LBB1930/20 Power amplifier, 1x120W

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BOSCH
Invented for life

- 120 W power amplifier in a compact housing
- 70 V / 100 V and 8 ohm outputs
- Dual inputs with priority switching
- 100 V input for slave operation on 100 V speaker line
- Temperature controlled forced front to back ventilation, directly stackable.

The LBB 1930/20 is a powerful 120 W power amplifier in a 2U high 19” case for rack mounting or tabletop use. LEDs on the front panel show the status of the amplifier: power, audio output level, and supervised functions. This high-performance unit fulfills a wide range of public address requirements at a surprisingly low cost.

Functions

Dependability
The amplifier is protected against overload and short circuits. A temperature-controlled fan ensures high reliability at high output levels and low acoustic noise at lower output levels. An overheat protection circuit switches off the power stage and activates an LED on the front panel, if the internal temperature reaches a critical limit due to poor ventilation or overload.

The unit operates both on mains power and on a 24 V battery power supply for emergency back up, with automatic switchover.

For emergency and evacuation use, the following functions are monitored: mains presence, battery present, pilot tone presence, amplifier operation. Front panel LEDs indicate the status of supervised functions. The LEDs of pilot tone supervision and battery status can be switched off for general public address use. Failsafe (normally energized) relays are provided for each supervised function. These relays are always active regardless of the switches on the rear panel.

Input
The system has two balanced inputs with priority control, each with a loop-through facility. This makes it easy to connect remote systems that require priority control. An additional 100 V line input is provided to connect the amplifier to a 100 V loudspeaker line to provide more power to remote locations.

Gain or level control is located on the rear of the unit to avoid accidental setting change. A meter with LED-bar shows the output level.

Output
The amplifier has 70 V and 100 V outputs for constant voltage loudspeaker systems, and a low impedance output for 8 ohm loudspeaker loads.

The LBB 1930/20 has two separate priority controlled 100 V outputs for zones that only need announcements made via the priority input, and for zones that will not receive announcements made via the priority input.

Controls and indicators

Front

- Meter (LED's for -20, -6, 0 dB and Power ON)
- Battery operation indicator
- Overheat indicator

Back

- Level control input 1
- Level control input 2
- Power button
- Mains switch

Interconnections

Back

- Priority line input 1 (XLR/balanced)
- Line loop-through 1 (XLR/balanced)
- Program line input 2 (XLR/balanced)
- Line loop-through 2 (XLR/balanced)
- Priority controlled loudspeaker output terminals
- 24 VDC power supply terminal
- Three loudspeaker direct output terminals
- Two 100 V slave input terminals
- Input 2 enable control terminal
- Input 1 priority control terminal
- Earth connection screw
- Mains socket

Certifications and approvals

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

Region	Regulatory compliance/quality marks	
Europe	CE	LBB1930/20

Parts included

Quantity	Component
1	LBB1930/20 Plena Power amplifier
1	Power cord
1	Set of 19" mounting brackets
1	Safety instructions
1	Cable with XLR connector

Technical specifications

Electrical

Mains power supply	
Voltage	230 VAC ±10%, 50/60 Hz
Inrush current	8 A
Max power consumption	400 VA
Battery power supply	
Voltage	24 VDC +15% / -15%
Current max	6 A
Performance	
Output power (rms/maximum)	120 / 180 W
Power reduction on backup power	-1 dB
Frequency response	50 Hz to 20 kHz (+1 / -3 dB at -10 dB ref. rated output)
Distortion	<1% at rated output power, 1 kHz
S/N (flat at max volume)	>90 dB
Line inputs	2 x
Connector	3-pin XLR, balanced
Sensitivity	1 V
Impedance	20 kohm
CMRR	>25 dB (50 Hz to 20 kHz)
Gain	40 dB
100 V input	
Connector	Screw, unbalanced
Sensitivity	100 V
Impedance	330 kohm
Line loop-through output	2 x
Connector	3-pin XLR
Nominal level	1 V
Impedance	Direct connection to line input
Loudspeaker outputs	3 x
Connector	Screw, floating
Direct output	100 V, 70 V, 8 ohm
Priority only (from input 1)	100 V or 70 V internally selectable
Music (non-priority) only	100 V or 70 V internally selectable

Power consumption

Mains operation	
Max power	274 W
-3dB	193 W
-6dB	143 W
Pilot tone*	41 W
Idle	18 W
24 VDC operation	
Max power	7.0 A (168 W)

-3 dB	6.0 A (144 W)
-6 dB	4.3 A (103 W)
Pilot tone*	0.9 A (22 W)
Idle	0.1 A (2.4 W)

* 20 kHz -20dB with maximum loudspeaker load

Mechanical

Dimensions (H x W x D)	100 x 430 x 270 mm (19" wide, 2U high, with feet)
Weight	Approx. 10.5 kg
Mounting	Standalone, 19"rack
Color	Charcoal

Environmental

Operating temperature	-10 ºC to +55 ºC (14 ºF to +131 ºF)
Storage and transport temperature	-40 ºC to +70 ºC (-40 ºF to +158 ºF)
Relative humidity	<95%
Acoustic noise level of fan	<48 dB SPL at 1 m (max output)

Ordering information

LBB1930/20 Power amplifier, 1x120W
120 W power amplifier in a 2U-high, 19" case for rack mounting or tabletop use.
Order number **LBB1930/20**

Services

EWE-PLNAMP-IW 12mths wrty ext. Plena Power Amp
12 months warranty extension
Order number **EWE-PLNAMP-IW**

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