AudioCodes High Definition IP Phones Series

RXV80 Standalone Video Collaboration Bar

Version 1.16









Table of Contents

1	Intro	oduction	9
	1.1	About AudioCodes' RX Suite	9
	1.2	Specifications	10
	1.3	Security Guidelines	11
		1.3.1 Microsoft Teams Security Guidelines	
		1.3.2 Android Level Security Hardening	
		1.3.2.1 Google Play Services	11
		1.3.2.2 Running Android in Kiosk Mode	
		1.3.2.3 Screen Lock	
		1.3.2.4 AudioCodes Private Key	
		1.3.2.6 App Signing	
		1.3.2.7 Web Browser	12
		1.3.2.8 Remote Configuration Management	
		1.3.2.9 AudioCodes Device Manager Validation	
		1.3.2.10 Sandboxing	
		1.3.2.12 Device Certificate	
		1.3.2.13 Data Protection	
		1.3.2.14 Device File System	
		1.3.2.15 Debugging Interface	
		1.3.3 Android Security Updates	
2	Sett	ting up the RXV80	15
3	Sigr	ning in	17
	3.1	Multi-Cloud Sign-in	
	3.1	3.1.1 Remote Provisioning and Sign in from Teams Admin Center	
4	Gett	tting Started	21
	4.1	Modifying Camera Settings	22
	4.2	Starting a New Meeting	26
	4.3	Dialing a Number	29
	4.4	Enabling Proximity Join	30
	4.5	Sharing your Screen	
	4.6	About Microsoft Teams	
	_		
	4.7	Signing out	
5	Con	nfiguring Device Settings	35
	5.1	Configuring Device Admin Settings	38
		5.1.1 Display Settings	
		5.1.2 Date & Time	
		5.1.3 Wi-Fi Settings	
		5.1.3.1 Configuring Wi-Fi	
		5.1.4 Camera	
		5.1.5 Bluetooth	
		5.1.6 Security	45
		5.1.7 Languages & input	
		5.1.8 Modify network	
		5.1.9 Calling 5.1.10 DSCP	
		0.1.10 2001	52



		5.1.11 Debugging	54
		5.1.11.1 Log Settings Collecting Logs	55
		5.1.11.2 Remote Logging	
		5.1.11.3 Diagnostic Data	58
		5.1.11.4 Reset configuration	59
		5.1.11.5 Restart Teams app	
		5.1.11.6 Company Portal Login	
		5.1.11.7 Getting Company Portal Logs	
		5.1.11.8 Launch Mobile Teams	
		5.1.11.9 Debug Recording	
		5.1.11.10 Erase all data (factory reset)	
		5.1.11.11 Screen Capture	
		5.1.11.12Remote Packet Capture	62
	5.2	Performing Recovery Operations Manually using Shortcut Keys	62
	5.3	Configuring User Settings	64
		5.3.1 Sound	64
		5.3.2 Accessibility	64
		5.3.3 Setting Live Captions	
		5.3.4 Hiding Names and Meeting Titles	
		5.3.5 Reboot	
		5.3.6 About	65
6	Upd	lating Microsoft Teams Devices Remotely	67
7	Rep	lacing Remote Controller Batteries	69
	7.1	Assessing the RC's Battery Level	69
	7.2	Restarting / Rebooting the RXV80	
8	Sub	ported Parameters	

List of Figures		
Figure 4-1: Home Screen	22	
Figure 4-2: Camera Settings	22	
Figure 4-3: Login when the RXV80 is in idle state		
Figure 4-4: Camera settings - Save View		
Figure 4-5: Camera settings - Save View		
Figure 4-6: New meeting – Invite someone		
Figure 4-7: New meeting – Enter the name of a person		
Figure 4-8: New meeting – Select the name of a person		
Figure 4-9: Dial pad	29	
List of Tables		
Table 1-1: Specifications	10	
Table 5-1: Wi-Fi Parameters	41	
Table 5-2: Wi-Fi Parameters per Index	41	



This page is intentionally left blank.

Notice

Information contained in this document is believed to be accurate and reliable at the time of printing. However, due to ongoing product improvements and revisions, AudioCodes cannot guarantee accuracy of printed material after the Date Published nor can it accept responsibility for errors or omissions. Updates to this document can be downloaded from https://www.audiocodes.com/library/technical-documents.

This document is subject to change without notice.

Date Published: Feb-17-2022

Trademarks

AudioCodes Ltd. All rights reserved. AudioCodes, AC, HD VoIP, HD VoIP Sounds Better, IPmedia, Mediant, MediaPack, What's Inside Matters, OSN, SmartTAP, VMAS, VoIPerfect, VoIPerfectHD, Your Gateway To VoIP, 3GX, VocaNom, AudioCodes One Voice and CloudBond are trademarks or registered trademarks of AudioCodes Limited All other products or trademarks are property of their respective owners. Product specifications are subject to change without notice.

WEEE EU Directive

Pursuant to the WEEE EU Directive, electronic and electrical waste must not be disposed of with unsorted waste. Please contact your local recycling authority for disposal of this product.

Customer Support

Customer technical support and services are provided by AudioCodes or by an authorized AudioCodes Service Partner. For more information on how to buy technical support for AudioCodes products and for contact information, please visit our Web site at https://www.audiocodes.com/services-support/maintenance-and-support.

Stay in the Loop with AudioCodes











Abbreviations and Terminology

Each abbreviation, unless widely used, is spelled out in full when first used.

Documentation Feedback

AudioCodes continually strives to produce high quality documentation. If you have any comments (suggestions or errors) regarding this document, please fill out the Documentation Feedback form on our Web site at http://online.audiocodes.com/documentation-feedback.

Related Documentation

Document Name
RXV80 Standalone Video Collaboration Bar Deployment Guide
RXV80 Standalone Video Collaboration Bar Release Notes
One Voice Operation Center (OVOC) Release Notes
One Voice Operation Center (OVOC) User's Manual
Device Manager Administrator's Manual
RX15 Speakerphone Quick Guide



This page is intentionally left blank.

1 Introduction

The AudioCodes RXV80 standalone video collaboration bar delivers an intuitive meeting room experience in video-enabled meeting rooms and is especially designed for huddle rooms. Integrated processing capabilities deliver unified communication in a standalone device, enabling remote participants to see and hear everyone in the room with outstanding video image clarity and enhanced voice quality.

Feature highlights:

Wide-angle 4K Camera & HDR Video Mapping

Covers a 110° viewing angle capturing every seat in the room even in tight spaces with challenging lighting conditions

Support for AudioCodes' **RX15 Speakerphone** | **Huddle Room Speaker** as a Wideband Bluetooth Speaker connected to the RXV80.

Seamless Integration with the Microsoft Teams UC Platform

Enables quick and easy deployment, installation, and moderation with click-to-join functionality for both video-enabled collaboration and voice-only conference calls.

Intuitive & Cost-effective Meeting Experience

Leverages touch controller and existing TV speakers without relying on personal devices such as laptops or phones.

AudioCodes' remote controller software is managed by the RXV80; the controller leverages Bluetooth which enables full control and bi-directional communication. Remote controller keys (Mute, Teams) are illuminated.

Operational Efficiency

Enhances meeting experience with centralized management, monitoring, and continuous productivity.

■ Dynamic Levelling & Intelligent Acoustics™

Boosts quiet or distant voices while distinguishing speech from noise.

1.1 About AudioCodes' RX Suite

The RX Suite offering initially consisted of a portfolio of meeting room solutions to enhance meeting productivity through high-quality audio conferencing plus the Meeting Insights app to handle meeting recording, post-meeting analytics, and action item follow up.

Collaboration Bars for Microsoft Teams provides customers a simple and easy-to-use Teams meeting experience in more spaces across their organizations. The RX Suite has a line of conferencing devices that address a wide range of meeting room environments from huddle rooms to boardrooms.

The RXV80 Collaboration Bar for Microsoft Teams, part of the RX Suite, dramatically enhances the experience of Teams users seeking next-level experiences.

Jointly developed with Dolby Communications Business Group, the video conferencing solution integrates Dolby audio and video quality with AudioCodes' expertise in integrating with Microsoft Teams.

The RXV80 ensures that users experience exceptional audio and video quality whether they're in the meeting room or anywhere else.



1.2 Specifications

The following table shows the RXV80 specifications.

Table 1-1: Specifications

Feature	Details
Video capabilities	 Ultra HD 4k Image Sensor 1/1.8" CMOS Super-wide Angle Horizontal Field of View: 110° Lens: Fixed focus, f/1.8 aperture HDR video mapping EPTZ capable H.264 Baseline and High Profile Resolution: 1080p on the decoder side and 720p on the encoding side Frame Rate: 30 fps
Audio	 Full duplex, noise suppression, acoustic echo cancellation, voice separation Audio output through HDMI (developed in partnership with Dolby) 4X beamforming microphone array Voice pickup range: 4.5m (15ft) Audio frequency: G.711a/G.711u/G.722/G.729ab/Opus Audio range: Super wideband, 160Hz – 16kHz
Device Interfaces	 Single HDMI output to TV HDMI input USB 3.0 host ports (x2) Wi-Fi (dual band support) Bluetooth (BLE support) Network: 10/100/1000 Mb (RJ-45) network interface Kensington lock Supports tripod mounting
Network Provisioning	 TCP/IP (IPv4), DHCP/ static IP; Time and date synchronization via SNTP; VLAN support; QoS support: IEEE 802.1p/Q tagging (VLAN), Layer 3 TOS and DSCP RTCP support: (RFC 1889) IP address configuration: TCP/IP (IPv4), DHCP/static IP Time and date synchronization: SNTP QoS support: IEEE 802.1p/Q tagging (VLAN), Layer 3 TOS and DSCP RTCP support: (RFC 1889)
os	Android 9.0
UC Platform Support	 Microsoft Teams Intuitive meeting experience with calendar integration and click-to-join (one-touch or proximity join experience)
Security	 Encryption: TLS (Transport Layer Security), SRTP encryption for media, AES256 Network Access Control: IEEE 802.1x Built-in certificate

1.3 Security Guidelines

The RXV80 is an AudioCodes Native Teams Android-based device purpose-built and customized for Teams calling and meeting and designed to enhance security as part of the default use.

Though customers might see Android-based systems as prone to security issues, security is much less a concern on devices that are purpose-built for Teams meeting and calling.

When analyzing the security of the device there are two levels that should be addressed:

- Authentication and security with regards to Teams connectivity and use
- Android level / system of the device

1.3.1 Microsoft Teams Security Guidelines

- Following are AudioCodes' recommendations with regards to device security:
 - Use "sign-in with other device option" using this mode the user does not type the
 password on the device, instead obtains a code to be used to sign-in on his PC/laptop;
 the device obtains a private token that enables it to access Teams cloud; this token,
 unlike a password, allows only that device which obtained it to reuse it. The token is
 stored on the secured file system.
 - Leverage Multi-Factor-authentication (MFA) to improve the security of the sign in.
 - IT can consider reducing the expiration time of the sign in for devices which are connected remotely (outside the organization network) vs devices in the organization premise.
- Visit Microsoft technical pages and learn more on security guidelines and policies for Microsoft Teams adoption:
 - Overview of security and compliance Microsoft Teams | Microsoft Docs
 - Identity models and authentication for Microsoft Teams Microsoft Teams | Microsoft Docs
 - Sign in to Microsoft Teams Microsoft Teams | Microsoft Docs

1.3.2 Android Level Security Hardening

This section describes the major changes performed on the system/Android level that were incorporated into the device to improve its security.

1.3.2.1 Google Play Services

Goggle Play services were removed from the device software – no access is allowed to any Google store or Play services.

The device update of the Android software and application is done via special software components that either connect into Teams Admin Center or to AudioCodes Device Manager over secured channel.

