

MMP1 Setup Guide

Version 1.0





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1. Introduction

This guide explains how to build an audio monitoring system using Yamaha MMP1, a studio monitor management system, and how to install and configure each required/related equipment and software.

The system can contain many elements including peripheral equipment such as powered speakers, microphones for talkback, mic preamps, headphone amps, cough boxes, VU meters, GPI devices, as well as computer system such as PC/Mac, iPad, network switches and software such as DAW, configuration software, controller app and so on, which requires experience and accumulated knowledge.

This guide will walk you step-by-step through installing each piece of primary equipment, connecting them via various types of cabled needed, installing software, apps and all the aspects of setup that need to be handled before the system can be used.

This guide will not explain how to operate each equipment and, for how to operate them, please refer to the operation manuals.

2. System Configuration and Channel Planning

This guide will use the following system example of a studio for recording and editing 5.1 surround sound.

Surround Studio (5.1ch)

A full 5.1 channel speaker system is provided in the control room in addition to two pairs of stereo monitors (near-field and small). Separate talkback microphones are provided for the engineer and director. Three cue feeds are provided for the recording. MMP1 analog output is expanded via the Dante interface, and built-in MMP1 bass management is applied to the 5.1 channel speaker system.

- 5.1 channels of "Dialog", "Music" and "Sound Effects" stems are input to MMP1 as monitor sources
- Bass management is applied to the Main Monitor (5.1ch, with LPF off and the trim level at 0dB)
- 3 different sets of speakers (5.1ch/Stereo[Large]/Stereo[Small]) are connected to Nuage I/O
- 5.1ch and stereo down-mix signals are sent to VU meter device
- 3 different stereo Cue mixes are mixed in DAW are sent to MMP1 as Cue sources and output to each Cue headphones
- A pair of studio speakers are connected to Nuage I/O (via MMP1 Monitor Matrix to Studio Speaker Out bus, which are muted when Cough Mute is turned on)
- 2 talkback microphones are connected to MMP1 (via mic preamps). Multiple Talkback
 Destinations will be created to send the talkback signals to each Cue and Studio Speakers
- 4 more microphones are also connected to MMP1 (via mic preamps). Each signal will be processed by Channels Strip and sent out to DAW



[System Diagram]

2-1. Connecting Diagram

Below is the connecting diagram for this example (black=analog, red=LAN, blue=AES/EBU)



2-2. Signal Flow Chart

Below is a diagram which illustrates the signal flow of this example, in other words, how the input signals go through each device to the DAW for recording, and how the DAW playback signals go out to the speakers and headphones. In order to easily make the channel planning, refer to the following flow chart.



[Signal Flow Chart]

2-3. Channel Planning

Here is the assignment chart for analog, digital and Dante channels of MMP1, Nuage I/O and Dante Accelerator card:

MMP1			
Analog	Input		Output
1	Mic In 1	1	Cue 1 L
2	Mic In 2	2	Cue 1 R
3	Mic In 3	3	Cue 2 L
4	Mic In 4	4	Cue 2 R
5	Talkback Mic 1	5	Cue 3 L
6	Talkback Mic 2	6	Cue 3 R
		7	Headphone L
		8	Headphone R
AES/EBU	Input		Output
		1	VU Meter L
		2	VU Meter R
		3	VU Meter C
		4	VU Meter LFE
		5	VU Meter Ls
		6	VU Meter Rs
		7	VU Meter Downmix L
_		8	VU Meter Downmix R
Dante	Input (from Dante Accelerator)		Output (to Nuage I/O/Dante Accelerator)
1	Dialog L	1	Left [Nuage I/O]
2	Dialog R	2	Right
3	Dialog C	3	Center
4	Dialog LFE	4	LFE
5	Dialog Ls	5	Ls
6	Dialog Rs	6	Rs
7	Music L	7	Large L
8	Music R	8	Large R
9	Music C	9	Small L
10	Music LFE	10	Small R
11	Music Ls	11	Studio Speaker L
12	Music Rs	12	Studio Speaker R
13	Sound Effects L	13	Microphone 1 [Dante Accelerator]
14	Sound Effects R	14	Microphone 2
15	Sound Effects C	15	Microphone 3
16	Sound Effects LFE	16	Microphone 4
17	Sound Effects Ls		
18	Sound Effects Rs		
19	Cue 1 L		
20	Cue 1 R		
21	Cue 2 L		
22	Cue 2 R		
23	Cue 3 L		
24	Cue 3 R		

Nuage I/O

Analog	Input		Output
		1 2 3 4 5 6 7 8 9 10 11 12	Left Right Center LFE Ls Rs Large L Large R Small L Small R Studio Speaker L Studio Speaker R
Dante	Input (from MMP1)		
1 2 3 4 5 6 7 8 9 10 11 12	Studio Speaker L		
Dante Acce	lerator		
Dante	Input (from MMP1)		Output (to MMP1)
1 2 3 4	Mic In 1 Mic In 2 Mic In 3 Mic In 4	1 2 3 4 5 6 7 8 9 0 11 12 13 14 15	Dialog L Dialog R Dialog C Dialog LFE Dialog Ls Dialog Rs Music L Music R Music C Music LFE Music LS Music Rs Sound Effects L Sound Effects R

15

16 17

18 19

20

21

22

23

24

Sound Effects C Sound Effects LFE

Sound Effects Ls Sound Effects Rs

Cue 1 L

Cue 1 R

Cue 2 L

Cue 2 R

Cue 3 L

Cue 3 R

3. Used Equipment List

The main devices used in this guide are as follows:

- 1. Yamaha MMP1
- 2. Dante audio interface (Yamaha Nuage I/O)
- 3. Dante PCIe card (Yamaha Dante Accelerator)
- 4. Monitor speakers (3 sets x Yamaha HS series) and a subwoofer (HS8S)
- 5. Mic preamp (Yamaha MLA8)
- 6. Network switch (Yamaha SWP1)
- 7. Cough box
- 8. 4x headphone amp (3 for Cue, 1 for Control Room)
- 9. VU meter
- 10. Main computer (computer for DAW)
- 11. Sub computer (computer for configuration software)
- 12. Apple iPad (for configuration app) and adapter (for wired connection)
- 13. Wifi access-point (Apple AirMac Extreme, for wireless connection)
- 14. 6x microphone (4 for audio recording + 2 for talkback)
- 15. External DC power supply for MMP1

1. Yamaha MMP1

http://www.yamahaproaudio.com/global/en/products/processors/mmp1/

In this example, MMP1 works as a signal processor, with which mic input signals are processed by using Channel Strip function and sent to the DAW via Dante, and also as a matrix mixer, the playback signals from DAW is routed to each speaker and headphone, either from local analog/AES/EBU outputs or from Nuage I/O (explained later) via Dante. Also, as a monitor controller, MMP1 switches between monitor sources, adjust the volumes and manages cue and talkback.



[Yamaha MMP1]

2. Dante Audio Interface(Yamaha NUAGE I/O)

http://www.yamahaproaudio.com/global/en/products/daw_systems/nuage/lineup.jsp

Nuage I/O expands the number of analog/ digital input and output channels. There are three product lineup for Nuage I/O, and they are A16 (analog 16 in/ 16 out), D16 (digital 16 in/ 16 out) and A8D8 (analog 8 in/ 8 out + digital 8 in/ 8 out) that you can choose from depending on the channel count requirement. This example will use an A16 as required.



[Yamaha NUAGE I/O]

3. Dante PCIe card (Yamaha Dante Accelerator)

http://www.yamahaproaudio.com/gobal/en/products/daw_systems/nuage/lineup.jsp

Dante Accelerator (product name is AIC128-D) is a PCIe card which handles the Dante audio data on a hardware basis, with up to 128 in/ 128 out channel capacity (@96kHz).



[Yamaha Dante Accelerator]

4. Monitor speakers (Yamaha HS powered speakers, 5.1ch surround + 2x stereo pair) http://www.yamahaproaudio.com/japan/ja/products/speakers/hsseries/

This example uses a 5.1 channel speaker set as well as large/small stereo speaker pair in the control room, while we use another 5.1 speaker set in the preview room.



