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Parlé VBC 2500 overview

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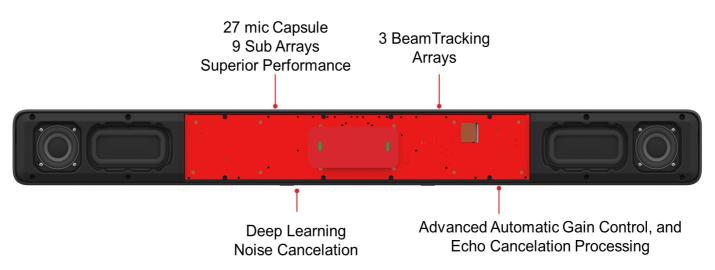
The Parlé VBC 2500 is an all-in-one conferencing bar featuring Biamp Audio Intelligence to deliver a premium audiovisual experiences for small and medium conference rooms. It offers the same audio intelligence features of its ABC 2500 counterpart with the addition on the Biamp Video intelligence camera system. Onboard DSP powers the integrated AEC, AGC, and NRD, along with the 27-microphone array and Biamp Beamtracking[™] technology to actively track and intelligently mix conversations from around the room. Room sound reinforcement is provided by a pair of Biamp audio intelligence optimized onboard speakers. The premium onboard optics feature a 12MP camera with 120° wide-angle lens, along with ePTZ, auto-framing, and automatic shutter features.

Parlé VBC 2500 can be plugged directly into a UC System with a single USB connection or can be paired with a Devio SCR-10 for a BYOD system.

This article will highlight and explain some of the technologies implemented in the Parlé conferencing bar products and how the integrate into the environment.

Microphones and DSP processing

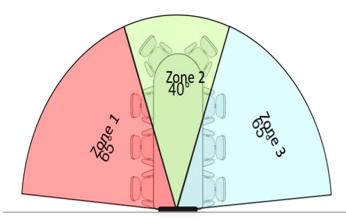
The VBC 2500 conferencing bar is designed around the same technology that is in the Parlé and Tesira products in one hardware device. Using 27 mics arranged in a vertical and horizontal array pattern, the ABC 2500 allows for pattern control on the Azimuth and Vertical fields of the room. In addition to the microphone array technology, the bar incorporates all the DSP elements that go into the Tesira products with an additional level of performance due to the nature of an all in one solution.

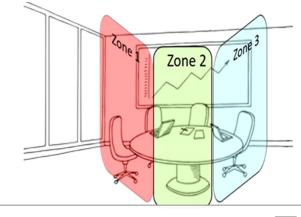


Mic array and DSP features of the Parlé VBC 2500

- 27 Element Mic Array (Horizontal and Vertical)
- Tuned for Voice
- Three Tracking Arrays
- Advanced BeamTracking, Gain Control, Noise Cancelation and AEC processing

The large number of spaced capsules allow for mics to be setup as "clusters" forming very tight coverage over more frequencies on both the Azimuth and Vertical zones in the room. This allows for accurate tracking of seated or standing participants without the pickup of HVAC, adjacent room, or fan noise.

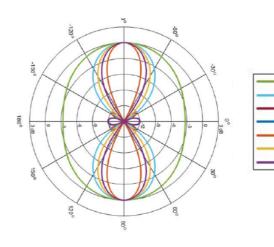




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Parlé capsule clusters are positioned and tuned to be focused in the speech range. This allows for an optimized approach of speech pickup even before DSP is introduced. This helps to get the best speech sound to the microphone before any additional processing is added.



