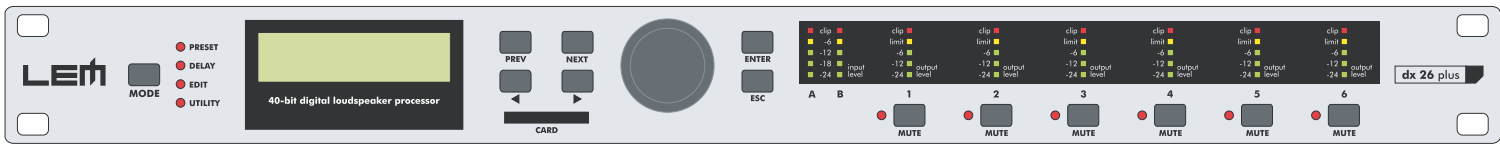




dx26plus 40bit digital loudspeaker processor



SERVICE MANUAL

Preliminary

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Notice

Service must be carried out by qualified personnel only. Any tampering carried out by unqualified personnel during the guarantee period will forfeit the right to guarantee.

For a correct operation of the instrument, after having switched off, be careful to wait at least 3 seconds before switching on again.

To improve the device's specifications, the schematic diagrams may be subject to change without prior notice.

All components marked by this symbol have special safety characteristics, when replacing any of these components use only manufacturer's specified parts.

The (μ) micro symbol of capacitance value is substituted by U.

The (Ω) omega symbol of resistance value is substituted by E.

The electrolytic capacitors are 25Vdc rated voltage unless otherwise specified.

All resistors are 1/8W unless otherwise specified.

All switches shown in the "OFF" position. All DC voltages measured to ground with a voltmeter 20KOhm/V.

← Soldering point.	↑ Supply voltage.	⏏ Logic supply ground.
• Male connector.	□ Test point.	⏏ Analog supply ground.
⌋ Female connector.	⏏ Flag joined with one or more flags with the same signal name inscribed.	⏏ Chassis ground.
⏏ M/F faston connector.		⏏ Earth ground.

ATTENTION

Observe precautions when handling electrostatic sensitive devices.