[Yamaha HS Series Powered Speakers]

5. 8-channel mic preamp (Yamaha MLA8) http://www.yamahaproaudio.com/global/en/products/interfaces/mla8/

Since MMP1 does not have built-in mic preamp, you will need to have a mic preamp when handling microphone signals (including talkback mic). This example uses Yamaha MLA8, an 8-channel mic preamp).



[Yamaha MLA8]

6. Yamaha SWP1 (network switch)

http://www.yamahaproaudio.com/global/en/products/interfaces/swp1/index.jsp

This example requires at least one level-two (L2) switch for Dante audio network, and we will use Yamaha SWP1 optimized for Dante.





7. Cough box

One cough box mutes only during pressing the COUGH button, another has volume fader or slider, the others have built-in microphone for Return Talkback (RTB). Connect the cough box to MMP1 via GPI connectors and configure MMP1 so the following control can be done remotely.

- Turn Cough Mute on/off
- Turn RTB (Return Talk Back) on/off
- Display Cough mute on/off status



[Cough box (image courtesy of ICONIC Co., LTD.)]

8. Headphone amp

With MMP1, you can flexibly assign any analog, digital or Dante channel for headphone output. We will substitute headphone amps for Cue boxes, because each Cue mix is created on the DAW and each performer simply hears their stereo Cue mix while they are performing.



[Headphone amp (image courtesy of Rupert Neve Designs)]

9. VU Meter

6 or more metering channels will be needed for monitoring 5.1 channels.



[VU Meter (image courtesy of Current, Inc.)]

10. Main Computer (Computer for DAW)



[Workstation for DAW (image courtesy of HP]

For running a DAW software, prepare a Windows PC or a Mac. If you are using a Mac or a Windows PC without PCIe slots, and would like to use Dante Accelerator card, you may need to have a PCI-Thunderbolt chassis

11. Sub Computer (computer for system configurations)

Prepare another computer for configuring the system by using MMP1 Editor, Dante Controller (explained later) and so on. One computer (as described in 10.) can handle these configurations, however, if you are concerned about the performance of DAW, use a separate computer.



[Laptop PC (image courtesy of Apple Inc.)]

12. Apple iPad

Use an iPad for MMP1 Controller. For connecting to MMP1, you can choose either wireless connection by using a Wi-Fi access point or wired connection by using LAN cable. A Wi-Fi router can be used, but if that is the case, use the router in the Bridge mode (instead of Router mode) which disables the routing functions. For wired connection, some adaptors will be required to connect iPad and the network switch.

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[Apple iPad and adaptors (images courtesy of Apple Inc.)]

13. Wifi Access Point (for wireless connection)

A Wifi access point will be required for connecting iPad and MMP1 wirelessly. In this example, we will use Apple AirMac Extreme (for compatibility reasons) in Bridge mode. Connect the access point to the network switch.



[Wifi Access Point (image courtesy of Apple Inc.)]

14. Microphones

In this example, we will use 4 condenser microphones for recording narrations, and 2 more microphones for talkback. Since MMP1 does not have mic preamp, use mic preamps for microphones and other mic-level devices.



[Microphones (Images courtesy of Neumann Company and Current, Inc.)]

15. External DC Power Supply for MMP1

In case of a power problem for built-in AC power supply, an external AC adapter to DC12V as the backup power supply. In this example, we will use IDX's IA-60A which we have tested for this purpose. MMP1 has [MAIN] and [BACKUP] power buttons on the front panel, and they can be independently switched on/off.



[IDX IA-60a]

4. System Installations

4-1. Installing MMP1 & Nuage I/O units

First, connect MMP1, Nuage I/O and Dante Accelerator to the network switch.

UNIT ID Configuration

In case of using more than one MMP1 or Nuage I/O unit, assign a unique ID number to each unit from 1 - 8. For assigning UNIT ID, simply rotate the rotary switch on the rear panel.



[UNIT ID on MMP1]



[UNIT ID on Nuage I/O]

Connecting LAN cables

For most LAN connections, use CAT5e or CAT6 cables. For connecting Dante Accelerator to the LAN switch, it is recommended to use CAT7 STP (Shielded Twisted-Pair) cables.

For connecting multiple MMP1/Nuage I/O units and the switch, there are 3 ways to do so (Refer to the manual for how to choose each mode). Depending on the requirement, choose from the following:

- 1. Redundant mode (Primary port only)
- 2. Redundant mode (Primary/Secondary ports)
- 3. Daisy chain mode

1. Redundant mode (Primary port only)



[Connect I/O devices and switch (Primary port only)]

2. Redundant mode (Primary/Secondary connections)



[Connect I/O devices and switch (Primary/Secondary ports)]

3. Daisy Chain mode



[Connect I/O devices and switch (daisy-chain mode)]

Applying external DC power unit

When connecting a backup power supply to MMP1, connect it to "BACK DC INPUT" on the back side of the unit.



[Redundant DC Power Unit]

External power supply for MMP1 specifications

- DC output voltage: 12V
- DC output wattage: 45W
- DC output connector: 4P XLR connector (XLR-4-32)



Signal	N.O.	GND	+12V
Pin	2, 3	1	4

[Pin assignment of external power supply for MMP1]

4-2. Connecting iPad

Next, connect iPad to the network. There are 2 ways to connect them. One is done by using a Wi-Fi access point, and the other is by using LAN cables.

This time, we will use the Wifi connection. For doing so, first connect a LAN port (not the WAN port at the bottom) of the access point to the switch.



[Wifi Access Point LAN port]

For connecting iPad to the switch wired, there will be 2 adaptors needed. One is Apple Lightning USB 3 Camera Adaptor, and the other is Apple USB Ethernet Adaptor. Connect as shown in the picture below (connect lightning cable to the right connector of the adaptor for supplying power to the adaptor)



[Lightning-Ethernet Connection]

4-3. Connecting audio cables

This example requires the following audio cables:

- 1. A D-sub cable (D-sub 25pin Male D-sub 25pin Male)
- 2. 3x Breakout cables (D-sub 25pin Male 8x XLR Male)
- 3. An AES/EBU cable (D-sub 25pin Male D-sub 25pin Male)
- 4. 26x XLR cables (6 for microphones, 10 for speakers, 6 for Cues, 2 for Studio Speakers and 2 for headphone amp)
- 1. For connecting MLA8 outputs and MMP1 analog inputs, use a 25-pin D-sub cable.



[D-sub 25pin cable (Male-Male)

2. For MMP1 analog outputs and Nuage I/O inputs/outputs, use a breakout cable with a D-sub 25pin Male connector and 8 XLR connectors.



[D-sub-XLR Breakout Cable]

Connect each analog input and output device by using breakout cables. For connecting microphones and other mic-level devices, use MLA8 or mic preamp.

3. Connect AES/EBU output 1-8 of MMP1 to the VU meter by using D-sub 25pin cable



[AES/EBU Digital Cable (D-sub 25pin)]



[CSP258 Rear Panel (image)]

Please note that the pin assignment of MMP1 AES/EBU connector and the BALANCED I/O connector of CSP258 is different so refer to the following chart and prepare a custom cable.

	Γ	
Pin #	MMP1	CSP258
1	IN 1/2 +	IN 1/2 +
2	IN 3/4 +	IN 1/2 GND
3	IN 5/6 +	IN 3/4 -
4	IN 7/8 +	IN 5/6 +
5	OUT 1/2 +	IN 5/6 GND
6	OUT 3/4 +	IN 7/8 -
7	OUT 5/6 +	OUT 1/2 +
8	OUT 7/8 +	OUT 1/2 GND
9	N.O.	OUT 3/4 -
10	GND	OUT 5/6 +
11	N.O.	OUT 5/6 GND
12	GND	OUT 7/8 -
13	GND	N.O.
14	IN 1/2 –	IN 1/2 _
15	IN 3/4 -	IN 3/4 +
16	IN 5/6 -	A3/4 GND
17	IN 7/8 -	IN 5/6 -
18	OUT 9/10 -	IN 7/8+
19	OUT 11/12	IN 7/8 GND
20	OUT 13/14	OUT 1/2 -
21	OUT 15/16	OUT 3/4 +
22	GND	OUT 3/4 GND
23	GND	OUT 5/6 -
24	GND	OUT 7/8 +
25	GND	OUT 7/8 GND
25	GND	OUT 7/8 GND

[AES/EBU Connector Pin Assignments]

4. Connect each stereo cue output pair as well as the headphone outputs for Control Room to headphone amp analog inputs.



[Connecting Headphone Amp]

Connecting Cough box

Cough box and MMP1 are connected via GPI connectors.



