



## Operating Instructions

# PS-1 AC Adapter



The Meyer **PS-1 AC Adapter** is a 300 W power supply that converts 110/220 VAC line voltage to 48 VDC . It is intended to power the Meyer **HM-1 self-powered loud-speaker** and other Meyer 48 V products.

Using a 48 VDC power supply allows the PS-1 to be placed at a remote location from the HM-1, allowing low voltage wiring with low noise DC power distribution. The PS-1 can also be located with the HM-1.

The PS-1 can power up to two HM-1s, or one HM-1 with a subwoofer. The PS-1 has two output connectors wired in parallel inside the supply, allowing either one output for two speakers at the end of a single cable, or one connector and cable per speaker. In both cases, the full output power is available to only two speakers per PS-1. Two pre-wired 10 ft power cables are provided with each PS-1.





The output connectors are *keyed* to prevent misconnection between the PS-1 and the HM-1. For example, the power cables are wired such that the GND and +48 VDC terminals plug into both the PS-1 and HM-1 in the correct orientation only. Use the cable wiring convention employed by these cables to create additional power cables, if necessary.

For installations of up to 10 HM-1s, using multiple PS-1 AC adapters is often the most cost-effective solution. Since the limited output power for each supply acts as circuit protection for light gauge cables, it is not necessary to install circuit breaker distribution panels. Using the PS-1 does, however, limit each 48 V line to two speakers.



## Symbols Used

These symbols indicate important safety or operating features in this booklet and on the chassis.

			
Dangerous voltages: risk of electric shock	Important operating instructions	Frame or chassis	Protective earth ground
Pour indiquer les risques résultant de tensions dangereuses	Pour indiquer important instructions	Masse, châssis	Terre de protection
Zu die gefahren von gefährliche spanning zeigen	Zu wichtige betriebs- anweisung und unter- haltsanweisung zeigen	Rahmen oder chassis	Die schutzerde
Para indicar azares provengo de peligroso voltajes	Para indicar importante funcionar y mantenimiento instrucciones	Armadura o chassis	Tierra proteccionista

## Declaration of Conformity

According to ISO/IEC Guide and EN 45014

The Manufacturer:

Name: Meyer Sound Laboratories Address: 2832 San Pablo Avenue Berkeley, California 94702-2204, USA
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declares that the product:

Product Name: PS-1 Product Options: All
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conforms to the following Product Specifications:

Safety: EN 60065: 1994
EMC: EN 55022: 1987 - Class A
IEC 801-2: 1984 - 8 kV
IEC 801-3: 1984 - 3 V/m
IEC 801-4: 1984 - 0.5 kV Signal Lines, 1.0 kV Power Lines

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC.

Office of Quality Manager  
Berkeley, California USA  
April 1, 1997

### Environmental Specifications for Meyer Sound Electronics Products

Operating temperature:	0° C to +45° C
Nonoperating temp:	< -40° C or > +75° C
Humidity:	to 95% at 35°C
Operating altitude:	to 4600 m (15,000 ft)
Nonoperating altitude:	to 6300 m (25,000 ft)
Shock:	30 g 11 msec half-sine on each of 6 sides
Vibration:	10 – 55 Hz (0.010 m peak-to-peak excursion)

Made by: Meyer Sound, Berkeley, Ca. U.S.A. European Office: Meyer Sound Germany Carl Zeiss Strasse 13 D-56751 Polch Germany	
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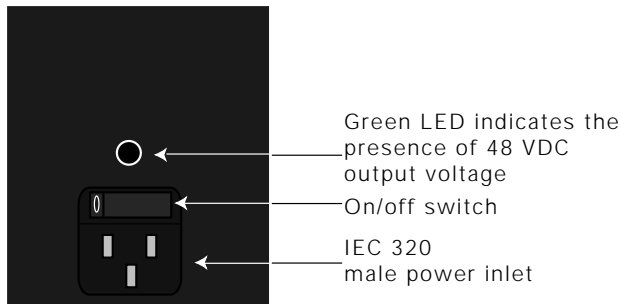
 LISTED 3K59 C  COMMERCIAL AUDIO SYSTEM
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## AC Inlet

The PS-1 uses an international standard IEC 320 Mains AC inlet. This convenient receptacle accepts many power cord types for mains outlets used around the world. The PS-1 is shipped with a North American IEC cable. To use the PS-1 in other countries, obtain an approved IEC 320 cable with the appropriate plug for that country. The AC voltage operating ranges are 90 – 132 V and 180 – 264 V, 47 – 440 Hz. The PS-1 automatically selects the proper operating voltage upon applying AC power.



To avoid unnecessary noise, don't use a ground-lifting adapter or cut the AC ground pin.

To avoid electrical shock and damage to the unit, use the power cord specified by Meyer Sound or an equivalent that satisfies the requirements of the local safety testing agency. Do not operate the unit if the power cables are frayed or broken.

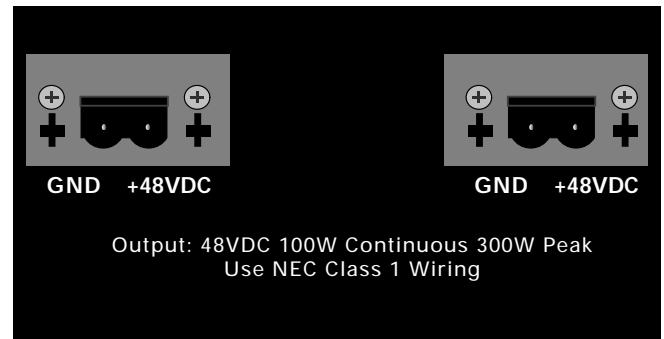
The LED indicates 48 VDC output voltage by illuminating with a green color. If the PS-1 is plugged into an AC power source but the output is not connected to a speaker, the LED blinks on and off in 2 second intervals.

