



**7 x 3 Seamless Presentation Switch
with Streaming, HDBaseT**

VP2730 User Manual



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.

Table of Contents

EMC Information	ii
RoHS	ii
User Information	iii
Package Contents	iv
About this Manual	vii
Conventions	viii
Product Information	viii

1. Introduction

Overview	1
Features	2
Planning the Installation	4
Required Equipment	4
Optional Equipment	4
Accessories	4

2. Hardware Setup

Components	5
VP2730 Front View	5
VP2730 Rear View	6
IR Remote Control	8
LED Display	9
Mounting	10
Rack Mount	10
Under Desk Mount	11
Installation	12

3. Local Operation

Overview	15
Operation Considerations	15
Switching the Display Source	16
Using the IR Remote Control / Front-panel Pushbutton	16
Using the OSD	18
Launching the OSD	20
Configuring the Multiview	23
Changing the Display Mode	25
Moderator Mode (Remote Display Control)	27
Locking the Front Panel	29
System Settings	30

4. Remote Operation

Overview	35
Supported Web Browsers	35
The VP2730's IP Address	36
The Participant Account	37
Logging in as Participant	37
The Participant Screen	38
Sharing a Screen or an Application Window	39
The Administrator Account	42
Logging in as Administrator	42
The Administrator Screen	44
Configuration View	44
Presentation View	45
System Configuration	46
General Settings	46
Audio Settings	48
Source Settings	49
Display Settings	50
Network Settings	52
Updating the System Firmware	53
Backing Up System Settings	53
Restoring System Settings	53
Reset the VP2730 to Default	53
Applying SSL Encryption	54

5. RS-232 Serial Commands

Overview	55
Setup	55
Commands	56
Guidelines	56

Appendix

Safety Instructions	61
General	61
Rack Mounting	63
Technical Support	64
Specifications	65
Limited Warranty	67

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 65.

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

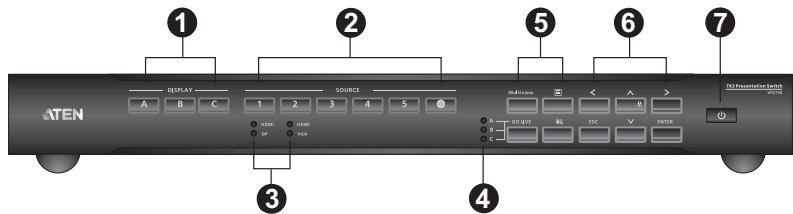
Hardware Setup




1. Please review the safety information regarding the placement of this device in *Safety Instructions*, page 61.
2. Do not power on the VP2730 until all the necessary hardware is connected.

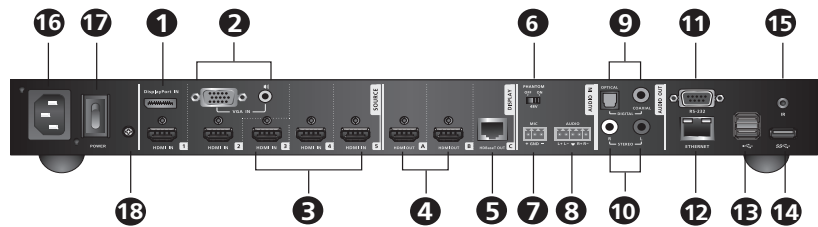
Components

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.

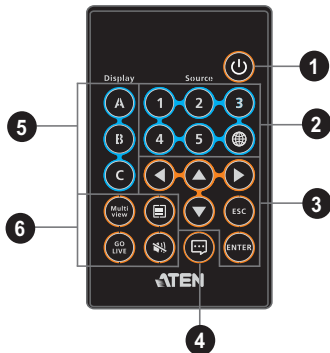
VP2730 Rear View







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

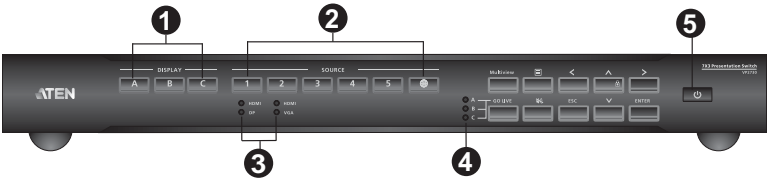


No.	Buttons	Description
1	On/Off	Turns the VP2730 on or off.
2	Source	Selects sources for connected displays.
3	Navigation	Navigates in the OSD, selects or unselects options, or leaves a current screen in the OSD.
4	Notifications	Opens the Notifications panel.
5	Display	Focuses the chosen display.
6	Function	<ul style="list-style-type: none">: Displays the OSD. Press again to display the OSD for the next connected display.: Switches the current display to multiview.: Streams out the current display out via the Ethernet.: Mutes all displays and speakers.

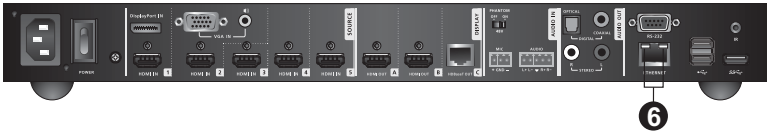
LED Display

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 Mbps.
		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.

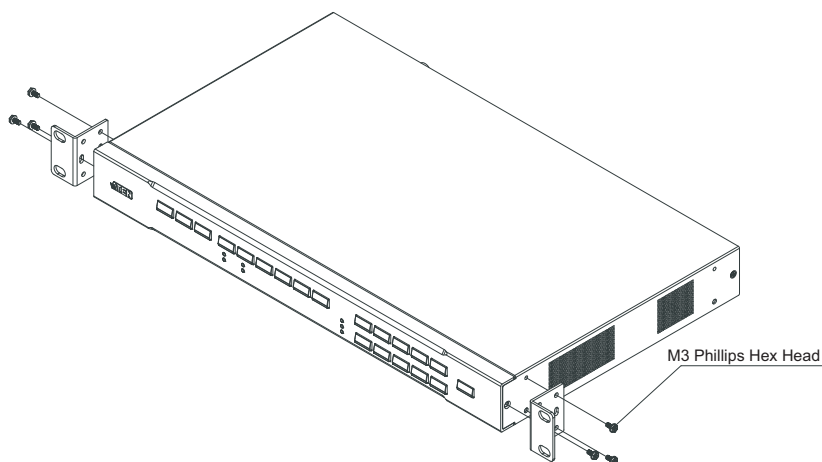
Mounting

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.