1.3.2.2 Running Android in Kiosk Mode

Android Kiosk Lockdown software is the software that locks down the Android devices to just allow the essential apps by disabling access to the Home/Launcher. Using Android Kiosk Lockdown software, the Android devices can be converted into public kiosk terminals or secured work devices.

Only specific Microsoft apps and AudioCodes signed apps that were certified and approved in the certification process can run under the Kiosk mode; even if a malicious user managed to install a new un-authorized app on the file system – the launcher on the device will only run those specific approved apps and this cannot be changed in run time (only with new software code that is provided by AudioCodes).



1.3.2.3 Screen Lock

AudioCodes Native Teams devices use a screen lock mechanism to prevent any malicious user/users from gaining access to Calendar information and / or Active Directory list of employees and / or triggering unauthorized Teams calls from the device. After enabling screen lock, the device automatically locks after a preconfigured period; a code is required to unlock the device and resume full operation.

1.3.2.4 AudioCodes Private Key

The system software on the device is signed with AudioCodes private key – users can replace the complete software only with new software that is also signed by the AudioCodes private key. This prevents the user from replacing the complete OTA package of the device with any new system software unless this software has been fully signed by AudioCodes.

1.3.2.5 Android Debug Bridge (ADB)

AudioCodes disables the Android Debug Bridge (ADB) application and keeps the Teams app running in the front all the time, which means there is no way to install other Apps from unknown sources and sideloading.

1.3.2.6 App Signing

Android requires that all apps are digitally-signed with a developer key before installation; currently the device verifies that the apps are signed by Microsoft. App signing prevents malicious user/users from replacing a Microsoft-signed app with an app that "pretends" to be Microsoft but which lacks the private key that is known only to Microsoft.

1.3.2.7 Web Browser

The device does not include a Web browser – users cannot browse to the public internet or internal intranet– all Web services are customized to connect to O365 services and AudioCodes managed services such as One Voice Operations Center (OVOC).

Without a web browser, malicious user/users will not be able to access the device and browse from it as a trusted device into the customer network.

1.3.2.8 Remote Configuration Management

The Native Teams device does not have an embedded WEB server – configuration and management is performed using one of the following remote interfaces:

- Microsoft Teams Admin Center (for Native Teams devices) over HTTPS protocols this is enabled after successful sign-in authentication process.
- AudioCodes Device Manager (part of AudioCodes OVOC suite) over HTTPS.
- Debugging interface over SSH. Note that SSH MUST be disabled by default and enabled only per specific case for debugging-purposes only.

1.3.2.9 AudioCodes Device Manager Validation

The IP phone validates the AudioCodes Device Manager identity using known root CA:

- The device is shipped with known Root CAs installed. See AudioCodes Root CA Certificate.
- For the initial connection phase, the AudioCodes Device Manager should access the device using a known CA.
- Once a successful secured connection has been established between the device and the Device Manager, the user can replace the root CA on the Device Manager and on the phone and re-establish the connection leveraging any private root CA.

1.3.2.10 Sandboxing

AudioCodes Native Teams devices use Android Application Sandbox so that each application can access its own data and is isolated from other applications. This prevents a malicious app from accessing the code or the data of other applications in the system.

1.3.2.11 Keystore

With AudioCodes Native Teams devices, the certificate keys are encrypted on the device file system.

1.3.2.12 Device Certificate

AudioCodes Native Teams devices are shipped with a unique certificate which is signed by AudioCodes Root CA.

1.3.2.13 Data Protection

AudioCodes Native Teams devices run Android which has integral procedures for protecting and securing user data.

1.3.2.14 Device File System

The device file system is encrypted on the RXV80 device – customers may enforce a policy of device encryption via Microsoft Intune.

1.3.2.15 Debugging Interface

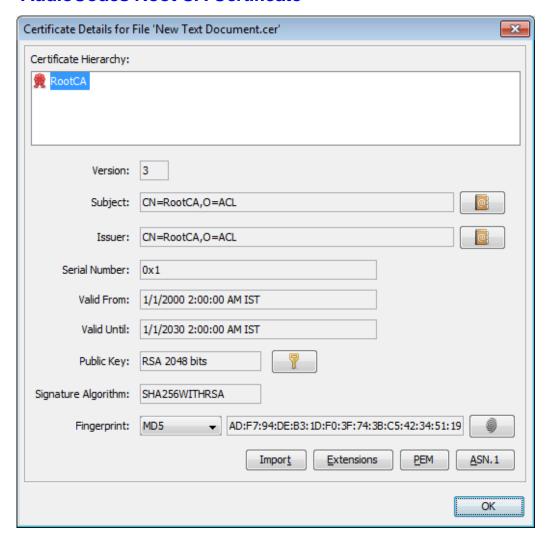
- The device leverages SSH as a debugging interface.
- AudioCodes recommends that customers disable SSH on the device this can be done via the AudioCodes Device Manager (OVOC).
- AudioCodes recommends changing the Admin password from the default, which can be done via Teams Admin Center or AudioCodes Device Manager (OVOC).
- When debugging of a specific device is required, the user can enable SSH on specific device/s, access SSH with the new Admin password for debugging phase and disable SSH once debugging has been completed.

1.3.3 Android Security Updates

In addition to all the above, AudioCodes regularly adopts and integrates the Android security updates. For reference see https://source.android.com/security/bulletin/2019-10-01).



1.3.4 AudioCodes Root CA Certificate



----BEGIN CERTIFICATE----

MIIDMTCCAhmgAwIBAgIBATANBgkqhkiG9w0BAQsFADAfMQwwCgYDVQQKEwNBQ0wx DzANBqNVBAMTBlJvb3RDQTAeFw0wMDAxMDEwMDAwMDBaFw0zMDAxMDEwMDAwMDBa MB8xDDAKBgNVBAoTA0FDTDEPMA0GA1UEAxMGUm9vdENBMIIBIjANBgkqhkiG9w0B AQEFAAOCAQ8AMIIBCqKCAQEA6GK495KUCXAm/UE17G4/cjnZN4LNaxYEYzbfZL0a EhgSKYt/LQ+iUcDhojsneusNgrcGkpwKklKsGsvGWmSRNULV01CW+TX2VJN73+hh V0uzhyOIYAUhbDaoqNM6Kp5b7sJ1ew4Ig9kfd/ma9Cz15koESLlw/inLj/r+rD96 mUcPElWrKspv7Qy4I14fsK/yMArixRopTL1munVVPpSFM9Jh8IY3JHyr5CQJXKKs EhGAJsnHaRqsR2Su3X/WtslqEF+cvP34pxhlhFL29nMfnaFATSS3rqGaFlSv11ZS esLMqkWjp9cqGYrvt7K61sYnvMMb+o/KbWqVokXb+Fr7bwIDAQABo3qwdjAMBqNV HRMEBTADAQH/MB0GA1UdDgQWBBQDXySn9hz151DraZ+iXddZGReB+zBHBgNVHSME QDA+gBQDXySn9hz151DraZ+iXddZGReB+6EjpCEwHzEMMAoGA1UEChMDQUNMMQ8w DQYDVQQDEwZSb290Q0GCAQEwDQYJKoZIhvcNAQELBQADggEBAI0rUywommWWJnH3 JOfKiS3+VnX5hJITZymvWanMXUz/6FonHccPXEBYTrUYwhiWx3dwELAFXDFKkxMp OKKWZ4F39cAOLRjqhzya+xUeeJ9HQZCXYAJ6XgvTfN2BtyZk9Ma8WG+H1hNvvTZY QLbWsjQdu4eFniEufeYDke1jQ6800LwMlFlc59hMQCeJTenRx4HdJbJV86k1gBUE A7fJT1ePrRnXNDRz6QtADWoX30mN7Megen/roTwvLpEP22nYwvB28dq3Jet1QKwu XC4qwI/o8K2wo3pySLU9Y/vanxXCr0/en513RDz1YpYWmQwHA8jJIu8rxdhr+VNQ Zv6R/Ys=

----END CERTIFICATE----

2 Setting up the RXV80



Note: See the *RXV80 Standalone Video Collaboration Bar Deployment Guide* shipped with the product or available from AudioCodes for information related to the hardware of the RXV80, including:

- Package contents
- Mounting
- Cabling



This page is intentionally left blank.

3 Signing in



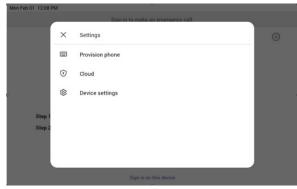
Note: See the *RXV80 Standalone Video Collaboration Bar Deployment Guide* shipped with the product or available from AudioCodes for detailed information on how to sign in to the device.

Users are provided by default with the option to sign in from any browser or smartphone with a prominent device code. If you choose to sign in from the device, you can enter your username and password on-screen via the device keyboard.



3.1 Multi-Cloud Sign-in

For authentication into specialized clouds, the network administrator can choose the Settings gear on the sign-in page to see the options that are applicable to their tenant.





3.1.1 Remote Provisioning and Sign in from Teams Admin Center

See Remote provisioning and sign in for Teams Android devices - Microsoft Teams | Microsoft Docs for more information.

IT admins can remotely provision and sign in to a Teams device.

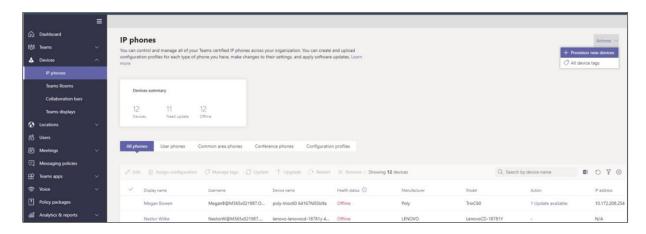
To provision a device remotely, the network administrator needs to upload the MAC IDs of the devices being provisioned and create a verification code. The entire process can be completed remotely from the Teams admin center.

Step 1: Add a device MAC address

Provision the device by imprinting a MAC address on it.

- 1. Sign in to the Teams admin center.
- 2. Expand Devices.
- 3. Select Provision new device from the Actions tab.





In the 'Provision new devices' window, you can either add the MAC address manually or upload a file

Manually add a device MAC address

- 1. From the Awaiting Activation tab, select Add MAC ID.
- 2. Enter the MAC ID.
- 3. Enter a location, which helps technicians identify where to install the devices.
- 4. Select **Apply** when finished.

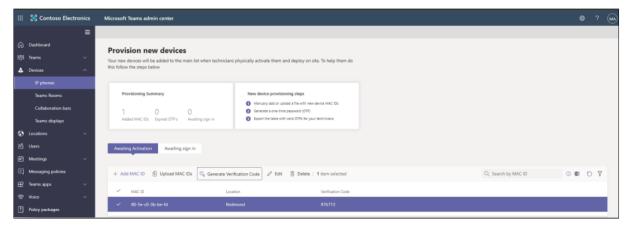
Upload a file to add a device MAC address

- 1. From the Awaiting Activation tab, select Upload MAC IDs.
- 2. Download the file template.
- 3. Enter the MAC ID and location, and then save the file.
- 4. Select the file, and then select **Upload**.

Step 2: Generate a verification code

You need to generate a verification code for the devices. The verification code is generated in bulk or at the device level and is valid for 24 hours.

From the **Awaiting Activation** tab, select an existing MAC ID. A password is created for the MAC address and is shown in the **Verification Code** column.



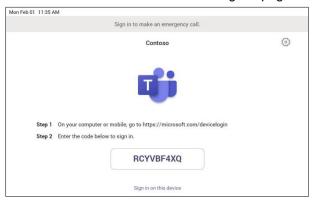
You'll need to provide the list of MAC IDs and verification codes to the field technicians. You can export the detail directly in a file and share the file with the technician who is doing the actual installation work.

