



Simply Better Connections

VP2420

4 × 2 True 4K HDMI Presentation Switch
with Multi View
User Manual

Compliance Statements

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Warning

Operation of this equipment in a residential environment could cause radio interference.

Achtung

Der Gebrauch dieses Geräts in Wohnumgebung kann Funkstörungen verursachen.



KCC Statement

유선 제품용 / A 급 기기 (업무용 방송 통신 기기)

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Industry Canada Statement

This Class A digital apparatus complies with Canadian ICES-003.

CAN ICES-003 (A) / NMB-003 (A)

HDMI Trademark Statement

The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.



RoHS

This product is RoHS compliant.

User Information

Online Registration

Be sure to register your product at our online support center:

International	http://eservice.aten.com
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Telephone Support

For telephone support, call this number:

International	886-2-8692-6959
China	86-400-810-0-810
Japan	81-3-5615-5811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988 1-949-428-1111

User Notice

All information, documentation, and specifications contained in this manual are subject to change without prior notification by the manufacturer. The manufacturer makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties as to merchantability or fitness for any particular purpose. Any of the manufacturer's software described in this manual is sold or licensed *as is*. Should the programs prove defective following their purchase, the buyer (and not the manufacturer, its distributor, or its dealer), assumes the entire cost of all necessary servicing, repair and any incidental or consequential damages resulting from any defect in the software.

The manufacturer of this system is not responsible for any radio and/or TV interference caused by unauthorized modifications to this device. It is the responsibility of the user to correct such interference.

The manufacturer is not responsible for any damage incurred in the operation of this system if the correct operational voltage setting was not selected prior to operation. PLEASE VERIFY THAT THE VOLTAGE SETTING IS CORRECT BEFORE USE.

Product Information

For information about all ATEN products and how they can help you connect without limits, visit ATEN on the Web or contact an ATEN Authorized Reseller. Visit ATEN on the Web for a list of locations and telephone numbers:

International	http://www.aten.com
North America	http://www.aten-usa.com

Package Contents

Check to make sure that all the components are in working order. If you encounter any problem, please contact your dealer.

VP2420

- ◆ 1 VP2420 True 4K HDMI Presentation Switch with Multi View
- ◆ 1 IR receiver
- ◆ 1 IR remote control
- ◆ 1 rack mount kit
- ◆ 1 3-pole terminal block
- ◆ 1 power adapter and power cord
- ◆ 1 user instructions

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About this Manual

This user manual is provided to help you get the most from the 4 x 2 True 4K Presentation Matrix Switch. It covers all aspects of installation, configuration, and operation for the following models:

Chapter 1, *Introduction* introduces you to the VP2420. Its purpose, features, benefits, and installation considerations are described.

Chapter 2, *Hardware Setup* introduces the panel components of the True 4K HDMI Presentation Switch with Multi View and the IR Remote Control, and details the steps to quickly and safely install the VP2420.

Chapter 3, *Local Operation* provides information on how to locally operate and access the system settings via the panel pushbuttons and IR remote control.

Chapter 4, *Remote Operation* provides details on remote management and control tasks via the system web interface.

Chapter 5, *CLI Commands* provides details on the functions and RS-232 commands that you can use to control the VP2420 using a serial controller.

Appendix provides a list of safety instructions and precautions, contact information for ATEN technical support, product specifications, and other technical information.

Note:

- ◆ Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit or any connected devices.
- ◆ This product may be updated, with features and functions added, improved or removed since the release of this manual. For an up-to-date user manual, visit <http://www.aten.com/global/en/>

Conventions

This manual uses the following conventions:

Monospaced Indicates text that you should key in.

[] Indicates keys you should press. For example, [Enter] means to press the **Enter** key. If keys need to be chorded, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt].

1. Numbered lists represent procedures with sequential steps.

◆ Bullet lists provide information, but do not involve sequential steps.

> Indicates selecting the option (on a menu or dialog box, for example), that comes next. For example, Start > Run means to open the *Start* menu, and then select *Run*.

 Indicates critical information.

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Chapter 1

Introduction

Overview

The VP2420 is a presentation switch featuring 4 HDMI inputs and 2 HDMI outputs and is capable of displaying video content in full screen, PiP, PbP, triple/quad multi-view. With display mode (Matrix/Mirror) and layout mode (Auto/Manual) selectable and its capability of fast switching among multiple sources, the VP2420 delivers a dynamic viewing experience in any conference settings. In addition to the support for 4096 × 2160/3840 × 2160 @ 60Hz (4:4:4), a True 4K scaler is also built in the device to ensure crisp and detailed visual quality. Thanks to the audio embedding and de-embedding functionalities, users can adapt suitable audio/video combinations based on various environments.

Designed with flexibility in mind, the VP2420 offers versatile control options including front-panel pushbuttons, RS-232, IR, Telnet, Web GUI, and ATEN Video Presentation Control mobile app, allowing multimedia signals to be easily managed and incorporated into a collaborative event. Up to 4 VP2420 can be cascaded to display up to 16 HDMI signals at once on a single screen, expanding video source quantity. Rack-mounting is supported for flexible installation. With a set of features coming in a compact, all-metal casing, which enhances durability, the VP2420 serves as perfect solution for smooth presentation flow and seamless transition in any education or commercial conferencing applications.

Features

Seamless AV Matrix Switching

- ◆ Supports 4 × HDMI inputs and 2 × HDMI outputs
- ◆ Supports Multi-view (full screen, PIP, PbP, triple/quad multi-view), Matrix/Mirror display modes, and Auto/Manual layout modes
- ◆ Supports audio embedding and de-embedding
- ◆ Fast switching at near-zero-second speed
- ◆ Auto switching—automatically detects and switches to the latest active source connection

Visually Stunning True 4K Outputs

- ◆ Supports up to 4096 × 2160/3840 × 2160 @ 60Hz (4:4:4) and 4K HDR
- ◆ Built-in True 4K scaler—supports video upscaling to True 4K
- ◆ EDID Expert™—automatically selects the optimum EDID settings for smooth power-up, high-quality display, and the best video resolution across connected devices
- ◆ HDMI (3D, Deep Color, 4K); HDCP 2.2 compliant

The Ultimate Flexibility in Streamlining Operation

- ◆ Multiple control options—front-panel pushbuttons, RS-232, IR, Telnet, Web GUI, and ATEN Video Presentation Control mobile app
- ◆ Consumer Electronics Control (CEC)
- ◆ Up to 4 × VP2420 cascadable—displays up to 16 signals on one screen simultaneously
- ◆ Long distance transmission—up to 5m via a High Speed HDMI cable
- ◆ Supports stand-by mode for power saving and fast waking up
- ◆ Rack-mountable
- ◆ All-metal casing suits the durability requirements in harsh environments

Planning the Installation

Required Equipment

Prepare the following equipment before installing the VP2420.

- ◆ Up to 4 input devices equipped with HDMI and 1 audio input device
- ◆ Up to 2 display devices each equipped with an HDMI port

Optional Equipment

Prepare the following equipment as required.

- ◆ 1 media player
- ◆ 1 active speaker
- ◆ 1 Ethernet cable to connect the VP2420 to a network switch for remote management via the web console
- ◆ 1 host computer, ATEN Controller, or third-party control system that supports RS-232 or Telnet

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Chapter 2

Hardware Setup

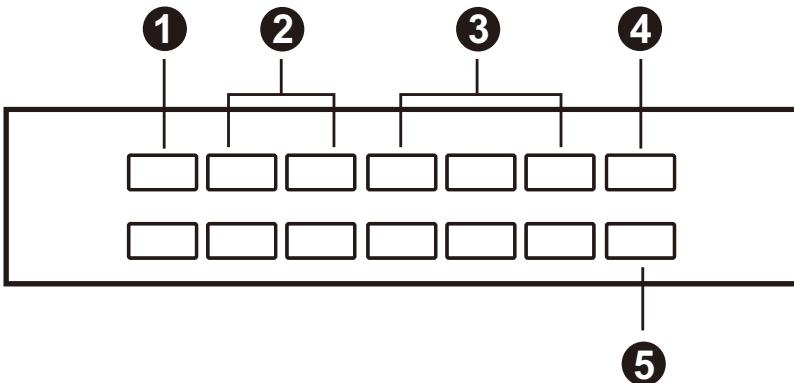


1. Please review the safety information regarding the placement of this device in *Safety Instructions*, page 55.
2. Do not power on the VP2420 until all the necessary hardware is connected.

Hardware Overview

VP2420

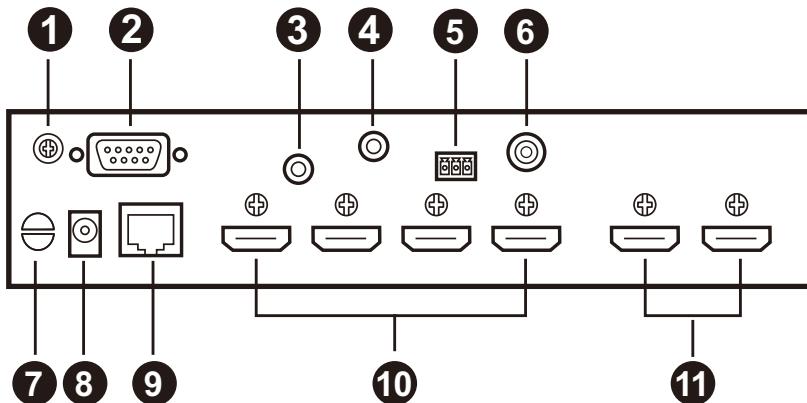
Front View



No.	Component	Description
1	display selection pushbuttons	Press to focus a display. The pushbutton for the focused display lights orange.
2	source selection pushbuttons	Press to select a source for the focused display. The pushbutton for the selected source lights green.
3	layout selection pushbuttons	Press to change the video layout to be displayed on display A.
4	power pushbutton	Used to power on/off the VP2420, or enable/disable the standby mode. For details, see , page 15.

No.	Component	Description
5	mode pushbutton	<ul style="list-style-type: none"> Press the pushbutton once to switch between the Matrix mode and the Mirror mode. Press and hold the pushbutton for 2 seconds to lock or unlock the front-panel pushbuttons.

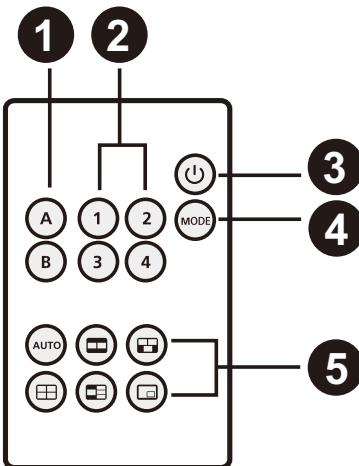
Rear View



No.	Component	Description
1	grounding terminal	Ground the VP2420 to prevent damages from power surge or static electricity.
2	RS-232 serial port	Connect to a hardware or software controller to transmit serial data.
3	IR receiver port	Connect to an IR receiver to receive IR signals from the IR remote control.
4	audio in	Receive an audio source.
5	stereo line out	Connect to a speaker.
6	coaxial audio out	Connect to a speaker.
7	cable tie slot	Reserved for a cable tie to hold the power adapter in place.
8	power jack	Receive a power adapter of the VP2420.
9	Ethernet port	Connect to a network switch via an Ethernet cable to allow remote operation via the web console.
10	HDMI in	Connect to a video source device using an HDMI cable.
11	HDMI out	Each connects to an HDMI-enabled display device.

IR Remote Control

To operate the VP2420, insert the supplied IR Receiver to the IR Receiver Port on back panel of the device.



No.	Buttons	Description
1	display	Press a display button to focus the display.
2	source	Press a source button to switch the focused display to the source.
3	on/off	Used to power on the VP2420 and enable/disable the standby mode. For details, see , page 15.
4	mode	<ul style="list-style-type: none"> ◆ Press the pushbutton once to switch between the Matrix mode and the Mirror mode ◆ Press and hold the pushbutton for 2 seconds to lock or unlock the front-panel pushbuttons.
5	layout	Press a layout button to select the layout to be displayed.