[Connect cough box and MMP1 via GPI]

REFERENCE: This connection example requires custom cables for connecting MMP1 and the cough main unit AB-1B. Below is a diagram of the pin assignment for each connector.



[MMP1 GPI IN connector and AB-1B CONTROL connector]



[MMP1 GPI OUT connector and AB-1B COMMAND connector]

Go to Settings – Global – GPI window of MMP1 Editor, and assign "Cough Mute–1-High" to GPI I In – 1, and "CH Strip RTB-1-Low" to 2 respectively. For GPI Out – 1, choose "Cough Status-1-Make".

30	MMI	21				M	1ain	Sub		M
Sc	tene	Glob	al	Edi	tor					
	General			IO L	abel	_	GPI		_	
GPI In					GPI Out	t				
	Function	P	Parameter	Trigger		Function	I	arameter	Behavi	or
1	Cough Mute		1 ~	High 🗸		Cough Status		1 ~		1
2	CH Strip RTB			Low Y	2				Make	
3					3				Make	
4	() teta	×1	1222		4				Make	
5					5				Make	
6					6				Make	
7					7				Make	
8					8				Make	
9					9				Make	
10					10				Make	
11										
12										
13										
14										
14										
15										

[Settings - Global - GPI]

Next, go to Settings - Editor and check channel 1 in "Show Cough Status".



[Show Cough Status]

And the Editor and the cough box will interact depending on each operation.



					A		1	
	PFL	PFL	PFL.		PFL		PFL	
	AFL	AFL					AFL	
	MUTE							
	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)
(DN 🔮)_	-	-		-		
						-	-	-
							Ŧ	
	0.0dB							

[When Cough is turned on]





[When Cough is turned off]

Show the RTB status on MMP1 Editor or MMP1 Controller so that that status is also visible on the Control Room side. Go to Settings-User Assignable of MMP1 Editor, and create a button and assign RTB Status to it.

8 •	MM	Р١				Main		Sub	Moni Mat		Speake Matrix
Scen	e	Global		Editor							
	MISC			System		Monitor	Matrix	ĸ		Speaker	Matrix
								Label	Color	Functio	on
			User Assigna	ble			1	RTB	~	RTB State	us V
	1	2	3	4	5		2	02	~		~
	RTB	02	03	04	05		3	03	~		~
		-			10		4	04	~		~
	6	ľ.	8	9	10		5	05	~		~

[Create a RTB status button]

Now the status of RTB on both the cough box and MMP1 Editor will interact.



[RTB (Return Talk Back) is ON]



[RTB is OFF]

Note: When "Cough Mute Override" is turned on via GPI or User Assignable button, the operation from the cough box is defeated and the orange icon below will appear on the Editor Channel Strip.

	din	All and		Alimana	athunnes		all land	- Carlos
	PFL	PFL		PFL	PFL	PFL		PFL
	AFL	AFL	AFL	AFL	AFL	AFL	AFL	AFL
	MUTE	MUTE	MUTE	MUTE	MUTE	MUTE	MUTE	MUTE
/	$\widehat{(\cdot)}$	(c	C	C	C	(c)	(c)	(c)
(ı		ľ		- 			- V
						1.1		
	0.0dB	0.0dB	0.0dB	0.0dB	0.0dB	0.0dB	0.0dB	0.0dB
	CH 1	CH 2	CH 3	CH 4	CH 5	CH 6	CH 7	CH 8

[Cough mute is defeated (overwritten)]

5. Installing software, drivers, apps and updating firmware

For the latest software and driver, please refer to the following page: <u>http://www.yamahaproaudio.com/global/en/products/processors/mmp1/downloads.jsp</u>

Listed below are the related program to be installed or updated:

- 1. Install MMP1 Editor
- 2. MMP1 firmware
- 3. Dante Controller
- 4. MMP1 Controller
- 5. Nuage Workgroup Manager (for Nuage I/O)
- 6. Dante Accelerator driver

5-1. Installing MMP1 Editor

MMP1 Editor is the offline editing and online monitoring software for MMP1 compatible with both Windows and Mac OS.

C) LTER	ALL DE	ALTER .	の一般	FRIER	- termi	10 lo	Selected Channel Hardwards							6 6	User Assignable			
SHE SHEFT SHEFT	SCHEFT FOR	EQ COMP INSER INDER		FLIER ED ED FLORE FLORE FLORE	EN DESE	CH 1 4 82		Seal Det	initia ((H) =	SCIENC SCIENCE FILT EQ CDM HIGH		19 10 10 10 10 10 10 10 10 10 10 10 10 10	LPE Trie	CTE Filler	HE Chings		
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[MMP1 Editor]

Download and install the latest MMP1 Editor from Yamaha PA website: http://www.yamahaproaudio.com/global/en/products/peripherals/applications/mmp1_editor/ Choose the Win/Mac version of MMP1 Editor.

Overview

INTUITIVE SETUP AND OPE

MMP1 Editor provides all-function access for everything from A setup wizard makes setup fast, easy, and precise.

Download



Click on "I agree to the license agreement and download the software now."

License agreement and software MMP1 Editor V1.0.1 for Mac macOS 10.13-C ATENTION You are only permitted to use this software program pursuant to the term ("Agreement"). It is an agreement between you (as individual or a legal software program(s) downloadable hereunder is/are licensed by Yamah compliant with the Agreement. Please read this Agreement carefully. Do program(s) signifies your agreement to all the terms and conditions set download, install, copy, or otherwise use this software program(s).

You also need to download these files.

Installation will begin. When finished downloading, double clock on the downloaded file and the file will be extracted.



[MMP1 Editor Installer]

Double click on MMP1 Editor V1.0.0.pkg and the installation will begin.



Click on "Continue".



Click on "Continue".



Click on "Agree" to accept the software license agreement.

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 Inti Lic De Insi 	the software lie	ense agreeme ontinue or click	ent.	agree to the terms o el the installation and Disagree Ag	
Summ	ary	THIS SOFTWAR THIS LICENSE. INSTALL, COPY YOU HAVE DOW AGREE TO THE 1. GRANT OF LI Yamaha hereby g ("SOFTWARE") a encompass eny u SOFTWARE is or	ING, INSTALLING, (E, YOU AR3 AGREE) IF YOU DO NCT AG JOWNLOAD, OR U' /NLOADED OR INST TERMS, PROMPTIN CENSE AND COPYR rarts you the right to accompanying this Agr pdates to the accompa yord by Yannaha and/	CCPYING, OR OTHERWI NG TO BE BOUND BY T REE WITH THE TERMS, HERWISE USE THIS SO ALLED THE SOFTWARE DELETE THE SOFTWA IGHT use the software program eemert. The term SOFTW nying software and data. I'y Yamaha's lisonoe(s), an icable treaty provisions. V	HE TERME OF DO NOT DFTWARE. IF AND DO NOT RE. (5) and data VARE shall The d is protected
		Print	Save	Go Back	Continue

Click on "Install".



Type the user name and password, and then click on "Install Software".

	rying to install new software.
Enter your pas	sword to allow this.
User Name:	Yamaha
Password:	
Installation will finish automatically. Click on "Close" to close the installer.



MMP1 Editor is now installed in the Application folder.



5-2. Updating MMP1 Firmware

Latest firmware for MMP1 will be downloadable from the link above (Note, as of April 2018, there is no downloadable firmware available on the website). The firmware update can be performed from MMP1 Editor. First, make MMP1 and MMP1 Editor online, and go to Information page of MMP1 Editor.



