or table installation of the models 1600 and 2200), the mounting kit RMK 1000-3 is available.**

Other accessories include the gooseneck light DC-LITLITE-4P and the DC-FS11 ON/OFF footswitch for the effects units.

TECHNICAL SPECIFICATIONS

Type / Name	PowerMate 1000	PowerMate 1600	PowerMate 2200
Order No.	F01U131113 DC-PM1000-3-UNIV	F01U131114 DC-PM1600-3-UNIV	F01U131115 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		
Maximum Midband Output Power, 1kHz, 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, 20Hz...20kHz, 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, 1kHz, no load	74 Vrms		
THD, at 1kHz, MBW=80kHz			
MIC Input to Master A L/R Outputs, +16dBu, typical	< 0.005%		
POWER AMP INPUTS to Speaker L/R outputs	< 0.075%		
DIM 30, power amplifier, 3.15kHz, 15kHz	< 0.05%		
IMD-SMPTE, power amplifier, 60Hz, 7kHz	< 0.15%		
CMRR, MIC input, 1kHz	> 80 dB		
Equivalent Input Noise, MIC Input, A-weighted, 150 Ω	-130 dBu		
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 ... 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, 1k, 1.6k, 2.5k, 4k, 6.3k, 12k Hz)	± 10 dB / Q = 1.5 – 2.5		
Filter			
LO-CUT, mono inputs	f = 80 Hz, 18 dB/oct.		
VOICE FILTER, mono inputs	switchable		
FEEDBACK FILTER, MON1/2	70 Hz ... 7 kHz, Notch, -9 dB		
Speaker Processing	LPN, switchable		

Type / Name	PowerMate 1000	PowerMate 1600	PowerMate 2200
Display	High Contrast OLED		
Effects			
Type	Dual stereo 24/48-bit multi effects processors		
Effects presets	100 Factory + 20 User, Tap-Delay		
Remote control	Footswitch, MIDI		
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		
MIDI Interface	5-pin DIN connector, In / Out		
Output Power Control	Adjustable longterm RMS Limiter		
Protections			
Mixer Outputs (Relay controlled)	MON1, MON2, MASTER A		
Amplifier	Audio Limiters, High Temperature, DC, HF, Short Circuit, Back EMF, Peak Current Limiters, Turn-On-Delay		
Switching Mode Power Supply (µC controlled)	Inrush Current Limiters, Mains Over/Under Voltage, Mains Over Current, High Temperature		
Cooling	Continuous speed controlled Fans		
Phantom Power, switchable in groups	48V DC		
Power Requirements (SMPS with auto range mains input)	100 V... 240 V AC, 50 Hz ... 60 Hz		
Power Consumption, at 1/8 maximum output power, 4 Ohms	450 W		
Safety Class	I		
Ambient Temperature Limits	+5 ℃ ... +40 ℃ (40 ℉ ... 105 ℉)		
Dimensions (W x H x D), mm			
PowerMate1000, Rack-Mount	483.0 x 135.0 x 443.7		
PowerMate1000, with lid	510.5 x 164.5 x 571.5		
PowerMate1600, with lid	663.5 x 164.5 x 571.5		
PowerMate2200, without lid	818.5 x 155.0 x 498.5		
Weight	PowerMate 1000	PowerMate 1600	PowerMate 2200
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 PowerMate1000)	F01U161506 (DC-RMK1000-3)		
Gooseneck Lamp, 12V/5W, 12", XLR 4 pol.	F01U118983 (DC-LITLITE-4P)		
FS11 (Footswitch with LED)	F01U100598 (DC-FS11)		
Staubschutzabdeckung for PowerMate 2200	DC-PM2200-COVER		

