Simply Better Connections

ATEN VanCryst™

VP2120

Seamless Presentation Switch with Quad View Multistreaming User Manual

Compliance Statements

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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

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

FCC Caution

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

Warning

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

Achtung

Der Gebrauch dieses Geräts in Wohnumgebung kann Funkstörungen verursachen.



KCC Statement

유선 제품용 / A 급 기기 (업무용 방송 통신 기기)
이 기기는 업무용 (A 급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며 , 가정 외의 지역에서 사용하는 것을 목적으로 합니다 .

HDMI Trademark Statement

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



RoHS

This product is RoHS compliant.

User Information

Online Registration

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

International	http://eservice.aten.com

Telephone Support

For telephone support, call this number:

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

User Notice

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

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

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

Product Information

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

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

Package Contents

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

- 1 VP2120 Seamless Presentation Switch with Quad View Multistreaming
- 1 IR receiver
- 1 IR remote control
- 1 power adapter
- 1 user instructions

Table of Contents

Compliance Statements ii
User Information iv
Online Registration iv
Telephone Support iv
User Notice iv
Product Information v
Package Contents vi
Table of Contents vii
About this Manual xi
Conventions xii

1. Introduction

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

2. Hardware Setup

Components 5
VP2120 Front View 5
VP2120 Rear View 6
IR Remote Control 7
LED Display 8
Mounting 9
Rack Mount 9
Under Desk Mount 10
Installation 11

3. Local Operation

Overview 13
Operation Considerations 13
Displaying the Room Info 14
The OSD 15
Switching the Sources 17
Display Settings and Behavior 19
Display Mode 19
Multiview Display for Streamed-in Sources 20
Streaming Out a Display 22
Overview 22
Using the IR Remote Control 22

Using the OSD 23
Getting Screen Captures 24
Whiteboard 25
Using the IR Remote Control 25
Using the OSD 26
Viewing Event Logs 27
Locking the Front Panel 28
System Settings 28

4. Remote Operation

Overview 33
The VP2120's IP Address 33
Account Types and Privileges 34
Supported Web Browsers 34
The Administrator Account 35
Logging in as Administrator 35
The Administrator Screen 37
Configuration View 37
Presentation View 38
Sharing a Screen or an Application Window 40
Whiteboard 42
How to Insert Text 43
Control Panel 44
Video 45
Audio 47
Settings 48
System Configuration 50
General Settings 50
Audio Settings 53
Display Settings 54
Maintenance 56
Network Settings 58
The Participant Account 59
Joining a Meeting as Participant via Web Interface 59
The Participant Screen 60

5. Telnet Commands

Overview 63
Connecting to the VP2120 via Telnet 63
Command Syntax 64
Command List 65
Port Numbers 65
capturescreen 66
displaymode 67
edid 67
golive 68

hdcpswitch 68
mute 69
power 69
read 70
reboot 70
roominfo 70
scalemode 71
screenshare 72
sw 72
swmode 73
volume 74
whiteboard 74

6. Video Presentation Control App

Overview 75
Requirements 75
Installing the App 75
iOS Version 76
Main Page 76
Info 77
Joining a Meeting 78
Joining a Meeting Automatically 78
Joining a Meeting via Manually Connect 80
Joining a Meeting via QR Code 81
Meeting Screen 82
Streaming Out Your Content 84
Chat Room 86
Whiteboard 87
How To Insert Text 88
Control Panel for iOS Smartphone 89
Go Live Using iOS Smartphone 91
Layout 91
Whiteboard 92
Room Info 92
Display A 93
Display B 94
More Settings on iOS Smartphone 95
General 96
Advanced 97
Audio 98
OSD Notification 99
Information 100
Control Panel for iOS Tablet 101
Switching a Source for a Display 102
Display Features and Settings 103
Screen Capturing 104

More Settings on iOS Tablet 105
Android Version. 106
Main Page 106
Info. 107
Joining a Meeting 108
Joining a Meeting Automatically 108
Joining a Meeting via Manually Connect 110
Joining a Meeting via QR Code 111
Meeting Screen 112
Streaming Out Your Content 114
Chat Room 116
Whiteboard 117
How To Insert Text 118
Control Panel for Android Smartphone 119
Go Live Using Android Smartphone 121
Layout 121
Whiteboard 122
Room Info 122
Display A 123
Display B 124
More Settings on Android Smartphone 125
General 126
Advanced. 127
Audio 128
OSD Notification 129
Information 130
Control Panel for Android Tablet 131
Switching a Source for a Display 132
Display Features and Settings 133
Screen Capturing. 134
More Settings on Android Tablet 135

Appendix

Safety Instructions. 137
General 137
Rack Mounting 139
Technical Support 140
International 140
North America 140
Specifications 141
Limited Warranty 143

About this Manual

This user manual is provided to help you get the most from the VP2120 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 VP2120. Its purpose, features, benefits, and installation considerations are described.

Chapter 2, *Hardware Setup* introduces the hardware components of the VP2120 and provides information on how to quickly and safely set up the unit.

Chapter 3, *Local Operation* provides information on operation of the VP2120 using the panel pushbuttons and IR remote control.

Chapter 4, *Remote Operation* provides details on remote tasks such as joining online meetings and system configuration via the web interface.

Chapter 5, *Telnet Commands* provides details on the functions and Telnet commands that you can use to control the VP2120 using a serial controller.

Chapter 6, *Video Presentation Control App* provides details on remotely configuring system settings via the ATEN Video Presentation Control App.

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.
- The product may be updated with features and functions added, improved or removed since the release of this manual. For an up-to-date user manual, visit http://www.aten.com/global/en/

Conventions

This manual uses the following conventions:

`Monospaced`	Indicates text that you should key in.
[ ]	Indicates keys you should press. For example, [Enter] means to press the **Enter** key. If keys need to be chorded, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt].
1.	Numbered lists represent procedures with sequential steps.
♦	Bullet lists provide information, but do not involve sequential steps.
>	Indicates selecting the option (on a menu or dialog box, for example), that comes next. For example, Start > Run means to open the *Start* menu, and then select *Run*.
	Indicates critical information.

Chapter 1
Introduction

Overview

The VP2120 is a Seamless Presentation Switch that integrates video matrix switch, quad-view multistreaming, audio DSP, and idea-sharing platform into one compact device. With the seamless switching between streamed-in sources, the online idea exchanging features, and the network capability that enables the wireless connection for mobile devices, the VP2120 and ATEN Video Presentation Control App empower wireless BYOD collaboration anytime when a short catch-up, quick meeting, instant brainstorm, stand-up, or ad hoc call is needed.

Designed for flexible and spontaneous team collaboration, the VP2120 along with ATEN Video Presentation Control App facilitates BYOD meetings with the straightforward user interface that give users quick and easy access to any on-the-fly meetings. Joining an online meeting is easy and secure. Participants can just bring their own devices and use the private QR code or room code, or auto scan the local network to get available room list to log in, even when they're not physically in the same area. The VP2120 allows bi-directional content streaming of up to 4 participants simultaneously. With the built-in multi-view mode, the streamed sources can be displayed on the same screen, which the layout dynamically adjusts to suit the number of sources available. Participants can also focus a streaming input to display full screen or view the go-live screen together for synchronization. As long as the participants are in the same network environment, the built-in audio DSP enables the remote one to broadcast microphone audio signal to other meeting members, as well as mixes Mic input and HDMI input for HDMI or audio output.

The VP2120 along with ATEN Video Presentation Control App also features more advanced online idea-sharing functions: Whiteboard allows real-time annotation for idea exchange and synchronization; Chat Room feature enhances interaction between participants; File Sharing enables further data sharing and follow-up; while the screen capture function records the meeting process for future tracking. This Collaborative presentation solution facilitates any forms of small-group discussion that gives an immediate boost to team work.

Features

Brilliant AV Routing

- One HDMI input and dual HDMI outputs plus 4 bi-directional streaming with matrix display support
- Seamless Switching between streamed-in sources for fast idea exchange
- Scaler - features a video scaling function to convert input resolutions to the optimum display resolutions
- Audio DSP - mixes Mic input and HDMI input for HDMI or audio output
- HDMI audio de-embedding support

Launch a Quick Meeting Anytime

- Launches wireless BYOD collaboration via Web GUI and Mobile App in a swift and agile way
- Offers quick and easy access to log in a quick meeting via multiple methods:
  - Start auto scan and select a room number from the list
  - Scan the QR code shown on the VP2120 OSD
  - Load a pre-saved QR code
  - Input the IP address and Room code shown on the OSD

Seamless BYOD Collaboration

- Multiple control method via front-panel pushbuttons, web GUI, OSD, IR remote, and mobile App
- Streaming in – view up to 4 streamed-in contents simultaneously for real-time synchronization
- Streaming out – allows log-in participants to view the Go-live contents on personal devices
- Multi-view with Auto layout – dynamically adjusts the layout to suit the number of streamed-in sources available
- Whiteboard allows real-time annotation for idea exchange and synchronization
- Chat room feature enhances text interaction and information sharing
- Video capture records the meeting process for future tracking
- File sharing enables further data sharing and follow-up

High-definition Video with Optimum Output

- Superior video quality up to 1920 x 1080 with single streaming input and 854 x 480 with four streaming inputs
- EDID Expert™ – automatically selects the optimum EDID settings for smooth power-up, high-quality display, and the best video resolution across connected devices
- HDMI (1080p); CEC (Consumer Electronics Control); HDCP 1.4 compliant

Planning the Installation

Required Equipment

Prepare the following equipment before installing the VP2120 unit.

- Source devices
  - 1 source device equipped with an HDMI port

  Note: The VP2120 supports Mac or PCs that are Windows, Linux, or Unix-based.

  - 1 HDMI cable for connecting the source devices to the VP2120
- Display devices
  - 1 or 2 display devices equipped with an HDMI connector (e.g. a monitor or a projector)
  - 1 or 2 cables for connecting the display devices to the VP2120

For information on the number of equipped ports for each connection interface, see *Specifications*, page 141.

Optional Equipment and Accessories

Equipment

Prepare the following equipment as required.

- 1 Microphone
- 1 Speaker
- 1 RJ-45 cable to connect the VP2120 to a network switch to allow for streaming over IP and access to the VP2120's web interface
- 1 to 4 wireless device to connect with the VP2120 for presentation viewing and sharing.

Accessories

Optionally purchase the following for your VP2120.

- Rack Mount Kit
- Under Desk Mount Kit

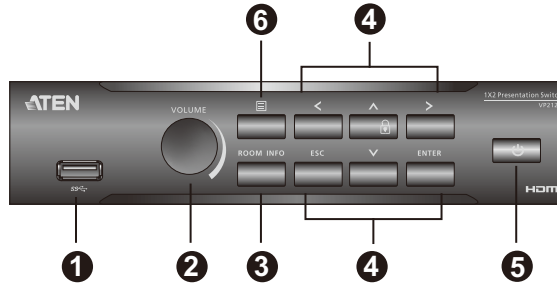
For more information about mounting, see *Mounting*, page 9.

Chapter 2
Hardware Setup

1. Please review the safety information regarding the placement of this device in *Safety Instructions*, page 137.
2. Do not power on the VP2120 until all the necessary hardware is connected.

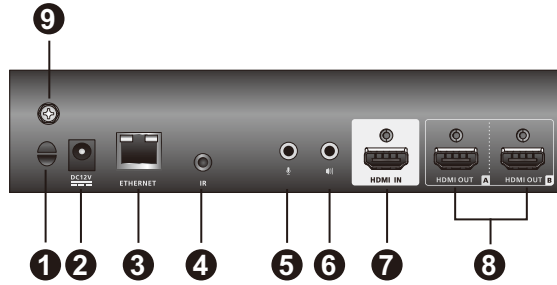
Components

VP2120 Front View



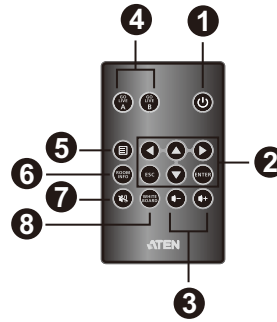
No.	Component	Description
1	USB Type-A port (3.0)	Receives a USB 3.0 device such as an external storage.
2	volume control	Turn to adjust the volume or press the knob to mute.
3	room info pushbutton	Press to display the room information such as room name, IP address of the web interface, room code, and QR code to access the meeting.
4	navigation pushbuttons	Press to navigate and configure the system settings via the OSD.
5	power pushbutton	Press to turn on the VP2120 unit.
6	menu pushbutton	Press to display the OSD on display A. **Note:** OSD can only be displayed on display A.

VP2120 Rear View



No.	Component	Description
1	cable tie slot	Receives a cable tie to hold the power cable in place.
2	power jack	Receives a power adapter to supply power to the VP2120.
3	Ethernet port	Connects to a network switch via an RJ-45 cable to allow streaming of audio and video data over IP.
4	IR receiver port	Connects to an IR receiver to receive IR signals from the IR remote control.
5	mic in	Connects to a microphone.
6	stereo audio out	Connects to a speaker.
7	HDMI in port	Connects to an HDMI source device via HDMI cable.
8	HDMI out ports	Connect to display devices equipped with an HDMI port.
9	grounding terminal	Grounds the VP2120 to prevent damages from power surge or static electricity.

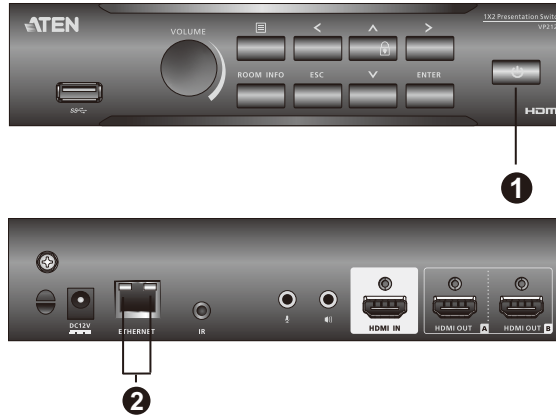
IR Remote Control



No.	Buttons	Description
1	on / off	Turns the VP2120 on or off.
2	navigation	Navigates in the OSD, selects or unselects options, or leaves a current screen in the OSD.
3	volume control	Adjusts the volume up and down.
4	go live	Select to stream out display between display A or display B via the Ethernet.
5	menu	Displays the OSD on display A. **Note:** The OSD can only be displayed on display A.
6	room info	Displays room information.
7	mute	Mutes all displays and speakers.
8	whiteboard	Displays the whiteboard on display A. **Note:** Whiteboard can only be displayed on display A.

LED Display

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



No.	LED	Indication	Description
1	power	Lights green	The unit is powered and switched **ON**.
		Lights orange	The unit is connected to power, but is currently **OFF**.
2	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.

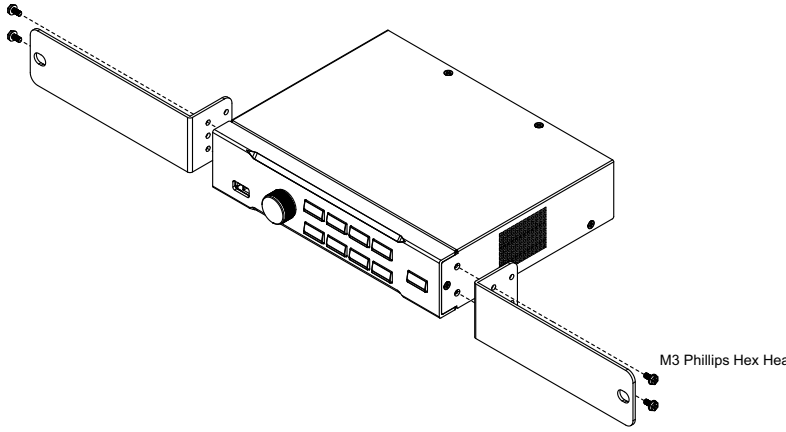
Mounting

Rack Mount

The VP2120 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 4 M3 Phillips hex head screws supplied with the mounting kit to secure the rack mounting brackets onto the unit.



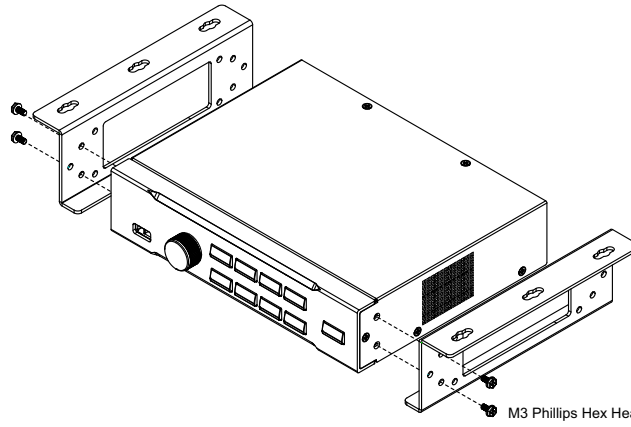
2. Position the unit in the front of the rack and align the holes in the mounting brackets with the holes in the rack.
3. Screw the mounting brackets to the rack.

Under Desk Mount

You can also mount the VP2120 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.

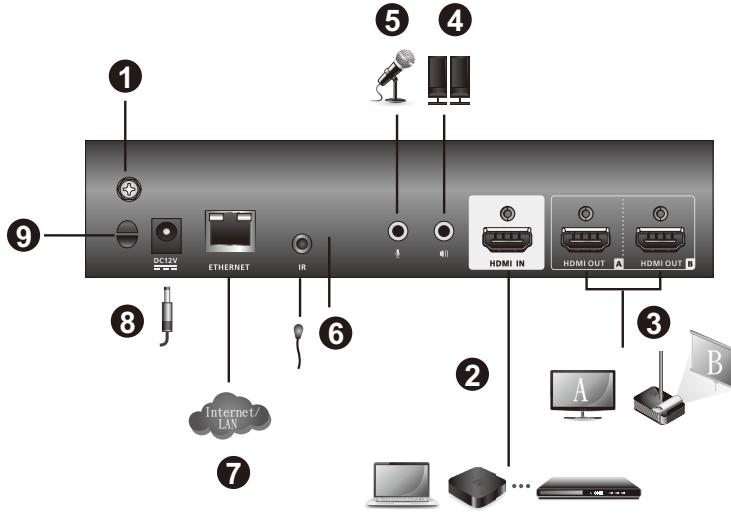
1. Use 4 M3 Phillips hex head screws supplied with the mounting kit to secure the mounting brackets onto the unit.



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 VP2120.



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. Use an HDMI cable to connect an HDMI source to the HDMI in port.
3. Use an HDMI cable to connect the unit to at least one HDMI-enabled display.

   Note: Because the OSD only shows on display A, make sure to connect the display to HDMI Out Port A if you are only using one display.

4. (Optional) Connect an active speaker to the stereo audio out port.
5. (Optional) Connect a microphone to the mic in port.

6. (Optional) To control the VP2120 using an IR remote control, connect the supplied IR receiver to the IR receiver port.
7. (Optional) To allow access to the web interface, use an Ethernet cable to connect the Ethernet port to a network switch.
8. Plug the power adapter to the power jack.
9. (Optional) Use the cable tie slot and a cable tie to hold the power cable in place.
10. Press the power pushbutton to power on the VP2120.
11. Power on all the connected devices.

Chapter 3
Local Operation

Overview

This chapter provides detailed information on the features of the VP2120'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 through the OSD:

- Switch display sources
- Change the display behavior, resolution, or aspect ratio settings
- Stream out (go live) the displayed content (display A or B) via network connection
- Configure the VP2120
- Make screen captures
- View logs of user actions in the OSD and the web interface
- Use whiteboard to communicate with meeting participants in real-time

Operation Considerations

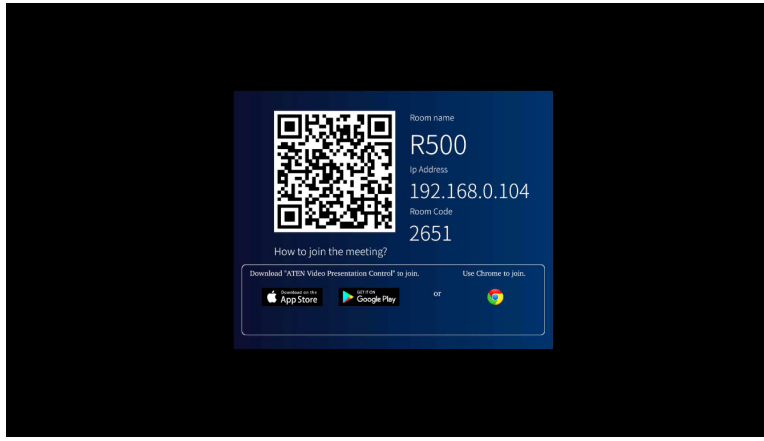
- The IR remote control and the VP2120's front panel offer the same operation capability. Use either method as required.

  Note: In this manual, "buttons" is used to refer to the buttons on the IR remote control, and "pushbuttons" is used to refer to the front-panel pushbuttons.

- 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 VP2120.
- When using the ATEN Video Presentation Control App, make sure your mobile device is connected to the same network environment where the VP2120 is installed.

Displaying the Room Info

To display meeting information such as the room code, IP address for the web interface, and QR code to join the meeting, use the **Room Info** pushbutton/button.



The OSD

- To launch the OSD, use the **Menu** pushbutton/button. The OSD menu appears on the display A.
- To navigate in the OSD, use the **Navigation** pushbuttons/buttons.
- The following controls are available in the OSD.



No.	Name/Information	Description
1	Connection Information	Displays the IP address of the VP2120's web interface and the room code. Access the web interface to join a remote meeting or remotely configure the VP2120's settings. For details, see Chapter 4, **Remote Operation**.
2	Options	Navigate to this icon and press the **Enter** pushbutton/button to view or configure VP2120's settings. For details on system settings, see *System Settings*, page 28.
3	Screen capture	Navigate to this field and then press the **Enter** pushbutton/button to capture the screen. The captured image is saved to the storage device connected to the VP2120's USB ports. Make sure you have a storage device inserted to the VP2120 for this function to be available. For more information, see *Getting Screen Captures*, page 24.

No.	Name/Information	Description
4	Notifications	Navigate to this field and then press the **Enter** pushbutton/button 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. For more information, see *Viewing Event Logs*, page 27.
5	Display A	Press the **Navigation** pushbutton/buttons to switch display source between HDMI source and Streaming source. For more details on the display source, see *Switching the Sources*, page 17.
6	Display B	Press the **Navigation** pushbuttons/buttons to switch display source between HDMI source and Streaming source. For more details on the display source, see *Switching the Sources*, page 17.
7	Streaming Source	Streamed-in devices are shown here. You can enlarge a streamed-in source of your choice when there are multiple streamed-in sources. For more information, see , page 61.
8	Overall Volume	Sets the volume of the speaker connected to the VP2120.
9	Mic Volume	Sets the volume of the microphone connected to the VP2120 by adjusting the output level.
10	Go Live	Navigate to this icon and press the **Enter** pushbutton/ button to stream out the display. This button grays out if the VP2120 is not connected to network. For more information, see *Streaming Out a Display*, page 22.
11	Whiteboard	Navigate to this field and then press the **Enter** pushbutton/button to bring up the whiteboard on display A. For more information, see *Whiteboard*, page 25.
12	Date and time	Indicates the system date and time.

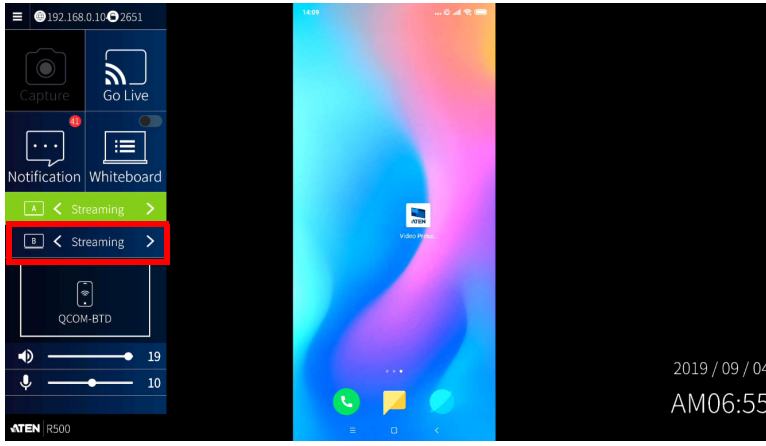
Switching the Sources

For each display, you can switch between two channels - the HDMI source and the streamed-in source. The two channels are compared in the table below.