Step 3: Provisioning on the device

Once the device is powered up and connected to the network, the technician provisions the device by choosing the 'Settings' gear on the top right of the new 'Sign in' page and selecting **Provision phone**.



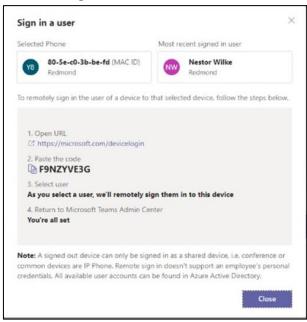
The technician is then expected to enter the device-specific Verification code that was provided in the Teams admin center on the phone's user interface. Once the device is provisioned successfully, the tenant name will be available on the sign in page.



Step 4: Sign in remotely

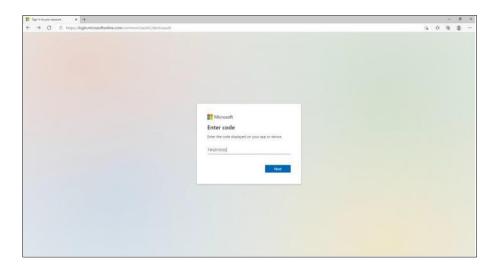
The provisioned device appears in the Awaiting sign in tab. Initiate the remote sign-in process by selecting the individual device.

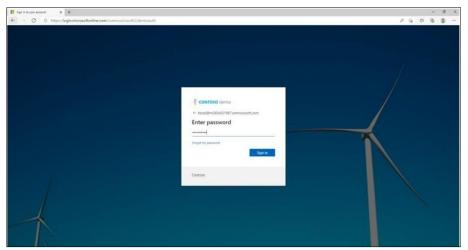
- 1. Select a device from the **Awaiting sign in** tab.
- 2. Follow the instructions in Sign in a user, and then select Close.



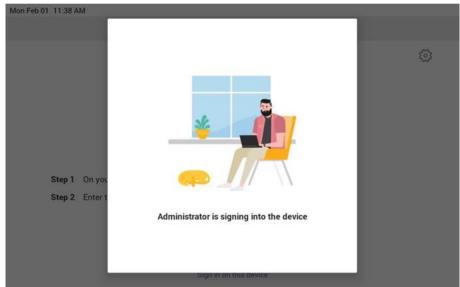
The tenant admin is expected to complete authentication on the device from any browser or smartphone.







When the tenant admin is signing in from Teams Admin Center, the user interface on the device is blocked to prevent other actions on the phone.



4 Getting Started



Note: See the *RXV80 Standalone Video Collaboration Bar Deployment Guide* shipped with the product or available from AudioCodes for information on how to synchronize the remote controller and the Teams application.

The figure below shows AudioCodes' remote controller.



- The software on the remote controller is managed by the RXV80.
- The remote controller leverages Bluetooth which enables full control and bi-directional communication (very much like touch control). See also Section 5.1.5.
- The keys on the remote controller (Mute, Teams) are illuminated.



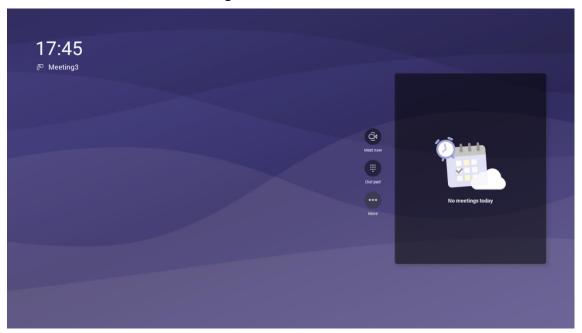
Note: The remote controller flashes if the connection to the RXV80 fails.



> To get started:

1. After signing in, view the RXV80 home page.

Figure 4-1: Home Screen



4.1 Modifying Camera Settings

You can modify the camera settings relating to the look and feel of the video user interface, to suit your preferences.

- To access the camera settings:
- On the remote controller, long-press the camera icon ...

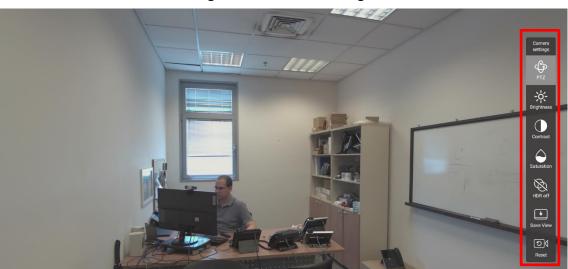


Figure 4-2: Camera Settings

 When the RXV80 is in *idle state* (i.e., *not* during a call / meeting), permissions are required to preset the camera. After long-pressing the remote controller's camera button, a prompt to log in as the administrator is displayed before it proceeds to the Camera settings tab:

Figure 4-3: Login when the RXV80 is in idle state

Note:

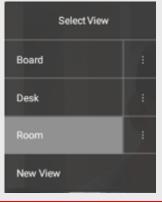
During a call, all users who are signed into the RXV80 – Admins and personal users can change Camera settings, including the presets. All have the permissions
required to do so. When the call ends, the RXV80 reverts to its preconfigured presets.



- Using a Teams shared account, only the Admin can access Camera Settings in idle
 and edit camera presets; the user can only move between the defined presets during
 a video call/meeting. The user can change Camera Settings during the meeting but
 the changes are not saved.
- Changing camera settings during a meeting can be done without turning off the video to remote parties.
- The option to access Camera settings from the RXV80's Device Settings still exists;
 administrator permissions will be required in this case.
- The Camera settings option allows saving different camera settings to be used in a video call so that users can switch easily between predefined camera settings (camera presets) per user requirements in the call.

Note: Users can toggle between the presets, a convenient way to move from one preset to another, to view each preset and to reconfigure a preset. Click the **Camera Views** option and in the **Select View** menu that opens, choose the required preset.







- For example, if a preset is configured to zoom in and focus on the whiteboard in a room, users in a video call/meeting will be able to switch to the relevant preset, focus on the whiteboard, and later switch back to the full room preset or any other predefined preset. It's recommended to have a few presets configured for locations frequently zoomed in and focused on:
 - Full room view to capture all participants and action in a meeting room
 - Presenter or single user / desk view to focus on a single user in the room, usually the presenter
 - Whiteboard view if there's a whiteboard in the room
 - Sunlight or dark modes if direct sunlight enters the room at specific times of the day/year

Changing camera settings during a meeting can be done without turning off the video to remote parties.

To add a camera preset when in idle mode:

 Long-press the camera button to access Camera settings; all camera settings can be changed; at the end of the procedure, save the new preset; the Camera settings bar includes a Save View option as shown in the next figure.

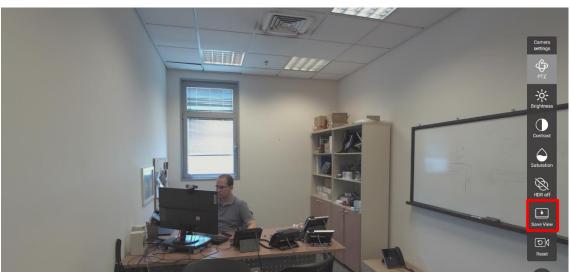


Figure 4-4: Camera settings - Save View

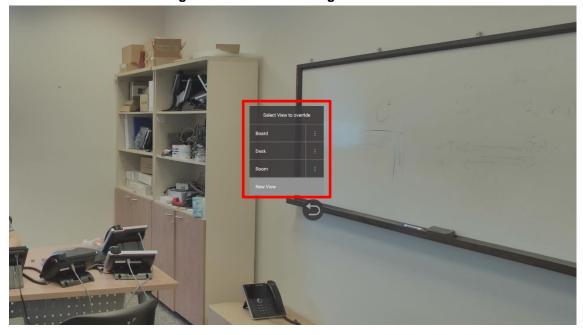


Figure 4-5: Camera settings - Save View

- 2. Navigate to and select **PTZ** to create and edit presets using PTZ control. You can create and edit up to three presets and assign specific pan, tilt, and zoom settings for each one.
- 3. Navigate to and select **Brightness** and then adjust the brightness using the -/+ buttons or the sliding scale.
- 4. Navigate to and select **Contrast** and then adjust the contrast using the -/+ buttons or the sliding scale.
- **5.** Navigate to and select **Saturation** (perceived color relating to chromatic intensity) and then adjust it using the -/+ buttons or the sliding scale.
- 6. Navigate to and select **HDR on** or **off**. High Dynamic Range allows dynamic metadata to be added on a frame-by-frame basis so viewers will always receive the intended image. HDR is adapted to the specific abilities of your monitor, allowing for an improved image.
- 7. Navigate to and select **Reset** for the camera settings to return to their defaults.



4.2 Starting a New Meeting



Note: You can navigate and select in the RXV80 using the:

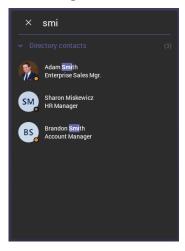
- Remote controller -OR-
- Touch screen
- To start a new meeting:
- In the home screen shown in the preceding figure, navigate to and select the Meet Now option.

Figure 4-6: New meeting - Invite someone



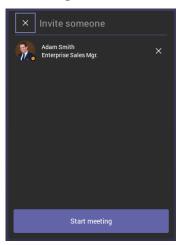
2. In the 'Invite someone' field, enter the name of a person to invite; after entering the first letters in the name, matching contacts from directory are displayed.

Figure 4-7: New meeting – Enter the name of a person



3. Select the name of the person to invite.

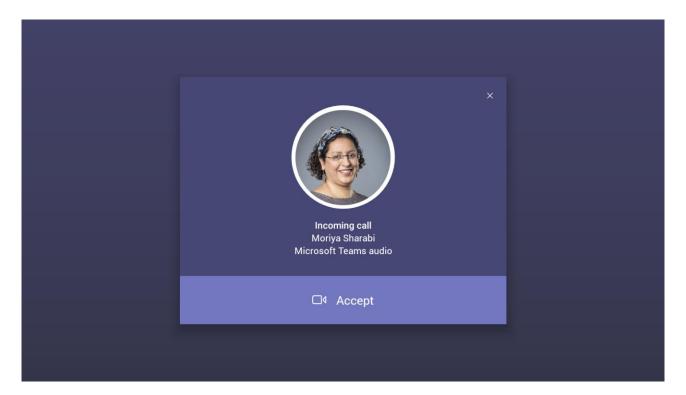
Figure 4-8: New meeting - Select the name of a person



4. Invite someone else – or others – and then select **Start meeting**.

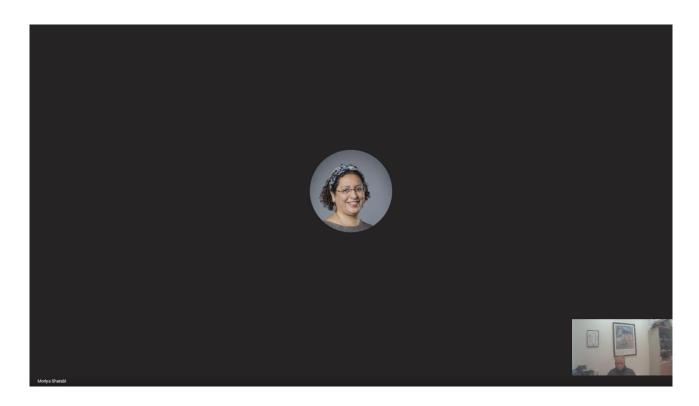


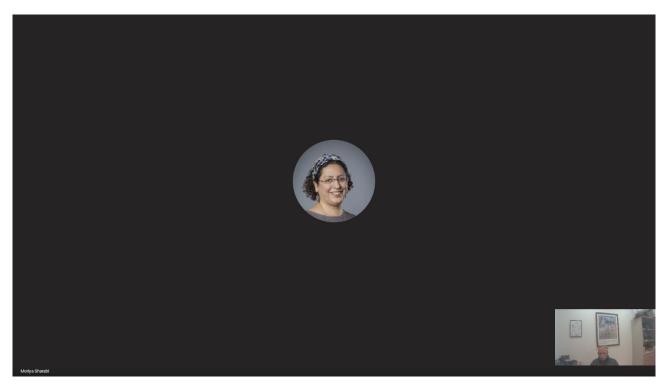
Note: The server allocates a meeting ID number and sends an invite message to all participant devices. All devices simultaneously indicate an incoming call (the 'Calling' screen is displayed). The server manages every aspect of the call.



