NT110

NT Mix V1.xx

Operation Manual (EN)

First Edition

2D-53-00027900

About This Manual

Please know that this manual is subject to change without notice for the purpose of improving the quality of the product.

Copyright

Copyright © 2017 TAMURA Corporation. All Rights Reserved. Do not duplicate or replicate without permission.

Trademark

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

1. About This Manual 1

2. Connection 2

2-1 Connecting Computer to NT110 with LAN Cable 2

2-2 Connection for Primary DSP CARD = ACT 2

2-3 Connection for Secondary DSP CARD = ACT 2

2-4 Connection Operation (Offline -> Online) 3

3. Overview 4

4. Menu Bar 5

5. Tool Icon 5

6. Mixer Status 6

7. Status Bar 6

8. Workspace 7

9. Mixer Menu 8

9-1 Mixer Base Area 9

9-1-1 Mixer Menu 10
9-1-2 Meter Select 10
9-1-3 Assign/Graph/Sum Select 10
9-1-4 Preset Program 11
9-1-5 DSP / On Air 11
9-1-6 Bus Master 11
9-1-7 OSC 11
9-1-8 Monitor 12
9-1-9 Talk Back 14
9-1-10 Utility 14
9-1-11 Bank Select 15
9-1-12 Layer Select 15

9-2 Mix 16

9-2-1 Meter Area 17
9-2-2 Bus Assign/Graph/Sum Send Areas 18
9-2-3 Select Encoder 21
9-2-4 Fader Area 24

9-3 Monitor 26

9-4 Group/Meter 27

9-5 OSC/TB 28

10. Status Menu 29

11. Appendix 30

11-1 Basic Operations of Fader/Encoder 30

11-1-1 Operation Procedure for Fader 30
11-1-2 Operation Procedure for Encoder 30

11-2 Backing Up and Uploading NT110 Data 31

11-2-1 Transferring Backup Data from NT110 to Computer File (Backup) 31
11-2-2 Transferring Backup Data from Computer File to NT110 (Upload) 32

1. About This Manual

This manual describes how to operate the NT110 NT Mix application. Install the NT110 NT Mix application software on a Computer to use it.

* Refer to the NT110 Operation Manual for the basic operation procedure for NT110.

2. Connection

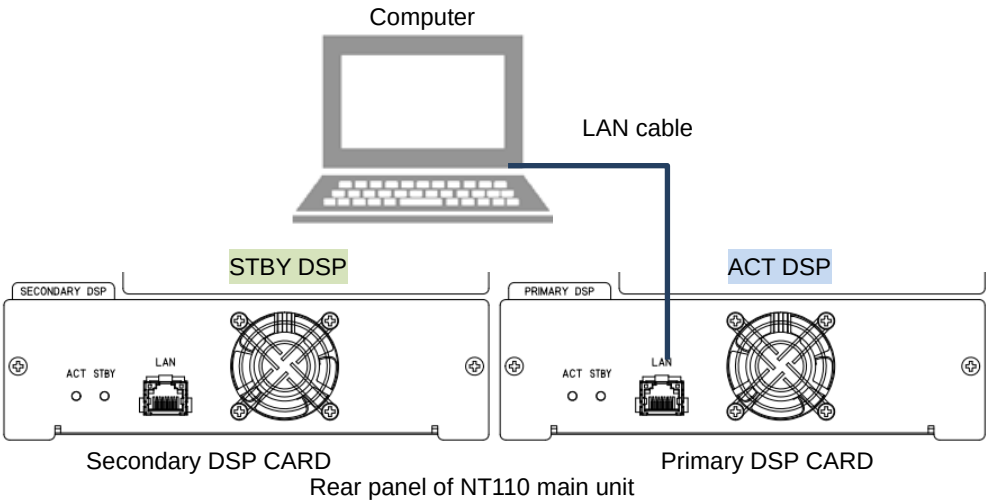
Connect the LAN port of the Computer with NT Mix installed to the LAN port of the DSP CARD mounted on the NT110 main unit with a LAN cable.

2-1 Connecting Computer to NT110 with LAN Cable

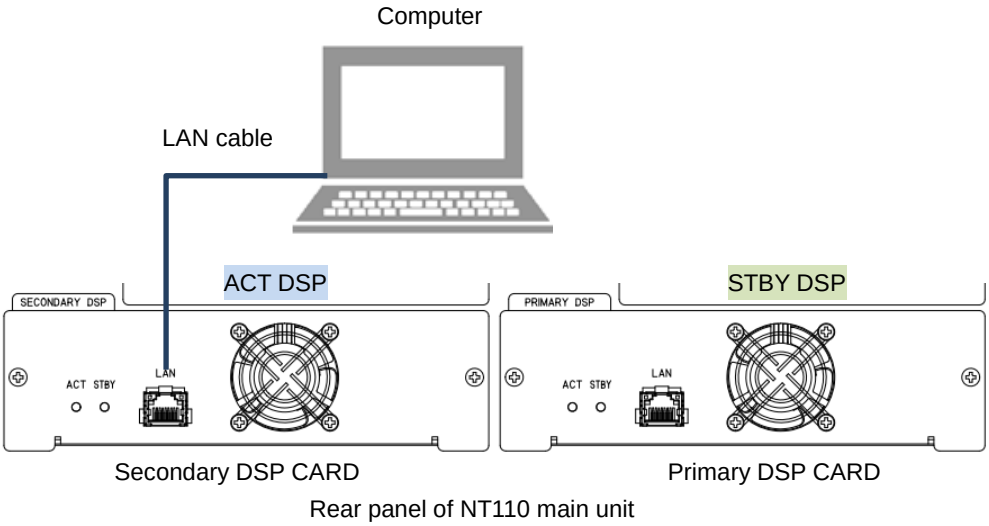
Connect the Computer to the Primary DSP with the LAN cable when it is ACT (active).
Connect the Computer to the Secondary DSP with the LAN cable when it is ACT (active).

* NT Mix is unavailable online when the Computer connects to the STBY (standby) DSP CARD.
* In the configuration of two DSP CARDs, when the ACT DSP CARD switches from Primary to Secondary, you need to change the connection with the LAN cable.
* Connect the DSP CARD to the Computer directly, not via any external equipment such as a hub.
* Use CAT5E or later versions of LAN cables.

2-2 Connection for Primary DSP CARD = ACT



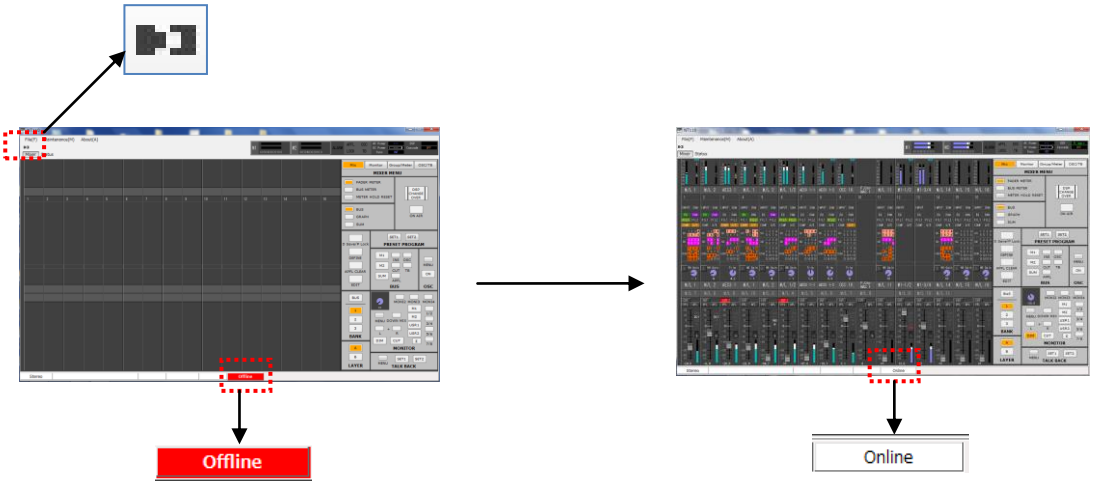
2-3 Connection for Secondary DSP CARD = ACT



2-4 Connection Operation (Offline -> Online)

Click the connection to console icon of NT Mix in Offline mode to connect to NT110.

