

Bose Work Management

User Guide



Introduction	4
Availability and Compatibility.....	4
Trademark Notices.....	4
User Agreement and Privacy Information.....	4
Device List and Menu Bar.....	5
Monitoring VB1 Devices.....	6
Adding/Removing Columns	6
Sorting the Device List.....	7
Refreshing the Device List.....	7
Searching Information.....	7
Identifying VB1 Devices	7
Selecting a Network	8
Removing VB1 Devices.....	8
Specifying a Global Password.....	9
Managing Profiles	9
Downloading (Saving) a Profile	9
Uploading (Copying) a Profile.....	10
Restoring a Profile.....	10
Rebooting VB1 Devices	10
Restoring Default Settings	10
Updating Firmware	11
Immediate Updates	11
Scheduled Updates.....	12
Scheduling a Firmware Update.....	12
Changing a Scheduled Update	12
Cancelling a Scheduled Update	13
Installing a Previous Firmware Version	13
Downloading Logs	13

Control Panel 14

- Configuring Parameters14
- Configuration Section16
- Video Section18
- Audio Section..... 20
- Network Section.....21
 - Wired Network Settings 21
 - Wireless Network Settings 22
 - SNMP Settings 23

Introduction

With remote management capabilities, Bose Work Management software makes it simple to deploy and manage Bose Videobar VB1s 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 VB1 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 and can be downloaded from [PRO.BOSE.COM](https://pro.bose.com).

Trademark Notices

Bose, Bose Work, and Videobar are trademarks of Bose Corporation.

Bluetooth® is a registered trademark of Bluetooth SIG, Inc.

Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation.

All other trademarks are the property of their respective owners.

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 and then click **End User License Agreement**.

Device List and Menu Bar

The main screen of the app displays the Device List—a list of all VB1s on your network. Above the device list is the menu bar, which contains menu (☰) and several buttons. This user interface enables you to:

[monitor VB1s](#) on your network

[add/remove columns](#) and [sort](#) the Device List to customize it to best suit your needs

[search](#) for a specific VB1 on your network

[refresh](#) the Device List

[select the network\(s\)](#) to search for VB1s

[remove VB1s](#) from a network

specify the [global password](#) for all VB1s on your network

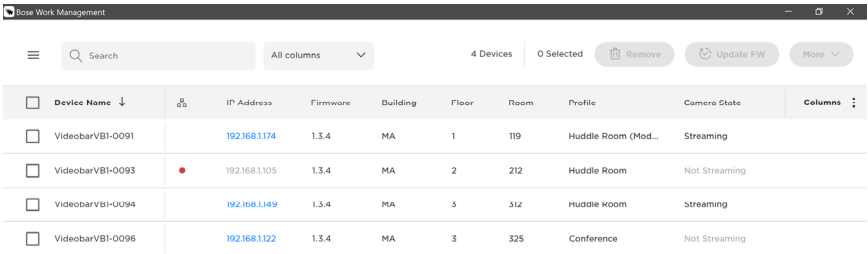
create and copy configuration [profiles](#)

[reboot VB1s](#)

restore VB1s to their [default settings](#)

update [firmware](#)

download [system logs](#)



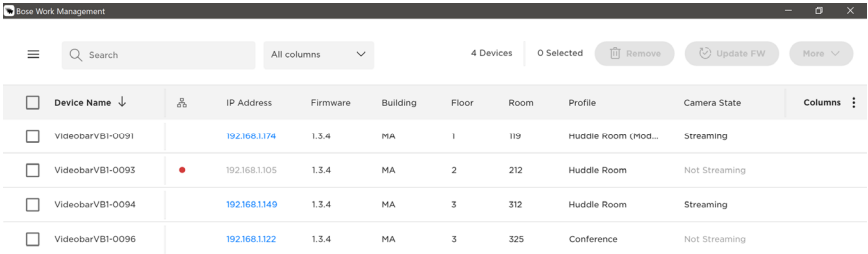
The screenshot shows the Bose Work Management interface. At the top, there is a search bar, a column selector, and status indicators for 4 devices and 0 selected. Below the menu bar is a table with columns for Device Name, IP Address, Firmware, Building, Floor, Room, Profile, and Camera State. The table contains four rows of device data.

