BOSE WORK MANAGEMENT

User Guide



INTRODUCTION4	-		
Availability and Compatibility	ļ		
Trademark Notices4			
User Agreement and Privacy Information	ļ		
DEVICE LIST AND MENU BAR	;		
Adding, Discovering, and Monitoring Videobar Devices	;		
Device List Icons/Symbols6	;		
Adding or Removing Columns	7		
Sorting the Device List	7		
Refreshing the Device List	3		
Manually Adding to the Device List	3		
Exporting the Device List)		
Searching Information10)		
Identifying Videobar Devices10)		
Selecting a Network1	1		
Removing Videobar Devices1	1		
Specifying a Global Password12)		
Managing Profiles13	5		
Downloading (Saving) a Profile13	Ś		
Uploading (Copying) a Profile13	Š		
Restoring a Profile12	ļ		
Rebooting Videobar Devices15	5		
Restoring Default Settings15	5		

Updating Firmware16			
Immediate Updates16			
Scheduled Updates17			
Scheduling a Firmware Update17			
Changing a Scheduled Update17			
Cancelling a Scheduled Update18			
Installing a Previous Firmware Version19			
Downloading Logs			
CONTROL PANEL			
Configuring Parameters20			
Configuration22			
Video25			
Audio			
Network30			
Wired30			
Wireless31			
SNMP32			
API			
Security - Certificates			
Certificate Signing Request34			
Install/View35			

INTRODUCTION

With remote management capabilities, Bose Work Management software makes it simple to deploy and manage Bose Videobar devices anywhere — from a single device in a meeting room to hundreds installed throughout a corporate campus. Control critical functions from a single location: push updates to all or only selected devices, discover all devices on the network, configure devices either individually or by group, create and deploy profiles, or send configuration commands directly.

Features

Real-time device status and control functionality for all your Bose Videobar devices from a single location

Schedule software updates to all or only selected devices

View, edit, save parameters by device or group of devices

Discover all devices on the network; create, save, and apply device profiles

Availability and Compatibility

The Bose Work Management application is compatible with Windows. You can download it at **PRO.BOSE.COM**.

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User Agreement and Privacy Information

To view the Bose Work Management application User Agreement or the Bose privacy policy, click the **menu** (≡), select **About Bose Work Management**, and then click **End User License Agreement** or **Privacy Policy**.

DEVICE LIST AND MENU BAR

The main screen of the app displays the Device List — a list of all Videobar devices on your network. Above the device list is the menu bar, which contains the **menu** (≡) and several buttons. This user interface enables you to:

monitor Videobar devices on your network

<u>add or remove columns</u> and <u>sort</u> the Device List to customize it to best suit your needs

<u>search</u> for a specific Videobar on your network

refresh the Device List

select the network(s) to search for Videobar devices

remove Videobar devices from the Device List

specify the **global password** for all Videobar devices on your network

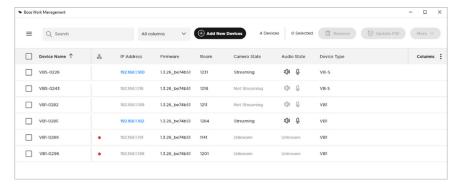
create and copy configuration profiles

reboot Videobar devices

restore Videobar devices to their default settings

update **firmware**

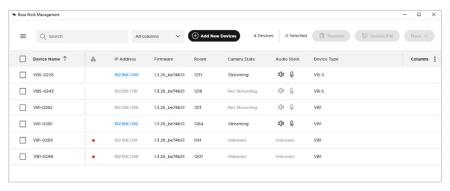
download system logs



Adding, Discovering, and Monitoring Videobar Devices

The Device List enables you to monitor the status of all Videobar devices on your network. You can organize the Device List to include columns for specific information (e.g., you can add a column for **Camera State**, which indicates whether the camera on a specific Videobar is streaming).

The app automatically and regularly scans the network in the background to discover new Videobar devices and add them to the Device List. You can also manually add Videobar devices to the Device List.



Device List Icons/Symbols

Icon/Symbol	Definition
8	Indicates the Network column.
•	The Videobar network connection is lost (disconnected). Appears in the Network column.
Q / &	The Videobar microphone is streaming and is unmuted or muted. Appears in the Audio State column.
Q / &	The Videobar microphone is not streaming and is unmuted or muted. Appears in the Audio State column.
	The Videobar loudspeaker is streaming and is unmuted or muted. Appears in the Audio State column.
(1)) / 好	The Videobar loudspeaker is not streaming and is unmuted or muted. Appears in the Audio State column.

Adding or Removing Columns

You can add or remove several optional columns to customize the Device List.

