PROCESSORS

DIGITAL SIGNAL PROCESSORS

OVERVIEW

The NEXT LMS242 loudspeaker management system, brings a new level of audio performance and value to the installers and live sound engineers that are looking for full features high-end audio quality processor.

The "state of the art" 96kHz, 40Bit floating point DSP engine, the high performance 24Bit converters, and the precise algorithms, guarantee high end audio quality.

The NEXT LMS242 has 2 inputs that can be matrix mixed/routed to any or all 4 outputs. Both 2 inputs offer 650ms delay, 31-band graphic and 8 parametric equalizers, a complete Low-pass/High-pass filter section (max 48dB/oct) and a compressor.

All 4 outputs offer 650ms delay, a 8-band parametric EQ, a complete Low-pass/High-pass filter section (max 48dB/oct) and a true RMS limiter. The LMS242 configuration can be accomplished in real time from the front panel or, for ultimate control, with a computer, by using the supplied LMS software control GUI for XP, Vista, Windows 7, Windows 8 and Windows 10.

Connectivity over RS232, USB and Ethernet are standard. That makes the LMS242 wireless ready (through a standard wireless router) and able be connected to an Ethernet network, with max 16 units, being real time controlled from any location. This processor is an excellent choice among installers and live sound engineers that are looking for full features high-end audio quality processor.

The NEXT DP240 and DP260 are accurate yet affordable sound processors, for professional sound system management, considerably more powerful than similarly priced units, providing a versatile and economical alternative for system designers.

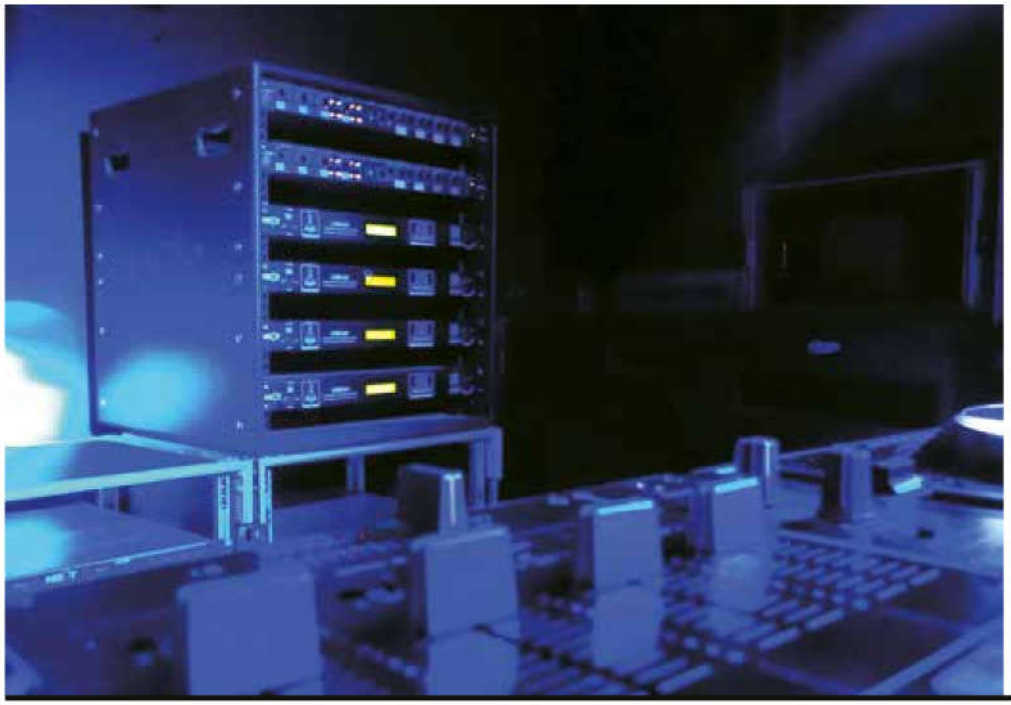
These digital speaker processors deliver excellent sound quality and an impressive variety of processing functions.

They feature 2 inputs and 4 outputs on DP240 and 2 inputs and 6 outputs on DP260, and have a 3 parametric equalizers for each input. All the outputs feature crossover filters, 5 parametric equalizers, phase inversion, gain, source selector, delay and fully featured high performance limiter with complete control over attack, release and threshold parameters. Other features include a choice of Low-pass and High-pass filters from 6 to 48dB/Octave roll-off, and Butterworth, Bessel, Linkwitz-Riley or 12dB variable Q responses.

Independent control of each High-pass and Low-pass filters allows asymmetric crossover bands to be created. Inputs and outputs can be routed in multiple configurations to meet any requirement.

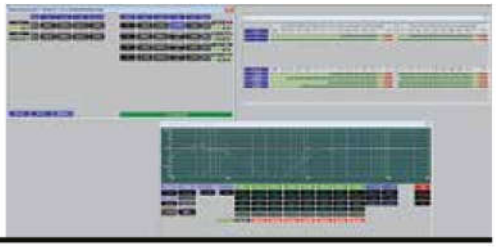
Three velocity-sensitive encoders provide a familiar and intuitive control format with all filter information displayed simultaneously on a backlit LCD screen. Full metering is provided for inputs and outputs, with mute/access buttons allowing quick set up and gain adjustment.

These processors are supplied with PC compatible control software for full system set up and management.



