MERGING ANUBIS

Appendix



September 30th 2024

Contents

Thank you for acquiring MERGING ANUBIS	4
OVERVIEW	5
MERGING ANUBIS VARIANTS AND KEY FEATURES	5
ABOUT RAVENNA	7
ABOUT DANTE	7
Dante Setup Guidelines	8
Dante operation modes	12
Anubis RAVENNA/AES67 vs Dante specifications	13
MISSION CONTROL - MODULAR BY SOFTWARE Error! Bookmark no	t defined.
HOW TO CONNECT MERGING ANUBIS	14
Connecting the Ethernet cable to the Network for Dante or RAVENNA use	14
ANUBIS HOME PAGE	15
Missions	15
STATUS BAR	16
SETTINGS	17
MONITORING Settings	19
DANTE IO Settings	
INFO Settings	24
EXIT Settings	25
Dante Redundancy	
BASIC DANTE MONITORING SETUP (Monitor Mission)	27
MUSIC MISSION SETUP	
MORE ANUBIS USE CASES HERE	
WEB USER INTERFACE	
How to Open the Remote Web User Interface	
Dante Appendix available from the Web Access	35
Identify Device	
ANUBIS FIRMWARE UDPATE PROCEDURE	
FOR MORE INFORMATION	

Thank you for acquiring MERGING ANUBIS

This manual is intended to take you through the setup of Dante with the MERGING ANUBIS. We encourage you to familiarize yourself with the features, applications, and connection procedures before setting up your MERGING ANUBIS.

To ensure the safe operation of your Anubis please read the instructions, important safety information and warnings carefully before installation and use.

For all details in regards to the MERGING ANUBIS hardware please refer to the main user manual.

© 2024 All rights reserved. Merging Technologies and MERGING ANUBIS are registered Trademarks of Merging Technologies SA.

Audinate® and Dante® are registered trademark of Audinate Pty Ltd.

OVERVIEW

MERGING ANUBIS is a ground-breaking new audio interface incorporating the Swiss expertise of Merging Technologies in analogue and digital, networked audio and DSP technology. More significantly, it offers unique features to any engineer or musician looking for a compact AD/DA unit with the quality you would expect from Merging, and a fully featured monitor controller that integrates with any DAW.

MERGING ANUBIS was designed in Switzerland, where it is assembled and tested to the same exacting standards as our complete line of professional products and is intended to deliver the same high level of performance and reliability.

MERGING ANUBIS VARIANTS AND KEY FEATURES

VARIANTS

MERGING ANUBIS SPS PRO: Seamless Protection Switching. ST2022-7 class C and NMOS compliance and built-in switch mode. Supports sample rates from 44.1kHz to 192kHz PCM at a 32-bit resolution

MERGING ANUBIS SPS PREMIUM: Seamless **P**rotection **S**witching. ST2022-7 class C and NMOS compliance and built-in switch mode.

Supports sample rates from 44.1kHz to 352.8kHz (DXD) and 384kHz PCM at a 32-bit resolution. Premium High Samplling rates formats DSD64, DSD128 and DSD256 are not supported in Dante mode.

Important: When running in Dante mode the maximum sampling rate is 192kHz.

KEY FEATURES

- Modular by software. Evolving long life product with multiple missions (upcoming)
- Merging class of its own sound quality
- Ethernet with RAVENNA/AES67 or DANTE interface allows asynchronous data transfer with computer audio systems and allows cable runs up to 100m with Cat5e/Cat6 cable
- Standalone or central part of a highly scalable and expandable network. Multiple MERGING ANUBIS, RAVENNA/AES67 or DANTE compliant interfaces can be connected to the network and Anubis can remotely and locally: Control, Mix, Monitor multichannel content and route those I/O's.
- Full 32 bit signal path from analog Input to Output, via Mixer
- TFT LCD capacitive multi-touch screen
- Web based remote control accessible via smartphone, tablet or computer.
- Rotary Control knob allowing easy adjustment of volume level. The rotary knob provides also access to comprehensive and intuitive menu within the Anubis software
- FPGA-based DSP mixer with effects with ultra-low latency for the performer foldback/Cues
- Up to 4 x 128 x 8 Mix engines
- Redundant power supply with PoE and DC Power Supply

- RAVENNA/AES67 mode (firmware)
 - 256 IO channels supported
 - SMPTE 2110-30 support: Audio transport is built on AES67 uncompressed 48kHz PCM audio. Up to 8 channels can be bundled in one stream,16- and 24-bit depth are supported.
 - SMPTE 2110-10 support: PTP v2 (IEEE 1588)
 - ST2022-7 Support with new Anubis SPS (Seamless Protection Switching) and as of firmware 1.1.X and above.
 - NMOS Support as of firmware 1.1.X and above. Refer to the link below for more details. <u>https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4819466/NMOS+Implementatio</u> <u>n+Notes</u>
 - Peering Support
 - Stream Listener Support
- DANTE Mode (firmware)
 - 8 IO or 64 IO supported channels (varies with purchased plan)
 - Dante Redundancy support
 - AES67 support with fixed sampling rate at 48kHz
 - Anubis Settings include a Dante Routing page for the Music and Monitor Missions. Other missions must use the <u>Advanced Dante Pages</u>.

