ADMINISTRATOR GUIDE



PANACAST 50 VBS

Technology for life's new rhythm

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Made in China

MODEL: VSM040; VTD040

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

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1. Introduction

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

The information in this guide is applicable to the VBS running the following minimal firmware version:

Jabra PanaCast 50 VBS bar (video bar): 3.6.0-31

Jabra PanaCast Control (touch controller): 3.6.0-31

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, such as HDMI, Ethernet and USB, their standards and limitations.

2. Getting started

Welcome to the Jabra PanaCast 50 VBS. 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

For product and feature information: *Jabra PanaCast 50 VBS User Manual*

For installation instructions: *Jabra PanaCast 50 VBS Installation Manual*

For all product documents: *Jabra Support Page*

2.2 Powering the PanaCast 50 VBS on/off

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

Do not unplug the power to the PanaCast 50 VBS 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.

2.3 Management interfaces

Touch controller

The touch controller acts as the main management interface for the PanaCast 50 VBS. 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 IP address. Using the Web Console, Administrators can make configuration changes to the video bar.

Jabra Plus

Jabra Plus is the cloud based remote management platform which can be used to provision, mass deploy, monitor, and manage the PanaCast 50 VBS. For more information on Jabra Plus, go to Jabra Plus support page.

VaaS partner management portals

The PanaCast 50 VBS can be managed using Microsoft Teams Admin Center or Zoom Device Management to configure UC specific settings. For more details, refer to the Microsoft Teams Room management guide or Zoom device management guides.

Touchscreen monitor

The video bar can be connected via the USB-A port to a touchscreen monitor which can be used as an interface to control the PanaCast 50 VBS. Connection to only one touchscreen is currently supported. An additional USB cable is required to connect to a touchscreen 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 VBS settings.

2.4 Management through VaaS partner portals

Microsoft TAC/Pro portal

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

Zoom Device Management (ZDM)

- *Zoom Device Management*

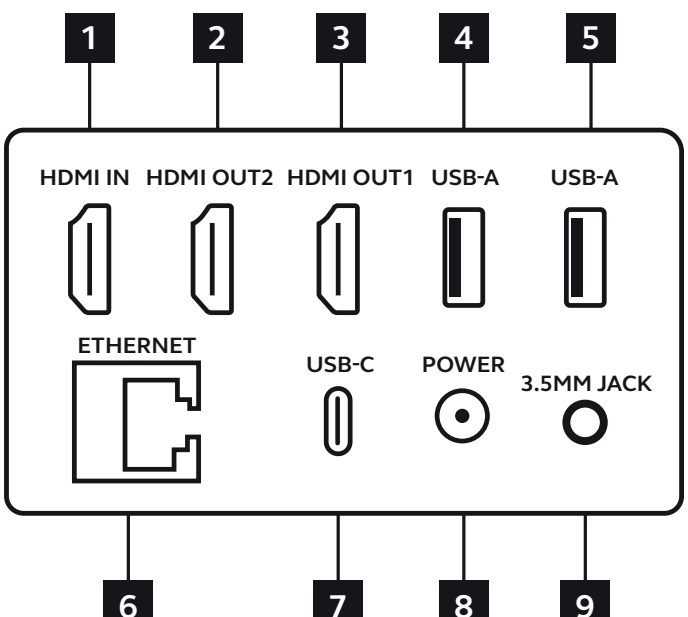
3. Hardware overview

For instructions on installing the Jabra PanaCast 50 VBS, view the *Installation guide*.