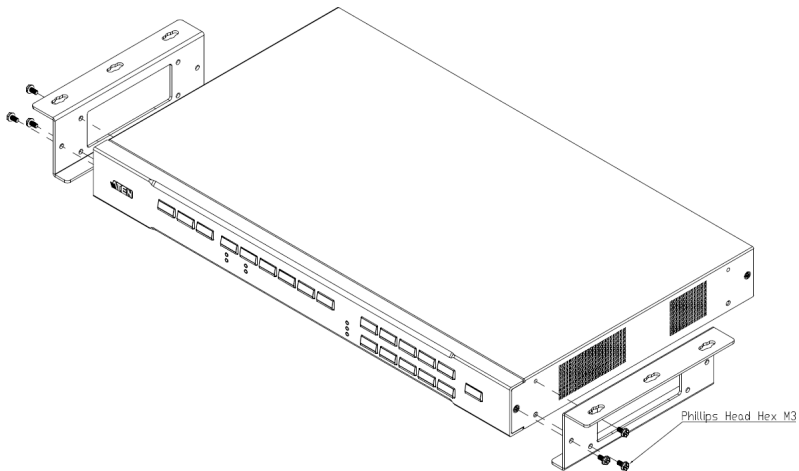
2. Position the unit in the front of the rack and align the holes in the mounting brackets with the holes in the rack.
3. Screw the mounting brackets to the rack.

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.

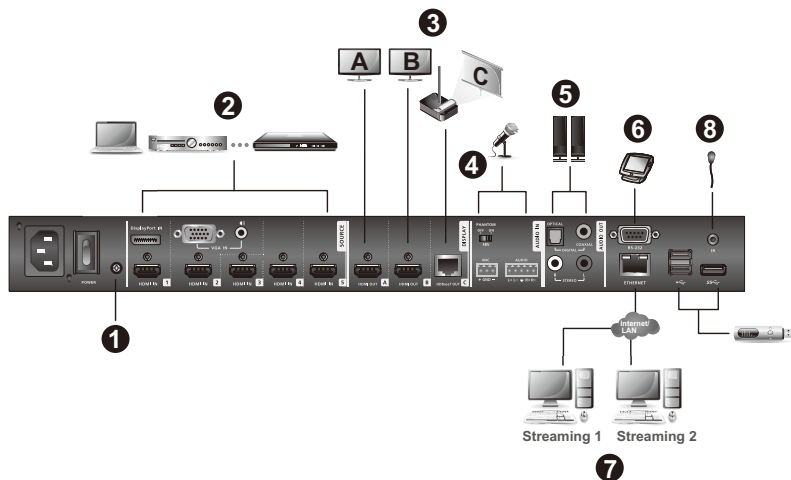
1. Use 6 M3 Phillips hex head screws supplied with the mounting kit to secure the mounting brackets onto the unit.



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**.

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

This Page Intentionally Left Blank

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 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.

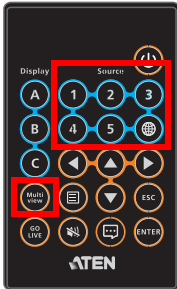
OSD Source List	Description
Source 1 ~ 5	Source 1 to 5 correspond to the sources connected to the VP2730.
Source 6	Source 6 is a reserved channel for sources that are streamed in over the Internet. Streamed-in sources are listed as options among which you can select for display. For details about sharing source content, see <i>Sharing a Screen or an Application Window</i> , page 39.
Source 7	This is a multiview channel where you can select multiple sources and create a composite view. For details, see <i>Configuring the Multiview</i> , page 23.

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:

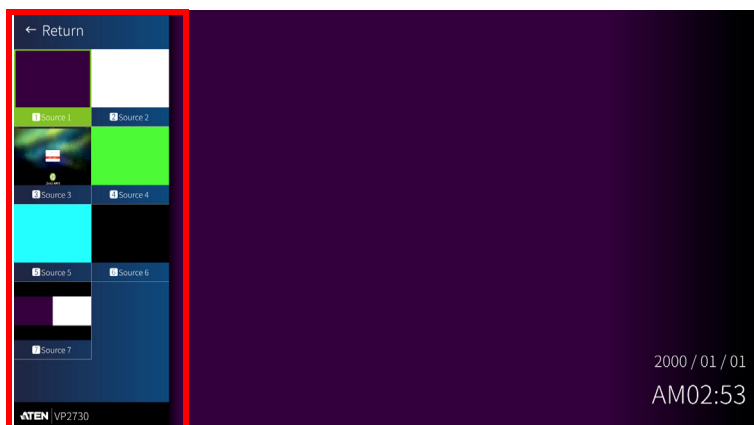
- ♦ For combo ports (Source 1 and 2), HDMI sources are prioritized as the output for the ports. To change the priority, configure the Source settings in the OSD. For details, see *System Settings*, page 30. To manually change the output source of a combo port, press the Display button/pushbutton and then press the Source button/pushbutton twice. The pushbutton for the selected source lights green.
 - ♦ For details on multiview, see *Configuring the Multiview*, page 23.
-

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. The OSD appears in the display.





2. Use any of the following methods to select a source.
 - ◆ Use the left and right navigation buttons. The source displays on the monitor as you navigate.
 - ◆ Press the **Enter**  button/pushbutton to open a preview panel. Use the navigation buttons to select a source, and then press the **Enter**  button/pushbutton. The source is immediately applied to the display.