5. Select **Accept**. Note that according to the icon in the 'Incoming call' screen shown in the preceding figure, the caller has video capability.







4.3 Dialing a Number

You can manually dial someone's phone number.

- > To dial a phone number:
- 1. In the home screen, navigate to and select the **Dial pad** option.

Figure 4-9: Dial pad



2. Enter the digits of the destination to call and select Call.

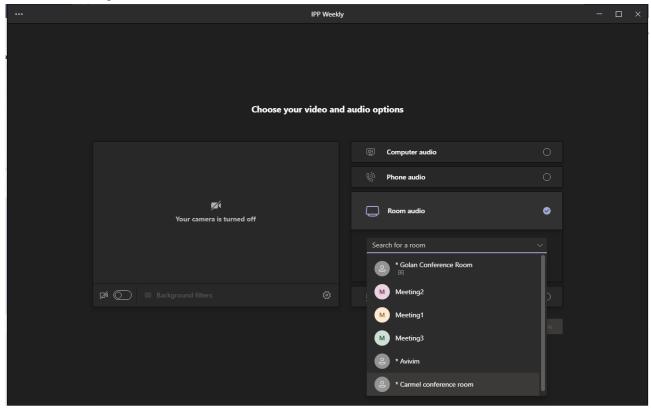


4.4 Enabling Proximity Join

'Proximity Join' allows you to discover and add a nearby, available Microsoft Teams Room, i.e., the RXV80, in this case, to any meeting. It's also possible to accept the incoming meeting on the console of the room.

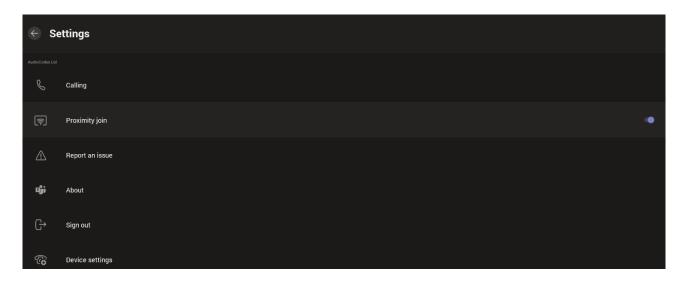
The feature functions in combination with Bluetooth and 'Bluetooth Beaconing', an integral feature in Microsoft Teams Rooms (MTRs). The meeting room device as mentioned is the RXV80. If you bring a laptop or a Teams Mobile Client near the RXV80, the Teams Mobile Client will offer the RXV80 as the room audio device.

The figure below shows how to select the room audio device.



After you select the room audio device, the meeting is opened without any audio device on your PC client, and then the room meeting device (RXV80) gets a request to join the meeting.

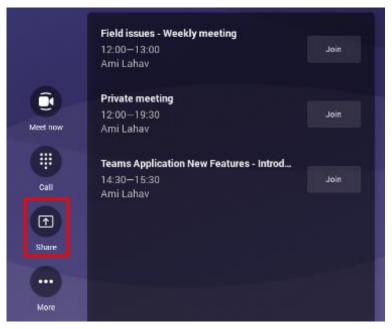
- To enable 'Proximity join':
- In the Settings screen, navigate to and select Proximity join. If it's disabled, it'll become enabled and vice versa.



4.5 Sharing your Screen

The RXV80 allows you to share a screen during meetings and when the device is idle, via the HDMI Input port.

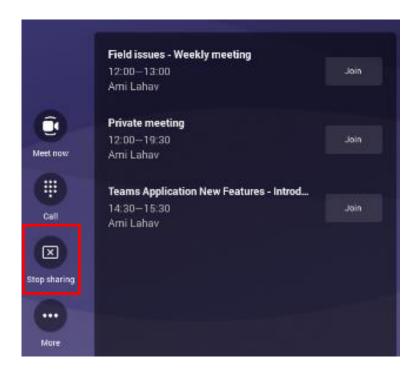
When the device is idle (when no meeting is taking place), a **Share** key allows you to present your PC screen via the RXV80 into a TV screen, for example, during a physical (face-to-face) meeting.



- > To exit from Share screen:
- Select the Stop Sharing key.







During meetings, a **Share** key appears in the meeting keys options allowing you to present your PC screen directly via the RXV80 into the meeting and local TV without needing to join the meeting from your PC.





Note: The HDMI Ingest was tested with Microsoft using the external RX10 speaker. AudioCodes recommends customers to use the RX10 speaker when using the HDMI Ingest option.

4.6 About Microsoft Teams

Information about the Microsoft Teams application can be viewed by navigating to and selecting the Settings screen's **About** option shown in the preceding figure.



4.7 Signing out

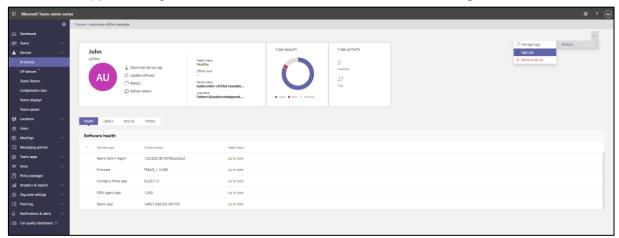
You can sign out of the application as one user and optionally sign in again as another.

- To sign out:
- Navigate to and select Sign out in the Settings screen shown in the preceding figure.



Optionally, remote sign-out can be performed from Microsoft Teams admin center (TAC). Network administrators can provision the RXV80 from the TAC, remotely sign in, and also sign out.

- To sign out of the RXV80 using Microsoft TAC:
- Navigate to the TAC screen shown in the figure below and from the ··· menu located in the uppermost right corner of the screen, select **Actions** and then **Sign out**.





This page is intentionally left blank.

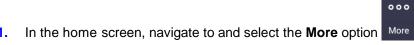
5 Configuring Device Settings

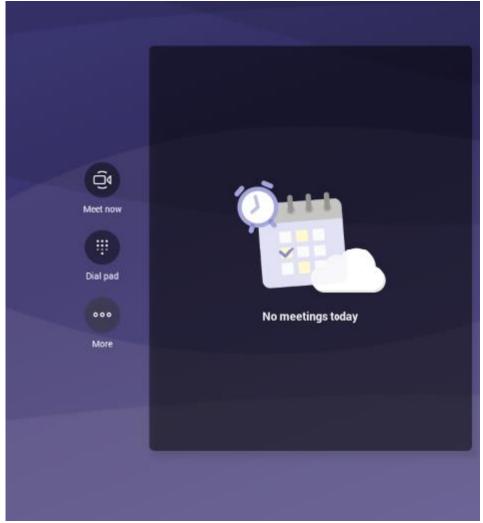
The section familiarizes you with the RXV80's settings. RXV80s are delivered to customers configured with their default settings. Customers can customize these settings to suit specific enterprise requirements.



Note: Navigate and select options using the remote controller or touch screen.

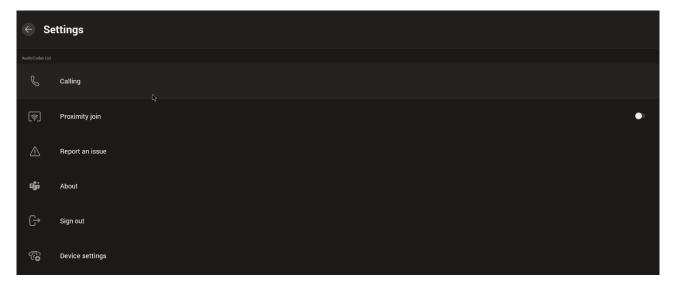
> To access device settings:



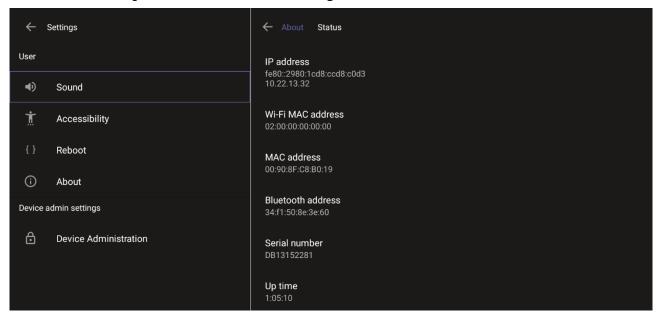


2. Navigate to and select Settings.

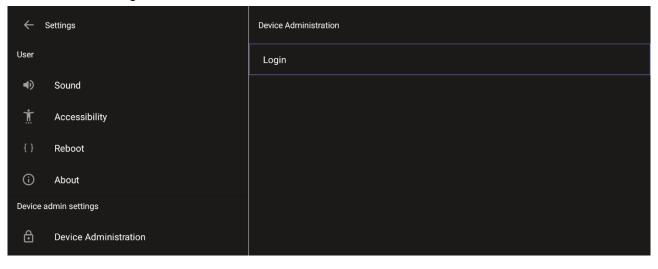




3. Navigate to and select **Device settings**.



4. Navigate to and select **Device Administration**.

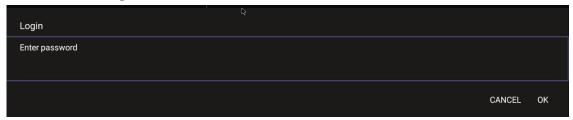


5. Log in as administrator.



Note: Logging in as Administrator is required for some debugging options. It is password protected. Default password: **1234**. After logging in as an Administrator, you can log out | change password.

6. Select Login.



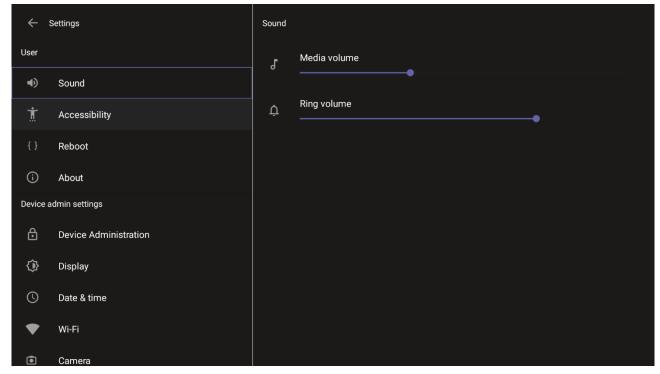
7. Enter the password in the 'Enter password' field; use the virtual keyboard to enter the password (1234). Note that the virtual keyboard pops up for all 'Settings' fields to allow inputting characters and / or numbers. Two virtual keyboard types can be displayed: Numeric or QWERTY.



Note: These virtual keyboards are also displayed when network administrators need to enter an IP address to debug, or when they need to enter their PIN lock for the security setting.

After logging in, the Settings screen now also displays the settings under the section 'Device admin settings'.

