

PRELIMINARY Specifications for C Series

	C 48:4	C 28:4	C 16:4
Number of channels per amplifier	4	4	4
Max. total output all channels driven	4800 W	2800 W	1600 W
Max. output voltage per channel	100 V _{rms}	100 V _{rms}	42 V _{rms}
Max. output current per channel	22 A _{rms}	13 A _{rms}	10 A _{rms}
Max. continuous output power			
8 ohms (per ch.)	1200 W	700 W	210 W
4 ohms (per ch.)	1200 W	700 W	400 W
2 ohms (per ch.)	1000 W	350 W	200 W
Hi-Z: 70V/100V (per ch.)	1200 W	700 W	N/A
16 ohms (bridged, per 2 ch.'s) ¹⁾			
8 ohms (bridged, per 2 ch.'s) ¹⁾	2400 W	1400 W	420 W
4 ohms (bridged, per 2 ch.'s) ¹⁾	2400 W	1400 W	800 W
4 ohms (bridged, per 2 ch.'s) ¹⁾	2000 W	700 W	400 W
Hi-Z: 70V/100V/140V/200V (bridged, per ch. pair) ¹⁾	2400 W	1400 W	800 W ²⁾
Default gain (adjustable from 23 - 44dB in 3 dB steps)	35 dB	32 dB	29 dB
Voltage Peak Limiter (VPL), max. peak output			
VPL selectable per ch. (V) ⁵⁾	141 (100V _{rms}), 118, 99 (70V _{rms}), 60, 50, 42, 35, 30 V	141 (100V _{rms}), 118, 99 (70V _{rms}), 60, 50, 42, 35, 30 V	59, 49, 41, 35, 30, 25, 21, 17 V
VPL when bridged (V) ^{1) 5)}	282 (200V _{rms}), 237, 197 (140V _{rms}), 169, 141, 118, 99, 85 V	282 (200V _{rms}), 237, 197 (140V _{rms}), 169, 141, 118, 99, 85 V	118, 99 (70V _{rms}), 82, 71, 59, 51, 42, 34 V
Voltage Peak Limiter mode (per ch.)	Hard / Soft	Hard / Soft	Hard / Soft

Common Values for all Models:

General	
Amplifier gain selectable (all channels) ¹⁾	Rear panel switch, 23, 26, 29, 32, 35, 38, 41, 44 dB
Level adjustment (per ch.)	Front panel pot, 21 position detent -inf to 0 dB, hidden behind security panel/dust filter grille
Power on/off and Remote enable on/off	
Power on/off	Individual switches on front panel
Cooling	Two fans, front to back airflow, temperature controlled speed
Intelligent fans (on/off)	Depending on presence of output signal
NomadLink network	On board, 2 x RJ45 EtherCon connectors, IN and OUT
Input/Output	
Output bridge mode	A+B and/or C+D, inputs A and C are signal source
Input connectors (per ch.)	3-pin Phoenix, electronically balanced
Output connectors (per ch.)	Barrier strip 2-pole screw terminals
Front panel indicators	
Common:	
NomadLink Network connected	Blue LED
Automatic Fuse Saver (AFS™) ³⁾	Yellow LED
Power on	Green LED
Option card active (on)	Yellow LED
Per individual channel:	
Signal present / Hi Impedance warning	Green/Red LED
-10 dB and -4 dB output signal present	2x Green LED's
Voltage Peak Limiter (VPL) clipping	Red LED
Current Peak Limiter (CPL) active	Orange LED
Very High Frequency (VHF) warning	Yellow LED
High temperature warning	Yellow LED
Fault warning	2x Yellow LED
Mute	2x Yellow LED
Power	
Operation voltage, 230 V / 115 V nominal ⁴⁾	130-265 V / 65-135 V
Automatic Fuse Saver (AFS™) ³⁾	Yes
Soft start	Yes
Dimensions	
Weight	12 kg (26.4 lbs.)
Finish	Black painted steel chassis with gray painted steel front
Approvals	
	CE, ETL, FCC

Note 1): Automatic -6 dB gain compensation when bridging channels. Ch.'s A+B and/or C+D can be bridged individually.

Note 2): Max. 70V systems.

Note 3): AFS™ reduces the maximum output power to prevent from excessive current draw tripping the mains breaker. Refer to user's manual.

Note 4): Separate 230 V or 115 V versions available. Not selectable on the amplifier.

Note 5): The Voltage Peak output values translates to _{rms} Voltage for a sine wave as: peak/1.41 = V_{rms}. E.g. 141V peak is 100V_{rms} and 99V peak is 70V_{rms}. This enables outputs set for high impedance loads without using external transformer.