You can also press F12 on the keyboard to do that.

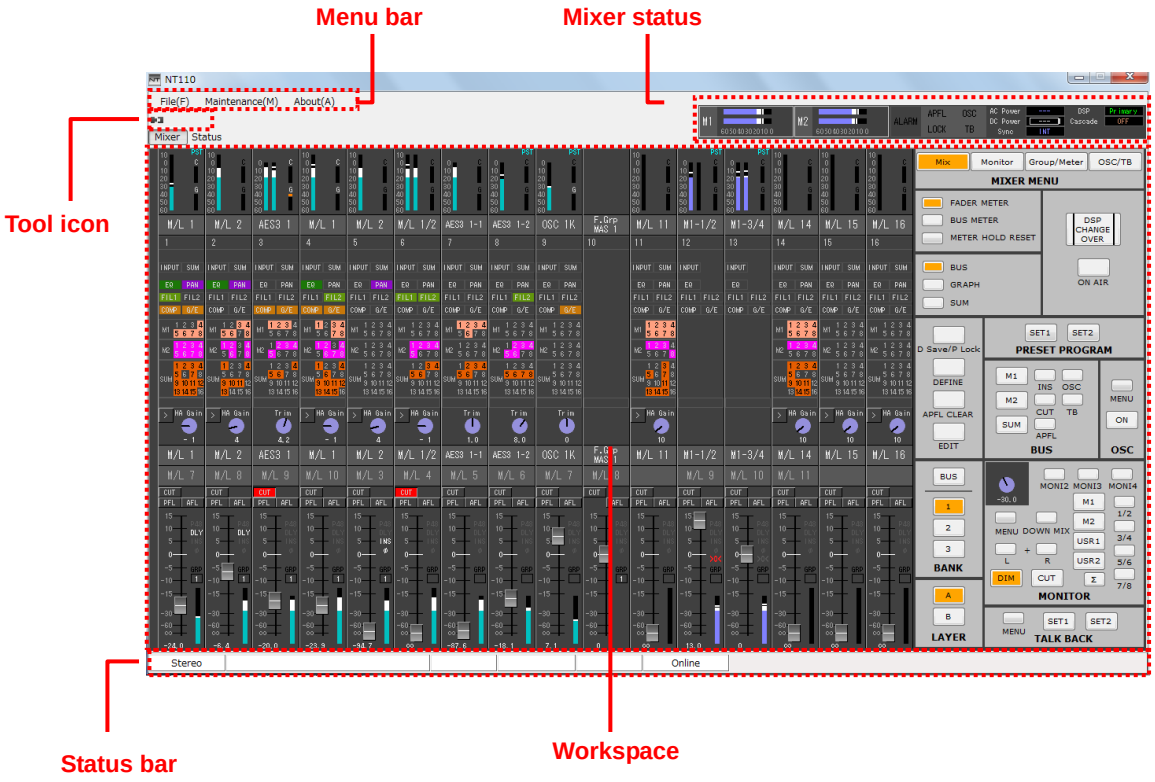


Before connecting to NT Mix

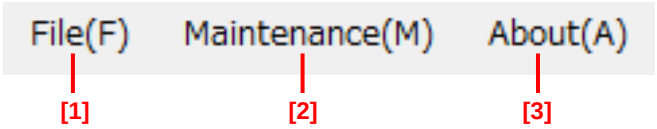
After connecting to NT Mix

3. Overview

The NT Mix screen consists of the areas shown in the figure below.



4. Menu Bar



[1] File(F)

[Exit]

Exits this application.

[2] Maintenance(M)

[Mixer Data]

Backs up and uploads NT110 main unit data.

For how to use this menu, refer to Appendix, Backing Up and Uploading NT110 Data.

[3] About(A)

[Version]

Displays the software version information window.

5. Tool Icon

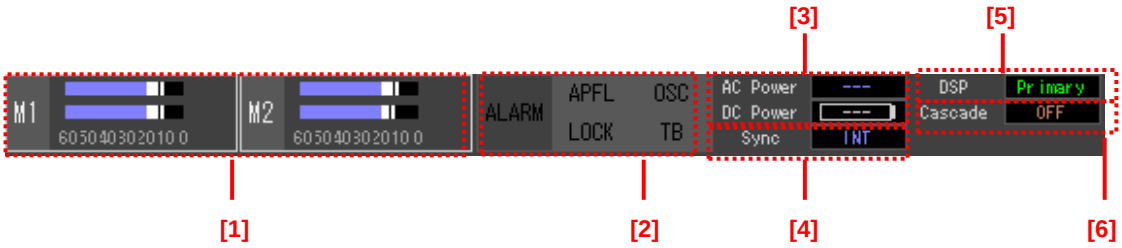
[1] Connection to console (F12)

Press this button to connect to the NT110 main unit. (Offline to Online)

F12, a keyboard shortcut, has the same function as this button.

When the connection is established successfully, Online appears in the Status bar.

6. Mixer Status



The Mixer status always provides the following information:

[1] **M1 bar meter, M2 bar meter**
[2] **Icons to turn on or off ALARM, APFL, LOCK, OSC, and TB**
[3] **AC POWER, DC POWER status**
[4] **SYNC status**
[5] **ACTIVE DSP status**
[6] **CASCADE setting**

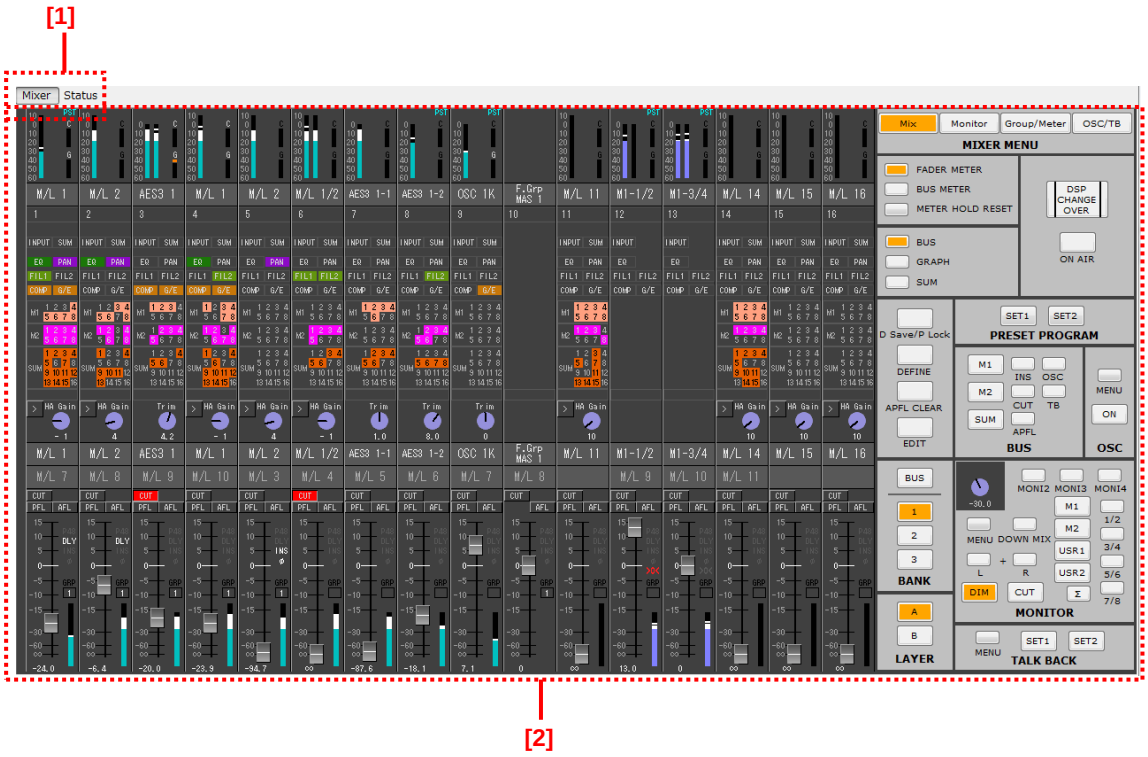
7. Status Bar

[1] **Console Mode/FS Status**
Displays the Console Mode and FS settings.