To add or remove optional columns to or from the Device List:

- Click Columns in the upper-right corner of the Device List.
- In list that appears, select a checkbox to add that column to the Device List, or deselect a checkbox to remove it. You can select **Show** All to select all columns.

The available columns are:

Building

Floor

Room

Capacity

MAC Address

Profile

Serial Number

Bluetooth State

Camera State

Call Status

USB Connection

Device Type

Audio State

Note: You cannot remove the columns for **Device Name**,

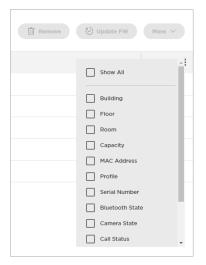
Network, IP Address, and Firmware.

Sorting the Device List

You can sort the Device List in ascending or descending order by the entries in one column or multiple columns.

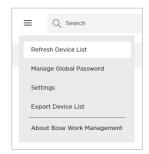
To sort a column, click the column heading and select a sorting option:

Ascending order: ↓ (A-Z)
Descending order: ↑ (Z-A)



Refreshing the Device List

The app automatically scans in the background to discover new Videobar devices on the network and add them to the Device List. To manually force this discovery process, click the **menu** (**=**) and select **Refresh Device List**.

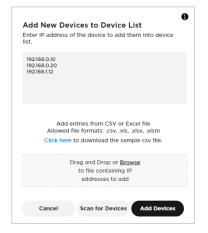


Manually Adding to the Device List

To add Videobar devices to the Device List by entering their IP addresses manually:

- Click the Add New Devices button at the top of the window.
- In the Add New Devices to Device List window that appears, you can do any of the following:
 - Enter the IP addresses in the larger field at the top of the window. Use one line per IP address or per range of IP addresses (click the Φ icon in the upper-right corner to view the acceptable formats of IP addresses to enter here).

Drag and drop a file containing the IP addresses over the smaller field at the bottom of the window. The acceptable file formats are CSV, XLS, XLSX, or



XLSM (click the **Click here** link to download an example of this type of file containing the proper IP address formatting).

Click **Add Devices** to add entries for each IP address to the Device List. The new Videobar devices will be added to the Device List whether they are online or offline. Information for each Videobar will appear if the Videobar is reachable by the host.

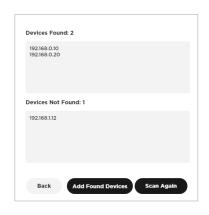
Click **Cancel** to exit the process without adding any Videobar devices.

 After entering the IP addresses of all desired Videobar devices, do one of the following:

> Click **Scan for Devices** to scan the network for Videobar devices with those IP addresses.

> > IP addresses of Videobar devices that are online and reachable by the host will be listed under **Devices**Found.

IP addresses of Videobar devices that are offline or not reachable by the host will be listed under **Devices Not Found**



You may click **Scan Again** to rescan the network or click **Add Found Devices** to add the Videobar devices with IP addresses listed under **Devices Found** to the Device List.

Click **Back** to return to the previous screen.

After manually adding a Videobar to the Device List, its information will appear next to it and continue to update in real time.

Exporting the Device List

You can export the contents of the Device List to a spreadsheet. Each row of the spreadsheet corresponds to a Videobar in the Device List, and each column of the spreadsheet corresponds to a setting column of the Device List:

Device Name

IP Address

Firmware

Building

Floor

Room

Capacity

MAC Address

Profile

Serial Number

Bluetooth State

Camera State

Call Status

USB Connection Device Type Audio State

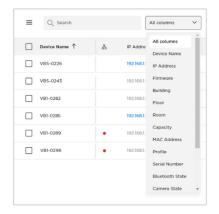
To export the current Device List:

- 1. Click the menu (≡) and select Export Device List.
- Select where you want to save the file, enter a unique name, and then click Save. The default file name is DeviceList-[year][month][day]_[time].

Searching Information

To search for a specific Videobar or parameters, click the **Search** field in the upper-left corner of the window, and enter the desired search term.

To narrow your search to a specific parameter, click the down arrow (V) in the **Search** field and select the desired parameter. Select **All columns** to search through all parameters.



Identifying Videobar Devices

To identify a specific Videobar in the network:

- Select the checkbox next to the desired Videobar in the Device List.
- Click More v in the upper-right part of the window, and then click Identify Device.

On that Videobar, a small section of lights in the center of the light bar will pulse purple repeatedly. This will continue until you stop the identification.



 Click More V in the upper-right part of the window, and then click Stop Device Identification.

Selecting a Network

To select the network(s) in which to search for Videobar devices:

- Click the menu (≡), and then click Settings.
- In the **Settings** window that appears, select the checkbox(es) for the network(s) you want to include in the search.

To enable or disable multicast discovery, select or deselect

Enable Multicast Discovery (mDNS).

