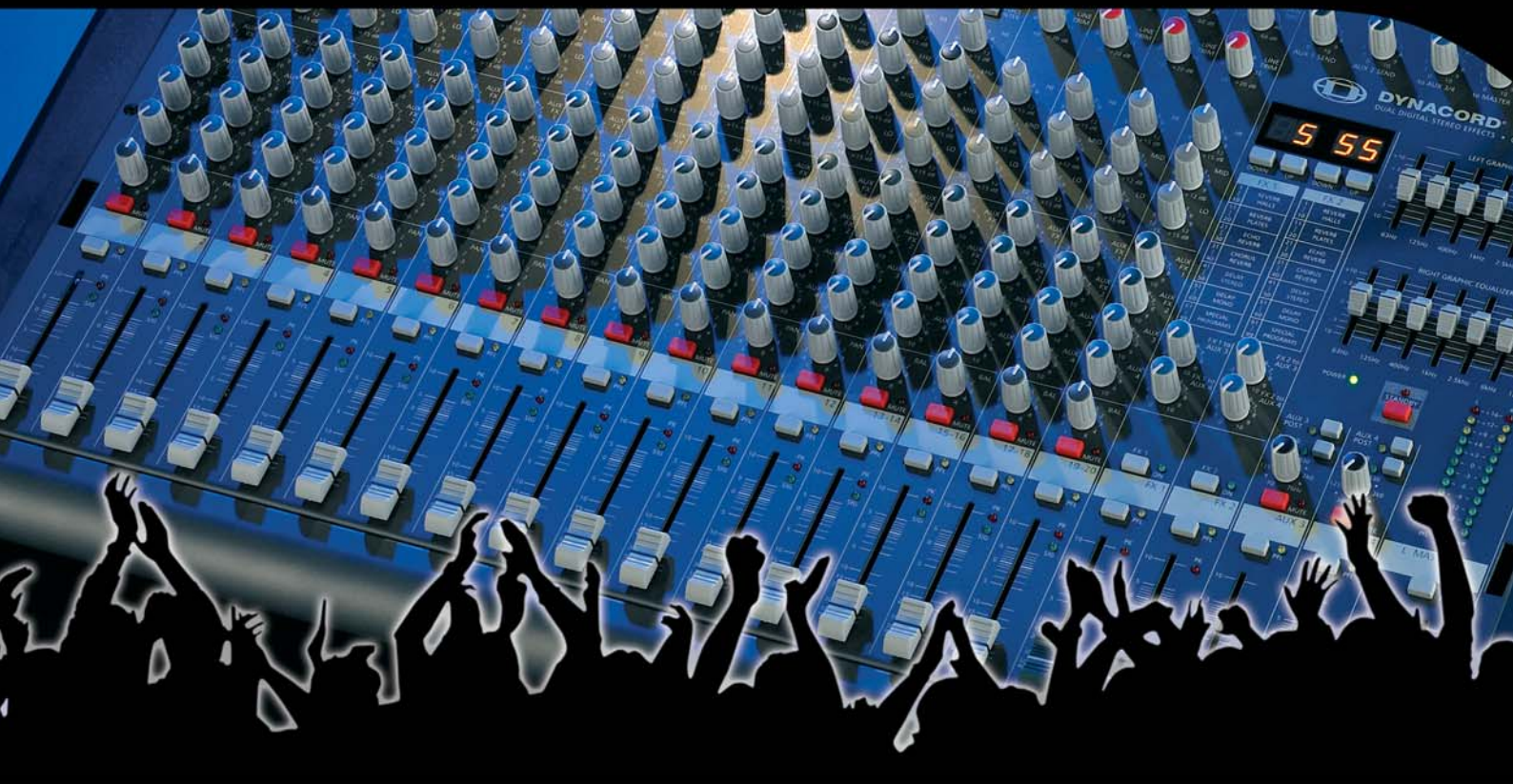


CMS

compact mixing system



C.M.S.
compact mixing system



Philosophy

In a world of over-abundance and mass production quality, functionality and design are still decisive factors. We at DYNACORD develop and produce best-in-class products ('Made in Germany') that provide only positive experiences for our users, bringing them many years of pleasure in day-to-day operation.

