

# **VIVOTEK IP Network Audio Solution**

**User Manual** 

Version 1.0.1

# 1. Introduction

IP network audio devices with VAST2 VMS are the next generation network based on TCP / IP audio broadcasting technology, with standard SIP protocol to support one by one VoIP call or Multicast Broadcast protocol to allow users to broadcast multiple audio devices.

With VAST2 alarm management, all the triggering events can be set for auto broadcasting, this application has diverse usages on all scenarios, such as school, factory, transportation, retail...etc.

2. System Architecture



# 3. Use Shepherd to search for AU-001 & AU-002.

1 selec	cted 🗿							
٩		â	+ E	All devices	Ci	amera	NVR	
Status	Model 🗸	IP	MAC	Firmware	НТТР	HTTPS	Client	
	AT8131-SF	192.168.40.76	00-02-D1-6B-4A-FD	0104c_SF11	80	443		
	AU-001	192.168.40.96	00-02-46-63-A7-4C	AU001_FW0	80			
	AW-GEV-264A-185	192.168.40.9	00-02-D1-46-E2-BB	0119	80			
	CC8370-HV	192.168.40.224	00-02-D1-44-9C-6F	0213b	80			
	CC8371-HV	192.168.40.46	00-02-D1-66-AD-0A	0113b	80			
	CC9380-HV	192.168.40.37	00-02-D1-93-35-3B	2.2002.13.0	80			
	CC9381-HV	192.168.40.90	00-02-D1-88-7E-96	2.2002.13.0	80			
	FD8131V	192.168.40.47	00-02-D1-19-BB-17	0301c	80			
	FD8133	192.168.40.22	00-02-D1-0F-B0-89	0301c	80			
	FD8134	192.168.40.223	00-02-D1-0F-B1-CC	0301c	80			
	FD8137H	192.168.40.11	00-02-D1-24-C5-1E	0200e	80			
	ED8166A-N	102 168 40 42	00-02-D1-68-71-16	0100i	80			

Double click on AU-001 to open the web UI.

Username: admin

Password: 1234

(Password can be changed in Advance Setup -> System -> Administrator Settings)

A Delta Group Company
Home
Broadcast Status
Broadcast Record
Audio Configure
Broadcast Setup
Advance Setup
System
WAN
Backup/Firmware
Reboot
Language/ 語言
Save modification

# 4. Upgrade F/W

Sign in to the AU-001/AU-002 web page

ſ				Simple Setup
		Welcome to	Welcome to	Welcome to
	Netv	Network Audio SYSTEM	Network Audio SYSTEM	Network Audio SYSTEM
		Model AU-001	Model AU-001	Model AU-001
		Web UI version 3.0	Web UI version 3.0	Web UI version 3.0

## Click Backup/Firmwre and choose Firmware Upgrade, find Upload Firmware

VIVOTEK A Delta Group Company		iple Setup	Advance Setup
Home	Einnunge Umgende		
Broadcast Status	Firmware Opgrade		
Broadcast Record	Upload Firmware		
Audio Configure	Browse Upload		
Broadcast Setup			
Advance Setup			
System			
WAN			
Backup/Firmware			
Configurations			
<u>Firmware</u> <u>Upgrade</u>			
Reboot			
Language/ 語言			
Save Modification			

# Choose F/W image and upload then press the Upload button

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A Delta Group Company			
Home Broadcast Status	Firmware Upgrade		
Broadcast Record	Upload Firmware		
Audio Configure	D-NLiberAIP Audio/FWVFWC Browse Upload		
Broadcast Setup			
Advance Setup			
System			
WAN			
Backup/Firmware			
Configurations			
<u>Firmware</u> Upgrade			
<u>Reboot</u> Language/ 語言 <b>Save Modification</b>			