To include all listed networks in the search, select the **Select All** checkbox.

Settings

Enable or Disable Device Discovery

Select any networks that apply

✓ Wi-Fi (10.0.0.2)

✓ Select All

Enable Multicast Discovery (mDNS)

Cancel

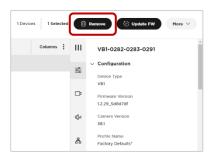
- 3. Click **Cancel** to exit the process without saving, or click **Save** to continue.
- 4. If you clicked **Save**, a confirmation message will appear. Click **OK** to continue.

Now, only the Videobar devices in the selected networks will appear in the Device List.

Removing Videobar Devices

To remove a Videobar from the Device List:

- Select the checkbox next to the desired Videobar in the Device List.
- 2. Click **Remove** in the upper-right part of the window.
- In the message that appears, click Cancel to keep the Videobar in the network or click Remove to remove it.



a

 If you clicked **Remove**, a confirmation message will appear. Click **OK** to continue, or click **Cancel** to cancel the operation.

If you clicked **OK**, the Videobar will no longer appear in the Device List.

Note: If a Videobar remains on the network it will be rediscovered automatically.



Specifying a Global Password

You can specify a global password for all Videobar devices in your network. This is helpful so you do not have to remember multiple unique passwords assigned to all Videobar devices.

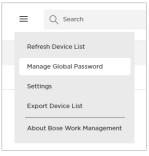
IMPORTANT: There is no password retrieval method available for the global password. If you forget or lose the global password, you must reset the Videobar to its original factory settings. The factory default password is **Bose123!**.

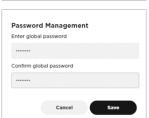
Note: We recommend changing the password after gaining access.

Note: To set or change the password of a specific Videobar, select the desired Videobar, and click the Configuration tab in the control panel. While setting or changing the password for a Videobar, you will be given the option to assign that password as the global password.

To set the global password:

- Click the menu (≡), and then click Manage Global Password.
- In the Password Management window that appears, enter the global password once in the first field and then again in the second field to confirm it.
- Click Save to save the global password or click Cancel to cancel the operation.
- If you clicked **Save**, a confirmation message will appear. Click **OK** to continue.





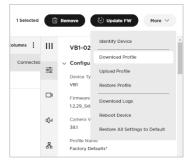
Managing Profiles

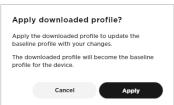
You can create and save a profile to include all of the parameters on one Videobar and quickly copy them to other Videobar devices.

Downloading (Saving) a Profile

To create and save (download) a profile from a Videobar:

- Select a Videobar in the Device List and configure its parameters as desired. (See <u>Control Panel</u> > <u>Configuring Parameters</u> for more information.)
- Click More V in the upper-right part of the window, and then click Download Profile.
- Select where you want to save the profile, enter a unique name for the profile, and then click **Save**.
- 4. In the **Apply download profile?**window that appears, click **Apply** to use the saved profile as the "baseline" profile of that Videobar, or click **Cancel** to cancel the operation.





Uploading (Copying) a Profile

To copy (upload) a profile to one or more Videobar devices:

- Select the Videobar device(s) in the Device List to which you want to copy the profile.
- Click More V in the upper-right part of the window, and then click Upload Profile(s).
- In the Upload Profile window that appears, drag and drop the desired profile onto the gray box, or click Browse to locate and select the desired profile, and then click Apply. Click Cancel to cancel the operation.

Note: Uploading a profile will override any current device settings.

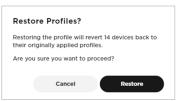


Restoring a Profile

To restore a profile by discarding any changes and reverting them to their originally applied profiles:

- Select the Videobar device(s) in the Device List whose profile(s) you want to restore.
- Click More V in the upper-right part of the window, and then click Restore Profile(s).
- In the Restore Profiles? window that appears, click Restore to discard the changes and revert to the previous settings, or click Cancel to cancel the operation.

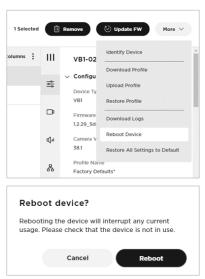




Rebooting Videobar Devices

To manually reboot one or more Videobar devices:

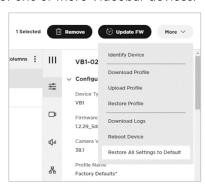
- Select the Videobar device(s) that you want to reboot in the Device List.
- Click More V in the upper-right part of the window, and then click Reboot Device(s).
- In the Reboot device(s)? window that appears, click Reboot to reboot the Videobar device(s), or click Cancel to cancel the operation. Note that Videobar operation will be interrupted as it reboots.



