YAMAHA

MTX Setup Manual

This manual serves as an introduction to possible installation methods and application examples for the MTX series of DSP processors used in conjunction with MTX Editor control software. Please refer to the owner's manual on a device about the details of MTX, and refer to the "MTX Editor User's Manual" (PDF file) about the details of MTX Editor.

Special Notice

- The software and this manual are the exclusive copyrights of Yamaha Corporation.
- Copying of the software or reproduction of this manual in whole or in part by any means is expressly forbidden without the written consent of the manufacturer.
- Yamaha makes no representations or warranties with regard to the use of the software and documentation and cannot be held responsible for the results of the use of this manual and the software.
- Future upgrades of application and system software and any changes in specifications and functions will be announced at the following website.
   http://www.yamahaproaudio.com/
- The screen displays as illustrated in this manual are for instructional purposes, and may appear somewhat different from the screens which appear on your computer.
- Copying of the commercially available musical data including but not limited to MIDI data and/or audio data is strictly prohibited except for your personal use.
- Ethernet is trademarks of Xerox Corporation.
- Windows is a registered trademark of Microsoft® Corporation in the United States and other countries.
- Bonjour is trademarks of Apple Inc., registered in the U.S. and other countries.
- The SDHC and SD logos are trademarks of SD-3C, LLC.

- MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.

- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

Introduction

The MTX Setup Manual explains how to create setups using the MTX and MTX Editor.
As examples, we will provide simple explanations of the typical setups described below.
For detailed parameter settings, refer to "MTX Editor User's Manual" and to the owner's manuals of the XMV, MTX, and DCP.

When you install MTX Editor, the four example files described here will be found in the following folders.

● **32-bit operating system**

  C:\Program Files\Yamaha\MTX Editor\V*.*\ProjectFile

● **64-bit operating system**

  C:\Program Files(x86)\Yamaha\MTX Editor\V*.*\ProjectFile

  . will be the version of the installed MTX Editor.
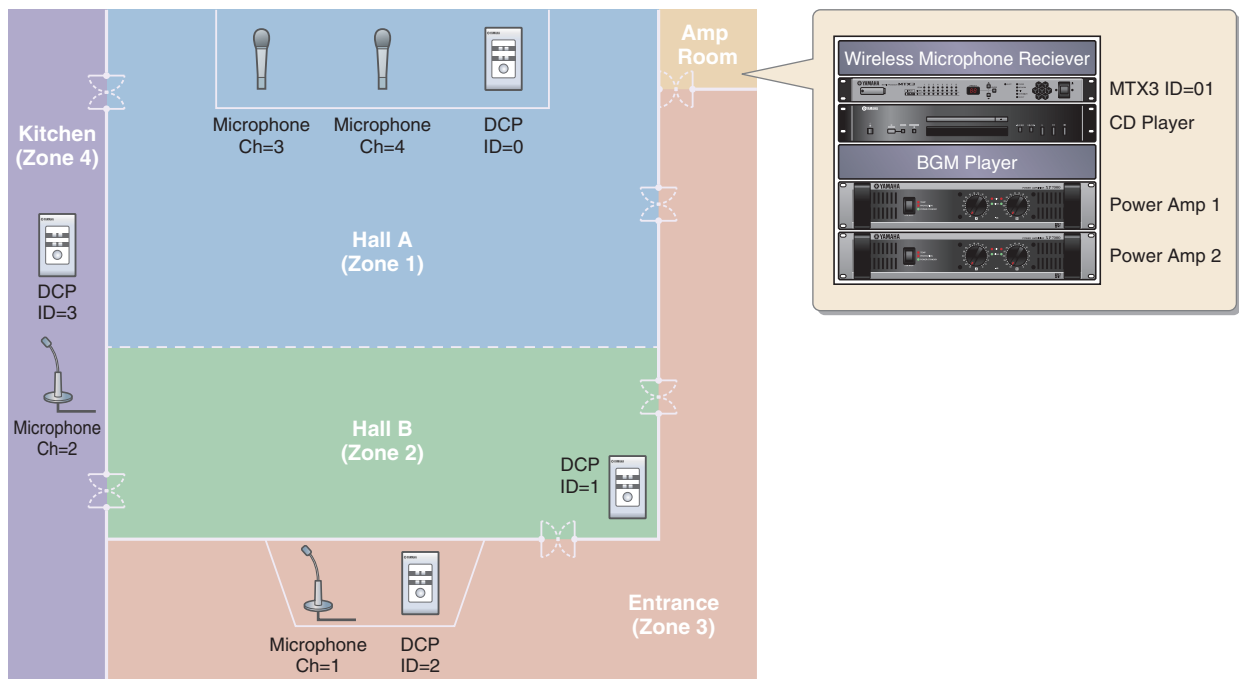
  Example 1 : MTX3 basic system-*.mtx
  Example 2 : MTX3 XMV digital system-*.mtx
  Example 3 : MTX3 cascade example-*.mtx
  Example 4 : MTX5-D Dante system-*.mtx

  -* is a management number. In some cases, there will be no -*.

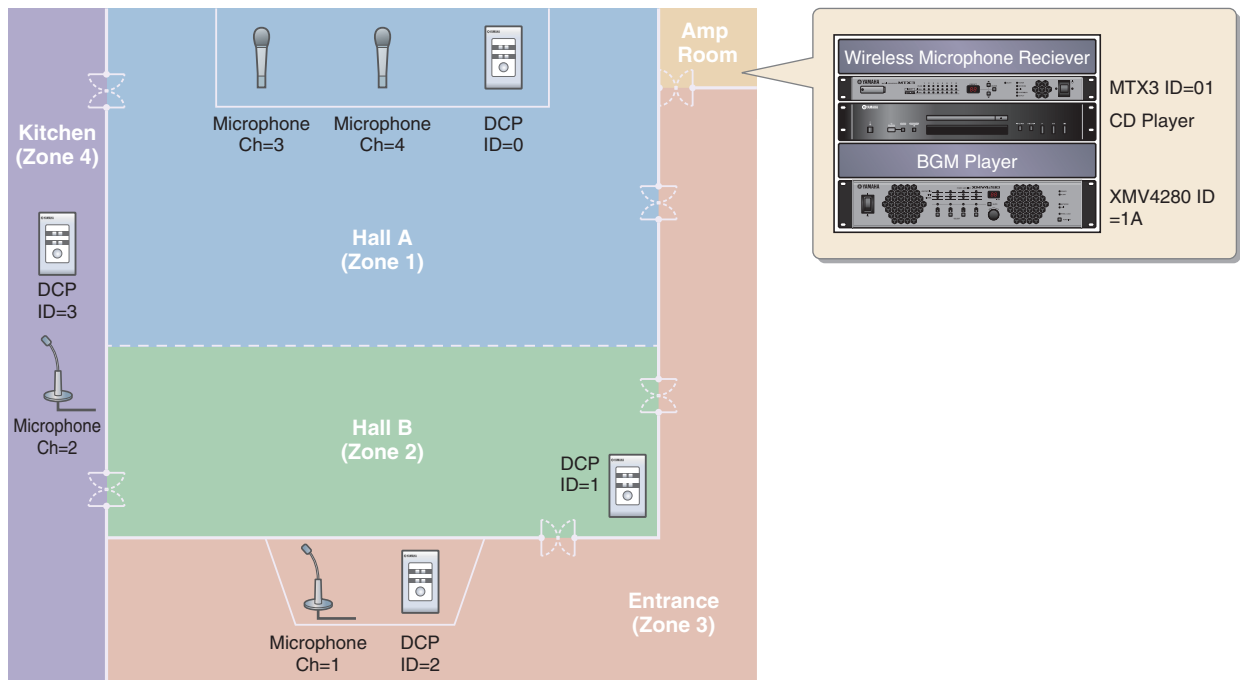## Example 1) Basic MTX3 system example (analog connections)

This example assumes that you're using the following equipment.

- MTX3 × 1
- DCP1V4S × 4
- Amplifiers (four channels of amplification)
- Speakers (the number needed)
- SD memory card × 1
- Background music source such as a CD player × 1
- Paging microphones with switch × 2
- Wireless microphone receivers (2 channels)
- Wireless microphones × 2

  The number of speakers is not specified; choose amps that are suitable for your speaker setup. You will also need to provide the appropriate number of cables.

Example 2) High audio quality system with XMV and YDIF connections (digital connections)

This repeats the system of example 1, replacing the amps with an XMV series unit.

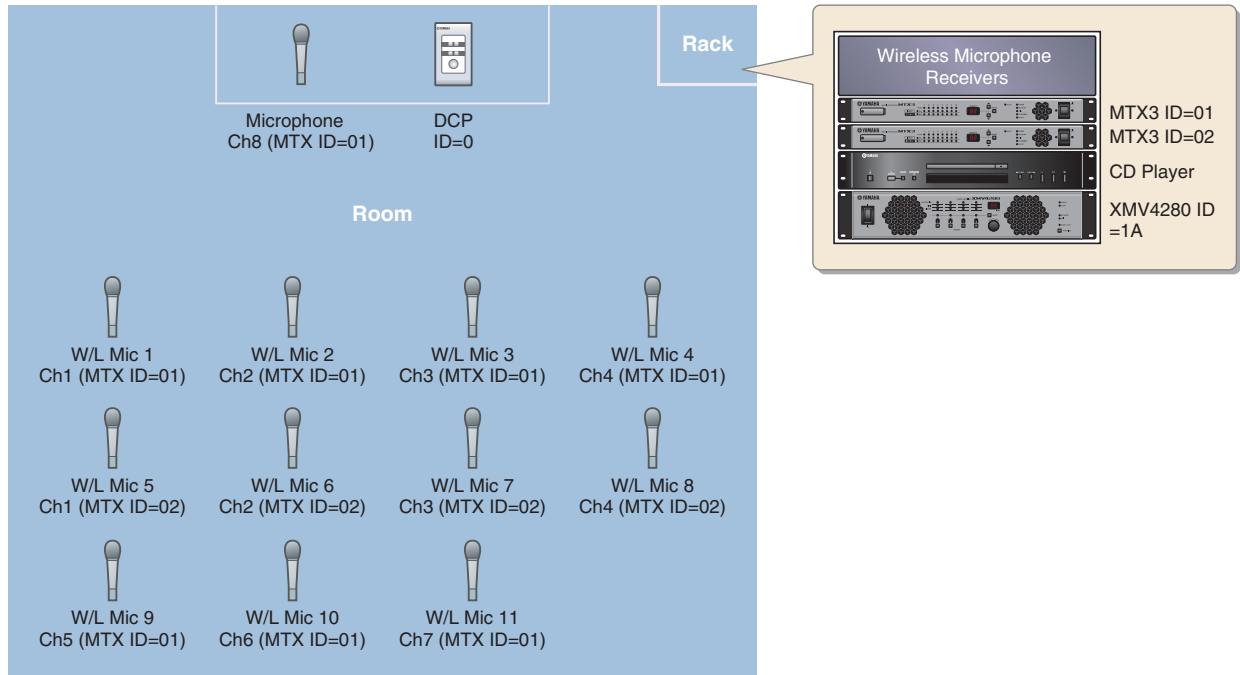This example assumes that you're using the following equipment.

- MTX3 × 1
- DCP1V4S × 4
- XMV4280 (four channels of amplification) × 1
- Speakers (the number needed)
- SD memory card × 1
- Background music source such as a CD player × 1
- Network switch × 1
- Paging microphones with switch × 2
- Wireless microphone receivers (2 channels)
- Wireless microphones × 2

The number of speakers is not specified; choose amps that are suitable for your speaker setup. You will also need to provide the appropriate number of cables.

Example 3) Using cascade mode to add MTX input channels (analog connection)

Cascade mode allows the matrix buses to be shared between MTX units. This mode lets you use two MTX units to increase the number of inputs, and output the combined inputs to a single amp.

In cascade mode, audio cannot be transmitted to the XMV via YDIF.

This example assumes that you're using the following equipment.

- MTX3 × 2
- XMV4280 (or an amp with analog input) × 1
- Background music source such as a CD player × 1
- Speakers (the number needed)
- Microphone with switch (for the MC or chair) × 1
- Wireless microphone receivers (11 channels)
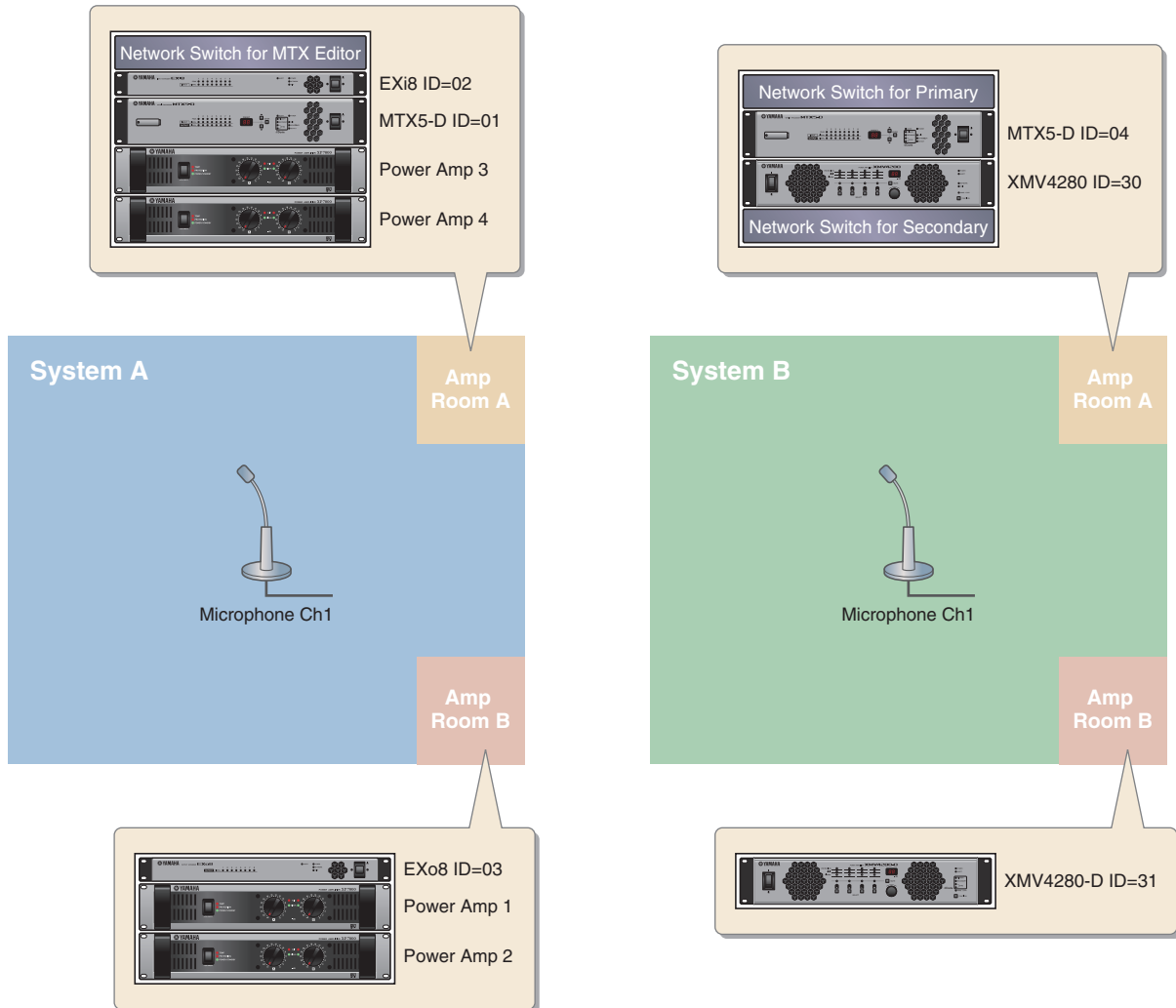- Wireless microphones × 11

The number of speakers is not specified; choose amps that are suitable for your speaker setup. You will also need to provide the appropriate number of cables.

Example 4) A system using Dante

In this example, existing amps continue to be used, while we set up a new system at a distant location, with connections made using Dante.

The system using the existing amps is labeled System A, and the new system is labeled System B.

In example 4, our explanation will be centered on the network settings. For more about increasing the number of mics, DCP settings, or presets, refer to example 2.

This example assumes that you're using the following equipment.

System A
- MTX5-D × 1
- Exi8 × 1
- EXo8 × 1
- Amplifiers (eight channels of amplification)
- Network switch × 1
- Speakers (the number needed)
- SD memory card × 1
- Paging microphones with switch × 1

System B
- MTX5-D × 1
- XMV4280 × 1
- XMV4280-D × 1
- Network switch × 2*
- Speakers (the number needed)
- SD memory card × 1
- Paging microphones with switch × 1

* As the network switch for Dante connections, we recommend that you use a model that provides IGMP snooping functionality.

The number of speakers is not specified; choose amps that are suitable for your speaker setup. You will also need to provide the appropriate number of cables.

Setup workflow

The following table shows the workflow for connecting equipment such as MTX series matrix mixers and XMV series power amplifiers to your computer, and making settings in MTX Editor.

			Example 1	Example 2	Example 3	Example 4
Installing MTX Editor			Page 6			
Starting up MTX Editor			Page 7			
Using the Device Configuration Wizard to create your device setup			Page 8	Page 29	Page 54	Page 81
Making preliminary settings in MTX Editor	Making EXT. I/O settings	YDIF	—	Page 34	—	Page 93
		XMV (Analog)	—	—	Page 59	—
		XMV (Dante)	—	—	—	Page 106
	Parameter settings for the MTX and external devices (Parameter settings such as for jacks and channels)		Page 13	Page 38	Page 62	Page 98, 112
	Settings in the "DCA" screen (Settings that control the level or mute of multiple channels in a single operation)		—	—	Page 71	—
	Digital Control Panel (DCP) settings		Page 20	Page 45	Page 72	—
	Storing a preset (Presets and recall filter settings)		Page 22	Page 47	Page 73	—
	Dante settings between systems		—	—	—	Page 115
Connecting the equipment			Page 25	Page 50	Page 76	Page 121
Powering-on the MTX			Page 25	Page 51	Page 77	Page 123
Powering-on the amp			Page 25	Page 51	Page 77	Page 123
Specifying the computer's TCP/IP address			Page 26	Page 51	Page 77	Page 123
Taking MTX Editor online			Page 27	Page 52	Page 78	Page 125
Making XMV settings			—	Page 53	Page 79	Page 125
Verifying that the settings were applied			Page 28	Page 53	Page 79	Page 126

Installing MTX Editor

In order to connect MTX series devices to your computer, you'll need to download MTX Editor from the "download" page of the Yamaha Pro Audio website.

http://www.yamahaproaudio.com/

System Requirements

OS	Windows 7 Home Premium or higher Windows 8
CPU	Core i3/5 or better
Memory	4 GB or more
H.D.D	150 MB or more free
Other	Bonjour must be installed, Ethernet (1000BASE-T or higher)

NOTE

The System Requirements described above are applied to the MTX Editor version 1.2.0. You can check the latest version information of each program and its system requirements at the following website

http://www.yamahaproaudio.com/

The system requirements may differ slightly depending on the particular computer.

Follow the steps below to install MTX Editor.

1. **After decompressing the downloaded file, double-click "setup.exe" in the decompressed file location.**

The MTX Editor setup wizard will appear.

2. **Proceed with the installation as directed by the instructions in the screen.**

> **NOTE**
> If the computer you're using does not have Bonjour installed, a screen asking you to install Bonjour will appear during the installation.
>
> If you are asked to install Bonjour, download Bonjour from the Yamaha Pro Audio website, and install it. Then install MTX Editor again.
>
> http://www.yamahaproaudio.com/

Starting up MTX Editor

Follow the steps below to start up MTX Editor.

1. **Double-click the MTX Editor icon on the desktop.**

> **NOTE**
> The "User Account Control" dialog box may appear. Click [Continue] or [Yes].

2. **If the "Network Setup" dialog box appears, click [OK] or [Cancel].**

You'll be performing the setup during the step "Making settings in MTX Editor."

3. **The "Startup" dialog box will appear; click [New file] and then click [OK].**

The "Device Configuration Wizard" will start up. Now you can proceed to make basic settings.

We will use specific examples to explain "Using the Device Configuration Wizard to create your device setup" and subsequent steps.

"Using the Device Configuration Wizard to create your device setup" for example 1: Page 8

"Using the Device Configuration Wizard to create your device setup" for example 2: Page 29

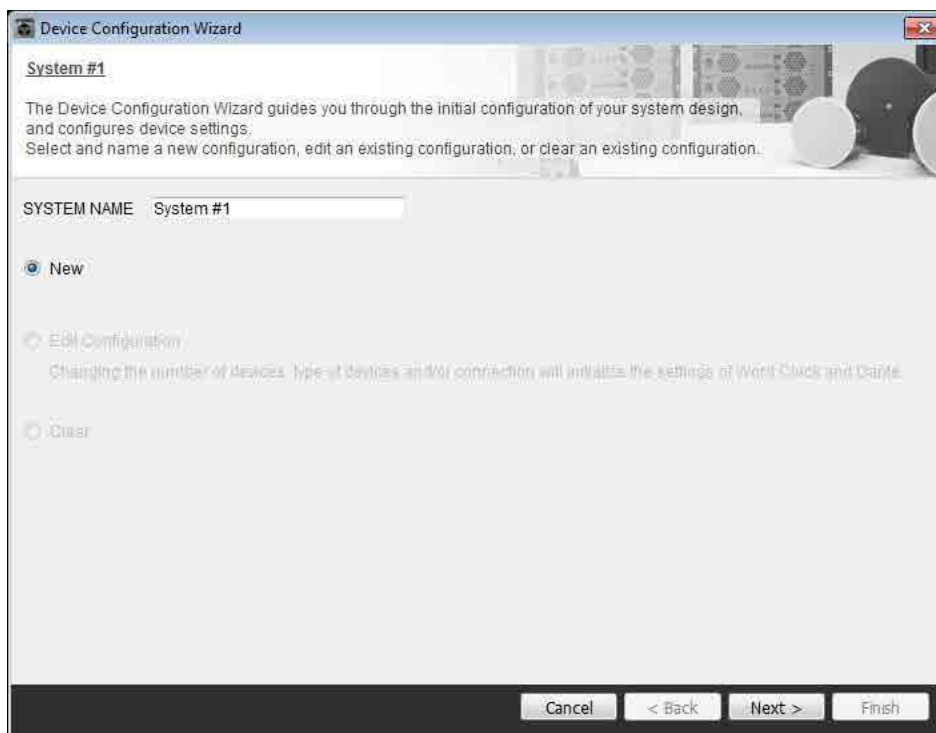**"Using the Device Configuration Wizard to create your device setup" for example 3: Page 54**

"Using the Device Configuration Wizard to create your device setup" for example 4: page 81

Example 1) Basic MTX3 system example (analog connections)

Using the Device Configuration Wizard to create your device setup

You will use MTX Editor's wizard to create your device setup before actually connecting your equipment.
After you've made basic settings, you'll be able to print information about system cabling and ID numbers.
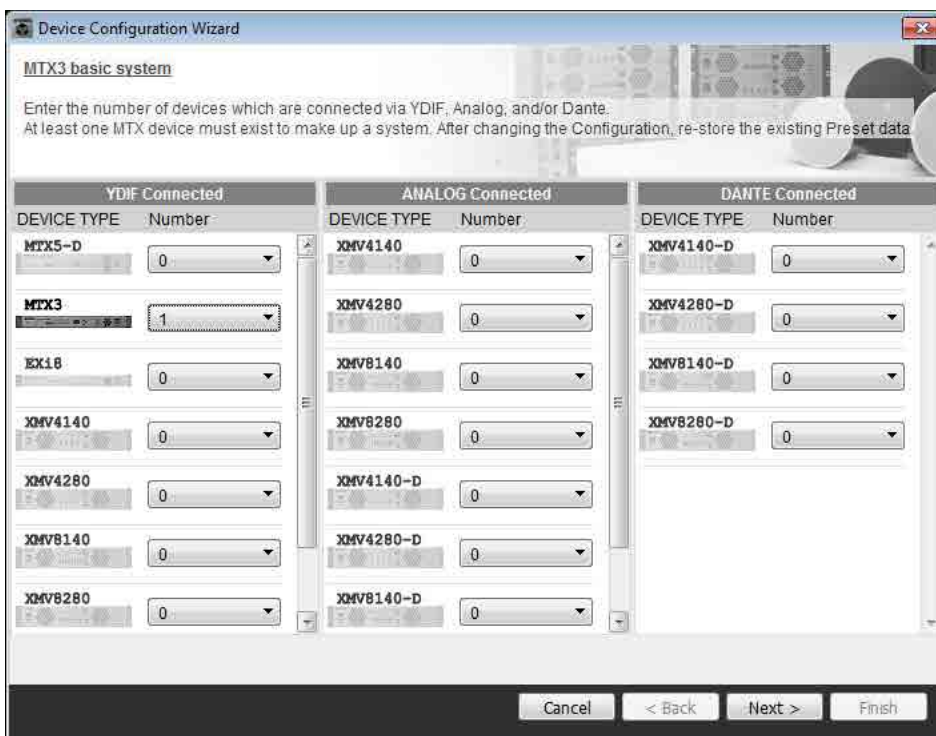Use the following procedure to make basic settings.

**1.** **Type a name for the MTX system you'll be constructing, and click [Next>].**

Example 1) Basic MTX3 system example (analog connections)

2. **Specify the number of units that will be connected in your MTX system, and click [Next>].**

In "YDIF Connected," specify 1 as the number of MTX3 units.

3. **Verify that the MTX's UNIT ID is 1, and then click [Next>].**

Unless you have specific reasons for doing so, use the UNIT ID that is assigned.

Example 1) Basic MTX3 system example (analog connections)
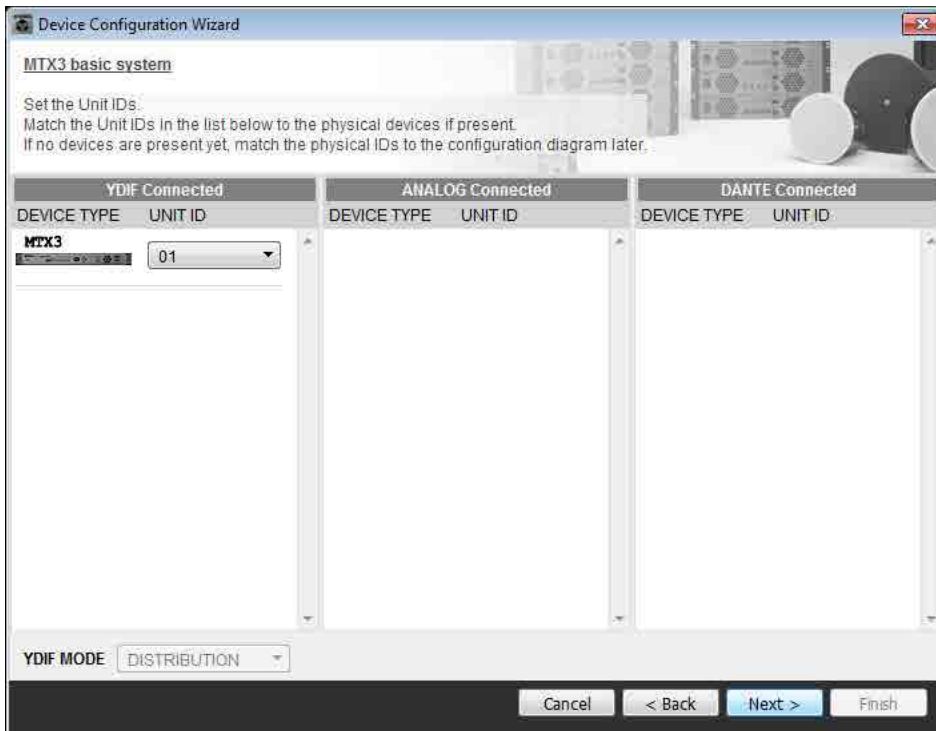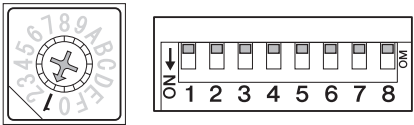
4. **Set the MTX's [UNIT ID] rotary switch and DIP switch.**

You will set the computer's IP address after completing the wizard, in "Specifying the computer's TCP/IP address."
If the MTX is not nearby, make settings during the step "Connecting the equipment."

Make the following settings.

MTX3	
	UNIT ID = 01 　　[UNIT ID] rotary switch = 1 　　DIP switches are all OFF (upward)

5. **When you've finished setting the MTX's [UNIT ID] rotary switch and DIP switch, click [Next>].**

Example 1) Basic MTX3 system example (analog connections)

6. **Verify that the MTX is shown, and click [Next>].**

7. **Choose the model of DCP that is connected to the MTX, enter a device name, and click [Finish].**

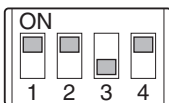Since four DCP1V4S units will be connected, make settings for four units.

Example 1) Basic MTX3 system example (analog connections)

8. **When you see the dialog box "Display the configuration diagram? The diagram can also be printed." click [Yes].**

A cabling diagram will appear. If you want, click [Print] to print the diagram.
To close the screen, click [Close].

Set the DIP switches of the DCP units as shown in the "Digital Control Panel" section of the schematic diagram.
For the last DCP (ID=3), set DIP switch 4 ON (upward).

NOTE
If you want to view the cabling diagram again, do so by choosing [File] menu → [Print Configuration Diagram].

If you want to use the Device Configuration Wizard to change the device configuration, click the [Device Config] button in the Project screen.

Example 1) Basic MTX3 system example (analog connections)

Making preliminary settings in MTX Editor

Here's how to make detailed MTX system settings in MTX Editor.
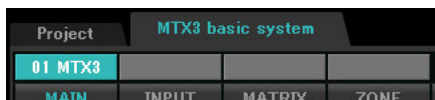When you've finished making settings, you should save them by clicking [File] menu, then [Save].

> **NOTE**
> The "User Account Control" dialog box may appear. Click [Continue] or [Yes].

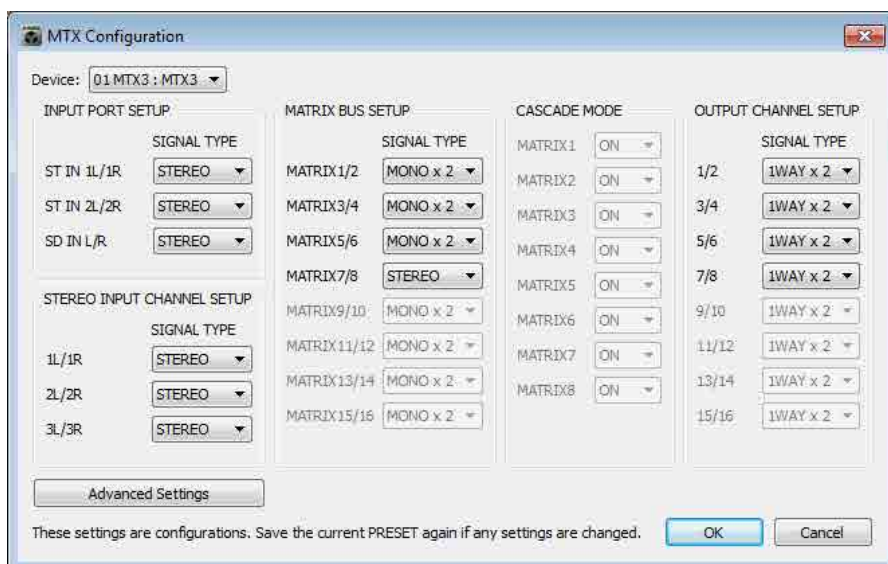## ■ Specifying the MTX configuration

Here you'll specify how the MTX's inputs and outputs will be handled.
Move to the System screen by clicking the tab of the system name you specified in step 1 of "Using the Device Configuration Wizard to create your device setup."

On the [System] menu, click [MTX Configuration] to open the "MTX Configuration" dialog box.
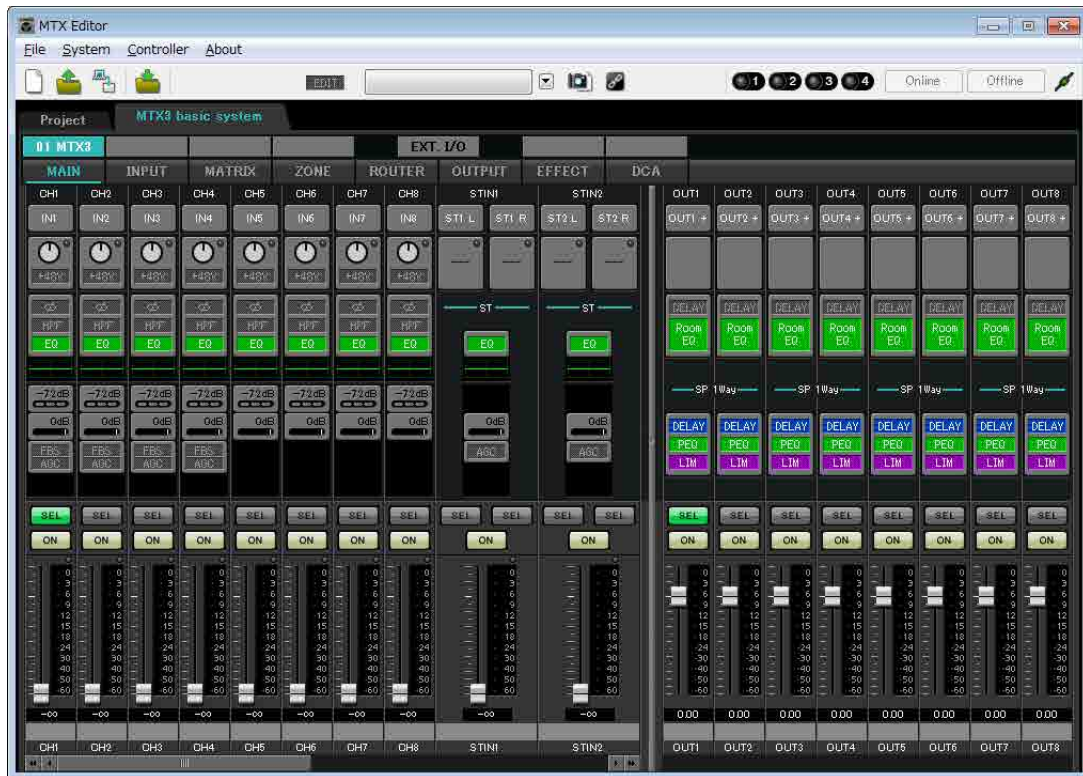The default settings are shown in the screen below. You can change them as necessary. In this example, we'll use the default settings without change.
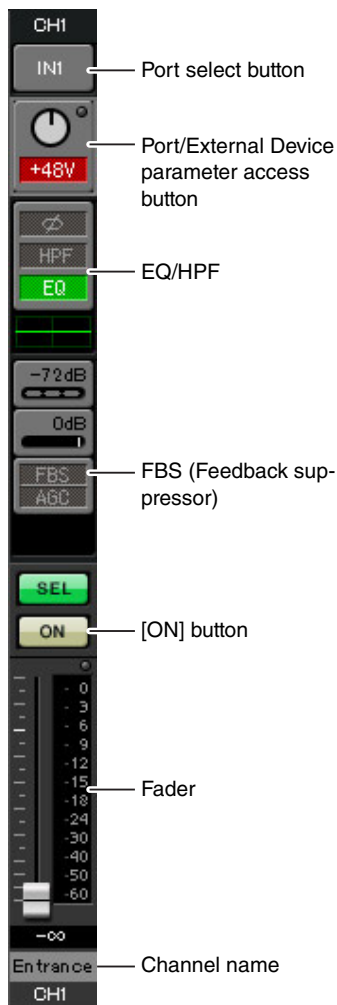
Example 1) Basic MTX3 system example (analog connections)

◼ Settings in the "MAIN" screen

In the "MAIN" screen you can make overall settings for each channel.
For details on each parameter, refer to "MTX Editor User's Manual."
Here you'll make the following settings.

- Channel name
- Channel on/off
- Gain and phantom power
- (As necessary) EQ settings

Example 1) Basic MTX3 system example (analog connections)

● INPUT settings

Port select button

When you click this, the "Input Patch" dialog box will open. In this example we are using the default settings, but if you want to switch to a different input port of the MTX, click this button, choose the desired input port, and then click the [Close] button.

Port/External Device parameter access button

This button lets you adjust the gain and turn phantom power on/off. When you click the button, a popup window will appear, allowing you to adjust the gain and turn phantom power on/off. Make the desired settings, and then in the upper right, click × to close the popup window. The appropriate gain level will depend on the devices that are connected, so set the level appropriately for your devices.

For channels 1 through 8, the gain is set to 30 dB by default. Because condenser microphones are connected to CH1 and 2, leave the gain at 30 dB and turn phantom power on. Because wireless microphones are connected to CH3 and 4, lower the gain to 0 dB.

EQ/HPF (High Pass Filter)

Click this to switch to the "CHANNEL EDIT" screen. Adjust the EQ and HPF appropriately for the microphone you're using. For ST IN, only EQ is available. When you want to return to the "MAIN" screen, click the [MAIN] button.