<input type="checkbox"/>	Device Name ↓		IP Address	Firmware	Building	Floor	Room	Profile	Camera State	Columns ⋮
<input type="checkbox"/>	VideobarVB1-0091		192.168.1.174	1.3.4	MA	1	119	Huddle Room (Mod...	Streaming	
<input type="checkbox"/>	VideobarVB1-0093		192.168.1.105	1.3.4	MA	2	212	Huddle Room	Not Streaming	
<input type="checkbox"/>	VideobarVB1-0094		192.168.1.149	1.3.4	MA	3	312	Huddle Room	Streaming	
<input type="checkbox"/>	VideobarVB1-0096		192.168.1.122	1.3.4	MA	3	325	Conference	Not Streaming	

Monitoring VB1 Devices

The Device List enables you to monitor the status of all VB1s 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 a VB1's camera is streaming).

Note: A red dot in the Network column indicates that the connection to the VB1 has been lost (disconnected). Device parameters are not visible for disconnected VB1s.



<input type="checkbox"/>	Device Name ↓		IP Address	Firmware	Building	Floor	Room	Profile	Camera State	Columns ⋮
<input type="checkbox"/>	VideobarVB1-0091		192.168.1.174	1.3.4	MA	1	119	Huddle Room (MOD...	Streaming	
<input type="checkbox"/>	VideobarVB1-0093	●	192.168.1.105	1.3.4	MA	2	212	Huddle Room	Not Streaming	
<input type="checkbox"/>	VideobarVB1-0094		192.168.1.149	1.3.4	MA	3	312	Huddle Room	Streaming	
<input type="checkbox"/>	VideobarVB1-0096		192.168.1.122	1.3.4	MA	3	325	Conference	Not Streaming	

Adding/Removing Columns

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

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

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

The available columns are:

Building

Floor

Room

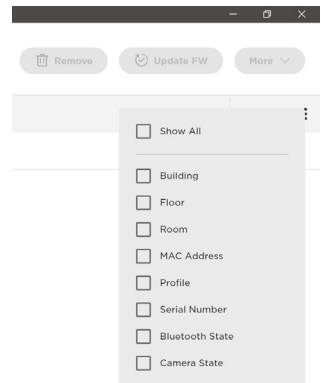
MAC Address

Profile

Serial Number

Bluetooth State

Camera 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.

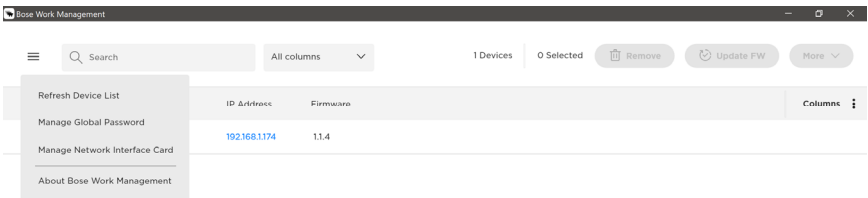
To sort a column, click the column heading and select a sorting option:

Ascending order: ↓ and **A-Z**

Descending order: ↑ and **Z-A**

Refreshing the Device List

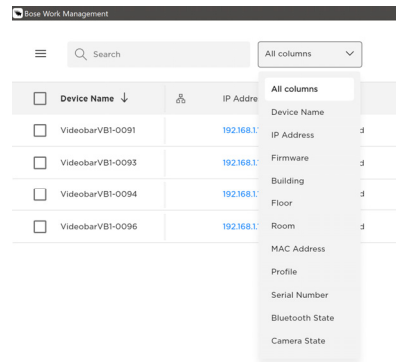
The app automatically scans in the background to discover new VBIs on the network and add them to the Device List. To manually force this discovery process, click the menu (☰) and select **Refresh Device List**.



Searching Information

To search for a specific VBI 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 (∨) in the **Search** field and select the desired parameter. Select **All columns** to search through all parameters.



Identifying VB1 Devices

To identify a specific VBI device in the network,

1. Select the checkbox next to the desired VBI in the Device List.
2. Click **More** ∨ in the upper-right part of the window, and then click **Identify Device**.

On that VBI, a small section of lights in the center of the light bar will pulse purple repeatedly.

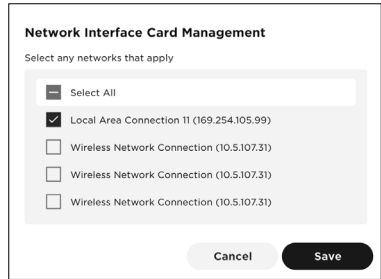
Selecting a Network

To select the network(s) in which to search for VB1s:

1. Click the menu (☰), and then click **Manage Network Interface Card**.
2. In the window that appears, select the checkbox(es) for the network(s) you want to include in the search.

