

- 120W, 240W AND 480W BOOSTER AMPLIFIERS IN A COMPACT HOUSING •
- 70V/100V AND 8OHM OUTPUTS •
- BALANCED LINE INPUTS AND LOOP-THROUGH OUTPUTS •
- 100V INPUT FOR SLAVE OPERATION ON 100V SPEAKER LINE •
- TEMPERATURE CONTROLLED FAN FOR HIGH RELIABILITY •
- MAINS AND BATTERY BACK-UP OPERATION •

**PLENA booster amplifier LBB1930/x0,
LBB1935/x0 and LBB1938/00**

The PLENA series offers three types of booster amplifiers: the LBB1930/x0 is a 120W booster amplifier, the LBB1935/x0 is a 240W booster amplifier and the LBB1938/00 is a very powerful 480W booster amplifier. These are high performance mono amplifiers capable of fulfilling a wide variety of public address requirements at a surprisingly low cost. The LBB1930/x0 and LBB1935/x0 use the same compact 19", 2U high housing for tabletop use and rack mounting, while the LBB1938/00 comes in a 19", 3U high housing.

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 LBB1938/00 this is shown by the front panel overheat indicator.

The LBB1930/x0 and LBB1935/x0 have a balanced input and a loop-through connector for easy connection of multiple booster amplifiers to increase the available output power. The LBB1938/00 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 100V line input is provided to connect the booster amplifiers to a 100V 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.



**LBB 1930/x0, LBB 1935/x0
LBB 1938/00**

PLENA BOOSTER AMPLIFIER

The amplifiers have 70V and 100V outputs for constant voltage loudspeaker systems and a low impedance output for 8 Ohm loudspeaker loads. Additionally, the LBB1938/00 has two separate priority controlled 100V 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 24V battery power supply for emergency backup, with automatic switchover. The LBB1938/00 has a front panel LED, that shows when it operates on the battery.

LBB 1930/x0, LBB 1935/x0, LBB 1938/00

PLENA BOOSTER AMPLIFIER

ELECTRICAL

Mains voltage

LBB 1930/00, LBB 1935/00	230Vac/240Vac, ±10%, 50/60Hz
LBB 1930/50, LBB 1935/50	110Vac, ±10%, 50/60Hz
LBB 1938/00	230Vac, ±10%, 50/60Hz

Max mains power consumption

LBB 1930/x0	400VA
LBB 1935/x0	800VA
LBB 1938/00	1600VA

Max mains inrush current

LBB 1930/00	8A
LBB 1930/50	16A
LBB 1935/00	9A
LBB 1935/50	19A
LBB 1938/00	19A

Battery voltage

24Vdc, +20%/-10%

Max battery current

LBB1930/x0	6A
LBB1935/x0	11A
LBB1938/00	30A

PERFORMANCE

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

Distortion <1% @ rated output power, 1kHz

S/N (flat at max volume)

LBB1930/x0	>80dB
LBB1935/x0	>85dB
LBB1938/00	>90dB

INPUTS

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

LBB1930/x0, LBB1935/x0

Sensitivity	1V
Impedance	20kOhm
CMRR	>25dB (50Hz-20kHz)

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

LBB1938/00

Sensitivity	1V
Impedance	20kOhm
CMRR	>25dB (50Hz-20kHz)

100V input (Screw, unbalanced)

Sensitivity	100V
Impedance	330kOhm

OUTPUTS

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

LBB1930/x0, LBB1935/x0

Nominal level	1V
Impedance	direct connection to line input

Line loophrough output 1,2 (3-pin XLR, balanced)

LBB1938/00

Nominal level	1V
Impedance	direct connection to line input

Loudspeaker outputs (Screw, floating)

Max/rated output power

70/100V output	LBB1930/x0	180W/120W
	LBB1935/x0	360W/240W
	LBB1938/00	720W/480W
8Ohm output	LBB1930/x0	31V (120W)
	LBB1935/x0	44V (240W)
	LBB1938/00	62V (480W)

Output power @ 24V battery operation -1dB ref. rated power

ENVIRONMENTAL CONDITIONS

Operating temperature range -10 to +55°C

Storage temperature range -40 to +70°C

Relative humidity <95%

GENERAL

EMC emission acc. to EN 55103-1

EMC immunity acc. to EN 55103-2

Acoustic noise level of fan

LBB1930/x0, LBB1935/x0	<45dBSPL @ 1m
LBB1938/00	<48dBSPL @ 1m

Dimensions

LBB1930/x0, LBB1935/x0	100 x 430 x 270 mm (19" wide, 2U high, with feet)
LBB1938/00	145 x 430 x 370 mm (19" wide, 3U high, with feet)

Weight

LBB1930/x0	approx. 10.5kg
LBB1935/x0	approx. 12.5kg
LBB1938/00	approx. 25kg

19" mounting brackets included