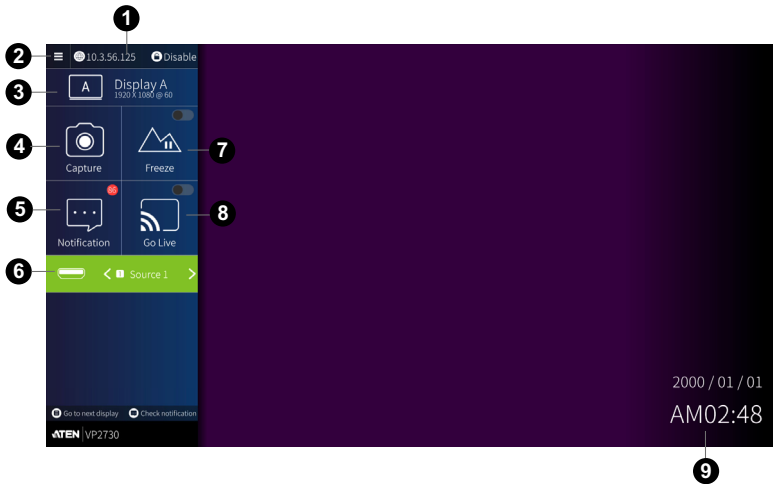


Note:



- ♦ 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 *Launching the OSD*, page 20.
-





Launching the OSD



Each connected display can only be configured via the OSD when the OSD menu appears on that particular display. To launch the OSD, press the **Menu**  button/pushbutton. The OSD appears on the left-hand side of a connected display. To launch the OSD for the next display, press the **Menu**  pushbutton/button again.



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 .
2	 Options	Navigate to this icon and press the Enter  button/pushbutton to access the following functions: <ul style="list-style-type: none">◆ Remotely control a selected display. For details on remote display control, see <i>Moderator Mode (Remote Display Control)</i>, page 27.◆ View or configure VP2730's settings. For details on system settings, see <i>System Settings</i>, page 30.◆ Power off the VP2730.


No.	Name/Information	Description
3	Display settings	<p>Identifies the display port (A, B, or C) that the display device is connected and shows the following information.</p> <ul style="list-style-type: none"> ◆ 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 <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.
4	Screen capture	<p>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.</p>
5	Notifications	<p>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.</p>
6	Source List	<p>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 <i>Switching the Display Source</i>, page 16.</p>

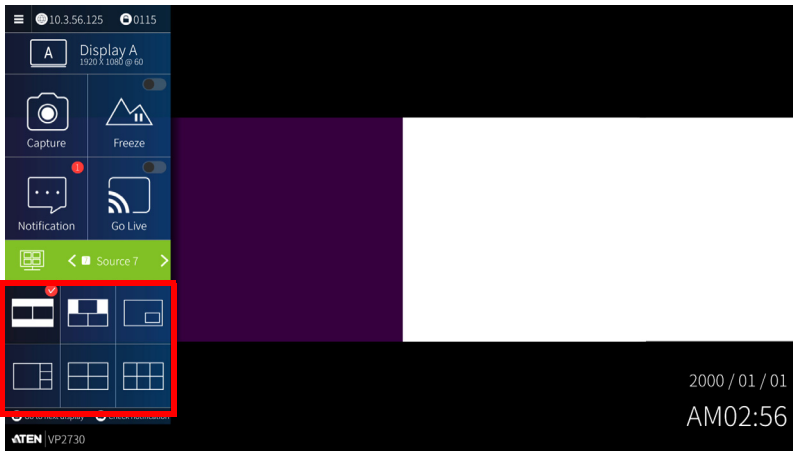
No.	Name/Information	Description
7	Freeze	Navigate to this field and then press the Enter  button/pushbutton to freeze the video.
8	Go Live	<p>Press the Go Live  button/pushbutton to stream out the display.</p> <p>IMPORTANT:</p> <ul style="list-style-type: none">♦ Make sure that the VP2730 is connected 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.
9	Date and time	Indicates the system date and time.

Configuring the Multiview

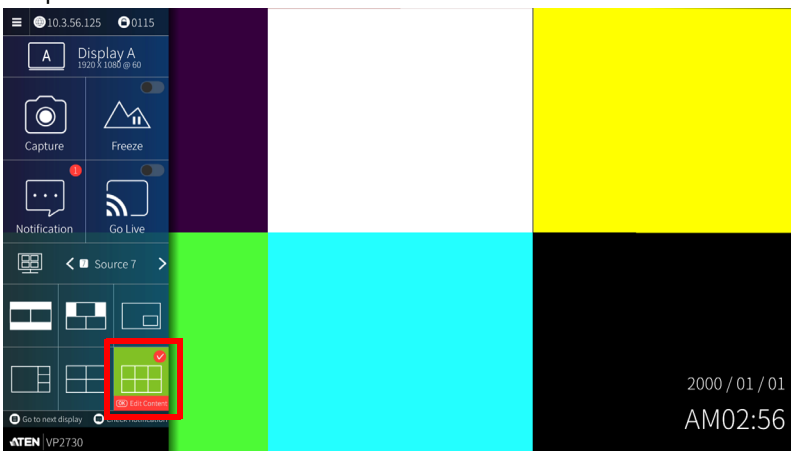
You can set up a multiview to assemble frequently used sources into one composite view.


To configure the multiview channel:

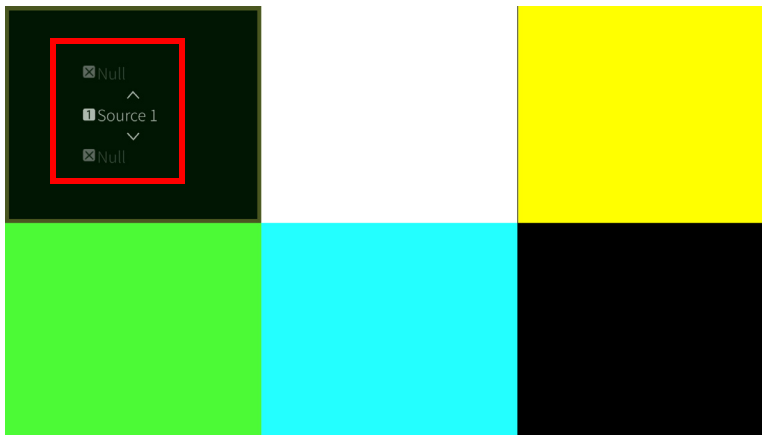
1. Press the **Menu**  button/pushbutton to launch the OSD.
2. Navigate to **Source 7**. A list of multiview templates appears.




3. Navigate and press the **Enter**  button/pushbutton to choose a multiview template.



4. Press the **Enter**  button/pushbutton to assign sources to the multiview.
- a) Navigate to a division you wish to assign a source to, and then press the **Enter** pushbutton/button to open the source list.