3.1 Ports and LEDs

Video bar ports

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

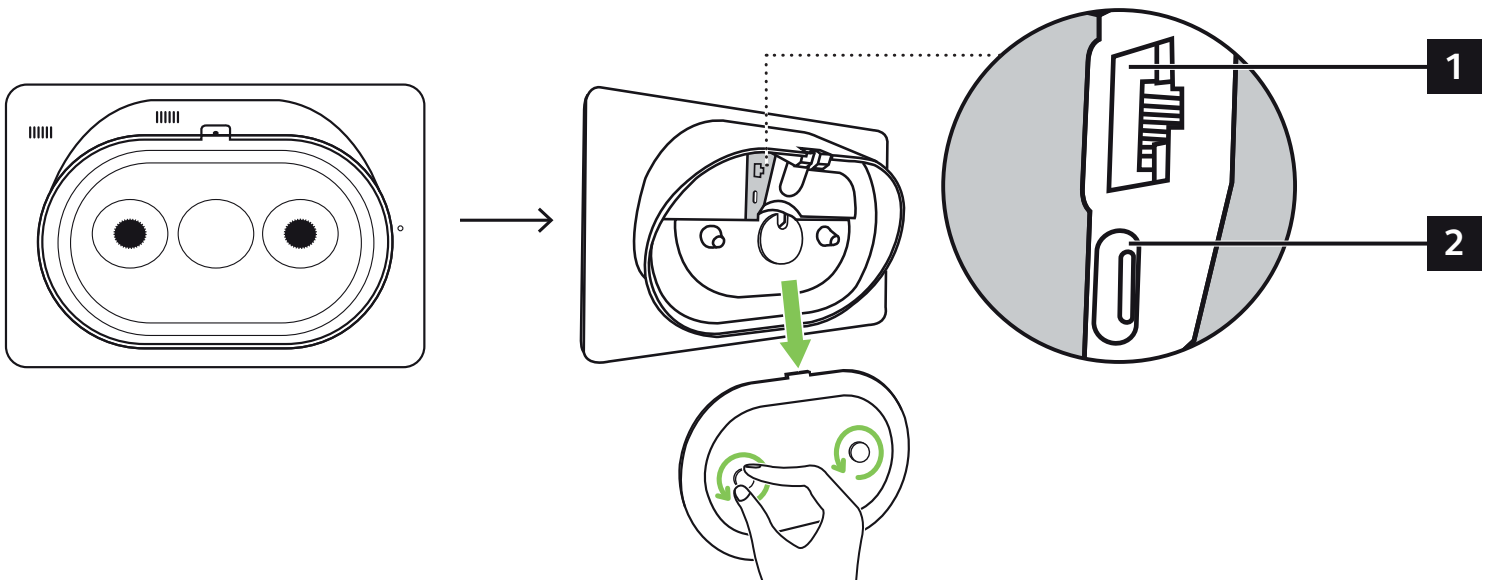


PORT DESCRIPTIONS

Number	Port	Description
1	HDMI IN (2.0)	To connect a laptop or PC for content sharing.
2	HDMI OUT 2 (2.0)	To connect a second monitor or display.
3	HDMI 1 (2.0)	To connect the primary monitor or display.
4	USB-A (2.0)	To connect a keyboard or mouse.
5	USB-A (2.0)	To connect a keyboard, mouse, or touchscreen monitor.
6	ETHERNET	To connect the Ethernet LAN cable.
7	USB-C 3.2 gen 1x1	For BYOD.
8	POWER	To connect the power adapter.
9	3.5MM JACK	AUX-out for connection of Assistive Listening Devices.

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 Power over Ethernet (PoE) kit.
2	USB-C	For future use.

LED status indicators

The following tables explain the LED indicators for the PanaCast 50 VBS.

VIDEO BAR LEDS

LED Indicator	Status
Off	Video bar is powered off or the system is idle.
Flashing white	PanaCast 50 VBS is switching from off to on.
White	In call or streaming video/media.
Red	In call, audio muted.
Flashing pink	Firmware updating or video bar resetting.

TOUCH CONTROLLER LED

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

4. Setup and configuration

Follow the steps below to fully set up and configure the PanaCast 50 VBS.

1. Install and cable the hardware.
2. Use the Setup Wizard.
3. Configure device settings.

4.1 Install and cable hardware

For instructions on how to install the Jabra PanaCast 50 VBS, refer to the *Installation guide*.

4.2 Use the Setup Wizard

The PanaCast 50 VBS can be configured using the Web Console or directly on the Jabra device (video bar or touch controller).

The setup includes:
- Language selection
- Date and time setup
- Pairing between video bar and touch controller, if not already paired
- Firmware update, if necessary
- Link with an organization in Jabra Plus
- Video Service Provider selection, if not preselected

To link the Jabra PanaCast 50 VBS with an organization in Jabra Plus, enter the provisioning code and name the meeting room to identify the device in Jabra Plus.

The provisioning code is generated in Jabra Plus. For more information, go to *jabra.com/support*

4.3 Configure device settings

The PanaCast 50 VBS settings can be configured using the Web Console and/or the touch controller.

