



BOSCH
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PLE-1Pxx0-US Plena Amplifier



- ▶ 120 and 240 W power amplifier in a compact housing
- ▶ 1 V line level balanced input
- ▶ 70 V, 25 V and 4 ohm outputs
- ▶ 70 V input for slave operation on 70 V speaker line
- ▶ Temperature-controlled forced front to back ventilation (directly stackable)
- ▶ 24 VDC backup power with built-in charger

The PLE-1P120-US and PLE-1P240-US are two high-power plug-and-play cost effective power amplifiers that deliver 120 and 240 Watts to constant voltage or 4 ohm loads. Built with premium quality and protections, they offer basic functionality at a budget price. The amplifiers offer straight 1 V and 70 V line in, and 25/70 V and 4 ohm outputs. They can extend the power of the PLE- series mixer-amplifiers or be combined with the PLE-10M2-US mixer, or work anywhere where more power on an existing 70 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 backup, with automatic switchover. The amplifier also has a built-in charger to charge the connected battery. The system has two balanced inputs that are summed together and a loop-through facility. This makes it easy to connect multiple

amplifiers. The secondary input is a 70 V line input to connect the amplifier to a 25/70 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. An LED VU meter shows the output level.

The amplifier has 25 and 70 V outputs for constant voltage loudspeaker systems, and a low impedance output for 4 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-US or PLE-1P240-US Plena 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-US	4.5/9 A (230/115 VAC)
Inrush Current PLE-1P240-US	9/18 A (230/115 VAC)
Power consumption PLE-1P120-US	380 VA
Power consumption PLE-1P240-US	760 VA

Battery power supply

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

Power consumption (PLE-1P120-US)

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-US)

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-US	180 W / 120 W
Max / rated power PLE-1P240-US	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 Euro style, balanced
Sensitivity	1 V
Impedance	20 kohm
Connector 2	3-pin Euro style, balanced
Sensitivity	70 V
Impedance	300 kohm
Dynamic range	100 dB
CMRR (mic)	>40 dB (50 Hz to 20 kHz)

Loudspeaker outputs 25 V and 70 V

Connector	Euro style pluggable screw terminals
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Loudspeaker output 4 ohm

Connector	Euro style pluggable screw terminals
PLE-1P120-US	31 V (120 W)
PLE-1P240-US	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-US)	Approx. 23.2 lb
Weight (PLE-1P240-US)	Approx. 27.6 lb

Environmental

Operating temperature	+14 °F to +131 °F
Storage temperature	-40 °F to +158 °F
Relative humidity	<95%
Acoustic noise level of fan	<40 dB SPL @ 1 m temperature controlled

Ordering Information

PLE-1P120-US Plena Amplifier 120 W	PLE-1P120-US
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PLE-1P240-US Plena Amplifier 240 W	PLE-1P240-US
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