ABOUT RAVENNA

RAVENNA is a solution for real-time distribution of audio and other media content in IP-based network environments. Utilizing standardized network protocols and technologies, RAVENNA can operate in existing network infrastructures and is fully AES67 compliant. The RAVENNA protocol manages the data transfer between the MERGING ANUBIS and a computer or other hardware when the Ethernet interface is used. This open and published IP network technology had been created to meet the demands of national broadcasters and focused on the essential requirements of extremely accurate clocking, high resistance to packet loss and very low latency i.e. getting the data to where it needs to be, intact and at the right time.

ABOUT DANTE

Dante by Audinate is one of the leading closed AoIP ecosystems, offering a comprehensive set of software, hardware and network protocols to deliver uncompressed networked audio.

Dante is the product name for a combination of software, hardware, and network protocols that delivers uncompressed, multi-channel, low-latency digital audio over a standard Ethernet network using Layer 3 IP packets. Developed in 2006 by the Sydney-based Audinate, Dante builds on previous audio over Ethernet and audio over IP technologies.

Like most other audio over Ethernet technologies, Dante is primarily for professional, commercial applications. Most often, it is used in applications where a large number of audio channels must be transmitted over relatively long distances or to multiple locations.

The Anubis is a Dante Ready device delivered without a Dante license, the license must be purchased separately.

In order to operate in Dante mode it requires that the Anubis Dante firmware is updated in the unit. Refer to the Dante Set Up guidelines for all details.

About Dante Ready[™] and Dante Activator.

A Dante Ready[™] device allows you to purchase and add audio channels to a device after initial purchase using the Dante Activator feature in Dante Controller.

Dante Controller route's AV signals between all Dante-enabled audio and video devices on your network. Configurations are saved directly to the devices themselves, ensuring the stability of your network through power cycles, device disconnection and system reconfiguration.

- Dante Setup Guidelines

Detailed procedure on how to setup the Anubis Dante AoIP operation mode.

Important:

- The MERGING ANUBIS is delivered without a Dante license, the license must be purchased separately.
- The MERGING ANUBIS are always delivered with the RAVENNA/AES67 firmware
- In order to operate in Dante mode it requires that the MERGING ANUBIS Dante firmware is updated in the unit and that an IO license plan is purchased.

Requirements:

- MERGING ANUBIS latest hardware revision Dante Ready* (Anubis SPS Made in Hungary with serials 10000 and above). Refer to the <u>Dante FAQ</u> for all details.
- MERGING ANUBIS Dante Firmware 1.7.0 and above
- Applications installed
 - o MT Discovery 20.0.0 and above
 - Anubis Toolkit 1.7.0 and above
 - o MT Portal 1.2 and above
 - o Dante Controller
- Creation of an Audinate account
- License purchasing plan is an additional cost

*All Anubis SPS models can be serviced to be Dante Ready, refer to the Merging website for all details.

Procedure:

- 1. Download and Install the Anubis Toolkit or MT Discovery application, those can be downloaded from the Neumann website.
- 2. Connect the MT 48 via the network to your system
- 3. The MERGING ANUBIS should be detected, please open the Maintenance Page



4. Update the Firmware to the Dante firmware version

The MT Portal will display the Dante firmware please select Download & Update, otherwise downloaded the Dante firmware from the Neumann website.

Note: The firmware update will take more than 15min, please do not abort at anytime.

▼ MERGING+ANU	JBIS	
RAVENNA AES67	Dante	
170	Anubis Installed version: None Released version:	- > Dante (Not Running)
	🛑 Update available	Download Only
		Download & Update

- 5. Once the Dante Firmware has been updated reboot the unit.
- 6. Make sure you have downloaded and installed the Dante Controller application from the Audinate site. The Dante Virtual Sound Card is also recommend for operating in Dante mode. <u>https://www.audinate.com</u>
- 7. With the MERGING ANUBIS connected to the system running Dante Controller launch the Dante Activator from the view menu



8. The MERGING ANUBIS should be detected into the Dante Activator

🗢 Dante Activator		– o ;	×
企 Home	Q jsearch	-Â	
🚊 Devices 🚺	Upgradeable Up-to-date	Discussion in the last	
-	 New Activation 1 	Please select a device from the list	
도 Cart	🚔 ANUBIS		
⑦ Support	Upgrade Available		
,	- Recoverable 💿		
文A Language 、			
② Log in	Scan for Devices		

 Select a license plan. 8 x 8 IO are offered or 64 x 64 IO Note: License plans are upgradable and current paid amount deducted from the upgrade cost.