LAB.GRUPPEN
INNOVATIVE POWER SOLUTIONS

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In High Performance Installations
...it's the sound that matters



The new C-Series from Lab.gruppen

Tailored for high-quality permanently installed sound systems where sonic quality and continuous performance is critical - churches, theaters, clubs, theme parks, arenas and stadiums.

C Series includes:

- Premium Fidelity: Proven in our touring products, patented Class TD and Regulated Switch Mode PSU, delivers uncompromised sound quality.
- Network: An integrated CAT-5 based monitoring and control system, as standard.
- Efficiency: Amplifiers at 3 power levels, each 4 channels in 2U.
- Stability: Built-in voltage and current limiters, plus over temperature and fuse protection, for maximum reliability.
- Flexibility: Four discrete channels, low impedance or 70/100V, switchable.
- Get more information from www.LabCSeries.com

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C Series: The Flexible Amplifier for Permanent Installation

The Lab.gruppen C Series is the new benchmark in amplification for installed sound systems. C Series offers versatility with a feature set that enables complex systems to be designed, configured, installed and commissioned without having to manage an extensive number of individual products. The ability to provide cost engineered solutions no matter the size of the installation, without compromising sound quality, is the Lab.gruppen C Series philosophy.

- ▶ Houses of Worship
- ▶ Theaters
- ▶ Performing Arts Centers
- ▶ Arenas
- ▶ Stadiums
- ▶ Clubs
- ▶ Theme Bars
- ▶ Theme Parks
- ▶ Auditoriums
- ▶ Cruise Ships

Flexibility and Quality

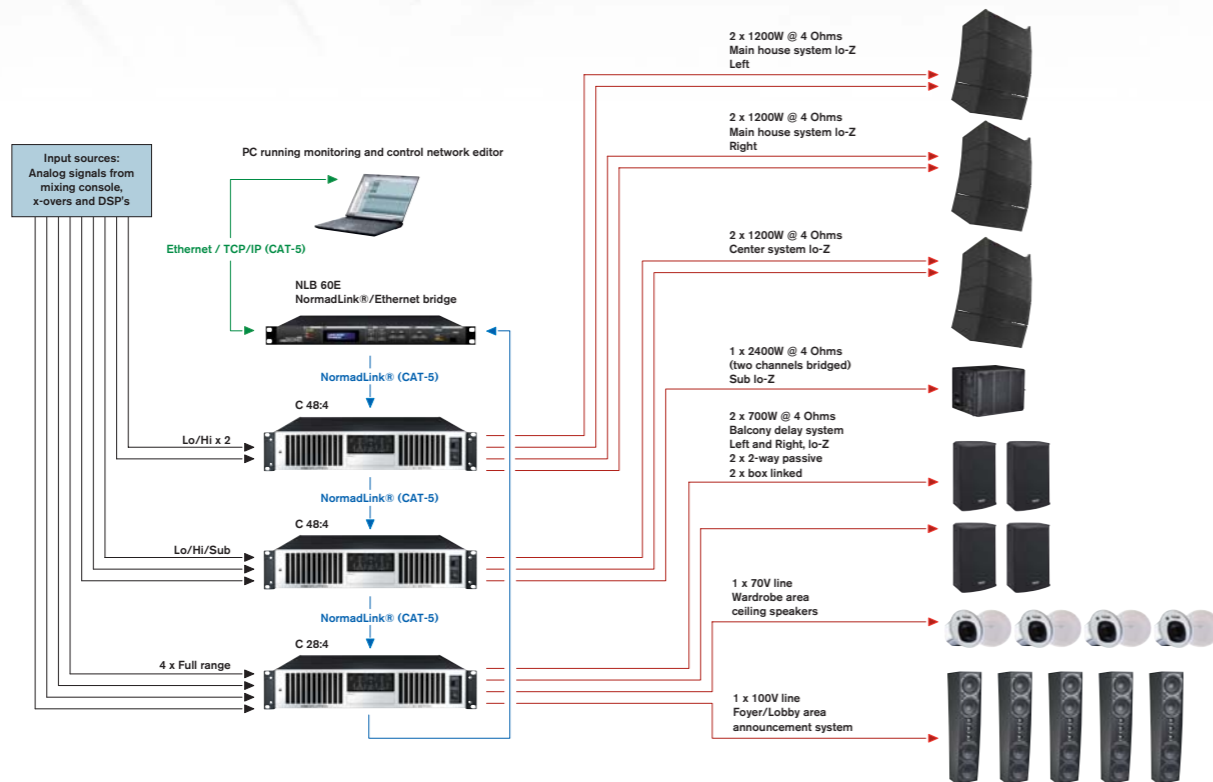
At the heart of the C Series solution is three 4-channel amplifiers, each packed with features true to the 25 years of research and development that exist in Lab.gruppen products today. Each amplifier permits the individual adjustment of maximum voltage peak output, bridge-mode operation, gain adjustment, and as standard, features

