



Technical information

Power Output

	8100	4250	4500	4700
# of Ch	8	4	4	4
Output power per channel (from 20Hz to 20kHz, THD < 0.05%), continuous sine wave (in Watt RMS)				
8Ω	80	200	400	600
4Ω	115	280	500	700
2Ω	130	280	500	n/a
Bridged mono operation (from 20Hz to 20kHz, THD < 0.05%), continuous sine wave (in Watt RMS)				
16Ω	160	400	800	1200
8Ω	230	560	1000	1400
4Ω	260	560	1000	n/a
Output power per channel (at 1kHz), continuous music (in Watts)				
8Ω	110	330	600	760
4Ω	180	490	880	1220
2Ω	250	610	1100	n/a
Bridge mono operation (at 1kHz), continuous music (in Watts)				
16Ω	220	660	1200	1520
8Ω	360	980	1760	2440
4Ω	500	1220	2200	n/a

Power bandwidth, all models:

20Hz to 80kHz (+0dB, -3dB)

Frequency response, all models:

20Hz to 20kHz (+0dB, -0,2dB)

Channel separation:

Model 8100:

> 65dB @ 1kHz

> 54dB @ 10kHz

Model 4250/4500/4700:

> 72dB @ 1kHz

> 58dB @ 10kHz

Input impedance all models:

18.4k Ω

Sensitivity (for maximum output power into 8 Ω):

Model 8100: 0dBu

Model 4250: 3,4dBu

Model 4500: 4,6dBu

Model 4700: 7,8dBu

Input overload all models:

+21dBu

THD all models:

At 1kHz into 8 Ω < 0.05%

Signal-to-noise ratio:

Model 8100: > 101dB, A-weighted, referenced to rated power into 8 Ω

Model 4250/4500/4700: > 105dB, A-weighted, referenced to rated power into 8 Ω

Noise gate:

Threshold -54dB nominal, switchable to -48dB

Damping factor:

Model 8100: > 500

Model 4250/4500: > 700

Model 4700: > 900

Power consumption:

Table 2 shows the power consumption in Watt at idle, 1/8, 1/3 and at full power into 4 and 8 Ω (all channels driven)

Power requirements:

230VAC/50-60Hz

	8100		4250		4500		4700	
Load (all ch)	4Ω	8Ω	4Ω	8Ω	4Ω	8Ω	4Ω	8Ω
Idle	45		55		65		75	
1/8	750	510	540	340	870	580	1050	700
1/3	1170	750	1180	790	2080	1450	2560	1940
Full	1900	1190	2640	1650	4210	2780	5420	3610

Fusing:

Model 8100: 10 Amp fast-blow (230V)

Model 4250: 2x 8 Amp fast-blow (230V)

Model 4500: 2x 10 Amp fast-blow (230V)

Model 4700: 1x 16 Amp fast-blow (230V)

