



BOSCH
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PLE-1Pxx0-EU Plena Amplifier



- ▶ 120 and 240 W power amplifier in a compact housing
- ▶ 1 V line level balanced input
- ▶ 70 V, 100 V and 8 ohm outputs
- ▶ 100 V input for slave operation on 100 V speaker line
- ▶ Temperature-controlled forced front to back ventilation (directly stackable)
- ▶ 24 VDC backup power with built in charger

The PLE-1P120-EU and PLE-1P240-EU are two high-power plug-and-play cost effective power amplifiers that deliver 120 and 240 Watts to constant voltage or 8 ohm loads. Built with premium quality and protections, they offer basic functionality at a budget price. The amplifiers offer straight 1 V and 100 V line in, and 70 V, 100 V and 8 ohms out. They can extend the power of the PLE- series mixer amplifiers or be combined with the PLE-10M2-EU mixer, or work anywhere where more power on an existing 100 V line is needed or when a line level signal is provided.

Functions

Protection

The amplifier is protected against overload and short circuits. A limiter protects the amplifier and loudspeaker against accidental overdriving. A temperature-controlled fan ensures proper cooling without producing acoustic noise at lower output levels.

Power input and output

The unit operates both on mains power and on a 24 V battery power supply for emergency back up, with automatic switchover. The amplifier also has a built-in charger to charge the connected battery. The system has a balanced input and loop-through facility. This makes it easy to connect multiple amplifiers. The secondary input

is a 100 V line input to connect the amplifier to a 100 V loudspeaker line to provide more power in remote locations.

Gain or level control is located on the rear of the unit to avoid accidental setting change. A meter with LED bar shows the output level.

The amplifier has a 70 V or 100 V output for constant voltage loudspeaker systems, and a low impedance output for 8 ohm loudspeaker loads.

Controls and indicators

Front

- Power on LED
- LED VU meter for master output (LEDs for -18, -12 -6, -3, 0 dB)
- On/off button

Back

- Level control

Interconnections

See Technical Specifications.

Certifications and Approvals

EMC emission	acc. to EN 55103-1
EMC immunity	acc. to EN 55103-2

Installation/Configuration Notes



Rear view

Parts Included

Quantity	Components
1	PLE-1P120-EU or PLE-1P240-EU Plena Mixer Amplifier
1	Power cord
1	Manual
1	Set of 19" mounting brackets

Technical Specifications

Electrical

Mains power supply

Voltage	115 - 230 VAC $\pm 10\%$, 50/60 Hz
Inrush Current PLE-1P120-EU	4.5/9 A (230/115 VAC)
Inrush Current PLE-1P240-EU	9/18 A (230/115 VAC)
Power consumption PLE-1P120-EU	380 VA
Power consumption PLE-1P240-EU	760 VA

Battery power supply

Voltage	24 VDC $\pm 15\%$
Current PLE-1P120-EU	5.5 A
Current PLE-1P240-EU	11 A
Charge current	0.5 ADC
Charge float voltage	27.3 VDC

Power consumption (PLE-1P120-EU)

Max power (mains)	227 W
-6dB (mains)	130 W
Idle (mains)	12 W
Max power (24 V)	7 A (150 W)
-6 dB (24 V)	4.4 A (194 W)
Idle (24 V)	0.3 A (7 W)

Power consumption (PLE-1P240-EU)

Max power (mains)	451 W
-6dB (mains)	244 W
Idle (mains)	16 W
Max power (24 V)	12 A (290 W)
-6 dB (24 V)	8.1 A (194 W)
Idle (24 V)	0.3 A (7 W)

Performance

Max / rated power PLE-1P120-EU	180 W / 120 W
Max / rated power PLE-1P240-EU	360 W / 240 W
Power reduction on backup power	-1 dB
Frequency response	50 Hz to 20 kHz (+1/-3 dB @ -10 dB ref. rated output)
Distortion	<1% @ rated output power, 1 kHz

Inputs

Connector 1	3-pin XLR, balanced
Sensitivity	1 V
Impedance	20 kohm
Connector 2	3-pin Euro style, balanced
Sensitivity	100 V
Impedance	300 kohm
Dynamic range	100 dB
CMRR (mic)	>40 dB (50 Hz to 20 kHz)

Loudspeaker outputs 70 V / 100 V

Connector	Euro style pluggable screw terminals
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Loudspeaker output 8 ohm

Connector	Euro style pluggable screw terminals
PLE-1P120-EU	31 V (120 W)
PLE-1P240-EU	44 V (240 W)

Mechanical

Dimensions (H x W x D)	100 x 430 x 270 mm (19" wide, 2U high)
Mounting	Stand-alone, 19" rack
Color	Charcoal
Weight (PLE-1P120-EU)	Approx. 10.5 kg
Weight (PLE-1P240-EU)	Approx. 12.5 kg

Environmental

Operating temperature	-10 °C to +55 °C
Storage temperature	-40 °C to +70 °C
Relative humidity	<95%
Acoustic noise level of fan	<40 dB SPL @ 1 m temperature controlled

Ordering Information

PLE-1P120-EU Plena Amplifier 120 W	PLE-1P120-EU
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PLE-1P240-EU Plena Amplifier 240 W	PLE-1P240-EU
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Americas:
Bosch Communications Systems
12000 Portland Avenue South
Burnsville, Minnesota 55337, USA
Phone: +1-800-392-3497
Fax: +1-800-955-6831
audiosupport@us.bosch.com
www.boschsecurity.com

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2600
Fax: +65 6571 2698
apr.securitysystems@bosch.com
www.boschsecurity.com

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