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

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 VB1s in the selected networks will appear in the Device List.

Removing VB1 Devices

To remove a VB1 from your network:

1. Select the checkbox next to the desired VB1 in the Device List.
2. Click **Remove** in the upper-right part of the window.
3. In the message that appears, click **Cancel** to keep the VB1 in the network or click **Remove** to remove it.
4. If you clicked **Remove**, a confirmation message will appear. Click **OK** to continue.

The VB1 will no longer appear in the Device List.

Note: If a VB1 remains on the network it will be rediscovered automatically.

Specifying a Global Password

You can specify a global password for all VB1s in your network. This is helpful so you do not have to remember multiple unique passwords assigned to all VB1s.

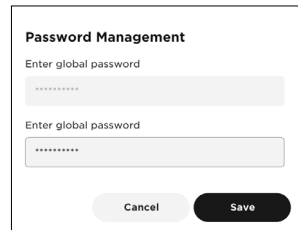
IMPORTANT: *There is no password retrieval method available for the global password. If you forget/lose the global password, you must reset the VB1 to its original factory settings. The factory default password is **Bose123!***

Note: *We recommend changing the password after gaining access.*

Note: *To set or change the password of a specific VB1, select the desired VB1, and click the **Configuration** tab in the control panel. While setting or changing the password for a VB1, you will be given the option to assign that password as the global password.*

To set the global password:

1. Click the menu (☰), and then click **Manage Global Password**.
2. In the window that appears, enter the global password once in the first field and then again in the second field to confirm it.
3. Click **Cancel** to exit the process without saving, or click **Save** to save the global password.
4. If you clicked **Save**, a confirmation message will appear. Click **OK** to continue.



Password Management

Enter global password
.....

Enter global password
.....

Cancel Save

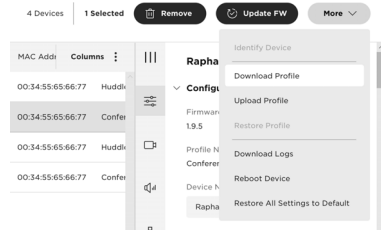
Managing Profiles

You can create and save a profile to include all of the parameters on one VB1 and quickly copy them to other VB1s.

Downloading (Saving) a Profile

To create and save (download) a profile from a VB1:

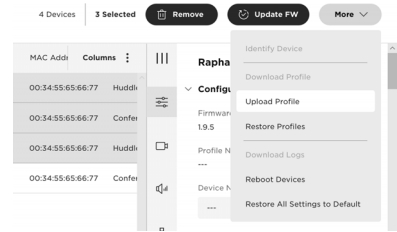
1. Select a VB1 in the Device List and configure its parameters as desired. (See [Configuring Parameters](#) for more information.)
2. Click **More** ∨ in the upper-right part of the window, and then click **Download Profile**.
3. Select where you want to save the profile, enter a unique name for the profile, and then click **Save**.



Uploading (Copying) a Profile

To copy (upload) a profile to one or more VB1s:

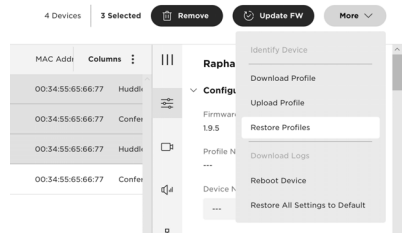
1. Select the VB1(s) in the Device List to which you want to copy the profile.
2. Click **More** ∨ in the upper-right part of the window, and then click **Upload Profile**.
3. Locate and select the profile you want to upload to the VB1(s), and then click **Save**.



Restoring a Profile

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

1. Select the VB1(s) in the Device List whose profile(s) you want to restore.
2. Click **More** ∨ in the upper-right part of the window, and then click **Restore Profiles**.
3. Click **Cancel** to return to the previous window, or click **Restore** to discard the changes and revert to the previous settings.



Rebooting VB1 Devices

To manually reboot one or more VB1s, select the VB1(s) in the Device List, click **More** ∨ in the upper-right part of the window, and then click **Reboot Device**.

