

LBB 1925/10 Plena System Pre-Amplifier

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Invented for life



- ▶ Six-zone system pre-amplifier, with single or dual channel operation
- ▶ Two input channels for call stations
- ▶ Universal input for microphone/line, with speech optimized tone control
- ▶ Three inputs for BGM selection and music optimized tone control
- ▶ Front panel zone selection for BGM and call station zone selection for calls

The Plena system pre-amplifier is a versatile, high-performance unit with call and mono BGM (background music). It fulfills a wide variety of public address requirements at a surprisingly low cost. It can provide dual channel operation for simultaneous calls and BGM for up to six different zones, using two Plena amplifiers.

Functions

The call channel provides two inputs for the Plena call stations, LBB 1941/00 (all-call) or LBB 1946/00 (six-zone), with loop-through capability, and universal, balanced input. One is a 3-pin XLR connector for microphone or line level (selectable), and the other is a 5-pin DIN-connector with all-call priority contact, which may also be used to start one of the available chime attention signals.

The microphone input has a selectable speech filter for improved intelligibility, a volume control, and bass and treble tone controls with shelving characteristics optimized for speech. The call channel is available on the balanced XLR master output.

The BGM channel provides three inputs on stereo cinch-connectors, converted to mono, with front panel selection, volume control and bass and treble tone controls with shelving characteristics optimized for music. The BGM channel has a direct output on balanced XLR for dual channel operation. It can also feed the master output, with the lowest priority, for single channel operation. Zone selector switches on the front panel control the BGM routing. An overload protected 24 VDC output provides power for driving external relays, often making an external power supply unnecessary.

An emergency/telephone input with signal level detector (VOX) and volume preset has the highest priority to all zones. Two trigger inputs (contact closure) activate alarm or time signals to pre-selected zones. Many different chime tones are available. A PC audio input with RS-232 control provides software controlled zone configuration, or automatic messaging in combination with the LBB 1965/00 Plena Message Manager. There are six levels of priority available for BGM, microphone, call stations, trigger inputs and emergency input. A set of relays directs the amplifier output(s) to different loudspeaker groups (zone switching).

Each zone has a tri-state control on the front panel that can turn it off, switch it to the call channel, or to the BGM channel. The all-call microphone input and emergency activation override the call station selection on the call channel. Each zone has separate priority overrides with preset volume levels. This assures an appropriate message volume, independent of any local volume settings, such as for BGM. Both three-wire and four-wire override schemes are supported. An override also activates a voltage-free contact (call-active) available for external control and monitoring. The master output channel, or one of the input channels, can be monitored through the headphone connector and/or the LED VU-meter.

Controls and indicators

Front

- LED power meter
- Power on LED
- Call active LED
- Three knobs for mic/line volume, treble, and bass levels
- Three knobs for BGM volume, treble, and bass levels
- BGM source selection knob
- Six zone-selections keys
- Six zone status LEDs
- On/off switch

Back

- EMG input volume control
- Mains voltage switch

Interconnections

Front

- Headphone jack

Back

- One (DIN or XLR) Mic/line input
- Two (DIN/DIN) call station inputs
- PC audio (cinch) input
- Priority input
- Master (XLR) output
- BGM (XLR) output
- Emergency signal input
- Two trigger inputs
- RS-232 (DE-9)
- Three (cinch) CD, tape, aux inputs
- Six 100 V speaker outputs
- 24 VDC output
- 24 VDC input
- Three control inputs
- Ground screw
- IEC mains socket

Certifications and approvals

Safety	acc. to EN 60065
Immunity	acc. to EN 55103-2
Emission	acc. to EN 55103-1

Region	Certification
Europe	CE

Installation/configuration notes



LBB 1925/10 rear view

Parts included

Quantity	Component
1	LBB 1925/10 PLENA System Pre-amplifier
1	Power cord
1	Set of 19" mounting brackets
1	Plena CD
1	Installation and User Instructions

Technical specifications

Electrical

Mains power supply	
Voltage	230/115VAC, $\pm 15\%$, 50/60 Hz
Current inrush	230/115 VAC, 1.5/3 A
Max power consumption	25 VA
Battery power supply	
Voltage	24 VDC, $+10\%$ / -15%
Current max	1 A
Performance	
Frequency response	50 Hz to 20 kHz ($+1$ / -3 dB)
Distortion	$<0.5\%$
Bass control	± 10 dB @ 100 Hz
Treble control	± 10 dB @ 10 kHz
Channel separation	>70 dB @ 1 kHz
Priority mute	>40 dB
Dynamic range	100 dB
Mic/line input	
Connectors	5-pin DIN, 3-pin XLR, balanced, with phantom power
Sensitivity	1 mV (mic), 200 mV (line)

Impedance	>1 kohm (mic); >5 kohm (line)
S/N (flat at max volume)	>63 dB (mic); >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, 6 dB/oct
Phantom power supply	16 V via 1.2 kohm, (mic mode only)
Line input	3 x
Connector	Cinch, stereo converted to mono, unbalanced
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
Master output	1 x
Connector	3-pin XLR, balanced
Nominal level	1 V
Impedance	<100 ohm
Tape output	1 x
Connector	Cinch, 2 x mono
Nominal level	350 mV
Impedance	<1 kohm
Headphone output	1 x
Connector	6.3 mm jack stereo, signal mono
Nominal level	3 V
Impedance	<100 ohm
Zone relays	5 A
Contacts voltage	250 V
Contacts current	8 A
Interconnection input / emergency	1 x
Connector	3-pin XLR, balanced
Sensitivity	200 mV (interconnection), 100 mV to 1 V adjustable (emergency)
Impedance	>10 kohm
VOX threshold	45 mV (emergency)
Interconnection output	1 x

Connector	3-pin XLR, balanced
Nominal level	200 mV
Impedance	<100 ohm
Relay contacts	30 V, 1 A
DC supply output voltage	24 V, 250 mA max

Mechanical

Dimensions (H x W x D)	100 x 430 x 270 mm (19" wide, 2U high)
Weight	Approx. 5 kg
Mounting	Standalone, 19" rack
Color	Charcoal

Environmental

Operating temperature	-10 °C to +55 °C (14 °F to +131 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	<95%

Ordering information

LBB 1925/10 Plena System Pre-Amplifier

6-zone, 2-channel distribution system unit with call
and BGM (background music)

Order number **LBB1925/10**

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