Restoring Default Settings

To restore the factory default settings of one or more Videobar devices:

- Select the Videobar device(s) in the Device List whose settings you want to restore to their defaults.
- Click More v in the upper-right part of the window, and then click Restore All Settings to Default.
- In the Restore Factory Defaults? window that appears, click Restore to restore the factory default settings of the selected Videobar device(s) or click Cancel to cancel the operation.





Updating Firmware

You can update the firmware of one or more Videobar devices immediately or at a scheduled time. You can also install an older version of the firmware to revert to a previous release.

IMPORTANT: After the firmware installation process has completed on a Videobar, that Videobar will reboot automatically.

To view the currently installed firmware version on a Videobar:

- Select the checkbox next to the desired Videobar in the Device List, enter its password, and then click **Submit**.
- 2. In the control panel, click the Configuration tab.

The version number will be displayed under Firmware Version.

Update Firmware

1 device running firmware v1.2.29

Firmware v1.2.30 is available

Upload and Install another version

Browse the Bose Work website to download previous

Date and time for update (Device local time)

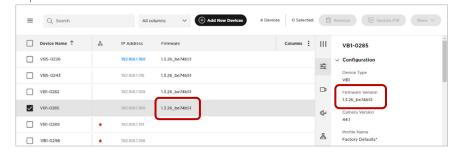
12:43 PM (L)

Drag and Drop or Browse

Cancel Install

Install v1.2.30

Note: The current firmware version for each Videobar is also shown in the **Firmware** column of the Device List.



Immediate Updates

To immediately install the latest firmware version on one or more Videobar devices:

- Select the checkbox(es) next to the desired Videobar device(s) in the Device List.
- 2. Click **Update FW** in the upper-right corner of the window.
 - In the **Update Firmware** window that appears, the version number of the currently installed firmware will appear at the top.
- 3. If a newer version of the firmware is available, an **Install v**___ button will be shown (where **v**___ is the version number of the latest available firmware).

Scheduled Updates

You can schedule a firmware update to occur at a specific date and time (e.g., outside of regular business hours to avoid any impact on users).

A clock icon will be shown in the **Firmware** column of the Device List for any Videobar with a scheduled firmware update.



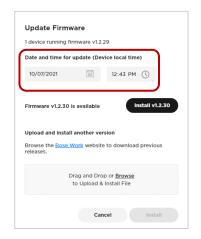
Scheduling a Firmware Update

To schedule a firmware update:

- Select the checkbox(es) next to the desired Videobar device(s) in the Device List.
- Click **Update FW** in the upper-right corner of the window.

In the **Update Firmware** window that appears, the version number of the currently installed firmware will appear at the top.

- Under Date and time for update (Device local time), select the desired date and time for the update. You can type directly in the fields or click the calendar and clock icons.
- 4. Click Schedule Install.



Changing a Scheduled Update

To change the date and time of a scheduled update:

- Select the checkbox(es) next to the desired Videobar device(s) in the Device List.
- Click Edit FW Update in the upper-right corner of the window.
 Alternatively, in the Configuration section of the Control Panel, click
 Edit under Firmware Version.

In the **Edit Scheduled Firmware Update** window that appears, the message will show the version numbers of the currently installed firmware and the firmware that will be installed.



- Under Date and time for update (Device local time), select the desired date and time for the update. You can type directly in the fields or click the calendar and clock icons.
- 4. Click **Cancel** to close the window without making any changes or click **Reschedule Install** to continue.

If you clicked **Reschedule Install**, the **Firmware update rescheduled** message appears in the lower-left part of the window.

Cancelling a Scheduled Update

To cancel a scheduled update:

- Select the checkbox(es) next to the desired Videobar device(s) in the Device List.
- In the Configuration section of the Control Panel, click Cancel under Firmware Version.
- In the Cancel Scheduled Firmware
 Update window that appears, click
 Cancel Update to cancel the update or Don't Cancel to close the window without making any changes.



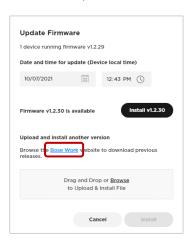


Installing a Previous Firmware Version

To install an older version of the firmware to revert to a previous release:

- Select the checkbox(es) next to the desired Videobar device(s) in the Device List.
- 2. Click **Update FW** in the upper-right corner of the window.
- In the **Update Firmware** window that appears, click the **Bose Work** link to locate and download the firmware version you wish to install.
- In the gray box on the Firmware window, drag and drop or click
 Browse to locate and select the .swu file for the desired firmware, and then click Install below the gray box.

If you clicked **Install**, the **File upload in progress** message appears in the lower-left part of the window. When the process is complete, the Videobar will reboot automatically.