- b) Navigate to select a source for the division and press  to close the source list.
- c) Repeat step 4 (a) and 4 (b) to finish assigning sources to all the divisions.

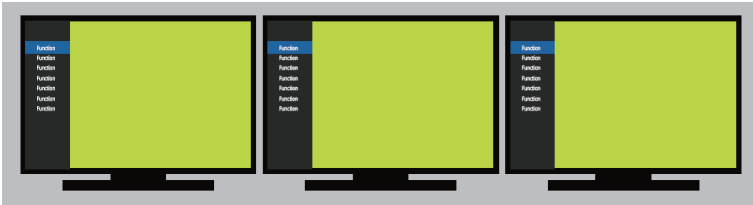
Changing the Display Mode

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

Matrix Mode






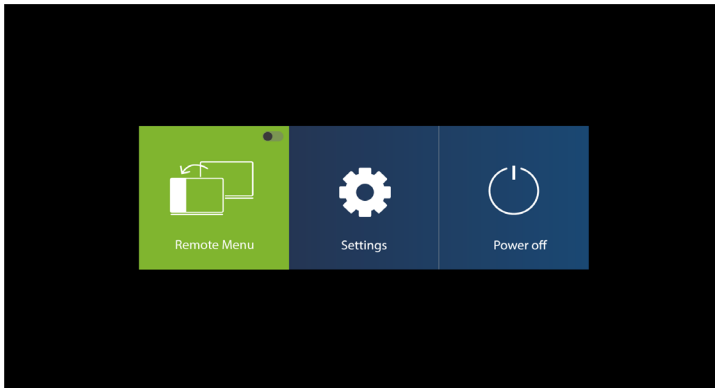
Mirror Mode




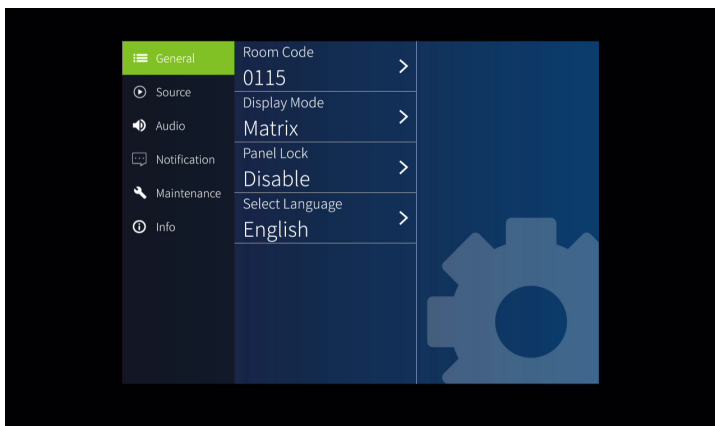
- ♦ **Matrix mode:** Each connected display can be set differently and show different content. This is the default mode. In this mode, each display is configured on its own OSD panel.
- ♦ **Mirror mode:** Each connected display mirrors each other and does not take different settings. In this mode, configuration 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 **Setting** and press the **Enter**  button/pushbutton. This screen appears.






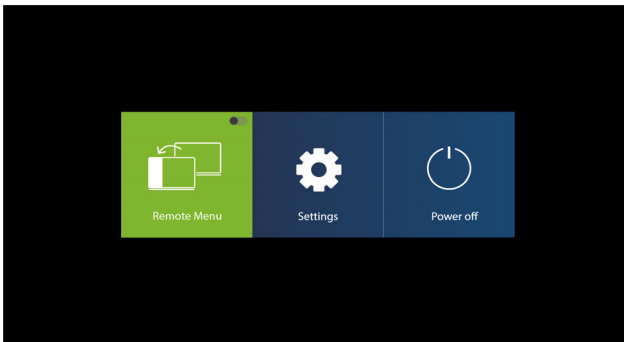
4. Navigate to **General > Display Mode** and then select a view mode. The view mode is immediately applied to the connected displays.


Moderator Mode (Remote Display Control)

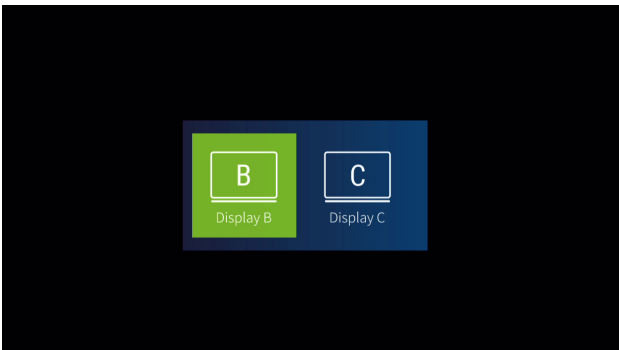
When the OSD of a display is too far to be seen clearly, or when host control of a remote display is required, you can enable remote control of the target display using a display that is located near you.


To enable remote control:

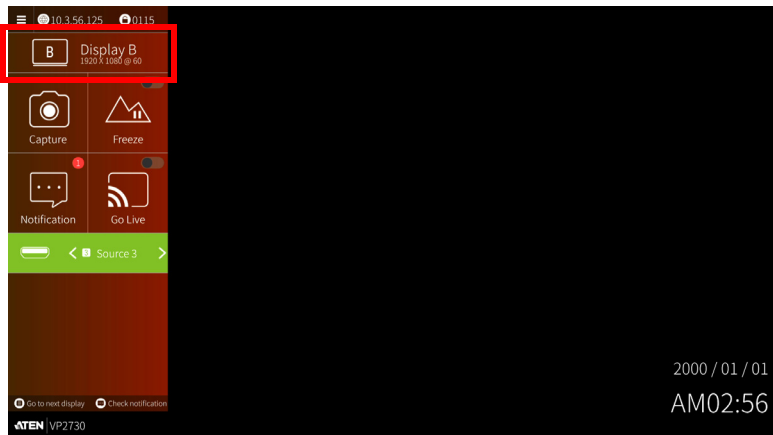
1. Press the **Menu**  button/pushbutton to launch the OSD on a display that is located near the operator.
2. In the OSD, navigate to  and then press the **Enter**  button/pushbutton. This screen appears.



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.