Reboot the device

			Advance Setup
A Delta Group Company			
Home	Sten1:   oad File Ok/359918/J/vmltemn/Al 1001 FW0002 img		
Broadcast Status			
Broadcast Record	Step2.upgrade /xmitemp/AOUUT_F /violu02.img		
Audio Configure	Step3: Pass Boot: MTD0		
Broadcast Setup	Pass Kernel: MI D1 Pass VoIPFS: MTD2		
Advance Setup	Reboot System		
System			
WAN	Are you sure you have already <u>saved modification</u> ?		
Backup/Firmware	Tes, Flease click Rebool bulloni		
Configurations	Reboot		
<u>Firmware</u> <u>Upgrade</u>			
Reboot			
Language/ 語言			
Save Modification			

It is highly recommended to run Reset to default after a firmware upgrade, click Backup/Firmware, and next choose Configurations, press Reset to Default button to restore the setting.

VIVOTEK A Delta Group Company		Simple Setup Advance Setup
Home Broadcast Status	Backup	/Restore Configurations
Broadcast Record	Backup( Download System Configurations )	Restore (Upload System Configurations)
Audio Configure	Download setting backup file	Browse Restore
Broadcast Setup	Reset to Default	
Advance Setup	Reset to Default	
System		
WAN		
Backup/Firmware		
Configurations		
<u>Firmware</u> <u>Upgrade</u>		
<u>Reboot</u> Language/ 語言 <b>Save Modification</b>		

### 5. VAST2 Setup

Install VAST2\_2.13.0.7100(64-bit) Server and Client.

a. Go to Settings



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<b>-</b>		(( 🔔 ))	100			
Device	Recording	Alarm	User	System	VIVOCloud	
Cameras	Recording options	Add & Delete	Add & Delete	License	Account	
Sites	Backup			SMTP	NVR	
DI/DO devices	Failover			Preferences		
Data magnet	Local DB			Identity management		
External devices				Media		
				Feedback and bugs		
<b>N</b>						
E-Map	Matrix					
Import & Setup	Matrix management					

Go to Device / External Devices.

b. Click on Network Audio and Add to enter your audio device.

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🎝 Settings			Device management
Carrens Carrens UO U/CO devices Carrens Disa magnet Carrens Ca	Joyatick POS Wingand converter	Device Group Schedule	<section-header><section-header><section-header><section-header><section-header><section-header><text></text></section-header></section-header></section-header></section-header></section-header></section-header>

\*The port number is 5060 for AU-001 and AU-002.

c. Binding a speaker with your IP camera.

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🔊 Settings		Device management
Cameras Stations U/O DU/DO devices Data magnet External devices	Joystick Network audio POS Wiegand converter	Device Group Schedule

You can choose one or more cameras to synchronize a speaker with camera broadcast on the Liveview. Click on Apply after setup.

d. Click on Broadcast to test if the connection is established.

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🔊 Settings	I		Dev	vice managemen	t						
Cameras Cameras Stations L/O D/DO devices Data magnet	Joyatick Network audio POS Wiegand converte	*	Device Group Schedule	Network aud Device name IP/Domain name Port User name Password	lio device AU-001 192.168.40.96 5060 admin		Broadcast Play audio file please_leave w	Broad	Start broadcast	•	
				Select one camera to	pair with this network audio	device - the audio o	device will be used	when that	camera is broa Cancel	dcasting.	

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n Settings	÷1	Device r	nanagement							
-	Joystick	Device Group Schedule								
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Stations 1/0 DI/D0 devices $\hat{c}^{\pm}$ :. Data magnet	Wegand converter	4) AU-001	Device name AU-001 IP/Domain name 192.168.40.9 Port 5060 User name admin	96		Broadcast	Broadcas	) sting	•	
External devices			Select one compare to pair with this or	atwork audio devi	ce - the audio d	Play audio file please_leave	.wav	camera is bros	• (E	2
				and a duo devi	the audio de	ende will be US	Apply	Cancel		P.

- e. One more click to stop the broadcast.
- f. Upload your broadcast audio files.Go to System / Media.

