

LAB.GRUPPEN

E Series



Energy efficiency begins with a brilliant IDEEA™

Introducing E Series, built around Lab.gruppen's newest IDEEA, the IntelliDrive™ Energy Efficient Amplifier. Specifically designed for greater sustainability through "greener" commercial installations, the E Series incorporates the latest advances in Lab.gruppen quality and durability into three powerful, ultra-compact, and highly cost-effective two-channel amplifiers.

Small in size, huge in benefits

Building on Lab.gruppen's touring reputation for sonic excellence and rock-solid durability, E Series brings a competitive edge to the installation market by adding ultra-compact size, high operating efficiency, output configuration flexibility, and an unprecedented cost-benefit ratio. At the heart of E Series is IDEEA (IntelliDrive Energy Efficient Amplifier) technology. Based around a patented Class D output stage, IDEEA produces high power levels with very low distortion while drawing minimal mains current. E Series also introduces a proprietary Rail Sensing Limiter (RSL™) with user selection of either Hi-Z (100 V all models) or Lo-Z (40 V to 69.3 V model dependent) as output thresholds. The RSL switch circuit senses rail voltages and optimizes output for instantaneous load conditions. RSL settings also facilitate asymmetric loading to optimize performance and efficiency from a single unit – connecting a small subwoofer to one channel and a 70 V distributed system to another, for example.

Lab.gruppen performance with Energy Star compliance

Lab.gruppen's patented IDEEA architecture facilitates Energy Star 2.1 compliance by combining net operating efficiency of greater than 80% with an auto-power-down feature. After 20 minutes with no input signal present, the amplifier automatically switches to standby mode – reducing power consumption to less than 1 W – and switches back on when an input signal returns. GPIO facilities enable third-party systems to remotely control and monitor power state via contact closure.



Benefits

- High power density - Up to 2 x 600 W in 1U
- Certified Energy Star 2.1 compliant
- Flexible – IntelliDrive delivers similar power per channel at 70 V, 2, 4, 8 and 16 ohms
- Asymmetric loading allows "mixing and matching" of loads with different impedances to maximize both overall system efficiency and inventory utilization
- Patented IDEEA output stage based on Class D topology
- High efficiency - Extremely low power consumption and heat output
- Exceptionally low cost of ownership over lifetime
- RSL switch circuit senses rail voltage and optimizes output for instantaneous load conditions
- Efficient cooling – One temperature-controlled fan
- Comprehensive circuit protection and fault indication

Applications

- Bars and Restaurants
- Retail Outlets
- Malls
- Hotels & Ballrooms
- Conference Centers
- Museums & Galleries
- Houses of Worship
- Theme Park Installations
- Educational Establishments
- Auditoriums
- Performing Arts Centers
- Convention Centers
- Transport Hubs

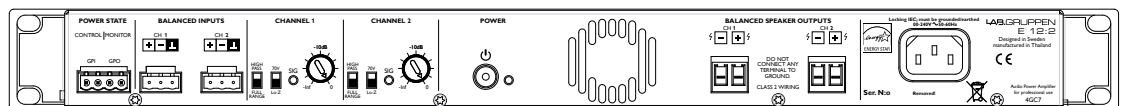
PRELIMINARY PRODUCT INFORMATION

Specifications

PRELIMINARY PRODUCT INFORMATION

Model	E 12:2	E 8:2	E 4:2
Number of channels	2	2	2
Peak total output all channels driven	1200 W	800 W	400 W
Peak output voltage per channel	100 V / 70 Vrms	100 V / 70 Vrms	100 V / 70 Vrms
Max. output current per channel	18 Arms	16 Arms	11 Arms
Max. Output Power Per ch. (all ch.'s driven)			
2 ohms (Lo-Z mode)	600	400	200
4 ohms (Lo-Z mode)	600	400	200
8 ohms (Hi-Z mode)	600	400	200
16 ohms (Hi-Z mode)	310	290	200
70V (Hi-Z mode)	600	400	200
8 ohms (Lo-Z mode)	300	200	100
16 ohms (Lo-Z mode)	150	100	50
Performance			
THD 20 Hz - 20 kHz for 1 W	<0.1%	<0.1%	<0.1%
THD at 1 kHz and 1 dB below clipping	<0.05%	<0.05%	<0.05%
Signal To Noise Ratio	>112 dBA	>112 dBA	>112 dBA
Channel separation (Crosstalk) at 1 kHz	>70 dB	>70 dB	>70 dB
Frequency response	2 Hz - 40 kHz	2 Hz - 40 kHz	2 Hz - 40 kHz
Input impedance	20 kOhm	20 kOhm	20 kOhm
Common Mode Rejection (CMR)	50 dB	50 dB	50 dB
Output impedance	25 mOhm	25 mOhm	25 mOhm
Gain, Sensitivity and Limiters			
Limit and gain switch (per channel)	2 pos: Lo-Z and Hi-Z	2 pos: Lo-Z and Hi-Z	2 pos: Lo-Z and Hi-Z
VPL for Hi-Z mode	100 V	100 V	100 V
VPL for Lo-Z mode	69.3 V	56.6 V	40.0 V
Sensitivity for 70V out in Hi-Z mode	4 dBu	4 dBu	4 dBu
Sensitivity for full power into 4/8/16 ohms in Lo-Z mode	4 dBu	4 dBu	4 dBu
Gain in Hi-Z mode	35.2 dBu	35.2 dBu	35.2 dBu
Gain in Lo-Z mode	32.0 dB	30.3 dB	27.2 dB
Level adjustment (per channel)	Rear panel potentiometer, detented from -inf to 0 dB		
Connectors and switches			
Input connectors (per ch.)	3-pin detachable screw terminals, electronically balanced		
Output connectors (per ch.)	2-pin detachable screw terminals		
High pass filter	Fixed at 35 Hz, switchable per channel		
Power control	Can be used to go between standby and ON		
GPI (power control input)	Contact closure type, 2-pin detachable screw terminal, controls the power state		
GPO (power state output)	Contact closure type, 2-pin detachable screw terminal, for external monitoring of the power state		
Cooling	Single fan, front to rear airflow, no filter required, temperature controlled speed		
Power			
Nominal voltage	100 - 240 VAC	100 - 240 VAC	100 - 240 VAC
Operating voltage	70 - 265 VAC	70 - 265 VAC	70 - 265 VAC
Standby consumption	<1 W	<1 W	<1 W
Mains connector	IEC inlet		
Dimensions			
	W: 483 mm (19"), H: 44 mm (1 U), D: 276 mm (10.9")		
Weight	4.2 kg (9.3 lbs.)	4.1 kg (9 lbs.)	4 kg (8.8 lbs.)
Finish	Dark grey aluminium front and black steel chassis		
Approvals	CE		
Warranty	3 years, components and factory workmanship. See full warranty statement.		

All specifications are subject to change without notice.



LAB.GRUPPEN

LAB.GRUPPEN AB | SWEDEN
 INTERNATIONAL CONTACT | INFO@LABGRUPPEN.COM
 NORTH & SOUTH AMERICA CONTACT | INFO@TCG-AMERICAS.COM
 WWW.LABGRUPPEN.COM