Configure settings using the Web Console

Enter 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.

Configure settings using the touch controller

The touch controller can also be used to make changes to the PanaCast 50 VBS settings.

If **Microsoft Teams Room** is the selected VaaS:

- Go to **Settings** > **Device settings** on the touch controller.
- Select **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.**

If **Zoom Room** is the selected VaaS:

- Go to **Settings** > **Device settings** > **System settings** on the touch controller.
- Enter the password set in Zoom web portal for this Zoom room

If the touch controller is not available, a touchscreen 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 VBS settings.

The first step that administrators should undertake when deploying the PanaCast 50 VBS is updating the default local administrator password. The password can be changed under the account settings on the Web Console and/or touch controller.

Configure settings using Jabra Plus

Log in using your Jabra Plus account. Go to the **Meeting rooms** > **Room inventory** menu, select your organization and corresponding meeting room. Select the provisioned Jabra PanaCast 50 VBS to access the video settings.

5. Settings

The following sections describe in detail each setting that can be configured using the Web Console, Jabra Plus and/or touch controller.

To review Jabra PanaCast 50 VBS settings and device details in Jabra Plus, log in using your Jabra Plus account. Go to **Meeting rooms** > **Room inventory** menu, select the corresponding meeting room. Select the provisioned Jabra PanaCast 50 VBS device.

5.1 System settings

System management

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

Setting	Values	Description
Room name	Text entry field	Create a room name for the PanaCast 50 VBS. It is recommended to give the device the same name as the room it is located within. This name will not be shared with the VaaS provider.
Automatic firmware update	Enable, Disable *Default: Disable	Enable automatic firmware updates of the JabraPanacast 50 VBS devices.
Manual firmware update	Update button	Manually update the Jabra PanaCast 50 VBS devices.
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: Download firmware updates from Jabra cloud. Zoom Rooms / Microsoft Teams Rooms: Control firmware updates through the VaaS Partner management portal. Custom Server URL: Download firmware updates from a custom file server (HTTPS only).

About system

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

The video bar and touch controller must both be paired for information about each device to be displayed.

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 addresses
- Video conferencing app version

Certificates

User interface	Path
Web Console	System > Certificates

Setting	Description
Device CA certificates	Upload CA certificates. After uploading, the certificates will be displayed with their corresponding expiration date.
Manual certificate enrollment	Manually create certificate signing requests and upload CA and client certificates. After uploading, the certificates will be displayed with their corresponding expiration date.
802.1X Simple Certificate Enrollment Protocol (SCEP)	Enable and configure an SCEP protocol.

Bring Your Own Device

User interface	Path
Jabra PanaCast control	Jabra Settings > System > Bring Your Own Device
Web Console	System > Bring Your Own Device

Setting	Values	Description
Enable BYOD	Enable, Disable *Default: Disable	Enable BYOD mode when connecting a personal computer via USB-C.
Start BYOD session	Start button	Start a BYOD session when connecting a personal computer via USB-C. *Only available in the touch controller.

5.2 Video settings

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 automatic adjustments to HDR depending on the lighting conditions in the room.
Contrast	0-100 *Default: 80	Set the camera contrast.
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 automatic adjustments to the white balance depending on the lighting conditions in the room.
White balance	0-6500K *Default: 5000K	Set the camera white balance manually using the Kelvin scale.

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, Multi-stream Dynamic Composition *Default: Intelligent Zoom	Select the preferred camera mode. 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.
Intelligent Meeting Space	*Default: Not configured Configured	Set up the boundaries for the meeting space. Only people within this boundary will be included as participants in the meeting.

For a detailed overview of all camera modes, refer to the *Jabra PanaCast 50 VBS User Manual*.

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.
Standby mode	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 VBS to enter standby mode.

Reset

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

Setting	Description
Reset video settings	Reset the PanaCast 50 VBS to the default video settings.

5.3 Audio settings

The PanaCast 50 VBS settings can be configured using the Web Console and/or the touch controller.

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.
Noise suppression	Normal (recommended) Extreme *Default: Normal	Suppress constant static noise in the meeting room, such as a fan or air conditioning. Extreme noise suppression will suppress all background noise, but may make voices sound flat.
AUX port (3.5mm jack)	Enable, Disable *Default: Disable	When enabled, it allows the connection of Assistive Listening Devices to improve accessibility for people with hearing loss.

