

AETA ScoopTeam – Connecting to an Artist-1024 Intercom System



This document describes how to connect an AETA ScoopTeam to an Artist-1024 via the AES67 Ravenna board, giving access to the commentators' audio signals, enabling comms with the commentators and being able to provide program feeds to the commentators.

The Ravenna board is a Merging Technologies "ZMAN OEM - Audio Network Module for RAVENNA / AES67 Ecosystems". **1** Merging Technologies - Zman Oem

Within the Audio menu of the ScoopTeam device or the "My ScoopTeam LE" software, it is only possible to configure the IP addresses of the LAN interfaces of the Ravenna card, but it is not possible to import/export SDP files from here. For this it is necessary to use the free "Aneman" (Audio Network Manager) software from Merging Technologies. ¹ Merging Technologies - Aneman

Unfortunately, the current version 1.6.0 seems to be buggy, both on Windows 10 and on Windows 11. Thus, it is recommended to download the older Aneman version 1.5.6 from the archives, which proved to be stable. Archives <u>Merging Technologies - Download Archives</u>



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Integration of an AETA ScoopTeam commentary unit with an Artist-1024 via AES67.

The following description shows the setup using static IP addresses and a manual configuration not using NMOS.

Step 1

Log in to the device as "Administrator".

My ScoopTeam (LAN Edition) - Version 2.00.0.5197			×
Browse Disconnect Recent Manage devi	ces ?		
	Operator		
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	Administrator		
Login			



Step 2

Select "Settings".



Step 3

Select "Audio".

	Exit	Network		
	Network	Network for Outgoing Calls Ethernet		
Ę	Coding	Secondary IP Network for Double Streaming Mobile		
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	Book			
*	Tools	AoIP settings Configure the AoIP controller	I	
i	Status	LAN1 settings Configure the primary Ethernet interface		
		LAN2 settings Configure the auxiliary Ethernet interface		



Step 4

Scroll down to the "AES67" section and select "RAVENNA".



Step 5

Select "IP Addressing"





Step 6

Set the IP Address, Subnet Mask and Gateway according to your requirements.



Exit the menu.

Step 7

Open the Aneman software (version 1.5.6).

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Right-click on the ScoopTeam in the Devices list and select "Open Advanced Page".

Dences					
Name	Туре	IPV4			
ScoopTeam 111407	-	10 110 10			
	Open Web App				
	Open Advanced Page				
	Open Maintenance Page				
	Launch Lic	Launch Licence Manager			

The page will open in your web browser.

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RAVENNA AES67 ^{now!}	Vendor AETA Product ScoopTeam Serial 111407.local. 2 Identify Me	Q • •
General settings PTP A	ASIO Clock Session sources Session sinks Ins/Outs I/O Router Statistics NMOS System	
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ScoopTeam_111407 This is the unique zeroconf device na Audio Configuration	ame. Other devices see this device name.	۵ ۵
Sample rate Frame size (@1FS)	48 kHz ▼ 48 smpl AES67(1ms) ▼	T T
Session Sinks Global Safety Playout Delay (@1FS)	0	+
SSM (requires IGMP v3)		
Network		
Multi-Interface mode		
Note: must be checked for ST2022-7	7 support.	
Interface 1	L In	
Name	Primary	
Туре	Static 💌	
Address	10.128.101.198	
Gateway	0.0.0.0 V Use as Primary Gateway	
Interface 2	Арріу	
	Down	
Name	Secondary	
Туре	Static 💌	
Address	10.128.201.198	
Netmask	255.255.0.0	
Gateway	0.0.0.0 Use as Primary Gateway	
	Apply	
Note: changing the network settings r	require a reboot of the device.	ŝ



On this page you will find various tabs allowing you to configure the RAVENNA card inside the ScoopTeam unit. After adjusting the Audio, PTP- and NMOS settings according to your need, you can use the two session tabs to set up your AES67 streams to and from the Artist-1024.