Dante Ready License Plan	44.1/48kHz	88.2/96kHz	176.4/192kHz
License plan 8 x 8 IO	8	8	8
License plan 64 x 64 IO	64	32	16

10. Go to Cart and Check out

You will be asked Login to your Audinate account, create one if you do not have one.



10. Activate your license plan upon entering the purchase details (e.g. credit card)

Dante Activator				- 0 x
命 Home				
සි Devices ()	CART			
몇 Cart 🚺	Device	Item		Amount
② Support	Anubis Merging Technologies - Hapi Dante	Dante IP Core Device License Fee 64x64 Channels - Pools Activate	🖉 Edit	
	Summary			
	Sub-Total:			
	GRAND TOTAL:			
	Once you complete your purchase, you or upgrade your device(s). This will inte a short time.	u will be prompted to activate mupt your audio and video for		
ŻĄ Language →				
Merging Merging	I have read and agree to the Terms a	and conditions		Check out

11. Wait for the confirmation of the Activation

Dante Activator				_	0	×
命 Home					Ī	
🚽 Devices 🚺						
몇 Cart						
③ Support	O Don't an or of disconnect your devices					
	Device	Progress				
	Anubis Merging Technologies - Hapi, Dante	Activated Activated				
	Cancel Activation		Done			
XA Language *						
Merging Merging						

12. The MERGING ANUBIS is now ready for Dante operations.

It will be discovered into the Dante Controller and can be used with the Dante Virtual Sound Card



Note: Dante Virtual Sound card and/or Dante VIA come at extra cost.

Dante operation modes

Dante Network integration



Dante Redundancy



Anubis RAVENNA/AES67 vs Dante specifications

	ANUBIS FIRMWARES	SPECIFICATIONS	
FIRMWARE RUNNING	RAVENNA AES67 FIRMWARE	DANTE FIRMWARE	
Features	RAVENNA & AES67	DANTE	AES67
Drivers and Utilities	Free of charge	Requires a Dante IO licence plan p	urchase
IO Count	256 IO	8 IO or 64 IO	
	Merging: MAD (Windows) -		
Integration	VAD (macOS) - ANEMAN	Dante Controller - DVS - VIA	4
	*Max 352.8kHz (DXD),		
Sampling Rate	384kHz and DSD (premium)	up to 192kHz	48kHz Only
			1ms - 2ms -
latency	6-12-16-32-48-64 samples	0.25ms - 0.5ms - 1ms - 2ms - 5ms	5ms
Additional Protocols			
supported	NMOS, LAWO HOME	NA	
Network redundancy	ST2022-7	Redundant mode (Dante)	
WDM Support			
(Windows)	Merging Audio Device (MAD)	Dante VIA	
	Flexible (from interface) -		
PTP Clocking	PTPv2	Dante Controller - PTPv1	
	Available with Monitor		
AoIP listener disabled	Mission	Not Available	
ASIO Clock	Available	Not Available	
Advanced Pages	Full advanced features	Limited Advanced options	
Peering Support	Available	Not Available	
Generic AES67 input			
streams	Available	Not Available	
Sound ID Room			
Correction	Available	Available	
Plugins (EQ, Dynamics,			
Reverb)	Available	Available	
Plugins (Deesser,			
Blackhole*)	Available	Available	
MIDI PreAmps remote			
control	Available	Not Available	
Neumann KH AES67			
Support	Available	Available	48kHz only

HOW TO CONNECT MERGING ANUBIS

Connecting the Ethernet cable to the Network for Dante or RAVENNA use

The Network connection uses an RJ45 female receptacle with an EtherCon locking connector. A standard Cat5e, Cat6 or higher cable can be used. Anubis is supplied with a 3 meters Ethernet Cat6 cable, if a longer cable is required, it can be ordered from your Merging Technologies dealer. If using an EtherCon align this one to the Network connector so that the small slot in the EtherCon connector body is facing upwards, then push the connector home until the lock clicks. To remove the cable, grasp the EtherCon cable connector body and push the tab above the Network input connector to release the lock, then withdraw the connector. Do not pull on the cable. If the lock release tab is not pushed sufficiently, the cable cannot be removed.



Figure 1 Cat5e or Cat6 Ethernet cable

Note: A network interface adaptor might be required to connect the Anubis RJ-45 cable to a USB Type A, B or C port or to a Thunderbolt port of your notebook/computer. Merging recommends the Sonnet Thunderbolt Gigabit Ethernet Adaptor.

For Dante Networks

If you have more than one Anubis or if you have another Dante device such as a Hapi, or a second system running Dante over the same network it is highly recommended to use a Merging certified Dante switch and follow our configuration guidelines.

Merging's recommended Switches and Configurations: RAVENNA/AES67 and Dante Certified Switches

https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4818859/Dante+devices+Multica st+Groups+configuration+-+Cisco+switches.