5.4 Network settings

Network configuration settings, such as IP address, default gateway, subnet mask, and DNS servers, are obtained through DHCP (if a dynamic IP is required) or manually configured (if a static IP is required). By default, the IP is obtained through DHCP.

LAN configuration can be auto-negotiated if dynamic IP configuration has been selected, or manually configured if static IP configuration has been selected.

Currently, IPv4 is only required for Microsoft Teams.

INFORMATION

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

Setting	Values	Description
Devices	Jabra PanaCast VBS Base Unit (video bar), Jabra PanaCast Control (touch controller)	Select which device network properties are shown.
WiFi	Not configured, Configured Default - Not configured	View or configure a WiFi network.

Setting	Values	Description
Internet Protocol (IPv4 or IPv6)	Not connected, Connected, No Internet access Default - Not connected	Configure the Internet Protocol. When both IPv4 and IPv6 addresses are available through DHCP, IPv6 takes precedence.
LAN	Informational Field	View auto negotiated link speed for the selected device.
Use Proxy Server	Not configured, Configured Default - Not configured	Enable or disable the use and configuration of a proxy server
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.
Authentication protocol (802.1X)	"Not configured Configured *Default: Not configured"	Set the credentials for the PEAP authentication type.
802.1X authentication protocol	"Enable Disable *Default: Disabled"	EAP methods for 802.1X authentication: MD-5, TLS and MSCHAPv2 (limited to IPv4).

Setting	Values	Description
Authentication type	PEAP	Security protocol used to protect wireless networks.
Username	Text entry field	Set the username to be used as credential during the authentication process.
Password	Text entry field	Set the password to be used as credential during the authentication process.

Bluetooth

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

Setting	Values	Description
Proximity join	Enable, Disable *Default - Enable	Enable or disable Bluetooth connections. Bluetooth is used for VaaS provider features.

5.5 General settings

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 VBS 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 VBS supports manual configuration of NTP server and DHCP option 42. *Default – ntp.jabra.com

Service provider

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

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

Support

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

Setting	Description
Description	Enter a description about your organization's support team. This information will be displayed to end users.
Phone	Enter the phone number for your organization's support team. This information will be displayed to end users.
Email	Enter the email for your organization's support team. This information will be displayed to end users.

System reset

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

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

5.6 Account settings

ACCESS

User interface	Path
Jabra PanaCast Control	Jabra Settings > Account > Account
Web Console	Account > Access
Link with organization in Jabra Plus	Account > Access

Setting	Description
Web Console	Enable or disable login access to the Web Console. If disabled, this setting can be re-enabled on the touch controller.
Credentials	Set the admin username and password to log in to the system.
Link with organization in Jabra Plus	Link to an organization in Jabra Plus using a provisioning code.

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)	URL link to the Jabra product support website.
Register product (only available on the Web Console)	URL link 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
Download logs*	Download the debug logs for the device. Logs are stored independently on the video bar and touch controller.

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.
Multi-Focus	In a Meeting > Camera Control > Multi-Focus	Set the camera to focus on multiple in-room participants and groups them into a single video stream.
Multi-Stream	In a Meeting > Camera Control > Multi-Stream	Set the camera to enable multiple video streams to focus on multiple in-room participants, while also sending a stream framing the entire group.
Contacts	Home > Contacts	List of contacts within an organization, including the ability to launch a meeting.
Test microphone	Home > Settings > Microphone > Test Micro-phone	Start/stop the microphone test.
Test speaker	Home > Settings > Microphone > Test Speaker	Start/stop the speaker test.

Setting	Path	Description
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.	

Setting	Path	Description
Room	Teams Admin Settings > Devices > Room Camera > Room	Set the camera to automatically center and focus on everyone in the room.
Active speaker	Teams Admin Settings > Devices > Room Camera > Active speaker	Set the camera to automatically center and focus on the person talking.
Composite	Teams Admin Settings > Devices > Room Camera > Composite	Set the camera to zoom in each person in the room and group them into a single video stream.

5.7 Network settings

This chapter introduces how to configure the network of your PanaCast 50 VBS.

