



LBB 4402/00 Audio Expander



- ▶ **Four audio inputs – two selectable mic/line and two line inputs**
- ▶ **Four line audio outputs**
- ▶ **Eight supervised control inputs and five control outputs**
- ▶ **Audio processing functions**
- ▶ **Redundant network connection**
- ▶ **Headphone connection and VU meter for audio monitoring**

The audio expander inserts external audio into the system and extracts audio from the system. This unit has control inputs and outputs for external interfacing. It can route its audio inputs permanently or conditionally to any of the zones or to other audio outputs. The routing conditions are configured using the configuration software. The audio output can be programmed to get its signal from any of the audio inputs. The equipment can be used freestanding (tabletop) or in a 19" rack.

Functions

The audio expander has four transformer isolated analog audio inputs. Two of these are selectable between microphone and line. The other two inputs are fixed line inputs. The expander has four transformer isolated analog audio line outputs. It has built-in digital audio processing capable of three parametric and two shelving equalizer sections for all audio in and outputs. They also have a selectable 20 kHz monitoring signal. The 2 x 16-character display and the rotary control enable local status enquiries.

The display shows the VU-meter reading when audio monitoring mode is active. Audio can also be monitored by using a headphone.

The eight control inputs are freely programmable for system actions, and priorities can be assigned to these inputs. Each control input has the ability to monitor the attached line for open and short-circuits. Five control outputs are freely programmable for faults and call-related actions.

The audio expander supports redundant network cabling. The network can be either single branch or redundant loop. The unit is powered from the network controller via the network cable. The expander is self-monitoring and continuously reports its status to the network controller.

Controls and Indicators

- Two x 16-character LCD status display
- Rotary/push control for menu control and headphone volume

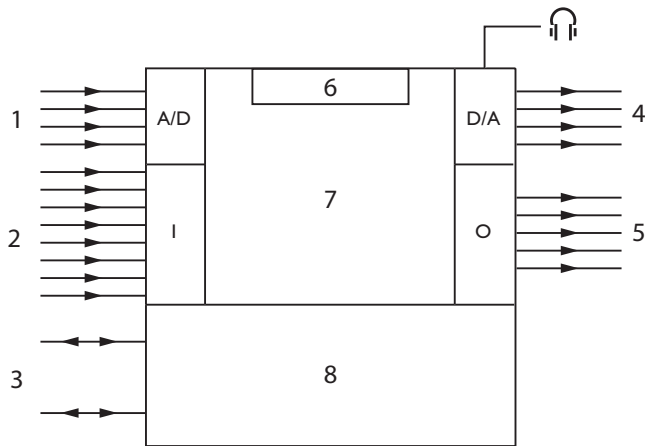
Interconnections

- Two system network connections
- Eight control inputs
- Two mic/line inputs
- Two line inputs
- Four line outputs
- Five control outputs
- Headphone output

Certifications and Approvals

Region	Certification	
Europe	CE	Declaration of Conformity
	TUEV-SUED	TUV Certificate IEC60849
	GL	GL-SOLAS
Poland	CNBOP	
Safety	acc. to IEC 60065 / EN 60065	
Immunity	acc. to EN 55103-2	
Emissions	acc. to EN 55103-1 / FCC-47 part 15B	
Emergency	acc. to EN 60849 / EN 54-16 / ISO 7240-16	
Maritime	acc. to IEC 60945	

Installation/Configuration Notes



- 1 Audio inputs
- 2 Control inputs
- 3 Plastic optical fiber network
- 4 Audio outputs
- 5 Control outputs
- 6 Display and control
- 7 Network processor and DSP
- 8 Network redundancy switching

Parts Included

Quantity	Component
1	LBB 4402/00 Audio Expander
1	Set of mounting brackets for 19" rack
1	Set of feet
1	Set of connectors

Technical Specifications

Electrical

Power consumption 9 W (DC)

Performance

Frequency response 20 Hz to 20 kHz (-3 dB)

Line inputs 2 x

Connectors 3-pin XLR and 2 cinch (for each line)

S/N >87 dBA at maximum level

CMRR >40 dB

Input range +6 dBV to +18 dBV (XLR)
-6 dBV to +6 dBV (cinch)

Mic / line inputs 2 x

Connector 3-pin XLR and 2 cinch (for each line)

Nominal Input Level -57 dBV

S/N >62 dBA with 25 dB headroom

CMRR >55 dB at 100 Hz

Input Impedance 1360 ohm

Phantom supply 12 V ±1 V at 15 mA

Input range -7 dB to 8 dB ref nominal input level

Line outputs 4 x

Connectors XLR and 2 cinch (for each line)

Output Impedance <100 ohm

S/N >89 dBA at maximum level

Crosstalk <-85 dB

Signal range -12 dBV to +18 dBV (XLR)
-24 dBV to +6 dBV (cinch)

Distortion at 1 kHz <0.05%

Control inputs 8 x

Connectors Removable screw terminals

Operation Closing contact (with supervision)

Control outputs 5 x

Connectors Removable screw terminals

Mechanical

Dimensions (H x W x D)

for tabletop, with feet 92 x 440 x 400 mm
(3.6 x 17.3 x 15.7 in)

for 19" rack, with brackets 88 x 483 x 400 mm
(3.5 x 19 x 15.7 in)

in front of brackets 40 mm (1.6 in)

behind brackets 360 mm (14.2 in)

Weight 7 kg (15.4 lbs)

Mounting Tabletop, 19"-rack

Color Charcoal (PH 10736) with silver

Environmental

Operating temperature	-5 °C to +55 °C (23 °F to 131 °F)
Storage temperature	-20 °C to +70 °C (-4 °F to 158 °F)
Humidity	15% to 90%
Air pressure	600 to 1100 hPa

Ordering Information**LBB 4402/00 Audio Expander****LBB4402/00**

Inserts external audio into the system and extracts audio from the system.

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