

What is Amp Editor?

Amp Editor is software that enables network-compatible amplifiers (such as the TXn series and XMV series); amp control devices (the ACD1); and compatible amplifiers connected to amp control devices to be assembled into a system, and then be monitored and controlled from a computer.

Amp Editor allows centralized monitoring and control of multiple connected devices.

Special Notices

- The software and this manual are the exclusive copyrights of Yamaha Corporation.
- Use of the software and this manual is governed by the license agreement which the purchaser fully agrees to upon breaking the seal of the software packaging. (Please read carefully the Software Licensing Agreement at the beginning of Installation Guide before installing the application.)
- 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.
- The illustrations and screens as shown in this manual are for instructional purposes only, and may appear somewhat different from those on your instrument.
- For information on modification of system software, certain functions, or specifications due to version update
 of the application, please visit the following website:
 http://www.yamahaproaudio.com/
- Windows is a registered trademark of Microsoft® Corporation in the United States and other countries.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

Contents

Chapter 1	Preparing for operation	4
Terms		
Installing a	nd setting up Amp Editor	7
Chapter 2	An overview of Amp Editor	8
	window	a
	vindow	
	window	
	Wildow	
Chapter 3	Setup	15
Device ID s	ettings	
	settings	
	Ç.	
Chapter 4	Basic operations in Amp Editor	23
Chapter 5	Main panel window	33
	he window and their function	
	ne main panel window	
	S	
_	rmation	
	ager	
-	(TXn only)	
	ocessor Library Manager (TXn only)	
	TXn only)	
	only)	
•		
-		
	Port No	
	lpdate (Updating the internal firmware)	
	Manager (for devices other than XMV)	
	etup	
	ation (Synchronization with devices)	
-	ntrol Panel Manager	
	w Creator	
-	ocessor Library Converter	
-	•	

Chapter 6	Tree View window	102
Tree structi	ıre	104
Operations	in the Tree View window	105
Chapter 7	Detail View window	114
Device Deta	il View	115
Chapter 8	Device Properties window	127
Chanter 9	Signal Path View window (TXn only)	144
	e component editor	
-	function or signal on/off	
Chapter 10	Component editor (TXn only)	146
	he window and their function	
	node and Design mode	
Context me	nu	152
Snap		153
Library		155
Parameter	ink / Component link	159
Component	guide	165
Chapter 11	Custom control panels	179
Creating a r	new custom control panel	
Operation r	node and Design mode	180
Context me	nu	181
Tool palette		183
Placing con	trols	186
Editing con	trols	190
Control pro	perties	192
Changing th	ne tab order	204
Size and ba	ckground settings for a custom control panel	205
Full-screen	displaydisplay	206
Appendix	1	207
Alert messa	ige list	207
Troublesho	oting	213

1

Preparing for operation

As of August 2013, the following devices and functions can be used with Amp Editor.

Network-compatible amplifiers

- TXn series (subsequently called TXn): TX6n, TX5n, TX4n
- XMV series (subsequently called XMV): XMV4140, XMV4280, XMV8140, XMV8280, XMV4140-D, XMV4280-D, XMV8140-D, XMV8280-D

Amp control devices

ACD1

Amplifiers compatible with amp control devices

- XP series (subsequently called XP) : XP7000, XP5000, XP3500, XP2500, XP1000
- XM series (subsequently called XM): XM4180, XM4080
- XH series (subsequently called XH) : XH200
- PC-1N/PC-N series (subsequently called PC-N): PC9501N, PC6501N, PC4801N, PC3301N, PC2001N, PC9500N, PC4800N, PC3300N
- Tn series (subsequently called Tn): T5n, T4n, T3n

http://www.yamahaproaudio.com/

Functions available on each device

Functions	TXn	ACD1 (Tn/PC-NXP/XM/XH)	XMV	Page
Event Log	✓	✓	✓	43
Device Information	✓	✓	✓	49
Scene Manager	✓	✓	_	51
Scene Link Manager	✓	✓	_	89
Alert Setup	✓	✓	_	55
Word Clock	✓	_	_	59
Clock	✓	✓	✓	66
Language	✓	_	_	67
GPI	_	✓	_	68
Utility	✓	✓	✓	76
IP Address	✓	✓	✓	84
IP Control Port No.	✓	√	√ (Display only)	85
Firmware Update	✓	✓	✓	86
Recovery Update	✓	✓	✓	88
Synchronization	✓	✓	✓	94
Custom Control Panel Manager	✓	✓	✓	96
System View Creator	✓	✓	✓	98
Speaker Processor Library Manager	✓	_	_	61
Global Link	✓	✓	✓	161
Local Link	✓		_	162

✓ : Available

- : Not available

^{*} For the most recent information, refer to the following URL.

Parameters that can be monitored/controlled

Parameter		TV	AC	D1	VAAV
		TXn	Tn/PC-N	XP/XM/XH	XMV
Signal Path View*	Component parameter editing	✓	_	_	_
Analog Input	Level meter	✓	✓	_	_
	Mute switching	✓	_	_	_
Clat Innut	Pre Input meter	✓	_	_	_
Slot Input	Mute switching	✓	_	_	_
	Level meter (output voltage)	✓	✓	✓	✓
	Power meter	✓	✓	_	_
	Impedance meter	✓	✓	_	_
Charles Outnut	Attenuation operations	✓	✓	_	✓
Speaker Output	Attenuator's Link switching	✓	✓	_	_
	Mute switching	✓	✓	✓	✓
	Solo switching	✓	√	√	_
	Polarity (phase reversal) switching	√ **	√	_	✓
Slot Output	Level meter	✓	_	_	_
	Power Standby/On operations	✓	√	√	✓
General	Temperature meter	✓	√	_	_
	Protection monitor	✓	✓	✓	✓
	Amp Output mode detection	✓	✓	_	✓
	Amp Output mode switching	✓	_	_	_
	Fan meter	✓	_	_	_

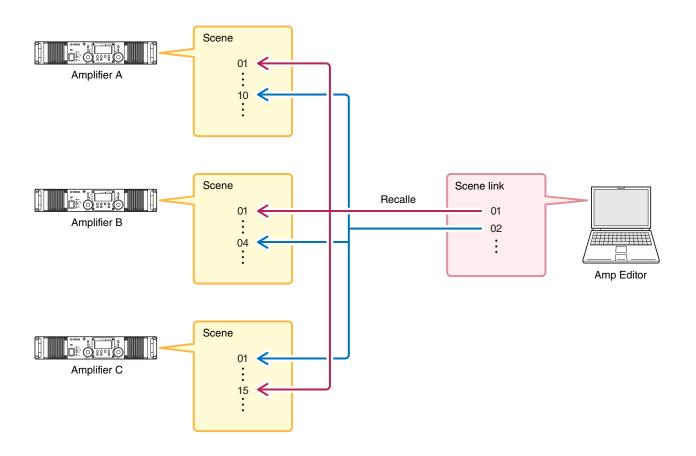
^{✓ :} Available— : Not available

^{*} For more about the Signal Path View, refer to page 144.

^{**} Polarity switching for the TXn is performed in the Signal Path View.

Terms

Term	Definition
Workspace	The set of devices that can be simultaneously monitored and controlled by Amp Editor is called a workspace.
Online/Offline	"Online" is the state in which the devices are connected to the computer and network, and are synchronized with Amp Editor so that they can be monitored and controlled. "Offline" is the state in which the devices and computer are not physically connected, or connected but not synchronized.



Term	Definition
Scene	A settings for each amplifier is called a "scene." By recalling a scene, the saved settings can be immediately applied to the amplifiers.
Scene link	Settings for simultaneously recalling scenes for multiple amplifiers within a workspace are called a "scene link." By recalling a scene link, scenes can be simultaneously recalled for multiple amplifiers. Scene links can be created and recalled using Amp Editor.

Installing and setting up Amp Editor

In order to use Amp Editor to monitor and control your system, you must install Amp Editor in your computer, and then specify IP addresses and IDs for the computer and devices.

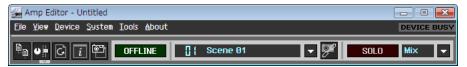
For details on installing Amp Editor, refer to the "Amp Editor Installation Guide." For details on making settings in your computer, refer to "Setup" (page 15).

For details on making settings in your devices, refer to the owner's manual or reference manual for each device. You can download these manuals from the Yamaha Pro Audio website (http://www.yamahaproaudio.com/downloads/)

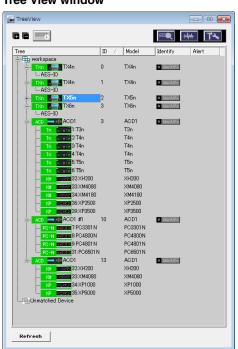
An overview of Amp Editor

Broadly speaking, Amp Editor consists of three windows: the Main Panel window, the Tree View window, and the Detail View window.

Main Panel window



Tree View window



Detail View window



Main Panel window

The Main Panel window is the main window of Amp Editor.

NOTE • You can open a project file (filename extension .yae) by dragging and dropping it onto the Main Panel window.



■ Menu bar

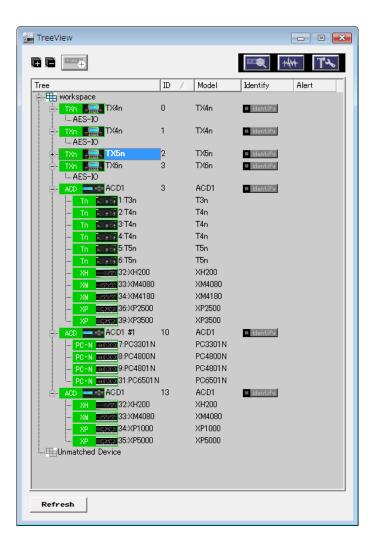
Here are the functions that can be executed by Amp Editor, grouped by category. Click to see a list of functions. For details, refer to "Main Panel window" (page 33).

■ Toolbar

This area contains buttons for the most frequently used functions of Amp Editor, and also shows the current status. For details, refer to "Main Panel window" (page 33).

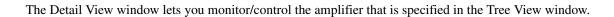
Tree View window

The Tree View window is a hierarchical view of the connection status of the devices connected to the network.



By double-clicking an icon shown in this window, you can access the Detail View window to see detailed information. For details, refer to "Tree View window" (page 102).

Detail View window





The following four types of screen are shown.

Screen name	Content
Device Detail View (page 115)	This will appear when you double-click an amplifier icon. Here you can monitor the amplifier's status such as its level meters, or control the attenuation and Mute status of an amplifier.
Signal Path View (TXn only) (page 144)	This will appear when you click the [Signal Path View] button in the TXn's Device Detail and the Tree View window, or when you choose [Show] → [Signal Path View] from the context menu that appears when you right-click the TXn icon. Here you can edit the parameters of the TXn's components.
Device Properties (page 127)	This will appear when you click the [Device Properties] button in the Tree View window and the Detail View window, or when you choose [Show] → [Device Properties] from the context menu that appears when you right-click the amp icon. Here you can make various settings, such as the amplifier's output mode, gain/input sensitivity, and alerts/protection settings.
I/O Card Editor (TXn only) (page 176)	This will appear when you choose [Show] → [I/O Card Editor] from the context menu that appears when you right-click the TXn or I/O card icon. This lets you specify the input/output mode of a digital I/O card inserted in the slot. You cannot select I/O Card Editor for cards other than a digital I/O card (e.g., an AD card or a DA card).

Projects

A system constructed by Amp Editor is saved in a folder as a "project."

A project contains settings for workspace, components, and parameters.

Only one project can be opened at a time; when you open a different project, the currently-open project will be closed.

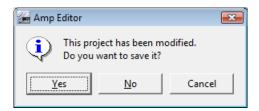
The commands for opening, creating, or saving a project are found on the [File] menu of the main panel window.

■ Creating a new project

Here's how to create a new project.

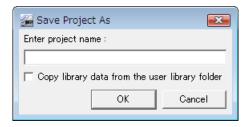
1. In the main panel window, click [File] menu \rightarrow [Name].

The currently-open project will be closed when you create a new project, so a dialog box will ask whether you want to save the current project.



2. Click [Yes] if you want to save the project, or [No] if you don't want to save it.

If you click [Yes], the "Project Save As" dialog box will appear if the project has never been saved before. Enter the name under which you want to save the project, and click the [OK] button. In the folder selection dialog box that will then appear, select or create the folder in which to save the project, and click the [OK] button.



The new project will be created.

■ Saving a project

In Amp Editor, projects are saved in units of folders.

To save a project, use the main panel window [File] menu [Save] or [Save As...] command. The [Save] command will overwrite the previously-saved version of the project. The [Save As...] command will save the project under a different name.

Saving a project

1. In the main panel window, click [File] menu ightarrow [Save].

The currently-open project will be overwritten.

Save as a specified name

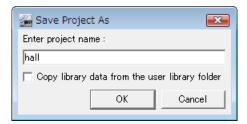
The main panel window [File] menu \rightarrow [Save As...] command lets you save the currently-open project with the name you specify. If you're saving for the first time, a project will be created. If the project has already been assigned a name and saved, it will be saved as a different project.

1. In the main panel window, click [File] menu \rightarrow [Save As...].

The "Save Project As" dialog box will appear.

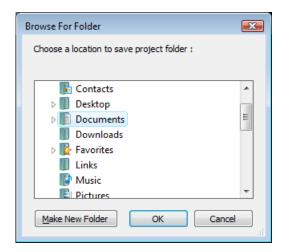
When saving the library file with a project, select the [Copy library data from the user library folder.] check box. If you click the [OK] button, the [Select Library] dialog box will appear. This dialog box shows the library files are saved to the User Library folder. Select the library file to be copied to the project folder, and then click the [OK] button.

• If a library file of the same name already exists in the destination for the project, the dialog box will ask whether you want to overwrite, or save the library file as a specified name with numbers. When you save it as a specified name with numbers, a list of the library files that were most recently saved (starting with the same letters as that specified name) will be displayed.



2. Enter the name under which you want to save the project, and click the [OK] button.

The folder selection dialog box will appear.



3. Select or create the folder in which you want to save the project, and click the [OK] button.

The project will be created.

■ Opening a project

Here's how to open a previously-saved project.

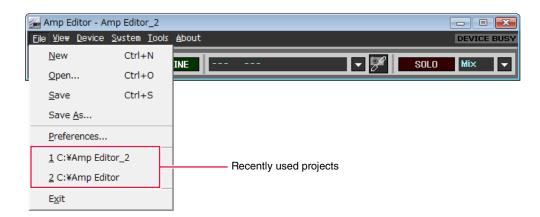
The currently-open project will be closed when you open a new project, so a dialog box will ask whether you want to save the current project.

[Open] command

- In the main panel window, click [File] menu → [Open].
 The folder selection dialog box will appear.
- 2. Select the folder of the project that you want to open.
- 3. Click the [OK] button.

Open a project from [Recently used projects]

The [File] menu of the main panel window will list the recently used projects. You can open a project by clicking its project name.



Double-click the icon of a project file

You can open a project by double-clicking the icon of the project file (file name extension .yae) in a project folder. If Amp Editor is not running, Amp Editor will start up and the project will be opened.



Drag and drop a project file onto the main panel window

You can open a project by dragging and dropping a project file (or its shortcut) from a project folder into the main panel window.

■ Closing a project

Amp Editor is not able to open multiple projects simultaneously. To close the currently open project, either create a new project or open a different project.

• When copying a project to another folder or another computer, you must copy the entire project folder.

Setup

To use Amp Editor to monitor and control your equipment, you must first specify the IP address for your computer and devices, and the ID for your devices.

NOTE • A Device ID is a unique number assigned to each device to be recognized by the network. Depending on the product, the Device ID might be represented differently. For example, on the TXn or ACD1, it is called "Device ID" and expressed in decimal numbers. On the XMV, it is called "UNIT ID" and expressed in hexadecimal numbers. In this manual, the term Device ID or UNIT ID will be used depending on the product.

Device ID settings

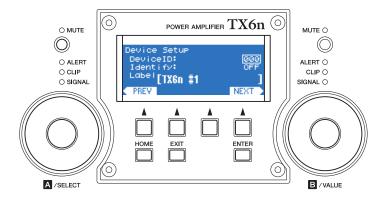
Here's how to set the Device ID so that Amp Editor can distinguish each unit. If multiple devices exist on the same network, you must assign a unique ID to each device.

■ For the TXn

1. Power-on the TXn.

After approximately ten seconds, the unit's front panel display will show the HOME screen.

2. On the front panel of the unit, hold down the [ENTER] button for one second or longer. The Device ID setting screen will appear.



3. Use encoder B on the front panel of the unit to select the Device ID. You can select a value in the range of 0-255.

If multiple ACD1 and/or TXn units are connected to a single network, set each unit to a different Device ID.

4. On the unit's front panel, press the [ENTER] button.

The value you specified will be applied to the unit.

• The value you edit will blink until you press the [ENTER] button. If you move to a different screen while the value is still blinking, the change you made will not be applied.

5. Repeat steps 1-4 to specify the Device ID for each connected TXn unit.

NOTE • You can also change the Device ID on Amp Editor's [Change Device ID] dialog box (page 108) after the devices are synchronized with Amp Editor.

■ For the ACD1

1. Power-on the ACD1.

After approximately ten seconds, the unit's front panel display will show the HOME screen.

2. On the front panel of the unit, hold down the [BACK] button for one second or longer.

The Device ID setting screen will appear.



3. Use the [▲INC/YES] or [▼DEC/NO] button on the front panel of the unit to select the Device ID. You can select a value in the range of 0–255.

If multiple ACD1 or TXn units are connected to a single network, set each unit to a different Device ID.

4. Press the front panel [NEXT] button.

The cursor moves to $\ #$.

5. Press the front panel [▲INC/YES] button.

The value you specified will be applied to the unit.

- If you move to a different screen without pressing the [▲INC/YES] button, your change will not be applied.
- 6. Repeat steps 1-5 to specify the Device ID for each connected ACD1 unit.
 - You can also change the Device ID on Amp Editor's [Change Device ID] dialog box (page 108) after the devices are synchronized with Amp Editor.

■ For the XMV4140/XMV4280/XMV8140/XMV8280

- 1. Power-off the XMV.
- 2. Use the DIP switches (1–3) to specify the upper digit, and use the rotary switch to specify the lower digit to select the UNIT ID value from a maximum of 127 combinations in the range of 01 through 7F (127).
 - To change the switch settings, turn off the power to the unit. If you change the settings while the power is on, the change will not be effective until you turn the unit off and then on.
 - Do not use "00" as the UNIT ID.

■ For the XMV4140-D/XMV4280-D/XMV8140-D/XMV8280-D

- 1. Power-off the XMV-D.
- 2. Use the rotary switch (HIGH) to specify the upper digit, and use the rotary switch (LOW) to specify the lower digit to select the UNIT ID value from a maximum of 254 combinations in the range of 01 through FE (254).
 - Do not use "00" or "FF" as the UNIT ID.
 - To change the switch settings, turn off the power to the unit. If you change the settings while the power is on, the change will not be effective until you turn the unit off and then on.

IP address settings

Here's how to set the IP address of the computer and of the devices so that Amp Editor can communicate with the devices.

■ Accessing the Control Panel

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

Windows XP / Vista / 7

Select [Start] \rightarrow [Control Panel].

Windows 8

1. In the Start screen, click [Desktop].

The desktop will appear.

2. Move the cursor to the upper right or lower right corner of the desktop.

The Charms bar will appear.

3. Select [Settings] \rightarrow [Control Panel].

■ IP address settings for the computer

- NOTE Unless you have a specific need to do otherwise, you should set the IP address to a private address (192.168.0.2-192.168.255.253). If you need to specify a global address, please consult your network administrator before doing so.
 - Do not connect to the same network as an audio network such as EtherSound or CobraNet. If you do so, communication may be interrupted, and the system may stop operating correctly.
 - The explanation that follows will assume that the Windows network connection is named "Local area connection." The name may differ according to your environment.

If the control panel appears as category view, switch the view as follows:

For Windows XP

Click [Switch to Classic View] in the upper left of the control panel.

For Windows Vista

Click [Classic View] in the upper left of the control panel.

For Windows 7 / 8

Click [View by: Category] in the upper right of the control panel, and select "Large icons" or "Small icons".

Windows Vista / 7 / 8 users

1. Access the Control Panel, then click or double-click [Network and Sharing Center] or [View network status and tasks].

The "Network and Sharing Center" is displayed.

2. Click [Manage network connection] or [Change adapter settings] from the "Tasks" list located in the left side of "Network and Sharing Center" window, then double-click [Local Area Connection].

The "Local Area Connection Status" dialog box will be displayed.

- NOTE The "User Account Control" dialog box may appear. Click [Continue].
 - If the "Local Area Connection properties" dialog box appears, skip ahead to step 4.
- 3. Click [Properties].

The "Local Area Connection properties" dialog box will be displayed.

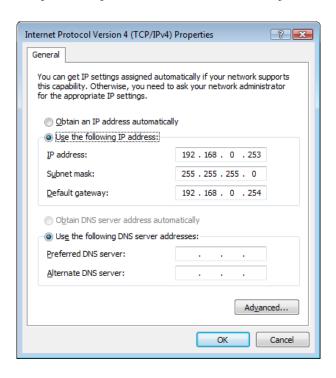
• The "User Account Control" dialog box may appear. Click [Continue].

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

The "Internet Protocol Version 4(TCP/IPv4) Protocol" dialog box will be displayed.

5. Select [Use the following IP address], and set the [IP address] and [Subnet mask].

We recommend an [IP address] value of "192.168.0.253" and a [Subnet mask] value of "255.255.255.0".



6. Click the [OK] button to close the dialog box.

Windows XP users

1. Chose [Control Panel] → [Network connections], and double-click [Local area connections].

The "Local area connection status" dialog box will appear.

2. In the [General] tab, click [Properties].

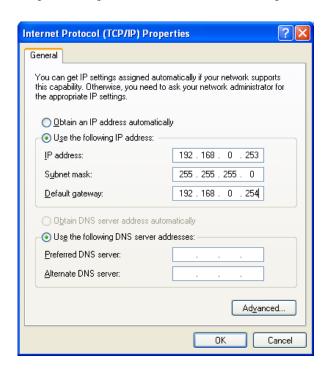
The "Local area connection properties" dialog box will appear.

3. In the [General] tab, double-click [Internet protocol (TCP/IP)].

The "Internet protocol (TCP/IP) properties" dialog box will appear.

4. Select [Use the following IP address], and set the [IP address] and [Subnet mask].

We recommend an [IP address] value of "192.168.0.253" and a [Subnet mask] value of "255.255.255.0".

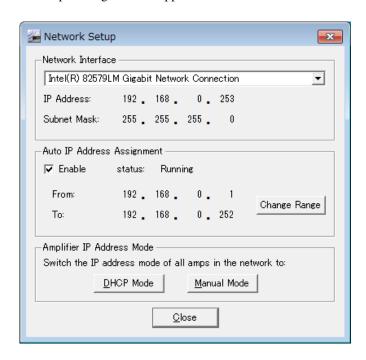


5. Click the [OK] button to close the dialog box.

■ Setting the device IP address (example for a TXn or ACD1)

On a TXn or ACD1, the Auto IP Address Assignment function of Amp Editor (page 92) automatically assigns an IP address to each device. The following procedure is based on the assumption that these IP address settings are used for communication between the devices and Amp Editor.

- 1. Before turning on the power to the devices, use an Ethernet cable to connect your computer's Ethernet connector to the network switch, and then start up the computer.
- 2. Click [Start] → [All Programs] → [Yamaha Amp Editor] → [Amp Editor] to start Amp Editor.
- **3.** From the Amp Editor menu bar, choose [System] → [Network Setup]. The "Network Setup" dialog box will appear.



4. In [Network Interface], select the network adapter you're using.

As the network adapter, select the same card as you used in "Computer's IP address setting."

- **5.** If necessary, click the [Change Range] button to edit the range of the IP address to be assigned to the device.
- **6.** If the [Enable] checkbox in the Auto IP Address Assignment section is not checked, check it to enable the Auto IP Address Assignment function.

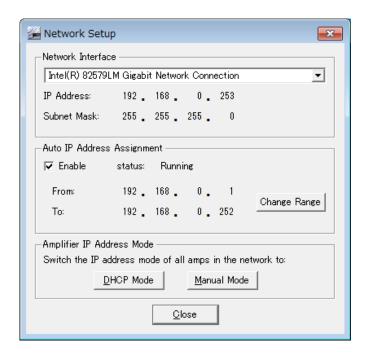
- 7. Use an Ethernet cable to connect the [NETWORK] connector of the XMV to a network switch, and then power-on all devices.
- 8. Verify that all connected devices are shown in the Tree View window.

- Make sure that all devices are displayed in the Tree View, then click the [Manual Mode] button. In this way, the IP address assigned to the devices by the Auto IP Address Assignment function will become static. This is a convenient way to assign a static IP address, especially if you want to facilitate assignment of the IP address when the system starts up, or if you want to control the devices using a remote controller, such as AMX/Crestron.
 - Once the device IP address becomes static, uncheck the [Enable] checkbox in the Auto IP Address Assignment section (page 92).
 - It may take some time for IP addresses to be assigned to the devices. Correspondingly more time will be required for a larger number of devices.
 - If the network settings of a device are not the factory settings, it might not appear in the Tree View window. In this case, operate the device's front panel to change the IP Address Mode to [DHCP], or initialize the device's memory.
 - On the TXn unit, use [Utility] → [Network Setup] to change the IP Address Mode to [DHCP], and then press the unit's front panel [ENTER] button.
 - On the ACD1 unit, use [6.Network Setup] → [IP Address Mode] to change the IP Address Mode to [DHCP]. For details on initializing the memory, refer to the owner's manual or reference manual for each device.

Setting the device IP address (example for an XMV)

On the XMV, the IP address is automatically specified based on the unique UNIT ID of each device. The following procedure is based on the assumption that these IP address settings are used for communication between the devices and Amp Editor.

- 1. Before turning on the power to the devices, use an Ethernet cable to connect your computer's Ethernet connector to the network switch, and then start up the computer.
- 2. Click [Start] → [All Programs] → [Yamaha Amp Editor] → [Amp Editor] to start Amp Editor.
- **3.** From the Amp Editor menu bar, choose [System] → [Network Setup]. The "Network Setup" dialog box will appear.



4. In [Network Interface], select the network adapter you're using.

As the network adapter, select the same card as you used in "Computer's IP address setting."

- **5.** If you are using the XMV4140-D, XMV4280-D, XMV8140-D, or XMV8280-D, and if the [Enable] checkbox in the Auto IP Address Assignment section is checked, uncheck it to disable the Auto IP Address Assignment function (page 92).
- **6.** Make sure that the device setting DIP switch (IP SETTING) on the XMV's rear panel is set to UNIT ID.
- 7. Use an Ethernet cable to connect the [NETWORK] connector of the XMV to a network switch, and then power-on all devices.
- 8. Verify that all connected devices are shown in the Tree View window.

Basic operations in Amp Editor

As examples of how amplifiers can be controlled from Amp Editor, this chapter explains the process of editing the basic settings of each amplifier, creating a custom control panel from which you can monitor and control multiple amplifiers, and then using Scene Link to switch multiple amplifiers together.

- NOTE Before you continue with the procedure described below, you must make IP address and Device ID settings for your computer and devices as described in "Setup" (page 15).
 - For details on how to connect the ACD1 to an amplifier and set the AMP ID, refer to the ACD1 Owner's Manual.

Synchronizing Amp Editor and the devices

Here's how to perform synchronization so that the devices can be monitored and controlled from Amp Editor.

1. After you've powered-on your equipment, start up Amp Editor.

The main panel window and the Tree View window will appear.

The connected devices are shown in the workspace of the Tree View window.

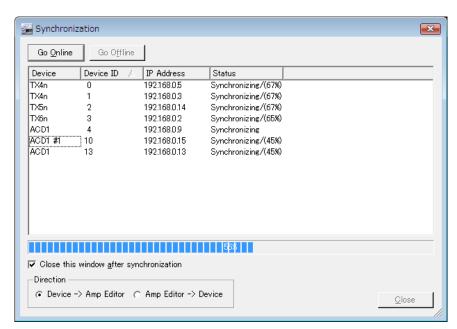
NOTE • If a connected device is not shown in the workspace, refer to "Troubleshooting" (page 213).



2. In the main panel window, click the [OFFLINE] button.

The "Synchronization" screen (page 94) will appear. Verify that the connected TXn(s) and/or ACD1(s) are shown.

• Amplifiers connected to the ACD1 are not shown. To verify that the amplifiers are connected to the ACD1, follow the steps below:

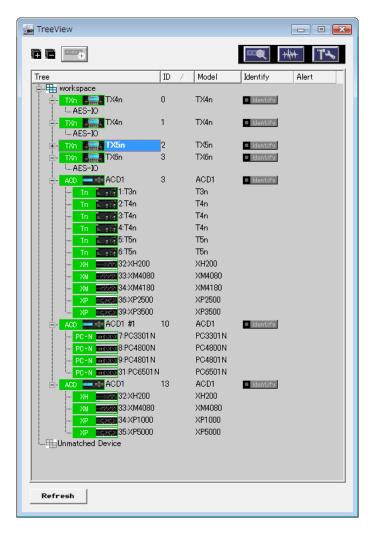


3. Use the Direction field to specify the direction of synchronization, and then click the [Go Online] button.

Amp Editor and the devices will synchronize, and the indication in the main panel window will change to [ONLINE].

NOTE • If you choose [Amp Editor → Device], synchronization will occur by sending data from Amp Editor to the devices. In this case, please take care that unexpected high volume does not damage your speakers or cause hearing damage.

When you switch to [ONLINE], the amplifier icons shown in the workspace of the Tree View window will turn green.



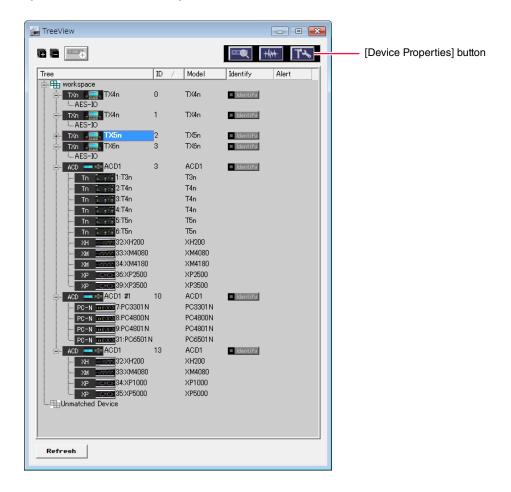
- NOTE If synchronization with the devices is not possible due to a network problem, information about the devices that were unable to synchronize will be displayed. Check the network cable connections, and try again from step 2 of the procedure.
 - If the Amp Editor does not recognize the synchronized devices, a dialog box which indicates the devices that were unable to be recognized will appear.



■ Making basic settings for each amplifier

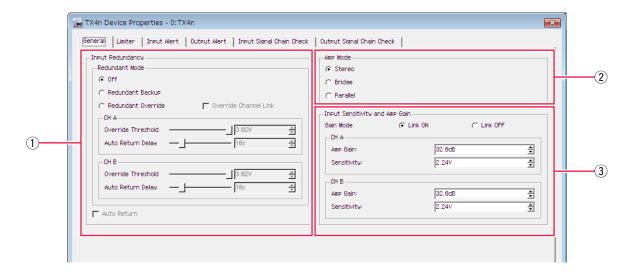
Here you'll make basic settings such as the amplifier's Gain and Power Amp Mode.

4. Click an amplifier icon in the workspace of the Tree View window.



5. Click the [Device Properties] button ().

The Device Properties window will appear.



6. Make basic settings for the amplifier.

In the "General" tab you can make the following basic settings. For details, refer to Device Properties window (page 127).

1 Input Redundancy

Here you can make settings for a redundant connection (duplicate audio connections) that uses both the analog input signal and the digital (slot) input signal. If the digital input audio is interrupted by a broken connection or other problem, the amplifier can automatically switch to the analog input (Redundant Backup), or the amplifier can automatically switch to the analog input simply when an analog audio input signal is detected (Redundant Override).

By default, this is Off.

2 Amp Mode

This specifies the amplifier's output mode (Stereo/Bridge/Parallel). The default setting is [Stereo].

3 Input Sensitivity and Amp Gain

This specifies the gain (Amp Gain) and input sensitivity (Sensitivity) for each channel. Gain and input sensitivity settings are linked.

The default settings are "Amp Gain" [32.0 dB], "Sensitivity" [11.8 dBu] (for the Tx6n) / [10.4 dBu] (for the Tx5n) / [9.2 dBu] (for the Tx4n).

• Gain Mode

This specifies whether the gain / input sensitivity settings will be linked between channels A/B when the Amp Mode is Stereo.

The default setting is Link On.

- 7. Click the [Close] button to close the dialog box.
- 8. Repeat steps 4 through 7 to make basic settings for the other amplifiers.

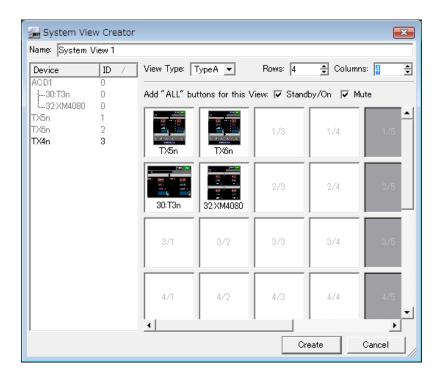
NOTE • You can copy basic settings as described in "Copying settings" (page 106).

Monitoring and controlling multiple amplifiers

By using the "System View Creator" dialog box you can create a System View custom control panel that enables centralized monitoring and control of multiple amplifiers.

9. From the [Tools] menu, choose [System View Creator...].

The "System View Creator" dialog box will appear.



- 10. In the [Name] field, enter the name of the custom control panel that you want to create.
- 11. In this example, select [Type A] for the [Type] field.

[Type A] displays more controllers than [Type B].

• If you select [Type B], you'll be able to monitor and control a larger number of amplifiers in a single screen, but there will be fewer controllers.

12. From the Device list, drag an amplifier that you want to monitor and control, and drop it into the desired cell.

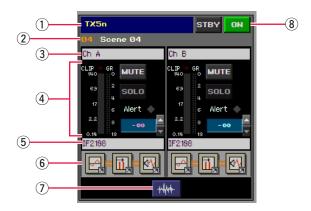
The amplifier will be placed at that location. Place the other amplifiers in the same way.

- By default, the cell layout will be 4 x 4. Use [Rows] and [Columns] to edit the layout if desired.
 - If the [Standby/On] check box or the [Mute] check box is selected, a button will be added, allowing you to switch the power status or muting of all amplifiers registered in the custom control panel.

13. When you've finished placing the amplifiers, click the [Create] button.

The "System View Creator" dialog box will close, and the System View custom control panel you created will open. You can use this custom control panel to monitor and control multiple amplifiers.

Type of TXn has the following structure.



1 Amplifier name

Indicates the name of the amplifier.

② Scene name

Indicates the amplifier's scene number and scene name.

3 Channel name

Indicates the amplifier's channel name.

4 Amplifier control section

Here you can monitor and control the following items.

- Level meter / GR meter indication
- MUTE on/off
- · SOLO on/off
- Alert indication (This will light if any alert indicator in the Device Detail View is lit.)
- · Attenuator operation

5 Library name

Indicates the amplifier's Speaker Processor library name.

6 [EQ] icon / [Delay] icon / [SP] icon

You can click these to access the following component editors.

- 8 Band EQ
- · Input Delay
- · Speaker Processor

(7) [Signal Path View] button ()

This opens the Signal Path View window. In the Signal Path View window you can access all component editors.

8 [STBY]/[ON] button

Monitors and controls the status (Standby/On) of the amplifier's power supply.

■ Editing an amplifier's Speaker Processor component settings (TXn only)

For each channel of the amplifier, you can edit the settings (the parameter set) of the Speaker Processor component for the speaker you're using.

14. Click the [SP] icon of the channel whose Speaker Processor component settings you want to edit.

The "Speaker Processor" dialog box will open.



15. Click the [RECALL] button to select the library item for the speaker you're using.

The parameter set for the Speaker Processor component will be switched.