Continuous, authentic application testing of all products ensure comprehensive configuration, and precise operation of every feature. The highest possible performance and reliability of our products, and the absolute satisfaction of our customers are our highest precepts.

Until now, the only way to transmit signals in the highest audio quality between signal sources and power amplifiers was through the use of professional (and expensive) stand-alone systems. Mixing consoles, effects devices and signal processors make up today's typical, all-purpose, professional mixing systems. However, the challenge of properly configuring and operating such systems is

unrealistic for many, and the complexity and time involved with set up and cabling is unmanageable for most.

The new **CMS 1000 / CMS 1600 / CMS 2200 Compact Mixing Systems** from DYNACORD are conceived as all-in-one solutions, easily transported and swiftly made ready for use. For the first time, customers are being offered a unit combining a substantial-in-features, yet superb-in-sound quality mixer with professional quality, digital studio effects devices, graphic equalizers and a multitude of other problem-solvers- Ease of operation the basic user will appreciate, and the responsiveness a discerning professional demands.

The **CMS 1000 / CMS 1600 / CMS 2200** represent the ideal 'complete solution' for driving active loudspeaker systems as well as all possible combinations of power amplifiers and loudspeaker enclosures. Typical applications range from live music situations to the rental business, high-quality fixed installations in the catering sector, schools, and professional multi-media installs.

Yes, we made it!



 **DYNACORD®**



Mixer Section

The discrete microphone preamps in the input channels offering audio quality of the very finest, a 60 dB gain range, and extremely low levels of noise and THD, set new standards in professional mixing equipment, whilst phantom power (switchable in groups of six channels), 3-band semi-parametric EQs with sweepable mids, 4 Aux Sends, PFL and Mute, dust-protected ALPS faders, 2 x 7-band graphic EQs, two feedback filters and four stereo line channels are only a few of the professional features.

Effekt Section

Two independently-controllable, 24/48 bit stereo digital effects devices offer a total of 198 presets optimized for live use but delivering studio quality. The room and plate reverb, echo reverb, chorus reverb, mono / stereo delay and a host of other special effects are easily selected using the Up/Down keys. Preferred presets can be stored in programming mode and are then instantly available the next time you switch the CMS on. One global (or else two individual) foot switch(es) can be used to turn the effects devices on and off singly (or collectively).





Mic / Line

All 6 / 12 / 18 (respectively) mic inputs of the **CMS 1000 / CMS 1600 / CMS 2200** are equipped with XLR- (Mic) and jack (Line) sockets as well as a common Gain control with a range of 60 dB. This makes it possible to introduce even line level signals through the XLR Mic inputs.

A channel break allows you to connect additional devices, such as compressors and gates, on a channel-by-channel basis using the Insert sockets. A switchable Lo Cut filter permits the elimination of low-frequency noise in the sub-80 Hz region. The 3-band tone controls section comprises a semi-parametric equalizer with a sweepable Mid, the range of which is 100 Hz to 8 kHz. The Lo shelving EQ has its 3 dB down point (corner frequency) at 60 Hz, whilst that of the Hi shelving EQ is 12 kHz, the boost/cut being +/- 15 dB in each case. In all, four aux busses are provided to permit you to ply the two internal effects devices with signals independently as well as two separately controllable monitor busses. AUX 1 and AUX 2 control the level of the post-fader signal sent to the two internal effects devices, FX 1 and FX 2. AUX 3 and AUX 4 are set pre-fader to allow the creation of independent monitor mixes, but can be switched post-fader, if preferred, for the control of additional effects devices in the sum.

All channels offer MUTE and PFL switches as well as level control meters with Signal Present and Peak LEDs. Ultra high-quality ALPS faders control the Volume of the individual channels and are remarkable for their extremely high attenuation values.