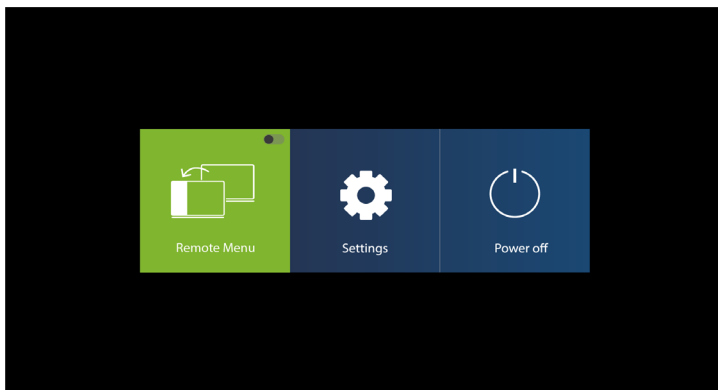
Locking the Front Panel


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.

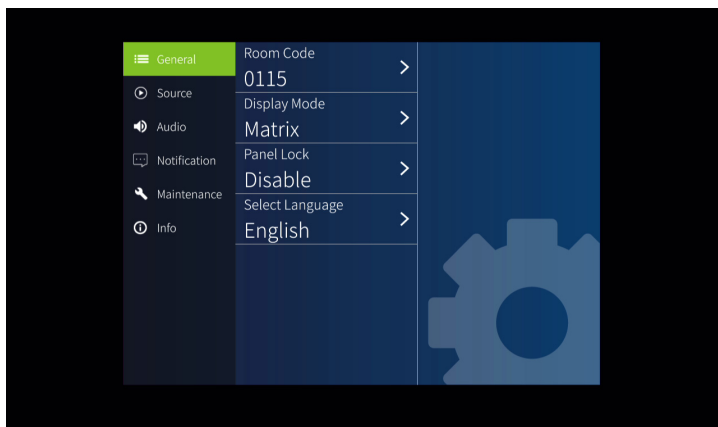
System Settings

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 . This screen appears.



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



4. Configure the settings as required.

System Setting			Description
General	Room Code	<ul style="list-style-type: none"> ◆ 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	<ul style="list-style-type: none"> ◆ Matrix ◆ Mirror 	For details, see <i>Changing the Display Mode</i> , page 25.
	Panel Lock	<ul style="list-style-type: none"> ◆ 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	<ul style="list-style-type: none"> ◆ 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	<ul style="list-style-type: none"> ◆ HDMI ◆ VGA ◆ Auto 	
	EDID Mode	<ul style="list-style-type: none"> ◆ ATEN Default ◆ Display A 	<ul style="list-style-type: none"> ◆ 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	<ul style="list-style-type: none"> ◆ Increase (+) ◆ Decrease (-) ◆ Mute 	Sets the volume of the speaker connected to the VP2730.
	Mic Volume	<ul style="list-style-type: none"> ◆ Increase (+) ◆ Decrease (-) ◆ Mute 	Sets the volume of the microphone connected to the VP2730 by adjusting the output level.
	Mic Gain	<ul style="list-style-type: none"> ◆ Increase (+) ◆ Decrease (-) 	Sets the volume of the microphone connected to the VP2730 by adjusting the input level.
	Streaming Volume	<ul style="list-style-type: none"> ◆ Increase (+) ◆ Decrease (-) ◆ Mute 	Sets the volume of the streamed-in source.
	Line-in Volume	<ul style="list-style-type: none"> ◆ Increase (+) ◆ Decrease (-) ◆ Mute 	Sets the volume of the source that is plugged to the Source 2 audio jack on the VP2730.
	Media Volume	<ul style="list-style-type: none"> ◆ Increase (+) ◆ Decrease (-) ◆ Mute 	Sets the volume of connected sources.
Notifications	Display Time	<ul style="list-style-type: none"> ◆ 3s ◆ 5s ◆ 10s 	Sets the duration for which a notification message pops up in the OSD.
	Web General	<ul style="list-style-type: none"> ◆ Disable ◆ Enable 	Displays notifications on user actions performed via the web interface.
	System General	<ul style="list-style-type: none"> ◆ 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.

This page is intentionally left blank.

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

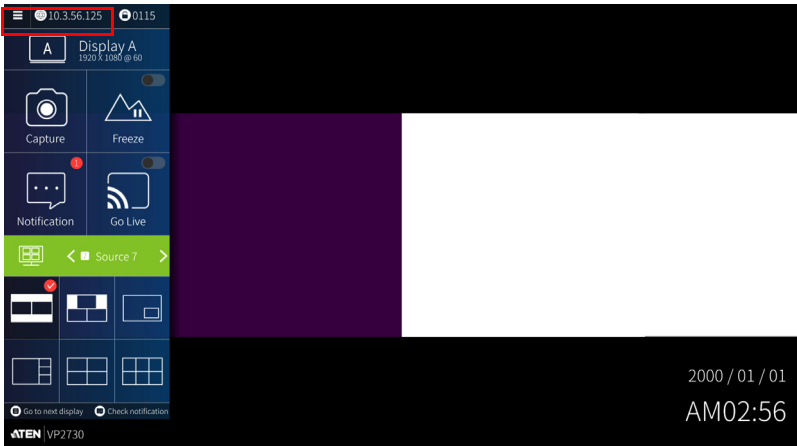
The VP2730's IP Address

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.