FBS (Feedback suppressor)

FBS is provided on input channels 1 through 4. We recommend that microphone inputs, and particularly movable microphones such as wireless microphones, be connected to channels 1 through 4. When you click here, you will switch to the FBS setting screen.

When you want to return to the "MAIN" screen, click the [MAIN] button.
For details on FBS settings, refer to "MTX Editor User's Manual."

[ON] button

This turns the channel on/off. You should turn off unused channels.

Fader

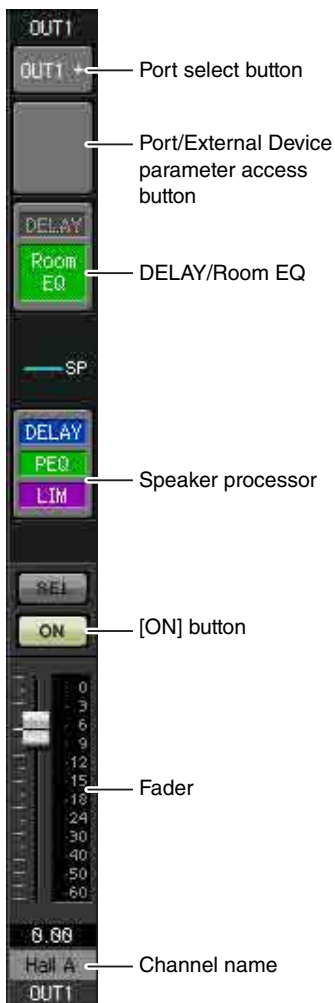This adjusts the input level. Leave the fader at -∞ until the system goes online.

Channel name

You can double-click this to edit the name.
In this example, names have been assigned as follows.

CH1	Entrance
CH2	Kitchen
CH3	W.Mic1
CH4	W.Mic2
STIN1	CD Player
STIN2	BGM
SDIN	SD Player

Example 1) Basic MTX3 system example (analog connections)

● OUTPUT settings

Port select button — Port select button

Port/External Device parameter access button

DELAY/Room EQ

Speaker processor

[ON] button

Fader

Channel name

Port select button

Click this to open the "Output Patch" dialog box. In this example we will use the default settings, but if you want to use a different output port of the MTX, click this button, choose the desired output port, and then click the [Close] button.

Port/External Device parameter access button

When you click this button, the MTX output connector parameter edit screen will appear as a popup. Verify that GAIN is set to 0.0 dB.

DELAY/Room EQ

Click this to move to a screen where you can set delay and room EQ.

Speaker processor

Click this to move to the "CHANNEL EDIT" screen. Make the appropriate settings for the speakers that will be connected.

NOTE
The pre-installed library contains speaker processor files that are appropriate for the response of various speakers. By using these files you can make speaker processor settings easily.

[ON] button

This button turns the channel on/off. Turn off unused channels.

Fader

This adjusts the output level.

Channel name

You can double-click this to edit the name.
In this example, names have been assigned as follows.

OUT1	Hall A
OUT2	Hall B
OUT3	Entrance
OUT4	Kitchen

Example 1) Basic MTX3 system example (analog connections)

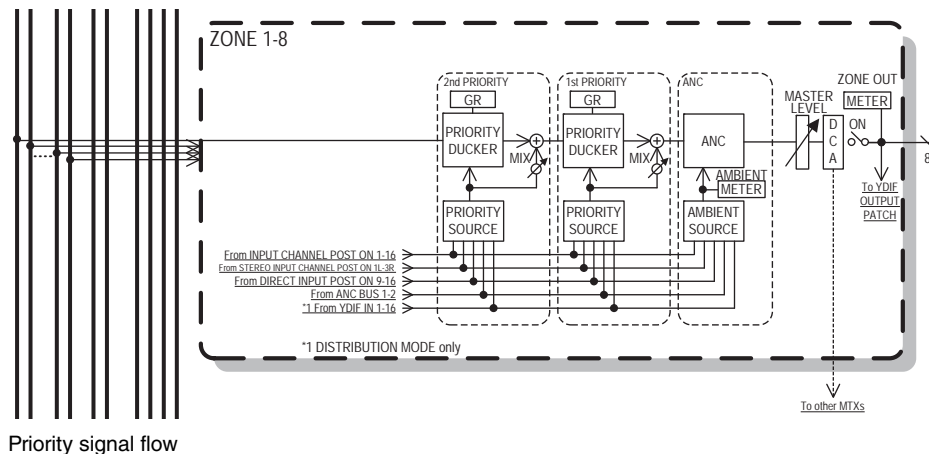# ■ Settings in the "MATRIX" screen

Here you can specify which input channel will be sent to which zone. For details on send level and other parameters, refer to "MTX Editor User's Manual."

In this example, make the settings shown in the above illustration. Clicking a cross point (a square area) or dragging cross points will switch it on/off. If you right-click on a cross point, a context menu appears. You can select [All OFF] to turn off all cross points. The cross point shows the send level as the amount of green.

With the settings shown here, the two microphones in hall A (CH3 and 4) are broadcast only to hall A. In addition, CD/ BGM/SD (STIN1–3) are being broadcast to the entire building. The microphone in the entrance (CH1) is assigned to be broadcast to the entire building in the event of an emergency, and is therefore assigned in the "ZONE" screen (described next) as 1st PRIORITY. If channel 1 is turned on in the matrix, the signal from the matrix (attenuated) and the signal from Priority will be combined and output. Similarly, the microphone in the kitchen (CH2) is assigned as 2nd PRIORITY that is valid only in zone 4 (Kitchen), and therefore is not specified in the matrix.

For the input channel faders in the lower left of the screen, the grayed-out faders show input levels, and the other faders show input channel send levels. Grayed-out faders cannot be operated in this screen.

Priority signal flow

Example 1) Basic MTX3 system example (analog connections)

■ Settings in the "ZONE" screen

In the "ZONE" screen you can make Priority DUCKER settings. The Priority Ducker function temporarily attenuates the inputs from other channels when audio is input from a specified input channel, ensuring that the audio from the specified input channel will be broadcast clearly. Priority is given in the order of "1st PRIORITY > 2nd PRIORITY >Matrix Out signals."

ZONE select button

In this example, we assume that the microphone in the entrance (CH1) will be used to speak to the entire building. Therefore, we select CH1 as the 1st PRIORITY SOURCE for zone 1 through zone 4, and click the [ON] button located at the right of 1st PRIORITY to make it light. We select the kitchen microphone (CH2) as the 2nd PRIORITY SOURCE only for zone 4 (Kitchen), and click the [ON] button located at the right of 2nd PRIORITY to make it light. Because there's no need to make settings for zones 5 through 8, make sure that the [ON] button at the right of 1st PRIORITY and 2nd PRIORITY are unlit (turned off).

Use the ZONE select buttons to switch the zone.

For details on each parameter, refer to "MTX Editor User's Manual."

Example 1) Basic MTX3 system example (analog connections)

■ Settings in the "ROUTER" screen

In the "ROUTER" screen you can assign zones to outputs.
In this example we will leave the default settings unchanged, since the assignments are ZONE1=OUTPUT 1, ZONE2=OUTPUT 2, ZONE3=OUTPUT 3, and ZONE4=OUTPUT 4.
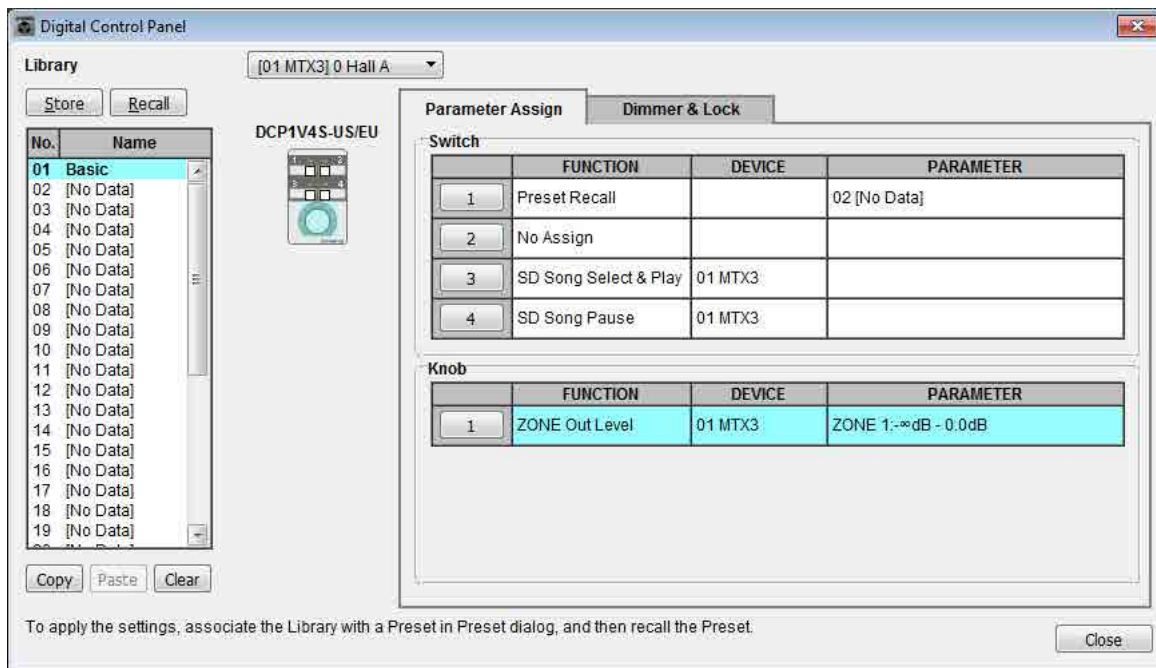
Example 1) Basic MTX3 system example (analog connections)

■ Digital Control Panel (DCP) settings

Here's how to assign functions to the DCP that is installed in each zone.
To make these settings, choose the [Controller] menu item [Digital Control Panel].

Here we will use the example of the DCP located in Hall A of the Preset 01 Basic library.
Use the drop down list at the top of the screen to select the DCP for which you want to make settings.
When you click one of the numbered buttons, a "Settings" dialog box will appear; assign parameters to the controls. If you assigned [SD Song Select & Play], enter the name of the file that you want to play.
When you've made the assignments, click to select "01 [No data]" and then click the [Store] button. In the "Store Library" dialog box, change the name to "Basic" and then click the [OK] button.

In Basic, switch 1 is the preset select switch for the Party settings. Switches 3 and 4 control pause/resume for playback of audio sources on the SD memory card. The knob controls the output level of zone 1.

Example 1) Basic MTX3 system example (analog connections)

Next click the [Copy] button, and then click "02 [No Data]" to select the second library item. With this selected, click the [Paste] button. The library item you created as "Basic" will be copied.

After changing the PARAMETER of switch 1 to "01," double-click "Basic" in "02 Basic" located in the left of the screen, and change the name of the library item to "Party." (After you've entered the name, press the <Enter> key to confirm the name change.) After making this change, click the [Store] button to overwrite-save the library item.

In Party, switch 1 is the preset select switch for the Basic settings. Other settings are the same as for Basic.

Example 1) Basic MTX3 system example (analog connections)

Example settings for other DCP units

ID of the DCP / Library name	1 (Hall B)		2 (Entrance)		3 (Kitchen)	
	Basic	**Party**	**Basic**	**Party**	**Basic**	**Party**
Switch 1	Same as ID=0 (Hall A)	Same as ID=0 (Hall A)	Input Ch ON (CH1)		Input Ch ON (CH2)	
Switch 2			No Assign		No Assign	
Switch 3						
Switch 4						
Knob 1	ZONE OUT Level (ZONE2)		Input Ch Level (CH1)		Input Ch Level (CH2)	

■ Storing a preset

Now we'll store the settings we've made up to this point as a preset.

By recalling presets from the MTX itself or from the DCP, you can switch the settings as appropriate for various situations.

To store or recall a preset, click the camera icon in the upper part of MTX Editor.

When you click the camera icon, the "Preset" dialog box will appear. You can create up to 50 presets.

Click the preset number that you want to store; the line will be selected. Then click the [Store] button, specify the preset name, and click the [OK] button.

Click a location where the DCP column indicates "No Assign," and choose a library that you specified on the DCP.

Example 1) Basic MTX3 system example (analog connections)

Up to this point, you made separate settings for zone 1 and zone 2. However in some cases, such as a party, you might want to remove the boundary between zone 1 and zone 2 so that they can be a single meeting area. In this case, make settings in the "ROUTER" screen to route zone 1 to output 2, so that zone 1 and zone 2 can be used as a single space.

Example 1) Basic MTX3 system example (analog connections)

If you store these settings as a different preset, you'll be able to easily switch to settings suitable for a party.
If you use Recall Filter to specify that only ROUTER and DCP settings are recalled, other settings such as gain will remain at the Basic settings even if you recall a party preset.

This completes settings in the offline state. Save the settings once again.

Example 1) Basic MTX3 system example (analog connections)

Connecting the equipment

After you've rack-mounted the MTX and your other equipment, connect the MTX and the other equipment as shown below. If you've copied audio sources to an SD memory card, insert the card into the MTX now.

To connect the MTX to your computer, use a CAT5e or higher cable with all eight pins connected.

Powering-on the MTX

Turn on the power of the MTX.
Turn off the amplifier before you power-off the MTX.

Powering-on the amp

Turn on the power of the amplifier.
To prevent unwanted sound from being output, we recommend that you turn down the attenuator settings of all channels on the amp itself before you turn it on.

Example 1) Basic MTX3 system example (analog connections)

Specifying the computer's TCP/IP address

To allow the MTX and the computer to communicate, specify the computer's TCP/IP as follows.

1. **On the [System] menu, click [Network Setup].**

The "Network Setup" dialog box will appear.

2. **Click [Open Network Connection].**

"Network Connections" will appear.

3. **Right-click the adapter to which the MTX is connected, and choose [Properties].**

The "Local Area Connection Properties" dialog box will appear.

4. **Choose [Internet Protocol Version 4 (TCP/IPv4)], and then click [Properties].**

The "Internet Protocol Version 4 (TCP/IPv4) Properties" dialog box will appear.

5. **Click [Use the following IP address (S)].**

6. **In the [IP address] box, enter "192.168.0.253"; in the [Subnet mask] box, enter "255.255.255.0."**

> **NOTE**
> The IP address of the MTX3 is set to "192.168.0.1".
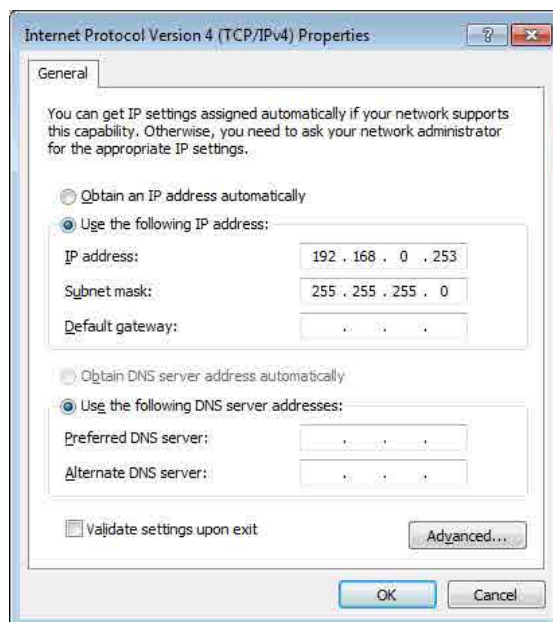
7. **Click [OK].**

> **NOTE**
> In some cases, Windows firewall may block MTX Editor when you make this setting. Select the [Private Network] check box, and click [Allow Access].

Example 1) Basic MTX3 system example (analog connections)

Taking MTX Editor online

In the upper right of MTX Editor, click the [Online] button. When the unit has successfully come online, the indicator 1 will light blue.

When the "Synchronization" dialog box appears, select "To Device," and click the [OK] button. When the indication in the dialog box has switched, select the system that you want to place online, and click the [Online] button.
The project created in MTX Editor will be sent to the MTX.

Example 1) Basic MTX3 system example (analog connections)

Verifying that the settings were applied

The main items to verify are listed below. For details on each parameter setting, refer to "MTX Editor User's Manual."

1. **Recall the Basic preset.**

2. **Using the oscillator in the "ROUTER" screen, adjust the output level.**

Adjust the amp's attenuator value to an appropriate level.

3. **Specify the gain from the microphone.**

You can set the gain in the dialog box that appears when you press the parameter recall button for a port or external device of an input channel in the "MAIN" screen. Watch the input meter, and adjust the setting appropriately.

4. **Set the input levels and output levels.**

Using the input/output faders in the "MAIN" screen, adjust the levels. As necessary, apply the output limiter in the "CHANNEL EDIT" screen to prevent your speakers from being damaged.
Adjust the amp attenuator values to obtain the optimal S/N ratio.
In addition, make FBS settings as necessary.

5. **Store the Basic preset.**

Store by overwriting the previously-specified content.

6. **Recall the Party preset.**

Verify that the audio from the wireless microphone is also heard in Hall B.
If you're not using Recall Filter, perform steps 2 through 4 before you overwrite-store the Party preset.

7. **Check the DCP settings.**

Verify that the DCP operates as you expect.
Check these for each preset.

When you have finished making all settings, save the project and switch MTX Editor offline.

This completes the settings for example 1.

Example 2) High audio quality system with XMV and YDIF connections (digital connections)

Using the Device Configuration Wizard to create your device setup

You will use MTX Editor's wizard to create your device setup before actually connecting your equipment.
After you've made basic settings, you'll be able to print information about system cabling and ID numbers.
Use the following procedure to make basic settings.

1. **Type a name for the MTX system you'll be constructing, and click [Next>].**

2. **Specify the number of units that will be connected in your MTX system, and click [Next>].**

Specify "1" as the number of MTX3 units in "YDIF Connected," and specify "1" as the number of XMV4280 units to be connected.

3. **Specify the UNIT ID of each device, and click [Next>].**

Unless you have specific reasons for doing so, use the UNIT ID that is assigned.
In this example, set the XMV's UNIT ID to 1A so that we can explain how to change the UNIT ID.

4. **Set the [UNIT ID] rotary switch and DIP switch of the MTX and XMV.**

You will set the computer's IP address after completing the wizard, in "Specifying the computer's TCP/IP address."
If the MTX and XMV are not nearby, you can set them during the step "Connecting the equipment."

Make the following settings.

MTX3	UNIT ID = 01
	[UNIT ID] rotary switch = 1 DIP switches are all OFF (upward)
XMV	UNIT ID = 1A
	[UNIT ID] rotary switch = A DIP switch 1 is ON (downward), others are OFF (upward)

NOTE
Use the DIP switch to specify the upper digit of the UNIT ID, and use the [UNIT ID] rotary switch to specify the lower digit. For details, refer to the owner's manual of each unit.

UNIT ID = 1 A

Lower digit: specify using the rotary switch

Upper digit: specify using DIP switch 1–3

5. **When you have finished setting the [UNIT ID] rotary switch and DIP switch of the MTX and the XMV, click [Next>].**

6. **Verify that the MTX and XMV are shown in the screen, and click [Next>].**

Since there is only one MTX unit and one XMV unit, there's no need to change the order.
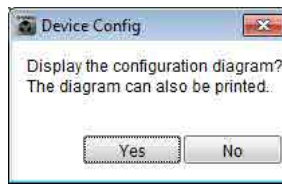

7. **Choose the model of DCP that is connected to the MTX, enter a device name, and click [Finish].**

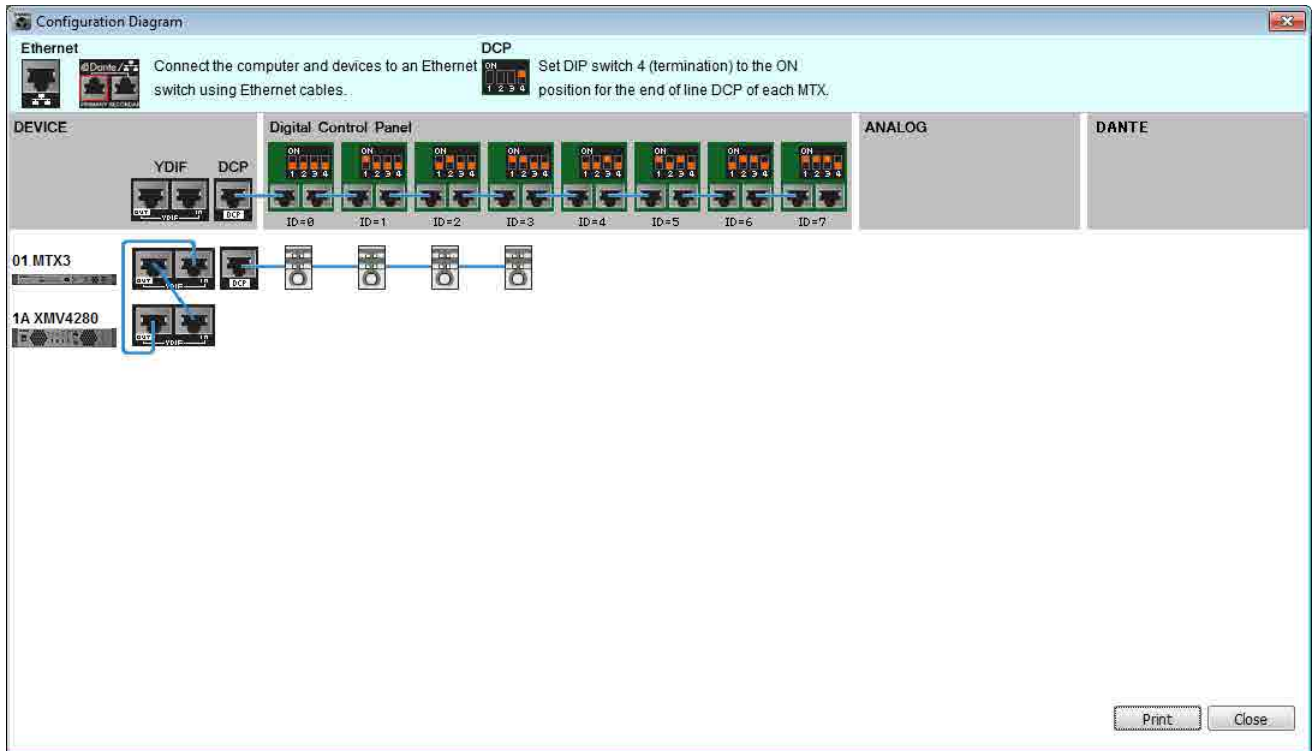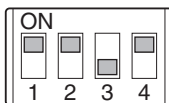Since four DCP1V4S units will be connected, make settings for four units.

8. **When you see the dialog box "Display the configuration diagram? The diagram can also be printed." click [Yes].**

A cabling diagram will appear. If you want, click [Print] to print the diagram.
To close the screen, click [Close].

Set the DIP switches of the DCP units as shown in the "Digital Control Panel" section of the schematic diagram.
For the last DCP (ID=3), set DIP switch 4 ON (upward).

NOTE
If you want to view the cabling diagram again, do so by choosing [File] menu → [Print Configuration Diagram].

If you want to use the Device Configuration Wizard to change the device configuration, click the [Device Config] button in the Project screen.

Making preliminary settings in MTX Editor

Here's how to make detailed MTX system settings in MTX Editor.
When you've finished making settings, you should save them by clicking [File] menu, then [Save].

NOTE
The "User Account Control" dialog box may appear. Click [Continue] or [Yes].

■ Making EXT. I/O settings

Here you'll make settings for inputting digital audio into the XMV.
Move to the System screen by clicking the tab of the system name you specified in step 1 of "Using the Device Configuration Wizard to create your device setup."

1. **Click the [EXT. I/O] button.**

The "EXT. I/O" screen will appear, allowing you to make input/output settings for the external devices. Since you'll be making settings for YDIF 1–8, there's no need to switch screens; simply make the settings in this screen.
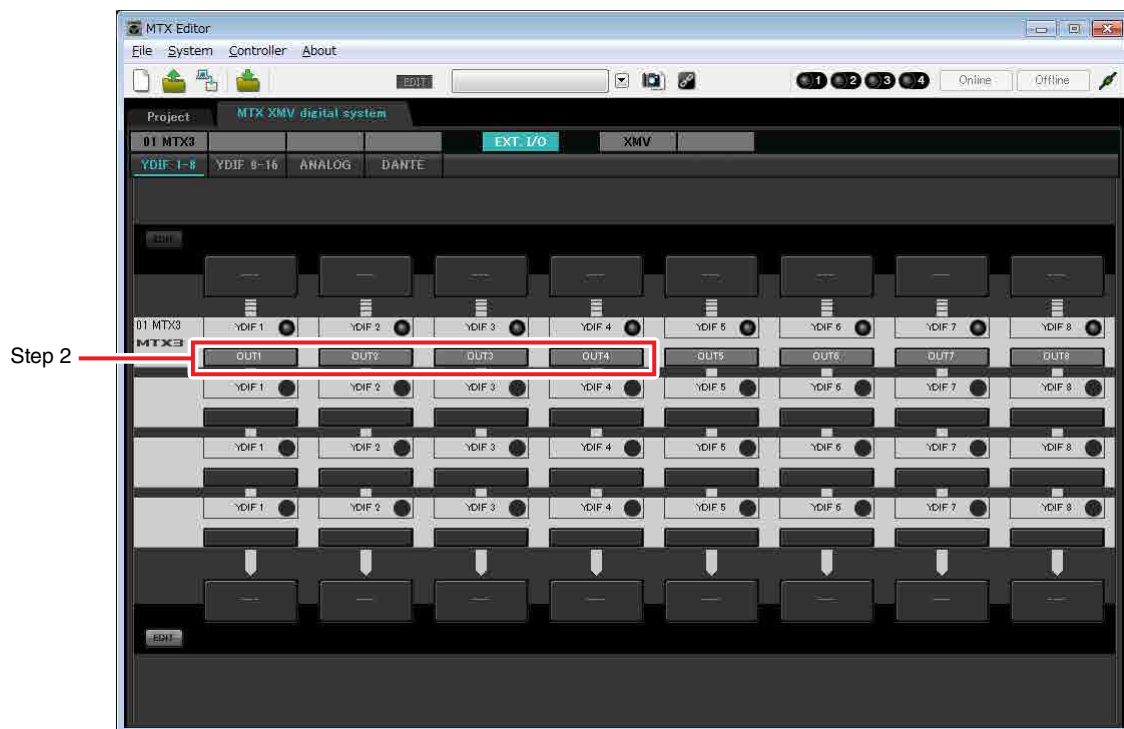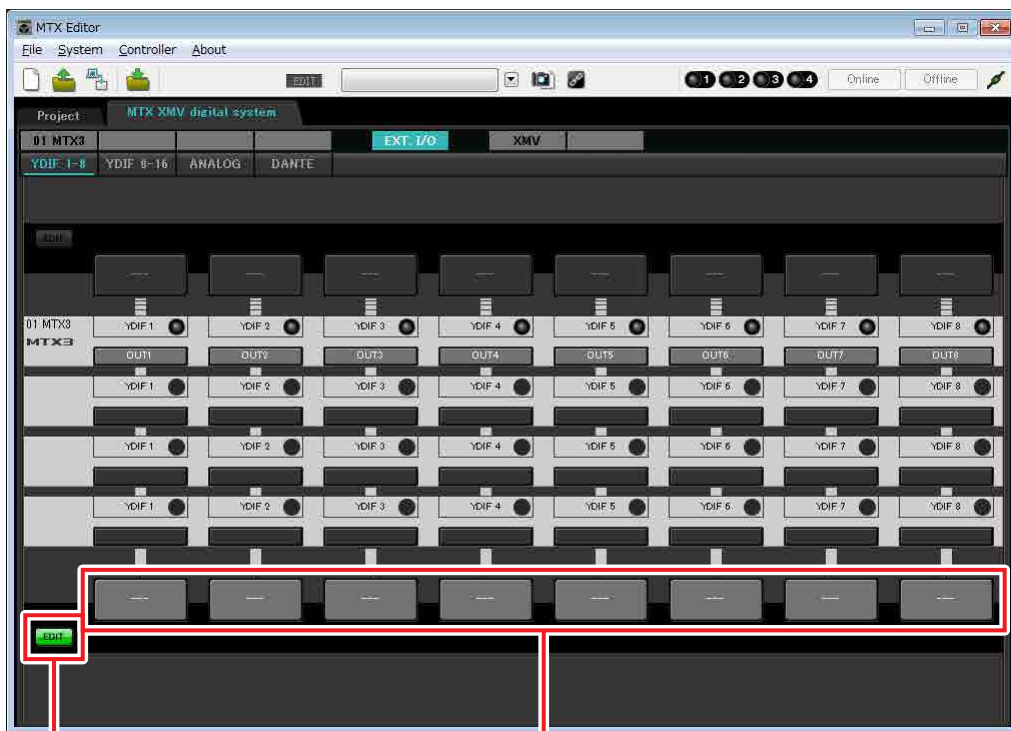
2. **Verify that for the MTX with UNIT ID = 01, the buttons located below YDIF 1 through YDIF 4 are set to OUT1 (OUTPUT 1) through OUT 4 (OUTPUT 4) respectively.**

If the settings are different, click the button and change the setting.
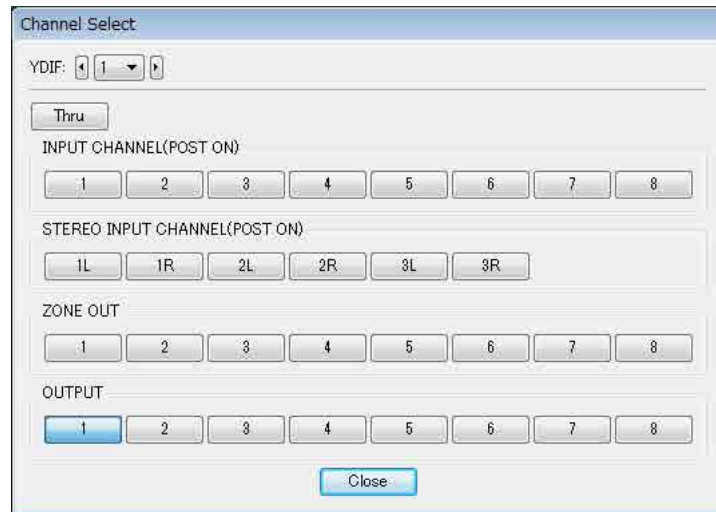
3. **In the lower left, click the [EDIT] button.**

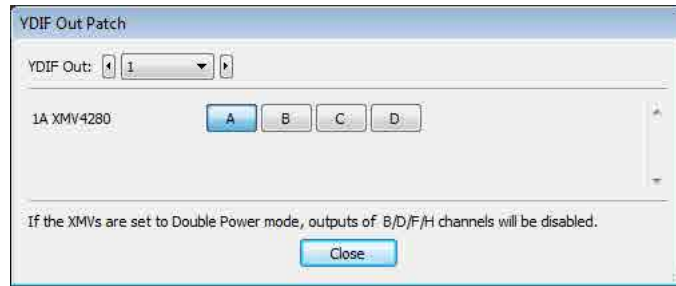Now you can specify the outputs from the MTX to YDIF 1–8.

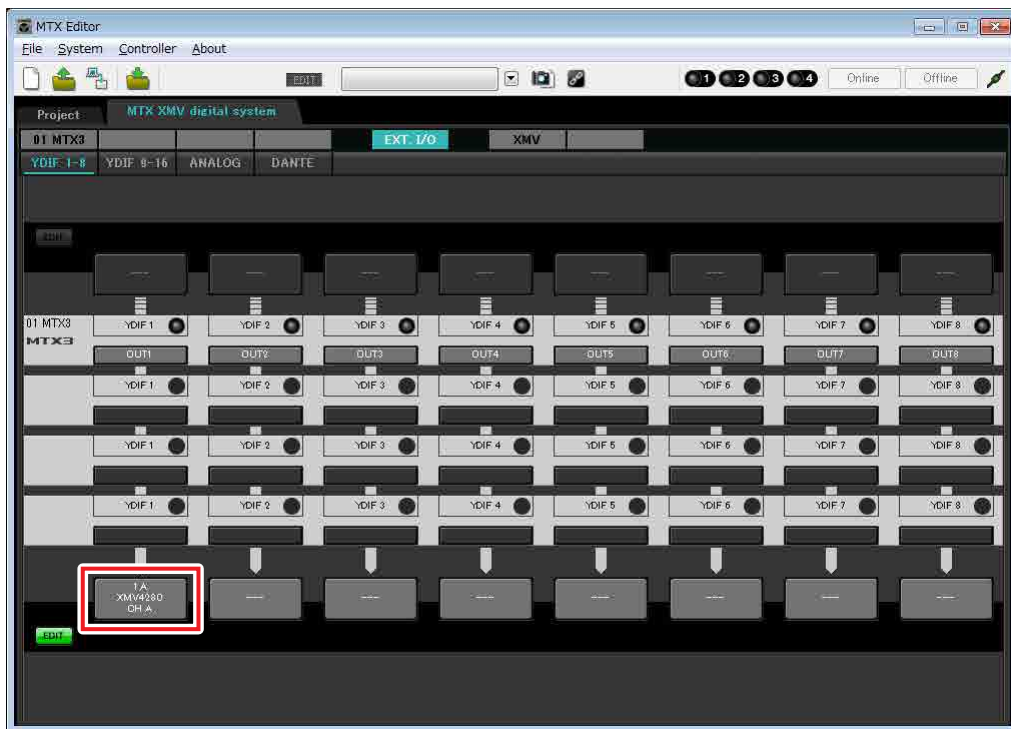[EDIT] button   Output routing select button

4. **Click the output routing select button located below YDIF 1.**

The "YDIF Out Patch" dialog box will appear.

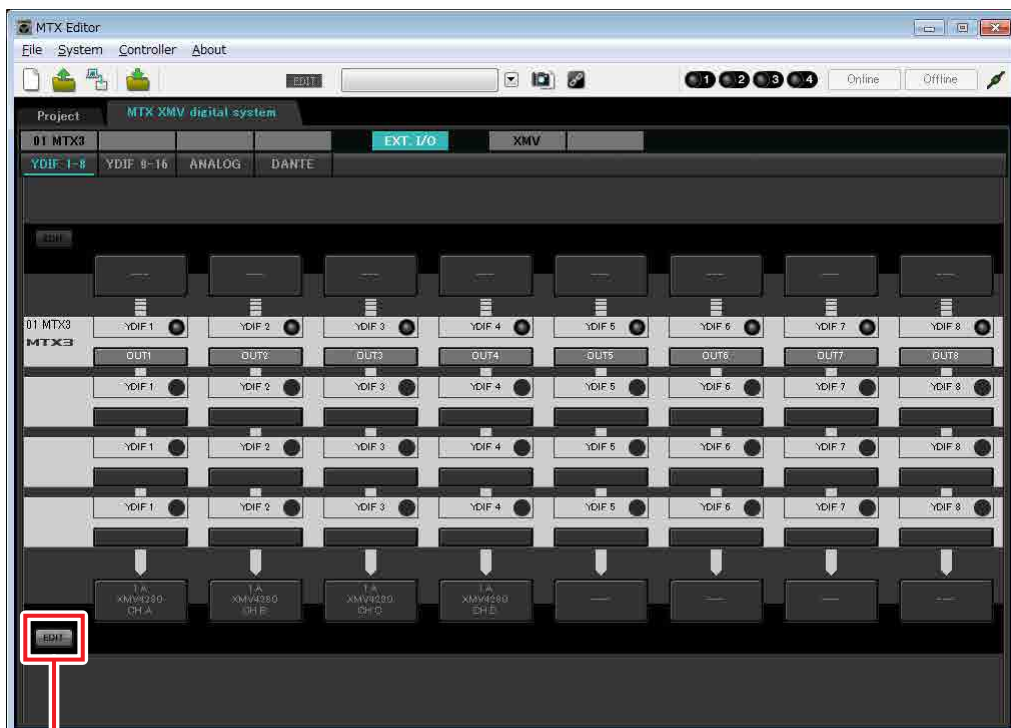**5.** **For CHANNEL, click [A] button.**

The YDIF 1 output routing select button shows that the YDIF 1 output has been assigned to CH A of the UNIT ID=1A XMV.

6. Change the output destination in the [YDIF Out:] list box, to assign YDIF 2 through YDIF 4 to CH B through CH D of the XMV and then click [Close] button.

**7.** In the lower left, click [EDIT] button to lock the settings.

[EDIT] button

■ Specifying the MTX configuration

Here you'll specify how the MTX's inputs and outputs will be handled.

On the [System] menu, click [MTX Configuration] to open the "MTX Configuration" dialog box.

