

Extra Sound Series

TECHNICAL SPECIFICATIONS

Type of product	Professional 2-channel amplifiers.
Power, both channels running (8/4 Ohms)	
EX 900	250/ 400 WRMS
EX 1200	350/ 600 WRMS
EX 1500	450/ 730 WRMS
Power, bridged operation (8/4 Ohms)*	
EX 900	Not available
EX 1200	700/ 1,100 WRMS
EX 1500	900/ 1,400 WRMS
Input impedance (Ohms)	100k balanced
Input sensitivity	Max 0.775 VRMS (0 dBm)/ 4 Ohms
Maximum Input Level	+19 dBV
Voltage gain	
EX 900	stereo 35 dB
EX 1200	stereo 36 dB, bridged 42 dB
EX 1500	stereo 36.8 dB, bridged 42.8 dB
Bandwidth (Hz)	10 ÷ 80,000 +0dB / - 3dB 20 ÷ 20,000 - 0.5dB
THD at maximum power	< 0.1%
I.M. distortion (SMPTE) at full power	< 0.05%
Signal-to-noise ratio	EX 1200, EX 1500: □ 95 dBA at maximum power (100.5 dBA EX 900).
Amplifier protections	Over-voltage on output, short-circuit, overheating.
Load protections	ON/OFF bumps, DC, subsonic signals.
Cooling:	Forced ventilation system, with front in-take and rear discharge with fan whose speed varies according to the temperature and signal.
Output stage semiconductors	100W 160V 7A per channel EX 1200: 4 pairs of MOS-FET 100W 160V 7A per channel EX 1500: 5 pairs of MOS-FET 100W 160V 7A per channel
Power supply filter capacity	EX 1200, EX 1500: 40000 µF/100V
Controls	
Front panel:	ON/OFF, Input levels.
Rear panel:	ground selector, remote control.
Indicators	
Front panel:	Output levels, Clipping, low power supply voltage, Protections tripped, Signal Mute (EX 900).
Input Connectors	Balanced and unbalanced with male and female XLR connected in parallel.
Output connectors	Binding posts (Red Pos., Black Neg.).
Dimensions (cm.)	
Height (with packing)	EX 900 - EX 1200/1500 4.4 - 8.8 (8 - 20)
Width (with packing)	EX 900 - EX 1200/1500 48.3 (61 - 56)
Depth (with packing)	EX 900 - EX 1200/1500 45.2 (51 - 54)
Weight	EX 900 (with packing) 10.8 (12.8) EX 1200 (with packing) 17.5 (19) EX 1500 (with packing) 17.5 (19)



FEATURES

- High output power:
 - EX 900: 400 WRMS per channel on 4 Ohms
 - EX 1200: 600 WRMS per channel on 4 Ohms
 - EX 1500: 730 WRMS per channel on 4 Ohms
- Device for remote control of the input sensitivity.
- Twin forced ventilation with front intake and rear discharge.
- Complete displays indicating: Output levels, Running mode, load or amp protection tripped.
- Twin balanced input connectors.
- Compact construction.

APPLICATIONS

- Outline EX (Extra Sound) Series amplifiers are designed for the most severe applications in pro sound reinforcement, such as systems for shows, clubs, conference halls, theatres, cinemas and public venues in general. For their compact size and low weight compared to the high continuous power supplied and the great dynamic capacity, EX Series amplifiers are particularly suitable for use in the system which have to be transported. The exceptional output power in relation to their dimensions, combined with the very simple (a potentiometer) but effective remote volume control, makes these amplifiers particularly interesting for those permanent installations in which a large number of amps have to be used in small space, or even in narrow places, provided they are air-conditioned.

DESCRIPTION

Designed by using the most advanced electronic techniques and the latest technology, Outline EX (Extra Sound) Series is a range of professional amplifiers with Mos-Fet circuitry, built to the highest standards (EX 900 uses PWM technology). Studied to ensure completely reliable operation, the EX Series doesn't require preventive maintenance and are fitted exclusively with components selected to CEI/IEC norms following the most up to date circuitry criteria and constructed to meet safety norms regarding "electrical equipment" laid down by the relative European Community directives. Based on original circuitry with hybrid components, the Outline EX 1200/1500 amplifiers, use high-speed IC in the differential input stages (operating in class AB) and high current field effect transistors (Mos-Fet) in the output stages, also running in class AB, with low counter reaction values. The power supply circuit is based on a heavily-built high-powered toroid transformer, backed up by batteries of high capacity low series resistance electrolytic filter capacitors.