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. Measurements at other mains voltages may vary ±.
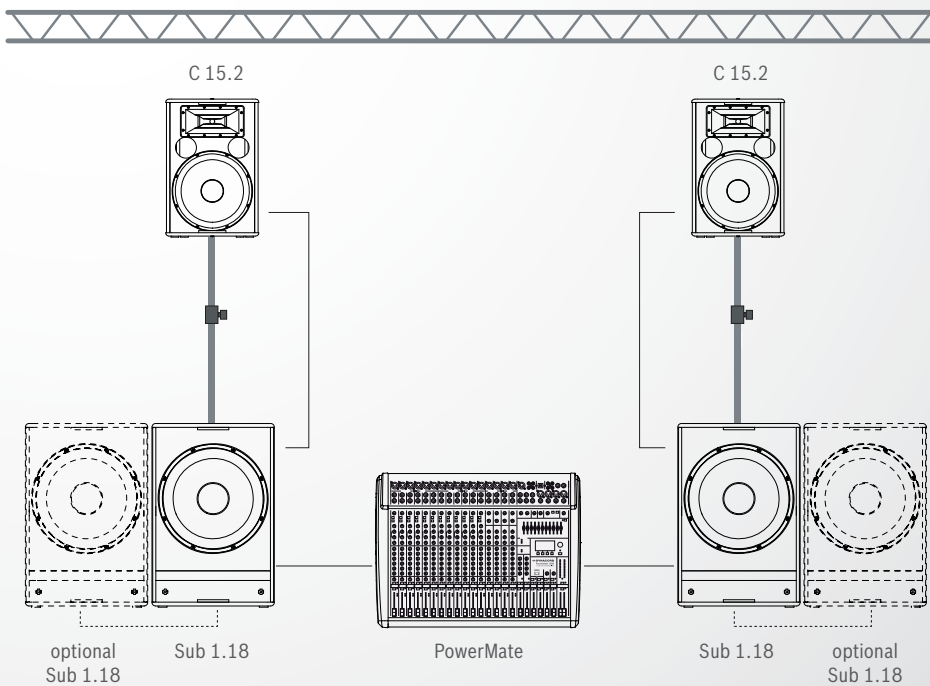
# System Combinations

MEDIUM HIGH POWER LIFE APPLICATIONS
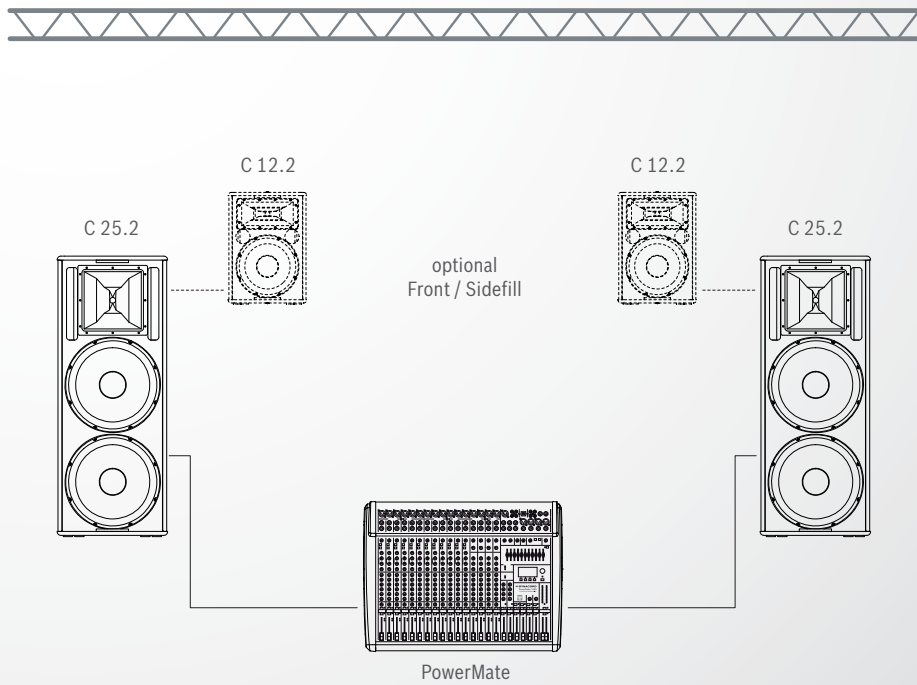
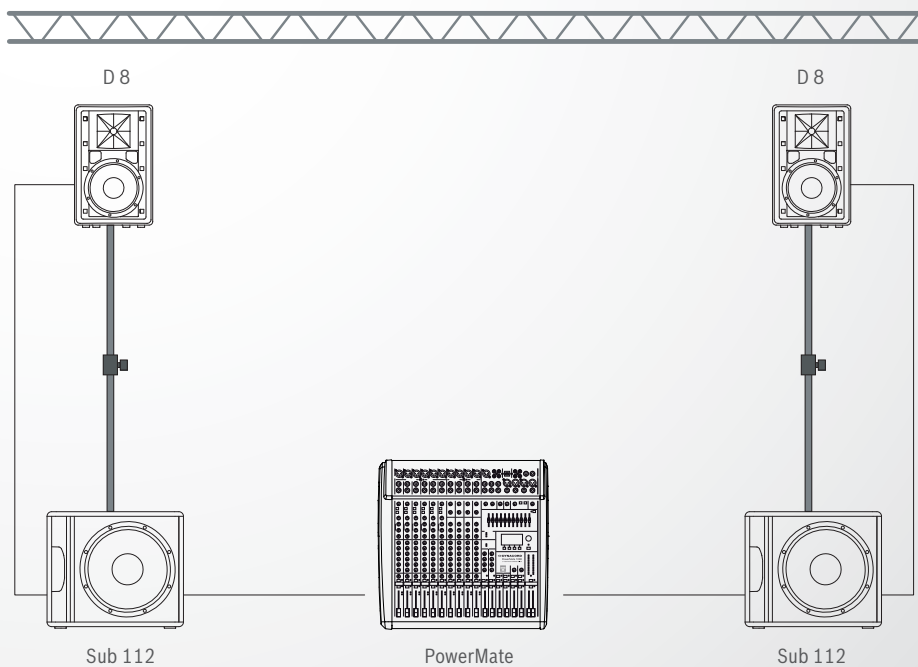| Configuration	Full-Range
Comments:	One added 8 ohm Cabinet can be driven on each side (8 ohms + 4 ohms).