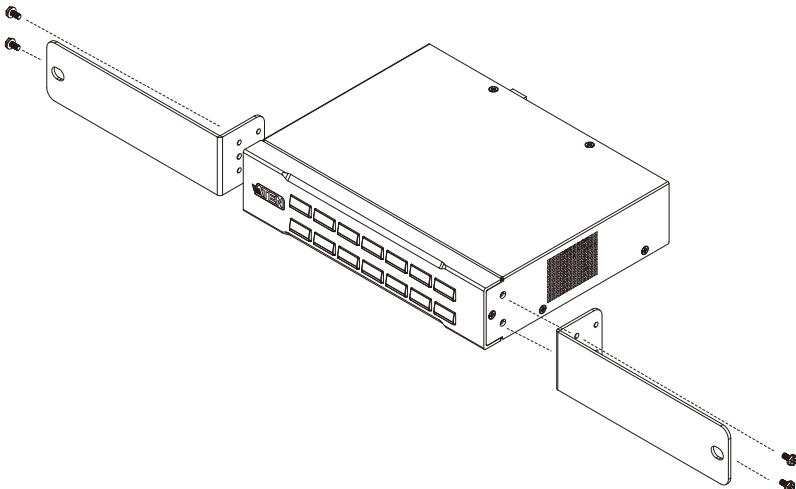
Mounting

Rack Mount

The VP2420 can be mounted on a 19" (1U) system rack. To conveniently access the front panel for local configuration and operation, mount the unit in a rack with the front panel facing outward.

Note: The Rack Mount Kit is not included in the package. Visit the product web page for more information.

1. Use the M3 Phillips hex head screws supplied with the mounting kit to secure the rack mounting brackets onto the unit.



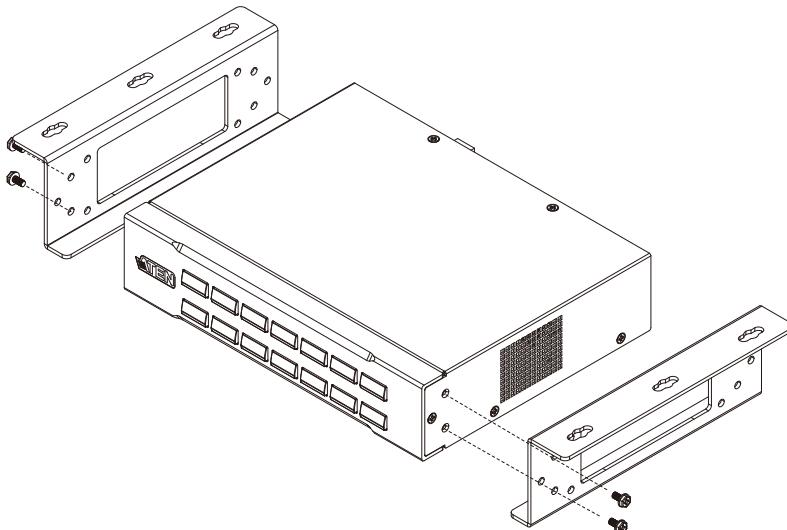
2. Position the unit in the front of the rack and align the holes in the mounting brackets with the holes in the rack.
3. Secure the mounting brackets to the rack using self-prepared screws.

Under Desk Mount

The VP2420 can be installed under a desk. To conveniently access the front panel for local configuration and operation, install the unit with the front panel facing forward.

Note: The mounting kit required for this installation is not included in the package. Visit the product web page for more information.

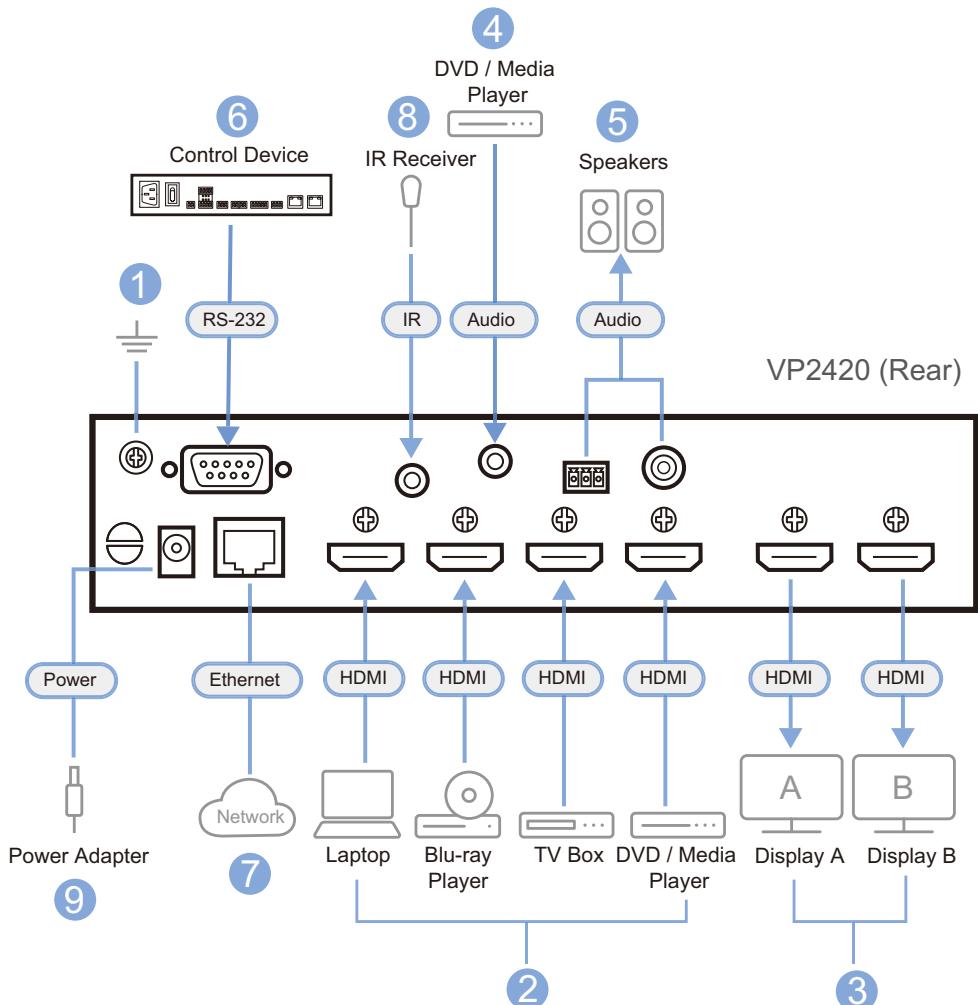
1. Use the M3 Phillips hex head screws supplied with the mounting kit to secure the mounting brackets onto the unit.



2. Position the unit to a spot under the desk where you can easily access the front panel, and then secure the racks to the desk with self-prepared screws.

Installation

Follow the steps below to safely install sources, displays, and other equipment to the VP2420. Before you start, make sure all the equipment you are connecting to the unit is turned off and disconnected from the power source.



1. Use a grounding wire to ground the unit by connecting one end to the grounding terminal, and the other end to a suitable grounded object.

Note: Do not omit this step. Proper grounding helps prevent damage to the unit from surges or static electricity.

2. Connect up to four HDMI source devices to the presentation switch using HDMI cables.
3. Use an HDMI cable to connect the unit to at least one HDMI-enabled display.
4. (Optional) Connect the unit to an audio source device, such as a media player, to the audio in port.
5. (Optional) Connect the presentation switch to a speaker via an appropriate audio out port.
6. (Optional) To configure the system settings via RS-232 serial commands, connect a hardware controller, such as ATEN Control Box, to the RS-232 serial port.
7. (Optional) To allow access to the presentation switch's web console for system configuration, use an Ethernet cable to connect the Ethernet port of the unit to a network switch.
8. (Optional) To control the VP2420 using an IR remote control, connect the IR receiver to the IR receiver port.
9. Plug the power adapter to the power jack. Optionally use the cable tie slot and a cable tie to hold the power cable in place.
10. Press the power pushbutton to power on the unit.
11. Power on all the connected devices.

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Chapter 3

Local Operation

Overview

This chapter provides information on operating the VP2420 using the front panel and IR remote control.

Note: The instructions use *pushbutton* to refer to the front panel and *button* to refer to the IR remote control.

Operation Considerations

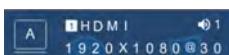
- ◆ To use the IR remote control, make sure to insert the IR receiver (supplied in the package) to the VP2420.
- ◆ To ensure smooth operation using the IR remote control, use the IR remote control within the effective range (6 m) and keep a clear line-of-sight between the remote control and the IR receiver connected to the VP2420.

Switching Sources

To display a source:

1. Press a display selection pushbutton.
2. Press the source selection pushbutton that corresponds to the input you wish to display. The selected source pushbutton lights green, and the selected display lights orange.

Note:



appears on the top left corner of the OSD for 5 seconds when the source is switched. This is the resolution from the original source without scaling.

Display Mode

Understanding Display Mode

The VP2420 supports the following display modes:

- ◆ **Matrix mode:** When enabled, the AV sources can be configured separately, capable of showing different outputs.
- ◆ **Mirror mode:** When enabled, display B uses the AV source assigned for display A and shows identical content.

Multiview Layout Configuration

To change the video layout of display A:

1. Press a layout selection pushbutton. The selected layout pushbutton lights orange.
2. Press the selected layout pushbutton again to enter the edit mode.
3. Press the source selection pushbutton to set the sources to be displayed. The selected source pushbutton lights green.

Note:◆ Be sure to make each of the source selections in 5 seconds before the system exits the selection mode

- ◆ Display B only supports single source.

Panel Lock

To prevent accidental tampering of system settings via the front panel, you can lock the panel using the **mode** pushbutton or set up an idle time for an auto lock via the web console (**General > Panel Auto Lock**).

To lock or unlock the front-panel pushbuttons, press and hold the mode pushbutton for 2 seconds. When the front panel is locked, the lock icon lights red.

Note: If you have locked the panel using the **mode** pushbutton, make sure to unlock only by pressing the **mode** pushbutton. Disabling panel lock from the web console will not be effective in this case.

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Chapter 4

Remote Operation

Overview

This chapter provides information on how to remotely operate and configure the VP2420 via the web console.

Default Network and Login Settings

The VP2420 uses the following network settings and login credentials as its default settings.

- ♦ Default network settings

Network Parameter	Default Setting
IP Address	192.168.0.60
Subnet Mask	255.255.255.0
Gateway	192.168.0.1
HTTP Port	80

Note: If the VP2420 is connected to a router that supports DHCP, a dynamic IP address will be assigned to the VP2420 as soon as it connects to the network. Look up the IP address by sending a read command via an RS-232 serial controller. For more details, see *Chapter 5, CLI Commands*.

- ♦ Default login credentials

Login Credential	Default Setting	Limitations
Username	administrator	5 to 30 characters in length without special characters, not case-sensitive
Password	password	

Supported Web Browsers

The VP2420 supports access to its web UI through the following web browsers:

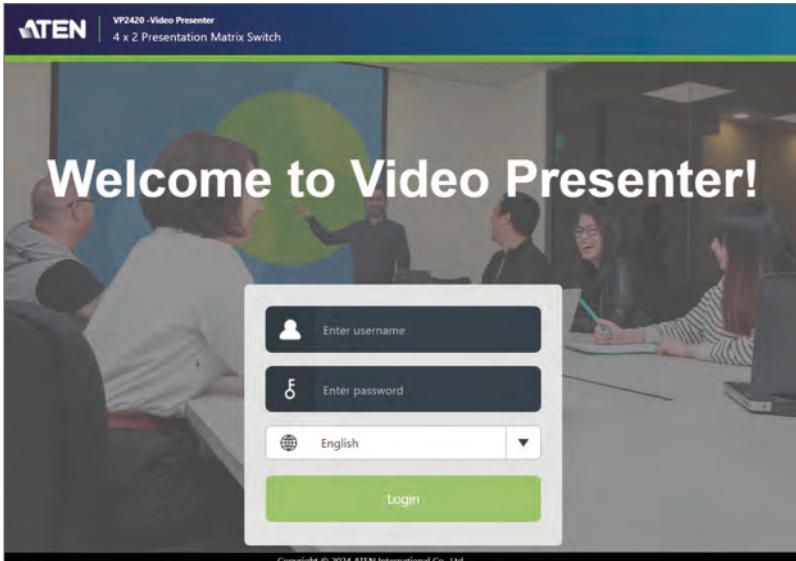
Web Browser	Supported Version
Firefox	117
Edge	117.0.2045.36
Chrome	117.0.5938.88

Logging In the Web Console

To log in to the VP2420 web console, do the following:

1. Launch a web browser and enter the IP address of the VP2420 you'd like to access. The default IP address is **192.168.0.60**.