Downloading Logs

To download system log files:

- Select the Videobar device(s) in the Device List whose system log files you want to download.
- Click More V in the upper-right part of the window, and then click Download Logs.
- Select where you want to save the system log files, enter a unique name, and then click Save.



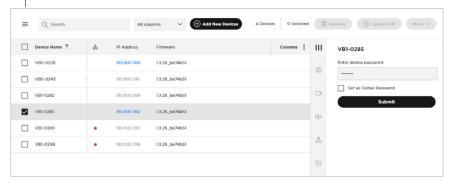
CONTROL PANEL

The app enables you to administer one or multiple Videobar devices via the control panel. Use this interface to configure a range of parameters, including Videobar identification and profile parameters, camera settings and presets, microphone beams and settings, and settings for both wired and wireless network connections.

Configuring Parameters

To open the control panel for a Videobar, select the checkbox to the left of the **Device Name** in the Device List, enter the password in the control panel that appears on the right side of the window, and then click **Submit**.

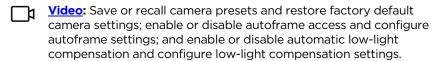
Note: You can set a **global password** instead of specifying a different password for each Videobar.



The control panel includes the following sections. Jump to each by clicking its respective tab.



<u>Configuration</u>: Install firmware; configure user access to certain video, audio, and connectivity settings; configure profiles, system settings, and identification settings.



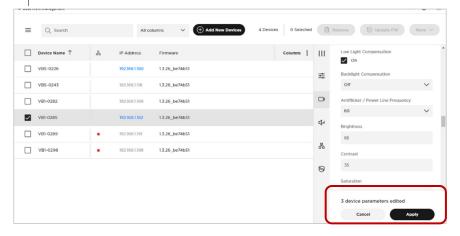


Network: Enable or disable both wired and wireless connections, configure Internet Protocol (IP) settings for network connections, and configure wireless network security settings.



<u>Security - Certificates</u>: Create certificate signing requests (CSRs), transfer CSRs to a host for certificate authority (CA) generation, deploy or install a CA certificate, and view, activate, or delete a certificate.

Note: After you edit a parameter, **Cancel** and **Apply** buttons appear at the bottom of the control panel. Click **Cancel** to discard the changes or click **Apply** to save the changes and implement them for the selected Videobar device(s).



Configuration

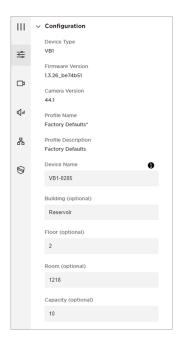
The Configuration section includes firmware information and updating features; user access to certain video, audio, and connectivity settings; controls to manage profiles, system settings, and identification settings:

Firmware Version: The version number of the currently installed firmware. If a newer version of the firmware is available, a message will appear next to a link to install the latest version. See **Updating Firmware** to learn more.

Camera Version (VB1 only): The version number of the Bose Videobar VB1 camera software.

Profile Name: The unique name of the configuration **profile** that was uploaded to the Videobar.

Profile Description: An identifying description of the configuration **profile**.



Device Name: A configurable name assigned to the Videobar. (The device name may contain case-sensitive alphabetical characters [A-Z], numbers [0-9], or hyphens [-]. Spaces and other special characters are not allowed.)

Building: A configurable setting to identify the location of the Videobar.

Floor: A configurable setting to identify the location of the Videobar.

Room: A configurable setting to identify the location of the Videobar.

Capacity: A configurable setting to identify the room capacity of the location of the Videobar.

User Access: Select or deselect these checkboxes to enable or disable user access to the following features:

Microphone Mute: Enables or disables the ability to mute the Videobar microphone.

WiFi: Enables or disables wireless network connection.

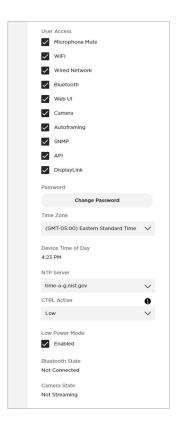
Wired Network (VB1 only): Enables or disables wired network connection.

Bluetooth: Enables or disables Bluetooth connectivity.

Web UI: Enables or disables the ability to access the Bose Work Configuration WebUI.

Camera: Enables or disables the Videobar camera.

Autoframing: Enables or disables the ability to turn autoframe on or off. Autoframe automatically adjusts the pan/tilt/zoom (PTZ) camera settings to present a panoramic view of all participants in the room at all times.



SNMP: Enables or disables SNMP (simple network management protocol) over the network. See **SNMP** to learn more.

API: Enables or disables REST API over the network. See **API** to learn more.

DisplayLink (VB1 only): Enables or disables the HDMI Display port output on Bose Videobar VB1. The default setting is **Disabled**.

Password: Click **Change Password** to change the password for a Videobar.