## DC Output Connectors

The PS-1 has two 48 VDC output connectors wired in parallel inside the supply, allowing either one output for two speakers at the end of a single cable, or one connector and cable per speaker. In both cases, the full output power is available to only two speakers per PS-1.



Do not connect the outputs of multiple PS-1s together.



PS-1 output connectors

The “-” pin of the 48 VDC input on the HM-1 is connected to the chassis which is connected to earth ground via the AC power cable (labeled “GND” on the PS-1). The HM-1 amplifier is at earth potential which minimizes noise and allows easy *same potential* interfacing with audio sources.

# Specifications

<b>AC Input</b>	
Connector	IEC 320 (line, neutral/line, earth)
Operating Voltage	90 – 132 VAC / 180 – 264 VAC auto-selecting; 47 – 440 Hz
Maximum Power Consumption	400 Watts
<b>DC Output</b>	
Connectors	Two keyed pluggable terminal blocks with +48 VDC and GND pins
Voltage	48 VDC $\pm$ 0.5 V
Current	2 A continuous; 6.5 A peak
<b>Physical</b>	
Dimensions	Height: 10"; Width: 5"; Depth: 3"
Weight	1 lb (2.2 kg); shipping: 2 lb (4.4 kg)
Enclosure/Finish	Black 16-gauge aluminum chassis



## Safety Summary



### English

- To reduce the risk of electric shock, disconnect the loudspeaker from the AC adapter before installing audio cable. Reconnect the adapter only after making all signal connections.
- Connect the AC adapter to a two-pole, three wire grounding mains receptacle. The receptacle must be connected to a fuse or circuit breaker. Connection to any other type of receptacle poses a shock hazard and may violate local electrical codes.
- Do not install the loudspeaker or AC adapter in wet or humid locations.
- Do not put objects containing liquid on, or near, the AC adapter or speaker.
- Do not install the AC adapter or speaker near heat emitting appliances, such as a room heater or stove, or in direct sunlight.

### Français

- Pour réduire le risque d'électrocution, débranchez la prise principale de l'haut-parleur, avant d'installer le câble d'interface allant à l'audio. Ne rebranchez le bloc d'alimentation qu'après avoir effectué toutes les connexions.
- Branchez l'haut-parleur dans une prise de courant à 3 dérivations (deux pôles et la terre). Cette prise doit être munie d'une protection adéquate (fusible ou coupe-circuit). Le branchement dans tout autre genre de prise pourrait entraîner un risque d'électrocution et peut constituer une infraction à la réglementation locale concernant les installations électriques.
- Ne pas installer l'haut-parleur dans un endroit où il y a de l'eau ou une humidité excessive.
- Ne pas laisser de l'eau ou tout objet pénétrer dans l'haut-parleur. Ne pas placer de récipients contenant un liquide sur cet appareil, ni à proximité de celui-ci.
- Pour éviter une surchauffe de l'haut-parleur, conservez-la à l'abri du soleil. Ne pas installer à proximité d'appareils dégageant de la chaleur tels que radiateurs ou appareils de chauffage.

### Deutsch

- Um die Gefahr eines elektrischen Schlages auf ein Minimum zu reduzieren, den Lautsprecher vom Stromnetz trennen, bevor ggf. ein Audio-Schnittstellensignalkabel angeschlossen wird. Das Netzkabel erst nach Herstellung aller Signalverbindungen wieder einstecken.
- Der Lautsprecher an eine geerdete zweipolige Dreiphasen-Netzsteckdose anschließen. Die Steckdose muß mit einem geeigneten Abzweigschutz (Sicherung oder Leistungsschalter) verbunden sein. Der Anschluß der unterbrechungsfreien Stromversorgung an einen anderen Steckdosentyp kann zu Stromschlägen führen und gegen die örtlichen Vorschriften verstoßen.
- Der Lautsprecher nicht an einem Ort aufstellen, an dem sie mit Wasser oder übermäßig hoher Luftfeuchtigkeit in Berührung kommen könnte.
- Darauf achten, daß weder Wasser noch Fremdkörper in das Innere den Lautsprecher eindringen. Keine Objekte, die Flüssigkeit enthalten, auf oder neben die unterbrechungsfreie Stromversorgung stellen.
- Um ein Überhitzen dem Lautsprecher zu verhindern, das Gerät vor direkter Sonneneinstrahlung fernhalten und nicht in der Nähe von wärmeabstrahlenden Haushaltsgeräten (z.B. Heizgerät oder Herd) aufstellen.

### Español

- Para reducir el riesgo de descarga eléctrica, desconecte de la red el altoparlante antes de instalar el cable de señalización de interfaz de la segnale. Vuelva a conectar el conductor flexible de alimentación solamente una vez efectuadas todas las interconexiones de señalización.
- Conecte el altoparlante a un tomacorriente bipolar y trifilar con neutro de puesta a tierra. El tomacorriente debe estar conectado a la protección de derivación apropiada (ya sea un fusible o un disyuntor). La conexión a cualquier otro tipo de tomacorriente puede constituir peligro de descarga eléctrica y violar los códigos eléctricos locales.
- No instale el altoparlante en lugares donde haya agua o humedad excesiva.
- No deje que en el altoparlante entre agua ni ningún objeto extraño. No ponga objetos con líquidos encima de la unidad ni cerca de ella.
- Para reducir el riesgo de sobrecalentamiento, no exponga la unidad a los rayos directos del sol ni la instale cerca de artefactos que emiten calor, como estufas o cocinas.