



# LBB 193x/x0 Plena Power Amplifier



- ▶ 120 W and 240 W power amplifiers in a compact housing
- ▶ 70 V / 100 V and 8 ohm outputs
- ▶ Balanced line inputs and loop-through outputs
- ▶ 100 V input for slave operation on 100 V speaker line
- ▶ Temperature controlled fan for high reliability
- ▶ Mains and battery back-up operation

The Plena series offers several types of power amplifier:  
 the LBB 1930/x0 is a 120 W power amplifier,  
 the LBB 1935/x0 is a 240 W power amplifier.  
 These are high-performance mono amplifiers capable of fulfilling a wide variety of public address requirements at a surprisingly low cost. The LBB 1930/x0 and LBB 1935/x0 use the same compact 19", 2U high housing for table-top use and rack mounting.

## Functions

The amplifiers are protected against overload and short circuits. A temperature-controlled fan ensures high reliability at high output power and low acoustic noise at lower power output. Additionally, all booster amplifiers have an overheat protection circuit that switches off the power stage if the internal temperature reaches a critical limit due to poor ventilation or overload.

The LBB 1930/x0 and LBB 1935/x0 has a balanced input and a loop-through connector for easy connection of multiple power amplifiers to increase the available output power.

An additional 100 V line input is provided to connect the booster amplifiers to a 100 V loudspeaker line, for additional output power e.g. on remote locations.

Sensitivity or level control is located on the rear of the unit to avoid accidental setting change. A VU-meter with LED-bar shows the output level. The amplifiers have 70 V and 100 V outputs for constant voltage loudspeaker systems and a low impedance output for 8 Ohm loudspeaker loads. The power amplifiers operate both on mains power and on a 24 V battery power supply for emergency back-up, with automatic switchover.

## Certifications and Approvals

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

## Parts Included

Quantity	Component
1	LBB 193x Plena Booster Amplifier
1	19" mounting brackets
1	Power cord

## Technical Specifications

### Electrical

#### Power Consumption of the Plena Amplifiers

		LBB 1930	LBB 1935
230/115 V	max power	273.7W	450.8W
power	- 3 dB	193,2	340,3
W	- 6 dB	142,6	243,8
	pilot tone 20khz	41,4	55,2
	idle	18,4	16,1
power red.	(?) dB	-2	-1
24v current	max power	7.01A	12.06A
	- 3 dB	6,04	11,38
	- 6dB	4,29	8,09
A	pilot tone 20khz	0,97	1,72
	idle	0,1	0,26
24 VDC power cons	max power	168.2W	289.44W
	- 3 dB	144,96	273,1
	- 6dB	102,96	194,16
W (out=70V)	pilot tone 20khz	23,28	41,28
	idle	2,4	6,24

#### Mains Voltage

LBB 1930/00, LBB 1935/00 230 VAC / 240 VAC, ±10%, 50 / 60 Hz

LBB 1930/50, LBB 1935/50 110 VAC, ±10%, 50 / 60 Hz

#### Max Mains Power Consumption

LBB 1930/x0 400 VA

LBB 1935/x0 800 VA

#### Max Mains Inrush Current

LBB 1930/00 8 A

LBB 1930/50 16 A

LBB 1935/00 9 A

LBB 1935/50 19 A

Battery voltage 24 VDC, +20% / -10%

#### Max Battery Current

LBB 1930/x0 6 A

LBB 1935/x0 11 A

#### Performance

Frequency Response 50 Hz – 20 kHz (+1/-3 dB, @ -10 dB ref. rated output)

Distortion <1%@rated output power, 1 kHz

#### S/N (flat at max volume)

LBB 1930/x0 >80 dB

LBB 1935/x0 >85 dB

#### Inputs

Line input (3-pin XLR, 6.3mm phone jack, balanced)

LBB 1930/x0, LBB 1935/x0

Sensitivity 1 V

Impedance 20 kOhm

CMRR >25 dB (50 Hz - 20 kHz)

Line Input 1, 2 (3-pin XLR, balanced)

100 V Input (Screw, unbalanced)

Sensitivity 100 V

Impedance 330 kOhm

#### Outputs

Line Loop-through Output (3-pin XLR, 6.3mm phone jack, balanced)

LBB 1930/x0, LBB 1935/x0

Nominal Level 1 V

Impedance Direct connection to line input

Line Loop-through Output 1,2 (3-pin XLR, balanced)

Loudspeaker Outputs (Screw, floating)

Max/rated Output Power

70 / 100 V Output LBB 1930/x0 180 W / 120 W

LBB 1935/x0 360 W / 240 W

8 ohm Output LBB 1930/x0 31 V (120 W)

LBB 1935/x0 44 V (240 W)

Output Power @ 24 V

Battery Operation -1 dB ref. rated power

### Environmental

Operating Temperature -10 to +55°C

Storage Temperature -40 to +70°C

Relative Humidity <95%

#### Acoustic Noise Level of Fan

LBB 1930/x0, LBB 1935/x0 <45 dB SPL @ 1 m

#### Dimensions

LBB 1930/x0, LBB 1935/x0 100 x 430 x 270 mm (19" wide, 2U high, with feet)

#### Weight

LBB 1930/x0 approx. 10.5 kg

LBB 1935/x0 approx. 12.5 kg

## Ordering Information

### Model | Description

LBB 1930/00 Plena Booster Amplifier  
180 W / 125 W, 400 VA, 8 A, 31 V (125 W)

LBB 1930/50 Plena Booster Amplifier  
180 W / 125 W, 400 VA, 16 A, 31 V (125 W)

LBB 1935/00 Plena Booster Amplifier  
360 W / 250 W, 800 VA, 9 A, 44 V (250 W)

LBB 1935/50 Plena Booster Amplifier  
360 W / 250 W, 800 VA, 19 A, 44 V (250 W)

### Hardware Accessories

LBC 1901/00 Rack Mount Kit  
For Plena amplifier, 19-inch

**Americas:**

Bosch Security Systems  
130 Perinton Parkway  
Fairport, New York, 14450, USA  
Phone: +1 585 223 4060  
Fax: +1 800 289 0096  
security.sales@us.bosch.com  
www.boschsecurity.us

**Europe, Middle East, Africa:**

Bosch Security Systems B.V.  
P.O. Box 80002  
5600 JB Eindhoven, The Netherlands  
Phone: +31 (0) 40 27 83955  
Fax: +31 (0) 40 27 86668  
emea.securitysystems@bosch.com  
www.boschsecurity.com

**Asia-Pacific:**

Bosch Security Systems Pte Ltd  
38C Jalan Pemimpin  
Singapore 577180  
Phone: +65 6319 3450  
Fax: +65 6319 3499  
apr.securitysystems@bosch.com  
www.boschsecurity.com

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