On the "Session sources" tab you can define a multicast address after ticking the box "user defined". After adjusting the stream settings according to your need, you can export an SDP file by clicking on the link at the bottom of the page. In this example all eight available channels are used.

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1 ScoopTeam 111407 1	Configuration										
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	onamicio	1 - 8			-						
		Inputs I2S PGM	1	2 3	4	5	6	7 8	B		
		I/O COORD							-		
		MIC1									
		MIC2									
		MIC3									
		AUX1									
		AUX2									
	The URL of the SDP of	f this session is <u>t</u>	<u> http://10</u>	.128.10	1.198	<u>/by-id</u>	<u>/1</u> .				

Your browser will then ask you where to save the SDP file.

-7.9	4-Wire (AES67)	Scoop CH 1	
-7.10	4-Wire (AES67)	▼ Scoop CH 2	
-7.11	4-Wire (AES67)	▼ Scoop CH 3	
-7.12	4-Wire (AES67)	Scoop CH 4	
-7.13	4-Wire (AES67)	▼ Scoop CH 5	
-7.14	4-Wire (AES67)	▼ Scoop CH 6	
-7.15	4-Wire (AES67)	▼ Scoop CH 7	
-7.16	4-Wire (AES67)	Scoop CH 8	



After creating eight linked AES67 ports for your Artist system in Director, you can import this SDP file on the "Input" tab in the "Properties" window of the first of the eight linked AES67 ports.

A window will open, asking you if you want to override the UI settings.

mport SDP audi	io settings	×
	Note: Choose the audio channel you want to import.	
Media 1:	Name: ScoopTeam_111407_1, mid: Primary IP: 239.128.101.103	~
Media 2:	Do not override UI settings	\odot
	Do not override UI settings	
	Name: ScoopTeam_111407_1, mid: Primary IP: 239.128.101.103	
	Name: ScoopTeam_111407_1, mid: Secondary IP: 239.128.201.103	1.0
	Import Cancel	

Choose the corresponding elements for both Media interfaces and then confirm with the "Import" button.



ral Details I Deta	ils 2 Trunking	Gain	Beep	Virt. Keys	AES67 Input	AES67 Output	Usage	Rights			
57 Stream and Conne	ection Settings										
Mode	Port -7.9		~								
iscovery Connection	Management			- 12 C							
Protocol:	Manual		~	Manual NMOS	Manual (KTP only), NMOS						
Connection settings											
Import SDP File	Media 1			Me	Media 2						
RTP Multicast IP:	239 . 128 . 101 . 103				239 . 128 . 2	201 . 103	(IPv4 Ra	ange, 224.0.2.0 - .255.255)			
RTP Multicast Port:	5004				5004		(Default 1024-65	: 5004, Range 535)			
Sender IP:	10 . 12	3 <mark>. 1</mark> 01	. 198		10 . 128 . 2	201 . 198	More Inf	formation			
tream settings											
Channels:	8		~	Channe	ls per stream						
Bit Depth:	L24		~	Default	Default: 'L24', Bits per Sample						
Packet Time:	1.000 ms		~	Audio co	Audio content per packet						
Payload Type:	96			Default	96, Range 96-1	127					
SSRC:	0			Default	0, Range 32bit						
Time Stamp Offset:	0			Default	0, Range 32bit						
eceiver Settings											
Play Mode:	synchron		~	Synton	(Min. Buffer Size	3.000ms)					
Receive Buffer:	8.000 ms (8 x	P. Time)	~	Buffer S	Size: Min. (3x Pa	cket Time); Max.	(150.000	Oms)			
hannel Settings											
Selection:	1		~	Audio c	Audio channel from the stream to be used						

The "Input" tab in the "Properties" window will now show the values you previously configured on the RAVENNA card.

In the "Output" tab of the "Properties" window you can configure corresponding streams to the RAVENNA card and export the SDP file using the "Export SDP" button.



