C 88:4

- **Unprecedented power density –** Total output of 8800 W (2 ohms) in 2U
- **Four channels –** All channels bridgeable for 2- or 3-channel configurations
- **Lo-Z or Hi-Z (70 V / 100 V) –** Selectable per channel, normal or bridged
- **Patented Class TD® amplifier topology**
- **Voltage Peak Limiter (VPL) –** Configurable per channel to optimize each output for connected loads
- **Phoenix-type input connectors**
- **Screw terminal output connectors**
- **Comprehensive protection and warning –** Excessive output current, DC, high temperature, very high frequency (VHF), short circuit, open load, mains fuse protection, and soft start
- **Efficient and uniform Intercooler® cooling**
- **NomadLink® network ready**

An Installation Amplifier without Compromise

Installed or on tour, uncompromising quality begins with superior sound. Over the past decade, the sound of Lab.gruppen amplifiers has earned praise from renowned FOH engineers and owners of the world's premier sound rental companies. At the core of the C Series high-power* model's tight and transparent sound is patented Class TD technology. As a proprietary implementation of tracking Class D, Class TD approaches the exceptional efficiency of Class D while retaining the superior sonic quality of the best Class B output stages.

A Regulated Switch Mode Power Supply™ (R.SMPS) contributes to the remarkable efficiency of the C Series high-power models, while at the same time providing stable operation even with wide fluctuations in mains voltage. R.SMPS also works in conjunction with Class TD to give extraordinary power density. More channels with more power are condensed into a smaller package, allowing C Series amplifiers to minimize rack space requirements and reduce installation costs.

Extreme power density demands efficient cooling, and here Lab.gruppen's Intercooler proves remarkably effective. Thousands of small copper cooling fins dissipate heat, and all output devices are mounted on one row perpendicular to airflow for uniform cooling.

C Series amplifiers are uniquely capable of adapting to a wide variety of demanding load conditions. Each channel has an individually configurable Voltage Peak Limiter (VPL), which allows the output to be optimized for any loudspeaker load – whether one massive subwoofer or a series of small 100 V loudspeakers. VPL works in combination with adjustable input gain to achieve maximum headroom regardless of input levels or output impedances.

To assure reliability, and minimize service interruptions, C Series amplifiers offer comprehensive warning and protection features. Whenever faulty wiring, improper use, or extreme ambient temperatures threaten trouble, a C Series amplifier gives clear and accurate warning indications. Protection measures are inserted only when dangerous thresholds are passed. Conditions are re-checked at six-second intervals, and normal operation resumes when measurements return to nominal.

Every C Series amplifier is ready for the NomadLink network right out of the box. With NomadLink, key amplifier parameters are displayed via DeviceControl software, and remote control of channel mutes and power on/off is under network control. (NomadLink requires the separate NLB 60E NomadLink Bridge & Network Controller.)

Applications

- **Auditoriums**
- **Performing Arts Centers**
- **Convention Centers**
- **Stadiums and Arenas**
- **Theme Parks**
- **Hotels**
- **Houses of Worship**
- **Restaurants**
- **Clubs**
- **Educational Establishments**
- **Boardrooms**
- **Museums**
- **Offices**
- **Shopping Malls**
- **Transportation Facilities**

* C Series high-power models are:
C 88:4, C 68:4, C 48:4, C 24:4 and C 16:4

Specifications C 88:4

General					
Number of channels	4				
Peak total output all channels driven	8800 W				
Peak output voltage per channel	141 V				
Max. output current per channel	35.5 Arms				
Max. Output Power	**16 ohms**	**8 ohms**	**4 ohms**	**2 ohms**	**70 Vrms/100 Vrms peak**
Per ch. (all ch.'s driven)	625 W	1250 W	2100 W	2200 W	2200 W
Bridged per ch.	2500 W	4200 W	4600 W	n.r [4]	n.r [4]
Performance with Gain: 35 dB and VPL: 141 V					
THD 20 Hz - 20 kHz for 1 W	<0.1%				
THD at 1 kHz and 1 dB below clipping	<0.05%				
Signal To Noise Ratio	>112 dBA				
Channel separation (Crosstalk) at 1 kHz	>70 dB				
Frequency response (1 W into 8 ohms) +0/-3 dB	6.8 Hz - 34.2 kHz				
Input impedance	20 kOhm				
Input Common Mode Rejection, CMR	50 dB				
Output impedance @ 100 Hz	30 mOhm				
Voltage Peak Limiter (VPL), max. peak output					
VPL, selectable per ch. [3]	141, 118, 100, 85, 71, 59, 50, 42 V				
VPL, when bridged [3] [1]	282, 236, 200, 170, 142, 118, 100, 84 V				
Voltage Peak Limiter mode (per ch.)	Hard / Soft				
Gain and Level					
Amplifier gain selectable (all channels) [1] – rear-panel switches	23, 26, 29, 32, 35, 38, 41, 44 dB				
Default gain	35 dB				
Level adjustment (per ch.)	Front-panel potentiometer, 21 position detented from -inf to 0 dB, hidden behind security panel/dust filter grille				
Connectors and switches					
Input connectors (per ch.)	3-pin Phoenix, electronically balanced				
Output connectors (per ch.)	Barrier strip 2-pole screw terminals				
Output bridge mode	A+B and/or C+D, inputs A and C are input source				
NomadLink network	On board, 2 x RJ45 connectors				
Intelligent fans (on/off)	Yes, depending on presence of output signal				
Power on/off and Remote enable on/off	Individual switches on front-panel				
Cooling	Two fans, front-to-rear airflow, temperature controlled speed				
Front-panel indicators					
Common	NomadLink Network; Power Average Limiter (PAL) [2]; Power on				
Per channel	Signal present / High-impedance; -10 dB and -4 dB output signal; Voltage Peak Limiter (VPL); Current Peak Limiter (CPL); Very High Frequency (VHF); High Temperature; Fault; Mute				
Power					
Operating voltage, 230 V / 115 V nominal	130 -265 / 65-135 V				
Minimum power-up voltage, 230 V / 115 V	171 V / 85 V				
Power Average Limiter (PAL) [2]	Yes				
Soft start / Inrush Current Draw	Yes / max. 5 A				
Mains connector	230 V CE: 16 A, CEE7; 115 V ETL: 30 A Twist Lock				
Dimensions (W/H/D)	W: 483 mm (19"), H: 88 mm (2 U), D: 343 mm (13.5")				
Weight	12 kg (26.4 lbs.)				
Finish	Black painted steel chassis with gray painted steel front				
Approvals	CE, ANSI/UL 60065 (ETL), CSA C22.2 NO. 60065, 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): PAL can reduce the maximum output power to keep the power supply operating safely, and/or to prevent excessive current draw tripping the mains breaker. Refer to Operation Manual.
Note 3): For sine waves, peak voltage output values translate to Vrms with the formula V/1.41 = Vrms. E.g. 100 V peak equals app. 70 Vrms. Hence, outputs can be set for high-impedance loads without requiring a transformer.
Note 4): Regarding n.r. (not recommended) notes: The amplifier will be fully operational in bridge-mode into 2 ohm and high impedance (Hi-Z) loads, but due to physical constraints in the construction, the max. output power will not be significanty higher than running individual channels and therefore this mode of operation is not recommended.

All specifications are subject to change without notice.

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Item no. TDS-C884