DP240/DP260 User Interface

LMS242 User Interface



LMS242

2 IN 4 OUT Loudspeaker Management System

- 2 Inputs and 4 Outputs with routing
- 96kHz, 40 Bit Floating Point DSP Engine
- Ethernet connection
- 8 band parametric EQ per input and output
- 31band graphic equalizer per input

DP240

2 IN 4 OUT Loudspeaker Management System

- 2 Inputs and 4 Outputs with routing
- Dual 24 bits, 48 kHz sampling rate
- Crossover slopes of 6, 12, 18, 24, 36 48dB/Oct
- Adjustable threshold, attack and release times
- Phase invert switch per output

DP260

2 IN 6 OUT Loudspeaker Management System

- 2 Inputs and 6 Outputs with routing
- Dual 24bit, 48kHz sampling rate
- Crossover slopes: 6, 12, 18, 14, 36, 48dB/Oct
- Adjustable threshold, attack and release times
- Phase invert switch per output

LMS242	
INPUT/OUPUT TYPE	Balanced 10kΩ/50Ω
MAXIMUM LEVEL	+20dBu
FREQUENCY RESPONSE	± 0.1dB (20Hz to 30.000Hz)
DYNAMIC RANGE	115dB (unweighted)
CMMR	>100dB (50Hz to 10.000Hz)
CROSSTALK	≤100dB
DISTORTION	0.002% (1.000Hz to +4dBu)
PROCESSOR (DSP)	40Bit floating point
SAMPLING RATE	96kHz
ANALOGUE CONVERTERS	Super performance 24Bit
PROPAGATION DELAY	1.5ms
GAIN	-40dB to +15dB in 0.25dB steps
POLARITY	+/-
DELAY	Up to 650ms (225m) per Input / Output
VARIABLE EQUALIZERS	8 PEQ per Input / Output + 31 band GEQ per Input
EQUALIZER TYPE	Parametric, High-Shelf, Low-Shelf and Phase
PHASE	1st and 2nd order
EQUALIZER GAIN	-30dB to +15dB in 0.25dB steps
BANDWITH	0.02 to 3.61 Oct. (Q=0.311 to 72)
GRAPHIC EQUALIZER	1 per Input, 31 band 1/3 oct ISO spaced, -30dB/+15dB
AVAILABLE CROSSOVER	2 individual filters per Input / Output
CROSSOVER (Type)	Butterworth, Linkwitz-Riley, Bessel
CROSSOVER (Slopes)	6dB to 48dB per octave
COMPRESSORS	1 Compressor per input channel
LIMITERS	1 Limiter per output channel
LIMITER (Threshold)	-20dBu to +20dBu
LIMITER (Attack)	0.3ms to 100ms
RELEASE	2x to 32x the attack time
COMPRESSOR (Parameters)	Ratio: 1:1 to 1:40 | Atk: 3 to 100ms Rel: 2x to 32x
N° OF PROGRAMS	30
DELAY UNITS	ms, ft, m
SECURITY LOCKS	Password
DISPLAY	2x16 characters backlit LCD
BUTTONS	6 mute/channel controls, 6 system menu cor
DIAL ENCODER	1 speed sensitive rotary encoder
PC CONTROL	USB, RS-232, Ethernet
POWER	90 - 265VAC (50Hz - 60Hz) – 20VA
DIMENSIONS (WxHxD)	483mm x 44mm x 229mm (19.02 x 1.73 x 9.02in)
WEIGHT	4.6kg (8.82lb)

DP240	
Balanced 10kΩ/50Ω	
+20dBu	
± 0.5dB (20Hz to 20.000Hz)	
95dB (unweighted)	
>102dB (50Hz to 10.000Hz)	
≤100dB	
0.005% (1.000Hz at +4dBu)	
40Bit floating point	
48kHz	
24Bit	
1.5ms	
-40dB to +6dB in 0.1dB steps	
+/-	
Up to 6.979ms (2.397m) per output	
7 output or 3 input and 5 output (selectable)	
Parametric	
-	
-30dB to +15dB in 0.1dB steps	
0.011 to 2.54 octaves (Q=0.5 to 128)	
-	
2 individual filters per output	
Butterworth, Linkwitz-Riley, Bessel and Variable Q	
6dB to 48dB per octave	
-	
1 Limiter per output channel	
-10dBu to +15dBu	
0.3ms to 90ms	
2x to 32x the attack time	
-	
30	
ms, m	
Password	
2x16 characters backlit LCD	
6 mute/channel controls, 6 system menu controls	
3 speed-sensitive rotary encoder	
USB, RS-232	
90 - 250 VAC (50Hz - 60Hz) – 18VA	
482mm x 44.5mm x 168mm (18.98 x 1.75 x 6.61in)	
3.6kg (6.61lb)	

DP260
Balanced 10kΩ/50Ω
+20dBu
± 0.5dB (20Hz to 20.000Hz)
95dB (unweighted)
>102dB (50Hz to 10.000Hz)
≤100dB
0.005% (1.000Hz at +4dBu)
40Bit floating point
48kHz
24Bit
1.5ms
-40dB to +6dB in 0.1dB steps
+/-
Up to 6.979ms (2.397m) per output
7 output or 3 input and 5 output (selectable)
Parametric
-
-30dB to +15dB in 0.1dB steps
0.011 to 2 octaves (Q=0.5 to 128)
-
2 individual filters per output
Butterworth, Linkwitz-Riley, Bessel and Variable Q
6dB to 48dB per octave
-
1 Limiter per output channel
-10dBu to +15dBu
0.3ms to 90ms
2x to 32x the attack time
-
30
ms, m
Password
2x16 characters backlit LCD
6 mute/channel controls, 6 system menu controls
3 speed-sensitive rotary encoder
USB, RS-232
90 - 250 VAC (50Hz - 60Hz) – 18VA
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