

UC9020

StreamLIVE™ HD Multi-Channel AV Mixer 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.

About this Manual

This user manual is provided to help you get the most from the UC9020 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 Multi-Channel AV Mixer. Its purpose, features, installation considerations, and panel components are presented and described.

Chapter 2, Hardware Setup describes the steps that are necessary to quickly and safely set up your installation.

Chapter 3, ATEN OnAir App & Side Menu explains the functions in the OnAir App and its side menu.

Chapter 4, ATEN OnAir App & Video Mixer explains the functions in the Video Mixer deck in the OnAir App, including scene editing, media resizing/ cropping and text and image overlays.

Chapter 5, ATEN OnAir App & Audio Mixer explains the functions in the Audio Mixer deck in the OnAir App.

Chapter 6, ATEN OnAir App & Settings explains the settings you can configure for the collaborations between the unit and the OnAir App.

Chapter 7, Quick Live-Stream Setup describes how to quickly setup your system to help you start live-streaming.

Chapter 8, Firmware Upgrade describes the firmware upgrade procedure and how the volume mixer LED behaves during the firmware upgrade.

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

Note:

- Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit or any connected devices.
- ATEN regularly updates its product documentation for new features and fixes. For an up-to-date UC9020 documentation, visit <u>http://</u> 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 <i>Start</i> menu, and then select <i>Run</i> .
A	Indicates critical information.



Package Contents

- 1 UC9020 StreamLIVE[™] HD Multi-Channel AV Mixer
- 1 USB Type-C to USB Type-A custom-made cable (parts no.: LIN6-09B1-C11G)
- 1 USB Type-A to USB Type-A cable (parts no.: LIN5-04U1-U1HG)
- 1 power cord
- 1 user instructions

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

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

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.

Table of Contents

	Compliance Statements .ii About this Manual .iv Conventions .v Package Contents .vi Product Information .vii User Information .viii User Notice .viii
1.	Introduction
	Overview
	Features
	Requirements
	Components
	Top View
	Rear View
	Side View
n	Hardwara Satun
۷.	Hardware Setup
	Connecting the StreamLIVE™ HD Unit9
	Connecting iPad
	Lightning Connector on iPad
	ATEN OnAir App & Side Menu ATEN OnAir Application 13 Page Components 15 Side Menu 16 Current Project 16 Create Project 17 Copy as New Project 18 Open Project 19 About 20 All Projects 21 Tutorial 22 Self-diagnostic 22
4.	ATEN OnAir App & Video Mixer
	Video Mixer
	Scene Editor
	Resize/Crop Tool
	Resize
	Crop (Media Only)

	Re-order the Overlays	. 31
5.	ATEN OnAir App & Audio Mixer Audio Mixer	. 33
6.	ATEN OnAir App & Settings	
	Settings	. 35
	Live-streaming on Facebook & Youtube	
	Logging into Youtube Account for Live-streaming	
	Logging into Facebook Account for Live-streaming	
	Example Live-stream URL and Stream Key (Facebook)	
	Example Live-stream URL and Stream Key (Youtube)	
	Recording Live-stream Video (External Storage)	
	External Storage Settings	
	Video Information for Live-stream Recording	.47
7.	Quick Live-Stream Setup	
•••	Setup	٨v
	During the Live-Stream / Live-Stream Recording	3
	Quick Mode	
	-	-
8.	Firmware Upgrade	
	Download Requirements	. 55
	Preparing the Firmware	. 55
	Upgrading the Unit	
	Upgrade Assessment Fail	
	Upgrade Fail	. 57
۸.	opendix	
	Safety Instructions	50
	General	
	Technical Support	
	Specifications	
	Live-Streaming Information.	
	Create a Live Stream with Youtube	
	What is CDN Service?	
	RTMP/RTMPS and RTSP Protocols	
	Other ways to input image overlays	. 65
	Limited Warranty	. 66

Chapter 1 Introduction

Overview

The StreamLIVE[™] HD is a portable, all-in-one, multi-channel audio/video mixer device that integrates a 1080p video capture, video switch, stream broadcaster, video converter, video splitter, and audio mixer into one compact box to eliminate the hassle of working with different AV equipment. The StreamLIVE[™] HD makes HDMI video sources broadcast for higher quality live stream to CDN platforms such as YouTube Live, Facebook and Twitch.

For added convenience, the StreamLIVE[™] HD provides an intuitive app, making it easy to monitor, edit image layouts, and adjust PIP settings. The StreamLIVE[™] HD is PC and software-free, and with its well-designed control panel, it makes livestreaming operations smooth and effortlessly. You can even preview video and monitor audio levels before going live with your web broadcast! To get started, simply connect video/audio sources, and an Ethernet with an ATEN app-installed iPad, and you are ready to roll.

Whether you're capturing, editing or streaming, the StreamLIVETM HD with its ergonomic and practical design, it is flexible enough to fit all independent live streaming broadcasting environments. With a rich feature set, the StreamLIVETM HD addresses the challenges that independent live streaming broadcasters encounter and provides an easy-to-use solution.

Features

- All-in-one design to simplify streaming workflow Integrates 1080p video capture, video switch, streaming encoder, video converter, video splitter, and audio mixer
- Professional-quality live streaming to global audiences by any CDN platform, with a low entry threshold, even entry-level users can quickly get started
- PC-free and software-free with plug-n-roll capability
- Intuitive app for preview and program monitoring, change video layout in Full Screen/PBP/PIP settings, adding image and subtitles overlays, and smooth scenes transitions for a professional finish
- Storyboard-like management preset up to 8 scenes for later while streaming and during performances to reduce the need to interact with hardware
- Compact mixer control panel Switching & mix between multiple video & audio sources with the help of easily identifiable luminous keys
- Fanless and optimized thermal air flow system for quiet operation
- Multitask designed handle-stand to enhance portability and ergonmic comfort angle

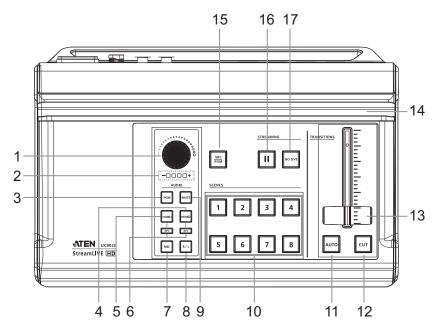
Requirements

- Ethernet connection
- The following iPad with iOS 11 or later
 - iPad Pro (1st gen, 12.9")
 - iPad Pro (1st gen, 9.7")
 - iPad Pro (2nd gen, 12.9")
 - iPad Pro (2nd gen, 10.5")
 - iPad Pro (3rd gen, 12.9" or later)
 - iPad Pro (3rd gen, 11" or later)
 - iPad (5th gen or later)
 - iPad Air (3rd gen or later)
 - iPad Mini (5th gen or later)

- USB Storage Device (for live-stream video recording)
 - USB 3.x compatible flash drive or mobile drive (HDD / SSD)
 - At least 32GB of free space

Components

Top View



No.	Component	Description
Audio	Section (Controls the	e audio settings of the system)
1	audio level control	Controls the volume of the selected audio source.
2	volume meter LEDs	The LED reflects the controlled volume. During firmware upgrade, the LED behavior is changed. Refer to <i>Upgrading the Unit</i> on page 56 for the LED behavior during firmware upgrade.
3	PGM	Switches to the PGM audio source. The button will light up when switched to this source.
4	HDMI 2 audio source	Switches to the HDMI 2 audio source. The button will light up when switched to this source.
5	HDMI 1 audio source	Switches to the HDMI 1 audio source. The button will light up when switched to this source.
6	AFV	Audio-Follows-Video: Pressing the AFV button will light up. If the video source is selected, the source's audio will also be played.