OSD Source List	Description
HDMI source	HDMI source is the source connected to the VP2120's HDMI In Port.
Streaming source	Streaming source 1 ~ 4 are sources that streamed in over the Internet. This channel suports multiview, and streamed-in sources are laid out dynamically to fit in the screen depending on the number of sources available. For more information, see *Multiview Display for Streamed-in Sources*, page 20.

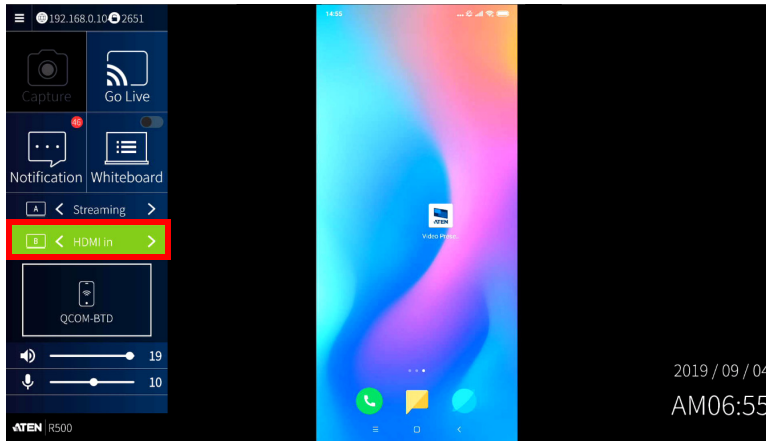
To switch the source for a display, follow the steps below.

1. Press the **Menu** pushbutton/button to open the OSD.
2. In the OSD, use the **Navigation** pushbuttons/buttons to locate your target display.



3. Use the left and right **Navigation** pushbuttons/buttons to select the source. In this example, Display B is switched from streamed-in sources to HDMI.

4. Now you have successfully switched the display source from streaming to HDMI for display B.

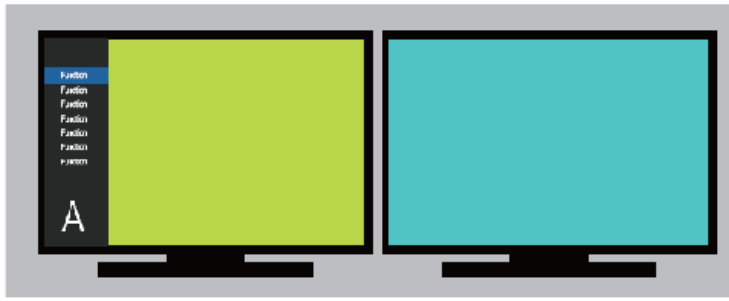


Display Settings and Behavior

Display Mode

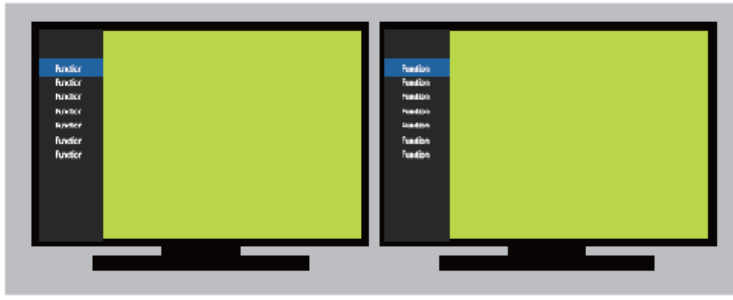
By default. the VP2120 can show different sources and keep their own sets of display settings (refer to page 30), including resolution, aspect ratio, and auto switch mode on the two displays:

Matrix Display



You can also have the connected displays automatically showing identical content using the Mirror Mode feature, which allows display B to automatically follow the source and display settings configured for display A:

Mirror Display



To enable Mirror Mode:

1. Use the Navigation pushbuttons/buttons and go to General > Mirror Mode > Enable.
2. Press the Enter pushbutton/button. Display B immediately switches to the source assigned for display A.

Multiview Display for Streamed-in Sources

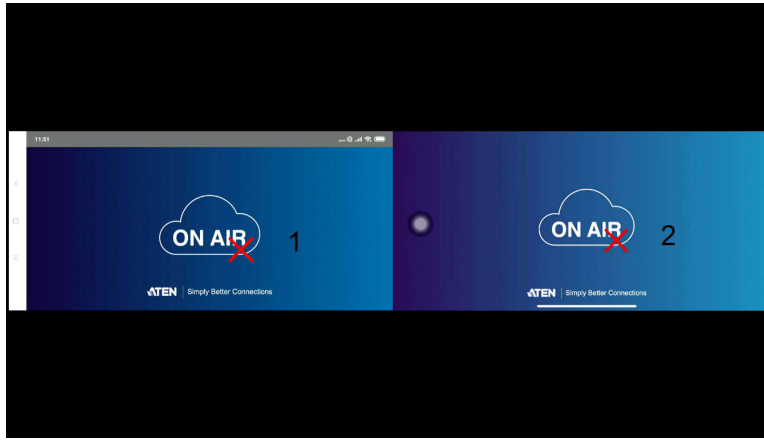
The VP2120 supports multiview display for streamed-in sources. This display mode is automatically enabled when a display is set to **Streaming**, and that 2, 3, or 4 video sources are shared to the Presentation Switch.

Note: In a multiview, shared sources display in predefined locations based on the order at which the source is shared. As sources are received by the Presentation Switch, they appear on the display from left to right, top to bottom.

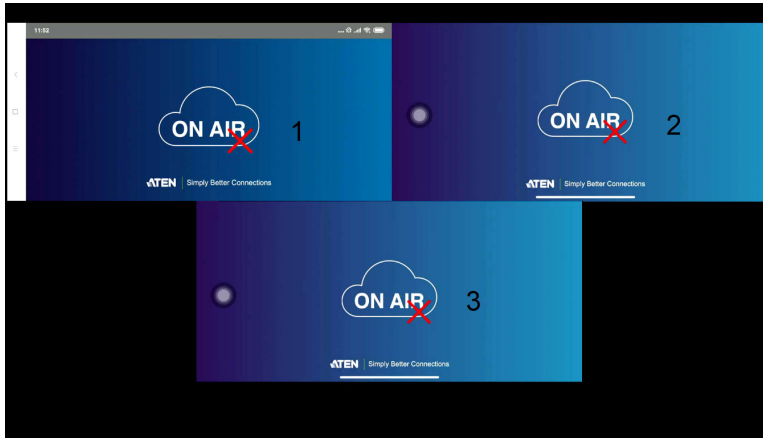
- One source



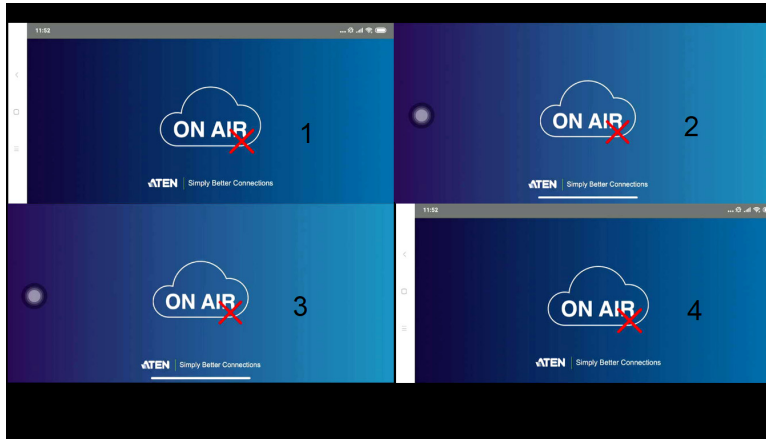
- Two sources



- Three sources



- Four sources



Streaming Out a Display

Overview

There are two ways to broadcast the content on one of the displays at a time to meeting participants. You can use the IR remote control or the OSD via the front-panel pushbuttons.

Note: Make sure that the VP2120 is connected to the network and reserve at least 3 MB of network bandwidth for smooth streaming.

Using the IR Remote Control

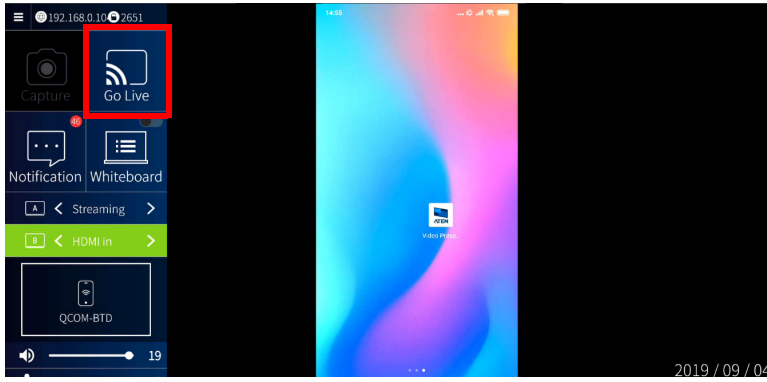
To start broadcasting, use the  buttons to select display A or display B to stream out.



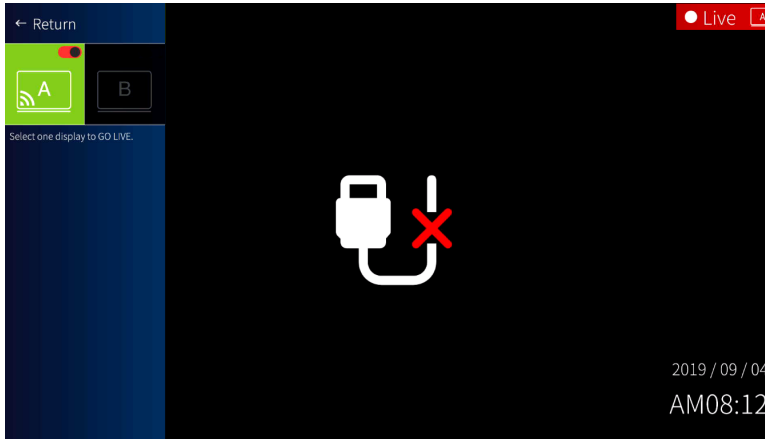
Using the OSD

To start broadcasting, follow the steps below.

1. Press the **Menu** pushbutton/button to open the OSD.
2. In the OSD, locate the **Go Live** icon using the **Navigation** pushbuttons/ buttons.



3. Press the **Enter** pushbutton/button to select a display to stream out and press the **Enter** again.
4. The display of your choice is now streamed out. A live icon appears on the top-right of your chosen display, reminding you which display is being streamed out.



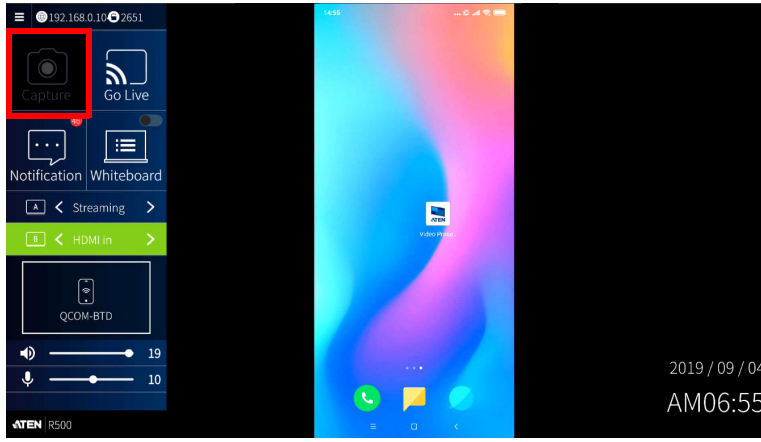
Getting Screen Captures

You can capture and save important screens during a meeting using the Capture function.

Note: The USB storage device must be in format FAT to be recognized by the VP2120.

To capture a screen, follow the steps below.

1. Insert a USB storage device to the VP2120 for this function to be available.
2. Press the **Menu** pushbutton/button to open the OSD.
3. In the OSD, locate the **Capture** icon using the **Navigation** pushbuttons/ buttons.
4. Press the **Enter** pushbutton/button. The screen is captured and saved to the storage device.



Whiteboard

The whiteboard allows you to draw, insert images, create texts, and share to all the participants and administrator. You can also save the whiteboard locally for future use. Fore more information, see , page 61.

Use the IR remote control or the front-panel pushbuttons to open the whiteboard.

Note: The whiteboard can only be displayed on display A. For more information on whiteboard, see , page 61.

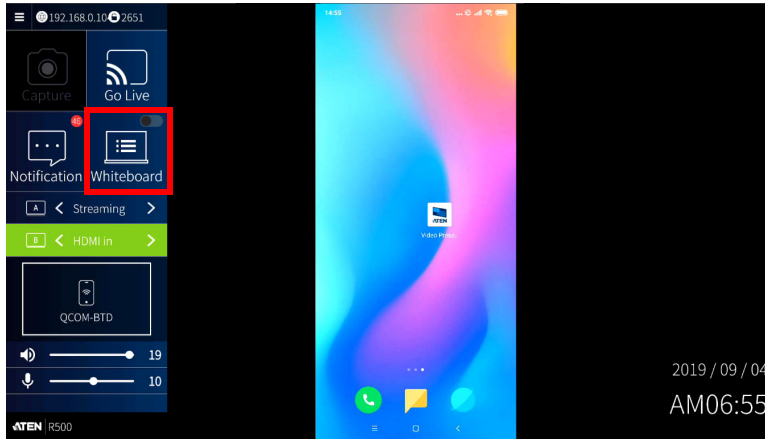


Using the IR Remote Control

To launch the whiteboard, use the **Whiteboard** button. The whiteboard opens on display A.

Using the OSD

1. Press the **Menu** pushbutton/button to open the OSD.
2. In the OSD, locate the **Whiteboard** icon using the **Navigation** pushbuttons/buttons.
3. Press the **Enter** pushbutton/button.

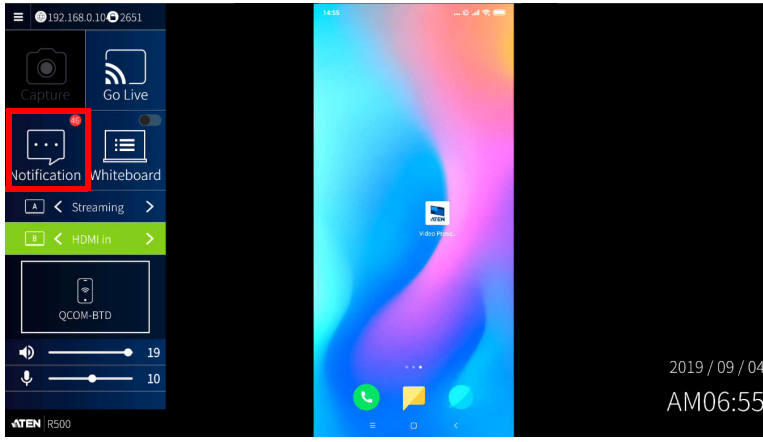


Viewing Event Logs

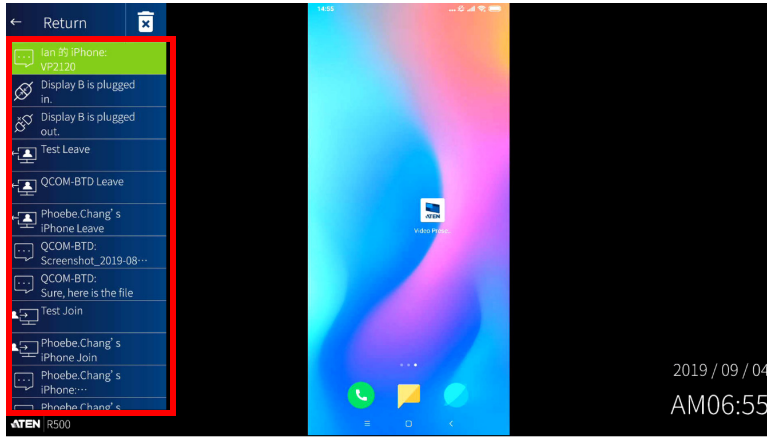
The VP2120 logs user actions performed via the OSD and the web interface, such as users joining a meeting, saving of a screen capture to a connected storage device, or a screen going live.

To view these events, follow the steps below.

1. Press the **Menu** pushbutton/button to open the OSD.
2. In the OSD, locate the **Notification** icon using the **Navigation** pushbuttons/buttons, and press the **Enter** pushbutton/button.



3. Eevent logs are displayed on the OSD, press icon to delete event logs.



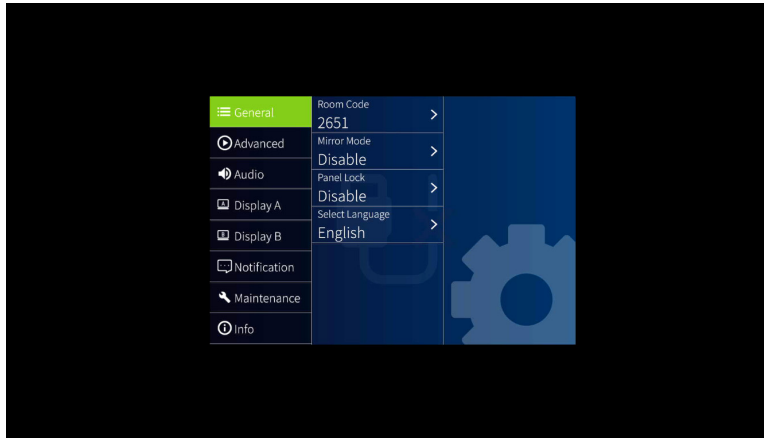
Locking the Front Panel

To lock the front-panel pushbuttons, press and hold the **Up** Navigation pushbutton for 5 seconds until the lock icon lights red. To unlock, press and hold the **Up** navigation pushbutton for 5 seconds, until the lock icon dims.

System Settings

To access system settings:

1. Press the **Menu** pushbutton/button to launch the OSD on display A.
2. In the OSD, navigate to and then Press the **Enter** pushbutton/button, this screen appears.



3. Configure the system settings as required. Refer to the following tables for details of each setting.

System Settings			Description
Note: Default settings are indicated in bold.			
General	Room Code	◆ Disable ◆ Refresh code	Enables and generates a random room code to be required for joining a meeting.
	Mirror Mode	◆ Enable ◆ **Disable**	Each connected display mirrors each other and does not take different settings. Click the check-box to enable, configuration on display A is automatically applied to the display B. For details, see *Display Mode*, page 19.
	Panel Lock	◆ **Disable** ◆ 5 sec later ◆ 30 sec later ◆ 5 min later	Automatically locks the front-panel pushbuttons if the OSD idles for the selected duration.
	Select Language		Sets the display language of the OSD.
Advanced	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.
	HDCP Mode	◆ None HDCP ◆ **HDCP**	Enables this function to prevent copying of the audio and video content as it travels across connections.

System Settings			Description
Note: Default settings are indicated in bold.			
Audio	Overall Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the speaker connected to the VP2120.
	Mic Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the microphone connected to the VP2120 by adjusting the output level.
	Streaming Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the streamed-in source.
	Media Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of connected sources.
Display A	Channel	◆ HDMI ◆ Streaming	Switches source between HDMI and Streaming for display A. For more information, see *Switching the Sources*, page 17.
	Resolution		Select a resolution and refresh rate setting for display A. This field is only available when the display is connected to the VP2120.
	Aspect Ratio	◆ **Scale to Whole** ◆ Auto Fit ◆ Auto Cut	◆ **Scale to Whole:** Fully extends the video to the four sides of the display. ◆ **Auto Fit:** Proportionally scales the video to fit the display without cutting any content off. This may leave some blank on either the top and bottom or the left and right of the screen. ◆ **Auto Cut:** Proportionally scales the video to fully fill the display. The content that goes out of the display range will be cut off.
	Auto Switching	◆ Enable ◆ **Disable**	Automatically switches to a newly detected source.

System Settings			Description
Note: Default settings are indicated in bold.			
Display B	Channel	◆ HDMI ◆ Streaming	Switches source between HDMI and Streaming for display B. For more information, see *Switching the Sources*, page 17.
	Resolution		Select a resolution and refresh rate setting for display B. This field is only available when the display is connected to the VP2120.
	Aspect Ratio	◆ **Scale to Whole** ◆ Auto Fit ◆ Auto Cut	◆ **Scale to Whole:** Fully extends the video to the four sides of the display. ◆ **Auto Fit:** Proportionally scales the video to fit the display without cutting any content off. This may leave some blank on either the top and bottom or the left and right of the screen. ◆ **Auto Cut:** Proportionally scales the video to fully fill the display. The content that goes out of the display range will be cut off.
	Auto Switching	◆ Enable ◆ **Disable**	Automatically switches to a newly detected source.
Notifications	Display Time	◆ 3 sec ◆ **5 sec** ◆ 10 sec ◆ Disable	Disable or sets the duration for which a notification message pops up in the OSD.
	Web Event	◆ Disable ◆ **Enable**	Displays notifications on user actions performed via the web interface.
	System Event	◆ Disable ◆ **Enable**	Displays notifications on system status, device connection status, and user actions performed via the OSD.

System Settings		Description
Note: Default settings are indicated in bold.		
Maintenance	FW Upgrades	Upgrades the VP2120's system firmware. **Note:** Save the firmware file to a USB drive and plug it into the VP2120 before the upgrade.
	Reset to Default	Sets the VP2120 to its default settings.
Info	Vender, firmware version, serial number, hardware version, build version	Displays the system information.

Chapter 4
Remote Operation

Overview

This chapter provides information on remote operation of the VP2120 - the web interface and the ATEN Video Presentation Control App. The information is organized based on account type and control interface (web interface or ATEN Video Presentation Control App).

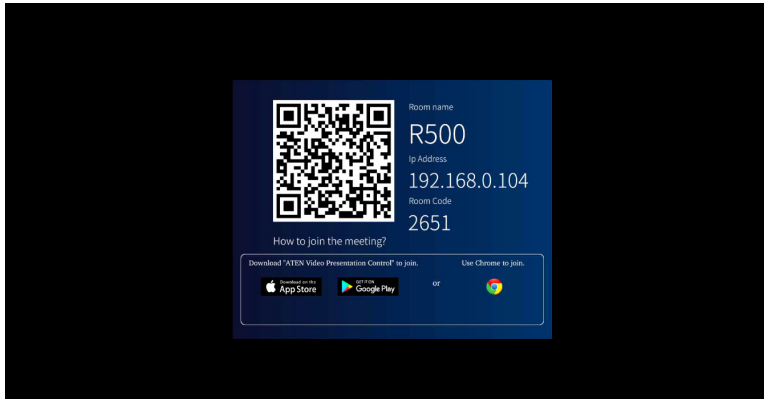
The VP2120's IP Address

When the VP2120 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 VP2120's IP address, press  on the remote control or front panel pushbutton to launch the OSD. The IP address is indicated in the OSD. For more information on the room info, see page 15.



Account Types and Privileges

The web interface allows both administrator and participant logins, and ATEN Video Presentation Control App only allows participant logins. The administrator account differs from a participant account in that it has access to the VP2120 system configuration.

Privileges	Administrator	Participant
Join online meetings and share content	✓	✓
Configure the basic VP2120's settings	✓	✓
Configure administrator settings	✓	x
Back up and restore VP2120's settings	✓	x
Maximum number of logins	No limit	4
Control Interface	Web interface	◆ Web interface ◆ ATEN Video Presentation Control App

Note: The total number of logins includes those made from the web interface and the App.