Passwords must contain:

- 8-12 characters
- an uppercase letter
- a lowercase letter
- a number
- a special character

Note: Select or deselect the **Set as Global Password** checkbox to enable or disable use of the new password for all Videobar devices in the network.

Time Zone: Select the local time zone.

Device Time of Day: Read-only display of the current time of the Videobar.

NTP Time Server: Select or enter the IP address or domain name of the Network Time Protocol (NTP) server.

CTRL Active (VB1 only): Specify the active state of the connected alarm system: **High** (active) or **Low** (inactive).

Low Power Mode: Enable or disable Low Power Mode. When enabled, the Videobar will enter a standby mode with low power consumption after being idle for two hours.

Bluetooth State: Name of any device that is paired and connected to the Videobar via a *Bluetooth* connection.

Camera State: The camera (video) status: Streaming or Not Streaming.

Video

The Video section includes controls for configuring the Videobar camera, autoframing, and image processing:

Camera Position: Adjust the Pan, Tilt, and Zoom settings for the camera.

Preset 1: Adjust the **Pan**, **Tilt**, and **Zoom** settings for the **Preset 1** camera position.

Preset 2: Adjust the **Pan**, **Tilt**, and **Zoom** settings for the **Preset 2** camera position.

Home: Adjust the **Pan**, **Tilt**, and **Zoom** settings for the **Home** camera position.

Autoframe Status: Select or deselect this checkbox to turn autoframe on or off.

Framing Mode (VB-S only): Select the autoframing mode: Individual (Follow-Me) for faster tracking or Group (Conferencing) for slower, more deliberate tracking. (Group is the default setting for VB1.)

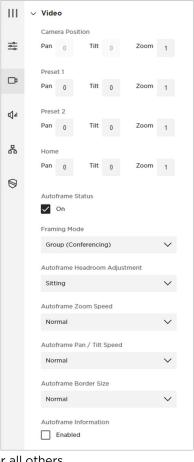
Autoframe Headroom Adjustment (VB1 only): Select Standing or Sitting to specify the amount of space between the top of the camera frame and a subject's head. Select Standing

for stand-up meetings and Sitting for all others.

Autoframe Zoom Speed (VB1 only): Select how quickly the Videobar camera zooms in and out when people move in the room: **Slow**, **Normal**, or **Fast**.

Autoframe Pan/Tilt Speed (VB1 only): Select how quickly the Videobar camera pans and tilts when people move in the room: **Slow, Normal,** or **Fast**.

Autoframe Border Size (VB1 only): Adjusts the border size of the framed image: **Small**, **Normal**, or **Large**. For minimal border (maximum zoom), select **Small**.

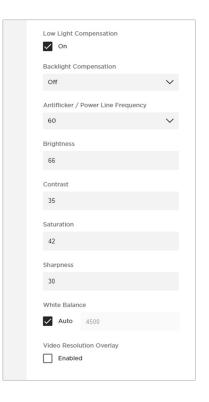


Autoframe Information (VB1 only): Select or deselect this checkbox to enable or disable this troubleshooting feature. When set to **Enabled**, autoframe objects will be superimposed on the video image. These will be visible to the far-end meeting participants and in the self-view.

Low-light Compensation: Select or deselect this checkbox to enable or disable automatic low-light compensation. When enabled, Low-light Compensation optimizes video in dim lighting conditions.

Note: You can enable lowlight compensation only when Backlight Compensation is set to **Off**.

Backlight Compensation: This setting adjusts the image exposure in conditions with bright light sources. For example, Backlight Compensation will better illuminate people who are silhouetted in front of bright lighting. (When Backlight Compensation is enabled, Low Light Compensation will be set to Off automatically.)



For VB1, select **Low**, **Medium**, or **High** to set the level of Backlight Compensation or select **Off** to disable it.

For VB-S, select **On** or **Off** to enable or disable Backlight Compensation.

Antiflicker/Power Line Frequency: Select **50** or **60** specify the AC frequency (in Hz) of lighting in the room; this feature will compensate for any flickering seen in the video image. Select **Off** to disable this feature.

Brightness: Set the overall lightness or darkness of the image.

Contrast: Set the difference between the light and dark areas of the image.

Saturation: Set the depth of colors in the image.

Sharpness: Set the image clarity.

White Balance: Set the balance of color temperature of the light source. Select **Auto** to set the balance automatically.

Video Resolution Overlay: Select or deselect this checkbox to enable or disable this troubleshooting feature. When enabled, the screen resolution will be superimposed on the video image. This will be visible to the far-end meeting participants and in the self-view.