No.	Component	Description
7	MIC	Switches to the MIC audio source. The button will light up when switched to this source.
8	L/R	Switches to the RCA Line In audio source. The button will light up when switched to this source.
9	mute	Mutes / unmutes the audio the system is currently tuned into. When muting source 1 or 2, AFV will also be turned off.

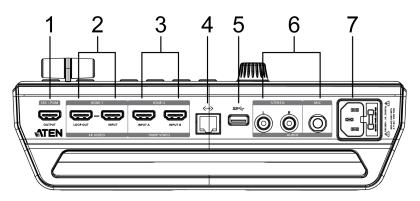
Video Section (controls the video settings of the system)

10	scenes selector	Selects the current stream (PGM) scene and the preview (PRV) scene.
		Greenly lit button indicates PRV Preview.
		Redly lit button indicates PGM Preview.

Transition Control Section (switches the current stream (PGM) scene to the preview (PRV) stream and vice versa)

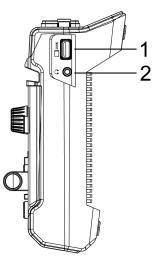
11	auto (transition)	Pressing the Auto button will begin the transition after a specified time (0.3-3.0 seconds). Go to the Setting Deck and refer to page 37 on how to modify this specified time. Press and hold for 3 seconds to enter <i>Quick Mode</i> . Refer to <i>Quick Mode</i> on page 52 for more information.
12	cut (transition)	The transition happens immediately when you press the Cut button.
		Press and hold for 3 seconds to enter <i>Quick Mode</i> . Refer to <i>Quick Mode</i> on page 52 for more information.
13	T-Bar (transition)	Slide the T-Bar to start the transition. The scene transition speed depends on how fast you slide the bar. Sliding the T-bar all the way to one end will complete the transition.
		You can create different effects by sliding it slowly, quickly or even hold it half way.
14	iPad stand	Allows the iPad to sit in.
15	SRC / PGM view selector	Pressing the button will switch video source between HDMI source 1, HDMI source 2 and PGM.
16	pause stream	Press this button to <i>pause</i> streaming.
17	GoLive	Press this button to <i>start</i> streaming and/or recording. Press again to <i>stop</i> .

Rear View



No.	Component	Description
1	SRC / PGM output port	Programmed (PGM) video output.
2	4K HDMI loop out port / 4K HDMI input port	An HDMI 1 input source and an HDMI 1 loop out.
3	1080P video input port	HDMI 2 input that can take video input A or B. To select A or B, go to <i>Media</i> on page 27.
4	Ethernet port	For Internet connection.
5	USB 3.2 Gen1 Type- A port	For firmware upgrade and livestream recording.
6	RCA line in port / mic in port	Connect mic or audio sources for additional audio effects.
7	AC power socket	Powers the unit.

Side View



No.	Component	Description
1	iPad link port (Data only)	Connects to the iPad for ATEN OnAir app.
2	3.5mm audio monitor jack	Sound output for the preview scene (the greenly lit scene).

This Page Intentionally Left Blank

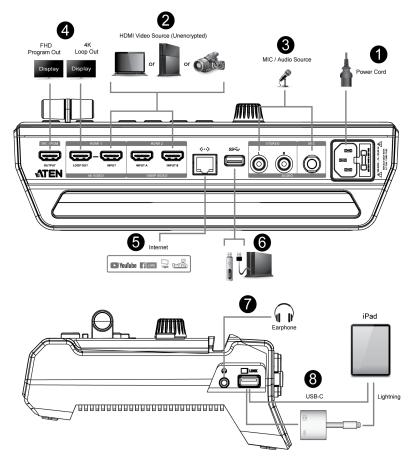
Chapter 2 Hardware Setup



Please review the safety information regarding the placement of this device in *Safety Instructions*, page 59.

Connecting the StreamLIVE™ HD Unit

Follow the steps below to connect the StreamLIVE[™] HD to an HDMI source and the host.



- 1. Power on the unit by connecting the power cord. Wait for the boot-up luminous (scene keys) sequence.
- 2. Connect the HDMI sources (e.g. PC, gaming console or video recorder)¹.
- 3. Connect a microphone or any other audio sources.
- 4. (Optional) Connect the HDMI output cable if necessary:
 - a) Connect the HDMI display to the SRC/PGM output port.
 - b) Connect the HDMI display to the loop out port.
- 5. Connect an Ethernet cable for Internet connection².
- 6. (Optional) If you wish to firmware upgrade or record your live-stream, connect a USB storage device and refer respectively to *Firmware Upgrade* on page 55 or *Recording Live-stream Video (External Storage)* on page 46 for more information.
- 7. (Optional) Connect an earphone to receive sound output for the preview scene.
- 8. Connect your iPad to the iPad link port. Refer to *Connecting iPad* on page 11 for more information.
- 9. (Optional) Place your iPad onto the iPad stand as shown in the diagram below³.



Note: 1. The HDMI sources must be unencrypted.

- 2. Use the connected iPad to configure further network settings for livestreaming.
- 3. iPad placed on the unit is recommended for viewing only. Hand holding your iPad is still recommended for control.

Connecting iPad

Lightning Connector on iPad

For iPads having lightning connectors, simply connect the Apple Lightning USB 3 Adapter (not included, may need additional purchase) and the USB Type-A to USB Type-A cable serially between the StreamLIVETM HD and your iPad.

If you wish to have the charging function, connect your lightning charging cable to the Apple Lightning to USB 3 Adapter.

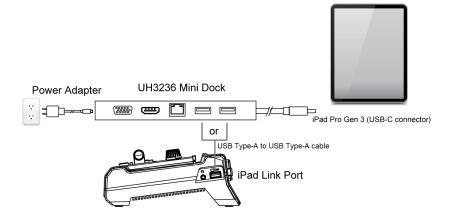
USB-C Connector on iPad

For iPads having USB-C connectors (e.g. iPad Pro Gen 3), simply connect the USB Type-A to USB Type-C cable included in the package between your iPad and the StreamLIVE[™] HD.

Note: The USB Type-A to USB Type-C cable included in the package is custom-made for this setup, a general USB Type-A to USB Type-C cable will not work.

If you wish to have the charging function, connect an ATEN UH3236 mini dock (available for purchase separately) between the iPad and the StreamLIVETM HD, and connect a USB Type-C power adapter (60W or above) to the UH3236.

An example is shown:



This Page Intentionally Left Blank

Chapter 3 ATEN OnAir App & Side Menu

ATEN OnAir Application

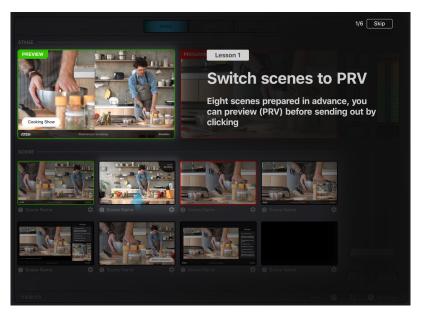
ATEN OnAir app acts as the central controller for UC9020. The app's design is a control panel where you can monitor program results, edit scenes, setup video and audio stream settings, stream recording settings, etc.

Download the ATEN OnAir app from App Store and install it on your iPad.

The icon looks like the one below:



Tap to open the ATEN OnAir application and the tutorial will start for the first time you open it.



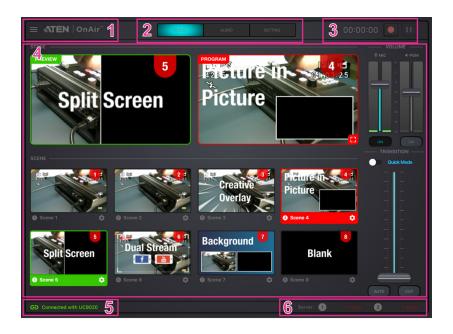
Follow the on-screen instruction as it guides you through the basics of using the ATEN OnAir app with UC9020.