Installed applications

Anubis Toolkit 1.7.0 and above For latest package of installers, firmware and remote control tools MT Discovery 15.0.10 and above For Dante access to Web App, Remote App, Dante Advanced Pages and Firmware updates MT Portal 1.2 and above For automatic software and firmware updates

ANUBIS HOME PAGE

Select the Mission you plan to use



Missions

All missions are supported in Dante mode. For details refer to the Anubis User Manual or the Mission Appendix.

LOGS MESSAGES

Select if log message are preset (yellow toolbar envelop blinking).

PREAMPS CONTROL

Opens the Anubis PreAmps page (refer to Mission Manual)

Note: Peering is not supported in Dante mode.

STATUS BAR

Displays information and notifications about the Anubis status



48V: Will light up red if 48 Phantom power is active on an input channel

CLP: Clipping peak detected, clear the clipping by either tapping the meters section (PreAmps & Meters page) or use the Peak clear option available

OV: Overload detected in the Anubis built-In Mixer.

Input Cut: When lit it will indicate that one or more Preamp channel is cut (muted) 1-2-3-4-TB

Talkback: Built-in and/or routed input to the Talk 1 or 2. Active talkback will light up if engaged

Page title: Information related to the selected page

GPIO: GPIO indicator for input and output, will lit if GPIO is received or transmitted

MIDI IO: MIDI indicator for input and output, will lit if MIDI is received or transmitted

Log: Lights up when a message or error has been received. Check message in Home page Log

Dante: Icon indicator that the Anubis is Running in Dante mode

Power Over Ethernet: (PoE) when active, the icon will be highlighted green

Synchronization status: M Master PTP or S Slave PTP clock

Sampling Rate indication: e.g. 192kHz

SETTINGS

The Settings layout may vary with the Mission running.

Open the Anubis Settings from the Anubis home page, with a long press on the Anubis Home button.



The Dante mode Settings option will differ from the RAVENNA/AES67 Settings. In this section we will aim a describing the difference. For details on the RAVENNA/AES67 setting please refer to the User Manual or Mission Manual.





scroll up or down to view and navigate through the settings entries



SETTINGS CATEGORIES DESCRIPTION

GENERAL SETTINGS

Note: The General Settings are displayed on a Black Background as of Firmware 1.4.4 and above

Sample Rate



Selector to the different sampling rates, available from a drop down menu. Dante mode highest supported sampling rate is 192kHz.

Anubis Pro: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz Anubis Premium: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz and 192kHz

Note: 384kHz, DXD and DSD are supported with the RAVENNA/AES67 firmware only.

CLOCK Internal: Dante Optical: Synchronize to external Optical clock.

About Dante Clock

All Dante-enabled devices use the IEEE 1588 Precision Time Protocol (PTP) across the network to synchronize their local clocks to a leader clock, providing sample-accurate time alignment throughout the network. One Dante device will be elected as the PTP Leader Clock for the network; all other Dante devices act as a PTP Follower Clocks to the elected leader clock. Although many Dante devices may be capable of becoming PTP

Leader Clock, only one device will win the election. Devices with clock inputs (e.g. Word Clock or AES3) will be preferred in the election process. A gigabit connected device is preferred over a device connected via 100Mbps. A tie-breaker rule of the lowest MAC address is used if several equivalent candidate leader clocks are available. The election process may be overridden by manually setting 'Preferred Leader' on a device.

Dante Clock Types

Each Dante hardware device can derive its clock from either its high-quality onboard clock circuit, or an externally connected word clock. In the case of Dante Virtual Soundcard, the computer's clock will be used.

About Dante Latency

For Dante audio devices, variation in latency in the network is compensated for at the receiver. Each receiver has a device latency setting. This setting defines the latency between the timestamps on the incoming audio samples and when those samples are played out.

The typical default latency for a Dante audio device is 1 msec. This is sufficient for a very large network, consisting of a Gigabit network core (with up to 10 hops between edge switches) and 100 megabit links to Dante devices. Smaller, Gigabit-only networks can use lower values of latency (down to 150 μ sec for very fast devices, such as PCIe cards). Recommended latency settings are displayed in Dante Controller, and may also be found in the documentation accompanying the product.

Refer to the Dante Controller Manual for all details

MONITORING Settings

The Monitoring settings are the central part of the Monitoring Mission, this is where you can configure the incoming Sources and outgoing Monitor sets and configure their routing.



< Settings	Sources		Ľ	⊠ M	96kHz
SOURCES					
Mic/Line 1-2		>	^	$\mathbf{\sim}$	t
Inst/Line 3		>	^	$\mathbf{\sim}$	Ŵ
DAW 1-2		>	^	$\mathbf{\sim}$	Ŵ
7.1.4		>	^	$\mathbf{\vee}$	Ŵ
CREATE A NEW SOURCE) (+)

The first step is to configure your Sources (e.g. DAW or External DANTE Device) prior to deciding how you will monitor those. By default, Anubis comes with pre-created sources that consist of the current Anubis physical inputs: Mic/Line (Back Panel Inputs 1-2) and INST/LINE (Front Panel inputs 3-4), with an additional DAW Source ready to listen to your DAW Playout, upon a first connection within Dante Controller.