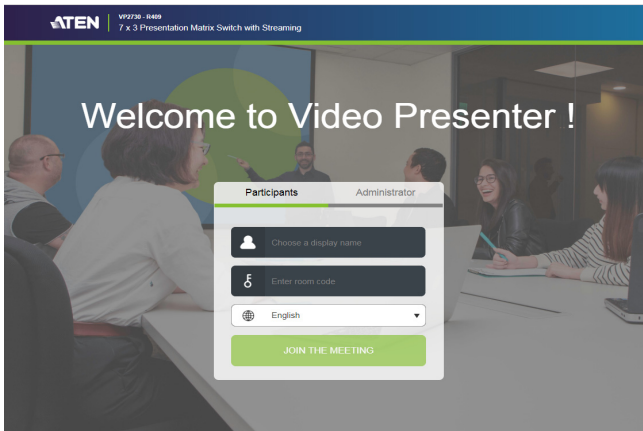
The Participant Account

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

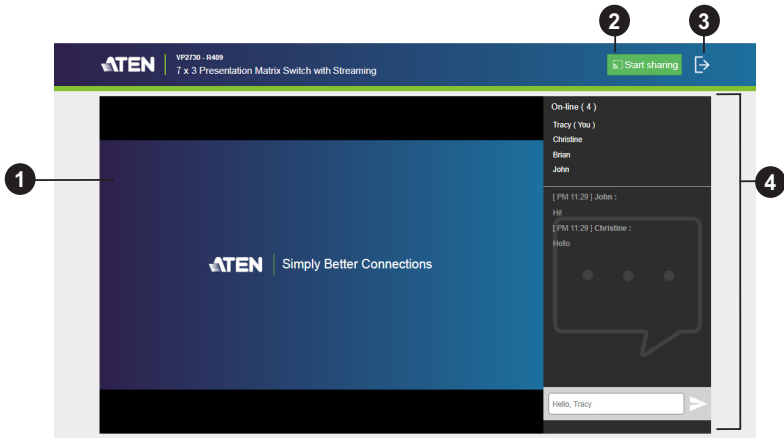
1. In a web browser, type the web link (IP address) of the VP2730. This screen appears.



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 <i>Sharing a Screen or an Application Window</i> , page 39.
3	Log Out	Click to log out the VP2730.
4	Chat panel	Use this panel to instantly message and interact with other meeting participants.

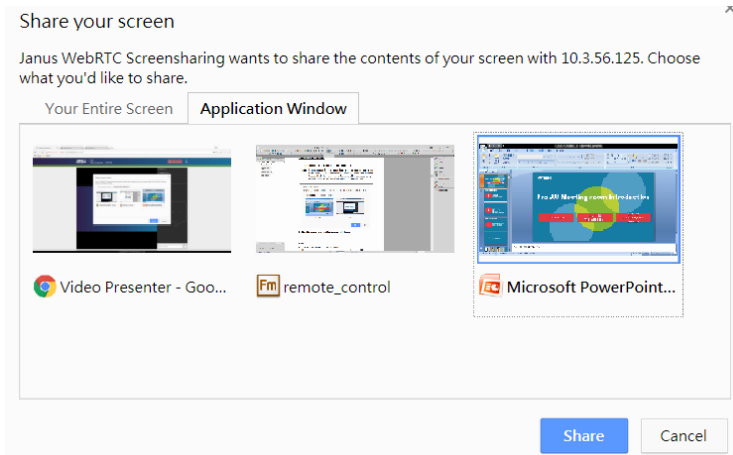
Tip: Click the ATEN logo at the top-left corner to visit ATEN's official website.

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.

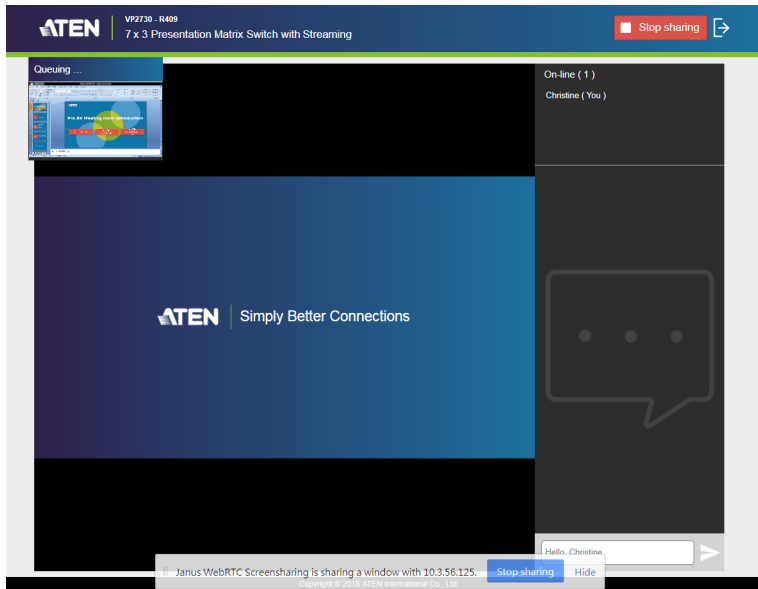


Note:

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.



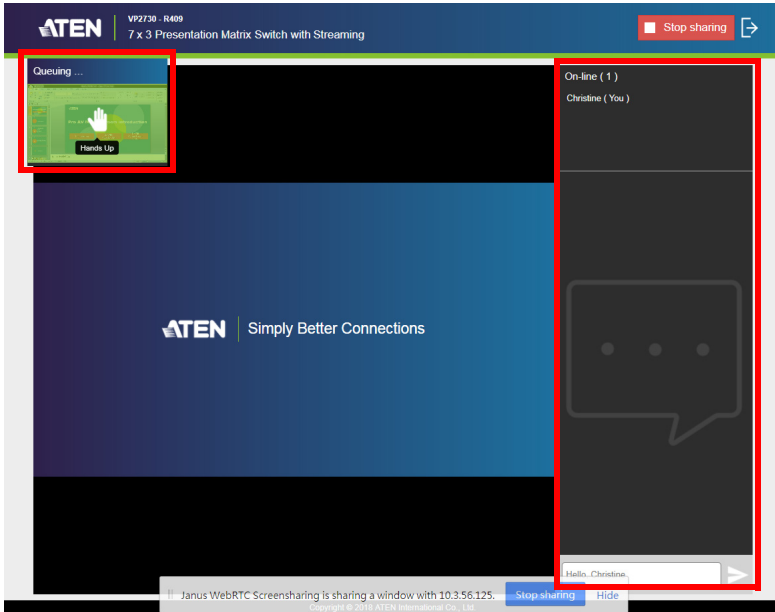
Note:

- ♦ 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.