The default settings are shown in the screen below. You can change them as necessary. In this example, we'll use the default settings without change.
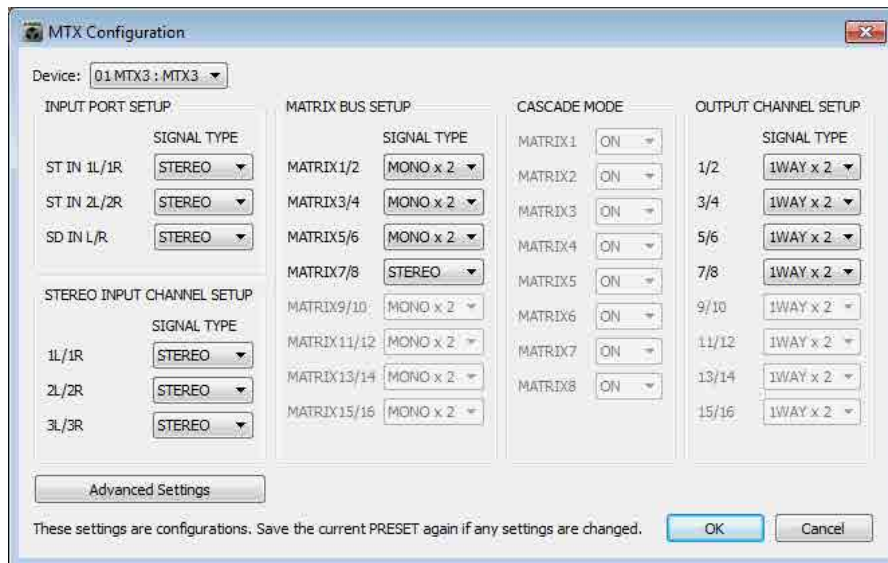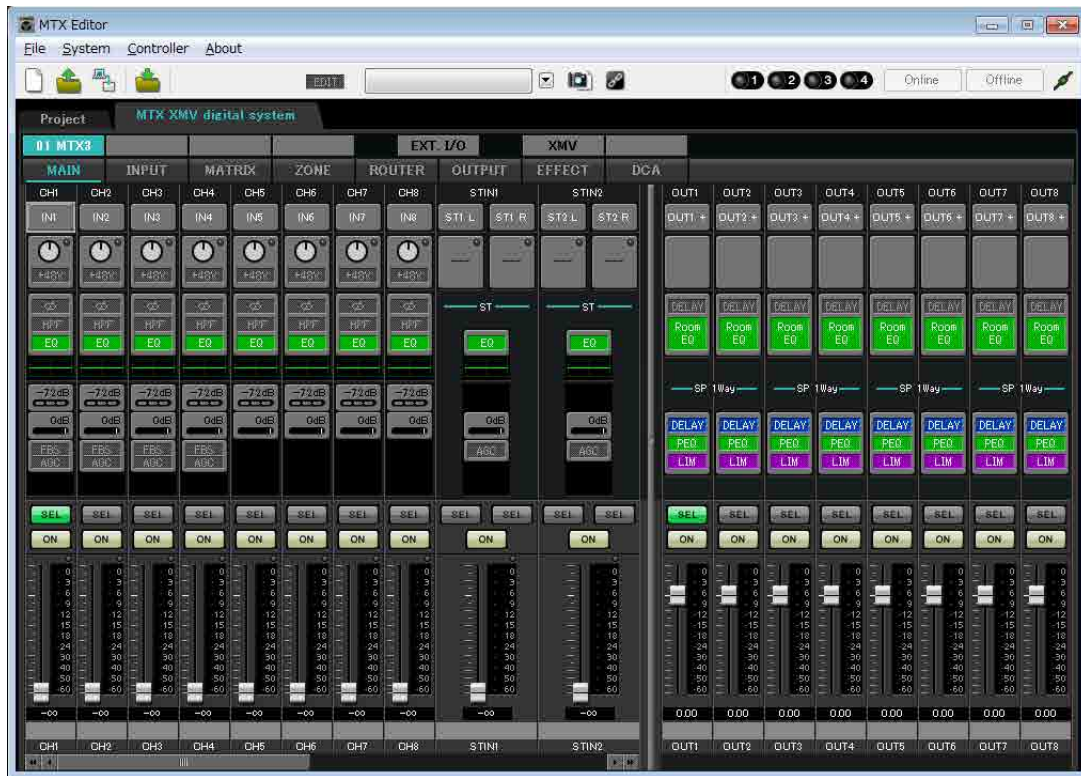
■ Settings in the "MAIN" screen

In the "MAIN" screen you can make overall settings for each channel.
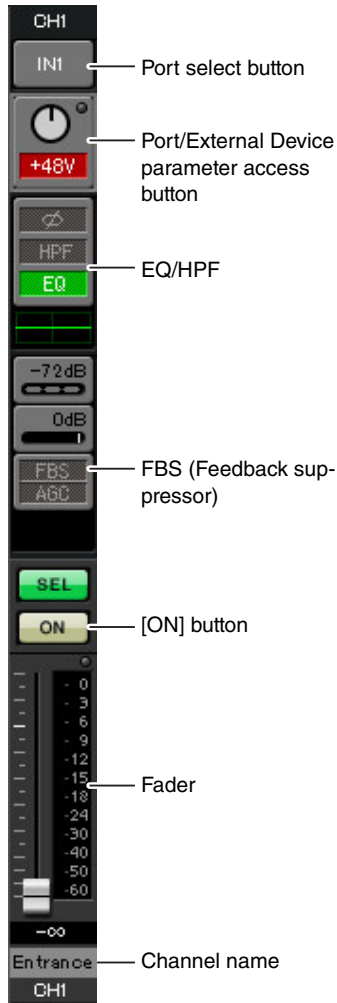Click the [01 MTX3] button to access the MTX "MAIN" screen.
For details on each parameter, refer to "MTX Editor User's Manual."
Here you'll make the following settings.

- • Channel name
- • Channel on/off
- • Gain and phantom power
- • (As necessary) EQ settings

● INPUT settings

Port select button — Port select button

Port/External Device parameter access button

EQ/HPF

FBS (Feedback suppressor)

[ON] button

Fader

Channel name

Port select button

When you click this, the "Input Patch" dialog box will open. In this example we are using the default settings, but if you want to switch to a different input port of the MTX, click this button, choose the desired input port, and then click the [Close] button.

Port/External Device parameter access button

This button lets you adjust the gain and turn phantom power on/off. When you click the button, a popup window will appear, allowing you to adjust the gain and turn phantom power on/off. Make the desired settings, and then in the upper right, click × to close the popup window. The appropriate gain level will depend on the devices that are connected, so set the level appropriately for your devices.

For channels 1 through 8, the gain is set to 30 dB by default. Because condenser microphones are connected to CH1 and 2, leave the gain at 30 dB and turn phantom power on. Because wireless microphones are connected to CH3 and 4, lower the gain to 0 dB.

EQ/HPF (High Pass Filter)

Click this to switch to the "CHANNEL EDIT" screen. Adjust the EQ and HPF appropriately for the microphone you're using. For ST IN, only EQ is available. When you want to return to the "MAIN" screen, click the [MAIN] button.

FBS (Feedback suppressor)

FBS is provided on input channels 1 through 4. We recommend that microphone inputs, and particularly movable microphones such as wireless microphones, be connected to channels 1 through 4. When you click here, you will switch to the FBS setting screen.
When you want to return to the "MAIN" screen, click the [MAIN] button.
For details on FBS settings, refer to "MTX Editor User's Manual."

[ON] button

This turns the channel on/off. You should turn off unused channels.

Fader

This adjusts the input level. Leave the fader at -∞ until the system goes online.
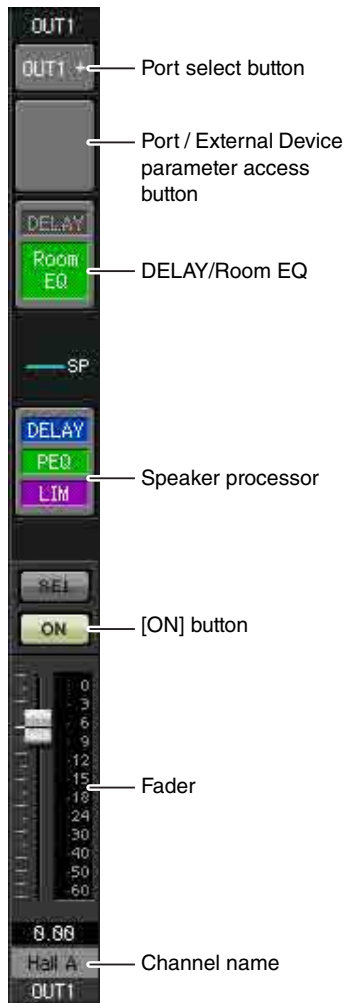
Channel name

You can double-click this to edit the name.
In this example, names have been assigned as follows.

CH1	Entrance
CH2	Kitchen
CH3	W.Mic1
CH4	W.Mic2
STIN1	CD Player
STIN2	BGM
SDIN	SD Player

● OUTPUT settings

Port select button

Click this to open the "Output Patch" dialog box. In this example we will use the default settings, but if you want to use a different output port of the MTX, click this button, choose the desired output port, and then click the [Close] button.

Port / External Device parameter access button

When you click this button, a popup window will appear, allowing you to set the MTX's output connector parameters and the parameters of the external device associated with the channel. Verify that GAIN is set to 0.0 dB.

In this example, the MTX output parameters are above, and the XMV parameters are below. Put the system online before you edit the settings of these parameters.

When you click this button, the MTX output connector parameter edit screen will appear as a popup. Verify that GAIN is set to 0.0 dB.

DELAY/Room EQ

Click this to move to a screen where you can set delay and room EQ.

Speaker processor

Click this to move to the "CHANNEL EDIT" screen. Make the appropriate settings for the speakers that will be connected.

NOTE

The pre-installed library contains speaker processor files that are appropriate for the response of various speakers. By using these files you can make speaker processor settings easily.

[ON] button

This button turns the channel on/off. Turn off unused channels.

Fader

This adjusts the output level.

Channel name

You can double-click this to edit the name.
In this example, names have been assigned as follows.

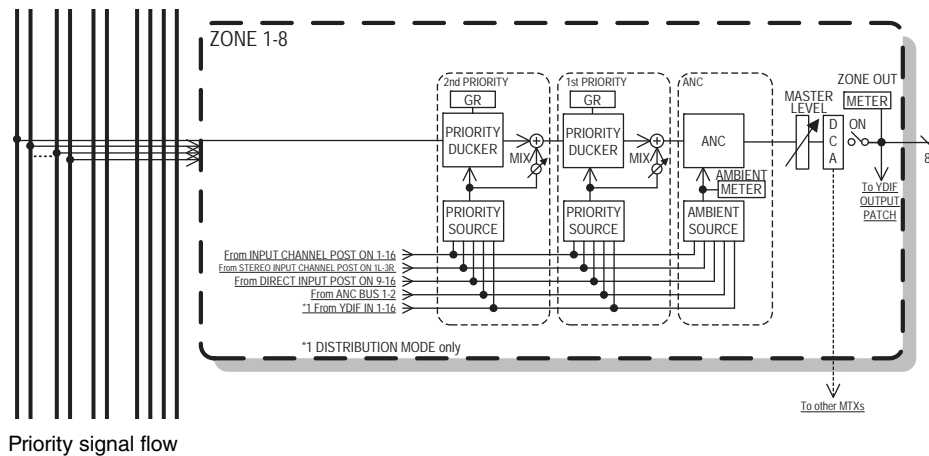| OUT1	Hall A
OUT2	Hall B
OUT3	Entrance
OUT4	Kitchen

■ Settings in the "MATRIX" screen

Here you can specify which input channel will be sent to which zone. For details on send level and other parameters, refer to "MTX Editor User's Manual."

In this example, make the settings shown in the above illustration. Clicking a cross point (a square area) or dragging cross points will switch it on/off. If you right-click on a cross point, a context menu appears. You can select [All OFF] to turn off all cross points. The cross point shows the send level as the amount of green.

With the settings shown here, the two microphones in hall A (CH3 and 4) are broadcast only to hall A. In addition, CD/BGM/SD (STIN1–3) are being broadcast to the entire building. The microphone in the entrance (CH1) is assigned to be broadcast to the entire building in the event of an emergency, and is therefore assigned in the "ZONE" screen (described next) as 1st PRIORITY. If channel 1 is turned on in the matrix, the signal from the matrix (attenuated) and the signal from Priority will be combined and output. Similarly, the microphone in the kitchen (CH2) is assigned as 2nd PRIORITY that is valid only in zone 4 (Kitchen), and therefore is not specified in the matrix.

For the input channel faders in the lower left of the screen, the grayed-out faders show input levels, and the other faders show input channel send levels. Grayed-out faders cannot be operated in this screen.

Priority signal flow

■ Settings in the "ZONE" screen

In the "ZONE" screen you can make Priority DUCKER settings. The Priority Ducker function temporarily attenuates the inputs from other channels when audio is input from a specified input channel, ensuring that the audio from the specified input channel will be broadcast clearly. Priority is given in the order of "1st PRIORITY > 2nd PRIORITY >Matrix Out signals."

In this example, we assume that the microphone in the entrance (CH1) is used for broadcasting to the entire building. Therefore, we select CH1 as the 1st PRIORITY SOURCE for zone 1 through zone 4, and click the [ON] button located at the right of 1st PRIORITY to make it light. We select the kitchen microphone (CH2) as the 2nd PRIORITY SOURCE only for zone 4 (Kitchen), and click the [ON] button located at the right of 2nd PRIORITY to make it light. Because there's no need to make settings for zones 5 through 8, make sure that the [ON] button at the right of 1st PRIORITY and 2nd PRIORITY are unlit (turned off).
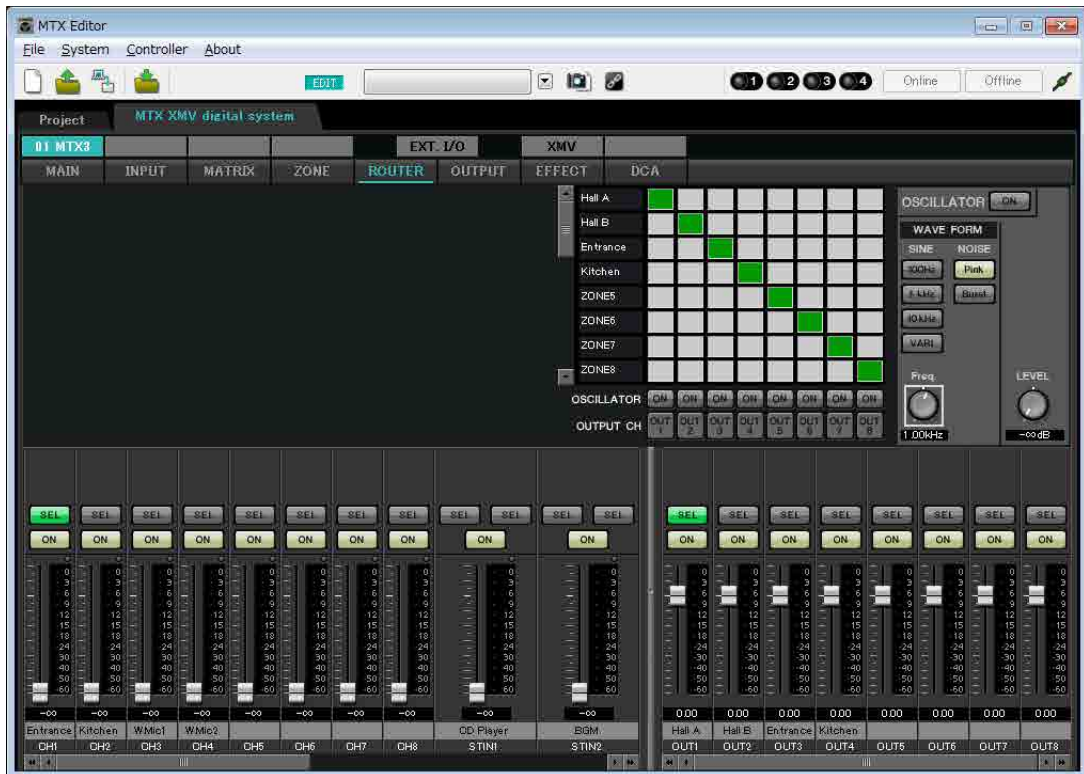
Use the ZONE select buttons to switch the zone.

For details on each parameter, refer to "MTX Editor User's Manual."
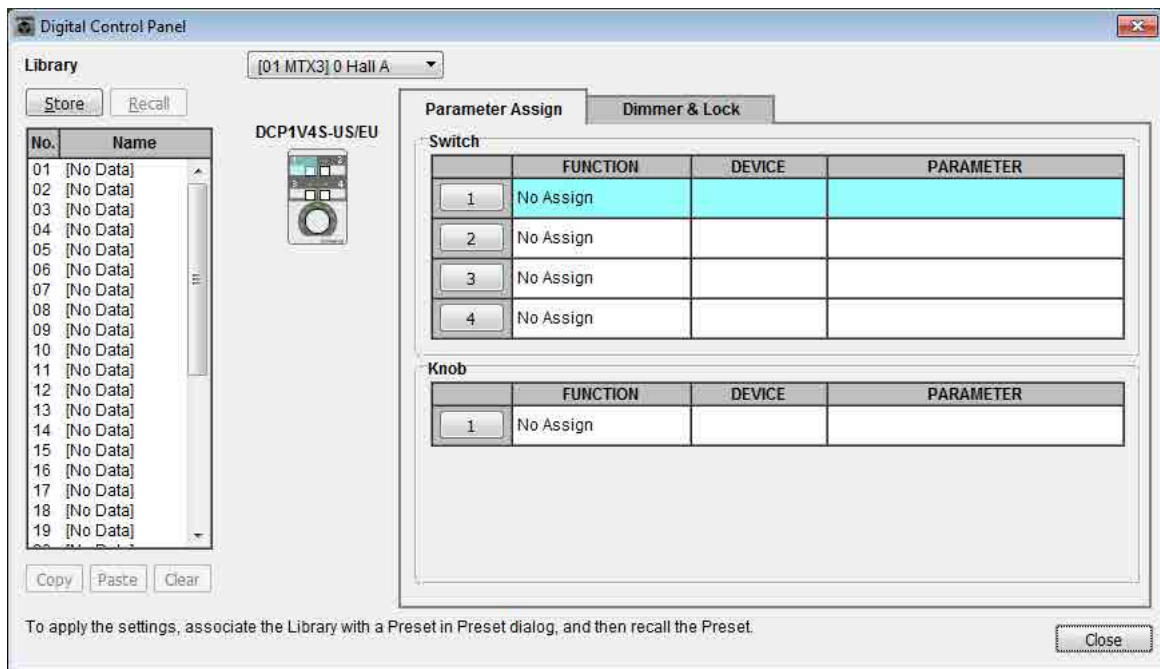
■ Settings in the "ROUTER" screen

In the "ROUTER" screen you can assign zones to outputs.
In this example we will leave the default settings unchanged, since the assignments are ZONE1=OUTPUT 1, ZONE2=OUTPUT 2, ZONE3=OUTPUT 3, and ZONE4=OUTPUT 4.
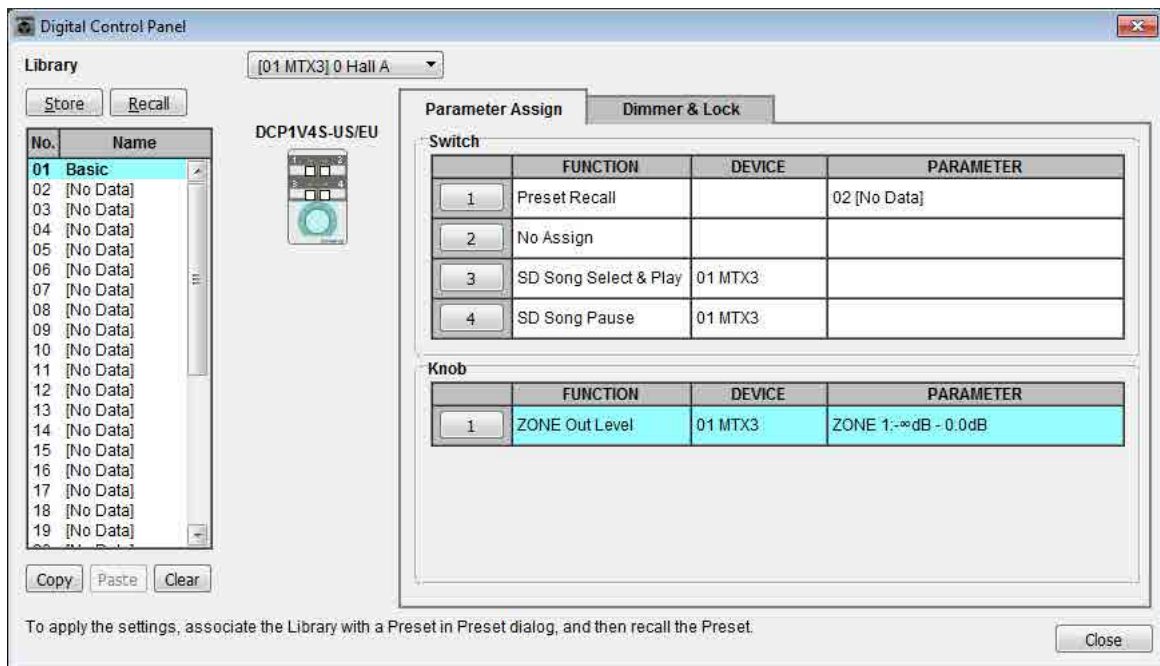
■ Digital Control Panel (DCP) settings

Here's how to assign functions to the DCP that is installed in each zone.
To make these settings, choose the [Controller] menu item [Digital Control Panel].
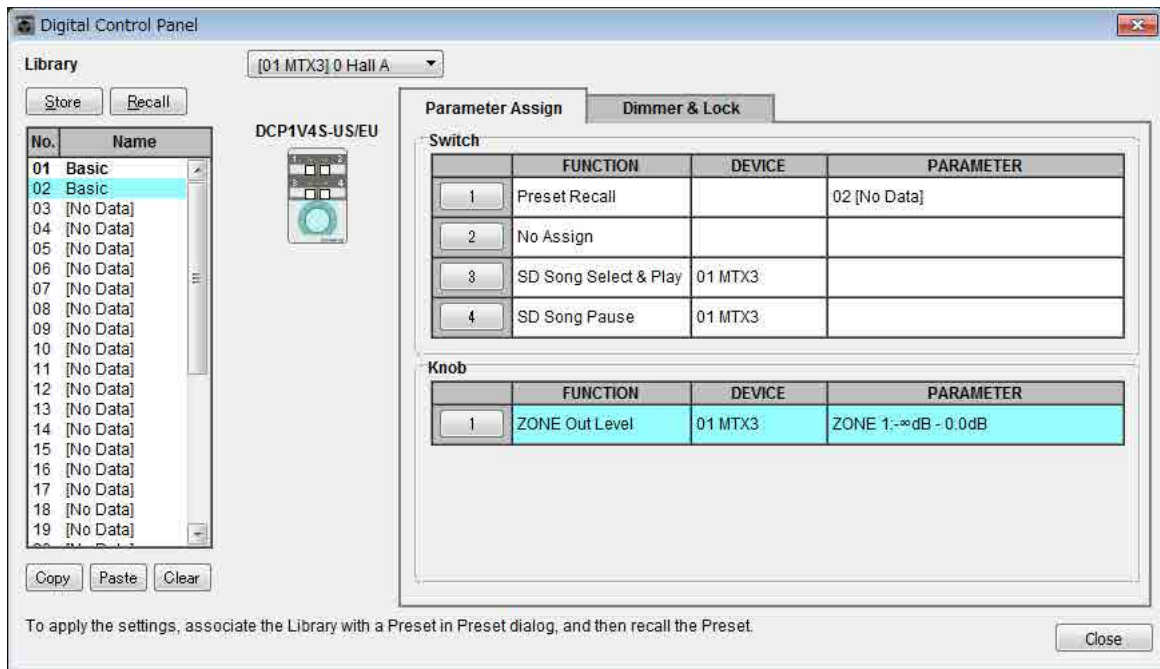

Here we will use the example of the DCP located in Hall A of the Preset 01 Basic library.
Use the drop down list at the top of the screen to select the DCP for which you want to make settings.
When you click one of the numbered buttons, a "Settings" dialog box will appear; assign parameters to the controls. If you assigned [SD Song Select & Play], enter the name of the file that you want to play.
When you've made the assignments, click to select "01 [No data]" and then click the [Store] button. In the "Store Library" dialog box, change the name to "Basic" and then click the [OK] button.
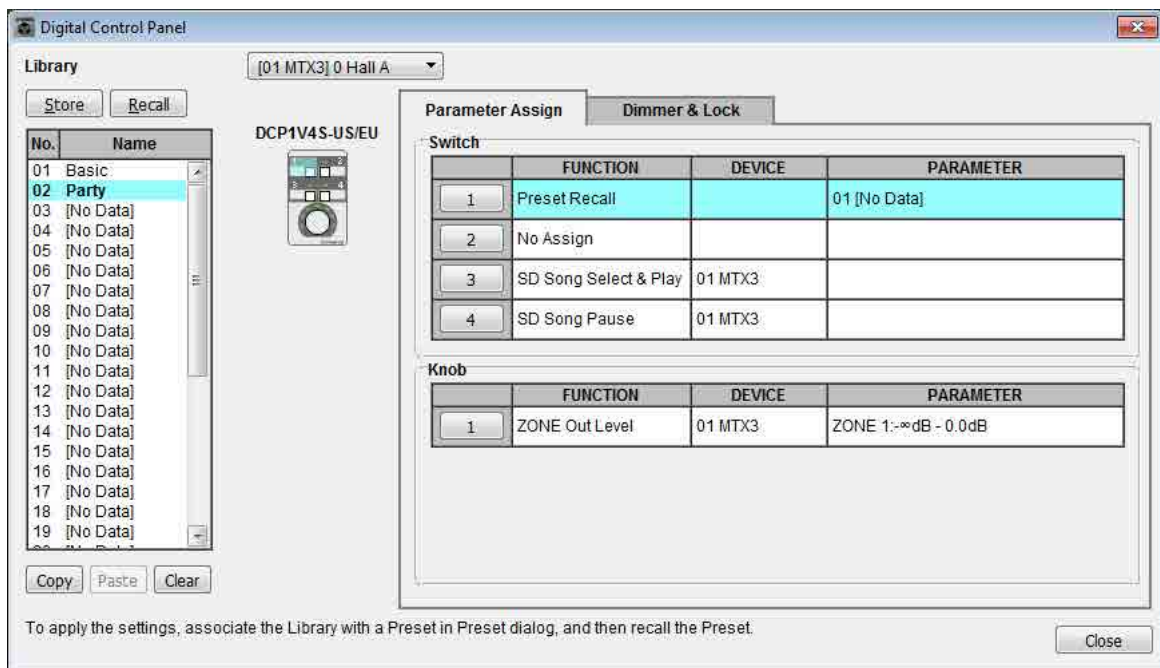

In Basic, switch 1 is the preset select switch for the Party settings. Switches 3 and 4 control pause/resume for playback of audio sources on the SD memory card. The knob controls the output level of zone 1.

Next click the [Copy] button, and then click "02 [No Data]" to select the second library item. With this selected, click the [Paste] button. The library item you created as "Basic" will be copied.

After changing the PARAMETER of switch 1 to "01," double-click "Basic" in "02 Basic" located in the left of the screen, and change the name of the library item to "Party." (After you've entered the name, press the <Enter> key to confirm the name change.) After making this change, click the [Store] button to overwrite-save the library item.

In Party, switch 1 is the preset select switch for the Basic settings. Other settings are the same as for Basic.
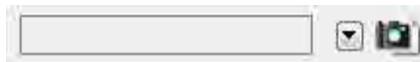
Example settings for other DCP units

ID of the DCP / Library name	1 (Hall B)		2 (Entrance)		3 (Kitchen)	
	Basic	**Party**	**Basic**	**Party**	**Basic**	**Party**
Switch 1	Same as ID=0 (Hall A)	Same as ID=0 (Hall A)	Input Ch ON (CH1)		Input Ch ON (CH2)	
Switch 2			No Assign		No Assign	
Switch 3						
Switch 4						
Knob 1	ZONE OUT Level (ZONE2)		Input Ch Level (CH1)		Input Ch Level (CH2)	

■ Storing a preset

Now we'll store the settings we've made up to this point as a preset.

By recalling presets from the MTX itself or from the DCP, you can switch the settings as appropriate for various situations.

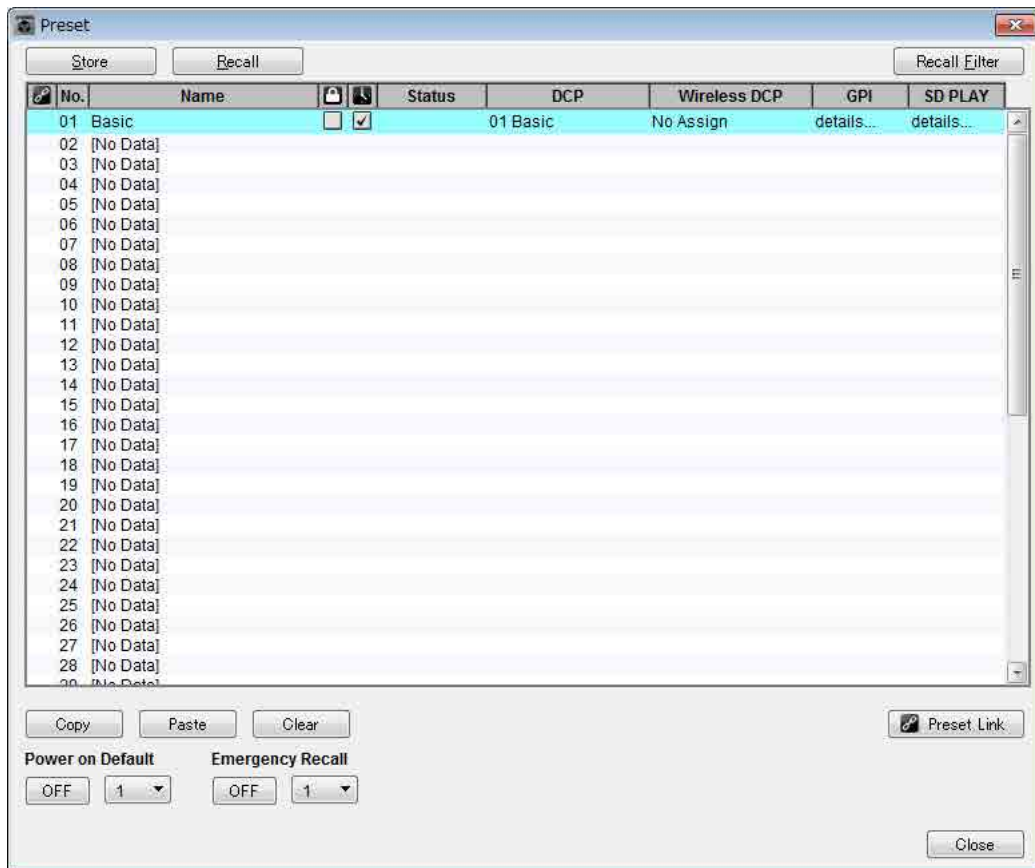To store or recall a preset, click the camera icon in the upper part of MTX Editor.

When you click the camera icon, the "Preset" dialog box will appear. You can create up to 50 presets.

Click the preset number that you want to store; the line will be selected. Then click the [Store] button, specify the preset name, and click the [OK] button.

Click a location where the DCP column indicates "No Assign," and choose a library that you specified on the DCP.
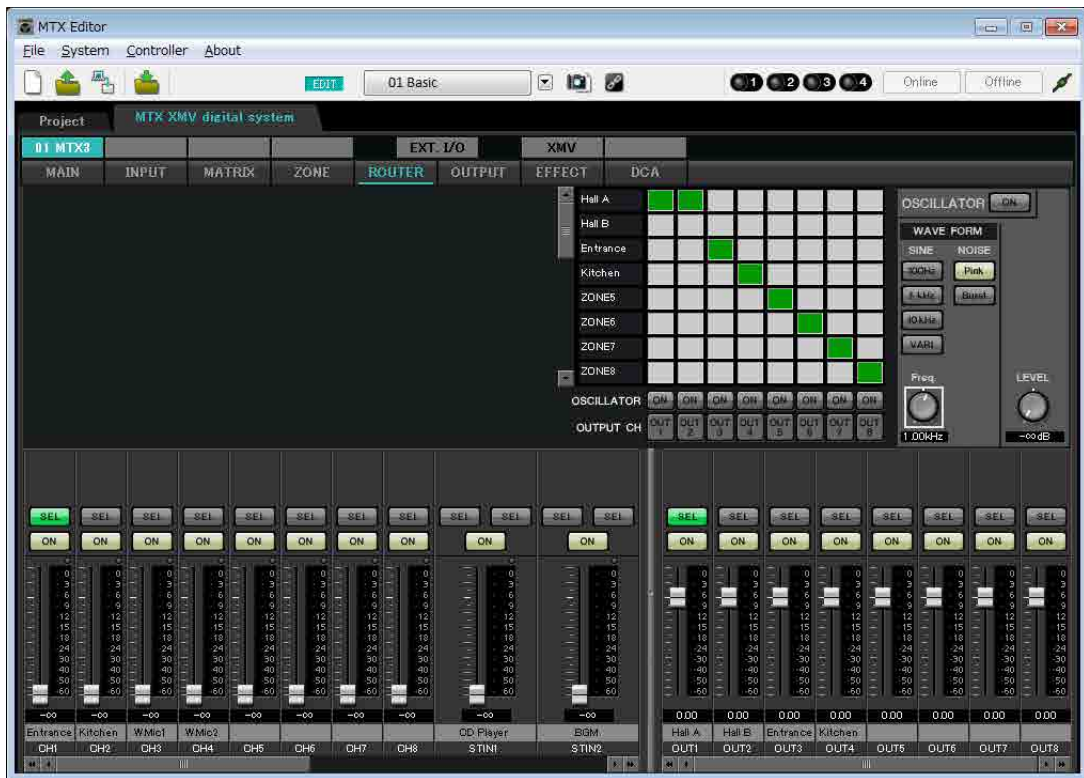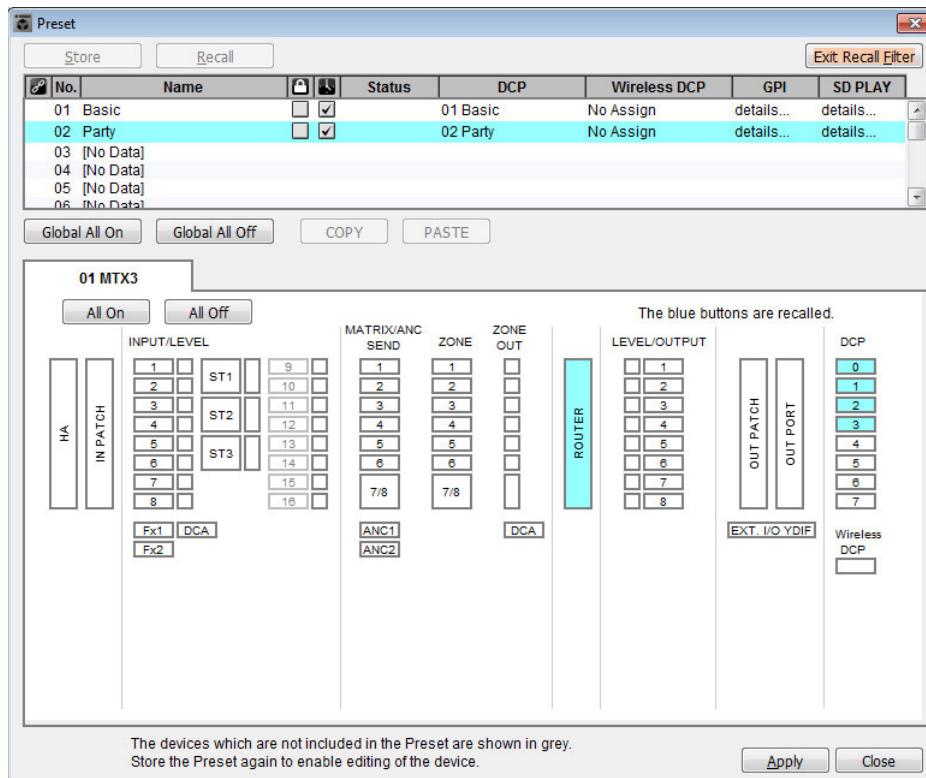
Up to this point, you made separate settings for zone 1 and zone 2. However in some cases, such as a party, you might want to remove the boundary between zone 1 and zone 2 so that they can be a single meeting area. In this case, make settings in the "ROUTER" screen to route zone 1 to output 2, so that zone 1 and zone 2 can be used as a single space.
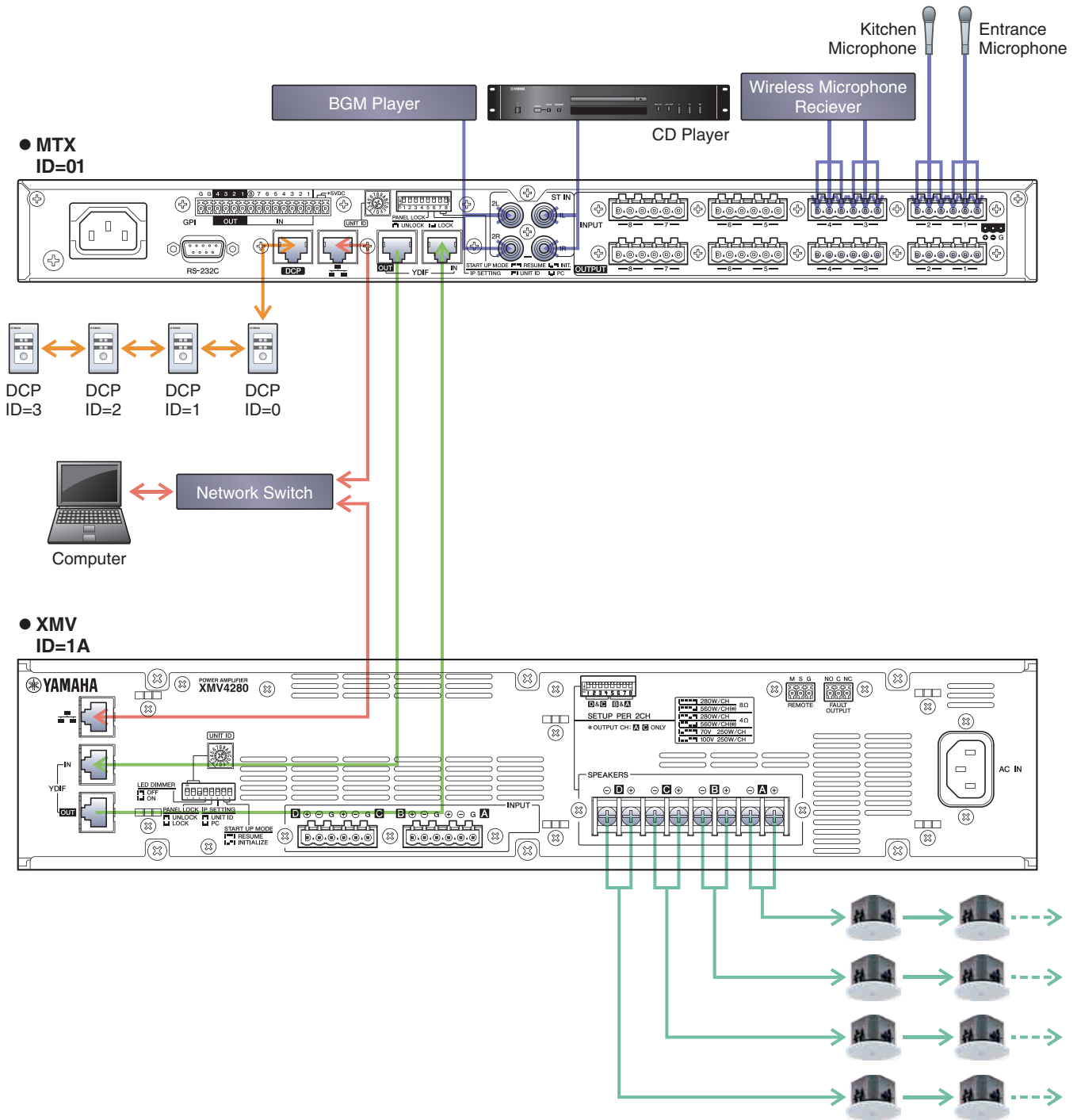
If you store these settings as a different preset, you'll be able to easily switch to settings suitable for a party.
If you use Recall Filter to specify that only ROUTER and DCP settings are recalled, other settings such as gain will remain at the Basic settings even if you recall a party preset. For External I/O as well, press the [All Off] button so that all settings are carried over.

