7 x 3 Seamless Presentation Switch

with Streaming, HDBaseT

VP2730 User Manual

www.aten.com

EMC Information

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.

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.

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

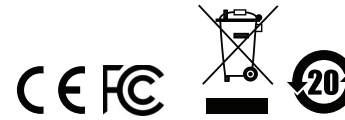
(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Suggestion: Shielded twisted pair (STP) cables must be used with the unit to ensure compliance with FCC & CE standards.

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

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.

Package Contents

- 1 VP2730 7 x 3 Seamless Presentation Matrix Switch
- 1 IR Receiver
- 1 IR Remote Control
- 1 Power Cord
- 2 Terminal Blocks
- 4 Foot Pads
- 1 User Instructions

Note: Make sure that all of the items are present and in good order. If anything is missing or was damaged in shipping, please contact your dealer for further assistance.

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About this Manual

This user manual is provided to help you get the most from the VP2730 unit. It covers all aspects of installation, configuration, and operation. An overview of the information found in the manual is provided below.

Chapter 1, *Introduction* introduces you to the 7 x 3 Seamless Presentation Matrix Switch. Its purpose, features, benefits, and installation considerations are described.

Chapter 2, *Hardware Setup* introduces the panel components of the 7 x 3 Seamless Presentation Matrix Switch and the IR Remote Control, and details the steps to quickly and safely set up the VP2730.

Chapter 3, *Local Operation* provides information on locally operating and configuring the VP2730 via the panel pushbuttons and IR remote control.

Chapter 4, *Remote Operation* provides details on remote tasks such as joining online meetings and configuring system settings via the VP2730's web interface.

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.
- ATEN regularly updates its product documentation for new features and fixes. For an up-to-date VP2730 documentation, 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.

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

Chapter 1
Introduction

Overview

The VP2730 7 x 3 Seamless Presentation Matrix Switch is a multi-in-one presentation switch that integrates video matrix switch with scaler, streaming, audio mixer, HDBaseT extender, and analog-to-digital converter functions into one compact device. With seven multi-format inputs to two HDMI and one HDBaseT high-definition outputs, VP2730 empowers larger meetings and facilitates collaboration between local and remote participants in boardrooms, video conferencing rooms, lecture halls or distance learning classrooms.

With the user in mind, VP2730 comes with a straightforward and accessible OSD and web GUI to streamline operation for both local and remote participants. To facilitate sharing and collaboration with no distance limitations, VP2730 not only allows the meeting moderator to share video content to up to five remote sites, but also enables remote sites or local participants to wirelessly stream in their content for discussion. The moderator can monitor and switch among sources in any variation of full-screen, dual-view, tri-view, quad-view or PIP modes, with up to six sources displayed simultaneously on one screen.

VP2730 also features more advanced meeting management functions: Moderator Mode enables the meeting moderator to control other displays via the host display; Chat Room facilitates meeting communications; while Screen Capture and Freeze record and control the meeting flow. This Collaborative presentation solution facilitates distance-free content sharing along with advanced audio, simplifying AV integration via eliminating the need for numerous individual components and the compatibility challenges that accompany them.

Features

Seamless Multi-format AV Switching

- Supports 7 multi-format inputs:
  - 2 combo inputs (HDMI/VGA, HDMI/DisplayPort)
  - 3 HDMI inputs
- 2 HDMI and 1 HDBaseT outputs
- Superior video quality up to 1080p @ 60Hz (HDMI/DisplayPort)
- Ultra Seamless Switch™ – zero second switching that provides continuous video streams, real-time video switching, and stable signal transmissions
- Scaler – features a scaling function to convert input resolutions to the optimum display resolutions
- Flexible aspect ratio conversion

1080p Streaming for Distance-free Sharing and Collaboration

- Go Live – meeting moderator can broadcast HD video streams to up to 5 remote locations

  Note: Streaming out requires a bandwidth of 2 MB or more.

- Streaming In – remote locations can stream and share video content to the meeting moderator without distance limitations via intuitive web interface
- Streaming queuing – share the streamed-in content approved by the meeting moderator one at a time to help manage the meeting flow

Audio Mixer Integration for Advanced Audio Support

- Audio Mixer – allows mixing of the microphone inputs to any external analog or digital audio output device
- Embed/De-embed Audio – HDMI/DisplayPort audio signals can be extracted to separate digital/analog audio signals; Mic/Line audio can be embedded to HDMI audio
- Supports multi-format digital/analog audio outputs, including coaxial, TOSLINK, and RCA up to 2 channels

Advanced Conferencing Management Features for Collaboration

- Multi-view – display and switch simultaneously in any variation of full-screen, dual-view, tri-view, quad-view or PIP modes, with up to six sources displayed simultaneously on one screen
- Moderator Mode – enables the meeting moderator to control other displays via host display
- Chat Room – facilitates real-time and precise communication among remote participants
- Screen Capture – captures anything on your screen with a click
- Freeze – freezes the screen for discussion or to control the meeting flow

Streamlined Operation

- Multiple Control Options – flexible control via Built-in Web UI, Front Panel, OSD, IR Remote Control, and RS-232 serial commands
- Auto switching – automatically detects and switches to a new source as soon as it is connected for time-saving and convenience

Planning the Installation

Required Equipment

Prepare the following equipment before installing the VP2730 unit.

- Source devices
  - 1 to 5 source devices equipped with HDMI, DisplayPort, or VGA ports (e.g. a laptop, PC, or a Blu-ray disc)

  Note: The VP2730 supports Mac or PCs that are Windows, Linux, or Unix-based.

  - 1 to 5 cables for connecting the source devices to the VP2730
- Display devices
  - 1 to 3 display devices equipped with an HDMI connector or an HDBaseT port (e.g. a monitor or a projector)
  - 1 to 3 cables for connecting the display devices to the VP2730

For information on the number of equipped ports for each connection interface, see *Specifications*, page 67.

Optional Equipment

Prepare the following equipment as required.

- 1 Microphone
- 1 Speaker
- 1 RJ-45 cable to connect the VP2730 to a network switch to allow for streaming over IP and access to the VP2730's web interface
- 1 to 3 USB devices to serve as external storage
- 1 RS-232 controller for serial control

Accessories

Optionally purchase the following for your VP2730:

- Rack Mount Kit
- Under Desk Mount Kit

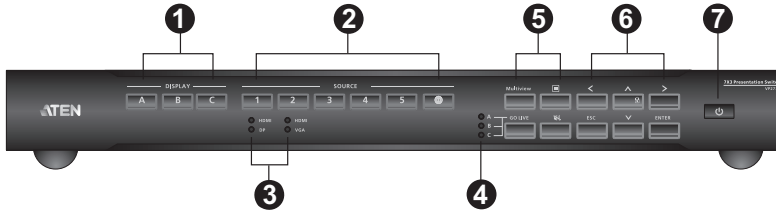
For more information about mounting, see *Mounting*, page 10.

Chapter 2
Hardware Setup

1. Please review the safety information regarding the placement of this device in *Safety Instructions*, page 63.
2. Do not power on the VP2730 until all the necessary hardware is connected.

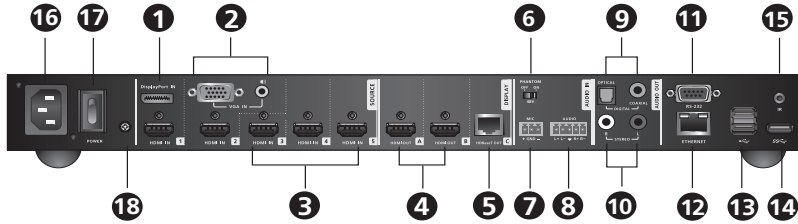
Components

VP2730 Front View



No.	Component	Description
1	Display Selection Pushbuttons	Press to focus a display. The pushbutton for the focused display lights amber.
2	Source Selection Pushbuttons	Press to select a source for the focused display. The pushbutton for the selected source lights green. Press to stream in a video source over the Internet.
3	Source LEDs	Indicate the selected sources for Source (1) and (2).
4	Go Live LEDs	Indicate the display that is streamed out.
5	Function Pushbuttons	Press to access multiview, menu, go-live settings, and mute settings.
6	Navigation Pushbuttons	Press to navigate and configure settings via the OSD.
7	On/Off Pushbuttons	Press to turn on the unit.

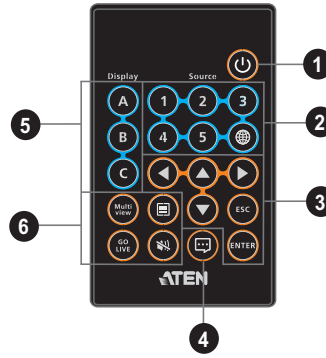
VP2730 Rear View



No.	Component	Description
1	Source (1)	Connects up to two source devices, one equipped with a DisplayPort, another equipped with an HDMI port. Users can select which source to display by pressing the Source Selection pushbutton on the front panel.
2	Source (2)	Connects up to two source devices, one equipped with a VGA port, another equipped with an HDMI port. Users can select which source to display by pressing the Source Selection pushbutton on the front panel.
3	Source (3), (4), and (5)	Connect to HDMI source devices via HDMI cables.
4	HDMI Out	Connect to display devices equipped with an HDMI port.
5	HDBaseT Out	Connects to a display device equipped with an HDBaseT port.
6	Phantom Power	Enables or disables phantom power supply for a condenser microphone.
7	Mic In	Connects to a microphone.
8	Balanced Audio In	Connects to a balanced analog audio source.
9	Digital Audio Out	Connects to a speaker via Optical Audio Out or Coaxial Audio Out port.
10	Stereo Audio Out	Connects to a speaker.
11	RS-232 Serial Port	Connects to a hardware or software controller to transmit serial data.

No.	Component	Description
12	Ethernet Port	Connects to a network switch via an RJ-45 cable to allow streaming of audio and video data over IP.
13	USB Type-A Ports (2.0)	Receive up to two USB 2.0 devices as external storages.
14	USB Type-A Port (3.0)	Receives a USB 3.0 device as an external storage.
15	IR Receiver Port	Connects to an IR receiver to receive IR signals from the IR remote control.
16	Power Socket	Receives a power cord to supply power to the VP2730.
17	Power Switch	Enables (ON) or disables (OFF) the power supply to the VP2730.
18	Grounding Terminal	Grounds the VP2730 to prevent damages from power surge or static electricity.