Mic / Stereo Line

The four Mic / Stereo Line channels offer separate Mic Gain and Line Trim controls instead of the Lo Cut and Vocal Voicing filter in the mono channels and offer a full dual-channel implementation. Stereo signals from keyboards and samplers therefore take up no more than one of the available channel strips each. The mixing of stereo line and microphone signals is also unproblematic.

Master Section

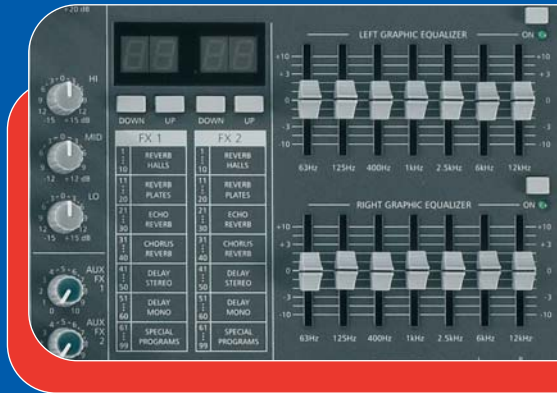
In the master, all the control elements are laid out clearly in sections, in a configuration based on practical experience. The Return level of the integrated effects devices (FX 1 and FX 2), the Send level for AUX 3 and AUX 4, as well as the Stereo Master, are all implemented as faders. The 2 x 7-band graphic equalizer can be switched instantly between the Master and AUX 3 + AUX 4. Separate AUX 1 and AUX 2 Send controls allow the control of additional effects devices — parallel to the internal effects or solo.

Systems for neighbouring rooms, side fills or even active sub-woofers can be driven via the separately controllable Mono Out, which can be switched pre- or post-fader. There is a useful Standby switch for programme pauses that does not affect the 2-track Return path, allowing material on tape or CD to be routed to the master or else AUX 3 and AUX 4. All the XLR outputs are electronically balanced and wired in such a way that operation via relay is not accompanied by clicks and pops.



Graphic Equalizer

If there is no need for EQ in the master section for the main system or room equalization, the integrated 2 x 7-band graphic equalizer can be looped into the monitor busses at the push of a button, making it available to AUX 3 and AUX 4 for the provision of an optimized foldback mix. LEDs indicate clearly the current selection.



Feedback Filter

AUX 3 and AUX 4 are equipped with a switchable Anti-Feedback filter in the master, offering continuous control from 80 Hz to 7.7 kHz. In the event that less-than-ideal microphone placements or excessive volume levels provoke feedback, it can be zapped swiftly and with laser-like precision.



Vocal Voicing Filter

This filter, which can be switched into the signal path of any of the Mic / Line channels, is designed to rescue particularly 'thin' voices from the main mix. An asymmetric filter structure deliberately emphasizes the fundamentals in the vocals and lifts them transparently into the foreground through decent shelving. This type of 'fundamental equalization' cannot be produced with any standard EQ.





Powered Speaker Systems

Compact Mixing System CMS 1000 / CMS 1600 and Powered Speaker System D-LITE 2000.

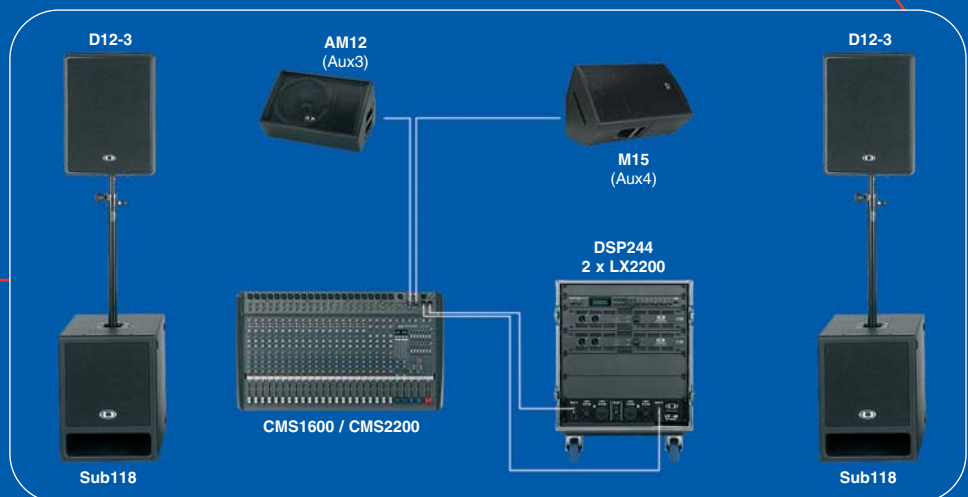
Typical configuration for Entertainer and smaller Live Bands but although, in the best way suitable for fixed installation in schools, restaurants or pubs.