[MMP1 Editor – Information]

Check the version number in Version field, and if needed, click on "Update".

Nickname	a-MMP1	
Version	1.01rc1	Update
Connect Informa	tion Editor : 1	
Error Informatio	'n	

File dialog will open to choose the firmware, so click on the downloaded firmware, and click on "Open".



Then the firmware update will begin automatically. Please do not turn of the power of the equipment until the update is finished, to avoid any accidental failure of the update process or possible damage to the equipment.

5-3. Installing Dante Controller

Dante Controller can be downloaded from Audinate website: <u>https://www.audinate.com/products/software/dante-controller?lang=en</u> (Registration required).

Choose your OS in "Choose your operating system:"



Dante Controller

Dante Controller is a free software application that enables you to route audio and configure devices on a Dante network. With automatic device discovery, one-click signal routing and user-editable device and channel labels, setting up a Dante network couldn't be easier. See the overview for more detail on Dante audio networking.

Technical note: Dante Controller is supported on macOS Sierra v10.12 - click for other important details

Dante Controller is much more than just a configuration and routing matrix. Dante Controller provides essential device status information and powerful real-time network monitoring, including device-level latency and clock stability stats, multicast bandwidth usage, and customized event logging, enabling you to quickly identify and resolve any potential network issues. You can also quickly and easily backup, restore, move, and reuse Dante network configurations using Presets, and edit Dante routing configurations offline.

Dante Controller is available for Windows and Mac OS X.

Features

- · View all Dante-enabled audio devices and their channels on the network
- · View and edit device clock and network settings
- · Route audio between devices, and view the state of existing audio routes
- · Rename devices and channels using your own friendly names
- · Customize the receive latency (latency before playout)
- · Save and reapply audio routing presets
- · Edit presets offline, and apply as configurations for new network deployments
- Change sample rates and clock settings
- · View multicast bandwidth across the network
- · View transmit and receive bandwidth for each device
- · View device performance information, including latency stats, clock stability stats and packet errors

macOS 10.13

· Lock and unlock devices



When any OS is selected, appropriate version of Dante Controller will be shown. Click on the button and download the installer (this time, Mac OSX10.13 will be installed)

Choose your operating system:

\$

Dante	e Controller v	4.1.0.5 (macOS)		
and the second second	uturek Van - Filmed	Paular Ox5 101018	- 0	×
Char al Char al B Service (ab B Service (ab	Runny (Search Code State &	And	3153 X	
28 28 28 28 28 28 28 28 28 28 28 28 28 2	Aller Factores	Second stand		

> Dante is easy to integrate, easy to install, and easy to use. Dante integrates media and control for your entire AV system over a single IP network. Dante performs best, and sounds even better.

Download

Choose your operating system:

Windows 10



You will be asked if you have an account and. If so, click on "I have an account" and if not, click on "I need to create an account" and have one with Audinate.

TUESUAY, NOVETIDET 21, 2011



Type your email address or username and password, and click on "Log in".

Create new account	t Log in	Request new password	
E-mail or username	э *		
john_yamaha@yamaha.o	om		
Enter your e-mail add	ress or use	rname.	
Password *			

If you are successfully logged in, the installer can be downloaded. Click on the fine name and download the installer.

)ante Domain Manager.	Version:
	4.0.6.5
	Release Date:
	Tuesday, November 21, 2017
	Download Eile:
/er, log in as a DDM user, and Itton to open the Server	DanteController-4.0.6.5_osx.dmg
own menu to select domains for	Image Number Numer N
ork Status tabs are now	
displays the Domain Status for	
omains) are displayed in green	C KD

When the download is finished, double click on the file and then double click on "DanteController.pkg"

	Dante Controller	
×	2項目	
	1 million and the second secon	
DanteController.pkg	Uninstall Dante Controller	

Click on "Continue".



Similarly, click on "Continue".



Click on "Agree".



Click on "Install" and the installation will begin automatically.



Type user name, password and click on "Install Software".

Installer is t	rying to install new software.
Enter your pas	sword to allow this.
User Name:	Yamaha
Password:	•••••

When completed, click on "Close" to finish the installer.



Click on "Move to Trash"



5-4. Installing MMP1 Controller

Since MM1 Controller is an iPad app, please download it from Apple's App Store



[Apple App Store]

Type "mmp1" in the search box and it will auto-complete as "mmp1 controller", so tap on it.



[Search box]

Tap on "GET" button, and then "INSTALL" button to complete the installation.



[GET button]



[INSTALL button]

5-5. Installing Nuage Workgroup Manager

Nuage Workgroup Manager is a tool contained in a software for Nuage called "TOOLS for NUAGE". TOOLS for NUAGE can be downloaded from the following website: http://www.yamahaproaudio.com/global/en/downloads/firmware_software/nuage_utilities/

Click on "TOOLS for NUAGE V2.0.0 for Mac macOS 10.13-OSX10.10

NUAGE

Name	Description	OS	Last Update
TOOLS for NUAGE V2.0.0 for Win 10/8.1/7 (64-bit)		Win	Apr. 9, 2018
TOOLS for NUAGE V2.0.0 for Mac macOS 10.13-OS X 10.10		Mac	Apr. 9, 2018
Nuage Master Firmware V2.00			Apr. 9, 2018
Nuage Fader Firmware V2.00		-	Apr. 9, 2018

Click on "I agree to the license agreement and download the software now."

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TOOLS for NUAGE V2.0.0 for Mac macOS 10.13-OS X 10.10

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You also need to

Ungrade Instruction

You are recommended

Double click in the downloaded file, and then double click "TOOLS for NUAGE V2.0.0.pkg"



Click on "Continue".



Click on "Continue"



Click on "Agree"

00		😺 Install	Dante Infrastruc	lure		
	To continue ins the software li	and the second se	tware you must ent.	agree to the te	erms of	
Inti	Click Agree to g	ontinue or click	Disagree to car	cel the installati	on and	
• Lic	quit the Installe	r.	0			
o De						S
 Ins 	Read License			Disagree	Agree	
 Ins 	2					IS.
 Summ 	nary	ACREEMENT, D AGREEMENT IS PURCHASE OF OR MISCELLAN AGREEMENT GG INCONSISTENT INCORPORATE! The Software is of function only with AUDINATEs other	ID-USER") DO NOT O NOT INSTALL OF ENTERED INTO IN LICENSOR PRODU EOUS TERMS AND DVERNING SUCH T WITH THE TERMS D HEREIN BY REFE reated and licensed AUDINATEs produc r DANTE™ enabled End-User. If the End	USE THE SOFTW I CONJUNCTION W ICTS AND AS SUCI CONDITIONS OF T FRANSACTIONS W OF THIS AGREEM RENCE.	ARE. THIS (ITH THE EN H THE GENE FHE PURCH HICH ARE N ENT SHALL I as such is d ementations ware is licens	ID-USERS IRAL AND/ ASE IOT BE esigned to of sed, not
		Print	Save	Go B	ack	Continue

Check only "NUAGE Workgroup Manager" and click on "Continue".

	Custom Install on "Macintosh HD"		
	Package Name	Action	Size
Introduction	🗹 NUAGE Workgroup Manager	Upgrade	29.5 MB
License	NUAGE Extension	Skip	72.3 MB
Destination Select	NUAGE PT Bridge	Skip	3 MB
 Installation Type 			
Installation			
 Summary 			
	Space Required: 29.5 MB	Remaining:	149.73 GB
		Remaining:	149.73 GB
		Remaining:	149.73 GB
		Remaining:	149.73 GB

Click on "Install".



Type user name and password, and then click on "Install Software".

Installer is t	rying to install new software.
Enter your pas	sword to allow this.
User Name:	Yamaha
Password:	••••

TOOLS for NUAGE is now installed. Click "Close" and go to the next installation, which is for Dante Infrastructure.

	😓 Install TOOLS for NUAGE
 Introduction License Destination Select Installation Type 	The installation was completed successfully. At the end of this installation, and then install the "Dante Infrastructure".
 Installation Summary 	
	Go Back Close

Click on "Continue".