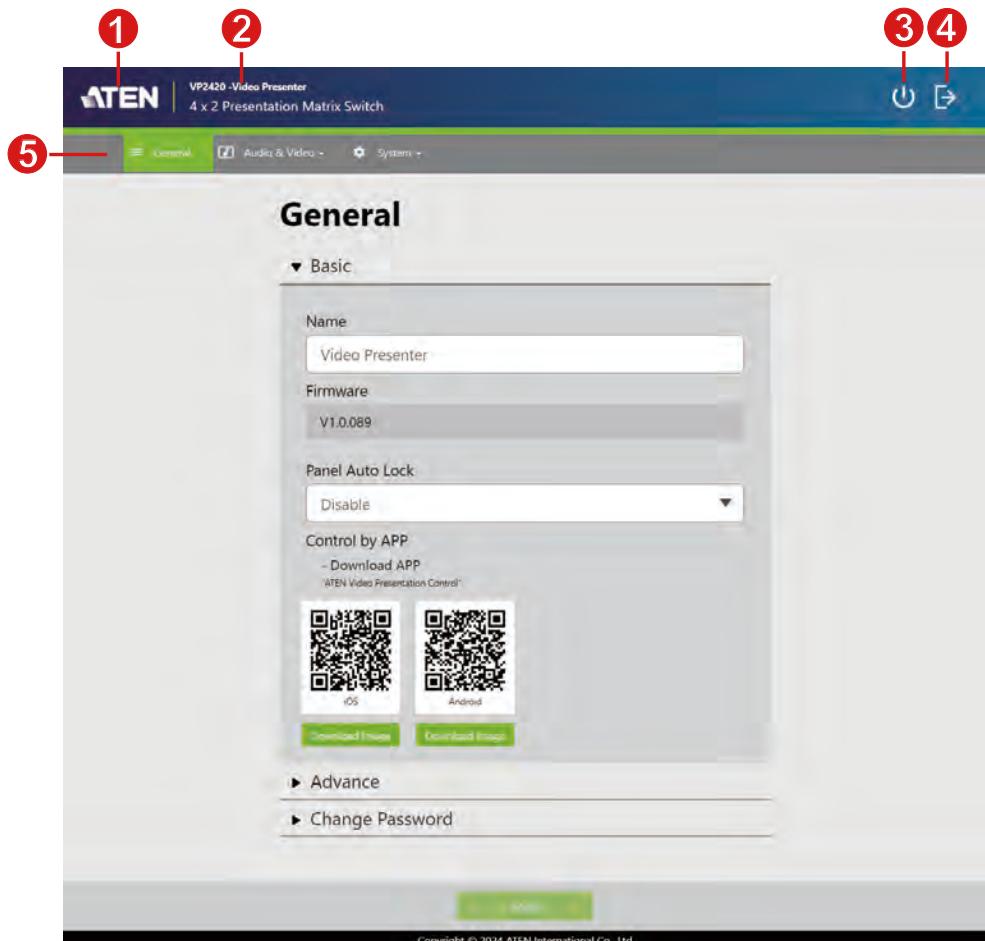
The screen appears:



2. Enter the username and password. The default credentials are **administrator** and **password**.
3. Click **Login**. The main screen appears.

The Main Screen

The VP2420 defaults to the main screen after logging in. Refer to the illustration and table below for an overview of the web console.



No.	Element	Description
1		Click the ATEN logo to visit ATEN's official website.

No.	Element	Description
2	Device Information	Indicates the device model and name.
3		Click standby button to enable the standby mode, a power-saving mode that shuts parts of the system down to allow the user to quickly resume operation when needed.
4		Click the logout button to log out of the web console.
5	Settings Tab	Click on the tabs to switch between different sets of settings.

General Settings

The General tab is divided into 3 parts: Basic, Advance, and Change Password. The tab page includes settings such as device name, panel lock, EDID, and login password. To access the general settings, log in the web console and the screen defaults to the page.

General

▼ Basic

Name
Video Presenter

Firmware
V1.0.089

Panel Auto Lock
Disable

Control by APP
- Download APP
"ATEN Video Presentation Control"

 
iOS Android

[Download Image](#) [Download Image](#)

► Advance

► Change Password

[Apply](#)

By making any changes on this page, the Apply button located at the bottom of the page becomes available. Click on it to adopt the changed settings.

Basic

The Basic settings part contains the following:

Item	Description
Name	Enter a name for the VP2420. A valid name should be within 30 characters in length and contains no special characters. Once you apply the changed settings, the name you entered appears on the header.
	
Firmware	Indicates the firmware version for the VP2420. This field is unavailable for change.
Panel Auto Lock	Set the idle time for the front panel to be locked. The options are 5 seconds, 30 seconds, 5 minutes, and disabling.
Control by APP	Download the ATEN Video Presentation Control app to your mobile device, use your mobile device and scan the QR code.

Advance

Configure the following advance settings:



Item	Description
EDID	Select the EDID mode from the options: <ul style="list-style-type: none">◆ Display A: Sends the EDID of Display A to the connected sources.◆ ATEN default: Sends ATEN-predefined EDID to the connected sources.◆ Remix: Sends the optimum EDID of the connected displays to the connected sources.
CEC	Consumer Electronics Control (CEC) allows for control of devices connected through HDMI ports to communicate with each other and makes the control of these devices using one remote control device possible.
HDCP Mode (Input)	Set HDCP (High-bandwidth Digital Content Protection) settings for digital copy protection. Select between HDCP 1.4 and HDCP 2.2 from the drop-down menu.
HDCP Mode (Output)	Select whether to fix the HDCP settings by individual port. Enable by the function Fix to ensure the VP2420 is possible even when switching between HDCP and non-HDCP enabled device.
OSD Info	When enabled, the OSD info and icons will be shown on Display A.

Change Password

To configure the login account, fill in the fields and apply the changed settings:

General

- ▶ Basic
- ▶ Advance
- ▼ Change Password

Administrator

Username

Password

Confirm Password

Basic User

Username

Password

Confirm Password

Item	Description
Administrator	The administrator account has access to all settings in the web console. The default password is administrator.
Basic User	A basic user account has access to the audio and video controls on the web console. To create a basic user account, specify the username and password fields here.

Note: A valid password (for the administrator or basic user account) is not case-sensitive and should be 5 to 16 characters in length, without space or special characters.

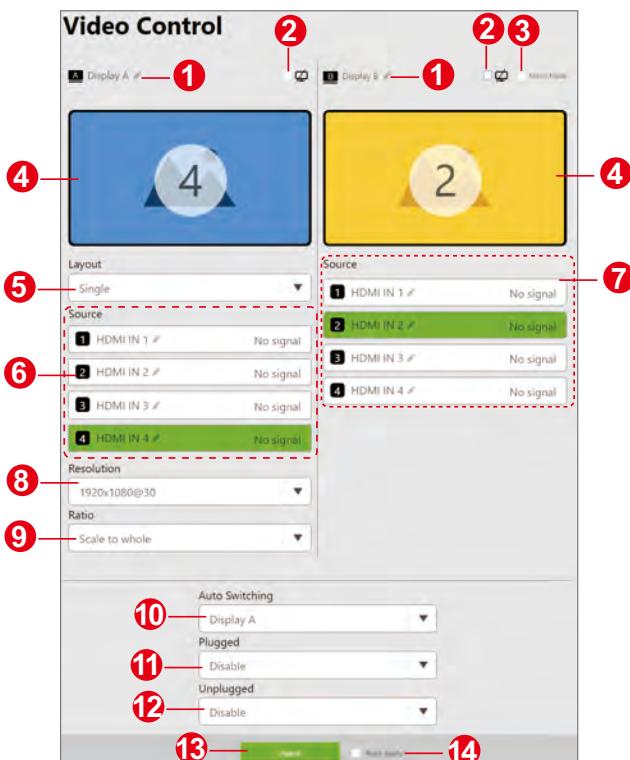
Audio & Video Settings

Hover the cursor over **Audio & Video** to expand the option list. Click on the listed option to enter the page you'd like to access for further configuration.



Video Control

Go to **Audio & Video > Video** to use the video control page to assign video source and configure video settings.



No.	Item	Description
1	Display A / Display B	Click the edit button  to rename the source.
2	Blank	Select Blank to disable the display shown on the screen.
3	Mirror mode	Enable this setting for display B to show identical video content as display A.
4	Preview	Shows a preview of the currently selected source and indicates the source number at the center of the preview.
5	Layout	Set the video content placement.
6	Source (for Display A)	<p>Lists the connection status of all source ports and the currently assigned source. The source options vary depending on the layout you selected.</p> <p>To rename the source, set the layout to be Single, and then click the edit button  next to the listed source.</p>
7	Source (for Display B)	<p>Lists the connection status of all source ports and the currently assigned source (indicated in green).</p> <ul style="list-style-type: none"> ◆ To switch the source for the display, click on one of the listed sources. The assigned source is highlighted green. ◆ To rename the source, click the edit button .
8	Resolution	Click the drop-down list to select a resolution and refresh rate setting for the display device. This field is only available when the display is connected to the unit. Make sure to select the correct display resolution for the connected display, otherwise the display will not display any content.
9	Ratio	<p>Set the ratio from the options:</p> <ul style="list-style-type: none"> ◆ Scale to Whole: Fully extends the video to the four sides of the display. ◆ Auto Fit: Proportionally scales the video to fit the display without cutting any content off. This may leave some blank on either the top and bottom or the left and right of the screen. ◆ Auto Cut: Proportionally scales the video to fully fill the display. The content that goes out of the display range will be cut off.
10	Auto Switching	Enable the auto switching of audio-video source on Display A or Display B.

No.	Item	Description
11	Plugged	Defines the automatic switching of audio-video source on the selected display from the auto switching above when a new source is plugged in. <ul style="list-style-type: none"> ◆ Disable: Disable automatic switching. ◆ Next: Automatically switches to the next available source when the current video source is plugged in.
12	Unplugged	Defines the automatic switching of audio-video source on the selected display from the auto switching above when a previously used source goes detected. <ul style="list-style-type: none"> ◆ Disable: Disable automatic switching. ◆ Next: Automatically switches to the next available source when the current video source is plugged out. ◆ Last: Automatically switch the display to the previous available source based on the order of source connection. For example, if sources are connected to the unit in the order of port 2, port 3, port 4 and then port 1, and that selected display from the auto switching above is switched to port 3, when the source (port 3) is unplugged, the selected display from the auto switching above will automatically switch to port 1.
13	Apply	Click on the Apply button to adopt the changes you made on this page.
14	Auto apply	To automatically apply the changes you make on the Video Control page, checks the Auto apply checkbox at the bottom of the page.

Audio Control

To access the audio control page, log in the web console, and then go to **Video & Audio > Audio Control**. The Audio Control page is divided into the following two parts: Audio Output and Audio Input.

The screenshot shows the VP2420 Video Presenter 4x2 Presentation Matrix Switch web interface. The top navigation bar includes the ATEN logo, the model name 'VP2420 -Video Presenter 4 x 2 Presentation Matrix Switch', and power and network status indicators. Below the bar, a secondary navigation bar offers links to 'General', 'Audio & Video' (which is currently selected), and 'System'. The main content area is titled 'Audio Control' and contains the following sections:

- Audio Output**:
 - Overall**: A volume slider and a 'Mute' button.
 - A Display A**: A volume slider and a 'Mute' button.
 - Multi-view Audio Source**: A dropdown menu set to 'HDMI IN 1'.
 - B Display B**: A volume slider and a 'Mute' button.
 - Audio Out**: A volume slider and a 'Mute' button.
- Source**: A dropdown menu set to 'Audio In'. A note below it states: 'Coaxial output does not support bypassing the signal from audio link in.'

At the bottom of the page are two buttons: a green 'Apply' button and a 'Cancel' button, followed by an 'Auto apply' checkbox.