Supported Web Browsers

The VP2120 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

Note: The streaming-in function (Sharing button) is not supported by Firefox due to compatibility. Only use Chrome if you need to share your contents through VP2120.

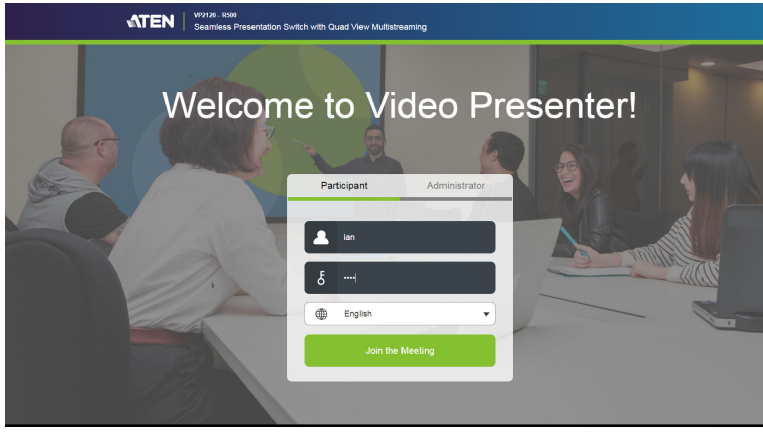
The Administrator Account

When you log into the VP2120's web interface as administrator, you are connected to an online meeting and have access to the VP2120's settings.

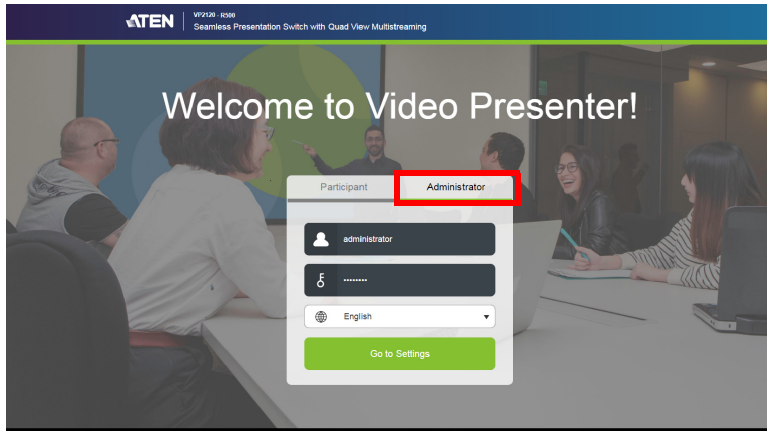
Logging in as Administrator

1. In a web browser, type the web link (IP address) of the VP2120. This screen appears.

Note: Find the VP2120's web link from the OSD. For more information, see *The VP2120's IP Address*, page 33.



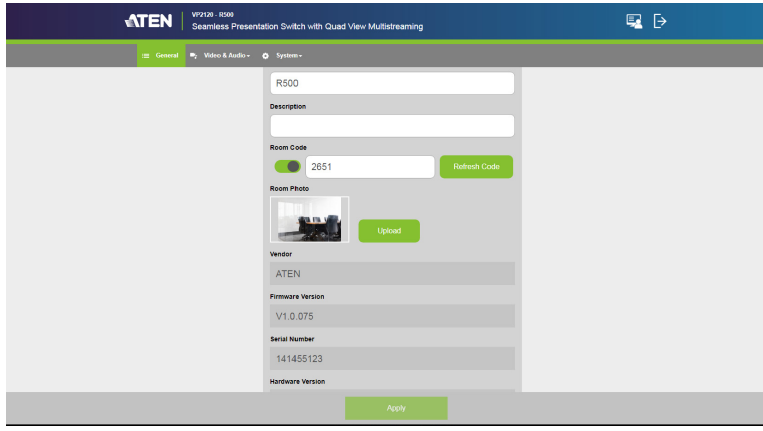
2. Click the **Administrator** tab. This screen appears.



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.

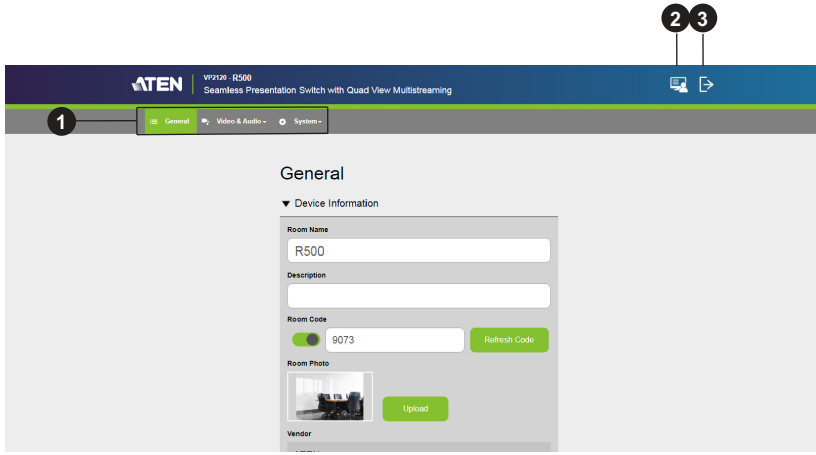


The Administrator Screen

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.



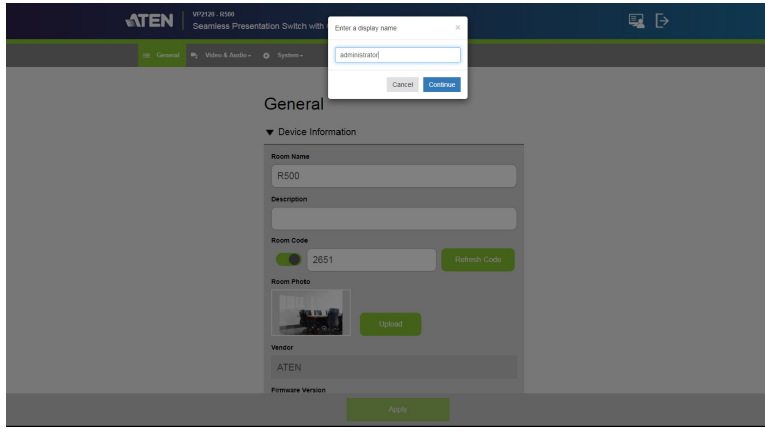
No.	Control	Description
1	Settings Tabs	Use these tabs to access system settings. For details, see *System Configuration*, page 50.
2	Go to Presentations 	Click this button go to the presentation view to join online meetings.
3	Log Out 	Click this button to log out the VP2120's web interface.

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

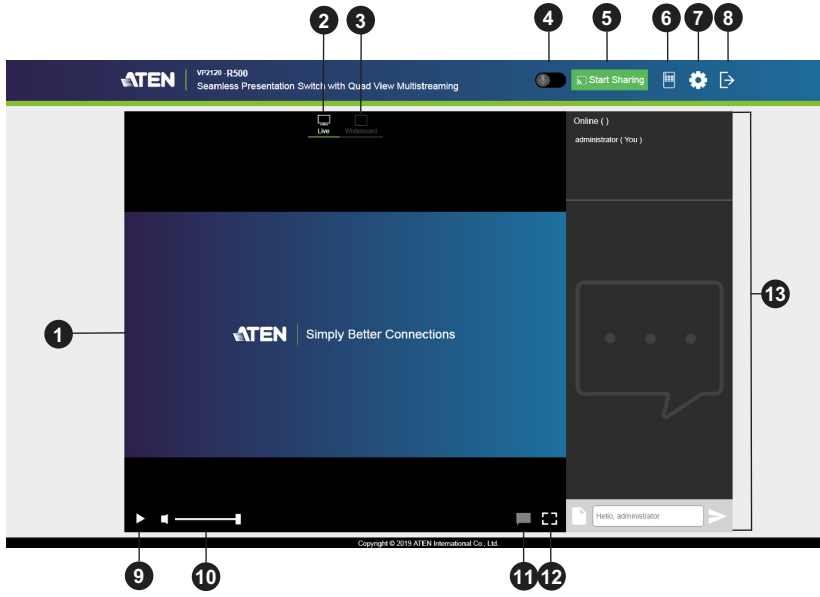
Presentation View

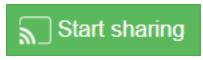
Use the Presentation View to participate online meetings. To access the Presentation View, log in the web interface as administrator and click the **Go to Presentation** icon in the toolbar.

You will be asked to enter a display name:



Type a display name and click **Continue**. The Presentation View appears.



No.	Control	Description
1	Live Screen	Displays the content that goes live from the VP2120.
2	Live	When the Live icon  appears, your Live Screen is showing a live streaming.
3	Whiteboard	When the whiteboard icon  appears, your Live Screen is showing the Whiteboard. For more information, see *Whiteboard*, page 42.
4	Microphone 	Click to speak to the meeting members. Make sure your microphone is plugged into the VP2120 for this function to be available.
5		Click to share a screen, an application window, or a Chrome tab from you PC or laptop to the VP2120 and makes it available for broadcast to all meeting participants. For details, see *Sharing a Screen or an Application Window*, page 40.
6	Control Panel 	Click to access to the basic VP2120 settings. For more information, see , page 44. System settings such as maintenance, network settings, and general settings are not located in the control panel.
7	Go to Configuration 	Click this button to go to the Configuration View. For details about the Configuration View, see *Configuration View*, page 37.
8	Log Out 	Click this button to log out the VP2120's web interface.
9	Play / Pause	Click this button to play or pause the live streaming contents.
10	Volume Control	Allows you to tune the volume and click on the icon to mute.
11	Disable Chat Panel	Removes the chat room to make the display bigger.
12	Full Screen	Extends the display to full screen.
13	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.

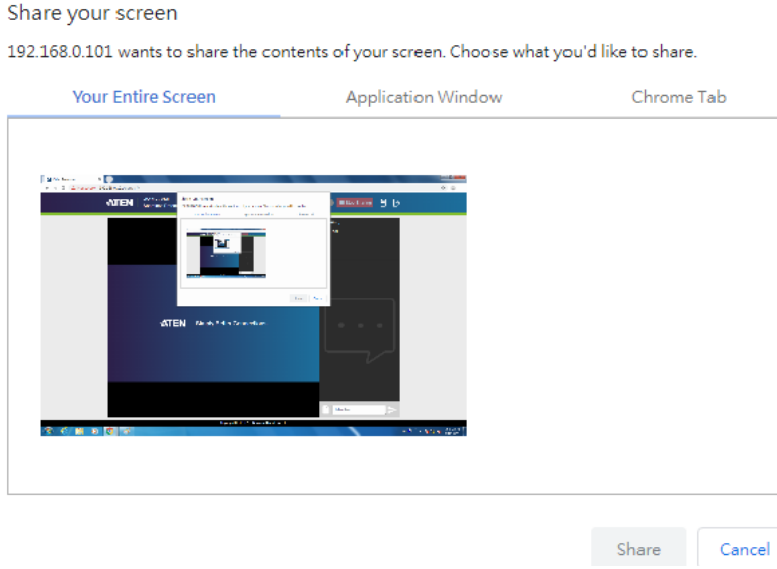
Sharing a Screen or an Application Window

You can share your laptop/PC screen, or an application window/Chrome tab from your laptop/PC.

Note:

- This feature is only available using Chrome.
- The VP2120 can receive up to 4 concurrent streamed-in channels.

1. Make sure you have the screen, application window, or the Chrome tab you wish to share opened on your PC/desktop.
2. Log into the VP2120'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.

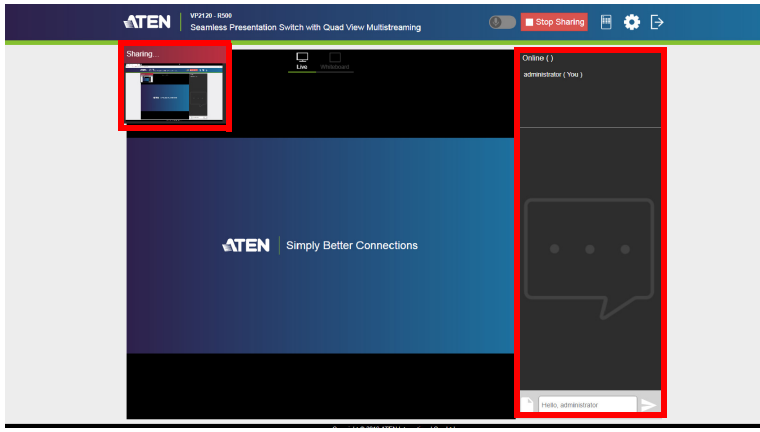
b. Open a new tab in your Chrome and type **chrome://extensions** in the address bar to open the extensions page.

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 an option and click **Share**. The VP2120 is now sharing the selected content.



5. To remind the host and participants that you have shared your content, you can:
   - Send another notification to the VP2120 by clicking the Queuing window.
   - Send a text message using the chat panel.

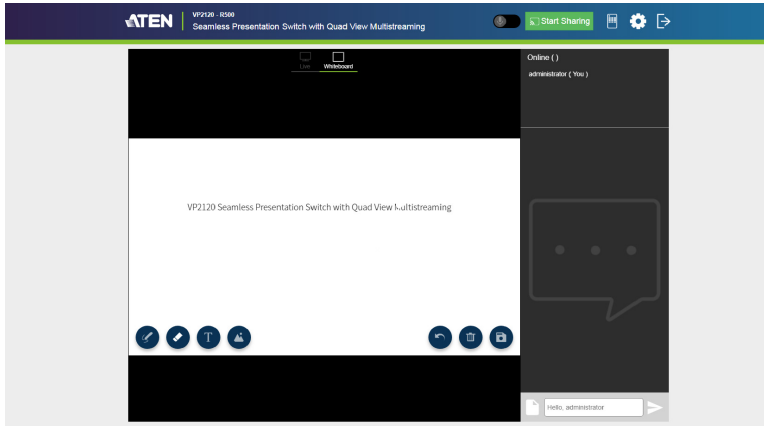
Note:

- When sharing an application window, keep it open to allow sharing. Minimizing the window terminates the sharing.
- To speak during the meeting from your PC/laptop, unplug the audio output wire from your speaker and replug it into the microphone input port on your PC/laptop.
- Make sure to set at least one display to streaming for the source to show. For more information, see *Switching the Sources*, page 17.

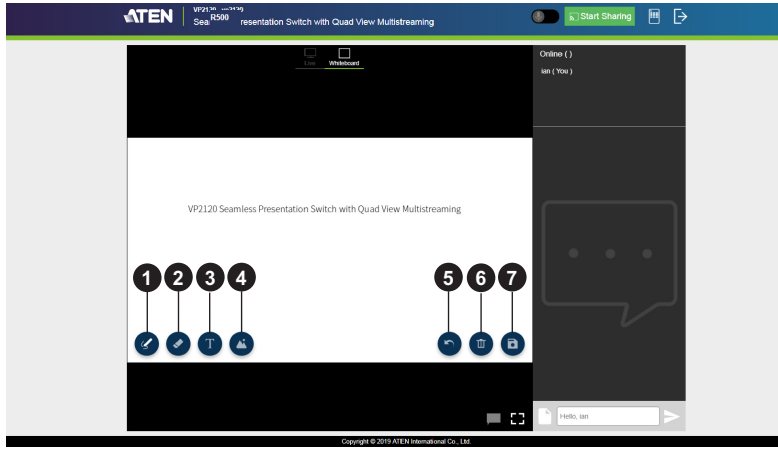
Whiteboard

The whiteboard allows you to draw, insert images, or create texts and share to all the participants and administrator. You can also save the sketches locally for future use.

To enable the whiteboard, click **Whiteboard** from the presentation view. This screen appears.



Each tools and its purpose are described below.

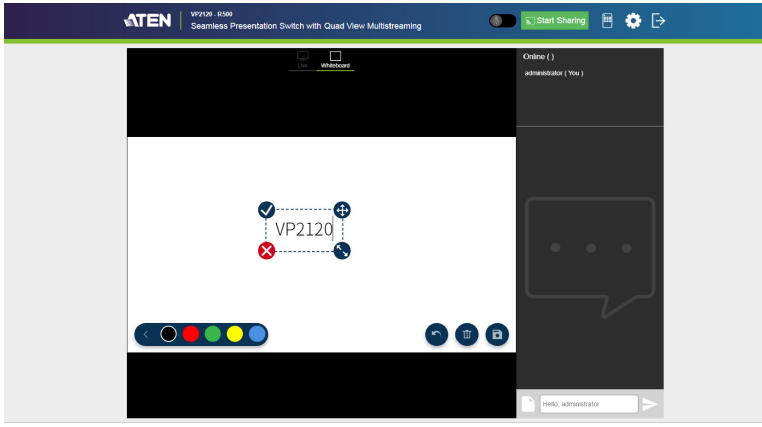


No.	Tool	Description
1	Pencil	Click to select a color and size for the pencil to write or draw on the whiteboard.
2	Eraser	Click to select a size for the eraser to remove any pixels on the whiteboard.
3	Text	Click to insert and select a color for the text. For detailed steps, see *How to Insert Text*, page 43.
4	Image	Click to browse and insert an image on the whiteboard.
5	Undo	Click to undo your current move.
6	Bin	Click to remove the current whiteboard to the bin. A warning message appears, click cancel or continue to remove the whiteboard.
7	Save	Click to automatically save your current whiteboard in your local computer/desktop.

How to Insert Text

To insert a text in the whiteboard, follow the steps below.

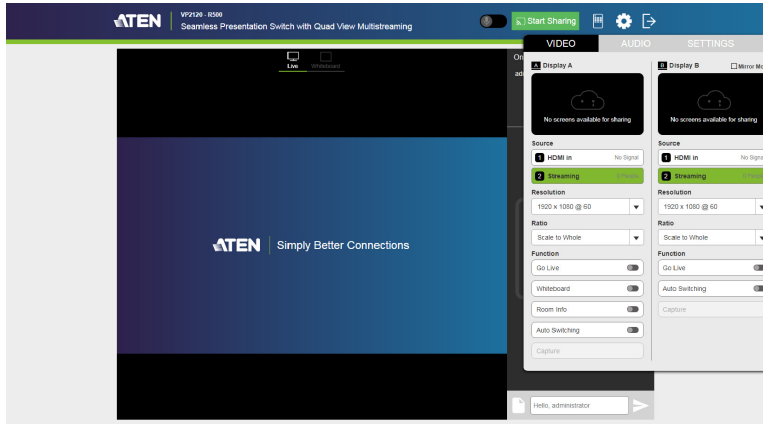
1. Click the text tool to select a color for the text.
2. Left click anywhere on the whiteboard to insert a text.



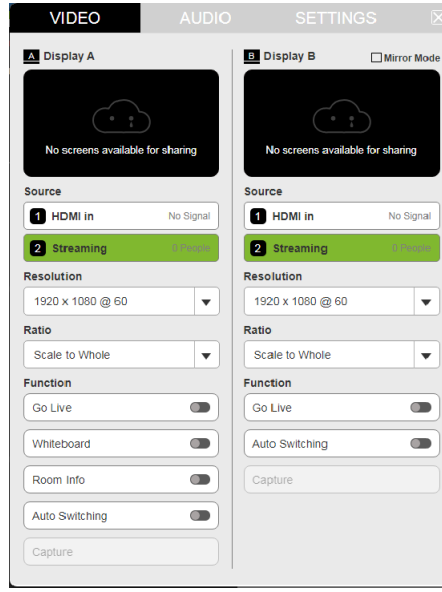
No.	Tool	Description
1		Click to accept and the current text will be entered on the whitboard.
2		Click to drag the current text to a position that you like.
3		Click and drag to resize the current text.
4		Click to remove the current text.

Control Panel

You can adjust audio, video, and general settings of the VP2120. To access these settings, click the control panel icon from the presentation view. The control panel opens.



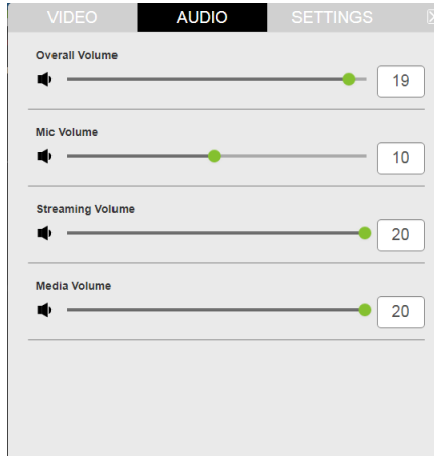
Video



Video Settings		Description
A	Display A	Shows a preview of the selected source.
B	Display B	Shows a preview of the selected source.
	Mirror Mode	Each connected display mirrors each other and does not take different settings. Tick the check-box to enable, configuration on display A is automatically applied to the display B.
Source	HDMI	Selects the HDMI source to be displayed on display A or B.
	Streaming	Selects the Streaming source to be displayed on display A or B.
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 VP2120.

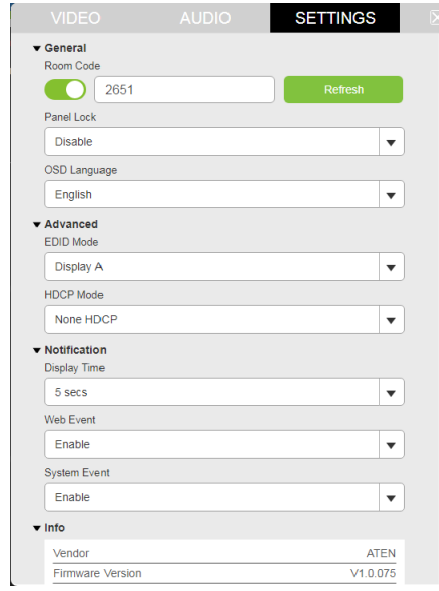
Video Settings		Description
Ratio	Scale to Whole	Fully extends the video to the four sides of the display.
	Auto Fit	Proportionally scales the video to fit the display without cutting any content off. This may leave some blank on either the top and bottom or the left and right of the screen.
	Auto Cut	Proportionally scales the video to fully fill the display. The content that goes out of the display range will be cut off.
Function	Go Live	Enables go live for the display A or B.
	Whiteboard	Enables whiteboard on display A. **Note:** Whiteboard can only be displayed on display A.
	Room Info	Enables room info on display A. **Note:** Room info can only be displayed on display A.
	Auto Switching	Automatically switches to a newly detected source.
	Capture	Captures the screen image and save it to the storage device connected to the VP2120's USB ports. Make sure you have a storage device inserted to the VP2120 for this function to be available.

Audio



Audio Settings	Description
Overall Volume	Sets the volume of the speaker connected to the VP2120 and press to mute.
Mic Volume	Sets the volume of the microphone connected to the VP2120 and press to mute.
Streaming Volume	Sets the volume of the streamed-in source and press to mute.
Media Volume	Sets the volume of connected sources and press to mute.

