PANACAST 50
Video Bar System

Technology for life's new rhythm

Made in China
MODEL: VSM040; VTD040

❽ Bluetooth®

Declaration of Conformity can be found on www.jabra.com/doc

1. Introduction

This guide contains an overview of information and references that can be used on your Jabra PanaCast 50 Video Bar System.

The information in this guide is applicable to the video bar system running the following minimal firmware version:

Jabra PanaCast 50 Video Bar System Base Unit (video bar): 1.12.0-8

Jabra PanaCast Control (touch controller): 1.12.0-7

1.1 Audience

This guide is written for an audience with a technical background.

You should have the following knowledge before starting:

- Familiarity with Video as a Service (VaaS) / Unified Communications (UC) technologies including Microsoft Teams Rooms (MTR) and Zoom Rooms (ZR).
- Networking fundamentals such as DHCP, Subnetting, VLANs, DNS, TCP/IP, UDP, NTP, and firewalls.
- Familiarity with common cable/low-voltage technologies, standards, and limitations including HDMI, Ethernet, and USB.

2. Getting started

Welcome to the Jabra PanaCast 50 Video Bar System. The all-in-one meeting room solution with world-leading audio, 180° full-room coverage, intelligent AI-enabled meeting features, and a sleek touch controller.

2.1 Related documents and resources

Jabra PanaCast 50 Video Bar System User Manual

Jabra PanaCast 50 Video Bar System Installation Manual

Jabra Support Page

2.2 Technical specifications

https://www.jabra.com/supportpages/jabra-panacast-50-video-bar-system/#TECH

2.3 Powering the PanaCast 50 Video Bar System on and off

The PanaCast 50 Video Bar System will turn on once it is plugged into a power source. To turn off the PanaCast 50 Video Bar System you must unplug the power cable from the system. The PanaCast 50 Video Bar System does not have a power button.

Do not unplug the power to the PanaCast 50 Video Bar System during maintenance (for example, when running a software update).

The video bar is powered by an included 12V DC power supply. Do not use third-party power supplies. If a replacement power supply is required please contact Jabra.

The touch controller uses Power over Ethernet (PoE) which can be provided by an 802.3af or better PoE switch or by the included PoE adapter. The touch controller requires 15.4W available power.

2.4 Management interfaces

Touch controller
The touch controller acts as the main management interface for the PanaCast 50 Video Bar System. Users can control in-meeting settings and admin settings using the touch controller.

Web Console
Administrators can access the Web Console of the video bar using its IPv4 address. Using the Web Console, Administrators can make configuration changes to the video bar.

Jabra+
Jabra+ is the cloud based remote management platform which can be used to monitor and manage the configuration of the video bar ystem. Jabra+ can help the administrators to manage the PanaCast 50 Video Bar System for mass deployment. Jabra+ will be available for use in 2024.

VaaS partner management portals

The PanaCast 50 Video Bar System can be managed using Microsoft Teams Admin Center or Zoom Device Manager to configure UC specific settings. For more details refer to the Microsoft Teams Room management guide or Zoom device manager guides.

Touch screen monitor

The video bar can be connected to a touch screen monitor which can be used as an interface to control the PanaCast 50 Video Bar System. Connection to only one touch screen is currently supported. An additional USB is required to connect to a touch screen monitor.

Keyboard and mouse

The video bar supports HID input on the USB-A port. This allows a USB keyboard and mouse to be connected to the USB-A port on the video bar to directly access the PanaCast 50 Video Bar System settings.

2.5 Management through VaaS partner portals

Microsoft TAC/Pro portal
- *Microsoft Teams admin center*
- *Microsoft Teams Rooms Pro management portal*

Zoom device manager
- *Zoom device manager*

3. PanaCast 50 Video Bar System setup

View the installation guide for the Jabra PanaCast 50 Video Bar System.

Installation guide

3.1 Overview of the video bar and touch controller

The following tables and illustrations provide hardware information available on the PanaCast 50 Video Bar System.

Video bar ports

The following illustration and table explain the ports on the back of the video bar.
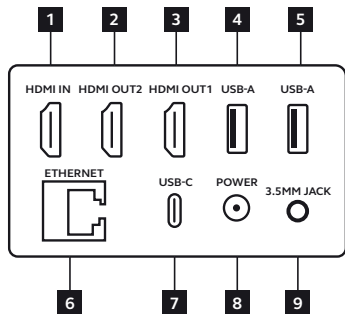
PORT DESCRIPTIONS

Number	Port	Description
1	HDMI IN	To connect a laptop or PC for content sharing.
2	HDMI OUT2	To connect a second monitor or display.
3	HDMI OUT1	To connect the primary monitor or display.
4	USB-A	To connect a keyboard or mouse.
5	USB-A	To connect a keyboard, mouse, or touch screen monitor.
6	Ethernet	To connect the Ethernet LAN cable.
7	USB-C	For future use.
8	Power	To connect the power adapter.
9	3.5MM Jack	For future use.

Touch controller ports

The following illustration and table explain the ports on the back of the touch controller.
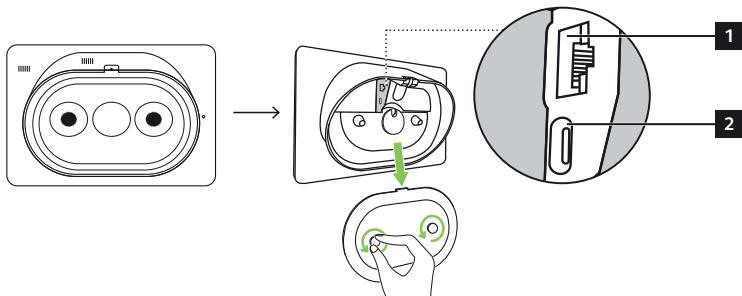
PORT DESCRIPTIONS

Number	Port	Description
1	Ethernet	To connect the Ethernet LAN cable with PoE.
2	USB-C	For future use.

LED status indicators

The following lists the LED indicators for your system.