Audio Output

For Audio Output, you can configure the following:

Item	Description
Overall	Mute or unmute the connected speaker.
Display A	Mute or unmute display A.
Multi-view Audio Source	Select the input port that the audio source is connected to.
Display B	Mute or unmute display B.
Audio Out	Mute or unmute the independent speaker connected to the audio output port.
Source	<p>Set the audio source for the independent speaker connected to the audio output port of the VP2420.</p> <ul style="list-style-type: none">◆ To use the same audio source for display A, select Follow Display A.◆ To use the same audio source for display B, select Follow Display B.◆ To use the audio source from an HDMI input port, select between HDMI IN 1, HDMI IN 2, HDMI IN 3, and HDMI IN 4.◆ To use the independent audio source (connected to the audio input port), select Audio In.

Audio Input



Set the audio source for the HDMI 1 / HDMI 2 / HDMI 3 / HDMI 4 source. To use the audio source that comes along with the video, select **Digital Audio**. To use the audio source from the independent audio source (connected to the audio input port), select **Embedded Audio In**.

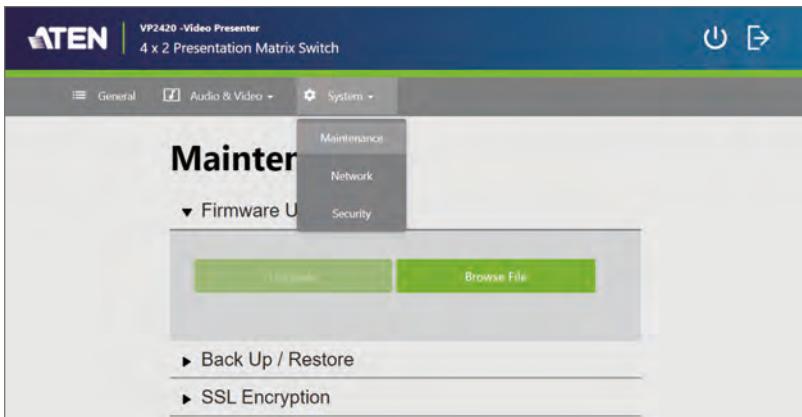
Apply vs. Auto Apply

Click on the **Apply** button to adopt the changes you made on this page. To automatically apply the changes you make on the Audio Control page, select **Auto apply** at the bottom of the page.

System Settings

Maintenance

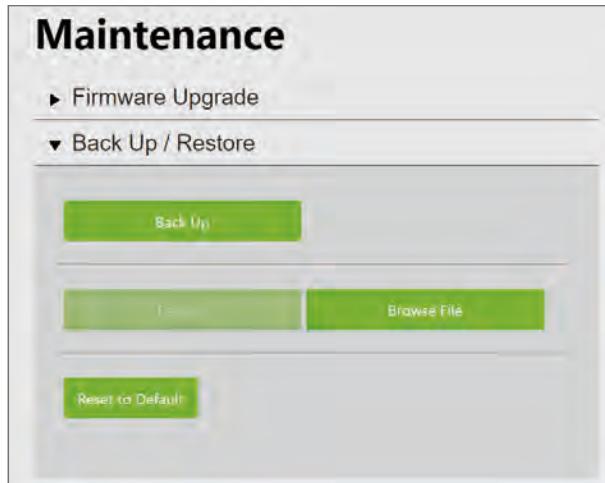
Use the maintenance page to upgrade system firmware, back up or restore system configurations, and restore default settings. To access the maintenance page, log in the web console, and then go to **System > Maintenance**.



Upgrading the System Firmware

To upgrade the system firmware of the VP2420:

1. Prepare the firmware file you wish to apply.
 - a) Visit the product web page from <http://www.aten.com/global/en/>
 - b) In the **Support and Download** tab, download a firmware file.
2. Log in the VP2420's web console, and then go to **System > Maintenance**.
3. In the Firmware Upgrade section, click **Browse File** to select the firmware file that you downloaded, and then click **Upgrade**. The upgrade starts immediately.
4. When the upgrade is complete, a confirmation message appears and the unit reboots.



Backing Up System Settings

You can back up and export the VP2420's configurations. This backup will not include the username and password settings.

1. Log in to the VP2420's web console, and then go to **System > Maintenance**.
2. Click **Back Up**.

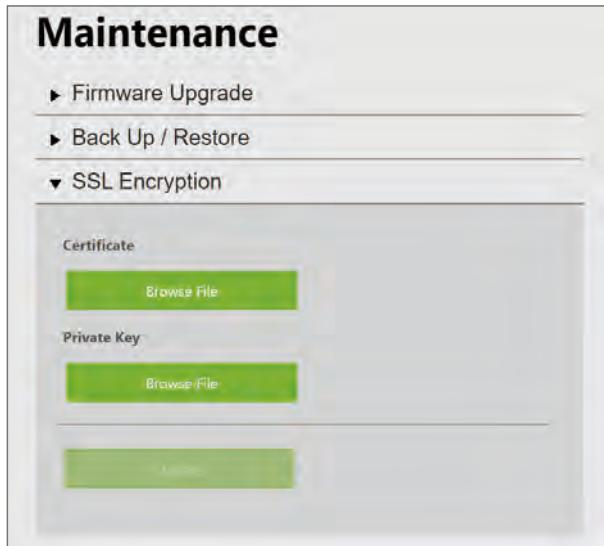
Restoring System Settings

1. Log in to the VP2420's web console, and then go to **System > Maintenance**.
2. To restore the VP2420's settings, click **Browse File** to locate a previously backed up file (.aes), and then click **Restore**.

Resetting the Default Settings

1. Log in to the VP2420's web console, and then go to **System > Maintenance**.
2. Click **Reset to Default**. This will reset all the settings, including network settings to default.

Configuring the SSL Encryption Settings

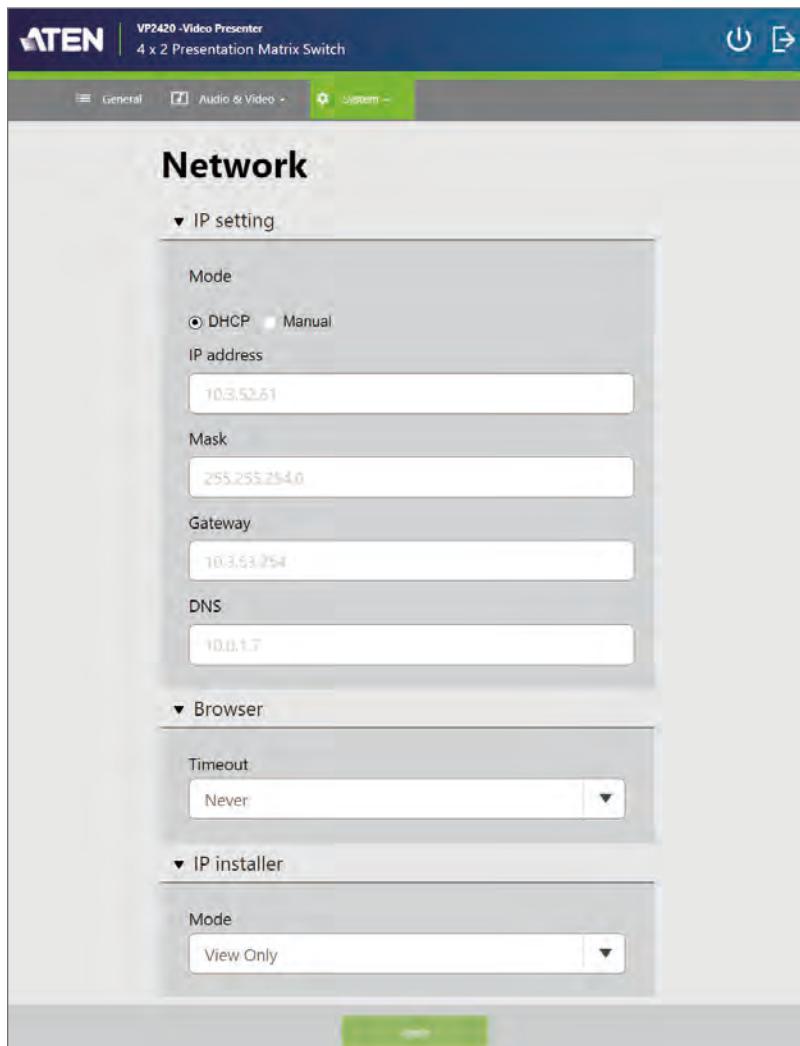


When logging in over a secure (SSL) connection, a signed certificate is used to verify that the user is logging in to the intended site. For enhanced security, the Private Certificate section allows you to use your own private encryption key and signed certificate, rather than the default ATEN certificate.

1. Click **Browse File** to upload the certificate file and the private key.
2. Click **Update** to complete the settings.

Network Settings

To configure the VP2420's network connection settings, log in the web console, and then go to **System > Network**.



IP Settings

Item	Description
Mode	<p>Configure the method to which the VP2420 obtains an IP address and connects to the network.</p> <ul style="list-style-type: none"> ◆ DHCP: Select this option for the connected network switch to dynamically assign an IP address, subnet mask, gateway, and DNS to the VP2420. ◆ Manual: Select this option for the VP2420 to use a fixed IP address. Specify the IP address, subnet mask, and default gateway.
IP address	By selecting Manual mode, you can set the IP address for this VP2420.
Mask	By selecting Manual mode, you can configure the mask settings for this VP2420.
Gateway	By selecting Manual mode, you can configure the gateway settings for this VP2420.
DNS	By selecting Manual mode, you can configure the DNS settings for this VP2420.

Browser

From the drop-down menu of **Timeout**, select the time to set the duration of time that a web browser waits to obtain connection to the VP2420 before terminating the request.

IP Installer

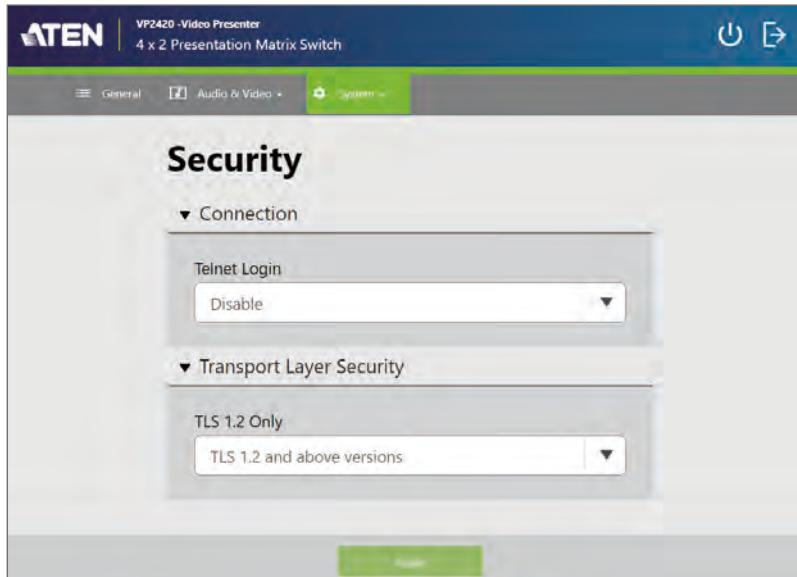
This setting defines the access rights of ATEN IP Installer to the presentation switch. To get the DHCP-assign IP address, please download the ATEN program, IP Installer, from the Support and Downloads tab of the product page, and install it to your PC in advance.

Select the mode for IP Installer from the options:

Item	Description
Enable	The unit's IP address can be found by IP Installer and configured through the Set IP function of IP Installer.
View Only	The unit's IP address can be found by IP Installer, but it cannot be configured through IP Installer.
Disable	The unit's IP address cannot be found by IP Installer.

Security

To configure Telnet login or TLS setting, go to **System > Security**.



Connection

Enable the Telnet login function that connects to the unit over a network to provide text based management and control.

Transport Layer Security

Select the TLS version to be adopted.

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Chapter 5

CLI Commands

Overview

The VP2420 can be configured and controlled via RS-232 or Telnet commands when connected to a host computer or other device, such as a control system. This chapter provides information on how to connect to the VP2420 via RS-232/Telnet and command syntax.

Connecting to the VP2420 via Telnet

To establish a Telnet session with the VP2420, do the following:

1. Connect a host computer or control system to a shared network with the VP2420.

2. Open a command-line interpreter program from your computer.

3. In the command-line interpreter, type the VP2420's IP address in the following way:

```
telnet [IP address]:23
```

4. Press **Enter**. The login screen appears.

5. At the login prompt, type the login username and password for the VP2420.

6. When a session is established with the VP2420, you can control and configure the VP2420 via RS-232 commands. For more information on commands, see:

- ◆ *Command Syntax*, page 41
- ◆ *Command List*, page 42

Note: If a user logs in using a username that is already in session, the newest login takes effect and the previous session will be replaced.

