

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.

٩		A	+ 🖪	All devices	Ca	mera	N\
Status	Model 🗸	IP	MAC	Firmware	HTTP	HTTPS	Clier
	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		
	ED81664-N	192 168 40 42	00-02-D1-6B-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)

		Simple Setup	Advance Se
A Delta Group Company			
me			
Broadcast Status			
Broadcast Record			
Audio Configure			
Broadcast Setup			
Advance Setup	Welcome to		
System	Network Audio SYSTEM		
WAN			
Backup/Firmware	Model AU-001		
Reboot			
.anguage/ 語言 ave Modification	Web UI version 3.0		

4. Upgrade F/W

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

		Simple Setup	Advance
VIVOTEK A Delta Group Company			
ome			
Broadcast Status			
Broadcast Record			
Audio Configure			
Broadcast Setup			
Advance Setup	Welcome to		
System	Network Audio SYSTEM		
WAN			
Backup/Firmware	Model AU-001		
<u>Reboot</u> Langnage/ 語言 <mark>Save Modification</mark>	Web UI version 3.0		

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

VIVOTEK A Delta Group Company		nple Setup	Advance Setup
Home	Firmware Upgrade		
Broadcast Status			
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

VIVOTEK A Delta Group Company	Simple Setup	Advance Setup
Home	Firmware Upgrade	
Broadcast Status		
Broadcast Record	Upload Firmware	
Audio Configure	D:VLiker/IP Awdio/FWYFWC Browse	
Broadcast Setup		
Advance Setup		
System		
WAN		
Backup/Firmware		
Configurations		
<u>Firmware</u> Upgrade		
Reboot		
Language/ 語言		
Save Modification		

Reboot the device

			Advance Setup
A Delta Group Company			
Home	Step1:Load File Ok/3589184J/xmitemp/AU001 FW0002.img		
Broadcast Status			
Broadcast Record	Step2:upgrade /xmltemp/AU001_FW0002.img		
Audio Configure	Step3: Pass Bool: MTDD		
Broadcast Setup	Pass Kernel: MTD1 Pass VoIPFS: MTD2		
Advance Setup	Reboot System		
System			
WAN	Are you sure you have already <u>saved modification</u> ? Yes, Please click Reboot buttonl		
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 Save Modification		

5. VAST2 Setup

Install VAST2_2.13.0.7100(64-bit) Server and Client.

a. Go to Settings



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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	3			Media	
				Feedback and bugs	
N					
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 U/O U/O devices Data magnet External devices	Joystick Network audio POS Wiegand converter	Device Group Schedule	<section-header><section-header><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></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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Cameras Stations U/O DU/DO devices Data magnet External devices	Joystick Network audio POS Wiegand converter	Device Group Schedule Image: Comparison of the state o

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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				Select one camera to	pair with this network audio d	levice - the audio de	evice will be used w	hen that ca Apply	amera is broa Concei	dcasting.	

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-	Joystick	Device Group Schedule								
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External devices						Play audio file				
			Select one camera to pair with this ϵ - ϵ	network audio devi	ice - the audio d	please_leave			• (E	y.

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

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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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ţţţ		Name welcome.w				0	0:04				(V)	VAV: 8Khz, N	1ono, 16-Bit F	PCM) +	
†↓↓ Preferences		Name welcome.w				0	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 https://g711.org/. 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)	
 High Definition WAV (16Khz, Mono, 16-Bit PCM) 	
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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() License	Audio file	(WAV: 8Khz, Mono, 16-Bit PCM) +	
SMTP	Name	Time	
∳↓↓ Preferences	welcome.wav youaretringpassing.wav	00:04	
[Identity 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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Cameras Stations I/O DI/DO devices Data magnet External devices	Joyetick Network audio POS Wiegand converter	Device Group Schedule Add group Group name [I] Select devices I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	

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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▲)) AU-001 sample 1				
(ii) AU-001 sample 2				
4)) 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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• Q				
Sources Devices				
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 Network audio devices All AU-001 AU-001 sample 1 AU-001 sample 2 AU-002 	i i			

i. Add Schedule broadcast

Go to Device / External Devices / Network audio / Schedule

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Cemeras Exations I/O DI/DO devices	Joyritick Network audio POS Wegand converter	Device Group Schedule				
Data magnet						

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 POS	Device Group Schedule		
Stations I/O DI/D0 devices	Wiegand converter		Add Schedule	
Data magnet			Name Noon Music Start 2022/03/07 13:00 Repeat 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		Д			
E-Map	Matrix	Labs			
Import & Setup	Matrix management	IP speaker			
		Audio file			

Click on Add an alarm.

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n Settings		Alarm ma	nagement			
					Q Search alarms	
If		Do	Add an alarm At			
-			+ Add a schedule	Alarm		
	+ Add trigger	+ Add action	✓ Always	Instruction		
	+ Add trigger	+ Add action	Customize			Cancel
<u>.</u>						

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

	Select trigger and source ×
Event/Status	IB9387-HT
All Motion detection	ו די לסביפו Motion window1
Q Search devices	V Motion window2
 WMS_Station FD8169A 	Motion window3
FD8369A-V	Motion window4 Motion window5
FD8382-EVF2	No repeated triggers within 5 s
■ 1B9387-HT	
	•
	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	×
Play audio file with network audio device	*	
	· .	
Audio file youaretringpassing.wav	•	
Network audio device		
Q Search device	0	
🔽 🐠 AU-001		
(1)) AU-002		
		Cancel

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

Settings Alarm management Alarm management O At Motion detection Pagagatar Motion detection Pagagatar Add a schedule VCA Pagagatar Add a schedule Pagagatar Add a sc	Motion detection IB33374T Windows1 Play audio file with network au. Alog ywwellinggesating ww Customize Alam Intraction Main Intraction Intraction Alam Intraction Alam Intraction Interverse Interverse Interverse Interverse
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Motion detection + Add action + Add a schedule VCA	Motion detection + Add acton + Add a schedule VCA IB9387-HT Window 1 Play audio file with network au AU-001 youaretringpassing.way ✓ Always Instruction Cancel
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No. Name If the following i By Do On/to At	1 VCA IB9387-HT Motion detection Play audio file with n AU-001 Always youaretringpassing.wav

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.