The internal Sources are already patched to the Anubis mix engine, so that you can immediately use them for monitoring purpose. You are free to remove any of those pre-configured and/or to create your own additional Sources at any time.

Anubis ex-factory comes with some pre-configured Sources (such as DAW 1-2). Users are free

add and create their own sources or edit the present ones. 128 channels @ 1FS (44.1/48kHz) are available to connect those Sources.





Number: Channel numbering of the Source

Type: The channel type is predefined in accordance with the selected Source Type **Patch:** Configure the Source routing by patching each of the source channels. Scroll to view the entire listing.

< Sources	DA	W 1-2	Ľ	-⊱ ⊠ M	48kHz
ТҮРЕ				Ster	reo
😅 TRIM					0.0 dB
CHANNELS					-
•	Туре		Patc	h	
1	Left		Dante	_1	
2	Right		Dante	_2	

Figure 2 Example: Dante Patched Source

Note: Stream Listener Sources are not supported in Dante Mode.



< Settings	Monitors		1	M	48kHz
MONITORS					
ه») Main 1-2		>	^	$\boldsymbol{\sim}$	Ŵ
م») Alt 3-4		>	^	\sim	Ē
ه») Phone 1		>	^	$\boldsymbol{\sim}$	1
ه») Phone 2		>	^	\sim	b
CREATE NEW MONITOR					• (+)

Configure your Monitoring sets, whether you plan to use the Anubis hardware output sets for your Studio Monitor Speaker, Headphones, Cue Mix or to Remotely control the outputs of an external compatible device Dante device.



Figure 3 Example: Configured Patch Monitor



Patch: Configure the Monitor routing. Users can patch an Anubis Hardware Output Monitor, an external source (e.g. Paired device) or Dante Stream. The Patch list starts with the Anubis Hardware inputs followed by the Dante Stream. Scroll to view the entire listing.

< Main 1-2	Patching C	hannel L	₫ •≱ 🖂	M 48kHz
DANTE				-
00 1		Single	Add	Auto↓
2		Single	Add	Auto↓
😳 з		Single	Add	Auto↓
4		Single	Add	Auto↓
5		Single	Add	Auto↓

DANTE IO Settings

Assign the DANTE IO channel from within the Anubis Settings. Allowing the operator to patch by example Microphone inputs of the Anubis directly to the Dante channels in order to record those within the DAW.



The **Venue Mission** and **Commentary Unit Mission** do not have the Dante IO settings page. to perform the Dante routing open the Dante Advanced pages from MT Discovery.



$\leftarrow \rightarrow$	C Â	∆ No	t seci	are	169.2	54.22	9.108	3/advi	ancec	l/inde	ex.htm	ıl																								Q	. ☆		a :
🚮 NEW M.	AJL 🕂 Jira	🗙 Coi	nfluer	nce ,	▲ м	erginç	g.Com	۲	Neun	nann	0	Forum	мт	s He	otmail	8	20min		Imho	tep	🖬 Yal	nooMa	*	UBS	E-Bank	•	Backs	tage	s s	onic Ra	de 🤇	🕽 SugarCRI	вм I 2	Z IZ Port	al	»		All B	lookmarks
-‡ Dan	te																															Vendo Produc	or Mergin ct MERG	ing Techno SING+ANU	ologies JBIS		- n ar		-
	An	ubis-660	1326	• 🕐																												Identify Me	le 🗌	10	-				-
General setti	ngs Ins/Outs	VO Ros	iter	System	m																																		
Max 16 Channel	s per module 🖌																																						
																				(a /		n'		ma2		1			. /		4. 45							
		0	s# /								1	1	1	1	1	1	1	12	×~/~	Jack	1	S.M.	an a	St. State	and .	ser.	anc2 p	¥ /	3	The state	GUITA	REVES							
Dante	1		1	-	1	-	-	1	1	-	~0	-	-	~	~	~	20		1	2	•	- W	614 ·	4. 6		- A	1	1	-	<u> </u>	ň –	<u>```</u>							
Darres	2																	0																					
	3																		0																				
	4																																						
	5																																						
	6																																						
	7																																						
	8																																						
	9																																						
	10																																						
	11																																						
	12																																						
	14																																						
	15																																						
	16																																						
Combo 1/2	Combo 1/2: Lef																				0 0) 🛛														
	Combo 1/2: Rigt																				0 0																		
Jack 3/4	Jack 3/4: Left																																						
	Jack 3/4: Right																																						
Built-In Mic	Built-in Mic	0																																					
TONY	1	2	0																		U		1 0																
Mandaharan 2	2																																						
meauphone 2	1																																						
	2	0	0	0			0	0	0			U	U	0			0		0		0 1				10		U	0			0 1								

Routing Example of the Venue Mission in the advanced.