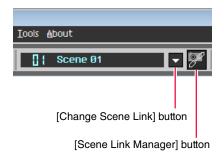
- If you want to use a library file created in DME Designer (file name extension "cel"), use the "Speaker Processor Library Converter" (page 101) to convert it to a library item file for TXn.
 - If the library is created with an extension, the file name extension "ce2" indicates "without security" and "cep" means "with security."
- 16. Click the [X] button located in the upper right of the dialog box to close it.
- 17. Repeat steps 14 through 16 to change the Speaker Processor component library item for each channel of each amp.

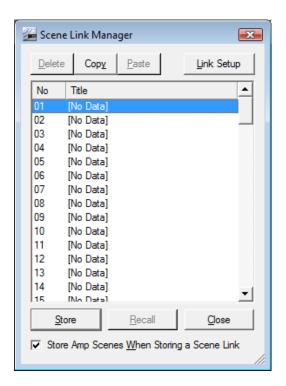
■ Using Scene Link to switch the settings of multiple amplifiers simultaneously

If you use Scene Link to associate the scenes of multiple amplifiers, the scenes of multiple amplifiers can be stored/recalled simultaneously.

18. In the main panel window, click the [Scene Link Manager] button.

The "Scene Link Manager" dialog box will open.





19. In the Scene Link list, click [01 [No Data]] to select it.

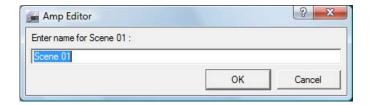
If 01 is not [No Data], select any scene link that indicates [No Data].

20. Select the [Store Amp Scenes When Storing a Scene Link] check box.

When you store the scene link, the scene of the corresponding amplifiers will also be stored.

21. Click the [Store] button.

A dialog box will appear, allowing you to enter a name for the scene link.



22. Enter the scene link name, and click the [OK] button.

The current settings will be stored into each amplifier unit as scene 01, and scene link 01 will be registered in Amp Editor.

The scene link you stored here can be recalled from the [Change Scene Link] button in the main panel window.

• If the amplifier's scene 01 is [No Data], the same name as the scene link name will be stored as the scene name.

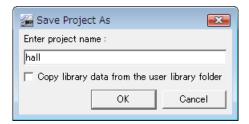
■ Saving a project

Here's how to save the project containing the various settings you created.

23. In the main panel window, click [File] menu \rightarrow [Save As...].

A dialog box will appear, allowing you to enter a name for the project name.

When using the project with a different computer, if you select the [Copy library data from the user library folder] check box, the library file will also be conveniently saved in the project's save destination folder.



24. Enter the project name, and click the [OK] button.

A dialog box in which you can specify the project's save destination will appear.



NOTE • Projects are saved in units of folders.

25. When you've specified the save destination for the project, click the [OK] button.

The project will be saved.

This completes the introduction of basic operations.

For more details about Amp Editor operations, refer to the appropriate chapter of this document.

If you've restarted Amp Editor, choose the main panel window [File] menu and click [Open]; then specify the saved project and load it to reproduce Amp Editor's settings.

Main panel window

Objects in the window and their function

The Main Panel window is the main window of Amp Editor.



• You can open a project file (filename extension .yae) by dragging and dropping it onto the Main Panel window.

■ Title

The name of the currently-open project is shown. When a new project has been created or if the project has not yet been saved, this will indicate "Untitled."

■ Menu bar

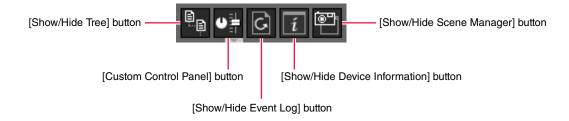
The commands that can be executed by the application are grouped here into categories.

Click here to see lists of commands.

At the right side, a [DEVICE BUSY] indicator will be displayed. If the device is busy processing, such as when writing data, the [DEVICE BUSY] indicator will light. Do not turn off the device while the indicator is lit.

■ Shortcut buttons

Frequently-used commands are placed here as buttons. If the corresponding window or dialog box is not displayed, the button will be dimmed. If the corresponding window or dialog box is displayed, the button will turn green.



[Show/Hide Tree] button

Shows or hides the Tree View window (page 102).

[Custom Control Panel] button

Clicking this will display a popup menu from which you can select a custom control panel. By selecting [New Custom Control Panel] you can create a new custom control panel (page 180). By selecting [System View Creator...], you can create a new custom control panel using the "System View Creator" dialog box, which provides templates for frequently-used parameters (page 98).

• The "System View" you created using the "System View Creator" dialog box can also be accessed from the [Custom Control Panel] button.

[Show/Hide Event Log] button

Shows or hides the "Event Log" dialog box (page 43).

[Show/Hide Device Information] button

Shows or hides the "Device Information" dialog box (page 49).

[Show/Hide Scene Manager] button

Shows or hides the "Scene Manager" dialog box (page 51).

ONLINE/OFFLINE (communication status)

This indicates the status of communication between the computer and the devices in the workspace. "Online" is the state in which the devices are connected to the computer and network, and are synchronized with Amp Editor so that they can be monitored and controlled. "Offline" is the state in which the devices and computer are not physically connected, or connected but not synchronized.



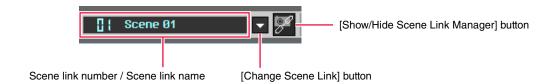
Online status in which at least one device in the workspace can be monitored and controlled

: Status in which all devices in the workspace are offline

When you click this button, the "Synchronization" dialog box will appear. By synchronizing Amp Editor with your devices, you will then be able to monitor and control the amplifiers in realtime (page 94).

■ Scene Link

This shows scene link information. By recalling a scene link, you can switch the scenes of multiple amplifiers in a single action.



Scene link number / Scene link name

This shows the number and name of the last-recalled scene link.

[Change Scene Link] button

Click to $[\nabla]$ display a list from which you can select a scene link to recall. The selected scene link will be recalled.

[Show/Hide Scene Link Manager] button

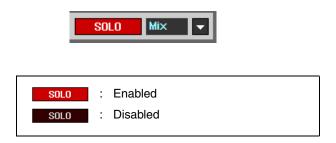
Opens the "Scene Link Manager" dialog box (page 89). In order to use scene link to recall the scenes of multiple amplifiers in a single operation, you must first register the scenes to be recalled as a scene link.

NOTE • The XMV does not support scenes.

■ SOLO (Solo Master)

You can enable or disable the solo function (Solo Master) for the workspace. When online, clicking the [SOLO] button will display a confirmation dialog box, allowing you to enable or disable the function.

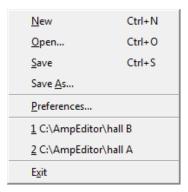
You can click [▼] to access a list that lets you switch between Mix mode and Last mode. Select "Mix" if you want to select multiple channels for solo output, or "Last" if you want only the last selected channel to be soloed.



• The XMV does not support the solo function.

Menus in the main panel window

■ [File] menu



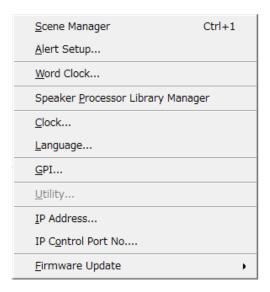
Command	Operation	
New	Creates a new project (page 12). This cannot be selected when online.	
Open	Opens a saved project (page 14). This cannot be selected when online.	
Save	Saves (overwrites) onto the existing project (page 13).	
Save As	Saves the project to a different folder (page 13).	
Preferences	Opens the "Preferences" dialog box (page 39).	
Recently used projects	Lists projects that were saved recently. You can open a project by clicking its project name. This cannot be selected when online.	
Exit	Quits Amp Editor.	

■ [View] menu



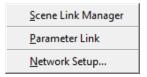
Command	Operation
Tree	Shows or hides the Tree View window (page 102).
Custom Control Panel	Clicking this will display a popup menu from which you can select a custom control panel (page 179). By selecting [New Custom Control Panel] or [System View Creator] you can create a new custom control panel (page 180). A screen you created using the "System View Creator" dialog box can also be shown as a custom control panel.
Event Log	Shows or hides the "Event Log" dialog box (page 43).
Device Information	Shows or hides the "Device Information" dialog box (page 49).

■ [Device] menu



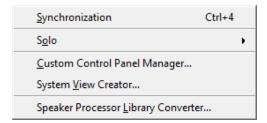
Command	Operation		
Scene Manager	Shows the "Scene Manager" dialog box (page 51).		
Alert Setup	Shows the "Alert Setup" dialog box (page 55).		
Word Clock Shows the "Word Clock" dialog box (page 59).			
Speaker Processor Library Manager	Shows the "Speaker Processor Library Manager" dialog box (page 61).		
Clock	Shows the "Clock" dialog box (page 66).		
Language	Shows the "Language" dialog box (page 67).		
GPI	Shown the "GPI" dialog box (page 69).		
Utility	Shows the "Utility" dialog box (page 76).		
IP Address	Shows the "IP Address" dialog box (page 84).		
IP Control Port No	Shows the "IP Control Port No." dialog box (page 85).		
Firmware Update	Click this to access a sub-menu from which you can access the "Firmware Update" dialog box (page 86) or the "Recover Update" dialog box (page 88).		

■ [System] menu



Command	Operation	
Scene Link Manager	Shows the "Scene Link Manager" dialog box (page 89).	
Parameter Link	Shows the "Parameter Link" dialog box (page 163).	
Network Setup	Shows the "Network Setup" dialog box (page 91).	

■ [Tools] menu



Command	Operation	
Synchronization	Shows the "Synchronization" dialog box (page 94).	
Solo	Click this to access a sub-menu from which you can enable or disable the solo function (Solo Master) for the workspace. You can also switch between Mix mode and Last mode. Select "Mix Solo" if you want to select multiple channels for solo output, or "Last Solo" if you want only the last selected channel to be soloed. Both of these items can be switched only while online.	
Custom Control Panel Manager	Shows the "Custom Control Panel Manager" dialog box (page 96).	
System View Creator	Shows the "System View Creator" dialog box (page 98).	
Speaker Processor Library Converter	This allows a Speaker Processor component library item (2Way–6Way) created by DME Designer to be converted for use with TXn (1Way) (page 101).	

■ [About] menu

About Amp Editor

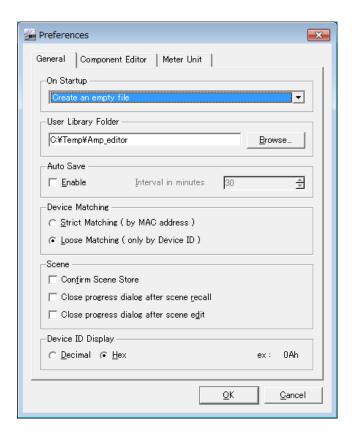
Command	Operation	
About Amp Editor	Shows software version and copyright information for Amp Editor.	

Preferences

Click the [File] menu command [Preferences...] to access the "Preferences" dialog box. Here you can make preference settings for Amp Editor. Click the [OK] button to apply the modified settings and close the dialog box.

■ [General] tab

Here you can make overall preference settings.



On Startup

Choose what will happen when the application is started and when you log on.

• [Load the last file opened]

Opens the project that had last been open. If the project folder cannot be found because it has been moved, deleted, or renamed, a new project will be opened.

• [Create an empty file]

A new project will be opened.

User Library Folder

Here you can specify a default folder when storing the library.

Auto Save

Here you can make settings for saving the project automatically. This does nothing if the project has never been saved.

• Auto Save does not copy a library file to the project folder. If you want to save the library file to the project folder, execute the [Save] or [Save As...] function from the File menu (page 32).

• [Enable] check box

If this is selected, the current project will be saved automatically. The project file will be overwritten onto the existing one.

• [Interval in minutes]

Specifies the interval in minutes at which the file will be automatically saved.

Device Matching

Specifies how the devices in the project will be associated with the actual devices if the Device IDs or MAC addresses of the devices in the project differ from those of the actual devices when you open a project.

[Strict Matching (by MAC address)]

Matches the devices based on their MAC address. Choose this if you want to manage the devices strictly based on their MAC address.

[Loose Matching (only by Device ID)]

Matches the devices based on their Device ID. Normally you will choose this setting.



- The direction in which synchronization is performed will determine whether the settings of the devices in the project or the settings of the actual devices will take priority.
 - Matching will not be performed if the models differ between the project and the actual devices. If the models are different, you'll need to synchronize, and then perform matching (Device Matching) (page 112) in the Tree View window.

Scene

Here you can make settings for dialog boxes that appear when storing or recalling a scene.

• [Confirm Scene Store] check box

If this is selected, a confirmation dialog box will appear when storing the scene.

• [Close progress dialog after scene recall] check box

If this is selected, a progress dialog box that appears when recalling a scene will be automatically closed after scene recalling.

• [Close progress dialog after scene edit] check box

If this is selected, a progress dialog box that appears when editing a scene will be automatically closed after scene editing.

Device ID Display

Here you can switch the Device ID display between decimal and hexadecimal.

Decimal

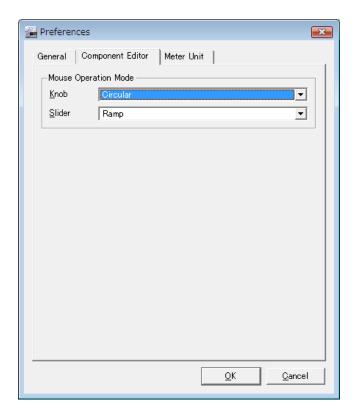
Choose this to display the Device ID in decimal.

• Hex (Hexadecimal)

Choose this to display the Device ID in hexadecimal. In the hexadecimal display, an "h" appears after the value.

■ [Component Editor] tab

Here you can specify how the component editor's knobs and sliders and the edit boxes will operate.



Knob Mode

Specifies how knobs will be operated.

• [Circular]

Drag in a circular motion following the shape of the knob.

• [Linear]

Drag upward to increase the value, or downward to decrease the value.

Slider Mode

Specifies what will happen when you click on the bar of a slider.

• [Ramp]

When you click on the bar of a slider, the knob will move by a fixed amount in the direction of where you clicked.

• [Touch]

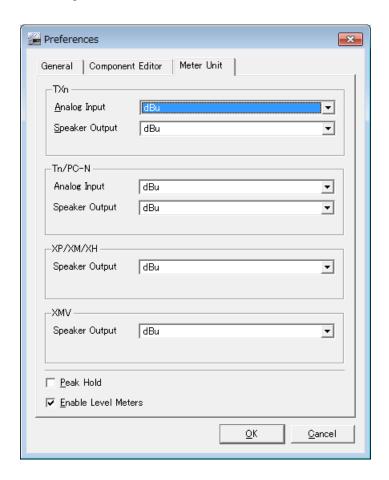
Clicking will not move the knob.

• [Jump]

The knob will jump to the location where you clicked.

■ [Meter Unit] tab

For each type of amplifier, you can specify the index and parameter units of the meters shown in the Detail View window and the Device Properties window.



• [Analog Input]

Here you can select the units of the Analog Input level meter as "dBFS," "dBu" or "V."

[Speaker Output]

Here you can select the units of the Speaker Output level meter as either "dBu" or "V."

• [Peak Hold] check box

If this is checked, peak hold will be enabled for the level meter. The peak hold setting is valid only within Amp Editor. It is not linked with the settings of the amplifier itself.

• [Enable Level Meters] check box

The level meter will be enabled if this is checked.

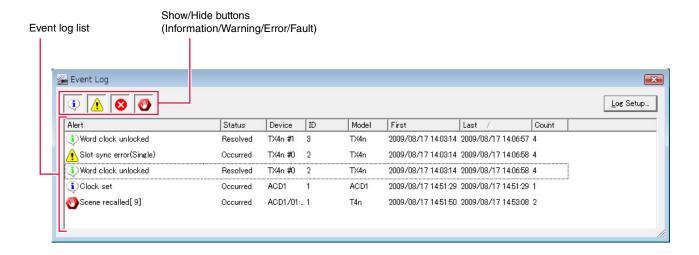
Event Log

Here you can view the event log of a device, write to a log file on the computer, and specify the event log that will be saved on the device itself.

■ "Event Log" dialog box

To access the "Event Log" dialog box, click the [View] menu [Event Log] command, or click the [Show/Hide Event Log] shortcut button. If the dialog box is open while online, a new event log for all devices connected online will be displayed in realtime. If [Enable] is turned on in the "Log Setup" dialog box, the events will simultaneously be written to the log file on the computer.

NOTE • The event log that is shown can be specified for each device in the "Alert Setup" dialog box (page 55).



Show/Hide buttons (Information/Warning/Error/Fault)

These buttons switch each type of event between shown and hidden.

[Log Setup...] button

Shows the "Log Setup" dialog box (page 47). Here you can make event log settings.

Event log list

This shows the events that have occurred.

When you double-click on a displayed event, the "Individual Event Log" dialog box for the device that generated that event will appear, showing detailed information.

When you right-click the name indication of an item, a context menu will appear, allowing you to switch each item between visible and hidden.

• If the same event occurs in succession, all instances will be folded into one line.

• [Alert]

Shows an event icon and the content of the event. The event icon will be one of the following five types.

: Other events

: Warning events

: Error events

: Fault events

: A continuing event has ended

• [Status]

Indicates the status of the event.

This will indicate Occurred when the event occurs. When a continuing event has ended, this will indicate Resolved. A continuing event is a continuously occurring event, such as when a parameter exceeds a specific threshold value.

• [Device]

Indicates the name of the device.

• [ID]

This shows the log ID of the event that occurred. A new ID is assigned each time a new event occurs or the event type changes. If the same type of event occurs successively, the same ID will be assigned.

• [Model]

Indicates the model of the device.

• [First]

Indicates the date and time that Amp Editor first received the event.

• [Last]

Indicates the date and time that Amp Editor last received the continuing event.

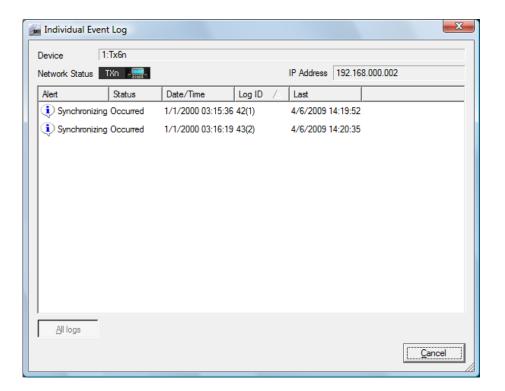
• [Count]

Indicates the total number of times that the same event occurred since Amp Editor was started.

■ "Individual Event Log" dialog box

To access the "Individual Event Log" dialog box, double-click an event in the "Event Log" dialog box, or right-click a device item in the workspace of the Tree View window and choose [Individual Event Log] from the short-cut menu that appears.

The [Individual Event Log] dialog box shows the events that have occurred on the selected device.



Device

Indicates the name of the device whose events are shown.

Network Status

Displays icon indicating network status for the device whose events are shown.

IP Address

Indicates the IP address of the device whose events are shown.

Event log list

This shows the events that have occurred on the device.

If you accessed this from the "Event Log" dialog box, the selected events will be expanded and shown.

If you accessed this from the Tree View window, all events of that device will be shown.

• This log list will not be updated in real time. However, it will be updated to the latest status if you close, then re-open the "Individual Event Log" dialog box.

Alert

Indicates the content of the event. You can click [Alert] to sort the list in order of the event's content.

Status

Indicates the status of the event.

This will indicate Occurred when the event occurs. When a continuing event has ended, this will indicate Resolved. You can click [Status] to sort Occurred and Resolved separately.

Date/Time

Indicates the date and time of occurrence for the event saved in the device.

• Log ID

This shows the log ID of the event that occurred. A new ID is assigned each time a new event occurs or the event type changes. If the same type of event occurs successively, the same ID will be assigned. You can click [Log ID] to sort the list in order of ID.

Last

Indicates the date and time that Amp Editor last received the continuing event. You can click [Last] to sort the list in order of time.

[All logs] button

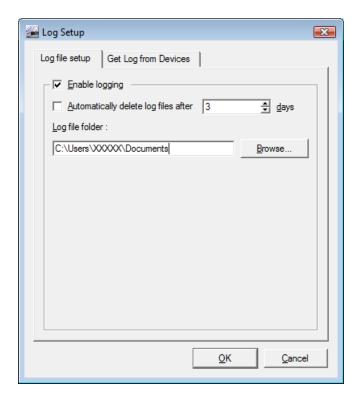
When this button is pressed, all events generated in the device will be shown in Event log list. When this button is not pressed, events selected in the "Event Log" dialog box will be expanded and shown in the Event log list.

This is available when you call it up from the "Event Log" dialog box. If you call it up from the Tree View window, the [All logs] button (in its pressed down condition) will appear.

■ "Log Setup" dialog box

In the "Event Log" dialog box, click the [Log Setup] button to access the "Log Setup" dialog box. Here you can automatically obtain an event log from a device and save it as a file, or manually obtain and save an event log. Click the [OK] button to apply the modified settings and close the dialog box.

[Log file setup] tab



[Enable logging] check box

Turns on/off the function that automatically writes the obtained event log to a file. If this is checked, the obtained event log will be written to a file in the specified folder at the following timing.

- When you quit Amp Editor
- When midnight occurs while Amp Editor is running
- When the number of obtained log events exceeds 2,560.

Even if this check box is cleared, the event log will still be saved in the device itself; however when the capacity of the device itself is exceeded, the old log events will be overwritten by newer log events.

• [Automatically delete log files after __ days]

If this is selected, log files older than the specified number of days will automatically be erased. Specify the number of days after which log files will automatically be erased.

• [Log file folder]

Specifies the folder in which the log file will be saved. If you click the [Browse] button, the operating system's standard folder selection dialog box will appear, allowing you to select a folder.

The log file is saved with a file name of "LOG+starting date.txt". If the file size exceeds the specified size, a number will be appended to the end of the file name, and the data will be saved as a separate file. (Example: LOG20091024-2.txt)

[Get Log from Devices] tab



Target Device (device list)

This shows the names and types of the devices connected to the network. Click to add a check mark to the devices for which you want to get the event log.

[Output File Name]

Specifies the file name and location in which the log file will be saved. If you click the [Browse] button, a folder selection dialog box will appear, allowing you to specify the location in which the file will be saved.

[Get Log and Save] button

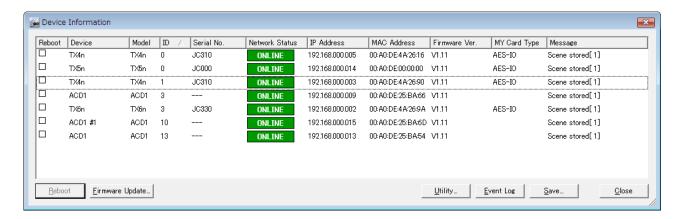
Writes the event log from the device to the specified log file.

Device Information

To access the "Device Information" dialog box, click the [View] menu [Device Information] command, or click the [Show/Hide Device Information] shortcut button.

Regardless of the online status, this lists the status of the devices that are connected to the network within the workspace. When a problem occurs or when performing system maintenance, this provides conveniently centralized management of the operating state of the devices.

• Amplifiers connected to the ACD1 are not shown.



[Reboot] check box

By selecting the desired check boxes and clicking the [Reboot] button, you can reboot multiple amplifiers in a single operation. When you turn on a check box, the [Device] check box for the corresponding devices in the "Firmware Update" dialog box (page 86) will also turn on.

• [Device]

Indicates the name assigned to the device.

[Model]

Indicates the model name of the device (e.g., TX6n).

● [ID]

Indicates the Device ID of the device.

[Serial No.] (TXn/XMV only)

Indicates the serial number of the device.

[Network Status]

Shows an icon to indicate the communication status of the device.

ONLINE : Online state in which the device can be monitored and controlled : Offline state, not synchronized with the device

• [IP Address]

Indicates the IP address.

• [MAC Address]

Indicates the MAC address.

• [Firmware Ver.]

Indicates the firmware version.

• [MY Card Type]

If an I/O card is installed in the slot, indicates the card name.

• [Message]

Displays messages generated by the amplifier itself. Only the single most recent message is displayed; older messages are not shown.

• [Reboot] button

Reboots all of the amplifiers whose [Reboot] check box is selected in the list.

● [Firmware Update...] button

Opens a dialog box allowing you to select the folder containing the update file. When you select a folder, the "Firmware Update" dialog box will appear (page 86). Here you can update the firmware.

• [Utility...] button

Shows the "Utility" dialog box for the device selected in the list (page 76).

• [Event Log] button

Shows the "Event Log" dialog box (page 43).

• [Save...] button

Saves the displayed information as a CSV file (comma-delimited text file).

Scene Manager

■ What is a scene?

Settings such as power Standby/On and muting can be named and saved for each amplifier as a "scene." The operation of saving a scene is called "scene store." You can store multiple sets of parameter settings for different situations, and recall them as necessary.

The operation of recalling a scene (to make it the current scene) is called "scene recall." To recall a scene, use the "Scene Manager" dialog box.

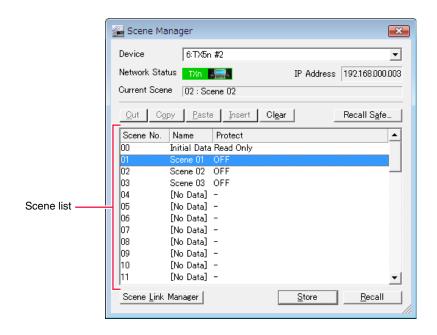
Each amplifier has one preset memory and 49 user memories. Scene #00 is a read-only scene that returns the amplifier to its initial settings, and is specified by default in the preset memory. Scenes #01-#49 are user memories to which you can store settings.

The XMV does not support scenes.

■ "Scene Manager" dialog box

To access the "Scene Manager" dialog box, click the [Device] menu command [Scene Manager], or right-click a device icon in the workspace of the Tree View window and choose [Scene Manager] from the shortcut menu that appears. Here you can store, recall, or edit scenes. You can edit the scene name, the protect setting, and perform copy and paste editing.

- NOTE When online, editing operations such as store/recall and rename can be performed, but operations such as copy and paste cannot be performed.
 - The "Scene Manager" dialog box does not have an [OK] button or [Cancel] button. To close the dialog box, click the [Close] button located at the upper right of the dialog box.
 - Editing operations such as storing or recalling a scene or editing the name or content are applied immediately to the device.
 - You can leave this dialog box opened, and make the Detail View window active to edit various settings of the amplifier.



• [Device]

Selects the amplifier in the workspace for which changes will be made.

Network Status

The icon indicates the network status of the amplifier.

• IP Address

Indicates the IP address of the amplifier.

Current Scene

Indicates the scene number and scene name of the amplifier.

Scene list

This shows the scene contents.

• [Scene No.]

Indicates the scene number. Click here to select a scene.

• [Name]

Indicates the scene name. Click the [Name] box and enter a name for the scene. A maximum of 18 singlebyte characters can be entered. Double-byte characters such as Japanese can also be used.

If the scene has not been stored, this will indicate "No Data." You can enter a name when storing the scene. By default, this will automatically be given a name such as "Scene 01" or "Scene 02." The twodigit number will be the same as the stored scene number (the number shown in [Scene No]).

- NOTE You can enter up to 18 single-byte characters, but the number and type of characters that can be displayed will depend on the device. Characters other than single-byte alphanumeric characters cannot be shown on the display of the device, even if they appear in Amp Editor. Please refer to the Owner's Manual of the corresponding device for details. "\" (backslash) is displayed as "¥" (yen symbol).
 - The display of the TXn itself can show a scene name in the following languages: English, German, French, Spanish, and Japanese. The language to be displayed must be selected beforehand in the "Language" dialog box (page 67).
 - For information about characters that the ACD1 can display, refer to the "List of supported characters" in the "ACD1 Reference Manual."

• [Protect]

Specifies the protect setting. You can select "ON" or "OFF." If this is "ON," it will not be possible to delete, overwrite, edit, or rename scene data.

[Cut] button

Cuts the scene selected in the list. When online, or for scene 00 or the current scene, the button will be gray and cannot be used.

NOTE • If the scene number to be recalled when an EMG signal is received is located after the scene number you cut, you'll need to re-specify the EMG Scene No. if necessary (page 79).

[Copy] button

Copies the scene selected in the list. When online, the button will be gray and cannot be used.

[Paste] button

Pastes the contents of the copied or cut scene to the scene selected in the list. The selected scene will be overwritten. When online, or when scene 00 or the current scene is selected, the button will be gray and cannot be used.

[Insert] button

Inserts the contents of the copied or cut scene at the position of the scene selected in the list. When online or for scene 00, the button will be gray and cannot be used.

Scenes following the selected scene will be moved downward by one. For example if a scene named "Conference" is stored in scene number "05," and you select scene number "05" and click the [Insert] button, the inserted scene will be scene number "05," and the "Conference" scene will move to scene number "06." If a scene is stored in the bottom scene of the list, this button will be gray, and it will not be possible to insert a scene. Delete the contents of the bottom scene of the list before you insert a scene.

NOTE • If the scene number to be recalled when an EMG signal is received is located after the scene number you inserted, you'll need to re-specify the EMG Scene No. if necessary (page 79).

[Clear] button

Erases the contents of the scene selected in the list. When scene 00 or the current scene is selected, the button will be gray and cannot be used.

[Recall Safe...] button

Opens the "Recall Safe" dialog box (page 54).

[Scene Link Manager] button

Opens the "Scene Link Manager" dialog box (page 89).

[Store] button

Stores the current parameter settings to the scene selected in the list. If an empty scene is selected when you store, a new scene will be created. If a scene is already stored in the selected scene number, a confirmation dialog box will appear, and then the existing scene will be overwritten.

- NOTE If you store a scene in Amp Editor when online with the device, the scene will also be stored in the device itself regardless of the settings on the device.
 - If the [Confirm Scene Store] check box is cleared in the "Preferences" dialog box (page 39), the confirmation dialog box will not appear.

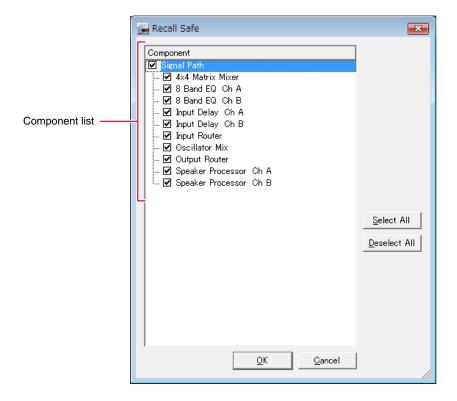
[Recall] button

Recalls the scene selected in the list, making it the current scene.

■ "Recall Safe" dialog box (TXn only)

In the "Scene Manager" dialog box, click the [Recall Safe] button to access the "Recall Safe" dialog box. For each amplifier, you can specify the components that you want to be unaffected by a scene recall. Click the [OK] button to apply the modified settings and close the dialog box.

- This setting can be edited only when the unit is offline.
 - Scene data other than that for components (such as power Standby/On) will be recalled regardless of the settings in this dialog box.



Component list

This shows all the components included in the scene. There is a check box at the left of each component; use these to select the components that you want to be unaffected by a scene recall.

[Select All] button

Selects the check boxes of all components.

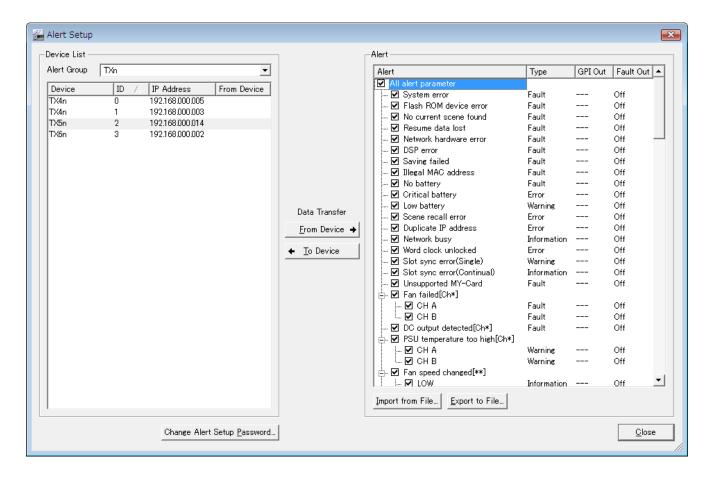
[Deselect All] button

Clears the check boxes of all components.

Alert Setup

To access the "Alert Setup" dialog box, click the [Device] menu command [Alert Setup], or right-click a device icon in the workspace of the Tree View window and choose [Alert Setup] from the shortcut menu that appears. Here you can enable or disable alerts and specify their types for each device. You can lock the alert settings by specifying a password. Alerts can be viewed and saved in the event log (excluding the Information), and are used as trigger signals when a fault occurs.

• Since the XMV does not support the Alert Setup function, all alerts that occur will be displayed.



Device List

Lists the amplifier for which the alert settings are displayed and/or modified.

Alert Group

Selects the type of amplifier for which you will make the alert settings.

• Device List

Displays information for the ACD1 and the amplifiers that are registered in the workspace and selected by the Alert Group.

• [Device]

Indicates the name of the device.

Also indicates AMP ID of each amplifier connected to the ACD1.

• [ID]

Indicates the Device ID of the device.

• [IP Address]

Indicates the IP address of the device.

• [From Device]

The amplifier in the Alert Group that loaded the alert settings most recently will be marked with "*". If you use the [Import from File...] button to load the alert settings, the "*" mark will disappear.

Alert

Displays and enables you to change the alert settings for the amplifier selected in the Device list.

• [Alert]

Here you can enable or disable each alert. The alert that can be specified will depend on the Alert Group.

This shows the type of alert. Click here to view a list from which you can select the type. You can choose [Information], [Warning], [Error], or [Fault].

If you select [Information], no alert pop-up window will be displayed.

• [GPI Out]

When this alert is received, a signal will be sent from the GPI OUT connector. Click here to view a list from which you can select the output destination GPI OUT connector port. If the amplifier is connected to the ACD1, a signal will be sent from the GPI OUT connector on the ACD1.

NOTE • The polarity of the signal sent from the GPI OUT connector can be specified in the Output Type field of the "GPI" dialog box (page 69).

• [Fault Out]

When this alert is received, the NO and C contacts of the FAULT OUTPUT connector will change to the Closed state. If the amplifier is connected to the ACD1, a signal will be sent from the FAULT OUTPUT connector on the ACD1.

• [Import from File...] button

This button loads an alert setup file (file name extension: .al0, .al1, .al2, .al3) into the alert settings of the selected amplifier. The file name extension varies depending on the type of amplifier selected by the Alert Group.

When you click the button, a dialog box enabling you to load a file is displayed.

• [Export to File...] button

Exports the current alert settings to an alert setup file. The file name extension varies depending on the type of amplifier selected by the Alert Group.

When you click this button, a dialog box enabling you to specify the save destination is displayed.

Data Transfer

Transmits and receives the alert settings to and from the amplifier selected in the Device list.

• [From Device] button

Transmits the amplifier alert setting to Amp Editor.

• [To Device] button

Transmits the alert settings enabled in the Alert field to the amplifier.

word, a dialog box enabling you to enter a new password is displayed.

If a password has been established, a dialog box requiring you to enter the password is displayed.

● [Change Alert Setup Password...] button

Enables you to change the password that is required when you click the [To Device] button. Click this button to display a dialog box requesting the current password. When you enter the correct pass-

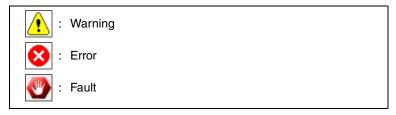
■ "Alert" dialog box

If an alert specified as "Warning," "Error," or "Fault" occurs, the "Alert" dialog box will appear, indicating the content of the alert. The single most recent alert is displayed; when a new alert occurs, it will replace the old alert. To check the details of the alert that occurred, open the "Event Log" dialog box (page 43).



Icon

The icon indicates the type of alert that occurred.



Device

Indicates the name (label) of the device for which the alert occurred.

Message

Indicates the content of the alert.

For details of massages, refer to "Alert message list" (page 207).

Status

Indicates the status of the alert.

This will indicate Occurred when the alert occurs. When a continuing alert has ended, this will indicate Resolved.

[Locate This Device] button

When you click this button, the corresponding device will be selected in the Tree View window.

Word Clock (TXn only)

■ What is word clock?