When finished, a message will be shown:



To run the tutorial again, tap the \equiv icon on the top left corner for the side menu and tap \Box Tutorial.

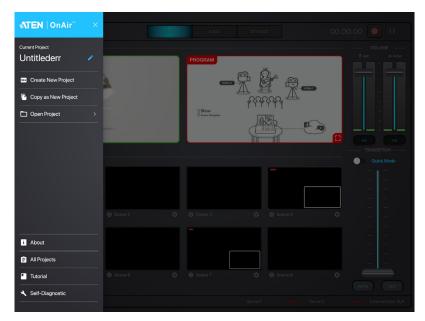
Page Components



No.	Component	Description
1	Side Menu	Tap the ei icon for the side menu. Refer to <i>Side Menu</i> on page 16 for more details.
2	Deck Selector	Tap to select the desired configuration deck. Three decks are available: Video Mixer, Audio Mixer and Setting.
3	GoLive	Tap t to start streaming. Tap t to pause streaming. The timer on the left shows how long you have been streaming for.
4	Deck Content	The content depends on the selected deck.
5	iPad Link Status	Displays the link status between your iPad and the StreamLIVE™ HD.
6	Network Traffic Status	Displays the network traffic status.

Side Menu

A side menu is available for project management, tutorial, app information and self-diagnostic function. For the side menu, tap the end icon on the top left corner.



Current Project

Tap the *icon* to edit the name of your project:

Cancel	Rename
	7/16
Untitled	
Rename	

Create Project

1. Tap Create New Project.

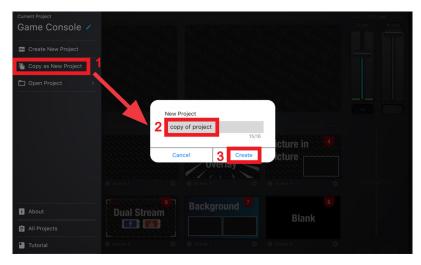
∿ATEN OnAir"	×						
Current Project Untitled							
🔤 Create New Project	1						
🚡 Copy as New Project							
🛅 Open Project			Project Name				
			Template		8/16		
			3 None	Demo	,		
			Presentation	Show			
		Free Name	Game Console	Mobile G	ame		
		Ø Scene 2	Cancel	4 Cr	eate		
i About			ream Ba	ackground	7		
All Projects		f					
Tutorial							
🔧 Self-diagnostic							

- 2. Enter a name for the project.
- 3. (Optional) Select a template. Templates are project settings pre-configured for you if you are unsure how your new project should be.
- 4. Tap Create.

Copy as New Project

If you like the settings of your current project when you are to create a new one, you can use this function copy the settings.

1. Tap Create New Project.



- 2. Enter a name for the project.
- 3. Tap Create.

Open Project

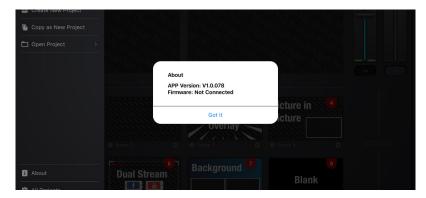
Tap **Open Project** for a list of available projects. An example is shown:

ATEN OnAir [∞] ×	VIDEO			
Current Project Game Console 🖍				
Create New Project				
🎦 Copy as New Project				
Den Project >	Default Project Game 9020			
	Game Console			
	Mobile Game		Picture in	
	Presentation	reative	Picture	
	Show	verlay		
	Blank			
i About		ground 🌌	Blank	
Ê All Projects			Blank	
Tutorial				
Self-diagnostic				

Tap to select the project you wish to use.

<u>About</u>

Tap About for information of the app. An example is shown below:



All Projects

For information of the available projects, tap **All Projects**. An example is shown:

Game Console 🖍					
🚥 Create New Project					
🕒 Copy as New Project	n_5				
Dpen Project	Close	9	All Projects	Open	
		Name	Last Modifie	ed	
	0	Default Project	2019/08/20 PM 6	:26:54	
	0	Mobile 9020	2019/08/12 PM 4	:23:30	
	0	Game Console	2019/08/27 PM 3	:56:58	
	0	Mobile Game	2019/08/12 PM 4	:20:32	
	0	Presentation	2019/08/21 PM 5	5:13:3	
	0	Show	2019/08/12 PM 4	:23:22	
i About	-	Dual Stream	Background 7	8 Blank	
Tutorial					

You can also open or delete the projects here.

To open a project, tap to select a project and tap Open. An example is shown:

Game Console 🗸		82482461 4 8		16 ⁵⁸ 16	¢ sic	4 PGM
📼 Create New Project						
Copy as New Project						
Dpen Project	Close	A	Il Projects	Open		
		Name	notified			
	0	Defendantoject	2019/08/20 PM 6:26:54	Î		
		Mobile 9020	2019/08/12 PM 4:23:30			
	0	Game Console	2019/08/27 PM 3:56:58			
	0	Mobile Game	2019/08/12 PM 4:20:32			
	0	Presentation	2019/08/21 PM 5:13:3	ً		
	0	Show	2019/08/12 PM 4:23:22			
About	D	ual Stream	ckground 7 Bla	ank 🛛		
Tutorial	O See					

To delete a project, tap the garbage can icon corresponding the project. An example is shown:

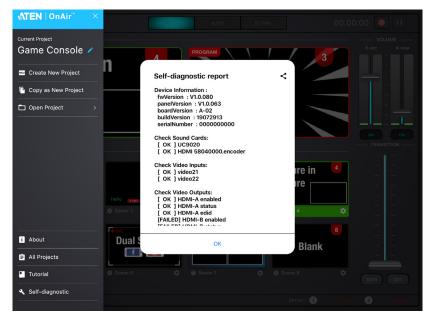
Create New Project					
🕒 Copy as New Project	250				
Dpen Project	Close	A	Il Projects	Open	
		Name	Last Modified		
	0	Default Project	2019/08/20 PM 6:26:54	Î	
	0	Mobile 9020	2019/08/12 PM 4:23:30	茵	
	0	Game Console	2019/08/27 PM 3:56:58		
	0	Mobile Game	2019/08/12 PM 4:20:32		
	0	Presentation	2019/08/21 PM 5:13:3	Ô	
	0	Show	2019/08/12 PM 4:23:22	亩	
i About	Du	al Stream	kground 7	ank	
All Projects					

Tutorial

Tap Tutorial to go through the tutorial again.

Self-diagnostic

Tap Self-diagnostic to self-diagnose for a report. An example is shown:



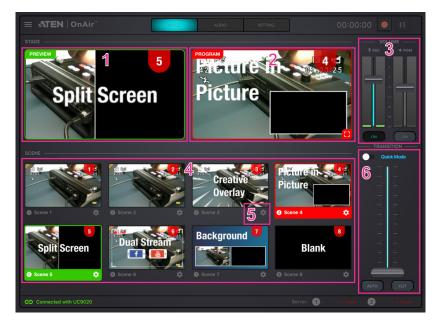
You can tap the \prec icon to share the report.

Chapter 4 ATEN OnAir App & Video Mixer

Video Mixer

The video mixer page allows you to preview videos of PRV and PGM, adjust MIC and PGM volume, scene selection and editing, and transition control.

The components of the page is shown below:



No.	Component	Description
1	PRV Preview	The preview scene.