8. Click **OK**; the Settings screen now also displays 'Device admin settings', in addition to the 'User' settings.





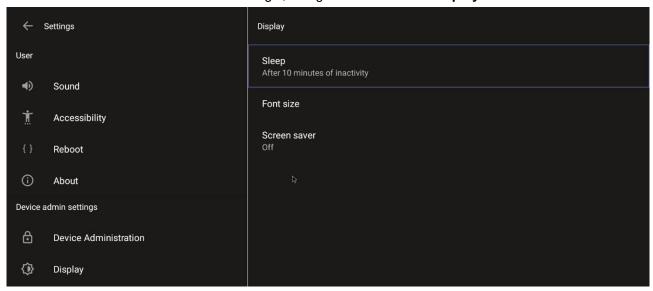
5.1 Configuring Device Admin Settings

After logging in as Device Administration as shown in the previous section, you can configure Device Administration settings: Display, Date & Time, Wi-Fi, Camera.

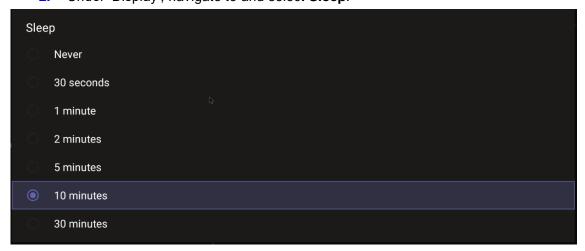
5.1.1 Display Settings

Modify these settings to suit your preferences related to the look and feel of the user interface.

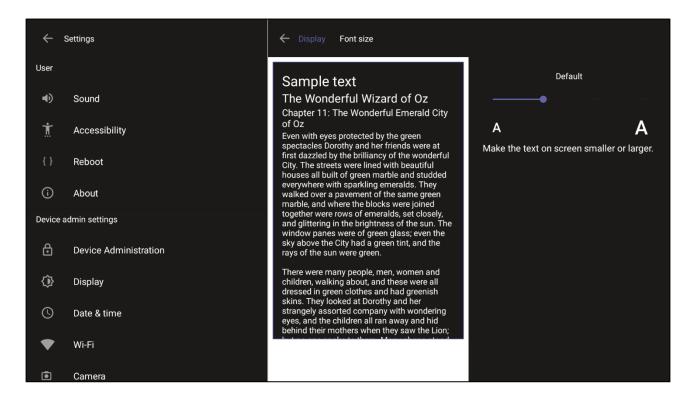
- To configure Display settings:
- 1. Under 'Device admin settings', navigate to and select **Display**.



2. Under 'Display', navigate to and select Sleep.



- 3. Navigate to and select the time to lapse before the interface 'goes to sleep'. Default: 10 minutes.
- 4. Navigate to and select Font size.



Navigate to and select Screen saver.



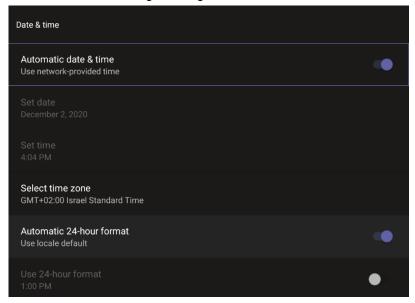
6. Navigate to and select **Off** to switch it on and then choose the screen saver.



5.1.2 Date & Time

Date and time are automatically retrieved from the deployed Network Time Protocol (NTP) server.

- To configure Date & Time:
- 1. Under 'Device admin settings', navigate to and select **Date & Time**.



2. Navigate to and select **Use 24-hour format** [Allows you to select the Time format].



Note: The device automatically detects time zone via geographical location (**Automatic Time Zone Detection**).

5.1.3 Wi-Fi Settings

The RXV80 can connect to an Access Point via Wi-Fi.



Note: See the Deployment Guide for detailed information on how to set up Wi-Fi.

To configure Wi-Fi settings:

1. Under 'Device admin settings', navigate to and select Wi-Fi.



Navigate to and select Use Wi-Fi.

5.1.3.1 Configuring Wi-Fi

Network administrators can configure Wi-Fi parameters for the phone. The parameters are concealed from the user's view. Use the following table as reference.

Table 5-1: Wi-Fi Parameters

The following table shows the parameters per index. The phone can currently store 16 connected SSIDs.

Table 5-2: Wi-Fi Parameters per Index

Parameter	Description
network/wifi/[0-15]/ssid	Saves the Access Point's SSID.
network/wifi/[0- 15]/password	Saves the password for some authentication methods which need it, e.g., WPAPERSONAL, WPA2PERSONAL
network/wifi/[0- 15]/security	Saves the Access Point's authentication method: • WPAPERSONAL • WPA2PERSONAL • WPAENTERPRISE • WPA2ENTERPRISE
network/wifi/[0- 15]/auto_reconnect	Configure this parameter to reconnect this SSID automatically.

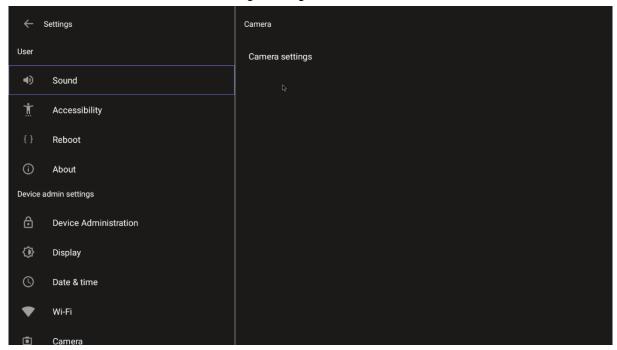


Parameter	Description
network/wifi/[0- 15]/identity	Saves the identity for some authentication methods that need it, e.g., WPAPERSONAL, WPA2PERSONAL
network/wifi/[0- 15]/anonymous_ identity	Saves the anonymous identity for some authentication methods that need it, e.g., WPAENTERPRISE, WPA2ENTERPRISE, etc.
network/wifi/[0- 15]/phase2_ authentication	Phase 2 authentication for WPAENTERPRISE, WPA2ENTERPRISE.
	The phone supports PAP, MSCHAP, MSCHAPV2, CHAP, MD5, GTC
network/wifi/[0-15]/pin_code	Defines the PIN code for the WPS PIN code authentication method.
network/wifi/[0- 15]/wps_method	Defines the WPS method. The phone supports PIN and push button.
network/wifi/[0- 15]/client_cert	Defines the certificate path for WPAENTERPRISE, WPA2ENTERPRISE certificate authentication.
network/wifi/[0- 15]/private_key	Defines the private key path for WPAENTERPRISE, WPA2ENTERPRISE certificate authentication.

5.1.4 Camera

Settings controlling the look and feel of the video UI can be set to suit individual preferences.

- To configure Camera settings:
- 1. Under 'Device admin settings', navigate to and select Camera.



2. Navigate to and select **Camera settings**; the video stream is played and the following is displayed on the right side of the screen:



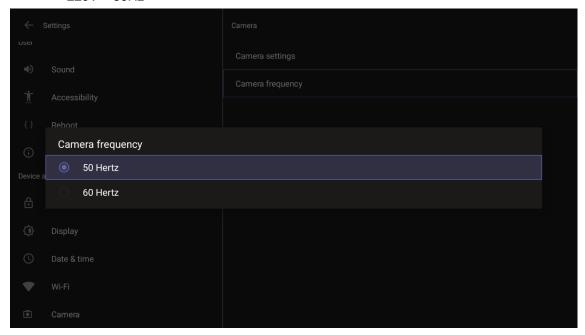
- 3. Create and edit presets using PTZ control. For more information, see here.
- 4. Adjust the camera for lighting conditions. For more information, see here.



5.1.4.1 Configuring Camera Frequency

The Camera frequency (under Device settings) must be set per the power supply as follows:

- 110V 60Hz
- 220V 50Hz



5.1.5 Bluetooth

Bluetooth is currently used for the remote controller and the 'Proximity Join' feature. Bluetooth speakers (selected types only) will be supported in the future.

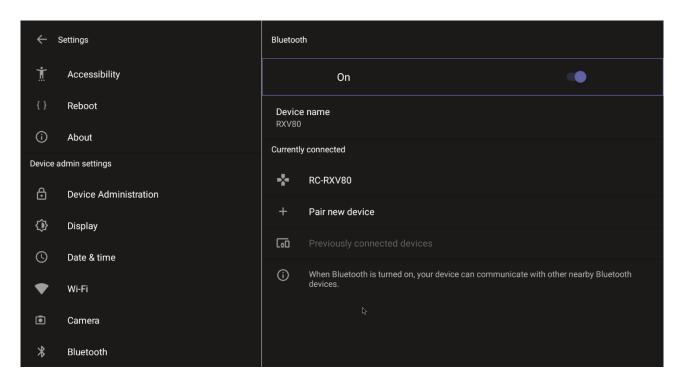


Note: The built-in Bluetooth capability can support only one Bluetooth feature at the time (the remote controller or the 'Proximity join' feature). To use both the remote controller and 'Proximity Join' in parallel, the Bluetooth dongle provided with RXV80 bundles must be used. The dongle fully supports the remote controller and **the** 'Proximity Join' feature. Note that if your package does not include a dongle, you can contact AudioCodes to obtain one. After it's inserted, the RXV80 must be restarted.

Bluetooth must be enabled to support use of the remote controller and the 'Proximity Join' feature. For information on how to enable/disable Bluetooth and on how to locate the remote controller manually (without using the popup automatically displayed at the start to pair the remote controller), see the *RXV80 Deployment Guide*.

> To pair a new device:

1. Under 'Device admin settings', navigate to and select **Bluetooth**.

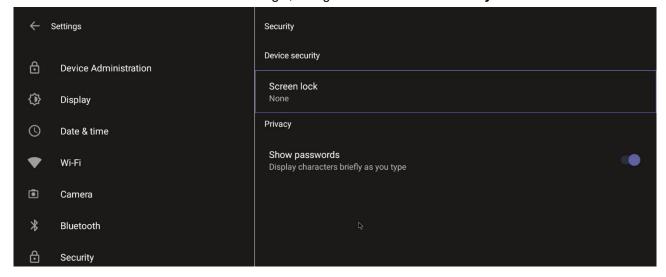


Navigate to and select Pair new device.

5.1.6 Security

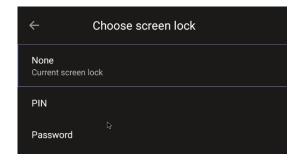
As a security precaution, the RXV80 can be locked and unlocked. The setting helps secure the device against breaches.

- To secure the device:
- 1. Under 'Device admin settings', navigate to and select **Security**.

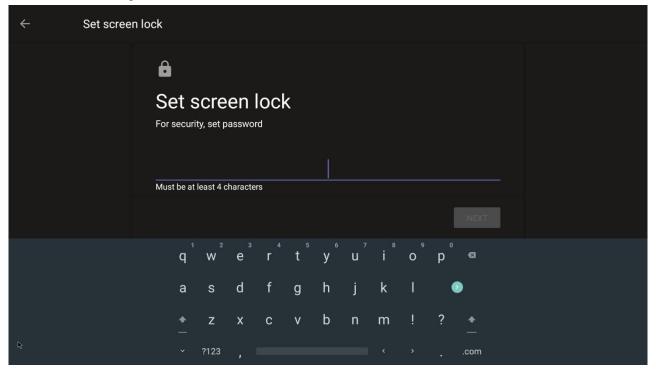


2. Navigate to and select **Screen lock** [The phone automatically locks after a configured period to secure it against unwanted use. If left untouched for 10 minutes (default), it automatically locks and is inaccessible to anyone who doesn't know its lock code.]