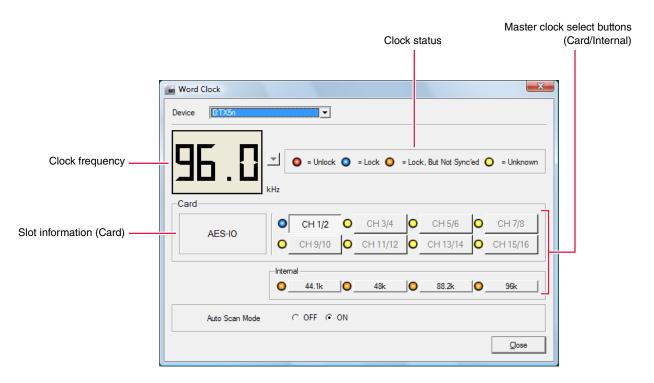
In order for digital audio signals to be transmitted and received between multiple devices, all of the devices must process the audio signals with the same timing. For example even if two devices are set to the same sampling frequency, signals will not be transmitted correctly or unpleasant noise will occur if the timing at which they process audio signals is not synchronized.

The signal used to synchronize the processing of digital audio signals is called the "word clock" signal. Normally, one device transmits a word clock signal that is used as a reference, and all other devices will synchronize to that received word clock signal. (The transmitting device is called the "word clock master," and the receiving device is called the "word clock slave."

■ "Word Clock" dialog box

Click the [Device] menu command [Word Clock...] to access the "Word Clock" dialog box. Here you can make word clock settings for amplifiers that support a digital audio input/output slot.

• The TXn is the only supported amplifier. This dialog box will not open if you've selected an amplifier that is not supported.



Device

Selects the amplifier for which word clock settings will be made.

Clock frequency

Indicates the word clock frequency of the selected amplifier.

When offline, you can click the $[\mathbf{V}]$ button located at the right to change the word clock frequency.

Clock status

This indicates the color-coded word clock status.

Status	Meaning
= Unlock	A valid word clock is not being input (and cannot be selected as the master clock).
O = Lock	There is an input signal, and it is synchronized with the current word clock.
= Lock, But Not Sync'ed	There is an input signal, but it cannot be synchronized with the word clock (the clock is different).
O = Unknown	This channel of the slot is invalid, an analog I/O card is installed, or no card is installed.

Slot information (Card)

This indicates the name of the card installed in the slot.

Master clock select buttons (Card/Internal)

Select one word clock to use for synchronization. The clock that can be selected will depend on the amplifier. Clock buttons shown in gray cannot be selected.

Status	Meaning
Card	Synchronize to the clock information included in the input signal from the digital I/O card installed in the slot. Select this either by two-channel units or by the card (depending on the type of I/O card).
Internal	The internal word clock will be the master clock. You can also select the frequency of the internal word clock.

Auto Scan Mode

This specifies whether the master clock will be switched automatically when a valid word clock is no longer being input to the port that's assigned as the master clock, or when a port of the slot is found to have a valid word clock being input while the internal word clock is selected.

If this setting is ON, the master clock will automatically be switched according to the following order of priority.

- 1. The selected port of the slot
- 2. The internal word clock

Speaker Processor Library Manager (TXn only)

From the [Device] menu, choose [Speaker Processor Library Manager] to access the "Speaker Processor Library Manager" dialog box.

Here you can edit the amplifier unit's Speaker Processor component library or add an item.

The edit/add/copy procedure is described below.

Editing the library

- 1. In the Device list, click the amplifier that you wish to edit.
- 2. Click the [From Device] button.

The Library list displays data from the Speaker Processor component library.

3. Edit the settings.

Select an item from the Library list. Use the [Move Up] and [Move Down] buttons to modify the order of the item list if desired. Use the [Delete Item] button to delete the selected item. Press the [Export Library...] button to save the Library list data as a file. Press the [Import Library...] button to apply the file content to the settings.

4. After you finish editing, click the [To Device] button.

The Library list data is applied to the amplifier settings.

Adding an item (file) to the Library

- 1. In the Device list, click the amplifier that you wish to add to the Library.
- 2. Click the [From Device] button.

The Library list displays data from the Speaker Processor component library.

3. Click the [Add Item...] button.

Items that can be added are displayed in the list. Select an item you wish to add to the Library.

4. Click the [Add selected...] button.

The added item appears in the Library list.

Use the [Move Up] and [Move Down] buttons to modify the order of the item list if desired.

5. Click the [To Device] button.

The Library list data is applied to the amplifier settings.

Copying the Library data between amplifiers

- 1. In the Device list, click the copy source amplifier.
- 2. Click the [Copy] button.
- 3. In the Device list, click the copy destination amplifier.

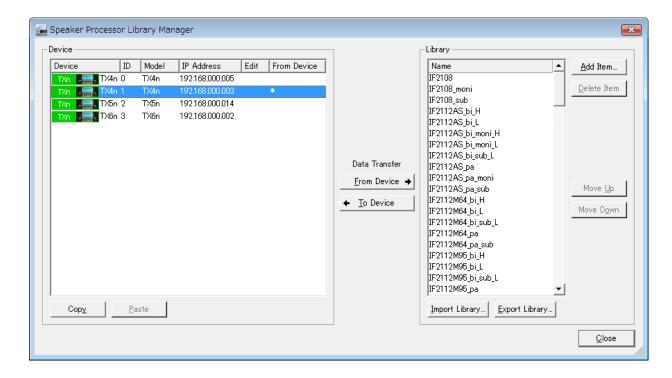
You can select multiple amplifiers by holding down the <Shift> key or <Ctrl> key while making your selection.

4. Click the [Paste] button.

Amp Editor pastes the Library list data.

5. Click the [To Device] button.

The copied Library list data is applied to the copy destination amplifier.



Device list

Lists the amplifiers that support the Speaker Processor component.

• Amplifiers that are not online in the network will also be listed. However, be sure to keep the amplifier that you want to edit online.

• Device/ID/Model/IP Address

Indicates the name, Device ID, model name, and IP address of the amplifier.

Edit

If the changes you made by editing the library data in Amp Editor have not been applied to the amplifier itself, an "E" will be shown here.

• From Device

If the amplifier Library data was sent correctly to Amp Editor, "*" will be displayed.

[Copy] button

This button copies the library of the selected amplifier.

[Paste] button

This button pastes the library data copied by the [Copy] button onto (overwriting) the selected amplifier. You can overwrite the settings for multiple amplifiers by holding down the [Ctrl] key or [Shift] key while you select amplifiers, and then clicking the [Paste] button.

[From Device] button

This button obtains library data from the amplifier unit selected in the Device list. If an amplifier not connected to the network is selected, this is shown in gray.

[To Device] button

This button sends the library data from Amp Editor to the amplifier unit. When you click the [Amp Editor → Device] button, a dialog box will appear, and transmission will begin when you click the [OK] button. If an amplifier not connected to the network is selected, this is shown in gray.

• When you transmit the library data, the library data of the amplifier unit will be overwritten.

Library list

This area lists the items stored in the library of the amplifier selected in the Device list.

If you drag an item from the Library list and drop it onto an amplifier in the Device list, that item will be added at the end of the library items of the copy-destination amplifier.

NOTE • If an item of the same name already exists in the amplifier to which you dragged the item, a check box will ask whether you want to overwrite it. If you click the [Yes] button, the existing item will be overwritten.

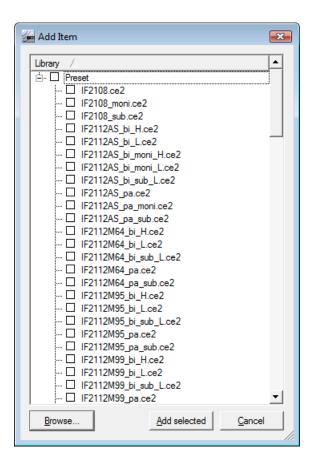
Name

Indicates the name of the item. By default, this will be the name of the library file without the file name extension. If you add or move an item, library items other than those received from the amplifier unit itself will be shown in red. You can double-click an item name to edit it. You cannot edit a multiple selection.

NOTE
 An item name can consist of up to twenty single-byte characters.

[Add Item...] button

This button adds an item to the Library list. When you click the [Add Item...] button, the "Add Item" dialog box will appear.



• Library add item list

Here you can select the items that you want to add to the Library list. To select an item, add a check mark to the check box shown at the left of the item file name.

• [Browse...] button

This button lets you add an item file (extension ".ce2" or ".cep" (with security)) to the Library add item list. When you click the [Browse...] button, a dialog box will appear, allowing you to select a file. Select an item file, then click the [Open] button; the item will be added to the Library add item list. You can select multiple files by holding down the [Ctrl] key or [Shift] key while making your selection.

• [Add selected] button

Click this button to add the selected items to the Library list, and then close the "Add Item" dialog box.

• [Cancel] button

Press this button to cancel the operation, and then close the "Add Item" dialog box.

• [Delete Item] button

This button deletes the selected item from the library.

[Move Up]/[Move Down] buttons

These move the selected item up or down in the Library list.

• You can move multiple files simultaneously by holding down the [Ctrl] key or [Shift] key while making your selection.

• [Import Library...] button

This button loads a library archive file (file name extension .sla) into the Library list of the currently selected amplifier.

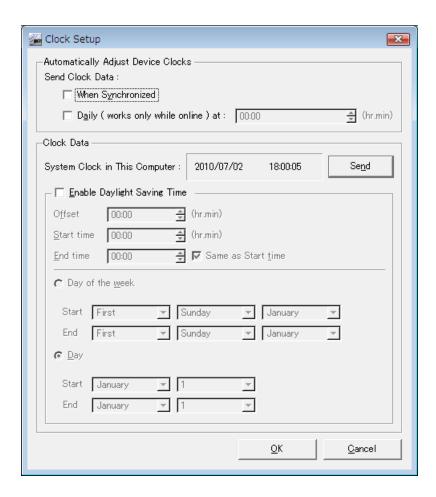
• [Export Library...] button

This button saves the library data of the currently selected amplifier as a library archive file (file name extension .sla).

Clock

Click the [Device] menu command [Clock...] to access the "Clock Setup" dialog box.

Here you can set the internal clock of the connected device. You can also enable daylight saving time. Click the [OK] button to apply the modified settings and close the dialog box. Clicking the [OK] button will send the computer's date and time to the devices to set them, regardless of the Automatically Adjust Device Clocks setting.



Automatically Adjust Device Clocks

Here you can synchronize the device's internal clock to the computer's clock time. There are two ways to set this.

• [When Synchronized] check box

The time will be set when synchronizing with the device.

• [Daily (works only while online) at :]

If Amp Editor is always running, the clock will be set each day at the specified time. Use the box at right to specify the time at which the clock will be set. To change the value, use the upward $[\blacktriangle]$ button and downward $[\blacktriangledown]$ button located at the right side of the box.

Clock Data

• System Clock in This Computer :

Indicates the time of the computer's clock.

• [Send] button

Specifies the time of the computer's clock sent to the connected device. The setting can be made also when in offline status.

• [Enable Daylight Saving Time] check box

Daylight saving time display will be enabled if this is selected. An indication of "DST" will be shown in the "Clock Setup" area of the device's own display.

[Offset]

Specifies the length of time by which to advance for daylight saving time.

[Start time]

Specifies the time at which to start using daylight saving time.

• [End time]

Specifies the time at which to stop using daylight saving time. If this is the same as the Start time, select the [Same as Start time] check box.

• The format in which the date and time are shown can be changed using the Windows control panel "Region and Language Options." The display format in other dialog boxes such as "Utility" and "Event Log" will also be changed in the same way.

• [Day of the week]

If this is selected, you can specify the start and end of daylight saving time as a day of the week. Use the [Start] fields to specify the desired weekday of the month on which daylight saving will begin, and [End] to specify the day on which it will end. For example, you can specify [First][Sunday][April] for the first Sunday in April and [Last][Sunday][October] for the last Sunday of October.

[Day]

This lets you specify the start and end of daylight saving time as a day of the month. Use [Start] to specify the day of the month on which it will begin, and [End] to specify the day on which it will end.

NOTE • If you set the current time or the ending time within two hours before or after the start of daylight saving time, or if you set the current time or the starting time within two hours before or after the ending time, the setting will not be made correctly. Events specified two hours before or after the start or end of daylight saving time will not be executed correctly.

Language (TXn only)

Click the [Device] menu command [Language...] to access the "Language" dialog box. Here you can select the language for the scene names shown in the display of the TXn itself. The languages that can be displayed are English, German, French, Spanish, and Japanese.

Click [OK] to apply the modified settings and close the dialog box.



GPI (ACD1 only)

■ What is GPI?

GPI stands for General Purpose Interface, and allows you to use GPI input/output for remote control of compatible devices from a custom-made controller or an external device. For example, input signals via GPI IN can be used to switch scenes or to edit the parameters of a component.

For details on GPI connections, refer to the owner's manual of each device.

The following items can be specified.

	Parameter		Tn/PC-N	XH	XP/XM
No Assign			✓	✓	✓
Scene Recall			✓	✓	✓
Mute			✓	✓	✓
Standby/On			✓	✓	✓
Parameter Value Edit /	AttenuationLink	Link	✓	_	_
Direct Parameter Value	ThermalMeter (*)	AlertMaxTH	✓	_	_
	AnalogInputVoltage (*)	AlertMaxTH	✓	_	_
		Enable	✓	_	_
	Output (*)	Mute	✓	✓	✓
		Attenuation	✓	_	_
		Polarity	✓	_	_
	Power	PowerSwitch	✓	✓	✓
	SpeakerOutputImp (*)	AlertMaxTH	✓	_	_
		AlertMinTH	✓	_	_
		Enable	✓	_	_
	SpeakerOutputPower (*)	AlertMaxTH	✓	_	_
		Enable	✓	_	_
	SpeakerOutputVoltage (*)	AlertMaxTH	✓	✓	✓
		Enable	✓	✓	✓
	Mode (**)	AmpMode	✓	_	✓
Emergency Scene Reca	mergency Scene Recall (GPI IN only)		✓	✓	✓
Alert (GPI OUT only)			✓	✓	✓

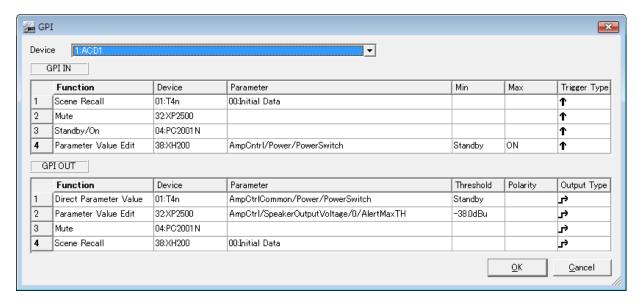
^{✓ :} Available— : Not available

^{*} The number of these items equals the number of channels.

^{**} The amplifier mode will not be switched via GPI IN signals. The XM model features two amplifier modes.

■ "GPI" dialog box

Click the [Device] menu command [GPI...] to access the "GPI" dialog box. Here you can make GPI input/output settings for the device. Click the [OK] button to apply the modified settings and close the dialog box.



[Device]

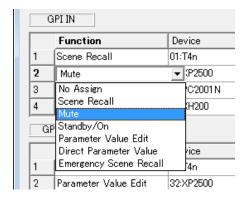
From the list, select the device whose settings you want to edit.

GPI IN

For each port, you can specify which parameter of the device will be modified by a signal input to GPI IN. The column at the far left indicates the port number.

Function

Specifies the function that will be controlled by GPI IN. Click here to access a list from which you can select the function to be assigned to the GPI IN port. You can select one of seven functions: [No Assign], [Scene Recall], [Mute], [Standby/On], [Parameter Value Edit], [Direct Parameter Value] and [Emergency Scene Recall]. The editable content of [Device], [Parameter], [Min], [Max], and [Trigger Type] will change according to the function you select.



[No Assign]

No function will be assigned. This is the default value. Select this if you want to clear the function assigned to a GPI IN port. The [Device], [Parameter], [Min], [Max], and [Trigger Type] fields are unavailable.

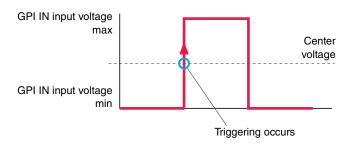
[Scene Recall]

The specified scene will be recalled. Use [Device] to select the amplifier that will be controlled. If you select "ALL," all amplifiers connected to that device will be selected.

Use [Parameter] to specify the scene number that you want to recall.[Min] and [Max] are unavailable. Use [Trigger Type] to specify how the input voltage from GPI IN will be applied to the parameter.

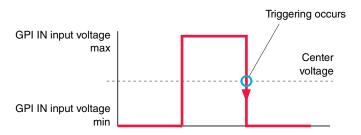
When 1 is selected

The scene specified by [Parameter] will be recalled when the GPI IN input voltage changes from below the center voltage to above it.



When J is selected

The scene specified by [Parameter] will be recalled when the GPI IN input voltage changes from above the center voltage to below it.



When 🗗 is selected

Same as 1.

When 4 is selected

Same as **J**.

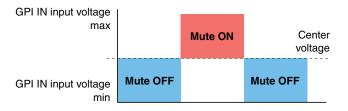
[Mute]

Turns muting on/off. Use [Device] to select the amplifier that will be controlled. If you select "ALL," all amplifiers connected to that device will be selected.

[Parameter], [Min], and [Max] are unavailable. Use [Trigger Type] to specify how the input voltage from GPI IN will be applied to the parameter.

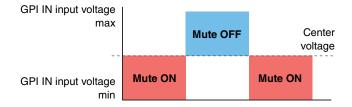
When † is selected

Muting will turn on when the GPI IN input voltage is above the center voltage, and will turn off when it is below the center voltage.



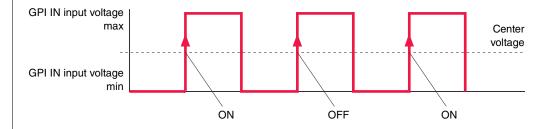
When J is selected

Muting will turn off when the GPI IN input voltage is above the center voltage, and will turn on when it is below the center voltage.



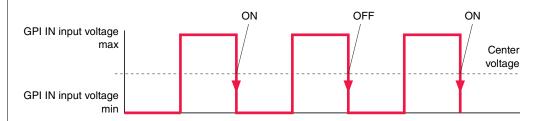
When 🗗 is selected

Muting will alternately turn on/off when the GPI IN voltage changes from below the center voltage to above it.



When 3 is selected

Muting will alternately turn on/off when the GPI IN voltage changes from above the center voltage to below it.



[Standby/On]

The power will be switched between Standby and On. Use [Device] to select the amplifier that will be controlled. If you select "ALL," all amplifiers connected to that device will be selected.

[Parameter], [Min], and [Max] are unavailable. Use [Trigger Type] to specify how the input voltage from GPI IN will be applied to the parameter.

[Parameter Value Edit]

Edits a parameter of the component. Use [Device] to select the amplifier that will be controlled. Use [Parameter] to specify the name of the parameter that will be edited. Use [Min] and [Max] to specify the range in which the parameter will be controlled. Use [Trigger Type] to specify how the input voltage from GPI IN will be applied to the parameter.

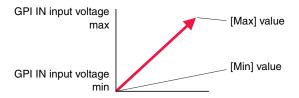
Use the $\uparrow \downarrow$ settings if you want to use a device such as an external fader or knob to control a parameter that has a continuous value.

Use 🗗 😘 if you want to use an external switch device to control a binary parameter such as on/off.

When 1 is selected

The specified parameter will change proportionally with the input voltage to GPI IN. The value will be at the [Min] setting when the GPI IN input voltage is at the minimum, and at the [Max] setting when the GPI IN input voltage is at the maximum.

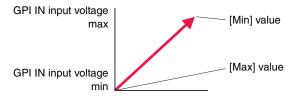
Example: How the input voltage is related to the Attenuation when "Attenuation" is specified as the parameter



When J is selected

The specified parameter will change inversely proportionally with the input voltage to GPI IN. The value will be at the [Max] setting when the GPI IN input voltage is at the minimum, and at the [Min] setting when the GPI IN input voltage is at the maximum.

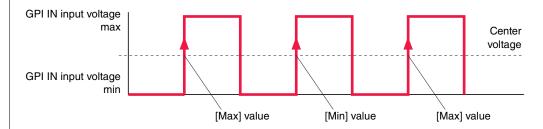
Example: How the input voltage is related to the Attenuation when "Attenuation" is specified as the parameter



When 🗗 is selected

When the input voltage to GPI IN changes from below the center voltage to above it, the [Min] value and [Max] value will be alternately specified.

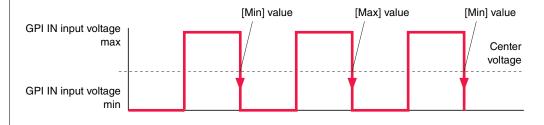
Example: How the input voltage is related to the Attenuation when "Attenuation" is specified as the parameter



When 4 is selected

When the input voltage to GPI IN changes from above the center voltage to below it, the [Min] value and [Max] value will be alternately specified.

Example: How the input voltage is related to the Attenuation when "Attenuation" is specified as the parameter



[Direct Parameter Value]

The parameter of the component will be changed to a specific value. Use [Device] to select the amplifier that will be controlled.

Use [Parameter] to specify the name of the parameter that will be edited. Use [Max] to specify the edited value of the parameter. [Min] and [Trigger Type] are unavailable.

When the input voltage to GPI IN changes from below the center voltage to above it, the parameter value will be set to the [Max] setting.

[Emergency Scene Recall]

Of the amplifiers connected to the device, the scene will be recalled to only the amplifier that specified by the scene number in the EMG Scene Setup of the Utility dialog box.

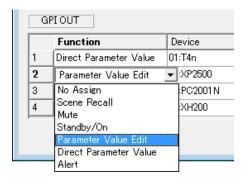
[Device], [Parameter], [Min] and [Max] are unavailable. Use [Trigger Type] to specify how the input voltage from GPI IN will be applied to the parameter.

GPI OUT

For each port, you can specify a device's parameter whose state will be output from GPI OUT. The column at the far left indicates the port number.

Function

Specify the function whose state will be output from GPI OUT. You can select one of seven functions: [No Assign], [Scene Recall], [Mute], [Standby/On], [Parameter Value Edit], [Direct Parameter Value] and [Alert]. The editable content of [Device], [Parameter], [Threshold], [Polarity], and [Output Type] will change according to the function you select.



[No Assign]

No function will be assigned, and nothing will be output from GPI OUT. This is the default value. You can use [Output Type] to specify only the polarity of the output signal during an alert occurrence. The [Device], [Parameter], [Threshold], and [Polarity] fields are unavailable.

[Scene Recall]

The recall status of the specified scene will be output from GPI OUT. Use [Device] to select the appropriate amplifier. If you select "ALL," all amplifiers connected to that device will be selected. Use [Parameter] to specify the number of the scene whose recall status will be sent from GPI OUT. [Threshold] and [Polarity] are unavailable. [Output type] specifies how the voltage to GPI OUT will be output.

Output Type	GPI OUT output
7÷	Closed will be output if the current scene is the same scene specified by [Parameter], and Open will be output otherwise.
7.5	Open will be output if the current scene is the same scene specified by [Parameter], and Closed will be output otherwise.
л,	The output will briefly change (for 250 msec) from Open to Closed if the current scene is the same scene specified by [Parameter].
υ ^ş	The output will briefly change (for 250 msec) from Closed to Open if the current scene is the same scene specified by [Parameter].

[Mute]

The muting status of the specified amp will be output from GPI OUT. Use [Device] to select the amplifier that will be controlled. If you select "ALL," all amplifiers connected to that device will be selected.

[Parameter], [Threshold], and [Polarity] are unavailable. [Output Type] specifies how the output from GPI OUT will occur.

[Standby/On]

The power Standby/On status of the specified amp will be output from GPI OUT. Use [Device] to select the amplifier that will be controlled. If you select "ALL," all amplifiers connected to that device will be selected.

[Parameter], [Threshold], and [Polarity] are unavailable. [Type] specifies how the output from GPI OUT will occur.

[Parameter Value Edit]

The state of a component's parameter will be output from GPI OUT. Use [Device] to select the applicable amplifier.

Use [Parameter] to specify the name of the parameter that will be sent from GPI OUT when it is modified. [Threshold] specifies the threshold value of the parameter. [Output Type] and [Polarity] specify how the output from GPI OUT will occur.

Output Type	Polarity	GPI OUT output
τ,	cannot be specified	The output will be Closed when the value specified by [Parameter] is above [Threshold], and Open when the value is below it.
79	cannot be specified	The output will be Closed when the value specified by [Parameter] is below [Threshold], and Open when the value is above it.
л,	1	The output will briefly change (for 250 msec) from Open to Closed when the value specified by [Parameter] changes from below [Threshold] to above it.
	1	The output will briefly change (for 250 msec) from Open to Closed when the value specified by [Parameter] changes from above [Threshold] to below it.
u³	1	The output will briefly change (for 250 msec) from Closed to Open when the value specified by [Parameter] changes from below [Threshold] to above it.
	1	The output will briefly change (for 250 msec) from Closed to Open when the value specified by [Parameter] changes from above [Threshold] to below it.

[Direct Parameter Value]

A signal will be output from GPI OUT when the component's parameter reaches a specific value. Use [Device] to select the applicable amplifier.

[Parameter] specifies the name of the parameter. [Threshold] specifies the value of the parameter. [Polarity] is unavailable. [Output Type] specifies how the output from GPI OUT will occur.

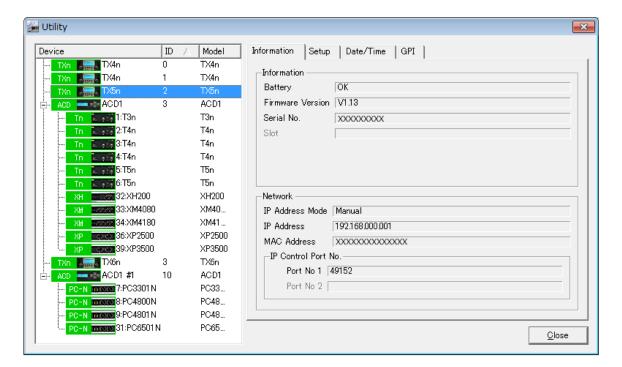
[Alert]

Message indicating that an alert specified by Alert Setup will be output from GPI OUT. [Output Type] is fixed to \mathbf{F} .

Utility

To access the "Utility" dialog box, click the [Device] menu command [Utility...], or right-click a device icon in the workspace of the Tree View window and choose [Utility...] from the shortcut menu that appears. Here you can make various settings for a device. This dialog box is available only when online.

■ Common to all tabs



Device/ID/Model

From the list, select the device whose settings will be viewed/edited.

■ [Information] tab

Information

Battery

Indicates the state of the internal backup battery. This is shown as three levels: "OK," "Low Battery," or "No Battery."

• Firmware Version

Indicates the firmware version.

• Serial No. (TXn/XMV only)

Indicates the serial number of the device.

• Slot (TXn only)

Indicates the card name, if an I/O card is installed in the device's slot.

Network

• IP Address Mode

Displays the IP address setting mode that will be used for communication with Amp Editor.

- UNIT ID (XMV only): IP address will use the UNIT ID value.
- DHCP: IP address can be set automatically from Amp Editor or the DHCP server.
- Manual: IP address will be set manually from Amp Editor.

To change the setting, use the "Network Setup" dialog box (page 91).

• IP Address

Indicates the IP address. To change the IP address, use the "Network Setup" dialog box (page 91) or the "IP Address" dialog box (page 84).

• MAC Address

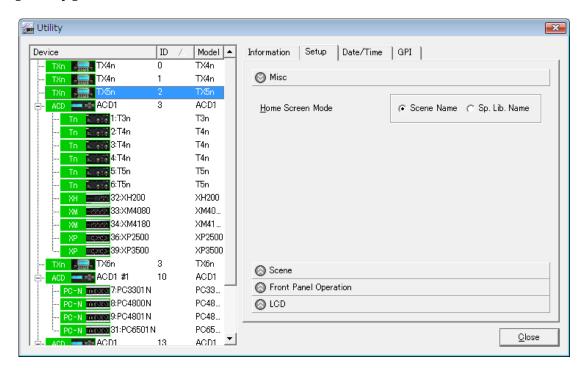
Indicates the MAC address.

• IP Control Port No.

Indicates the Ethernet port number that will be used for remote control from an external remote controller via the remote control protocol. If there is another device in the network that uses the same port number, use the "IP Control Port No." dialog box (page 85) to change the port number.

NOTE • The XMV will display the static address "49280".

■ [Setup] tab



• [Misc]

• Home Screen Mode

Here you can specify the name that will be shown in the HOME screen of the TXn amplifier itself.

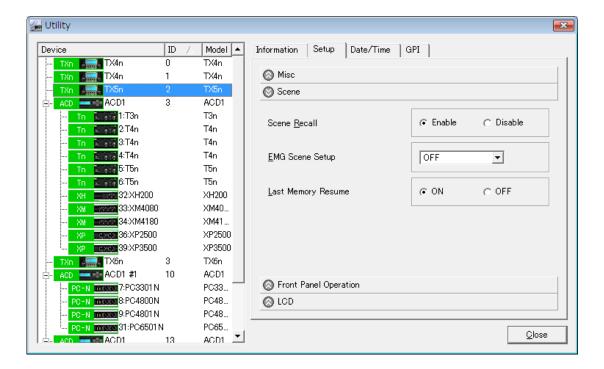
Scene Name

The scene name will be shown.

• Sp. Lib. Name

The Speaker Processor library name will be shown.

• [Scene]



• Scene Recall

Specifies whether scene recall operations performed from the TXn or ACD1 panel will be allowed (Enable). This will not affect control from an external device such as Amp Editor, a GPI device, or a remote controller.

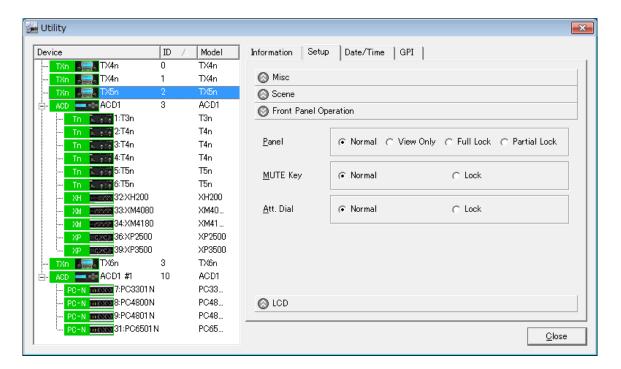
• EMG Scene Setup

Specifies the scene number of the scene that will be recalled when the TXn or ACD1 receives an EMG (Emergency) signal from an external device. If you don't want to specify a scene to be recalled, choose OFF.

• Last Memory Resume

When the amplifier is powered-on, this specifies whether the amplifier will start up by recalling the state in which it was last powered-off (ON), or will start up by recalling the scene of the scene number that had been selected when the power was turned off (OFF).

• [Front Panel Operation]



Panel

Restricts panel operations performed on the device itself.

Normal

No restrictions on operation.

View Only

Switching to a different screen is possible, but parameter editing will not be possible.

• Full Lock

No operation will be possible other than disabling the Lock setting.

Partial Lock

No operations will be possible on the panel other than muting, attenuating, and recalling the library.

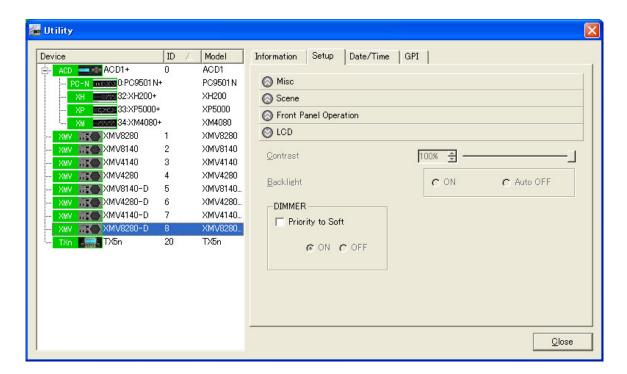
• MUTE Key (TXn only)

Restricts mute operations performed on the amplifier itself.

• Att. Dial (TXn only)

Restricts attenuation operations performed on the amplifier itself.

• [LCD]



• Contrast (TXn only)

Indicates/specifies the display contrast. The setting has a range of 0–100%.

• Backlight (TXn/ACD1 only)

Indicates/specifies the lit status of the display's backlight.

ON

Always lit.

• If the power supply is in Standby mode, the operation will be the same as Auto OFF.

Auto OFF

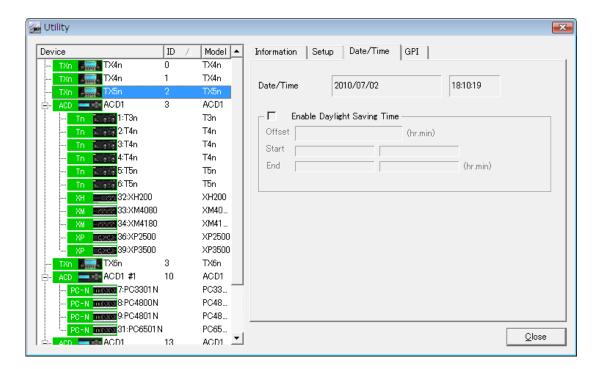
The backlight will light when a panel operation is performed, and will go dark ten seconds after the panel operation has ended.

• DIMMER (XMV only)

Priority to Soft check box

Checking this check box will enable you to change the brightness of the LED on the rear panel from Amp Editor. Unchecking this check box will disable the ON/OFF radio button, and you will be unable to change the brightness of the LED on the rear panel from Amp Editor.

■ [Date/Time] tab



Date/Time

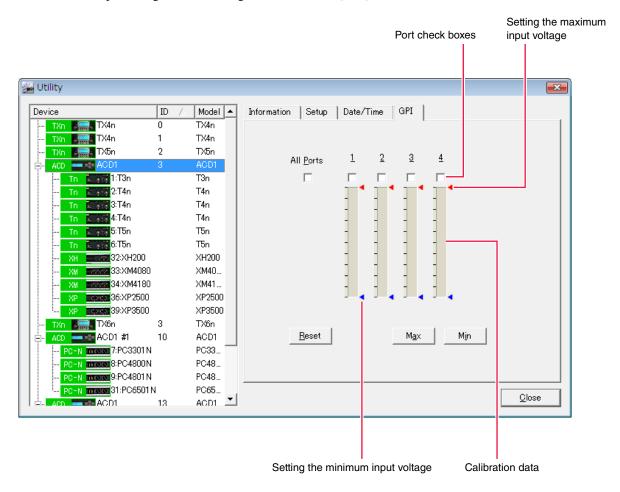
Shows the time of the internal clock built into the device. To set this, use the "Clock Setup" dialog box (page 66).

[Enable Daylight Saving Time] check box

This indicates the device's daylight saving time setting. To make daylight saving time settings, use the "Clock Setup" dialog box (page 66).

■ [GPI] tab (ACD1 only)

Calibrates the input voltage detection range for the device's [GPI] connector.



• [All Ports] check box

Selects the check boxes of all ports.

Port check boxes

Specifies the selected ports as the target of calibration.

Calibration data

Indicates the input voltage in realtime.

• [Reset] button

Resets the calibration of the selected port(s).

[Max] button

Sets the current input voltage of the selected port(s) as the maximum value. The specified maximum value is shown as a red marker.

[Min] button

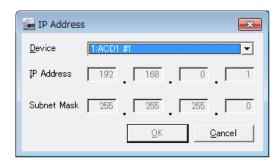
Sets the current input voltage of the selected port(s) as the minimum value. The specified minimum value is shown as a blue marker.

IP Address

Click the [Device] menu command [IP Address...] to access the "IP Address" dialog box. Here you can specify the IP address of an offline connected device, one unit at a time. Click [OK] to apply the modified settings and close the dialog box.

• This can be set only when offline.

- When you click the [OK] button, communication between Amp Editor and the device will be interrupted momentarily and the device icon in the Tree View window will be grayed out until the device IP address is re-established. Once communication restarts and Amp Editor recognizes the device, the device icon in the Tree View window will indicate that the device is off-line. If Amp Editor does not recognize the device, click the [Refresh] button in the Tree View window.
- When you click the [OK] button, the IP Address Mode will change to Manual.
- Unless you have a specific need to do otherwise, you should set the IP address to a private address (192.168.0.2–192.168.255.253). If you need to specify a global address, please consult your network administrator before doing so.
- If you change the IP Address Mode for XMV, you must set the device setting DIP switch (IP SETTING) on the XMV's rear panel to "PC" and then restart the XMV so that the change will take effect.