This completes settings in the offline state. Save the settings once again.

Connecting the equipment

After you've rack-mounted the MTX and your other equipment, connect the MTX and the other equipment as shown below. If you've copied audio sources to an SD memory card, insert the card into the MTX now.

To connect the MTX to your computer, use a CAT5e or higher cable with all eight pins connected.

Powering-on the MTX

Turn on the power of the MTX.
Turn off the amplifier before you power-off the MTX.

Powering-on the amp

On the rear panel of the XMV, set the [SPEAKERS] DIP switch, and then turn on the power of the amps (XMV).
To prevent unwanted sound from being output, we recommend that you turn down the attenuator settings of all channels on the amp itself before you turn it on.
To change the XMV attenuator setting, press the button of the appropriate channel and then turn the encoder.

NOTE
- With the factory settings, the XMV's attenuators are set to the lowest value.
- For more about the [SPEAKERS] DIP switch, refer to the XMV owner's manual.

Specifying the computer's TCP/IP address

To allow the MTX and the computer to communicate, specify the computer's TCP/IP as follows.

1. **On the [System] menu, click [Network Setup].**

The "Network Setup" dialog box will appear.

2. **Click [Open Network Connection].**

"Network Connections" will appear.

3. **Right-click the adapter to which the MTX is connected, and choose [Properties].**

The "Local Area Connection Properties" dialog box will appear.

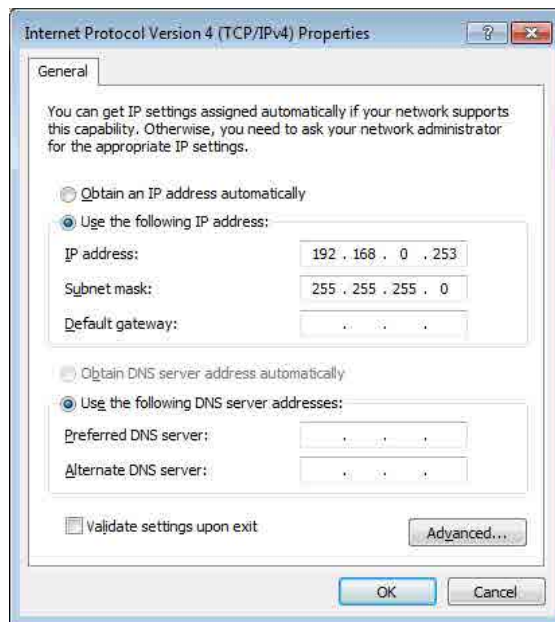**4.** **Choose [Internet Protocol Version 4 (TCP/IPv4)], and then click [Properties].**

The "Internet Protocol Version 4 (TCP/IPv4) Properties" dialog box will appear.

5. **Click [Use the following IP address (S)].**

6. **In the [IP address] box, enter "192.168.0.253"; in the [Subnet mask] box, enter "255.255.255.0."**

> **NOTE**
> The MTX3's IP address is set to "192.168.0.1," and the XMV's IP address is set to "192.168.0.26."
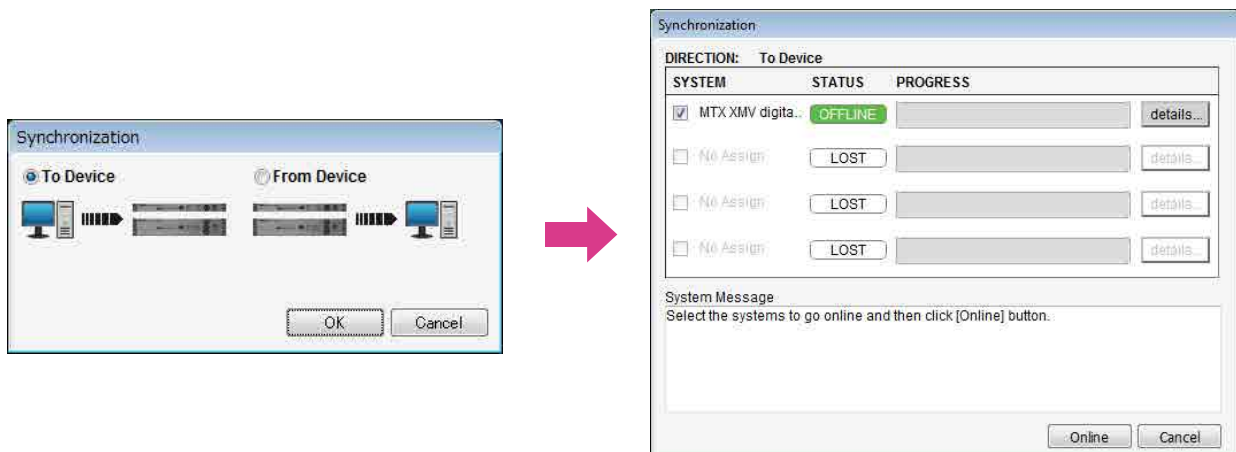

7. **Click [OK].**

> **NOTE**
> In some cases, Windows firewall may block MTX Editor when you make this setting. Select the [Private Network] check box, and click [Allow Access].

Taking MTX Editor online

In the upper right of MTX Editor, click the [Online] button. When the unit has successfully come online, the indicator 1 at the left will light blue.

When the "Synchronization" dialog box appears, select "To Device," and click the [OK] button. When the indication in the dialog box has switched, select the system that you want to place online, and click the [Online] button.
The project created in MTX Editor will be sent to the MTX.

Making XMV settings

If necessary, use the XMV's front panel to make settings such as the high pass filter. For more about the settings you can make on the XMV, refer to the XMV owner's manual.

Verifying that the settings were applied

The main items to verify are listed below. For details on each parameter setting, refer to "MTX Editor User's Manual."

1. Recall the Basic preset.

2. Using the oscillator in the "ROUTER" screen, adjust the output level.

Adjust the amp's attenuator value to an appropriate level.

3. Specify the gain from the microphone.

You can set the gain in the dialog box that appears when you press the parameter recall button for a port or external device of an input channel in the "MAIN" screen. Watch the input meter, and adjust the setting appropriately.

4. Set the input levels and output levels.

Using the input/output faders in the "MAIN" screen, adjust the levels. As necessary, apply the output limiter in the "CHANNEL EDIT" screen to prevent your speakers from being damaged.
Adjust the amp attenuator values to obtain the optimal S/N ratio.
In addition, make FBS settings as necessary.

5. Store the Basic preset.

Store by overwriting the previously-specified content.

6. Recall the Party preset.

Verify that the audio from the wireless microphone is also heard in Hall B.
If you're not using Recall Filter, perform steps 2 through 4 before you overwrite-store the Party preset.

7. Check the DCP settings.

Verify that the DCP operates as you expect.
Check these for each preset.

When you have finished making all settings, save the project and switch MTX Editor offline.
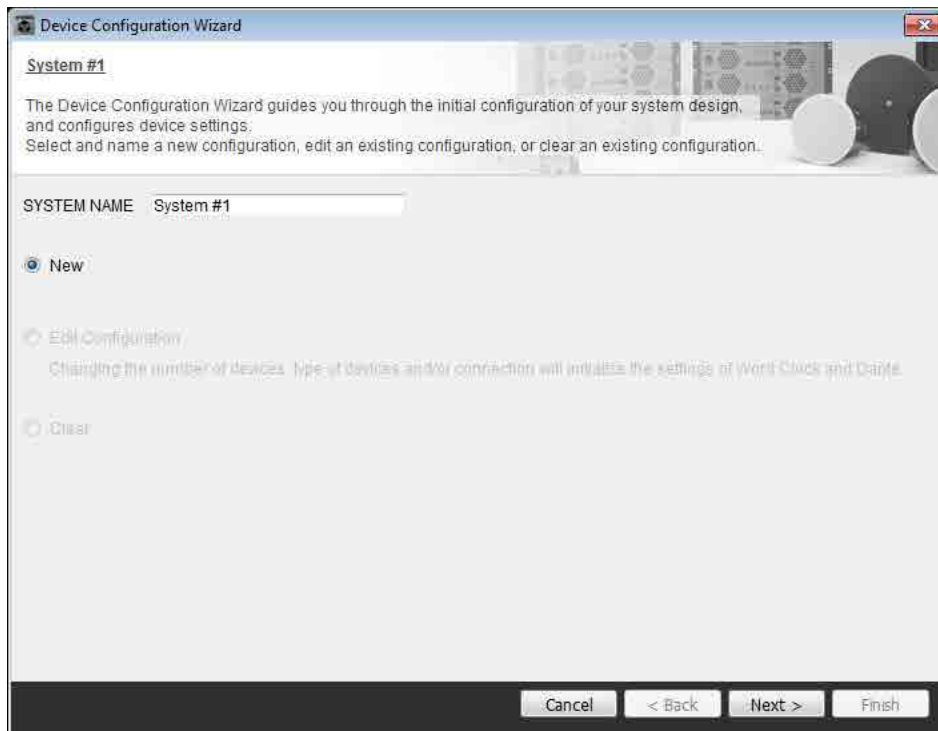
This completes the settings for example 2.

Example 3) Using cascade mode to add MTX input channels (analog connection)

## Using the Device Configuration Wizard to create your device setup

You will use MTX Editor's wizard to create your device setup before actually connecting your equipment.
After you've made basic settings, you'll be able to print information about system cabling and ID numbers.
Use the following procedure to make basic settings.

1. **Type a name for the MTX system you'll be constructing, and click [Next>].**

2. Specify the number of units that will be connected in your MTX system, and click [Next>].

Specify "2" as the number of "YDIF Connected" MTX3 units, and specify "1" as the number of "ANALOG Connected" XMV4280.
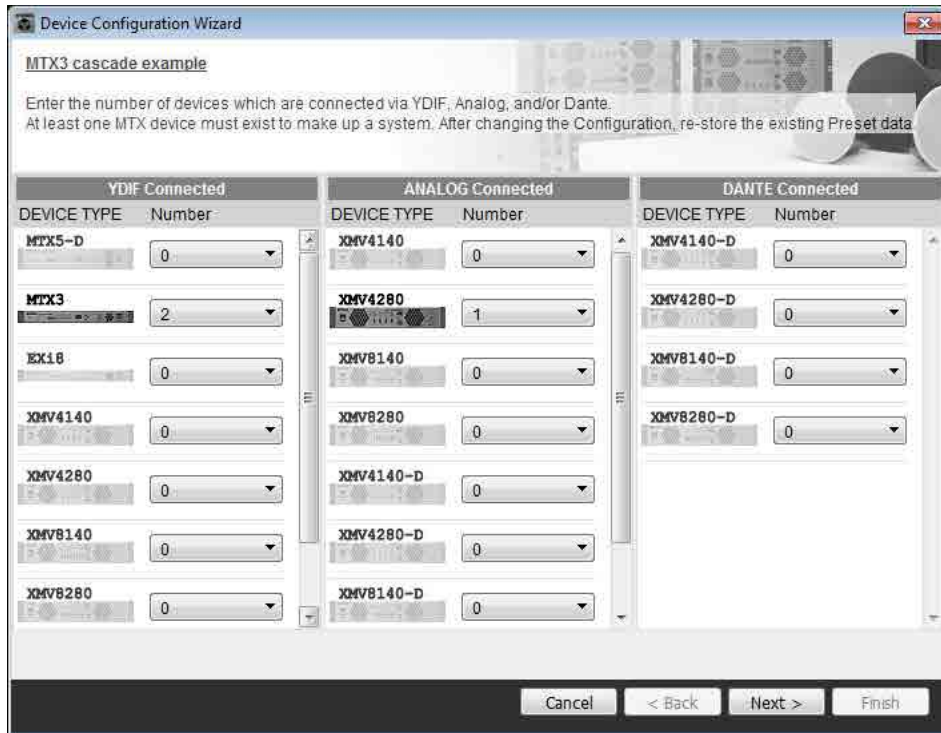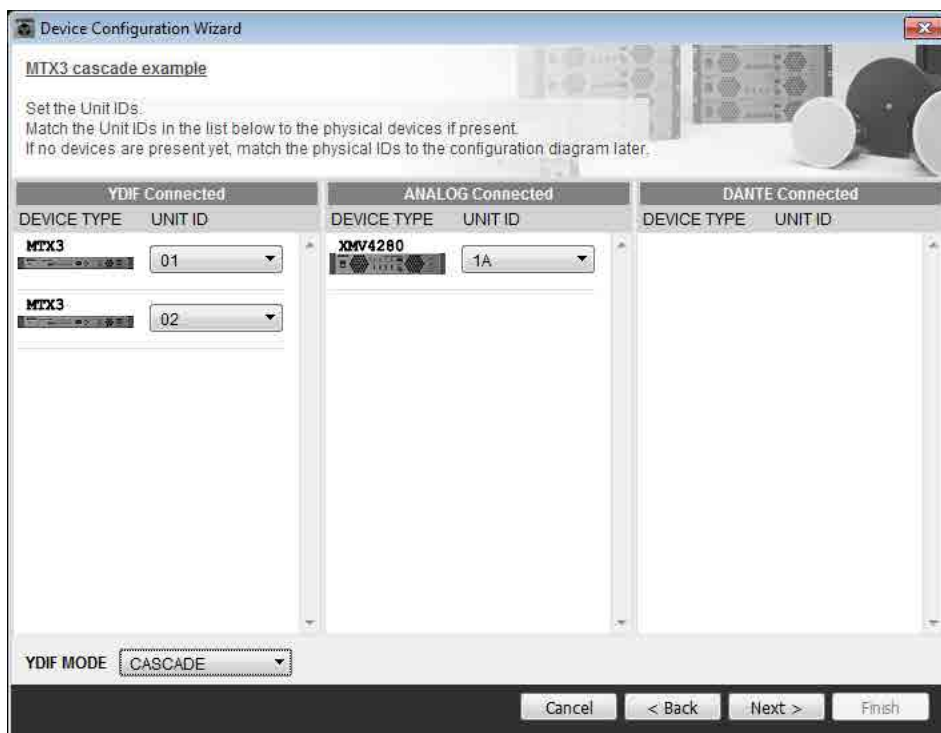

3. Specify the YDIF MODE to CASCADE, and then click [Next>].

A dialog box will appear when you change this to CASCADE; click [OK].
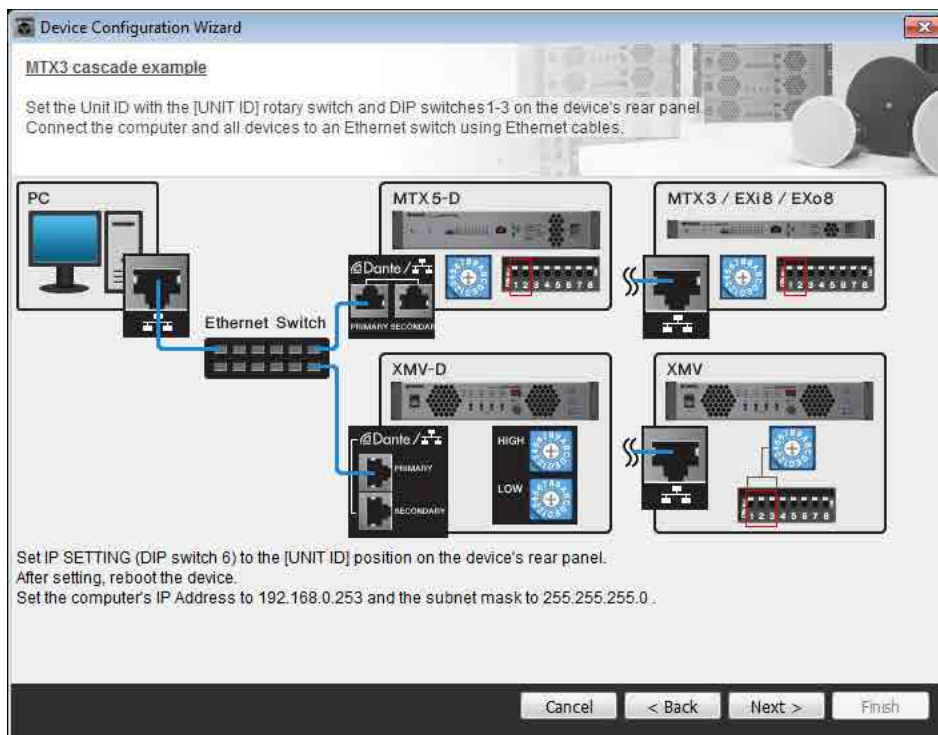Unless you have specific reasons for doing so, use the UNIT ID that is assigned.
In this example, set the XMV's UNIT ID to 1A so that we can explain how to change the UNIT ID.

4. **Set the [UNIT ID] rotary switch and DIP switch of the MTX and XMV.**

You will set the computer's IP address after completing the wizard, in "Specifying the computer's TCP/IP address."
If the MTX and XMV are not nearby, you can set them during the step "Connecting the equipment."

Make the following settings.

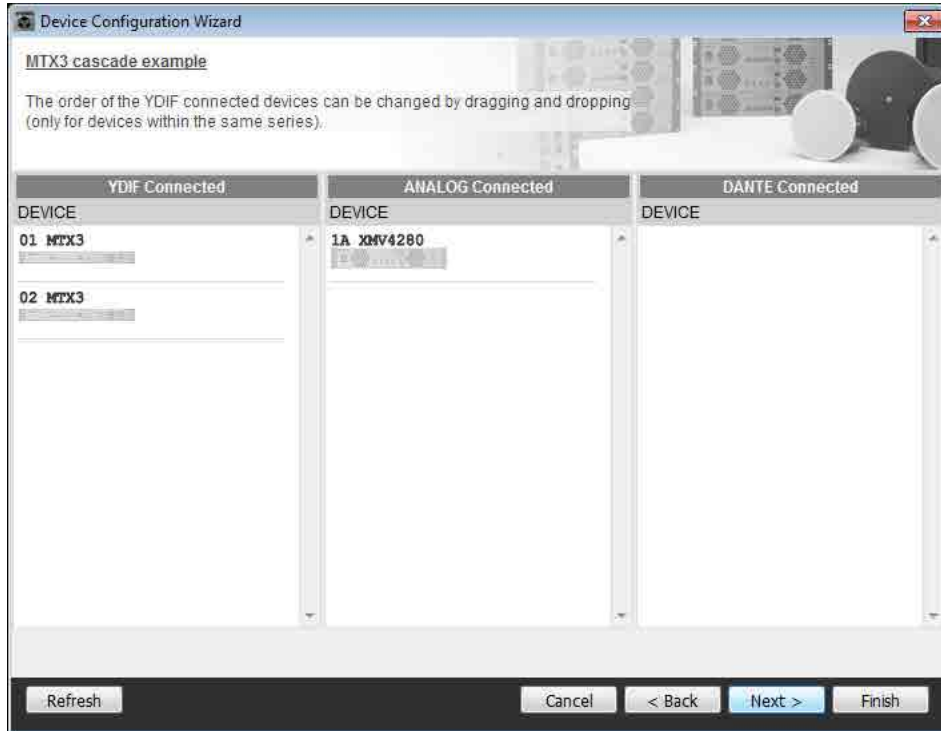| MTX3		UNIT ID = 01
		[UNIT ID] rotary switch = 1 DIP switches are all OFF (upward)
MTX3		**UNIT ID = 02**
		[UNIT ID] rotary switch = 2 DIP switches are all OFF (upward)
XMV		**UNIT ID = 1A**
		[UNIT ID] rotary switch = A DIP switch 1 is ON (downward), others are OFF (upward)

NOTE
Use the DIP switch to specify the upper digit of the UNIT ID, and use the [UNIT ID] rotary switch to specify the lower digit. For details, refer to the owner's manual of each unit.

UNIT ID = 1 A

Lower digit: specify using the rotary switch

Upper digit: specify using DIP switch 1–3
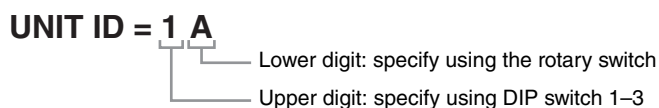
5. **When you have finished setting the [UNIT ID] rotary switch and DIP switch of the MTX and the XMV, click [Next>].**
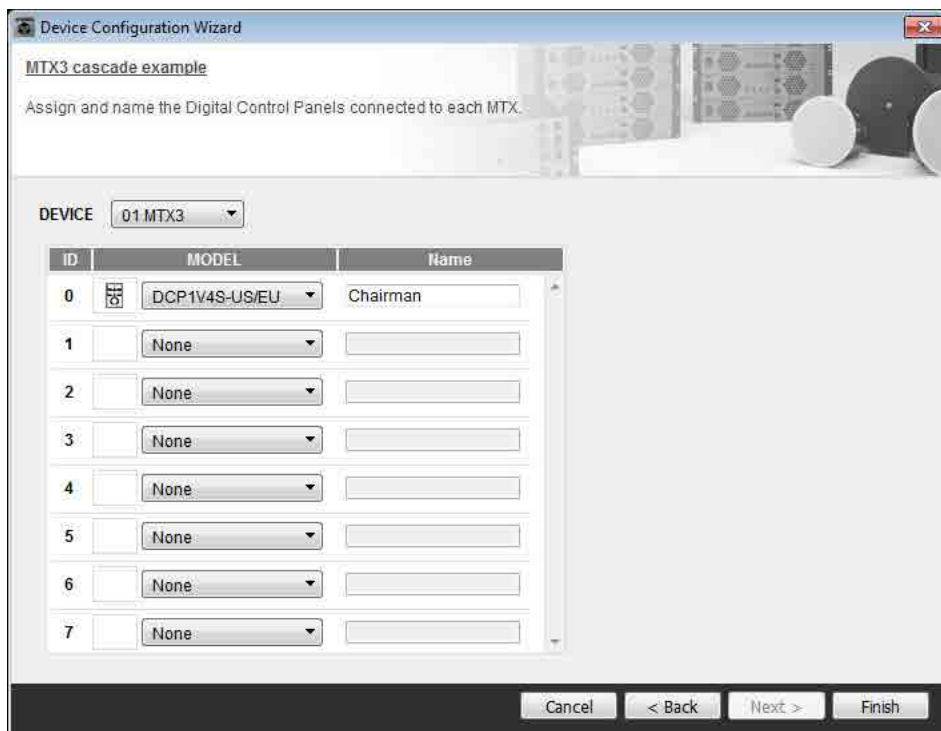
**6.** **Verify that the MTX and XMV are shown in the screen, and click [Next>].**

7. **Choose the model of DCP that is connected to the MTX, enter a device name, and click [Finish].**
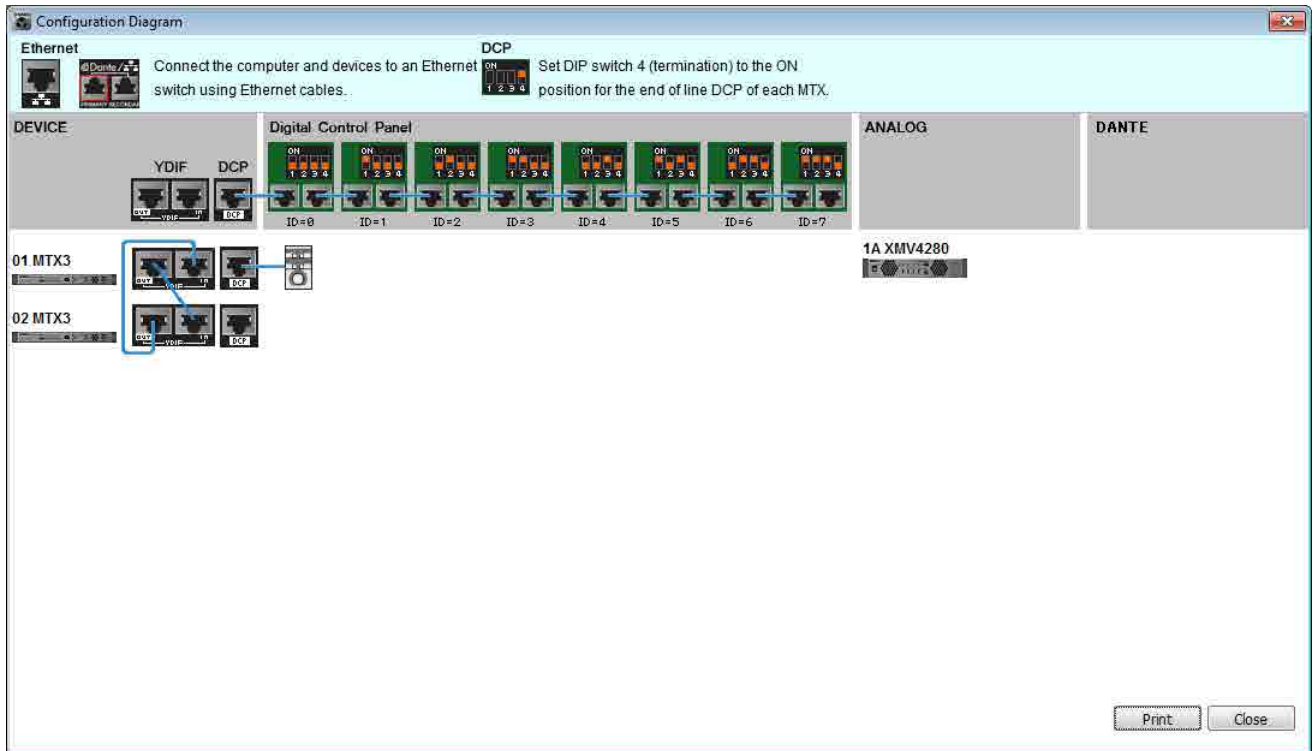
Since one DCP1V4S will be connected to the UNIT ID=01 MTX3, choose [01 MTX3] for Device, and register the one DCP unit.
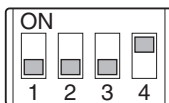
8. **When you see the dialog box "Display the configuration diagram? The diagram can also be printed." click [Yes].**
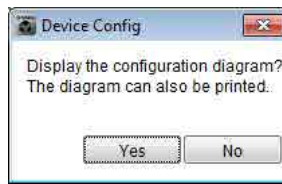
A cabling diagram will appear. If you want, click [Print] to print the diagram.
To close the screen, click [Close].

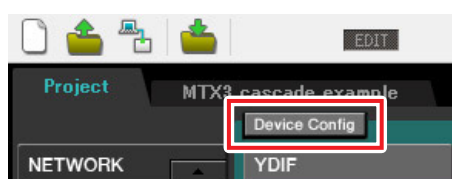Set the DIP switches of the DCP units as shown in the "Digital Control Panel" section of the schematic diagram.
For the last DCP (ID=0), set DIP switch 4 ON (upward).

NOTE
If you want to view the cabling diagram again, do so by choosing [File] menu → [Print Configuration Diagram].

If you want to use the Device Configuration Wizard to change the device configuration, click the [Device Config] button in the Project screen.

Making preliminary settings in MTX Editor

Here's how to make detailed MTX system settings in MTX Editor.
When you've finished making settings, you should save them by clicking [File] menu, then [Save].

NOTE
The "User Account Control" dialog box may appear. Click [Continue] or [Yes].

■ Making EXT. I/O settings

Here you'll make settings for inputting analog audio into the XMV.
Move to the System screen by clicking the tab of the system name you specified in step 1 of "Using the Device Configuration Wizard to create your device setup."
If you're using an amp other than the XMV, proceed from "Specifying the MTX configuration."

1. Click the [EXT. I/O] button.

The output setting screen will appear.
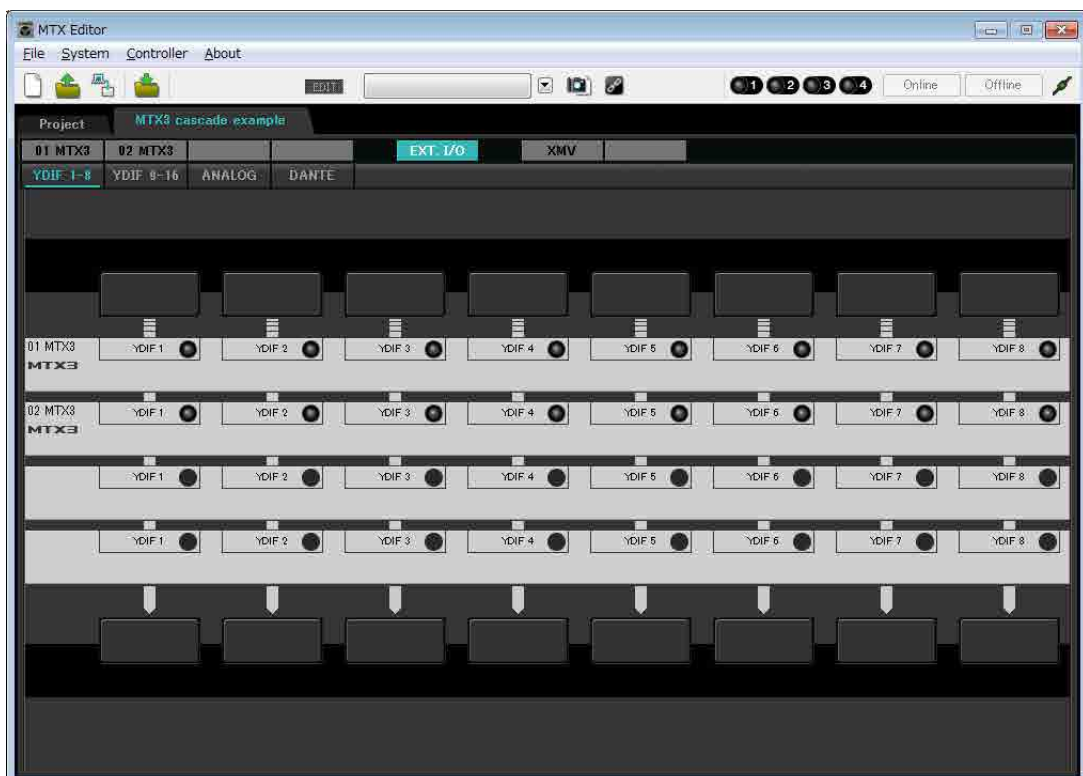
2. Click the [ANALOG] button.

The MTX analog output setting screen will appear.

3. Click the button located below OUT1.

The "Line Out Patch" dialog box will appear.
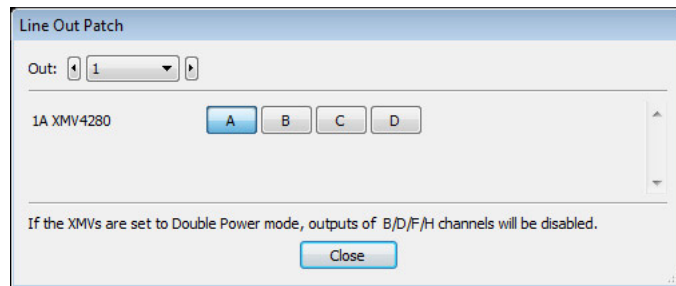
4. **Click the "CHANNEL" [A] button.**

The screen will show that with these settings, analog output 1 of the ID=01 MTX is connected to the CH A analog input of the XMV.

5. **Change the output destination in the [Out:] list box, to assign CH B through CH D of the XMV to OUT 2 through OUT 4, and then click the [Close] button.**

■ Specifying the MTX configuration

Here you'll specify how the MTX's inputs and outputs will be handled.
On the [System] menu, click [MTX Configuration] to open the "MTX Configuration" dialog box.
The default settings are shown in the screen below. You can change them as necessary. In this example, we'll use the default settings without change.
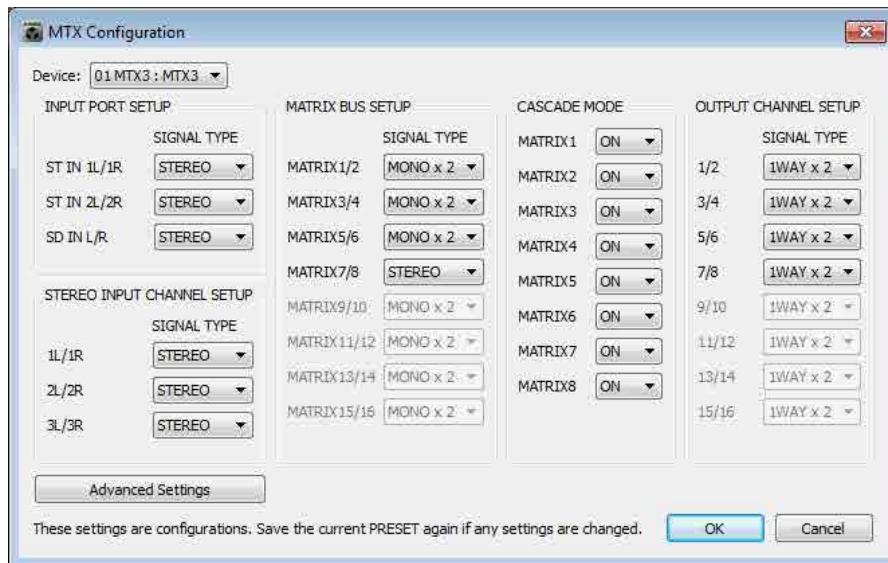
■ Settings in the "MAIN" screen

In the "MAIN" screen you can make overall settings for each channel.
For details on each parameter, refer to "MTX Editor User's Manual."
You'll make these settings for both MTX units, UNIT ID=01 and UNIT ID=02.
Here you'll make the following settings.