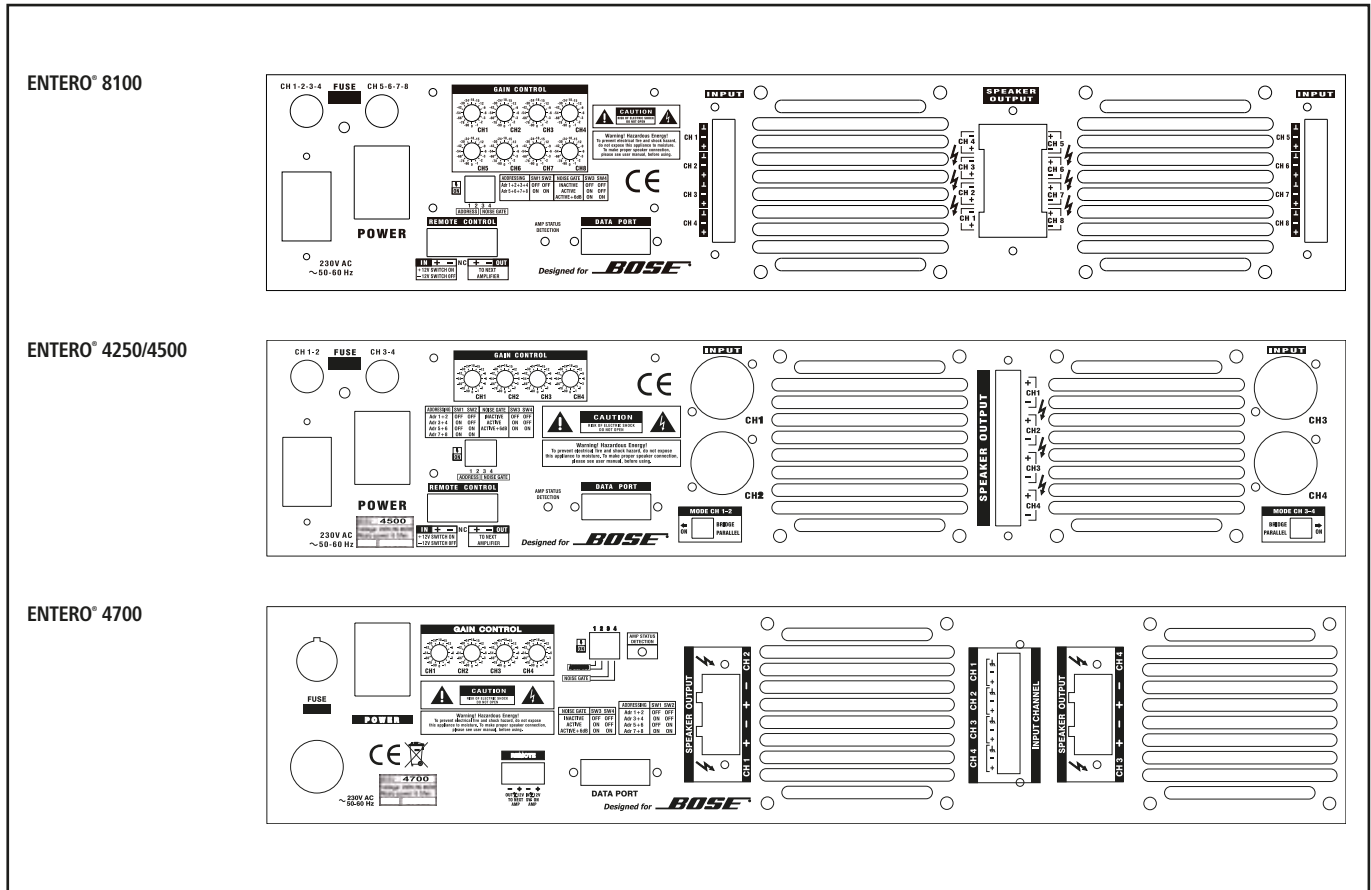
Display:

Model 8100: 4 LED indicators per channel: 1 blue (POWER), 1 green (SIGNAL), 2 red (CLIP/PROTECT)

Model 4250/4500: 7 LED indicators per channel: blue (POWER), 1 green (SIGNAL), 1 green/red (LIMIT/CLIP), 1 red (PROTECT), 3 amber (MODE: Stereo, Parallel, Bridge)

Model 4700: 4 LED indicators per channel: 1 blue (POWER), 1 green (SIGNAL), 1 green/red (LIMIT/CLIP), 1 red (PROTECT)

	net	shipping
8100	19 kg	21,6 kg
4250	22 kg	24,6 kg
4500	23 kg	25,6 kg
4700	15 kg	17,6 kg
TraPack 1	23 kg	26 kg
TraPack 3	24 kg	27 kg
TraPack 5	27 kg	30 kg
size (HxWxD)	88 mm (2u) x 483 mm x 454 mm (3,5" x 19" x 17,87")	



General description

The BOSE® ENTERO® multi-channel power amplifier is a high performance amplifier designed for use with all BOSE® Professional Products loudspeaker systems. The unit offers high power in a rugged, lightweight package that is only two 19" rack space units (8.8 cm) high. The 4 and 8 channels may be used in bridge mode to obtain even more power. The amplifier is suitable for professional multi-channel applications, for foreground and background and speech applications but also for portable or permanent installations.

Every ENTERO® amplifier channel has a selectable noise gate to avoid disturbing noises to be heard. The ENTERO® 4250, 4500 and 4700 are equipped with a selectable clipping limiter, acting at 1dB below clipping of the output signal.

