

JBL DEE SERIES

AUDIO TECHNOLOGY YOU CAN HEAR



Key features ■

- Intuitive interface with two levels of access.
- Dedicated JBL presets for quick setup.
- Advanced DSP capabilities for acoustic optimization.
- Extensive connectivity with Bluetooth, USB, FM, optical and analog input.

Highlights ■

The JBL DEE Series was developed to offer a complete and professional solution for ambient sound systems in residential and commercial projects. In a single device, it integrates an audio mixer, microphone inputs, digital signal processing (DSP) and power amplification, simplifying installation, reducing the need for external equipment and providing greater reliability to the system. Compatible with multiple audio sources, including Bluetooth, USB, FM, optical input, RCA, and microphones, the range offers flexibility to suit everything from small installations to multi-area distributed audio projects. The intuitive interface and quick-access shortcuts make operation simple for users and installers alike.

On the DEE 8.2 and DEE 16.4 models, each output channel can be configured individually, allowing independent adjustments of

volume, equalization, and DSP processing per environment. The channels can also operate in stereo or mono mode, offering greater versatility for different applications and installation layouts. The integrated DSP has presets developed for JBL loudspeakers and ceiling speakers, speeding up system configuration and ensuring more consistent results. The range also offers auxiliary outputs for system expansion and subwoofer integration, expanding design possibilities without increasing complexity.

With up to 120 W RMS per channel in 2 Ω , the JBL DEE Series combines performance, convenience and flexibility to deliver excellent audio quality in a wide variety of ambient sound applications.

Technical specifications ■

Mixer Model:	DEE 4.1	DEE 8.2	DEE 16.4
Microphone Inputs:		2	
Frequency Response (± 3 dB):		20 Hz – 20 kHz	
Output channels x power ¹ :	1 x 120W RMS	2 x 120W RMS	4 x 120W RMS
Number of 8 Ω loudspeakers per channel:	1 x 4	2 x 4	4 x 4
THD+N ¹ :		≤ 1.0 %	
Minimum Impedance:		2 Ω	
Bluetooth Version:		5.4	
Maximum USB Storage Capacity:		32 GB	
Maximum USB Output Current:		500 mA	
Supported USB Format:		FAT16, FAT32 and exFAT	
Supported Audio Format:		MP3, WAV, APE, FLAC, WMA	
Maximum optical input signal:		Stereo Digital PCM 0 dBFS	
Maximum RCA Input Signal:		+2.2 dBu (1.0 V RMS)	
Maximum XLR/P10 input signal:		+6.3 dBu (1.6 V RMS)	
Maximum RCA Output Signal:		+2.2 dBu (1.0 V RMS)	
FM tuning band (MHz):		76,0 a 107,9	
Bluetooth (MHz):	2 402 ~ 2 480	2 402 ~ 2 480	2 402 ~ 2 480
FM antenna length (m):		1.0 (detachable)	
AC Operating Voltage:		100 - 240 VAC 50/60 Hz	
AC Cable Length (m):		1.2 (detachable)	
Net Weight (kg):	2,00	2,30	3,00
Gross Weight (kg):	2,60	2,90	3,60
Product dimensions (L x D x H mm):	345 x 230 x 48	390 x 230 x 48	428 x 230 x 70
Product packaging dimensions (L x D x H mm):	467 x 327 x 95	512 x 327 x 95	550 x 327 x 117
Color:		Black	
Model (SKU):	JBLDEE41BR	JBLDEE 82BR	JBLDEE164BR

