

LBB 193x/x0 Plena Booster Amplifier



Security Systems



- 120 W, 240 W and 480 W booster 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 three types of booster amplifier: the LBB 1930/x0 is a 120 W booster amplifier, the LBB 1935/x0 is a 240 W booster amplifier and the LBB 1938/00 is a very powerful 480 W booster 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, while the LBB 1938/00 comes in a 19", 3U 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. On the LBB 1938/00 this is shown by the front panel overheat indicator.

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

The LBB 1938/00 has two balanced inputs with priority control, each with a loop-through facility. This allows for easy and automatic switching between e.g. a local music source and a priority announcement from a remote system. 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.

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The LBB 1938/00 has two separate priority controlled 100 V outputs for zones that only need announcements made via the priority input, and for zones that will not get any announcements made via the priority input.

The booster amplifiers operate both on mains power and on a 24 V battery power supply for emergency back-up, with automatic switchover.

The LBB 1938/00 has a front panel LED that indicates when the unit is battery operated.

Parts Included

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

Certifications and Approvals

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

Technical Specifications		
Electrical		
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	
LBB 1938/00	230 VAC, ±10%, 50 / 60 Hz	
Max Mains Power Consumption		
LBB 1930/x0	400 VA	
LBB 1935/x0	800 VA	
LBB 1938/00	1600 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	
LBB 1938/00	19 A	
Battery voltage	24 VDC, +20% / -10%	
Max Battery Current		
LBB 1930/x0	6 A	
LBB 1935/x0	11 A	
LBB 1938/00	30 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	
LBB 1938/00	>90 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)		
LBB 1938/00		
Sensitivity	1 V	
Impedance	20 kOhm	
CMRR	>25 dB (50 Hz - 20 kHz)	
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)		
LBB 1938/00		
Nominal Level	1 V	
Impedance	Direct connection to line input	
Loudspeaker Outputs (Screw, floating)		
Max/rated Output Power		
70 / 100 V Output	LBB 1930/x0	180 W / 120 W

Electrical		
	LBB 1935/x0	360 W / 240 W
	LBB 1938/00	720 W / 480 W
8 ohm Output	LBB 1930/x0	31 V (120 W)
	LBB 1935/x0	44 V (240 W)
	LBB 1938/00	62 V (480 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
LBB 1938/00		<48 dB SPL @ 1 m
Dimensions		
LBB 1930/x0, LBB 1935/x0		100 x 430 x 270 mm (19" wide, 2U high, with feet)
LBB 1938/00		145 x 430 x 370 mm (19" wide, 3U high, with feet)
Weight		
LBB 1930/x0		approx. 10.5 kg
LBB 1935/x0		approx. 12.5 kg
LBB 1938/00		approx. 25 kg

Ordering Information	
Model & Description	
LBB 1930/00 Plena Booster Amplifier	180 W / 120 W, 400 VA, 8 A, 31 V (120W)
LBB 1930/50 Plena Booster Amplifier	180 W / 120 W, 400 VA, 16 A, 31 V (120W)
LBB 1935/00 Plena Booster Amplifier	360 W / 240 W, 800 VA, 9 A, 44 V (240W)
LBB 1935/50 Plena Booster Amplifier	360 W / 240 W, 800 VA, 19 A, 44 V (240W)
LBB 1938/00 Plena Booster Amplifier	720 W / 480 W, 1600 VA, 19 A; 62 V (480W), 2 balanced inpts, front panel LED, 2 separate controlled 100 V outputs

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