Audio

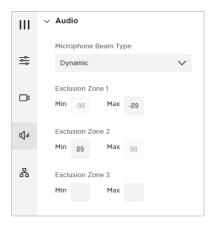
The Audio section provides access to microphone array settings (including beam configuration), audio settings, and audio input and output levels:

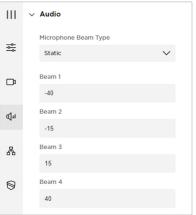
Microphone Beam Type: Select **Static** or **Dynamic** to specify whether the microphone beams are automatically or manually adjusted.

The default beam type is **Dynamic**, which includes a single beam that freely searches for the loudest sound in the room and additional dynamic beams that are automatically directed at the people speaking in the room.

Static beams can be manually aimed at designated speaking locations.

Microphone Beams 1-4: Specify the angle of each beam to optimize the detection of people speaking in the room. You can do this only when the Microphone Beam Type is set to Static. You can create a maximum of four beams.





Note: Leaving a beam's value blank removes it from the microphone beam coverage.

Exclusion Zones 1–3: Specify the **Min** and **Max** angles of the area in which dynamic microphone beams will never be directed. You can do this only when the **Microphone Beam Type** is set to **Dynamic**. There is a maximum of three exclusion zones.

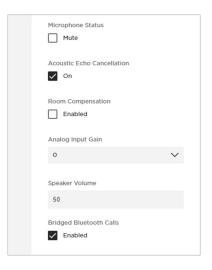
Note: Leaving these values blank removes that exclusion zone from the coverage area.

Microphone Status: Mutes or unmutes the Videobar microphone.

Acoustic Echo Cancellation:

Enable or disable Acoustic Echo Cancellation (AEC), which suppresses acoustic feedback between the loudspeaker and the microphone.

Room Compensation (VB1 only): Enable or disable audio processing for rooms that are more reverberant. Enable this feature to improve mic2rophone intelligibility in a reverberant room (e.g., with glass walls). The default is **Disabled**.



Analog Input Gain (VB1 only): Set the gain as needed to balance the volume of an external source with the other audio sources (USB and *Bluetooth* audio signal).

Speaker Volume: Set the audio level of the Bose Videobar loudspeaker.

Bridged *Bluetooth* **Calls:** Enable or disable the ability of *Bluetooth* calls and media to bridge to the active UC call.

Network

The Network section provides access to wired, wireless, SNMP, and REST API configuration settings.

Wired

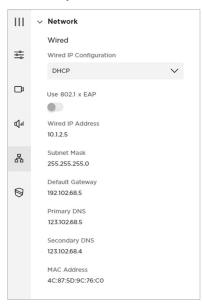
This section is available for Bose Videobar VB1 only.

Wired IP Configuration: Select the IP configuration type: **DHCP** or **Static**.

> DHCP (Dynamic Host Configuration Protocol) dynamically assigns the Wired IP Address, Subnet Mask, and other network parameters (when applicable) for the Videobar.

Select **Static** to manually enter a **Wired IP Address** and **Subnet Mask**.

Use 802.1 x EAP: Click this switch to enable or disable connection to an 802.1 x EAP network with advanced security settings. When enabled, use the menus and fields that are shown to specify the settings:



EAP Method: Select PEAP, TLS, or TTLS.

Phase 2 Authentication: Select None, MSCHAPV2, or MD5.

Identity

Anonymous Identity

Password (Select or deselect the **Show Password** checkbox to show or hide the password.)

The following optional settings can only be configured when the **Wired IP Configuration** is set to **Static**. These settings are read-only when the **Wired IP Configuration** is set to **DHCP**. The **MAC Address** is always read-only.

Wired IP Address: The IP address of the wired network.

Subnet Mask: The IP address of the wired network's subnet mask.

Default Gateway: The IP address for the Videobar used to forward traffic to other networks.

Primary DNS: The IP address of the primary DNS server that assigns an IP address to a Videobar.

Secondary DNS: The IP address of the primary DNS server that assigns an IP address to a Videobar when the Primary DNS server is not available.

MAC Address: The media access control address, which is a unique identifying number assigned to the network interface controller (NIC).

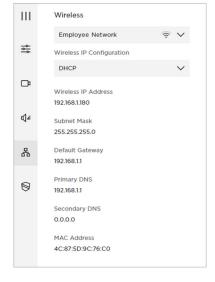
Note: Videobar also supports auto-IP. If **Wired IP Configuration** is set to **DHCP** and no DHCP server is found, the Videobar will automatically assign itself an IP address in the auto-IP range.

Wireless

Wireless Network: This menu includes a list of available networks, the signal strength of each network, and a lock icon if the network is password-protected. If you select a WPA2 network, enter the password in the field that appears, and then click Join to connect to the network.

Wireless IP Configuration: Select the IP configuration type: **DHCP** or **Static**.