IR Remote Control

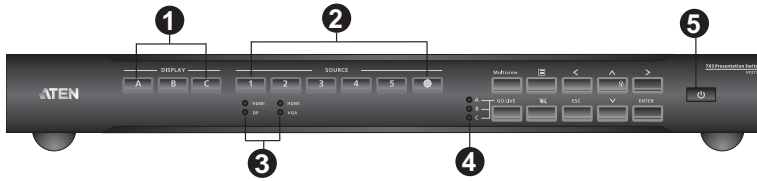


No.	Buttons	Description
1	On/Off	Turns the VP2730 on or off.
2	Source	Selects sources for connected displays.
3	Navigation	Navigates in the OSD, selects or unselects options, or leaves a current screen in the OSD.
4	Notifications	Opens the Notifications panel.
5	Display	Focuses the chosen display.
6	Function	◆ : Displays the OSD. Press again to display the OSD for the next connected display. ◆ Multi view: Switches the current display to multiview. ◆ GO LIVE: Streams out the current display out via the Ethernet. ◆ : Mutes all displays and speakers.

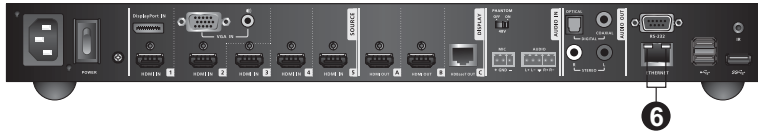
LED Display

You can find the unit's LEDs as illustrated below. See the table below for details on LED indication.

VP2730 Front Panel



VP2730 Rear Panel



No.	LED	Indication	Description
1	Display Pushbuttons	Light amber	The indicated display device (Display A, B, or C) is focused.
2	Source Pushbuttons	Light green	The indicated source is selected for display.
3	Source LEDs	Light green	The indicated source (interface) is selected for the combo port.
4	Go Live LEDs	Light amber	The indicated display is streamed out.
5	Power	Lights green	The unit is powered and turned to **ON**.
		Lights orange	The unit is connected to power, but is currently **OFF**.
6	ACT (Left LED)	Lights orange	Data is being transmitted at 100 Mpbs.
		Lights green	Data is being transmitted at 1 Gpbs.
	Link (Right LED)	Lights green	LAN is connected and no data is being transmitted.
		Blinks green	LAN is connected and data is being transmitted.

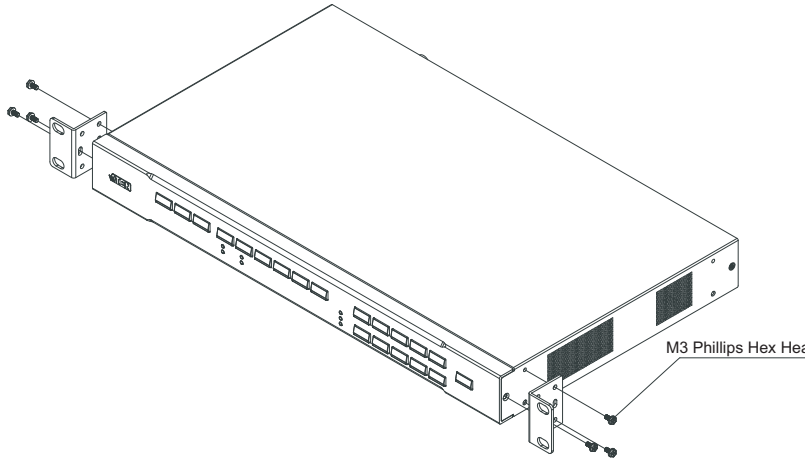
Mounting

Rack Mount

The VP2730 can be mounted on a 19” (1U) system rack. To conveniently access the front-panel pushbuttons for local configuration and operation, mount the unit at the front of the rack so that the front panel faces outward.

Note: The Rack Mount Kit required for this installation is not included in the package. For more information on purchasing this accessory, please visit the product web page.

1. Use the 6 M3 Phillips hex head screws supplied with the mounting kit to secure the rack mounting brackets onto the unit.



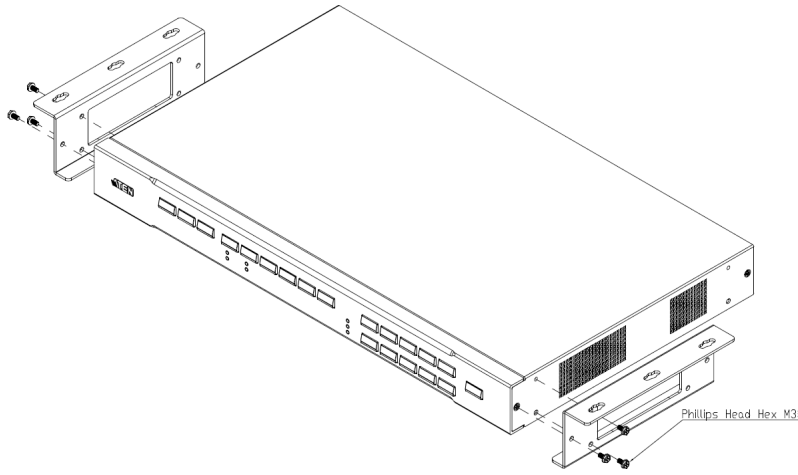
2. Position the unit in the front of the rack and align the holes in the mounting brackets with the holes in the rack.
3. Screw the mounting brackets to the rack.

Under Desk Mount

You can also mount the VP2730 under a desk using the under-desk mounting kit.

Note: The mounting kit required for this installation is not included in the package. For more information on purchasing this accessory, please visit the product web page.

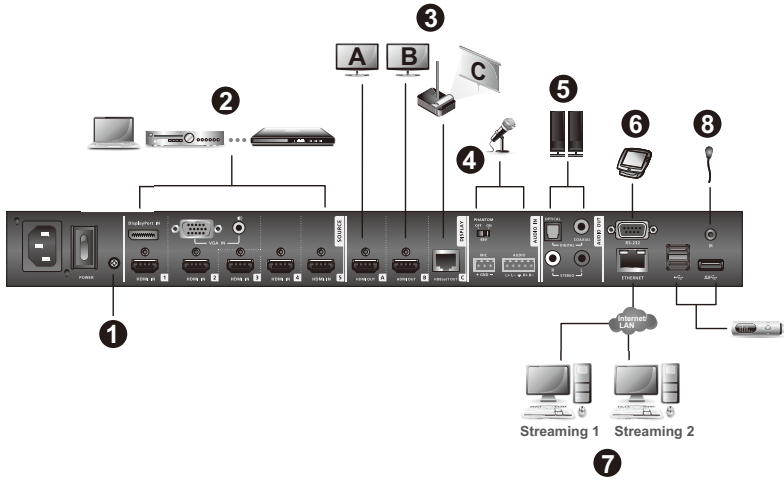
1. Use 6 M3 Phillips hex head screws supplied with the mounting kit to secure the mounting brackets onto the unit.



2. Position the unit to a spot under the desk where you can easily access the front-panel pushbuttons, 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 VP2730.



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 the unit to sources.

   Note: Source (1) and (2) can each receive two sources, but can only output one at a time.

3. Connect the unit to displays.

   a) Use HDMI cables to connect HDMI displays to the HDMI out ports.

   b) Use a Cat 5e/6/6a cable to connect an HDBaseT display to the HDBaseT Out port.

   Note: Use a Cat 5e/6 cable to transmit signals of 1080p up to 60 m, or a Cat 6a/ATEN 2L-2910 Cat 6a cable to extend the transmission up to 70 m.

4. Connect a microphone to the Mic In port.

Note:

- If you use a condenser (capacitor) microphone, put the Phantom Power Switch to **ON**.
- For detailed audio input specifications, see *Specifications*, page 67.

5. Connect a speaker to the Digital Audio Out port (via an amplifier and a converter) or the Stereo Audio Out port.

Note: For detailed, audio output specifications, see *Specifications*, page 67.

6. To configure the unit's settings via an RS-232 interface, connect a hardware or software controller to the RS-232 Serial Port.
7. To allow streaming over IP, use an RJ-45 cable to connect the Ethernet port of the unit to a network switch.
8. Connect the IR receiver to the IR Receiver port for IR remote control.
9. Plug the Power Cord to the power socket, put the power switch to **ON**, and then press the On/Off pushbutton.
10. Power on all the connected devices.

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Chapter 3
Local Operation

Overview

This chapter provides detailed information on the features of the VP2730's on-screen display (OSD), and how to locally operate the unit using the front-panel pushbuttons and the IR remote control. You can perform the following tasks with the OSD:

- Switch display sources
- Change the display mode, resolution, or aspect ratio settings
- Stream out (go live) the current display via network connection
- Configure the VP2730's main system settings
- Remotely control another display in the VP2730's environment (moderator mode)
- Make screen captures
- Freeze the screen

Operation Considerations

- Make sure to use the IR remote control within the effective range (6 m), and that there is a clear line-of-sight between the remote control unit and the IR receiver connected to the VP2730.
- The IR remote control and the VP2730's front panel offer the same operation capability. Use either method as required.

Switching the Display Source

You can switch the display source using the IR remote control, front-panel pushbuttons, or OSD. For each connected display, you can choose from 7 sources (channels) using the Source List in the OSD. The content of each source is summarized below.

OSD Source List	Description
Source 1 ~ 5	Source 1 to 5 correspond to the sources connected to the VP2730.
Source 6	Source 6 is a reserved channel for sources that are streamed in over the Internet. Streamed-in sources are listed as options among which you can select for display. For details about sharing source content, see *Sharing a Screen or an Application Window*, page 37.
Multiview	This is a multiview channel where you can select multiple sources and create a composite view. For details, see *Enabling a Multiview*, page 22.

Using the IR Remote Control / Front-panel Pushbutton

1. Press a Display button/pushbutton to focus a display. The pushbutton for the selected display lights amber.

2. Press a Source button/pushbutton or the Multiview button/pushbutton to assign a source to the focused display. The pushbutton for the selected source lights green.