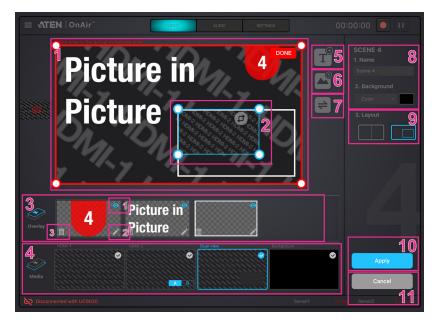
No.	Component	Description
2	PGM Preview	The program scene, or the on-air video output of the system. You can tap 🖸 on the bottom right-hand corner to view the video source in full screen mode. An example is shown below:
3	Volume Control	Tap and drag the volume slider to adjust MIC or PGM volume.
4	Scene Selector	 8 scenes are shown here. Green outline scene = PRV Preview. e.g. Split Screen i Scene 5 c Scene 5 c Red outline scene = PGM Preview. e.g. Fred outline scene = PGM Preview. e.g. Scene 4 c Scene 5 c Scene 4 c Scene 5 c Scene 6 c Scene 7 c Scene 7
5	Scene Editor	You can configure each individual scenes by tapping this icon. Refer to <i>Scene Editor</i> on page 26 on how to edit each scene.

No.	Component	Description
6	Transition Control	Controls the switching between the current stream (PGM) scene and the preview (PRV) stream.
		To switch, 1. slide the transition bar all the way to the top or bottom; or
		2. tap the Cut Cut button; or
		3. tap the Auto Auto button.
		Using the Transition Bar
		When using the transition bar, the scene transition speed depends on how fast you slide the bar.
		You can create different effects by sliding it slowly, quickly or even hold it half way.
		Using the Cut button
		The transition happens immediately when you tap the Cut button.
		Using the Auto button
		Tapping the Auto button will begin the transition after a specified time (0.3-3.0 seconds). Go to the Setting Deck and refer to page 37 on how to modify this specified time.
		Quick Mode
		Tap 💭 Quick Mode to start Quick Mode (🛑 Quick Mode).
		During Quick Mode, PRV preview disappears and you can tap any of the scenes to broadcast the scene as the PGM preview.
		Two Quick Modes are available: Tap for "Cut Quick Mode" () or tap for "Auto Quick Mode" ().
		Under Cut Quick Mode, tapping a scene will instantly broadcast that scene as the PGM preview.
		Under Auto Quick Mode, tapping a scene will broadcast that scene after the specified time (0.3-3.0 seconds).
		Tap eel or exit Quick Mode again to exit Quick Mode (Quick Mode).

Scene Editor

When you tap the scene in the scene selector region, you can start editing the scene's display.

An example is shown below:



No.	Component	Description
1	Scene Display	This region is how this scene will be displayed. You can configure the components within the region.
2	Resize/Crop tool	Tap to resize/crop the selected item. Refer to <i>Resize/Crop Tool</i> on page 28 on how to use this function.
3	Overlay	 Edit overlay in this region. You can Delete, Edit, and Show/Hide Overlay. 1. Show/Hide Overlay: Tap to show or hide 2. Edit: Tap to edit 3. Delete: Tap to delete You can also re-order the overlays to determine which overlay is to be displayed on top. Refer to for more details.

No.	Component	Description
4	Media	 Select the source(s) and how the source(s) are laid out for the scene. 1. Full Screen Mode 2. Select the source of the 1080p video input port (HDMI A or B) 3. Dual View Mode (Picture-in-Picture or Picture-by-Picture)
		4. Plain Background
5	Add Text Overlay	Tap this icon to add a text overlay. Refer to <i>Add/Edit Text</i> <i>Overlay</i> on page 30 below for more information. To edit the location and size of the overlay, select the overlay in the "Overlay" region and configure in the "Scene Display" region.
		The added overlay will appear in the "Overlay" region. Up to 30 text overlays (layers) are support per scene.
6	Add Image Overlay	 Tap this icon to add an image overlay. Tapping allows you to add an Image Overlay. iPad will flip to the Photos page for you to select an image. Select the image and tap OK. To relocate, tap and hold the overlay to drag. To resize, refer to <i>Resize/Crop Tool</i> on page 28. The added overlay will appear in the "Overlay" region. Up to 5 image overlays (layers) are support per scene.
7	Switch Video Source (Dual- View)	During dual-view, tapping this button switches video source position between 1 and 2.
8	Scene Information	This region displays the scene name and background. Tap the field to edit.
9	Dual-View Layout	Tap to select the preferred dual-view (Picture-in-Picture or Picture-by-Picture) layout. You can also resize the dual-view.
10	Apply	Tap this button to apply the configuration into this scene.
11	Cancel	Tap this button to cancel all configurations made in this page.

Resize/Crop Tool

This section describes how to resize or crop any of the components in the "Scene Display" region.

Resize

To resize any component, tap the component (overlay or media) and a resize tool will be visible on the "Scene Display" region. Examples are shown below:



Tap and select Media

Tap and hold to drag the resize tool to resize the component.

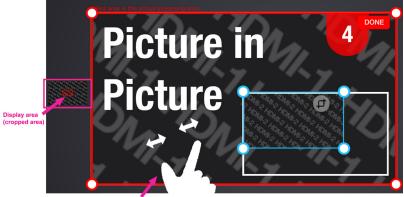
Crop (Media Only)

To resize a media, tap the media. An example is shown:



Tap the Resize/Crop Tool to start the tool.

Pinch your finger inward or outward to crop. A small box is on the left of the "Scene Display" region to show the display area (cropped area).

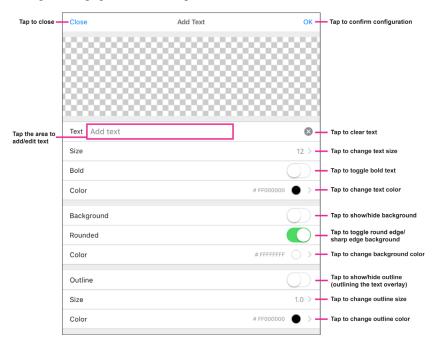


Pinch to adjust (crop) the display area

When completed, tap **DONE** on the top right corner.

Add/Edit Text Overlay

Tapping **T** allows you to add a Text Overlay to the scene. A pop-up configuration page and its description is shown below:

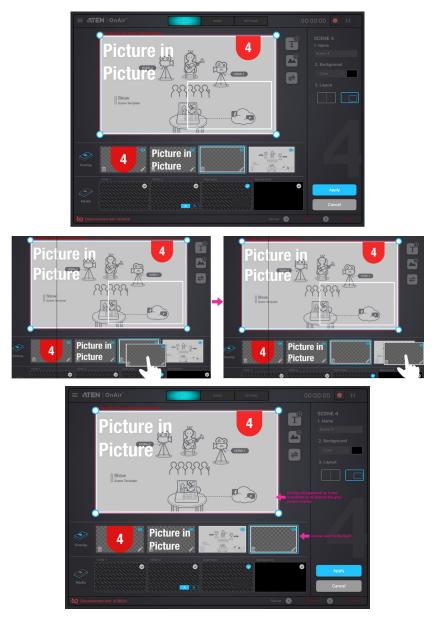


When completed, tap **OK** to save the configuration and return to the previous screen.

To edit the location and size of the overlay, select the overlay in the "Overlay" region and configure in the "Scene Display" region.

Re-order the Overlays

To re-order the overlays, tap and hold the overlay you wish to re-order. The overlay can then be dragged. You can drag the overlay to the place you wish it to be placed within the Overlay region. An example is shown:



This Page Intentionally Left Blank

Chapter 5 ATEN OnAir App & Audio Mixer

Audio Mixer

The components of the Audio Mixer deck page is shown below:



No.	Component	Description
1	Audio Level Control	Slide the volume slider to control the volume of each audio source.