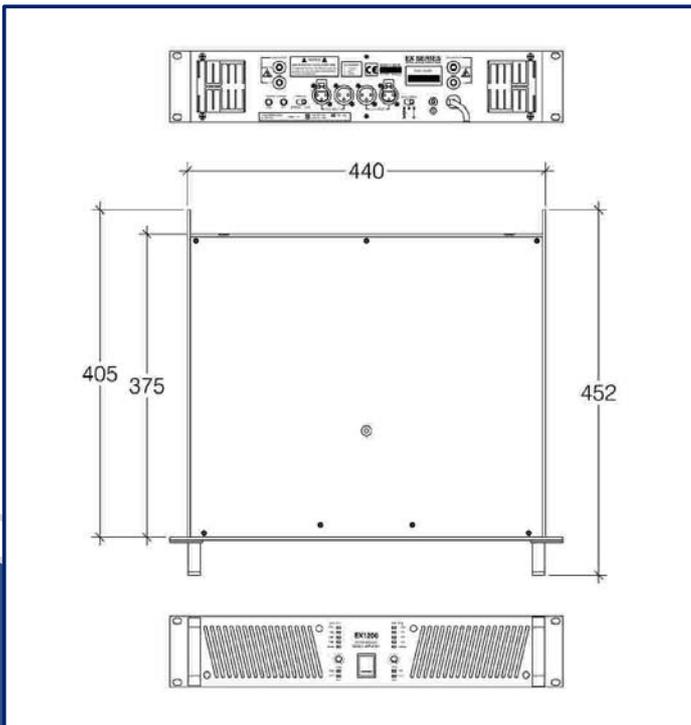
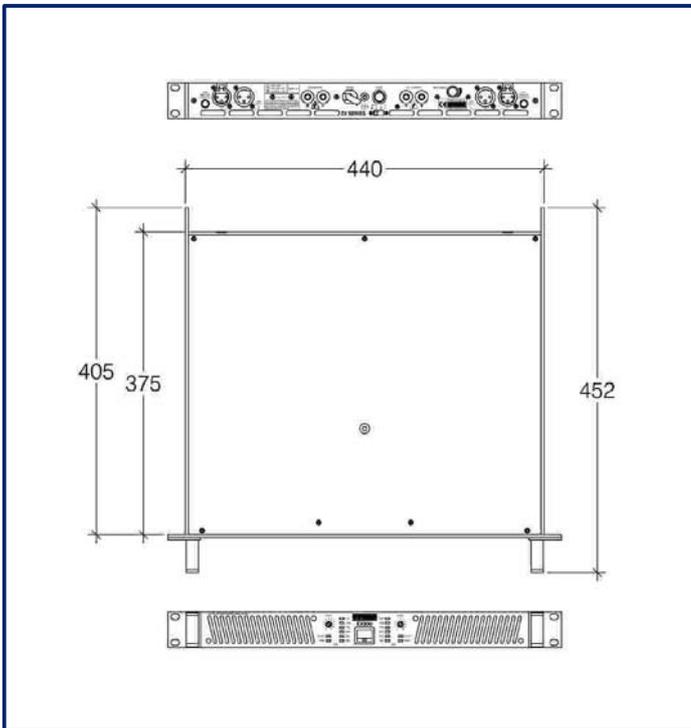
Sophisticated protection circuits, which don't limit the current fed out by the output stages, apart from in hazardous conditions of danger, allow the EX Series amplifiers to work with tranquillity even in the hardest environmental and running conditions.

There are protections for the amplifier operation and for safeguarding of the load connected to it.

The output semiconductors are cooled using a forced ventilation system, with front in-take and rear discharge with fan whose speed varies according to the temperature.

There are also adequate LED monitoring systems to indicate the output levels and numerous other functions regarding the running of the amplifiers and the tripping of the protection. Internal construction is completely modular and based on input and output boards which are replaceable without any need for soldering, greatly facilitating any assistance work. The Series EX amplifiers are built with a self-supporting structure in extremely aluminium with 19" EIA Standard dimensions, front handles and rear spacers. The EX 900 occupies one rack unit whereas the EX 1200 and EX 1500 occupy two.

All the models in the EX Series are fitted with a device which enables remote control of the input sensitivity and an original circuit which prevents high distortion or clipping due to overloading.



amplifiers

Extra Sound Series

outline

Via L. da Vinci, 56 - 25020 Flero (Brescia) Italy
tel. +39 030 3581351 - fax +39 030 3580431
www.outline.it - e-mail: info@outline.it