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	<b>a</b> -		(( 🔔 ))	<u>i</u> i i i		•	
	Device	Recording	Alarm	User	System	VIVOCloud	
	Cameras	Recording options	Add & Delete	Add & Delete	License	Account	
	Sites	Backup			SMTP	NVR	
	DI/DO devices	Failover			Preferences		
	Data magnet	Local DB			Identity management		
	External devices				Media		
					Feedback and bugs		
	E-Map	Matrix					
	Import & Setup	Matrix management					

Click on Audio file to upload your audio clip file.

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🔊 Settings				Sy	ystem r	manag	jement								
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SMIP HH Preferences E Identity management Media		e Name welcome.w	vav			0 0	ime 0:04 0:04				(V	/AV: 8Khz, N	lono, 16-Bit F	*CM) +	

Please note that the audio format must be WAV with 8Khz, Mono, 16-Bit PCM.

You can use this website for free converter <a href="https://g711.org/">https://g711.org/</a>. Choose Standard Definition WAV (8Khz, Mono, 16-Bit PCM)

# G711 File Converter

This free tool will convert just about any DRM-free media file into audio that's compatible with most telephony vendors' Music on Hold and IVR Announcements.

Source File	
	Browse
Note: 50MB Maximum File Size	
Output Format	
🔘 u-law WAV (8Khz, Mono, u-law)	
🔘 a-law WAV (8Khz, Mono, a-law)	
⊙ Standard Definition WAV (8Khz, Mono, 16-Bit PCM)	
<ul> <li>High Definition WAV (16Khz, Mono, 16-Bit PCM)</li> </ul>	
Asterisk G.722 (16Khz, Mono, G.722)	
Asterisk G.729 (8Khz, Mono, G.729)	
Asterisk RAW (8Khz, Mono, RAW)	

O Development (Non-Functional: Coming Soon)

You can delete the file by a click on the trash can icon at the right side of file.

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🔊 Settings	I				Syste	em man	agement	t						
() License	Audi	io file												
	Audio fi	ile								(WAV)	: 8Khz, Mo	no, 16-Bit PCM	(I) +	
SMTP		Name					Time							
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Î∳Î Preferences		youaretring	passing.wa	v			00:04							
[dentity management														
Media														
Feedback and bugs														

g. Test the sound on speaker.

Go to External Devices\Network Audio and select your speaker, then scroll down to the bottom.

Choose the file you want to test and click on play, VAST2 will broadcast the file to speaker.

		Broadcast
Device name	AU-001	
IP/Domain name	192.168.40.96	
Port	5060	
User name	admin	Broadcast
Password	••••	

h. Add broadcast group

Go to Device / External Devices / Network audio / Group Fill in a new group name and you can select which audio devices to join this new group.

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🔊 Settings	:		Dev	ice management
Cameras Cameras Stations J/O DI/DO devices DI/DO devices Cata magnet	Joystick Network audio POS Wiegand conver	ter	Device Group Schedule	Add group Group name Select devices • • • AU-001 • • • AU-001 sample 1 • • • AU-001 sample 2 • • • AU-002 • • • AU-002 • • • AU-002



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🔊 Settings	;	Device management	
Cameras Stations L/O DI/DO devices DI/DO devices Citar magnet External devices	Joyetick Network audio POS Wiegand converter	Device Group Schedule	

Go to VAST 2 Live view and choose the left side sidebar. Select the tab of Devices, find your Network audio devices group and right-click choose Broadcast.

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Source	95	Devices										
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. <b>▼</b> 1	Network a	udio devices										
	►	Broadqast										
	(1) AU-001 sa	mple 1										
	(II) AU-001 sa	mple 2										
	(I) AU-002											

You can then see the microphone icon in the middle of VAST2. Click on Broadcast and you can speak to the audio device of the group.