No.	Component	Description
2	HDMI 1 and 2 Audio Control	AFV ON Audio-Follows-Video ON: Broadcasting the source's video will also play the source's audio.
3	MIC Gain Control	You can adjust the MIC Gain settings here:
4	L / R Balance Control	Tap and hold to drag and control which side of the sound source is to be more emphasized.
5	Master / PGM Level Control	Slide the volume slider to control the volume of Master / PGM.
6	Master/PGM Compressor	You can adjust the Master/PGM Compressor here:
7	Earphone Level Control	Controls the volume level of the earphone

Chapter 6 ATEN OnAir App & Settings

Settings

The components of the Setting deck page is shown below:

■ ATEN OnAir [™]	VIDEO AU	DIXO SETTINGS 00:00:00 🔵 11
STREAM		NETWORK 2
Server 1 Custom RTM		Mode ODHCP Manual
External Storage	USB Storage - Q	
		Audio Delay (Time 0ms~300ms) 300 ms
		Cancel Reset to default 5

If you have configured a settings, **Apply** button will light up. Click it to apply the settings.

No.	Component	Description
1	Stream	Configure live-stream and external recording information here:
	Connection Settings	Server 1 & 2:
	Settings	C isable stream.
		e nable stream.
		When the Server 1 & 2 is enabled, Custome RTMP, Youtube, and Facebook are available to select. For more information on how to login to the Youtube and Facebook, see <i>Live-streaming</i> <i>on Facebook</i> & Youtube, page 38, and <i>Logging into Facebook</i> <i>Account for Live-streaming</i> , page 40.
		You can stream to two platforms simultaneously* if you enable both Server 1 & 2.
		For the stream key field, an eye icon will be shown. Tap to to toggle between 💽 and 💽:
		represents invisible stream key.
		in represents visible stream key.
		An example of visible stream key is shown:
		Stream Key apapapapap 📎
		If you wish to paste a copied stream key into the field, make sure it is visible .
		URL and Stream Key: Obtain the URL and Stream Key from the platform(s) you wish to livestream on and put them into their corresponding fields.
		An example URL and Stream Key is shown in <i>Live-streaming</i> on Facebook & Youtube below.
		Detailed configuration of your live-streaming / video recording software / platform is not within the scope of this user manual, please refer to the software / platform's instruction guide / manual.
		Record Live-stream Video
		If you wish to record the video live-stream as a video output*, you can enable the External Storage (()). For more details on setting up your live-stream video recording, refer to <i>Recording Live-stream Video</i> (<i>External Storage</i>) on page 46.
		Note: A maximum of 2 stream outputs are allowed:a) 2 streams, b) 1 stream and 1 recording, c) 1 stream, or d) 1 recording

No.	Component	Description
2	Network Settings	Choose your preferred network configuration methods. DHCP : The network automatically assigns IP address and the corresponding fields.
		Manual : If you are in a place where you are unable to utilize the DHCP method, you will need to get the settings, possibly from IT, and input them into each field here manually.
3	Stream Output Settings	Transition Period : This is the scene transitioning delay for the Auto button (on the app or on the unit). Choose between 0.3 and 3 seconds. (Refer to <i>Transition Control</i> on page 25 for the Auto button behavior)
		Streaming Resolution: Select your stream resolution from one of the following:
		1080p 30
		720p 30
		480p 30
		Streaming Quality: Select the quality from one of the following.
		Fluent
		Normal
		Quality
		Manual
		If manual is selected, the quality slider will light up and you can tap and drag the slider to a desired stream quality.
		Streaming Quality 🗊 Manual 🗢
4	Others	Pause Picture : Pause picture is the display when the streaming is paused. You can select black, the pause logos, or upload your own custom logo.
		Audio Delay: If you are experiencing audio delays (due to network or other reasons), you can adjust this slider, in milliseconds, to sync the audio with the video.
		Video System : Click to select the video system of your choice.
5	Reset to default	Tap to reset the device to factory default settings.

Live-streaming on Facebook & Youtube

The ATEN OnAir app supports two live-streaming methods.

- Logging into your Youtube and Facebook social account
 - For Youtube live-stream procedure, see *Logging into Youtube Account* for Live-streaming, page 38.
 - For Facebook live-stream procedure, see *Logging into Facebook Account for Live-streaming*, page 40.
- Enter the URL and Stream Key, see *Example Live-stream URL and Stream Key (Youtube)*, and *Example Live-stream URL and Stream Key* (*Facebook*), page 45.

Logging into Youtube Account for Live-streaming

To join Youtube without entering the URL and Stream Key, follow the steps below:

1. From the Setting Deck page, enable Server 1 or Server 2, and select Youtube.

= ATEN OnAir		OIDUA C	SETTINGS		
STREAM			NETWORK		
Server 1	Custom RTMP		/lode (🗿 DHCP 🔘 Manual	
URL 🔳	Youtube				
Stream Key	Facebook				
Server 2					

2. Tap Login and the screen below appears. Tap Continue.

ten OnAir™		AUDIO	s 00:00:00 🔴 II
		NETWORK	
Server 1 💿 🛗 Youtube			
		DNS	
	"google. This allows t	Air" Wants to Use com" to Sign In he app and website to rmation about you.	
	Share Info	innation about you.	
	Cancel	Continue	k ar 100000 G

- Image: Concel and accounts.google.com
 A
 C

 Image: Concel and accounts.google.com
 C
 S

 Image: Concel and profile phone
 Email or phone
 Email or phone

 Image: Concel and profile picture with Aten OnAir. Before using this app.you
 Concel and profile picture with Aten OnAir. Before using this app.you

 Image: Construct Atended Atended Atended Service
 250 ms

 Image: Construct Atended Atended Service
 250 ms

 Image: Construct Atended Atended Service
 250 ms
- 3. Signing in with your Google account and tap Next.

Logging into Facebook Account for Live-streaming

To join Facebook without entering the URL and Stream Key, follow the steps below:

1. From the Setting Deck page, enable Server 1 or Server 2, and select Facebook.

≡ €TEN OnAir [™]		VIDEO		SETTINGS		
STREAM			NE	TWORK		
Server 1 🧾					🔘 DHCP 🔘 Manua	
URL 🔳	Toutube					
Stream Key	Facebook					
Server 2	- racebook					

2. Tap Login and the screen below appears. Tap Continue.

ten On				vos 00:00:00 🕒 II
STREAM			NETWORK	
	Youtube			
	Facebook			
			DNS	192.168.0.1
			ir" Wants to Use .com" to Sign In	
			e app and website to mation about you.	
		Cancel	Continue	* 00000 o

3. Signing in with your Facebook account and tap Log In.

≡ ATEN OnAir [™]	VIDEO AUDIO SETTINOS			
STREAM	Cancel 🔒 facebook.com	۸A	S	
Server 1 🕒 🛅	facebook			fanual
Title				2.168.0.140
Scope 💿 Public				5.255.255.0
Server 2	onÅr			92.168.0.1
Title	Log into your Facebook account to connect to ATEN OnAir			92.168.0.1
Scope Timeline				
External Storage	Mobile number or email			
OUTPUT	Facebook Password			
Transition Period (0.3~3.0 Sec)	Log In			
	Create Account			
Streaming Resolution	Not now			
	Forgot Password? - Help Center			• 250 ms
Streaming Quality 🚯				sc in the left of the left of the
	< >		ſ ¹	
		_	_	

Live-streaming to Facebook Groups

To live-stream to your Facebook Groups, follow the steps below.

- **Note:** The administrator of the Facebook Group needs to allow ATEN OnAir to make post in the group. If the ATEN OnAir app has not been allowed by the administrator, an error message appears asking you to allow the ATEN OnAir app to create a post.
- 1. Go to your Facebook Group, and select **More**. You will need to use a physical computer or laptop for this process.