- **Video bar LEDS**

LED Indicator	Status
Off	Video bar is powered off or the system is idle.
Flashing white	PanaCast 50 Video Bar System switches from off to Idle.
White	On Call, active audio, or video stream.
Red	Microphones muted.
Flashing pink	Firmware updating or video bar is resetting.

- **Touch controller LED**

LED Indicator	Status
Flashing green	VaaS provier starts for the first time or firmware update completed.

3.2 Connecting to room monitors

The following shows you how to connect the system to your room monitor. The PanaCast 50 Video Bar System supports a connection to a single touch display.

Single monitor

When only one monitor is used, the supplied HDMI cable can be used to connect HDMI OUT 1 of the video bar to the HDMI input of the monitor. Once the PanaCast 50 Video Bar System has been set up, the VaaS provider determines which content and video feeds, as well as which layouts, are displayed on the monitor.

Monitor

HDMI OUT 1

Power

Ethernet

PanaCast 50 Video Bar System Base Unit (video bar)

Ethernet switch
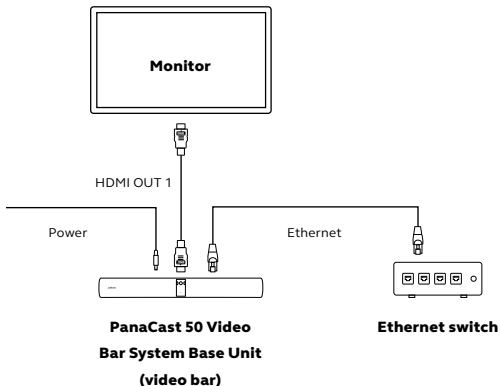
Dual monitors

When two monitors are used, an additional HDMI cable is required. Additional HDMI cables of differing lengths are available for purchase as accessories. Android based devices have a hardware defined HDMI OUT 1 and HDMI OUT 2, therefore ensure to connect the appropriate port on the video bar to the appropriate monitor port. Once the PanaCast 50 Video Bar
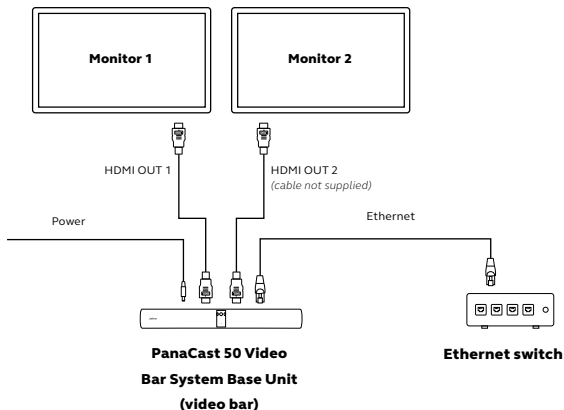
System has been set up, the VaaS provider determines which content and video feeds, as well as which layouts, are displayed on the monitors.

3.3 Initial setup

Device configuration
The PanaCast 50 Video Bar System configuration can be managed using the Web Console or the touch controller.

Accessing the Web Console
The Web Console can be accessed by entering the IP address of the video bar or touch controller into a web browser on a device connected to the same network. If this is the first time accessing the Web Console, the default username is **admin** and the password is the **last 6 digits of the video bar or touch controller serial number.** It is recommended to change the username and password.

Touch controller
The touch controller can also be used to make changes to the PanaCast 50 Video Bar System configuration.

In **Microsoft Teams Room** mode, follow these steps to access Jabra settings
- Go to Settings > Device settings
- Click on Admin > Enter the username and password

- The default username is **admin** and the password is the **last 6 digits of the touch controller serial number.**

In **Zoom Room** mode, follow these steps to access Jabra settings.
- Go to Settings > Device settings > System settings
- Enter the passcode set in Zoom web portal for this Zoom room

If the touch controller is not available, a touch screen display, or USB mouse and keyboard can be connected to the video bar, in which case the same steps described above can be used to make changes to the PanaCast 50 Video Bar System configuration.

3.4 Settings

The following portion of this guide covers each section within the configuration menus and the settings within each section.

System
The System section is for firmware management and general information.

System management

User interface	Path
Jabra PanaCast Control	Jabra Settings > System > Management
Web Console	System > System Management

Setting	Values	Description
Room name	Text entry field	Configure a Room Name for the PanaCast 50 Video Bar System. This name will not be shared with the VaaS provider.
Firmware download site/URL	Jabra Support Zoom Rooms / Microsoft Teams Rooms Custom Server URL *Default: Jabra Support	Select the site or URL to use for downloading firmware updates. Jabra Support – To download the firmware from Jabra cloud. Zoom Rooms / Microsoft Teams Rooms - To control the firmware through the VaaS Partner management portal. Custom Server URL - To download the firmware from a custom file server (HTTPS only).

About System

The video bar and the touch controller must both be paired for the information for for both devices to be displayed.

User interface	Path
Jabra PanaCast Control	Jabra Settings > About
Web Console	System > About system

The following system information is displayed in this section:

- Serial number
- Room name
- Product name
- Model
- Service provider
- Firmware version
- Audio engine version
- Video engine version
- MAC address
- IP address
- Video conferencing app version

Video

This section enables configuration of video related parameters.

Image quality

User interface	Path
Jabra PanaCast Control	Jabra Settings > Video > Image Quality
Web Console	Video > Image Quality

Setting	Values		Description
Brightness	0-100	*Default: 50	Set the camera brightness.
Vivid HDR	Enable, Disable *Default: Enable		Enable or disable dynamically adjusting HDR according to lighting conditions in the room.
Contrast	0-100	*Default: 80	Set the camera contras.
Color saturation	0-100	*Default: 30	Set the camera color saturation.
Sharpness	0-100	*Default: 60	Set the camera sharpness.
Automatic white balance	Enable, Disable *Default: Enable		Enable or disable dynamically adjusting the white balance according to lighting conditions in the room.
White balance	0-6500K	*Default: 5000K	Set the camera white balance manually using Kelvin scale.

Click the undo button next to the slider to undo unsaved image quality changes.