on-board network capability for monitoring and control. With these features it is now possible to specify identical amplifiers in an installation and then adjust and fine tune each output to the very specific requirement of the speaker system design.

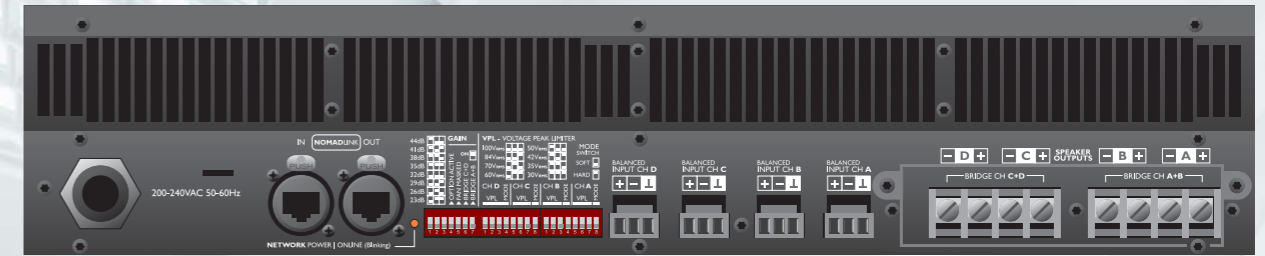
System Integration

The flexibility of the C Series solution is especially evident when designing complete multi-zoned systems. For example, a typical large scale system is a combination of high-powered speakers, active speaker management, full range under balcony speakers and 70/100V lobby speaker

systems. With just three amplifier models, each with switchable 70/100V outputs and on-board capabilities, the C Series can be designed into a complete value engineered system handling all amplification tasks.



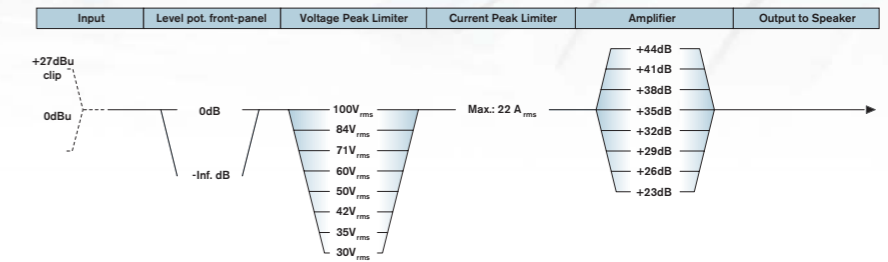
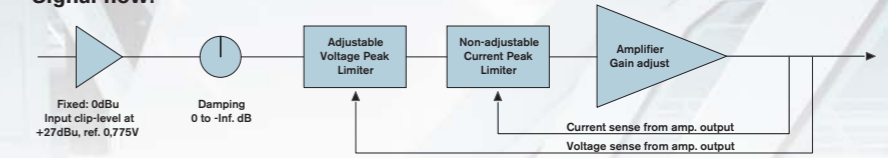
Amplifier Rear Panel View



NomadLink® network In/Out on RJ45 Gain, Bridge mode, Voltage Peak Limiter Phoenix connector input Screw terminals output

Model	Power @ 4Ω
C 48:4	4 x 1200 W
C 28:4	4 x 700 W
C 16:4	4 x 400 W

C 48:4 Signal flow:



Main Features

- ▶ 4 amplifier channels in 2U
- ▶ On-board monitoring and control network
- ▶ Selectable Lo-Z or 70V/100V per channel
- ▶ Adjustable amplifier gain
- ▶ Adjustable Voltage Peak Limiter
- ▶ Bridge-mode operation
- ▶ Phoenix connector input
- ▶ Screw terminal output

Monitoring and Control Network

Integrated in the amplifiers, NomadLink® network enables daisy chain connection of amplifiers using standard CAT-5 cable. Optional NomadLink® Bridge monitors and controls the amplifiers stand-alone or from a PC using TCP/IP network.