Restoring Default Settings

To restore the factory default settings of one or more VB1s, select the VB1(s) in the Device List, click **More** ∨ in the upper-right part of the window, and then click **Restore All Settings to Default**.

Updating Firmware

You can update the firmware of a single VB1 or multiple VB1s immediately or at a scheduled time. You can also install an older version of the firmware to revert to a previous release.

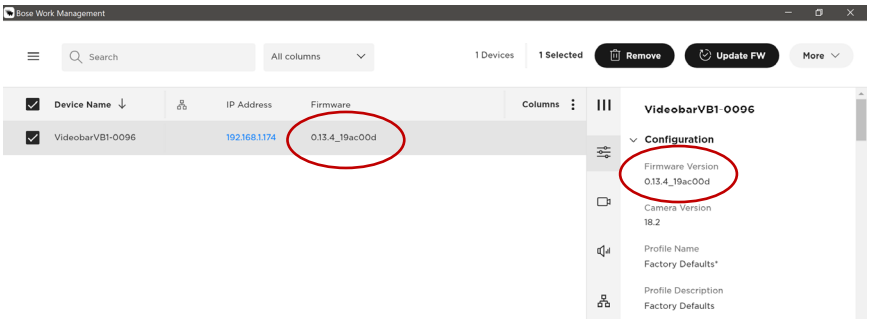
IMPORTANT: After the firmware installation process has completed on a VB1, that VB1 will reboot automatically.

To view the currently installed firmware version on a VB1:

1. Select the checkbox next to the desired VB1 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**.

Note: The current firmware version for each VB1 is also shown in the **Firmware** column of the Device List.



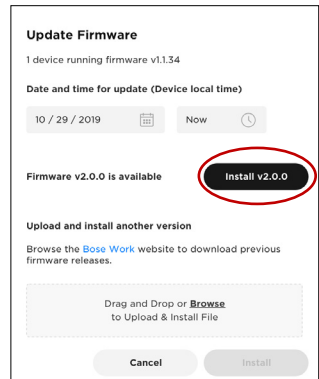
Immediate Updates

To immediately install the latest firmware version on one or more VB1s:

1. Select the checkbox(es) next to the desired VB1(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 VB1 with a scheduled firmware update.



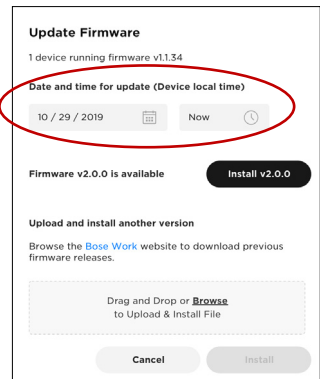
Scheduling a Firmware Update

To schedule a firmware update:

1. Select the checkbox(es) next to the desired VB1(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. 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

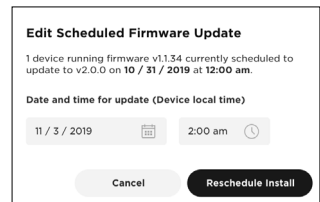
To change the date and time of a scheduled update:

1. Select the checkbox(es) next to the desired VB1(s) in the Device List.
2. Click **Update FW** in the upper-right corner of the window.

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.

3. 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. In the window that appears, confirm the new date and time is correct. You can change the date or time in the provided fields, if necessary.
5. 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:

1. Select the checkbox(es) next to the desired VB1(s) in the Device List.
2. Click **Update FW** in the upper-right corner of the window.

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.

3. Click **Cancel**.

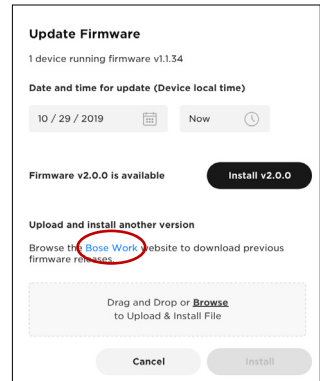
Installing a Previous Firmware Version

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


1. Select the checkbox(es) next to the desired VB1(s) in the Device List.
2. Click **Update FW** in the upper-right corner of the window.
3. In the **Update Firmware** window that appears, click the **Bose Work** link to locate and download the firmware version you wish to install.

4. 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 VB1 will reboot automatically.



Downloading Logs

To download system log files, select the VB1(s) in the Device List, click **More**  in the upper-right part of the window, and then click **Download Logs**.