[2] **Online/Offline Status**
Displays NT Mix operation modes (Online, Offline).

8. Workspace

The workspace is an area used to display various states and to make settings.



[1] Menu selection button

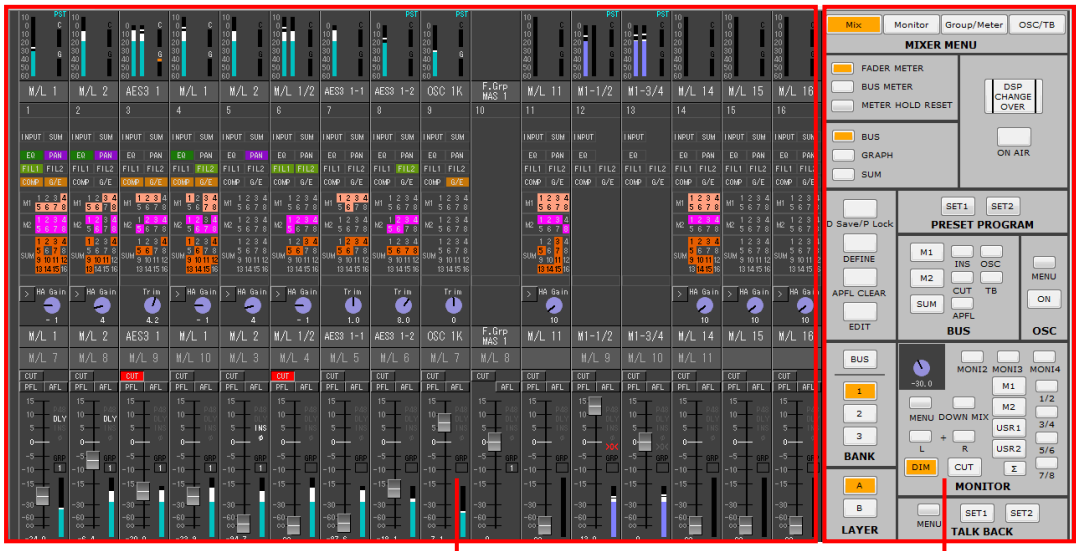
Select the menu to be called to the workspace.
Two menus are provided: Mixer and Status.

[2] Workspace

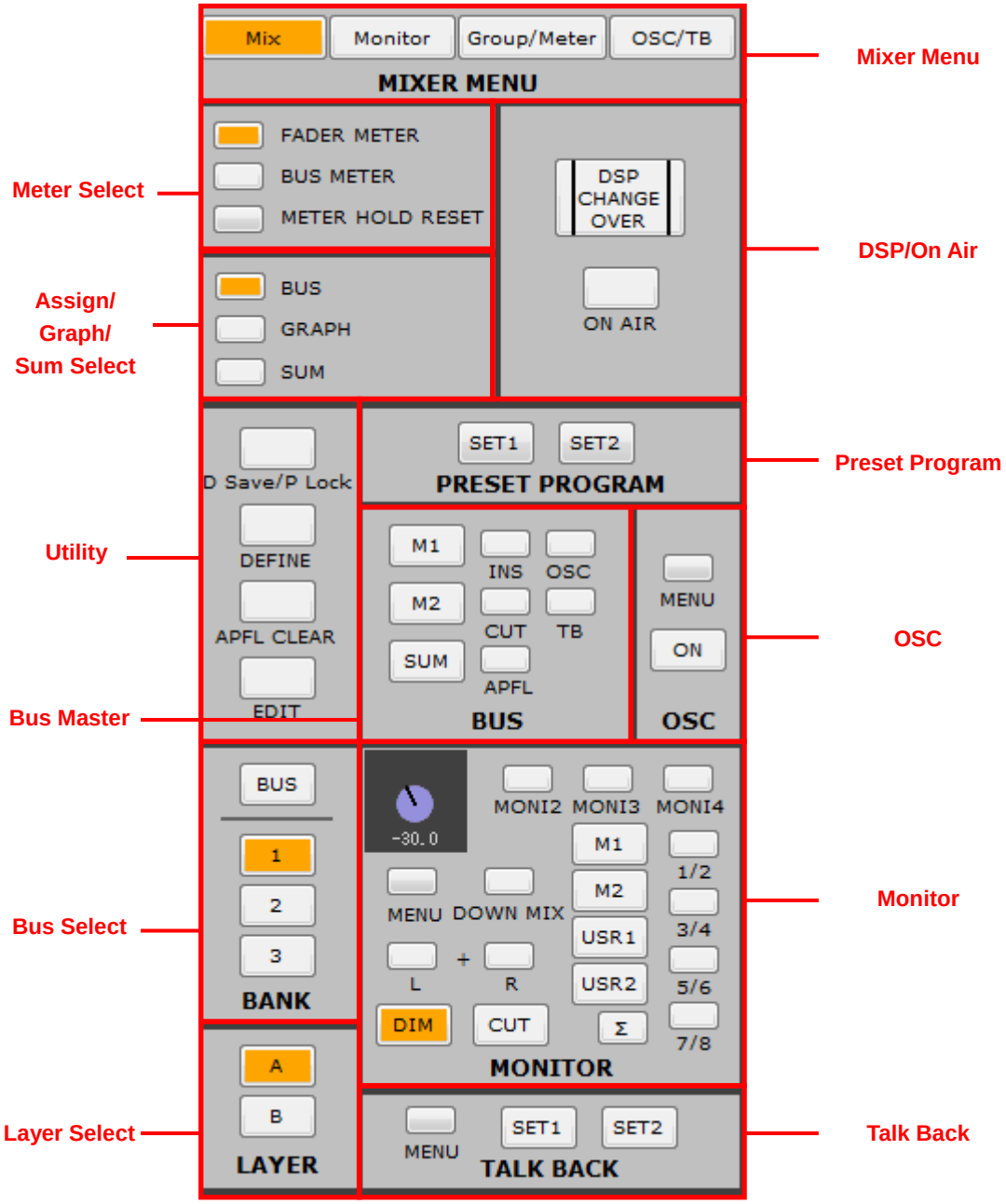
Displays the screen selected using the menu selection button.
Use the workspace to make various settings.

9. Mixer Menu

Use the Mixer menu to perform NT110 mixing operations.
In the online connection state, this screen linking to the operation panel of the NT110 main unit can be used as an active redundant operation panel.
Bank/Layer selections on this screen are independent of those on the NT110 main unit. For this reason, they also work as extension faders if the number of physical faders on the NT110 main unit is insufficient.

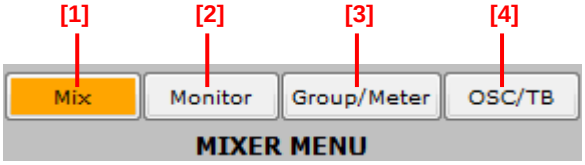


9-1 Mixer Base Area



9-1-1 Mixer Menu

Switches among the Mix, Monitor, Group/Meter, and OSC/TB screens in the Mixer Work area.