3. Navigate to and select PIN.

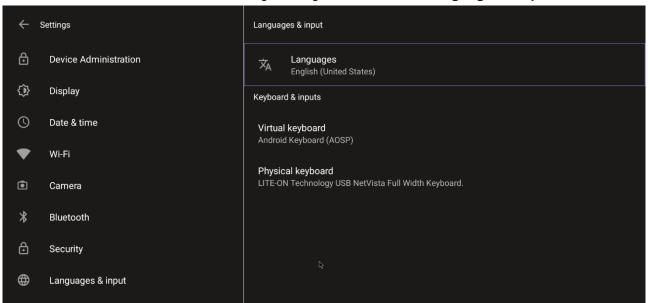


4. Enter a PIN, click **Next** and then navigate to and select **Password**; a screen like the preceding is displayed. Set the password (must also be at least four characters) and then again navigate to and select **Next**. You've successfully configured screen lock.

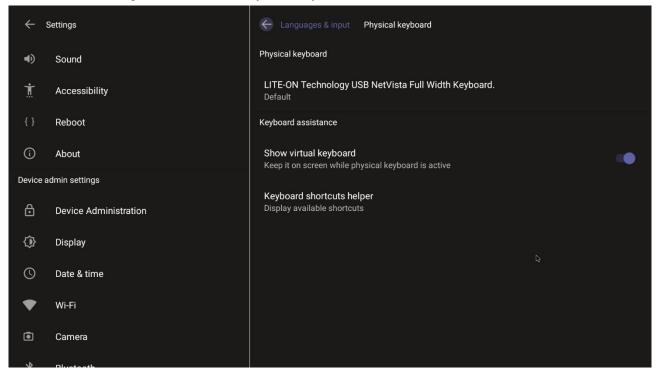
5.1.7 Languages & input

This setting allows users to customize inputting to suit personal requirements.

- > To set language and input:
- 1. Under 'Device admin settings', navigate to and select Languages & input.



2. Navigate to and select Physical keyboard.



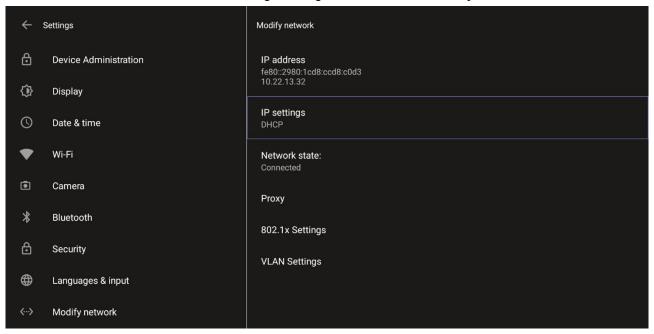
3. Navigate to and select Show virtual keyboard.



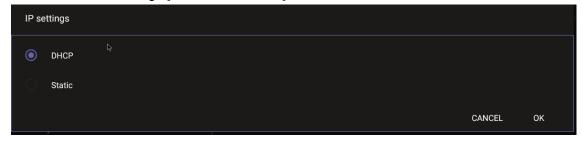
5.1.8 Modify network

This setting enables the Admin user to determine network information and to modify network settings.

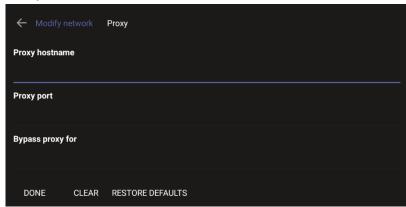
- > To modify network settings:
- 1. Under 'Device admin settings', navigate to and select Modify network.



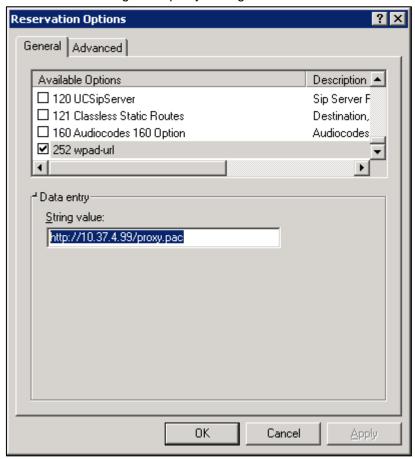
- 2. Navigate to and select:
 - IP Address [Read Only]
 - IP Settings [DHCP or Static IP]



- Network state [Read Only]
- Proxy



- Manually (from the screen shown in the preceding figure). Allows you to configure the RXV80 with an HTTP proxy server. Configure the proxy hostname and proxy port and then navigate to and select **Done**.
- DHCP Option 252 (recommended). Option 252 provides a DHCP client with a URL to use to configure its proxy settings:

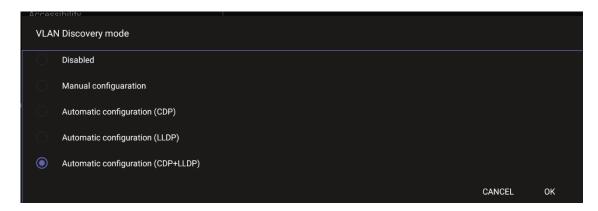


The proxy setting is provided in a Proxy Auto-Configuration (PAC) file that contains a set of rules coded in JavaScript which allows a web browser to determine whether to send web traffic directly to the Internet or to be sent via a proxy server. PAC files control how the phone handles HTTP, HTTPS, and FTP traffic. Example of a basic PAC file:

```
function FindProxyForURL(url, host)
{
return "PROXY 10.13.2.40:3128";
}
```

- 802.1x Settings [Allows enabling 802.1x]
 802.1X Authentication is the IEEE Standard for Port-based Network Access Control (PNAC). See https://l.ieee802.org/security/802-1x/ for more information.
- VLAN Settings
 - Allows you to configure 'VLAN Discovery mode' to Manual configuration, Automatic configuration (CDP), Automatic configuration (LLDP) or Automatic configuration (CDP+LLDP)]





Cisco Discovery Protocol (CDP) is a Cisco proprietary Data Link Layer protocol Link Layer Discovery Protocol (LLDP) is a standard, layer two discovery protocol

Allows you to configure 'VLAN Interval'.

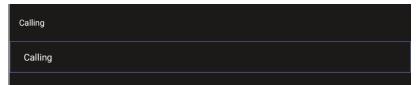


'VLAN interval' refers to CDP/LLDP advertisements' periodic interval. Default: 30 seconds. You can increase or decrease the intervals between the CDP/LLDP packets that are sent, based on network traffic and topology.

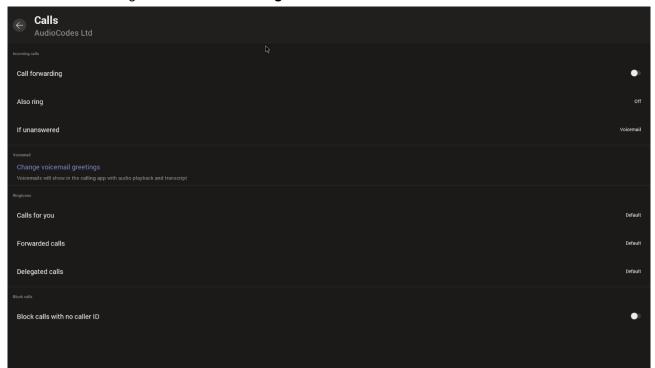
5.1.9 Calling

This setting enables the user to configure call-associated functionalities to suit personal preferences.

- To configure call settings:
- 1. From the home page, navigate to and select **More** and then navigate to and select **Settings**.



2. Navigate to and select Calling.



- In the Calls screen, navigate to and select:
 - Call forwarding to enable automatically redirecting incoming calls to another destination.
 - Also ring to configure other phones to ring on incoming calls; only displayed if Call forwarding is disabled.
 - If unanswered to configure the destination to which unanswered calls will be sent; only displayed if Call forwarding is disabled. Select either Off, Voicemail, Contact or number.
 - Calls for you to configure the ringtone played on your phone when calls come in.
 - Forwarded calls
 - Delegated calls to configure the ringtone played to delegates.
 - Block calls with no caller ID to block calls that do not have a Caller ID.



5.1.10 DSCP

The RXV80 Teams application supports DS (Differentiated Services) containing a differentiated Services Code Point (DSCP) value and an ECN (Explicit Congestion Notification) value, for monitoring Quality of Service (QoS).

DSCP is part of the IP header that defines the type of routing service to tag outgoing voice packets originated from the device. It informs routers that this packet must receive a specific QoS. Values can be set in decimal (e.g., 184) or hexadecimal (e.g., 0xb8). The default value is 0xb8 (184).

The DSCP value for audio is 0x46.

The DSCP value for video is 0x34 (screen sharing is not supported).

See also Microsoft's website for more information.



Note: The DSCP value can be adjusted on the server; it cannot be adjusted on the client.

The figure below shows the recommended port ranges.

fledia traffic type	Client source port range	Protocol	DSCP value	DSCP class
audio	50,000-50,019	TCP/UDP	46	Expedited Forwarding (EF)
íideo	50.020-50.039	TCP/UDP	34	Assured Forwarding (AF41)
Application/Screen Sharing	50.040-50.059	TCP/UDP	18	Assured Forwarding (AF21)

The figure below shows the recommended DSCP setting for Audio.

```
192.168.2.104
                                           172.17.178.203
     2058 47.390541
                      192.168.2.104
                                                                                              228 50006 + 50012 Len=186
                                            172.17.178.203
     2059 47.393899
                     192.168.2.104
                                           172.17.178.203
                                                                        UDP
                                                                                              151 50006 + 50012 Len=109
     2060 47.395193
                     172.17.178.203
                                           192,168,2,104
                                                                        LIDE
                                                                                              114 50012 + 50006 Len=72
     2061 47.395209 172.17.178.203
                                           192,168,2,104
                                                                        UDP
                                                                                              114 50012 → 50006 Len=72
> Frame 2057: 84 bytes on wire (672 bits), 84 bytes captured (672 bits) on interface \Device\NPF_{296D2E63-3934-488A-BFAB-666A48797EE2}, id 0
 Ethernet II, Src: AudioCod_9c:1a:38 (00:90:8f:9c:1a:38), Dst: Whware_ff:63:15 (00:0c:29:ff:63:15)
 Internet Protocol Version 4, Src: 192.168.2.104, Dst: 172.17.178.203
    0100 .... = Version: 4
     ... 0101 = Header Length: 20 bytes (5)

    Differentiated Services Field: 0xb8 (DSCP: EF PHB, ECN: Not-ECT)

       1011 10.. = Differentiated Services Codepoint: Expedited Forwarding (46)
          ....00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 70
    Identification: 0xd3ba (54202)
  > Flags: 0x4000, Don't fragment
    Fragment offset: 0
    Time to live: 64
    Protocol: UDP (17)
    Header checksum: 0x4447 [validation disabled]
    [Header checksum status: Unverified]
     Source: 192.168.2.104
    Destination: 172.17.178.203
 User Datagram Protocol, Src Port: 50006, Dst Port: 50012
```

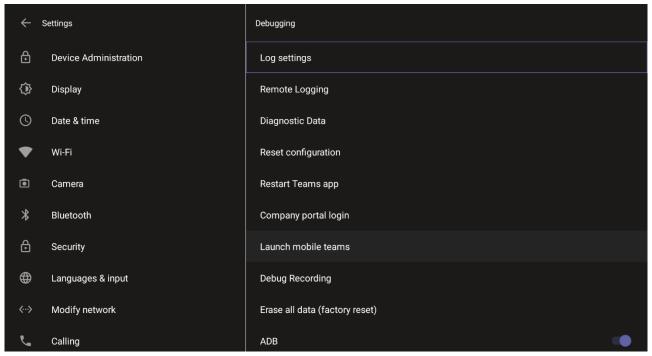
The figure below shows the recommended DSCP setting for Video.



5.1.11 Debugging

Admin users can perform debugging for troubleshooting purposes.

- > To perform Debugging:
- 1. In the Settings screen under 'Device administration', select **Debugging**.