Device

Selects the device whose IP address will be changed. The current IP address of the selected device is shown.

IP Address

Here you can change the IP address of the selected device.

Subnet Mask

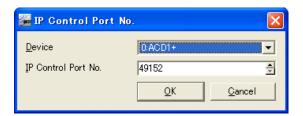
Displays the subnet mask of the selected device.

IP Control Port No.

Click the [Device] menu command [IP Control Port No....] to access the "IP Control Port No." dialog box. For each device, you can specify the Ethernet port number that will be used for remote control from an external remote controller via the remote control protocol. Click [OK] to apply the modified settings and close the dialog box.

NOTE • This can be set only when offline.

• When you click the [OK] button, communication with the specified device will be broken and the device icon will temporarily be dimmed in the Tree View window.



Device

Selects the device whose port will be changed. The current port setting of the selected device is shown below.

IP Control Port No.

Specifies the Ethernet port number (49152–49407) that will be used for remote control from an external remote controller via the remote control protocol. All devices in the network can communicate on the same port number. Change the port number if there are other devices (other than the TXn/ACD1) that use the same port number.

• The XMV will display the static address "49280".

Firmware Update (Updating the internal firmware)

A folder selection dialog box will appear when you click the [Device] menu command [Firmware Update] → [Firmware Update...], or when you click the [Firmware Update...] button of the "Device Information" dialog box. When you select the folder that contains the update file, the "Firmware Update" dialog box will appear. Here you can update the firmware of the device itself.

If you click the [Device] menu command [Firmware Update] \rightarrow [Recovery Update...], firmware recovery (page 88) will be performed.

• The most recent firmware can be downloaded from the Yamaha professional audio website.

http://www.yamahaproaudio.com/

 Updating can be done only for a device connected offline. Amplifiers connected to the ACD1 will not be updated.

■ Firmware Update

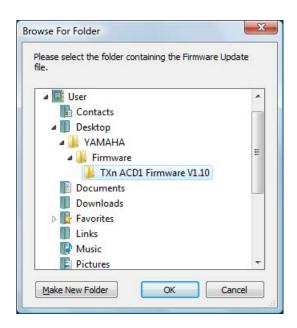
Use this when you need to update the firmware of the device itself. You need to update the firmware when the device is connected offline.

Before updating the firmware, load the device's information into Amp Editor and save it as a precaution.

 Before you continue, you'll need to download the firmware that you want to use, and decompress the compressed file.

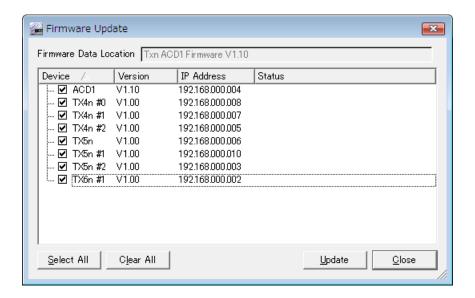
1. Click the [Device] menu item [Firmware Update] \rightarrow [Firmware Update...].

A folder selection dialog box will appear.



2. Select the folder that contains the update file, and click the [OK] button.

The "Firmware Update" dialog box will appear. The name of the device connected offline, the current firmware version, and the IP address will be displayed.



3. Select the check box of the device that you want to update.

If you click the [Select All] button, all devices will be selected. If you click the [Clear All] button, the check boxes of all devices will be cleared.

4. Click the [Update] button.

The firmware update will begin.

When the update is completed, the device will automatically restart.



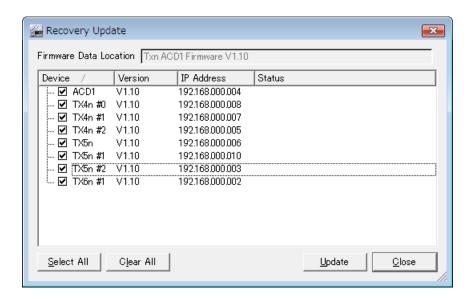
Do not disconnect the Ethernet cable or power-off the devices while the update is proceeding.

■ Recovery Update

If necessary, you can recover the firmware of a device. If the power turns off while a firmware update is being executed, the firmware will become unbootable; if this occurs, use Recovery Update to recover.

- Before you continue, you'll need to download the firmware that you want to use for the recovery update and the firmware that you want to use for the firmware update, and decompress the compressed file.
 - 1. Power-on the device.
 - 2. Using the "Network Setup" dialog box (page 91) or a DHCP server, assign an IP address to the device.
 - **3.** Click the [Device] menu item [Firmware Update] → [Recovery Update...]. A folder selection dialog box will appear.
 - 4. Select the folder that contains the update file, and click the [OK] button.

The "Recovery Update" dialog box will appear. The name of the device connected offline, the current firmware version, and the IP address will be displayed.



5. Select the check box of the device that you want to recover.

If you click the [Select All] button, all devices will be selected. If you click the [Clear All] button, the check boxes of all devices will be cleared.

6. Click the [Update] button.

The firmware recovery will begin.



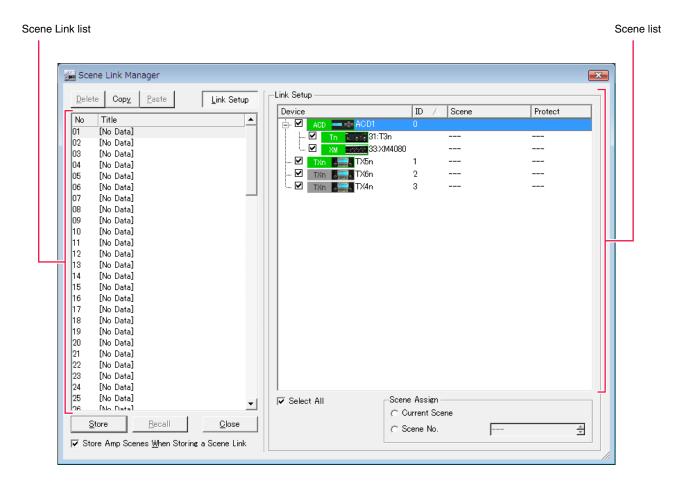
- Do not disconnect the Ethernet cable or power-off the devices while the recovery is proceeding.
- 7. When the recovery is completed, execute Firmware Update (page 86) in order to recover the data other than the firmware.

Scene Link Manager (for devices other than XMV)

To access the "Scene Link Manager" dialog box, select the [System] menu command [Scene Link Manager], click the [Scene Link Manager] button in the "Scene Manager" dialog box, or click the [Show/Hide Scene Link Manager] button in the Main Panel window.

This allows you to specify or recall a scene link with multiple amplifiers in the workspace. By making scene link settings, the scenes of multiple amplifiers can be simultaneously recalled in a single operation. Up to one hundred scene links can be specified.

- NOTE This is a function in Amp Editor; it does not affect scene recalls that are performed from the panel of a device itself or from an external device.
 - The "Preferences" dialog box specifies the automatic closure of the dialog box that appears when storing or recalling a scene. (page 39)



[Delete] button

Deletes the selected scene link. A confirmation dialog box will appear when you click this.

[Copy] button

Copies the selected scene link.

[Paste] button

Pastes the contents of the copied scene link to the selected scene link. The selected scene link will be overwritten.

[Link Setup] button

Switches the Link Setup area, where you can view and edit scene link details, between visible and hidden.

Scene Link list

This shows the scene link list.

[Store] button

Saves the selected scene link.

If you click the [Store] button for a scene link that indicates [No Data], a dialog box will appear, allowing you to enter a name for the scene link.

- NOTE Scene links are not stored in the amplifier itself.
 - If you've selected a scene link whose Label area indicates [No Data], and then click the [Store] button without editing in the Scene Select area, the scene of the same number as that scene link number will be stored as the scene link for all amplifiers in the workspace.

■ [Recall] button

Recalls the scenes specified by the selected scene link, for all amplifiers in a single operation.

[Store Amp Scenes When Storing a Scene Link] check box

If this check box is selected, storing a scene link will simultaneously store the corresponding scene on the amplifier itself. If this check box is cleared, only the link information of the scene (that is listed in the scene list) will be stored.

Link Setup

Here you can select the amplifiers and scene that will be the target of the scene link.

Scene list

This lists the name (label) of the amplifiers in the workspace, the amplifier ID, the linked scene numbers (and names), and the scene protect status.

If you select the check box located at the left of the amp icon, the corresponding amplifier will be the target of the scene link.

Click the scene number to specify the scene number for each amplifier.

• [Select All] check box

This will select the check boxes of all amplifiers.

• Scene Assign

Here you can collectively specify scenes that will be linked for each amplifier whose check box is selected.

Current Scene

The current scene for the selected amplifier will be linked.

· Scene No.

The scene associated with the scene number you select will be linked.

Network Setup

Click the [System] menu command [Network Setup...] to access the "Network Setup" dialog box. This dialog box contains the following three functions.

Network Interface

Selects the network interface card for communication.

This can be selected only when offline.

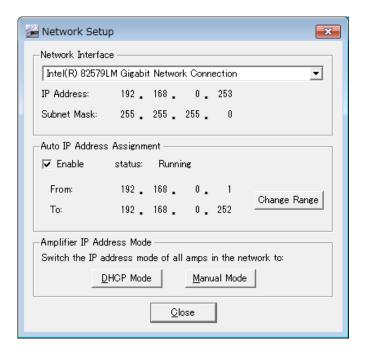
Auto IP Address Assignment

While Amp Editor is running, it will operate as a DHCP server and will assign the range of IP addresses to devices whose "IP Address Mode" is DHCP. This will not operate if a DHCP server exists in the network.

• Amplifier IP Address Mode

The "IP Address Mode" of all devices connected to the specified network will be switched to DHCP or Manual.

NOTE • If you want to specify IP addresses one unit at a time, use the "IP Address" dialog box (page 84).



■ Network Interface

[Network Interface] box

Selects the network interface card to which the device you want to connect is connected.

IP Address/Subnet Mask

This indicates the IP address and subnet mask assigned to the selected network interface card.

Auto IP Address Assignment

This section displays the range of IP addresses that can be assigned.

Enable check box

Check the [Enable] check box so that the Auto IP Address Assignment function will assign an IP address to each device.

• If the Auto IP Address Assignment function remains enabled, the IP address of devices other than the amplifier on the same network might be affected. For example, if Dante-enabled devices, such as the XMV4140-D, XMV4280-D, XMV8140-D, or XMV8280-D, are connected to the same network, and Amp Editor is started while the Auto IP Address Assignment is enabled, certain problems may occur, such as temporary audio interruption on the Dante network. Therefore, once you assign an IP address to your amplifier, it is recommended to disable the Auto IP Address Assignment function.

Change Range button

Click this button to display the "IP Address Range" dialog box to specify the range of the IP address to be assigned.

• This can be changed only when offline.

■ Amplifier IP Address Mode

You can set the IP Address Mode for all devices to DHCP mode or Manual mode simultaneously.



- NOTE You can change IP Address Mode only for devices that are recognized correctly by Amp Editor and that are displayed in the Tree View or other relevant windows. Devices that are not correctly recognized by Amp Editor might have an incorrect IP address assigned.
 - TXn/ACD1: Check the IP address on the unit's LCD display.
 - XMV: Change the device setting DIP switch (IP SETTING) on the unit's rear panel to the UNIT ID value, and then restart the unit. An IP address in the range of 192.168.0.1 through 192.168.0.254 (that corresponds to the UNIT ID value) will be assigned, and the unit will be recognized by Amp Editor.
 - If you change the IP Address Mode for XMV, you must set the device setting DIP switch (IP SETTING) on the XMV's rear panel to "PC" and then restart the XMV so that the change will take effect.

[DHCP Mode] button

The "IP Address Mode" of all devices connected to the specified network will be switched to DHCP. When the IP Address Mode is set to DHCP, you can use the Auto IP Address Assign function or a DHCP server to assign IP addresses to the devices.

- This can be changed only when offline.
 - When you click the [DHCP Mode] button, communication between Amp Editor and the device will be interrupted momentarily and the device icon in the Tree View window will be grayed out until the device IP address is re-established. Once communication restarts and Amp Editor recognizes the device, the device icon in the Tree View window will indicate that the device is off-line. If Amp Editor does not recognize the device, click the [Refresh] button in the Tree View window.

[MANUAL Mode] button

The "IP Address Mode" of all devices connected to the specified network will be switched to Manual. If this is set to Manual, the same IP address will be maintained even if the device's power is turned off. Choose this if you want to shorten the time required for IP address assignment when the system starts up, or if you're using a remote controller such as AMX or Crestron.

- NOTE This can be changed only when offline.
 - When you click the [Manual Mode] button, communication between Amp Editor and the device will be interrupted momentarily and the device icon in the Tree View window will be grayed out until the device IP address is re-established. Once communication restarts and Amp Editor recognizes the device, the device icon in the Tree View window will indicate that the device is off-line. If Amp Editor does not recognize the device, click the [Refresh] button in the Tree View window.
 - If an IP address has already been assigned to the device, click the [MANUAL Mode] button to retain that IP address.

[Close] button

When you click this button, the dialog box will close.

Synchronization (Synchronization with devices)

By synchronizing Amp Editor with your devices, you will then be able to monitor and control the amplifiers in realtime.

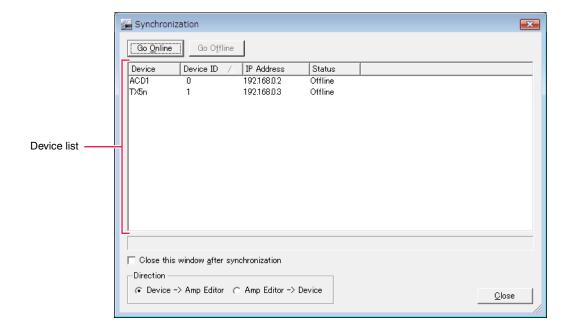
■ Online/Offline

"Online" is the state in which the devices are connected to the computer and network, and are synchronized with Amp Editor so that they can be monitored and controlled. "Offline" is the state in which the devices and computer are not physically connected, or connected but not synchronized.

These synchronization states are also shown by an indicator in the main panel window.

■ "Synchronization" dialog box

Click the [Tools] menu command [Synchronization] to access the "Synchronization" dialog box. Here you can synchronize the settings of Amp Editor with the settings of the devices.



[Go Online] button

If you click this when offline, the settings of Amp Editor and the settings of the devices will be compared, and you will change to the online state. If all connected devices are online, this button will be grayed.

• A message will appear if there is a device that fails to synchronize and is unable to go online. In this case, check the network connections, and perform the synchronization operation again.

• [Go Offline] button

You can click this to change from online to offline. If no device is online, this button will be grayed.

Device list

This lists information about the devices that are subject to synchronization.

Device : Indicates the name (label) of the device.
Device ID : Indicates the Device ID of the device.
IP Address : Indicates the IP address of the device.

• Status : Indicates one of the following synchronization states.

Offline : Offline

Synchronizing (xx%) : Synchronization is being performed Completed : Synchronization has been completed

Online : Online

Synchronization Error: Synchronization has failed

[Close this window after synchronization] check box

If this check box is selected, this dialog box will automatically be closed when synchronization is completed.

Direction

Specifies the direction in which synchronization will occur.

• [Device -> Amp Editor]

Synchronization will be performed by loading data from the devices into Amp Editor.

• [Amp Editor -> Device]

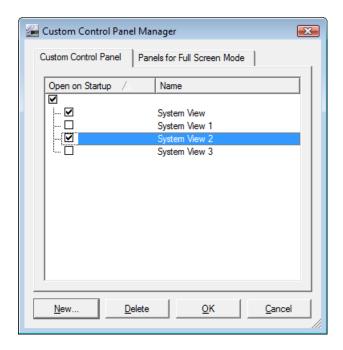
Synchronization will be performed by sending data from Amp Editor to the devices.

Custom Control Panel Manager

To access the "Custom Control Panel Manager" dialog box, click the [Tools] menu command [Custom Control Panel Manager...]. Here you can add, delete, or rename custom control panels. Click the [OK] button to apply the modified settings and close the dialog box.

• For details on custom control panels, refer to "Custom control panels" (page 179).

■ [Custom Control Panel] tab



[Open on Startup] check box

If this is selected, the custom control panel will open automatically when the project is opened.

Name

Indicates the name of the custom control panel. You can click this to select the text and edit the name. By double-clicking this, you can show or hide the custom control panel.

[New...] button

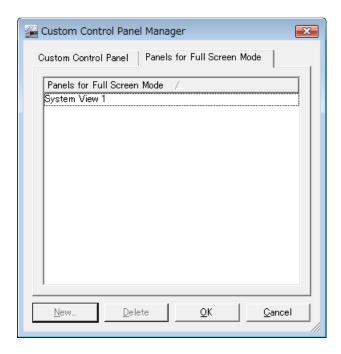
Creates a new custom control panel. When you click this, a dialog box will appear, allowing you to assign a new name. Enter a name for the custom control panel, and click the [OK] button; the custom control panel will be added.

• [Delete] button

Deletes the custom control panel selected in the list. A confirmation dialog box will appear when you click this.

■ [Panels for Full Screen Mode] tab

You can specify the custom control panel that will automatically be displayed in the full screen when the project is opened. In the [Custom Control Panel] tab, [Open on Startup] must be selected for the custom control panel that is to be displayed in the full screen.



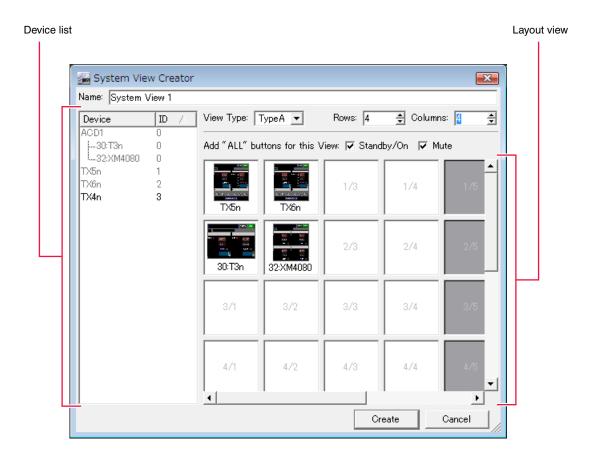
Panels for Full Screen Mode

Here you can specify the custom control panel that will be displayed in the full screen when the project is opened. Click here to view a list from which you can select the custom control panel to be displayed in the full screen.

System View Creator

Click the [Tools] menu command [System View Creator...] to access the "System View Creator" dialog box. Functions that are frequently used in Amp Editor are provided as templates. By placing multiple amplifiers in the cells, you can monitor and control multiple amplifiers from a single custom control panel. A custom control panel in which a template has been placed is called a "System View."

• By switching to Design mode, you can add or remove functions from a custom control panel that you created in the "System View Creator" dialog box.



• [Name]

Enter the name of the System View you're creating.

Device list

This lists the amplifiers that are registered in the workspace.

You can place an amplifier in the System View by dragging it from the Device list view and dropping it on a cell.

NOTE • You cannot place the same amplifier multiple times in a single System View.

• [View Type]

Here you can select the type of template to be placed in the System View (page 28). The following types are available.

Different Types cannot be combined in a single System View.

Type A (For the TXn)



Type B (For the TXn)



• [Rows]

This specifies the number of cell rows. You can specify between 1 and 8.

• If you reduce the number of rows, the information for amplifiers assigned to the deleted cells will be deleted. Rearrange the cells as necessary.

• [Colums]

This specifies the number of cell columns. You can specify between 1 and 8.

• If you reduce the number of columns, the information for amplifiers assigned to the deleted cells will be deleted. Rearrange the cells as necessary.

[Standby/On]

If this is selected, a button that changes the power supply status of all registered amplifiers will be added in the upper part of the custom control panel.



[Mute]

If this is selected, a button that turns mute on/off for all registered amplifiers will be added in the upper part of the custom control panel.



Layout view

This shows the System View layout as a combination of cells. You can place an amplifier in a cell by dragging the amplifier from the Device list and dropping it on the desired cell.



- NOTE If you want to move an amplifier to a different cell, drag the amplifier from its current cell and drop it on the desired cell.
 - If you want to delete an amplifier that you placed in a cell, right-click the amplifier and choose [Delete] from the shortcut menu.

[Create] button

Registers the newly created System View in the custom control panel. When registration is completed, the System View you created will appear.

[Cancel] button

Cancels creation of a System View.

Speaker Processor Library Converter

This allows a Speaker Processor component library item (2Way-6Way) created by the DME Designer application software to be converted for use with TXn (1Way).

The conversion procedure is described below.

1. In the [Tools] menu, click [Speaker Processor Library Converter...].

A dialog box will appear, allowing you to select the conversion-source library file (file name extension ".cel").

2. Select the desired library file, and click the [Open] button.

A dialog box allowing you to specify the save destination will appear.

NOTE • You can select more than one library file.

3. Select the save destination, and click the [Save] button.

The library file will be converted for each frequency channel and saved into the destination library file(s) for each channel. Files that are saved will be named "Original file name _ frequency channel name.ce2".

NOTE • The following abbreviated letter will be added to the frequency channel name based on the level of frequency:

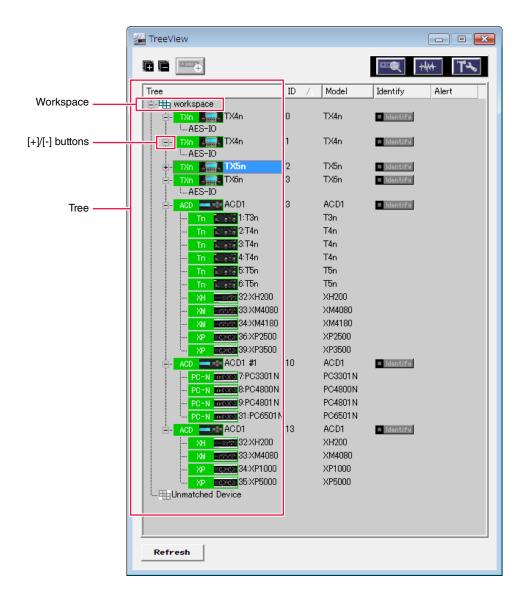
High (high frequency) = H, Mid-High = M-H, Mid = M, Mid-Low = M-L, Low = L, Sub Low = S-L

Tree View window

In the Tree View window you can view, add, or delete devices to be monitored/controlled from Amp Editor.

Workspace and devices are displayed in a hierarchy, providing a visual indication of the entire system's structure. You can double-click an icon to open its Detail View window.

To show or hide the Tree View window, click the [Show/Hide Tree] (\bigcirc) button in the main panel window, or choose the menu item [View] \rightarrow [Tree].



● Expand all (🕞)

When you click this, all levels in the tree will appear.

● Collapse all (🗐)

When you click this, all levels in the tree will be hidden.

• [New Device] button ()

When you click this, the "Select New Device" dialog box will appear (page 105).

When you click this, the Device Detail View of the selected amplifier will appear (page 115).

● [Signal Path View] button (+)

When you click this, the Signal Path View window of the selected TXn will appear (page 144).

• [Device Properties] button (

When you click this, the Device Properties window of selected amplifier will appear (page 127).

Workspace

This is the set of devices that are monitored and controlled simultaneously by Amp Editor.

● [+]/[-]

Use the [+]/[-] buttons at the right of the workspace and device icons to show or hide lower levels of the hierarchy. The button is displayed as [-] if the lower level is shown; click this button to hide the lower level. The button is displayed as [+] if the lower level is hidden; click this button to show the lower level. Clicking a workspace or device icon will also show the lower level and display the button as [-].

Tree

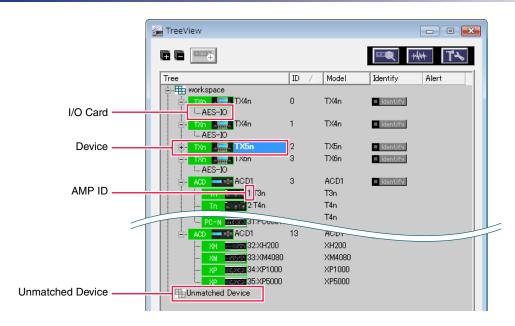
This shows a hierarchical view of the devices that can be controlled.

When you double-click the icon of an item, click the [Device Detail View] button, or right-click and choose [Show] from the context menu, the Detail View window for that item will appear. For details, refer to page 109.

[Refresh] button

When you click this, all devices connected to the network will be detected and displayed in the Tree View window.

Tree structure



Device

The devices registered in Amp Editor are shown as an icon and a name (label). The icons will indicate the online status or alerts for the corresponding devices.

Device icon	Status
XMV III	Does not exist on the network, or is not connected to the computer (Amp Editor).
XMV III	Exists on the network, and is synchronized with Amp Editor (online status).
XMV	Exists on the network, but is not synchronized with Amp Editor (offline status).
XMV III	Synchronized with Amp Editor (online status), and an alert has occurred.

Indicates the Device ID of the device.

Model

Indicates the model name of the device.

Identify

When you click the [Identify] button, the button will light and the indicator or display on the corresponding physical device will blink. When you perform the Identify operation on the physical device, the [Identify] button corresponding to that device will light. The type of indication and the method of operation will depend on the device, so refer to the owner's manual for your particular device.

NOTE • No [Identify] button is available for amplifiers connected to the ACD1.

Alert

The Alert symbol will appear when an alert event occurs on an amplifier. Even after the cause of the alert has been addressed, the indication will not disappear until you click the Alert symbol.

AMP ID

This indicates the ID of each amplifier connected to the ACD1.

I/O Card

Indicates the I/O card connected to the device.

Unmathced Device

Indicates devices that have the same Device ID, or that feature a MAC address that is different from the one registered in Amp Editor.

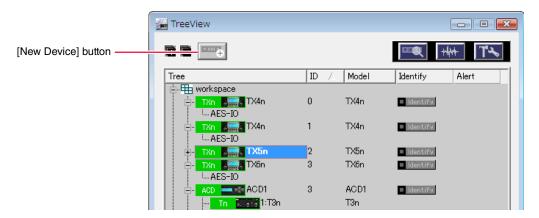
Operations in the Tree View window

In the Tree View window you can perform various operations by double-clicking, right-clicking, or by dragging and dropping an icon.

■ New Device

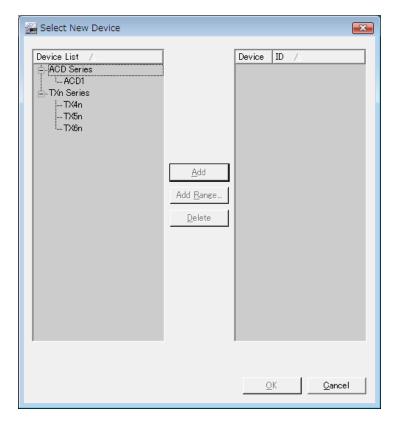
You can add devices to the tree.

NOTE • Up to 32 ACD1 units can be added to the tree.



1. To add TXn or ACD1 units, select the icon of the workspace and then click the [New Device] button, or right-click the icon to choose the [New Device...]. Alternatively, to add an amplifier that connects to the ACD1 unit, select the desired ACD1's icon and then click the [New Device] button, or right-click the icon to choose [New Device...].

The "Select New Device" dialog box will appear.



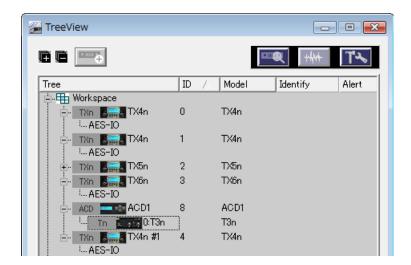
2. From the [Device List], select the device that you want to add, and click the [Add] button.

The selected device will be added to the [Device] area at the right.

- You can also add a device by double-clicking a device shown in [Device List].
 - By clicking the [Add Range...] button you can add multiple devices of the same model.
 - If you want to change the ID of the device you added, click the ID column to select an ID.

3. Click the [OK] button.

A new device will be added below the specified workspace.



■ Copying settings

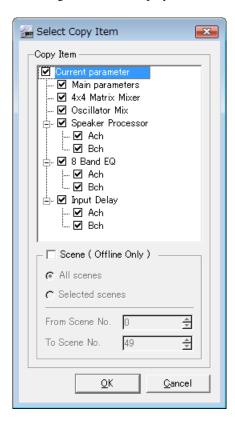
You can copy the settings of an amplifier that is listed in the tree. You can select from two copy types: [All current parameters], which enables you to copy all settings other than those unique to the device, such as a Device ID; and [Selected parameters], which enables you to copy the selected settings.

- Copying "All current parameters"
 - 1. Right-click the icon of the amplifier whose settings you want to copy.
 - **2.** From the context menu, choose [Copy] \rightarrow [All current parameters].

All parameters other than those listed below will be copied. Scene, Device ID, device name, Utility settings, Log Setup, Global Link, Solo and MY-Card (TXn only)

- Copying "Selected parameters"
 - 1. Right-click the icon of the amplifier whose settings you want to copy.
 - 2. In the context menu, choose [Copy] → [Selected parameters].

The "Select Copy Item" dialog box will be displayed.



3. Selects the settings you wish to copy.

If you select the [Scene] check box when the unit is offline, you will be able to select a scene as a copy source.

4. Click the [OK] button.

The selected setting will be copied.

■ Pasting settings

You can paste the copied amplifier settings to another unit in the same series.

- 1. Right-click the icon of the amplifier to which you want to paste the amplifier settings.
- 2. In the context menu, choose [Paste].
- 3. Click the [OK] button on the confirmation dialog.

The settings will be pasted to the destination amplifier.

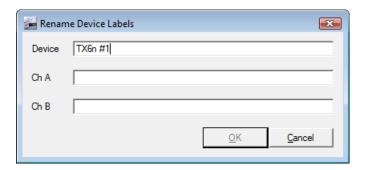
• You cannot paste the scene to the destination amplifier while the amplifier is online.

■ Renaming (Rename Label)

You can edit the name (label) of a device or workspace (with the exception of I/O cards).

- 1. Right-click the icon of the item that you want to rename.
- 2. From the context menu, choose [Rename Label].

The "Rename (Device) Label" dialog box will appear.



NOTE • For items other than an amplifier, only Name can be edited.

- 3. Enter the desired name in the text box such as "Device" and "Channel A."
- 4. Click the [OK] button.

The name will be changed, and the dialog box will close. If you click the [Cancel] button, the dialog box will close without changing the name.

■ Changing the Device ID (Change Device ID) (for devices other than XMV)

You can change the Device ID of a device.

- 1. Right-click the icon of the item whose ID you want to change.
- 2. From the context menu, choose [Change Device ID].

The "Change Device ID" dialog box will appear.



3. Use the [New ID] field to specify the desired value, and click the [OK] button.

The ID will be changed. If the value specified in [New ID] already exists for another device, a message will appear, and the [Current ID] value will remain unchanged.

- AMP ID only changes the setting within Amp Editor. To change the AMP ID of the amplifier itself, use the AMP ID switch located on the rear panel of the amplifier. For details on the AMP ID switch, refer to "Connections with the PC-N or Tn series" in the ACD1 owner's manual.
 - To change the UNIT ID on an XMV unit, use a combination of the device setting DIP switches and the [UNIT ID] rotary switch on the rear panel.

■ Disengage Device Maching

This operation removes an offline device from the workspace and moves it to Unmatched Device.

• You can drag and drop removed devices from Unmatched Device back into the workspace.

- 1. Right-click the icon of the item that you want to remove.
- 2. From the context menu, choose [Disengage Device Matching].
- 3. In the confirmation dialog box, click the [OK] button.

The item will be removed, and moved to Unmatched Device.

■ Delete

You can delete an offline device.

- 1. Right-click the icon of the item that you want to delete.
- 2. From the context menu, choose [Delete].

A confirmation dialog box will appear.

3. In the confirmation dialog box, click the [OK] button.

The selected item will be deleted.

■ Editing a scene (Scene Manager)

When you right-click an amplifier's icon and choose [Scene Manager] from the context menu that appears, the "Scene Manager" dialog box will appear (page 51). Here you can store, recall, or edit scenes for an amplifier. You can edit the scene name, the protect setting, and perform copy and paste editing.

- When online, operations other than Store and Recall are not possible.
 - The "Scene Manager" dialog box does not have an [OK] button or [Cancel] button. To close the dialog box, click the [Close] button located at the upper right of the dialog box.

■ Showing the window (Show)

By double-clicking an icon in the tree or by using the following procedure, you can open the corresponding window.

- 1. Right-click the icon of the item whose details you want to view.
- 2. From the context menu, choose [Show].
- 3. Select the view that you want to see.

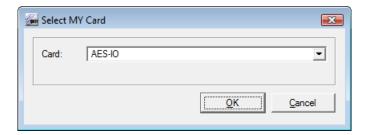
You can choose "Device Detail View," "Signal Path View," "Device Properties," or "I/O Card Editor." Only "I/O Card Editor" can be selected from an I/O card.

■ Specifying the I/O card (MY Card Type)

When offline, you can change the I/O card that is inserted in the TXn. By default, an AES-IO card is inserted in the TXn.

- 1. Right-click a TXn icon.
- 2. From the context menu, choose [I/O Card Selection].

The "I/O Card Selection" dialog box will appear.



- 3. From the dropdown menu beside [Card], choose the appropriate card. If you want to remove the card, select "none."
- 4. Click the [OK] button.

The setting will be applied, and the dialog box will close. If you click the [Cancel] button, the dialog box will close without applying the setting.

• If a TXn in which an I/O card is inserted is connected to the network, it will be shown in Amp Editor with the corresponding card selected.

■ Viewing the event log (Individual Event Log)

When you right-click a device's icon and choose [Individual Event Log] from the context menu that appears, the "Individual Event Log" dialog box will appear (page 45). This displays an event log for the events generated by the device that you right-clicked.

• If you opened the "Individual Event Log" dialog box from the Tree View window, this will be displayed with the [All Logs] button turned on.

■ Resetting the FAULT OUTPUT connector (Reset Fault Output)

From the context menu that appears when you right-click the icon of a device, you can choose [Reset Fault Output] to reset the output of that device's FAULT OUTPUT connector. Once the C and NC pins of a device's FAULT OUTPUT connector have been shorted, the C and NC pins will remain shorted until you power-off the device or perform this operation to reset it. Before you use this operation to reset the fault output, verify that the device is operating normally.

■ Identifying a device (Identify)

When you click the [Identify] button or right-click a device icon and choose [Identify], an indicator or a display will blink on the corresponding device itself.

■ Viewing device information (Device Information)

When you right-click and choose [Device Information] from the context menu, the "Device Information" dialog box will appear, listing information about the devices connected in the workspace. For details, refer to the main panel window's "Device Information" (page 49).

Various settings for devices (Utility)

When you right-click a device's icon and choose [Utility] from the context menu that appears, the "Utility..." dialog box will appear (page 76). Here you can make various settings for a device.

When offline, these are for display only.

■ Alert message settings (Alert Setup)

When you right-click a device's icon and choose [Alert Setup] from the context menu that appears, the "Alert Setup" dialog box will appear (page 55). Here you can enable/disable alert messages and specify their types for each device. Alert messages can be viewed and saved in the event log, and are used as trigger signals when a fault occurs.

■ Detecting devices (Update)

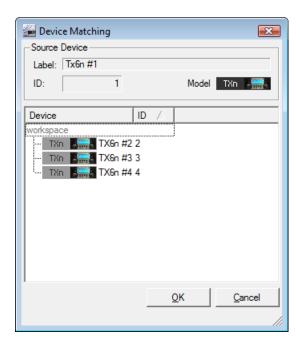
From the context menu that appears when you right-click, choose [Update]; the devices connected to the network will be detected and shown in the Tree View window.

■ Matching (Device Matching)

If devices are connected to the network, the devices in Amp Editor will normally be automatically matched with the actual devices. If the Device ID or MAC addresses differ between the devices in Amp Editor and the actual devices, the devices in Amp Editor and the actual devices must be manually matched. Matching must be done if devices have been replaced due to a malfunction or other reason.

- The Device Matching function does not work with XMV units. Use a combination of the DIP switches and [UNIT ID] rotary switch on the rear panel to match the UNIT ID.
 - 1. Right-click the icon of a device in the Unmatched Device area.
 - 2. From the context menu, choose [Device Matching...].

The "Device Matching" dialog box will appear.