Refer to the online Dante Advanced Pages online information for all details <u>https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/257392641/Merging+DANTE+Advanced+Pages.</u>

Refer to the Use Case here for all details on the Venue Mission <u>https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/665649153/COMMON+SETUP+DANTE</u>.



OUTPUTS Settings

TRIGGERS Settings

Refer to Main Manual for all details.

INFO Settings



Find all information about the Anubis Name, Type, Firmware version, Maintenance mode and Serial Number along with additional information on the Anubis status: Temperature, CPU, Memory usage and the AoIP Running Firmware (Dante) as well as the Dante license plan (8 IO or 64 IO)

< Settings	Info	🗹 🖗 🖂 M	44.1kHz
AOIP		Dante	e/AES67
DANTE LICENSE			64 IO
STATUS			-
TEMPERATURE			21 °C
CORES		0 %	0 %
MEMORY			0 %

Note: Anubis users should regularly check if a new firmware is available. It is important to update to the latest firmware in order to benefit from the latest improvements and fixes. Follow the firmware update procedure for all details.

EXIT Settings

< Settings	Exit	🗹 🖂 м	96kHz
EXITS			
REBOOT			Ċ
SAVE			
REBOOT TO FACTORY			**

C Reboot

Reboot the Anubis

Note: To turn OFF Anubis, press on the POWER button to switch it to the released state.



Save the current Anubis configuration

Note: The Anubis entire configuration is saved every 2 minutes, and as well every time you exit the Anubis Settings. If changes are applied when in the Anubis Settings and you plan to power off the Anubis while in the Settings, it is recommended to first perform a Save configuration.



Reboot your Anubis to factory settings will recall to the default factory settings.

Marning: All Sources, Monitors and Settings will be lost.

Since the saved Presets will not be erased we recommend that you first back up your Anubis Configuration by saving it to a Preset.

Dante Redundancy

The Merging Anubis fully supports (2) RJ45 connectors, that can be configured in two different modes of operations.

1. Dante Redundancy:

Dante offers a full-time redundancy option with permanent primary and secondary audio transmission. Redundancy requires a second network, either using a second physical switch (recommended) or via a VLAN isolating the network traffic.

Audio data is transmitted on both the primary and secondary networks simultaneously. In the event of a failure on one network, audio will still continue to be transmitted via the other network

NETWORK				-
REDUNDANT MODE				
OBTAIN AN IP ADDRESS				MANUAL
IP ADDRESS	169	254	229	108
SUBNET MASK	255	255	0	0
DEFAULT GATEWAY	0	0	0	0
			APPLY AN	D REBOOT

Can be activated from the TFT under Settings>General

2. Network Switch mode (default)

Allowing the daisy changing of one extra network interface connected directly to one of the Hapi MKIII RJ45 port.

Notice: We do not support multiple daisy chained devices from the Hapi second ethernet port in switch port. A properly configured Network switch is recommended in order to daisy chain more than one additional hardware audio interface.

BASIC DANTE MONITORING SETUP (Monitor Mission)



SetUp:

Using a Main Speaker Set and headphones in order to Monitor the DAW Main playout Source.

Prerequisites:

Make sure you have Dante Controller and Dante Virtual Sound Card installed and running Properly connect and powered up your Anubis.

Connect your Active Monitors (or Power Amp) to the Anubis physical Outputs XLR 1 and 2 and/or TRS outputs 3-4 if you have alternate Monitors in your setup.

Procedure:

1. In order to connect your DAW playback to Anubis you must first have a Source available to host your DAW Playout Stream 1-2 (if stereo)

Note: Ex-factory Anubis comes with a DAW 1-2 Source. If this one is not available in the Sources page, create it, refer to the Settings>Sources manual section.

- 2. Launch your DAW making sure it is loading the Dante Driver
- 3. open Dante Controller and connect Streams between your Anubis and your system



4. Patch your DAW 1-2 Source to the Dante Streams 1-2

< Sources	D	AW 1-2	⊡ -⊱ 🖂	M 48kHz
П ТҮРЕ			S	tereo
😴 TRIM				0.0 dB
CHANNELS				-
•	Туре		Patch	
1	Left	C)ante_1	
2	Right	C)ante_2	

5. Patch your Monitor Set. Ex- Factory Speaker Sets: A, B, and Headphones 1, 2 should already be patched to their respective physical outputs. This can be verified and changed if desired under the Settings>Monitors Patch section.