C 12.2

C 12.2

C 25.2

C 25.2

optional
Front / Sidefill

PowerMate

MEDIUM LIVE APPLICATIONS

Configuration	Full-Range + passive Sub
Comments:	One added Top or one added Sub can be driven on each side (3 x 8 ohms).

C 15.2

C 15.2

optional
Sub 1.18

Sub 1.18

PowerMate

Sub 1.18

optional
Sub 1.18

SMALL TO MEDIUM LIVE APPLICATIONS
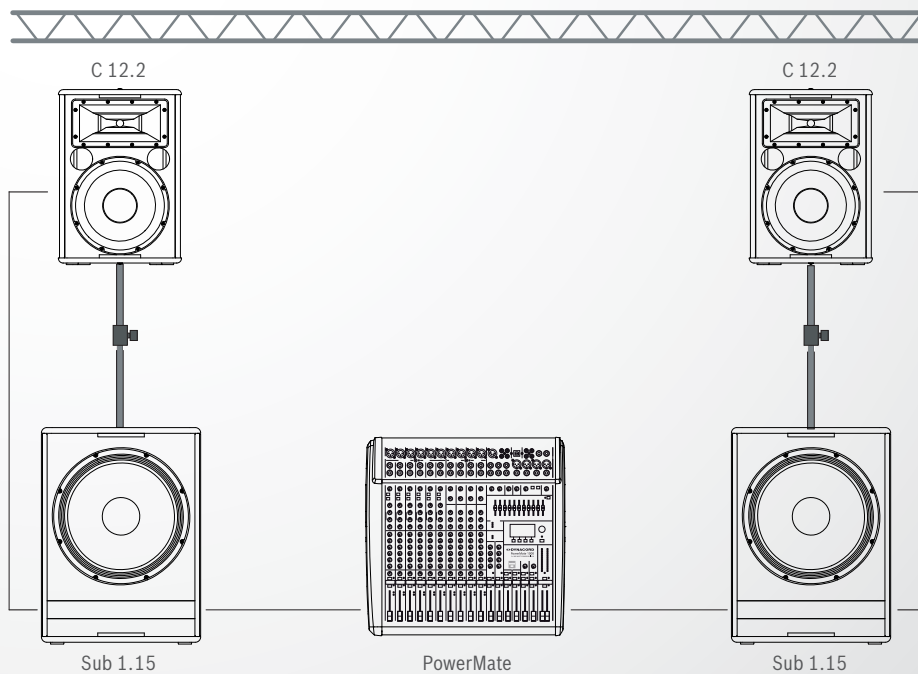
C 12.2   C 12.2

Configuration	Full-Range + passive Sub
Comments:	One added Top or one added Sub can be driven on each side (3 x 8 ohms).

Sub 1.15   PowerMate   Sub 1.15

SMALL LIVE APPLICATIONS

D 8   D 8

Configuration	Full-Range + passive Sub
Comments:	One added Top or one added Sub can be driven on each side (3 x 8 ohms).

Sub 112   PowerMate   Sub 112

MUSICIANS, SMALL CLUBS

D 12 / D 12-3   D 12 / D 12-3

Configuration	Full-Range + passive Sub
Comments:	One added Top or one added Sub can be driven on each side (3 x 8 ohms).