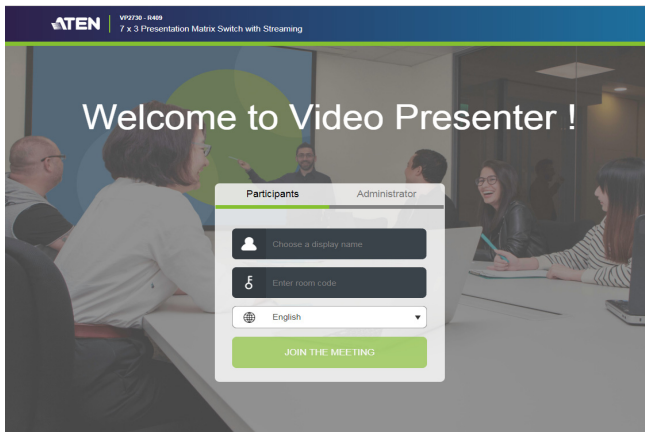
The Administrator Account

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.



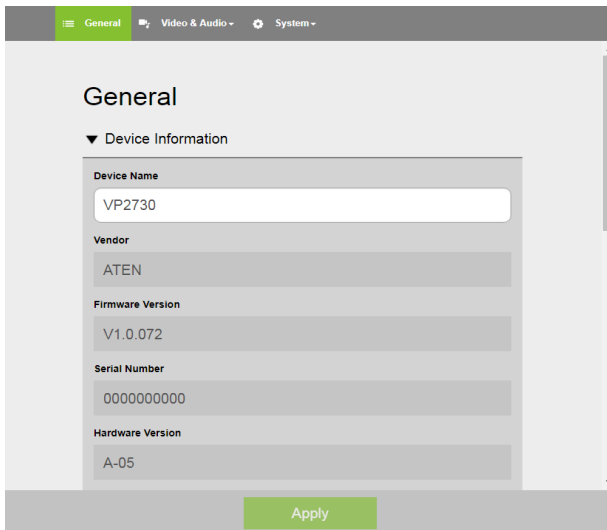
- Click the **Administrator** tab. This screen appears.



- 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.

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

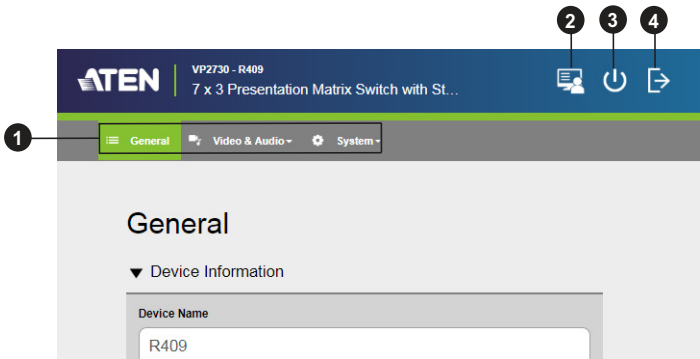





The Administrator Screen

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.

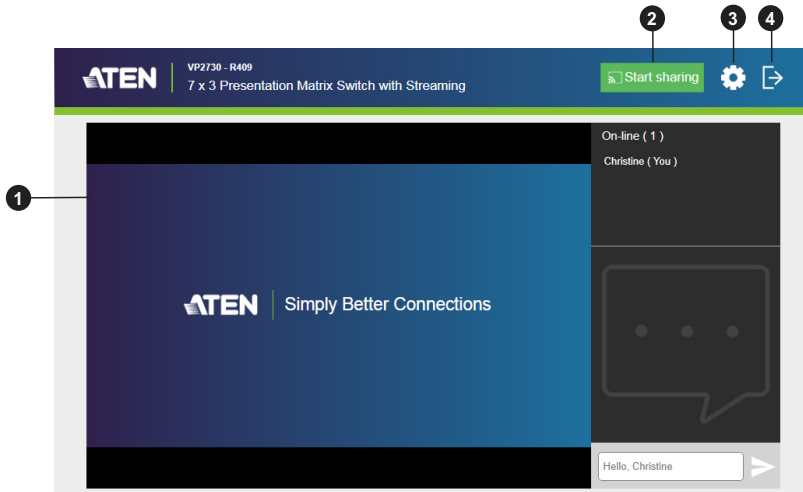


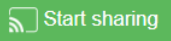


No.	Control	Description
1	Settings Tabs	Use these tabs to access system settings. For details, see <i>System Configuration</i> , page 46.
2	Go to Presentations 	Click this button go to the presentation view to join online meetings.
3	Power Off 	Click this button to power off the VP2730.
4	Log Out 	Click 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		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 <i>Sharing a Screen or an Application Window</i> , page 39.
3	Go to Configuration 	Click this button to go to the Configuration View. For details about the Configuration View, see <i>Configuration View</i> , page 44.
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.

General

▼ Device Information

Device Name

Room 307

Vendor

ATEN

Firmware Version

V1.0.072

Serial Number

0000000000

Hardware Version

A-03

Build Version

18031695

▼ Date / Time


Device Time

2018-03-20 06:10:15

Time Zone

(GMT) Monrovia, Reykjavik ▼

☒ NTP Server ☐ Manual Setting

2018-03-20 06:10:43 

Sync With PC

▼ Change Password

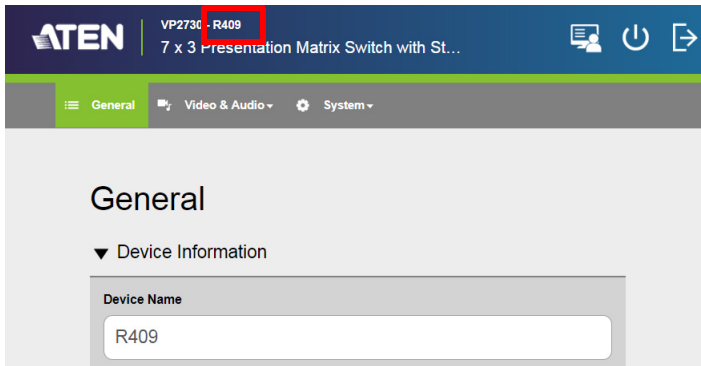
User name

Password

Confirm Password


◆ Device Information

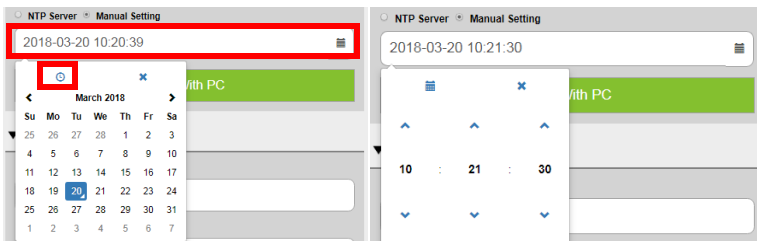
- ◆ Indicates device information including the vendor, firmware version, serial number, hardware version, and build version of the VP2730.
- ◆ Device Name: Type a name for the VP2730. This name appears on the top of the VP2730's web interface.