	Details 1	Details 2	Trunking	Gain	Beep	Virt. Keys	AES67 Input	AES67 Output	Usage	Rights			
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	Export SDP		Media 1			Me	dia 2						
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R	RTP Multicast Port:		5004			5	004		(Default	: 5004, Range			
									1024-65	535)			
Str	eam Setting	\$											
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в	it Depth:	L	.24		~	Defaul	t: L24, Bits per	Sample					
P	acket Time:	1	1.000 ms		~	Audio	Audio content per packet						
P	ayload Type	:	96			Defaul	Default: 96, Range 96-127						
-	SRC:	10	0			Defaul	Default: 0, Range 32bit						
5	ime Stamp C	ffset:	0			Defaul	t: 0, Range 32b	it					
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T Ch	annel Setting	gs				1							

On the "Session sinks" tab of the RAVENNA configuration web page you first need to tick the box for a "Manual" source.



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RAVENNA AES67 ^{now!} ScoopTea	m_111407.local. 💌 ?		Ve Pro S Identif	ndor AETA duct Scoop Tear serial 111407 y Me			
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							Ŧ

This will reveal a box into which you can manually paste the SDP information for the RX stream, which you can copy from a Text Editor with which you have opened the SDP file exported from the "Output" tab of the "Properties" window in the Director software.



Configuration





After pasting the SDP information to the RAVENNA sink configuration, click on "Apply".



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RAVENNA ES67 now!	m_111407.local. 💌 🔇				Ide	Vend Prode Ser	dor A uct S rial 11 Me	ETA coopTea 11407			ERGI		÷
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manual://PORT-7.9-Bay5-Artis 😒	Configuration				Session Info							0	1
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		1 2 3 4 5 6 7 8 1 2 3 4 5 6 7 8	Outputs I2S I/O										

Interface 2 shows a warning, as it was not connected to the network during this test.

In the lower part of the page, you will find a Routing matrix showing you the assignment of the stream channels.



Channels



The following pages describe the routing options using the Ravenna interface, once the connection to the Artist-1024 is established.

Audio Routing – Outputs via Ravenna

The Program Out can be assigned to Ravenna 1 and Coord Out to Ravenna 2.





The other Ravenna Output channels are not accessible via the routing menu.



2.1.7. AES67 / RAVENNA interface

This interface is only available on the "Premium+" version, and has the following features:

- Ethernet 1000BaseT, two RJ45 sockets located on the back
- Five input channels (selectable from the source streams) and eight output channels
- Input gain control -30dB to +16dB, 1 dB steps (for each channel, independently)
- All parameters controllable by remote (some of the settings by using a separate software tool and accessing the RAVENNA/AES67 interface)

The 8 output channels are assigned as follows:

Channel	Name	Function	
1	RAV. 1	Output mix (see further)	
2	RAV. 2	Output mix (see further)	
3	MIC1	Direct output of Mic1 (after gain adjustment)	
4	MIC2	Direct output of Mic2 (after gain adjustment)	
5	MIC3	Direct output of Mic3 (after gain if Mic level)	
6	MIC4	Direct output of Mic4 (after gain if Mic level)	
7	AUX1	Direct output of Aux1 line input	
8	AUX2	Direct output of Aux2 line input (muted if AES mode is selected for the AES/Aux2 input)	

Pressing a commentator's Program button routes the Mic input to the Program mix (Ravenna 1) as well as to corresponding Ravenna output (Mic 1 to Ravenna 3, Mic 2 to Ravenna 4, etc.).

Pressing a commentator's Coord button routes the Mic input to the Coord mix (Ravenna 2) and interrupts the signal to the Program mix as well as to the dedicated Ravenna channel.

Audio Routing – Inputs via Ravenna

It is possible to mix the incoming Program (Ravenna 1) and Coord (Ravenna 2) signal to all four headset outputs, as well as create individual headset mixes of incoming Ravenna channels 3-6.









Figure 3 - Mixer diagram, main part