	🥪 Install Dante Infrastructure	
 Introduction License Destination Select Installation Type Installation Summary 	Install Dante Infrastructure Welcome to the Dante Infrastructure Installer You will be guided through the steps necessary to install this software.	
	Go Back Continue	>

Click on "Continue".

	Software License Agreement						
Introduction	English						
License	END USER LICENSE AGREEMENT						
Destination Select	NOTICE: CAREFULLY READ THE FOLLOWING LEGAL AGREEMENT WHICH CONTAINS RIGHTS AND RESTRICTIONS ASSOCIATED WITH YOUR USE OF THE AUDINATED						
Installation Type	SOFTWARE (THE "SOFTWARE") AND DOCUMENTATION PROVIDED TO						
Installation	YOU BY AUDINATE PTY, LTD (THE 'LICENSOR'). INSTALLING OR USING THE SOFTWARE CONSTITUTES YOUR ACCEPTANCE OF THESE TERMS.						
Summary	IF YOU (THE "END-USER") DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, DO NOT INSTALL OR USE THE SOFTWARE. THIS AGREEMENT IS ENTERED INTO IN CONJUNCTION WITH THE END-USERS PURCHASE OF LICENSOR PRODUCTS AND AS SUCH THE GENERAL AND/ OR MISCELLANEOUS TERMS AND CONDITIONS OF THE PURCHASE AGREEMENT GOVERNING SUCH TRANSACTIONS WHICH ARE NOT INCONSISTENT WITH THE TERMS OF THIS AGREEMENT SHALL BE INCORPORATED HEREIN BY REFERENCE. The Software is created and licensed by AUDINATE, and as such is designed to function only with AUDINATEs products, or licensed implementations of AUDINATEs other DANTE™ enabled products. The Software is licensed, not						

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Click on "Install".



Type user name, password, and click on "Install Software".

our password to allow this.
Name: Yamaha
word:

Installation of Dante Infrastructure is now finished. Click on "Close" and finish the installer.

	😺 Install Dante Infrastructure
 Introduction License Destination Select Installation Type Installation Summary 	The installation was completed successfully. The installation was successful . The software was installed.
	Go Back Close

5-6. Installing Dante Accelerator driver

Dante accelerator driver can be downloaded from the following website: http://www.yamahaproaudio.com/global/en/products/interfaces/dante_accelerator/download s.jsp



Click on "Dante Accelerator Driver V2.5.2 for Mac OS 10.13-10.9".

Name	Description	OS	Last Update
Dante Accelerator Driver V2.0.4 for Win 10/8.1/7 (64-bit)		Win	Sep. 21, 2017
Dante Accelerator Driver V2.5.2 for Mac OS 10.13-10.9		Mac	Dec. 15, 2016
Dante Accelerator Firmware V3.0.0		4 <u>4</u> 32	Sep. 21, 2017

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Dante Accelerator Driver V2.5.2 for Mac OS 10.13-10.9

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Double click the downloaded file, and then double click "yaic128-d_2.5.2.pkg".



Click on "Continue".

	Welcome to the Yamaha AIC128-D Installer
Introduction License Destination Select Installation Type Installation Summary	You will be guided through the steps necessary to install this software.
	Go Baci Continue

Click on "Continue".



Click on "Agree".

20	0		🥪 Install Yamaha	AIC128-D		6
			talling the software yo cense agreement.	ou must agree to the te	rms of	
0	Inti	Click Agree to c	ontinue or click Disagre	e to cancel the installatio	on and iA	
	Lic	quit the Installer			101	ES
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	Summ	hary	PAID BY THE END-USER, IF ANY.	TWARE SHALL DE A REFUND OF THere are a state of the Energy to the Energy and the		TEE
			transferable, limited license to (i) computer as a single end-user, (install and use the Software in objec ii) make one (1) copy of the Softwa	t code form only on a sin	gle
			of the Software.	ntation provided with the Software onl	y in conjunction with the u	use
			of the Software. The End-User shall not modify, rea decompile, disassemble, or create any other software. The End User intranet, extranet or web site. Ti avsilable such trade secrets or cop written consent of Audinate. The I	ntation provided with the Software onl it, lease, assign, copy, distribute, modif derivative works based on the Software may not upload or post the Software the End User agrees not to disclose, yrighted material in any form to any ind-User shall not sublicense any of th party. The End-User shall not copy a	y, translate, reverse engine e, or merge the Software in on a network, bullotin boz provide, or otherwise mz hind party without the pr ne rights granted to the Ei	eer, nto urd, ake tior nd-

Click on "Install".



Click on "Continue Installation" (as installing this driver requires rebooting the computer after the installation).

0 🔴 🔿 🚬	😺 Install Yamaha AIC128-D	
Introductic License	When this software finishes installing, you must restart your computer. Are you sure you want to install the software now? Cancel Continue Installation ter will l	
Destinatio		
Installation Type Installation		
Summary		
	Change Install Location.	
		<u> </u>
	Go Back Ins	

Type user name, password and click on "Install software".

Installer is t	rying to install new software.
Enter your pas	sword to allow this.
User Name:	Yamaha
Password:	•••••

Click "Restart" and the installation will be completed. After rebooting the computer, Dante Accelerator will become available.

0	🥪 Install Yamaha AIC128-D 🔒
 Introduction License Destination Select Installation Type 	The installation was completed successfully.
 Installation Installation Summary 	The installation was successful. The software was installed.
	Click Restart to finish installing the software.
	Go Back Restart

6. Configuring and running each program

6-1. Configuring Dante Patching

Audio signals between MMP1, Nuage I/O and PC are routed through Dante audio network. Configuration of Dante audio network can be done by using the Dante Controller.

Below is the Dante patching required for this example:

1. Patch Dante output 1-12 of MMP1 to Dante input channel 1-12 of Nuage I/O (Large + Small + Studio Speakers + 3x Cue).



[Patch MMP1 to Nuage I/O]

Note: If the Dante devices are either not correctly displayed on the Dante Controller or no audio is heard even if patches are correctly made, check if the IP address of each device is correctly configured (private/link local address, subnet mask etc.) and also the sampling frequency setting is the same on each device. The initial device name of each Dante device can be renamed. Double click on the device name on the grid or choose "Device View" in the Device menu, and Device View window will open. Go to "Device Config" page and you can change the device name.

🐵 •< 🗄 🔒		Y002-	a-MMP1 📴	
eceive Transmit S	tatus Latency	Device Config	Network Config	AFS67 Config
eceive Transmit S	tatus Latency	Device Config	Network Config	AF567 Config
r Rename Device				
	eceive Transmit S	eceive Transmit Status Latency	eceive Transmit Status Latency Device Config	eceive Transmit Status Latency Device Config Network Config

[Dante Controller – Rename Device]

2. Patch Dante output 1-24 of Dante Accelerator to Dante input 1-24 of MMP1 (3x 5.1ch stem playback from DAW + 3x stereo Cue)



[Patch Dante Accelerator to MMP1]

3. Patch Dante output 13-16 of MMP1 to Dante Input 1-4 of Dante Accelerator (microphone inputs to record onto DAW)

Dante [®]	Transmitters	DanteAccelerator	r001-a-Nuage-IO	r002-a-MMP1	Large L-	Large R	Small L	Studio Speaker L	Studio Speaker R	Cue 1 L	Cue 1 R	Cue 2 L	Cue 2 R	Cue 3 L-	Cue 3 R	Vicrophone 1	Wicrophone 2	/icrophone 3	Vicrophone 4
Filter Receivers	Dante Trans	Da	V00	ſ				Stur	Stuc							~	~	~	~
		Ŧ	+	Ξ															
- Microphone 1	0															0			
Microphone 2 Microphone 3	8																9		
Microphone 4																		Dec.	-

[Patch MMP1 to Dante Accelerator]

6-2. Configuring MMP1 Editor

Next, run and configure MMP1 Editor offline by using Setup Wizard. Since Setup Wizard guides you though a basic setup procedure with mouse clicking and keyboard typing, you may need to make additional settings manually after Setup Wizard is completed. Below is how to do so:

First, run MMP1 Editor offline, click on the file icon and select "New"



[MMP Editor - New]

The following confirmation dialog will show up so click on "YES" (If any change has been made before selecting "New", "Do you want to save?" will be asked).