Sub 115   PowerMate   Sub 115

LIVE BANDS, MEDIUM CLUBS

D 15-3   D 15-3

Configuration	Full-Range + passive Sub
Comments:	One added Top or one added Sub can be driven on each side (3 x 8 ohms).

Sub 118   PowerMate   Sub 118
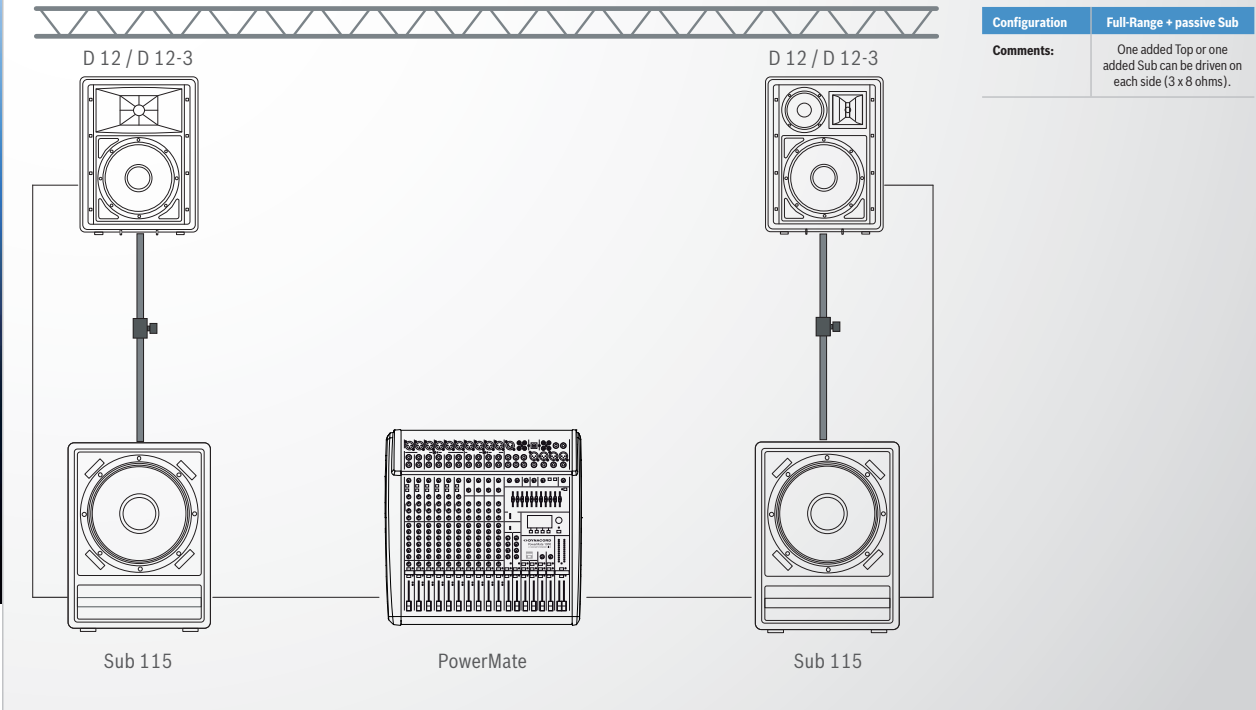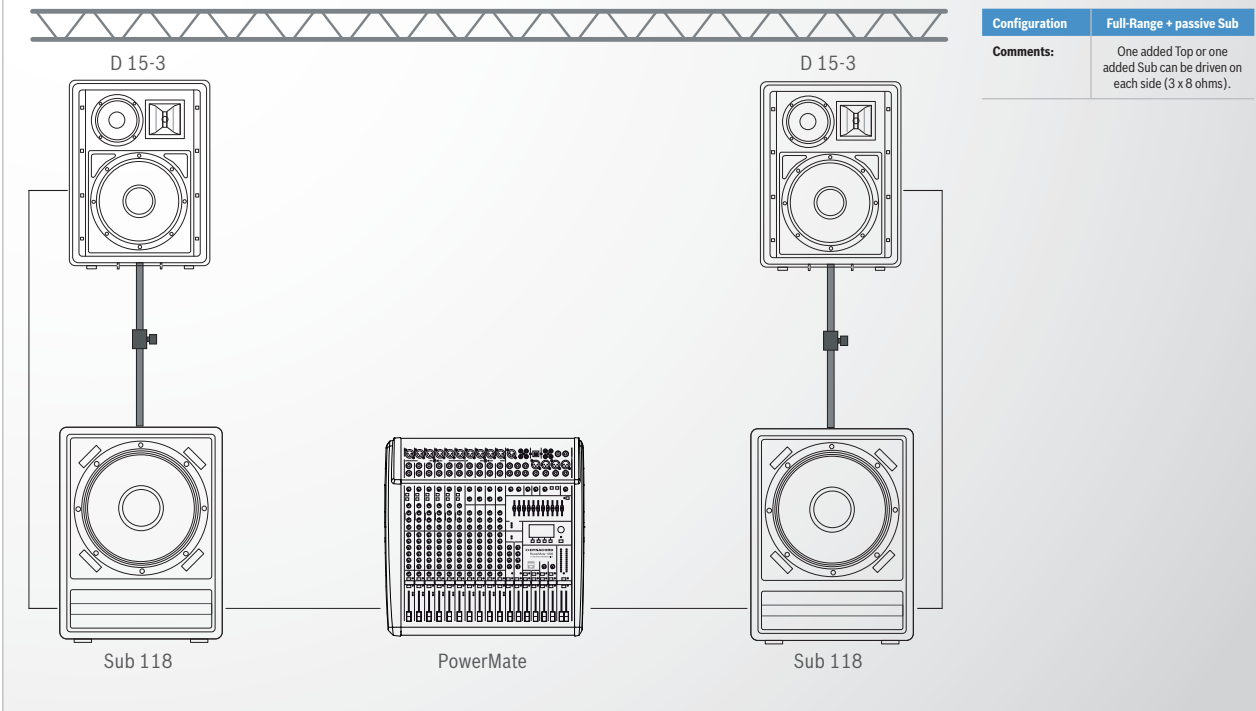
MEDIUM ENTERTAINMENT INSTALL