[1] Mix
Displays the Mix screen in the Mixer Work area.

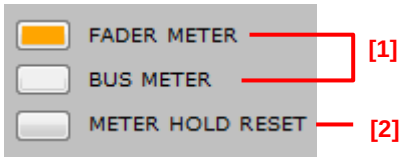
[2] Monitor
Displays the Monitor screen in the Mixer Work area.

[3] Group/Meter
Displays the Group/Meter screen in the Mixer Work area.

[4] OSC/TB
Displays the OSC/TB screen in the Mixer Work area.

9-1-2 Meter Select

Selects the Meter area display on the Mix screen.

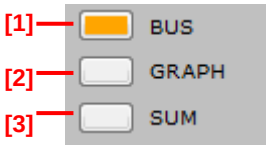


[1] FADER METER / BUS METER
Selects the Meter area display on the Mix screen.

[2] METER HOLD RESET
Resets the Meter Peak Hold display.

9-1-3 Assign/Graph/Sum Select

Selects the Bus Assign/Graph/Sum Send area display on the Mix screen.



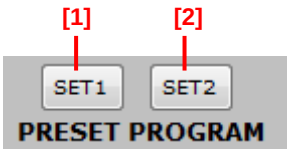
[1] BUS
Displays Bus Assign.

[2] GRAPH
Displays EQ/Dynamics/Pan graphs.

[3] SUM
Displays the Sum Send bar.

9-1-4 Preset Program

Performs various controls of preset programs.



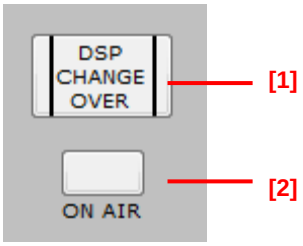
[1] SET1

Press the SET1 button to recall Preset Program No.1.
(A message appears before it is recalled)

[2] SET2

Press the SET2 button to recall Preset Program No.2.
(A message appears before it is recalled)

9-1-5 DSP / On Air



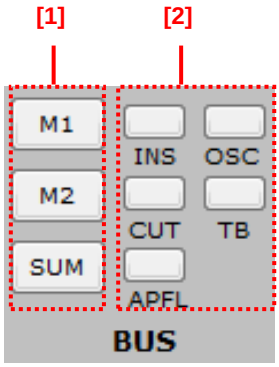
[1] DSP CHANGE OVER

If DSP CARDs are in a redundant configuration, press this button to activate the DSP CARD mounted in the Secondary DSP Slot.
If DSP Changeover is set to Auto in the Setup menu, the DSP CARD is automatically switched. In this case, this button is used to forcibly select the DSP CARD mounted in the Secondary DSP Slot.

[2] ON AIR

Press this button to set the mixer to ON AIR.
In the ON AIR status, a function selected in the Config menu (prohibiting OSC or Talk Back transmission, etc.) starts working.

9-1-6 Bus Master



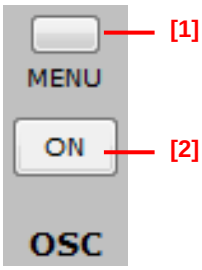
[1] M1/M2/SUM

Recall Bus Master to Select Encoder.
Operate Select Encoder to adjust the Fader Level of Bus Master and other settings.
* These buttons work separately from those of the NT110 main unit.

[2] INS/CUT/APFL/OSC/TB/SEL

Press one of these buttons to switch the button functions of Select Encoder.
* These buttons work separately from those of the NT110 main unit.

9-1-7 OSC



[1] MENU

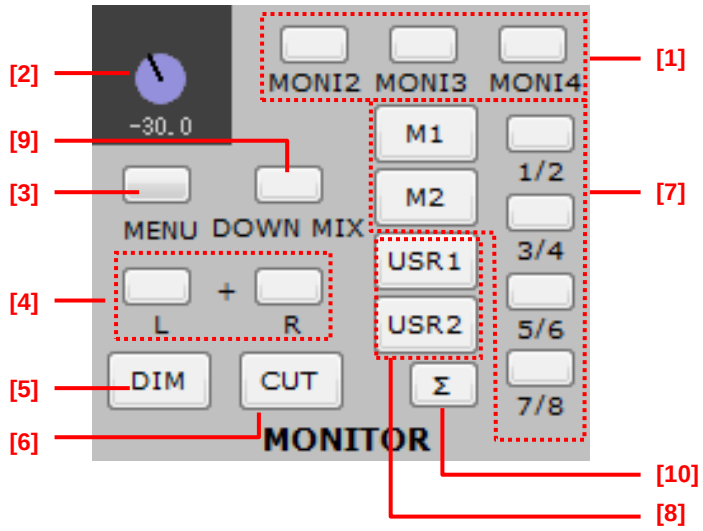
Displays the OSC/TB screen in the Mixer Work area.

[2] ON

Press the ON button to have OSC interrupt the output selected as OSC Set (Preset). Press the ON button again to cancel all the OSC interruptions.

9-1-8 Monitor

Perform various controls of Monitors 1 to 4.



[1] MONI2 / MONI3 / MONI4

Select a monitor that you want to control. Only one of these buttons can be selected. When all the buttons are off, Moni1 is selected.

* These buttons work separately from those of the NT110 main unit.

[2] Monitor volume (Encoder)

Adjust the monitor volume. The MONI LEVEL value is displayed under the volume.

[3] MENU

Displays the Monitor screen in the Mixer Work area.

[4] L/R

Perform L and R branching. Turn on both the L and R buttons to perform L+R branching.

[5] DIM

Turn on/off Dimmer. The volume is reduced.

[6] CUT

Turns on/off Cut. Audio is muted when Cut is on.

[7] M1/M2, 1/2, 3/4, 5/6, 7/8

Select M1/M2 monitor source. Selecting a combination of the M1/M2 button and the 1/2, 3/4, 5/6, or 7/8 button selects a source.

Example: If the M1 and 1/2 buttons are on, Master1-1/2 source is selected.

* You can select a monaural source by combining them with the L/R button.

Selection of a monitor source using a combination of M1/M2 and 1/2, 3/4, 5/6, or 7/8 buttons

Button selection		Console Mode			
		Stereo		5.1 Surr	
M1/M2	1- 8	RESOURCE	FORMAT	RESOURCE	FORMAT
M1	OFF	M1 1/2	ST	M1 1 - 6	5.1
	1/2	M1 1/2	ST	M1 1/2	ST
	3/4	M1 3/4	ST	M1 3/4	ST
	5/6	M1 5/6	ST	M1 5/6	ST
	7/8	M1 7/8	ST	M1 7/8	ST
M2	OFF	M2 1/2	ST	M2 1 - 6	5.1
	1/2	M2 1/2	ST	M2 1/2	ST
	3/4	M2 3/4	ST	M2 3/4	ST
	5/6	M2 5/6	ST	M2 5/6	ST
	7/8	M2 7/8	ST	M2 7/8	ST

[8] USR1 / USR2

Select a monitor source specified as User Source 1 or 2. Set the User Sources in the Monitor menu on the touch panel.

[9] DOWN MIX

Turn on this button to downmix surround sources and monitor them.

[10] Monitor Mix (Σ) button

This button enables the Monitor Mix function.
When this button is On, the maximum number of monitor source selection buttons that can be selected at a time is six in Mono or Stereo format and two in 5.1 Surround format. The audio of selected monitor sources are all sent being mixed.

9-1-9 Talk Back

[1] MENU

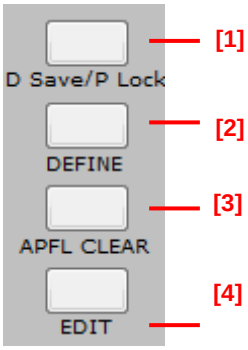
Displays the OSC/TB screen in the Mixer Work area.