Camera

User interface	Path
Jabra PanaCast Control	Jabra Settings > Video > Camera
Web Console	Video > Camera

Setting	Values	Description
Camera mode	Intelligent Zoom, Virtual Director, Panoramic View, Dynamic Composition - Single-stream *Default: Intelligent Zoom	Select the camera mode to send to the remote participants in the meeting. Dynamic Composition - Single-stream is only available when the VaaS provider is set as Microsoft Teams. When Zoom Rooms is set as the VaaS provider, the camera modes cannot be changed from the Web Console or the touch controller. Camera modes can only be changed in Zoom Device Manager or by users during a meeting by pressing the Camera Control button in Zoom Rooms.
Transition speed	0-100 *Default: 90	Adjust the transition speed of Intelligent Zoom and Virtual Director.
Transition style	Smooth, Immediate *Default: Smooth	Select the transition style of Intelligent Zoom and Virtual Director.

Click the undo button next to the slider to undo unsaved transition speed changes.

Monitor

User interface	Path
Jabra PanaCast Control	Jabra Settings > Video > Monitor
Web Console	Video > Monitor

Setting	Values	Description
Region frequency	Auto 50Hz/60Hz, 50Hz *Default: Auto 50Hz/60Hz	Select the region frequency to prevent video flicker issues.
Automatic wake up	Enable, Disable *Default: Disable	Enable or disable standby mode on the HDMI connected monitor. Standby mode will end when a person is detected in the room. This setting only applies when the VaaS provider is set to Microsoft Teams Rooms.
Standby interval in seconds	30-3600 *Default: 900	Select the number of seconds to wait when no people are detected in the room for the PanaCast 50 Video Bar System to enter standby mode.

Reset (video settings)

User interface	Path
Jabra PanaCast Control	Jabra Settings > Video > Reset
Web Console	Video > Reset

Setting	Description
Reset video settings	Reset the PanaCast 50 Video Bar System to the default video settings.

Audio

MICROPHONE VOLUME

User Interface	Path
Jabra PanaCast Control	Jabra Settings > Audio
Web Console	Video > Audio

Setting	Values		Description
Microphone volume	0-100	*Default: 70	Set the microphone volume.

Click the undo button next to the slider to undo unsaved volume changes.

Network

The network configuration settings, such as IP address, Default gateway, subnet mask, DNS servers are obtained through DHCP. There is no option to set the network configuration manually on the device. LAN configuration is also auto negotiated and there is no option to set it manually. Currently IPv4 is required, IPv6 will be supported in a future firmware update.

INFORMATION

User interface	Path
Jabra PanaCast Control	Jabra Settings > Network > Information
Web Console	Network > Information

Setting	Values	Description
Devices	Jabra PanaCast Video Bar System Base Unit (video bar), Jabra PanaCast Control (touch controller)	Select which device network properties are shown.
Network	Informational Field	View IPv4 connection details for the selected device.
LAN	Informational Field	View autonegotiated link speed for the selected device.
Use Proxy Server	Enable, Disable Default - Disable	Enable it to configure Web proxy server

Setting	Values	Description
Proxy Type	Manual, Autoconfig *Default - Manual	Set the proxy type.
Host name	Text entry field	Set the web proxy server host name or IP address.
Port Number	Text entry field	Set the web proxy server port.
Bypass Proxy	Text entry field	Set the IP addresses which need to be bypassed.
PAC URL	Text entry field	Set Proxy AutoConfig (PAC) URL when setting the proxy type as Autoconfig.

Bluetooth

User interface	Path
Jabra PanaCast Control	Jabra Settings > Network > Bluetooth
Web Console	Network > Bluetooth

Setting	Values	Description
Bluetooth	Enable, Disable *Default - Enable	Select to enable or disable Bluetooth, which is used for VaaS provider features.

General

REGION AND LANGUAGE

User interface	Procedure
Jabra PanaCast Control	Jabra Settings > General > Region and Language
Web Console	General > Region and Language

Setting	Description
Language	Select the PanaCast 50 Video Bar System language.
Time Zone	Select the time zone.
24-Hour Format	Set 12 or 24 hour time.
Date	System date obtained through NTP (Non-Editable).
Clock	System time obtained through NTP (Non-Editable).
Time Server (NTP)	Set NTP server to sync date and time. The PanaCast 50 Video Bar System supports manual configuration of NTP server and DHCP option 42. *Default – ntp.jabra.com

Service provider

This field is only available through the touch controller when the system is configured for Microsoft Teams Rooms mode.

User interface	Procedure
Jabra PanaCast Control	Jabra Settings > General > Service Provider

Setting	Description
Microsoft Teams Sign Out	Sign the touch contoller and video bar out of Microsoft Teams.
Microsoft Teams Admin Settings	Access admin level settings for Microsoft Teams.

Support

Enter the support information which will be displayed to end users on the touch controller.

User interface	Path
Jabra PanaCast Control	Jabra Settings > General > Support
Web Console	General > Support

Setting	Description
Description	(Optional) Enter a description about the support team that the end users should contact.
Phone	(Optional) Enter the support team phone number that end users should contact.
Email	(Optional) Enter the support team email that end users should contact.

System reset

User interface	Path
Jabra PanaCast Control	Jabra Settings > General > System Reset
Web Console	General > System Reset

Setting	Description
Custom configuration reset	Reset customized settings (System, Video, Audio, General > Support, Account > Jabra Support) to factory default settings. VaaS provider sign in and network settings will be preserved. The video bar and touch controller will not reboot.
System reset	Reset the video bar and touch controller to the factory default settings. The devices will maintain their factory pre-pairing.
System restart	Restart the video bar and touch controller.

Account

ACCESS

User interface	Path
Jabra PanaCast Control	Jabra Settings > Account > Account
Web Console	Account > Access

Setting	Description
Web Console	Enables login access to the Web Console. If disabled, this can be re-enabled on the touch controller.
Username	Set the admin username to login to the system.
Password	Set the admin password to login to the system.