Settings



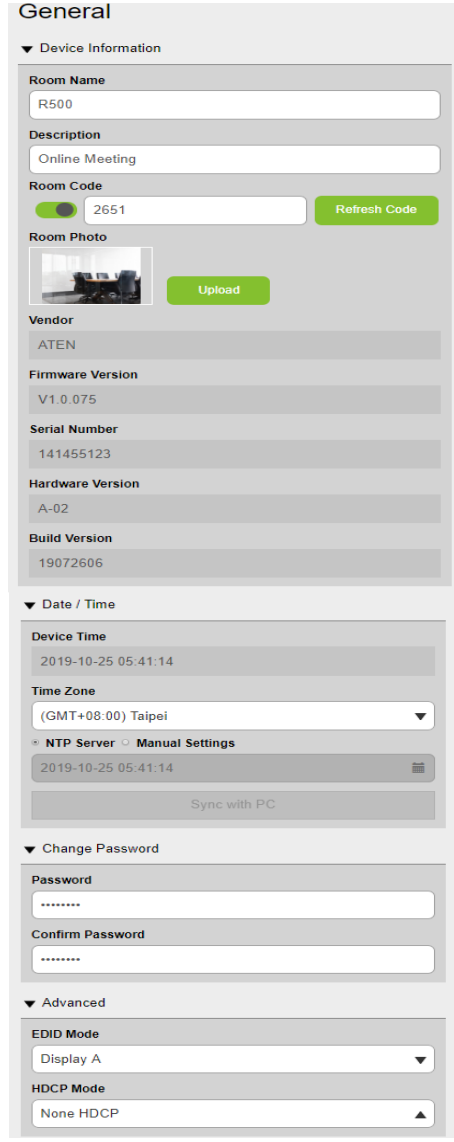
Settings		Description
General	Room Code	Enables a room code that is a-digit combination that is required for logging in the VP2120 web interface and joining an online meeting. You can type your own combination or click **Refresh** to generate a random number.
	Panel Lock ◆ Disable ◆ 5 sec later ◆ 30 sec later ◆ 5 min later	Automatically locks the front panel pushbuttons if the OSD idles for the selected duration.
	OSD Language	Use the drop-down list to set the language of the OSD.

Settings		Description
Advanced	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.
	HDCP Mode ◆ None HDCP ◆ HDCP	Enables this function to prevent copying of the audio and video content as it travels across connections.
Notification	Display Time ◆ Disable ◆ 3 sec ◆ 5 sec ◆ 10 sec	Disable or sets the duration for which a notification message pops up in the OSD.
	Web Event ◆ Enable ◆ Disable	Displays notifications on user actions performed via the web interface.
	System Event ◆ Enable ◆ Disable	Displays notifications on system status, device connection status, and user actions performed via the OSD.
Info	Vendor, Firmware Version, Serial Number, Hardware Version, Build Version	Displays the system information.

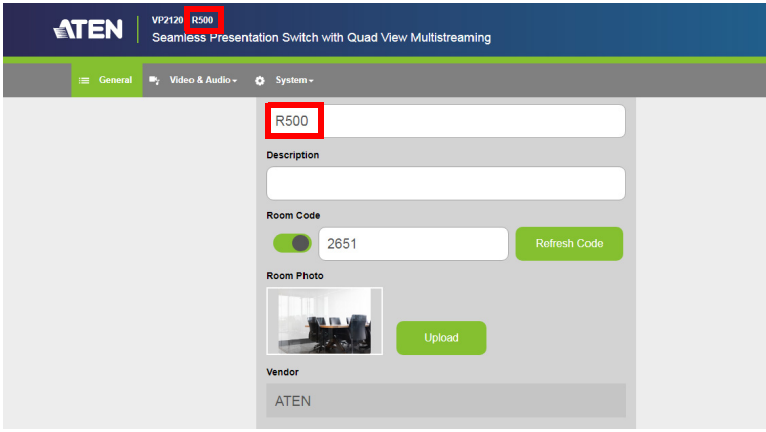
System Configuration

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.



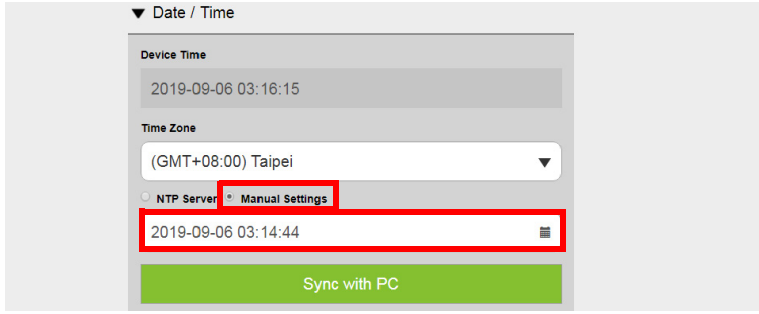
- **Device Information**
  - **Room Name:** Type a name for the VP2120. This name appears on the top of the VP2120's web interface.



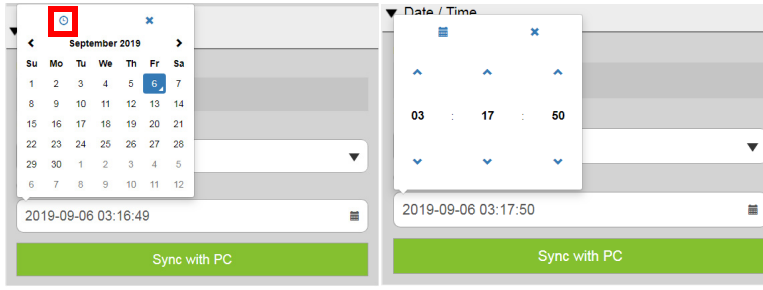
  - **Description:** Type a description to describe the meeting.
  - **Room Code:** A room code is a 4-digit combination that is required for logging in the VP2120's web interface and joining an online meeting. You can type your own combination or click **Refresh Code** to generate a random number.
  - **Room Photo:** You can upload an image to represent the meeting.
  - **Vendor, Firmware Version, Serial Number, Hardware Version, Build Version:** Indicate device information of the VP2120.
- **Date / Time**

Note: When any date/time setting is changed, the VP2120 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 VP2120's date and time with the NTP server.
  - **Manual Setting:** Select this option to manually set the VP2120'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 VP2120's date and time with the PC with which the web interface is opened.

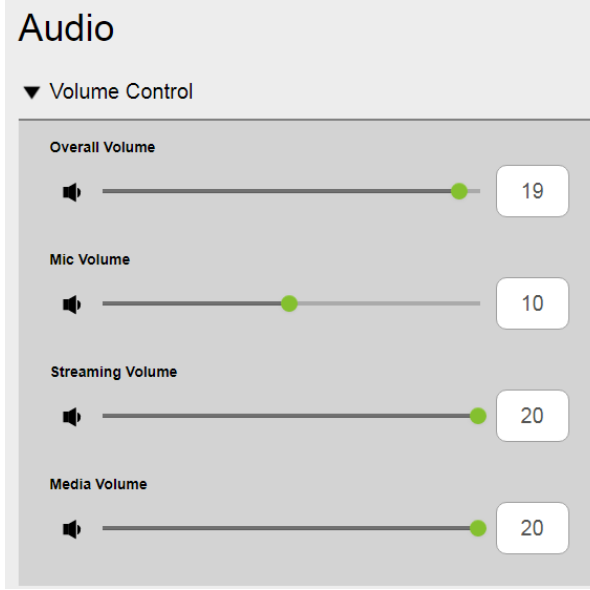
- **Change Password**

  Use these fields to change the login password.

- **Advanced**
  - **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.
  - **HDCP Mode:** Enables **None HDCP** or **HDCP** to prevent copying of the audio and video content as it travels across connections.

Audio Settings

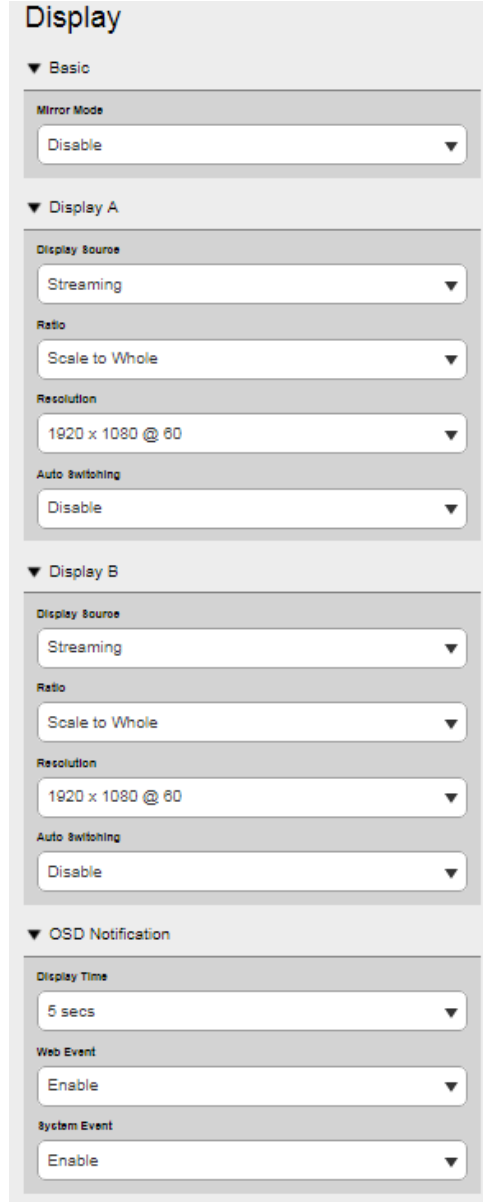
To access the audio settings, log in the web interface as administrator, and then go to **Video & Audio** > **Audio**.



- **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 VP2120 and press to mute.
  - **Mic volume:** Sets the volume of the microphone connected to the VP2120 and press to mute.
  - **Streaming volume:** Sets the volume of the streamed-in source and press to mute.
  - **Media volume:** Sets the volume of connected source and press to mute.

Display Settings

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



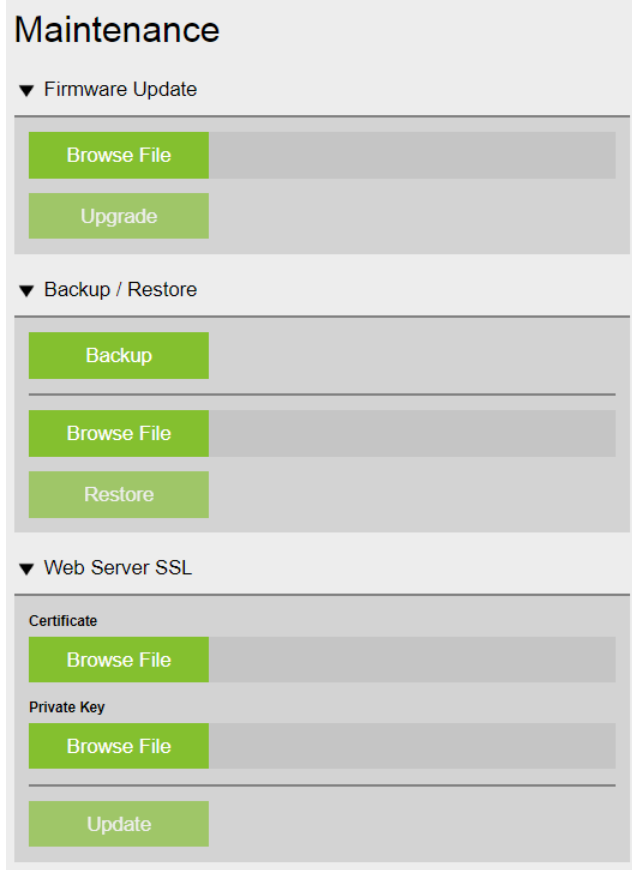
- **Basic (Mode):**
  - **Mirror mode:** Each connected display mirrors each other and does not take different settings. In this mode, configuration on one display is automatically applied to other displays connected to the VP2120.
- **Display A:** Sets the display source, ratio, resolution, and auto switching for the connected display devices.
  - **Display Source:** Click the drop-down menu to select display source between HDMI and Streaming.
  - **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 VP2120.
  - **Auto switching**: Automatically switches to a newly detected source. This option is only available for Display A.
- **Display B:** Sets the display source, ratio, resolution, and auto switching for the connected display devices.
  - **Display Source:** Click the drop-down menu to select display source between HDMI and Streaming.
  - **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 VP2120.

- **Auto switching**: Automatically switches to a newly detected source. This option is only available for Display A.

- **OSD Notification**
  - **Display Time:** Sets the duration for which a notification message pops up in the OSD.
  - **Web Event:** Displays notifications on user actions performed via the web interface.
  - **System Event:** Displays notifications on system status, device connection status, and user actions performed via the OSD.

Maintenance

To access to the maintenance, log in the web interface as administrator, and then go to **System** > **Maintenance**.



- **Firmware Upgrades:** Prepare the firmware file you wish to apply.
  - **Browse File:** Browse the firmware file that you have downloaded.
  - **Upgrade:** Click **Upgrade** when you have completed the above step, or the Upgrade button will be inaccessible.

Note:

- Please visit the product web page from http://www.aten.com/global/en/ , in the **Support and Download** tab, download a firmware file.
- When the upgrade is complete, a confirmation message.

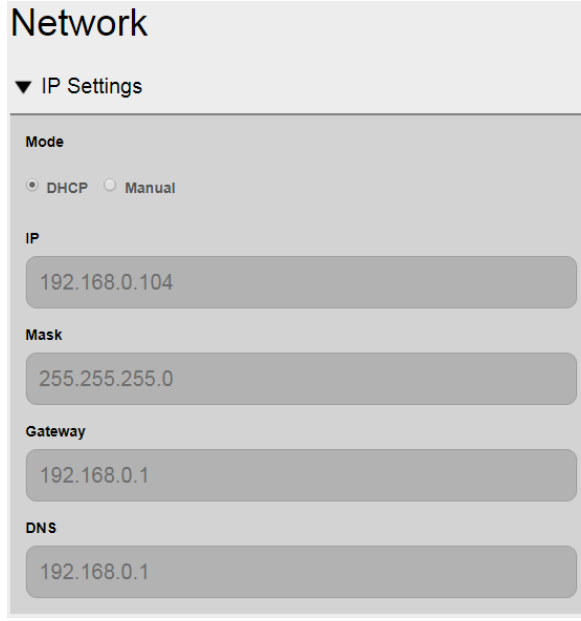
- **Backup / Restore:** You can back up, export, and restore the VP2120's configuration, you can also reset the VP2120 to default settings. The backup will not include the username and password settings.
  - **Backup:** Click back up to back up your VP2120's configuration.
  - **Browse File:** Browse to locate a previously backed up file (.aes).
  - **Restore:** Click **Restore** when you have completed the above step, or the Restore button will be inaccessible.
- **Reset to Default:** Reset all the settings, including network settings, to default.
- **Web Server SSL:** To secure sessions between the VP2120 and web browsers accessing the VP2120's web interface, you can apply SSL encryption.

Note: Before you begin to encrypt SSL, you are required to purchase an SSL certificate from a trusted certificate authority and save the files to a computer with access to the VP2120's web interface.

  - **Certificate:**
    - **Browse File:** Browse to upload the SSL certificate.
  - **Private Key:**
    - **Browse File:** Browse to upload the SSL private key.
  - **Update:** Click **Update** when you have completed the above two steps, or the Update button will be inaccessible.

Network Settings

To configure the VP2120'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 VP2120.
- **Manual:** Select this option to manually type in an IP address, subnet mask, gateway, and DNS. The VP2120 does not require a reboot after the network setting is changed.

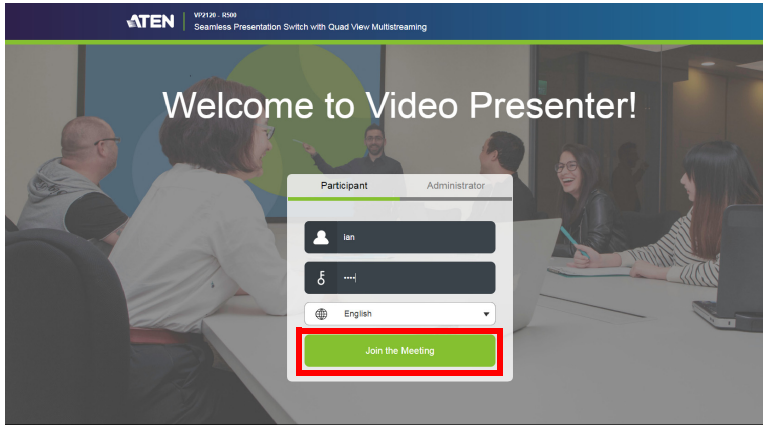
The Participant Account

When you log into the VP2120's web interface/App as participant, you are remotely connected to an online meeting where you can:

- View the video streamed out from the VP2120
- Interact with other meeting participants by instant messaging and share file.
- Share your screen to meeting participants
- Adjust audio, video, and general settings of the VP2120 from the control panel.

Joining a Meeting as Participant via Web Interface

1. In a web browser, type the web link (IP address) of the VP2120. This screen appears.



2. Type a display name of your choice.
3. If the room code is enabled on the VP2120, type the room code.

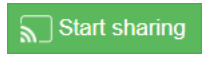
> **Note:** To look up the room code, press the pushbutton/button.

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 VP2120's web interface.



No.	Element	Description
1	Live Screen	Displays the content that goes live from the VP2120.
2	Live	When the green line appears under the icon it means your display is displaying live streaming content.
3	Whiteboard	When the green line appears under the icon it means your display is diplaying the whiteboard. For more information, see *Whiteboard*, page 42.
4	Microphone 	Click to speak to the meeting members. Make sure your microphone is plugged to the VP2120 for this function to be available.
5		Click to share a screen or an application window from you PC or laptop to the VP2120 and makes it available for broadcast to all meeting participants. For details, see*Sharing a Screen or an Application Window*, page 40.

No.	Element	Description
6	Control Panel 	Click to access to the basic VP2120 settings. For more information, see *Control Panel*, page 44.
7	Log Out 	Click this button to log out the VP2120's web interface.
8	Play / Pause	You can play or pause the live streaming contents.
9	Volume Control	Allows you to tune the volume and click on the icon to mute.
10	Disable Chat Panel	Removes the chat room to make the display bigger.
11	Full Screen	Extends the display to full screen.
12	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.

This Page Intentionally Left Blank

Chapter 5
Telnet Commands

Overview

The VP2120 can be configured and controlled via Telnet commands when connected to a host computer or other device, such as a control system. This chapter provides information on how to connect to the VP2120 via Telnet and command syntax.

Connecting to the VP2120 via Telnet

To establish a Telnet session with the VP2120, do the following:

1. Connect a host computer or control system to a shared network with the VP2120.
2. Open a command-line interpreter program from your computer.
3. In the command-line interpreter, type the VP2120's IP address in the following way:

   telnet [IP address]:23
4. Press **Enter**. The login screen appears.
5. At the login prompt, type the login username and password for the VP2120.
6. When a session is established with the VP2120, you can control and configure the VP2120 via Telnet. For more information on commands, see:
   - *Command Syntax*, page 64
   - *Command List*, page 65

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

Command Syntax

- The general form of a command is:

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

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

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

  command name + parameter 1 + parameter 2

  command name + parameter 2 + parameter 1

Command List

Use the following commands to control and configure the VP2120 via Telnet. For details on establishing a Telnet session to the VP2120, see *Connecting to the VP2120 via Telnet*, page 63.

Port Numbers

Use the table below to find out the argument value for each input/output port on the VP2120. For example, the <input_port> value for video HDMI input is i01, and the <input_port> value for audio MIC input is i03.

Source	Source	Interface	Port Numbers
Video Input	HDMI	HDMI	i01
	Streaming	Mobile Device	i02
Video Output	Display A	HDMI	o01
	Display B	HDMI	o02
Audio Input	MIC	Stereo	i03
	Streaming	Stereo	i04
	Media	Stereo	i05
Audio Output	Overall	Stereo	o10
	MIC to Line-out	Stereo	o11

capturescreen

- **Functions and Syntax**

Syntax	Function
capturescreen	Displays the available USB storage space for saving the images.
capturescreen {o<output_port>|d<device>}	Captures the screen and save the image to the USB storage device connected to the VP2120.

- **Parameters**
  - o<output_port>: Specifies an output port in two digits.
    - Output 1 (Display A) o01: Captures display A screen.
    - Output 2 (Display B) o02: Captures display B screen.
  - d<device>: Specifies the USB storage device connected to the VP2120.
    - USB Storage Device: d01 Captured image is saved to the USB storage device.
- **Example**

```
capturescreen o01 d01
```

displaymode

- **Functions and Syntax**

Syntax	Function
displaymode	Displays the current display mode.
displaymode {matirx|mirror}	Configures the VP2120 to matrix or mirror mode.

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

  displaymode mirror

edid

- **Functions and Syntax**

Syntax	Function
edid	Displays the current EDID mode.
edid {o<output_port>|default}	Configures the VP2120's EDID mode.

- **Parameters**
  - o<output_port>: Specifies an output port in two digits.
    - Output 1 (Display A) o01: Sets the VP2120's EDID mode to follow the display connected to the HDMI output port A.
  - default: Sets the VP2120's EDID mode to ATEN Default which sends ATEN-predefined EDID to the connected sources.
- **Example**

  edid default

golive

- **Function**

  Sets an HDMI output for streaming between display A and display B.

- **Syntax**

  golive o<output_port> {on|off}

- **Parameters**
  - o<output_port>: Specifies an output port in two digits.
    - Output 1 (Display A) o01: Streams out display A content.
    - Output 2 (Display B) o02: Streams out display B content.
  - on: Enables golive function on the specified port.
  - off: Disables golive function on the specified port.
- **Example**

  golive o01 on

hdcpswitch

- **Functions and Syntax**

Syntax	Function
hdcp	Displays the current HDCP mode.
hdcpswitch o<output_port> {on|off}	Configures the VP2120's HDCP mode.

- **Parameters**
  - o<output_port>: Specifies the output port.
    - o*: Sets HDCP mode on display A and display B.
  - on: Enables HDCP mode on the specified port.
  - off: Disables HDCP mode on the specified port.
- **Example**

  hdcpswitch o* on

mute

- **Functions and Syntax**

Syntax	Function
mute	Displays the mute setting for each input and output port.
mute {o<output_port>|i<input_port>} {on|off}	Mutes / unmutes the audio of a specified audio input or output.

- **Parameters**
  - i<input_port>: Specifies an input port in two digits.
    - MIC Input i03: Mutes the MIC audio input.
    - Streaming Input i04: Mutes the streaming audio input.
    - Media Input i05: Mutes the media audio input.
    - i*: Mutes all audio input ports.
  - o<output_port>: Specifies an output port in two digits.
    - Overall o10: Mutes the overall audio output.
    - MIC to Line-out o11: Mutes the streaming audio input.
    - o*: Mutes all audio output ports.
  - On: Mute the specified input/output ports.
  - Off: Unmute the specified input/output ports.
- **Example**

  mute i03 on

power

- **Function**

  Powers off the VP2120.
- **Syntax**

  power off
- **Parameters**
  - off: Powers off the VP2120.
- **Example**

  power off

read

- **Function**
  Displays the video and audio input and output information, EDID mode, device information, and network settings.
- **Syntax**
  `read`
- **Parameters**
  - `N/A`
- **Example**
  `read`

reboot

- **Function**
  Reboots the VP2120.
- **Syntax**
  `reboot`
- **Parameters**
  - `N/A`
- **Example**
  `reboot`

roominfo

- **Function**
  Displays / hides the room info on the OSD.
- **Syntax**
  `roominfo` `{on|off}`
- **Parameters**
  - `on`: Displays room information such as the room code, IP address for the web interface, and QR code to join the meeting on the OSD.
  - `off`: Hides room information such as the room code, IP address for the web interface, and QR code to join the meeting on the OSD.
- **Example**
  `roominfo on`

scalemode

- **Functions and Syntax**

Syntax	Function
scalemode	Displays the scale mode setting on display A and display B.
scalemode o<output_port> {full|fit|cut}	Configures a scale mode on display A and display B.

- **Parameters**
  - o<output_port>: Specifies an output port in two digits.
    - Output 1 (Display A) o01: Sets a scale mode for display A.
    - Output 2 (Display B) o02: Sets a scale mode for display B.
    - o*: Sets a scale mode on display A and display B.
  - full: Fully extends the video to the four sides of the display.
  - 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.
  - cut: Proportionally scales the video to fully fill the display. The content that goes out of the display range will be cut off.
- **Example**

  scalemode o01 full

screenshare

- **Functions and Syntax**

Syntax	Function
screenshare	Displays a list of mobile device user's information.
screenshare user<id> {focus|unfocus}	Focuses / unfocuses a user's sharing screen on the specified ID.