VL 262

VL 262
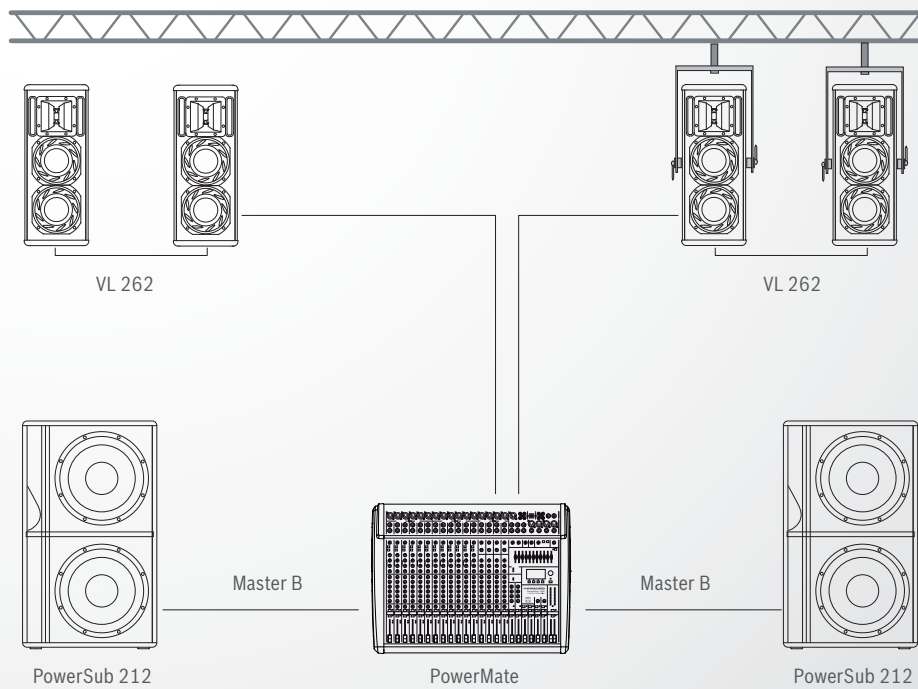
Configuration	Full-Range + active Sub
Comments:	One added Top can be driven on each side (3 x 8 ohms).