Note:

- For combo ports (Source 1 and 2), HDMI sources are prioritized as the output for the ports. To change the priority, configure the Source settings in the OSD. For details, see *System Settings*, page 29. To manually change the output source of a combo port, press the Display button/pushbutton and then press the Source button/pushbutton twice. The pushbutton for the selected source lights green.
- For details on multiview, see *Enabling a Multiview*, page 22.

Using the OSD

1. From the IR remote control, press to launch the OSD on the display for which you wish to change the source.

2. To switch to a full-screen source, use the left and right navigation buttons. The source displays on the monitor as you navigate.
3. To switch to a multiview, navigate to **Multiview** in the OSD menu, and then press the **Enter** button/pushbutton to display the multiview. For more details on multiview, see *Enabling a Multiview*, page 22.

Note:

- The source options are displayed in default names. To change these names, log in the VP2730's web interface as administrator, and then go to **Video & Audio** > **Source**.
- For details on other OSD features, see *Overview*, page 19.

The OSD

Launching the OSD to a Specific Display

Each connected display can only be configured via the OSD when the OSD menu appears on that particular display. To launch the OSD, follow the steps below.

1. Press the **Menu** button/pushbutton. The OSD menu appears on the display where you last left the menu.

2. To launch the OSD to another display, press the **Menu** button/ pushbutton again. The OSD menu cycles through all connected displays.

Overview

The following controls are available in the OSD:

No.	Name/Information	Description
1	Connection Information	Displays the IP address of the VP2730's web interface and the room code. Access the web interface to join a remote meeting or remotely configure the VP2730's settings. For details, see Chapter 4, **Remote Operation**.

No.	Name/Information	Description
2	Options	Navigate to this icon and press the **Enter** button/pushbutton to access the following functions: ◆ Remotely control a selected display. For details on remote display control, see *Moderator Mode (Remote Display Control)*, page 26. ◆ View or configure VP2730's settings. For details on system settings, see *System Settings*, page 29. ◆ Power off the VP2730.
3	Display settings	Identify the display port (A, B, or C) that the display device is connected and shows the following information. ◆ Device name: To change the device name, log in the web interface as administrator, and then go to **General** > **Device Information**. ◆ Auto switching: Automatically switches to a newly detected source. This option is only available for Display A. ◆ Resolution: To edit the resolution and ratio, navigate to this field in the OSD, and then press the **Enter** button/pushbutton. ◆ Display ratio ◆ **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.
4	Screen capture	Navigate to this field and then press the **Enter** button/pushbutton to capture the screen. The captured image is saved to the storage device connected to the V2730's USB ports. Make sure you have a storage device inserted to the V2730 for this function to be available.

No.	Name/Information	Description
5	Notifications	Navigate to this field and then press the **Enter** button/ pushbutton to view a record of user actions in the OSD and the web interface, such as users joining a meeting, saving of a screen capture to a connected storage drive, or the screen going live.
6	Source List	Press the Navigation buttons/pushbuttons to select the source for the display or press the **Enter** button/ pushbutton to select from a preview panel. For details on how to select sources, see *Switching the Display Source*, page 16.
7	Multiview	Enables/disables a multiview display for the selected display (A, B, or C). For details, see *Enabling a Multiview*, page 22.
8	Overall Volume	Sets the volume of the speaker connected to the VP2730.
9	Mic Volume	Sets the volume of the microphone connected to the VP2730 by adjusting the output level.
10	Freeze	Navigate to this field and then press the **Enter** button/ pushbutton to freeze the video.
11	Go Live	Press the **Go Live** button/pushbutton to stream out the display. This button grays out if the VP2730 is not connected to network. **IMPORTANT:** ◆ Make sure that the VP2730 is connected to the network and that the network bandwidth is of 2 MB or more. ◆ The VP2730 can broadcast the video stream to 6 remote locations at maximum.
12	Date and time	Indicates the system date and time.

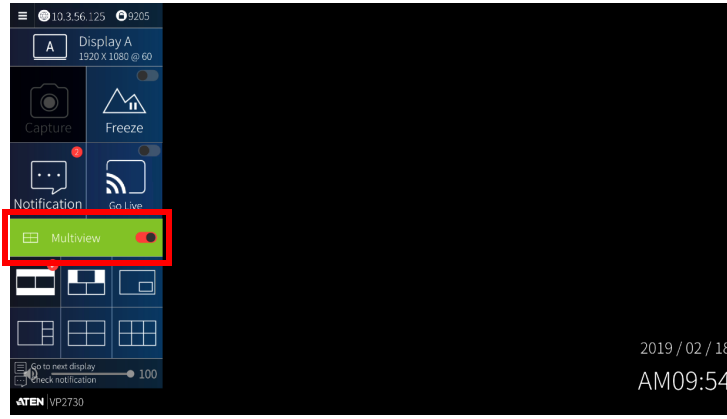
Enabling a Multiview

You can enable a multiview to assemble frequently used sources into one composite view.

Note: A multiview can only be enabled on one display (A, B, or C) at the same time.

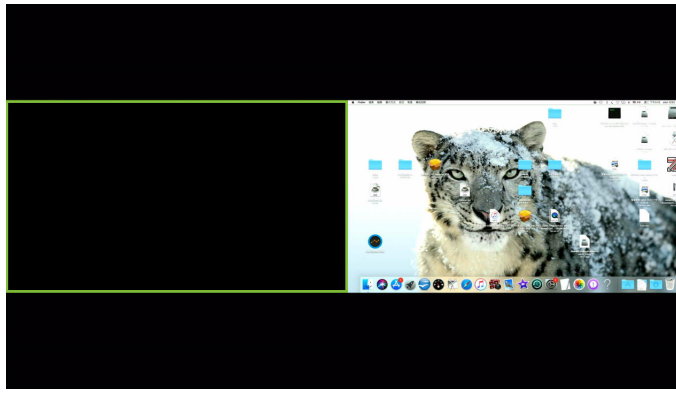
To enable the multiview channel:

1. Press the **Menu** button/pushbutton to launch the OSD on the display where you want to show the multiview.
2. Use one of the following methods to enable multiview.
   - Press the **Multiview** pushbutton on the front panel.
   - Press the Multiview button on the IR remote control.
   - In the OSD, navigate to **Multiview** and press the **Enter** button/pushbutton to enable the setting.

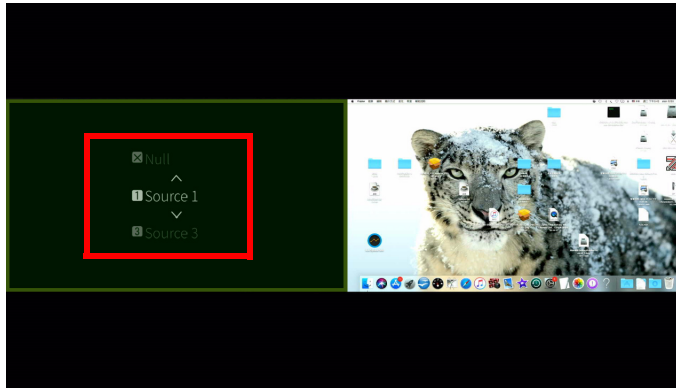


3. To change the multiview layout navigate to a layout you wish to use and press the **Enter** button/pushbutton. The layout is immediately switched.

4. To change the sources used in the multiview, follow the steps below.
   a) Navigate to the multiview layout that you selected and press the **Enter** button/pushbutton. The focused channel is indicated with a green border.



   b) Navigate to the channel to which you wish to change the source, and press the **Enter** button/pushbutton to open a source menu.

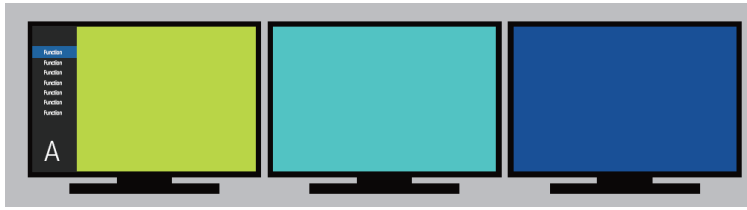


   c) Use the **Up** and **Down** buttons/pushbuttons to select a source. The selected source is immediately applied.

Changing the Display Mode

You can have the connected displays showing different or identical content using different display modes.

Matrix Mode

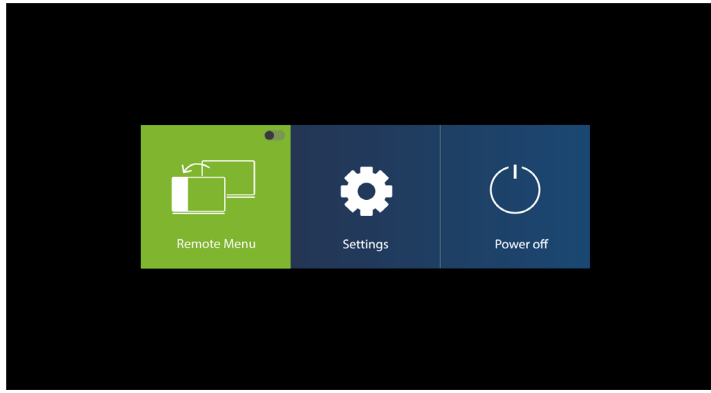


Mirror Mode

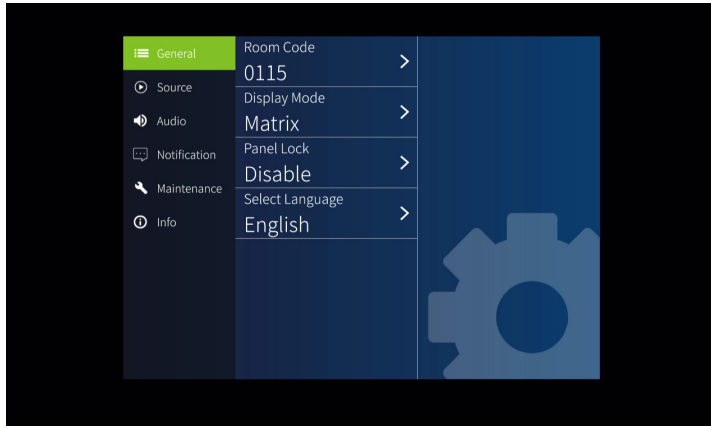
- **Matrix mode:** Each connected display can be set differently and show different content. This is the default mode. In this mode, each display is configured on its own OSD panel.
- **Mirror mode:** Each connected display mirrors each other and does not take different settings. In this mode, configuration on one display is automatically applied to other displays connected to the VP2730.