- **Parameters**
  - user<id>: Specifies a user ID in a single digit (1 - 4).
  - focus: Focuses the user's screen on the specified ID.
  - unfocus: Unfocuses the user's screen on the specified ID.
- **Example**

  screenshare user 2 focus

sw

- **Function**

  Switches the specified source to the specified display.
- **Syntax**

  sw {o<output_port>} {i<input_port>}
- **Parameters**
  - o<output_port>: Specifies an output port in two digits.
    - Output 1 (Display A) o01: Switches the source to display A.
    - Output 2 (Display B) o02: Switches the source to display B.
    - o*: Switches the source to display A and display B.
  - i<input_port>: Specifies an input port in two digits.
    - HDMI Input i01: Switches HDMI input to the specified display.
    - Streaming Input i02: Switches streaming input to the specified display.
- **Examples**

  sw o01 i02

swmode

- **Functions and Syntax**

Syntax	Function
swmode	Displays the auto switching mode setting on display A and display B.
swmode {o<output_port>} plugin {auto|off}	Enables / disables auto switching on display A and display B.

- **Parameters**
  - o<output_port>: Specifies an output port in two digits.
    - Output 1 (Display A) o01: Enables auto switching for display A.
    - Output 2 (Display B) o02: Enables auto switching for display B.
    - o*: Enables auto switching for display A and display B.
  - auto: Enables auto switching on the specified display.
  - off: Disables auto switching on the specified display.
- **Examples**

```
swmode o01 plugin auto
```

volume

- **Functions and Syntax**

Syntax	Function
volume	Displays the volume for each input and output port.
volume {o<output_port>|i<input_port>} v<volume_number>	Configures the volume of a specified input / output port.

- **Parameters**
  - i<input_port>: Specifies an input port in two digits.
    - MIC Input i03: Adjusts the of volume of MIC audio input.
    - Streaming Input i04: Adjusts the of volume of streaming audio input.
    - Media Input i05: Adjusts the of volume of media audio input.
    - i*: Adjusts the volume of all audio input ports.
  - o<output_port>: Specifies an output port in two digits.
    - Overall o10: Adjusts the volume of overall audio output.
    - o*: Adjusts the volume of all audio output ports.
  - v<volume_number>: Specifies the volume you wish to set to the specified audio port in two digits (01 - 20).
- **Examples**

  volume i03 v10

whiteboard

- **Function**

  Displays / hides the whiteboard on the OSD.
- **Syntax**

  whiteboard {on|off}
- **Parameters**
  - on: Displays whiteboard on the OSD.
  - off: Hides whiteboard on the OSD.
- **Example**

  whiteboard on

Chapter 6
Video Presentation Control App

Overview

The ATEN Video Presentation Control App is designed to help you conveniently joining a meeting, share contents, switch sources and displays, and configure system settings to your VP2120 device using smartphone/tablet.

Requirements

- Make sure your smartphone/tablet uses a supported version of the mobile operating system listed below before installing the app.

Mobile Operating System	Supported Version
iOS	12.0 or later
Android	8.0 or later

- Make sure to connect the smartphone/tablet to the network where your ATEN Presentation Switch is installed.

Installing the App

1. Download and install the ATEN Video Presentation Control App on a smartphone/tablet.

   a) From the smartphone/tablet, tap the **App Store** or **Google Play** icon.

   b) In the search box, type “ATEN Video Presentation Control App”.

   c) Tap **ATEN Video Presentation Control App** and install the app.

   Or, scan the QR Code below to install the app.

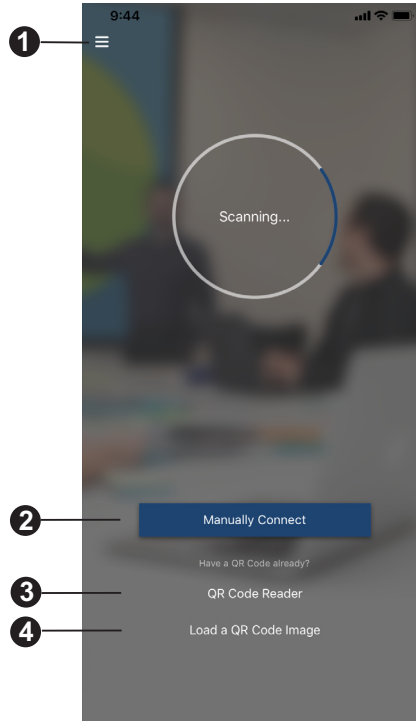
   Download on the App Store GET IT ON Google Play

2. From the smartphone/tablet, tap the **ATEN Video Presentation Control App** icon .

iOS Version

Main Page

When logged in, the ATEN Video Presentation Control App defaults to the scanning page. Refer to the table below for an overview of the functions on each tab.



No.	Component	Description
1	Info	Tap the info icon to show information such as version, privacy policy, and contact us.
2	Manually Connect	Tap this icon to manually connect to join a meeting by entering its IP address or a 4-digit room code.
3	QR Code Reader	Tap this icon to scan a QR code to join a meeting.
4	Load a QR Code Image	Tap this icon to upload a QR code image to join a meeting.

Info

Below screen is what the info page looks like. It shows the version, privacy policy and contact us. Tap on the **Contact Us** and it takes you straight to our ATEN's official website.



Note: Unless otherwise specified, all the screens shown in this manual are for smartphone only. The layout of the actual screens for tablet may vary slightly from these examples.

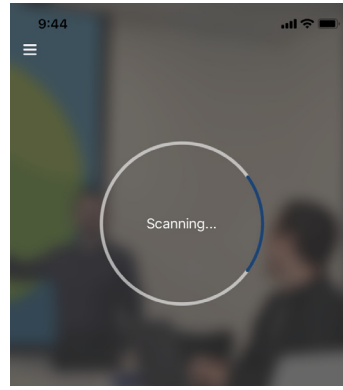
Joining a Meeting

There are three ways to join a meeting through our ATEN Video Presentation Control App on VP2120. When the App is opened, it automatically scans for the device and available rooms to access. Or you can manually type in the IP address and room code, or use a QR code to join a meeting. Each methods are described below.

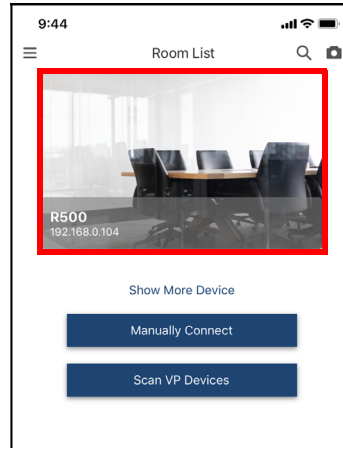
Joining a Meeting Automatically

To automatically scan and join a meeting, follow the steps below.

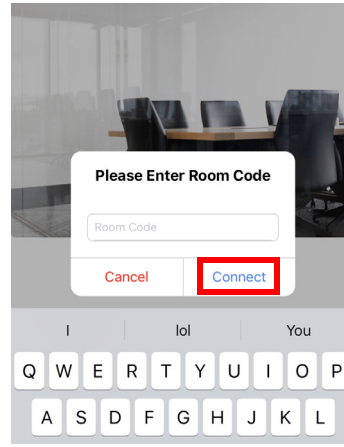
1. Open the ATEN Video Presentation Control App and wait for the scanning process to finish.



2. When the scanning finishes, the Room List appears. Tap on a room to join the meeting.



3. Enter a room code, and then tap **Connect**.



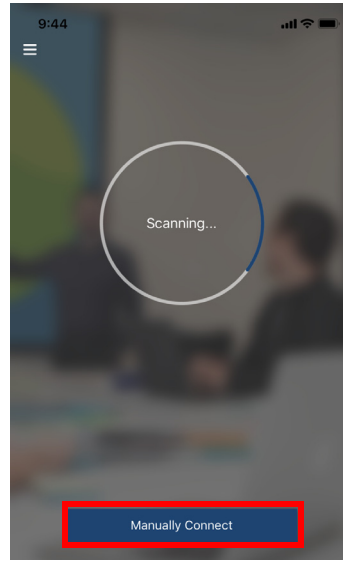
4. Now you have successfully joined the meeting.



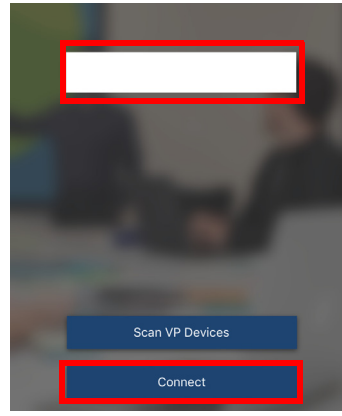
Joining a Meeting via Manually Connect

To manually connect and join a meeting, follow the steps below.

1. Open the ATEN Video Presentation Control App and tap **Manually Connect**.



2. Type in the IP address of the VP2120 and the required room code, and then tap **Connect**.

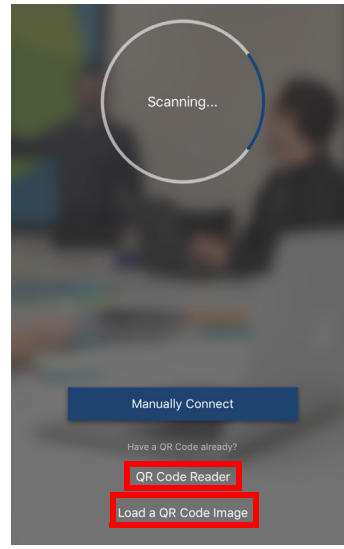


3. Now you have successfully joined the meeting.

Joining a Meeting via QR Code

To join a meeting via QR code, follow the steps below.

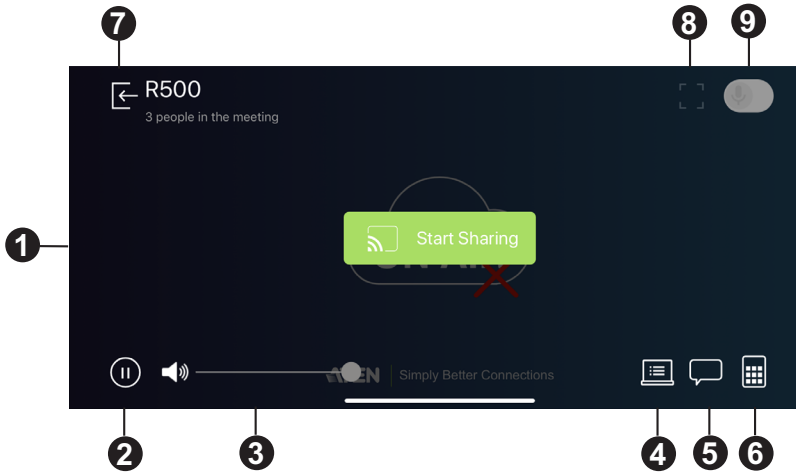
1. Open the ATEN Video Presentation Control App and tap on the **QR Code Reader** or **Load a QR Code Image**.



2. Tap on the **QR Code Reader** to scan a pre-generated QR code.
3. Tap on the **Load a QR Code Image** to upload a pre-generated QR code.
4. Now you have successfully joined the meeting.

Meeting Screen

Once you have successfully joined a meeting, tap on the screen and the below screen appears.



Each functions are described in the table below.

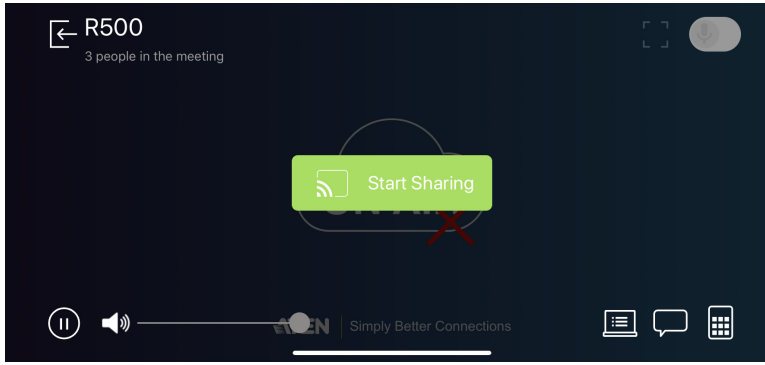
No.	Component	Description
1	Live Screen	Displays the contents that goes live from the VP2120 on your smartphone/tablet.
2	Play / Pause	Tap this icon to play or pause the live streaming contents.
3	Volume Control	Allows you to adjust the volume and tap on the  to mute.
4	Whiteboard 	Tap this icon to display the whiteboard on your smartphone/tablet. For more information, see *Whiteboard*, page 87.
5	Chat Room 	Tap this icon to display a chat panel to use text interaction and file sharing with other connected meeting participants.

No.	Component	Description
6	Control Panel 	Tap this icon to access to the basic VP2120 settings. For more information, see *Control Panel for iOS Smartphone*, page 89.
7	Log Out 	Tap this icon to log out leave the meeting.
8	Full Screen 	Tap this icon to extend the display to full screen.
9	Microphone 	This icon greys out when there is no streamed-out content. Fore more information, see *More Settings on iOS Smartphone*, page 95. When the microphone becomes available, tap  to speak to the meeting participants, and the icon becomes green .
10		Tap this icon to share the screen on your smartphone/ tablet and makes it available for broadcast to all meeting participants. For more information, see *Streaming Out Your Content*, page 84.

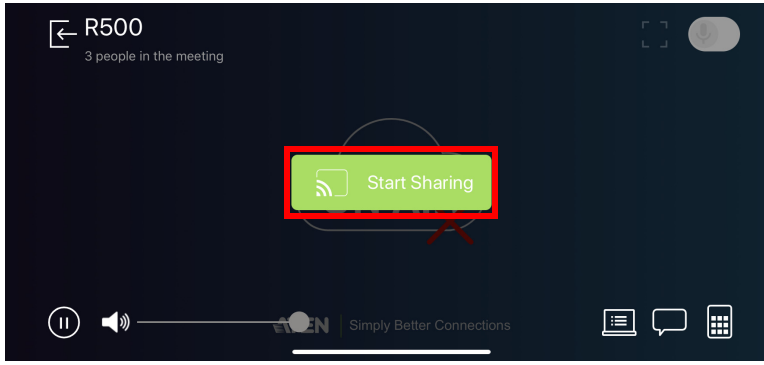
Streaming Out Your Content

Participants that are connected with the VP2120 can all share their display contents via the App. To share the content on your smartphone/tablet, follow the steps below.

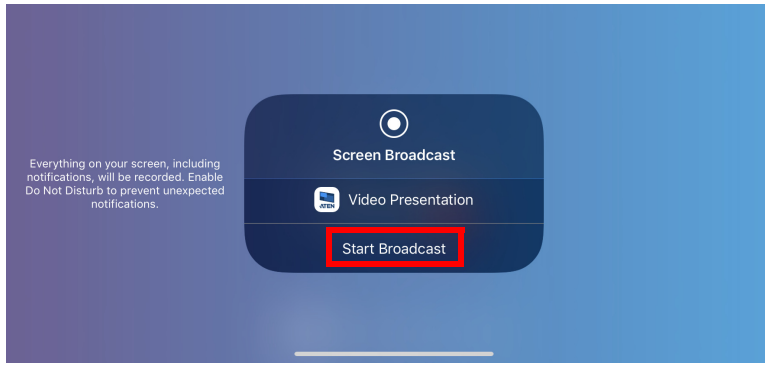
1. Once you have successfully joined a meeting on the VP2120, tap on your smartphone/tablet's display screen and the below picture appears.



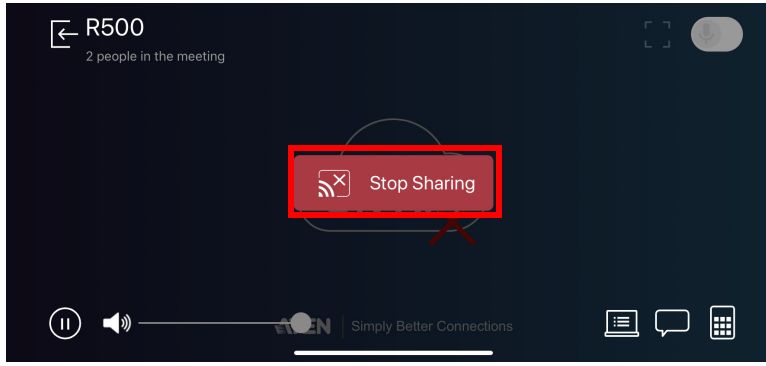
2. Click on the **Start Sharing**. A warning message similar to the one below appears.



3. A warning message similar to the one below appears, then click **Start Broadcast**.



4. Now your entire screen is being shared to all the meeting participants.
5. To end the sharing, tap on your smartphone/tablet's display screen and tap **Stop Sharing**.



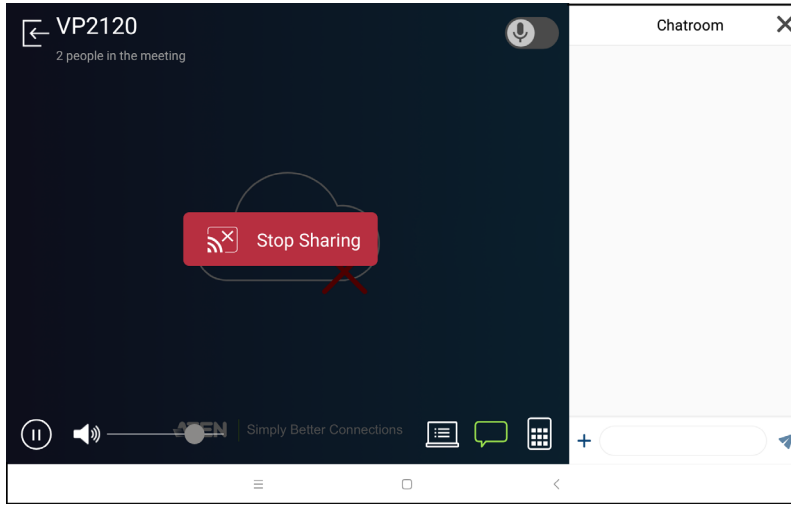
Chat Room

The chat room allows you to use text interaction and information sharing with the connected participants. File sharing enables further data sharing and follow-up.

From your smartphone's screen, tap the **Chat Room** button and the below screen appears.



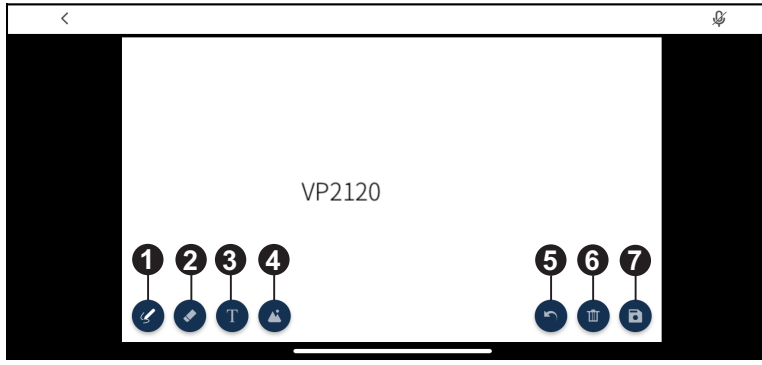
From your tablet's screen, tap the **Chat Room** button and the below screen appears.



Whiteboard

The whiteboard allows you to draw, insert images, or create texts and share to all the participants and administrator. You can also save the whiteboard locally for future use.

From your smartphone/tablet's screen, tap the **Whiteboard** button and the below screen appears. Each tool and its purpose are described in the table below.

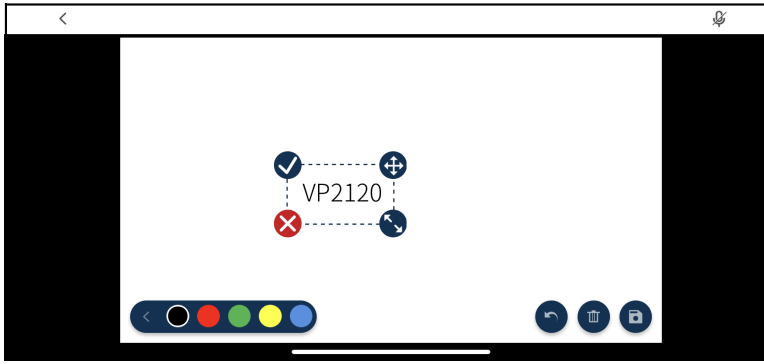


No.	Tool	Description
1	Pencil	Click to select a color and size for the pencil to write or draw on the whiteboard.
2	Eraser	Click to select a size for the eraser to remove any pixels on the whiteboard.
3	Text	Click to select a color for the text. To insert a text, see *How To Insert Text*, page 88.
4	Image	Click to browse and insert an image on the whiteboard.
5	Undo	Click to undo your current move.
6	Bin	Click to remove the current whiteboard to the bin. A warning message appears, click cancel or continue to remove the whiteboard.
7	Save	Click to automatically save your current whiteboard in your local computer/desktop.

How To Insert Text

To insert a text in the whiteboard, follow the steps below.

1. Click the **Text** tool to select a color for the text.
2. Left click anywhere on the whiteboard to insert a text.



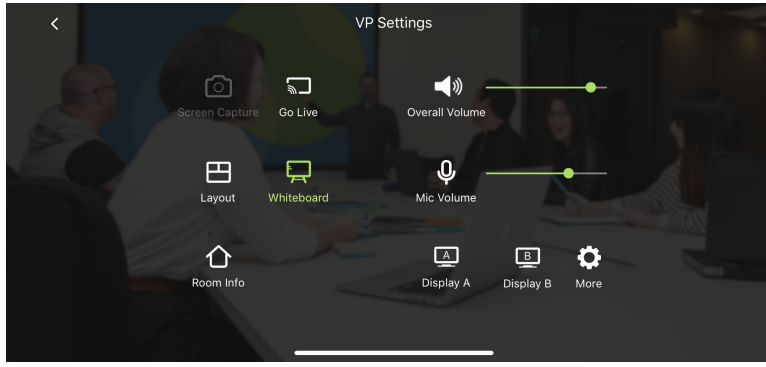
No.	Tool	Description
1		Click to accept and the current text will be entered on the whitboard.
2		Click to drag the current text to a position that you like.
3		Click and drag to resize the current text.
4		Click to remove the current text.

Control Panel for iOS Smartphone

You can perform the following tasks with the control panel.

- Switch display sources
- Change the display mode, resolution, or aspect ratio settings
- Stream out (go live) the current display via network connection
- Configure the VP2120's main system settings
- Make screen captures

From your smartphone's screen, tap the **Control Panel** button and the below screen appears.



Each tool and its purpose are described in the table below.

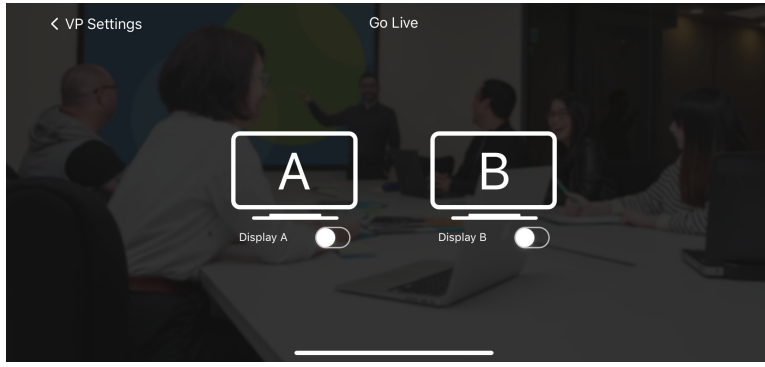
Tool	Description
Screen Capture 	Tap this icon to capture the screen, the capture image is saved to the storage device connected to the VP2120's USB port. Make sure you have a storage device inserted to the VP2120 for this function to be available.
Go Live 	Tap this icon to stream out the display. This icon grays out if the VP2120 is not connected to the network. For more information, see *More Settings on iOS Smartphone*, page 95. **IMPORTANT:** ◆ Make sure that the VP2120 is connected to the network and that the network bandwidth is of 2 MB or more.