- **3.** From the devices shown in the "Device List," select the device in Amp Editor that you want to match.
- 4. Click the [OK] button.

The setting will be applied, and the dialog box will close. If you click the [Cancel] button, the dialog box will close without applying the setting.

■ Moving from Unmatched Device to Workspace (Move)

To be able to monitor and control a device displayed in the Unmatched Device area, you must move the device icon to the workspace.

NOTE • You can move an item within the tree by dragging and dropping its icon.

- 1. Right-click the icon of a device in the Unmatched Device area.
- 2. From the context menu, choose [Move].

The item will move to the workplace.

■ Moving

You can move an item between the Unmatched Device area and the workspace by dragging and dropping its icon.

NOTE • You cannot move an I/O card by itself.

Detail View window

In the Detail View window, you can monitor and control the item that is selected in the Tree View window. To open the Detail View window, use one of the following procedures.

- Double-click an icon in the Tree View window.
 - The Device Detail View will will appear for an amplifier, and the I/O Card Editor will appear for a digital I/O card.
- Select the device in the Tree View window, and then click the [Device Detail View] button, [Signal Path View] button, or the [Device Properties] button.
 - The window corresponding to the button you selected will appear.
- Right-click an icon in the Tree View window, and then select the window that is displayed from [Show].

The window you selected will appear.



- For details on Signal Path View, refer to "Signal Path View window" (page 144)
 - For details on Device Properties, refer to "Device Properties window" (page 127)
 - For details on I/O Card Editor, refer to "I/O Card" (page 176)
 - If you need to monitor and control multiple amplifiers, it is convenient to use a custom control panel created in the "System View Creator" dialog box (page 98)

Device Detail View

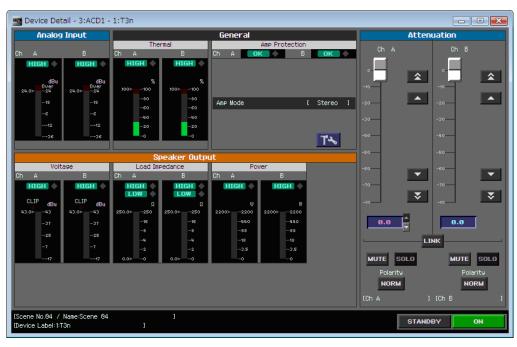
The Device Detail View lets you monitor or control the selected amplifier.

The structure of the screen will depend on the amplifier.

For the TXn



For the Tn/PC-N



For the XM



For the XP/XH



For the XMV



Screen shots for the TXn will be used subsequently in this chapter.

■ Input section (TXn/Tn/PC-N only)

Here you can monitor and control the input to the amplifier. Slot Input, Matrix Mixer Input, and Signal Chain Check are found only on the TXn.



1) Input level warning indication

This indicates whether the input level of each channel exceeds the threshold value (HIGH).

The input level warning indicator will turn red when the signal exceeds the input level threshold value that is specified in the [Input Alert] tab of the Device Properties window (page 135).

If an alert has been specified in the "Alert Setup" dialog box (page 55), the alert indicator will also light and be recorded in the log.

Input level warning indicator	Alert indicator
Below threshold level : HIGH green	Below threshold level : unlit
Threshold level exceeded : HIGH red	Threshold level exceeded: 🔷 lit
Invalid setting : HIGH grey	

2 Input level meter

This indicates the input level of each channel.

As the Analog Input meter display unit, you can select from the three choices dBu/V/dBFS in the [Meter Unit] tab of the "Preferences" dialog box (page 42).

• For amplifiers connected to the ACD1, the meter will not move if the input level is below the following value:

For the Tn: -15.3 dBu or lower, For the PC-N: -17.4 dBu or lower

3 Signal Chain Check warning indication (TXn only)

This indicates whether the input of each channel has been interrupted (LOW).

The Input Signal indicator will turn red when the signal falls below the input level threshold value that is specified in the [Input Signal Chain Check] tab of the Device Properties window (page 139).

If an alert has been specified in the "Alert Setup" dialog box, the alert indicator will also light and be recorded in the log.

Input Signal indicator	Alert indicator
Above threshold level : LOW green	Above threshold level : unlit
Below threshold level: LOW red	Below threshold level: 🔷 lit
Invalid setting : LOW grey	

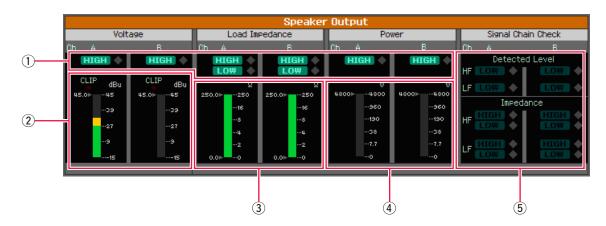
4 [ON] button (TXn only)

This turns on/off (mutes) the input signal of each channel. These buttons are the same as the input channel [ON]/[OFF] buttons of the Matrix Mixer.

■ Speaker Output section

Here you can monitor and control the output from the amplifier.

• When the power to the XH200 is switched between Standby mode and On, the switching of the internal relay circuit may cause the various Speaker Output meters to indicate unintended values.



1 Output warning indicator

When the output value thresholds specified in the Device Properties window [Output Alert] tab (page 137) are exceeded (HIGH) or fallen below (LOW), the output warning indicator will turn red.

If an alert has been specified in the "Alert Setup" dialog box, the alert indicator will also light and be recorded in the log.

Output warning in	dicator	Alert indicator
Upper threshold value exceeded :	HIGH red	Within specified value : unlit
Within upper threshold value :	HIGH green	Specified value exceeded: 🔷 lit
Above lower threshold value :	LOW green	
Below lower threshold value :	LOW red	
Invalid setting :	HIGH LOW grey	

2 Output level meter

This indicates the output level of each channel. As the meter display unit, you can select either dBu or V in the [Meter Unit] tab of the "Preferences" dialog box. When the output level exceeds the clip level of the amplifier, the [CLIP] indicator will light.

• For amplifiers connected to the ACD1, the meter will not move if the output level is below the following value:

For the PC9500N/PC9501N: 5.74 dBu (1.50 V) or lower, For the PC4800N/PC4801N: 2.64 dBu (1.05 V) or lower, For the PC3300N/PC3301N: 1.10 dBu (0.88 V) or lower, For the PC6501N: 4.29 dBu (1.27 V) or lower, For the PC2001N: -0.52 dBu (0.73 V) or lower,

For the T5n/T4n: 5.91 dBu (1.53 V) or lower, For the T3n: 4.49 dBu (1.30 V) or lower,

For the XP/XH/XM: 0.00 dBu (0.77 V) or lower

3 Impedance meter (TXn/Tn/PC-N only)

This indicates the impedance of each channel's speaker output jack. In the Device Properties window [Output Alert] tab you can change the upper and lower threshold value settings for impedance.

NOTE • The impedance value is calculated based on the current that flows from the amplifier to each speaker. The meter will not move until a certain level of sound is output from the speakers.

4 Power meter (TXn/Tn/PC-N only)

This indicates the power consumption of each channel. In the Device Properties window [Output Alert] tab, you can adjust the upper threshold for power output to modify the power output value that will trigger an alert.

NOTE • For the amplifiers connected to the ACD1, the meter will not move if the power consumption is below the following value:

> PC9500N/PC9501N: 0.50.W or lower, PC4800N/PC4801N: 0.24.W or lower, PC3300N/PC3301N: 0.17.W or lower, PC6501N: 0.35.W or lower, PC2001N: 0.12.W or lower

T5n/T4n: 0.99.W or lower, TX3n: 0.70.W or lower

5 Signal Chain Check (TXn only)

This indicates whether the output of each channel has been interrupted.

When the output value thresholds specified in the Device Properties window [Output Signal Chain Check] tab are exceeded (HIGH) or fallen below (LOW), the Output Signal indicator will turn red.

"Detected Level" uses a pilot tone of the specified frequency to detect the impedance of the speaker output jack and determine whether the output level has fallen below the lower threshold.

"Impedance" uses a pilot tone of the specified frequency to detect the impedance of the speaker output jack and determine whether the impedance value has risen above the upper threshold or fallen below the lower threshold.

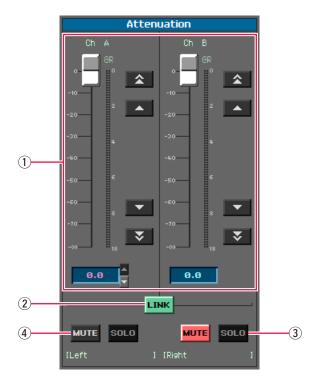
If an alert has been specified in the "Alert Setup" dialog box, the alert indicator will also light and be recorded in the log.

Output Signal in	ndicator	Alert indicator
Upper threshold value exceeded :	HIGH red	Within specified value : unlit
Within upper threshold value	: HIGH green	Specified value exceeded: 🔷 lit
Above lower threshold value	: LOW green	
Below lower threshold value	: LOW red	
Invalid setting	: HIGH LOW grey	

- NOTE If the "Impedance" upper threshold value has been exceeded, this means that the conductor is open due to a break or similar reason.
 - If the "Impedance" lower threshold value has been fallen below, this means that the resistance has decreased due to a shorted coil or similar reason.

■ Attenuation section

Here you can monitor and control the amount of attenuation for each channel.



1 Attenuator (TXn/Tn/PC-N/XMV only)

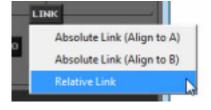
Use the slider or numerical entry to control the amount of attenuation for each channel. The GR meter (TXn only) indicates the amount of gain reduction produced by the limiter of the amplifier protection circuit.

2 [LINK] button (TXn/Tn/PC-N only)

This links the attenuator value between the channels. This button is unavailable in Bridge mode.



When clicking the [LINK] button to turn it on, use the pulldown menu to select how offset will occur between the channels.



Absolute Link (Align to A): The channel A value will be copied to channel B, and operation will be linked.

Absolute Link (Align to B): The channel B value will be copied to channel A, and operation will be linked.

Relative Link: The offset between channels will be maintained, and operation will be linked.

3 [SOLO] button (for devices other than XMV)

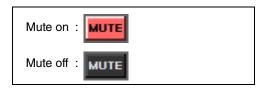
This turns Solo on/off for each channel.

This is available if the main panel window's Solo function (Solo Master) is on.

If you turn this on when the solo mode is "Last," only the signal of the last-specified channel in the area will be soloed. If you turn this on when the solo mode is "Mix," the signals of the specified multiple channels in the area will be soloed.

4 [MUTE] button

Mutes the output signal of each channel.



5 [Polarity] button (Tn/PC-N/XMV only)

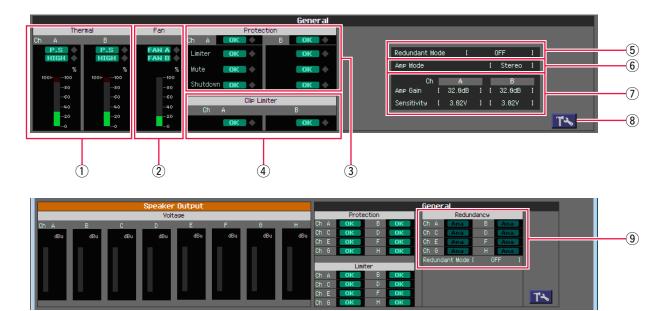
Inverts the phase of the output signal of each channel.



This button is available only for the Tn/PC-N. For the TXn, this is specified in the Signal Path View window.

■ General section

Here you can monitor and control overall settings for the entire amplifier.



1 Temperature monitor (TXn/Tn/PC-N only)

The meter shows the temperature of the heat sink of the amp section in a range of 0%-100%. If this exceeds 90%, the protection circuit will operate and the speaker output will be muted; please allow sufficient margin for operation.

- The meter shows only the head sink temperature of the amp section. The temperature of the power supply section is not shown.
 - The temperature at 90% will differ between amplifiers. For details, refer to the owner's manual or reference manual of each amplifier.

The power supply protection indicator shows the status of the power supply section, and will turn red if the amplifier's power supply protection temperature is exceeded. If an alert has been specified in the "Alert Setup" dialog box, the alert indicator will also light and be recorded in the log.

Power supply protection indicator	Alert indicator
Normal state : P.S green	Normal state : unlit
Power supply protection active : P.S red	Power supply protection active : lit

The amplifier protection indicator will turn red when the heat sink temperature of each channel of the amplifier exceeds the threshold value specified in the [Output Alert] tab (page 137) of the Device Properties window. If an alert has been specified in the "Alert Setup" dialog box, the alert indicator will also light and be recorded in the log.

Amplifier protection indicator	Alert indicator
Within threshold level : HIGH green	Within threshold level : unlit
Threshold level exceeded : HIGH red	Threshold level exceeded: it

2 Fan monitor (TXn only)

This displays the rotational state and speed of the cooling fans.

The fan rotational speed is shown in % units. The rotational speed of the fan at 100% will differ according to the amplifier.

If the fan is stopped, the fan rotation indicator will turn red. If an alert has been specified in the "Alert Setup" dialog box, the alert indicator will also light and be recorded in the log.

Fan rotation indicator	Alert indicator
Rotating: FAN A green	Rotating: unlit
Stopped: FAN A red	Stopped:

As seen from the front panel of the TXn, the left fan is FAN A and the right fan is FAN B.

3 Amplifier protection

This indicates that the amplifier's protection function has operated.

Protection

When any of the following protection functions for Limiter, Mute, or Shutdown has operated, the protect indicator will turn red. At this time, the PROTECTION indicator on the panel of the TXn itself will also light.

P	rotection indicator	Alert indicator
Normal state	: OK green	Normal state: unlit
Protected	: red	Protected : Viit

NOTE • On the XMV, the PROTECTION indicator will not turn red while the Limiter is operating.

• Limiter (TXn/XMV only)

When the amp section's heat sink temperature indication exceeds 80%, or when overcurrent occurs, the limiter will operate to reduce the speaker output, and the Limiter indicator will light red. If an alert has been specified in the "Alert Setup" dialog box, the alert indicator will also light and be recorded in the log (TXn only).

• The temperature at 80% will differ between amplifiers. For details, refer to the owner's manual or reference manual of each amplifier.

Limiter indicator	Alert indicator
Normal state: OK green	Normal state: unlit
Limiting : Limit red	Limiting : 🚺 lit

• On the XMV the Limiter indicator will light red in the following situations:

- When an instantaneous input overload is detected
- When an input overload has been occurring for a specific duration
- When the heat sink of the amplifier section exceeds the allowable temperature

• Mute (TXn only)

When the amp section's heat sink temperature indication exceeds 90%, or when a short has caused the load to fall below 0.5Ω , or when the power supply has malfunctioned, or when ultra-high frequencies are detected, the speaker output will be muted and the Mute indicator will light red. If an alert has been specified in the "Alert Setup" dialog box, the alert indicator will also light and be recorded in the log.

NOTE • The temperature at 90% will differ between amplifiers. For details, refer to the owner's manual or reference manual of each amplifier.

Mute indicator	Alert indicator
Normal state: OK green	Normal state: unlit
Muted : MUTE red	Muted : Viit

• Shutdown (TXn only)

When the power supply section's temperature exceeds the power supply protection temperature of the amplifier itself, when abnormal heating occurs, or when DC output is detected, the power supply to the amplifier's drive section will automatically stop, and the Shutdown indicator will light red. The alert indicator will light and will be recorded in the log. In order to clear the Shutdown state, you must cycle the power switch of the amplifier itself. (This state cannot be cleared by power supply operations from Amp Editor.)

- NOTE The power supply protection temperature will differ between amplifiers. For details, refer to the owner's manual or reference manual of each amplifier.
 - The temperature monitor meter shows only the head sink temperature of the amp section. The temperature of the power supply section is not shown.

Shutdown indicator	Alert indicator
Normal state : OK green	Normal state: unlit
Shutdown : S.D. red	Shutdown : 🔷 lit

4 Clip Limiter (TXn only)

If the Clip Limiter operates for a channel, the output from the amplifier will be compressed, and the Clip Limiter indicator will turn red. If an alert has been specified in the "Alert Setup" dialog box, the alert indicator will also light and be recorded in the log.

Clip Limiter indicator	Alert indicator
Normal state : OK green	Normal state: unlit
Limiting : Limit red	Limiting : 🔷 lit
Clip Limiter Off:	

5 Redundant Mode (TXn only)

Indicates the amplifier's input redundant mode (Redundant Backup/Override/Off). To change the mode, use the Device Properties window [General] tab.

6 Amp Mode (TXn/Tn/PC-N/XP/XM only)

Indicates the amplifier's output mode (Stereo/Parallel/Bridge). To change the mode, use the Device Properties window [General] tab (page 131).

⑦ Amp Gain/Sensitivity (TXn only)

Indicates each channel's gain and input sensitivity values. To change the settings, use the Device Properties window [General] tab.

8 [Device Properties] button

When you click this, the Device Properties window will appear (page 127).

Indicates the status of the analog or digital input and redundancy.

Redundant Indicator					
Indicator	Input Souce	Input Redundancy	Redundancy Enabled	Status	
Ana	Analog	_	_	_	
OFF		_		_	
ОК		Other than Off	✓	Audio signal is input from the digital connector.	
(Over)	Dante or YDIF	Redundant Override	V	Audio signal is input from the analog connector by the Redundancy Override function.	
[Back]		Redundant Backup	V	Audio signal is input from the analog connector by the Redundancy Backup function.	

To make redundancy settings, use the Device Properties window [Input (V3.1 –)] tab (page 128).

■ Other



1) Scene

Indicates the scene number and scene name.

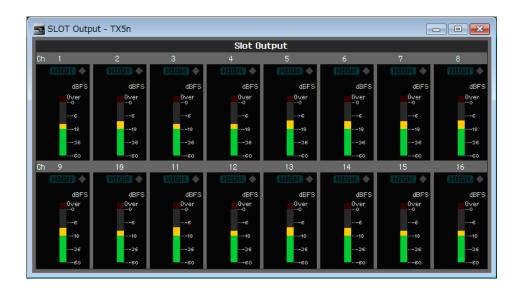
2 Amp Name

Indicates the name of the amplifier.

3 [SLOT OUT] button (TXn only)

Click this button to open the "Slot Output" window.

In the "Slot Output" window you can monitor the slot output levels and the state of the output warning indicators.



4 [Signal Path View] button (TXn only)

Click this button to open the Signal Path View window (page 144).

5 [STANDBY]/[ON] button

Monitors and controls the Standby/On status of the amplifier's power supply.

Click the [STANDBY]/[ON] button to switch the power supply between Standby/On.

• If you switch amplifiers other than the XM/XH/XP from Standby to On, this button indicator will flash yellow until the power to the amplifiers is turned on.



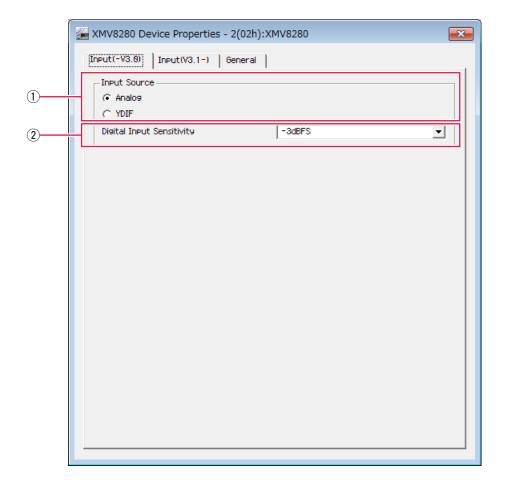
Device Properties window

Here you can make settings such as the power amplifier's output mode, gain / input sensitivity, and alerts and protection settings.

If you click the [Device Properties] button (), or if you right-click the icon of an amplifier in the Tree View window and then select [Show] \rightarrow [Device Properties] from the context menu, the Device Properties window will appear.

■ [Input (–V3.0)] tab (XMV)

This tab is for XMV firmware version 3.0 or earlier.



1 Input Source

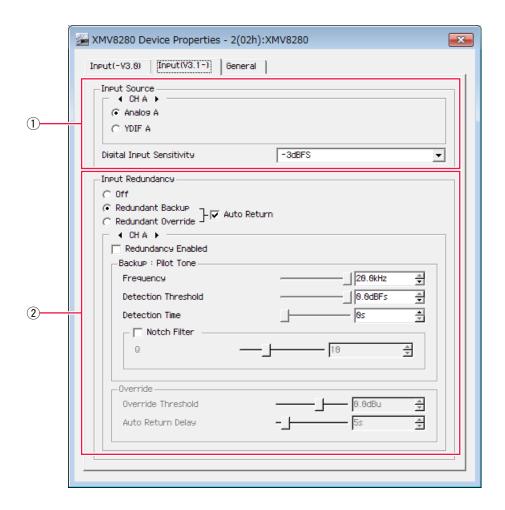
Here you can select the input source, analog or digital (YDIF or Dante).

2 Digital Input Sensitivity

Here you can specify the digital input sensitivity. This setting is available in firmware version 1.2 or later.

■ [Input (V3.1 –)] tab (XMV)

This tab is for XMV firmware version 3.1 or later.



1 Input Source

Here you can select the amp channel for which you want to make settings.

• Analog / YDIF / Dante

Here you can select the input source, analog or digital (YDIF or Dante) for each amp channel.

Digital Input Sensitivity

Here you can specify the digital input sensitivity. This setting is applied to all the amp channels.

② Input Redundancy

You can enable audio network redundancy for use with analog input signal(s) and digital input signal(s).

Mode	Content		
Off	Input redundancy function is off.		
Redundant Backup	The input switches automatically from digital (for main input) to analog (for backup input) when the pilot tone of a digital input is interrupted.		
Redundant Override	The input switches automatically from digital to analog when the analog input reaches the specified level or higher. You can specify the threshold level at Override Threshold in the Override field.		

Auto Return

If this check box is selected, operation returns to the digital input automatically.

Redundant Backup: Returns to the digital input when the pilot tone is detected.

Redundant Override: Returns to the digital input when the analog input falls below the specified level.

Channel selection

Here you can select the amp channel which you want to make settings.

• Redundancy Enabled

If this check box is selected, the redundancy function is enabled for each amp channel.

Backup : Pilot Tone

Here you can make settings for the pilot tone which is used on Backup mode.

Frequency: Here you can specify the center frequency of the pilot tone.

Detection Threshold: Here you can specify the threshold value for the pilot tone level.

Detection Time: Here you can specify the pilot tone detection interval.

If the pilot tone was not detected within the specified time interval, it will be

determined that the input has been interrupted.

Notch Filter: When selected, this enables the notch filter that eliminates the frequency component of the pilot tone so that the pilot tone will not be output by the amplifier.

Q: Here you can specify the width of the notch filter's frequency band.

Override

Here you can make detailed settings in the Override mode.

Override Threshold: Here you can specify the input signal level at which digital input is switched

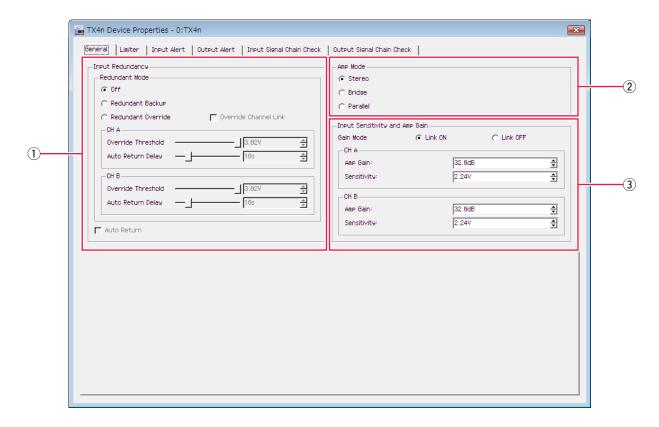
to analog input.

Auto Return Delay: Here you can specify the time from when the analog input falls below the

specified level until the signal is switched to the digital input.

■ [General] tab (for devices other than XMV)

Here you can make mode settings such as the amplifier's output mode. This setting can be changed when online or offline. For information on the XMV, refer to page 132.



1 Input Redundancy (TXn only)

Here you can make settings for a redundant connection (duplicate audio connections) that uses both the analog input signal and the digital (slot) input signal. If the digital input audio is interrupted by a broken connection or other problem, the amplifier can automatically switch to the analog input (Redundant Backup), or the amplifier can automatically switch to the analog input simply when an analog audio input signal is detected (Redundant Override).

Redundant Mode

Specifies the redundant connection mode. You can choose one of the following three settings.

Mode	Content	
Off	Redundant connection is off	
Redundant Backup	The input signal from the card installed in the slot will be the main signal; if the input from the card becomes unlocked, the amplifier will automatically switch to the input signal from the analog jack. To verify whether the I/O card you're using supports Redundant Backup mode, refer to "Supported cards" in the TX6n/5n/4n reference manual.	
Redundant Override	The input signal from the card installed in the slot will be the main signal; if an input signal from the analog jack is detected, the amplifier will automatically switch to the input signal from the analog jack. If [Override Channel Link] is checked, all channels will switch together to the input signal from the analog jacks when an input signal is detected from either analog jack.	

Override Threshold

When using Redundant Override mode, this specifies the input level threshold value used to determine the presence or absence of analog input for each channel.

Auto Return Delay

When using Redundant Override mode with Auto Return ON, this specifies the time from when an interruption in the analog input is detected until the amplifier switches to the digital input.

Auto Return

When using Redundant Backup mode, this specifies whether the slot input will be re-enabled when the interrupted slot input has recovered.

When using Redundant Override mode, this specifies whether the slot input will be re-enabled when the analog input is interrupted.

② Amp Mode (TXn/Tn/PC-N/XP/XM only)

This section displays the amplifier's output mode (Stereo/Bridge/Parallel). For the TXn, it enables you to specify the output mode.

For details on each output mode, refer to the owner's manual of each amplifier.

NOTE • In the case of the TXn, the setting of the amplifier itself will change when you specify the output mode here. In the case of the Tn/PC-N, the mode setting of the amplifier itself will be reflected in Amp Editor when synchronization occurs. In the case of the XM/XP, this is not linked with the mode setting of the amplifier itself, so you must set the two settings to match.

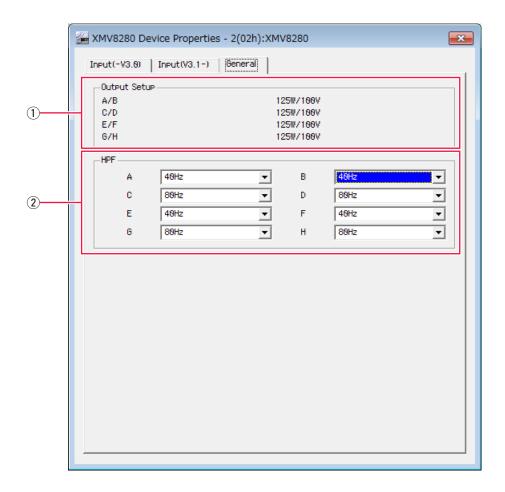
③ Input Sensitivity and Amp Gain (TXn only)

This specifies the gain (Amp Gain) and input sensitivity (Sensitivity) for each channel. Gain and input sensitivity settings are linked. Settings will also be linked between channels A/B if the Amp Mode is Bridge or Parallel, or if the Gain Mode is Link ON.

• The gain for the Tn/XP is specified by a switch on the rear panel of the amplifier.

■ [General] tab (XMV)

Here you can confirm the DIP switch settings and specify each channel's frequencies. You can change these settings only when online.



1 Output Setup

This section displays the [SPEAKERS] DIP switch settings on the XMV's rear panel.

• The indicator "---" will appear instead if the unit is offline or if the [SPEAKERS] DIP switches have been set to something other than the specified combination. For more information on the [SPEAKERS] DIP switches, refer to the XMV Owner's Manual.

2 HPF

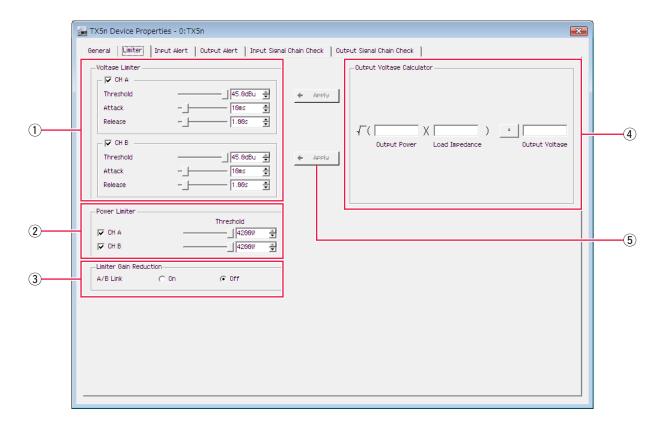
This section enables you to specify the HPF frequencies. You can select 40Hz/80Hz for high impedance, and Off, 40Hz or 80Hz for low impedance.

• The indicator "---" will appear instead if the unit is offline or if the [SPEAKERS] DIP switches have been set to something other than the specified combination.

■ [Limiter] tab (TXn only)

Here you can specify the limiter values for each amplifier.

These settings can be changed when online or offline.



1 Voltage Limiter

These settings specify how the limiter will be controlled by the output voltage.

Check box

Turns the limiter on/off.

• Threshold

Specifies the upper threshold value for the output voltage.

Click the $[\leftarrow APPLY]$ button to specify the value calculated in the "Calculate the Output Voltage."

Attack

Specifies the time over which 20 dB of attenuation will be applied after the threshold value is exceeded.

• Release

Specifies the time over which the voltage that had been attenuated will be returned to the original level after the voltage falls back to below the threshold value.

2 Power Limiter

These settings specify how the limiter will be controlled by the output power.

Check box

Turns the limiter on/off.

• Threshold

Specifies the upper threshold value for the output power.

3 Limiter Gain Reduction

Turns channel linking of the limiter on/off.

If this is "On," the limiter of the other channel will also operate in tandem when the limiter is applied to one of the channels.

4 Output Voltage Calculator

Calculates the Threshold value in the Voltage Limiter area.

Output Power

Inputs the amplifier's output power.

• Load Impedance

Inputs the impedance of the speaker connected to each channel.

• [=] button

Click this button to calculate the output voltage based on the values that are input to Power and Impedance.

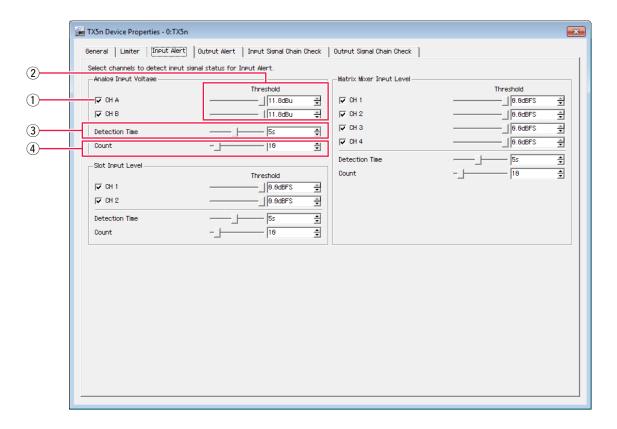
⑤ [← APPLY] button

Click this button to specify the Output Voltage value in the Output Voltage Calculator for Threshold at the left side of the button.

• In order to convert the available values for the TXn unit, the result of the calculation and the specified value may differ.

■ [Input Alert] tab (TXn/Tn/PC-N only)

Here you can make settings such as the threshold values for the amplifier's maximum input. These settings can be changed when online or offline.



The content of the settings for Analog Input Voltage, Slot Input Voltage (TXn only), and Matrix Mixer Input Level (TXn only) are identical.

1) Channel check box

Specifies whether alert detection will be enabled or disabled. If a point exceeding the specified value (Threshold) is detected for the specified number of times (Count) within the specified duration (Detection Time), it will be determined that an alert has occurred. Detection is in 2 ms intervals.

2 Threshold

Specifies the threshold value for the maximum input level.

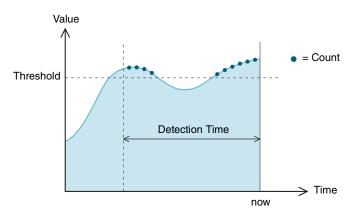
③ Detection Time (TXn only)

Specifies the time during which points exceeding the threshold value will be counted.

4 Count (TXn only)

Specifies the number of times that a point exceeding the threshold value must be counted in order to trigger an alert.

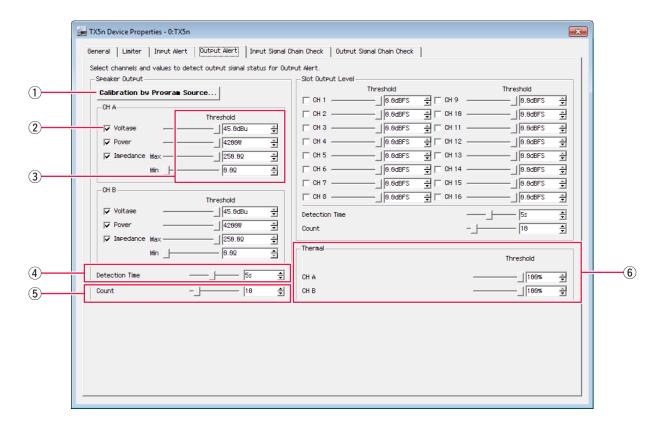
Alert detection parameters



■ [Output Alert] tab

Here you can make settings such as the threshold values for the amplifier's maximum output. These settings can be changed when online or offline. Specifying the impedance allows you to detect whether the output without the pilot tone is disconnected or shorted.

- The [Calibration by Program Source...] button is available only when online.
 - In the [Output Signal Chain Check] tab (page 140), you can make settings concerning detection for disconnection or shorting of the output with the pilot tone.



The settings are the same for Speaker Output and Slot Output Level (TXn only).

(1) [Calibration by Program Source...] button (TXn only)

In the "Calibration by Program Source" dialog box, you can specify calibration of the Max/Min Threshold of the Speaker Output's Impedance.

- NOTE Completing measurement takes about ten seconds.
 - Depending on the character of the Program Source, it may be not properly measured.
 - If the Program Source level is low, it may be not properly measured.
 - If the output level is lowered by the attenuator, it may be not properly measured.

2 Check box

Specifies whether alert detection will be enabled or disabled. If a point exceeding the specified value (Threshold) is detected for the specified number of times (Count) within the specified duration (Detection Time), it will be determined that an alert has occurred. Detection is in 2 ms intervals.

Check boxes in the Slot Output Level area enable/disable Level.

(3) Threshold

Specifies the maximum output threshold value.

4 Detection Time (TXn only)

Specifies the time during which points exceeding the threshold value will be counted.

5 Count (TXn only)

Specifies the number of times that a point exceeding the threshold value must be counted in order to trigger an alert.

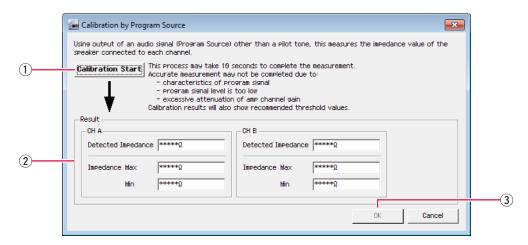
6 Thermal

Specifies the upper threshold value for the temperature of the amplifier section.

"Calibration by Program Source" dialog box

Using an audio signal (Program Source) other than a pilot tone, this measures the impedance value of the speaker connected to each channel, and sets the Impedance Max and Impedance Min parameters of "Output Alert" tab accordingly.

- NOTE To complete measurement, it takes about ten seconds.
 - Depending on the character of the Program Source, it may be not properly measured.
 - If the Program Source level is low, it may be not properly measured.
 - If the output level is lowered by the attenuator, it may be not properly measured.



1 [Calibration Start] button

Click this button to start measuring the impedance value of speakers connected to each channel.

2 Result

Indicates the detected impedance values and recommended threshold values.