To change the display mode:

1. Press the **Menu** button/pushbutton to launch the OSD.
2. In the OSD, navigate to and then press the **Enter** button/pushbutton. This screen appears.



3. Navigate to **Settings** and press the **Enter** button/pushbutton. This screen appears.



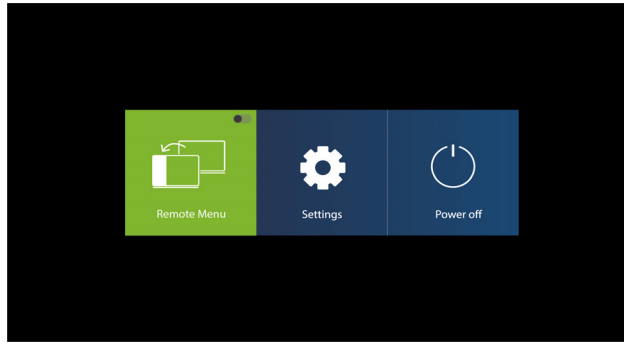
4. Navigate to **General** > **Display Mode** and then select a view mode. The view mode is immediately applied to the connected displays.

Moderator Mode (Remote Display Control)

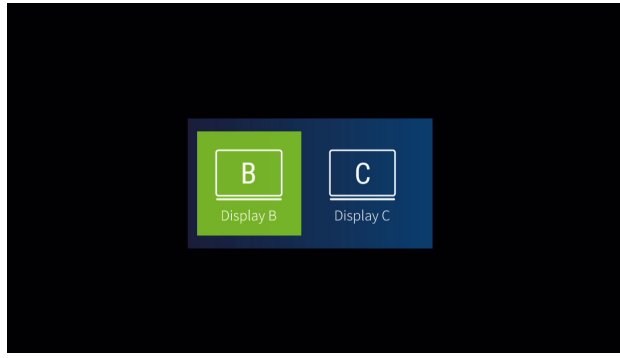
When the OSD of a display is too far to be seen clearly, or when host control of a remote display is required, you can enable remote control of the target display using a display that is located near you.

To enable remote control:

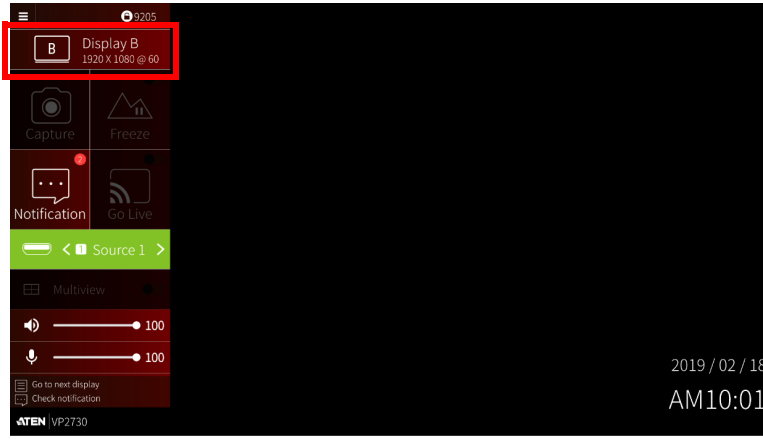
1. Press the **Menu** button/pushbutton to launch the OSD on a display that is located near the operator.
2. In the OSD, navigate to and then press the **Enter** button/pushbutton. This screen appears.



3. Press the **Enter** button/pushbutton to enable remote control. This screen appears.



4. Navigate to the display you wish to control and then press the **Enter** button/pushbutton. You can now use the OSD to remotely control the display. The OSD changes to red and the controlled display is indicated.



5. To end the control session, follow steps 1 and 2 to disable the **Remote Menu** function.

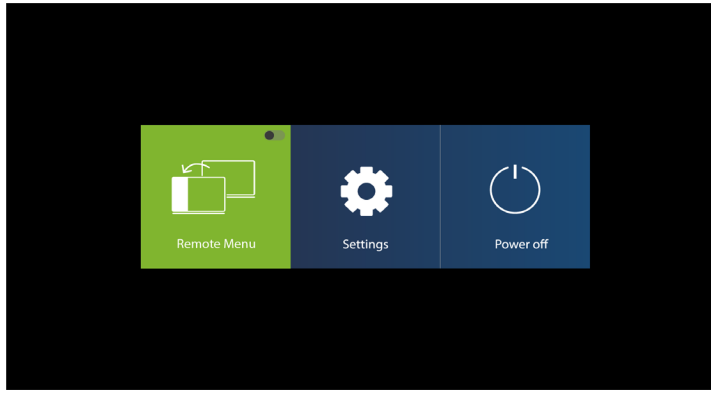
Locking the Front Panel

To lock or unlock the front-panel pushbuttons, press and hold the Up navigation pushbutton for 5 seconds. When the front-panel pushbuttons are locked, the lock icon lights red.

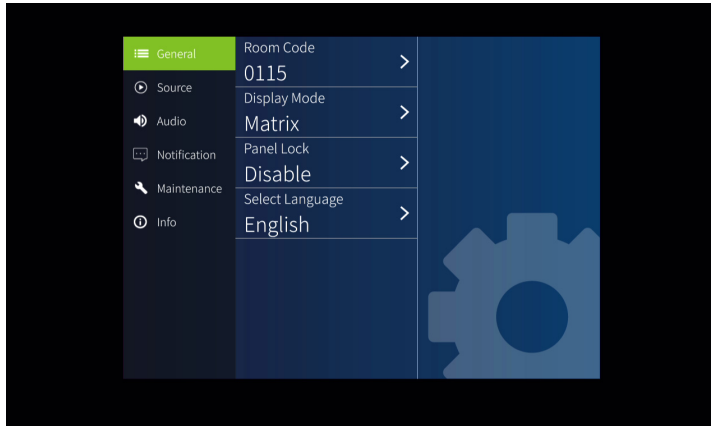
System Settings

To configure system settings:

1. Press the **Menu** button/pushbutton to launch the OSD on the display you wish to configure.
2. In the OSD, navigate to and then press ENTER. This screen appears.



3. Navigate to **Setting** and press ENTER. This screen appears.



4. Configure the settings as required.

System Setting			Description
General	Room Code	◆ Disable ◆ Refresh code	Enables and generates a random room code to be required for joining a meeting via the VP2730's web interface.
	Display Mode	◆ Matrix ◆ Mirror	For details, see *Changing the Display Mode*, page 24.
	Panel Lock	◆ Disable ◆ 5s later ◆ 30s later ◆ 5 mins later	Automatically locks the front-panel pushbuttons if the OSD idles for the selected duration.
	Select Language		Sets the display language of the OSD.
Source	Source 1 Selection	◆ HDMI ◆ DP ◆ Auto	Sets the prioritized port for Source 1/Source 2. Select **Auto** to prioritize the first detected input as the source.
	Source 2 Selection	◆ HDMI ◆ VGA ◆ Auto	
	EDID Mode	◆ ATEN Default ◆ Display A	◆ **ATEN default:** This mode sends ATEN-predefined EDID to the connected sources. ◆ **Display A:** This mode sends the EDID of Display A to the connected sources.

System Setting			Description
Audio	Overall Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the speaker connected to the VP2730.
	Mic Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the microphone connected to the VP2730 by adjusting the output level.
	Mic Gain	◆ Increase (+) ◆ Decrease (-)	Sets the volume of the microphone connected to the VP2730 by adjusting the input level.
	Streaming Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the streamed-in source.
	Line-in Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the source that is plugged to the Source 2 audio jack on the VP2730.
	Media Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of connected sources.
Notifications	Display Time	◆ 3s ◆ 5s ◆ 10s	Sets the duration for which a notification message pops up in the OSD.
	Web General	◆ Disable ◆ Enable	Displays notifications on user actions performed via the web interface.
	System General	◆ Disable ◆ Enable	Displays notifications on system status, device connection status, and user actions performed via the OSD.

System Setting		Description
Maintenance	FW Upgrades	Upgrades the VP2730's system firmware. **Note:** Save the firmware file to a USB drive and plug it into the VP2730 before the upgrade.
	Reset to Default	Sets the VP2730 to its default settings.
Info	Vender, firmware version, serial number, hardware version, build version	Displays the system information.

Chapter 4
Remote Operation

Overview

You can remotely join meetings hosted via VP2730 and/or configure the VP2730's settings by logging in its web interface. Depending on your needs, log in the web interface as administrator or participant. The privileges and number of maximum login of the administrator and participant account are compared in the table below.

	Administrator	Participant
Join online meetings and share content	✓	✓
Configure the VP2730's settings	✓	
Back up and restore VP2730's settings	✓	
Number of maximum login	No limit	6

Supported Web Browsers

The VP2730 supports access to its web UI through the following web browsers and operating systems:

Web Browser	Supported Version	Operating System
Chrome	64.0.3282.168	Windows 10
	60.0.3112.113	Windows 10
	64.0.3282.167	Ubuntu 16.04
	60.0.3112.78	Ubuntu 16.04
Firefox	58.0.2	Windows 10
	54.0.1	Windows 10
	58.0.2	CentOS 7.0
	52.4.0	CentOS 7.0
Opera	50.0.6762.67	Windows 10

The VP2730's IP Address

When the VP2730 connects to the network for the first time, it is assigned a dynamic IP address or uses a default IP address if the network switch does not support DHCP.

- The default IP address and other network settings are as follows:

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

- To look up the VP2730's IP address, press on the remote control to launch the OSD. The IP address is indicated in the OSD.