Tool	Description
Layout 	Tap this icon to select a layout format between single view or multiview for the display content on your screen. For more information, see *More Settings on iOS Smartphone*, page 95.
Whiteboard 	Tap this icon to bring up the whiteboard page. For more information, see *Whiteboard*, page 87.
Room Info 	Tap this icon to bring up the room information on your smartphon's screen such as QR code, room name, IP address, room code, connected participants. For more information, see *Room Info*, page 92.
Overall Volume 	Tap this icon to mute the speaker volume or sets the volume of the speaker connected to the VP2120 using .
Mic Volume 	Tap this icon to mute the microphone volume or sets the volume of the microphone connected to the VP2120 using .
Display A 	Tap this icon to switch display source between HDMI source and Streaming source, or sets resolution, aspect ratio, and auto switching settings for display A. For more information, see *More Settings on iOS Smartphone*, page 95.
Display B 	Tap this icon to switch display source between HDMI source and Streaming source, or sets resolution, aspect ratio, and auto switching settings for display B. For more information, see *More Settings on iOS Smartphone*, page 95.
More Settings 	Tap this icon to configure more settings to the VP2120. For more information, see *More Settings on iOS Smartphone*, page 95.

Go Live Using iOS Smartphone

To stream out a display, follow the steps below.

1. From your smartphone's screen, tap the **Go Live** button and the below screen appears.



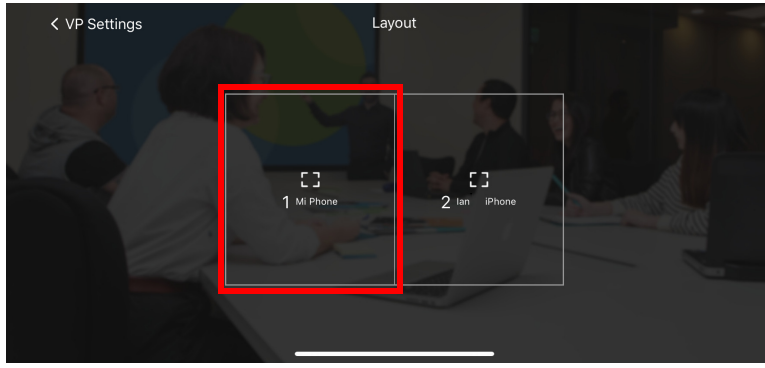
2. Select a display to stream out by tapping this button.

Layout

To select a streamed-in source to display on the display A, tap the **Layout** button from your smarphone's screen and the below screen appears.

Note: In order to select a streamed-in source to display, you must have at least two streamed-in sources.

Tap to select the source you wish to display on display A.



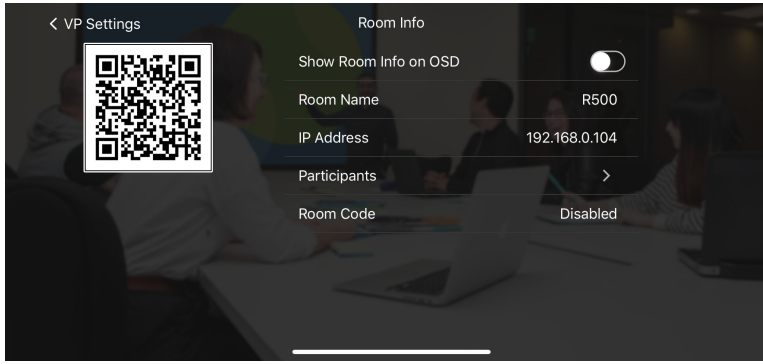
Whiteboard

To display whiteboard on display A, tap the **Whiteboard** icon from your smartphone's screen. When the Whiteboard icon turns green, the display A is now showing the whiteboard.

Room Info

To display room info on your smartphone's screen, follow the steps below.

1. From your smartphone's screen, tap the **Room Info** button and the below screen appears.

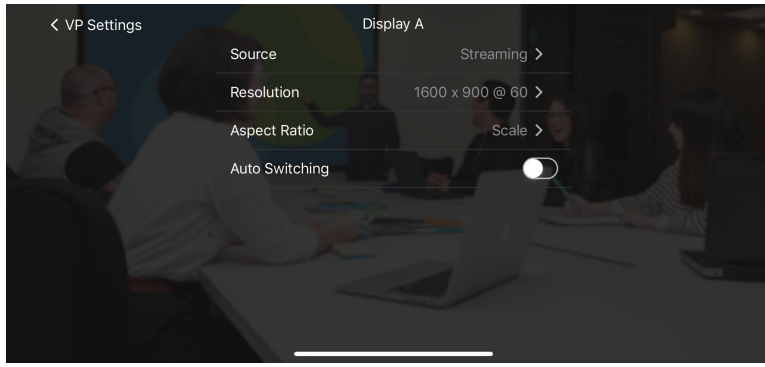


2. To show room info on the OSD, tap on the button.
3. To view a list of the connected participants, tap on the button.

Display A

To switch a display source, or configure settings for display A, follow the steps below.

1. From your smartphone's screen, tap the **Display A** button and the below screen appears.

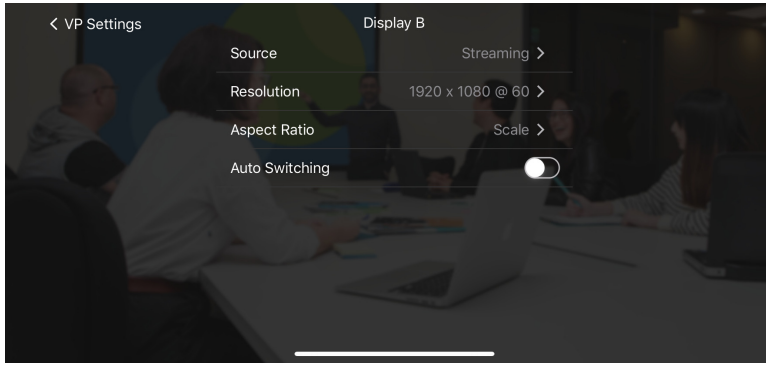


2. To switch display source between HDMI source and Streaming source, tap on the button and select a desired display source,
3. To change the resolution for display A, tap on the button and select a desired resolution.
4. To change the aspect ratio for display A, tap on the button and select a desired aspect ratio.
5. To enable the auto switching for display A, tap on the button to enable, tap again to disable.

Display B

To switch a display source, or configure settings for display B, follow the steps below.

1. From your smartphone's screen, tap the **Display B**  button and the below screen appears.



2. To switch display source between HDMI source and Streaming source, tap on the  button and select a desired display source,

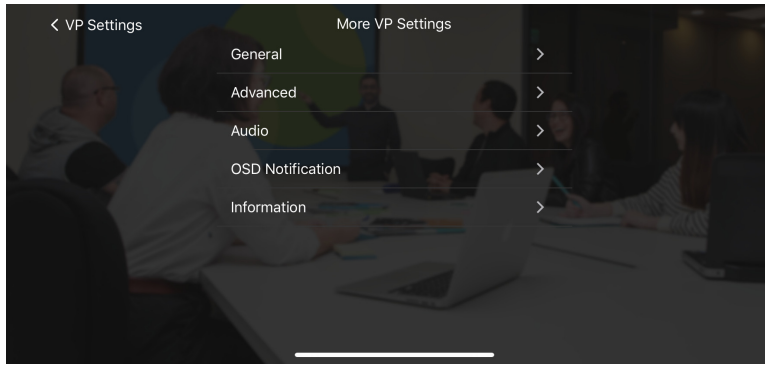
3. To change the resolution for display A, tap on the  button and select a desired resolution.

4. To change the aspect ratio for display A, tap on the  button and select a desired aspect ratio.

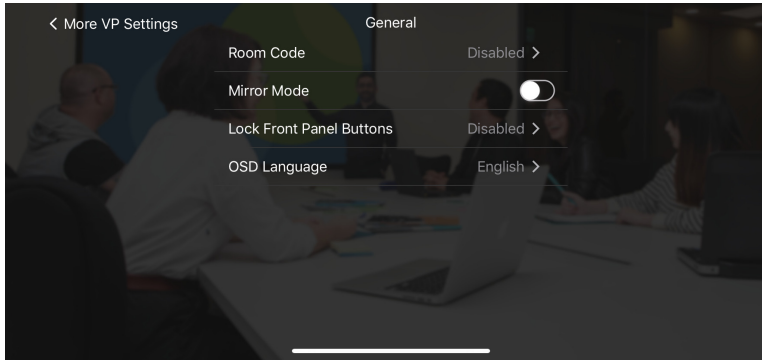
5. To enable the auto switching for display A, tap on the  button to enable, tap again to disable.

More Settings on iOS Smartphone

To configure more settings to the VP2120, tap the **More Settings** button from your smarphone's screen and the below screen appears.

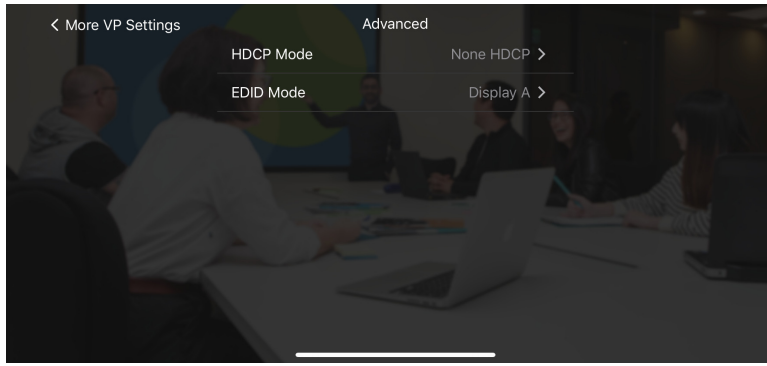


General



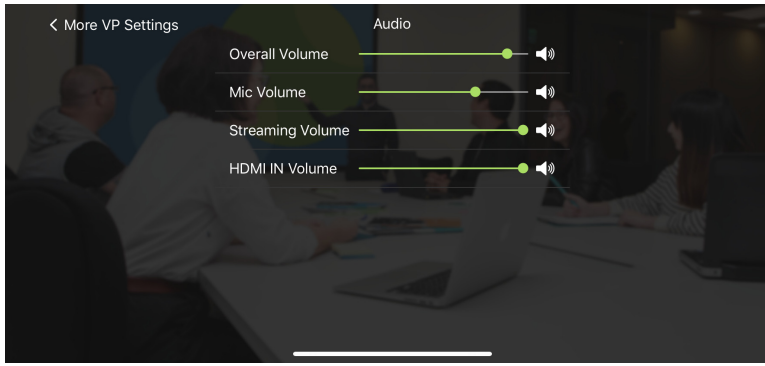
System Settings			Description
Note: Default settings are indicated in bold.			
General	Room Code	◆ Disable ◆ Refresh code	Enables and generates a random room code to be required for joining a meeting.
	Mirror Mode	◆ Enable ◆ **Disable**	Each connected display mirrors each other and does not take different settings. Click the check-box to enable, configuration on display A is automatically applied to the display B.
	Lock Front Panel Buttons	◆ **Disable** ◆ 5 sec later ◆ 30 sec later ◆ 5 min later	Automatically locks the front-panel pushbuttons if the OSD idles for the selected duration.
	OSD Language		Sets the display language of the OSD.

Advanced



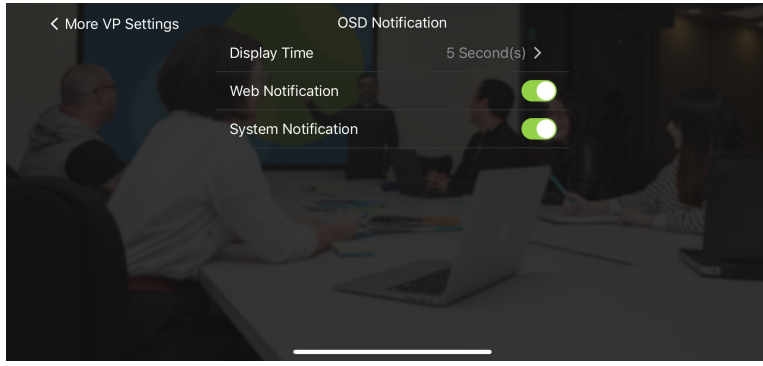
System Settings			Description
Note: Default settings are indicated in bold.			
Advanced	HDCP Mode	◆ None HDCP ◆ **HDCP**	Enables this function to prevent copying of the audio and video content as it travels across connections.
	EDID Mode	◆ **ATEN Default** ◆ Display A	◆ **ATEN default:** This mode sends ATEN-predefined EDID to the connected sources. ◆ **Display A:** This mode sends the EDID of Display A to the connected sources.

Audio



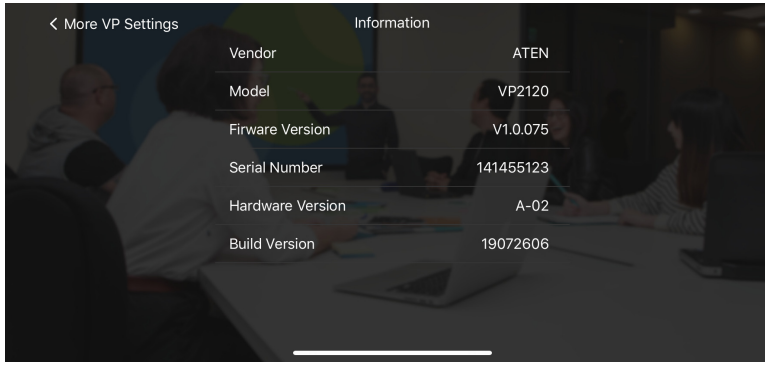
System Settings			Description
Note: Default settings are indicated in bold.			
Audio	Overall Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the speaker connected to the VP2120 and tap to mute.
	Mic Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the microphone connected to the VP2120 and tap to mute.
	Streaming Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the streamed-in source and tap to mute.
	Media Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of connected sources and tap to mute.

OSD Notification



System Settings			Description
Note: Default settings are indicated in bold.			
OSD Notification	Display Time	◆ 3 sec ◆ **5 sec** ◆ 10 sec ◆ Disable	Disable or sets the duration for which a notification message pops up in the OSD.
	Web Notification	◆ Disable ◆ **Enable**	Displays notifications on user actions performed via the web interface.
	System Notification	◆ Disable ◆ **Enable**	Displays notifications on system status, device connection status, and user actions performed via the OSD.

Information



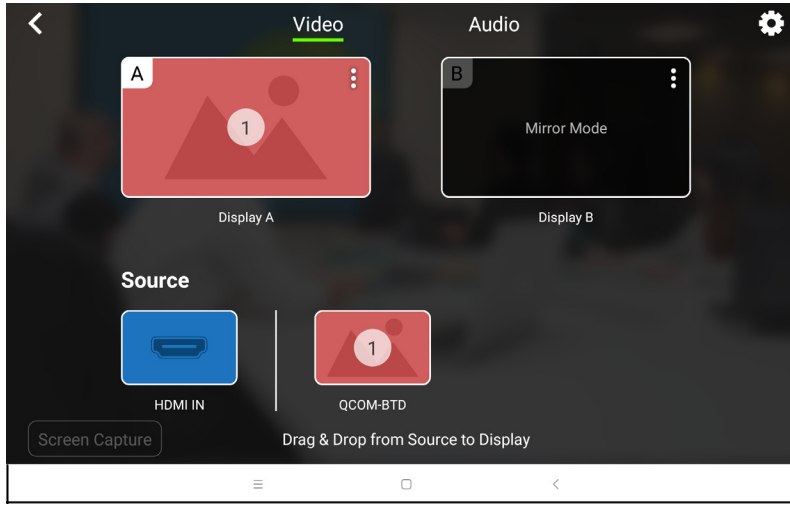
System Settings		Description
Note: Default settings are indicated in bold.		
Infomation	Vender, firmware version, serial number, hardware version, build version	Displays the system information.

Control Panel for iOS Tablet

You can perform the following tasks with the control panel.

- Switch display sources
- Change the display mode, resolution, or aspect ratio settings
- Stream out (go live) the current display via network connection
- Configure the VP2120's main system settings
- Make screen captures

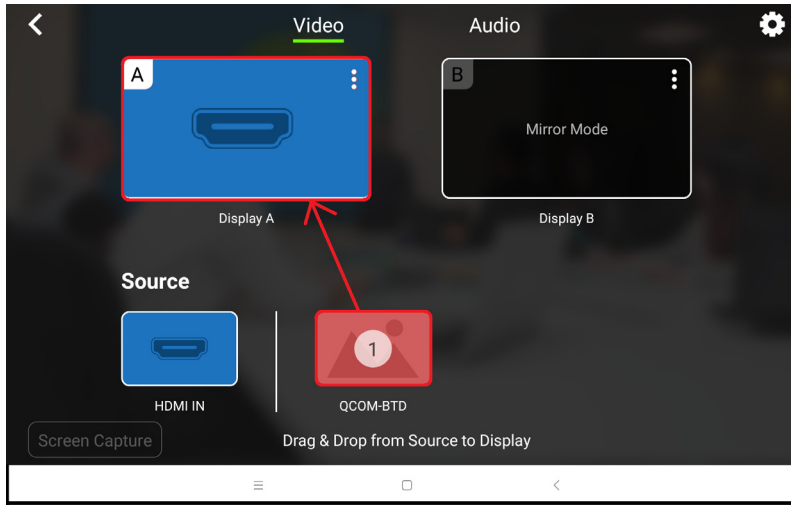
From your tablet's screen, tap the **Control Panel** button and the below screen appears.



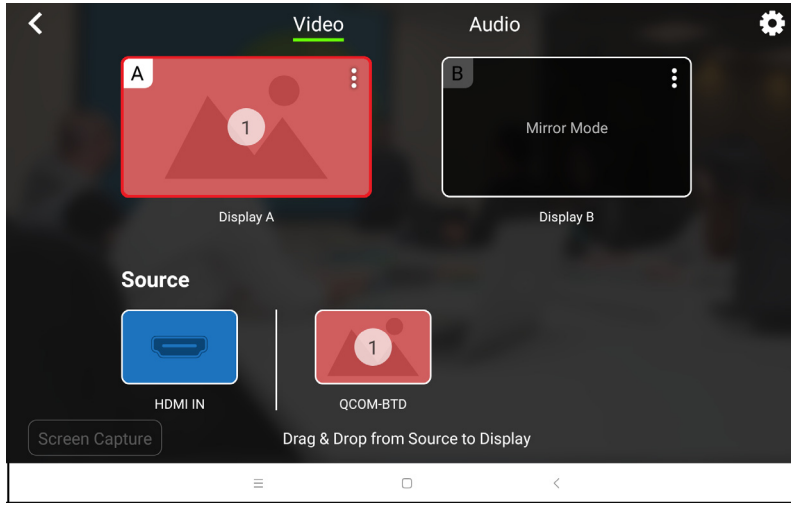
Switching a Source for a Display

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

1. To switch streaming source to Display A. From the display page, drag the streaming source to Display A.



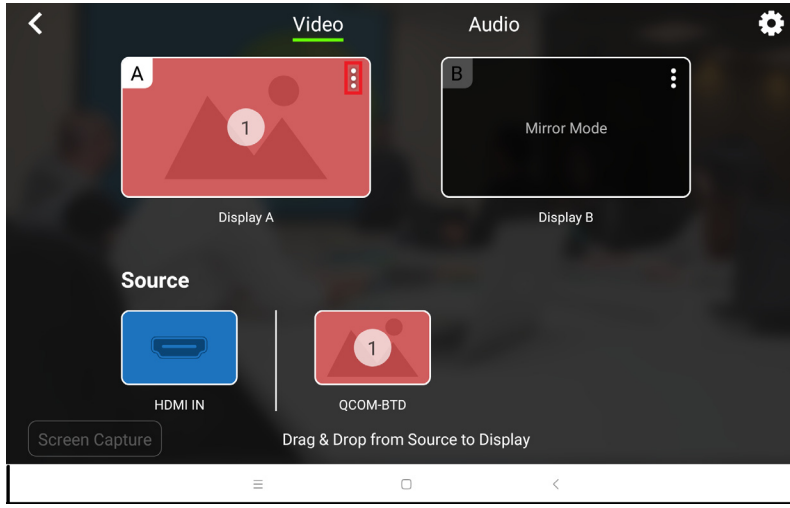
2. The Display A is now displaying streaming source content.



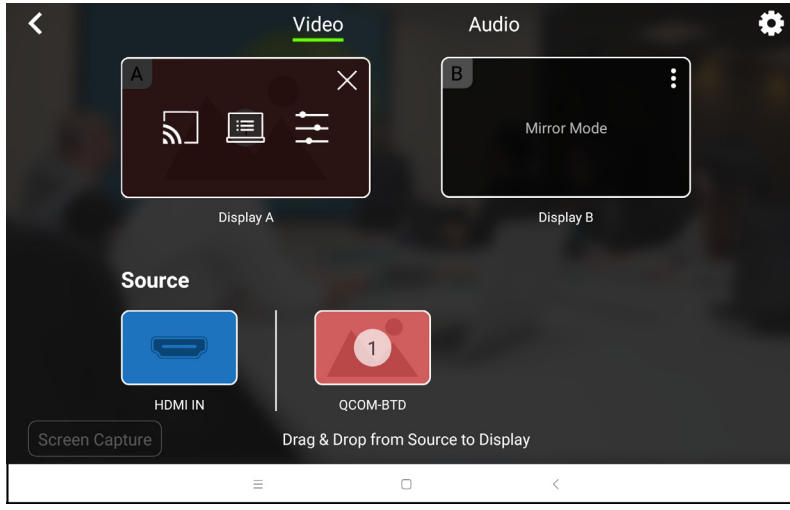
Display Features and Settings

To go live, whiteboard, or configure display settings for the selected display, follow the steps below.

1. Tab ⋮ from the top right corner of the selected display.



2. The below screen appears.



Each tool and its purpose are described in the table below.

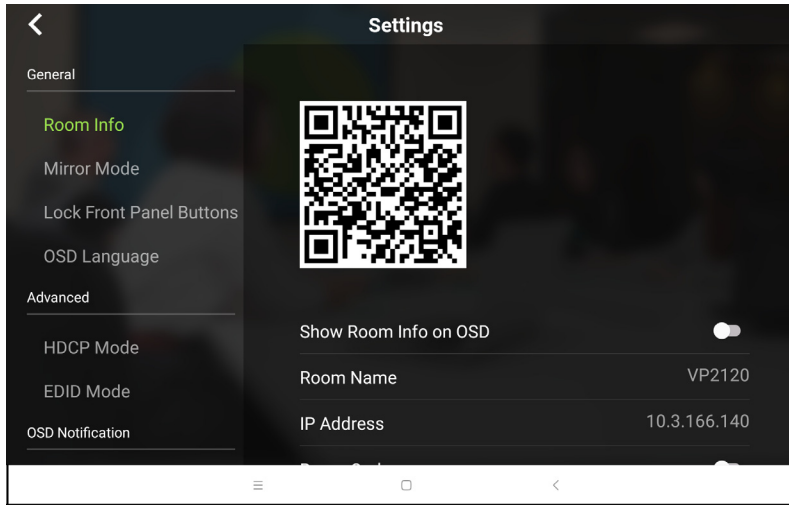
Tool	Description
Go Live 	Tap this icon to stream out the display. This icon grays out if the VP2120 is not connected to the network. **IMPORTANT:** ◆ Make sure that the VP2120 is connected to the network and that the network bandwidth is of 2 MB or more.
Whiteboard 	Tap this icon to bring up the whiteboard page. For more information, see *Whiteboard*, page 87.
Display Settings 	Tab this icon to make display settings such as aspect ration, resolution, and auto switching.
Audio Panel 	Tap this icon to go to the Audio Panel for adjusting the volume of the VP2120.