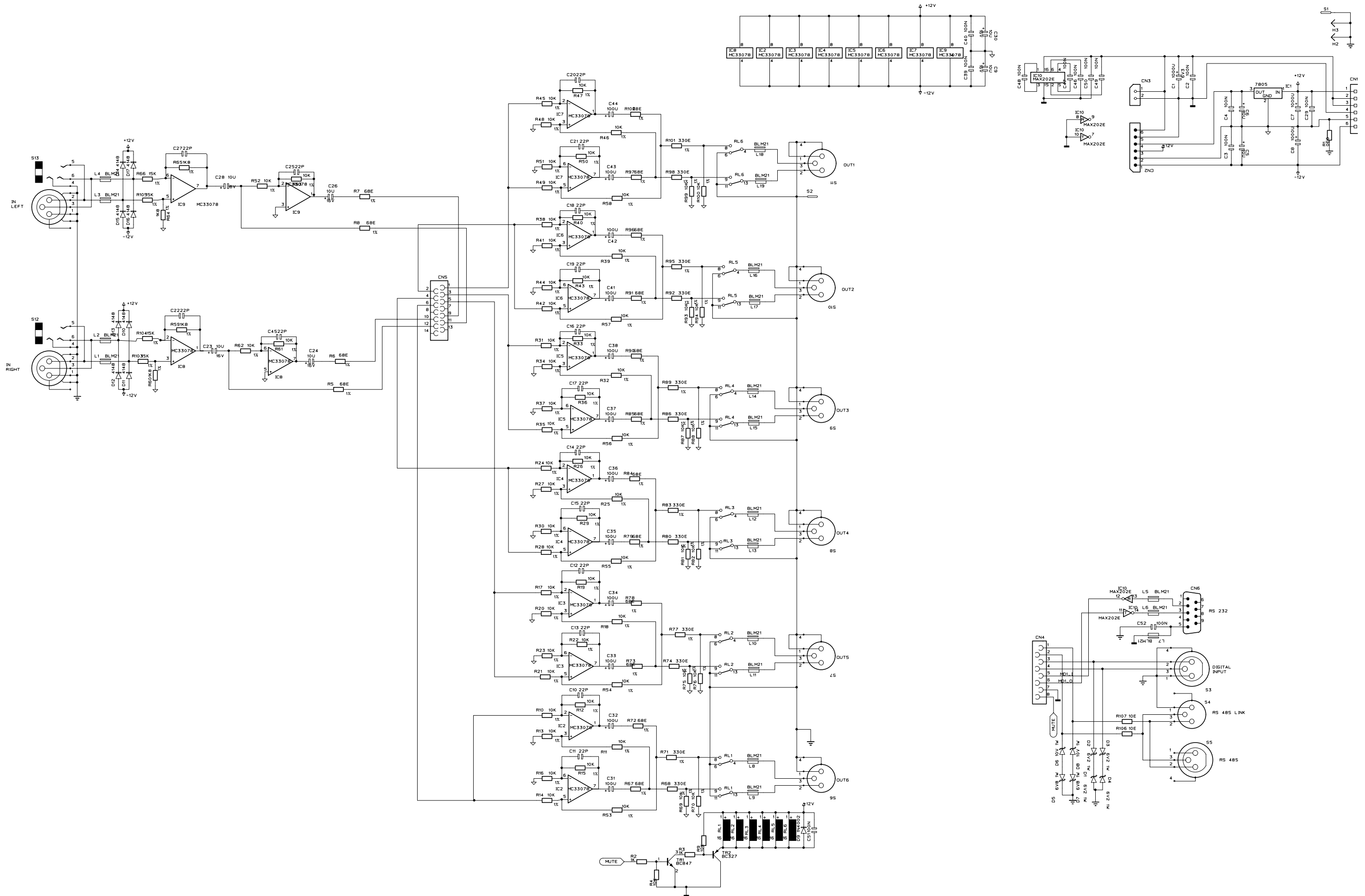


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dx26plus - Technical Specifications

INPUT section	
Connectors	2 x COMBO
Nominal input sensitivity	0 dB (0.775 V)
Input Impedance	30kOhm, electronically balanced
Maximum Input Level	+20dBu
Input Gain	-30 / +6 dB variable in 0.5 dB steps
Digital input	AES/EBU, XLR-F
Digital input sample rate	32 kHz ÷ 48 kHz
Output Section	
Connectors	6 x XLR-M
Output Impedance	600 Ohms, electronically balanced
Nominal Output Level	0 dBu
Maximum Output Level	+20 dBu
Output Gain	-30 / +6 dB variable in 0.5 dB steps
DSP Section	
A/D converters	20 bit
D/A converters	20 bit
Internal dynamics	40 bit
Sampling frequency	48 kHz
Features	
Configuration	2-WAY STEREO, 3-WAY STEREO, 2,3,4,5,6-WAY MONO
Crossover Filters Type	Bessel, Butterworth or Linkwitz-Riley
Crossover Filters Slope	6, 12, 18, 24, or 48dB per octave
Delay Step	21 microseconds minimum
Max Delay time	2621 ms (inputs), 291 ms (outputs)
EQ filters	Up to 40 maximum (depending on the crossover slope)
EQ Type	Peak, 6dB Lo-Shelf, 12dB Lo-Shelf, 6dB Hi-Shelf, 12dB Lo-Shelf, Notch
EQ Gain	+/-15dB, variable in 0.5dB steps
EQ Bandwidth	0.05 to 3.00 octaves, variable in 0.05 steps
EQ freq	15.6 Hz to 16 kHz
Dynamics	Digital limiter on all the output
Memories	21 FACTORY PRESETS + 128 USER PRESETS + 128 CARD PRESETS
Communications	9-pin RS232, XLR-F RS485 IN, XLR-F RS485 IN
General Performance (with filters out)	
Frequency Response	20Hz - 20kHz, ±0.25dB
Dynamic range	>117dB 20Hz to 20kHz >120dB 20Hz to 20kHz on AES/EBU input
Channel Separation	>100dB 20Hz to 20kHz
Distortion (THD)	0.05%, 20Hz to 20kHz
Input Metering	-24dB, -18dB, -12dB, -6dB, CLIP relative to Clip point (+20dBu)
Output Metering	-24dB, -12dB, -6dB, LIMIT relative to limiter threshold setting, CLIP
General Specification	
Dimensions	483x44x300 mm
Weight	4.0 Kg
Power supply	see label on the unit



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APP.	REV: 03/09/02	DX26 PLUS IN & OUT BOARD