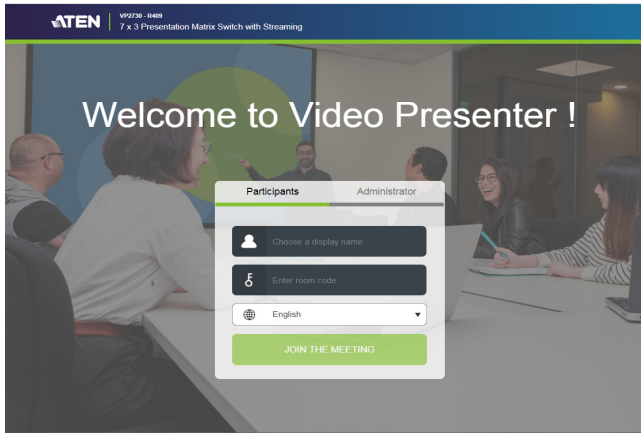
The Participant Account

When you log in the VP2730's web interface as participant, you are remotely connected to an online meeting where you can:

- View the video streamed out from the VP2730
- Interact with other meeting participants by instant messaging
- Share your screen to meeting participants

Logging in as Participant

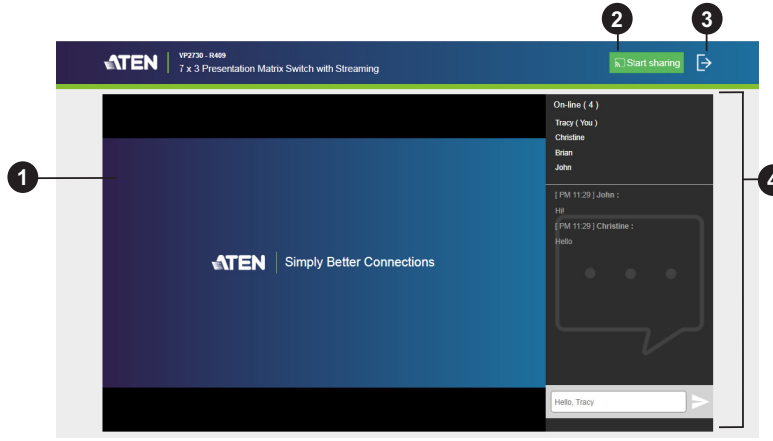
1. In a web browser, type the web link (IP address) of the VP2730. This screen appears.



2. Type a display name of your choice.
3. If the room code is enabled on the VP2730, type the room code.
4. (Optional) Click the drop-down list to change the display language.
5. Click **Join the Meeting**. You are immediately logged into the web view of the meeting.

The Participant Screen

You can access the following controls when logged in as participant in the VP2730's web interface.



No.	Element	Description
1	Live Screen	Displays the content that goes live from the VP2730.
2	Start Sharing	Click to share a screen or an application window from you PC or laptop to the VP2730 and makes it available for broadcast to all meeting participants. For details, see *Sharing a Screen or an Application Window*, page 37.
3	Log Out	Click to log out the VP2730.
4	Chat panel	Use this panel to instantly message and interact with other meeting participants.

Tip: Click the ATEN logo at the top-left corner to visit ATEN's official website.

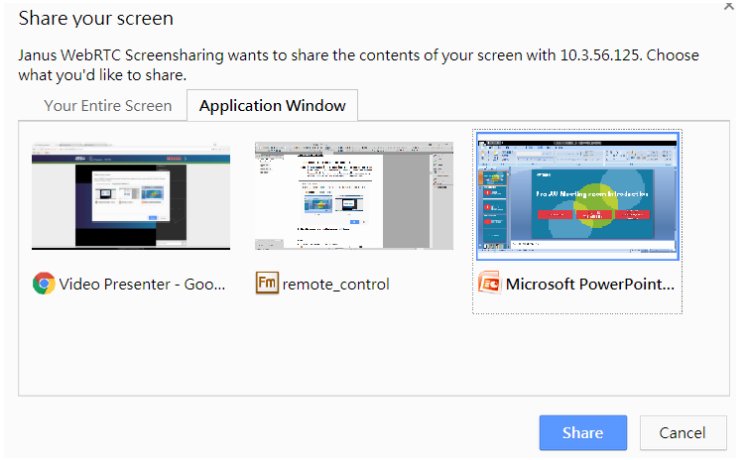
Sharing a Screen or an Application Window

By logging in to the VP2730's web interface, you can share the entire screen of your PC/laptop or an application window to the VP2730 with participants and administrators that have logged in the web interface.

Note:

- This feature is only available using Chrome.
- The VP2730 can receive up to 5 concurrent streamed-in channels.

1. Make sure you have the screen or the application window you wish to share opened on your PC/desktop.
2. Log in the VP2730's web interface as participant.
3. From the participant's screen, click **Start Sharing**. This screen appears.



Note:

If your Chrome does not have an appropriate extension installed for this feature, a prompt appears for installing an extension when you try to enable the function. In this case, follow the steps below to download and install the extension.

a. Click **download** in the pop-up prompt.

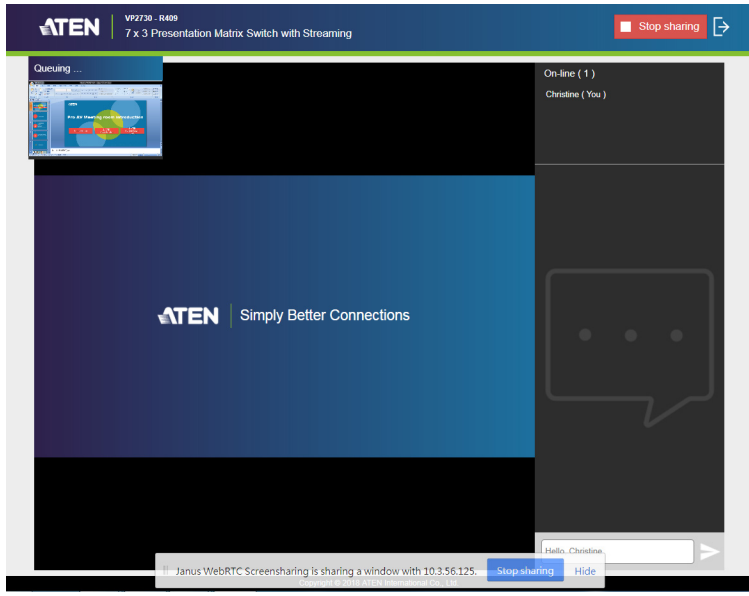
b. Open a new tab in your Chrome and type **chrome://extensions** in the address bar to open the extensions page.

c. Enable **Developer mode** at the top-right corner and reload the page.

d. Drag-and-drop the downloaded extension file to this page to install the file.

e. Close and reopen the tab to refresh your browser.

4. Select a screen or an application window and click **Share**. The VP2730 is notified of this sharing.



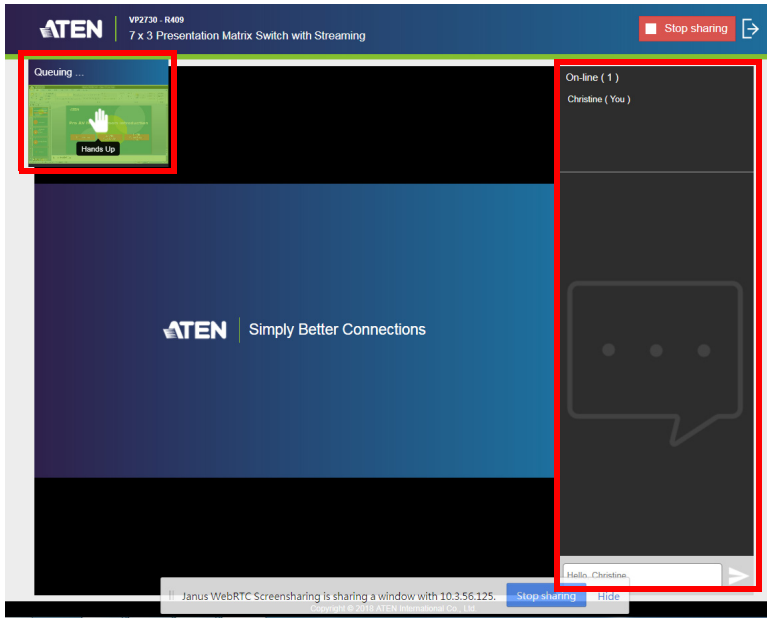
Note:

- When sharing an application window, keep it open to allow sharing. Minimizing the window terminates the sharing.
- To share videos along with their audio content from your PC/laptop, unplug the audio output wire from your speaker and replug it into the microphone input port on your PC/laptop.

5. The host of the meeting can now display the shared content by switching to Source 6.

   Tip: To remind the host that you have shared your content, you can:

   - Send another notification to the VP2730 by clicking the Queuing window.
   - Send a text message using the chat panel.



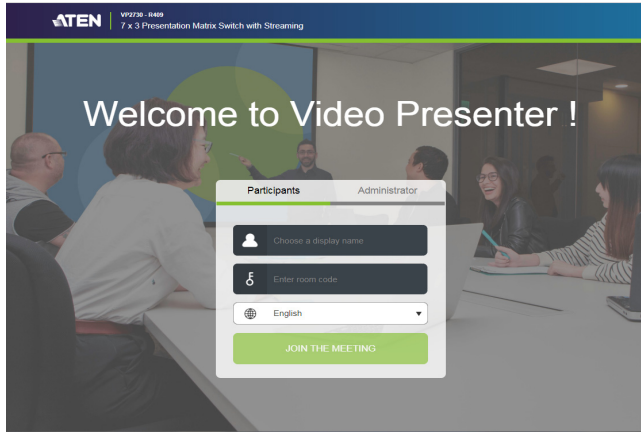
The Administrator Account

When you log in the VP2730's web interface as administrator, you are remotely connected to an online meeting and have access to the VP2730's settings.

Logging in as Administrator

1. In a web browser, type the web link (IP address) of the VP2730. This screen appears.

Note: Find the VP2730's web link from the OSD. For more information, see *Switching the Display Source*, page 16.