00			
2	Do you want to use	the Setur	Wizard?
0	Cancel	No	Yes

[Setup Wizard - confirmation]

Click on "Next >"

•	MMP1 Setup Wizard	
MMP1 Setup	Wizard	
This Setup Wizar	l is designed to help you setup your	
	lowing speaker configurations :	
	/ 7.1.2 / 7.1.4 / 9.1.2.	
		< Back Next :
		L DOLK NEXT

[MMP1 Setup Wizard]

Choose "5.1" as Speaker Format, and click on "Next >"



[Setup Wizard – Sample Rate/Speaker Format Settings]

"5.1" or other multi-channel formats can be selected only when using Setup Wizard. If chosen in Setup Wizard, speaker-shaped mute buttons are available in the Controller View of MMP1 Controller.

Even if "L/C/R/Ls/Rs/LFE" or "L/R/Ls/Rs/C/LFE" as the surround channel order is selected, internal order or the order shown in the Speaker Matrix is always in the order of "L/R/C/LFE/Ls/Rs" and only the order of input/output patching will be changed.

Turn "Bass Management" on and click on "Next >".

	MMP1 Setup Wizard	
LFE Channel	/ Bass Management Settings	
LFE Filter		
O Off	On	
	-pass filter is desired for the LFE channel.	
	, the low-pass filter is applied at 120 Hz.	
LFE Trim		
O OdB	+10dB	
Select the tr	im level for the LFE channel.	
Select OdB if	f the level is adjusted with power amplifier.	
Bass Managemen		
Off	On	
		< Back Next >

[Setup Wizard – LFE Channel / Bass Management Settings]

Next, configure the monitor sources to monitor on MMP1 (these are the ones to be shown as the monitor source on MMP1 Editor or MMP1 Controller. Labels can be multi-line) In this example, there are three 5.1 "stems" as the monitor source and those are Dialog, Music and Sound Effects.

Choose the first Dante channel of each source and type the label. Click "Next >".

•			MMP1 Se	iup m	2010			
Monitor	Source	Sett	ings					
 Configure t	the param	eters in	selection butt the table bel					
- Monitor S (number of			els available:	lonut	14/00	tout 26	e.	
remaining maximum - Source na	channels number o	will be f chann displaye	nel (select the assigned in in els in the forr d on Monitor	creasir nat cho	g order sen)	up to the		
F	ormat		Source			Label		
1	5.1	~	Dante In O		Dialog			
2	5.1	~	Dante In 07	-	Music			
3	5.1	~	Dante In 13		Sound E	ffects		_
4		~		×				_
5		~	***	× ×				-
7		v			5			
8		~		~				-
The Monito	Nr. Sourca	colort h	utton will be	dicolay	ad as fol	lowe		
1	7 30urce		3	4		101151		
Dialog	Mu	sic	Sound Effects					
5	6		7	8	E			
						<	Back	Next >

[Setup Wizard - Monitor Source Settings]

Next, configure the speaker sets and, in this example, assign the 5.1 channel speakers as A, Large stereo as B, and Small stereo as C. Choose the first channel of each speaker set as Destination (Only "A" is in multi-channel format when using Setup Wizard. If multi-channel format is preferred for B,C or D, make additional changes manually after Setup Wizard is completed).

00		MMP	1 Setup Wizard
	Speaker Set Ou	tout Setting	15
			ch each speaker set is to be assigned emaining channels will be assigned in
			umber of channels in the format chosen)
	Speaker Set	Format	Destination
[A	5.1	Analog Out 1
	В	Stereo	Dante Out 01
	C D	Stereo	Dante Out 03
l	U	Stereo	V
			< Back Next >

[Setup Wizard – Speaker Set Output Settings]

In the next page, we will configure the 3 stereo Cue inputs and outputs (those Cue mixes come from DAW, and they are routed through MMP1 to each Cue). Choose "Stereo" as Format, and choose the first Dante channel of each Cue, and then choose the first Dante channels of MMP1 for each Cue as Destination. Click "Next >"

9 😑	MMP1	l Setu	up Wizard		
Cue Mix Input	and Output S	etti	nas		
Settings for Cue M					
- Select the speake					
	nput channel to whi				
	utput channel to wh g channel, remaining				-
	ximum number of cl	-	-		-
(number of remain	ing channels availab	ble: In	put 8 /Outpu	t 20,)
Cue Mix	Format		Source		Destination
1	Stereo	~	Dante In 19	~	Dante Out 07 V
2	Stereo	V	Dante In 21	V	Dante Out 09 🛛 🗸
3	Stereo	~	Dante In 23	×	Dante Out 11 🛛 🗸
4		V	222	V	

[Setup Wizard - Cue Mix Input and Output Settings]

Next, we will configure the talkback microphones. Even though we are using 2 talkback microphones in this example, Setup Wizard allows us to assign only one microphone, so choose the channel for the first talkback and go to next.



[Setup Wizard – Talkback Mic Input Setting]

Now Setup Wizard is being completed. Make sure all the settings are correct and, if so, click on Finish button and close the Setup Wizard. If you look at the Main window of MMP1 Editor, you will see some buttons such as those for speaker select and talkback created on the screen.

	nple Rate	48kHz	1 - (D-)			
	eaker Format E Filter	5.1(L/R/C/LFE/	LS/RS/			
-	E Trim	OdB				
	ss Management	On				
	nitor Source					
12.2	Dante In 01 - 06		Dialog			
	Dante In 07 - 12		Music			
	Dante In 13 - 18		Sound Effects			
4	-					
5	-					
6	1					
7	-					
8	7 .					
Бре	eaker Set					
A	Analog Out 1 - 6					
	Dante Out 01/02					
C	Dante Out 03/04	-				
D	-					
Tue	Mix Input Channe	el	Cue Mix Output Channel			
1.00	Dante In 19/20		Dante Out 07/08			
-	Dante In 21/22		Dante Out 09/10			
1.58	Dante In 23/24		Dante Out 11/12			
4						
÷,	-		<u> </u>			
		the second second	alog In 5			
Tal	kback Mic Input C	nannel An				
al	kback Mic Input C	nannel An				

[Setup Wizard - completed]

From here, we are going to manually make additional settings.
Assign the second talkback microphone

First, we will set up the second talkback microphone. Go to Patch – Input Patch, and choose the channel for the second talkback microphone (in this example, choose "Analog In 6").

Speake Matrix			h	Settings	Info	mation	\ \
Type Monitor Monitor LFE Monitor 	Direct Speal Sou 1 L 2 R 3 L 4 R 5 6	ker Send	1-1 A 1-2 - 2-1 A 2-2	back Mic In Source malog In 5 		Analog In 1 Analog In 2 Analog In 3 Analog In 4 Analog In 5 Analog In 6 Analog In 7 Analog In 8	

[Patch – Input Patch]

In MMP1, there are 2 busses for talkback and those busses can be turned on/off independently. Also, there are 4 areas in Talkback Mic In section that are[1-1],[1-2], [2-1] and [2-2]. This means that 2 talkback microphones can be assigned to each bus ("1-x" and "2-x"). "1-1" and "1-2", and "2-1" and "2-2" are turned on/off simultaneously so if you want to control 2 talkback microphones independently, they should be patched to "1-1" and "2-1".

Configure the Studio Speakers

Next, manually configure the studio speakers. Since any Studio Speaker is not configured, go to Settings – Monitor Matrix and choose "2" for "Studio Speaker 1" so a stereo Studio Speaker output is created.

Homeor Jource o	0			cue /	0	
Cue Source 1	2			Cue 8	0	
Cue Source 2	2			Studio Speaker 1	2	
Cue Source 3	2		<u> </u>	Studio Speaker 2	0	
Cue Source 4	0			Studio Speaker 3	0	\sim
Cue Source 5	0			Studio Speaker 4	0	\sim
Cue Source 6	Ō	\sim		Studio Speaker 5	Ō	
Cue Source 7	0	\sim		Studio Speaker 6	0	
Cue Source 8	0			Studio Speaker 7	0	\sim

[Settings – Monitor Matrix]

Studio Speaker outputs are used to automatically mute themselves when Cough Mute is turned on. If you do not use this function, you don't need to create Studio Speaker outputs.