Master B

Master B

PowerSub 212

PowerMate

PowerSub 212

LIVE BANDS, CLUBS
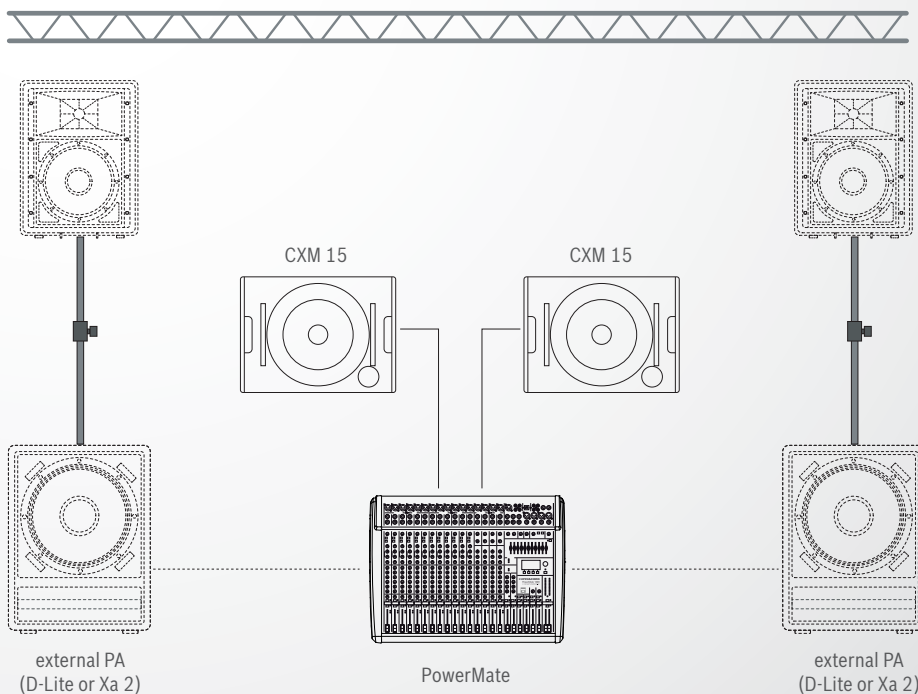
Configuration	Monitoring + external PA
Comments:	Internal Amplifiers are routed to MON1 and MON2. External PA is connected to Master OUT L/R. Max. 3 x 8 ohm Monitors can be driven on each side.

CXM 15

CXM 15

external PA
(D-Lite or Xa 2)

PowerMate

external PA
(D-Lite or Xa 2)

AMERICAS

HEADQUARTERS AMERICAS
Bosch Security Systems, Inc.
12000 Portland Ave South,
Burnsville, MN 55337, USA
USA–Tel: 1 800 392 3497
Fax: 1 800 955 6831
Canada–Tel: 1 866 505 5551
Fax: 1 866 336 8467
Latin America–Tel: 1 952 887 5532
Fax: 1 952 736 4212

EMEA

**HEADQUARTERS EUROPE,
MIDDLE -EAST & AFRICA**
Bosch Sicherheitssysteme GmbH
Werner-von-Siemens-Ring 10
85630 Grasbrunn, Germany

Contact & Visitor Address
EVI Audio GmbH
Sachsenring 60
94315 Straubing, Germany
Tel: +49 9421 706 0
Fax: +49 9421 706 265

FRANCE
EVI Audio France S.A.S
Tel: +33 1 6480 0090
Fax: +33 1 6006 5103

MIDDLE EAST
Robert Bosch Middle East FZE
Tel: +97 14 212 3300
Fax: +97 14 212 3388

ASIA & PACIFIC

HEADQUARTERS APR
Robert Bosch (SEA) Pte Ltd.
11 Bishan St. 21
Singapore 573943
Tel: +65 6571 2534
Fax: +65 6571 2699

AUSTRALIA
Bosch Security Systems Pty Ltd.
Tel: +61 2 9683 4752
Fax: +61 2 9890 5928

CHINA
Bosch (Shanghai) Security
Systems Ltd. (Shanghai) Co., Ltd.
Tel: +86 21 6317 2155
Fax: +86 21 6317 3025

INDIA
Bosch Limited
Tel: +91 80 4176 8378
Fax: +91 80 4176 8263

JAPAN
EVI Audio Japan Ltd.
Tel: +81 3 5485 4427
Fax: +81 3 5485 4428

THAILAND
Robert Bosch Limited
Tel: +662 639 3111
Fax: +662 631 2030

KOREA
Robert Bosch Korea Ltd.
Tel: +82 31 270 4765
Fax: +82 31 270 4601

TAIWAN
Robert Bosch Taiwan Co., Ltd.
Tel: +886 2 2515 5388 Ext. 2688
Fax: +886 2 2515 5399

VIETNAM
Robert Bosch Vietnam Co., Ltd.
Tel: +84 8 62583690
Fax: +84 8 62583693

INDONESIA
PT Robert Bosch
(Security Systems)
Tel: +62 21 5210600
Fax: +62 21 5214848

DYNACORD
GERMAN ENGINEERING EXCELLENCE