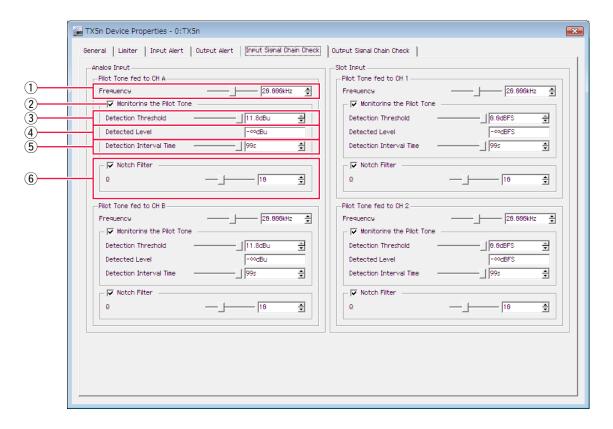
Impedance Max: Double the value of the detected impedance Impedance Min : Half the value of the detected impedance

3 [OK] button

Based on the currently displayed impedance, this sets the "Impedance Max" and "Impedance Min" values for the corresponding Speaker Output of the "Output Alert" tab.

■ [Input Signal Chain Check] tab (TXn only)

Here you can make settings to specify how a pilot tone supplied from the external device will be detected to determine whether the input has been interrupted. These settings can be changed when online or offline.



The settings for Analog Input and Slot Input are the same.

1 Frequency

Specifies the center frequency of the pilot tone.

2 [Monitoring the Pilot Tone] check box

Enables/disables monitoring of whether the input has been interrupted. If this is checked, the Signal Chain Check warning indicator will light red if a pilot tone above the specified Detection Threshold level could not be detected within the specified Detection Time.

3 Detection Threshold

Specifies the threshold value for the pilot tone input level.

(4) Detected Level

Indicates the input level of the pilot tone currently being received.

5 Detection Interval Time

Specifies the detection time for the pilot tone.

If the pilot tone was not detected within the specified time interval, it will be determined that the input has been interrupted.

6 Notch Filter

Enables/disables the notch filter that eliminates the frequency component of the pilot tone to prevent the pilot tone from being output by the amplifier. The center frequency of the notch filter is the value specified in Frequency (1).

Check box

Enables/disables the notch filter.

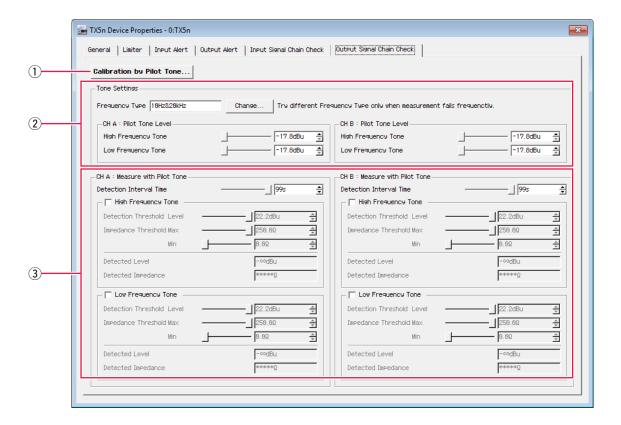
• Q

Specifies the width of the notch filter's frequency band.

■ [Output Signal Chain Check] tab (TXn only)

Here you can make settings for using the pilot tone to determine whether the output might be disconnected or shorted. By outputting a pilot tone, the impedance can be detected reliably without relying on the audio signal output.

These settings can be changed when online or offline.





 If an HF driver is installed in the connected speaker, do not select Low Frequency. The driver might be damaged due to the low-frequency component since the pilot tone is added after the Speaker Processor.

The same settings can be made for Channel A and Channel B.

1 [Calibration by Pilot Tone] button

When you click this, the "Calibration by Pilot Tone" dialog box will appear (page 142).

In the "Calibration by Pilot Tone" dialog box, values other than Detection Interval Time in the [Output Signal Chain Check] tab use the pilot tone.

- NOTE The [Calibration by Pilot Tone...] button is available only when online.
 - In the [Output Alert] tab (page 137), you can make settings concerning detection for disconnection or shorting of the output with the pilot tone.

2 Tone Settings

Specify the frequency and output level of the pilot tone that will be output to the speaker.

• Frequency Type

Indicates the combination of low-frequency component (5 Hz or 10 Hz) and high-frequency component (20 kHz) of the pilot tone. If you want to change the combination, click the [Change] button and make the desired change in the dialog box that appears.

• Pilot Tone Level

Specifies the output level of the pilot tone.

3 Measure with Pilot Tone

Specifies a pilot tone for each channel.

Detection Interval Time

Specifies the number of seconds for the interval at which it will be detected whether the upper threshold has been exceeded or the lower threshold has been fallen below. However, the detection time is enabled if you specify a time that is shorter than the time required for a single measurement (approximately 0.5–8 seconds).

Check box

Specifies whether broken connections or shorts will be detected.

Detection Threshold Level

Specifies the lower threshold value of the level that is detected. If the detected value falls below the specified value, it will be determined that the connection has been broken.

Impedance Threshold Max

Specifies the upper threshold value of the impedance that is detected. If the detected value exceeds the specified value, it will be determined that the connection has been broken.

• Impedance Threshold Min

Specifies the lower threshold value of the impedance that is detected. If the detected value falls below the specified value, it will be determined that the connection has broken and shorted at some point.

Detected Level

Indicates the current output level value.

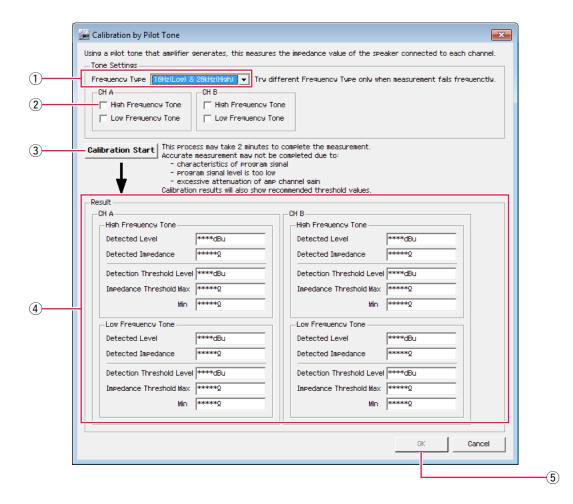
• Detected Impedance

Indicates the current impedance value.

"Calibration by Pilot Tone" dialog box

In the "Calibration by Pilot Tone" dialog box, the values other than Detection Interval Time in the [Output Signal Chain Check] tab using the pilot tone.

- NOTE To complete measurement, it may take about 120 seconds at longest.
 - Be aware that the speaker outputs a powerful bass sound or high-pitched sound.
 - Depending on the character of the speaker, it may be not properly measured.
 - If the output level is lowered by the attenuator, it may be not properly measured.



1 [Frequency Type]

Indicates the combination of low-frequency component (5Hz or 0Hz) and high-frequency component (20kHz) of the pilot tone. Normally, select the combination of "10Hz (Low) & 20KHz (High)."

2 Check box

Specifies the frequency component of the pilot tone that is output to each channel.

If an HF driver is installed in the connected speaker, do not select Low Frequency Tone. The driver might be damaged due to the low-frequency component since the pilot tone is added after the Speaker Processor.

3 [Calibration Start] button

Click this button to start calibration of the impedance value of the speaker connected to each channel and the lower threshold value of the level.

4 "Result"

Indicates the result of calibration and recommended threshold values.

Detection Threshold : 3 dB lower than the detected level
Impedance Max : Double the detected impedance
Impedance Min : Half the detected impedance

• If even a single proper result is not obtained, this will be displayed in gray.

⑤ [OK] button

Indicates the corresponding item's value other than Detection Interval Time in the "Output Signal Check" tab, based on the specified item, the measured level, and the impedance.

Signal Path View window (TXn only)

In the Signal Path View window, the audio signal processing functions of the TXn's internal DSP are placed in the signal path as modular components.

To open the Signal Path window, use one of the following procedures.

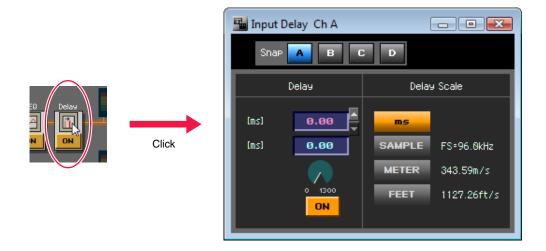
- Click the [Signal Path View] button in the Device Detail View window.
- Select a TXn icon in the Tree View window, then click the [Signal Path View] button in the Tree View window.
- lacktriangle Right-click a TXn icon in the Tree View window and choose [Show] ightarrow [Signal Path View].



- NOTE The signal path display will change depending on the Input Redundancy mode and the Power Amp mode.
 - The Gain/Sens. indication will change depending on the Gain Setting mode.
 - The various meter displays will detect the level and move in realtime.
 - When you click the [Device Detail View] button, the Device Detail View of the Detail View window will appear.
 - Points 1–8 in the signal path indicate output points to the Output Router.
 - When you click the [Limiter] button, the [Limiter] tab of the Device Properties window will appear (page 133).
 - When you click the [Gain/Sens.] button, the [Redundancy] button, or the [Amp Mode] button, the [General] tab of the Device Properties window will appear (page 127).

Opening the component editor

When you click the icon of a component, the corresponding component editor window will open (page 146). The component editor lets you edit detailed parameters of the component.



Switching a function or signal on/off

By clicking the [ON] button or [MUTE] button of a component or signal path, you can switch the component or mute on/off.

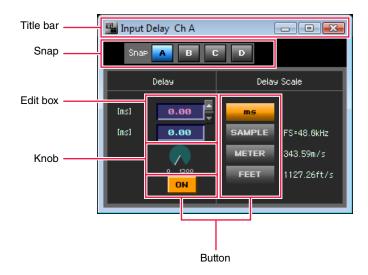


• Locations where nothing happens when you click are for display only.

Component editor (TXn only)

When you click a component that has been placed in the Signal Path View window, the component editor window will open. The component editor allows you to edit detailed parameters for the component.

Objects in the window and their function



The content of the window as well as the name shown in the title bar will depend on the type of component.

Title bar

Shows the name of the component.

Snap

This lets you temporarily store up to four parameter sets for the component editor (page 153). Click a button to switch parameter sets. You can copy a parameter set by dragging and dropping a button onto another button. You can also copy a parameter set by using the context menu that appears when you right-click a button.

Knob

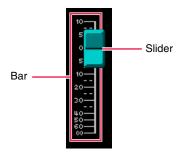
Drag a knob to edit its parameter. The mode of knob operation will depend on the "Preferences" dialog box setting [Component Editor] tab \rightarrow [Knob Mode] (page 39).



• To make fine adjustments, drag while holding down the <Shift> key when [Knob Mode] is [Linear]. To reset a parameter to its default value, hold down the <Ctrl> key and click.

Slider

Drag a slider to edit its parameter. The way in which the mouse will operate relative to the bar can be specified in the "Preferences" dialog box [Component Editor] tab \rightarrow [Slider Mode] setting (page 39).



• To make fine adjustments, drag while holding down the <Shift> key. To reset a parameter to its default value, hold down the <Ctrl> key and click.

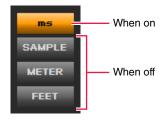
Button

There are several types of buttons.

• This button is an on/off switch. It will light when on. Its color depends on its function.



• This is a set of multiple buttons; when you select one, the other buttons will turn off.



• This button opens another window. This cannot be placed in a custom control panel.



Pull-down menu

When you click this, a pull-down menu will appear.



Edit box

This shows the current value of the setting. To edit the value, use the mouse or keyboard to enter the desired value. When you change the value, the knob or slider will move.

• Click

The text of the selected edit box will turn red. You can edit the value by entering the desired value from the keyboard. Press the <Enter> key to confirm the input.



• Using the spin box to edit a value

The spin box will appear when you move the mouse cursor to the edit box. Click the $[\nabla]/[\triangle]$ buttons to increase or decrease the value.



• Double-click

This will select the numerical value. You can edit the value by entering the desired value from the key-board. Press the <Enter> key to confirm the input.



• Movement using the <Tab> key

When an edit box is selected, you can press the <Tab> key to select the next edit box. By pressing <Shift> + <Tab> you can select the preceding edit box.

• Using the keys/mouse to edit a value

You can use the keys and mouse to modify the value of the selected edit box.

Up/down arrow keys

Increase or decrease the value.

<PageUp> key / <PageDown> key

Increase or decrease the value in larger steps.

<Enter> key

Press the <Enter> key to confirm the value.

<Ctrl> key + <Enter> key

To reset a parameter to its default value, press the <Ctrl> + <Enter> keys.

Mouse wheel

When the mouse cursor is located over an edit box, you can increase or decrease the value by turning the mouse wheel.

Dragging

Drag up/down or left/right to increase or decrease the value.

<Esc> key

Cancels the value that you were entering.

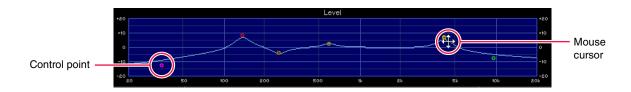
Graph

Parameters are shown in graphical form. When you edit a parameter, the graph will change shape.

If the graph has control points, you can edit the parameters by dragging the control points. If a control point's movement is constrained to a vertical or horizontal direction, the mouse cursor will change to a bi-directional arrow when you place the mouse cursor on the control point and hold down the mouse button. Drag in the direction of the arrow to edit the parameter.

If a control point's movement is not constrained in direction, its position will normally be determined by multiple parameters of the component editor. Multiple parameters will change depending on the direction in which you drag.

If a graph contains multiple control points, they will be categorized by color. The value shown below the corresponding knob or edit box will be the same color as the control point.



NOTE

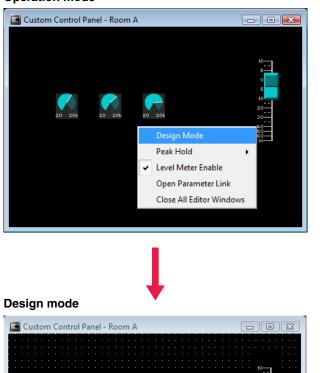
• Even if you copy a graph containing control points to a custom control panel, the control points will not be displayed. If you want the control points to be displayed, you must also copy the controls of the corresponding parameters.

Operation mode and Design mode

The component editor and the custom control panel (page 179) will operate in either "operation mode" or "design mode." Operation mode lets you edit the parameters, and Design mode lets you lay out controls in your custom control panel.

To switch between Operation mode and Design mode, use the context menu that appears when you right-click in the component editor or custom control panel window. Use the [Design Mode] command to turn Design mode on/off. A check mark is shown by this item if you're in Design mode. If a check mark is shown, selecting this command will turn Design mode off, returning to Operation mode.

Operation mode





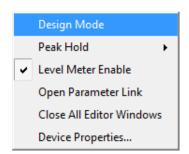
• In the component editor, you can select controls to copy to your custom control panel. You can <Shift> + click to select multiple controls.

Context menu

The context menu that appears when you right-click in the window will differ depending on whether you're in Operation mode or Design mode. It will also differ depending on whether you're in the component editor or the custom control panel, and on the location at which you click.

■ The context menu in Operation mode

Some of the commands shown in the Operation mode context menu are also shown in Design mode.



• [Design Mode]

Switches between Design mode and Operation mode. When you're in Design mode, a check mark is shown at the left of the command name.

[Peak Hold]

Turns the level meter's peak hold on/off and resets it.

[On]

Selecting this will add a check mark, and peak hold will be turned on. Selecting this when a check mark is already shown will turn peak hold off.

The peak hold on/off setting is valid only within Amp Editor.

• [Reset]

Resets peak hold.

• Peak Hold is a function that causes the maximum signal level value to remain visible.

• [Level Meter Enable]

Specifies whether the level meters will be enabled.

[Add Parameter to Parameter Link] (only when you right-click on a control)

Allows you to create a parameter link group, or to add the parameter of the right-clicked control to a group (page 161).

[Add Component to Component Link]

Allows you to create a component link group or to add a component to a group (page 161).

[Open Parameter Link]

Opens the "Parameter Link" dialog box (page 163). Here you can view or edit the status of parameter link.

[Close All Editor Windows]

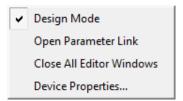
Closes all of the editor windows.

[Device Properties...]

Opens the Device Properties window (page 127).

■ The context menu in Design mode

Of the items in the Operation mode context menu, [Peak Hold] and [Level Meter Enable] are not shown.



Snap

This function temporarily memorizes the parameter settings of the component editor. When you click a snap button, all parameters of the editor will switch to the parameter set that was stored in that button. At this time, the parameter set prior to this change will be stored in the snap button that had been selected before the switch. When you recall a library item (page 155), the library item's parameter set will be stored in the snap button that is turned on at that time.



- NOTE The snap settings are not saved in the library or project folder. The snap settings will be discarded when you exit Amp Editor or close the project.
 - When you use the snap buttons to switch parameter sets, parameters for which local link is enabled will change in tandem, but global link will not operate.

■ Snap buttons ([A]–[D] buttons)

These buttons switch parameter sets. The appearance of the button will change depending on their on/off state and on whether there has been a change from the parameter set at the time the editor was started.

Buttons whose parameter set has not been modified since the editor was started The button will light when you select it.



Buttons containing a parameter set that is different than when the editor was started

If a button's parameter set has been modified, the button name will change color. The button will light when you select it.



There are no snap buttons for simple components or for the components included in a speaker processor.

■ Storing a parameter set

Switching the snap buttons

The parameters at the time you switch snap buttons will be stored in the snap button prior to the switch.

- 1. Click a snap button ([A]–[D]) in which you want to store the parameter set; the button will turn on.
- 2. Set the parameters in the editor to the state in which you want to store them.
- 3. Click some other snap button.
- Recalling a library item (Speaker Processor only)
 - 1. Click a snap button in which you want to store the parameter set; the button will turn on.
 - 2. Recall the desired library item.

Switching parameter sets

Click a snap button in which a parameter set has been stored, and you'll switch to the parameter set that's stored in that button.

■ Copying a parameter set

You can copy parameter sets between snap buttons ([A]–[D]).

By selecting from the context menu

Right-click the copy-source snap button, and choose the copy-destination from the context menu.



By dragging and dropping

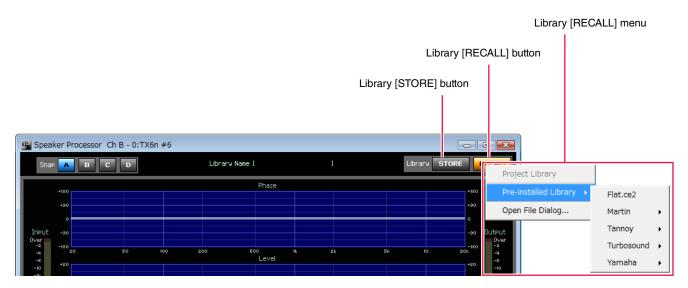
You can also copy by dragging and dropping between components of the same type. The copy will be executed when you click [Yes] to the confirmation message that appears.

Library

Parameter sets for Speaker Processor components and 8 Band EQ components are saved as library items (files). When you load a saved library item, all parameters of the respective component will be set to the state in which you saved them. The action of saving a library item is called "Store," and loading it is called "Recall." The User Library folder manages all library files. Saving a library file in the User Library folder allows you to copy it to a project folder when saving a project (page 13).

• Use the "Properties" dialog box to specify the User Library folder (page 39).

Speaker Processor component library



You can save a library item by pressing the Library [STORE] button, then specifying the library file name and a folder to store it in. If you save the library file in the folder selected in the [User Library Folder] of the "Preference" dialog box (page 39), the file name will appear in the Library [RECALL] menu. The name of the copied library file will also be shown in the project folder when saving a project.

NOTE • Library items for Yamaha and other manufacturers' speakers are provided as a Pre-installed Library.

• You are also free to specify a different folder for saving. If you've saved a library file in a different folder, you can recall it by specifying the location of the file.

■ About the limiter threshold

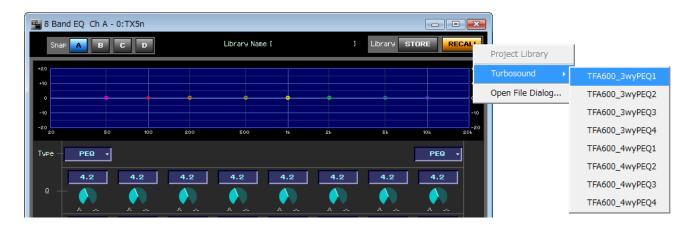
DME libraries provided by Yamaha assume that a processor such as the DME24N or SP2060 that features a maximum output level of +24 dBu is being combined with a power amp of 26 dB gain.

When a DME library file is recalled, the limiter threshold is raised by +6 dB to optimize the settings for the TXn. When the file is stored, the threshold is lowered by -6 dB.

If the settings are other than the combination listed above, use the Speaker Processor's Limiter setting (page 175) to make further adjustments to the threshold as follows.

- If the gain is 6 dB low (e.g., when the MY8-DA96 whose maximum output is +18 dBu is used together with an amplifier whose gain is 26 dB)
 - \rightarrow lower the threshold 6dB.
- If the gain is 6 dB high (e.g., when the SP2060 whose maximum output is +24 dBu is used together with an amplifier whose gain is 32 dB)
 - \rightarrow raise the threshold 6dB.

■ 8 Band EQ component library



Library files have a file name extension of ".ce2". 8 BandEQ Library files created by DME Designer (file name extension ".cel") can also be recalled, but not saved.

You can save a library item by pressing the Library [STORE] button, then specifying the library file name and a folder to store it in. If you save the library file in the folder selected in the [User Library Folder] of the "Preference" dialog box (page 39), the file name will appear in the Library [RECALL] menu. The name of the copied library file will also be shown in the project folder when saving a project.

NOTE • If you recall a "cel" file, the level will become "0."

- A library item for Turbosound TFA600 series is provided as a Pre-installed Library.
- You are also free to specify a different folder for saving. If you've saved a library file in a different folder, you can recall it by specifying the location of the file.

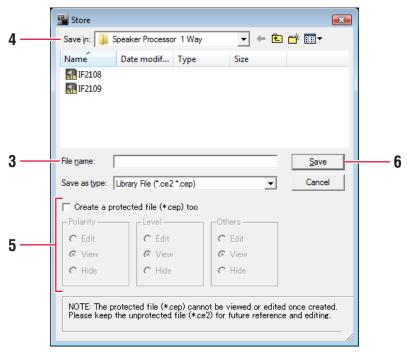
Storing a library item

A component's parameter set can be saved as a library file.

- 1. Set the parameters of the component editor.
- 2. In the component editor, click the Library [STORE] button.

The "Store" dialog box will appear.

For a Speaker Processor component



3. Enter the file name.

The file name will be used as the library name.

• For a Speaker Processor component, the library name is shown in the display of the TXn itself. English is the only language that can be shown in the TXn unit's display as the library name, and the name will be a maximum of 20 characters.

4. Specify the folder in which the file will be saved.

If you want the file to appear in the Library [RECALL] menu, save without changing the folder.

NOTE • If you do not change the folder, the file will be saved in the User Library folder.

5. For a Speaker Processor component, specify the security of the library item if necessary.

After selecting the [Create a protected file (*.cep) too] check box, choose the security level (Edit (editable), View (viewable), or Hide (not viewable)) for each parameter (Polarity, Level, and Others). A library item file that was saved with security settings cannot be re-saved with modified security settings.

6. Click the [Save] button.

If the [Create a protected file (*.cep) too] check box has been selected, both *.cep file (with security) and *.ce2 (without security) will be saved.

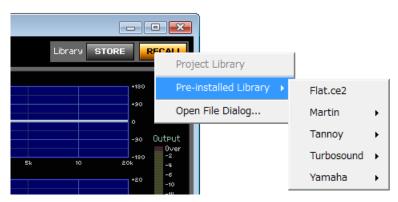
■ Recalling a library item

You can load a stored parameter set into the component. To recall a library item, use the Library [RECALL] button. When you recall a library item, the parameter set will be stored in the currently selected Snap button.

- 1. Click the snap button ([A]–[D]) in which you want to store the parameter set.
- 2. Click the Library [RECALL] button.

The library items in the User Library folder, the library items in the project folder, and the pre-installed library items will be displayed as the Library [RECALL] menu.

For a Speaker Processor component



3. Click a library item name (file name) in the Library [RECALL] menu.

The parameters of the library item will be recalled.

NOTE

• Library items that were saved in folders other than the User Library folder or the project folder are not shown in the Library [RECALL] menu. You can recall such a file by clicking [Open File Dialog] in the Library [RECALL] menu, and selecting it in the dialog box that appears.

Parameter link / Component link

■ What are Parameter Link and Component Link?

Parameters of the same type (controls of a component) can be grouped to link their parameters. This is called "parameter link." When you edit one of the parameters in a parameter link group, the other parameters of the same parameter link group will change in the same way.

In the same way as when using the Parameter Link function, parameters can also be linked between groups of components of the same type. This is called "component link."

Since Parameter link and Component link each allow two types of linking (Global link and Local link), there are a total of four types of linking. Global link will link the parameters/components of the amplifiers in a workspace; Local link will link the parameters/components of a single amplifier. Global link applies only within Amp Editor, while Local link also applies to panel operations of the amplifier itself.

Parameter link groups can be created or parameters can be added to a group in the component editor or in a custom control panel. The "Parameter Link" dialog box lets you view or edit the status of Parameter link or Component link.

■ Features of Global Link / Local Link

The features and uses of Global Link and Local Link are described below.

Global link

This type of link operates on multiple amplifiers within a workspace.

- Use this when you want to use Amp Editor to perform centralized monitoring and control of numerous amplifiers, such as in a large installation.
- Linking will operate only when the units are being controlled from Amp Editor. Do not link if you want
 to operate the amplifiers from their own panel or if you want to remotely control them from an external
 device.
- Link settings are saved within a project; they cannot be switched for individual scenes.

Local link

This type of link operates only within a single amplifier.

- Use this in cases such as when you want channels A/B to remain stereo-linked.
- Parameters will remain linked whether they are operated from Amp Editor, from the amplifier's own panel, or remotely from an external device.
- Link settings are saved within scene memory, so they can be switched between individual scenes.

■ Parameter link support list

	Global link (Absolute link only)		Local link	
	Component link	Parameter link	Component link	Parameter link
Attenuation	_	✓	_	√*
Output Mute	_	✓	_	_
Speaker Processor 8Band EQ	√	_	√ (Absolute link only)	_
4 x 4 Matrix Mixer Polarity Input Delay Oscillator	✓	✓	√	✓
Other	_	_	_	_

^{✓ :} Available - : Not available

- Parameters or components cannot belong to multiple link groups.
 - Use the Signal Path View window to create component link groups or add components to groups (page 144).
 - Local link for attenuators is not included in parameter link; it can be specified in the Detail View window (page 120).
 - For a Speaker Processor component, the parameters of a recalled library item whose security level was set to View or Hide cannot be assigned to parameter link. Component link can be specified for these parameters.
 - If you want to also make Global link settings for a Local-linked parameter or component, do not specify Global link for multiple components or parameters within the same local link. Doing so may cause unexpected behavior.

^{*} Linking is possible only between channels A/B by using the [LINK] button in the Detail View window; this cannot be added to a local parameter link group.

■ Creating a parameter link

In the component editor or in a custom control panel, right-click a control to access the context menu. [Add Parameter to Parameter Link] \rightarrow [Global Link]/[Local Link] \rightarrow [Add Group] will create a new group, and add the control you right-clicked to this group.

In the same way, right-clicking a component in the Signal Path View window will display a context menu. [Add Component to Component Link] \rightarrow [Global Link]/[Local Link] \rightarrow [Add Group] will create a new group, and add that component to this group.



Adding a parameter/component to a link group

In the component editor or in a custom control panel, right-click a control to access the context menu. You can use the [Add Parameter to Parameter Link] sub-menu command to create a parameter link group and add a parameter. Parameter groups of a differing type are grayed-out, and cannot be selected.

In the same way, you can right-click a component in the Signal Path View window, and from the context menu that appears, choose the [Add Component to Component Link] sub-menu command to create a component link group and add a component. Component groups of a differing type are grayed-out, and cannot be selected.

Global link

The [Global Link] sub-menu will show the global link group names. By clicking a group name, you can add the parameter/component to that group.



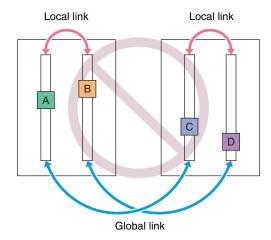
• A parameter/component can belong only to one group. Only parameters/components of the same type can be grouped.

Local link

The [Local Link] sub-menu will show the local link group names. By clicking a group name, you can add the parameter/component to that group.



• If you want to also make Global link settings for a Local-linked parameter or component, do not specify Global link for multiple components or parameters within the same local link. Doing so may cause unexpected behavior.



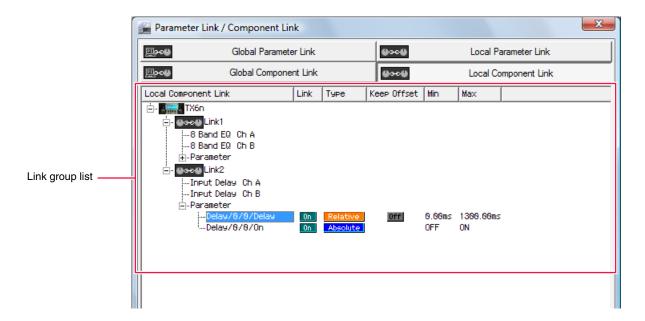
Adding multiple controls

In Design mode, you can select multiple controls by holding down the <Shift> key while you click. By selecting multiple controls, you can add multiple parameters to a group in one step.

■ The "Parameter Link" dialog box

Here you can view or edit the status of Parameter link or Component link.

In the main window, click the [System] menu item [Parameter Link] to access the "Parameter Link" dialog box. You can also access this dialog box from the context menu of the component editor or custom control panel by choosing [Open Parameter Link].



[Global Parameter Link]/[Local Parameter Link]/[Global Component Link]/[Local Component Link] buttons

These buttons switch the window display.

• Global Parameter Link

Links parameters of multiple amplifiers in the workspace.

• Local Parameter Link

Links parameters of a single amplifier.

Global Component Link

Links components of the same type for multiple amplifiers in the workspace.

• Local Component Link

Links components of the same type for a single amplifier.

Link group list

This shows a list of the link groups. The link groups and the parameters, components, and amplifiers associated with the groups are shown in a hierarchical display.

You can click to select a parameter, component, or amplifier that is associated with a link group.

Link group name

By clicking the [+]/[-] symbols shown at the left of the link group name, you can show or hide the lower levels of the link groups.

To delete a link group, select the link group name and press the <Delete> key. You can also delete a link group by right-clicking a link group name and choosing [Delete] from the context menu.

• Amplifier icon

These show the amplifiers that contain parameters/components associated with a group. You can use the [+]/[-] symbols of an amplifier icon to show or hide components, and use a component's [+]/[-] symbols to show parameters, Min (minimum value), and Max (maximum values).

You can also delete the selected item from a link group by using the context menu that appears when you right-click an amplifier, component, or parameter.

• Link

Click this to turn it on/off. You can disable Parameter Link by turning this off. You can turn on/off all Component links by using the context menu that appears when you right-click the group name.

• Type

Here you can make settings for offset operation between parameters.

Absolute Link

With this link setting, editing any parameter in the group will set all parameters in the group to the same value.

Relative Link

With this link setting, editing any parameter in the group will cause the other parameters to be adjusted while maintaining their current offset.

Keep Offset [ON] : A parameter cannot be adjusted further once any parameter in the group

has reached its minimum or maximum value.

Keep Offset [OFF]: A parameter can be adjusted even if a parameter in the group has

reached its minimum or maximum value.

NOTE • Relative Link cannot be specified for a Speaker Processor or for an 8 Band EQ.

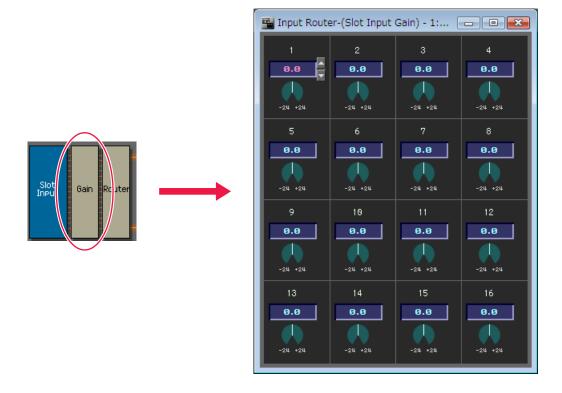
For Component link, you can make these settings in a single operation by using the context menu that appears when you right-click the group name.

Component guide

■ Slot Input Gain

Specifies the gain of each channel (1-16) from the slot input in the range of -24 to +24dB. This is used to match the slot input level to the analog input level.

• This setting is linked to the Input Router setting (page 166). If you select a different Snap, the gain will use the value set in that Snap.

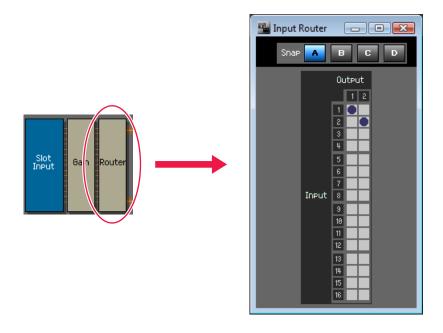


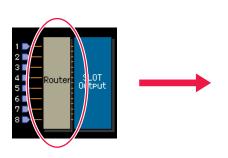
■ Input Router/Output Router

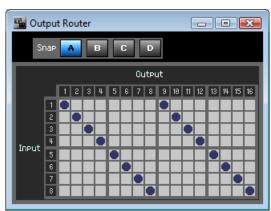
The Input Router specifies the routing from the slot inputs (channels 1–16) to the amplifier inputs (channels 1–2). The Output Router specifies the routing from the output points (channels 1–8) to the slot outputs (channels 1–16).

Only one input can be assigned to a single output. One input can be output to multiple channels, but multiple inputs cannot be output from a single channel. In other words, a router can branch signals but not mix them.

• Four types of output points are available as inputs to the Output Router. For details on output points, refer to "Signal Path View window" (page 144).

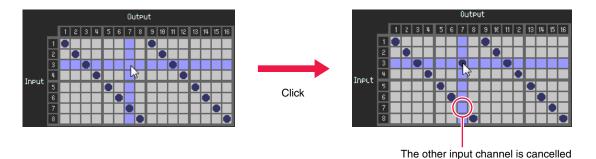






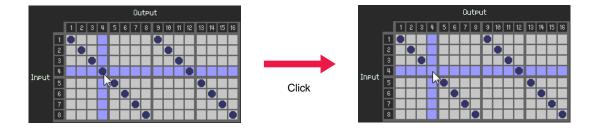
Specifying a routing

To change a routing, click the point where an input channel and output channel intersect. When you place the cursor on a cell, the input/output channels will be highlighted, and a blue line will be displayed. When you click, a routing will be established at that position. If another output channel was already assigned to the input channel on which you clicked, the previous assignment will not be cancelled. If another input channel was already assigned to the output channel on which you clicked, the previous assignment will be cancelled.



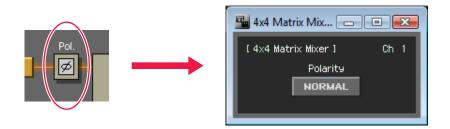
Cancelling a routing

Click the "●" that indicates a routing; that routing will be cancelled, and the "●" will disappear.



■ Polarity (phase reversal)

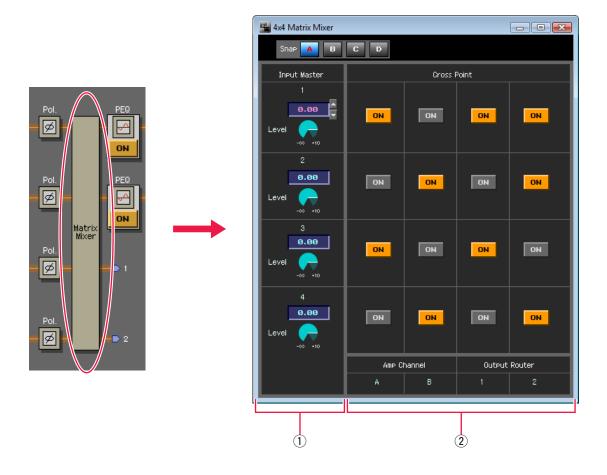
Here you can reverse the phase of the signal. The phase will be reversed if the button is on.



■ 4 x 4 Matrix Mixer

This is a 4-input 4-output mixer with the input channels and output buses arranged in a matrix. You can independently adjust the balance for each input channel.