Next, go to Patch – Output Patch. Click on Source 5 of Dante Out, mouse over Monitor Matrix Out and choose "STU 1 – L". Similarly, choose "STU 1 – R" for Source 6 (we have patched those channels to Nuage I/O Dante Input channels earlier on the Dante Controller).

D	ante Out		
	Source	_	Lab
1	Speaker Set B 1	\sim	
2	Speaker Set B 2	\sim	
3	Speaker Set C 1	\sim	
4	Speaker Set C 2	\sim	
5	STU 1 - L	\sim	
6	STU 1 - R	\sim	
7	Cue 1 - L	\sim	
8	Cue 1 - R	\sim	
0	C	100000	

[Patch - Output Patch]

Assign the headphone outputs

Since Setup Wizard has not configured the headphone monitoring for Control Room, we will assign it manually. Go to Patch – Output Patch and assign "Headphone Out L" and "Headphone Out R" to Analog Source 7 and 8 respectively.

	Source	a	Label
1	SPK Out A - L	\sim	
2	SPK Out A - R	~	
3	SPK Out A - C	~	
4	SPK Out A - LFE	\sim	
5	SPK Out A - Ls	~	
6	SPK Out A - Rs	~	
7	Headphone Out L	\sim	
8	Headphone Out R	~ = 1	

[Patch- Output Patch]

Configure Talkback Destination

Next, we will configure the Talkback Destinations. Talkback Destination is a kind of router for talkback, and you can choose whether or not you route each talkback microphone to each Cue, Studio Speaker and Aux bus. You can program up to 8 destination settings and assign them to User Assignable buttons. This time we will make the following 8 destinations:

Talkback Destinations

- 1. Talkback 1 (Mic 1) to Cue 1
- 2. Talkback 1 (Mic 1) to Cue 2
- 3. Talkback 1 (Mic 1) to Cue 3
- 4. Talkback 1 (Mic 1) to Cue 1/2/3 and Studio Speakers
- 5. Talkback 2 (Mic 2) to Cue 1
- 6. Talkback 2 (Mic 2) to Cue 2
- 7. Talkback 2 (Mic 2) to Cue 3
- 8. Talkback 2 (Mic 2) to Cue 1/2/3 and Studio Speakers

Destination	1	2	3	્યુ	5	6	7	8
Bus	1 2	Mic 1	Mic 2 🔽 Mic 2					
Cue 1	Studi	Speaker 1	AUX 01		AUX 09	AUX 17	A	UX 25
Cue 2	Studi	o Speaker 2	AUX 02		AUX 10	AUX 18	A	UX 26
Cue 3	Studio	o Speaker 3 I	AUX 03		AUX 11	AUX 19	A	UX 27
Cue 4	i Studio	o Speaker 4 i	AUX 04		AUX 12	AUX 20	A	UX 28
Cue 5	i Studio	o Speaker 5 i	AUX 05		AUX 13	AUX 21	A	UX 29
Cue 6	Studio	o Speaker 6	AUX 06		AUX 14	AUX 22	A	UX 30
Cuc 7	Studi	o Speaker 7	AUX 07		AUX 15	AUX 23		
Cue 8	Studi	o Speaker 8	AUX 08		AUX 16	AUX 24		

[Settings - Talkback Destination]

Once you have set up Talkback Destination, go back to User Assignable and create buttons for those destinations.

Go to Settings – User Assignable of MMP1 Editor.

	4P1	1 13	u	IT::	Main	2	Sub	Matr	ux M	abrix	Manager	nent	Patch	-			sation
MISC	Global		Editor System		Monitor	Matrix	i.		Speaker M	atrix		Ţa	klas k Des	lination		Ĺ	har Assignal
							Label	Color	Function		Parameter		Label	Color	Functio	n	Parameter
	-	User Assign	abla		1	1		~				19		~			
1	2	User Accelge	aune M	5		2	02	~	1000	4		20		~			
01	02	03	04	05		3						21		~			
	1		0.00	2723		4		×				22		~			
•	7	0	9	10		5	05	v				25	25	~			
06	07	08	09	10		6	05					24	24				
11	12	13	14	15		7	07	-				25	25				
11	12	13	14	15		8	08					26	26	U.			
16	17	18	19	20		9	09										
16	17	18	19	20		20		-				27					
		- 20	518	10000				~				28		~			
21	22	23	24	25		11		1				29					
21	22	23	24	25		17		Ľ				80		~			
26	27	28	29	30		15						53					
26	27	28	29	30		1.6		1				37					
31	52	33	34	35		15		~				44		~			
31	32	33	34	35		10		~				31					
- a1	- 32	- 11	.34	- 33		17						35					
					3	10	18					Sec.					

[Settings – User Assignable]

Click on "01" of Label row, the label of the User Assignable button 01 can be changed. Type "TB1->Cue1", hit Return (Enter) key and that label will appear on the button.

MISC	_		System		Monitor Matrix		Speaker Ma	trix		Ta	kback Des	tination		User Assigni
			0.500		Laber 1 TB1-s fue	Loior 1	Function Tolkiesk Destination	15	rameter	19	Label 19	Color ~	Function	Parameter
1	2	User Assignal	ole 1	3				8		20		~		
181 -> Cue1	02	03	04	05	3 03	-				21				
6	7	8	0	10	4 04	~				22				

[User Assignable – Label]

Click on the color area and you will see the 16-color palette to choose button color from.

MISC			System		Monitor Matrix		Speaker Mat	trix	1	ikback Des	tination	_	User Assignable
					:) La	lel Color	Function	Paramet	er	Label	Color	Function	Parameter
1	1	lser Assignal	ble	-	1 101	s Cuet 🔍)	9	19		~		*
1	2	3	4	5	5 0	Nevy	i Dive	Aqua	Teal	Emerald		Line	Yellow
T81 -> Cue1	02	03	04	05	3 6	33	(United	nqua	ica:	Lineralu	Green	- LADE	TEROW
cuer				10	4 0	*							
06	07	08	09	10		Amber	Orange	Red	Mercon	Exclusion	Purple	Gray	Silver

[User Assignable – Button color]

Choose "Talkback Destination" as Function, and "1" (#1 out of 8 Talkback Destinations) as Parameter respectively.



[User Assignable – Function/Parameter]

Considering the color and position of each button, configure other User Assignable buttons. When configured, check those buttons in the Main window.





[Settings – User Assignable]

Assign VU Meter channels

Next, we will configure the AES/EBU channels for the VU meter. Choose each Monitor Matrix Output channel for the Source 1-6, and then Downmix Meter L and R for Source 7 and 8 respectively.

	A	ES / EBU Out			
		Source		Label	
	1	Meter Out1	~		
	2	Meter Out2	~		
	3	Meter Out3			
	4	Meter Out4			
	5	Meter Out5			
	6	Meter Out6			
N	7	Downmix Meter L	~		
	8	Downmix Meter R	/~		
	9		\sim		
	10	and the	~		

[Patch - Output Patch]

Assign the input microphones

Next, we will patch the microphones to the MMP1's Channel Strips, process those signals using EQ, Compressor etc., and send them to DAW inputs via Dante (earlier in 7-1.3, we have patched those Dante outputs to Dante Accelerator so they can be input to the DAW).

Ch	annel Strip In			
	Source			
1-A	Analog In 1	\sim	1-B	elli
2-A	Analog In 2	\sim	2-B	nd):
3-A	Analog In 3	\sim	3-B	-
4-A	Analog In 4	\sim	4-B	
5-A		\sim	5-8	
e 1			C D	

[Patch - Input Patch]



[Patch - Output Patch]

Configure Bass Management

Regarding the bass management (that we have turned on in the Setup Wizard), go to Speaker Matrix and you will see each channel with Low Pass Filter applied is sent to the LFE channel so you can adjust each trim, and also select the process type (IIR/FIR) and the filter slope of each channel in Settings – Speaker Matrix page.