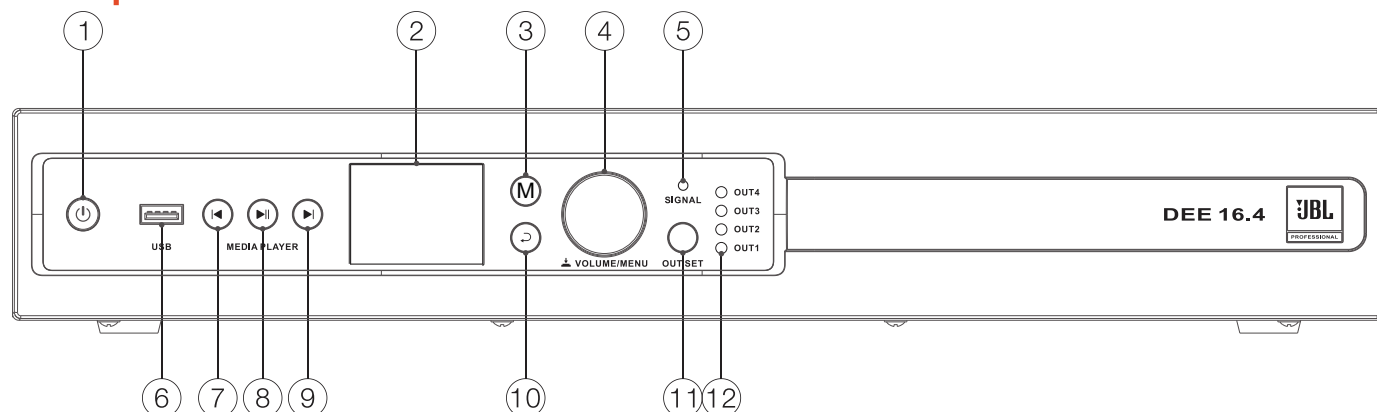
1 – Measured with THD+N $\leq 1\%$, 2 Ω load, 1kHz frequency

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Front panel ■



① **Power button** ⑥: Short press to turn on; press for 1 second to turn off the device.

② **Display Screen**: Displays the operating status and operation information of the device.

③ **MODE button** (M): Briefly press to switch between input signal sources (Bluetooth, USB, FM, Optical, and Auxiliary); press and hold for 1 second to mute the microphone; press and hold again for 1 second to cancel the microphone mute mode.

④ **[VOLUME/MENU] Volume/Edit Button**:

- Rotate to adjust the volume;
- Press the button for 1 second to mute all outputs, press again for 1 second to cancel the mute.
- On the main screen, press the button briefly to enter the settings menu.
- From the settings menu: Rotate to select the configuration item. Press briefly to activate the selected configuration item (the background color of the parameter value changes to blue) or to access the settings menu from the next level.

⑤ **Signal indicator LED**: No input signal (LED off); Input signal present (green LED), Limiter activated (orange LED).

⑥ **USB Port (Type A)**: Insert the USB device (maximum consumption of 500 mA) to play music or perform the firmware update. The USB port of the device should not be used for charging other devices, or activities of this nature.

⑦ **Return Button** (◀):

- When playing via Bluetooth:
 - Short Press – Plays the previous track.
- When playing via USB:
 - Short Press – Plays the previous track.
 - Press for 1 second – Accesses the previous folder.
- When playing via FM:
 - Short Press – Selects the previous stored radio station.
 - Press for 1 second – Starts the search for the previous available station. The search is automatically stopped when a station is located.

⑧ **Play/Pause Button** (⏮):

- When playing via Bluetooth or USB:
 - Short press – Toggles between play and pause modes.
- When playing via optical or auxiliary cable:
 - Short Press – Mutes the audio output. Press again to restore the sound.
- When playing via FM:
 - Short Press – Mutes the audio output. Press again to restore the sound.
 - Press for 1 second – Saves the current radio station to the

selected memory position. (**Note**: If there is already a station stored in the selected position, it will be replaced by the new station).

⑨ **Forward Button** (▶):

- When playing via Bluetooth:
 - Short Press – Plays the next track.
- When playing via USB:
 - Short Press – Plays the next track.
 - Press for 1 second – Accesses the next folder.
- When playing via FM:
 - Short Press – Selects the next stored station.
 - Press for 1 second – Starts the search for the next available station. The search is automatically stopped when a station is located.