Note: You must be an administrator of the Group for this setup.

f	٩ (٨)	Home	Create	. :	0 🧳	0	•	
Private group								
Mentorship Announcements Members Events Videos	Joined ▼ ✓ Notifications							
Photos Files Group Insights Recommendations	Write Post E Photo/Video Et Live Video More	GROUP		84like thi	S Sign Up		0	
Get Facebook Support	🔀 Photo/Video 🙀 Watch Party 🏖 Tag Friends 🚥	Срор	ULAR TOPIC	CS IN POS	TS	Manag	e ×	

2. Select Edit Group Settings.

f		Q	A	Home	Create	* 6) 🧳	0	•	
B Private group A										
Mentorship Announcements Members Events Videos	Joined 🔻 🗸 Notifications]							
Photos Files Group Insights Recommendations	Write Post Photo/Video	Invite Members Moderate Group Edit Group Settings Archive Group	More	GROUP		84 like this	🕑 Sign Up		0	
Get Facebook Support	Photo/Video 👸 Watch	Unpin from Shortcuts	tds •••	CPOP	ULAR TOPIC	S IN POSTS		Manage	×	

3. Scroll down and select Add Apps.

f		Q	A	Home	Create	* 6) 🧳	0	•	
	Group Type	General Change								
Private group	Description									
About										
	Pi	otential members can see the description	on unless your group is	hidden.						
Mentorship Announcements Members		his can help people find your group mo Add Location	re easily if they're lookin	g for groups in	n your area.					
Events Videos		Live video streaming ≍ Video product ags help people find groups they might			ge these at a	any time. Le	arn more			
Photos Files		ools and features offered by other busin	nesses. Learn More							
Group Insights Recommendations Get Facebook Support		leasure the actions people take on your Create New Pixel	website after engaging	with this grou	p. Learn Mo	re				

4. Select ATEN OnAir by typing ATEN OnAir in the search bar.

f		Q	A	Home	Create	* 0	4	0	•
	Browse Apps for This Group					×			
Private group	a more personalized experience.	tures by adding apps to this group. App	is can neip you manag	je your group	and offer	members			
A	Q ATEN OnAir					×			
About	CATEGORIES	ATEN OnAir							
	All Apps	Entertainment	>						
Mentorship	Entertainment								
Announcements	Shopping								
Members	Messaging								
Events	Utility & Productivity								
Videos							more		
Photos	Business & pages								
Files									
Group Insights									
Recommendatio									
Get Facebook Si									

5. Select **Add** to confirm that you want to allow live-streaming to your Facebook Group from ATEN OnAir.

f	Q (A Home Create 🎎 🧟 🤔 🤕 🔻
	Group Type Ceneral Change
Private group	Description
A	Add App to This Group 🛛 🕹
About	
Mentorship	
Announcements Members	Description Capture in HD and share in realtime
Events Videos	When added, this app can: - See posts and comments in the group, but not who wrote them
Photos	
Files	Terms · Privacy Policy · Find Support or Report App Back Add
Group Insights Recommendations Get Facebook Support	Facebook Pixel Measure the actions people take on your website after engaging with this group. Learn More Create New Pixel

6. Select **Done** to close the confirmation box.

f	🔍 (A) Home Create 💄 💿 🔑 🥥 💌
	Group Type Change Change
A Private group	Description
About	ATEN OnAir Added to This Group
Mentorship Announcements Members	You've added ATEN OnAir and it can now be used in your group. roups in your area. Done
Events	Tags Live video streaming × Video production × YouTubeLive × Periscope ×
Videos	Tags help people find groups they might be interested in joining. You can change these at any time. Learn more
Photos Files	Apps Tools and features offered by other businesses. Learn More Add Apps
Group Insights Recommendations Get Facebook Support	Facebook Pixel Measure the actions people take on your website after engaging with this group. Learn More Create New Pixel

How to Switch between Multiple Facebook Accounts

To switch your Facebook account via iOS device, follow the steps below.

- 1. Open your Facebook application on your iOS device.
 - a) If you are using a laptop or PC, click on the downward facing arrowto the top right side of the Facebook window.
 - b) If you are using an iPad or iPhone, tap More _____ located in the lowerright-hand corner of your screen.
- 2. Select Log Out. A confirmation message appears, select Log Out again. You are now logged out of your Facebook account from the Facebook application.
- Launch Safari and go the Facebook website by typing <u>https://</u> <u>m.facebook.com/</u> in the search bar.
- 4. Log in with your current Facebook account by entering the necessary information.
- 5. Select and a drop-down menu appears.
- 6. Select Log Out. A confirmation message appears, select Log Out again. You are now logged out of your Facebook account from Safari.
- 7. You may now sign in with a different Facebook account.

Example Live-stream URL and Stream Key (Facebook)

PiCanet Canad	Post Settings Interactive Choose where to post your live broadcast
Connect Your Live Stream to the Live API	Share on a Page You Manage *
Use live streaming software or a hardware encoder. Learn more	TEN International Co. Ltd *
1. Choose where you want to post your broadcast on the right.	Say something about this live video
2. Preview your broadcast with a stream key or paired encoder.	
Stream Key Paired Encoder	0 0 0
Enter the information below into your software's settings.	Title Add a title for your live broadcast (optional)
Use a backup obream () Server URL ()	Teas @
rtmps/llive-api-s.facebook.com.443/tmp/ Copy Ingest.URLs	Add tags (ec: comedy, animals, make-up etc.)
Purciclane Stream Koy () 2333241700119579, 3H-064, pa+184, sw+O44,-rt+ap+48a+Abzd,18F5/stemUIIMM Copy Revet	
3. Select Go Live in the bottom right corner.	
Don't put third party video ads in your live video. For example, don't include bumpers, pre-roll, mid-roll or post-roll. Ensure any pre-recorded content is clearly distinguishable from live content.	4 Schedule Go Live

Example Live-stream URL and Stream Key (Youtube)

Instructions and feetback OFFLINE O For other questions about live b	al Co., Ltd., welcome back! rroadcasts, please refer to the FAQ .
Establish focus cip Change Humboal	
BASIC INFORMATION STREAMING OPTION INFORMATION CARD	111
Add a new information card * Learn more about information cards	
ENCODER SETTING	
Server URL rtmp://artmp.youtube.com/live2 Stream name/key com/live2 display	
	Super Message' debut After the user purchases the super message, they can
	highlight their message in the chat room. You can get some of the proceeds from the super messages sold! Enable super messages.
	cancel Enable
	DUKT SHOW THIS MESSAGE AGAIN
	1

Recording Live-stream Video (External Storage)

Before you start recording the live-stream videos, make sure that you have a storage device ready to start and is connected to the StreamLIVETM HD.

Recording live-streams requires a USB 3.0 or later device. It is HIGHLY recommended that you use an external hard drive (with at least 32GB worth of storage).

When you first connect the storage device, the OnAir app will verify its format and USB spec. If the format is not desirable, the OnAir app will ask if you would like to format it. Make sure the files in the storage device are backed up before you format it.

When the format is desirable, you can start recording your live-stream.

External Storage Settings

Click the **s** icon and a dialog box will pop up to allow you to configure the storage device's record settings or format the device manually.

A pop-up dialog box example is shown:

_	Save	Cancel	
Sec			-
			-
*			Format

Tap the File Name field to adjust the file name of the recording(s).

Tap the **Split By Time** drop-down menu to select how long a recording is before splitting into the next recording. The drop-down menu is shown:

Gateway	10 mins
DNS	
USB File Name	
Split By Time	
Save	10 hrs

Tap **Format** to manually go through the format process.

Video Information for Live-stream Recording

Video Format: 1080p30 Video Compression: H. 264 Audio Compression: AAC Video Container Format: MP4 Does not support uncompressed recording. Record Media: USB 3.0 hard drive or USB 3.0 flash drive Does not support SD card. This Page Intentionally Left Blank

Chapter 7 Quick Live-Stream Setup

Setup

Before you start live-streaming, you need to setup your live-stream platform on the UC9020.

Setting these up can be on any interface (PC, laptop, tablets, etc.) as long as you are able to get the *Server URL* and *Stream Key*.