Jabra Support

User interface	Path
Jabra PanaCast Control	Jabra Settings > Account > Jabra Support
Web Console	Account > Jabra Support

Setting	Description
Support content (only available in the Web Console)	Links to the Jabra product support website.
Register product (only available on the Web Console)	Links to the Jabra product registration website.
Privacy policy	View the privacy policy.
End User License Agreement	View the End User License Agreement.
Debug logs	Enable or disable debug log collection and storage on the device
Logs*	Download the debug logs for the device, note that logs are stored independently on the video bar and JPC Control

User Level Options – Zoom Rooms

Setting	Path	Description
Manual	In a Meeting > Camera Control > Manual	Control pan/tilt/zoom and presets for camera.
Speaker Focus	In a Meeting > Camera Control > Speaker Focus	Set the camera to focus on the active speaker.
Auto-Framing	In a Meeting > Camera Control > Auto-Framing	Set the camera to focus on the entire group.

Setting	Path	Description
Contacts	Home > Contacts	List of contacts within an organization, including the ability to launch a meeting.
Test microphone	Home > Settings > Microphone > Test Microphone	Start/stop the microphone test.
Test speaker	Home > Settings > Microphone > Test Speaker	Start/stop the speaker test.
Send problem report	Home > Settings > Help > Send Problem Report	Allows users to submit a problem report via email to Zoom.
About	Home > Settings > About	About Zoom Rooms application.
Privacy policy	Home > Settings > About > Privacy Policy	View the Zoom privacy policy.
Open-source software	Home > Settings > About > Open-Source Software	View the open-source software components used by Zoom.

User Level Options – Microsoft Teams Rooms

User interface	Path	Description	Values
About Microsoft Teams	Home > More > Settings > About	About Microsoft Teams application.	
Report an issue	Home > More > Settings > Report an Issue	Report an issue to Microsoft.	
Microphone volume	Home > More > Settings > Device Settings > Accessibility > Microphone Volume	Adjust the device microphone sensitivity level.	Min - Max
User interface text size	Home > More > Settings > Device Settings > Accessibility > Text Size	Adjust the user interface text size to improve legibility of text.	1 - 4
High contrast mode	Home > More > Settings > Device Settings > Accessibility > High Contrast Mode	Enable high contrast mode to improve legibility of text.	Enable | Disable
About device	Home > More > Settings > Device Settings > About (Devices)	About Jabra device information.	
About device Support	Home > More > Settings > Device Settings > About (Device Support)	About Jabra device support information.	
Device restart	Home > More > Settings > Device Settings > Restart	Restart the video bar and touch controller.	Restart
Administrator settings	Home > More > Settings > Device Settings > Admin	Enter the administration settings of device.	

Initial setup

The video bar and touch controller are pre-paired at the factory. During setup the touch controller will automatically search for the video bar on the network. If the touch controller cannot discover the video bar on the network, a menu option will appear in the Setup Wizard to search for an additional video bar.
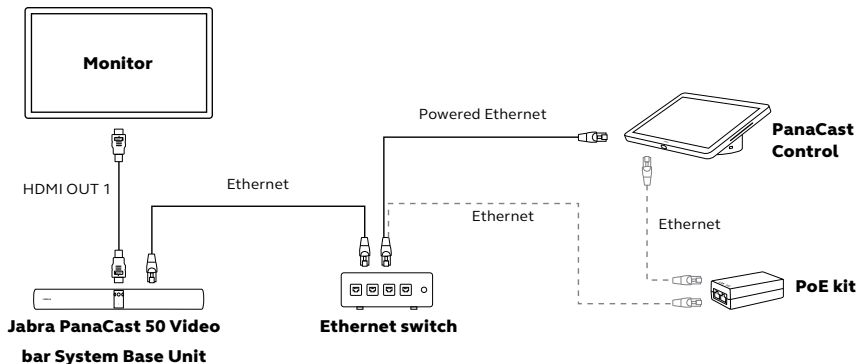
Once the video bar and touch controller are paired, the VaaS provider can be selected and setup in the Setup Wizard. The underlying technology and experience of the VaaS setup is controlled by the VaaS provider.

Re-pairing after reset

A factory reset of the video bar and touch controller will result in the same pairing experience as the initial installation. The touch controller will search for the factory pre-paired video bar. The VaaS provider will need to be selected and setup again using the Setup Wizard.

# 4. Room Systems Deployment and Connection

4.1 Deployment and connection of the Jabra PanaCast 50 Video Bar System

Monitor

HDMI OUT 1

Ethernet

Powered Ethernet

PanaCast Control

Ethernet

Ethernet

PoE kit

Jabra PanaCast 50 Video bar System Base Unit

Ethernet switch

4.2 Deployment and connection of the touch controller

Note: The touch controller is Powered by Ethernet (PoE).
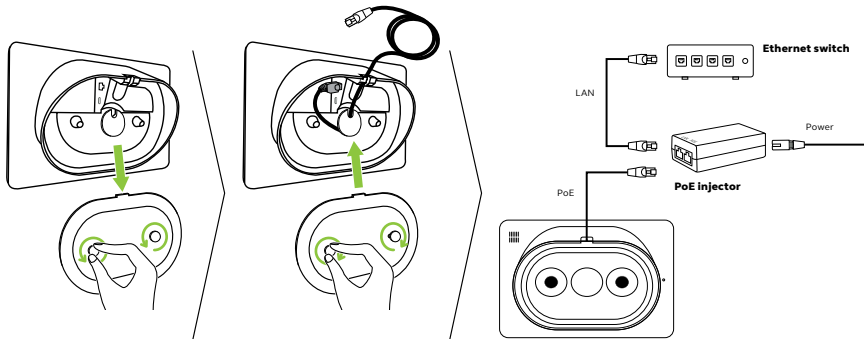
If the Ethernet connection does not supply power to the touch controller, the included PoE injector will need to be connected between the Ethernet switch and the touch controller.

4.3 Recommended installation

The Jabra PanaCast 50 Video Bar System is designed for meeting rooms up to 4.5 meters x 6 meters (15 feet x 20 feet).

It is recommended to install the video bar at eye-level of the meeting room participants.