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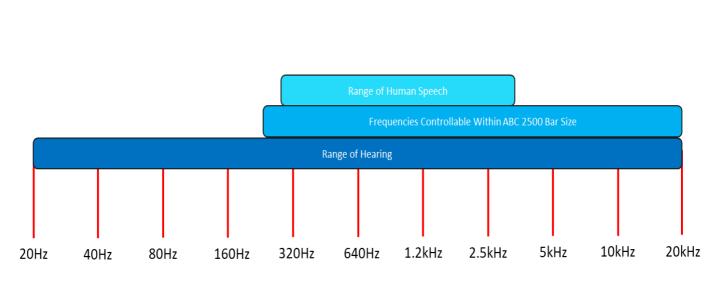
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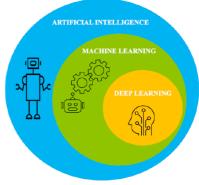
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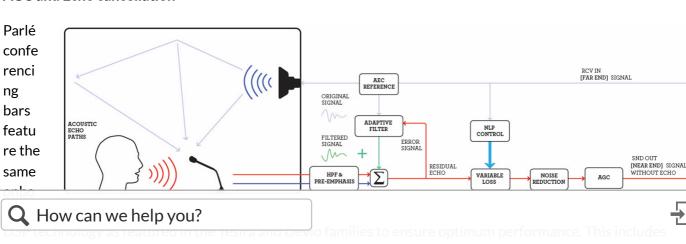


Biamp AI Noise Reduction

The Parlé ABC 2500 and VBC 2500 bars also feature Biamp's newest noise reduction algorithm that provides reduction of stationary room noise as well as non-stationary room sources. Previous noise reduction focused on sources in the room that were steady and made adjustments to reduce or remove. In our newest noise reduction intelligence, non stationary room sources that are short in duration or have a high variability can be reduced in the same manner.



This noise reduction is based on a deep learning algorithm that uses matching learning to identify and isolate human speech from other sources such as typing, coughing, or sounds from outside the room.



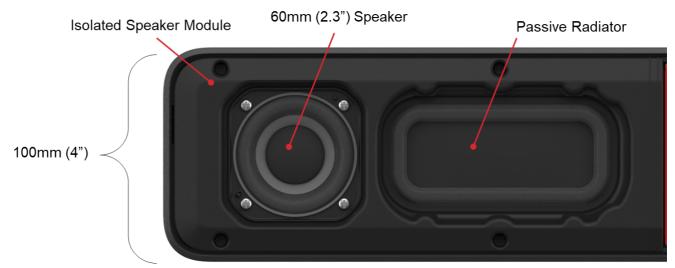
AGC and Echo cancellation

acoustic echo cancellation, AGC, speech sense, and non linear processing.

Speakers and Amplification

Both VBC 2500 and ABC 2500 conferencing bars have speaker components to provide the best in room audio performance. Stereo speakers have been provided to prepare for UC stereo conferencing needs.

- 60mm low distortion drivers are provided for uniform wide coverage.
- The innovative enclosure design includes high volume, sealed enclosures that allow for complete isolation of



the speaker assembly, passive radiator from the other bar components within the chassis.

- Dynamic Bass enhancement (DBE) is included to enhance low frequency content when at lower volumes, as well as ensure zoro low-end distortions at high volumes.
- 20W x 2 onboard amplification with distortion compensation DSP to maximize enclosure efficiency.

Camera

The VBC 2500 is designed around a 12MP image sensor for a 4K, 120° field of view. It is great fit for huddle spaces, or small to medium conference room design applications. The VBC 2500 incorporates Biamp Video Intelligence technology into its onboard DSP to provide a strong features that optimize camera performance to the far side participants. Below is a list of the features included in the VBC 2500 onboard camera.

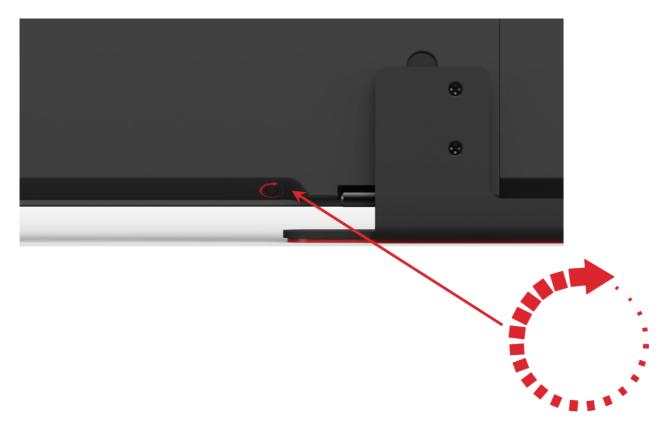
• LED indications for camera activity





- 4K, wide angle 120° field of view
- Electric Pan/Tilt/Zoom with 5x zoom
- Auto framing technology to keep participants in view
- Automatic privacy shutter
- Preset Recall
- Biamp Camera Control app for PC/MAC control and updates
- UVC camera control

Biamp LaunchTM



Parle' VBC 2500 features Biamp LaunchTM, and a suite of functions designed to speed up and optimize the installation and tuning of a Biamp conference system.