This section will therefore take you through obtaining the Server URL and Stream Key, input them into the OnAir app, synchronize the OnAir app with the UC9020 and start streaming using your iPad.

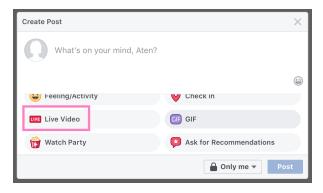
Follow the steps below:

Note: Facebook is the streaming platform example used in the setup steps below.

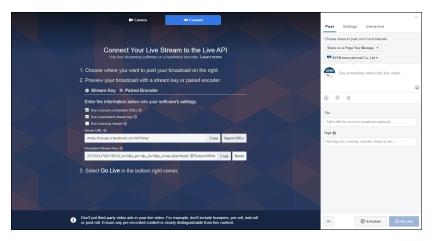
1. On the iPad, open Safari (Internet browser) and go to the Facebook page.

Note: Make sure your iPad is Internet-enabled and is using desktop mode. If your iPad is always bringing you to the facebook app (or youtube, twitch, etc.), remove it from the system first and install it again later.

- 2. Log into your account.
- 3. On the dashboard, locate and tap the What's on your mind field.
- 4. Tap to select Live Video.



5. Tap the **Connect** button up top. A page similar to the one below is shown:



- 6. Server URL and Stream Key are displayed here. Copy them and enter them into their corresponding fields in the stream settings section under the "Setting" deck of the OnAir app.
 - Note: 1. Make sure the eye icon in the Stream Key field is shown as to allow you to paste the key.
 - 2. It is highly recommended to check the "Use a persistent stream key" checkbox to keep this stream key.
- 7. Connect the iPad to your UC9020. The OnAir app will ask you about the synchronization option. Tap **Start**.



8. Configure other settings on the OnAir app and press the GO LIVE button on the unit or on the OnAir app:





9. Disconnect iPad from the unit and go to the Facebook **Connect** page. Upon receiving the stream, the **Go Live** button (on the bottom-right of the page) will light up.

			×
Post	Settings	Interactive	
Choose w	/here to post y	our live broadcast	
Share o	on a Page You	Manage 🔻	
ATE	N Internation	al Co. I td 💌	
ATEN	Say somethi	ing about this liv	e video
0	0		
Title			
Add a tit	le for your live	broadcast (option	al)
T 0			
Tags 🕜			
Add tags	(ex: comedy,	animals, make-up	etc.)
		Schedule	I Go Live
			1
			🖸 Go Live

- 10. You can tap **Go Live** to start broadcasting your stream, or you can edit the information here (scope not part of this manual) before you start broadcasting your stream.
- 11. Connect your iPad to the unit to control the stream using the OnAir app.
- **Note:** Streaming on other streaming platforms using the unit requires the same information (Server URL and Stream Key), refer to their websites for more information.

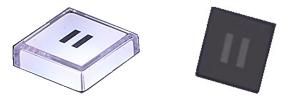
During the Live-Stream / Live-Stream Recording

During the live-stream or the live-stream video recording, you can:

• Use the transition function (T-bar, Auto button or Cut button) to switch PRV preview image to the PRG preview.



• Press the Pause button to pause streaming.



- Press the GO LIVE button again to stop the stream.
- Edit the video scenes in scene editor, tune audio settings in the audio mixer deck, adjusting audio delays in the settings deck, etc. Tap **Apply** to apply the changes.

Quick Mode

If you wish to immediately switch from one scene to another, use Quick Mode.

To enter Quick Mode, press and hold the **Cut** or **Auto** button for 3 seconds. Alternatively, tap the **Quick Mode** button on the OnAir app (Video or Audio deck).

During Quick Mode, the greenly lit PRV Preview button dims and the **Cut** or **Auto** button flashes (depends on which Quick Mode it is in).

Press any of the scene buttons to broadcast the scene as the PGM Preview.

Two Quick Modes are available: press the **Cut** button for "Cut Quick Mode" or the **Auto** button for "Auto Quick Mode".

Under Cut Quick Mode, the **Cut** button flashes and pressing a scene button will instantly broadcast that scene.

Under Auto Quick Mode, the **Auto** button flashes and pressing a scene button will broadcast that scene after the specified time (0.3-3.0 seconds).

Press and hold the flashing button to exit Quick Mode.

This Page Intentionally Left Blank

Chapter 8 Firmware Upgrade

Download Requirements

- A computer connected to the Internet.
- An empty external storage device or a USB flash drive with at least 1.1GB of free space.

Preparing the Firmware

- 1. On the external storage device, create a folder named "uc9020_img".
- 2. Download the complete software and unzip it.
- 3. Save your file (in the format "uc9020_Vx.x.xxx.bin") to the "uc9020_img" folder.
- 4. Plug the external storage device to the rear USB port of the unit.
- 5. Refer to Upgrading the Unit on page 56 to start firmware upgrade.

Note:	• A folder named "uc9020_img" must be created in the root menu of the USB storage device.
	 The firmware upgrade file (*.bin) must be placed in the "uc9020_img" folder.
	• The firmware upgrade file should look like the following:
	uc9020_Vx.y.yyy
	where x and y combine to indicate its version and
	x = 1-9
	$\mathbf{y} = 0-9$
	• The unit will upgrade using the newest firmware. For example, if the folder has a "uc9020_V1.0.080" file and a
	"uc9020_V1.1.102" file, the unit will upgrade using the "uc9020 V1.1.102" file.

Upgrading the Unit

Follow the steps below to upgrade the unit.

Note: Make sure the prepared USB storage device is plugged into the rear USB port (USB 3.2 Gen1 Type-A Port) of the unit.

- 1. Press the **Cut**, **Pause** (the **||**) and **Mute** buttons at the same time to start the firmware upgrade.
- 2. The unit will start the Upgrade Assessment where all the volume meter LEDs will blink every 0.5 seconds. Pictorial behavior is shown below:



3. If the assessment succeeds, the unit will start upgrading.

The volume meter LED will start filling in from the negative side every 0.5 seconds. When all the LEDs are filled, they will all dim for 0.5 seconds and start filling in again. Pictorial behavior is shown below:



Note: If the upgrade assessment fails, the **GO LIVE** button and the last LED of volume meter LEDs will blink every 0.3 seconds. Refer to *Upgrade Assessment Fail* on page 57 for more information.

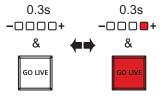
4. If the firmware upgrade was successful, the first LED of the volume meter LEDs will blink every 0.3 seconds. The unit will reboot after some time to complete the process.



Note: If the firmware upgrade fails, the last LED of volume meter LEDs will blink every 0.3 seconds. Refer to *Upgrade Fail* on page 57 for more information.

Upgrade Assessment Fail

When the upgrade assessments fail (e.g. when no USB storage device is connected or USB drive does not have a firmware upgrade file, etc.), the **GO LIVE** button and the last LED of volume meter LEDs will blink every 0.3 seconds.



Press the **GO LIVE** button to return the unit to normal operation and try again from step 1.

Upgrade Fail

If firmware upgrade fails during the firmware upgrade (e.g. disconnected USB storage device or power, etc.), the last LED of volume meter LEDs will blink every 0.3 seconds.



The unit will reboot after some time and try to upgrade the firmware again.

If it fails again, it will reboot and try again.

When this happens, it is likely that the upgrade file is corrupted. We recommend:

- 1. Unplug the power and the USB storage device from your UC9020.
- 2. Retrieve the firmware file again and recheck the USB preparation process (*Download Requirements*).
- 3. Replug your USB storage device.
- 4. Replug the power. The unit will start the upgrade process after booting up.

If you are still unable to upgrade the unit's firmware, please contact your dealer.