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Sources	De	vices	Views								
Q Searc	ch devices /MS_Station	i			الم						
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# i. Add Schedule broadcast

Go to Device / External Devices / Network audio / Schedule

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að Settings	T		Device management			
Comeras Exations VO DI/DO devices	Joyitick Network audio POS Wiegand converter	Device Group Schedule				
External devices						

Create a name for your schedule and choose which time you want to automatically run this schedule broadcast in the Start section and please choose which days you want the end of this schedule.

If you want to repeat this broadcast Monday to Friday at 13:00, please choose Repeat every week and click Repeat on Mon to Fri, last make it never end of this schedule.

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🎝 Settings			Device management	
Cameras	Joystick Network audio	Device Group Schedule		
Stations I/O DI/D0 devices	Wiegand converter		Add Schedule	
Data magnet			Name Noon Music Start 2022/03/07 13:00 Repet every 1 week(a) +	
External devices			Respect on Dan Mon Tae Wed The Fri Sat End Never On 2022/03/07	
			Select an audio file for broadcast Down_The_Ritreet=>1038767124 wev	

Furthermore, you can choose which audio file and audio group you want to run up with this schedule.



### 6. VAST2 Live view Broadcast

Go to Live view and drag the camera which have already been bound with a speaker on the view cell.

Right click on the view and choose Broadcast.



You can then see the microphone icon in the middle of VAST2. Click on Braodcast and you can speak to the audio device.

7. VAST2 Alarm Setting

Go to Settings and click on Add & Delete.

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	Device	Recording	Alarm	User	System	VIVOCloud
	Cameras	Recording options	Add & Delete	Add & Delete	License	Account
	Sites	Backup			SMTP	NVR
	POS	Failover			Preferences	
	DI/DO devices	Local DB			Feedback and bugs	
	Data magnet					
	External devices					
	N		A			
	E-Map	Matrix	Labs			
	Import & Setup	Matrix management	IP speaker			
			Audio file			

Click on Add an alarm.

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🔊 Settings		Alarm ma	nagement			
					Q Search alarms	
lf		Do	Add an alarm At			
-			+ Add a schedule	Alarm		
			✓ Always	Instruction		
	+ Add trigger	+ Add action	Customize			Cancel

Add a triggering event and the camera you want to configure.

	Select trigger and source ×
Event/Status	IB0387.HT
All   Motion detection	
Q Search devices	Motion window2
<ul> <li>         • VMS_Station      </li> <li>         • FD8169A      </li> </ul>	Motion window3
■ FD8369A-V	Motion window4     Motion window5
■ FD8382-EVF2	No repeated triggers within 5 s
✓ ■ IB9387-HT	
■ IPR160	·
	Add Cancel

Add action.

Select Play audio file with IP speaker then choose the audio file and device. (Please upload audio file first, refer to section3-d.)

	Select actions	×
Discondia file with petwork audio device		
Play audio me with network audio device	· .	
youaretringpassing.wav	·	
Network audio device		
Q Search device	0	
🔽 🕪 AU-001		
<b>€</b> 0) AU-002		
		Cancel

Choose a schedule and enter alarm name/instruction, then click Add.

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🔊 Settings			Alarm man	agement				
						Q Search alar	ms	
If	Motion detection IB9387-HT Window 1	Do Play audio fri ALP001 youaretringess	+ Add action le with network au	At + Add a scheel	Alarm	DN		Add Cancel
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When an alarm is triggered, VAST2 will pop up with a recordong clip and the IP speaker will braodcast the selected audio file automactically.



# 8. Reset to default

# AU-001

Please remove the back cover from Network Audio Hom Speaker, you will find the reset button on the PCB board. Power on AU-001, make sure the status green LED is on, press and hold the reset button for 5 seconds until the green LED turns Red and blinks and then release.



### AU-002

Please find the reset button on the AU-002 rear side, power on the AU-002, make sure the status green LED is on, press and hold the reset button for 5 seconds until the green LED turns Red and blinks then release.