Connecting to the VP2420 via RS-232

1. Connect a host computer or control system to the RS-232 Serial port on the VP2420 unit.
2. Download and install controller software that supports RS-232 serial control and the operation system of your controller PC.
3. Execute the software and configure the connection settings to the following:
 - ◆ Serial line to connect to: **COM1**
 - ◆ Speed (baud): **19200**
 - ◆ Data bits: **8**
 - ◆ Stop bits: **1**
 - ◆ Parity: **None**
 - ◆ Flow control: **None**
4. When a session is established with the VP2420, you can control and configure the VP2420 via RS-232 commands. For more information on commands, see:
 - ◆ *Command Syntax*, page 41
 - ◆ *Command List*, page 42

Command Syntax

- ◆ The general form of a command is:

```
command parameter<argument> {one|two|three}
```

Notation	Description
command	The name of the command is shown in bold.
parameter	Indicates the name of the parameter.
<argument>	Indicates the name of the value or the information that the user must provide. Only type the information in the angle brackets, not the brackets themselves.
[]	Indicates optional items. Only type the information in the brackets, not the brackets themselves.
{ }	Indicates a set of choices from which the user must choose one.
	Indicates two or more mutually exclusive choices in a command line. Only type one of the choices in the command line, not the symbol.

- ◆ If you have two or more parameters, the order of these parameters among themselves does not affect the result of the operation. For example, both of the following commands execute the same task:

```
command name + parameter 1 + parameter 2
```

```
command name + parameter 2 + parameter 1
```

Command List

Use the following commands to control and configure the VP2420 via Telnet or RS-232. For details on establishing a Telnet or RS-232 session to the VP2420, see *Connecting to the VP2420 via Telnet*, page 39 and *Connecting to the VP2420 via RS-232*, page 40.

Port Numbers

Use the table below to find out the argument value for each input/output port on the VP2420. For example, the <input_port> value for video port 1 is i1 or i01.

Source	Source No.	Interface	Port Numbers
Video Input	1	HDMI	i1 or i01
	2	HDMI	i2 or i02
	3	HDMI	i3 or i03
	4	HDMI	i4 or i04
Video Output	1	HDMI	o1 or o01
	2	HDMI	o2 or o02
Audio Input	N/A	Stereo	src7 or src07
Audio Output	N/A	Stereo	o3 or o03
	N/A	Coaxial	o3 or o03
HDMI in Audio	1	HDMI	src1 or src01
	2	HDMI	src2 or src02
	3	HDMI	src3 or src03
	4	HDMI	src4 or src04
HDMI out Audio	1 (Display A)	HDMI	src5 or src05
	2 (Display B)	HDMI	src6 or src06

Note: Audio output (coaxial) only adopts the audio source of HDMI in audio.

Switching Sources

◆ Function and Syntax

Syntax	Function
<code>sw {o<output_port> o*} {i<input_port> i+ i-}</code>	<p>Switches the specified source on the specified display.</p> <p>Note: The command is only available for single view.</p>

◆ Parameters

Parameter	Description
<code>i<input_port></code>	Specifies an input port in digit(s).
<code>+</code>	Indicates the next input port.
<code>-</code>	Indicates the previous input port.
<code>o<output_port></code>	Specifies an output port in two digits.
<code>o*</code>	Indicates all output ports.

◆ Examples

```
sw o1 i2
sw o1 +
sw o* i2
sw o1 i4
```

Configuring the Switching Mode

◆ Functions and Syntax

Syntax	Function
<code>swmode o<output_port> plugin {auto off}</code>	Configures the audio and video source switching behavior.
<code>swmode o<output_port> plugout {next prev off}</code>	Configures the audio and video source switching behavior.

◆ Parameters

Parameter	Description
plugin	Signifies the source connection on Display A when a new source is plugged in. <ul style="list-style-type: none">◆ auto Automatically switches to the newly plugged in source.◆ off Disables the automatic switching of video source on Display A when a new source is plugged in.
plugout	Signifies the source connection on Display A when the current source is plugged out. <ul style="list-style-type: none">◆ next Switches to the next available source when the current source is plugged out.◆ prev Switches to the previous available source when the current source is plugged out based on the order of source connection.◆ off Disables the automatic switching of video source on Display A when the current source is plugged out.

◆ Examples

```
swmode o01 plugin auto
swmode o01 plugout next
```

Configuring the Mute Function

◆ Functions and Syntax

Syntax	Function
mute	Indicates the mute setting for each input and output port.
mute {o<output_port> osys o*}	Indicates the mute setting for the specified output port.
mute {o<output_port> osys o*} {on off}	Mutes / unmutes the audio of a specified audio output.

◆ Parameters

Parameter	Description
o<output_port>	Specifies an output port in digit(s).
osys	Refers to all audio outputs (display devices and speakers).
o*	Indicates all output ports.
on	Mutes the specified output ports.
off	Unmutes the specified output ports.

◆ Example

```
mute o01 off
mute osys on
mute o* on
```

Setting the EDID Mode

◆ **Function and Syntax**

Syntax	Function
<code>edid {port1 remix default}</code>	Sets the VP2420's EDID mode.

◆ **Parameters**

Parameter	Description
<code>port1</code>	Sets the VP2420's EDID mode to follow the display connected to the output port A.
<code>remix</code>	Sets the VP2420's EDID mode to remix with which the system sends the optimum EDID of the connected displays to the sources.
<code>default</code>	Sets the VP2420's EDID mode to ATEN Default which sends ATEN-predefined EDID to the connected sources.

◆ **Example**

```
edid default
```

Setting the CEC

◆ Function and Syntax

Syntax	Function
cec o*{on off}	Enables/disables Consumer Electronics Control (CEC) on all output ports.

◆ Parameters

Parameter	Description
o*	Indicates all output ports.
on	Enables CEC.
off	Disables CEC.

◆ Example

cec o* on

Configuring the Read Status

◆ Functions and Syntax

Syntax	Function
read	Displays the video and audio input assigned to each output port, EDID mode, device information, and network settings.
read connection video	Shows the video assignment settings.
read connection audio	Shows the audio assignment settings.

◆ Example

read connection video
read connection audio

Resetting the Unit

- ◆ **Function and Syntax**

Syntax	Function
reset	Resets the VP2420 to its default settings.

- ◆ **Example**

```
reset
```

Enabling or Disabling the Echo Function

- ◆ **Function and Syntax**

Syntax	Function
echo {on off}	Enables/disables the echo function on the VP2420.

- ◆ **Parameters**

Parameter	Description
on	Enables echo on the VP2420.
off	Disables echo on the VP2420.

- ◆ **Example**

```
echo on
```

Configuring the Scaling

◆ Functions and Syntax

Syntax	Function
scaling	Reads the scaler settings on output A and B.
scaling o<output_port>	Configures the scaling setting for the specified output port.
hor	Configures the horizontal resolution for the specified output port. Note: Only output port 1 (Display A) supports resolution configuration.
ver	Configures the vertical resolution for the specified output port. Note: Only output port 1 (Display A) supports resolution configuration.
freq	Configures the frequency resolution for the specified output port.
cs <rgb yuv420 yuv422>	Configures the color space for the specified output port.
native	Maps the display's resolution to the specified output port.

◆ Parameters

Parameter	Description
o<output_port>	Specifies an output port in digit(s).
hor	Sets the horizontal resolution.
ver	Sets the vertical resolution.
freq	Sets the frequency.
cs	Sets the color space.
native	Maps the display's native resolution (default).

◆ Example

```
scaling o02 hor 1920 ver 1080 freq 60
scaling o01 native
```

Setting the Display Mode

- ◆ **Function and Syntax**

Syntax	Function
displaymode {matrix mirror}	Sets the VP2420 to matrix or mirror mode.

- ◆ **Parameters**

Parameter	Description
matrix	When enabled, the AV sources can be configured separately, capable of showing different outputs.
mirror	When enabled, display B uses the AV source assigned for display A and shows identical content.

- ◆ **Example**

```
displaymode matrix
```

Configuring Multiview Mode

◆ Functions and Syntax

Syntax	Function
<code>multiview o<output_port> m <mode></code>	Sets the layout mode for Display A. Note: Multiview mode is inapplicable to Display B. Display B supports matrix mode and mirror mode.

◆ Parameters

Parameter	Description
<code>o<output_port></code>	Specifies the output port.
<code>m <mode></code>	Sets the multiview mode: <ul style="list-style-type: none"> ◆ mode1: Auto ◆ mode2: SINGLE ◆ mode3: PIP ◆ mode4: PBP ◆ mode5: TRIPLE ◆ mode6: QUAD1 ◆ mode7: QUAD2

◆ Examples

`multiview o01 m mode1`

`multiview o01 m mode7`

Enabling or Disabling the Standby Mode

◆ Functions and Syntax

Syntax	Function
standby	Displays the current standby mode setting. Standby mode is a power-saving mode that shuts parts of the system down to allow the user to quickly resume operation when needed.
standby {on off}	Enables or disables the standby mode.

◆ Parameters

Parameter	Description
on	Enables the standby mode.
off	Disables the standby mode (default).

◆ Example

standby off

Rebooting the Unit

◆ Function and Syntax

Syntax	Function
reboot	Reboots the VP2420 unit.

◆ Example

reboot

Configuring the Audio Mapping

◆ Functions and Syntax

Syntax	Function
<code>audiomap i<input_port> src<port></code>	Sets the specified HDMI input port to adopt the audio source from audio input port.
<code>audiomap i<input_port> srcself</code>	Sets the specified HDMI input port to use its own HDMI audio.
<code>audiomap o<output_port> src<port></code>	Sets the specified output port to adopt the specified audio source.

◆ Parameters

Parameter	Description
<code>i<input_port></code>	Specifies the input port in digit(s).
<code>o<output_port></code>	Specifies the output port in digit(s). <ul style="list-style-type: none"> ◆ o1 or o01: Display A ◆ o2 or o02: Display B ◆ o3 or o03: audio output port <p>Note: Display B (o2 or o02) is not supported.</p>
<code>src<port></code>	Specifies an audio source in digit(s). <ul style="list-style-type: none"> ◆ src1 or src01: HDMI in audio 1 ◆ src2 or src02: HDMI in audio 2 ◆ src3 or src03: HDMI in audio 3 ◆ src4 or src04: HDMI in audio 4 ◆ src5 or src05: follow Display A ◆ src6 or src06: follow Display B ◆ src7 or src07: audio input port
<code>srcself</code>	Specifies the audio source from its own HDMI input port.

◆ Example

```

audiomap i03 src07
audiomap i03 srcself
audiomap i02 src7
audiomap o01 src03
audiomap o03 src05
audiomap o03 src06
audiomap o03 src07

```

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Chapter 6

Video Presentation Control App

Overview

The ATEN Video Presentation Control App is designed to help you conveniently configure system settings to your VP2420 device.

Supported Systems

The ATEN Video Presentation Control App supports the following mobile operating systems:

Mobile Operating System	Supported Versions
Android	version 8.0 or later
iOS	version 13 or later

Installing and Configuring the App

1. Install the ATEN Video Presentation Control App on a mobile device.

- a) From the mobile device, tap the **App Store**  or **Google Play**  icon.
- b) In the search box, type “ATEN Video Presentation Control App”.
- c) Tap **ATEN Video Presentation Control App** and install the app.

Or,

- d) Scan the QR Code below to install the app.

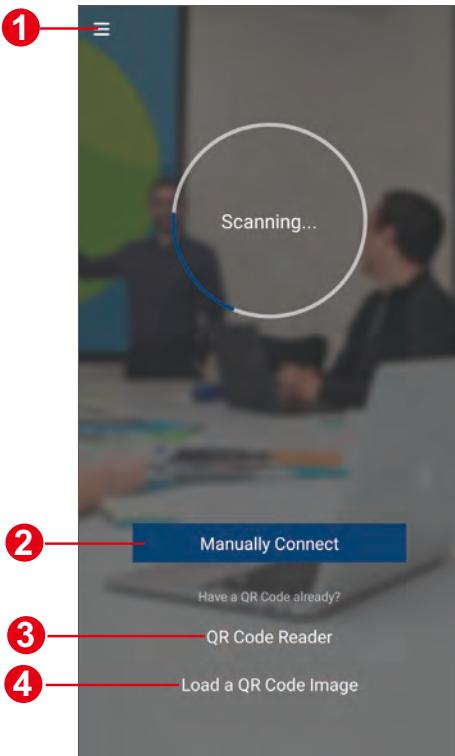


2. From the mobile device, tap the **ATEN Video Presentation Control App** icon .

Note: Make sure to connect the mobile device to the network where the VP2420 is installed.