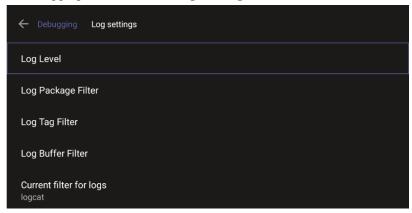
- 2. Use the following debugging features available to Admin users:
 - Log settings (see Log Settings)
 - Remote Logging (see under Remote Logging)
 - Diagnostic Data (see under Diagnostic Data)
 - Reset configuration (see under Reset configuration)
 - Restart Teams app (see under Restart Teams app)
 - Company portal login (see under Company Portal Login)
 - Launch mobile teams (see under Launch Mobile Teams)
 - Debug Recording (see under Debug Recording)
 - Erase all data (see under Erase all dat)
 - Screen Capture (see under Screen Capture)
 - Remote Packet Capture (see under Remote Packet Capture)

5.1.11.1 Log Settings | Collecting Logs

Device diagnostics (Logcat) can be collected using the Microsoft Admin Portal. For support purposes, general logs can be collected also using the Microsoft Admin Portal. The logs can help debug Teams application issues and also for issues related to the device.

> To configure log settings:

In the Debugging screen, select Log settings.

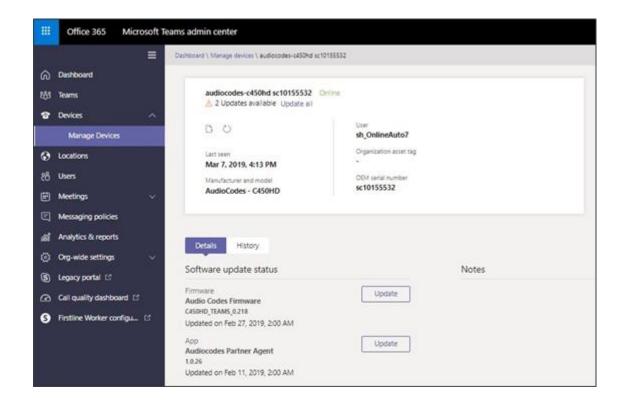


- 2. Navigate to and select Log Level and then select either
 - Verbose, Debug, Info, Warning, Error, Assert -or-None
- 3. Navigate to and select **Log Package Filter** and enter the filter.
- 4. Navigate to and select Log Tag Filter and enter the filter.
- 5. Navigate to and select Log Buffer Filter.



- 6. Navigate to and select Current filter for logs.
- > To collect logs:
- 1. Reproduce the issue
- 2. Access Microsoft Admin Portal and under the **Devices** tab click the **Diagnostics** icon.





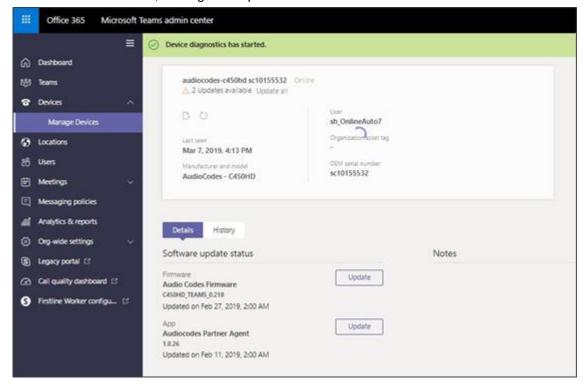


Note: The preceding figure is for illustrative purposes. It shows an AudioCodes phone. The same screen is displayed for the RXV80.

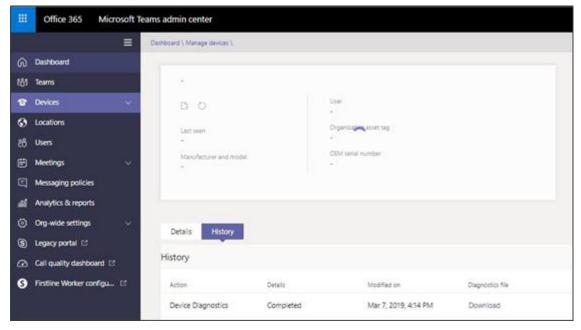
3. Click the **Diagnostics** icon.



4. Click **Proceed**; the logs are uploaded to the server.



Click the **History** tab.



6. Click **Download** to download the logs.

5.1.11.2 Remote Logging

Remote Logging via Syslog provides the same log level as Device Diagnostics (performed via the Microsoft Admin Portal) with some additional information that may be relevant to device issues (not Teams application issues).

Diagnostics via the Microsoft Admin Portal are saved to the device sdcard and collected after the event. Remote Logging via Syslog is different. The logs are collected in real time.



- To enable Remote Logging via Syslog:
- Navigate to and select Remote logging.



8. Configure the 'Remote IP address' and 'Remote port' and enable 'Remote Logging'; the device starts sending logs to the Syslog server.



Note: Network administrators can also enable Syslog using Secure Shell (SSH) protocol.

To enable Syslog using SSH protocol, type the following command at the shell prompt:

```
setprop persist.ac.rl address <syslog server ip>:<port>.
```

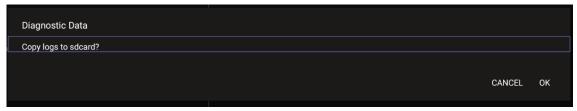
> To disable Syslog using SSH, type the following command at the shell prompt:

```
setprop persist.ac.rl address ""
```

5.1.11.3 Diagnostic Data

Admin users who need to get logs from the device can dump the logs to the phone's Secure Digital (SD) Card and then later collect them using Secure Copy Protocol (SCP) based on Secure Shell (SSH) protocol. Whenever an issue occurs, the Admin can dump the logs into the SD Card.

- To use the tool:
- 1. Navigate to and select **Diagnostic Data**.



- 2. Navigate to and select **OK** to confirm 'Copy logs to sdcard'; the RXV80 creates all necessary logs and copies them to the its SD Card / Logs folder.
- 3. Get the logs using SCP notation as follows:

```
scp -r admin@host IP:/sdcard/logs/ .
```

Following are the relevant logs (version and ID may be different to those shown here):

- dmesg.log
- dumpstate-TEAMS_1.3.16-undated.txt
- dumpstate_log-undated-2569.txt
- logcat.log

5.1.11.4 Reset configuration

Admin users can opt to 'clean up' their configuration history and return the RXV80 to an Out of Box Experience (OOBE). If the Teams app isn't running well, this might help.

- > To reset the configuration:
- 1. Navigate to and select Reset configuration.



2. Navigate to and select **OK**; all data is erased and default factory settings are restored but sign-in is retained.

See also:

 $\frac{https://docs.microsoft.com/en-us/MicrosoftTeams/rooms-rooms-operations\#microsoft-teams-rooms-reset-factory-restore}{}$

5.1.11.5 Restart Teams app

If the Teams application freezes or malfunctions, a good way to resolve this is to restart the app.

- > To restart the Teams app:
- Navigate to and select **Restart Teams app**; only the Teams app is restarted.

5.1.11.6 Company Portal Login

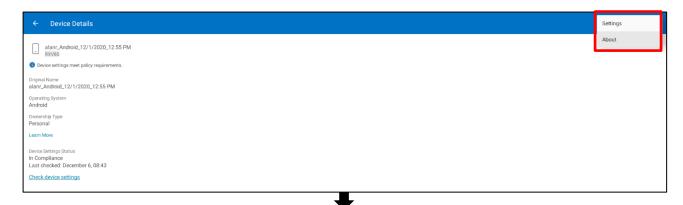


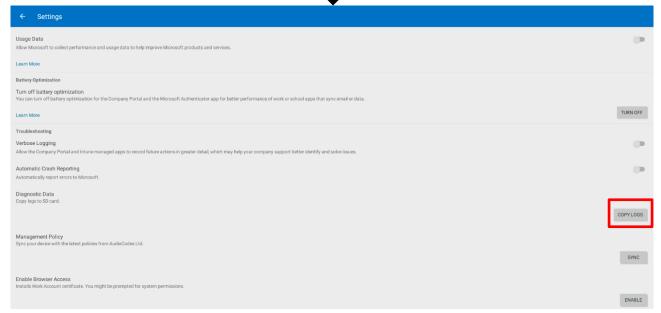
5.1.11.7 Getting Company Portal Logs

Company Portal logs can be helpful to network administrators when there are issues with signing in to Teams from the phone.

- To get Company Portal logs:
- 1. Reproduce the issue (logs are saved to the device so you first need to reproduce the issue and then get the logs).
- 2. Log in to the RXV80 as Administrator and then go back.
- 3. Navigate to and select the **Debugging** option.
- 4. Navigate to and select Company Portal login.
- 5. In the Device Details screen that opens, navigate to and select **Settings**:







6. Navigate to and select Copy Logs.

Company portal logs are copied to:

 $\verb|sdcard/Android/data/com.microsoft.windows in tune.company portal/files/|$

7. To pull the logs, use ssh:

scp -r admin@hosp_ ip:/sdcard/android/data/com.microsoft.windowsintune.companyportal/files/

Files are quite heavy so you may need to pull them one by one.

5.1.11.8 Launch Mobile Teams

'App not found'. N/A in this release.

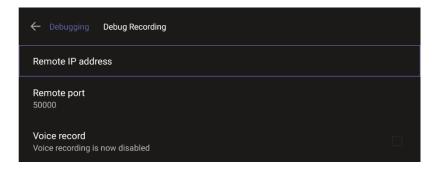
5.1.11.9 Debug Recording

This feature enables Admin users to perform media/DSP debugging.



Note: DSP recording can be activated on the fly without requiring the network administrator to reset the phone.

- > To reset the configuration:
- 1. Navigate to and select **Debug Recording**.

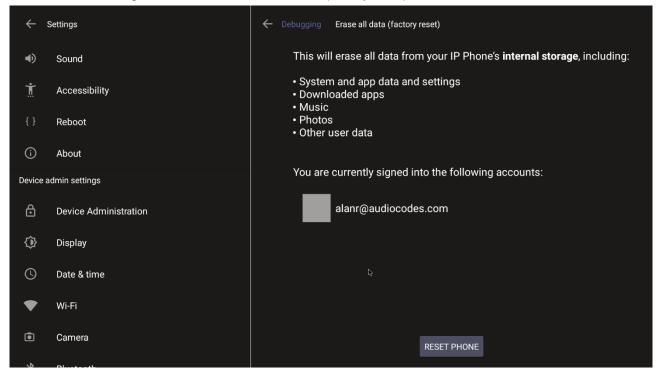


- 2. Navigate to and select **Voice record** to enable the feature.
- 3. Navigate to and select **Remote IP address** to input the IP address of the device whose traffic you want to record.
- 4. Navigate to and select **Remote port** and input it (Default: 5000).
- 5. Start Wireshark on your PC to capture audio traffic.

5.1.11.10 Erase all data (factory reset)

This option is the equivalent of restore to defaults; including logout and device reboot.

- To erase all data (factory reset):
- 1. Navigate to and select Erase all data (factory reset).



2. Navigate to and select **Reset Phone**.

5.1.11.11 Screen Capture

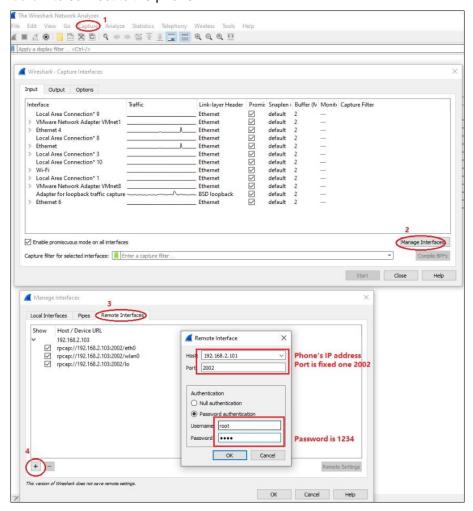
By default, this setting is enabled. If disabled, the phone won't allow its screens to be captured.



