

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

LBB 1930/x0, LBB 1935/x0 and LBB 1938/00 Plena Booster Amplifier

The Plena series offers three types of booster amplifiers: the LBB 1930/x0 is a 120 W booster amplifier, the LBB 1935/x0 is a 240W 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 tabletop use and rack mounting, while the LBB 1938/00 comes in a 19", 3U high housing for tabletop use and rack mounting.

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 have a balanced input and a loop-through connector for easy connection of

Communication you can rely on

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 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.

The amplifiers have 70V and 100V outputs for constant voltage loudspeaker systems and a low impedance output for 8 Ohm loudspeaker loads. Additionally, the LBB 1938/00 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 back-up, with automatic switchover. The LBB 1938/00 has a front panel LED, that shows when it operates on the battery.

BOSCH

SPECIFICATIONS (IEC60268-3)

ELECTRICAL

Mains voltage

LBB 1930/00, LBB 1935/00 230 Vac/240 Vac, $\pm 10\%$, 50/60 HzLBB 1930/50, LBB 1935/50 110 Vac, $\pm 10\%$, 50/60 HzLBB 1938/00 230 Vac, $\pm 10\%$, 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 dBLBB 1935/x0 >85 dBLBB 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)

100V input (Screw, unbalanced)

Sensitivity 100 V

Impedance 330 kOhm

OUTPUTS

Line loophthrough 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 loophthrough 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

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

LBB 1935/x0 360 W/240 W

LBB 1938/00 720 W/480 W

80hm 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 CONDITIONS

Operating temperature range -10 to $+55^{\circ}\text{C}$ Storage temperature range -40 to $+70^{\circ}\text{C}$ Relative humidity $<95\%$

GENERAL

EMC emission acc. to EN 55103-1

EMC immunity acc. to EN 55103-2

Acoustic noise level of fan

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

19" mounting brackets included