Main Screen

Go to the app drawer (for Android) / app library (for iOS) and tap the app Video Presentation Control to launch it. After the splash screen, you will enter the main screen which defaults to the scanning page.



No.	Item	Description
1	Info 	Tap on the hamburger button  to open the side drawer to check the information such as version, privacy policy, and contact us.
2	Manually Connect	Tap on the button to manually connect and log in to the control panel by entering its IP address and password.
3	QR Code Reader	Tap on it to scan a QR codes to join a meeting.

No.	Item	Description
4	Load a QR code Image	Tap on it to upload a QR code image to join a meeting.

Info

To check the info page, tap on the hamburger button  to open the side drawer. The info page shows the app version, ATEN's privacy policy, and **Contact Us** that takes you straight to ATEN's official website.

Tap the area outside the side drawer to close it.

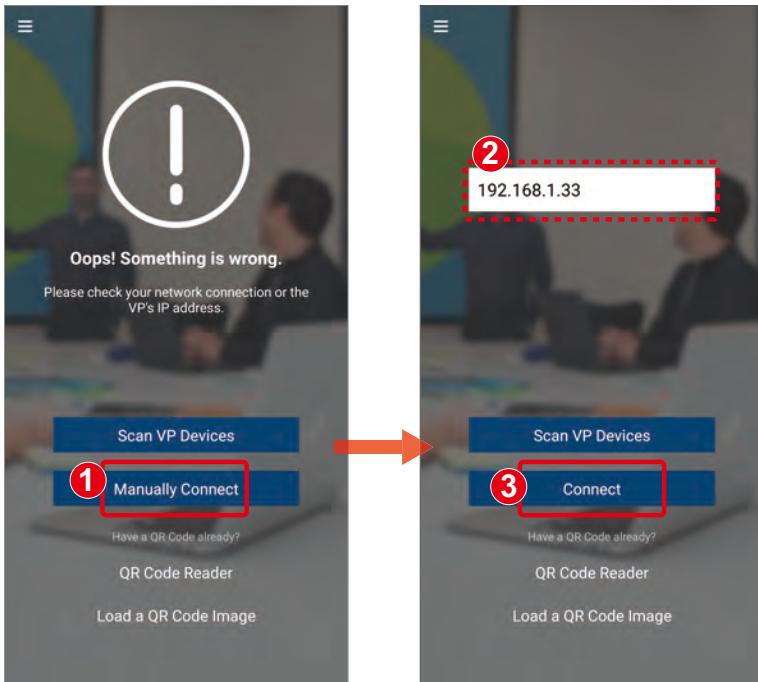


Manually Connect

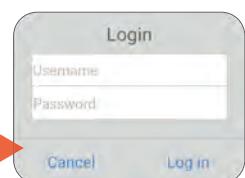
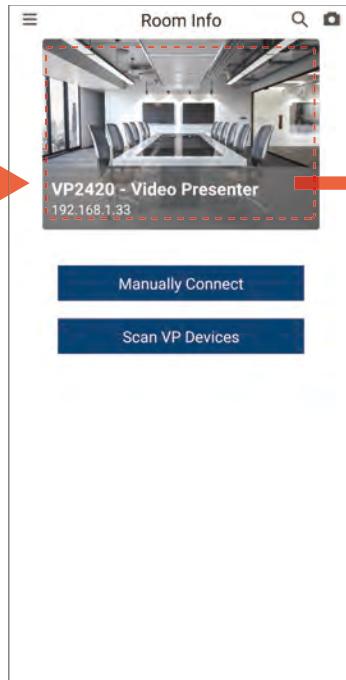
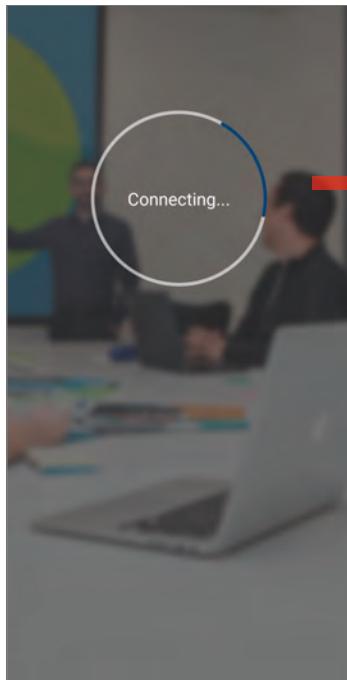
If you cannot find the VP2420 unit you'd like to access by automatically scanning, you can look up the unit through **Manually Connect**.

To manually connect to the unit, do the following:

1. Tap on the button **Manually Connect**.
2. Enter the VP2420 unit's IP address.
3. Tap on **Connect** to start scanning.

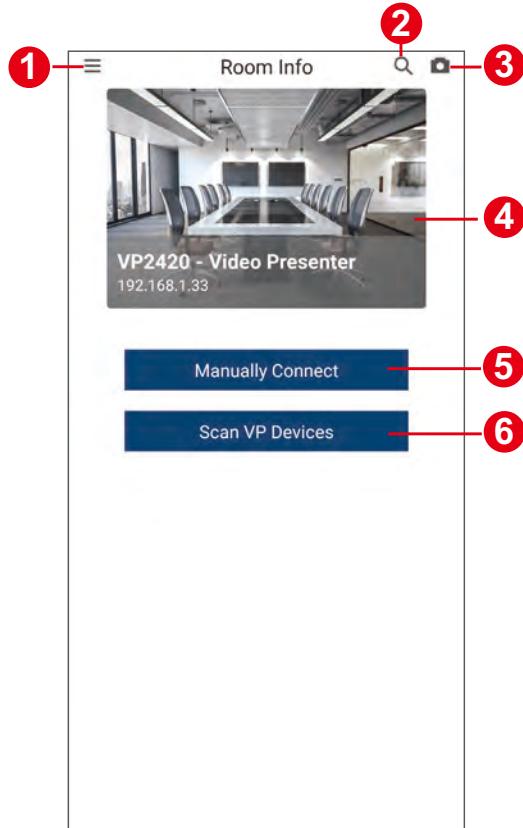


4. The scanning process finishes, and the Room Info page appears. Tap on the room you'd like to access to log in to the control panel.



Room Info Page

The Room Info page shows up right after the scanning process finishes. On this page, you can perform the following actions:



No.	Item	Description
1	Info 	Tap on the hamburger button  to open the side drawer to check the information such as version, privacy policy, and contact us.

No.	Item	Description
2	Search 	<p>Tap on the search button  to expand the search bar to search your VP2420 device by keywords (the room name or the IP address).</p>  <p>Tap on  to clear the entered keywords. Tap on Cancel next to the search bar to close the search bar.</p>
3	QR Code Processor 	<p>Tap on the button  to open the more menu which offers the two functions:</p> <ul style="list-style-type: none"> ◆ QR Code Reader Tap on it to scan a QR codes to join a meeting. ◆ Load a QR Code Image Tap on it to upload a QR code image to join a meeting.
4	Room	Tap on the room you'd like to access. A popup dialog appears. Enter the username and password, and then submit by tapping Log in .
5	Manually Connect	Looks up the VP2420 unit by manually entering its IP address.
6	Scan VP Devices	Performs the scanning process to list the VP devices.

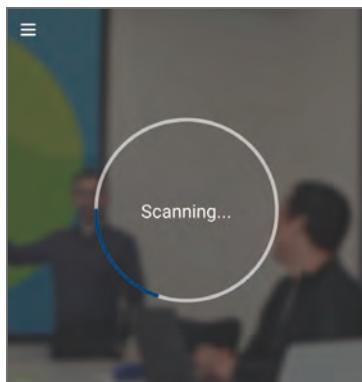
Logging in to the Control Panel

There are two ways to log in to the control panel through our ATEN Video Presentation Control App on VP2420. When the App is opened, it automatically scans for the device and available rooms to access. Or you can manually type in the IP address and password to log in to the control panel. Each methods are described below.

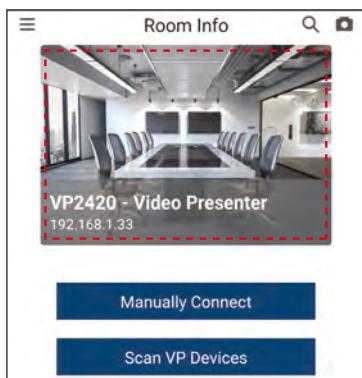
Logging in to the Control Panel Automatically

To automatically scan and log in to the control panel, follow the steps below.

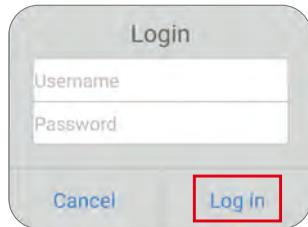
1. Open the ATEN Video Presentation Control App and wait for the scanning process to finish.



2. When the scanning finishes, the Room Info page appears. Tap on a room to log in to the control panel.

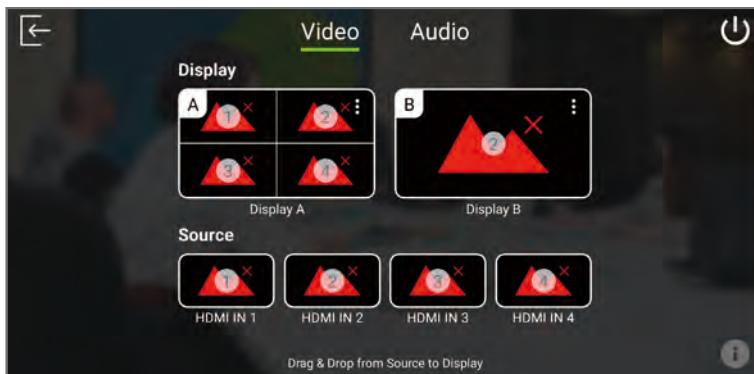


3. The login popup dialog appears. Enter the username and password, and then tap **Log in**.



Note: For security purposes, it is required to change the password from the VP2420 web console if you are logging in for the first time.

4. Now you have successfully logged in to the control panel.

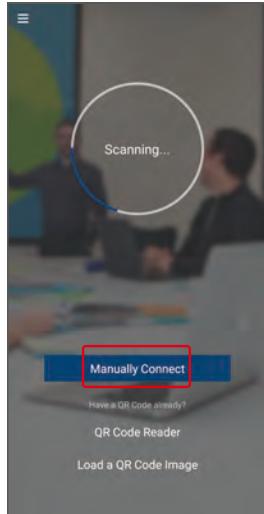


Logging in to the Control Panel via Manually Connect

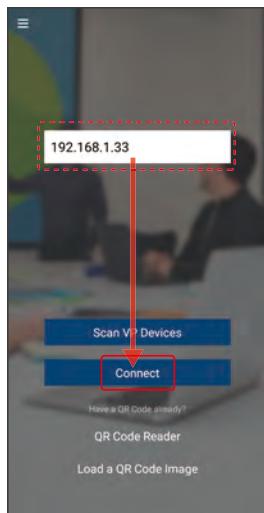
To manually connect and log in to the control panel, follow the steps below.

From Main Screen

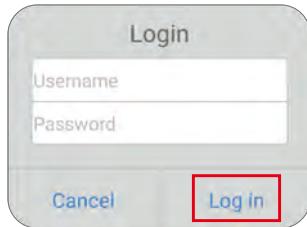
1. Launch the ATEN Video Presentation Control App, and on the main screen, tap **Manually Connect**.