- Channel name
- Channel on/off
- Gain and phantom power
- (As necessary) EQ settings

● ID=01

● **ID=02**

● INPUT settings

- Port select button
- Port/External Device parameter access button
- EQ/HPF
- FBS (Feedback suppressor)
- [ON] button
- Fader
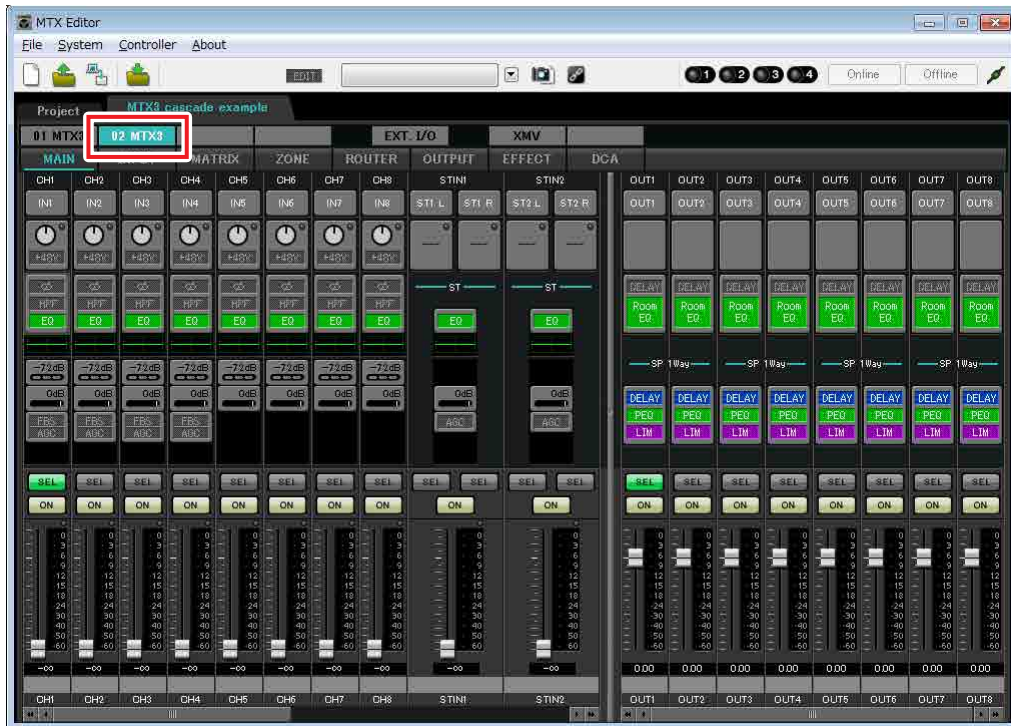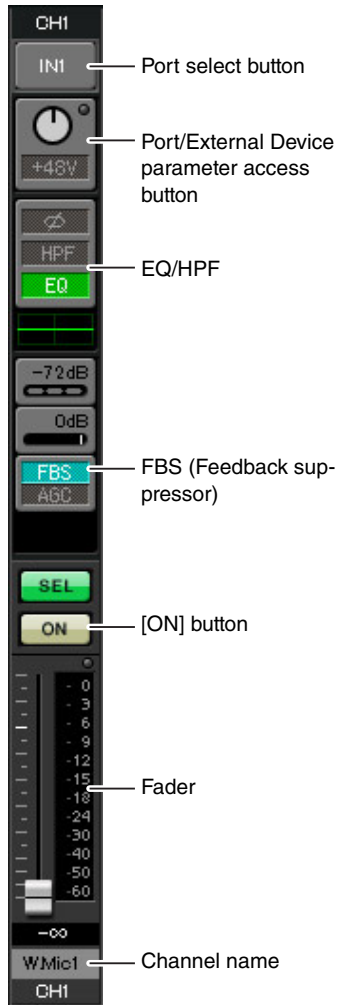- Channel name

Port select button

When you click this, the "Input Patch" dialog box will open. In this example we are using the default settings, but if you want to switch to a different input port of the MTX, click this button, choose the desired input port, and then click the [Close] button.

Port/External Device parameter access button

This button lets you adjust the gain and turn phantom power on/off. When you click the button, a popup window will appear, allowing you to adjust the gain and turn phantom power on/off. Make the desired settings, and then in the upper right, click × to close the popup window. The appropriate gain level will depend on the devices that are connected, so set the level appropriately for your devices.

For channels 1 through 8, the gain is set to 30 dB by default. Because a condenser microphone is connected to CH8 of UNIT ID=01, leave the gain at 30 dB and turn phantom power on. For the other channels to which wireless microphones are connected, lower the gain to 0 dB.

EQ/HPF (High Pass Filter)

Click this to switch to the "CHANNEL EDIT" screen. Adjust the EQ and HPF appropriately for the microphone you're using. For ST IN, only EQ is available. When you want to return to the "MAIN" screen, click the [MAIN] button.

FBS (Feedback suppressor)

FBS is provided on input channels 1 through 4. We recommend that microphone inputs, and particularly movable microphones such as wireless microphones, be connected to channels 1 through 4. When you click here, you will switch to the FBS setting screen.
When you want to return to the "MAIN" screen, click the [MAIN] button.
For details on FBS settings, refer to "MTX Editor User's Manual."

[ON] button

This turns the channel on/off. You should turn off unused channels.

Fader

This adjusts the input level. Leave the fader at -∞ until the system goes online.

Channel name

You can double-click this to edit the name.
In this example, names have been assigned as follows.

UNIT ID = 01	CH1	W.Mic1
	CH2	W.Mic2
	CH3	W.Mic3
	CH4	W.Mic4
	CH5	W.Mic9
	CH6	W.Mic10
	CH7	W.Mic11
	CH8	Chairman
	STIN1	CD Player
	STIN2	Computer
	STIN3	SD Player

UNIT ID = 02	CH1	W.Mic5
	CH2	W.Mic6
	CH3	W.Mic7
	CH4	W.Mic8

The UNIT ID = 01 MTX is the base unit, and the UNIT ID = 02 MTX is for expanding the number of microphones. Since wireless microphones are susceptible to feedback because of their mobility, we assign them preferentially to CH1 through CH4, which are equipped with FBS (feedback suppressor).

● OUTPUT settings
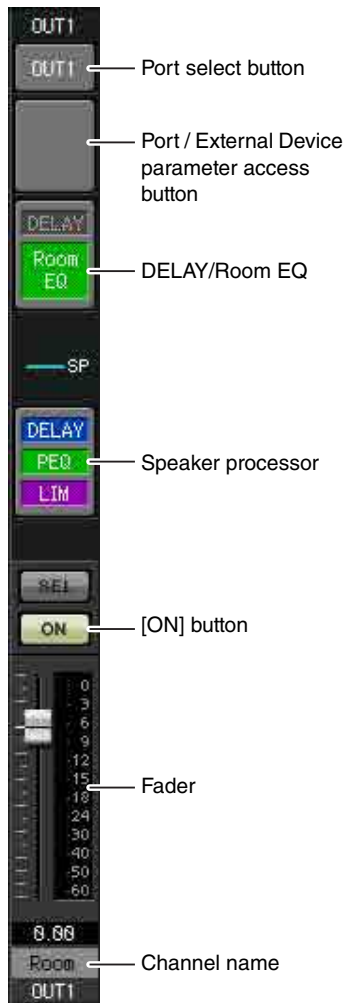
Port select button

Click this to open the "Output Patch" dialog box. In this example we will use the default settings, but if you want to use a different output port of the MTX, click this button, choose the desired output port, and then click the [Close] button.

Port / External Device parameter access button

When you click this button, a popup window will appear, allowing you to set the MTX's output connector parameters and the parameters of the external device(XMV) associated with the channel. Verify that GAIN is set to 0.0 dB.

DELAY/Room EQ

Click this to move to a screen where you can set delay and room EQ.

Speaker processor

Click this to move to the "CHANNEL EDIT" screen. Make the appropriate settings for the speakers that will be connected.

> **NOTE**
> The pre-installed library contains speaker processor files that are appropriate for the response of various speakers. By using these files you can make speaker processor settings easily.

[ON] button

This button turns the channel on/off. Turn off unused channels.

Fader

This adjusts the output level.

Channel name

You can double-click this to edit the name.
In this example, names have been assigned as follows.

UNIT ID = 01	OUT1	Room

■ Settings in the "MATRIX" screen

Here you can specify which input channel will be sent to which zone. For details on send level and other parameters, refer to "MTX Editor User's Manual."
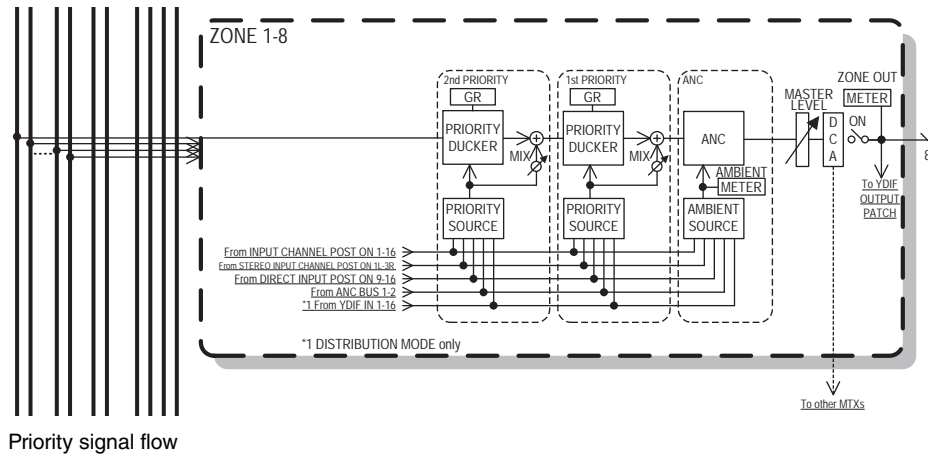
● ID=01

● ID=02

In this example, make the settings shown in the above illustration. Clicking a cross point (a square area) or dragging cross points will switch it on/off. If you right-click on a cross point, a context menu appears. You can select [All OFF] to turn off all cross points. The cross point shows the send level as the amount of green.

With these settings, all input signals other than the microphone at the chairman's seat (CH8 of ID=1) are handled in the same way. To give the microphone at the chairman's seat higher priority than the other signals, it is assigned to 1st Priority in the following "ZONE" screen. When CH8 is turned on in MATRIX, the signal from the matrix (attenuated) will be combined with the signal from Priority, and output together.

For the input channel faders in the lower left of the screen, the grayed-out faders show input levels, and the other faders show input channel send levels. Grayed-out faders cannot be operated in this screen.

Priority signal flow

■ Settings in the "ZONE" screen

In the "ZONE" screen you can make Priority DUCKER settings. The Priority Ducker function temporarily attenuates the inputs from other channels when audio is input from a specified input channel, ensuring that the audio from the specified input channel will be broadcast clearly. Priority is given in the order of "1st PRIORITY > 2nd PRIORITY >Matrix Out signals."

In this example, the chairman's microphone (assigned to CH8 of UNIT ID=01) has the highest priority. Thus, we select CH8 as the PRIORITY SOURCE for 1st PRIORITY in ZONE 1, and click the [ON] button located at the right of 1st PRIORITY to make it light. Since there is no need to make settings for ZONE2 through 8, make sure that the [ON] buttons at the right of 1st PRIORITY and 2nd PRIORITY are unlit (turned off).

Use the ZONE select buttons to switch the zone.

For details on each parameter, refer to "MTX Editor User's Manual."

■ Settings in the "ROUTER" screen
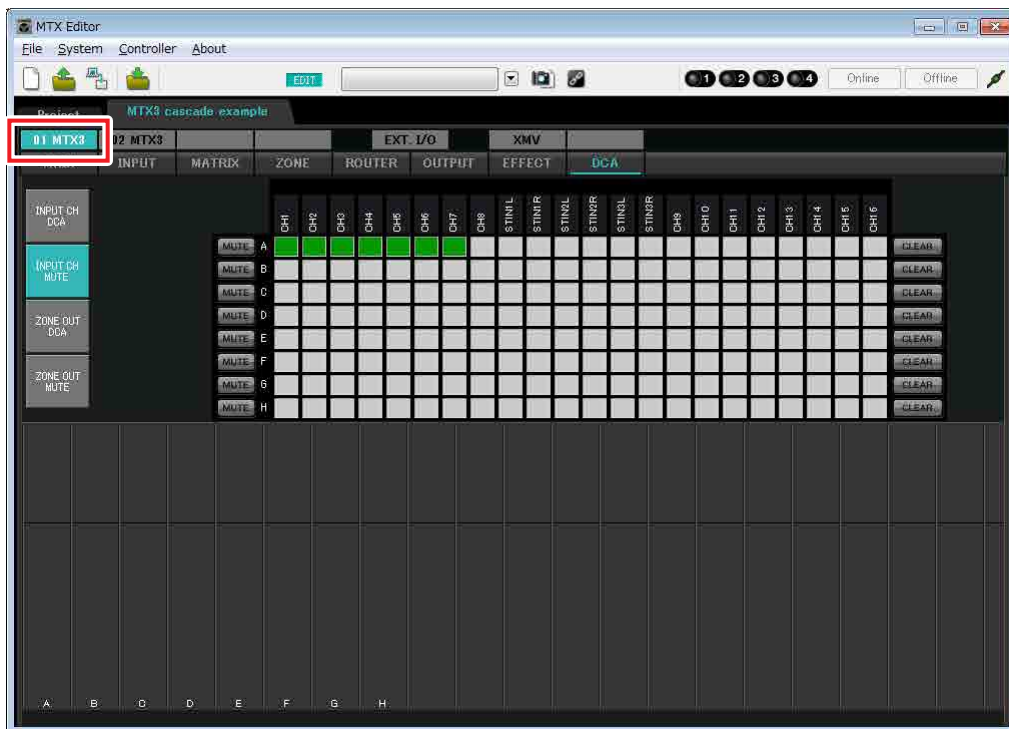
In the "ROUTER" screen you can assign zones to outputs.
In this example, since ZONE1 will be output to OUTPUT1 through 4, set the MTX units of ID=01 and 02 as shown in the illustration.

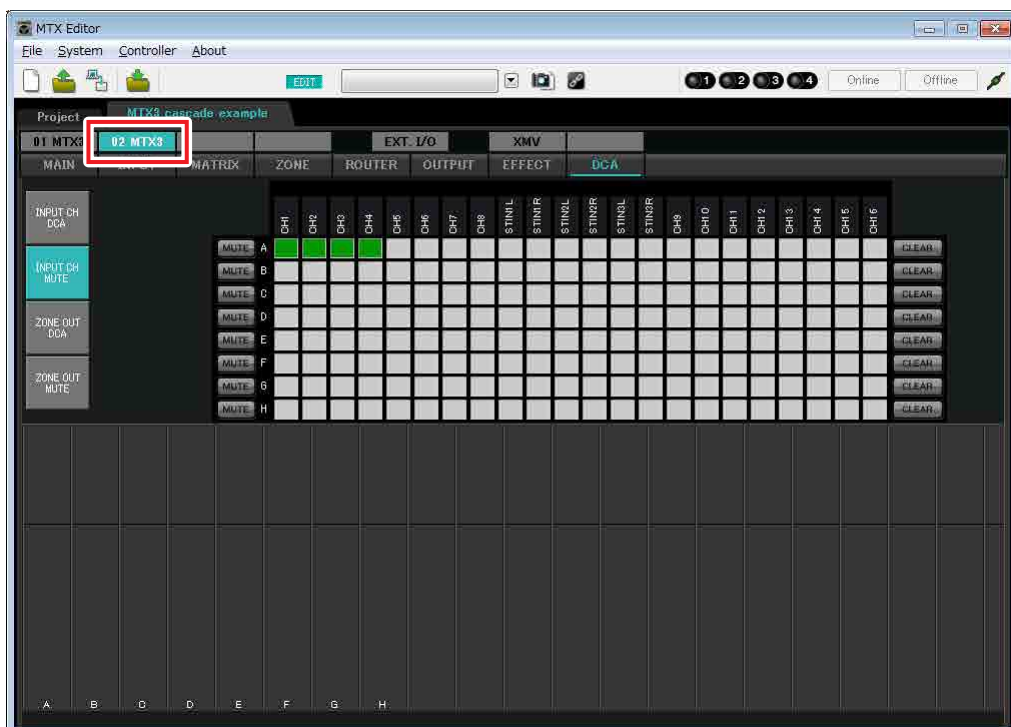■ **Settings in the "DCA" screen (INPUT CH MUTE)**

In the "DCA" screen you can make level and mute settings for multiple channels in a single operation.

● **ID=01**

● **ID=02**

In this example, press the [INPUT CH MUTE] button on the digital control panel at the chairman's seat to mute all microphones other than the chairman's microphone. Turn on CH1 through CH7 of ID=01, and CH1 through CH4 of ID=02.

■ Digital Control Panel (DCP) settings

Here we'll assign functions to the DCP that is located at the chairman's seat.

To make these settings, choose the [Controller] menu item [Digital Control Panel].

When you click one of the numbered buttons, a "Settings" dialog box will appear; assign parameters to the controls.

When you've made the assignments, click to select "01 [No data]" and then click the [Store] button. In the "Store Library" dialog box, change the name to "Basic" and then click the [OK] button.
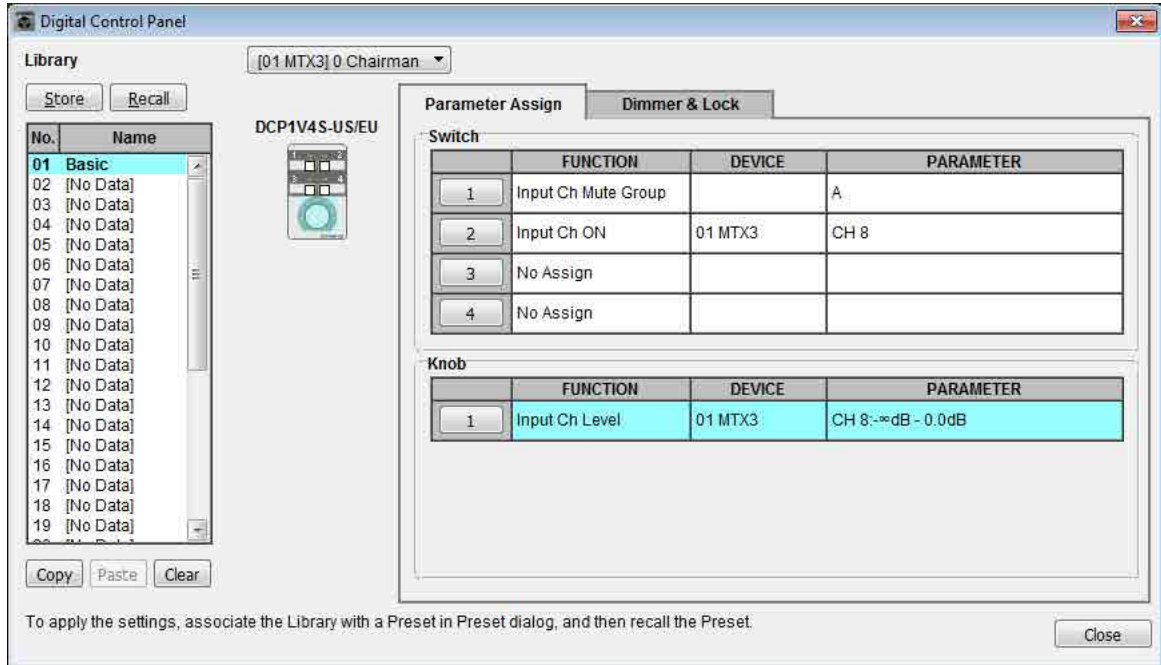
Assign the parameters. If you assigned [SD Song Select & Play], enter the name of the file that you want to play or the name of the folder that contains the file you want to play.

Switch 1 turns mute on/off for the microphone inputs other than the chairman's seat. Switch 2 turns the chairman's microphone on/off. The knob adjusts the input level of the chairman's microphone.

■ Storing a preset

Now we'll store the settings we've made up to this point as a preset.
By recalling presets from the MTX itself or from the DCP, you can switch the settings as appropriate for various situations.
To store or recall a preset, click the camera icon in the upper part of MTX Editor.

When you click the camera icon, the "Preset" dialog box will appear. You can create up to 50 presets.
Click the preset number that you want to store; the line will be selected. Then click the [Store] button, specify the preset name, and click the [OK] button.
Click a location where the DCP column indicates "No Assign," and choose a library that you specified on the DCP.
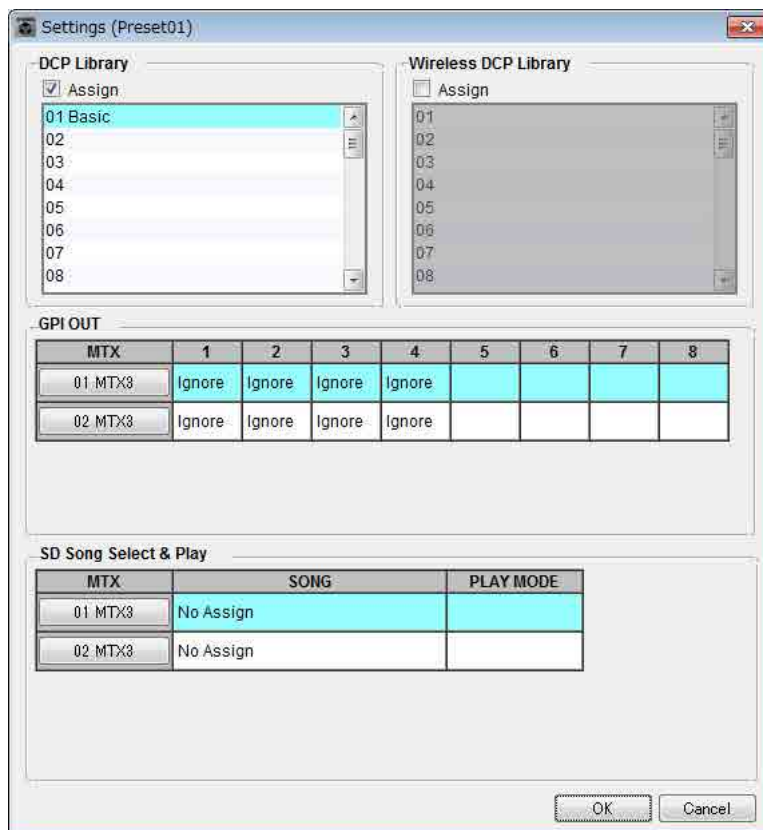
NOTE
If you don't store the preset, alert number 61 will occur.

Up to this point, our settings use all of the microphones connected to MTX units of UNIT ID =01 and 02, but there might be cases in which you want to use a different number of microphones. In such cases, you can limit the number of microphones by turning off the channels of unused microphones in the "MAIN" screen.
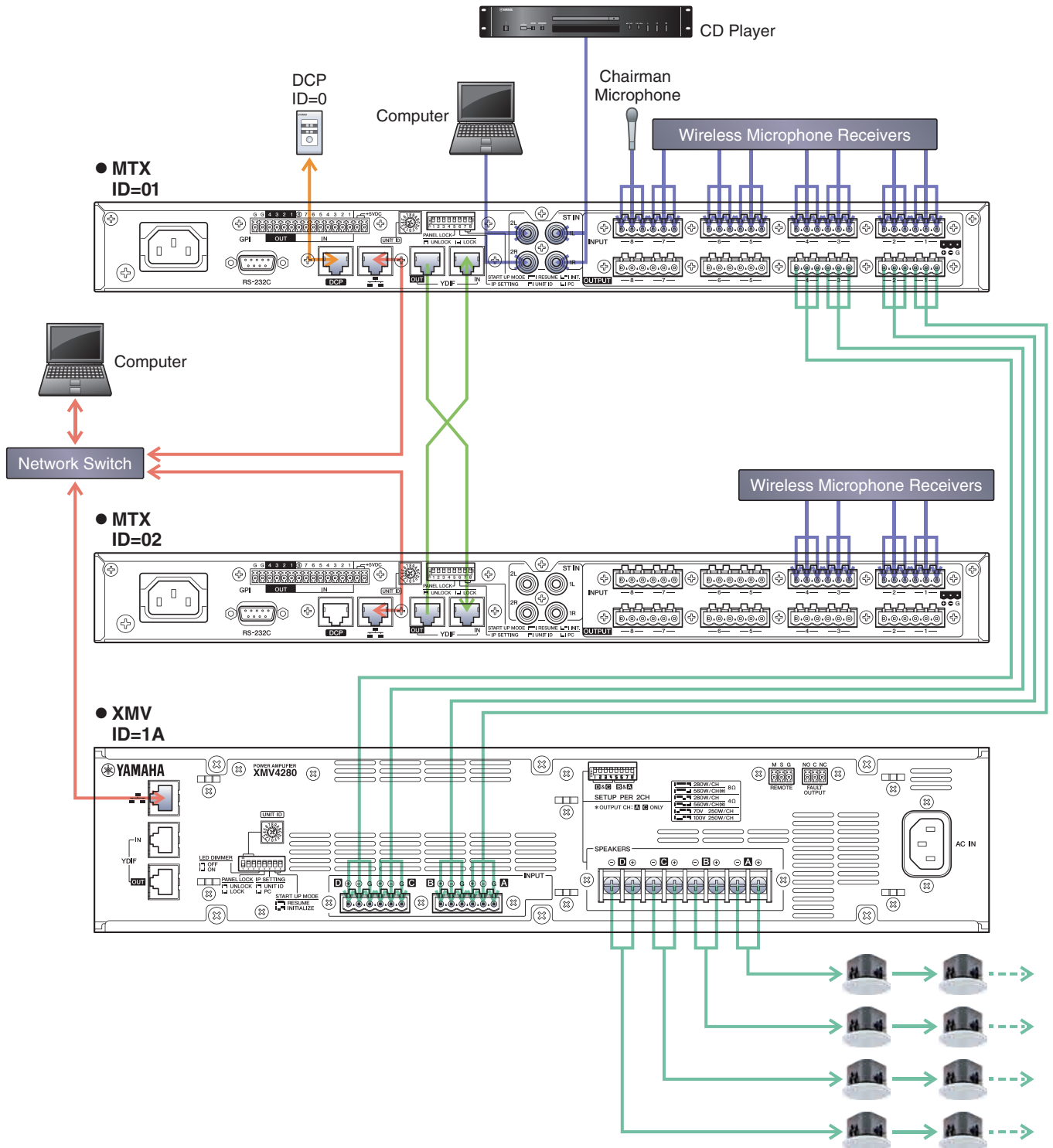
● **ID=01**
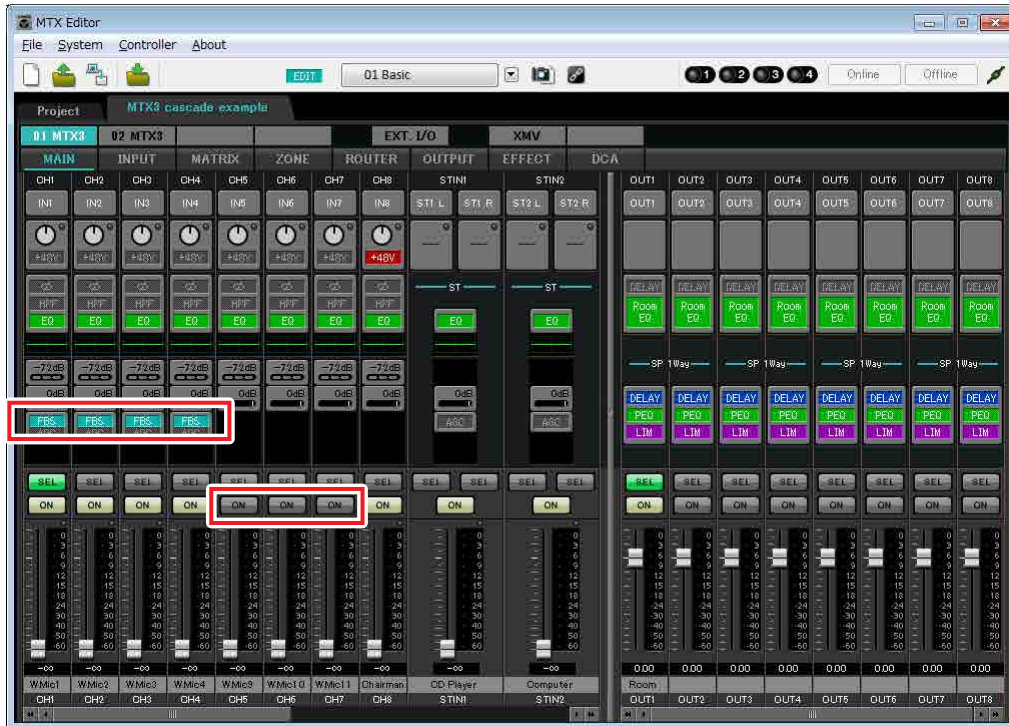
● **ID=02**

If you store these settings as a different preset, you'll be able to easily switch to settings with a limited number of microphones. In the example above, wireless microphones 9 through 11 are not used, so FBS is used on all of the wireless microphones (1 through 8) that are being used.

This completes settings in the offline state. Save the settings once again.

Connecting the equipment

After you've rack-mounted the MTX and your other equipment, connect the MTX and the other equipment as shown below. If you've copied audio sources to an SD memory card, insert the card into the MTX now.

To connect the MTX to your computer, use a CAT5e or higher cable with all eight pins connected.

Powering-on the MTX

Turn on the power of the MTX.
Turn off the amplifier before you power-off the MTX.

Powering-on the amp

On the rear panel of the XMV, set the [SPEAKERS] DIP switch, and then turn on the power of the amps (XMV).
To prevent unwanted sound from being output, we recommend that you turn down the attenuator settings of all channels on the amp itself before you turn it on.
To change the XMV attenuator setting, press the button of the appropriate channel and then turn the encoder.

> **NOTE**
> • With the factory settings, the XMV's attenuators are set to the lowest value.
> • For more about the [SPEAKERS] DIP switch, refer to the XMV owner's manual.

Specifying the computer's TCP/IP address

To allow the MTX and the computer to communicate, specify the computer's TCP/IP as follows.

1. **On the [System] menu, click [Network Setup].**

The "Network Setup" dialog box will appear.

2. **Click [Open Network Connection].**

"Network Connections" will appear.

3. **Right-click the adapter to which the MTX is connected, and choose [Properties].**

The "Local Area Connection Properties" dialog box will appear.

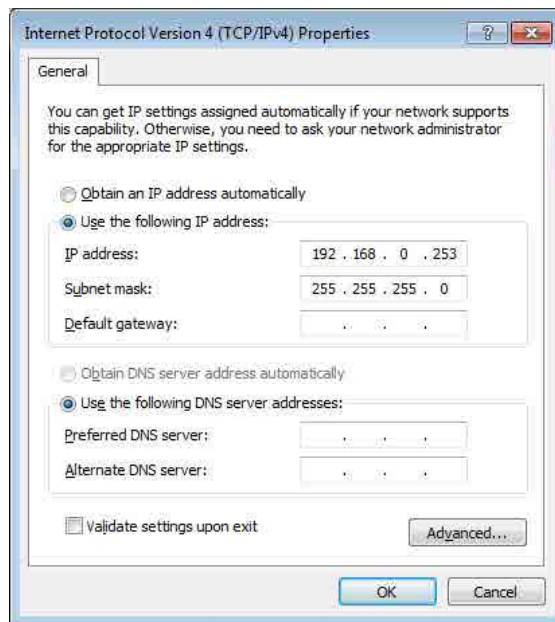**4.** **Choose [Internet Protocol Version 4 (TCP/IPv4)], and then click [Properties].**

The "Internet Protocol Version 4 (TCP/IPv4) Properties" dialog box will appear.

5. **Click [Use the following IP address (S)].**

6. **In the [IP address] box, enter "192.168.0.253"; in the [Subnet mask] box, enter "255.255.255.0."**

> **NOTE**
> The MTX3's IP address is set to "192.168.0.1" and "192.168.0.2," and the XMV's IP address is set to "192.168.0.26."
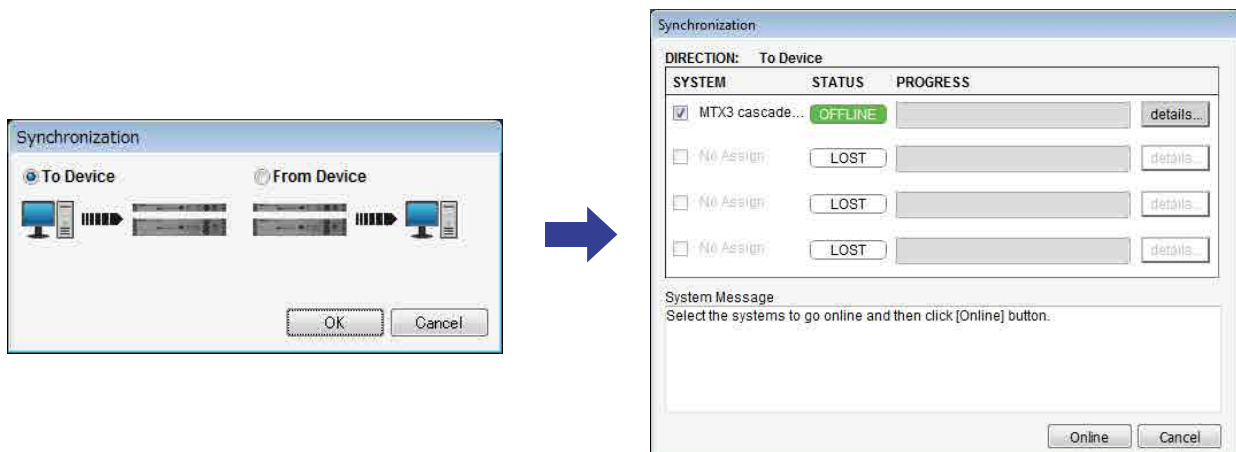

7. **Click [OK].**

> **NOTE**
> In some cases, Windows firewall may block MTX Editor when you make this setting. Select the [Private Network] check box, and click [Allow Access].

Taking MTX Editor online

In the upper right of MTX Editor, click the [Online] button. When the unit has successfully come online, the indicator 1 at the left will light blue.

When the "Synchronization" dialog box appears, select "To Device," and click the [OK] button. When the indication in the dialog box has switched, select the system that you want to place online, and click the [Online] button.
The project created in MTX Editor will be sent to the MTX.

Making XMV settings

If necessary, use the XMV's front panel to make settings such as the high pass filter. For more about the settings you can make on the XMV, refer to the XMV owner's manual.

Verifying that the settings were applied

The main items to verify are listed below. For details on each parameter setting, refer to "MTX Editor User's Manual."

1. **Recall the Basic preset.**

2. **Using the oscillator in the "ROUTER" screen, adjust the output level.**

Adjust the amp's attenuator value to an appropriate level.

3. **Specify the gain from the microphone.**

You can set the gain in the dialog box that appears when you press the parameter recall button for a port or external device of an input channel in the "MAIN" screen. Watch the input meter, and adjust the setting appropriately.

4. **Set the input levels and output levels.**

Using the input/output faders in the "MAIN" screen, adjust the levels. As necessary, apply the output limiter in the "CHANNEL EDIT" screen to prevent your speakers from being damaged.
Adjust the amp attenuator values to obtain the optimal S/N ratio.
In addition, make FBS settings as necessary.

5. **Store the Basic preset.**

Store by overwriting the previously-specified content.

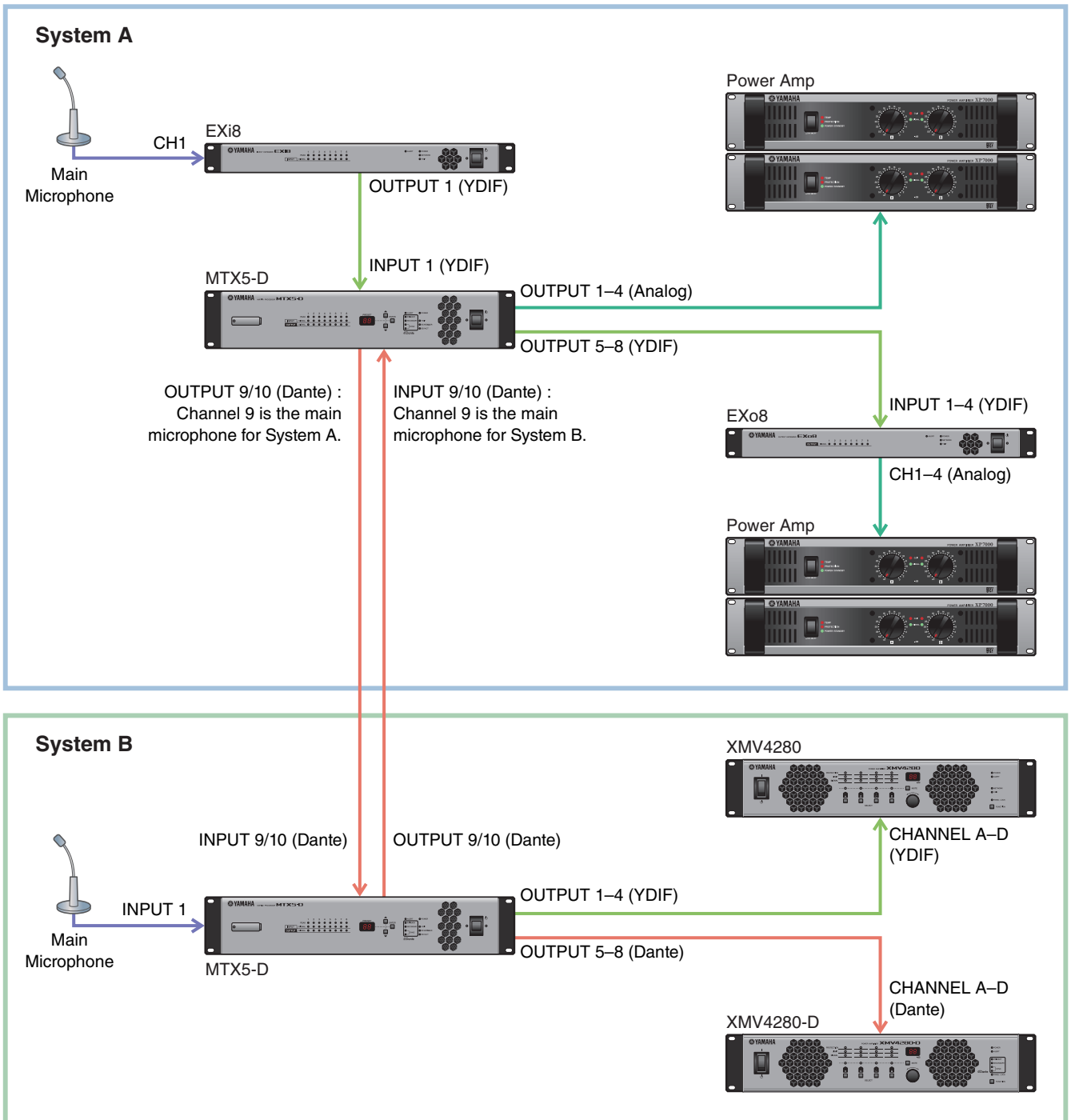**6.** **Check the DCP settings.**

Verify that the DCP operates as you expect.