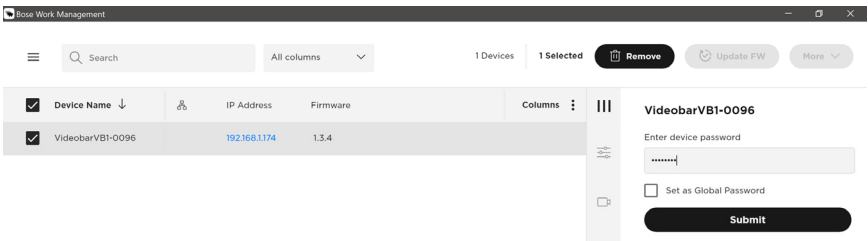
Control Panel

The app enables you to administer one or multiple VB1s via the control panel. Use this interface to configure a range of parameters, including VB1 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 VB1, 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 VB1.



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

- **Configuration:** Install firmware; configure user access to certain video, audio, and connectivity settings; configure profiles, system settings, and identification settings. 
- **Video:** Save/recall camera presets and restore factory default camera settings; enable/disable autoframe access and configure autoframe settings; and enable/disable automatic low-light compensation and configure low-light compensation settings. 
- **Audio:** Configure the linear microphone array, control access to microphone and other audio settings, and view audio input and output levels. 
- **Network:** Enable/disable both wired and wireless connections, configure Internet Protocol (IP) settings for network connections, and configure wireless network security settings. 

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 VBI(s).

The screenshot shows the Bose Work Management interface. At the top, there is a search bar and a dropdown menu for columns. Below this is a table with columns for Device Name, IP Address, and Firmware. One device, 'VideoBarVBI-0096', is selected. To the right of the table is a configuration panel for 'Autoframe' settings. The settings include: Autoframe Status (checked 'On'), Autoframe Headroom Adjustment (set to 'Sitting'), Autoframe Zoom Speed (set to 'Normal'), Autoframe Pan / Tilt Speed (set to 'Normal'), and Autoframe Border Size (set to 'Normal'). There is also a 'Disabled' checkbox under 'Autoframe Information'. At the bottom of the panel, it says '1 device parameter edited' and has 'Cancel' and 'Apply' buttons.

Device Name ↓	IP Address	Firmware
VideoBarVBI-0096	192.168.1.174	1.3.4

Autoframe Status

- On

Autoframe Headroom Adjustment

Sitting

Autoframe Zoom Speed

Normal

Autoframe Pan / Tilt Speed

Normal

Autoframe Border Size

Normal

Autoframe Information

Disabled

1 device parameter edited

Cancel Apply

Configuration Section

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:** The version number of the VB1 camera software.
- **Profile Name:** The unique name of the configuration [profile](#) that was uploaded to the VB1.
- **Profile Description:** An identifying description of the configuration [profile](#).
- **Device Name:** A configurable name assigned to the VB1.
- **Building:** A configurable setting to identify the location of the VB1.
- **Floor:** A configurable setting to identify the location of the VB1.
- **Room:** A configurable setting to identify the location of the VB1.
- **User Access:** Select/deselect these checkboxes to enable/disable user access to the following features:
 - **Microphone Mute:** Enables/disables the ability to mute the VB1 microphone.
 - **WiFi:** Enables/disables wireless network connection.
 - **Wired Network:** Enables/disables wired network connection.
 - **Bluetooth:** Enables/disables Bluetooth connectivity.
 - **Camera:** Enables/disables the VB1 camera.
 - **Autoframing:** Enables/disables the ability to turn autoframe on/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.

VideoBarVB1-0096

Configuration

Firmware Version
1.3.4

Camera Version
18.2

Profile Name
Factory Defaults*

Profile Description
Factory Defaults

Device Name
VideoBarVB1-0096

Building (optional)
Main

Floor (optional)
2

Room (optional)
535

User Access

- Microphone Mute
- WiFi
- Wired Network
- Bluetooth
- Camera
- Autoframing
- SNMP
- DisplayLink

Password
[Change Password](#)

Time Zone
(GMT-04:00) Eastern Standard Time

Device Time of Day
1:36 PM

NTP Server

CTRL Active
Low

Low Power Mode
 Enabled

Bluetooth State
Disabled

Camera State
Not Streaming

- **SNMP:** Enables/disables simple network management protocol (SNMP) over the network.
- **DisplayLink:** Enables/disables HDMI output/DisplayLink. The default setting is **Disabled**.
- **Password:** Click **Change Password** to change the password for a VB1.