Screen Capturing

Tab  to capture the screen. The captured image is saved to the storage device connected to the VP2120's USB ports. Make sure you have a storage device inserted to the VP2120 for this function to be available.

More Settings on iOS Tablet

To configure more settings to the VP2120, or to bring up the room information on your tablet's screen such as QR code, room name, IP address, room code, connected participants. Tap the **More Settings** button from your tablet's screen and the below screen appears.

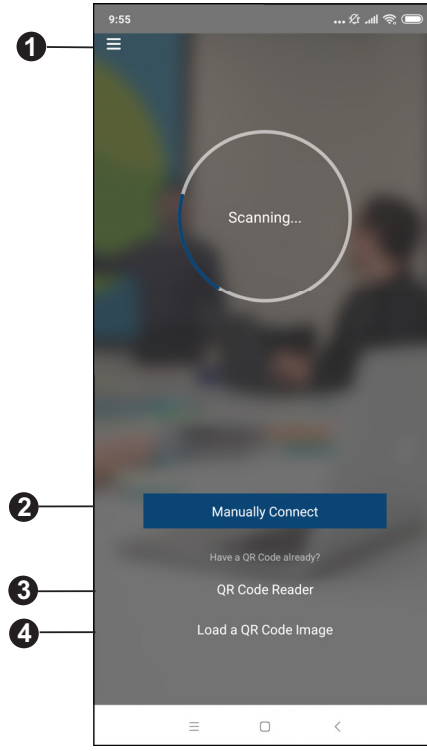


For more information on the settings, see *General*, page 96, *Advanced*, page 97, *Audio*, page 98, *OSD Notification*, page 99, and *Information*, page 100.

Android Version

Main Page

When logged in, the ATEN Video Presentation Control App defaults to the scanning page. Refer to the table below for an overview of the functions on each tab.



No.	Component	Description
1	Info	Tap the info icon to show information such as version, privacy policy, and contact us.
2	Manually Connect	Tap this icon to manually connect to join a meeting by entering its IP address or a 4-digit room code.
3	QR Code Reader	Tap this icon to scan a QR code to join a meeting.

No.	Component	Description
4	Load a QR Code Image	Tap this icon to upload a QR code image to join a meeting.

Info

Below screen is what the info page looks like, it shows the version, privacy policy and contact us. Tap on the **Contact Us** and it takes you straight to our ATEN's official website.



Note: Unless otherwise specified, all the screens shown in this manual are for smartphone only. The layout of the actual screens for tablet may vary slightly from these examples.

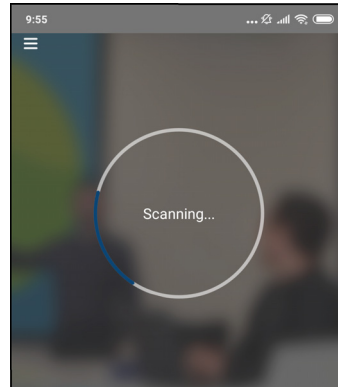
Joining a Meeting

There are three ways to join a meeting through our ATEN Video Presentation Control App on VP2120. When the App is opened, it automatically scans for the device and available rooms to access. Or you can manually type in the IP address and room code, or use a QR code to join a meeting. Each methods are described below.

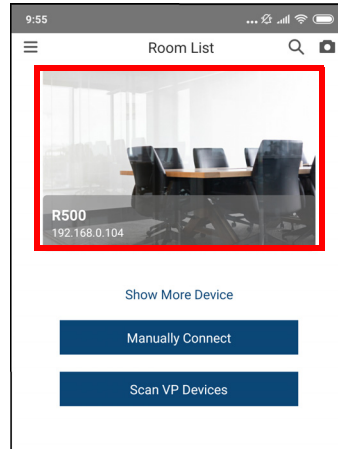
Joining a Meeting Automatically

To automatically scan and join a meeting, follow the steps below.

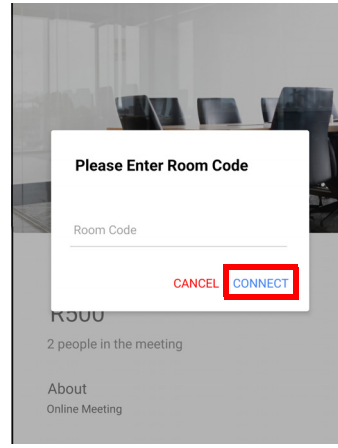
1. Open the ATEN Video Presentation Control App and wait for the scanning process to finish.



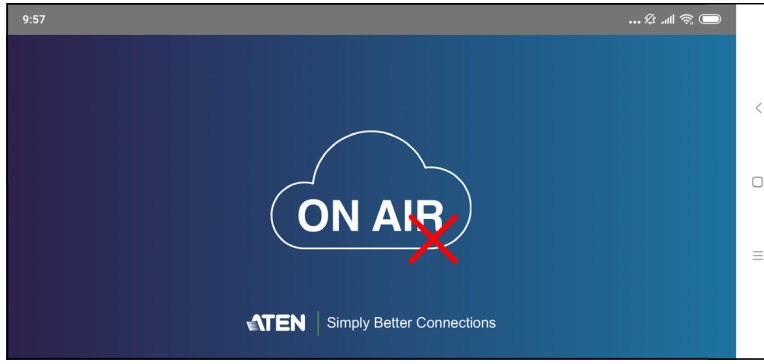
2. When the scanning finishes, the Room List appears. Tap on a room to join the meeting.



3. Enter a room code, and then tap **Connect**.



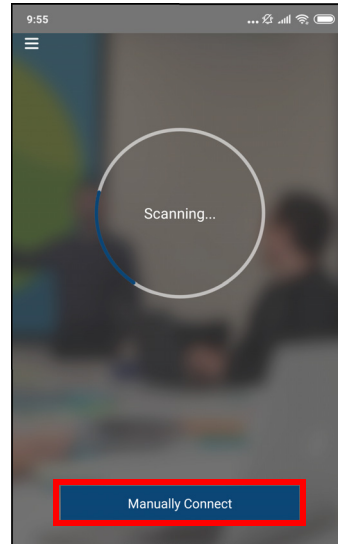
4. Now you have successfully joined the meeting.



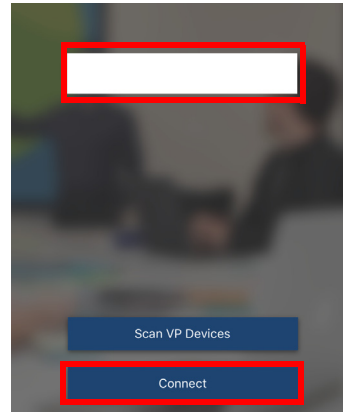
Joining a Meeting via Manually Connect

To manually connect and join a meeting, follow the steps below.

1. Open the ATEN Video Presentation Control App and tap **Manually Connect**.



2. Type in the IP address of the VP2120 and the required room code, and then tap **Connect**.

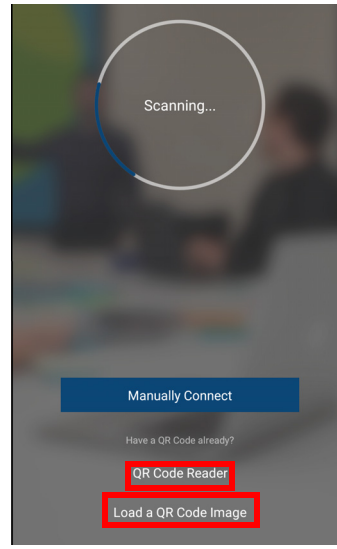


3. Now you have successfully joined the meeting.

Joining a Meeting via QR Code

To join a meeting via QR code, follow the steps below.

1. Open the ATEN Video Presentation Control App and tap on the **QR Code Reader** or **Load a QR Code Image**.



2. Tap on the **QR Code Reader** to scan a pre-generated QR code.
3. Tap on the **Load a QR Code Image** to upload a pre-generated QR code.
4. Now you have successfully joined the meeting.

Meeting Screen

Once you have successfully joined a meeting, tap on the screen and the below screen appears.



Each functions are described in the table below.

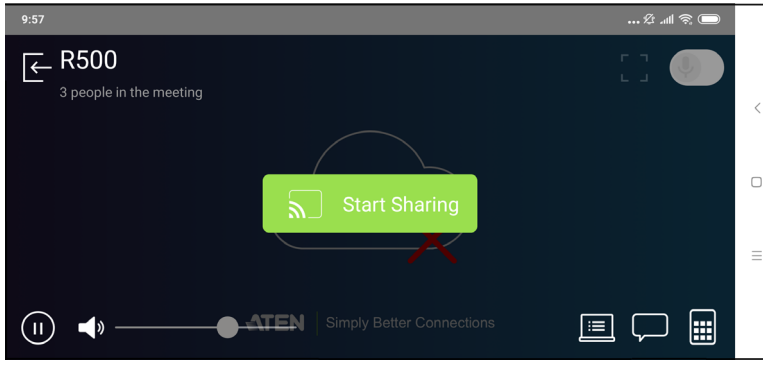
No.	Component	Description
1	Live Screen	Displays the contents that goes live from the VP2120 on your smartphone/tablet.
2	Play / Pause	Tap this icon to play or pause the live streaming contents.
3	Volume Control	Allows you to adjust the volume and tap on the  to mute.
4	Whiteboard 	Tap this icon to display the whiteboard on your smartphone/tablet. For more information, see *Whiteboard*, page 87.
5	Chat Room 	Tap this icon to display a chat panel to use text interaction and file sharing with other connected meeting participants.

No.	Component	Description
6	Control Panel 	Tap this icon to access to the basic VP2120 settings. For more information, see *Control Panel for iOS Smartphone*, page 89.
7	Log Out 	Tap this icon to log out leave the meeting.
8	Full Screen 	Tap this icon to extend the display to full screen.
9	Microphone 	This icon greys out when there is no streamed-out content. Fore more information, see *More Settings on iOS Smartphone*, page 95. When the microphone becomes available, tap  to speak to the meeting participants, and the icon becomes green .
10		Tap this icon to share the screen on your smartphone/ tablet and makes it available for broadcast to all meeting participants. For more information, see *Streaming Out Your Content*, page 84.

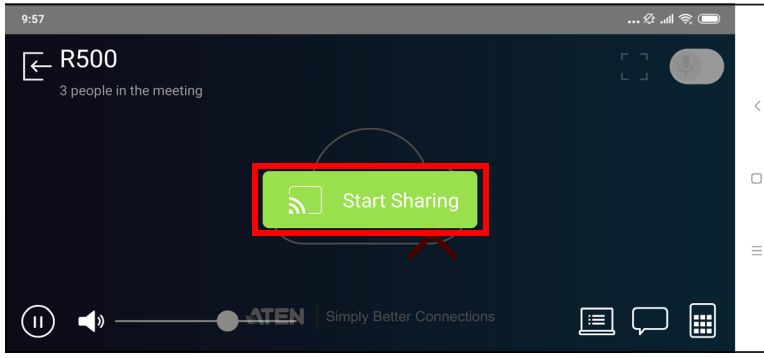
Streaming Out Your Content

Participants that are connected with the VP2120 can all share their display contents via the App. To share the content on your smartphone/tablet, follow the steps below.

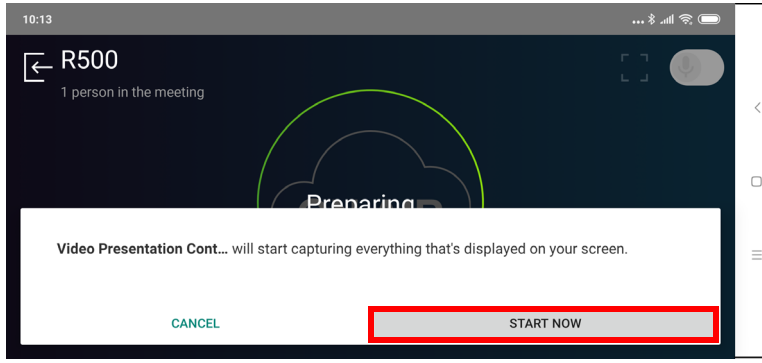
1. Once you have successfully joined a meeting on the VP2120, tap on your smartphone/tablet's display screen and the below picture appears.



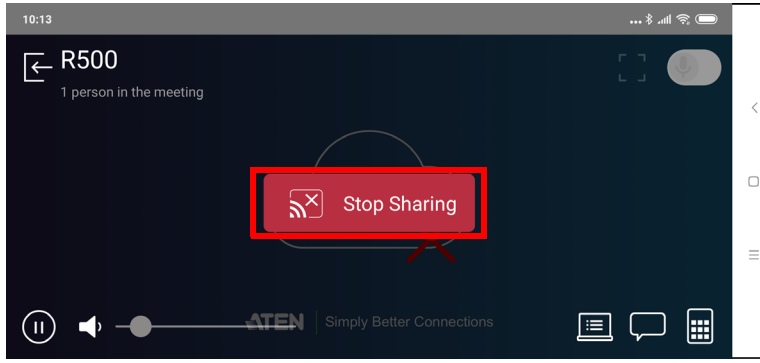
2. Click on the **Start Sharing**. A warning message similar to the one below appears.



3. A warning message similar to the one below appears, then click **START NOW**.



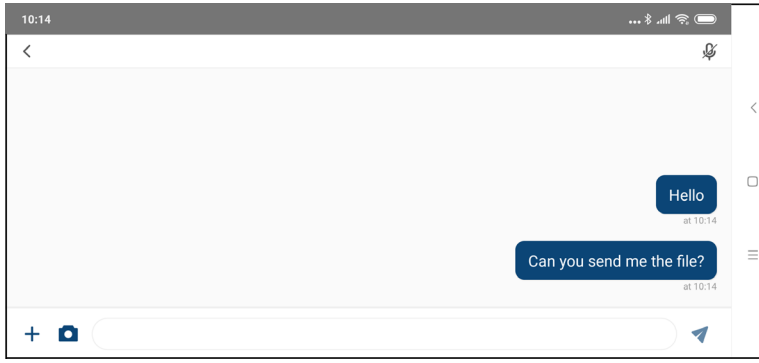
4. Now your entire screen is being shared to all the meeting participants.
5. To end the sharing, tap on your smartphone/tablet's display screen and tap **Stop Sharing**.



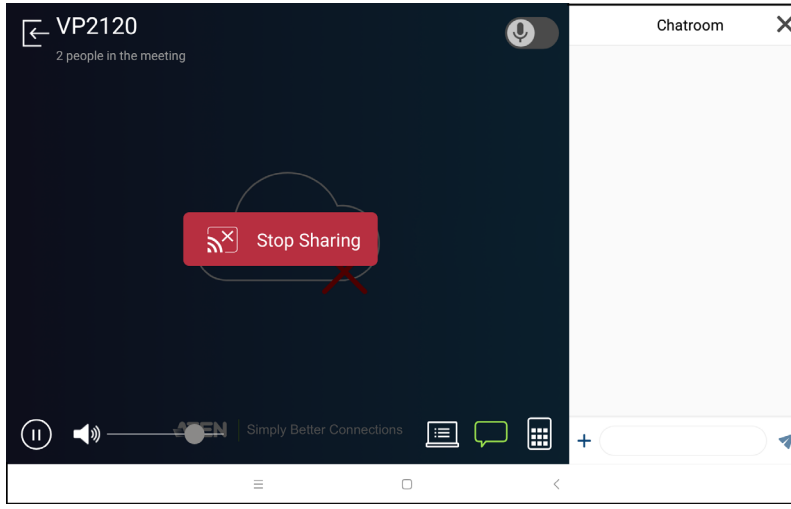
Chat Room

The chat room allows you to use text interaction and information sharing with the connected participants. File sharing enables further data sharing and follow-up.

From your smartphone/tablet's screen, tap the **Chat Room** button and the below screen appears.



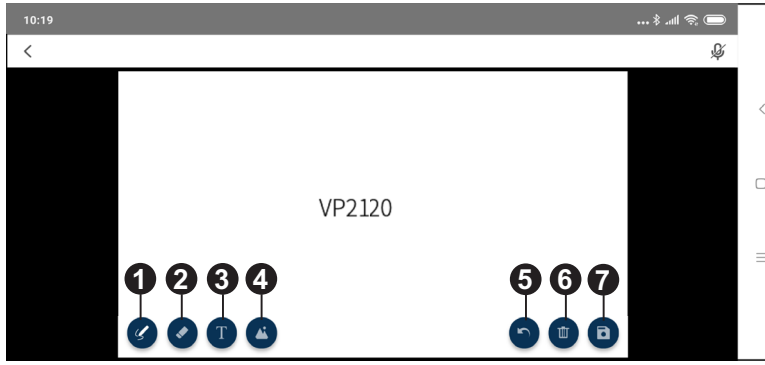
From your tablet's screen, tap the **Chat Room** button and the below screen appears.



Whiteboard

The whiteboard allows you to draw, insert images, or create texts and share to all the participants and administrator. You can also save the whiteboard locally for future use.

From your smartphone/tablet's's screen, tap the **Whiteboard** button and the below screen appears. Each tool and its purpose are described in the table below.

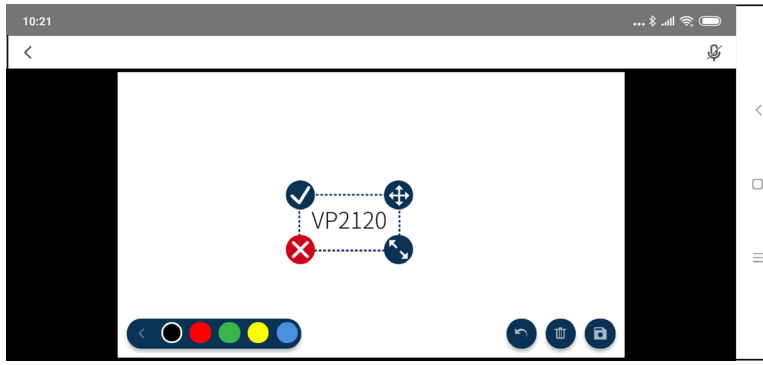


No.	Tool	Description
1	Pencil	Click to select a color and size for the pencil to write or draw on the whiteboard.
2	Eraser	Click to select a size for the eraser to remove any pixels on the whiteboard.
3	Text	Click to select a color for the text. To insert a text, see *How To Insert Text*, page 118.
4	Image	Click to browse and insert an image on the whiteboard.
5	Undo	Click to undo your current move.
6	Bin	Click to remove the current whiteboard to the bin. A warning message appears, click cancel or continue to remove the whiteboard.
7	Save	Click to automatically save your current whiteboard in your local computer/desktop.

How To Insert Text

To insert a text in the whiteboard, follow the steps below..

1. Click the **Text** tool to select a color for the text.
2. Left click anywhere on the whiteboard to insert a text.



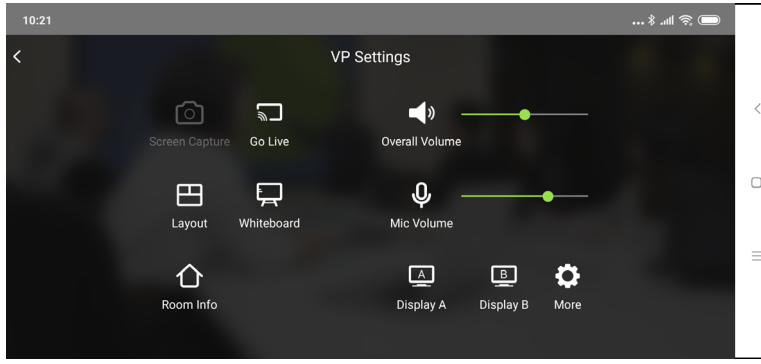
No.	Tool	Description
1		Click to accept and the current text will be entered on the whitboard.
2		Click to drag the current text to a position that you like.
3		Click and drag to resize the current text.
4		Click to remove the current text.

Control Panel for Android Smartphone

You can perform the following tasks with the control panel.

- Switch display sources
- Change the display mode, resolution, or aspect ratio settings
- Stream out (go live) the current display via network connection
- Configure the VP2120's main system settings
- Make screen captures

From your smartphone's screen, tap the **Control Panel** button and the below screen appears.



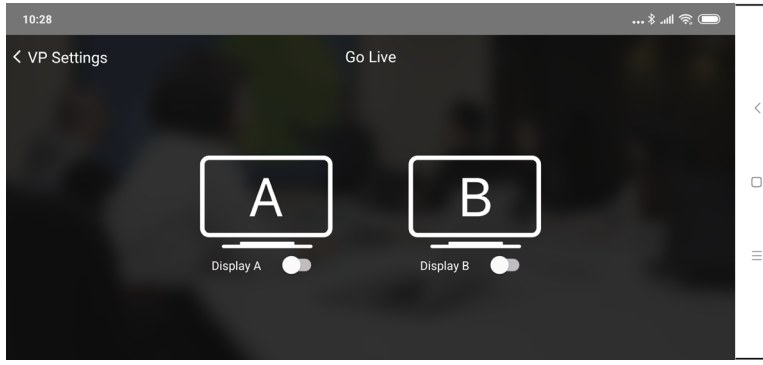
Tool	Description
Screen Capture 	Tap this icon to capture the screen, the capture image is saved to the storage device connected to the VP2120's USB port. Make sure you have a storage device inserted to the VP2120 for this function to be available.
Go Live 	Tap this icon to stream out the display. This icon grays out if the VP2120 is not connected to the network. For more information, see *More Settings on iOS Smartphone*, page 95. **IMPORTANT:** ◆ Make sure that the VP2120 is connected to the network and that the network bandwidth is of 2 MB or more.
Layout 	Tap this icon to select a layout format between single view or multiview for the display content on your screen. For more information, see *More Settings on iOS Smartphone*, page 95.

Tool	Description
Whiteboard 	Tap this icon to bring up the whiteboard page. For more information, see *Whiteboard*, page 117.
Room Info 	Tap this icon to bring up the room information on your smartphone's screen such as QR code, room name, IP address, room code, connected participants. For more information, see *Room Info*, page 122.
Overall Volume 	Tap this icon to mute the speaker volume or sets the volume of the speaker connected to the VP2120 using .
Mic Volume 	Tap this icon to mute the microphone volume or sets the volume of the microphone connected to the VP2120 using .
Display A 	Tap this icon to switch display source between HDMI source and Streaming source, or sets resolution, aspect ratio, and auto switching settings for display A. For more information, see *Display A*, page 123.
Display B 	Tap this icon to switch display source between HDMI source and Streaming source, or sets resolution, aspect ratio, and auto switching settings for display B. For more information, see *Display B*, page 124.
More Settings 	Tap this icon to configure more settings to the VP2120. For more information, see *More Settings on Android Smartphone*, page 125.

Go Live Using Android Smartphone

To stream out a display, follow the steps below.

1. From your smartphone's screen tap, the **Go Live** button and the below screen appears.



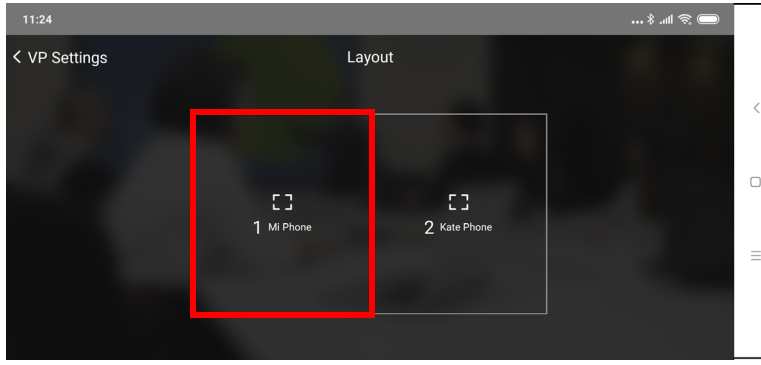
2. Select a display to stream out by tapping this button.

Layout

To select a streamed-in source to display on the display A, tap the **Layout** button from your smartphone's screen and the below screen appears.

Note: In order to select a streamed-in source to display, you must have at least two streamed-in sources.