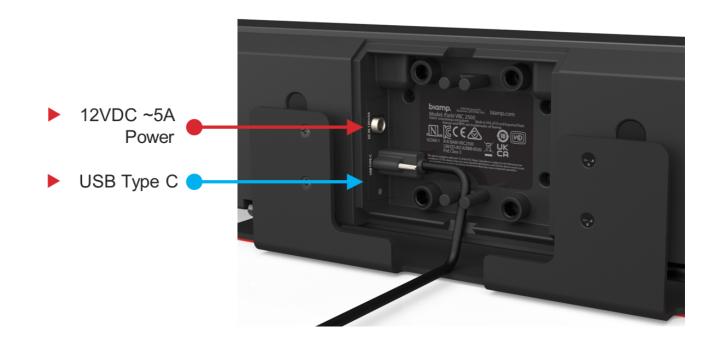
Auto-configuration may be initiated from the Launch button on the bar

The Launch-capable mics and amplifiers on the bar offer a known reference system to begin tuning the room. System adaptations are made based on measurements of the room's acoustic response and the loudspeaker behavior. Provides a room performance grade – before & after Launch.

Connectivity

Rear panel features power and USB type C connections for integration. Bar is powered by USB connection to UC client, Devio, or USB Hub devices. The VBC 2500 can also be powered by an optional 12VDC power supply.

- USB-C locking connection with provided USB cables
 - USB-C to USB C, 1M length, 20GBit/Sec Rated
 - USB-C to USB 3.1 A, 2M length, 5GBit/Sec Rated
- Locking 12VDC ~5A Power adapter PS-12-60 is included in Europe



Both ABC and VBC 2500 have a rated max output of 50W.

Integrated cable cover snaps in place for clean install. Includes rear panel mounting points for table, wall, or VESA mounts.





Factory reset is available via the

launch button on the Parlé conferencing bars. If reset is required, push and hold the launch button for <u>20</u> <u>seconds</u> to reset the VBC 2500 back to its factory settings including Launch configuration.



LED Indicators

Audio Privacy LED on the front with Red/Green mute status

indication tied to UC mute status. When configured as a speakerphone, the ABC 2500 uses Human Interface Device (HID) communication that can synchronize privacy mute state and volume control if the UC application supports this communication. HID mute synchronization and AEC offloading are supported by various UC platforms.



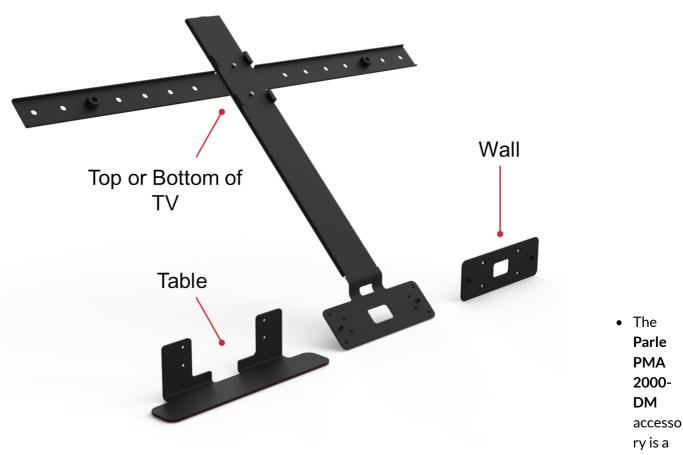
A camera privacy LED is provided on the front with white status indication tied to camera active state and physical privacy shutter.





Mounting and Accessories

The **ABC 2500** and **VBC 2500** ship with included table and wall mounts in the box for easy installation. Both included mounts attach via 4 mounting screws to the rear of the bar. The included wall mount allows for direct install to wall surface with cable pass-thru for ease of installation.