To avoid wrong settings or abuse, all buttons are placed on the backpanel. The ENTERO® amplifier is prepared for remote monitoring and control. It

has connections for remote power switching and for sequential start.

The ENTERO® 8100 and 4700 are equipped with 3.81mm phoenix connectors and the ENTERO® 4250 and 4500 are equipped with TRS/XLR Combo connectors. All ENTERO® amplifiers accept both balanced and unbalanced audio signals.

Separate TraPack transformer packages are available in 2U housing for 100 Volt applications.

System configuration

The installation and operating instructions are provided in the BOSE® ENTERO® multi-channel power amplifier manual. The units can be used in stereo, bridge or parallel mode. These modes can be activated by a dipswitch on the backpanel for the ENTERO® 4250 and 4500 and by using the wiring instructions for the ENTERO® 8100 and 4700.

100V systems

For 100 Volt applications, the speaker output connections may be connected to a transformer package TraPack 1, TraPack 3 or TraPack 5. See table 4.

Table 4: transformer package

	TraPack 1 (8x100W/100v)	TraPack 3 (4x300W/100v)	TraPack 5 (4x500W/100v)
8100	Yes	Yes*	No
4250	No	Yes	Yes**
4500	No	No	Yes

*Note: ENTERO® 8100 in 4 ch. Bridge mode, max load 260Watt/ch.
 **Note: ENTERO® 4250 in 2 ch. Bridge mode, max load 500Watt/ch.

Optional equalizer card information

The BOSE® ENTERO® multi-channel power amplifier is available with optional BOSE® equalization cards series II (EQ card-II-S) providing active equalization for BOSE® professional loudspeaker systems. Each channel has its own discrete circuit card input slot. Therefore zones with different speakers, e.g. PANARAY® 402°, 502°A, FreeSpace® M32 and MB4 can all be driven by only one 4 channel

amplifier. Active equalization plug-in circuit cards provide proper equalization for all BOSE® professional products loudspeakers without use of a separate controller.

Engineers' and architects' specifications

The BOSE® ENTERO® multi-channel power amplifier shall deliver power according to table 1, with no more than 0.05% distortion from 20Hz to 20kHz. For the ENTERO® 4250 and 4500 there shall be combo input connectors for all four channels, capable of connecting a ¼ " TRS or an XLR connector.

For the ENTERO® 8100 and 4700 there shall be quick connect terminal blocks, capable of accepting wire connections. There shall be an EQ-card slot for each amplifier channel.

The channel separation for the ENTERO® 4X00 series shall be greater than 72dB @ 1kHz and greater than 58dB @ 10kHz. For the ENTERO® 8100, the channel separation shall be greater than 65 dB @ 1kHz and greater than 54 dB @ 10kHz. The power bandwidth, from 20Hz to 80kHz shall be +0dB, -3dB.

The frequency response, from 20Hz to 20kHz, shall be +0dB, -0,2dB. The damping factor shall be at least 500 for the ENTERO® 8100 , at least 700 for the ENTERO® 4250 and 4500 and at least 900 for the ENTERO® 4700. The signal to noise ratio shall be greater than 101dB for the ENTERO® 8100 and greater than 105dB for the 4X00 series.

The input impedance shall be 18,4kOhm and the maximum input signal shall be 21dBu. The input sensitivity for maximum power into 8 ohm shall be 0dBu for the ENTERO® 8100, 3,4dBu for the ENTERO® 4250, 4,6 dBu for the ENTERO® 4500 and 7,8dBu for the ENTERO® 4700.

There shall be a selectable noise gate for each channel, with a threshold of -54dB nominal, switchable to - 48dB and a selectable clipping limiter, acting at 1dB below clipping of the output signal.

The amplifiers shall consume power according to table 2. The size, net weight and shipping weight of the amplifiers and transformer packages shall be according to table 3.

Regulatory information

The BOSE® ENTERO® multi-channel power amplifiers comply with the following regulations: EMC Directive 2004/108/EC (Electromagnetic Compatibility):
EN-55103-1:1996
EN-55103-2:1996
Low Voltage Directive 2006/95/EC (Safety):
EN/IEC60065:2002 7th edition

Warranty information

The BOSE® ENTERO® multi-channel power amplifier is covered by a 5-year, transferable limited warranty.