Default Patching under the respective Sources and Monitors settings

< Monite	ors		Main 1-2			⊡ * ⊡	M 48kHz
L	Solo	0.0) dB	0.00 ms	Eq	Link	Bypass
R	Solo	0.0) dB	0.00 ms	Eq	Link	Bypass
PATCH	ES						-
$ \mathbf{$	Eq	AP	F	Q		Patch	
L	Eq	Off	2000 I	Hz 1.0		XLR 1/2_	_1
R	Eq	Off	2000 I	Hz 1.0		XLR 1/2_	_2

Settings>Monitor Main 1-2 Speaker A Patched to the Physical Anubis XLR 1-2

Settings>Monitor Main 1-2 Speaker A Patched to the Dante Streams 1-2

< Monito	ors		Main 1-2	🗹 - 🌾 🖂 S 🛛 48kHz
L	Solo	0.0 dB	0.00 ms	Eq Link Bypass
R	Solo	0.0 dB	0.00 ms	Eq Link Bypass
PATCH	ES			-
•••	Eq	AP F	= Q	Patch
L	Eq	Off 2000) Hz 1.0	Dante_1
R	Eq	Off 2000) Hz 1.0	Dante_2

Warning: if the Dante Streams auto-disconnect make sure that under Settings>Dante IO page you do not have channels already mapped to those Dante channels

6. Return to the Main Anubis Source page in order select which source and from which Monitor set you will monitor. First select the Monitor Set (e.g. Anubis A or B button), then select the DAW 1-2 Source to monitor it.

Monitor Speaker Set A



Monitor Speaker Set B



48V OV	⊙ 1 3 TB 🛟 🖳 1 2	М	ain 1-	2	Ľ - K	M	48kHz
Stereo	Mic/Line 1-2		0.0	HOLD		-2	20 ^{dB} .0
Mono	Inst/Line 3		_{ав} 0.о		PE	AK	
Stereo	DAW 1-2		^{dв} 0.о	SUM	MON	>CUE	
					REF	DIM	

Select DAW 1-2 Source

7. In order to monitor multiple sources simultaneously enable the SUM option and sum your Sources selections.

To control the Headphones volume, simply select the Headphone 1 button and use the Anubis Rotary knob to adjust its Volume.

Note: The Speakers Set mode and Headphones mode listen to the same Sources selection. In order to listen to different Sources, a Monitoring Cue must be configured (refer to the Settings>Monitors Cue mode section)

You are ready to start your Anubis Monitoring Mission and have full control over your DAW monitoring.

MUSIC MISSION DANTE SETUP



Setup:

Adding Microphones and Instruments for recording while monitoring your DAW Main outputs along with an ultra-low monitoring Cue routed to the Headphones 1. Providing CUE Mixes to Artists over a Dante Network.

Prerequisites:

Install Dante Controller and Dante Virtual Soundcard.

Connect your microphones to the XLR combo inputs 1-2 located at the back of the Anubis, your Guitar or Bass can be directly connected to the Hi-Z instrument input at the front Input 3. Stereo inputs 3-4 can be used, but in this case under Settings>Sources>Inst/Line the source mode has to be changed to Stereo mode, and patched to Jack 3 and Jack 4.

Note: Using Input 4 will override the built-in Talkback microphone as both share the same circuitry.

Procedure:

1. Launch Dante Virtual Sound Card (DVS) and Dante Controller.

2. In Dante Controller establish connections between the Anubis and your system



3. Configure your DAW to use the Dante Virtual Sound Card and make sure it is configured to use the Dante Outputs 1-2 by example

4. Playback your DAW

The DAW signal will be coming into the Dante inputs channels of the Anubis.



DAW 1-2

It is recommended for Stereo DAW inputs to Pan the channels left and right.

5. Open the Bus Routing Page and patch the Mixer and Mixer-ALT to the outputs you wish to monitor from.

Bus Routing



You can map the Mixers outputs to local Anubis hardware outputs (e.g. XLR 1-2 or HP1 or HP2), but can also map your Bus Routing to Dante devices over your network (scroll down the page).

Note: For Dante Multichannel Monitoring we recommend using the Anubis Monitor Mission

6. To record the Physical Preamps of the MT 48 over Dante and your DAW, make sure you route them properly under Settings>Dante IO.

In the image below we have Routed the Analog inputs 1-4 of the Anubis to the Dante channels 1-4 in order to record those channels within your DAW inputs.

< Settings	🗹 - \$ 🖗 🖸 M	192kHz
INPUTS ROUTED TO COMPUTER		-
	Da	nte Ch.
Le Analog In		1-4
ANALOG IN POST FX		
BUILT-IN MIC		
間 BUS RETURN MIX		-

You are ready to Record and Monitor Software applications (DAW) using the Anubis Music Mission in which you can now Mix the Anubis Inputs channels in ultra-low latency as well.

MORE ANUBIS USE CASES HERE

https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4818957

WEB USER INTERFACE

Remote control your Anubis Monitoring through any tablet or web browser by opening the Web User page. The Anubis Monitoring Web User Interface combines all three pages of the Monitoring Mission into a single web page.

Peer to Peer Remote Access:



Network/Tablet Remote Access:



How to Open the Remote Web User Interface

MT Discovery:

Make sure that MT Discovery 15.0.10 and above is installed on your system. Once Anubis is properly connected to your PC or Mac launch MT Discovery and double mouse click on the Anubis entry. This will open the Monitoring Web Access page into your default web browser (Google Chrome recommended).