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 VBS 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 VBS uses the standard UDP port 123 to reach out to the NTP server. By default, the PanaCast 50 VBS 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 VBS 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 VBS would provide an option to set a custom NTP server.

802.1X

The PanaCast 40 VBS supports 802.1X for both wired and wireless connections. The PanaCast 40 VBS has the ability to securely connect to 802.1X RADIUS (Remote Authentication Dial in User Service) servers via Ethernet using TLS (Transport Layer Security) version 1.3 Certificates can be added to the device via the Web Console.

The EAP methods supported are EAP-TLS, PEAP-MSCHAPv2 and MD5.

SCEP (Simple Certificate Enrollment Protocol)

SCEP is a protocol used to streamline the process of issuing digital certificates to network devices, allowing management of certificates in a secure and scalable way.

IPv4 and IPv6

Internet Protocol version 4 (IPv4) and version 6 (IPv6) are fully supported in the PanaCast 40 VBS, including IPv6-only networks. IPv6 can be enabled or disabled on the devices. The PanaCast 40 VBS utilize SLAAC for address assignment and router advertisements for configuration of routes.

Security measures are identical for both IPv4 and IPv6, and traffic is encrypted for both protocols using Transport Layer Security (TLS) version 1.3. The encryption level depends on the protocol and service used. A variety of security initiatives are used to address security concerns, including threat modeling, secure coding practices, penetration testing, and more.

6. System security

6.1 Changing the administrator password

The first configuration step that device administrators should undertake when deploying the PanaCast 50 VBS is updating the default local administrator password. These credentials are used to access the Web Console and, if Microsoft Teams Rooms is the selected VaaS, the Jabra settings in the touch controller. When Zoom Rooms is the selected VaaS, access to the Jabra settings in the touch controller is secured by the Room Passcode set in Zoom Device Manager.

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 VBS 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 contain 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 Security (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 VBS 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 VBS is limited.

6.4 Firewall requirements

Refer to the following table for a 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
PanaCast 50 VBS	DHCP	UDP 67, 68	None required	Obtain IP address, default gateway, DNS etc.
PanaCast 50 VBS	UDP Broadcast	UDP 13006	None required (UDP traffic remains local to the subnet)	Discovery of JPC P50 VB-S Base Unit and JPC Control
PanaCast 50 VBS	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
PanaCast 50 VBS	NTP	UDP 123	Open UDP 123 on firewall to: ntp.jabra.com (Default)	NTP time server for various operations
PanaCast 50 VBS	HTTPS	TCP 443	Open TCP 443 to: https://api.cloud.jabra.com	Access Jabra cloud storage for firmware downloads
PanaCast 50 VBS	ICMP	N/A	Echo Request and Echo Reply to default gateway	Local network connectivity test
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. Device Management - only applicable for Microsoft Teams Rooms

Beginning with 6.5.0 firmware version, Jabra PanaCast 50 VBS runs a version of the Android Operating System managed by Microsoft called the Microsoft Device Ecosystem Platform (MDEP). This firmware version also includes the transition for device management in Intune from the legacy Android Device Administrator to Microsoft's new Android Open Source Project Device Management (AOSP Device Management).

Administrators must follow Microsoft's guidance and create an AOSP Enrollment Policy in Intune before updating to 6.5.0 firmware version or newer.

Find more information about MDEP here and about AOSP Device Management here.

Note: Microsoft officially supports firmware updates from version 3.6.0 (VP1.1) to version 6.5.0 (VP3). If you need to update from an older firmware version, you may need to restart the device and log in to your Microsoft Teams account after the firmware upgrade is completed.

8. Updating and maintenance

8.1 Firmware updating

There are three methods for updating the PanaCast 50 VBS firmware. For security reasons, firmware cannot be downgraded.

Update method 1: Web Console > Jabra Support

1. Login to the Web Console using the administrator credentials.
2. Go to **System** > **System Management**
3. Go to **Firmware download site/URL** and select **Jabra support**.
4. Click the **Update** button.

The latest firmware will be downloaded and installed from the Jabra Cloud to the PanaCast 50 VBS. Once the firmware has been updated, the **Update** button will be disabled, indicating that the installed firmware version matches the latest firmware version available.