When you have finished making all settings, save the project and switch MTX Editor offline.

This completes the settings for example 3.

Example 4) A system using Dante

This example assumes an audio signal flow like the one shown below.

System A

Main Microphone

CH1

EXi8

OUTPUT 1 (YDIF)

INPUT 1 (YDIF)

MTX5-D

OUTPUT 1–4 (Analog)

OUTPUT 5–8 (YDIF)

Power Amp

OUTPUT 9/10 (Dante) :
Channel 9 is the main
microphone for System A.

INPUT 9/10 (Dante) :
Channel 9 is the main
microphone for System B.

EXo8

INPUT 1–4 (YDIF)

CH1–4 (Analog)

Power Amp

System B

Main Microphone

INPUT 1

MTX5-D

INPUT 9/10 (Dante)

OUTPUT 9/10 (Dante)

OUTPUT 1–4 (YDIF)

OUTPUT 5–8 (Dante)

XMV4280

CHANNEL A–D
(YDIF)

CHANNEL A–D
(Dante)

XMV4280-D

Example 4) A system using Dante

# Using the Device Configuration Wizard to create your device setup

You will use MTX Editor's wizard to create your device setup before actually connecting your equipment.
After you've made basic settings, you'll be able to print information about system cabling and ID numbers.
Make basic settings for System A, and then make basic settings for System B.
Use the following procedure to make basic settings.

1. **Enter a name for the MTX system that we are calling System A, and then click [NEXT>].**
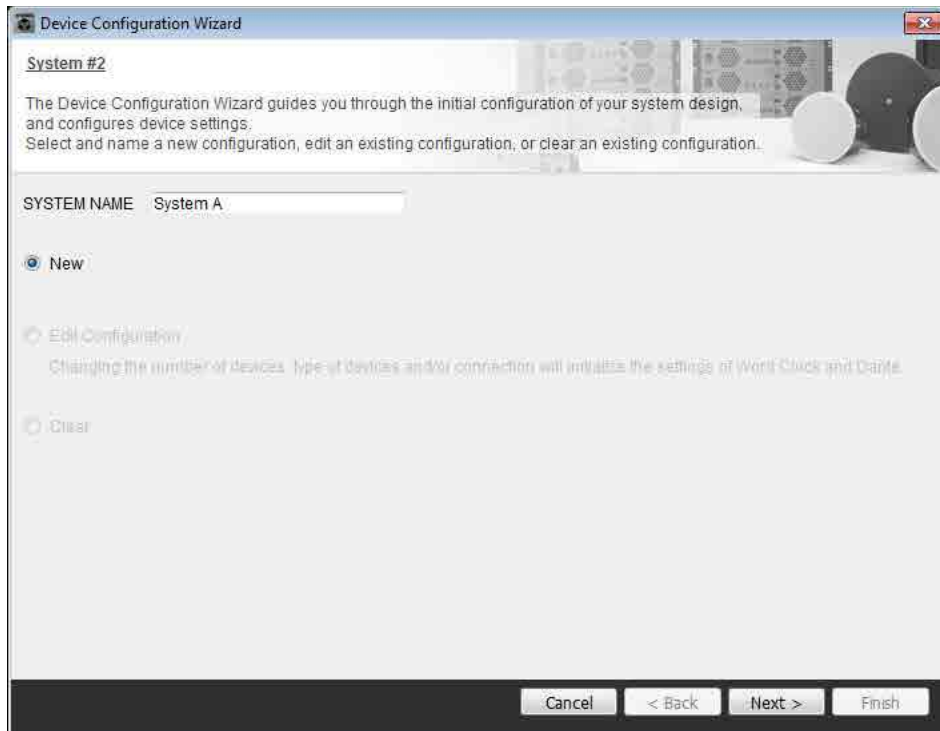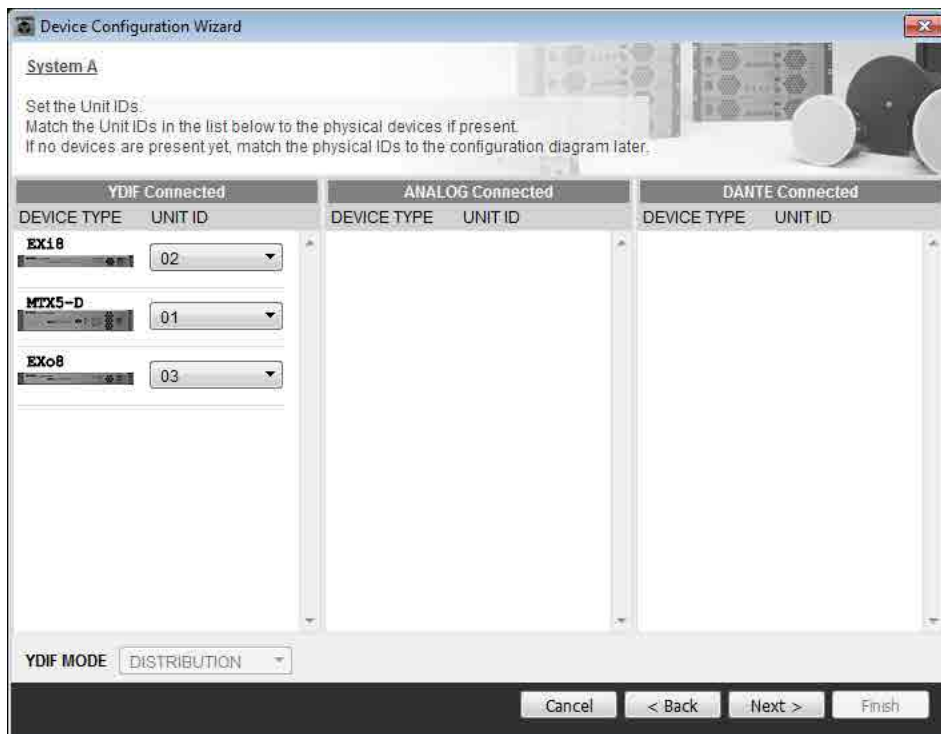

2. **Specify the number of units that will be connected in your MTX system, and click [Next>].**

In "YDIF Connected," specify 1 each as the number of MTX5-D, EXi8, and EXo8 devices.
To make settings for the EXo8, use the scroll bar to make the EXo8 visible.
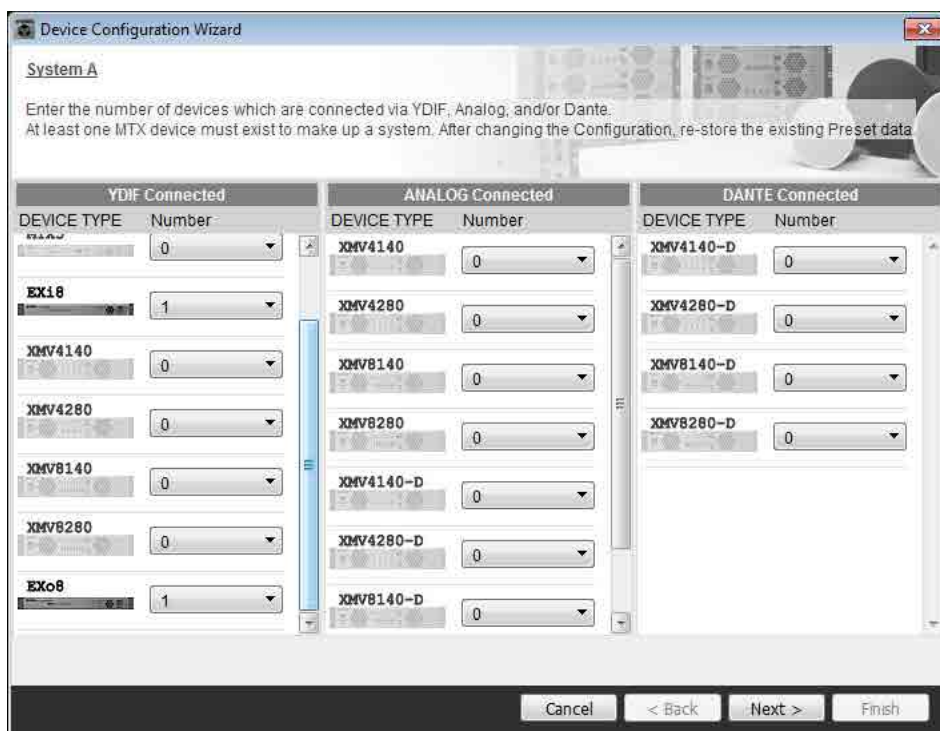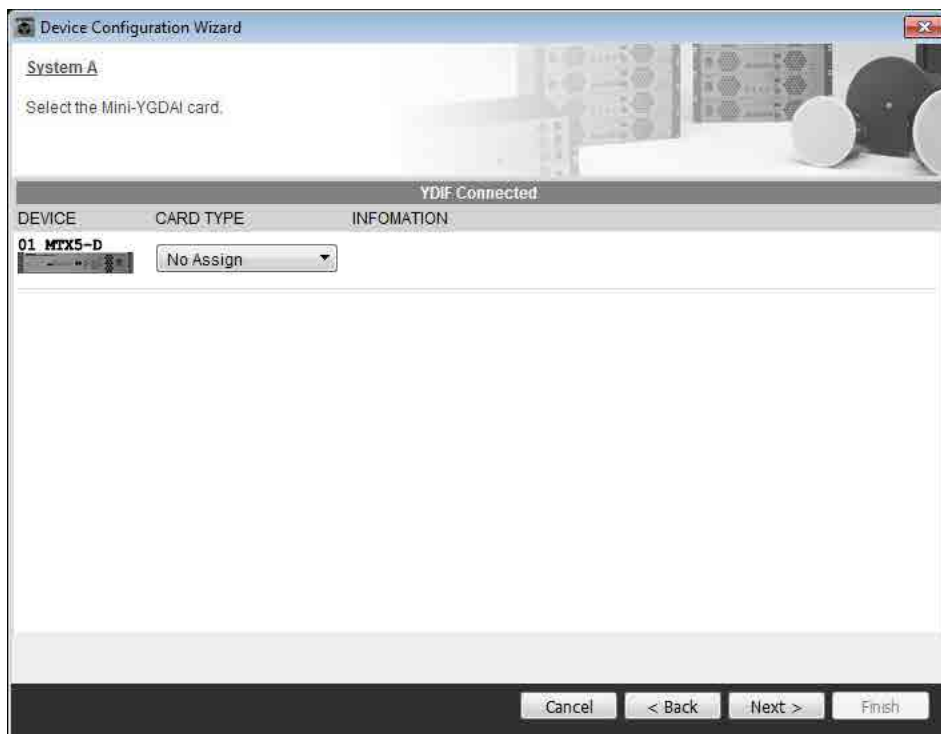
Example 4) A system using Dante

3. **Specify the UNIT ID of each device, and click [Next>].**

Unless you have specific reasons for doing so, use the UNIT ID that is assigned.

**4.** **Select the Mini-YGDAI card, and click [NEXT>].**

In this example we are not using a Mini-YGDAI card, so leave the setting at [No Assign] and click [Next>].
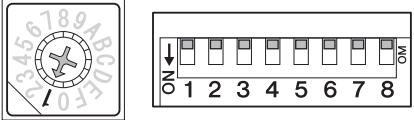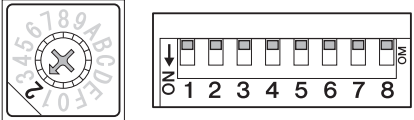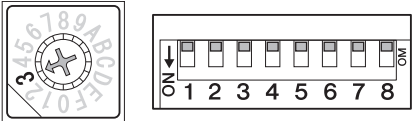
Example 4) A system using Dante

5. **Set the [UNIT ID] rotary switch and DIP switch of the devices.**

You will set the computer's IP address after completing the wizard, in "Specifying the computer's TCP/IP address."
If the devices are not nearby, you can set them during the step "Connecting the equipment."
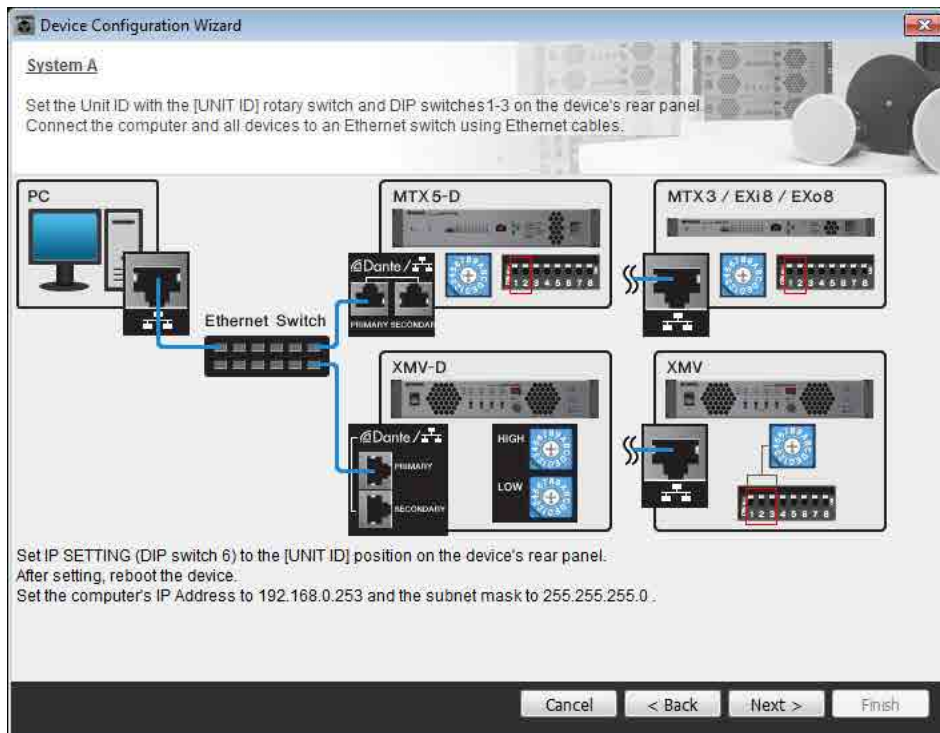
Make the following settings.

MTX5-D	

	UNIT ID = 01
	    [UNIT ID] rotary switch = 1
	    DIP switches are all OFF (upward)

EXi8	

	UNIT ID = 02
	    [UNIT ID] rotary switch = 2
	    DIP switches are all OFF (upward)

EXo8	

	UNIT ID = 03
	    [UNIT ID] rotary switch = 3
	    DIP switches are all OFF (upward)

6. **When you have finished setting the [UNIT ID] rotary switch and DIP switch of the devices, click [Next>].**

Example 4) A system using Dante

7. **Verify that the devices are shown in the screen, and click [Next>].**

8. **Choose the model of DCP that is connected to the MTX, enter a device name, and click [Finish].**

In this example we are not using a DCP, so leave the settings as they are.

Example 4) A system using Dante

9. **When you see the dialog box "Display the configuration diagram? The diagram can also be printed." click [Yes].**

A cabling diagram will appear. If you want, click [Print] to print the diagram.
To close the screen, click [Close].

NOTE
If you want to view the cabling diagram again, do so by choosing [File] menu → [Print Configuration Diagram].

If you want to use the Device Configuration Wizard to change the device configuration, click the [Device Config] button in the Project screen.

Example 4) A system using Dante
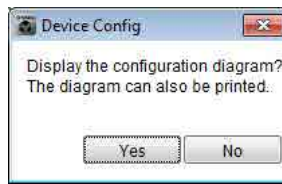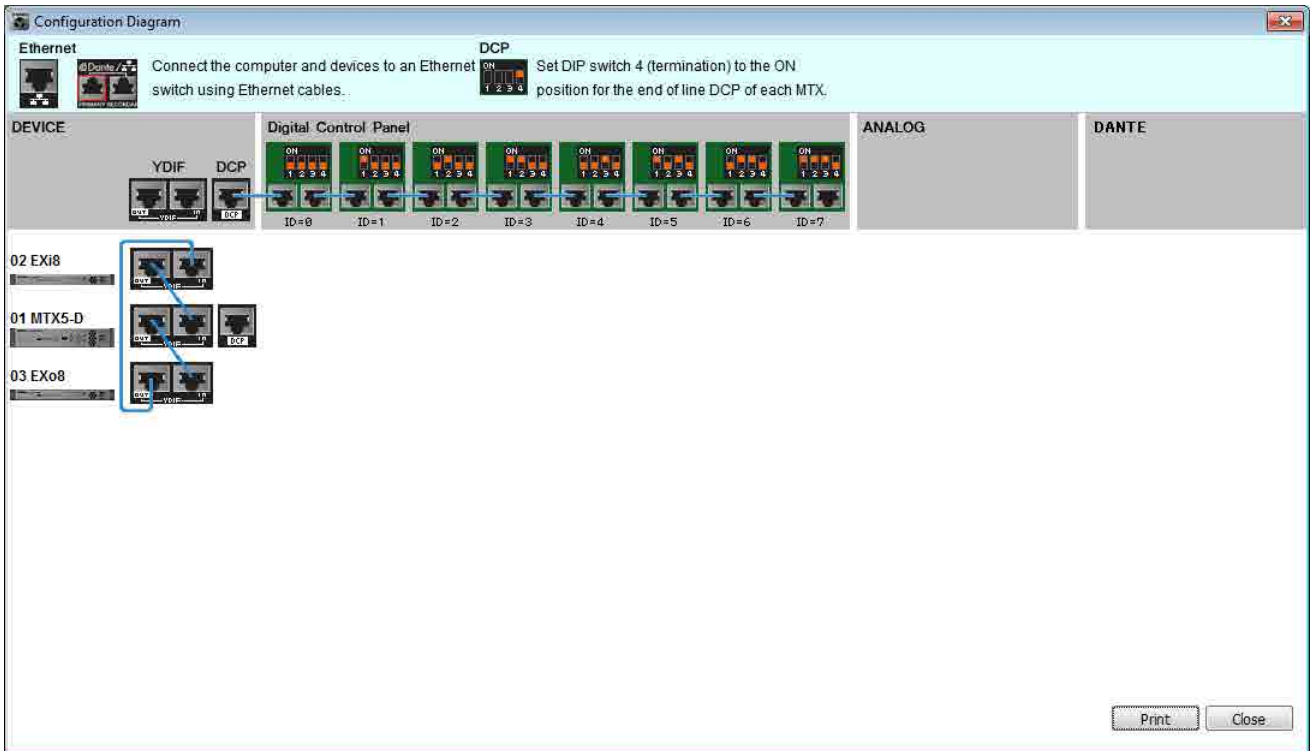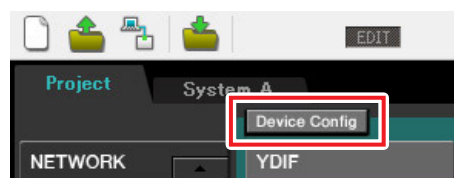
10. In order to make basic settings for System B, click the system select tab [2 No Assign].

Step 11

System select tabs
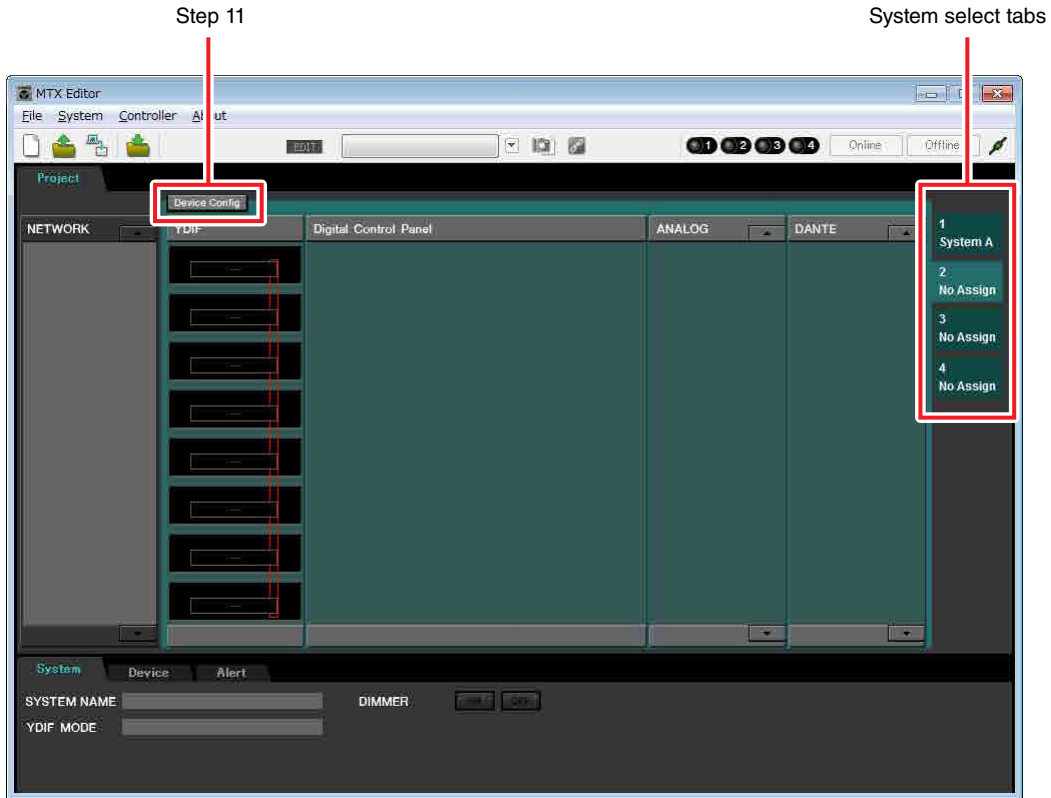
11. Click [Device Config].

The Device Configuration Wizard for System B will appear.

12. Enter a name for the MTX system that we are calling System B, and then click [NEXT>].

Example 4) A system using Dante
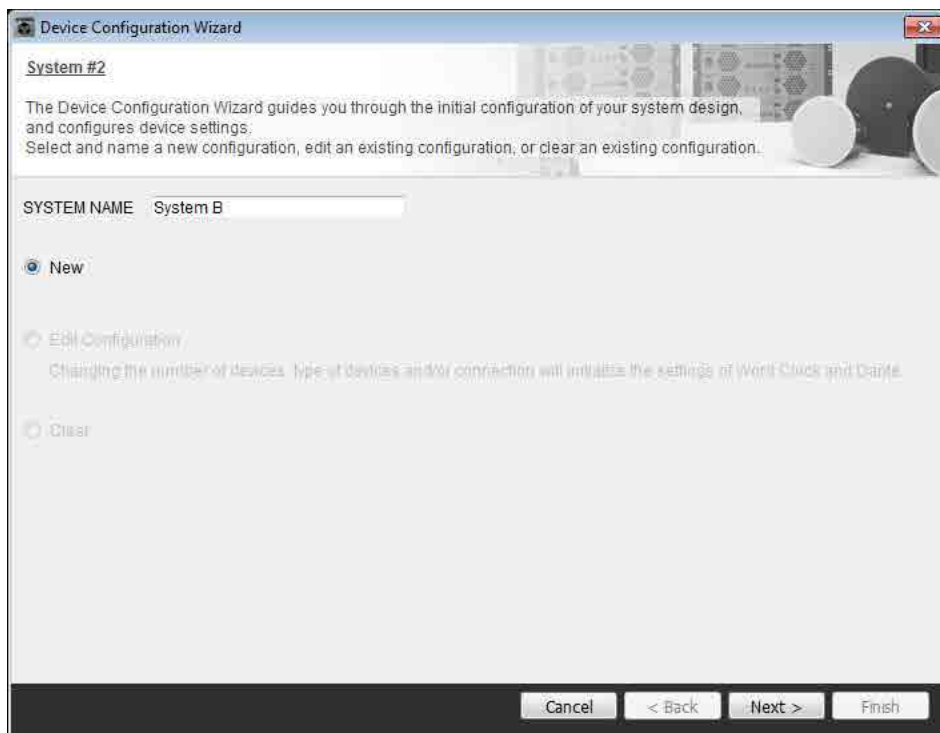
13. **Specify the number of units that will be connected in your MTX system, and click [Next>].**

In the "YDIF Connected" area, specify 1 each as the number of MTX5-D and XMV4280 units; in the "Dante Con-nected" area, specify 1 as the number of XMV4280-D devices.
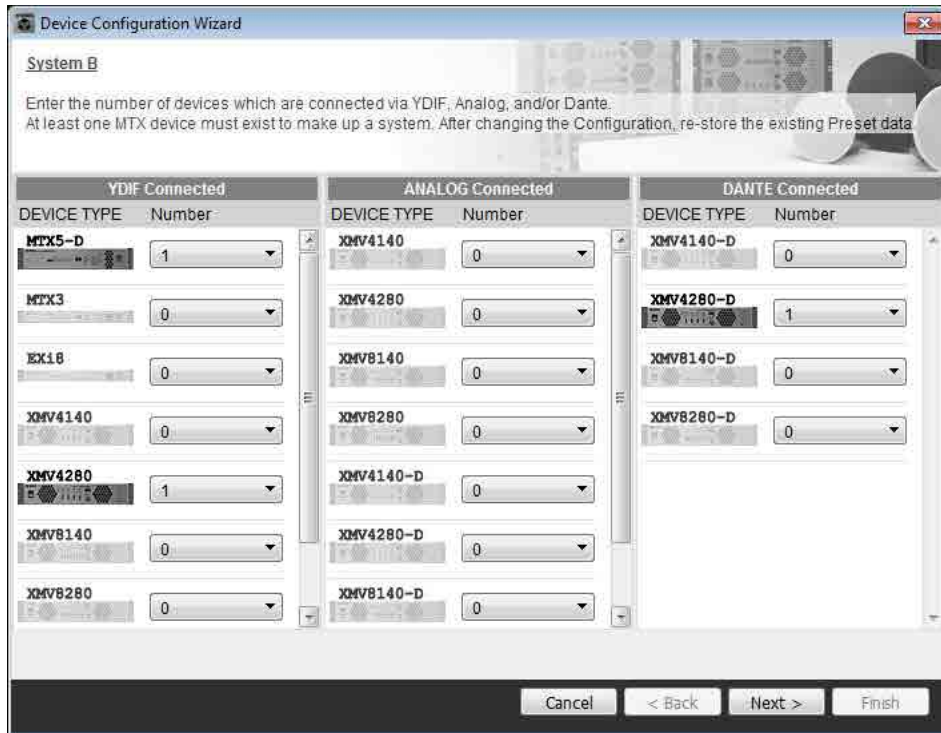
14. **Specify the UNIT ID of each device, and click [Next>].**

Unless you have specific reasons for doing so, use the UNIT ID that is assigned.

Example 4) A system using Dante
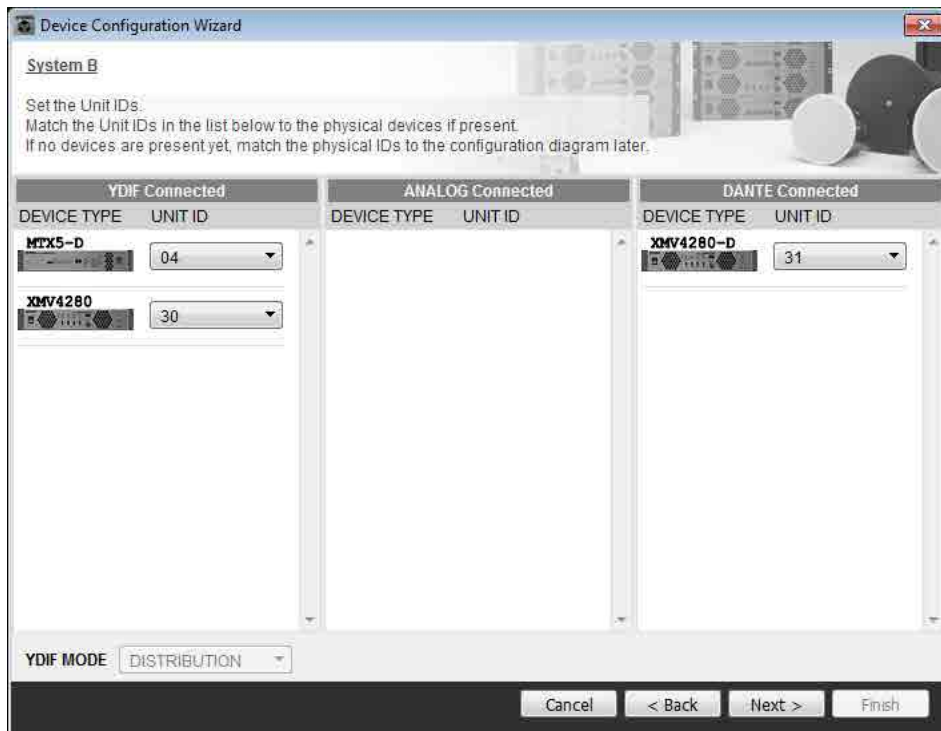
15. **Select the Mini-YGDAI card, and click [NEXT>].**

In this example we are not using a Mini-YGDAI card, so leave the setting at [No Assign] and click [Next>].

16. **Set the [UNIT ID] rotary switch and DIP switch of the devices.**

You will set the computer's IP address after completing the wizard, in "Specifying the computer's TCP/IP address."
If the devices are not nearby, you can set them during the step "Connecting the equipment."

Example 4) A system using Dante
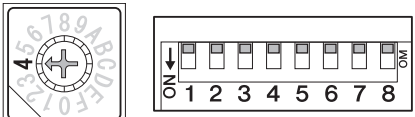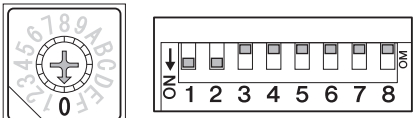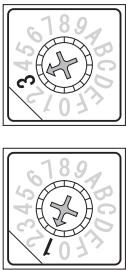
Make the following settings.

MTX5-D	UNIT ID = 04
	  [UNIT ID] rotary switch = 4
	  DIP switches are all OFF (upward)

XMV4280	UNIT ID = 30
	  [UNIT ID] rotary switch = 0
	  DIP switch 1 and 2 are ON (downward), others are OFF (upward)

XMV4280-D [HIGH]
 [LOW]
	UNIT ID = 31
	  [UNIT ID] rotary switch [HIGH] = 3
	  [UNIT ID] rotary switch [LOW] = 1

NOTE
On the XMV4280, the higher digit of the UNIT ID is set by the DIP switch, and the lower digit is set by the [UNIT ID] rotary switch.
For details, refer to the owner's manual of each device.
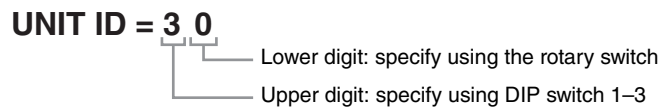
UNIT ID = 3 0

Lower digit: specify using the rotary switch

Upper digit: specify using DIP switch 1–3

17. **When you have finished setting the [UNIT ID] rotary switch and DIP switch of the devices, click [Next>].**

Example 4) A system using Dante

18. **Verify that the devices are shown in the screen, and click [Next>].**

19. **Choose the model of DCP that is connected to the MTX, enter a device name, and click [Finish].**

In this example we are not using a DCP, so leave the settings as they are.

Example 4) A system using Dante

20. **When you see the dialog box "Display the configuration diagram? The diagram can also be printed." click [Yes].**

A cabling diagram will appear. If you want, click [Print] to print the diagram.
To close the screen, click [Close].

NOTE
If you want to view the cabling diagram again, do so by choosing [File] menu → [Print Configuration Diagram].

If you want to use the Device Configuration Wizard to change the device configuration, click the [Device Config] button in the Project screen.

Example 4) A system using Dante

Making preliminary settings in MTX Editor

Here's how to make detailed MTX system settings in MTX Editor.
When you've finished making settings, you should save them by clicking [File] menu, then [Save].

NOTE
The "User Account Control" dialog box may appear. Click [Continue] or [Yes].

To switch between System A and System B, use the system select tabs in the "Project" screen.
The currently selected MTX system is indicated by the system select tabs and the SYSTEM tab.

Example 4) A system using Dante
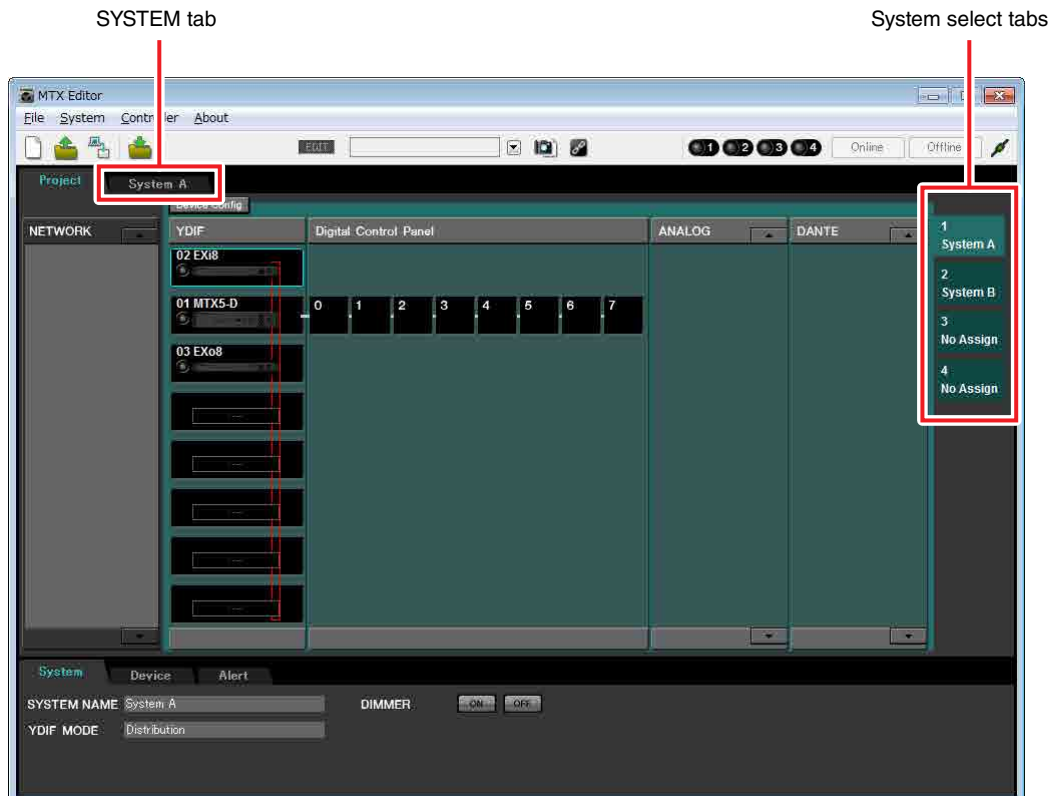
We'll start by making settings for System A.

■ Making EXT. I/O settings

Make settings for inputting and outputting digital audio. First we will make YDIF settings for System A. Click the SYSTEM tab to access the setting screen.