Passwords must contain:

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

***Note:** Select/deselect the **Set as Global Password** checkbox to enable/disable use of the new password for all VB1s in the network.*

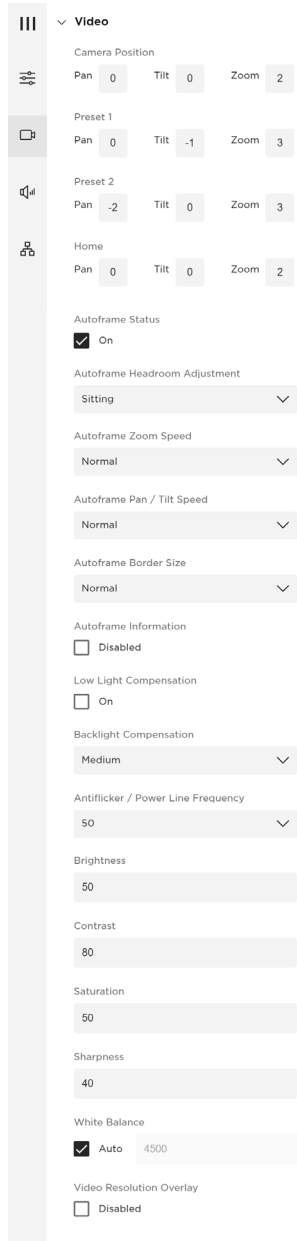
- **Time Zone:** Select the local time zone.
- **Device Time of Day:** Read-only display of the current time of the VB1.
- **NTP Time Server:** Select or enter the IP address of the Network Time Protocol (NTP) server.
- **CTRL Active:** Specify the active state of the connected alarm system: **High** or **Low**. The default setting is **Low**.
- **Low Power Mode:** Enable/disable Low Power Mode. When enabled, the VB1 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 VB1 via a *Bluetooth* connection.
- **Camera State:** The camera (video) status: **Streaming** or **Not Streaming**.

Video Section

The Video section includes controls for configuring the VB1 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.
- **Headroom Adjustment:** 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 Pan/Tilt Speed:** Select how quickly the VB1 camera pans/tilts when people move in the room: **Slow**, **Normal**, or **Fast**.
- **Autoframe Border Size:** Adjusts the border size of the framed image: **Small**, **Normal**, or **Large**. For minimal border (maximum zoom), select **Small**.
- **Autoframe Information:** Select/deselect this checkbox to enable/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/deselect this checkbox to enable/disable automatic low-light compensation. When enabled, Low-light Compensation optimizes video in dim lighting conditions.
*Note: You can enable low-light compensation only when Backlight Compensation is set to **Off**.*
- **Backlight Compensation:** Select **Low**, **Medium**, or **High** to set the level of adjustment to 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.) Select **Off** to disable Backlight Compensation.

*Note: If Backlight Compensation is set to **Low**, **Medium**, or **High**, Low Light Compensation will be disabled automatically.*



- **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/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/deselect this checkbox to enable/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 Section

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.

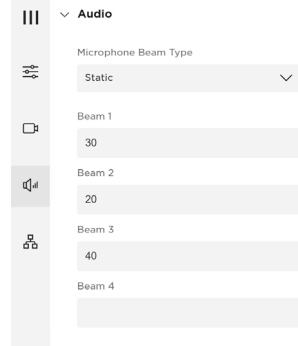
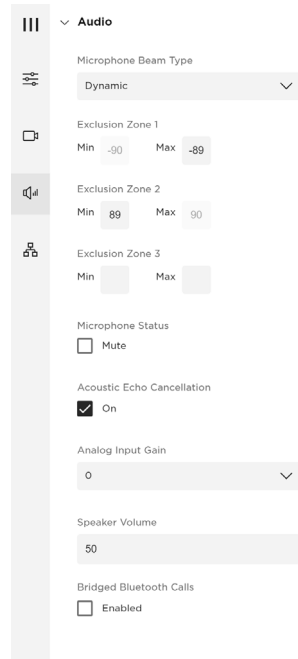
- **Microphone Beams 1-4:** Specify the angle of each beam to optimize the detection of people speaking in the room. You can do this only when the **Microphone Beam Type** is set to **Static**. You can create a maximum of four beams.

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. There is a maximum of three exclusion zones.