⑩ **Exit Button** (⏮):

- Configuration screens:
 - Short Press – Returns to the previous screen.
- When playing via FM:
 - Press for 1 second – Enters the manual FM frequency adjustment mode. The frequency value will be displayed in blue. Turn the [VOLUME/MENU] knob to adjust the desired frequency.
 - Turn the [VOLUME/MENU] knob to adjust the desired frequency.
 - Briefly press the [Return] or [VOLUME/MENU] button to exit the adjustment mode. And the selected frequency will be played.

⑪ **Output Channel Selector Knob [OUT SET]** (◯):

- Main Screen:
 - Short Press – Displays the volume adjustment screen of the AMP OUT 1 output.
 - Press again to switch between the volume adjustment screens of the AMP OUT 1, AMP OUT 2, AMP OUT 3 and AMP OUT 4 outputs. During navigation, the indicator LED corresponding to the selected output will automatically light up.

Note: This function is only available for DEE 8.2 and DEE 16.4 models.

⑫ **Output Indicator LED (OUT)**: Indicates the output channel selected for volume adjustment or setting.

Note: This function is only available for DEE 8.2 and DEE 16.4 models.

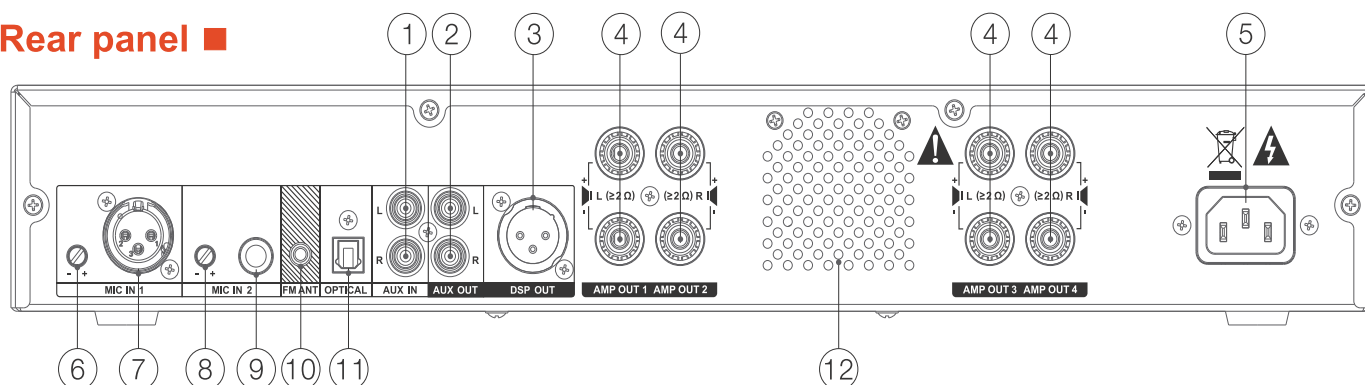
Simultaneously pressing the (M) + (◀) keys for 5 seconds will open the installer menu, to carry out these settings **consult the product manual on the www.jbl.com.br/som-professional/ website** or briefly press the button (▶) to return to the main screen.

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Rear panel ■



- ① **AUX IN:** Analog Stereo Input (RCA L/R).
- ② **AUX OUT:** Analog stereo output (RCA L/R).
- ③ **DSP OUT:** Balanced Analog Signal (XLR) Output.
- ④ **AMP OUT 1/ AMP OUT 2/ AMP OUT 3/ AMP OUT 4:** Output to speaker, minimum impedance of 2 Ω, power of 120 W RMS.
- ⑤ **AC Power Input:** 100~240 VAC, 50/60 Hz.
- ⑥ **MIC Level Control 1:** Microphone Input Level Adjustment 1.
- ⑦ **MIC Input 1:** Balanced Input (XLR).
- ⑧ **MIC Level Control 2:** Microphone Input Level Adjustment 2.
- ⑨ **MIC Input 2:** Balanced Input (TRS 6.35 mm).
- ⑩ **FM antenna connector:** 3.5 mm.
- ⑪ **OPT Input:** Optical Audio Input.
- ⑫ **Ventilation outlet and air circulation:** Do not obstruct. ⚠ Blockage of this area can cause overheating and improper operation of the equipment. The place must be kept clean and unobstructed.