Important: ANEMAN, VAD and MAD are RAVENNA/AES67 utilities and driver and do not support Dante operating mode nor will they discover your Anubis. If running in Dante we recommend using MT Discovery for interface access and management and Dante Controller for connectivity.

Dante Appendix available from the Web Access

Once the remote Web Access is opened in your browser (Chrome recommended). From the main Menu, see options with Settings access and also the Dante Appendix access.

MENU	
RESET PEAKS	BUS ROUTING
SHOW ALL AUX	SETTINGS
SHOW PREAMPS	SNAPSHOTS
SHOW SEND KNOBS	DOWNLOAD SNAPSHOT
ANUBIS MANUAL	UPLOAD SNAPSHOT
MISSION MANUAL	UPLOAD SOUNDID PROFILES
DANTE APPENDIX	
DEBUG REPORT	

Identify Device

Dante Controller incorporates support for device identification. Double click any device in the Network View to open the Device View, the click on the "Identify" button. This will Display the device Name/Serial in Overlay on the Anubis TFT display.





You have now identified an Anubis over the network.

ANUBIS FIRMWARE UDPATE PROCEDURE

PREREQUISITES

- MT Discovery 15.0.10 and above and MT Portal 1.2 and above.

Download from https://www.merging.com/download

- An internet connection to download the latest Firmware

- Connecting the ethernet interface of the Anubis to a Mac or PC system for the update procedure
- Google Chrome is the recommended browser

PROCEDURE – MT Portal

- 1. Install MT DISCOVERY and MT Portal
- 2. Download the latest Anubis Toolkit / Firmware from https://www.merging.com/anubis/download

3. Connect your Anubis network port to the system where you have downloaded the latest firmware

4. Launching MT Discovery, it will discover your Anubis within seconds.

5. Perform a Mouse + Right Click and select either "Show Available updates" Note: For manual Firmware updates refer to the Main User Manual.

MTDiscovery			_	×
				Refresh
	JG SE			
Copyright © 2024 Marging Technologies. All rights rese	erved	and the second se		
✓ ➡ RAVENNA Devices				
Horus				
NADAC				
ZMAN				
MassCore				
a ASIO				
CoreAudio				
Neumann Studio Monitors				
🛱 Others				
✓ ■ Dante ZMAN Devices (1)				
🛃 Anubis-660326				
Emotion Servers		Open Web App		
Pyramix Servers		Open Advanced Page		
VCube MXFix Servers		Open Maintenance Page		
Ovation Servers		Launch Remote Controller		
✓ [™] Others (3)		Launch Kennote Controller		
HP ENVY 4520 series [A55371]		Launch License Manager		
🕫 internetbox	•	Show Available Updates		

- 6. This will open the MT Portal.
- 7. Under the Dante tab of the Anubis, select "Download & Update"

▼ MERGING+AN	JBIS		
RAVENNA AES67	Dante		
Installe Releas	Installed versio Released versio	Anubis	- Conte (Not Running)
	🛑 Update ava	ilable	Download Only
			Download & Update

Important: Never about a Firmware update.

8. Reboot the Anubis once the update is successful. It will then be Running in Dante mode. The Dante IO License is not included, follow procedure at the beginning of this guide for details.

PROCEDURE - Manual

Update from the Maintenance Page (alternative)

Users can update the firmware from the Maintenance Mode page. This is supported from a network AoIP connection to your system (mac or PC).

OPEN MAINTENANCE PAGE from the Anubis form the MT Discovery Right Click menu

A browser window opens. Click SELECT FILE and locate the firmware file you downloaded. (The RAVENNA-AES67 or DANTE firmware/toolkits can be downloaded from the Merging site)

Click UPDATE and wait for the procedure to end. Make sure your computer does not enter sleep mode during the update process. The updating procedure takes about 10 minutes. Don't panic if the process appears to get stuck. Do not abort, just wait.

Once the update is completed, the message REBOOT DEVICE appears. Confirm.

After rebooting the device, your Merging Anubis will be updated to the latest firmware. Warning: Never abort an ongoing firmware update

FOR MORE INFORMATION

MERGING ANUBIS Downloads https://www.merging.com/anubis/download

MERGING ANUBIS Knowledge Database, FAQs and Tutorials <u>https://merging.atlassian.net/wiki/spaces/PUBLICDOC/overview?mode=global</u>

MERGING ANUBIS USE CASES <u>https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4818957/Anubis+Use+Cases</u>

MERGING ANUBIS Dante FAQ <u>https://merging.atlassian.net/wiki/spaces/DP/pages/364576772/Merging+Dante+FAQ</u>

MERGING SUPPORT support@merging.com

MERGING ANUBIS WEBSITE https://www.merging.com/products/anubis

MERGING YouTube CHANNEL https://www.youtube.com/channel/UCR5g_dlb9dYnXTrVDWMshgw