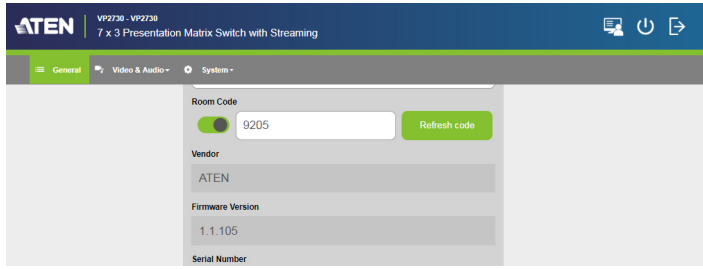


2. Click the **Administrator** tab. This screen appears.

3. Type the administrator's username and password. The default username is **administrator** and the password is **password**.

Note: ATEN suggests changing your password upon first login. To change the password, go to **General** > **Change Password** in the web interface.

4. Click **Go to Settings**. The main screen appears.

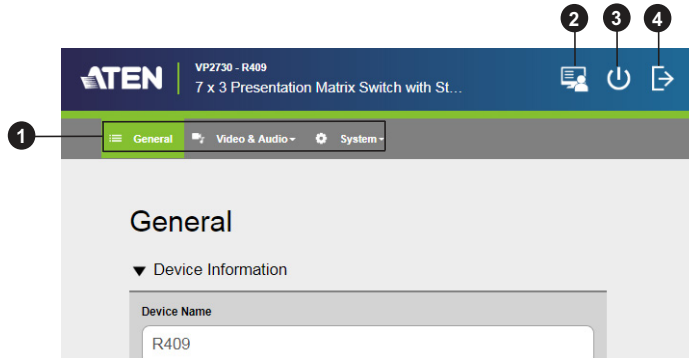


The Administrator Screen

When logged in as administrator, the configuration view appears.

Configuration View

Use the Configuration View to access system settings. To go to the Configuration View, log in the web interface as administrator.

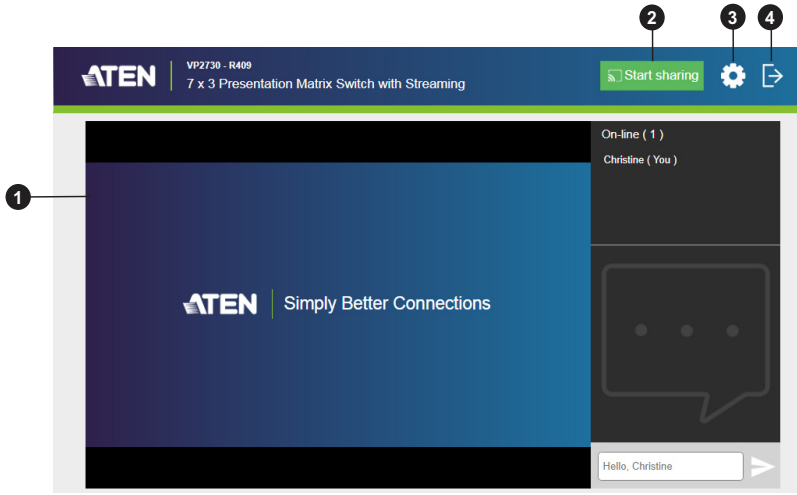


No.	Control	Description
1	Settings Tabs	Use these tabs to access system settings. For details, see *System Configuration*, page 44.
2	Go to Presentations	Click this button go to the presentation view to join online meetings.
3	Power Off	Click this button to power off the VP2730.
4	Log Out	Click this button to log out the VP2730's web interface.

Tip: Click the ATEN logo at the top-left corner to visit ATEN's official website.

Presentation View

Use the Presentation View to participate online meetings. To access the Presentation View, log in the web interface as administrator and click the **Go to Presentation** icon in the toolbar.



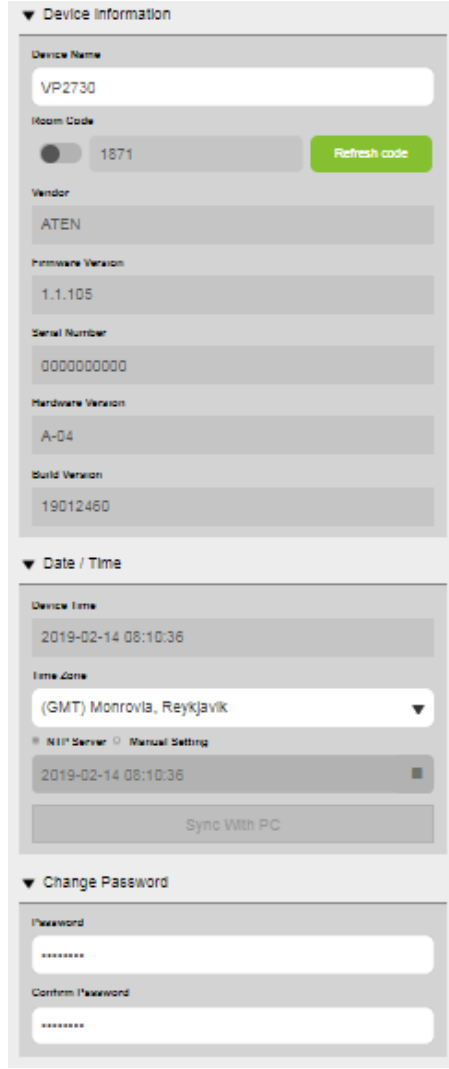
No.	Control	Description
1	Live Screen	Displays the content that goes live from the VP2730.
2	Start sharing	Click to share a screen or an application window from you PC or laptop to the VP2730 and makes it available for broadcast to all meeting participants. For details, see *Sharing a Screen or an Application Window*, page 37.
3	Go to Configuration	Click this button to go to the Configuration View. For details about the Configuration View, see *Configuration View*, page 42.
4	Log Out	Click this button to log out the VP2730's web interface.

Tip: Click the ATEN logo at the top-left corner to visit ATEN's official website.

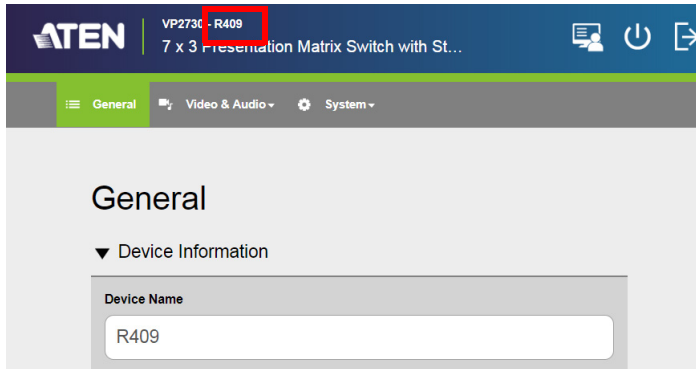
System Configuration

General Settings

General settings include settings for device name, system date and time, and login credentials. To access the general settings page, log in the web interface as administrator, and then click the **General** tab.



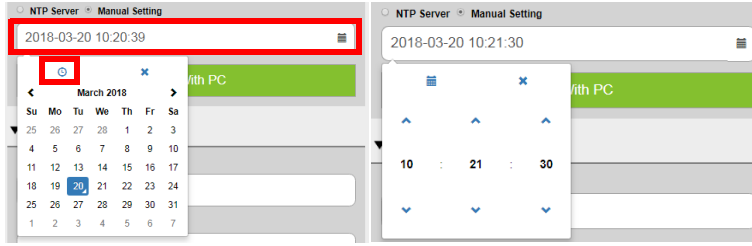
- **Device Information**
  - Device Name: Type a name for the VP2730. This name appears on the top of the VP2730's web interface.



  - Room Code: A room code is a 4-digit combination that is required for logging in the VP2730's web interface and joining an online meeting. You can type your own combination or click **Refresh Code** to generate a random number.
  - Vendor, Firmware Version, Serial Number, Hardware Version, Build Version: Indicate device information of the VP2730.
- **Date / Time**

Note: When any date/time setting is changed, the VP2730 will refresh itself and the connection to the streamed-in channel (Source 6) will be automatically closed.

  - Device Time: Displays the current device date and time.
  - Time Zone: Use the drop-down list to select a time zone.
  - NTP Server: Select this option to synchronize the VP2730's date and time with the NTP server.
  - Manual Setting: Select this option to manually set the VP2730's date and time. Click the indicated field to open the calendar and select a date; click to set the time.

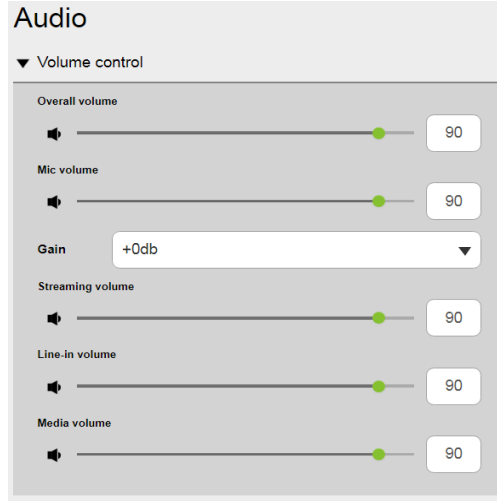


- Sync with PC: Click this button to synchronize the VP2730's date and time with the PC with which the web interface is opened.

- **Change Password**
  Use these fields to change the login password.