5.1.11.12 Remote Packet Capture

The 'rpcapd' (Remote Packet Capture) network sniffer application allows the Admin user to analyze and debug Android traffic on their desktop PC using the app's integral SSH server. Traffic is captured using the Android OS feature VpnService. Wireshark sshdump tool is supported. Traffic is captured as a pcap file. MITM (Man-in-the-Middle) functionality allows admins to decrypt traffic in Wireshark. Though it's recommended, others can be used.

- To enable Remote Packet Capture:
- 1. Navigate to and select the option.
- 2. After 'rpcapd' is enabled on the phone, use Wireshark to connect with it. Follow the steps below to connect to the phone.

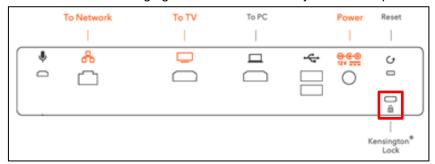


3. View the phone interfaces. Choose your preferred interface with which to capture packets.

5.2 Performing Recovery Operations Manually using Shortcut Keys

Shortcut keys allow network administrators to manually perform recovery operations. Besides manual recovery options, Android devices also feature an independent, automatic problem detection and recovery attempt capability that can culminate in recovery mode or in switching image slots. Note too that Android devices also feature a 'hardware watchdog'. This feature resets the phone if Android is stacked and doesn't respond (though Android stacking is unlikely); there's no recovery process; the device is only reset.

All AudioCodes devices for Microsoft Teams have a reset key or a combination of keys on the keypad to reset it. The following figure shows the reset key on the rear panel of the RXV80.



While the device is powering up, the network administrator can perform recovery operations by long-pressing the device's reset key / two-key combination.

While long- pressing the reset key / two-key combination, the device's main LED changes color after every *n* seconds; each color is aligned with a recovery operation option.

- Following are the recovery operation options using the RXV80's reset key:
 - Enter recovery mode Long-press the reset key for 4 seconds; the device's LED lights up red.
 - Switch to the other slot Long-press the reset key for 10 seconds; the device's LED lights up green.
 - Enter the device's boot Long-press the reset key for 15 seconds; the device's LED lights up blue.
 - Restore the phone to its default settings Long-press the reset key for 25 seconds; the device's LED lights up green + blue.

Network administrators can also restore the device to its default settings while the device is already powered up and functioning by long-pressing the reset key on the rear panel.



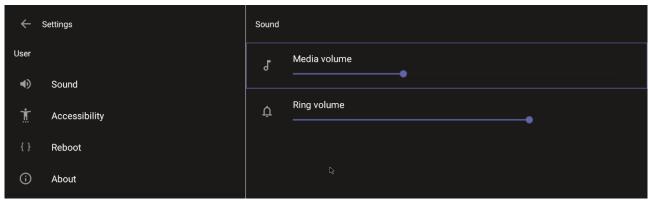
5.3 Configuring User Settings

In the 'Settings' screen you can optionally configure the following User settings: Sound, Accessibility, Reboot and About (read-only).

5.3.1 Sound

You can customize phone volume for a friendlier user experience.

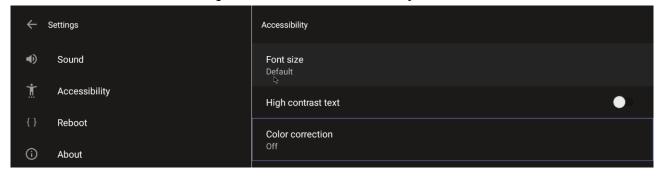
- To configure sound settings:
- Under 'User', navigate to and select Sound.



5.3.2 Accessibility

This option allows users to customize the screen to be reader-friendlier.

- > To configure the Accessibility setting:
- 1. Under 'User', navigate to and select Accessibility.



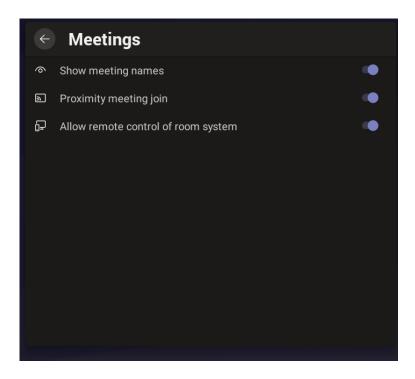
2. Adjust the settings to suit personal requirements.

5.3.3 Setting Live Captions

Live Captions can be set in regular one-on-one calls as well as in Teams meetings.

5.3.4 Hiding Names and Meeting Titles

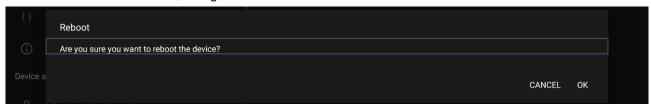
Users can hide information such as names and meeting titles for individual devices via the Meetings page (More > Settings > Meetings):



5.3.5 Reboot

Rebooting allows you to exit from and reconnect without needing to sign in again.

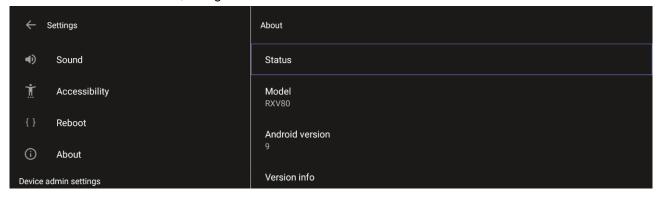
- To reboot the RXV80:
- Under 'User', navigate to and select Reboot.



5.3.6 About

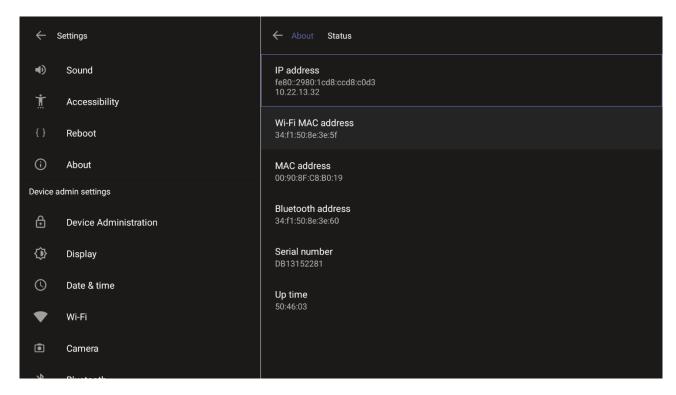
The 'About' screen gives you quick access to information about the RXV80 deployment.

- > To access the About screen:
- 1. Under 'User', navigate to and select **About**.



2. Navigate to and select Status.





3. View the RXV80's firmware information.

6 Updating Microsoft Teams Devices Remotely

For instructions on how to update Microsoft Teams devices remotely, see https://docs.microsoft.com/en-us/microsoftteams/devices/remote-update.



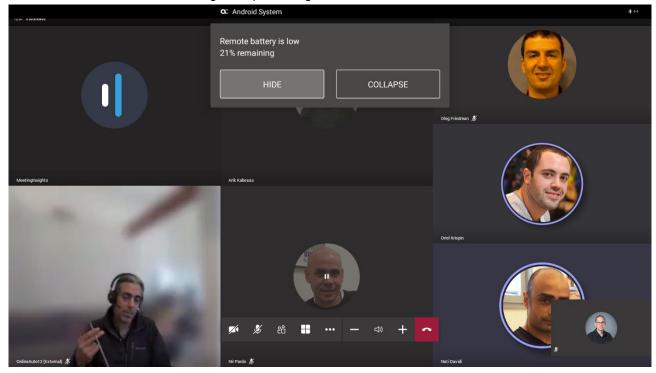
Note: Before an update is pushed to a device, the firmware detects whether the user is using the device or not. If they are, the user is notified and given an option to delay the update or apply it, nonetheless. The feature avoids disrupting users' ongoing activities on their devices, such as calls.



This page is intentionally left blank.

7 Replacing Remote Controller Batteries

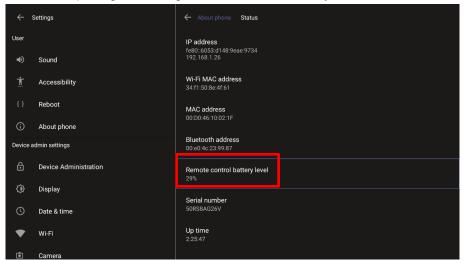
If the remote controller batteries run low, the RXV80 application notifies you about the issue. A notification is sent to the screen/TV as well as to AudioCodes' Device Manager if battery voltage level falls low, indicating what percentage level remains unused.



Select **HIDE** to conceal the notification.

7.1 Assessing the RC's Battery Level

You can determine the RXV80 Remote Controller's battery level through the Status screen (**About** > **Status**) using the setting **Remote control battery level**.





7.2 Restarting / Rebooting the RXV80

The RXV80 sometimes needs to be restarted / rebooted, for example, after inserting the Bluetooth dongle.

- To restart / reboot the RXV80:
- Long-press the remote controller's power on/off button for about five seconds.

8 Supported Parameters

Listed here are the configuration file parameters currently supported by Android-based Teams devices. They're in AudioCodes' UC version format. The parameters are comprised of Microsoft configuration profile settings and AudioCodes' device-specific parameters.

- general/silent_mode = 0 (default)/1
- general/power_saving = 0 (default)/1
- phone_lock/enabled = 0 (default)/1
- phone_lock/timeout = 900 (default) (in units of seconds)
- phone lock/lock pin = 123456
- display/language = English (default)
- display/screensaver_enabled = 0/1
- display/screensaver_timeout = 1800 (seconds)
- display/backlight = 80 (0-100)
- display/high_contrast = 0 (default)/1
- date_time/timezone = +02:00
- date_time/time_dst = 0 (default)/1
- date_time/time_format = 12 (default) / 24
- network/dhcp_enabled = 0/1
- network/ip_address =
- network/subnet mask =
- network/default_gateway =
- network/primary_dns =
- network/pecondary_dns =
- network/pc_port = 0/1
- office_hours/start = 08:00
- office hours/end = 17:00
- logging/enabled = 0/1
- logging/levels = Verbose, Debug, Info, Warn, Error, Assert, None
- admin/default_password = 1234
- admin/ssh enabled=0/1 (default)
- security/SSLCertificateErrorsMode = IGNORE, NOTIFICATION, DISALLOW (default)
- security/ca_certificate/[0-4]/uri uri to download costumer's root-ca
- provisioning/period/daily/time
- provisioning/period/hourly/hours interval
- provisioning/period/type = HOURLY, DAILY (default), WEEKLY, POWERUP, EVERY5MIN, EVERY15MIN
- provisioning/period/weekly/day
- provisioning/period/weekly/time
- provisioning/random_provisioning_time

International Headquarters

1 Hayarden Street, Airport City Lod 7019900, Israel Tel: +972-3-976-4000

Fax: +972-3-976-4040

AudioCodes Inc.

200 Cottontail Lane, Suite A101E, Somerset, NJ 08873 Tel: +1-732-469-0880

Fax: +1-732-469-2298

Contact us: https://www.audiocodes.com/corporate/offices-worldwide

Website: https://www.audiocodes.com/

©2022 AudioCodes Ltd. All rights reserved. AudioCodes, AC, HD VoIP, HD VoIP Sounds Better, IPmedia, Mediant, MediaPack, What's Inside Matters, OSN, SmartTAP, User Management Pack, VMAS, VoIPerfect, VoIPerfectHD, Your Gateway To VoIP, 3GX, VocaNom, AudioCodes One Voice and CloudBond are trademarks or registered trademarks of AudioCodes Limited. All other products or trademarks are property of their respective owners. Product specifications are subject to change without notice.

Document #: LTRT-18174