1. Click the [EXT. I/O] button.

The "EXT. I/O" screen will appear, allowing you to make input/output settings for the external devices. Since you'll be making settings for YDIF 1–8, there's no need to switch screens; simply make the settings in this screen.
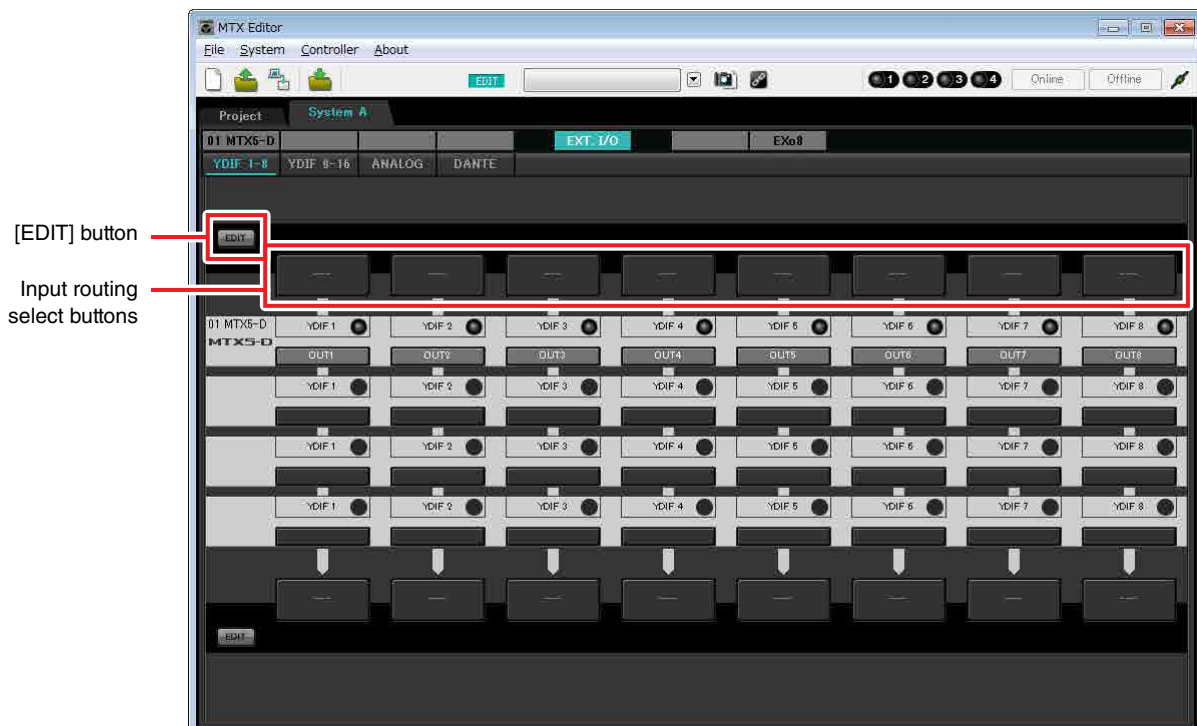
2. In the upper left, click the [EDIT] button.

Now you can specify the outputs from the EXi8 to YDIF 1–8.

3. Click the input routing select button located above YDIF 1.

The "YDIF In Patch" dialog box will appear.

Example 4) A system using Dante

4. **For CHANNEL, click [1] and then click [Close] button.**

The YDIF 1 input routing select button shows that CH1 of the EXi8 whose UNIT ID = 02 has been assigned to YDIF 1.
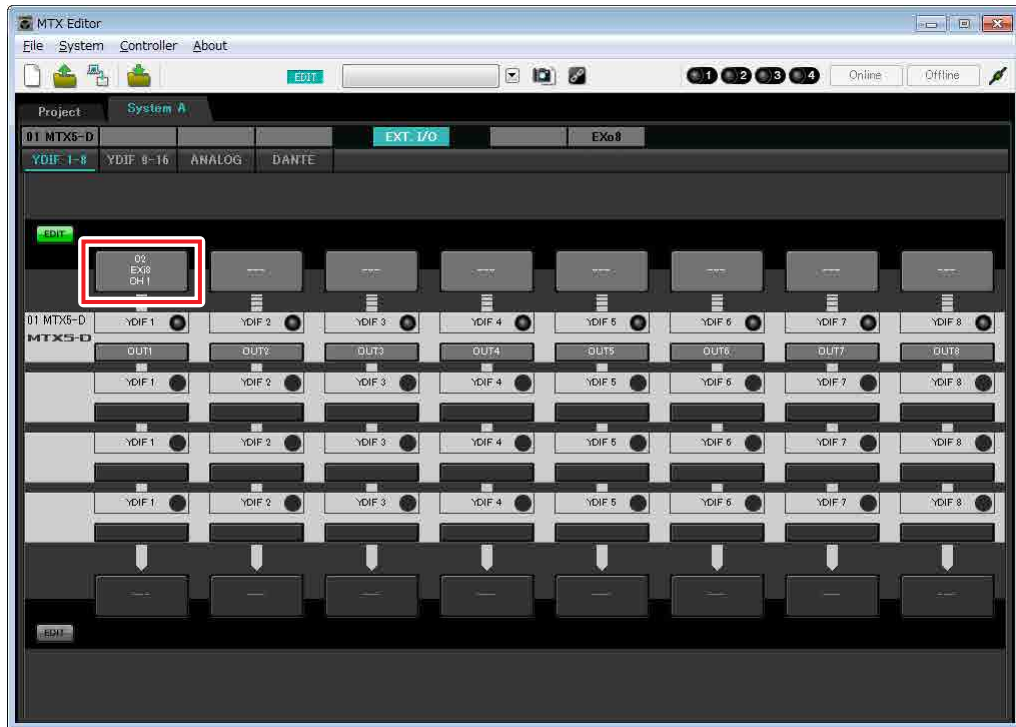
5. **In the upper left, click [EDIT] to lock the settings.**

[EDIT] button

Step 6

Example 4) A system using Dante

6. **Verify that for the MTX5-D with UNIT ID = 01, the buttons located below YDIF 5 through YDIF 8 are set to OUT5 (OUTPUT 5) through OUT 8 (OUTPUT 8) respectively.**

If the settings are different, click the button and change the setting.
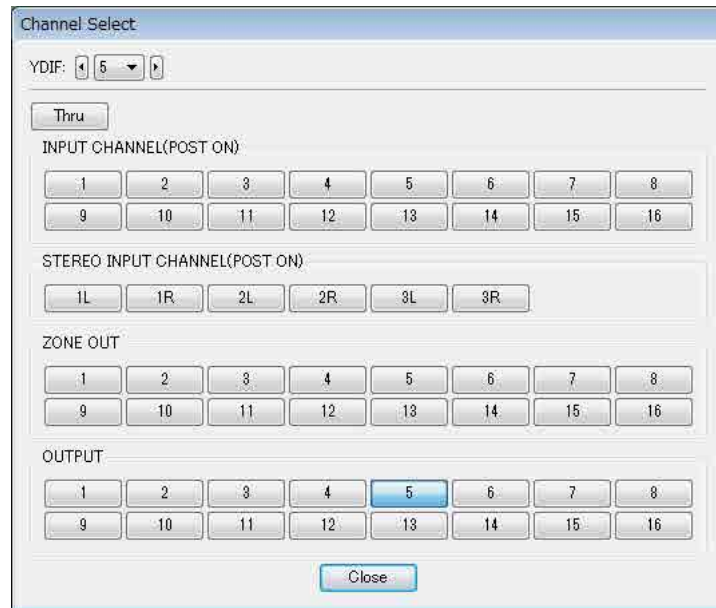
7. **In the lower left, click the [EDIT] button.**

Now you can specify the outputs from the MTX to YDIF 1–8.

[EDIT] button   Output routing select buttons

Example 4) A system using Dante
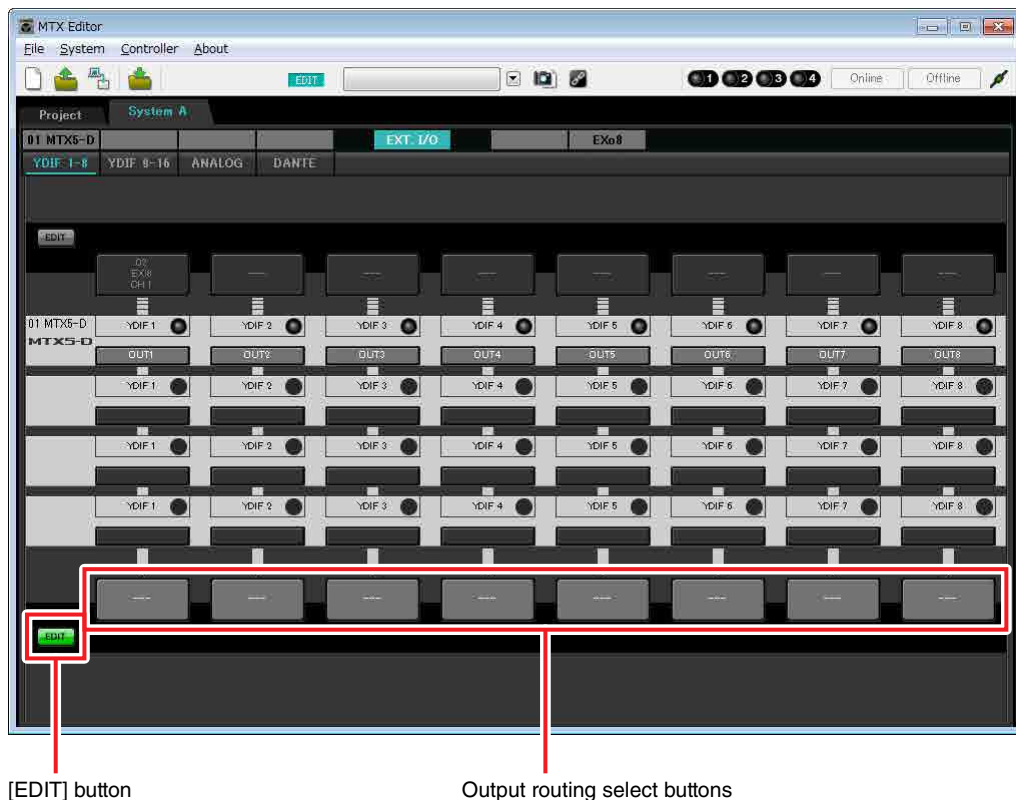
8. Click the output routing select button located below YDIF 5.

The "YDIF Out Patch" dialog box will appear.
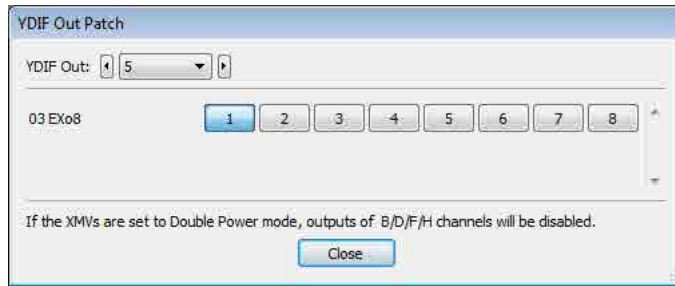
9. For CHANNEL, click [1] button.

The YDIF 5 output routing select button shows that the YDIF 5 output has been assigned to CH 1 of the UNIT ID=03 EXo8.

Example 4) A system using Dante
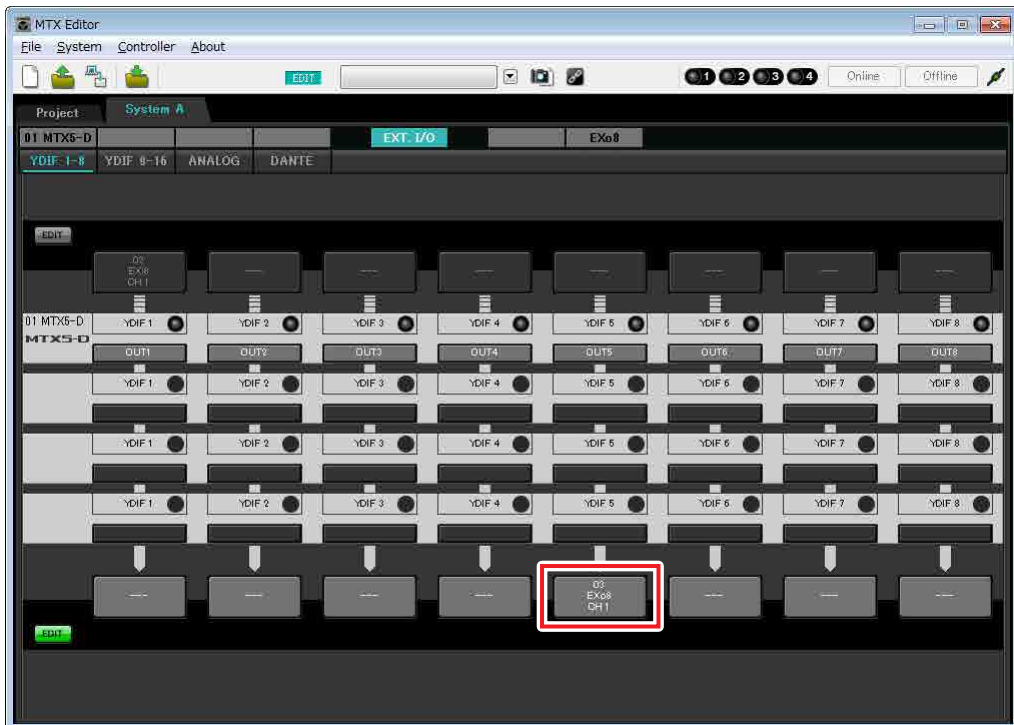
10. Change the output destination in the [YDIF Out:] list box, to assign YDIF 6 through YDIF 8 to CH 2 through CH 4 of the EXo8, and then click "Close" button.
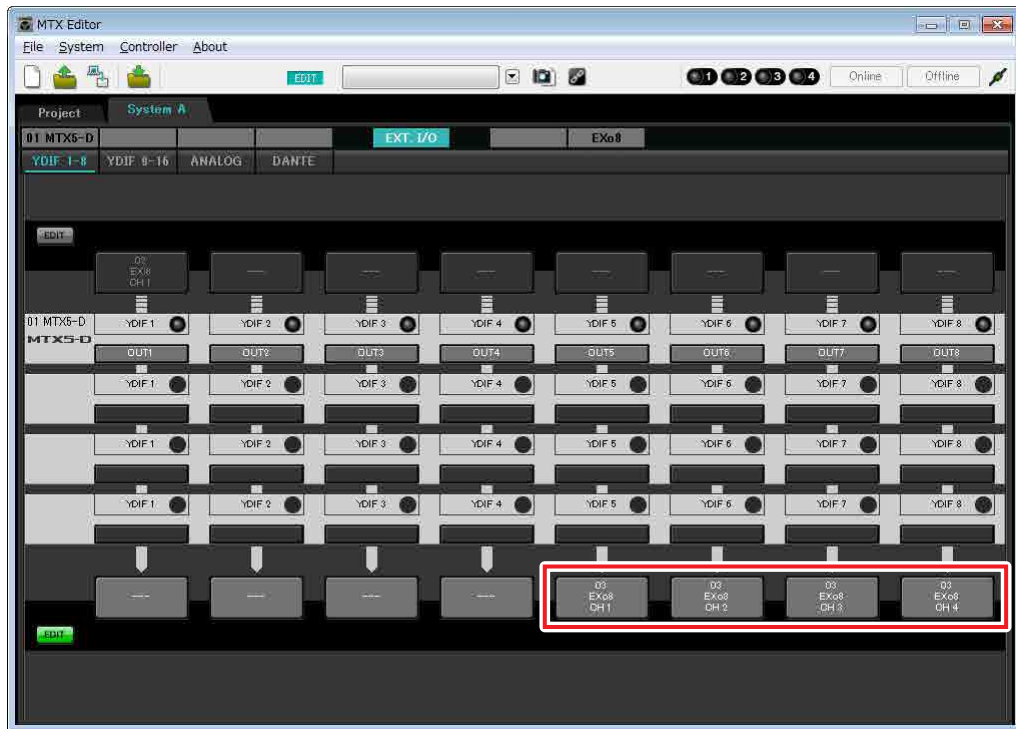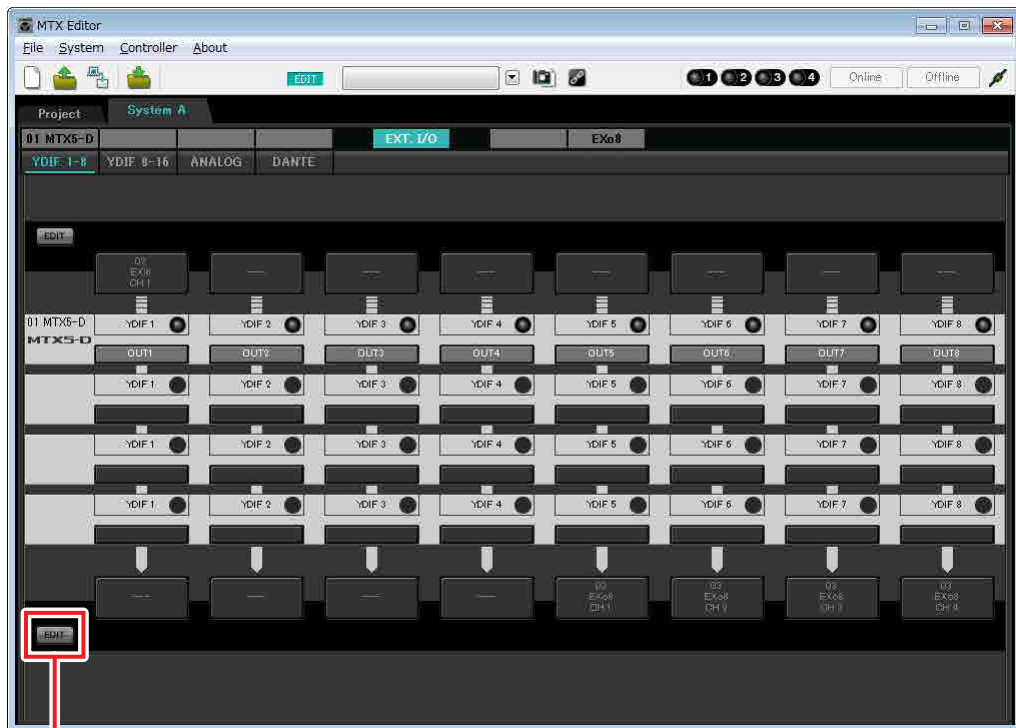
11. In the lower left, click [EDIT] button to lock the settings.

[EDIT] button

Example 4) A system using Dante

■ Settings in the "MAIN" screen

In the "MAIN" screen you can make overall settings for each channel.
Click the [01 MTX5-D] button to access the MTX "MAIN" screen.
For details on each parameter, refer to "MTX Editor User's Manual."
Here you'll make the following settings.

- Channel name
- Channel on/off
- Gain and phantom power
- (As necessary) EQ settings

Example 4) A system using Dante
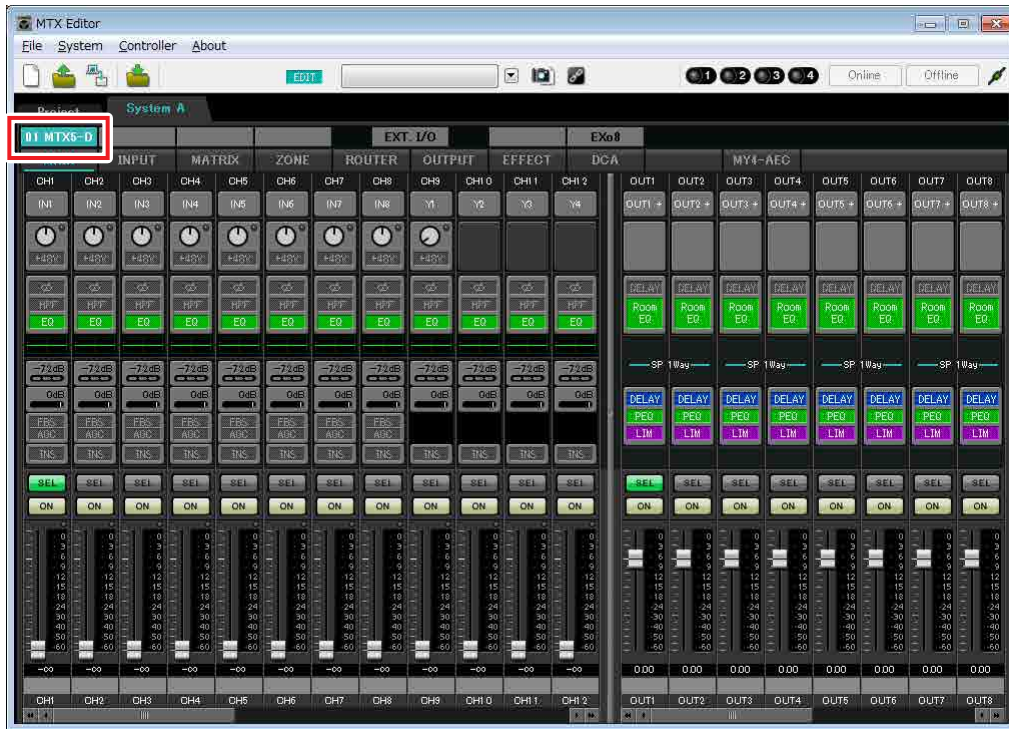
● INPUT settings

Make the following input settings.

CH1	Signal from the main mic of System A, connected to the EXi8
CH9	Signal from the main mic of System B
CH10	System B signal other than the main mic
STIN1 L/R	Signal from the CD player connected to ST IN1
STIN2 L/R	Signal from the background music player connected to ST IN2
STIN3 L/R	SD player built into the MTX5-D

— Port select button

— Port/External Device parameter access button

— [ON] button

— Fader

— Channel name
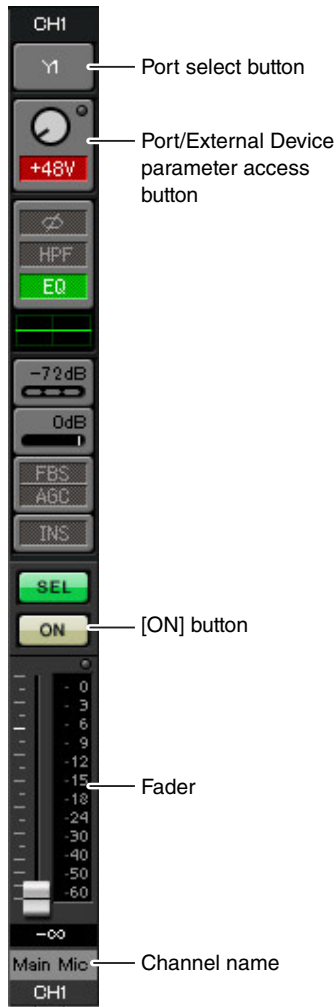
Port select button

When you click this, the "Input Patch" dialog box will open. This example makes the following changes to the default settings.

CH1	YDIF [1] (System A main mic connected to the EXi8)
CH9	DANTE [9] (Signal from the system B main mic)
CH10	DANTE [10] (System B signal other than the main mic)

Port/External Device parameter access button

This lets you make input connector settings for the MTX and EXi8. When you click the button, a popup window will appear. Make the desired settings, and then in the upper right, click × to close the popup window. The appropriate gain level will depend on the devices that are connected, so set the level appropriately for your devices.

For CH1, make settings for input connector 1 of the EXi8. The gain of the EXi8 is set to -6 dB by default.

Because condenser microphone is connected to CH1, leave the gain at 30 dB and turn phantom power on.

[ON] button

This turns the channel on/off. You should turn off unused channels.

Fader

This adjusts the input level. Leave the fader at -∞ until the system goes online.

Channel name

You can double-click this to edit the name.
In this example, names have been assigned as follows.

CH1	Main Mic
CH9	Sys B9
CH10	Sys B10
STIN1	CD Player
STIN2	BGM
STIN3	SD Player

Example 4) A system using Dante

● **OUTPUT settings**

Make the following output settings.

CH1–4	Output to the amps in Amp Room A using the analog outputs of the MTX5-D
CH5–8	Output to the amps of Amp Room B using CH1–4 of the EXo8 connected via YDIF
CH9	Output the signal of the main mic connected to the EXi8 to System B via Dante[9]
CH10	Output a signal other than the main mic to System B via Dante [10]
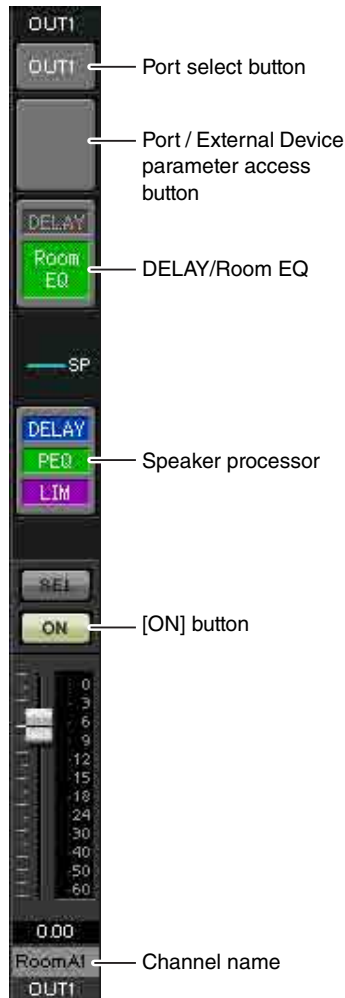
Port select button

Click this to open the "Output Patch" dialog box. This example makes the following changes to the default settings.

OUT1	OUTPUT [1]		OUT7	YDIF [7]
OUT2	OUTPUT [2]		OUT8	YDIF [8]
OUT3	OUTPUT [3]		OUT9	DANTE [9]
OUT4	OUTPUT [4]		OUT10	DANTE [10]
OUT5	YDIF [5]		OUT11–OUT16	No setting
OUT6	YDIF [6]			

Port / External Device parameter access button

When you click this button, a popup window will appear.
For OUT1 through OUT4, make settings for MTX output connectors 1 through 4.
For OUT5 through OUT8, make settings for EXo8 output connectors 1 through 4.
For OUT9 and OUT10, make settings for output to the Dante network.
Verify that each GAIN is set to 0.0 dB.

DELAY/Room EQ

Click this to move to a screen where you can set delay and room EQ.
Since OUT9 and OUT10 are for transmission to System B, do not make settings.

Speaker processor

Click this to move to the "CHANNEL EDIT" screen. Make the appropriate settings for the speakers that will be connected.
Since OUT9 and OUT10 are for transmission to System B, do not make settings.

NOTE
The pre-installed library contains speaker processor files that are appropriate for the response of various speakers. By using these files you can make speaker processor settings easily.

[ON] button

This button turns the channel on/off. Turn off unused channels.

Channel name

You can double-click this to edit the name.
In this example, names have been assigned as follows.

OUT1	RoomA1		OUT6	RoomB2
OUT2	RoomA2		OUT7	RoomB3
OUT3	RoomA3		OUT8	RoomB4
OUT4	RoomA4		OUT9	Sys B9
OUT5	RoomB1		OUT10	Sys B10

Example 4) A system using Dante

■ Settings in the "MATRIX" screen

Here you can specify which input channel will be sent to which zone. For details on send level and other parameters, refer to "MTX Editor User's Manual."

When making settings for System A, "this MTX system" refers to System A, and "the other MTX system" refers to System B.

When making settings for System B, "this MTX system" refers to System B, and "the other MTX system" refers to System A.

Example 4) A system using Dante

In this example, make the settings shown in the illustration in before page. Clicking a cross point (a square area) or dragging cross points will switch it on/off. If you right-click on a cross point, a context menu appears. You can select [All OFF] to turn off all cross points. The cross point shows the send level as the amount of green.

For each zone, this setting will be as follows.

Zone 1: Input channel 1, CD/BGM/SD (SDIN1–3), and the audio from the other MTX system are broadcast to this entire MTX system. Since the mic (CH1) of this MTX system and the mic (CH9) of the other MTX system are assigned for emergency announcements etc. for the entire building, specify their Priority in the "ZONE" screen that follows.

When you turn CH1 and CH9 on in the matrix, the (attenuated) signal from the matrix will be combined with the signal from Priority, and output.

Zone 2: This is for broadcasting the voice from the main mic (CH1) to the other MTX system.

Zone 3: This is for broadcasting signals other than the main mic to the other MTX system.

For the input channel faders in the lower left of the screen, the grayed-out faders show input levels, and the other faders show input channel send levels. Grayed-out faders cannot be operated in this screen.

Priority signal flow

Example 4) A system using Dante

■ Settings in the "ZONE" screen

In the "ZONE" screen you can make Priority DUCKER settings. The Priority Ducker function temporarily attenuates the inputs from other channels when audio is input from a specified input channel, ensuring that the audio from the specified input channel will be broadcast clearly. Priority is given in the order of "1st PRIORITY > 2nd PRIORITY > Matrix Out signals."

In this example, we are assuming that the main A mic (CH1) and the other MTX system's mic (CH9) will be used for broadcast to the entire building. Thus, for 1st PRIORITY, we set the PRIORITY SOURCE to CH1; as the 2nd PRIORITY SOURCE we select CH9 in ZONE1, and click the [ON] button located at the right to make it light. Because there's no need to make settings for zones 2 through 8, make sure that the [ON] button at the right of 1st PRIORITY and 2nd PRIORITY are unlit (turned off).

Use the ZONE select buttons to switch the zone.

For details on each parameter, refer to "MTX Editor User's Manual."

Example 4) A system using Dante

■ Settings in the "ROUTER" screen

In the "ROUTER" screen you can assign zones to outputs.

In this example, set ZONE1=OUTPUT 1 through 8, ZONE2=OUTPUT 9, and ZONE3=OUTPUT 10.

With these settings, this MTX system will broadcast all of its own audio as well as all audio of the other MTX system, the main mic of this MTX system will be sent to Dante channel 9, and signals of this MTX system other than the main mic will be sent to Dante channel 10.

This completes settings for this MTX system.

Example 4) A system using Dante

Next we will make settings for System B.

System B will have many of the same settings as System A. For the System B settings, we will explain settings made in the "EXT I/O" screen and settings made in the "MAIN" screen. Other settings will be the same as previously explained.
If you've also finished the settings for System B, proceed to "Dante settings between systems."
First, select System B in the "Project" screen.

Example 4) A system using Dante

■ Making EXT. I/O settings

Make settings for inputting and outputting digital audio. First make YDIF and Dante settings for System B. Click the SYSTEM tab to access the setting screen.

1. Click the [EXT. I/O] button.

The "EXT. I/O" screen will appear, allowing you to make input/output settings for the external devices. Since you'll be making settings for YDIF 1–8, there's no need to switch screens; simply make the settings in this screen.

2. In the lower left, click the [EDIT] button.

Now you can specify the outputs from the MTX to YDIF 1–8.
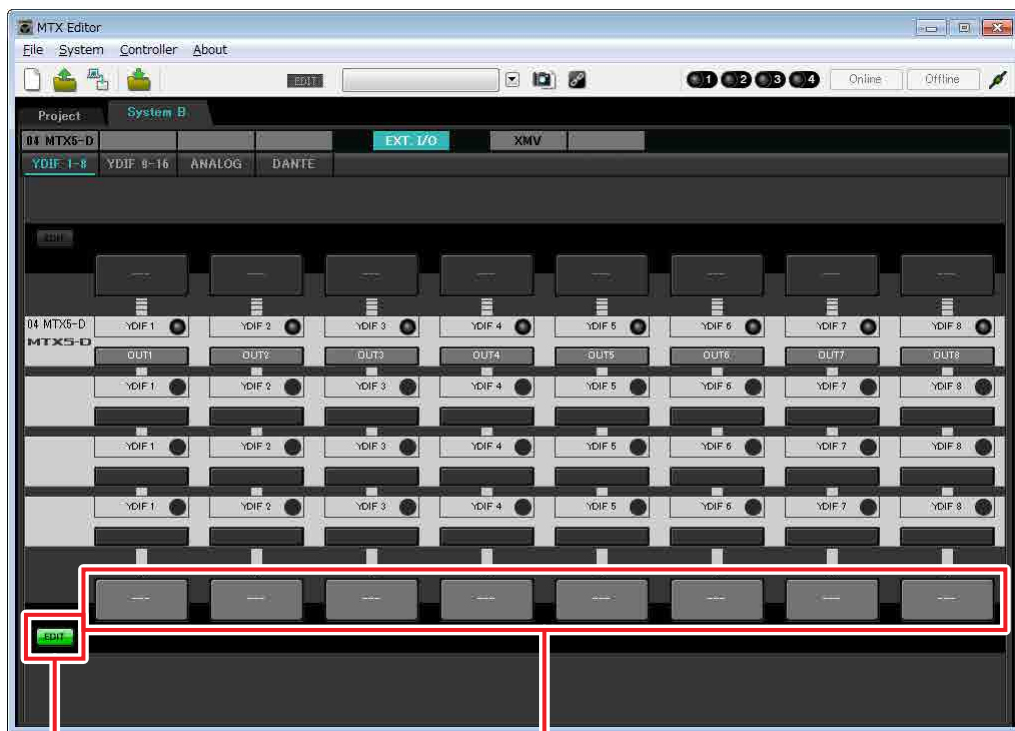
[EDIT] button   Output routing select buttons

3. Click the output routing select button located below YDIF 1.

The "YDIF Out Patch" dialog box will appear.