Audio Settings

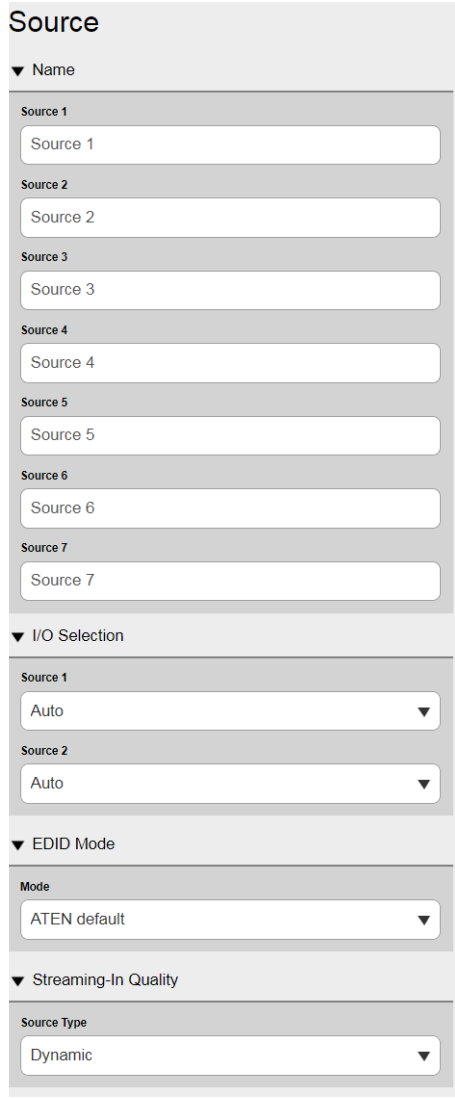
To access the audio settings, log in the web interface as administrator, and then go to **Video & Audio** > **Audio**.



- **Volume Control:** Adjust the volume settings by dragging the sliders or change the volume values.
  - Overall volume: Sets the volume of the speaker connected to the VP2730.
  - Mic volume: Sets the volume of the microphone connected to the VP2730 by adjusting the output level.
  - Gain: Sets the volume of the microphone connected to the VP2730 by adjusting the input level.
  - Streaming volume: Sets the volume of the streamed-in source.
  - Line-in volume: Sets the volume of the source that is plugged to the Source 2 audio jack on the VP2730.
  - Media volume: Sets the volume of connected sources.

Source Settings

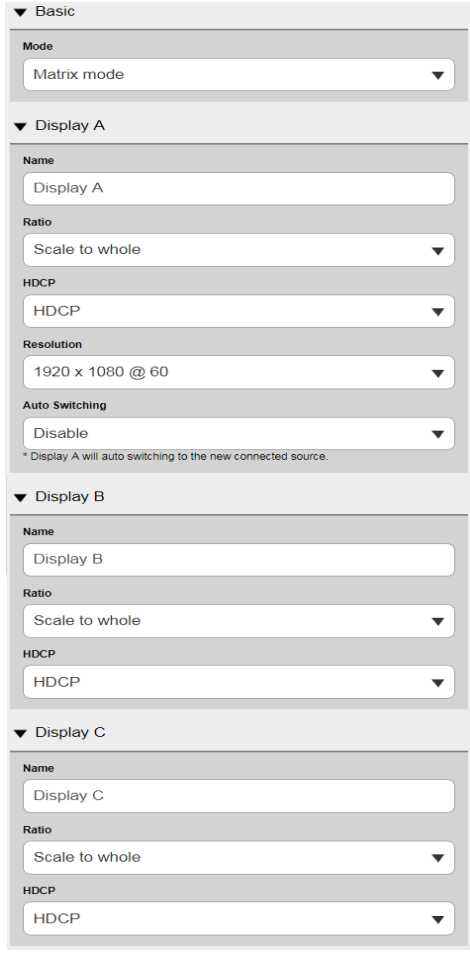
To access the source settings, log in the web interface as administrator, and then go to **Video & Audio** > **Source**.



- **Name:** Use these fields to name the sources connected to the VP2730.
- **I/O Selection:** Click the drop-down lists to select prioritized interfaces for Source 1 and 2. Select **Auto** to use the first detected input as the source.
- **EDID Mode:** Click the drop-down list to select an EDID mode.
  - **ATEN default:** This mode sends ATEN-predefined EDID to the connected sources.
  - **Display A:** This mode sends the EDID of Display A to the connected sources.
- **Streaming-in Quality:**
  - **Dynamic:** Select this option for sources to stream in at 720p, 30Hz. This is the default setting.
  - **Static:** Select this option for sources to stream in at 1080p.

Display Settings

To access the display settings, log in the web interface as administrator, and then go to **Video & Audio** > **Display**.



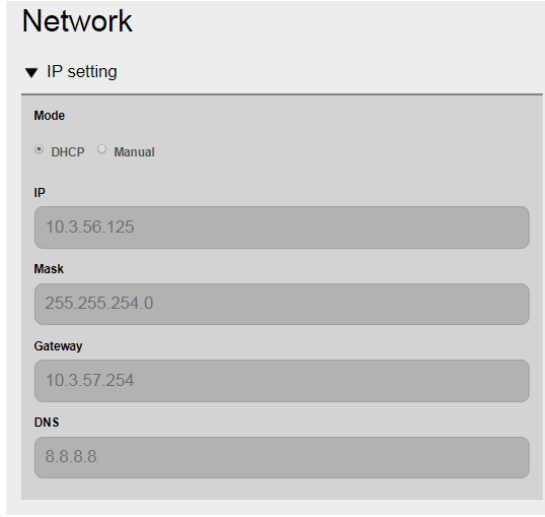
- **Basic (Mode):**
  - **Matrix mode:** Each connected display can be set differently and show different content. This is the default mode. In this mode, each display is configured on its own OSD panel.

- **Mirror mode:** Each connected display mirrors each other and does not take different settings. In this mode, configuration on one display is automatically applied to other displays connected to the VP2730.

- **Display A/B/C:** Sets the display name, ratio, and resolution for the connected display devices.
  - **Name:** Click to type a name for the connected display.
  - **Ratio:**
    - **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.
  - **HDCP:** Enable this function to prevent copying of the audio and video content as it travels across connections.
  - **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 VP2730.
  - **Auto switching**: Automatically switches to a newly detected source. This option is only available for Display A.

Network Settings

To configure the VP2730's network connection settings, log in the web interface as administrator, and then go to **System** > **Network**.



- **DHCP:** Select this option for the connected network switch to dynamically assign an IP address, subnet mask, gateway, and DNS to the VP2730.
- **Manual:** Select this option to manually type in an IP address, subnet mask, gateway, and DNS. The VP2730 does not require a reboot after the network setting is changed.

Updating the System Firmware

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 web interface of the VP2730 as administrator, and then go to **System** > **Maintenance** > **Firmware Updates**.
3. In the Firmware Updates section, browse the firmware file that you downloaded, and then click **Update**.
4. When the update is complete, a confirmation message appears.

Backing Up System Settings

You can back up and export the VP2730's configuration. This backup will not include the username and password settings.

1. Log in the web interface of the VP2730 as administrator, and then go to **System** > **Maintenance** > **Backup / Restore**.
2. Click **Backup**.

Restoring System Settings

1. Log in the web interface of the VP2730 as administrator, and then go to **System** > **Maintenance > Backup / Restore**.
2. To restore the VP2730's settings, click **Browse File** to locate a previously backed up file (.aes), and then click **Restore**.

Reset the VP2730 to Default

1. Log in the web interface of the VP2730 as administrator, and then go to **System** > **Maintenance > Backup / Restore**.
2. Click **Reset to Default**. This will reset all the settings, including network settings, to default.

Applying SSL Encryption

To secure sessions between the VP2730 and web browsers accessing the VP2730's web interface, follow the steps below to apply SSL encryption.

1. Purchase an SSL certificate from a trusted certificate authority and save the files to a computer with access to the VP2730's web interface.
2. Log in the VP2730's web interface as administrator, and then go to **System** > **Maintenance** > **Web Server SSL**.
3. Click **Browse File** to upload the SSL certificate and its private key.
4. Click **Update** to apply the SSL encryption.

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Chapter 5
RS-232 Serial Commands

Overview

The 7 x 3 Seamless Presentation Matrix Switch supports system configuration via RS-232 commands sent from a hardware or software controller.

Setup

1. Connect a PC to the RS-232 Serial port on the VP2730 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): **9600**
   - Data bits: **8**
   - Stop bits: **1**
   - Parity: **None**
   - Flow control: **None**
4. When a session is established with the VP2730, you can configure your VP2730 by sending RS-232 commands. For a list of commands, see *Commands*, page 56.

Commands

Guidelines

- 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

The following table lists the RS-232 commands.

Command Syntax	Description
capturescreen	Get USB storage device info in the format: device index X, label is XXX, remaining XX. Device index is used for the capture screen storage destination.

Command Syntax	Description
capturescreen o<output_port> i<device_index>	Capture the screen of a port and save it to the USB storage device. Output port parameters: ◆ o<output_port>: Specifies the output port in two digits. Device index parameters: ◆ i<device_index>: Specifies the capture screen USB storage destination. For example, type: **capturescreen** o02 i01
clearallsetting	Clear all settings.
deviceinfo	Display the host name, firmware version, device serial number, and the hardware version for the VP2730.
devicename	Display the device name for the VP2730.
devicename <name>	Sets the name for the VP2730. Enter a name 1-30 characters long without <>[]()&*+=?@/ |\',;:"
displaymode	Display the current display mode.
displaymode {matrix|mirror}	Configure the VP2730 to matrix or mirror mode where each connected display can show different content. For example, type: **displaymode** matrix
edid	Display the current EDID mode.
edid {default|o01}	Configure the VP2730's EDID mode. ◆ default: Set the VP2730's EDID mode to ATEN Default which sends ATEN-predefined EDID to the connected sources. ◆ o01: Set the VP2730's EDID mode to follow the display connected to the output port A. For example, type: **edid** default
engrxmode	Display the current interface settings for input port 1 and 2 (combo ports).