Input channels are arranged vertically, and output channels are arranged horizontally. You can specify the on/off status of the signal from each input channel to each output bus.

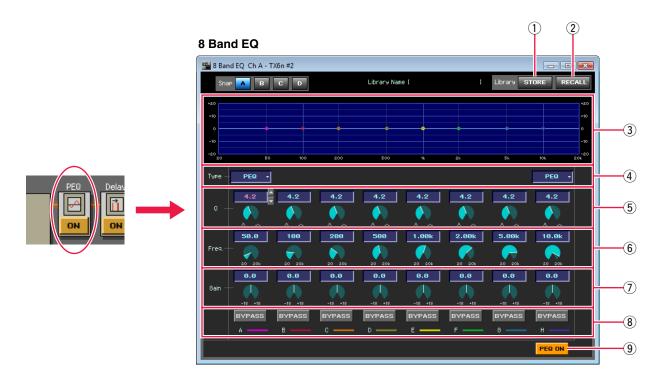


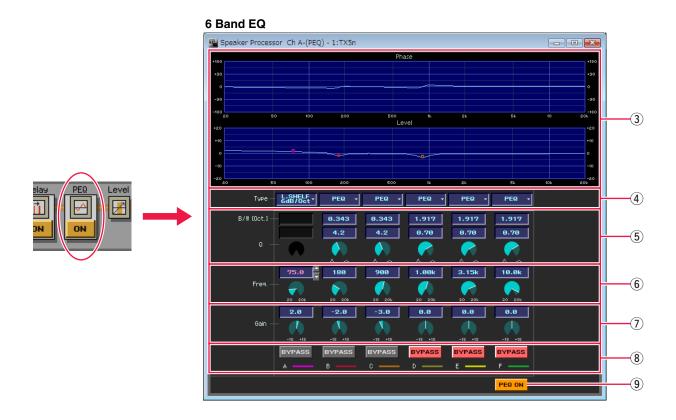
	Section	Parameter	Range	Function
1	Input Master	Level	-∞–+10dB	Specifies the level of each input channel.
2	Cross Point	ON	On/Off	Turns on/off the mix to each cross point.

■ 8 Band EQ / 6 Band EQ (parametric equalizer)

These are parametric equalizers that boost or cut the signal at the specified frequencies. An eight-band equalizer is provided for the input section, and a six-band equalizer is provided for the Speaker Processor section.

NOTE • If you recall a "cep" file (with security), the display will change according to the settings.





	Parameter	Range	Function
1	Library [STORE]	_	Stores the equalizer library. Files have a file name extension of "ce2".
2	Library [RECALL]	_	Recalls the equalizer library. Files have a file name extension of "ce2" or "cep".
3	PEQ response	_	Displays the equalizer response as a graph. Drag the control points to edit the parameters.
4	Туре	PEQ, L.SHELF 6dB/Oct, L.SHELF 12dB/Oct, H.SHELF 6dB/Oct, H.SHELF 12dB/Oct, HPF, LPF, APF 1st, APF 2nd, Horn EQ	Selects the filter type. You cannot select APF 1st, APF 2nd, or Horn EQ for the 8 Band EQ. Nor can you select the type for bands other than the two ends of the 8 Band EQ (they are fixed at PEQ).
5	Q	0.1–63.0	Specifies the width of each frequency band.
6	Freq.	20Hz-20kHz	Specifies the center frequency of each frequency band.
7	Gain	-18dB-+18dB	Specifies the level by which the frequency band will be adjusted.
8	BYPASS	On/Off	Turns bypass on/off for each frequency band.
9	PEQ ON	On/Off	Turns the entire equalizer on/off.

Filter types

Several types of level change curve are available. Click the [Type] button and select a type from the menu.

• PEG

This is a conventional parametric equalizer.

• L.SHELF (Low Shelving)

Without attenuating the low frequencies, this filter applies a fixed amount of attenuation to the region above the cutoff frequency. [6dB/Oct] and [12dB/Oct] specify the amount of attenuation per octave.

• H.SHELF (High Shelving)

Without attenuating the high frequencies, this filter applies a fixed amount of attenuation to the region below the cutoff frequency. [6dB/Oct] and [12dB/Oct] specify the amount of attenuation per octave.

• HPF (High Pass Filter)

A gently (12 dB/Oct) diminishing curve will be applied to the lower frequencies.

• LPF (Low Pass Filter)

A gently (12 dB/Oct) diminishing curve will be applied to the higher frequencies.

• APF (All Pass Filter)

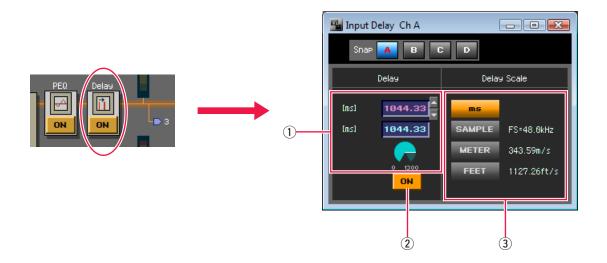
This filter modifies only the phase, passing the signal at all frequencies. This is mainly used to correct the phase at the crossover band. APF 1st will invert the phase at the specified frequency by 90° and for entire frequency bands by 0° – 180° , while APF 2nd will invert the phase at the specified frequency by 180° and for entire frequency bands by 0° – 360° . For APF 2nd, you can adjust the Q setting.

Horn EQ

CD (Constant Directivity) horn speakers have the characteristic of rolling-off the level of the high-frequency range. Horn EQ is an equalizer that compensates for this characteristic. For this reason, the Gain is limited to 0 dB or higher, and the Frequency is limited to 500 Hz or higher.

■ Delay

Here you can specify a delay for the signal. The delay time can be specified in units of milliseconds, samples, meters, or feet. This is provided at two locations; in the input section and in the Speaker Processor.

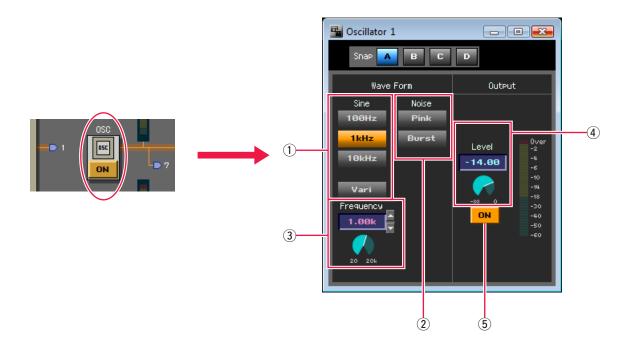


	Parameter	Range	Function	
		ms: 0–500 (0–1,300 for the input section)		
(1)	Delev	SAMPLE: This will depend on the sampling frequency.	Specifies the delay time. There are two edit boxes; the upper shows milli-	
	Delay	METER: 0–171.8 seconds, and the lower shows the units s by [Delay Scale].		
		FEET: 0–563.6 (0–1465.4 for the input section)		
2	ON	On/Off	Turns the delay on/off.	
3	Delay Scale	ms SAMPLE METER FEET	Selects the units in which the delay time is specified. The selected button will light, and the units will change for the lower of the [Delay] edit boxes.	

• Delay Scale does not support parameter link.

■ Oscillator

This is a mono-channel oscillator. It generates a sine wave, pink noise, or burst noise.



	Section	Parameter	Range	Function
1		Sine	100Hz, 1kHz, 10kHz, Vari	Selects the frequency/waveform that will be generated. You can select only one of the six [Sine] or
2	Wave Form	Noise	Pink, Burst	[Noise] buttons.
3		Frequency	20Hz–20kHz	If you selected the Sine wave [Vari] as the Wave Form, this specifies the frequency of the sine wave that will be generated.
4	Output	Level	-∞–±0dB	Specifies the output signal level.
(5)	Output	ON	On/Off	Switches the oscillator on/off.

Pink noise

This is a reference signal used for acoustical measurements. Across the frequency band of 20 Hz–20 kHz, doubling the frequency will halve the energy. The loudness will be the same for each frequency band.

Burst noise

Pink noise will be output intermittently.

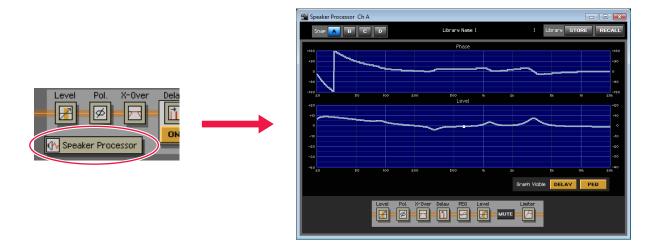
■ Speaker Processor

This displays the overall phase response and level response of all Speaker Processor components. Here you can also store or recall Speaker Processor library items.

Use the Graph Visible [DELAY]/[PEQ] buttons to specify whether the Delay and PEQ characteristics will be applied to the graph.

If you click one of the component icons shown in the lower part of the screen, the corresponding component editor will open.

• If you recall a "cep" file (with security), the display will change according to the settings.



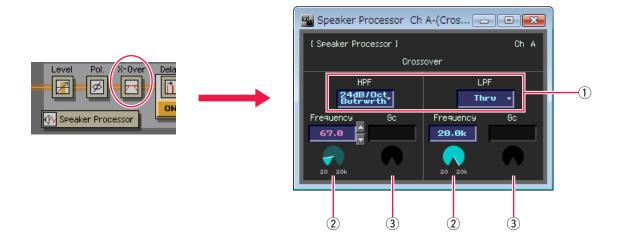
■ Level

This adjusts the signal level in a range of $-\infty - +10$ dB.



■ Crossover

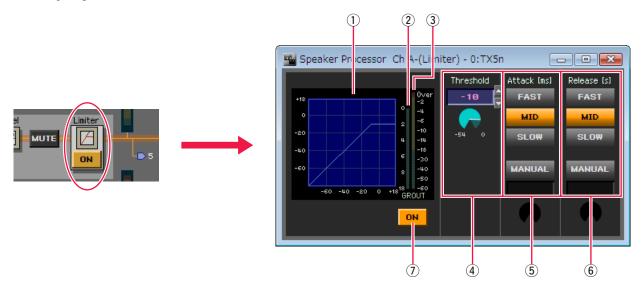
Here you can apply a high-pass filter and low-pass filter to the signal, so that only a specific frequency region is allowed to pass.



	Parameter	Range	Function
1	Туре	Thru 6dB/Oct 12dB/Oct AdjustGc 12dB/Oct Butrwrth 12dB/Oct Bessel 12dB/Oct Linkwitz 18dB/Oct AdjustGc 18dB/Oct AdjustGc 18dB/Oct Butrwrth 18dB/Oct Bessel 24dB/Oct Bessel 24dB/Oct Butrwrth 24dB/Oct Butrwrth 24dB/Oct Butrwrth 24dB/Oct Butrwrth 36dB/Oct Butrwrth 36dB/Oct AdjustGc 36dB/Oct AdjustGc 48dB/Oct Butrwrth 48dB/Oct Butrwrth 48dB/Oct Butrwrth	For each HPF/LPF, this selects the attenuation per octave and the filter type. If you select [Thru], the filter will not be applied.
2	Frequency	20Hz–20kHz	Specifies the cutoff frequency for each HPF/LPF.
3	Gc	-6dB-+6dB	Specifies the gain at the cutoff frequency when [Type] is set to [AdjustGc] (Adjustable Gc).

■ Limiter

This compresses signals exceeding the threshold at ∞:1, preventing signals higher than the threshold level from being output.



	Parameter	Range	Function
1	Limiter curve	_	Displays the limiter response as a graph. The horizontal axis is the input signal level, and the vertical axis is the output level.
2	GR meter	_	Displays the amount of gain reduction.
3	OUT meter	_	Displays the output signal level.
4	Threshold	-54dB-±0dB	Specifies the threshold value.
(5)	Attack	FAST, MID, SLOW, MANUAL (0-120ms)	Specifies the attack time. If the MANUAL setting is selected, use the knob shown below to specify the attack time. If you select [FAST], [MID] or [SLOW], the time values will be set automatically according to the HPF cutoff frequency of the Speaker Processor crossover band. Fast: One-quarter wavelength of cutoff frequency Mid: One-half wavelength of cutoff frequency Slow: One wavelength of cutoff frequency
6	Release	FAST, MID, SLOW, MANUAL (44.1kHz: 6ms-46s, 48kHz: 5ms-42.3s, 88.2kHz: 3ms-23s, 96kHz: 3ms-21.1s)	Specifies the release time. For [FAST], [MID], and [SLOW], the optimal values will be set automatically according to the maximum wavelength of the audio being input to the limiter. If the MANUAL setting is selected, use the knob shown below to specify the release time. If you select [FAST], [MID] or [SLOW], the time values will be set automatically according to the HPF cutoff frequency of the Speaker Processor crossover band. Fast: Four wavelengths of cutoff frequency Mid: Eight wavelengths of cutoff frequency Slow: Sixteen wavelengths of cutoff frequency
7	ON	On/Off	Turns the limiter on/off.

- If a Speaker Processor component library created by the DME Designer application software is recalled, the limiter's threshold value will be raised +6 dB overall relative to the original setting in order to convert the settings optimally for the TXn amplifier.
 - The limiter within the Speaker Processor is applied before the attenuator. This means that if the attenuator is lowered, the limiter will be applied at a lower output level. Limiters that are unaffected by the attenuator include the Voltage Limiter and Power Limiter found in the "Limiter" tab (page 133) of the "Device Property" window. (These limiters are applied at the last stage of the amplifier, later than the attenuator.)

■ I/O card

This lets you specify the input/output mode of a digital I/O card inserted in the slot. The parameters shown will depend on the type of card. There is no editor for an AD card or DA card.

- For details on the MY16-CII card editor, refer to page 177.
 - The editor for an EtherSound card such as the MY16-ES64 cannot make EtherSound settings such as routing. To make EtherSound settings, use the AuviTran Corporation's AVS-ESMonitor software.



	Parameter	Range	Function
1	Input Format	DOUBLE SPEED, DOUBLE CHANNEL, SINGLE	Select the input mode used for the high sampling rate (88.2/96 kHz). This cannot be selected for a card that supports only one format.
2	Output Format	DOUBLE SPEED, DOUBLE CHANNEL, SINGLE	Select the output mode used for the high sampling rate (88.2/96 kHz). This cannot be selected for a card that supports only one format.
3	Sampling Rate Converter (MY8-AE96S only)	On/Off	Turns on the sampling rate converter.
	DOUBLE FS	On/Off	If this is on, the speed of the word clock from the MY card will be doubled. This is shown only if this card is specified as the word clock master.

Input Format/Output Format

When operating at the high sampling rate (88.2/96 kHz), choose from the following to specify how signals will be transmitted and received by the digital I/O card installed in the slot.

Double Speed

Use this setting when a device operating at the high sampling rate (88.2/96 kHz) is connected, and the high sampling rate audio signals are being transmitted and received without change. (This setting can be selected only for a digital I/O card that supports 96 kHz.)

• Double Channel

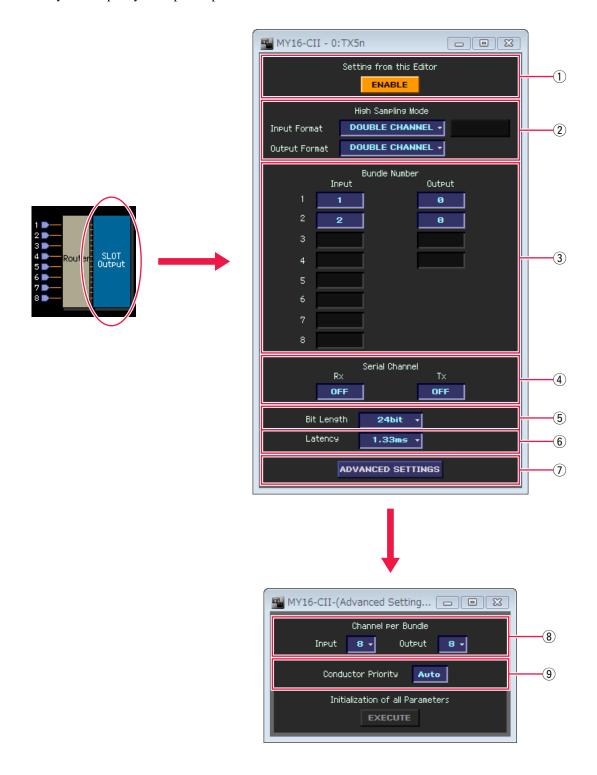
Use this setting if high sampling rate (88.2/96 kHz) audio signals are being handled when a device operating at the conventional 44.1/48 kHz is connected. Two channels of signals at a sampling rate of half the operating frequency (44.1/48 kHz) are combined, and sent or received as monaural signals at the high sampling rate. (The number of usable channels will be halved.)

• Single

Use this setting if a device operating at the conventional 44.1/48 kHz is connected, and the conventional number of channels is being transmitted and received without change. The sampling rate is converted for each channel of the digital I/O card, and transmitted or received at half the sampling rate of the operating frequency (i.e., at 44.1/48 kHz). (This setting can be selected only for a digital I/O card that does not support 96 kHz.)

■ MY16-CII

Here you can specify the input/output mode and CobraNet bundles for an MY16-CII card inserted in the slot.



	Section	Parameter	Range	Function
1)	Setting from this Editor		DISABLE, ENABLE	Settings via CobraNet will take priority if you select DISABLE, and the settings of Amp Editor will take priority if you select ENABLE(*1).
(2)	High Sampling	Input Format	DOUBLE CHANNEL,	Select the input/output mode used for
	Mode	Output Format	SINGLE	the high sampling rate (88.2/96 kHz).
(3)	Bundle Number	Input	0-65279	Specifies the input bundle number.
	Buridle Number	Output	0-05279	Specifies the output bundle number.
(4)	Serial Channel	Rx	OFF, 1–15	Specifies the serial channel for the receiving side.
4	Senai Channel	Тх		Specifies the serial channel for the transmitting side.
5	Bit Length		BIT OFF 16bit 20bit 24bit	Specifies the bit rate for output. If you specify [BIT OFF], the output will be muted.
6	Latency		5.33ms 2.67ms 1.33ms	Sets the delay.
7	ADVANCED SETT	INGS	_	Opens the "Advanced Settings" dialog box.

^{*1} Select DISABLE if you'll be making settings via CobraNet using CobraNet Manager, etc. Selecting ENABLE may cause faulty settings.

	Section	Parameter	Range	Function
8	Channel per	Input	1040	Specifies the number of channels per input bundle ^(*2) .
•	Bundle	Output	1, 2, 4, 8	Specifies the number of channels per output bundle ^(*2) .
9	Conductor Priority		Auto, 0–255	Specifies the priority order for becoming conductor. A setting of 255 is the highest priority.

^{*2} The number of usable channels will decrease according to this setting. Refer to the "MY16-CII Owner's Manual" for details.

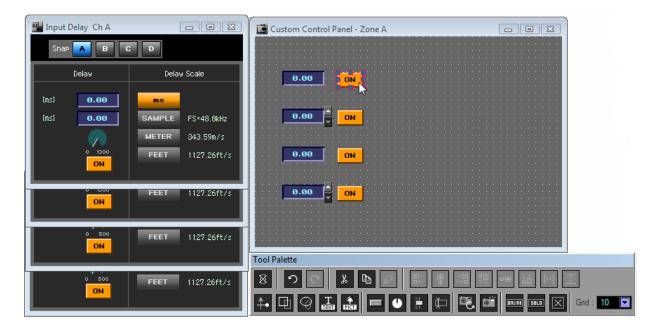
• For more information on CobraNet, refer to the Yamaha Pro Audio website.

http://www.yamahaproaudio.com

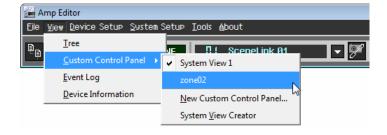
Custom control panels

You can create custom control panels by laying out controls in the Detail View window or the component editor. The controls in a custom control panel are linked with the original controls; when you edit a parameter in a custom control panel, the corresponding parameter in the Detail View window or the component editor will likewise change. If you edit a parameter in the Detail View window or the component editor, the control in the custom control panel will change in the same way. You can create a compact control panel by placing only the controls for parameters that are used frequently. You can also place controls for multiple components in a single custom control panel, so that multiple components can be controlled from a single window.

In the "System View Creator" dialog box (page 98) you can easily create a custom control panel by placing the main controls of multiple amplifiers in a matrix.

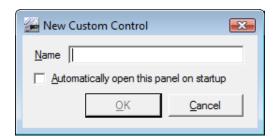


To create a custom control panel, use the main panel window [View] menu \rightarrow [Custom Control Panel] \rightarrow [New Custom Control Panel] command. A custom control panel you've created will appear in the [View] menu \rightarrow [Custom Control Panel] sub-menu, and will open when you select it.



Creating a new custom control panel

From the main panel window, click [View] menu \rightarrow [Custom Control Panel] \rightarrow [New Custom Control Panel] to open the "New Custom Control" dialog box. Type a name for your custom control panel in the [Name] box. Click the [OK] button to create the new custom control panel.



Operation mode and Design mode

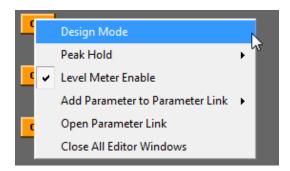
The component editor and the custom control panel will operate in either "operation mode" or "design mode." Operation mode lets you edit the parameters, and Design mode lets you lay out controls in your custom control panel switch between Operation mode and Design mode, use the context menu that appears when you right-click in the custom control panel, the component editor, the Detail View window, or the Signal Path View window. Use the [Design Mode] command to turn Design mode on/off. A check mark is shown by this item if you're in Design mode. If a check mark is shown, selecting this command will turn Design mode off, returning to Operation mode.

Context menu

The context menu that appears when you right-click in the window will differ depending on whether you're in Operation mode or Design mode.

■ The context menu in Operation mode

Some of the commands shown in the Operation mode context menu are also shown in Design mode.



• [Design Mode]

Switches between Design mode and Operation mode. When you're in Design mode, a check mark is shown at the left of the command name.

• [Peak Hold]

Turns the level meter's peak hold on/off and resets it.

• [On]

Selecting this will add a check mark, and peak hold will be turned on. Selecting this when a check mark is already shown will turn peak hold off.

The peak hold on/off setting is valid only within Amp Editor.

• [Reset]

Resets peak hold.

NOTE • Peak Hold is a function that causes the maximum signal level value to remain visible.

[Level Meter Enable]

Specifies whether the level meters will be enabled.

[Add Parameter to Parameter Link] (when you right-click on a control)

Allows you to add the parameter of the right-clicked control to a group, or to create a parameter link group (page 161).

[Open Parameter Link]

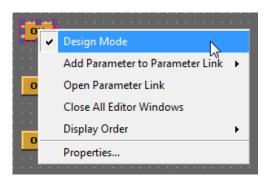
Opens the "Parameter Link" dialog box (page 163). Here you can view or edit the status of parameter link.

[Close All Editor Windows]

Closes all of the editor windows.

■ The context menu in Design mode

The context menu differs depending on the location where you right-click and the control state.



[Display Order] (when you right-click on a control)

Changes the display order for the selected control.

• [Top]

Moves the control to the very top.

• [Bottom]

Moves the control to the very back.

• [Front]

Moves the control one step toward the top.

• [Back]

Moves the control one step toward the back.

• [Properties...] (when you right-click on a control)

Opens the properties dialog box for the control that you right-clicked (page 192).

[Tab Order]

Shows the order in which the edit box will move when you press the <Tab> key in the custom control panel. When you select this command, a number will appear on the edit box. For details on changing the tab order, refer to "Changing the tab order" (page 204).

[Custom Control Panel Setting]

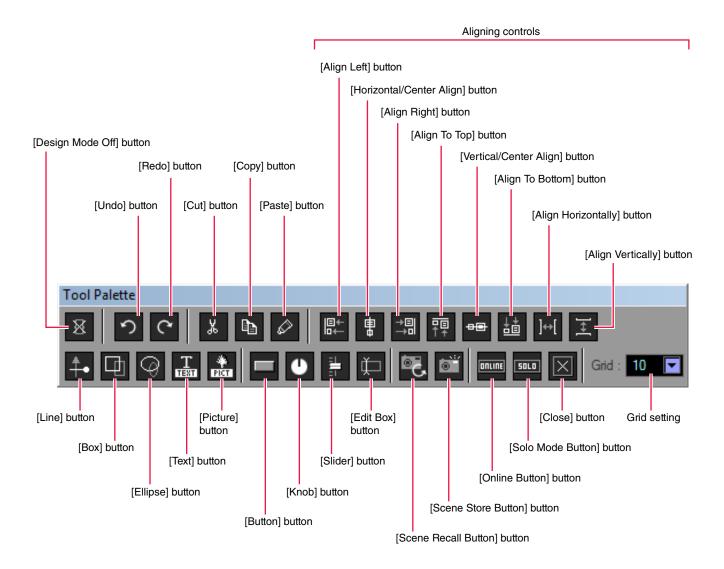
Changes the size or background of the custom control panel (page 205).

[Convert] (when you right-click on a knob or slider)

Converts the selected knob to a slider, or the selected slider to a knob (page 191).

Tool palette

The tool palette will automatically appear when a custom control panel becomes active in Design mode. This palette contains commands for editing a custom control panel. When you move the custom control panel, the tool palette will move with it. It will be hidden when you turn Design mode off.



- [Design Mode Off] button
 - Turns design mode off.
- [Undo] button / [Redo] button

Execute Undo or Redo for an operation.

• [Cut] button / [Copy] button

Cuts or copies the selected control (page 191).

• [Paste] button

Pastes the copied control (page 191).

Aligning controls

These align the position of the selected controls.

• [Align Left] button

Aligns the selected controls to the left edge of the left-most selected control.

• [Horizontal/Center Align] button

Aligns the selected controls by their horizontal center.

• [Align Right] button

Aligns the selected controls to the right edge of the right-most selected control.

• [Align To Top] button

Aligns the selected controls to the top edge of the top-most selected control.

• [Vertical/Center Align] button

Aligns the selected controls by their vertical center.

• [Align To Bottom] button

Aligns the selected controls to the bottom edge of the bottom-most selected control.

• [Align Horizontally] button

This can be used only if three or more controls are selected.

The controls will be spaced apart at equal distances, left to right. The left-most control and right-most control will not move; the control(s) in the middle will be spaced equally. The space between each control will be equal.

• [Align Vertically] button

This can be used only if three or more controls are selected.

The controls will be spaced apart at equal distances, top to bottom. The top control and bottom control will not move; the control(s) in the middle will be spaced equally. The space between each control will be equal.

[Line] button

Places a line.

[Box] button

Places a rectangle.

• [Ellipse] button

Places an ellipse.

• [Text] button

Places a text box.

• [Picture] button

Places a graphic file.

[Button] button

Places a toggle button.

• [Knob] button

Places a knob.

• [Slider] button

Places a slider.

[Edit Box] button

Places an edit box.

[Scene Recall Button] button

Places a Scene Recall button.

[Scene Store Button] button

Places a Scene Store button.

[Online Button] button

Places an Online button.

[Solo Mode Button] button

Places a Solo Mode button.

● [Close] button

Places a Project Close button.

Grid setting

When placing controls, you can align them to a grid. Here you can specify the grid spacing.

A menu will appear when you click the [▼] button. Click the desired grid interval. If you select [OFF], the grid will be turned off.

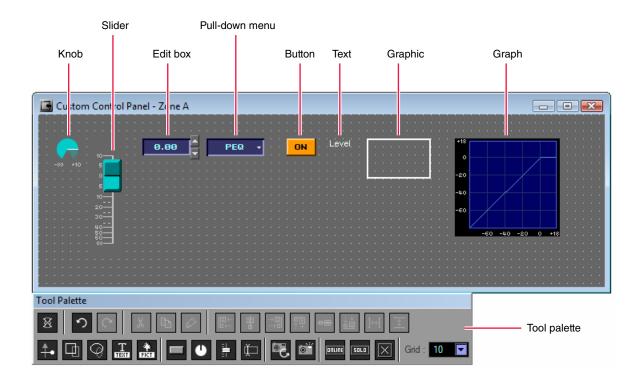
• If the grid is on (i.e., a grid other than [OFF] is selected), controls you drag will snap to the nearest grid location.

> Be aware that if you've copied multiple controls from the component editor in a single operation and their placement is aligned, simply dragging them may disrupt their placement if the locations do not match the grid.

> Also, if you change the grid spacing after you've placed controls in a custom control panel, using an alignment button will move the controls to locations that do not match the grid. Turn the grid [OFF] if there are controls that do not match the grid.

Placing controls

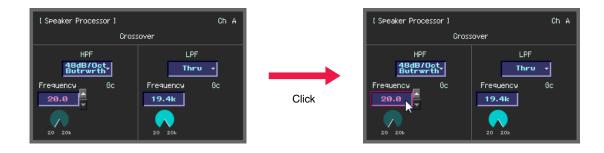
You'll use Design mode to place controls. To switch Design mode on/off, use the [Design Mode] command in the context menu that appears when you right-click in the custom control panel, the component editor, the Detail View window, or the Signal Path View window. To place a control, you can either drag it from the component editor or Detail View window, or you can copy and paste it.

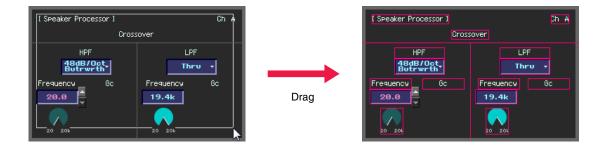


Selecting a control

In Design mode when you click a control in the component editor or Detail View window, that control will be selected and a red frame will appear around it. For a control, the knob or slider, the edit box, and the label are all separate objects; only the object you click will be selected.

You can select multiple controls or labels by holding down the <Shift> key while you click. You can clear a selection by holding down the <Shift> key and clicking the selected control. If you begin dragging from a location in a window where nothing is displayed, a border will appear, and the objects within that border will be selected.



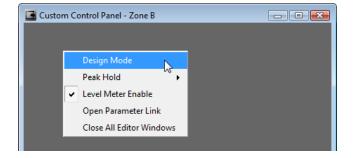


• If controls (e.g., a knob or slider), edit boxes, or labels that indicate the parameter type are dragged and dropped one at a time onto the custom control panel, their alignment will need to be adjusted in the custom control panel. If you drag and drop a multiple selection, the items will be copied to the custom control panel with their relative alignment intact.

Using the mouse to place a control

Drag and drop a control from the component editor or Detail View window into the custom control panel.

- 1. Open the component editor or Detail View window that contains the control you want to place.
- 2. Open the custom control panel.
 In the main panel window, the [View] menu → [Custom Control Panel] submenu will show the name of the custom control panel. Click this to open the window.
- **3.** Right-click in the component editor, the Detail View window, or the custom control panel. A context menu will appear.

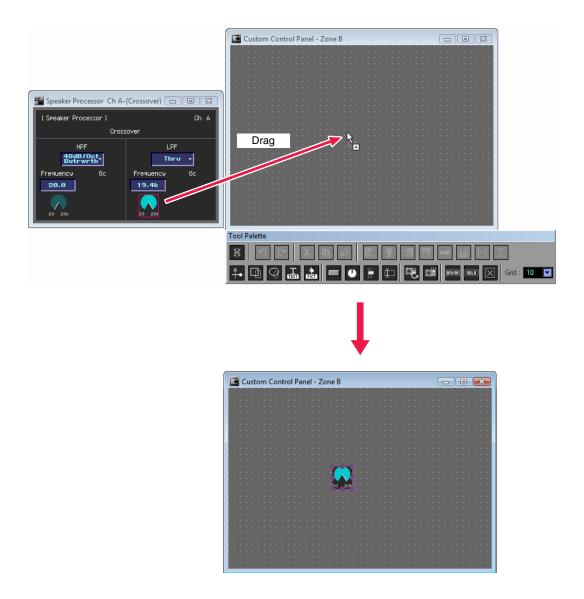


4. In the context menu, click [Design Mode] to turn it on.

You'll be in Design mode.

5. Drag a control from the component editor into the custom control panel.

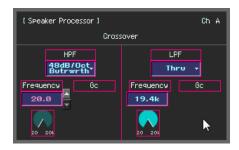
The control will be placed in the custom control panel.



Using copy and paste to place a control

Copy a control in the component editor or Detail View window, and then paste it into the custom control panel. In the component editor or Detail View window, you can copy the control by either pressing the [Copy] command shortcut key <Ctrl> + <C>, or by clicking the [Copy] button of the tool palette. In the custom control panel, you can paste the control by either pressing the [Paste] command shortcut key <Ctrl> + <V>, or by clicking the [Paste] button of the tool palette.

1. Make the copy-source component editor or Detail View window active, and select a control.

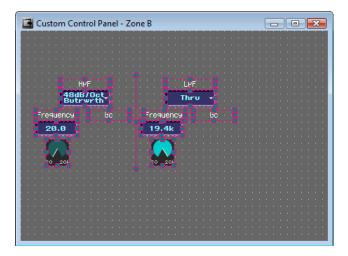


2. Hold down the <Ctrl> key and press the <C> key.

The control will be copied to the clipboard.

Make the custom control panel active; then hold down the <Ctrl> key and press the <V> key.

The control will be copied. You can also paste by clicking the [Paste] button of the tool palette.



The order of the controls

The controls will be stacked with the most recently pasted control on top. Edit boxes will be in the tab order in which you pasted them

• In the component editor, you can select multiple controls by holding down the <Shift> key while you click and drag. Controls that were copied in a single action will be pasted in the same order.

Editing controls

The controls you copied can be edited in the custom control panel.

Selecting a control

The way in which to select a control is the same as in the component editor or Detail View window. Click to select a control, or <Shift> + click to select multiple controls. You can clear a selection by holding down the <Shift> key and clicking the selected control. If you begin dragging from a location in a window where no controller is displayed, a border will appear, and the controls within that border will be selected. A red border is shown around the selected control(s).

Moving

You can move the selected control(s) by dragging them or by using the keyboard's cursor keys. If you've shift-clicked to select multiple controls, those controls will move together.

Dragging

If the grid is on, the upper left of the control(s) you drag will snap to the grid. The coordinates of the upper left corner of the control are shown while you're dragging it. The distances to the right and downward are shown in units of pixels, relative to the upper left corner of the window.



Cursor keys

If the grid is on, you can move the control(s) in steps of the grid. If the grid is off, you can move the control(s) in steps of one pixel.

Aligning

Use the [Align Left] button / [Align Right] button / [Align To Top] button / [Align To Bottom] button / [Align Horizontally] button / [Align Vertically] button / [Horizontal/Center Align] button in the tool palette to align multiple controls as desired. The [Align Horizontally] button and [Align Vertically] button can be used only if three or more controls are selected.

Cutting, pasting, and copying a control

You can use the [Cut] button, [Copy] button, and [Paste] button of the tool palette to edit the controls you've placed in the custom control panel.

Cut

Cuts the selected control(s). Select one or more controls, and click the [Cut] button in the tool palette.

Copy

Copies the selected control(s). Select one or more controls, and click the [Copy] button in the tool palette.

Paste

Pastes the control(s) that you cut or copied. Click the [Paste] button of the tool palette. If the Paste operation is not possible, the button's color will be dimmed.

Delete

To delete one or more controls, select them and press the <Delete> key.

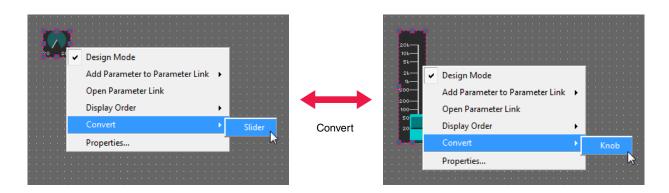
Undo/Redo editing

You can use the [Undo] and [Redo] buttons of the tool palette to undo/redo operations of moving, resizing, or deleting a control.

• Once you close the custom control panel, undo/redo will no longer be possible.

Converting between knobs and sliders

A knob you've placed in the custom control panel can be converted to a slider, or vice versa. Right-click the knob or slider, and choose [Convert] \rightarrow [Slider] or [Convert] \rightarrow [Knob] from the context menu that appears.