When installing the video bar with the Wall Mount or Screen Mount, the video bar should be positioned 8 centimeters (3 inches) below the monitor and ideally 30-35 centimeters (12-14 inches) above the tabletop or 100 centimeters (3 feet) from the floor. If this height is not possible, it is recommended to install the video bar above the monitor. Do not mount the camera facing direct sunlight as this may affect the preset white balance and compromise the image.

The Wall Mount is provided with the Jabra PanaCast 50 Video Bar System. The Screen Mount and Table Stand are available as optional accessories.

4.4 Content sharing

Wired - HDMI Ingest
Users can connect their laptop or PC to the HDMI port on the video bar to share content locally and to the remote participants during a meeting. HDMI Ingest can be used in both Microsoft Teams Rooms as well as Zoom Rooms.

Wireless - Microsoft Teams Cast
Users can cast content from their computer or mobile devices to the PanaCast 50 Video Bar System from their Microsoft Teams desktop app or Microsoft Teams mobile app.

Please refer to the following articles for the instructions on how to enable and use Microsoft Teams Cast feature:
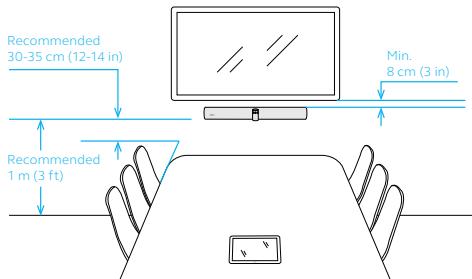
Recommended
30-35 cm (12-14 in)

Min.
8 cm (3 in)

Recommended
1 m (3 ft)

Note: This feature is only supported by Microsoft Teams Rooms.

Apple screen mirroring / AirPlay

The PanaCast 50 Video Bar System supports Apple AirPlay. A MacOS or iOS device can share content wirelessly by one-click using the Apple screen mirroring option. This uses the AirPlay bonjour protocol to communicate between a Zoom client on MacOS/iOS and a Zoom Room. Bluetooth must be enabled on the PanaCast 50 Video Bar System to trigger Airplay.

Please refer to the following article to learn how to enable and use Apple screen mirroring:https://support.zoom.us/hc/en-us/articles/204726885-Sharing-a-screen-using-Apple-screen-mirroring

Note: This feature is only supported by Zoom Rooms.

Zoom Direct Sharing

The PanaCast 50 Video Bar System supports one-click direct sharing from a Zoom Desktop Client (MacOS or Windows). The touch controller generates an ultrasonic signal which can be detected by the Zoom Desktop client.

Please refer to the following article to learn how to enable and use Zoom direct sharing: *https://support.zoom.us/hc/en-us/articles/214629303*

4.5 Optional peripheral devices

Privacy cover

The video bar comes with a privacy camera cover. When the video bar is not in use, the privacy cover can be used to cover the camera lens. It is recommended not to use the privacy cover while the video bar is being used for a meeting, as this may cause the image from the camera to flicker and affect photosensitive individuals. To stop sharing the video feed during the meeting, use the in-meeting controls in Zoom Rooms or Microsoft Teams Rooms.

5. Device configuration

5.1 Logging into the Web Console

The Web Console can be accessed by entering the IP address of the video bar or touch controller into a browser connected to the same network.

If this is the first time accessing the Web Console, the default username is **admin** and the password is the **last 6 digits of the video bar or touch controller serial number.** It is recommended to change the username and password.

5.2 Settings

All Jabra PanaCast 50 Video Bar System settings can be configured using the Web Console. To access the Web Console, enter the IP address of the video bar or touch controller in a browser. The IP address is displayed on the installation screen during the configuration process of the Jabra PanaCast 50 Video Bar System. The IP address is also available in the About section of the Device settings menu on the touch controller.

Camera modes

The PanaCast 50 Video Bar System has 4 camera modes, which can be configured locally using the touch controller or video bar, or remotely using the Web Console. Only one Camera mode can be active at a time.

- Intelligent Zoom
- Virtual Director
- Dynamic Composition - Single Stream
- Panoramic View - Manual

Note: Camera modes cannot be set on the video bar when Zoom Rooms is the selected VaaS provider.

Intelligent Zoom
Intelligent Zoom is a camera mode that dynamically frames all visible people within 4.5 meters (15 feet). Intelligent Zoom is the default camera mode.

Virtual Director
Virtual Director is a camera mode that utilizes speaker tracking, focusing on whomever is speaking in the camera view.

Dynamic Composition - Single Stream
Dynamic Composition - Single Stream is a camera mode that displays up to 4 participants in a meeting room in a tiled view. The tiled view will dynamically update to display the participants who are actively speaking.

Note: A device reboot is required if Dynamic Composition - Single Stream is selected.

Panoramic View - Manual
Panoramic View - Manual is a camera mode that displays a panoramic view of the meeting room.

Vivid HDR
Vivid HDR (High Dynamic Range) automatically balances the contrast and exposure to help improve video quality.

Field of view
The PanaCast 50 Video Bar System features a 180° field of view camera that combines three separate video feeds into one video feed real time. Traditional video conferencing devices use a single camera which leads to radial and scalar distortion, causing participants in the meeting room to appear non-true-to-life in size. The Jabra PanaCast 50 Video Bar System captures meeting participants as they truly are, regardless of their location in the room.

5.3 Camera configuration

Adjusting the display image of the camera
The image brightness, contrast, saturation, sharpness, and white balance can be configured locally using the touch controller or remotely using the Web Console.

Additionally, Vivid HDR and Automatic white balance can be enabled. If Vivid HDR is enabled, contrast, saturation, and sharpness cannot be adjusted manually. If Automatic white balance is enabled, the white balance cannot be adjusted manually.

Microsoft Team Rooms video settings
In the Web Console Video section, you have four options for video configurations:

- Image quality
- Camera modes
- Monitor
- Reset

In Image Quality
The admin has the option to fine tune the video image for the room conditions as displayed in the image below

Camera modes

The PanaCast 50 Video Bar System supports up to 4 camera modes in Microsoft Teams Rooms:

- Intelligent Zoom
- Virtual Director
- Panoramic View
- Dynamic Composition - Single Stream

When the selected VaaS provider is Teams Rooms, the camera mode can be switched while in a meeting either on the touch controller or in the Microsoft Team Rooms application to Active Speaker (Virtual Director) or Room (Intelligent Zoom) which captures all the room.