8 • N	4MP1	28						Ma	in			Sul	D	1
		Speake	er Matri	x Out	A	А	А	А	A	A				
Speaker Matrix I	n		Process	5	SPK Out A L	SPK Out A R	SPK Out A C	SPK Out A LFE	SPK Out A Ls	SPK Out A Rs	SPK Matrix Out 01	SPK Matrix Out 02	SPK Matrix Out 03	SPK Matrix Out 04
Source	Type	Trim	Туре	Filter Setting	1	2	3	4	5	6	7	8	9	10
1	 Monitor 	0.0dB	liR	HPF 80Hz(12dB/Butt)										
2 L	 Monitor 	0.0dB	IIR	LPF 80Hz(24dB/Butt)										
3 R	 Monitor 	0.0dB	IIR	HPF 80Hz(12dB/Butt)										
4 R	 Monitor 	0.0dB	IIR	LPF 80Hz(24dB/Butt)										
5 C	 Monitor 	0.0dB	IIR	HPF 80Hz(12dB/Butt)										
6 C	 Monitor 	0.0dB	IIR	LPF 80Hz(24dB/Butt)										
7 LFC	V LFC	0.0dB	IIR											
8 Ls	~ Monitor	0.0dB	I (R	HPF 80Hz(12dB/Butt)										
9 Ls	 Monitor 	0.0dB	IIR	LPF 80Hz(24dB/Butt)										
10 Rs	 Monitor 	0.0dB	IIR	HPF 80Hz(12dB/Butt)										
11 Rs	 Monitor 	0.0dB	IIR	LPF 80Hz(24dB/Butt)										
12	~	0.0dB												
13	~	0.0dB												
14	×	0.0dB												

[MMP1 Editor – Speaker Matrix]

Now we have completed offline settings. Connect MMP1 and the PC via switch and run MMP1 Editor to synchronize it with MMP1. Click on the sync icon at the top right.



[MMP1 Editor - Synchronization icon]

Choose the NIC (network interface) to connect to MMP1with, and the MMP1 units that can be connected are shown in the Device area. As we are sending the data we have just created to the MMP1 unit this time, Click on "CONNECT (Editor -> MMP2)" button.

00):	Select MMP	1	
NIC	en0 vmnet1 vmnet8			
	Y002-a-MMP1	Name	IP Address 169.254.6.121	Identify
Device				
	OFFLINE	CONNECT (Editor → MMP1)	CONNECT (MMP1 → Edite	

[MMP1 Editor – Select MMP1]

Then the synchronization will begin.

	мм								Marrix Mateix			Trans	Patch	Setting	formation	Opennik Dat	a state
_= ¹⁰																	
FADER																	
- 196 - 196																	
POTE					-	11											
(\mathbf{e})																	
-\$-0N																	
-					Syno	cing	Witl	h Y(002-	a-№	1MP	1 90069 1747 (
o,pea CH1																	

[MMP1 Editor Synchronization]

When the synchronization is finished, the green icon on the MMP1 Editor will light so it indicates that MMP1 and MMP1 Editor are online.



[MMP1 Editor – Online status]

6-3. Configuring MMP1 Controller

Here we are going to learn how to connect iPad to MMP1, and how to configure them so you can remotely control MMP1 from MMP1 Controller.

Wireless connection with iPad

In case you want to connect iPad to MMP1 wireless, use a Wifi access point. In this example, we will use Apple AirMac Extreme as the Wifi access point. Once you have connected the LAN port of AirMac to the switch, configure the AirMac by using AirPort Utility.



[Apple AirPort Utility]

You will see warning messages when you connect the PC to the AirMac such as no Internet Connection and No DNS Servers, simply ignore those messages.

Click on the AirMac icon and you will see an popup window. And click on Edit button. Type a name for the Base Station and the password for it.

	AirPort Utility	
Base Station Inte	net Wireless Networ	k Disks
Base Station Name:	/MP1 Network	
Base Station Password:	•••	
Verify Password:	•••	
	Remember this password	d in my keychain
	can access this AirPort ba g from your other comput	
[Airl	rt Utility - Base Station]	

Next, set the password for WiFi connection in the Wireless page. For Wireless Security, choose "WPA/WPA2 Personal".

	AirP	ort Utility			
Base Station Inte	rnet	Wireless	Network	Disks	
Network Mode:	Crea	te a wireless	network		0
Wireless Network Name:	MMP	1 Network			
Wireless Security:	WPA	/WPA2 Perso	onal		0
Wireless Password:	••••	••••			
Verify Password:	••••	••••			
	🗹 Rer	member this	password in	my keych	nain
Enable Guest Network:					

[AirPort Utility - Wireless]

In the Network tab, make sure you choose "Off (Bridge Mode)" as Router Mode.

	AirPort Utility		
Base Station In Router Mode	DHCP and NAT DHCP Only Off (Bridge Mode)	Istored Disks	

[AirPort Utility - Network]

Now the AirMac is configured and next we are going to connect the iPad to this AirMac wireless. Open Setting and turn the WiFi on.



[Settings - Wi-Fi]

When you choose the AirMac, you will see the "No Internet Connection" message, there will be no problem.

Wi-Fi	
Wi-Fi	
MMP1 Network	≜ ‡ (j)
CHOOSE A NETWORK 🕺	
[Settings – Wi-Fi]	0

Tap on MMP1 Controller icon and MMP1 Controller will run.



[Yamaha MMP1 Controller]

Tap on the icon at the upper right-hand corner for synchronizing MMP1 Controller and MMP1.



[Sync icon at the upper right]

When you see the following screen, tap on "Connect" and the synchronization will occur.

Select N	MMP1	
Wireless	Wired	
Y001-Yamaha-MMP1	169.254.6.121	
Offline	Conn	
		N

[Select MMP1 - Wireless]



Now the MMP1 Controller is online and you can remotely control MMP1 from it.

≣ ммрт	200		Ch Strip	Preference	[
Dialog Music Sound Effects	SUM				
		TB1 -> Cue 1	Cue 2	Cue 3	TB1 -> All Cue
Gue () Car 2 Car 2		TB2 -> Cue 1	Cue 2	Cue 3	TB2 -> All Cue
Monitor Le	100 C				
-00	ab 🗸				
-20.0 dB	SPL Level	5.1			
DIM					
No.	<u></u>				

[MMP1 Controller - online]

Wired connection with iPad

In order to connect iPad via LAN cable, you will need to use the two adapters described earlier and configure iPad connected to the switch. Make sure "Apple USB Ethernet Adapter" is shown, tap on that and you will see the IP address and other setting in the next page (in this example, we are using Auto IP addressing so make sure each IP address is set at 169.254.xxx.yyy with the subnet mask of 255.255.0.0).

	Ethernet
Settings	INTERFACES
Q. Search	Apple USB Ethernet Adapter
TMG Yamaha Apple ID, iCloud, iTunes & App Store	
Apple ID Suggestions 2	
Airplane Mode	
🛜 Wi-Fi Off	
Ethernet	

[Settings - Ethernet]

	Ethernet	Apple USB Ethernet Adapter
Settings	IPV4 ADDRESS	
Q. Search	Configure IP	Automatic >
	IP Address	169.254.139.174
TY TMG Yamaha Apple ID, iCloud, iTunes & App Store	Subnet Mask	255.255.0.0
Apple ID Suggestions 2	Router	
Airplane Mode	Renew Lease	
🛜 Wi-Fi Off	DNS	
💮 Ethernet	Configure DNS	Automatic >
• •• •		

[Settings - Ethernet - Apple USB Ethernet Adapter]

Run MMP1 Controller and tap on the icon at the top right-hand corner and the following window will open. Tap on "Wired" and make sure the device name and the IP address of the MMP1 are shown. Tap on "Connect" button and the synchronization will occur.



[Select MMP1 - Wired]

Now the MMP1, MMP1 Editor and MMP1 Controller are online and you are ready to get started.