[2] SET1/SET2

Press the Set1 button to have TB interrupt the output selected as TB Set1 (Preset1).

Press the Set2 button to have TB interrupt the output selected as TB Set2 (Preset2).

9-1-10 Utility



[1] D.SAVE/P.LOCK

Shows the Display Save/Panel Lock selection screen in the Mixer Work area on the Mix screen.

Select Display Save to put the NT110 main unit into the Display Save state, allowing the touch panel to go out. Press the D Save/P Lock button to cancel this state.

Select Panel Lock to lock panel operations on the NT110 main unit. Press the D Save/P Lock button to cancel this state.

[2] DEFINE

Press this button to switch Select Encoder to the Define function.

* These buttons work separately from those of the NT110 main unit.

[3] APFL CLEAR

This button is lit when at least one of the APFL buttons is on. Press this button while it is lit to deselect all the APFL buttons.

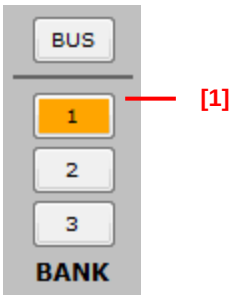
[4] EDIT

Displays the Edit menu in the Mixer Work area on the Mix screen.

The Edit menu allows you to copy and clear the channel parameters.

* These buttons work separately from those of the NT110 main unit.

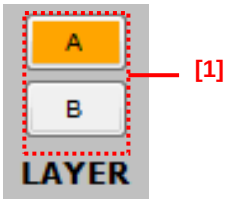
9-1-11 Bank Select



[1] BANK1/2/3/BUS

Switch the Fader 16 ch Banks.
There are three Banks for which the user can freely configure the layout: Bank1, Bank2, and Bank3. Each of the Banks has two layers (A/B).
Selecting the Bus switches the Fader 16ch Banks to the Bus. The Bus Bank has two layers: Layer A fixed to M1 and M2 and Layer B fixed to Sum.
* These buttons work separately from those of the NT110 main unit.

9-1-12 Layer Select

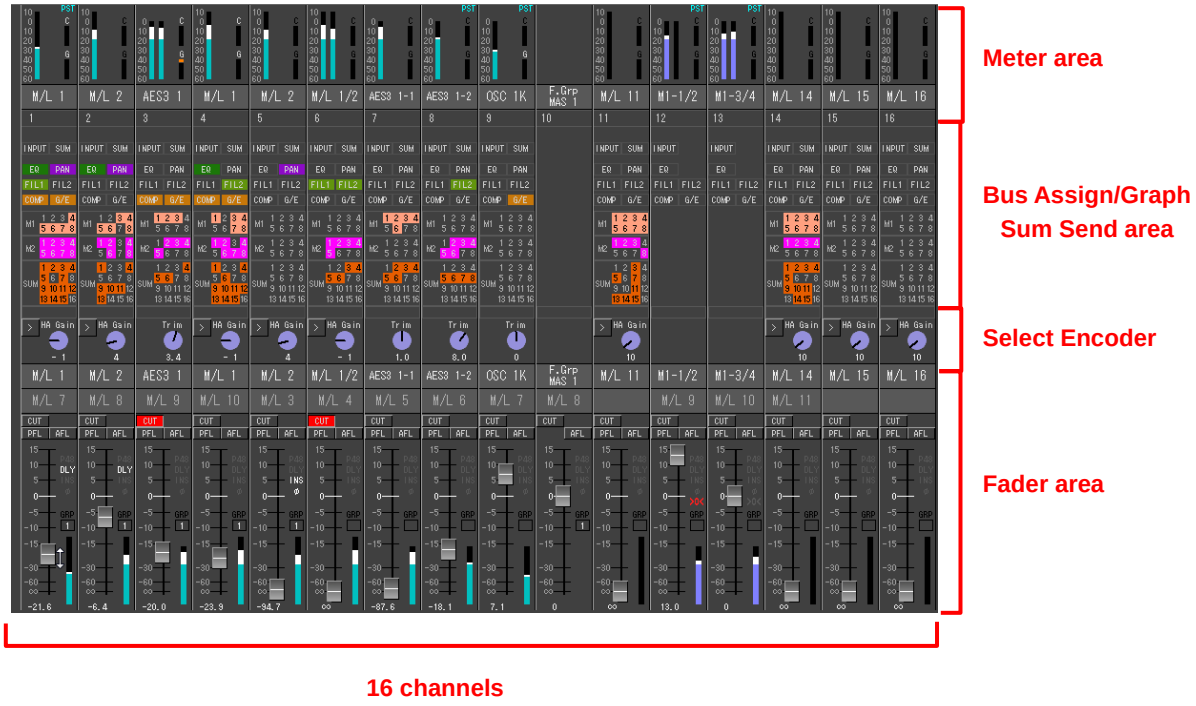


[1] LAYER A/B

Switch the Fader 16ch Layers.
Press this button to switch the all Fader 16ch Layers simultaneously.
* These buttons work separately from those of the NT110 main unit.

9-2 Mix

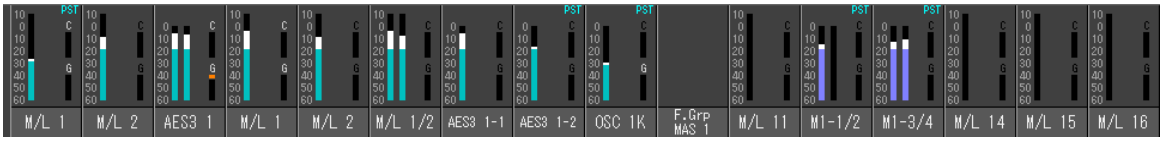
Displays this screen in the Mixer Work area when Mix is selected in the Mixer menu.
On this screen, parameters are set and meters are displayed for the channel laid out to the fader and for the Bus channel.



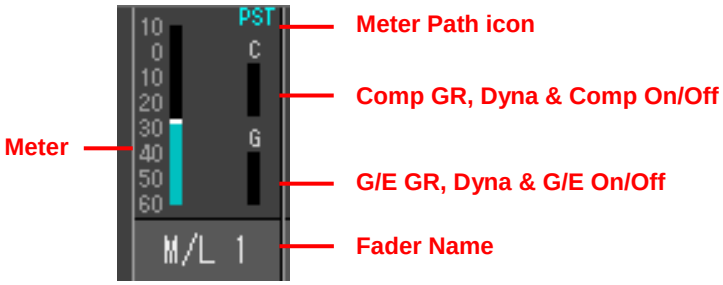
9-2-1 Meter Area

Displays Fader Meter or Bus Meter. Use the Meter Select button in the Mixer base area to display and select one of them.

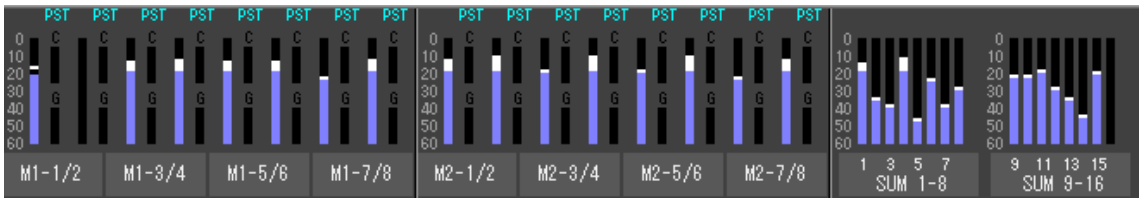
9-2-1-1 Fader Meter



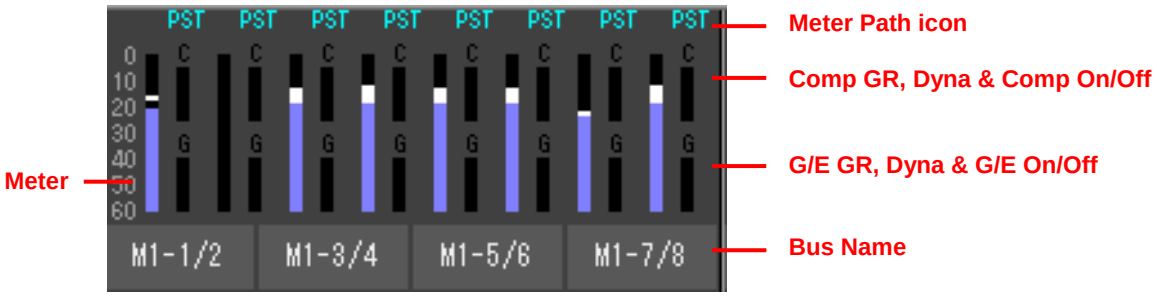
Displays the meter and information about fader channels.