On the touch controller select the active camera option

To configure the video bar for Dynamic Composition - Single Stream, the administration can only do this via the Web Console by selecting Single Stream. Please note, this cannot be done while in a meeting and requires a reboot of the PanaCast 50 Video Bar System.

Transition Speed and Transition style can also be adjusted in this section of the Web Console. Both options adjust how responsive you want the video experience to behave with Intelligent Zoom and Virtual Director in the room.

Monitor
In this section we can select the regional frequency to either
- Auto 50Hz/60Hz
- 50Hz

You may only need to adjust this setting if you experience flickering on the display, please reference your regional requirement.

Reset
Reset video settings, resets all your default video settings only.

Zoom Room Mode
When the selected VaaS provider is Zoom Rooms, the default camera mode needs to be configured from the Zoom Rooms admin portal.

The PanaCast 50 Video Bar System supports only three video modes in the Zoom Rooms admin portal: Manual Mode, Speaker Focus, and Auto-Framing. Each mode corresponds to an equivalent setting in the Jabra PanaCast 50 Video Bar System.

In Zoom Device Manager – Room Management – Zoom Room – Select your room – Room Settings – In Room Profile you can configure your video modes.

While in a meeting using the touch controller you can access **Camera Control** in this menu you can configure:

• Up to 3 **Presets**
• Change video modes for **Speaker Focus** to **Auto Framing**

Below we have the option to manually control the video or set the video to **Speaker Focus** or **Auto-Framing** this gives the meeting extra in room.

Refer to the following article on how to configure default camera mode for Zoom Rooms : *https://support.zoom.us/hc/en-us/articles/17803256431757-Configuring-default-camera-control-mode*

Note: Meeting presets, setting camera to preset position, and camera pan/tilt is only available in the Zoom Application.

5.4 Network settings

This chapter introduces how to configure the network of your PanaCast 50 Video Bar System.

Note: 802.1X Authentication support is planned and currently not supported.

LLDP
LLDP-IEEE 802.1AB (Link Layer Discovery Protocol) to resolve the devices dynamic location. The device supports the Ethernet connection and report Chassis ID and Port ID attribute. Attributes are sent to "Teams Calling" to resolve Teams Phone dynamic location Emergency calling Service.

NTP Server
The Jabra PanaCast 50 Video Bar System requires access to an NTP (Network Time Protocol) server for a variety of functions, and therefore a valid NTP server is a requirement when setting up and operating the system. The PanaCast 50 Video Bar System uses the standard UDP port 123 to reach out to the NTP server. By default, the PanaCast 50 Video Bar System is configured with the NTP server ntp.jabra.com

which in turn points to the public ntp time server *pool.ntp.org*

The PanaCast 50 Video Bar System also supports setting up an NTP server address via DHCP option 42, or a user can manually enter an NTP server address using the Web Console.

If the default NTP server ntp.jabra.com is not reachable during the initial out of box setup, the PanaCast 50 Video Bar System would provide an option to set a custom NTP server.

6. System Security

6.1 Changing the administrator password

The first configuration step that device administrators should take when deploying the PanaCast 50 Video Bar System is updating the default local administrator credentials. These credentials are used for accessing the Web Console, and if the PanaCast 50 Video Bar System is deployed in Microsoft Teams Rooms mode the Jabra Settings in the touch controller as well. When the PanaCast 50 Video Bar System is deployed in Zoom Rooms mode, access to the Jabra Settings in the touch controller is secured by the Room Passcode set in Zoom Device Manager.

The tables below provide the path to update the Administrator Credentials.

User Interface	Path
Touch controller	Jabra Settings > Account
Web Console	Account > Access

Setting	Description
Username	(1-30 characters) – upper/lower case letters, numbers, special characters
Password	Minimum 6 characters - must include upper/lower case letter, number, special character

6.2 Encryption and communication

The PanaCast 50 Video Bar System is built on Android Open Source Project (AOSP) and utilizes both Secure Boot and Verified Boot to secure the bootloader and firmware. Each video bar and touch controller contains a unique device certificate and private key which is generated on the device and stored in encrypted storage. During the pairing process, each device will verify the certificate it receives from the desired counterpart with our Online Certificate Status Protocol (OCSP) Responder, which maintains a list of valid device certificates. At a customer's request, device certificates can be revoked, preventing future use of the hardware.

Communication between the video bar and the touch controller, as well as administrator access to the Web Console, utilizes Transport Layer Secturity (TLS) 1.3.

Communication between the video bar, touch controller, and VaaS provider applications is architected by the VaaS provider. For more information review the following articles:

- Microsoft Teams Rooms - *https://learn.microsoft.com/en-us/microsoftteams/rooms/security?tabs=Android*
- Zoom Rooms - *https://explore.zoom.us/en/trust/security/*

6.3 Device security

The PanaCast 50 Video Bar System has physical security features for both the video bar and touch controller.

Each device has a Kensington® security slot for hardware loss prevention. The slot is located on the adjustable mounting bracket of the video bar, and on the base of the touch controller. The placement of the slot allows for devices to be secured when used with any of the compatible mounting accessories.

A cable compartment cover is provided for the video bar which uses T8 Torx® screws

to secure the cover in place. The shape of the cover, combined with Jabra's custom cables, prevents users from disconnecting power and HDMI cables, and significantly increases the difficulty of disconnecting the RJ-45 Ethernet cable once the cover is in place. The cover significantly increases the difficulty of connecting malicious devices to any unused port on the video bar.

To reduce the risk of attack via USB port access, the USB port functionality of the PanaCast 50 Video Bar System is limited. The device will not accept firmware updates or device configuration via USB.

6.4 Firewall requirements

Refer to the following table for the list of protocols used by the video bar and the respective network ports which need to be added to the corporate firewall.