Control properties

The properties dialog box will appear when you double-click a control that you placed in the custom control panel, or when you right-click the control and choose [Properties...] from the context menu. This allows you to specify the design of the control. Properties of the same type can be set in a single action by holding down the <Shift> key and clicking to make a multiple selection before you open the properties dialog box.

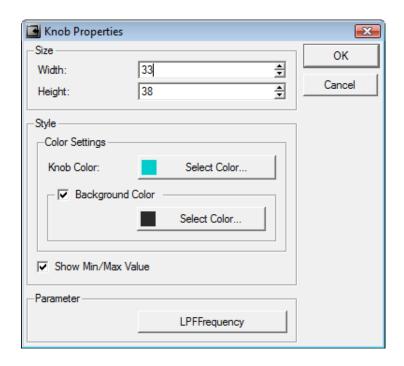
The edited item will be shown in bold type until you click [OK] or [Cancel].

Knob Properties - - X Custom Control Panel - Zone B ОК Width: 33 ŧ 38 ÷ Style Knob Color: Select Color Select Color. Double-click Show Min/Max Value LPFFrequency

NOTE • Some controls do not have a properties dialog box.

■ Knob

To open the "Knob Properties" dialog box, double-click a knob, or right-click it and choose [Properties...] from the context menu that appears. Here you can specify properties of the knob such as its size or color.



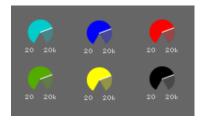
• [Size]

Specifies the knob's size in units of pixels. [Width] specifies the width, and [Height] specifies the height.

• You can also change a knob's size by dragging the handles shown at the four corners of the knob in the custom control panel.

• [Knob Color]

Select the color of the knob in the "Select Color" dialog box that appears when you click the [Select Color] button.



[Background Color]

If you clear this check box, the background color will be transparent. If you select this check box, you can select the background color in the "Select Color" dialog box that appears when you click the [Select Color] button below.



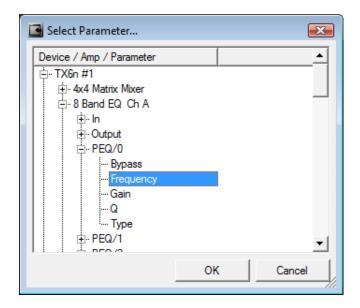
[Show Min/Max Value]

If this check box is selected, the maximum value and minimum value will be displayed below the knob.



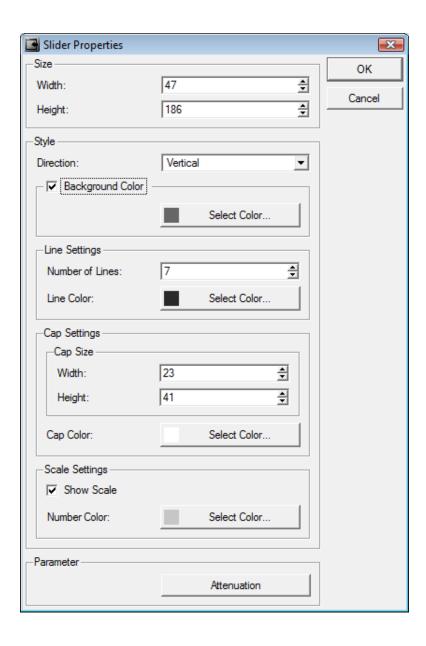
• [Parameter] button

This selects the parameter that will be assigned to the knob. When you click this, the "Select Parameter" dialog box will appear, showing a list of the parameters that can be assigned to this knob. Select the parameter that you want to assign, and click the [OK] button.



■ Slider

To open the "Slider Properties" dialog box, double-click a slider, or right-click it and choose [Properties...] from the context menu that appears. Here you can specify properties of the slider such as its size or color.



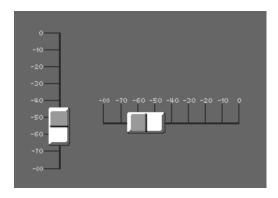
• [Size]

Specifies the slider's size in units of pixels. [Width] specifies the width, and [Height] specifies the height.

• You can also change a slider's size by dragging the handles shown at the four corners of the slider in the custom control panel.

• [Direction]

Specifies the direction of the slider. Choose either [Vertical] or [Horizontal].

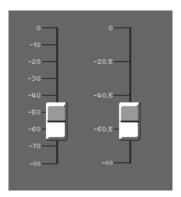


[Background Color]

If you clear this check box, the background color will be transparent. If you select this check box, you can select the background color in the "Select Color" dialog box that appears when you click the [Select Color] button below.

[Number of Lines]

Specifies the number of index lines between the minimum and maximum values.

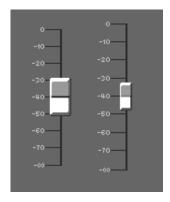


• [Line Color]

Select the color of the index lines in the "Select Color" dialog box that appears when you click the [Select Color] button.

• [Cap Size]

Specifies the size of the slider's cap in units of pixels. [Width] specifies the width, and [Height] specifies the height.

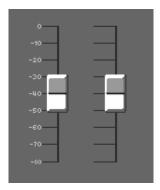


• [Cap Color]

Select the color of the slider cap in the "Select Color" dialog box that appears when you click the [Select Color] button.

[Show Scale]

If this check box is selected, numerical values will be shown for the index lines.



[Number Color]

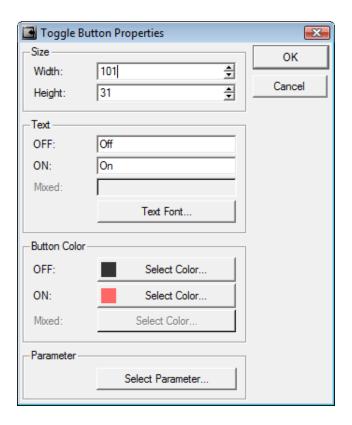
Select the color of the numerical values in the "Select Color" dialog box that appears when you click the [Select Color] button.

• [Parameter] button

This selects the parameter that will be assigned to the slider. When you click this, the "Select Parameter" dialog box will appear, showing a list of the parameters that can be assigned to this slider. Select the parameter that you want to assign, and click the [OK] button.

■ Toggle button

To open the "Toggle Button Properties" dialog box, double-click a toggle button (on/off button), or right-click it and choose [Properties...] from the context menu that appears. Here you can specify the text that's shown on the button, and the button's color and size.



• [Size]

Specifies the button's size in units of pixels. [Width] specifies the width, and [Height] specifies the height.



• [Text] box

Enter the text that will be shown on the button. From above, these specify the text when the button is off and when the button is on.



• [Text Font...] button

Click this to access the "Select Font" dialog box, where you can specify the font, font size, and style.

• [Button Color]

Click the [Select Color] button to access the "Select Color" dialog box, where you can specify the color of the button. From above, these specify the color when the button is off and when the button is on.

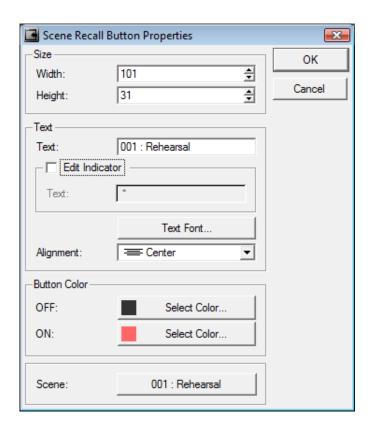


• [Parameter] button

This selects the parameter that will be assigned to the button. When you click this, the "Select Parameter" dialog box will appear, showing a list of the parameters that can be assigned to this button. Select the parameter that you want to assign, and click the [OK] button.

■ Scene Recall button

To open the "Scene Recall Button Properties" dialog box, double-click a Scene Recall button, or right-click it and choose [Properties...] from the context menu that appears. Here you can specify properties such as the scene that will be recalled by this Scene Recall button. You can edit the properties in the same way for the Scene Store button.



• [Size]

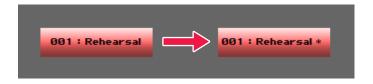
Specifies the button's size in units of pixels. [Width] specifies the width, and [Height] specifies the height.

[Text]

Enter the text that will be shown on the button.

• [Edit Indicator]

If this check box is selected, you'll be able to specify text that will be additionally shown if the assigned scene is edited after being recalled. Use the [Text] box below to enter the text that will be additionally shown.



• [Text Font...] button

Click this to access the "Select Font" dialog box, where you can specify the font, font size, and style.

• [Alignment]

Select [Left], [Center], or [Right] alignment.



• [Button Color]

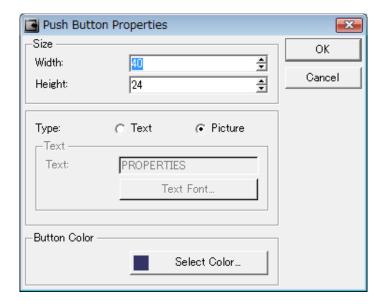
Click the [Select Color] button to access the "Select Color" dialog box, where you can specify the color of the button. From above, these specify the color when the button is off or on.

• [Scene] button

This selects the scene that will be assigned to the button. When you click this, the "Select Scene" dialog box will appear, showing a list of the scenes that can be assigned to this button. Select the scene that you want to assign, and click the [OK] button.

■ Push button

To open the "Push Button Properties" dialog box, double-click a [Detail View] button / [Signal Path View] button / [Device Properties] button, or right-click it and choose [Properties...] from the context menu that appears. Specifies button settings, such as the display format.



● [Size]

Specifies the button's size in units of pixels. [Width] specifies the width, and [Height] specifies the height.

■ [Type]

Specifies the display format for a button.



• [Text]

When you select Text in the [Type], enter the text that will be shown on the button.

• [Text Font...] button

Click this to access the "Select Font" dialog box, where you can specify the font, font size, and style.

[Button Color]

Click the [Select Color] button to access the "Select Color" dialog box, where you can specify the color of the button. From above, these specify the color when the button is off or on.

■ List of properties that can be edited

Control	Size	Text/ Font	Color	Background Color	Assignable parameter	Other
Knob	✓	_	✓	✓	✓	Show Min/Max Value
Slider	√	_	~	~	~	Direction Number of Lines Show Scale
Toggle button	✓	✓	✓	_	✓	_
Option button	✓	✓	✓	_	_	_
Scene Recall button	√	√	√	_	Scene	Edit Indicator Alignment
Scene Store button	√	√	√	_	Scene	Edit Indicator Alignment
Push button	✓	✓	✓	_	_	Туре
Online button	✓	✓	✓	_	_	_
Close Project button	✓	✓	✓	_	_	_
Solo Mode button	✓	✓	✓	_	_	Click Operation
Step button	✓	✓	_	_	_	_
Pull-down menu button	✓	✓	✓	_	_	_
Edit box	✓	✓	✓	_	✓	_
Level meter	√	_	_	_	_	Segment Scale
Level meter with threshold	✓	_	√	_	_	Show Scale Show Threshold Level
Gain reduction meter	✓	_	✓	_	_	Show Scale
Lamp indicator	✓	✓	✓	_	_	Threshold Logic
Alert indicator	✓	_	_	_	_	_
Maximum/minimum value graph	✓	_	√	✓	_	_
Router	✓	_	_	_	_	_
Text	√	✓	~	√	_	Alignment Rotate Link Component Editor
Color frame	✓	_	✓	✓	_	Line Widths
Вох	~	_	~	√	_	Box Style Round Corner Line Style/Thickness
Oval	✓	_	✓	✓	_	Line Style/Thickness
Line	_	_	~	_	_	Drawing Area : Width/Height Line : Style/Thickness/Color Arrows : Point1/Point2
Picture	√	_	_	_	_	File Path Size Stretch Link Component Editor

^{✓ :} Available

^{-:} Not available

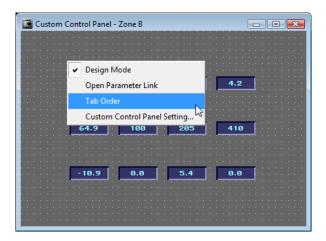
Changing the tab order

The tab order of the edit boxes will be the order in which you pasted them into the custom control panel. You can view or change the tab order by using the [Tab Order] command from the context menu that appears when you right-click in the custom control panel.

When you select the [Tab Order] command, a number will be shown in the upper left of each edit box to indicate the tab order. You can click these numbers to change the tab order.

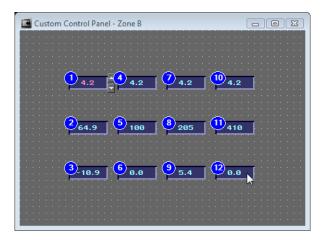
1. Right-click in the custom control panel.

A context menu will appear.



2. Click [Tab Order] in the context menu.

A number indicating the current tab order will appear at the upper left of each edit box.



3. Click the tab order numbers in the tab order that you want to specify.

Even if you don't want to change "1," you must start clicking from "1". When you click a number, its tab order number will change according to the sequence in which you clicked it.

4. When you've finished specifying the order, click somewhere in the window other than on a tab order number.

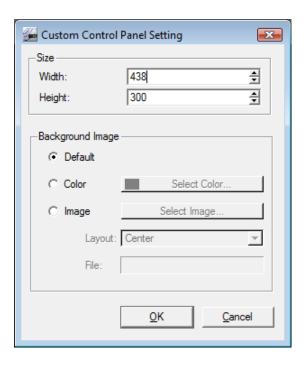
The tab order numbers will be hidden.

The changed tab order will be applied the next time you start up the custom control panel.

NOTE • You can't specify the tab order for controls such as knobs, sliders, or buttons.

Size and background settings for a custom control panel

In Design mode, right-click somewhere in the custom control panel other than on a control, and a context menu will appear; select [Custom Control Panel Setting] to access the "Custom Control Panel Setting" dialog box. Here you can change the window size or background of the custom control panel.



● [Size]

Specifies the window size in pixel units. [Width] specifies the width, and [Height] specifies the height. Maximum window size is in 2500 pixel units.

NOTE • You can also change the window size by dragging the border of the window.

• [Background Image]

Specifies the background color or image file.

Default

This is the default gray color.

Color

Select the background color in the "Select Color" dialog box that appears when you click the [Select Color] button.

Image

In the "Select Image" dialog box that appears when you click the [Select Image] button, select the image file (.bmp, .png, .xpm, .jpg) that you want to use as the background. You can also specify whether the image file will be displayed in the center (Center), tiled (Tile), or expanded to fit the size of the window (Fit).

Full-screen display

You can specify that a custom control panel will be shown in the full screen when a project is opened.

For details on this setting, refer to "Custom Control Panel Manager" (page 97).

• To exit the full-screen display, press the [Esc] key.

Appendix

Alert message list

Alert messages that can be specified on the TXn, ACD1, and XMV, their content, and the appropriate responses, are listed below.

"Single" will appear when an alert event occurs. "Continual" will appear when an alert event occurs and ends.

Some alert messages are displayed in Amp Editor. However, no alert messages are displayed on the ACD1 and the XMV. If the problem is not solved, please contact your Yamaha dealer.

TXn	ACD1	XMV	Message (shown in Amp Editor)	Message (shown on TXn/ACD1)	Alert number (shown on XMV)	Content	Response	Initial type	Single/ Continual
Devic	e prob	lem							
•	•	•	System error	System error	001		Turn the power off, then turn on	Fault	Continual
_	_	•	Sub CPU Comm error	_	002	The device has not started up correctly.	after waiting at least 6 seconds. If this does not solve the problem, please initialize the memory.	Fault	Continual
•	•	_	Flash ROM	Flash ROM	_	ир сопесну.	Should this also fails, contact	Fault	Single
_	_	•	device error	error	003		your Yamaha dealer.	Fault	Continual
•	•	_	No current scene found	Current scn lost	_	The current scene settings saved in internal memory have been lost.	Recall the scene. If this does not solve the problem, contact your Yamaha dealer.	Fault	Single
_	_	•	No current preset found	_	016	A memory problem has occurred.	Contact your Yamaha dealer.	Fault	Continual
•	•		Resume data	Resume data	_	The settings saved in internal memory have	Either the internal backup battery has run low, or the device has malfunctioned. If a problem persists even after a	Fault	Single
-	_	•	lost	lost	015	been lost.	scene or preset is recalled, consult your nearest Yamaha dealer.	Fault	Continual
•	_	_	DSP error	DSP error	_	A problem has occurred in the internal DSP.	It is likely that the device has malfunctioned; immediately stop using the device and contact your Yamaha dealer.	Fault	Continual
_	_	•	DSP hardware error	_	007			Fault	Continual
•	•	_	On the state of	On the state of	_			Fault	Single
_	_	•	Saving failed	Saving failed	004		Turn the power off, then turn on after waiting at least 6 seconds. If	Fault	Continual
•	•	•	Illegal MAC address	Illegal MAC adr	005	The device has not started up correctly.	this does not solve the problem, please initialize the memory. Should this also fails, contact	Fault	Continual
•	•	•	Network hardware error	Network HW error	006		your Yamaha dealer.	Fault	Continual
_	_	•	Dante hardware error	_	008			Fault	Continual
•	•	•	No battery	No battery	010	The internal backup battery has been completely exhausted or is not installed.	When you turn off the power, the current settings will be lost, and	Fault	Continual
•	•	•	Critical battery	Critical battery	011	The internal backup battery has run extremely low, and it is possible that the internal memory has been cleared.	will return to the default values. Please stop use immediately, and contact your Yamaha dealer.	Error	Continual
•	•	•	Low battery	Low battery	012	The internal backup battery has only a small amount of power remaining.	This does not affect the operation of the device. However, if you continue using the device, the settings may be lost and reset to the default values. Contact your Yamaha dealer as soon as possible.	Warning	Single

TXn	ACD1	XMV	Message (shown in Amp Editor)	Message (shown on TXn/ACD1)	Alert number (shown on XMV)	Content	Response	Initial type	Single/ Continual
_	_	•	Internal time clock error	_	013	A problem has occurred with the internal clock, and it has been initialized (January 1, 2000, 0:00)	If this occurs each time you turn on the power, it is possible that the internal backup battery has run down or that the device has malfunctioned. Contact your Yamaha dealer. If this occurs only once, an abnormality was detected with the clock setting and it was initialized; use Amp Editor to set the time.	Fault	Continual
•	•	_	Scene recall error	Scene recall err	_	The scene could not be recalled.	It is likely that the device has malfunctioned; immediately stop using the device and contact your Yamaha dealer.	Error	Single
•	•	•	Duplicate IP address	Duplicate IP adr	040	There is an IP address conflict on the network.	Change the IP addresses so that there are no duplicates.	Error	Continual
_	_	•	IP address setting error	_	041	IP address was not set within 60 seconds of startup.	Please check rear panel DIP switch 6 (IP Setting). If DIP switch 6 is set to "PC," use Amp Editor or DHCP server to specify the device IP address.	Warning	Continual
_	_	•	Too many devices on the network	_	043	Too many devices are connected to the network.	Reduce the number of devices connected to the network.	Error	Single
•	•		Network busy	Network busy	-	Due to heavy network traffic, communication is taking time.	Check the devices that are connected to the network. If an excessive number of devices are connected, try reducing the number of devices. Also make sure that you are not connected to the same network as an audio network.	Information	Continual
_	_	•	The UNIT ID is set to "00"	_	050	The UNIT ID is set to "00."	Set the UNIT ID to something other than "00."	Error	Continual
_	_	•	Duplicate UNIT ID error	_	051	Devices with identical UNIT IDs were found connected within the same network.	Change the UNIT ID so that there are no duplicates.	Error	Continual
_	•	_	Amp communication error	Amp comm error	_	A problem has occurred in the transmission at [DATA PORT] connector (0–31).	Make sure that each of the connected amplifiers has a unique ID. Alternatively, a cable may be shortcircuited or noise may be affecting the connection.	Error	Single
•		•	Word clock unlocked	WCLK unlocked	021	The word clock master has become unlocked.	Make sure that the word clock signal is being input correctly. This will also appear when you switch the word clock.	Error	Continual
_	_	•	YDIF sync error (Single)	_	022	The digital signal being input to the [YDIF IN] connector is not synchronized to the word clock of this device.		Error	Single
_	_	•	YDIF sync error (Continual)		023	The digital signal being input to the [YDIF IN] connector is not continuously synchronized to the word clock of this device.	Make sure that YDIF cables are properly connected. Use cables that meet the required specifications.	Error	Continual
_	_	•	YDIF input connection error	_	030	There is a problem with the connection of the [YDIF IN] connector.		Error	Continual
•	_	_	Slot sync error (Single)	SlotSyncErr Sngl	_	The digital signal being input to the slot is not synchronized to the word clock of this device	Either input a signal that is	Warning	Single
•	_	_	Slot sync error (Continual)	SlotSyncErr Cntn	_	The digital signal being input to the slot is not continuously synchronized to the word clock of this device.	synchronized, or specify the slot as the word clock master.	Information	Continual

Amp Editor ■ 208 ■ Owner's Manual

TXn	ACD1	XMV	Message (shown in Amp Editor)	Message (shown on TXn/ACD1)	Alert number (shown on XMV)	Content	Response	Initial type	Single/ Continual
•	_	_	Unsupported MY-Card	Unsupported card	_	It may be that an unsupported Mini-YGDAI card is inserted in the slot, or that the inserted Mini-YGDAI card has malfunctioned.	Replace the card with a supported Mini-YGDAI card.	Fault	Continual
Ampl	ifier pr	oblem							
•	_	_	Fan failed[Ch*]	Fan failed[*]	_	The channel * cooling fan has stopped.	Check whether dirt or a foreign object could have clogged the fan, and clean the fan appropriately. If this does not solve the problem, it is likely that the device has malfunctioned. Immediately stop using the unit, and contact your Yamaha dealer.	Fault	Continual
•	_		DC output detected[Ch*]	DC detected[*]	_	Since a direct current component was detected in the speaker output, the power amp's power supply has been shut down.	It is likely that the device has malfunctioned; immediately stop using the unit, and contact your	Fault	Continual
_	_	•	DC output detected	_	100	The power supply was shut down because d.c. was detected on a speaker output.	Yamaha dealer.	Fault	Continual
•	_		PSU temperature too high[Ch*]	PSU temp high[*]	_	The channel * power supply section's temperature is abnormally high, so the fan is rotating at high speed.	The power supply section may malfunction if you continue using the unit in this condition. Immediately stop using the unit, or lower the output level.	Warning	Continual
•	_		Fan speed changed[**]	Fan speed[**]	_	The temperature of the amp section (heat sink) has changed, and the fan speed is now **. ** L: Very low speed, M: low speed, H: medium speed, VH: high speed	Continuous high-power output will cause high temperatures, so please lower the output level. If the temperature is still high, check whether dirt or a foreign object could have clogged the	Information	Single
•	_	•	Speaker output level[****]	SP out lvl[****]	106	The temperature of the amp section (head sink) has changed, and the speaker output is now ±0dB/-1dB/-2dB/muted.	cooling fan, and clean the fan if necessary.	Warning	Single
•	_	_	Line voltage error	Line v error	_	Since the power supply voltage is outside the rated range, the amplifier's power supply did not turn on.	Verify that the power supply voltage is the specified voltage.	Fault	Continual
•	_		Output current too high[Ch*]	Curr too high[*]	_	There was a continuous high current flow at the channel * speaker output connector, so the limiter has operated.	Make sure that the speaker impedance does not get too low.	Information	Continual
•	_	1	VHF detected [Ch*]	VHF detected[*]	_	High-frequency components were detected in the audio output, so the high-frequency component of the output signal was limited.	Use a filter to cut the high- frequency component before the signal goes to the amplifier.	Warning	Continual
•	_	•	Speaker output shorted[Ch*]	SP out short[*]	105	A short was detected in the speaker output connector, so the output signal has been muted.	It may be that the speaker output connector's "+" and "-" are shorted, or that the connected speaker has malfunctioned.	Fault	Single
•	_	_	Speaker output clipped[Ch*]	SP out clip[*]	_	The speaker output of channel * has clipped, so the limiter has operated.	Lower the output level.	Information	Single
•	_	_	Output power is limited[Ch*]	Pwr limited[*]	_	The output power of channel * has exceeded the rated value, so the limiter has operated.		Information	Continual
•	_	_	Output voltage is limited[Ch*]	VItg limited[*]	_	The output voltage of channel * has exceeded the rated value, so the limiter has operated.		Information	Continual

Amp Editor ■ 209 ■ Owner's Manual

TXn	ACD1	XMV	Message (shown in Amp Editor)	Message (shown on TXn/ACD1)	Alert number (shown on XMV)	Content	Response	Initial type	Single/ Continual
_	•	-	Protection activated[Ch*]	Protection[*]	_	Protection has been activated for channel *.	For details, refer to the amplifier's Owner's Manual.	Warning	Continual
•	_	•	Limited by protection[Ch*]	Limt by Prot.[*]	102	Protection has been activated, and the limiter has operated for channel *.		Information	Continual
•	_	•	Muted by protection[Ch*]	Mute by Prot.[*]	104	Protection has been activated, and channel * was muted.	Continuous high-power output may have activated protection; lower the output level. For details on the reason that protection was	Error	Continual
•		-	Shutdown by protection[Ch*]	Sdwn by Prot.[*]	_	Protection has been activated, and the power supply of channel * was shut down.	activated, refer to Owner's manual. For an explanation of why protection was activated, refer to the Owner's Manual.	Error	Continual
_	_	•	Shutdown by protection	_	103	Protection has been activated, and the power supply was shut down.		Error	Continual
•	•	_	Heatsink temp too high[Ch*]	Htsnk too hot[*]	_	The amp (heat sink) of channel * has exceeded the rated temperature.	Continuous high-power output will cause high temperatures, so please lower the input level or attenuator. If the temperature is still high, check whether dirt or a foreign object could have clogged the cooling fan's air intake, and clean it if necessary.	Warning	Continual
•	•	_	Analog in level too high[Ch*]	AnlgInLvI H[*]	_	The analog input level of channel * exceeds the rated value.		Information	Single
•	_	_	Slot in level too high[Ch**]	SlotInLvI H[**]	_	The slot input level of channel ** exceeds the rated value.	Lower the input level.	Information	Single
•	_	_	MtrxMixerIn level too high[Ch**]	MtrxInLvI H[**]	_	The input level to the 4 x 4 Matrix Mixer for channel ** exceeds the rated value.		Information	Single
•	_	_	Slot out level too high[Ch**]	SlotOutLvl H[**]	_	The slot output level of channel ** exceeds the rated value.	Lower the output level.	Information	Single
•	_	_	No Output Pilot Tone HF[Ch*]	NoOutPltToneH [*]	_	The Signal Chain Check function does not detect the pilot tone (High) from the channel * speaker output.	Either the speaker output connector has been disconnected from the speaker,	Information	Continual
•	_	_	No Output Pilot Tone LF[Ch*]	NoOutPltToneL [*]	_	The Signal Chain Check function does not detect the pilot tone (Low) from the channel * speaker output.	or the speaker may have malfunctioned. Check the speaker cable and speaker condition.	Information	Continual
•	•	_	Speaker impedance too high[Ch*]	Sp imp hi[*]	_	The channel * speaker impedance is too high.	The speaker connected to the	Information	Continual
•	•	_	Speaker impedance too low[Ch*]	Sp imp low[*]	_	The channel * speaker impedance is too low.	speaker output connector may have malfunctioned.	Information	Continual
•	•	-	Output level too high[Ch*]	OutLevel hi[*]	_	The channel * output voltage is too high.		Information	Single
•	•	_	Output power too high[Ch*]	OutPower hi[*]	_	The channel * output power is too high.	Lower the output level.	Information	Single
•	_	ı	Analog in pilot tone lost[Ch*]	AnlgIn no PT[*]	_	The pilot tone signal included in the channel * analog input has been lost.	The connection between the external device and the digital input connector may have been broken.	Information	Continual
•	_	_	Slot in pilot tone lost[Ch**]	SlotIn no PT[**]	_	The pilot tone signal included in the channel ** slot input has been lost.	The connection between the external device and the slot input connector may have been broken.	Information	Continual

TXn	ACD1	XMV	Message (shown in Amp Editor)	Message (shown on TXn/ACD1)	Alert number (shown on XMV)	Content	Response	Initial type	Single/ Continual
•	_	_	HF SP impedance too low[Ch*]	HF imp low[*]	_	The channel * speaker impedance is too low.		Information	Continual
•	_	_	HF SP impedance too high[Ch*]	HF imp high[*]	_	The channel * speaker impedance is too high.	Either the speaker output connector has been disconnected from the speaker,	Information	Continual
•	_		LF SP impedance too low[Ch*]	LF imp low[*]	_	The channel * speaker impedance is too low.	or the speaker may have malfunctioned.	Information	Continual
•	_	-	LF SP impedance too high[Ch*]	LF imp high[*]	_	The channel * speaker impedance is too low.		Information	Continual
•	_	1	Input changed over[Ch*]	In changeover [*]	_	The Redundant Backup function has been activated, and the input signal has been switched.	There is a problem in the digital signal being input to the slot.	Warning	Continual
_	_	•	Input changed over[Ch*]	In changeover [*]	110	The Redundant Backup function has been activated, and the input signal has been switched.	There is a problem in the digital signal. Check the digital line connection and confirm that the pilot tone is input.	Warning	Continual
_	•	_	Amp f/ware version incompatible	Amp f/ware old	_	The firmware version of the amplifier is old, which prevents normal monitoring.	The amplifier must be repaired and the firmware version must be updated. Contact your Yamaha dealer.	Error	Single
•	_		PSU shutdown [*]	PSU shutdown [*]	_	The power supply for channel * was shut down because its temperature exceeded the allowed value.	Turn the power off, let the power supply cool down, then turn the power on again. Continuous high-power output will cause high temperatures, so please lower the output level. If the temperature is still high, check whether dirt or a foreign object could have clogged the cooling fan, and clean the fan if necessary.	Fault	Continual
_	_	•	PSU shutdown	_	101	The power supply was shut down because its temperature exceeded the allowed limit.		Fault	Continual
•	•	_	Synchronization is incomplete	Sync incomplete	_	Synchronization with Amp Editor has not been completed. The synchronization operation may have been interrupted.	Perform the synchronization operation once again from Amp Editor. If this does not solve the problem, please initialize the memory. Should this also fails, contact your Yamaha dealer.	Error	Continual
Devic	e infor	mation	1						
•	•	•	Power turned on	Power turned on	_	The power has turned on.	_	Information	Single
•	•	•	Power turned off	Power turned off	_	The power has turned off.	_	Information	Single
•	•	•	Firmware updated	Firmware updated	_	The firmware update has been completed.	_	Information	Single
•	•	•	Device initialized	Dev initialized	_	Initialization has been executed.	_	Information	Single
•	•	•	Panel unlocked	Panel unlocked	_	Panel operation lock has been disabled.	_	Information	Single
•	•	•	IP address fixed	IP address fixed	_	The IP address has been established.	_	Information	Single
•	•	•	IP address set by DHCP	IP set by DHCP	_	The network IP address has been allocated while operating with the DHCP server.	_	Information	Single
•	•	•	IP address released from DHCP	IP rised by DHCP	_	The network IP address has been released while operating with the DHCP server.	_	Information	Single
•	•	•	Emergency mode triggered	EMG triggered	_	An EMG (Emergency) signal was received, and the device switched to EMG mode.	Lower the input level.	Information	Single

Amp Editor • 211 • Owner's Manual

TXn	ACD1	XMV	Message (shown in Amp Editor)	Message (shown on TXn/ACD1)	Alert number (shown on XMV)	Content	Response	Initial type	Single/ Continual
•	•	•	Clock set	Clock set	_	The setting of the internal clock has been changed.	_	Information	Single
_	•	_	Amp disconnected[**]	Disconnected [**]	_	The amplifier identified as AMP ID** is disconnected from the ACD1.	Check the connection between the [DATA PORT] connector on the ACD1 and the amplifier.	Error	Single
Ampl	ifier inf	formati	ion						
•	•	_	Scene recalled [**]	ScnRecalled[**]	_	Scene number ** was recalled.	_	Information	Single
_	_	•	Preset recalled [**]	_	_	Preset number ** was recalled.	_	Information	Single
•	•	-	Scene stored[**]	SceneStored[**]	_	Scene number ** was stored.	_	Information	Single
_		•	Preset stored[**]	_	_	Preset number ** was stored.	_	Information	Single
•	•	•	Synchronizing	Synchronizing	_	Amp Editor and the amplifier began synchronizing.	_	Information	Single
•	•	•	Power amp mode changed	AmpMode changed	_	The Power Amp Mode was changed.	_	Information	Single
•	_	•	Input overridden[Ch*]	In overridden[*]	_	The Redundant Override function has been engaged and the channel* has been switched to analog input.	_	Information	Continual
_	•	_	Amp type changed	Amp type changed	_	A different model of the amplifier has replaced the connected amplifier and has been reset to default.	_	Information	Single

Troubleshooting

Symptom	Possible causes	Response
Can't communicate with the device from Amp Editor.	The computer's IP address setting is incorrect.	Refer to the IP address setting (page 17) in Chapter 3 Setup, and set the computer's IP address.
Can't communicate with the device from Amp Editor.	Firewall blocks the communication.	Windows XP: Choose [Start] → [Control Panel] (→ [Network and Internet Connections]), and double-click [Windows Firewall]. Click the [Exceptions] tab and select "Amp Editor." If Amp Editor is not in the list, click the [Add Program] button and select to add Amp Editor.
		Windows Vista: Click [Start] → [Control Panel] → [Allow a program through Windows Firewall], and then click the [Exceptions] tab and select "Amp Editor." If Amp Editor is not in the list, click the [Add program] button and select to add Amp Editor.
		Windows 7/8: Click [Start] → [Control Panel] → [System and Security] → [Allow a program through Windows Firewall], and then click the [Change settings] button and select "Amp Editor." If Amp Editor is not in the list, click the [Allow another program] button and select to add Amp Editor.
Can't specify the device's IP address from Amp Editor.	The computer's IP address setting does not match the range of IP addresses specified in the Auto IP Address Assign Range field of the "Network Setup" dialog box.	Make sure that the most significant three digits of your computer's IP address setting and the IP address setting in the Auto IP Address Assign field of the "Network Setup" dialog box are in the range of 192.168.0–192.168.254. If you want to use other settings, please contact your network administrator.
	The computer's subnet mask setting is incorrect.	Set the computer's subnet mask to "255.255.255.0".
Can't specify the device's IP address from	The device was started up before the DHCP server.	First start up the DHCP server, and then start up the device.
the DHCP server.	The device's IP Address Mode is set to Manual.	In the "Network Setup" dialog box, click the [DHCP] button to switch IP Address Mode to DHCP.
A device is not shown in the Tree View window.	The device or network switch is not powered-on.	Power-on the device or network switch. After a device has been powered-on, it will take several seconds for it to appear in the Tree View window.
	There are conflicting device IP addresses in the network.	In the "IP Address" dialog box, set each device to a different IP address.
	The most significant three digits of the computer's IP address do not match the most significant three digits of the device's IP address.	In the "IP Address" dialog box, set the most significant three digits of the IP address to match.
	You have confused the [NET-WORK] connector and the [DATA PORT] connector for connection on the ACD1.	Connect the [NETWORK] connector to your computer, and connect the [DATA PORT] connector to the Tn/PC-N series amplifier.
	You are using a network switch to connect the ACD1 to a Tn/PC-N series amplifier.	To connect the ACD1 to Tn/PC-N series amplifiers, use a daisy-chain connection; do not use a network switch.

Symptom	Possible causes	Response
Can't monitor or control amplifiers from Amp	Amp Editor is offline.	In the main panel window, click the [OFFLINE] button to switch it to [ONLINE].
Editor.	The device is registered as an "Unmatched Device" in the Tree View window.	Drag the icon of the device you want to monitor and control, and drop it in the workspace.
	The Device ID or IP address are not set correctly.	Refer to the device's owner's manual, and perform the setup again.
	The Tn/PC-N series amplifier connected to the ACD1 does not have the correct terminator setting.	Set the T switch located on the rear panel of the last amplifier (in the chain of amplifiers connected to the [DATA PORT] connector) to the ON position. Set the T switch of other amplifiers to the OFF position.
	The connected amplifiers were started before the ACD1.	Turn on the power to the ACD1 first, then to the amplifiers connected to the ACD1.
All scene data saved in the device has disappeared.	The power was turned off while the device's data was being saved.	Synchronize with Amp Editor once again to transmit the settings.

Manual Development Group © 2009 Yamaha Corporation Published 06/2017 PO-E0