Sound Reinforcement Systems

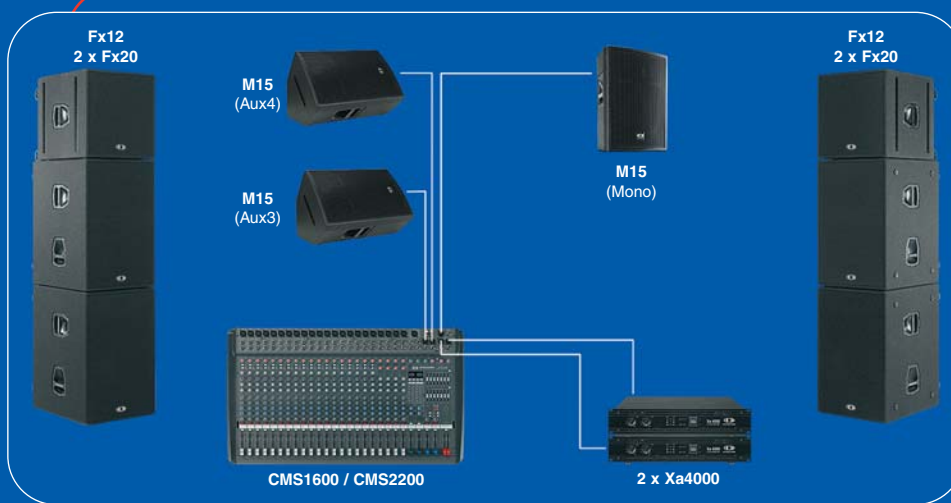
Compact Mixing System CMS 1000 / CMS 2200 with D-Lite speaker components driven by light weight LX 2200 power amplifiers in active 2-way mode.

Complete system dedicated for typical live applications and mid-sized events.





Sound Reinforcement Systems



Compact Mixing System CMS 1600 / CMS 2200 and Sound Reinforcement System Xa-2.

Complete setup for typical Top-40 Bands and medium sized events, but fits although perfect for permanent installation in theatres, clubs and larger pubs suitably.

Metal Lid

A stable, latching metal lid is provided for the safe transportation of the device, precluding the need for a flight case, whilst the panel running the width of the device at the front and the ergonomic side cheeks allow for easy and unproblematic handling.



Rack-Mount-Kit

The optionally available RMK-CMS rack-mounting kit permits the CMS 1000 to be used in the rack. The same kit allows the integration of either device into the control room table. For secure operation on particularly dark stages or in dark control rooms, a socket is provided for the connection of a 12V (up to 5W) gooseneck lamp.