Product	Protocol	Ports	Firewall rules	Description
JPC P50 VB-S	DHCP	UDP 67, 68	None required	Obtain IP address, default gateway, DNS etc.
JPC P50 VB-S	UDP Broadcast	UDP 13006	None required (UDP traffic remains local to the subnet)	Discovery of JPC P50 VB-S Base Unit and JPC Control
JPC P50 VB-S	TCP/TLS	TCP 50051	None required (UDP traffic remains local to the subnet)	Pairing of JPC P50 VB-S Base Unit and JPC Control using gRPC
JPC P50 VB-S	NTP	UDP 123	Open UDP 123 on firewall to: ntp.jabra.com (Default)	NTP time server for various operations
JPC P50 VB-S	HTTPS	TCP 443	Open TCP 443 to: https://api. cloud.jabra.com	Access Jabra cloud storage for firmware downloads
Microsoft	Various	Various	Follow Microsoft's guidelines _here_	To allow MTR to connect to Microsoft Teams Cloud
Zoom	Various	Various	Follow Zoom's guidelines here: _Zoom Clients_ and _Zoom Rooms_	To allow Zoom Room software to connect to Zoom cloud

7. Maintenance

7.1 Updating firmware

There are three methods available to update the PanaCast 50 Video Bar System firmware using the Web Console. For security reasons, firmware cannot be downgraded.

- Jabra Support
- Vaas provider
- Custom server URL

Jabra Support:
1. Login to the Web Console using the administrator credentials.
2. Go to System > System management
3. Select Firmware download site/URL as "Jabra Support."

User Interface	Path	Upgrade Method	Actions
Web Console	System -> System management	Jabra Support	1.Select "Jabra Support" 2.Click on Update button

By selecting this option, the PanaCast 50 Video Bar System will download the latest firmware from the Jabra Cloud. Once the firmware has been downloaded and the PanaCast 50 Video Bar System has been updated, the "Update" button will be greyed out, indicating that the updated version of firmware matches the latest firmware version available in the cloud.

Vaas provider:

User Interface	Path	Upgrade Method	Actions
Web Console	System -> System management	Microsoft Teams Rooms	1.Select "Microsoft Teams Rooms" 2.Click on Save
		Zoom Rooms	1.Select "Zoom Rooms" 2.Click on Save

The PanaCast 50 Video Bar System firmware can be updated using the VaaS partner portal. To manage the firmware update ,using the VaaS partner portals, select either "Microsoft Teams" or "Zoom Rooms" in the Web console.

By selecting Microsoft Teams Rooms or Zoom Room and hitting the Save button the PanaCast 50 Video Bar System will access the partner portal and obtain the latest firmware available on the cloud.

Custom server URL:

User Interface	Path	Upgrade Method	Actions
Web Console	System -> System management	Custom Server URL	1.Select "Custom Server URL" 2.Add Device Firmware URL in the new window. 3.Click Update now, once the Custom URL field has been populated

A custom server URL allows the PanaCast 50 Video Bar System to update the PanaCast 50 Video Bar System to a specific firmware that could be made available in special circumstances (a critical bug fix etc.). Custom server URL will only be provided by Jabra Service and Support on a limited basis.

7.2 Restarting the PanaCast 50 Video Bar System

The PanaCast 50 Video Bar System can be restarted locally using the touch controller or video bar, or remotely using the Web Console. A restart initiated from the Web Console, touch controller, or video bar will restart all devices. Factory paired devices will remain paired.

User Interface	Path	Actions
Web Console, touch controller, or video bar	General -> System Reset	1.Click on **Restart** button in System Restart 2.System will prompt for "**Restart System** – (Settings will not be changed) 3.Click on "**Restart**"

7.3 Resetting the PanaCast 50 Video Bar System

The PanaCast 50 Video Bar System can be reset locally using the touch controller or video bar, or remotely using the Web Console. A restart initiated from the Web Console, touch contoller, or video bar will reset of devices. All PanaCast 50 Video Bar System settings will revert to factory defaults. Factory paired devices remain paired.

User Interface	Path	Actions
Web Console, touch controller, or video bar	General -> System Reset	1.Click on **Reset** button in System Restart 2.System will prompt for "**Reset System** – (Settings will not be changed) 3.Click on "**Reset**"

Custom Configuration Reset

Custom configuration reset will reset all connected devices to the user default settings. Paired devices remain paired.

User Interface	Path	Actions
Web Console, touch controller, or video bar	General -> System Reset	1.Click on **Reset** button Custom configuration reset button "**Reset**" 2.System will prompt for "**Reset System** – (Settings will revert to the user default) 3.Click on "**Reset**"

Manual factory Reset

Device	Procedure	Commets
Video bar	Press and hold the Reset button on the back of the video bar for 15 seconds until LED flashes pink and "factory data reset" message is displayed on the monitor. The video bar will restart and play an audio notification when ready for use.	The reset takes approximately 1 minute.
Touch controller	Use a paperclip to press and hold the pinhole reset button on the back of the touch controller for 15 seconds until the "factory data reset" message is displayed on the touch controller.	The reset takes approximately 1 minute.

7.4 Setup without PanaCast Control

The video bar can be fully functional without the touch controller. The video bar can be connected to a monitor using the supplied HDMI cables and configured using a keyboard and mouse.

Connecting a keyboard and mouse
In absence of the touch controller, a keyboard and mouse can be connected to the Type A USB ports on the video bar to configure it.

7.5 Replacement of devices

Unpairing the devices
There are no settings to unpair the video bar and the touch controller once they are paired. However, when one of the devices is faulty, it may need to be replaced. The replacement device will require pairing with the non-faulty device..

Re-pairing after replacement

Regardless of which device is replaced, the equipment must be reset to factory default configuration before the replacement device can be paired.

With the touch controller and video bar connected to the same network, proceed through the Setup Wizard. During pairing, select the option 'Connect to a new PanaCast 50 System', and then select the video bar from the list of available video bars.

7.6 Cleaning the PanaCast 50 Video Bar System

Cleaning the video bar
When the video bar is not in use, it is recommended to cover the camera with the supplied privacy cover to keep dust from accumulating on the camera lenses.

If needed, use a clean, dry microfiber cloth to gently clean the camera lenses.