DHCP (Dynamic Host Configuration Protocol) dynamically assigns the Wireless IP Address, Subnet Mask, and other network parameters (when applicable) for the Videobar.



Select **Static** to manually enter a **Wireless IP Address** and **Subnet Mask**.

The following optional settings can only be configured when the **Wireless IP Configuration** is set to **Static**. These settings are read-only when the **Wireless IP Configuration** is set to **DHCP**. The **MAC Address** is always read-only.

Wireless IP Address: The IP address of the wireless network.

Subnet Mask: The IP address of the wireless network's subnet mask.

Default Gateway: The IP address for the Videobar used to forward traffic to other networks.

Primary DNS: The IP address of the primary DNS server that assigns an IP address to a Videobar.

Secondary DNS: The IP address of the primary DNS server that assigns an IP address to a Videobar when the Primary DNS server is not available.

MAC Address: The media access control address, which is a unique identifying number assigned to the network interface controller (NIC).

Note: Videobar also supports auto-IP. If **Wireless IP Configuration** is set to **DHCP** and no DHCP server is found, the Videobar will automatically assign itself an IP address in the auto-IP range.

SNMP

Bose Videobar supports the Simple Network Management Protocol (SNMP) for network management and monitoring. Videobar supports SNMP v3.

Authentication Protocol: Select an optional authentication protocol to ensure the identity of users.

Username: Enter the username of the user who can access SNMP v3 information (maximum of 32 characters).

Password: Enter the password for the user who can access SNMP v3 information (maximum of 32 characters). This password is sometimes referred to as the **authentication passphrase**.

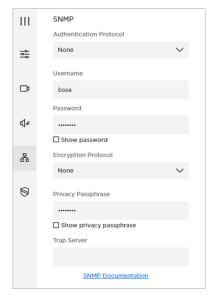
Encryption Protocol: Select an optional privacy protocol to ensure the confidentiality of data.

Privacy Passphrase: Enter the

privacy passphrase for the user who can access SNMP v3 information. You cannot enable privacy without enabling authentication.

Trap Server: Enter the IP address of the SNMP server. The Videobar will send traps and event notifications to this address per the MIB.

Note: Click the **SNMP Documentation** link for detail on specific polls and traps supported by Videobar via SNMP.



API

Bose Videobar supports representational state transfer application programming interface (REST API) for network management and monitoring.

These settings are available only if the API is enabled. If the API is disabled, **Disabled** will appear in this section in place of these settings. Use the Bose Work Configuration app or WebUI to enable or disable the API; you cannot enable or disable the API within the Bose Work Management app.

Username: Enter the username of the user who can access REST API information (maximum of 32 characters).



Password: Enter the password for the user who can access REST API information (maximum of 32 characters). Select or deselect the **Show Password** checkbox to show or hide the password.

Note: Click the **REST API Documentation** link to see the REST API Guide, which contains information on the REST API variables and operations that Bose Videobar supports.

Security - Certificates

The Security - Certificates section provides access to certificate management settings. Digital certificates contain information needed to authenticate identities of users. devices, organizations, servers, etc. This section is available for Bose Videobar VB1 only.



Certificate Signing Request

The Certificate Signing Request section lets you create certificate signing requests (CSRs).

To create a new CSR, click Create CSR. You can create only one CSR at a time.

In the Create New CSR window that appears, configure the following settings:

Use Case: Select the use case: Web Server or 802.1X EAP-TLS.

Hash Algorithm: Select the hash algorithm: SHA-256, SHA-384, or SHA-512.

Enter any of the following information:

> Common Name (CN) (This is the only required field.)

Organizational Unit (OU)

Organization (O)

City or Locality (L)

State or Province (ST)

Country (C)

SAN: DNS Domain Name

SAN: Other Name

SAN: IP Address SAN: UPN

Click **Create** to create the CSR or click **Cancel** to close the window.

Pending CSRs will be shown under **Pending Certificate Signing Requests**.



Install/View

The Install/View section lets you install certificates.

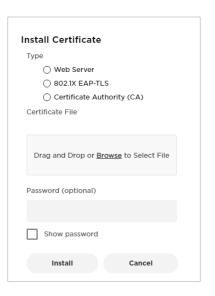
To install or view a new certificate, click **Install**.

In the **Install Certificate** window that appears, configure the following settings:

Type: Select the type of certificate: Web Server, 802.1X EAP-TLS, or Certificate Authority.

Certificate File: In the gray box under **Certificate File**, either drag and drop the desired certificate file or click **Browse** to locate and select the desired certificate file.

Password: Enter the password for the user who can access the certificate (maximum of 32 characters). Select or deselect the **Show Password** checkbox to show or hide the password.



Click **Install** to install the certificate or click **Cancel** to close the window.

Installed certificates will be shown under Installed Certificates.