2. Enter the IP address of the VP2420 and tap **Connect**.

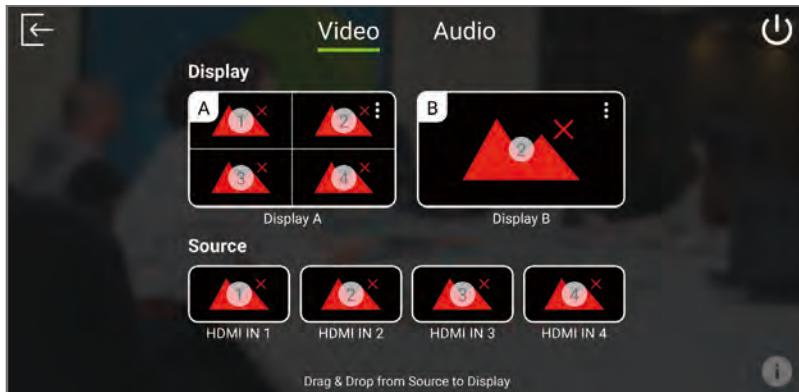


3. Enter the username and password, then tap **Log in**.



Note: For security purposes, it is required to change the password from the VP2420 web console if you are logging in for the first time.

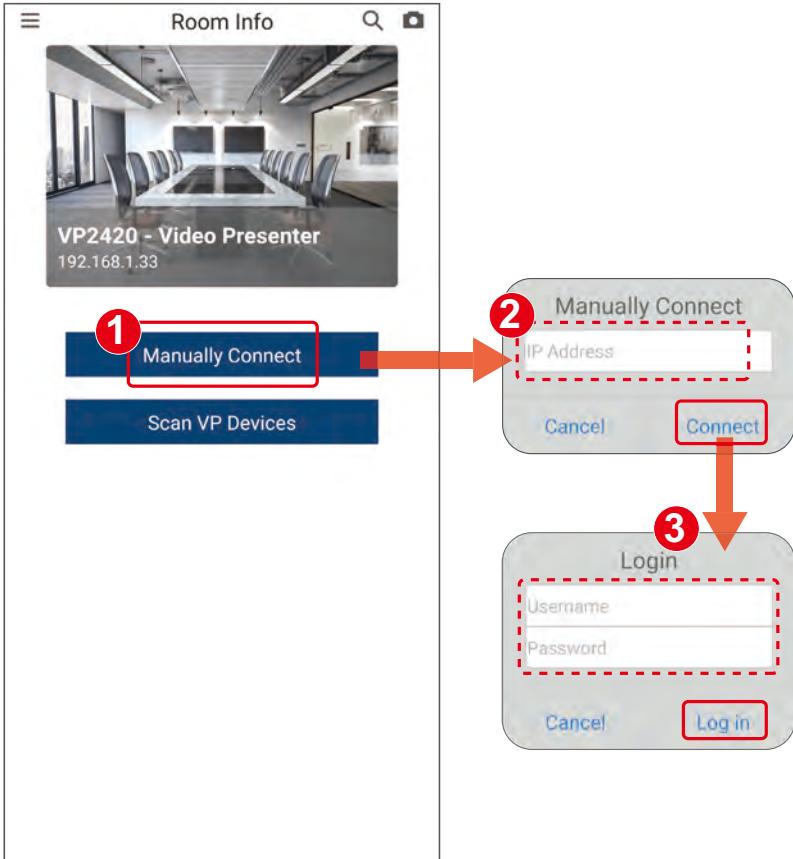
4. Now you have successfully logged in to the control panel.



From Room Info Page

The **Manually Connect** button also appears on the Room Info page for user to manually connect to the VP2420 unit.

1. From the Room Info page, tap **Manually Connect**.
2. Enter the IP address of the VP2420 and tap **Connect**.
3. Enter the username and password, then tap **Log in**.



Note: For security purposes, it is required to change the password from the VP2420 web console if you are logging in for the first time.

4. Now you have successfully logged in to the control panel.

Control Panel Operation

Once you successfully log in to a room, you will enter its control panel:



No.	Item	Description
1	leave	Tap the leave button to leave the control panel.
2	video control tab	Tap to enter the video control tab page to assign video source and configure video settings.
3	audio control tab	Tap to enter the audio control tab to configure the audio output and audio input settings.
4	standby	Tap on the standby button to enable the standby mode.
5	information	Tap on the information button to open a information screen to check the unit's model name, firmware version, and IP address.

Basic Operation

On the control panel, you can perform the following functions:

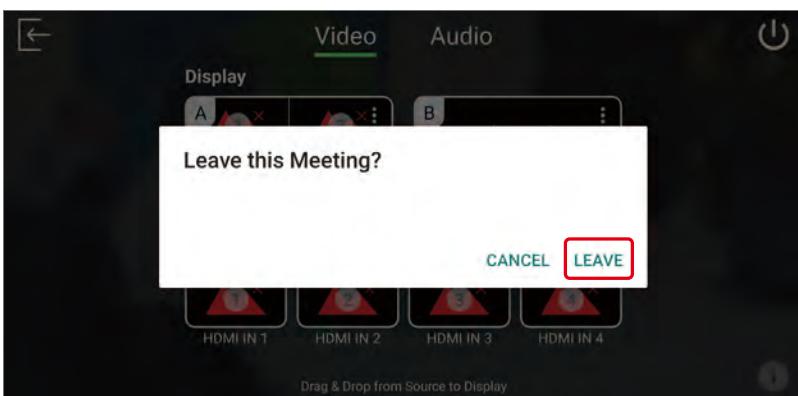
Leaving the Meeting

To leave the control panel, follow the steps below.

1. Tap on the leave button  from your main screen.



2. A warning screen appears, then tap **LEAVE**.



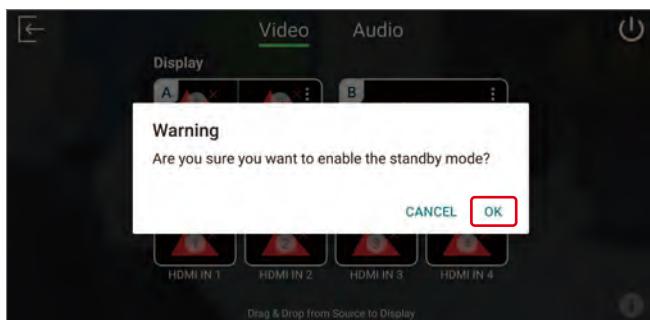
Enabling Standby Mode

To enable standby mode, follow the steps below.

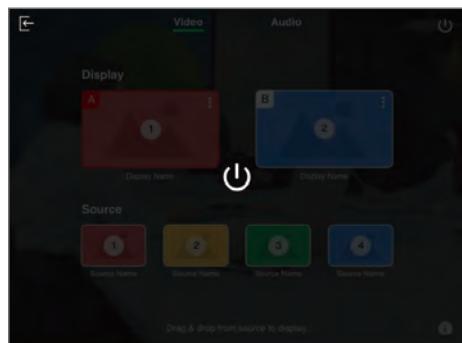
1. Tap on the standby button  from your main screen.



2. A warning screen appears, then tap **OK**.



3. To wake up the unit from standby mode, tap on the standby button on the screen center.



Checking the Model Name, Firmware Version, & IP Address

To check the unit's model name, firmware version, and IP address, follow the steps below.

1. Tap on the information button  from your main screen.



2. Below screen appears.



3. To close the screen, tap on the area outside the information screen.

Video Control Tab

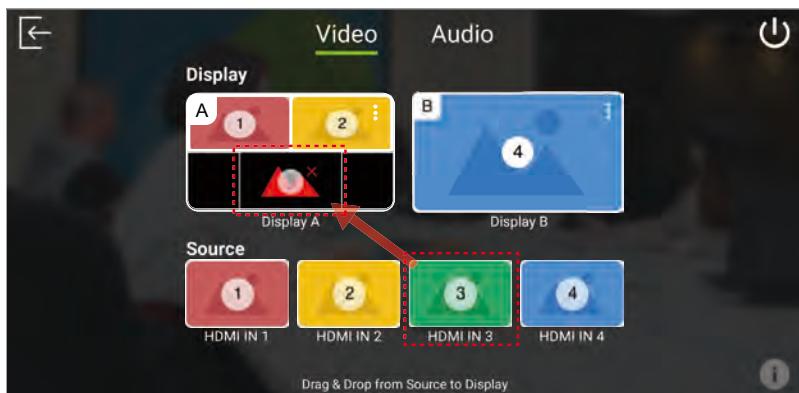
The video control tab lists the configuration screens of Display A and Display B, and the sources from the 4 source ports.



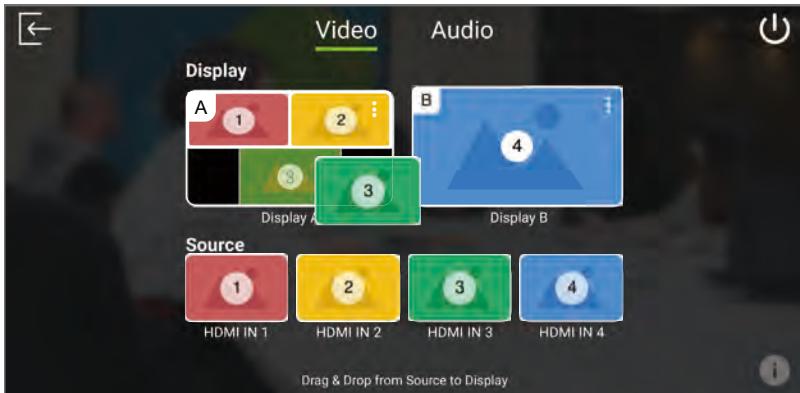
Switching a Source for a Display

To switch a source for a display, follow the steps below.

1. To switch a specific source to Display A. Tap and hold the source you'd like to use.



2. Drag and drop the source to your preferred window and release to have it placed.



3. The Display A is now displaying content from the source you set.



Display A Settings

To configure display settings for the display A, follow the steps below.

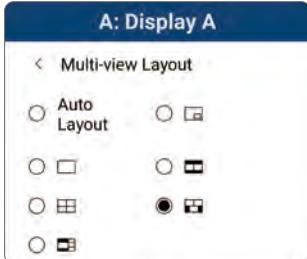
1. Tap on the more button  from the top right corner of the display A.

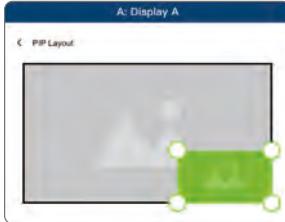
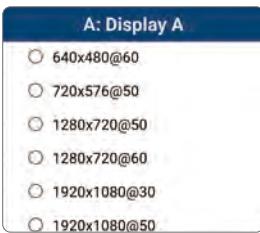
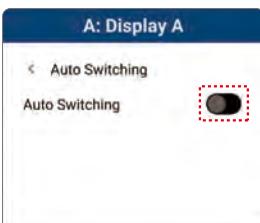


2. The below screen appears.



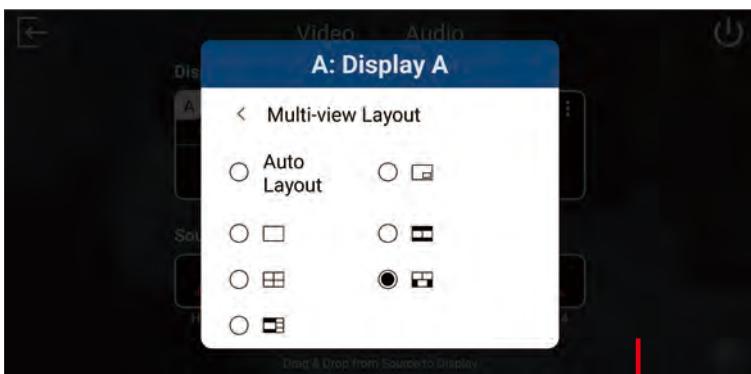
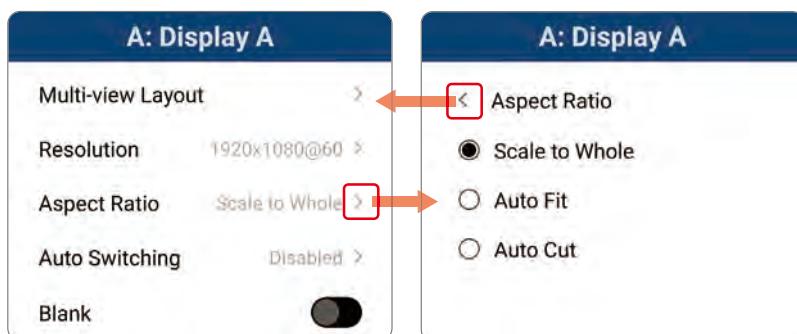
Tap to enter the option you'd like to configure.