Cleaning the touch controller
The touch controller screen has anti-fingerprint coating and anti-glare glass. However, with regular use, dirt, dust, and smudges may appear and require occasional cleaning.

Use a clean, dry microfiber cloth to wipe the screen. Do not use **any** chemicals to clean the screen. These cleaners can damage the screen by stripping protective coatings.

8. Troubleshooting

8.1 Touch controller does not bootup

Problem	• Touch controller does not power on.
Cause	• Incorrect power adapter being used. • The switch port doesn't provide sufficient power.
Potential Fix	• Connect the PoE injector provided with the touch control. • Connect the touch control to a known working PoE switch port which provides power of 15.4W.

8.2 Touch controller and video bar pairing Issues

Problem	• Touch controller doesn't automatically pair with the video bar. • Touch controller fails to manually pair with the video bar from the list of "Available Devices."
Cause	• Network traffic on UDP port 13006 is blocked. • Network traffic on TCP port 50051 is blocked. • Touch controller and video bar are not in same subnet/VLAN.
Potential Fix	• Allow traffic on UDP port 13006. • Allow traffic on TCP port 50051. • Make sure both the touch controller and video bar are in the same subnet / VLAN.

8.3 Zoom Rooms setup issues

Problem	• Touch controller and video bar Zoom controller pairing fails.
Cause	• Network traffic on TCP port 9090 is blocked. • Network traffic on TCP port 443 is blocked.
Potential Fix	• Make sure the video bar and touch controller are paired and the video bar is currently connected to the touch controller. • Allow traffic on TCP port 443 from touch controller and video bar to Zoom cloud (Refer to Zoom documentation for Zoom cloud IP address to be allowed). • Allow traffic on TCP port 9090 between touch controller and video bar.

8.4 Microsoft Teams Rooms setup issues

Problem	• Touch controller and video bar Microsoft Teams Room touch console pairing fails.
Cause	• Network traffic on TCP port 443 is blocked. • Touch controller and video bar are signed in using different resource accounts.
Potential Fix	• Sign into both touch controller and video bar using the same account. • Allow traffic on TCP port 443 from touch controller and video bar to Microsoft Teams cloud (Refer to Microsoft documentation for Microsoft IP address to be allowed).

8.5 Video bar or touch controller do not have network connectivity

Problem	• Video bar or touch controller do not have network connectivity.
Cause	• Video bar or touch controller are not on the correct network subnet / VLAN. • Network switch port is not enabled. • Video bar does not get an IP address from the DHCP server.
Potential Fix	• Make sure the switch port is enabled and the LED on both the switch port and video bar or / JPC controller network port has network activity. • Configure the switch port in the correct VLAN. • Make sure DHCP relay is configured in the switch (or port) and the DHCP server has IP address space available for leasing.

8.6 Video bar or touch controller do not have the correct date/time

Problem	• Video bar or touch controller do not have correct date and time.
Cause	• Video bar or touch controller is not synced to a valid NTP server. • Video bar or touch controller do not have network reachability to an NTP server
Potential Fix	• Configure a known working NTP server with less stratum level • Ensure the network reachability to the NTP server from the Jabra PanaCast 50 Video Bar System • If using the default NTP server ntp.jabra.com, allow UDP port 123 in the firewall to ntp.jabra.com

8.7 Firmware update failure

Problem	• Video bar or touch controller firmware update fails.
Cause	• Firmware upgrade URL is invalid. • Firmware cannot be downloaded due to network connectivity issues. • Firmware update is a lower version than current firmware version.
Potential Fix	• If using the custom URL update method, make sure the firmware upgrade URL is valid by entering it in a browser and verifying if the download succeeds. • If using Jabra Support update or VaaS partner update methods, ensure there is network connectivity between the PanaCast 50 Video Bar System and the cloud and there is sufficient bandwidth to download the firmware. • Ensure the firmware version is higher than the currently installed firmware version.

8.8 VaaS related issues

Microsoft

Refer to Microsoft documentation to troubleshoot Microsoft Teams Rooms application related issues.

https://learn.microsoft.com/en-us/microsoftteams/troubleshoot/teams-welcome

Zoom

Refer to Zoom documentation to troubleshoot Zoom Rooms application related issues.

https://support.zoom.us/hc/en-us/sections/115000963683-Troubleshooting-Zoom-Rooms

How to collect logs

The PanaCast 50 Video Bar System logs can be collected from the Web Console. Enable the Web Console access from the touch controller following these steps:

Jabra PanaCast 50 Video Bar System – Zoom Rooms

1. On the touch controller, go to Settings > General > System settings
2. Enter the passcode to access Admin settings (set in Zoom admin portal)
3. Go to Account Tab > Access > Toggle the button to enable Web Access

Once the Web Console access is enabled, log in to the Web Console using the IP address of the video bar.

Follow the steps below to collect the logs:

1. Log in to the Web Console of the video bar by entering its IP address in a browser.
2. Go to Account -> Jabra Support
3. Enable Debugging by toggling the button and click Save
4. Recreate the problem and click Download Logs below the Debugging tab.
5. Click Download in the pop-up window that appears.

Log bundle is created in the tar.gz format and downloaded to the PC.

Jabra PanaCast 50 Video Bar System – Microsoft Teams Room

1. On the touch controller go to Settings > Device settings > Admin
2. Log in using the touch controller admin credentials (Default password: Last 6 characters of the serial number of the touch controller)
3. Go to Account Tab -> Access -> Toggle the button to enable Web Access

Once Web Console access is enabled, log in to the Web Console using the IP address of the video bar.

Follow the steps below to collect the logs:

1. Login to the Web Console of the video bar by entering its IP address in a browser.
2. Go to Account -> Jabra Support
3. Enable Debugging by toggling the button and click Save
4. Recreate the problem and click Download Logs below the Debugging tab.
5. Click Download in the pop-up window that appears.

Log bundle is created in the tar.gz format and downloaded to the PC.

To learn more about the Jabra PanaCast 50 Video Bar System,
go to **jabra.com/help/panacast50vbs/getstarted**