

LBB 19xx/10 Plena Mixer Amplifiers



Security Systems



- Range of single and dual zone mixer amplifiers from 30 W to 120 W
- Four low-noise balanced inputs for microphone or line
- Selectable priority & vox switching on microphone input 1
- Optional 2-tone chime to precede announcements
- Separate overruling emergency input with vox
- Loudspeaker connections for normal, call-only and mix-only zones
- Choice of CD, tuner or auxiliary music inputs

The Plena mixer amplifier is a high-performance, versatile four-microphone inputs mono mixer amplifier, capable of fulfilling a wide variety of public address requirements at surprisingly low cost.

Functions

All microphone inputs have a phantom power supply to provide power to condenser microphones and selectable speech filters for improved intelligibility. Microphone inputs 3 and 4 can also be switched to line sensitivity. Furthermore, separate music inputs are available with their own input selector and volume control.

Microphone input 1 can be given priority over all other microphone and music inputs. Priority is given upon contact closure on the 5-pin DIN connector or if the signal level on input 1 exceeds a predefined value (VOX).

A 2-tone chime can be selected to precede a priority announcement.

A telephone or emergency input with VOX activation is provided that takes overall priority, and has its own preset volume control.

An interconnection input and output enables external sound processing equipment to be connected, such as an equalizer or the Plena feedback suppressor between the preamplifier section and the power amplifier. A tape output is provided and a LED VU-meter allows the master output to be monitored.

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The Plena mixer amplifiers come in a range of output powers. This power is directly available on 70 V and 100 V constant voltage outputs and on a low impedance output for 8 ohm load. Moreover, the amplifiers have a separate 70 V/100 V Call Only output for addressing areas where only priority announcements are required, and a 70 V/100 V Mix Only output for areas where no priority announcements should be heard. The Call Only output can also be used for 3-wire remote volume control override.

Additional Plena power amplifiers can be connected in a loop-through arrangement to the balanced line output if more output power is needed than the built-in power stage can deliver.

The LBB 1914/10 offers the same functionality as the LBB 1912/10 but also has two front-panel switches to direct the amplifier output to two separate zones. This is useful if some announcements or background music should only be heard in part of a building. Priority calls, however, are always routed to both zones, even if unselected for e.g. music.

Parts Included

Quantity	Components
1	LBB 19xx Plena Mixer Amplifier
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	115 Vac/230 VAC, ±10%, 50/60 Hz
Max mains power consumption	
LBB 1903/10	100 VA
LBB 1906/10	200 VA
LBB 1912/10, LBB 1914/10	400 VA
Max mains inrush current	
LBB 1903/10	4.5 A/9 A (230 Vac/115 VAC)
LBB 1906/10	5 A/10 A (230 Vac/115 VAC)
LBB 1912/10, LBB 1914/10	8 A/16 A (230 Vac/115 VAC)
Battery Voltage	24 VDC, +20%/-10%
Max battery current	
LBB 1903/10	1.6 A
LBB 1906/10	3 A
LBB 1912/10, LBB 1914/10	6 A
Performance	
Frequency Response	50 Hz – 20 kHz (+1/-3 dB, @ -10 dB ref. rated output)
Distortion	<1% @ rated output power, 1 kHz
Bass Control	-8/+8 dB @ 100 Hz
Treble Control	-8/+8 dB @ 10 kHz
Inputs	
Input 1 (5-pin DIN, balanced with phantom power, 6.3 mm phone jack)	
Input 2 (3-pin XLR, balanced with phantom power, 6.3 mm phone jack)	
Sensitivity	1 mV
Impedance	>1 kOhm
S/N (flat at max volume)	63 dB
S/N (flat at min volume/muted)	> 75 dB
CMRR	> 40 dB (50Hz-20kHz)
Headroom	> 25 dB
Speech Filter	-3 dB @ 315 Hz, high-pass, 6 dB/oct
Phantom Power Supply	16 V via 1.2 kOhm
VOX (input 1 only)	attack time 150 ms release time 2 s
Input 3,4 (3-pin XLR, balanced with phantom power, 6.3 mm phone jack)	
Sensitivity	1 mV (microphone), 200 mV (line)
Impedance	>1 kOhm (microphone), >5 kOhm (line)
Dynamic Range	100 dB
S/N (flat at max volume)	>63 dB (microphone), >70 dB (line)
S/N (flat at min volume/muted)	>75 dB
CMRR	>40 dB (50 Hz-20 kHz)
Headroom	>25 dB
Speech Filter	-3 dB @ 315 Hz, high-pass, 6dB/oct
Phantom Power Supply	16 V via 1.2 kOhm (microphone)

Electrical	
Music Input (Cinch, stereo converted to mono)	
Sensitivity	200 mV
Impedance	22 kOhm
S/N (flat at max volume)	>70 dB
S/N (flat at min volume/muted)	>75 dB
Headroom	>25 dB
Emergency/telephone (Screw, balanced)	
Sensitivity	100 mV – 1 V adjustable
Impedance	>10 kOhm
VOX	threshold 50 mV
	attack time 150 ms
	release time 2 s
S/N (flat at max volume)	>65 dB
Interconnection (Cinch)	
Nominal Level	1 V
Impedance	>10 kOhm
Outputs	
Master Output (3-pin XLR, balanced)	
Nominal Level	1 V
Impedance	<100 ohm
Tape Output (Cinch, 2 x mono)	
Nominal Level	350 mV
Impedance	1.5 kOhm
Interconnection (Cinch)	
Nominal Level	1 V
Impedance	<100 ohm
Loudspeaker outputs (Screw, floating)	
Max / rated output power 70 / 100 V	
LBB 1903/10	45 W / 30 W
LBB 1906/10	90 W / 60 W
LBB 1912/10, LBB1914/10	180 W / 120 W
8 Ohm Output	
LBB 1903/10	16 V (30 W)
LBB 1906/10	22 V (60 W)
LBB 1912/10, LBB 1914/10	31 V (120 W)
Output power @ 24 V battery	-1 dB ref. rated power

Environmental	
Operating Temperature	-10°C to +45°C
Storage Temperature	-40°C to +70°C
Relative Humidity	<95%
Acoustic Noise Level of Fan	<40 dB SPL @ 1m (LBB1912/10 & LBB1914/10)
Dimensions (WxH)	100 x 430 x 270 mm (19", 2U)
Weight	
LBB 1903/10	approx. 5 kg
LBB 1906/10	approx. 8.5 kg
LBB 1912/10, LBB 1914/10	approx. 10.5 kg
19" Mounting Brackets	LBC 1901/00 to be ordered separately

Ordering Information

Model & Description

LBB 1903/10 Plena Mixer Amplifier

45W/30 W, 100 VA, 4.5 A / 9 A (230 Vac/ 150 Vac)

LBB 1906/10 Plena Mixer Amplifier

90 W / 60 W, 200 VA, 5 A / 10 A (230 Vac/ 150 Vac)

LBB 1912/10 Plena Mixer Amplifier

180 W/120 W, 100 VA, 8 A / 16 A (230 Vac/ 150 Vac)

LBB 1914/10 Plena Mixer Amplifier

180 W /120 W, 100 VA, 8 A / 16 A (230 Vac/ 150 Vac);

2 front panel switchers

Americas:

Bosch Security Systems
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone:+1 (0) 585 223 4060
Fax:+1 (0) 585 223 9180
security.sales@us.bosch.com
<http://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
<http://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
<http://www.boschsecurity.com>

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