◆ 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.



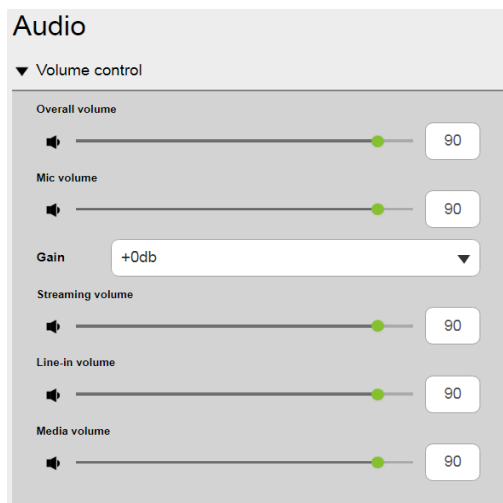
- ◆ Sync with PC: Click this button to synchronize the VP2730's date and time with the PC with which the web interface is opened.

- ◆ **Change Password**

To change the login credential, type the new username and password, confirm the new password, and then click **Apply**.

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**.

Source

▼ Name

Source 1
Source 1

Source 2
Source 2

Source 3
Source 3

Source 4
Source 4

Source 5
Source 5

Source 6
Source 6

Source 7
Source 7

▼ I/O Selection

Source 1
HDMI

Source 2
HDMI

▼ EDID Mode

Mode
ATEN default

- ◆ **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.

Display Settings

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

The screenshot shows a web interface for display settings. It is organized into sections, each with a dropdown arrow on the left:

- Basic**: Contains a 'Mode' dropdown menu currently set to 'Matrix mode'.
- Display A**: Contains fields for 'Name' (Display A), 'Ratio' (Scale to whole), 'Resolution' (1920 x 1080 @ 60), and 'Auto Switching' (Disable). A note below states: '* Display A will auto switching to the new connected source.'
- Display B**: Contains fields for 'Name' (Display B) and 'Ratio' (Scale to whole).
- Display C**: Contains fields for 'Name' (Display C) and 'Ratio' (Scale to whole).

◆ 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.
 - ♦ **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**.

The screenshot shows the 'Network' configuration page. At the top, there is a section titled 'IP setting' with a dropdown arrow. Below this, there are several fields for network configuration:

- Mode:** Two radio buttons are present: 'DHCP' (which is selected) and 'Manual'.
- IP:** A text input field containing the value '10.3.56.125'.
- Mask:** A text input field containing the value '255.255.254.0'.
- Gateway:** A text input field containing the value '10.3.57.254'.
- DNS:** A text input field containing the value '8.8.8.8'.

- ♦ **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.

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
	Display a list of available commands.
deviceinfo	Display the host name, firmware version, device serial number, and the hardware version for the VP2730.
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

Command Syntax	Description
set edid	Display the current EDID mode.
set edid {default o01}	<p>Configure the VP2730's EDID mode.</p> <ul style="list-style-type: none"> ♦ 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. <p>For example, type: set edid default</p>
engrxmode	Display the current interface settings for input port 1 and 2 (combo ports).
engrxmode i01 {auto hdm dp} engrxmode i02 {auto hdm vga}	<p>Configure the interface for the specified combo port (port 1 or port 2).</p> <ul style="list-style-type: none"> ♦ 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. ♦ hdm dp: Sets the specified combo port to select an HDMI or DisplayPort source. ♦ hdm vga: Sets the specified combo port to select an HDMI or VGA source.
freeze o<output_port> {on off}	<p>Enable/disable the freeze of the specified output on the display. Note: This function is not supported when moderator mode is enabled.</p> <p>For example, type: freeze o03 on</p>
golive o<output_port> {on off}	<p>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.</p> <p>For example, type: golive o<output_port> on</p>
power on	<p>Power on the VP2730.</p> <p>Note: The command will be ignored if it is not inputted within 0.3 second. Please copy and paste the command so that the command can be typed in quickly.</p>
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.

Command Syntax	Description
roomcode {on off refresh}	<p>Enable/disable/refresh room code.</p> <p>For example, type:</p> <p>roomcode on</p>
scalemode	<p>Show the display ratios for the connected displays.</p>
scalemode o<output_port> {full fit cut}	<p>Configure the display ratio of the source connected to the specified port.</p> <ul style="list-style-type: none"> ◆ 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. <p>For example, type:</p> <p>scalemode o<output_port> full fit cut</p>
scaling	<p>Display the current scale setting.</p>
scaling o<output_port> hor <horizontal_resolution> ver <vertical_resolution> freq <display_frequency>	<p>Configure the output resolution and refresh rate of the source connected to the specified port.</p> <p>For example, type:</p> <p>scaling o01 hor 1024 ver 768 freq 60</p>
sw o<output_port> i<input_port>	<p>Switch the specified display to the specified source.</p> <p>Input port related parameters:</p> <ul style="list-style-type: none"> ◆ i<input_port>: i<input_port>: Specifies the input port in two digits. ◆ +: Indicates the next input port. ◆ -: Indicates the previous input port. <p>Output port related parameters:</p> <ul style="list-style-type: none"> ◆ o<output_port>: Specifies the output port in two digits. ◆ o*: Indicates all output ports. <p>For example, type:</p> <p>sw o01 i02</p> <p>sw o01 +</p> <p>sw o* i02</p>
swmode {auto off}	<p>Enable/disable auto switching.</p>

Command Syntax	Description
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.

This Page Intentionally Left Blank

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	
Input	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
Output	Optical Audio: 1 x Toslink (Black) Coaxial Audio: 1 x RCA Female (Orange) Stereo Audio: 2 x RCA Female (White / Red)
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)

Function	VP2730
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	
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 defective, 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>