Update method 2: VaaS partner portal

The PanaCast 50 VBS firmware can be updated using the VaaS partner portal. When using Teams Rooms, go to Microsoft Teams Admin Center. When using Zoom Rooms, go to Zoom Device Management.

Update method 3: Web Console > 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 VBS to update the PanaCast 50 VBS 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.

Update method 4: Jabra Plus

Firmware updates in Jabra Plus will follow the Firmware policy assigned to the meeting room configuration.

1. Log in to Jabra Plus using your Jabra Plus account.
2. Go to the **Meeting rooms** > **Room configurations** menu and select **Firmware policy**.
3. Enable or disable the settings based on the firmware update requirements.

8.2 Restarting the PanaCast 50 VBS

The PanaCast 50 VBS can be restarted locally using the touch controller or video bar, or remotely using the Web Console or Jabra Plus. A restart initiated from the Web Console, Jabra Plus, 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.Select **Restart** in System Restart 2.System will prompt for **Restart System** – (Settings will not be changed) 3.Select **Restart**
Jabra Plus	Meeting rooms > Room name > Jabra PanaCast 50 VBS	Select **Reboot device** on the Jabra PanaCast 50 VBS action menu. Select **Confirm**.

8.3 Resetting the PanaCast 50 VBS

The PanaCast 50 VBS can be reset 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 reset all devices to factory default settings. Factory paired devices remain paired.

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

Custom Configuration Reset

A 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.Select **Reset** button 2.System will prompt for **Reset System** – (Settings will revert to the user default) 3.Select **Reset**

Manual factory Reset

Device	Procedure
Video bar	Press and hold the **Reset** button on the back of the video bar for 15 seconds until the LED flashes pink and a 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 a Factory data reset message is displayed on the touch controller. The reset takes approximately 1 minute.

8.4 Configuring using a keyboard and mouse

To configure the video bar without a touch controller, use a touch monitor or connect a keyboard and mouse to the USB-A ports on the back of the video bar. Follow the setup wizard to configure the Jabra PanaCast 50 video bar.

8.5 Replacing a faulty device

When either the video bar or touch controller is faulty, it may need to be replaced. The replacement device will require pairing with the non-faulty device.

When the video bar is replaced, the touch controller must be reset to factory default settings before it can be paired with the replacement video bar.

When the touch controller is replaced, unpair the video bar by accessing the Web Console of the video bar and go to **System** > **Devices** > **Unpair**. The replacement touch controller can now be paired with the video bar.

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

8.6 Cleaning the PanaCast 50 VBS

Cleaning the video bar

Use a clean, dry micro fiber cloth to gently clean the camera lenses. 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.

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 micro fiber cloth to wipe the screen. Do not use **any** chemicals to clean the screen. These cleaners can damage the screen by stripping protective coatings.

9. Troubleshooting

9.1 Touch controller does not boot up

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 kit provided with the touch controller. • Connect the touch controller to a well-known working PoE switch port which provides power of 15.4W.

9.2 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.

9.3 Zoom Rooms setup issues

Problem	• Failed pairing of the PanaCast 50 VBS to a Zoom controller.
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 connected. • Allow traffic on TCP port 443 from touch controller and video bar to Zoom cloud (refer to Zoom documentation for Zoom cloud IP address). • Allow traffic on TCP port 9090 between touch controller and video bar.

9.4 Microsoft Teams Rooms setup issues

Problem	• Failed pairing the PanaCast 50 VBS to a Microsoft Teams Room touch console.
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 the 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).

9.5 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.

9.6 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 VBS • If using the default NTP server ntp.jabra.com, allow UDP port 123 in the firewall to ntp.jabra.com

9.7 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.

9.8 VaaS related issues

Microsoft Teams Rooms

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

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

Zoom Rooms

Refer to Zoom documentation to troubleshoot Zoom Rooms related issues.

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

9.9 Logs

PanaCast 50 VBS logs can be collected using the Web Console.

Before logs can be collected, the Web Console will need to be granted access to the logs, which can be done using the touch controller.

If **Microsoft Teams Rooms** is the selected VaaS:

1. On the touch controller, go to Settings > Device settings > Admin.
2. Log in using the touch controller admin credentials.
3. Go to Account Tab -> Access -> Toggle the button to enable access to the logs.

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 -> 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.

If **Zoom Rooms** is the selected VaaS:

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

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. 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.

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