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

- **Microphone Mute Access:** Enable/disable users' ability to mute the VB1 microphone.
- **Acoustic Echo Cancellation:** Enable/disable Acoustic Echo Cancellation, which suppresses acoustic feedback between the loudspeaker and the microphone.
- **Analog Input Gain:** 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 VB1 loudspeaker.
- **Bridged Bluetooth Calls:** Enable/disable the ability of *Bluetooth* calls and media to bridge to the active UC call.

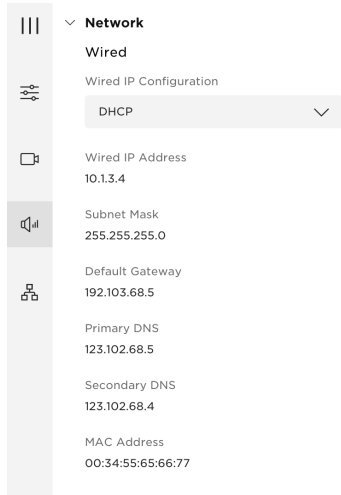


Network Section

The Network section provides access to wired, wireless, and Simple Network Management Protocol (SNMP) network configuration settings.

Wired Network Settings

- **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 VB1.
 - Select **Static** to manually enter a **Wired IP Address** and **Subnet Mask**.
- 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 VB1 used to forward traffic to other networks.
- **Primary DNS:** The IP address of the primary DNS server that assigns an IP address to a VB1.
- **Secondary DNS:** The IP address of the primary DNS server that assigns an IP address to a VB1 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: VB1 also supports AutoIP. If **Wired IP Configuration** is set to **DHCP** and no **DHCP** server is found, the VB1 will automatically assign itself an IP address in the AutoIP range.

Wireless Network Settings

- **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 VB1.
 - 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 VB1 used to forward traffic to other networks.

- **Primary DNS:** The IP address of the primary DNS server that assigns an IP address to a VB1.

- **Secondary DNS:** The IP address of the primary DNS server that assigns an IP address to a VB1 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: VB1 also supports AutoIP. If **Wireless IP Configuration** is set to **DHCP** and no DHCP server is found, the VB1 will automatically assign itself an IP address in the AutoIP range.

- **EAP Method:** Select the type of Extensible Authentication Protocol (EAP), if applicable.
- **Phase 2 Authentication:** Select the method to be used for the EAP second authentication phase.

The screenshot displays the 'Wireless' settings page. At the top, there are three menu icons: a list icon, a signal strength icon, and a lock icon. The 'Wireless' section shows a list of networks, with 'Employee Network' selected and a signal strength indicator. Below this, the 'Wireless IP Configuration' is set to 'DHCP'. The 'Wireless IP Address' is 10.1.3.4, 'Subnet Mask' is 255.255.255.0, 'Default Gateway' is 192.103.68.5, 'Primary DNS' is 123.102.68.5, and 'Secondary DNS' is 123.102.68.4. The 'MAC Address' is 00:34:55:65:66:77. The 'EAP Method' is set to 'EAP-TLS'. There is a 'Re-upload File' button and a 'Delete' link for the certificate.

- **Upload Certificate (optional):** If there is no certificate uploaded, click the **Upload File** button and select the desired certificate to upload for certificate authority (CA) validation. When a certificate is uploaded, it will appear in this section. You can click **Delete** to remove the certificate or click **Re-upload File** to select a different certificate to upload.
- **Private Key Password (optional):** Enter the password to establish the connection.

SNMP Settings

The VB1 supports the Simple Network Management Protocol (SNMP) for network management and monitoring.

- **Authentication Protocol:** VB1 supports SNMP v3. 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:** VB1 supports SNMP v3. 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 VB1 will send traps and event notifications to this address per the MIB.

The screenshot shows the 'SNMP Settings' configuration interface. It features a sidebar on the left with icons for various system settings. The main content area is titled 'SNMP Settings' and includes the following fields and options:

- Authentication Protocol:** A dropdown menu currently set to 'MD5'.
- Username:** An empty text input field.
- Password:** An empty text input field.
- Encryption Protocol:** A dropdown menu currently set to 'DES'.
- Privacy Passphrase:** An empty text input field.
- Show Privacy Passphrase:** A checkbox that is currently unchecked.
- Trap Server:** An empty text input field.

Note: Please see the VB1 API for detail on specific polls and traps supported by VB1 via SNMP.