Example 4) A system using Dante
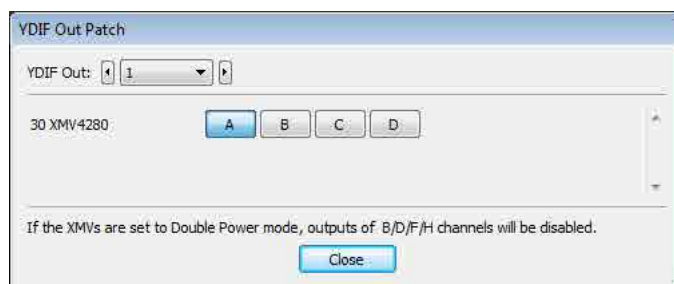
4. **For CHANNEL, click [A] button.**

The YDIF 1 output routing select button shows that the YDIF 1 output has been assigned to CH A of the UNIT ID=30 XMV4280.
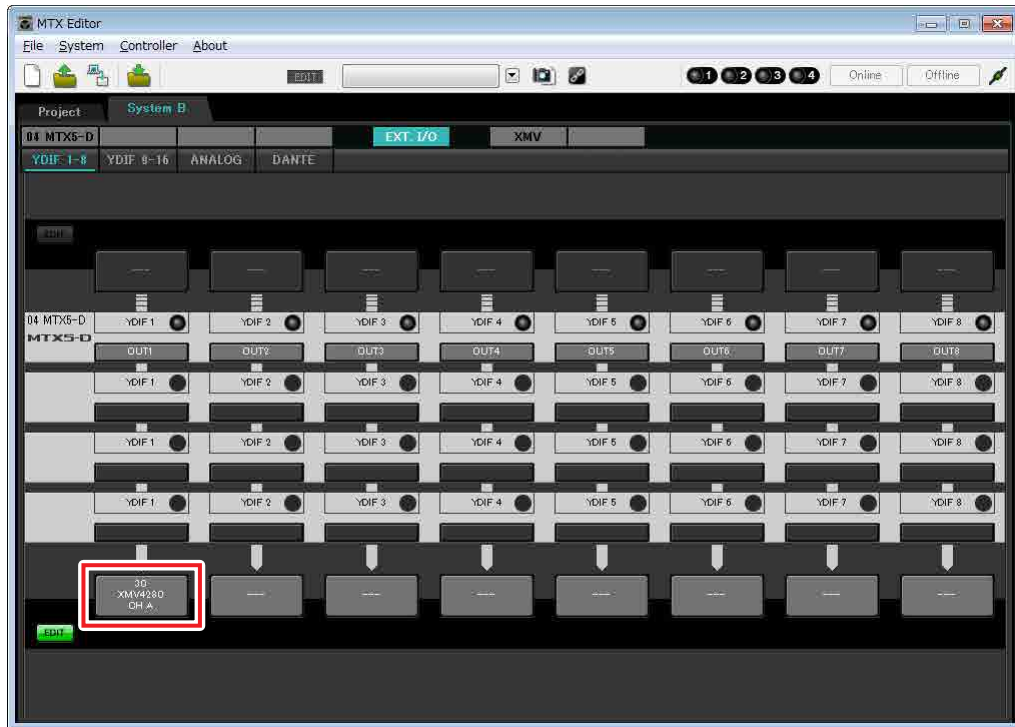
5. **Change the output destination in the [YDIF Out:] list box, to assign YDIF 2 through YDIF 4 to CH B through CH D of the XMV4280, and then click [Close] button.**

Example 4) A system using Dante
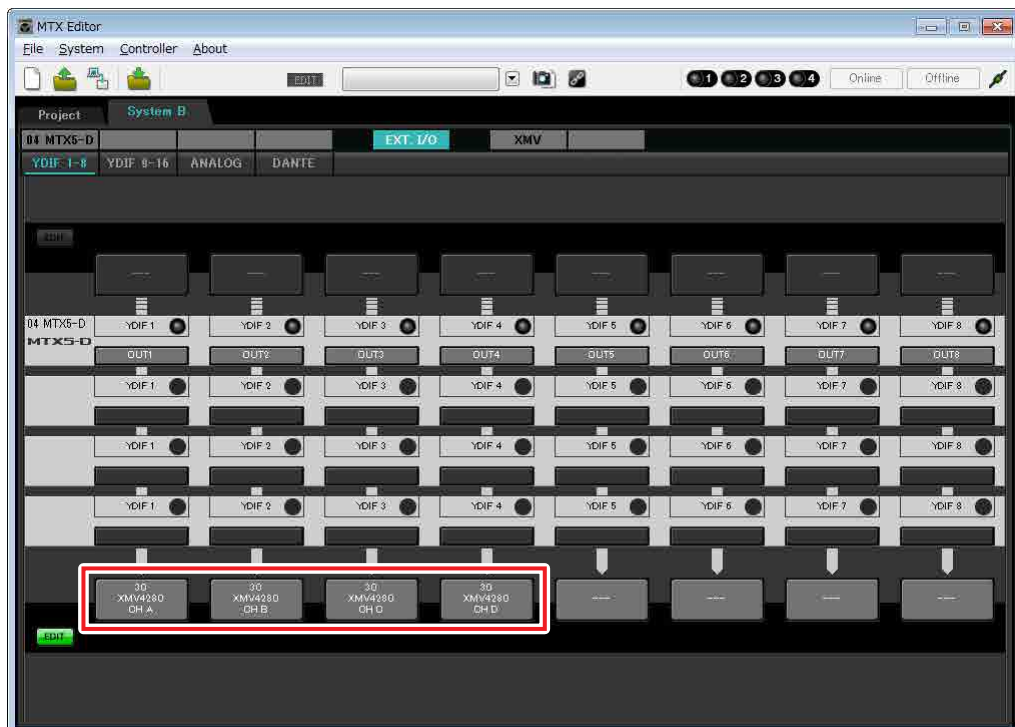
6. **In the lower left, click [EDIT] button to lock the settings.**
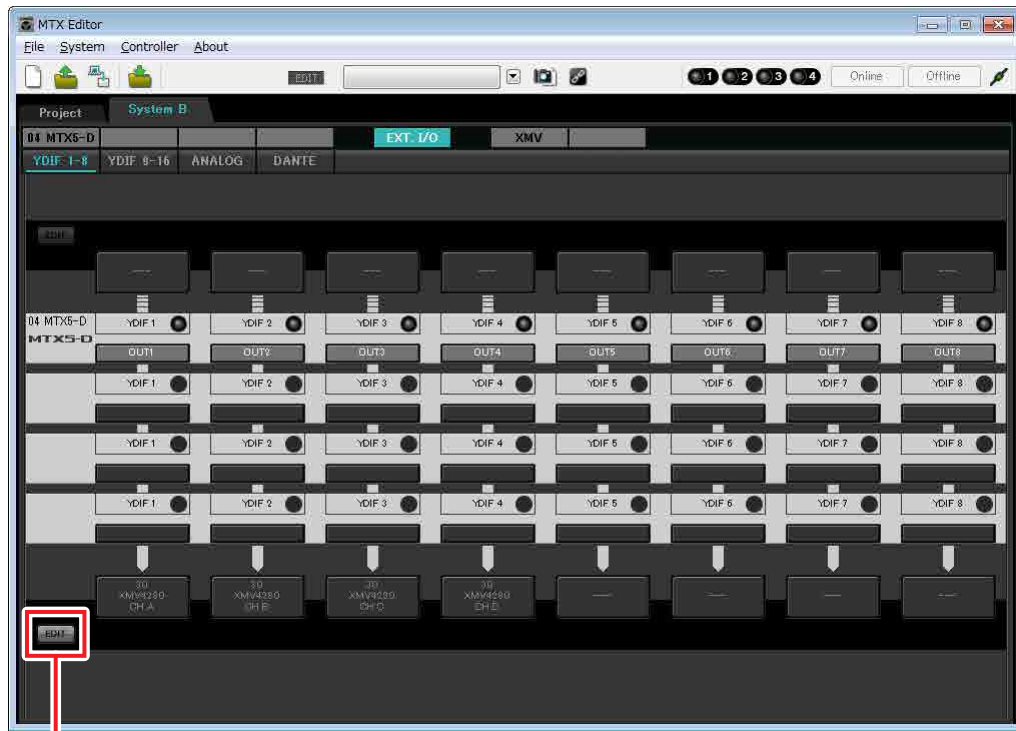
[EDIT] button

7. **Click [DANTE] button.**

The Dante setting screen will appear. Here you will specify the output to the XMV4280-D.

Example 4) A system using Dante

8. **In the lower left, click the [EDIT] button.**

   Now you can specify the outputs from the MTX to Dante.
   If the [Preserve the Dante settings configured by Dante Controller] check box is selected, clear the check box.

9. **Click the output routing select button located below D OUT 5.**

   The "Dante Out Patch" dialog box will appear.

Example 4) A system using Dante
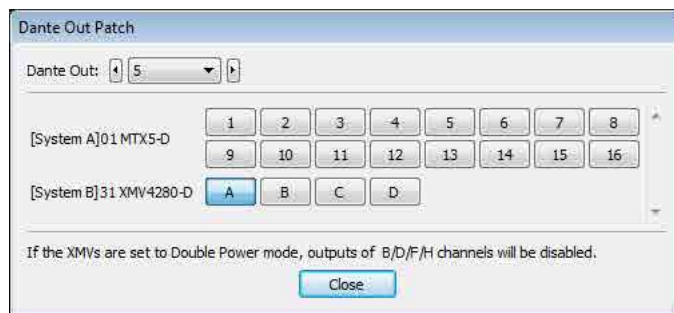
10. In "[System B]31 XMV428 ...", click [A].

The D OUT 5 output routing select button shows that the Dante 5 output has been assigned to CH A of the UNIT ID=31 XMV4280-D.

11. Change the output destination in the [Dante Out:] list box, to assign D OUT 6 through D OUT 8 to CH B through CH D of the XMV4280-D, and then click [Close] button.

Example 4) A system using Dante

12. **In the lower left, click [EDIT] button to lock the settings.**

Example 4) A system using Dante

■ Settings in the "MAIN" screen

In the "MAIN" screen you can make overall settings for each channel.
Click the [04 MTX5-D] button to access the MTX "MAIN" screen.
For details on each parameter, refer to "MTX Editor User's Manual."
Here you'll make the following settings.

- Channel name
- Channel on/off
- Gain and phantom power
- (As necessary) EQ settings

Example 4) A system using Dante
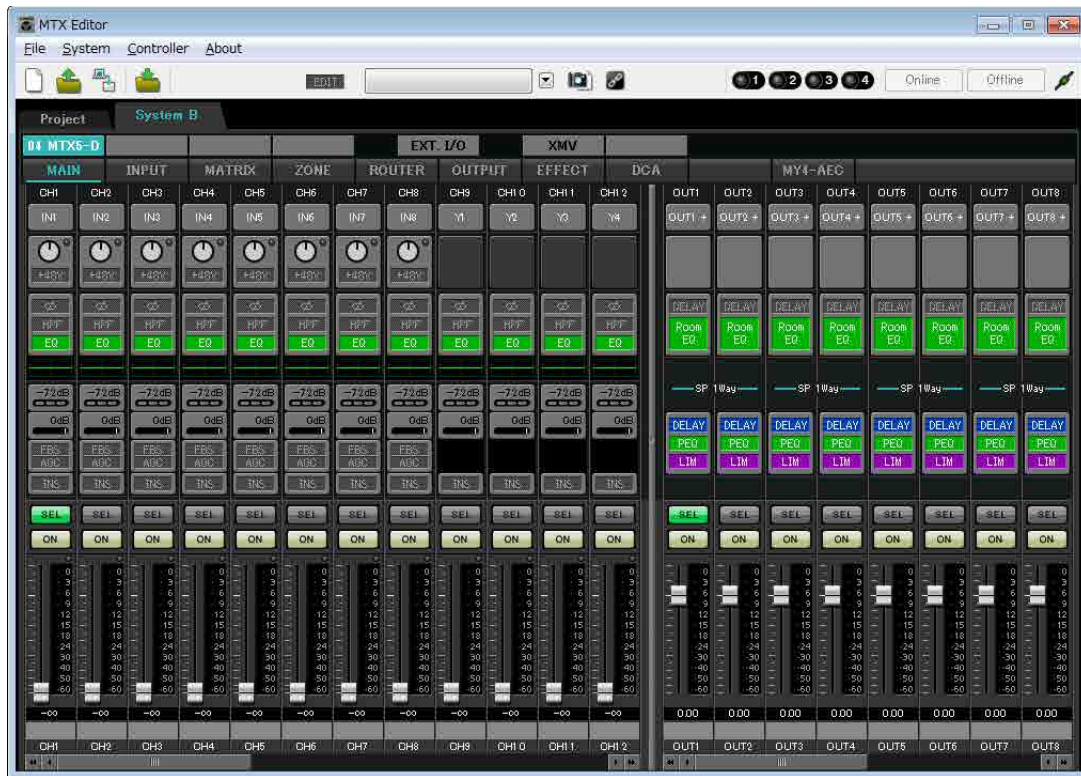
● INPUT settings

Make the following input settings.

CH1	Signal from the main mic of System B, connected to the MTX5-D
CH9	Signal from the main mic of System A
CH10	System A signal other than the main mic
STIN1 L/R	Signal from the CD player connected to ST IN1
STIN2 L/R	Signal from the background music player connected to ST IN2
STIN3 L/R	SD player built into the MTX5-D

Port select button → (Port select button)

Port/External Device parameter access button → (Port/External Device parameter access button)

[ON] button → ([ON] button)

Fader → (Fader)

Channel name → (Channel name)
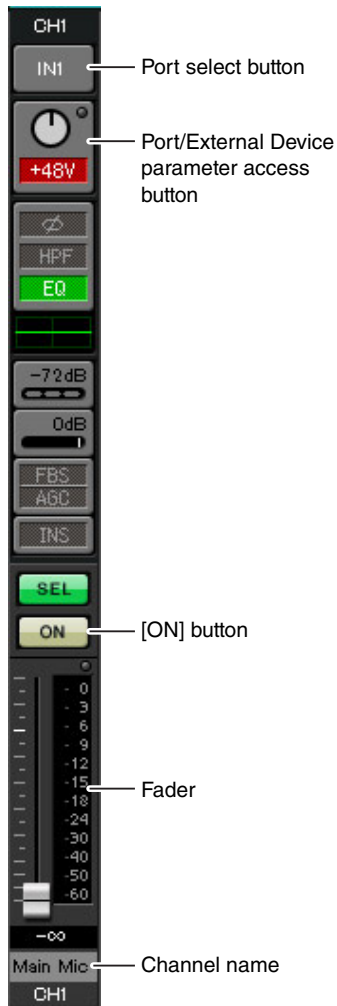
Port select button

When you click this, the "Input Patch" dialog box will open. This example makes the following changes to the default settings.

CH9	DANTE [9] (Signal from the system A main mic)
CH10	DANTE [10] (System A signal other than the main mic)

Port/External Device parameter access button

This lets you make input connector settings for the MTX. When you click the button, a popup window will appear. Make the desired settings, and then in the upper right, click × to close the popup window.

The appropriate gain level will depend on the devices that are connected, so set the level appropriately for your devices. For CH1, make settings for input connector 1 of the MTX. The gain is set to 30 dB by default.

Because condenser microphone is connected to CH1, leave the gain at 30 dB and turn phantom power on.

[ON] button

This turns the channel on/off. You should turn off unused channels.

Fader

This adjusts the input level. Leave the fader at -∞ until the system goes online.

Channel name

You can double-click this to edit the name.
In this example, names have been assigned as follows.

CH1	Main Mic
CH9	Sys A9
CH10	Sys A10
STIN1	CD Player
STIN2	BGM
STIN3	SD Player

Example 4) A system using Dante

● OUTPUT settings

Make the following output settings.

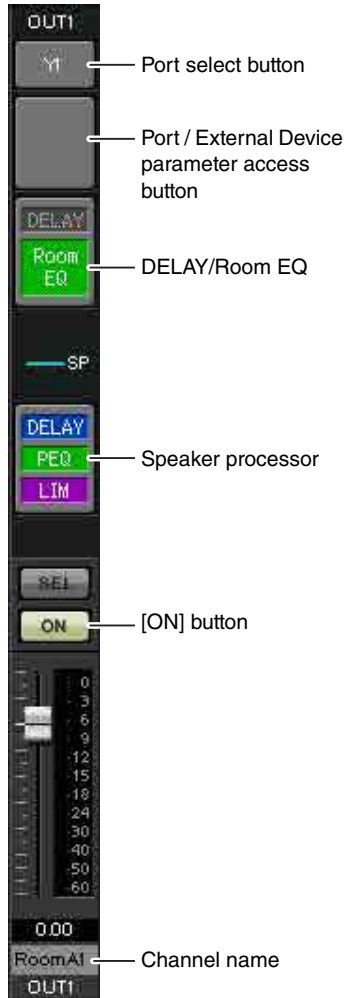|	
CH1–4	Output via YDIF to the XMV4280 in Amp Room A
CH5–8	Output via Dante to the XMV4280-D in Amp Room B
CH9	Output the signal of the main mic to System A via Dante[9]
CH10	Output a signal other than the main mic to System A via Dante [10]

— Port select button

— Port / External Device parameter access button

— DELAY/Room EQ

— Speaker processor

— [ON] button

— Channel name

Port select button

Click this to open the "Output Patch" dialog box. This example makes the following changes to the default settings.

OUT1	YDIF [1]		**OUT7**	DANTE [7]
OUT2	YDIF [2]		**OUT8**	DANTE [8]
OUT3	YDIF [3]		**OUT9**	DANTE [9]
OUT4	YDIF [4]		**OUT10**	DANTE [10]
OUT5	DANTE [5]		**OUT11–OUT16**	No setting
OUT6	DANTE [6]			

Port / External Device parameter access button

When you click this button, a popup window will appear, allowing you to set the MTX's output connector parameters.
For OUT1 through OUT4, make settings for XMV4280 output connectors A through D.
For OUT5 through OUT8, make settings for XMV4280-D output connectors A through D.
For OUT9 and OUT10, make settings for output to the Dante network.
Verify that GAIN is set to 0.0 dB.

DELAY/Room EQ

Click this to move to a screen where you can set delay and room EQ.
Since OUT9 and OUT10 are for transmission to System A, do not make settings.

Speaker processor

Click this to move to the "CHANNEL EDIT" screen. Make the appropriate settings for the speakers that will be connected.
Since OUT9 and OUT10 are for transmission to System A, do not make settings.

NOTE
The pre-installed library contains speaker processor files that are appropriate for the response of various speakers. By using these files you can make speaker processor settings easily.

[ON] button

This button turns the channel on/off. Turn off unused channels.

Channel name

You can double-click this to edit the name.
In this example, names have been assigned as follows.

OUT1	RoomA1		**OUT6**	RoomB2
OUT2	RoomA2		**OUT7**	RoomB3
OUT3	RoomA3		**OUT8**	RoomB4
OUT4	RoomA4		**OUT9**	Sys A9
OUT5	RoomB1		**OUT10**	Sys A10

Example 4) A system using Dante

Subsequent settings in MTX Editor are the same as System A "MATRIX" screen settings through "ROUTER" screen settings. Make the Settings in the "MATRIX" screen through the settings in the "ROUTER" screen.

Dante settings between systems

Here you'll make Dante settings for between System A and System B.
Regardless of whether you make these settings in System A or in System B, the settings will be applied to each other. For this example, our explanation will use the System B screen.

1. **Click the [EXT. I/O] button.**

   The "EXT. I/O" screen will appear, allowing you to make input/output settings for the external devices.
   If the Dante setting screen is not shown, click the [DANTE] button to access the Dante setting screen.

Example 4) A system using Dante

2. In the upper left and lower left, click the [EDIT] buttons.

Now you can make Dante input/output settings.

If the [Preserve the Dante settings configured by Dante Controller] check box is selected, clear the check box.

[EDIT] button   Input routing select buttons

[EDIT] button   Output routing select buttons
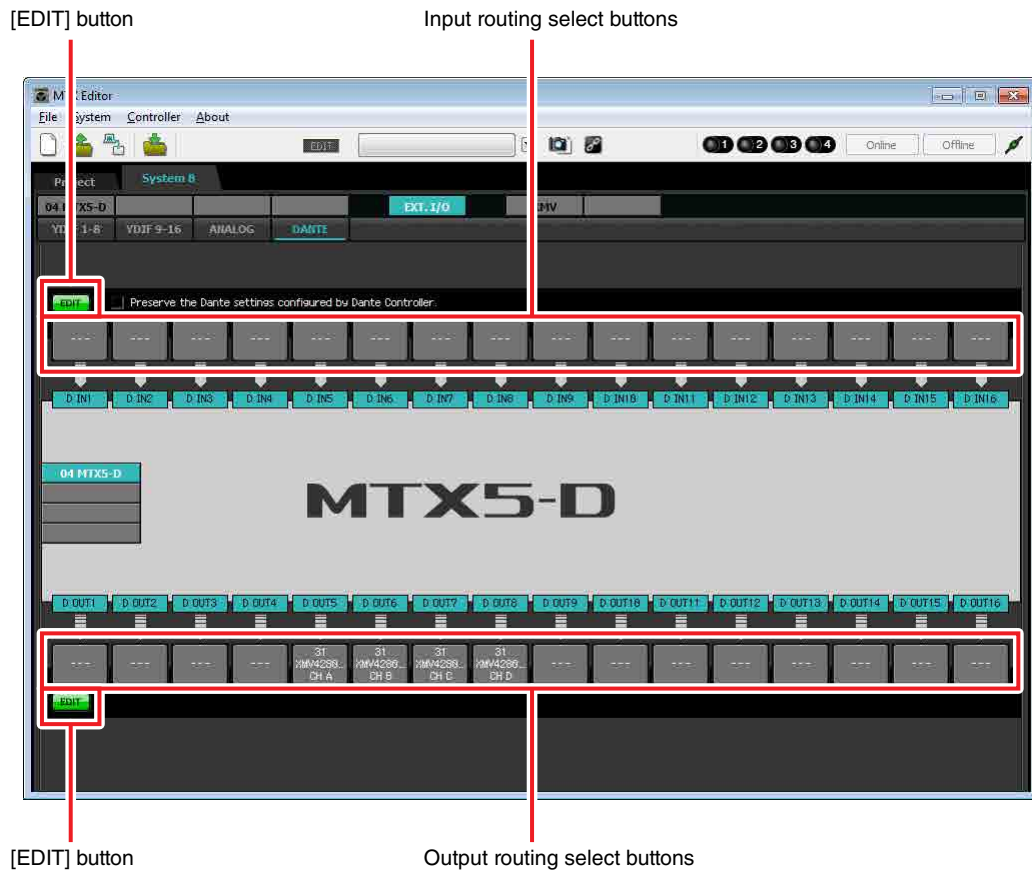
3. Click the input routing select button located above D IN9.

The "Dante In Patch" dialog box will appear.

Example 4) A system using Dante

4. **For CHANNEL, click [9] button.**

The D IN9 input routing select button shows that it is assigned to the signal being output by the MTX5-D (UNIT ID=01) from D OUT9.

5. **Change the input destination in the [Dante In:] list box, so that the signal being output from D OUT10 by the MTX5-D (UNIT ID=01) is assigned to D IN10, and then click [Close] button.**

Example 4) A system using Dante

6. **Click the output routing select button located below D Out9.**

The "Dante Out Patch" dialog box will appear.
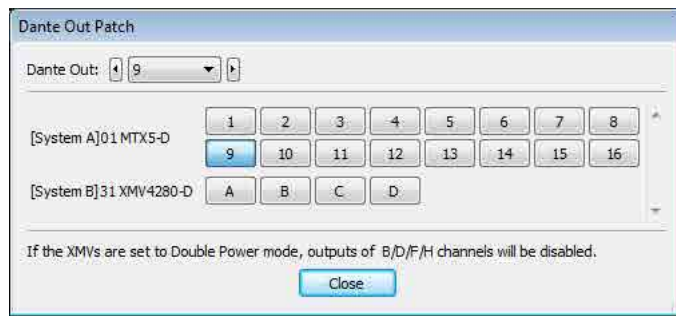
7. **In "[System A]01 MTX5-D", click [9].**

The D OUT9 output routing select button shows that it is assigned to the signal being input by the MTX5-D (UNIT ID=01) as D IN9.

Example 4) A system using Dante

8. **Change the output destination in the [Dante Out:] list box, so that the output of D OUT10 will be input to D IN10 of the MTX5-D (UNIT ID=01), and then click [Close] button.**

9. **In the upper left and lower left, click [EDIT] buttons to lock the settings.**

Example 4) A system using Dante

■ Storing a preset

Now we'll store the settings we've made up to this point as a preset.
To store or recall a preset, click the camera icon in the upper part of MTX Editor.

When you click the camera icon, the "Preset" dialog box will appear. You can create up to 50 presets.
Click the preset number that you want to store; the line will be selected. Then click the [Store] button, specify the preset name, and click the [OK] button.

NOTE
If you don't store the preset, alert number 61 will occur.

This completes settings in the offline state. Save the settings once again.

Example 4) A system using Dante

Connecting the equipment

After you've rack-mounted the MTX and your other equipment, connect the MTX and the other equipment as shown below. If you've copied audio sources to an SD memory card, insert the card into the MTX now.
Here we will explain an example of redundant Dante connections. If you're using daisy-chain connections, refer to the Q&A.

■ System A connections

Example 4) A system using Dante

■ System B connections

from the System A Network Switch

Network Switch for Primary

Computer

BGM Player

CD Player

● **MTX5-D**
ID=04

Main Microphone

● **XMV4280**
ID=30

● **XMV4280-D**
ID=31

from the System A MTX5-D's SECONDARY connector

Network Switch for Secondary

To connect the MTX to your computer, use a CAT5e or higher cable with all eight pins connected.

Example 4) A system using Dante

Powering-on the MTX

Turn on the power of the MTX.
Turn off the amplifier before you power-off the MTX.

Powering-on the amp

On the rear panel of the XMV, set the [SPEAKERS] DIP switch, and then turn on the power of the amps (XMV).
To prevent unwanted sound from being output, we recommend that you turn down the attenuator settings of all channels on the amp itself before you turn it on.
To change the XMV attenuator setting, press the button of the appropriate channel and then turn the encoder.

> **NOTE**
> • With the factory settings, the XMV's attenuators are set to the lowest value.
> • For more about the [SPEAKERS] DIP switch, refer to the XMV owner's manual.

Specifying the computer's TCP/IP address

To allow the MTX and the computer to communicate, specify the computer's TCP/IP as follows.

1. **On the [System] menu, click [Network Setup].**

The "Network Setup" dialog box will appear.

2. **Click [Open Network Connection].**

"Network Connections" will appear.

3. **Right-click the adapter to which the MTX is connected, and choose [Properties].**

The "Local Area Connection Properties" dialog box will appear.

4. **Choose [Internet Protocol Version 4 (TCP/IPv4)], and then click [Properties].**

The "Internet Protocol Version 4 (TCP/IPv4) Properties" dialog box will appear.

5. **Click [Use the following IP address (S)].**

Example 4) A system using Dante

6. **In the [IP address] box, enter "192.168.0.253"; in the [Subnet mask] box, enter "255.255.255.0."**

The IP address of each device is set as follows.

System A: MTX5-D : 192.168.0.1
            EXi8 : 192.168.0.2
            EXo8 : 192.168.0.3

System B: MTX5-D : 192.168.0.4
            XMV4280 : 192.168.0.48
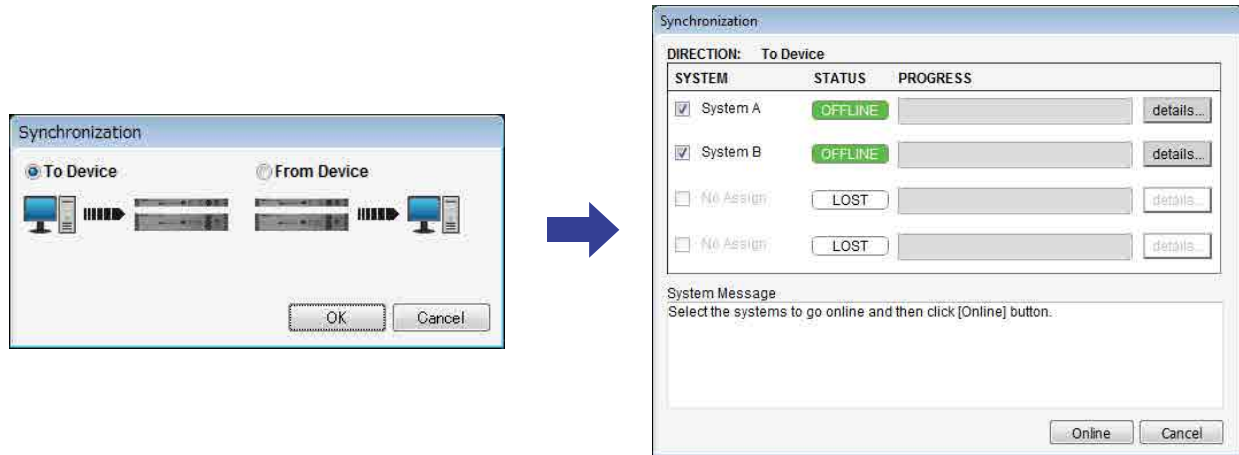   XMV4280-D : 192.168.0.49
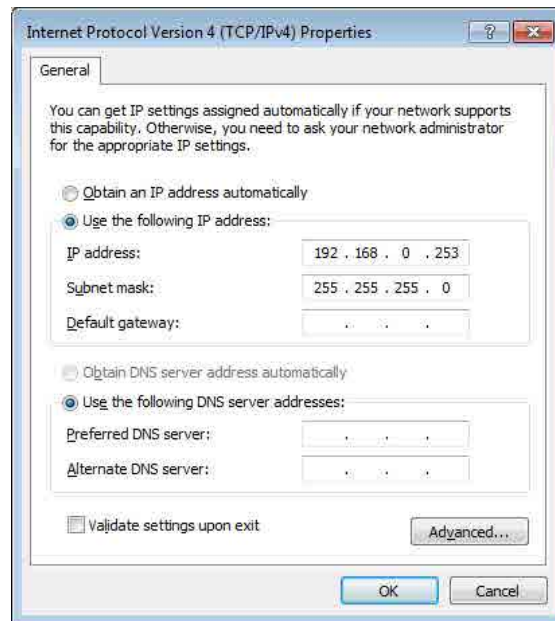
7. **Click [OK].**

NOTE

In some cases, Windows firewall may block MTX Editor when you make this setting. Select the [Private Network] check box, and click [Allow Access].

Example 4) A system using Dante

Taking MTX Editor online

In the upper right of MTX Editor, click the [Online] button. When the unit has successfully come online, the indicator 1 and 2 at the left will light blue.

When the "Synchronization" dialog box appears, select "To Device," and click the [OK] button. When the indication in the dialog box has switched, select the system that you want to place online, and click the [Online] button.
The project created in MTX Editor will be sent to the MTX.

Making XMV settings

If necessary, use the XMV's front panel to make settings such as the high pass filter. For more about the settings you can make on the XMV, refer to the XMV owner's manual.

Example 4) A system using Dante

Verifying that the settings were applied

The main items to verify are listed below. For details on each parameter setting, refer to "MTX Editor User's Manual." Perform these checks for each MTX system.

1. **Using the oscillator in the "ROUTER" screen, adjust the output level.**

Adjust the amp's attenuator value to an appropriate level.
The attenuator values of the XMV can be adjusted in the popup that is accessed by the port/external device parameter recall button located in the output channel area of the "MAIN" screen.

2. **Specify the gain from the microphone.**

You can set the gain in the dialog box that appears when you press the parameter recall button for a port or external device of an input channel in the "MAIN" screen. Watch the input meter, and adjust the setting appropriately.

3. **Set the input levels and output levels.**

Using the input/output faders in the "MAIN" screen, adjust the levels. As necessary, apply the output limiter in the "CHANNEL EDIT" screen to prevent your speakers from being damaged.
Adjust the amp attenuator values to obtain the optimal S/N ratio.
In addition, make FBS settings as necessary.

4. **Store the preset.**

When you have finished making all settings, save the project and switch MTX Editor offline.

This completes the settings for example 4.

Q&A

Q: If YDIF connections are in a ring, does the order of connections matter?
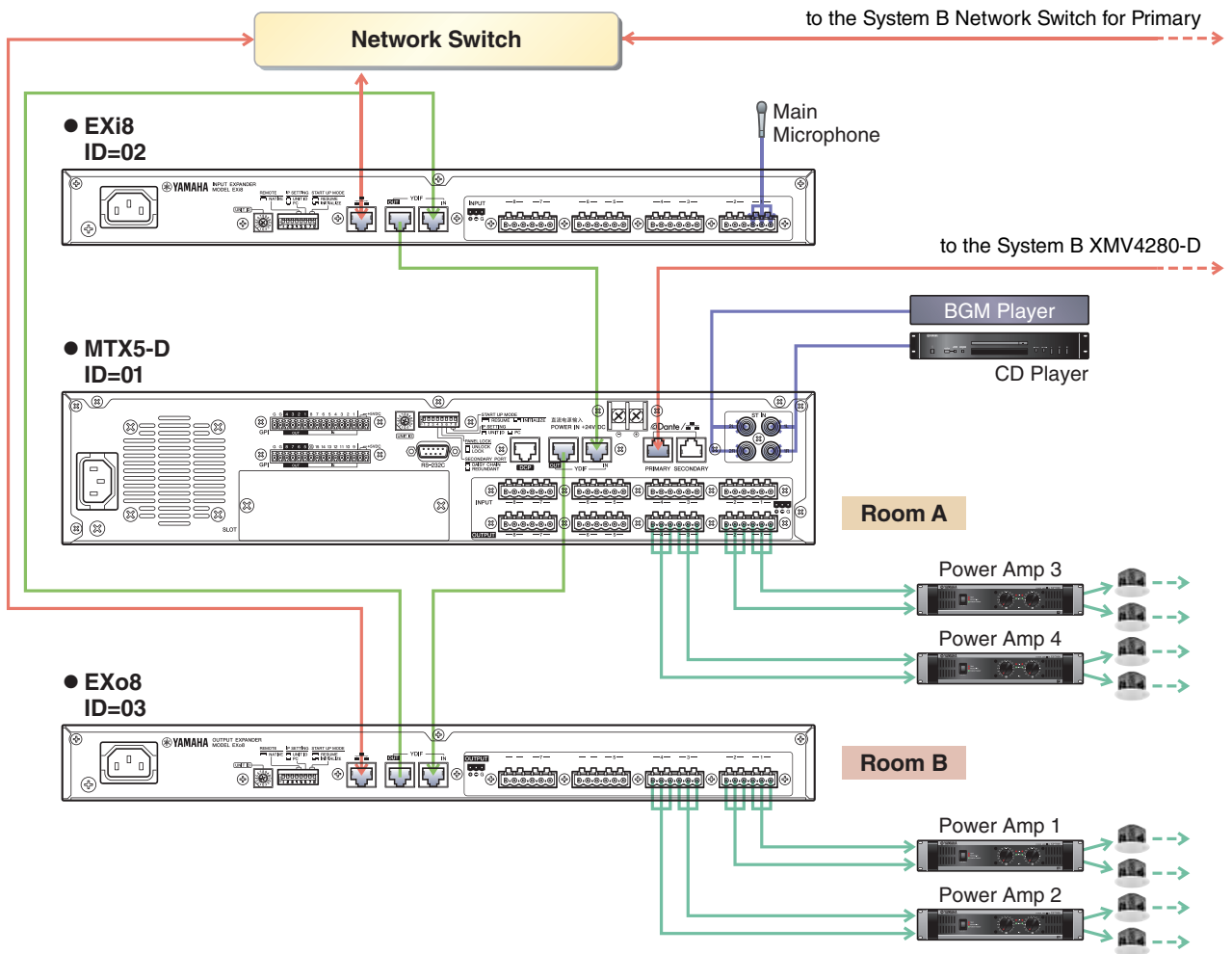
A: The order is very important. If you ignore the order, it will not be possible to correctly specify the YDIF routing. Make connections according to the "Configuration Diagram" displayed in [File] menu → [Print Configuration Diagram].

Q: How should I make connections when daisy-chaining the Dante network connections in example 4?
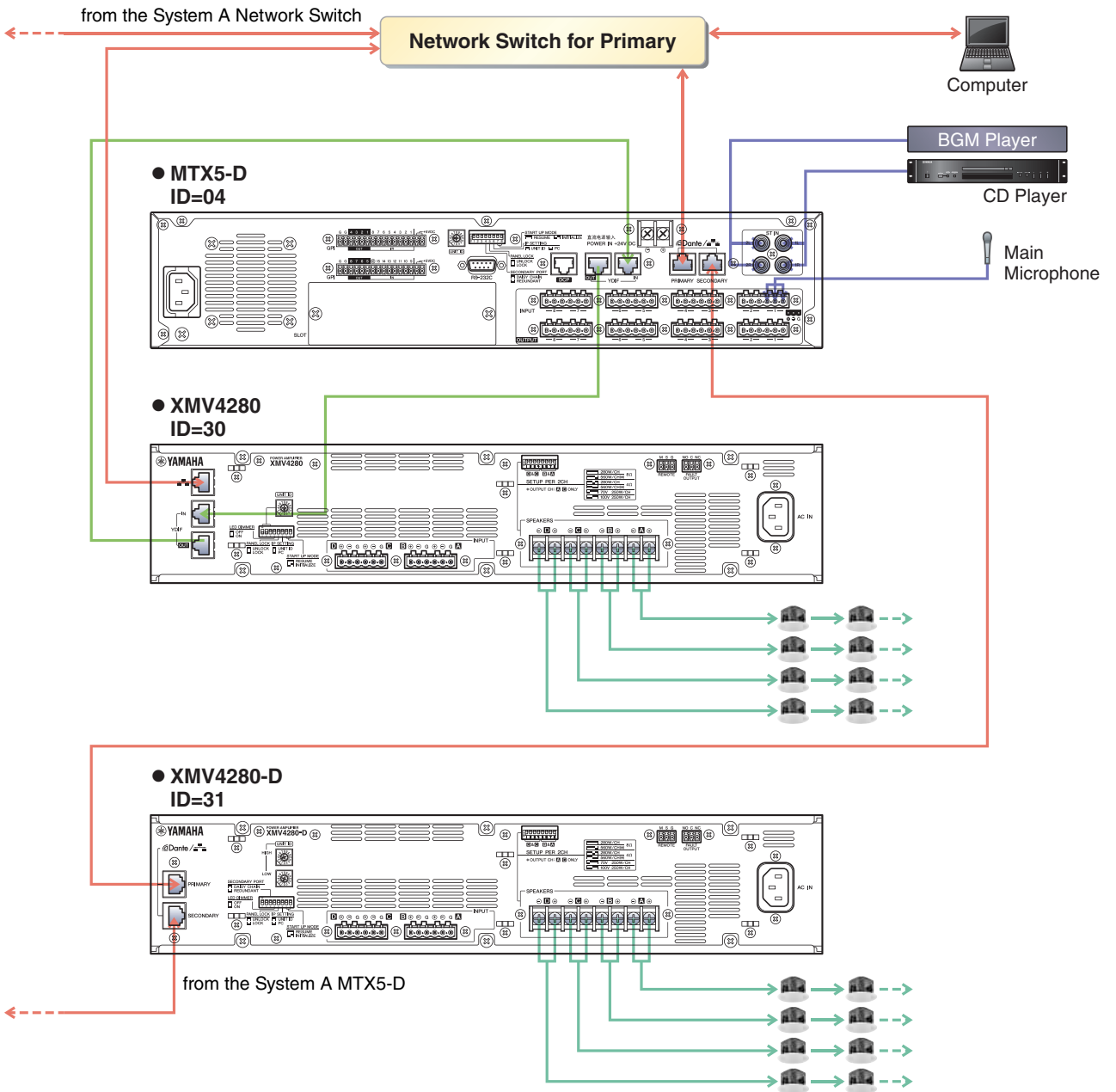
A: Make connections as follows.
Do not route the connection from the System B network switch to the System B XMV4280-D via the System A network switch. This will cause the Dante network to loop within System B, making communication impossible.

● **System A**

System B

from the System A Network Switch

Network Switch for Primary

Computer

BGM Player

CD Player

- **MTX5-D
  ID=04**

Main
Microphone

- **XMV4280
  ID=30**

- **XMV4280-D
  ID=31**

from the System A MTX5-D

Uninstalling the software (Removing the application)

Use "Control Panel" to uninstall the software.
In Control Panel, click [Programs and functions] or [Uninstall a program], then select the item you want to uninstall, and click [Uninstall or change].
A dialog box will appear; follow the instructions in the screen to uninstall the software.
If the "User Account Control" dialog box appears, click [Continue] or [Yes].

The way to access Control Panel will depend on your operating system.

● **Windows 7 users**

Click [Start] → [Control Panel].

● **Windows 8 users**

1. In the start screen, click [Desktop].
   The desktop will appear.

2. Move the cursor to the upper right or lower right of the desktop.
   The charms bar will appear.

3. Click [Settings] → [Control Panel].