VESA mount adapter to allow for both the ABC 2500 and VBC 2500 to be attached to a display with top or bottom orientation.

• The **Parle PS-12-60** 12VDC power supply may be purchased as a supplemental power source for both the ABC 2500 and VBC 2500. Both conferencing bars are designed to power via the USB connection, but there may be scenarios where a dedicated power supply is required or desired.

Biamp Camera Controller software

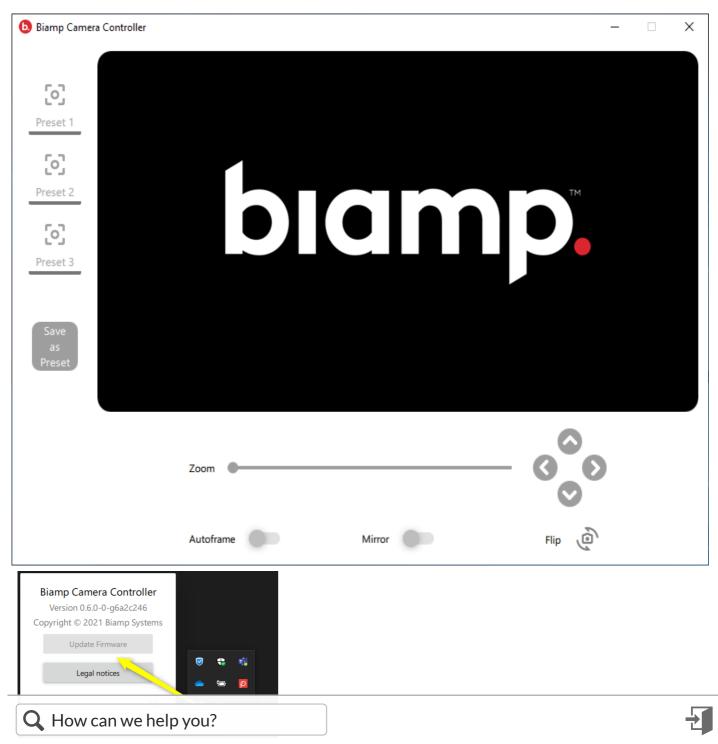
Biamp provides a camera management application that installs on PC or Mac for control and updates for the Vidi 250, ABC 2500 and VBC 2500 conferencing bars. The control software is available to download from the



Software Features

- Preset saving and recall
- Manual zoom and panning (ePTZ)
- Participant autoframing
- Image mirroring
- Image flip for under display mounting

In addition to the camera control features, the Biamp Camera Controller software is used for firmware updates to the hardware. These firmware updates will be made available for download, then can updates can be initiated via the camera software application. The firmware update screen can be access by selecting "about" from the camera control application icon.



- Biamp Camera Controller Software for Windows v1.0.0
- Biamp Camera Controller Software for Mac v1.0.0

Further reading

- Parlé VBC 2500 Conferencing Video Bar
- VBC 2500 Data Sheet
- VBC 2500 CAD files
- Biamp Camera Controller Software

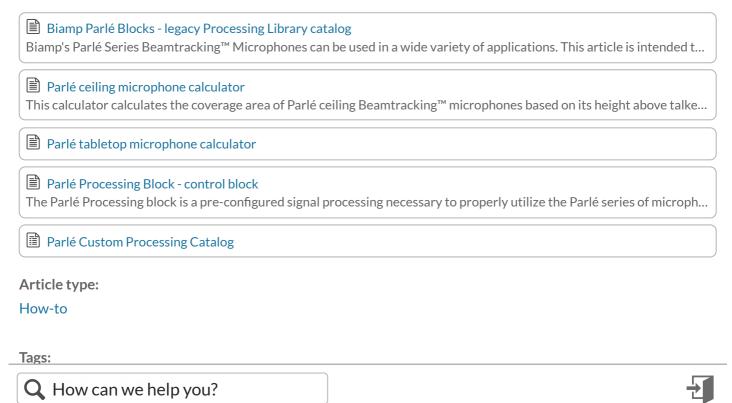
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