Note:

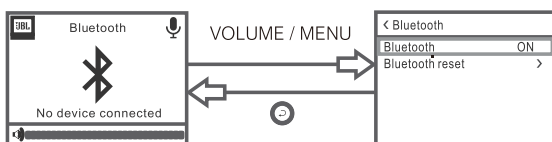
DEE 4.1: Only available **AMP OUT 1**.
DEE 8.2: Only available **AMP OUT 1** and **AMP OUT 2**.

Interface ■

After power-on, the device will automatically return to the last used operation screen (Bluetooth, USB, FM, OPT or AUX).

Bluetooth playback main interface. The device will automatically start pairing or automatically connect to the previously connected device.

To enter the Bluetooth settings, simply briefly press the [VOLUME/MENU] button. And to return to the main screen just briefly press the exit button.

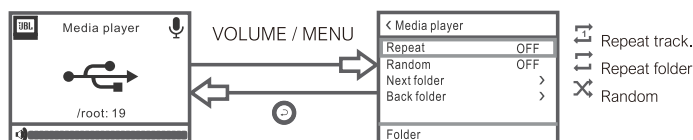


Bluetooth ON/OFF:

ON – Turns Bluetooth on
OFF – Turn Bluetooth off

Bluetooth reset: Clears the memory and deletes all previously paired devices.

From the main screen, press the key **M** until you access the main USB playback screen. When there is no USB device connected or recognized, the symbol **↔** will turn orange, and when the USB device is recognized, the symbol **↔** will turn blue.



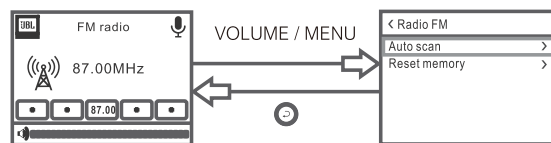
Repeat: If you select the **ALL** option, all songs on the device will be repeated. If you select the **Folder** option, all the songs in the selected folder will loop back.

Random: If you select the ON option, the Random function will be selected and the songs will play randomly, within the selected Repeat condition.

Next folder: Moves to the next folder, the folder name should appear at the bottom of the screen (indicated as Folder in the image above).

Back Folder: Returns to the previous folder.

From the main screen, press the key **M** until you switch to the main FM playback screen. To enter the FM settings, simply briefly press the [VOLUME/MENU] button. And to return to the main screen just briefly press the exit button.



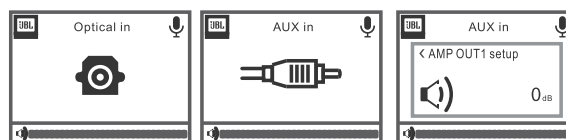
87.00 MHZ - The frequency of the tuned radio will be indicated in the center of the screen, as shown in 87.00 MHZ.

[+] Indicates that no radio stations have been stored. This device has a total of 10 memory positions for saving radio stations. **[87.00]** It indicates that the stored radio station is 87.00 MHz. To save the radio just navigate through the boxes using the buttons **⏮** **⏭** and to save just press the button **⏭** for 1 second.

Auto scan: Performs a search for radio stations. After the search is complete, the stations found will be saved and the device will return to the main FM playback interface.

Reset memory: Deletes all saved radio stations and clears the memory.

From the main screen, press the key **M** until you switch to the main playback screen Optical or AUX in. These functions do not have a dedicated menu for them. On these screens, it is possible to stop or resume audio playback at the outputs, for this you just have to briefly press the button **⏮**.



For the DEE 8.2 and DEE 16.4 models, it is possible to adjust the gain of each output independently, as well as the microphone, using the **[OUT SET]** button. **⦿** By pressing the button again, it is possible to navigate the AMP OUT and MIC screens, in these it is possible to adjust the gain of each channel separately. If the gain is reduced to -60 dB, the channel will mute and the screen will turn red. For more information, please refer to the product manual on the website: www.jbl.com.br/som-professional/