9-2-1-2 Bus Meter



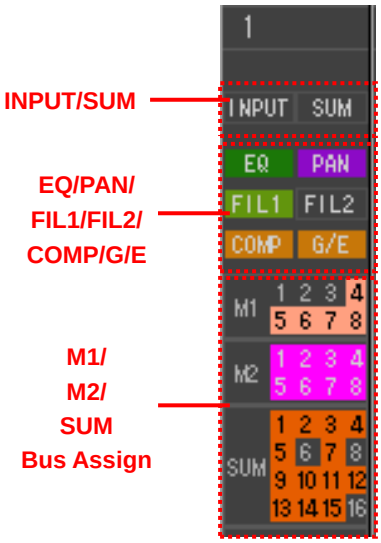
Displays the meter and information about Bus Master.



9-2-2 Bus Assign/Graph/Sum Send Areas

Displays Bus Assign, FIL/EQ/Dynamics/Pan graphs, and the Sum Send bar. Use the Assign/Graph/Sum Select buttons in the Mixer base area to display and select them. These areas also work as a function to assign parameters to Select Encoder.

9-2-2-1 Bus Assign



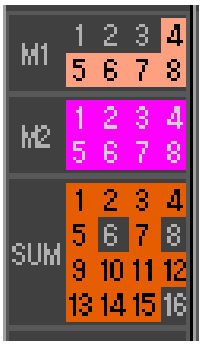
INPUT/SUM

Push one of these buttons to display the parameters appropriate for it in Select Encoder. Press the button again to cancel the display of the parameters.

EQ/PAN/FIL1/FIL2/COMP/G/E

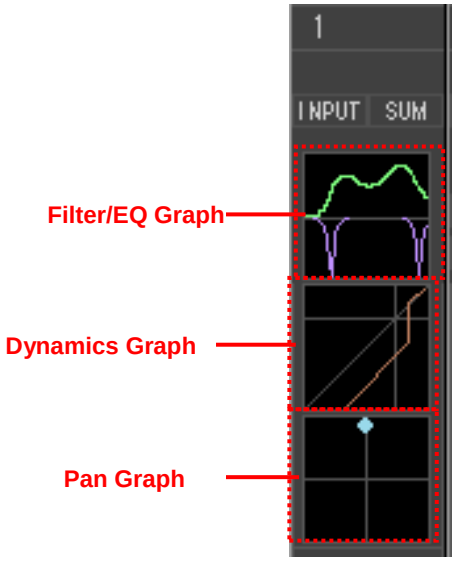
Turns on or off the setting value of each parameter.
Push one of these buttons to display the parameters appropriate for it in Select Encoder. Press the button again to cancel the display of the parameters.

M1/M2/SUM Bus Assign



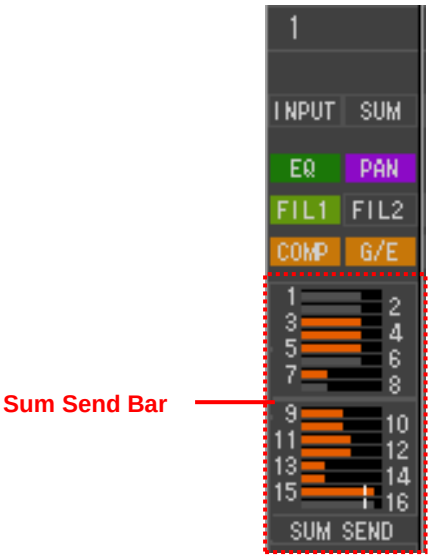
Makes Bus Assign settings of M1/M2/SUM.
Press each of 32 buttons to switch between on and off.

9-2-2-2 Graph



Displays each graph of Filter/EQ, Dynamics, and Pan.
Push the graph to display the parameters appropriate for it in Select Encoder.
Press the graph again to cancel the display of the parameters.

9-2-2-3 SUM Send



Displays the Send bars of SUM1 to 16.
Push the Send bar to display the parameters appropriate for it in Select Encoder.
Press the Send bar again to cancel the display of the parameters.

9-2-3 Select Encoder

Select Encoder, consisting of encoders and buttons, changes its use depending on modes.

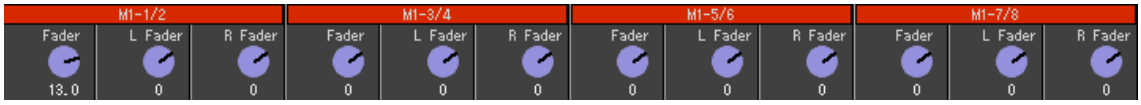
9-2-3-1 Default Mode

This is a normal mode. This mode is set when the other ones are not selected.
Select Encoder works as a function to set HA GAIN and TRIM parameters of each channel assigned to the fader.

9-2-3-2 Channel Setting Mode

By pressing the Bus Assign/Graph/Sum Send areas, the parameters of the channel assigned to the fader are deployed to ch1 to ch16 of the Select Encoder. Then, set and operate these parameters.

9-2-3-3 Bus Mode



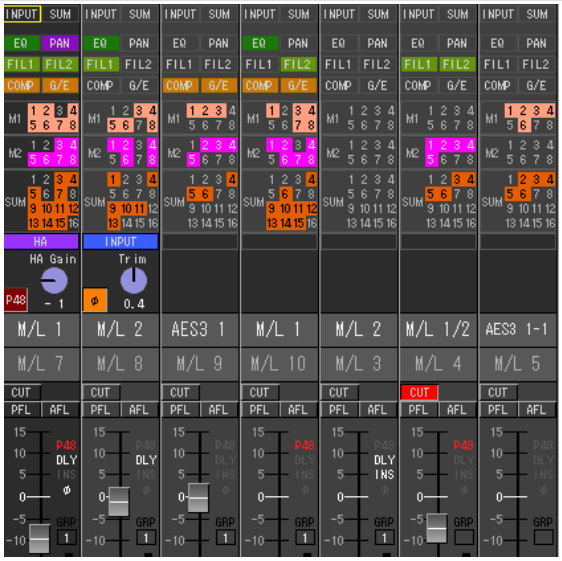
By pressing the Bus Master - M1/M2/SUM buttons in the Mixer base area, the parameters of the Bus channel are deployed to ch1 to ch16 of the Select Encoder. Then, set and operate these parameters.

