

LBB 1925/10

Plena System Pre-amplifier



Security Systems



- 6-zone system pre-amplifier, with single or dual channel operation
- Two inputs for call stations
- Universal input for microphone/line, with speech optimised tone control
- Three inputs for BGM selection and music optimised tone control
- Front panel zone selection for BGM and call station zone selection for calls
- PC and trigger inputs for automated calls, alarm tones and chimes to selected zones

LBB 1925/10 Plena System Pre-amplifier

The Plena system pre-amplifier is a high performance, versatile call and BGM (background music) mono pre-amplifier, capable of fulfilling a wide variety of public address requirements. It provides dual channel operation for calls and BGM simultaneously to a maximum of six different zones, using two Plena booster amplifiers.

Also single channel operation is possible with only one Plena booster.

The call channel provides two inputs for Plena call stations, LBB 1941/00 (all-call) or LBB 1946/00 (6-zone), with loop-through capability, and a universal balanced input, having the choice of a 3-pin XLR connector for microphone or line level (selectable), or a 5-pin DIN-connector with all-call priority contact, that may also 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 usage. 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, but may also feed the master output, with the lowest priority, for single channel operation. By means of zone selector switches on the front panel the routing of BGM can be selected.

An emergency/telephone input with signal level detector (VOX) and rear volume preset may detect an audio signal and gets the highest priority to all zones. Two trigger inputs (contact closure) control alarm or time signals to selectable zones. Many different tones are available for selection. Furthermore a PC audio input with RS232 control has been provided for PC control of zones or automatic messaging in combination with the Plena message manager. All together six levels of priority are available for BGM, microphone, call stations, trigger inputs and emergency input.

The LBB 1925/10 has a set of relays for zone-switching the power amplifier output(s) to different loudspeaker groups. Each of the zones can be switched between the call channel (upon call-station selection or all-call microphone or emergency activation), the BGM channel (upon front panel selection), or off.

In order to get a message through although the local volume controls have been set to a low volume level for e.g. background music, override relay contacts are provided for each zone separately for overriding local loudspeaker volume controls. Both the 3-wire and 4-wire override schemes are supported. Upon a call or an activated trigger input these contacts will be activated for the appropriate zones, together with an additional voltage free contact (Call Active) for control purposes. A 24Vdc output is available to supply power to external relays, so no external power supply is required for that purpose. A headphone connector and LED VU-meter allows for monitoring of the master output.

SPECIFICATIONS (IEC60268-3)

ELECTRICAL

Mains voltage	230 Vac/115 Vac, ±15%, 50/60 Hz
Max mains power consumption	50 VA
Battery voltage	24 Vdc, +20%/-10%
Max battery current	1 A
Max mains inrush current	1.5 A @ 230 Vac / 3 A @ 115 Vac

PERFORMANCE

Frequency response	50 Hz – 20 kHz (+1/-3 dB)
Distortion	<0.5%
Call channel	Bass control: -6/+6 dB @ 160 Hz Treble control: 0/+12 dB @ 5 kHz
BGM channel	Bass control: 0/+20 dB @ 100 Hz Treble control: 0/+18 dB @ 15 kHz
Channel separation	>65 dB @ 1 kHz
Priority mute	>50 dB

INPUTS

Call station inputs (8-pin DIN, balanced, for LBB 1941/00 and/or LBB 1946/00)

Sensitivity	1 V
Data	RS485, 1200, N, 8, 1, 0

Mic/Line input (3-pin XLR/5-pin DIN, balanced)

Sensitivity	1 mV (microphone), 200 mV (line)
Impedance	>1 kOhm (microphone), >5 kOhm (line)
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, 6 dB/oct
Phantom power supply	16 V via 1.2 kOhm, in microphone mode only

BGM input (Cinch, unbalanced, stereo converted to mono)

Sensitivity	500 mV (CD), 200 mV (aux, tape)
Impedance	22 kOhm
S/N (flat at max volume)	>70 dB
S/N (flat at min volume/muted)	>80 dB
Headroom	>25 dB

PC input (Cinch, unbalanced, stereo converted to mono)

Sensitivity	1 V
Impedance	22 kOhm
S/N	>70 dB

Emergency/telephone (Screw, balanced)

Sensitivity	100 mV – 1 V adjustable
Impedance	>10 kOhm
VOX threshold	50 mV
S/N	>65 dB

OUTPUTS

Master output (3-pin XLR, balanced)

Nominal level	1 V
Impedance	<100 Ohm

BGM output (3-pin XLR, balanced)

Nominal level	1 V
Impedance	<100 Ohm

Tape output (Cinch, 2 x mono)

Nominal level	350 mV
Impedance	3.3 kOhm

Headphone output (6.3mm jack stereo, signal mono)

Nominal level	3 V
Impedance	<100 Ohm

CONTROL

RS232 (9-pin D-sub)

Baudrate	19k2, N, 8, 1, 0
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Trigger inputs (Screw)

Activation	contact closure
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RELAYS

Zone output relay contacts	100 V, 2 A
Zone override relay contacts	100 V audio for 3-wire override 24 Vdc for 4-wire override
Call Active relay contacts	100 V, 2 A
DC supply output voltage	24 V, 250 mA max

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
Dimensions	100 x 430 x 270 mm (19" wide, 2U high)
Weight	approx. 5 kg
19" mounting brackets	included

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