Tap to select the source you wish to display on display A.



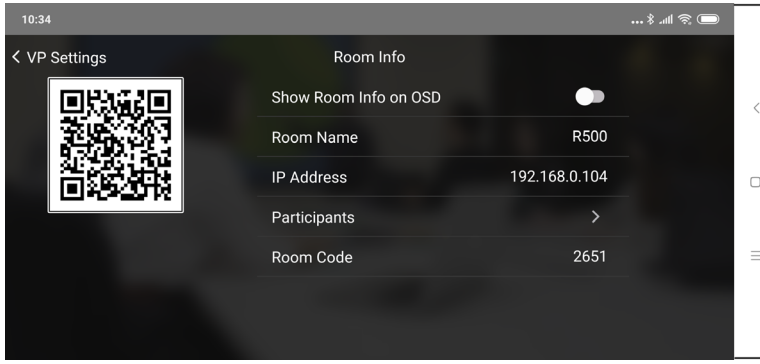
Whiteboard

To display whiteboard on display A, tap the **Whiteboard** icon from your smartphone's screen. When the Whiteboard icon turns green, the display A is now showing the whiteboard.

Room Info

To display room info on your smartphone's screen, follow the steps below.

1. From your smartphone's screen, tap the **Room Info** button and the below screen appears.

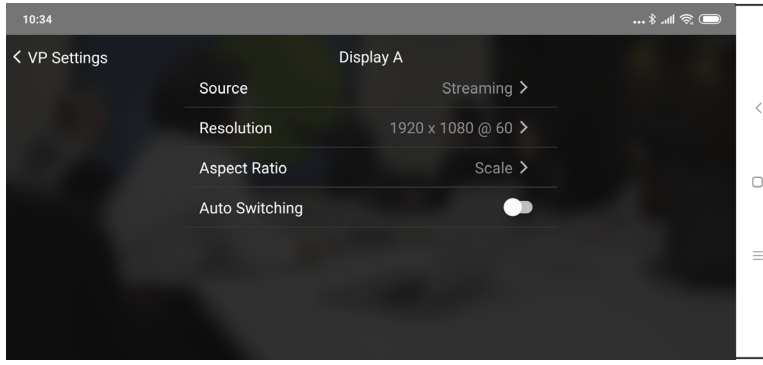


2. To show room info on the OSD, tap on the button.
3. To view a list of the connected participants, tap on the button.

Display A

To switch a display source, or configure settings for display A, follow the steps below.

1. From your smartphone's screen, tap the **Display A** button and the below screen appears.

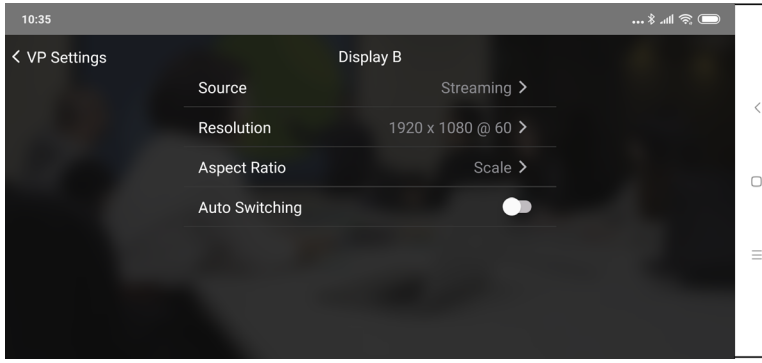


2. To switch display source between HDMI source and Streaming source, tap on the button and select a desired display source,
3. To change the resolution for display A, tap on the button and select a desired resolution.
4. To change the aspect ratio for display A, tap on the button and select a desired aspect ratio.
5. To enable the auto switching for display A, tap on the button to enable, tap again to disable.

Display B

To switch a display source, or configure settings for display B, follow the steps below.

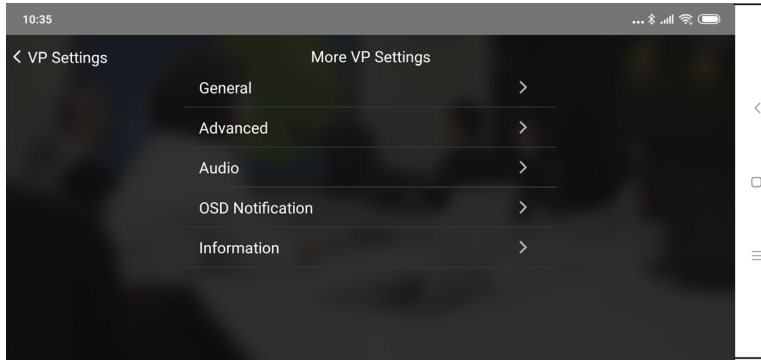
1. From your smartphone's screen, tap the **Display B** button and the below screen appears.



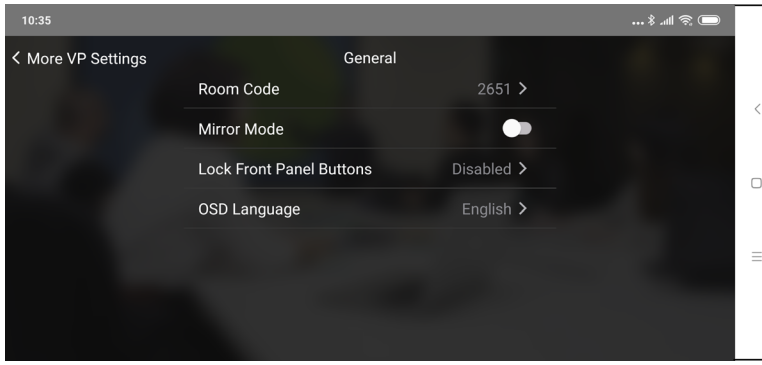
2. To switch display source between HDMI source and Streaming source, tap on the button and select a desired display source,
3. To change the resolution for display A, tap on the button and select a desired resolution.
4. To change the aspect ratio for display A, tap on the button and select a desired aspect ratio.
5. To enable the auto switching for display A, tap on the button to enable, tap again to disable.

More Settings on Android Smartphone

To configure more settings to the VP2120, tap the **More Settings** button from your smartphone's screen and the below screen appears.

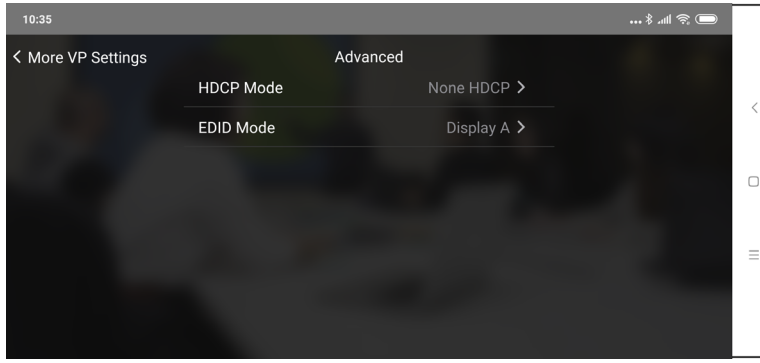


General



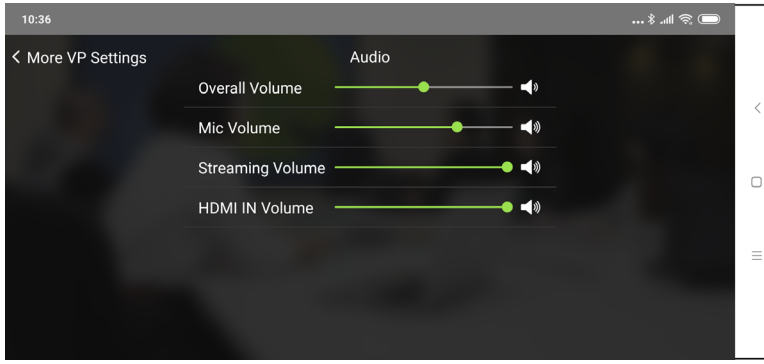
System Settings			Description
Note: Default settings are indicated in bold.			
General	Room Code	◆ Disable ◆ Refresh code	Enables and generates a random room code to be required for joining a meeting.
	Mirror Mode	◆ Enable ◆ **Disable**	Each connected display mirrors each other and does not take different settings. Click the check-box to enable, configuration on display A is automatically applied to the display B.
	Lock Front Panel Buttons	◆ **Disable** ◆ 5 sec later ◆ 30 sec later ◆ 5 min later	Automatically locks the front-panel pushbuttons if the OSD idles for the selected duration.
	OSD Language		Sets the display language of the OSD.

Advanced



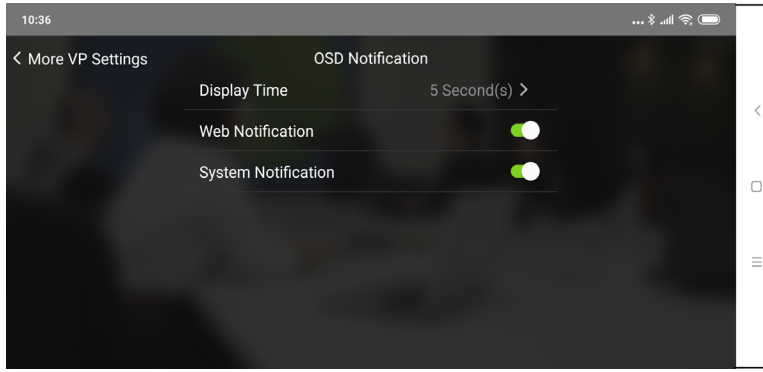
System Settings			Description
Note: Default settings are indicated in bold.			
Advanced	HDCP Mode	◆ None HDCP ◆ **HDCP**	Enables this function to prevent copying of the audio and video content as it travels across connections.
	EDID Mode	◆ **ATEN Default** ◆ Display A	◆ **ATEN default:** This mode sends ATEN-predefined EDID to the connected sources. ◆ **Display A:** This mode sends the EDID of Display A to the connected sources.

Audio



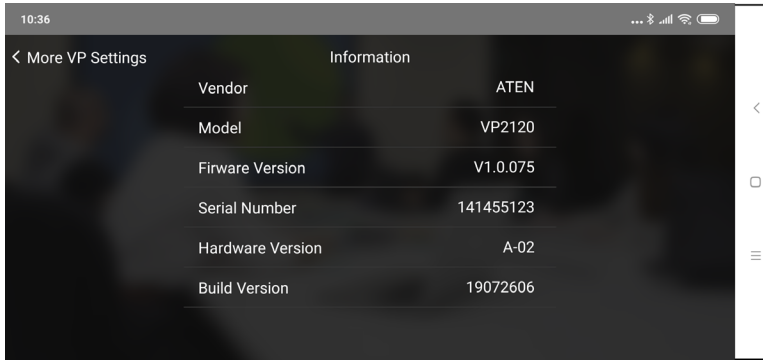
System Settings			Description
Note: Default settings are indicated in bold.			
Audio	Overall Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the speaker connected to the VP2120 and tap to mute.
	Mic Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the microphone connected to the VP2120 and tap to mute.
	Streaming Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of the streamed-in source and tap to mute.
	Media Volume	◆ Increase (+) ◆ Decrease (-) ◆ Mute	Sets the volume of connected sources and tap to mute.

OSD Notification



System Settings			Description
Note: Default settings are indicated in bold.			
OSD Notification	Display Time	◆ 3 sec ◆ **5 sec** ◆ 10 sec ◆ Disable	Disable or sets the duration for which a notification message pops up in the OSD.
	Web Notification	◆ Disable ◆ **Enable**	Displays notifications on user actions performed via the web interface.
	System Notification	◆ Disable ◆ **Enable**	Displays notifications on system status, device connection status, and user actions performed via the OSD.

Information



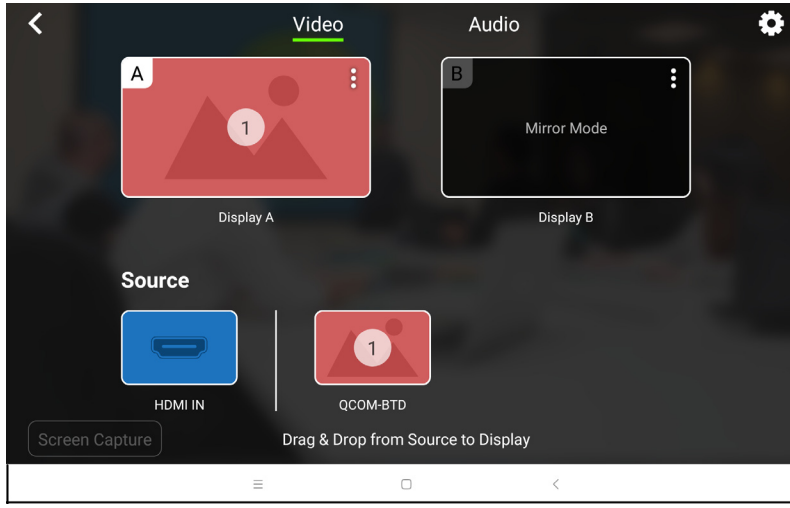
System Settings		Description
Note: Default settings are indicated in bold.		
Infomation	Vender, firmware version, serial number, hardware version, build version	Displays the system information.

Control Panel for Android Tablet

You can perform the following tasks with the control panel.

- Switch display sources
- Change the display mode, resolution, or aspect ratio settings
- Stream out (go live) the current display via network connection
- Configure the VP2120's main system settings
- Make screen captures

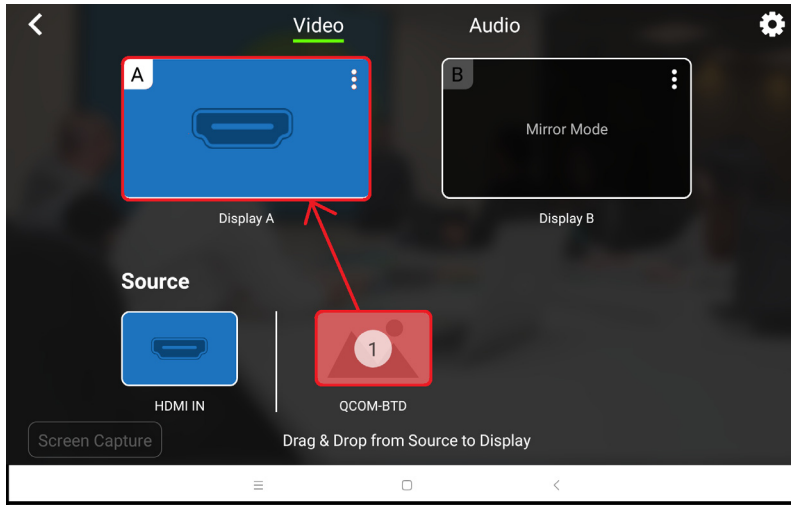
From your tablet's screen, tap the **Control Panel** button and the below screen appears.



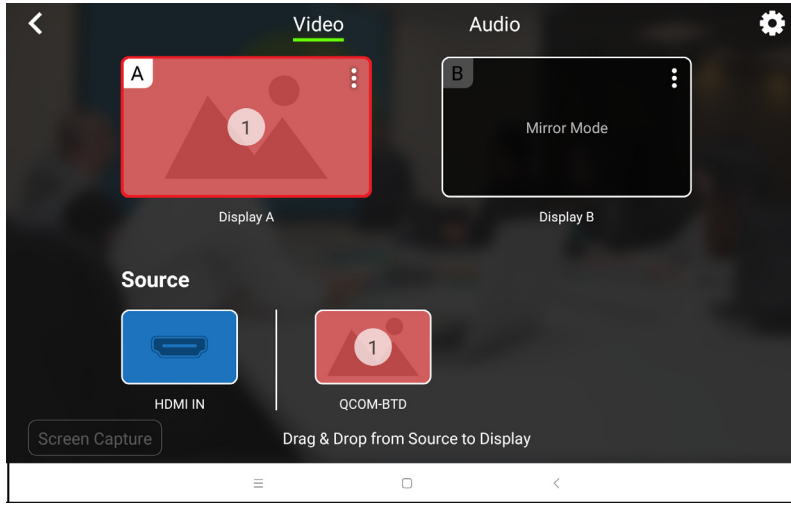
Switching a Source for a Display

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

1. To switch streaming source to Display A. From the display page, drag the streaming source to Display A.



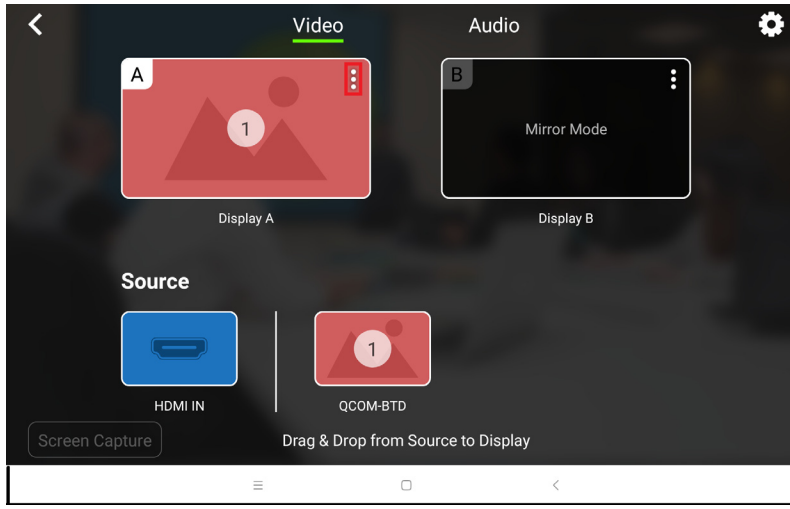
2. The Display A is now displaying streaming source content.



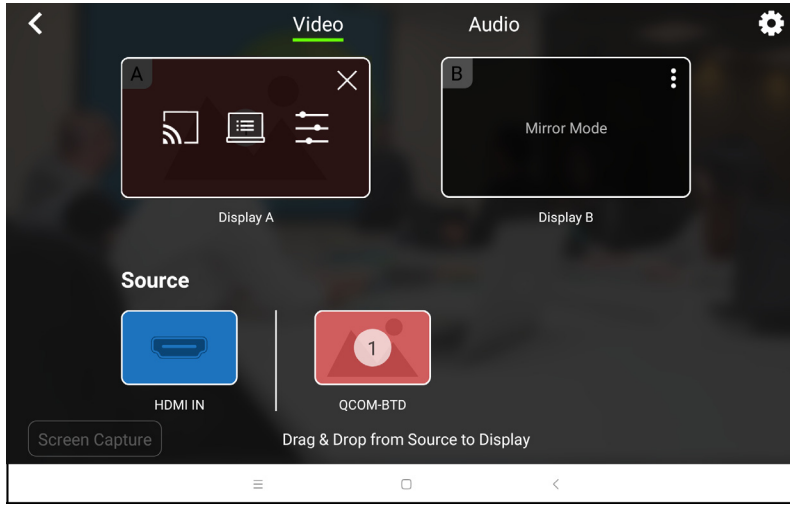
Display Features and Settings

To go live, whiteboard, or configure display settings for the selected display, follow the steps below.

1. Tab  from the top right corner of the selected display.



2. The below screen appears.



Each tool and its purpose are described in the table below.

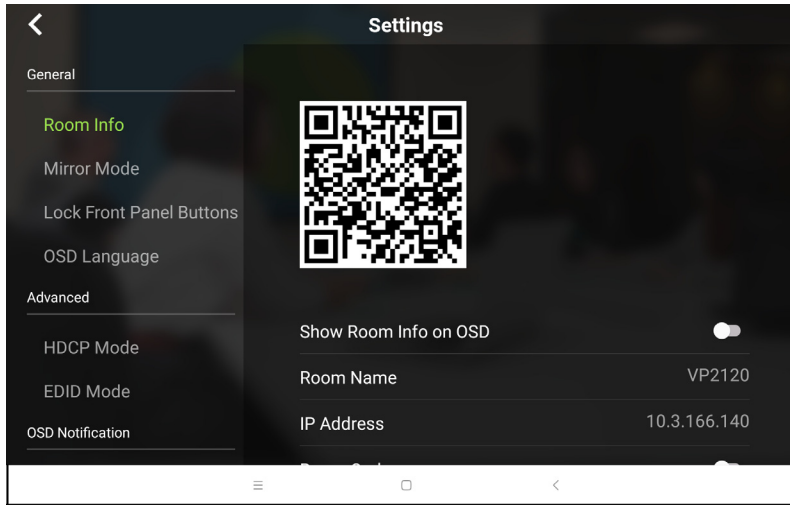
Tool	Description
Go Live 	Tap this icon to stream out the display. This icon grays out if the VP2120 is not connected to the network. **IMPORTANT:** ◆ Make sure that the VP2120 is connected to the network and that the network bandwidth is of 2 MB or more.
Whiteboard 	Tap this icon to bring up the whiteboard page. For more information, see *Whiteboard*, page 87.
Display Settings 	Tab this icon to make display settings such as aspect ration, resolution, and auto switching.
Audio Panel 	Tap this icon to go to the Audio Panel for adjusting the volume of the VP2120.

Screen Capturing

Tab  to capture the screen. The captured image is saved to the storage device connected to the VP2120's USB ports. Make sure you have a storage device inserted to the VP2120 for this function to be available.

More Settings on Android Tablet

To configure more settings to the VP2120, or to bring up the room information on your tablet's screen such as QR code, room name, IP address, room code, connected participants. Tap the **More Settings** button from your tablet's screen and the below screen appears.



For more information on the settings, see *General*, page 126, *Advanced*, page 127, *Audio*, page 128, *OSD Notification*, page 129, and *Information*, page 130.

This Page Intentionally Left Blank

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.
- To prevent damage to your installation it is important that all devices are properly grounded.
- Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.
- Position system cables and power cables carefully; Be sure that nothing rests on any cables.
- Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.

- Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.
- If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
  - The power cord or plug has become damaged or frayed.
  - Liquid has been spilled into the device.
  - The device has been exposed to rain or water.
  - The device has been dropped, or the cabinet has been damaged.
  - The device exhibits a distinct change in performance, indicating a need for service.
  - The device does not operate normally when the operating instructions are followed.
- Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.

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	VP2120
Video Input	
Interfaces	1 x HDMI Type-A Female (Black)
Video Output	
Interfaces	2 x HDMI Type-A Female (Black)
Max. Distance	HDMI: Up to 15 m
Video	
Max. Resolution	HDMI: Up to 1080p @ 60 Hz
Compliance	HDMI: HDCP 1.4 Compatible Consumer Electronics Control (CEC)
Audio	
Input	Microphone: 1 x Mini Stereo Jack Female (Pink)
Output	Stereo Audio: 1 x Mini Stereo Jack Female (Green)
Connectors	
Console Ports	USB 3.0: 1 x USB Type-A Female (Blue)
Power	1 x DC Jack (Black)
Control	
IR	1 x Mini Stereo Jack Female (Black)
Ethernet	1 x RJ-45 Female (Silver)
Switches	
Power	1 x Pushbutton (LED: Green)
Selection	Room Info: 1 x Pushbutton Menu: 1 x Pushbutton Left: 1 x Pushbutton Right: 1 x Pushbutton Down: 1 x Pushbutton Up/Unlock: 1 x Pushbutton Volume: 1 x Knob Enter: 1 x Pushbutton Esc: 1 x Pushbutton
EDID Settings	EDID Mode: ATEN Default / Display A
Power	
Consumption	DC12V:14.46W:87BTU
Environmental	

Function	VP2120
Operating Temperature	0 - 40°C
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	1.14 kg (2.51 lb)
Dimensions (L x W x H)	20.00 x 16.92 x 4.40 cm (7.87 x 6.66 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/

© Copyright 2021 ATEN® International Co., Ltd.
Released: 2021-11-17

ATEN and the ATEN logo are registered trademarks of ATEN International Co., Ltd. All rights reserved.
All other brand names and trademarks are the registered property of their respective owners.