9-2-3-4 Define Mode

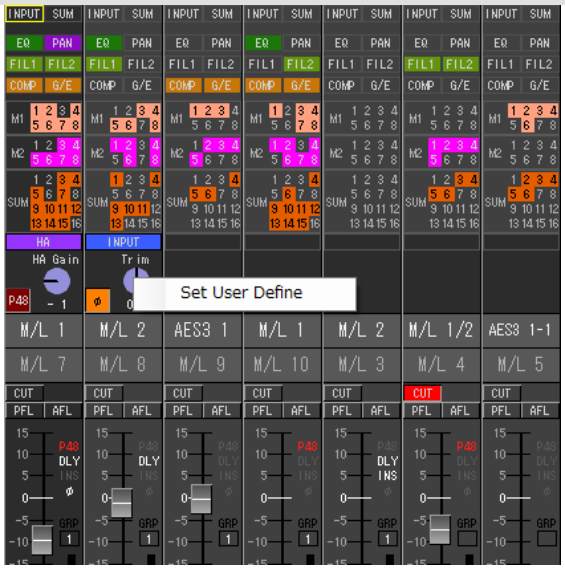
Recall the parameter set as a Define function for each channel when the Define button is On in the Mixer base area, and operate the parameter. The channel without the Define function works in Default Mode.

9-2-3-5 How to Set Define Encoder

1 Press the button in the Bus Assign/Graph/Sum Send areas on the Mix screen to recall in Select Encoder the parameter of the target channel you want to set as the Define function.

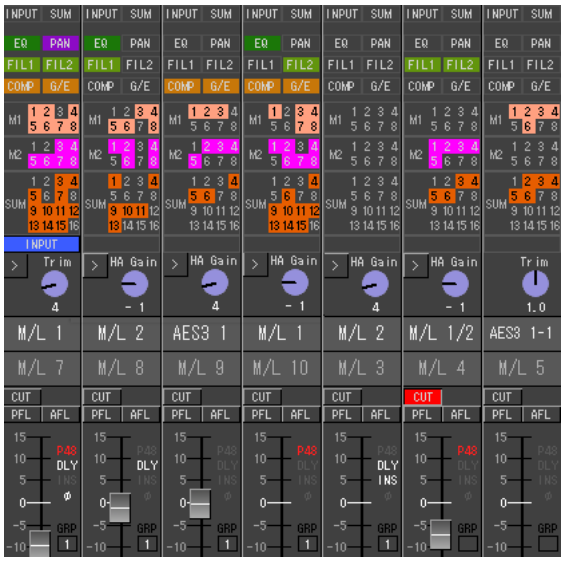


2 Put the mouse cursor on ENC of the target parameter, and select Set User Define from the right-click menu.

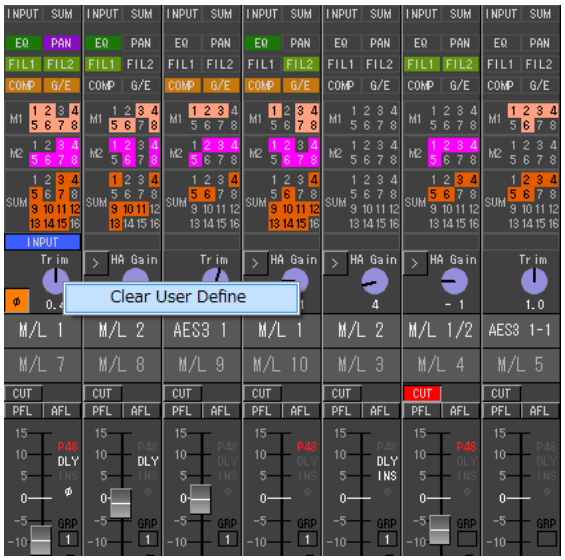


9-2-3-6 How to Cancel Define Encoder

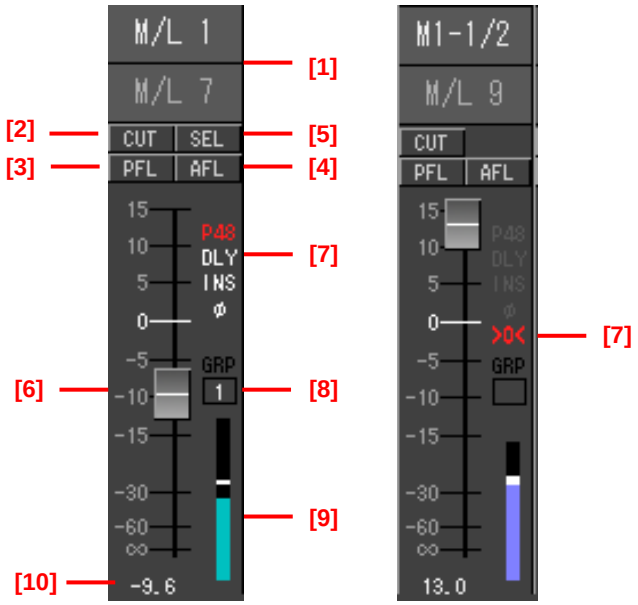
1 Turn on the DIFINE button to switch Select Encoder to the Define function.



2 Put the mouse cursor on ENC of which you want to clear the Define function, and select Clear User Define from the right-click menu.



9-2-4 Fader Area



[1] Fader Name

Displays the name of the assigned channel.
The currently selected layer is displayed in the upper row, and the unselected one in the lower row.

[2] CUT button

Sets CUT On/Off.

[3] PFL button

Sets PFL On/Off.

[4] AFL button

Sets AFL On/Off.

[5] SEL button

You can select this button in Edit mode.
It is used to specify channels.

[6] FADER slider

Sets the Fader Level.
The FADER slider knob is displayed in a Visual Group setting color. (8 colors including Off)

[7] Setting icons

Display the On/Off status of various settings.
>0< is displayed in the On state when the Fader Level of M1/M2/SUM channels is in the position other than 0 dB.

[8] Fader Group No.

Displays the number set for the Fader Group.

[9] Meter

Displays the audio meter.
The maximum level of L/R/C/LFE/Ls/Rs is displayed for Stereo channels or 5.1 surround channels.

[10] Fader Level

Displays the Fader Level.

9-3 Monitor

Displays this screen in the Mixer Work area when Monitor is selected in the Mixer menu. The setting items and information are the same as the touch panel menus on the NT110 main unit.

9-4 Group/Meter

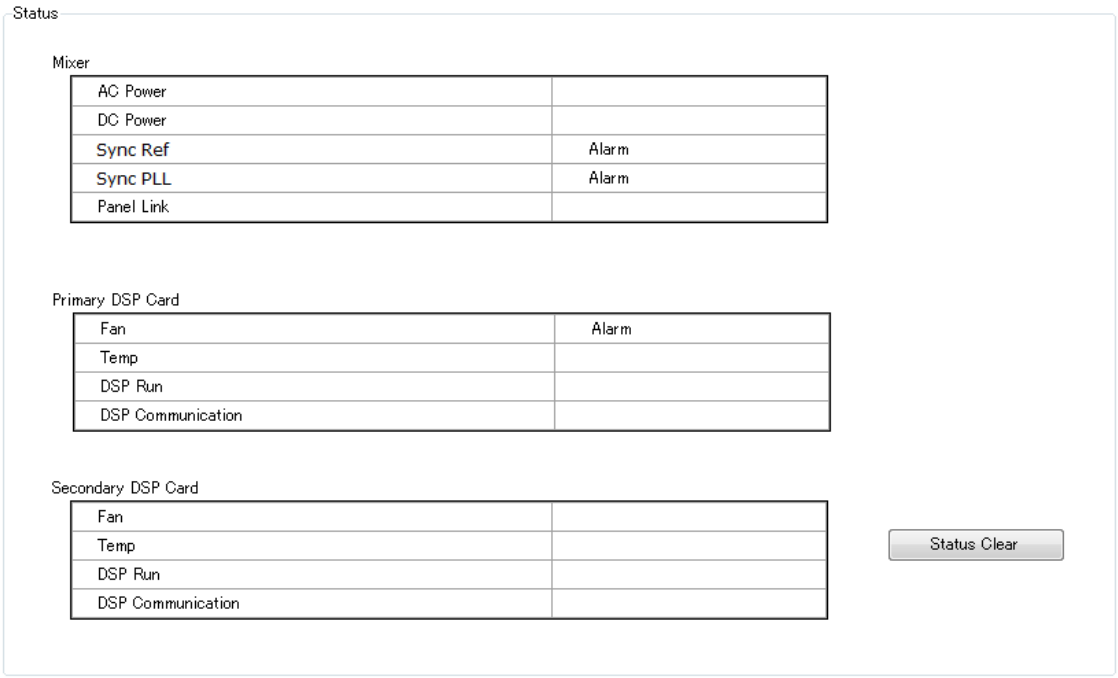
Displays this screen in the Mixer Work area when Group/Meter is selected in the Mixer menu.
The setting items and information are the same as the touch panel menus on the NT110 main unit.