Item	Description
Multi-view Layout	Tap to enter the selection menu to set the video content placement. 

Item	Description
PIP Layout	<p>By setting the multi-view layout as PIP, the option “PIP Layout” appears on Display A setting menu. Enter PIP Layout setting screen to configure the inset window.</p> 
Resolution	<p>Enter the selection menu and scroll to find the resolution you'd like to set.</p> 
Aspect Ratio	<p>Enter the selection menu to set the ratio from the options:</p> <ul style="list-style-type: none"> ◆ Scale to Whole: Fully extends the video to the four sides of the display. ◆ Auto Fit: Proportionally scales the video to fit the display without cutting any content off. This may leave some blank on either the top and bottom or the left and right of the screen. ◆ Auto Cut: Proportionally scales the video to fully fill the display. The content that goes out of the display range will be cut off.
Auto Switching	<p>Tap the switch to enable or disable the auto switching of audio-video source on Display A.</p> 

Item	Description
Blank	<p>Tap the switch to turn on Blank to disable the display shown on the screen.</p> 

3. To go back to the previous menu page, tap on the back button  .
To close the menu screen, tap on the area outside the menu screen.



Tap on the area outside the menu screen to close the screen.

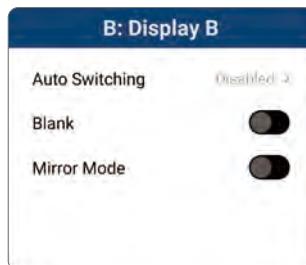
Display B Settings

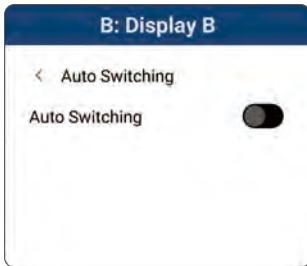
To configure display settings for the display B, follow the steps below.

1. Tap on the more button  from the top right corner of the display B.



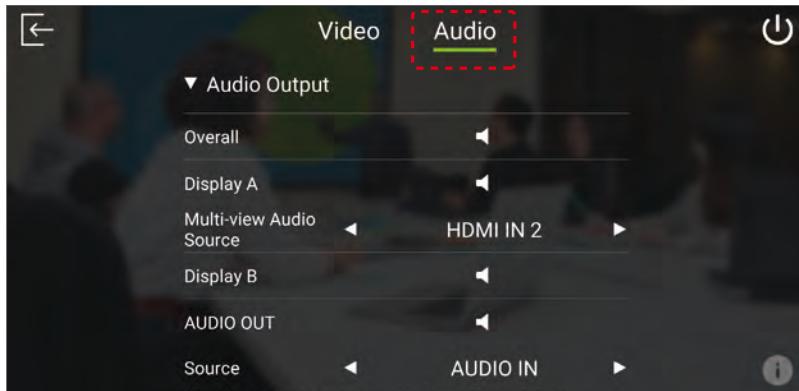
2. The below screen appears.



Item	Description
Auto Switching	Enter the menu to enable the auto switching of audio-video source on Display B. 
Blank	Tap the switch to turn on Blank to disable the display shown on the screen.
Mirror Mode	Tap to enable or disable the Mirror Mode. The mirror mode allows display B to show identical video content as display A.

Audio Panel

Tap to enter the audio control tab to configure the audio output and audio input settings.



Scroll down the page to find more settings to configure.

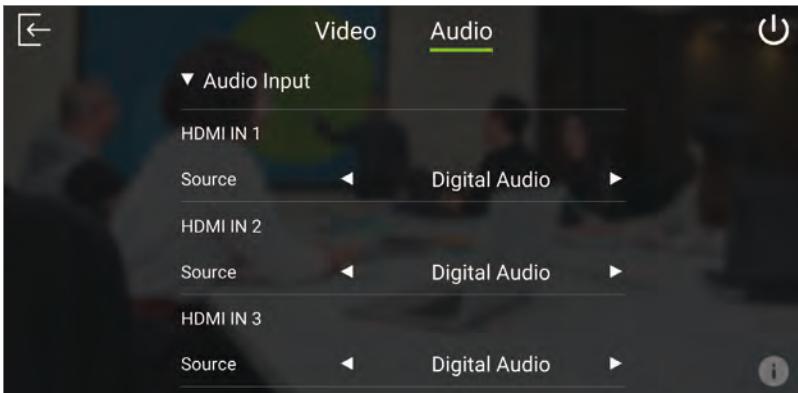
Audio Output

System Settings	Description
Overall	Tap on the volume button  /  to mute or unmute the connected speaker.
Display A	Tap on the volume button  /  to mute or unmute display A.
Multi-view Audio Source	Select the input port that the audio source is connected to.
Display B	Tap on the volume button  /  to mute or unmute display B.
Audio Out	Tap on the volume button  /  to mute or unmute the independent speaker connected to the audio output port.

System Settings	Description
Source	<p>Set the audio source for the independent speaker connected to the audio output port of the VP2420.</p> <ul style="list-style-type: none"> ◆ To use the same audio source for display A, select Follow Display A. ◆ To use the same audio source for display B, select Follow Display B. ◆ To use the audio source from an HDMI input port, select between HDMI IN 1, HDMI IN 2, HDMI IN 3, and HDMI IN 4. <p>To use the independent audio source (connected to the audio input port), select Audio In.</p>

Audio Input

Set the audio source for the HDMI 1 / HDMI 2 / HDMI 3 / HDMI 4 source. To use the audio source that comes along with the video, select **Digital Audio**. To use the audio source from the independent audio source (connected to the audio input port), select **Embedded Audio In**.



Safety Instructions

General

- ◆ This product is for indoor use only.
- ◆ Read all of these instructions. Save them for future reference.
- ◆ Follow all warnings and instructions marked on the device.
- ◆ Do not place the device on any unstable surface (cart, stand, table, etc.). If the device falls, serious damage will result.
- ◆ Do not use the device near water.
- ◆ Do not place the device near, or over, radiators or heat registers.
- ◆ The device cabinet is provided with slots and openings to allow for adequate ventilation. To ensure reliable operation, and to protect against overheating, these openings must never be blocked or covered.
- ◆ The device should never be placed on a soft surface (bed, sofa, rug, etc.) as this will block its ventilation openings. Likewise, the device should not be placed in a built in enclosure unless adequate ventilation has been provided.
- ◆ Never spill liquid of any kind on the device.
- ◆ Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- ◆ Avoid circuit overloads. Before connecting equipment to a circuit, know the power supply's limit and never exceed it. Always review the electrical specifications of a circuit to ensure that you are not creating a dangerous condition or that one doesn't already exist. Circuit overloads can cause a fire and destroy equipment.
- ◆ The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- ◆ To prevent damage to your installation it is important that all devices are properly grounded.
- ◆ Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.

- ◆ Position system cables and power cables carefully; Be sure that nothing rests on any cables.
- ◆ Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.
- ◆ Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.
- ◆ If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
 - ◆ The power cord or plug has become damaged or frayed.
 - ◆ Liquid has been spilled into the device.
 - ◆ The device has been exposed to rain or water.
 - ◆ The device has been dropped, or the cabinet has been damaged.
 - ◆ The device exhibits a distinct change in performance, indicating a need for service.
 - ◆ The device does not operate normally when the operating instructions are followed.
- ◆ Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.
- ◆ Do not connect the RJ-11 connector marked “UPGRADE” to a public telecommunication network.

Rack Mounting

- ◆ Before working on the rack, make sure that the stabilizers are secured to the rack, extended to the floor, and that the full weight of the rack rests on the floor. Install front and side stabilizers on a single rack or front stabilizers for joined multiple racks before working on the rack.
- ◆ Always load the rack from the bottom up, and load the heaviest item in the rack first.
- ◆ Make sure that the rack is level and stable before extending a device from the rack.
- ◆ Use caution when pressing the device rail release latches and sliding a device into or out of a rack; the slide rails can pinch your fingers.
- ◆ After a device is inserted into the rack, carefully extend the rail into a locking position, and then slide the device into the rack.
- ◆ Do not overload the AC supply branch circuit that provides power to the rack. The total rack load should not exceed 80 percent of the branch circuit rating.
- ◆ Make sure that all equipment used on the rack – including power strips and other electrical connectors – is properly grounded.
- ◆ Ensure that proper airflow is provided to devices in the rack.
- ◆ Ensure that the operating ambient temperature of the rack environment does not exceed the maximum ambient temperature specified for the equipment by the manufacturer.
- ◆ Do not step on or stand on any device when servicing other devices in a rack.

Caution: Slide/rail (LCD KVM) mounted equipment is not to be used as a shelf or a work space.

- ◆ Stability Hazard: The rack may tip over causing serious personal injury
 - ◆ Before extending the rack to the installation position, read the installation instructions.
 - ◆ Do not put any load on the slide-rail mounted equipment in the installation position.
 - ◆ Do not leave the slide rail mounted equipment in the installation position.



Technical Support

International

- ◆ For online technical support – including troubleshooting, documentation, and software updates: <http://support.aten.com>
- ◆ For telephone support, call this number:

International	886-2-8692-6959
China	86-400-810-0-810
Japan	81-3-5615-5811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988 1-949-428-1111

North America

Email Support		support@aten-usa.com
Online Technical Support	Troubleshooting Documentation Software Updates	http://www.aten-usa.com/support
Telephone Support		1-888-999-ATEN ext 4988

When you contact us, please have the following information ready beforehand:

- ◆ Product model number, serial number, and date of purchase
- ◆ Your computer configuration, including operating system, revision level, expansion cards, and software
- ◆ Any error messages displayed at the time the error occurred
- ◆ The sequence of operations that led up to the error
- ◆ Any other information you feel may be of help

Specifications

	VP2420	
Video Input		
Interfaces	4 × HDMI Type A female (Black)	
Max. Distance	HDMI: 4K@60Hz (4:4:4) at 5m; 4K@30Hz at 10m; 1080p@60Hz at 15m	
Video Output		
Interfaces	2 × HDMI Type A female (Black)	
Max. Distance	HDMI: 4K@60Hz (4:4:4) at 5m; 4K@30Hz at 10m; 1080p@60Hz at 15m	
Video		
Max. Resolution	HDMI: Up to 4096 × 2160 / 3840 × 2160 @ 60Hz (4:4:4)	
Compliance	HDMI (3D, Deep Color, 4K); 4K HDR HDCP 2.2 Compatible; Consumer Electronics Control (CEC)	
Audio		
Input	Stereo Audio (HDMI)	1 × mini stereo Jack female (Green)
Output	Line Out (Unbalanced)	1 × Captive Screw Connector, 3-pole (2PCM 2CH)
	Digital Audio	1 × Coaxial (LPCM 2CH, Dolby Digital, DTS)
Control		
RS-232	1 × DB-9 Female (Black); VP device control & configuration	
IR	1 × Mini Stereo Jack Female (Black)	
Ethernet	1 × RJ-45 Female (Silver)	
Switches		
Power	1 × Pushbutton (LED: Green / Orange)	
Video Input Port Selection	4 × Pushbutton (LED: Green)	
Video Output Port Selection	2 × Pushbutton (LED: Orange)	
Multi-View Mode	Layout	6 × Pushbutton (Full Screen, PiP, PbP, Triple/ Quad multi-view)
Selection	Mute	1 × Pushbutton
	Mode / Unlock	1 × Pushbutton

VP2420	
EDID Settings	EDID Mode: ATEN Default / Display A / Remix
Connectors	
Power	1 × DC Jack (Black)
Power Consumption	DC12V; 17.1W; 80BTU/h Note: <ul style="list-style-type: none"> ◆ The measurement in Watts indicates the typical power consumption of the device with no external loading. ◆ The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Environmental	
Operating Temperature	0°C–40°C
Storage Temperature	-20°C–60°C
Humidity	0°C–80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	1.08 kg (2.38 lb)
Dimensions (L x W x H)	20.00 × 16.05 × 4.40 cm (7.87 × 6.32 × 1.73 in.)
Carton Lot	3 pcs

ATEN Warranty Policy

The warranty policy may vary by product category and region of purchase. For details, please visit ATEN's official website, select your purchase counties/regions and then go to the Support Center, or contact your local ATEN sales representative for further assistance.

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