Command Syntax	Description
engrxmode i01 {auto|hdmi|dp} **engrxmode** i02 {auto|hdmi|vga}	Configure the interface for the specified combo port (port 1 or port 2). ◆ auto: Sets the specified combo port to auto switching with which the port automatically switches to a newly source as soon as the source is detected. ◆ hdmi|dp: Sets the specified combo port to select an HDMI or DisplayPort source. ◆ hdmi|vga: Sets the specified combo port to select an HDMI or VGA source.
freeze o<output_port> {on|off}	Enable/disable the freeze of the specified output on the display. **Note:** This function is not supported when moderator mode is enabled. For example, type: **freeze** o03 on
golive o<output_port> {on|off}	Enable/disable streaming out of the source connected to the specified output port. For example, type golive o02 on to stream out the source connected port 2. For example, type: **golive** o<output_port> on
multiview	Display the current multiview mode.
multiview o<output_port> l<layout_source> mode<mode_number>	Set the multiview mode for an output port and determine the output port's layout source. Output port parameters: ◆ o<output_port>: Specifies the output port in two digits. Layout source parameters: ◆ l<layout_source>: Specifies the layout source number (1-6, 7 is null). Mode parameters: ◆ mode<mode_number>: Specifies the mode (1-6). For example, type: **multiview** o02 mode2 -> sets the output port 2 to multiview mode 2 **multiview** l45 mode3 -> sets multiview mode 3 with layout source [4, 5] **multiview** o01 l356 mode4 -> sets the output port 1 to multiview mode 4 with layout source [3, 5, 6]

Command Syntax	Description
notification {s<display_time>|web<on|off>|sys<on|off>|clean}	Configure the notification settings such as the display time, turn on/off the web or system notifications or clean notifications. Notification display time s<display_time>: ◆ Set the notification display time by entering 3, 5 or 10. Turn on/off web notification web<on|off>: ◆ on: Turn on web notification. ◆ off: Turn off web notification. Turn on/off system notification sys<on|off>: ◆ on: Turn on system notification. ◆ off: Turn off system notification. Clean all notification messages clean. For example, type: **notification** s5 **notification** web on **notification** sys off **notification** clean
power on	Power on the VP2730. **Note:** The command will be ignored if it is not inputed within 0.3 second. Please copy and paste the command so that the command can be typed in quickly.
read	Display the EDID mode for all output ports, device information (device name, vendor, firmware version, serial number, hardware version, build version), and network settings.
reset	Reset the VP2730 to its default settings.
roomcode {on|off|refresh}	Enable/disable/refresh room code. For example, type: **roomcode** on
scalemode	Show the display ratios for the connected displays.

Command Syntax	Description
scalemode o<output_port> {full|fit|cut}	Configure the display ratio of the source connected to the specified port. ◆ full: Set the display to full screen. ◆ fit: Proportionally scale the content to fit the screen without cutting any content off. ◆ cut: Scale the content to fully fill the display with some content cut off. For example, type: **scalemode** o<output_port> full|fit|cut
scaling	Display the current scale setting.
scaling o<output_port> hor <horizontal_resolution> ver <vertical_resolution> freq <display_frequency>	Configure the output resolution and refresh rate of the source connected to the specified port. For example, type: **scaling** o01 hor 1024 ver 768 freq 60
sw o<output_port> i<input_port>	Switch the specified display to the specified source. Input port related parameters: ◆ i<input_port>: i<input_port>: Specifies the input port in two digits. ◆ +: Indicates the next input port. ◆ −: Indicates the previous input port. Output port related parameters: ◆ o<output_port>: Specifies the output port in two digits. ◆ o*: Indicates all output ports. For example, type: **sw** o01 i02 **sw** o01 + **sw** o* i02
swmode {auto|off}	Enable/disable auto switching.
time	Display the VP2730's current time settings, including device time, time zone, and synchronization setting (with NTP server or customized).
volume	Display the VP2730's current audio settings, including overall volume, mic volume, mic gain, streaming volume, line-in volume, and media volume.

Command Syntax	Description
volume t<volume_option_index> v<volume|gain>	Configures the volume option to a specified value. Volume option index t<volume_option_index>: ◆ 01: Overall volume ◆ 02: Mic input volume ◆ 03: Mic gain ◆ 04: Streaming input volume ◆ 05: Line input volume ◆ 06: Media input volume Volume / Gain v<volume|gain> value: ◆ If the volume option index is 01, 02, 04, 05, or 06 (Volume): enter a value between 0-100. ◆ If the volume option index is 03(Mic Gain): Enter 0, 10, 20 or 30. For example, type: **volume** t01 v36 **volume** t03 v20
mute t<volume_option_index> {on|off}	Mute / unmute a specified volume option. Volume option index t<volume_option_index>: ◆ 01: Overall volume ◆ 02: Mic input volume ◆ 04: Streaming input volume ◆ 05: Line input volume ◆ 06: Media input volume Mute / unmute: ◆ On: Mute the selected volume option. ◆ Off: Unmute the selected volume option. For example, type: **mute** t01 off

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Appendix

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.
- 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.
- The device is designed for IT power distribution systems with 230V phase-to-phase voltage.
- To prevent damage to your installation it is important that all devices are properly grounded.
- The device is equipped with a 3-wire grounding type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not attempt to defeat the purpose of the grounding-type plug. Always follow your local/national wiring codes.

- 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.
- If an extension cord is used with this device make sure that the total of the ampere ratings of all products used on this cord does not exceed the extension cord ampere rating. Make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
- To help protect your system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).
- 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.

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.
- 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.

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

Function		VP2730
Video Input		
Interfaces		5 x HDMI Type-A Female (Black) 1 x DP Female (Black) 1 x HDB-15 Female (Blue)
Video Output		
Interfaces		2 x HDMI Type-A Female (Black) HDBaseT: 1 x RJ-45 Female (Silver)
Max. Distance		HDMI: Up to 15 m HDBaseT: Up to 1080p @ 60 m (Cat 5e/6) / 70 m (Cat 6a/ATEN@ L-2910 Cat 6)
Video		
Max. Resolutions		HDMI/DP: Up to 1080p @ 60 Hz VGA/Analog: Up to 1920 x 1200 @ 60 Hz
Compliance		HDMI/DP: HDCP 1.4 Compatible Consumer Electronics Control (CEC)
Audio		
General		Frequency Response: 20Hz~20KHz, ±0.5dB (1Vrms @ 0dBV) THD + Noise: < -65dB (0.056%) (1KHz,1Vrms @ -3dBV) S/N: > 85dB (1KHz,1Vrms @ 0dBV) Cross Talk: < -60dB (15KHz,1Vrms @ 0dBV)
Input	Port	Stereo Audio: 1 x Mini Stereo Jack Female (Green) Balance Audio: 1 x Captive Screw Connector, 5-pole Microphone: 1 x Captive Screw Connector, 3-pole
	Signal Type	Line in: Analog stereo, balanced Mic in: analog mono, balanced
	Connectors	Line in: 3.5 mm captive screw connector, 5 pole Mic in: 3.5 mm captive screw connector, 3 pole
	Impedance	Line in: Analog inputs: 25k ohms unbalanced, 50k ohms balanced Mic in: Analog inputs: 6.8k ohms unbalanced, 13.6k ohms balanced
	Maximum Level	Line in: 0dBV (1Vrms) Mic in: 60dBV (1Vrms)
	Mic Preamp Level	Mic in: 0dB to +30 dB balanced , adjustable , in 10 dB steps
	Input Gain Adjustment	Line in: 0 dB to -16.5 dB, adjustable per input, analog inputs only Mic in: 30 dB to -16.5 dB, adjustable per input, analog inputs only
	Phantom Power	+48V, 10mA

Function		VP2730
Output	Port	Optical Audio: 1 x Toslink (Black) Coaxial Audio: 1 x RCA Female (Orange) Stereo Audio: 2 x RCA Female (White / Red)
	Signal Type	RCA out: Analog stereo, unbalanced Digital Toslink: Digital S/PDIF output Digital coaxial: Digital S/PDIF output
	Connectors	RCA out: RCA female Digital Toslink: Toslink Jack Digital coaxial: RCA female
	Maximum Level	RCA out: 1Vrms ±5%
	Output Impedance	Digital coaxial: 75 ohms
	Load Impedance	RCA out: 2K ohms, minimux
	Output Gain Adjustment	Overall output: 0 dB to -71.625 dB, adjustable per input
Connectors		
Console Ports		USB 2.0: 2 x USB Type-A Female (White) USB 3.0: 1 x USB Type-A Female (Blue)
Power		1 x 3-prong AC Socket
Control		
RS-232		1 x DB 9 Female (Black)
IR		1 x Mini Stereo Jack Female (Black)
Ethernet		1 x RJ-45 Female (Silver)
Switches		
Power		1 x Pushbutton 1 x Rocker
Video Input Port Selection		Video In: 5 x Pushbuttons Streaming In: 1 x Pushbutton
Video Output Port Selection		3 x Pushbutton
Selection		Multiview: 1 x Pushbutton Menu: 1 x Pushbutton Left: 1 x Pushbutton Up (Unlock): 1 x Pushbutton Right: 1 x Pushbutton Go Live: 1 x Pushbutton Mute: 1 x Pushbutton Esc: 1 x Pushbutton Down: 1 x Pushbutton Enter: 1 x Pushbutton
Phantom Power		1 x Slide Switch
LEDs		

Function	VP2730
Video	Source 1 HDMI / DP: 2 (Green) Source 2 HDMI / VGA: 2 (Green)
Video Output	Go Live: 3 (Amber)
EDID Settings	ATEN Default / Display A
Power	
Max. Input Power Rating	100-240 VAC; 50 - 60Hz; 1.0A
Consumption	AC110V, 28.5W AC220V, 27.3W
Environmental	
Operating Temperature	0 - 40°C
Storage Temperature	-20 - 60°C
Humidity	0 x 80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	3.70 kg (8.15 lb)
Dimensions (L x W x H)	43.24 x 26.28 x 4.40 cm (17.02 x 10.35 x 1.73 in)

Limited Warranty

ATEN warrants its hardware in the country of purchase against flaws in materials and workmanship for a Warranty Period of two [2] years (warranty period may vary in certain regions/countries) commencing on the date of original purchase. This warranty period includes the LCD panel of ATEN LCD KVM switches. Select products are warranted for an additional year (see *A+ Warranty* for further details). Cables and accessories are not covered by the Standard Warranty.

What is covered by the Limited Hardware Warranty
ATEN will provide a repair service, without charge, during the Warranty Period. If a product is detective, ATEN will, at its discretion, have the option to (1) repair said product with new or repaired components, or (2) replace the entire product with an identical product or with a similar product which fulfills the same function as the defective product. Replaced products assume the warranty of the original product for the remaining period or a period of 90 days, whichever is longer. When the products or components are replaced, the replacing articles shall become customer property and the replaced articles shall become the property of ATEN.

To learn more about our warranty policies, please visit our website:
http://www.aten.com/global/en/legal/policies/warranty-policy