Technical Specifications

	CMS 1000	CMS 1600	CMS 2200
Channels (Mono + Stereo)	6 + 4	12 + 4	18 + 4
Power Consumption	max. 60 W	max. 70 W	max. 80 W
Dimensions , (WxHxD), mm	510.5x138x484.7	669.5x138x484.7	828.5x138x484.7
Weight	9.2 kg	11.9 kg	14,6 kg
MIC Gain (Mono)		0 dB ... +60 dB	
MIC Gain (Stereo)		10 dB ... +60 dB	
Stereo Line Trim		-10dB ... +20dB	
THD+N at 1kHz, MBW=80kHz			
MIC input to Main L/R output, +16 dBu, typical		< 0.005%	
Frequency Response , -3dB ref. 1kHz			
Any input to any Mixer output		15Hz ... 55kHz	
Crosstalk , 1kHz			
Fader and AUX-Send attenuation		> 85 dB	
Channel to channel		> 80 dB	
CMR , MIC input, 1kHz		> 80 dB	
Input Sensitivity , all level controls in max. position			
MIC input		-74 dBu (155 µV)	
LINE Input (Mono)		-54 dBu (1.55 mV)	
LINE Input (Stereo)		-34 dBu (15.5 mV)	
Maximum Level , mixing desk			
MIC inputs		+ 21 dBu	
Mono Line inputs		+ 41 dBu	
Stereo Line inputs		+ 30 dBu	
All other inputs		+ 21 dBu	
Record Send output		+ 14 dBu	
All other outputs		+ 21 dBu	
Input Impedances			
MIC		2 k Ohms	
Insert Return		2.2 k Ohms	
2 Track Return		8 k Ohms	
All other inputs		> 15 k Ohms	
Output Impedances			
Record Send		1 kOhm	
Phones		47 Ohms	
All other outputs		75 Ohms	
Noise , Channel inputs to Main L/R outputs, A-weighted		CMS 1000 / CMS 1600 / CMS 2200	
Residual Noise, Master fader down		-96 dBu / -96 dBu / -96 dBu	
Bus Noise, Master fader 0 dB, Channel fader down		-91 dBu / -90 dBu / -89 dBu	
Mix Noise, Master fader 0 dB, Channel fader 0 dB, Channel gain unity		-83 dBu / -83 dBu / -83 dBu	
Equivalent Input Noise , MIC Input, A-weighted, 150 W		-130 dBu	
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, 63, 125, 400, 1k, 2k5, 6k, 12k Hz		± 10 dB / Q=2.0	
Mains Voltage		100 V – 240 V	
Mains Frequency		50Hz – 60 Hz	
Warranty		36 months	
Optional			
RMK-CMS (Rack-Mount-Kit CMS)		113 014	
Gooseneck Lamp, 12V/2,4W, 12", XLR		112 700	
Replacement bulb, 12V/5W		350 278	
FS11 (Footswitch)		110 693	

Americas Bosch Communications Systems
12000 Portland Ave South
Burnsville, MN 55337, USA

USA: Phone: 1-800-392-3497
Fax: 1-800-955-6831

Canada: Phone: 1-866-505-5551
Fax: 1-866-336-8467

Latin America: Phone: 1-952-887-5532
Fax: 1-952-736-4212

Europe, Africa & Middle-East

Germany: Bosch Communications Systems
EVI Audio GmbH
Hirschberger Ring 45
D-94315 Straubing, Germany
Phone: +49 9421 706-0
Fax: +49 9421 706-265

France: EVI Audio France S.A.
Parc de Courcerin
Allée Lech Walesa
F 77185 Lognes, France
Phone: +33 1-6480-0090
Fax: +33 1-6006-5103

UK: beyerdynamic UK Ltd.
17 Albert Drive
Burgess Hill
West Sussex RH15 9TN, UK
Phone: +44 1444 258 258
Fax: +44 1444 258 444

Asia & Pacific Rim

Japan: EVI Audio Japan Ltd.
5-3-8 Funabashi, Setagaya-Ku
Tokyo, Japan 156-0055
Phone: +81 3-5316-5020
Fax: +81 3-5316-5031

China: Telex EVI Audio (Shanghai) Ltd.
Room 2210-2215
Tower B, Far East International Plaza
No. 317, Xianxia Road
Shanghai, China, PC: 200051
Phone: +86 (21) 6235-1677
Fax: +86 (21) 6235-1676

Hong Kong: Telex EVI Audio (HK) Ltd.
Unit 5,1/F, Topsail Plaza
11 On Shum Street
Shek Mun, Shatin HK
Phone: +852 2351-3628
Fax: +852 2351-3329

Singapore: Telex Pte. Ltd.
3015A Ubi Road 1, 05-10
Kampong Ubi Industrial Estate
Singapore 408705
Phone: +65 6746-8760
Fax: +65 6746-1206