PowerMax 230 Controller

"PowerMax" - a crossover-function that provides improved SPL in the frequency range around the crossover frequency, making it the ideal solution for systems with relatively compact dimensioned full-range speakers plus sub woofer.

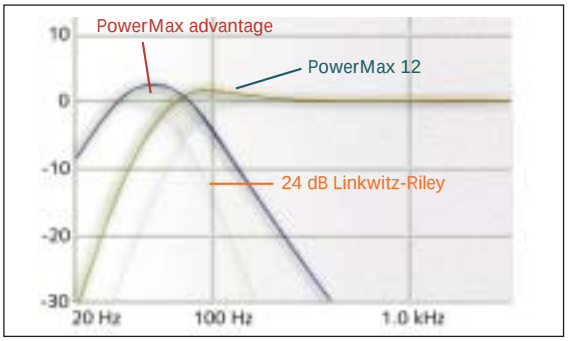
Meeting the highest requirements of modern audio applications is only possible when using active multi-component loudspeaker systems which provide the possibility to separately amplify and reproduce the audio signal's individual frequency ranges. Active 2-way installations with additional sub woofer systems probably offer the best price/performance ratio. The low frequency range of the audio signal is reproduced by the sub woofers while high-quality full-range cabinets take care of the Mid/Hi frequencies and vocals.

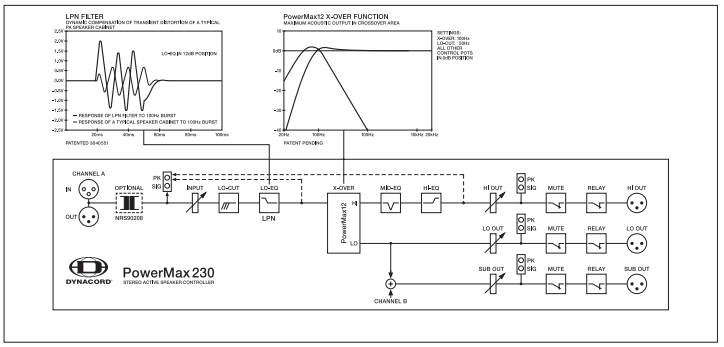
One essential advantage of active 2-way systems with additional sub woofers is the fact that the vocals are not divided between different speaker systems. This, in return, offers more convenience when adjusting the sound system. Opposite to active 3- or 4-way configurations, difficult analysing and measuring of sound fields is unnecessary.

Using individual sub woofer systems for each side is essential on wider stages. Otherwise, the level differences between bass and treble would result in audible degradation of the overall sound. Of course, adding a centrally located sub woofer might additionally improve the sound quality.

The PowerMax230 Controller has been designed for use in high-performance installations that employ active 2-way systems plus sub woofers. Applications like these also mostly incorporate professional linear power amplifiers like DYNACORD LINEAR- or STANDARD PRECISION power amps. Installing and operating the PowerMax230 Controller is easy as can be, since the user does not need to know any complex detail about crossover functions and equalization. All controls for matching the sound to different acoustic conditions and loudspeaker systems are located on the front panel. Difficult tasks - like electronic signal routing and settings for instance - are automatically carried out inside the appliance. The PowerMax12 crossover function optimally utilizes amplifier output power and loudspeaker transmission capacities. Compared to conventional crossovers or controllers, this results in an improved overall sound quality, which is achieved with less effort.

The PowerMax230 Controller is also most suitable for integration in active 2-way instrument reinforcement applications for keyboards, E-bass and drums. The PowerMax12 x-over function eliminates the often complained about "lack-of-punch-and-definition", like it is common for conventional active musical instrument reinforcement systems.
The EQ-section provides additional tools:
The Lo-EQ is an adjustable LPN-filter for controlling the "punch" while the Mid-EQ's 4 kHz dip-filter can be used to reduce the sometimes aggressive sound of a horn system. The Hi-EQ allows increasing the "clarity" depending on the desired degree of brilliance.
Its excellent dynamic range of more than 117dB, the extremely low noise level and the outstanding price/performance ratio makes the PowerMax230 Controller an advantageous alternative to conventional crossover and controller solutions – even in the critical field of permanent installation.





Block Diagram PowerMax 230

SPECIFICATIONS

PowerMax

	PowerMax 230
Crossover Type	2-way Stereo + Sub mono
Crossover Frequency (sweepable)	45-160 Hz
Crossover Filter type	PowerMax 12
Filter Options (adjustable)	Lo-Cut /EQ-Section
Frequency Response -3dB @ 1 k Hz	16 - 150 kHz
Nominal Gain	0 dB
Maximum Gain	+ 12 dB
Dynamic Range (+20 dBu, A-weighted)	117 dB
THD + N (20-20 kHz, + 6 dBu)	< 0.02 %
THD + N (typical, + 6 dBu)	0,003%
Crosstalk Attenuation	> 80 dB
Mute Switch Rejection	> 90 dB
Level Control Attenuation	> 80 dB
Input Impedance	20 k Ω
Maximum Level (Input: A, B)	+ 20 dBu
Rated Level (Input: A, B)	+ 6 dBu
Gain Range (Input: A, B)	- ∞ to + 6 dB
Output Impedance (HI, LO, SUB)	75 Ω
Maximum Level (Outputs: HI, LO, SUB)	+ 20 dBu
Rated Level (Outputs: HI, LO, SUB)	+ 6 dBu
Gain Range (Outputs: HI, LO, SUB)	- ∞ to + 6 dB
In-/Output Connectors	XLR (active balanced), Inputs with parallel out
Power Consumption	17 W
Power Requirements 50-60 Hz (switchable)	100-120 V / 220-240 V
Dimensions mm (W x H x D) 19" width	483.0 x 43.6 x 226.5 / 1 RU
Weight, net	3.2 kg