This Page Intentionally Left Blank

Appendix

Safety Instructions

<u>General</u>

- This product is for indoor use only.
- Read all of these instructions. Save them for future reference.
- Follow all warnings and instructions marked on the device.
- Do not place the device on any unstable surface (cart, stand, table, etc.). If the device falls, serious damage will result.
- Do not use the device near water.
- Do not place the device near, or over, radiators or heat registers.
- The device cabinet is provided with slots and openings to allow for adequate ventilation. To ensure reliable operation, and to protect against overheating, these openings must never be blocked or covered.
- The device should never be placed on a soft surface (bed, sofa, rug, etc.) as this will block its ventilation openings. Likewise, the device should not be placed in a built in enclosure unless adequate ventilation has been provided.
- Never spill liquid of any kind on the device.
- Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- The device is designed for IT power distribution systems with 230V phase-to-phase voltage.
- To prevent damage to your installation it is important that all devices are properly grounded.
- The device is equipped with a 3-wire grounding type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not attempt to defeat the purpose of the grounding-type plug. Always follow your local/national wiring codes.
- Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.

- If an extension cord is used with this device make sure that the total of the ampere ratings of all products used on this cord does not exceed the extension cord ampere rating. Make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
- To help protect your system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).
- Position system cables and power cables carefully; Be sure that nothing rests on any cables.
- Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.
- Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.
- If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
 - The power cord or plug has become damaged or frayed.
 - Liquid has been spilled into the device.
 - The device has been exposed to rain or water.
 - The device has been dropped, or the cabinet has been damaged.
 - The device exhibits a distinct change in performance, indicating a need for service.
 - The device does not operate normally when the operating instructions are followed.
- Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.
- For continued protection against risk of fire, replace only with the same type and rating of fuse T1.6A/250V.

Technical Support

International

- For online technical support including troubleshooting, documentation, and software updates: <u>http://support.aten.com</u>
- For telephone support, see *Telephone Support*, page vii:

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 1-949-428-1111

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	CAMLIVE
Video Input	1 x 4K HDMI Type A Female
	(up to 4K@60, no HDCP support)
	2 x HDMI Type-A Female
	(up to 1080p@60, switcher, no HDCP support)
Video Output	1 x 4K Loop-Thru HDMI Type-A Female
	(up to 4K@60, no HDCP support)
	1 x PGM HDMI Type-A Female
	(up to 1080p@60, no HDCP support)
Video Sampling	4:2:2 8-bit
Color Space	4:2:2 YUV
Video Resolution	Input Resolution
	HDMI1
	VGA: 640x480@60, 480p: 60/50/30/25, SVGA: 800x600@60, XGA: 1024x768@60, 720p: 60/50/30/25, SXGA: 1280x1024@60, WXGA+:1440x900@60, UXGA: 1600x1200@60 (RB), WUXGA+:1680x1050@60, 1080p: 60/50/30/25, 2160p: 60/50/30/25
	HDMI2 A/B*
	VGA: 640x480@60, 480p: 60/50/30/25, SVGA: 800x600@60, XGA: 1024x768@60, 720p: 60/50/30/25, SXGA: 1280x1024@60, WXGA+:1440x900@60, UXGA: 1600x1200@60 (RB), 1080p: 60/50/30/25
	*Only the selected port will show video. The other will show non-video photo or graph.
	Output Resolution
	SRC/PGM HDMI
	480p: 60/50/30/25, 576p: 60/50/30/25, 720p: 60/50/30/25, 1080p: 60/50/30/25
	HDMI Loop-Through
	VGA: 640x480@60, 480p: 60/50/30/25, SVGA: 800x600@60, XGA: 1024x768@60, 720p: 60/50/30/25, SXGA: 1280x1024@60, WXGA+:1440x900@60, UXGA: 1600x1200@60 (RB), WUXGA+:1680x1050@60, 1080p: 60/50/30/25, 2160p: 60/50/30/25
Audio Input	HDMI Captured Input (Stereo)
	1 x Mic input, 1.4" TRS Jack (Dual Mono)
	1 x Line input, RCA jack, signal level: -10dBV

Function	CAMLIVE
Audio Output	HDMI Output (Stereo)
	1 x 1/8" TRS Jack (Stereo)
Network Protocol	Dual- stream encoder supports direct live streaming to CDN server over Ethernet using Real Time Messaging Protocol (RTMP/RTMPS)
	Video Encoding
	Format: H.264
	Bit rate: 512Kbps-10Mbps
	Color Format: YUV420
	Resolution: 1080p: 30/25, 720p: 60/50/30/25, 480p: 60/50/ 30/25
	Audio Encoding
	Format: AAC
	Sampling Rate: 48kHz
	Bit rate: 128kbps
Recording Storage	Max. Video Resolution: 1080p: 30/25
	File Format: MP4
	Support Media: USB 3.x compatible mobile drive (HDD / SDD) or flash drive, at least 32GB of free space
Connection	1 x USB 3.2 Gen1 Type-A Female (Blue)
	1 x USB 2.0 Type-A (White)
	1 x GbE LAN port
Environmental	
Operating Temperature	0–40 °C
Storage Temperature	–20–60 °C
Humidity	0–80% RH, Non-Condensing
OS Support	◆ iPad Pro (3rd gen) with iOS 11 or later
	• The following iPad with iOS 11 or later (Additional Apple

 The following iPad with iOS 11 or later (Additional Apple)
Lightning USB 3 Adapter is required)
• iPad Pro (1st gen) • iPad Pro (1st gen) • iPad Pro (2nd
gen) • iPad Pro (2nd gen) • iPad (5th gen) • iPad (6th
gen) • iPad Air (3rd gen) • iPad Mini (5th gen)

Power

Maximum Input Power Rating	IEC C14, 100-240Vac (with 250V fuse)
Power Consumption	110V:12.9W:80BTU
	220V:12.7W:79BTU

Physical Properties

Function	CAMLIVE
Housing	Metal
Weight	1.89kg (4.16lb)
Dimensions (L x W x H)	28.85 x 18.99 x 9.66 cm (11.36 x 7.48 x 3.80 in.)

Live-Streaming Information

Create a Live Stream with Youtube

You can learn more from Youtube for "Encoder Streaming"

https://support.google.com/youtube/answer/ 9227510?hl=en&ref topic=9257984

Or from "Set up your live streaming encoder"

https://support.google.com/youtube/answer/2907883

What is CDN Service?

A content delivery network or content distribution network (CDN) is a geographically distributed network of proxy servers and their data centers. The goal is to provide high availability and high performance by distributing the service spatially relative to end-users. CDNs serve a large portion of the Internet content today, including web objects (text, graphics and scripts), downloadable objects (media files, software, documents), applications (e-commerce, portals), live streaming media, on-demand streaming media, and social media sites.

RTMP/RTMPS and RTSP Protocols

UC9020 supports RTMP/RTMPS protocol but not RTSP.

The Real-Time Messaging Protocol (RTMP) was initially a proprietary protocol for streaming audio, video and data over the Internet between a live stream client and a server. The RTMP protocol has multiple variations.

The Real Time Streaming Protocol (RTSP) is a network control protocol designed for use in entertainment and communications systems to control streaming media servers. The protocol is used for establishing and controlling media sessions between end points.

Other ways to input image overlays

When your iPad is connected to the unit using direct cable link, you can upload images to the iPad directly.

You can also use, and we strongly recommend you do, Apple AirDrop and its Continuity (Enable Handoff) features to upload all necessary data from Apple related products to improve convenience.

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/

Released: 2021-05-07

© Copyright 2021 ATEN® International Co., Ltd.

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.

ATEN International Co., Ltd., 3F, No. 125, Sec. 2, Datung Rd., Sijhih District, New Taipei City 221, Taiwan Phone: 886-2-8692-6789 Fax: 886-2-8692-6767 TECHNICAL SUPPORT CENTER: 886-2-8692-6959