9-5 OSC/TB

Displays this screen in the Mixer Work area when OSC/TB is selected in the Mixer menu. The setting items and information are the same as the touch panel menus on the NT110 main unit.

10. Status Menu

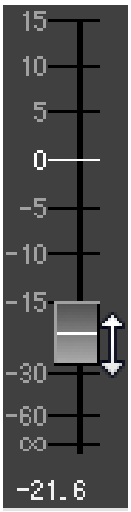
Displays the information about an alarm occurring on the NT110 main unit.
If the alarm occurs, the text string Alarm appears in cells on the right side.
Press the Status Clear button when the Mixer status ALARM blinks, and it will be lit.



11. Appendix

11-1 Basic Operations of Fader/Encoder

11-1-1 Operation Procedure for Fader



Put the mouse cursor on the fader knob, and move the mouse while holding down it.

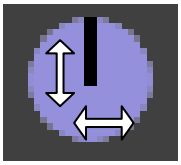
Movement in the upper direction:

The parameter value changes in the increment direction.

Movement in the lower direction:

The parameter value changes in the decrement direction.

11-1-2 Operation Procedure for Encoder



Put the mouse cursor on the encoder, and move the mouse while holding down it.

Movement in the upper or right direction:

The parameter value changes in the increment direction.

Movement in the lower or left direction:

The parameter value changes in the decrement direction.

11-2 Backing Up and Uploading NT110 Data

Have ready a Computer on which NT110 NT Mix has been installed.

11-2-1 Transferring Backup Data from NT110 to Computer File (Backup)

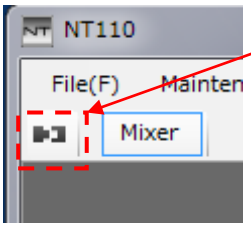
1 Connect the DSP CARD and the Computer with a LAN cable.

If two DSP CARDs are mounted, connect the cable to the ACT (active) DSP CARD. (If the Primary DSP CARD is ACT, connect the cable to the Primary DSP CARD; If the Secondary DSP CARD is ACT, connect the cable to the Secondary DSP CARD)

2 Turn on the NT110 power.

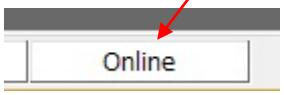
3 Start NT110 NT Mix installed on the Computer.

4 Connect NT110 NT Mix.

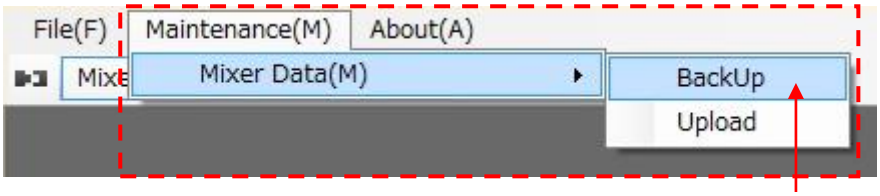


Press the connection button to connect NT110 and the computer.

When connection is established, the button displays Online.



5 On NT110 NT Mix, select Maintenance - Mixer Data - Backup.

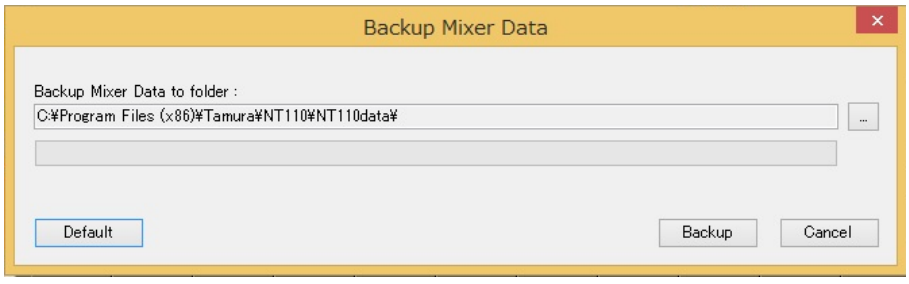


Select Maintenance - Mixer Data - Backup.

6 Using the displayed dialog, specify a file name and press the Backup button.

Data is transferred from NT110 to a file in the selected folder. This process takes some time. Wait until it is completed.

The stored file contains the settings (including Setup ones) and all the Preset Program files of the NT110 main unit.



11-2-2 Transferring Backup Data from Computer File to NT110 (Upload)

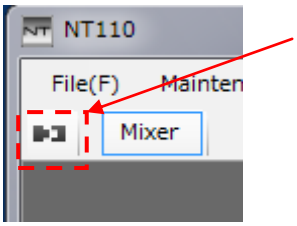
1 Connect the DSP CARD and the Computer with a LAN cable.

If two DSP CARDs are mounted, connect the cable to the ACT (active) DSP CARD. (If the Primary DSP CARD is ACT, connect the cable to the Primary DSP CARD; If the Secondary DSP CARD is ACT, connect the cable to the Secondary DSP CARD)

2 Turn on the NT110 power.

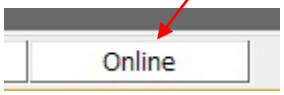
3 Start NT110 NT Mix installed on the Computer.

4 Connect NT110 NT Mix.

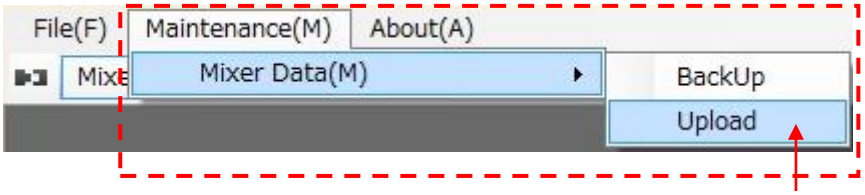


Press the connection button to connect NT110 and the computer.

When connection is established, the button displays Online.



5 On NT110 NT Mix, select Maintenance - Mixer Data - Upload.



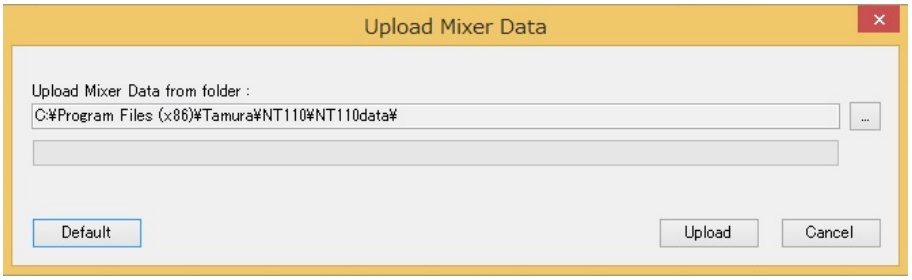
Select Maintenance - Mixer Data – Upload.

6 Using the displayed dialog, select the NT110 backup file that has been stored on the Computer and press the Upload button.

Data is transferred from the backup file to NT110. This process takes some time. Wait until it is completed.

The backup file contains the settings (including Setup ones) and all the Preset Program files of the NT110 main unit.

After data transfer is completed, the data in the NT110 main unit is replaced with the data in the backup file.



—— TAMURA QUALIITY CIRCLES THE ELECTRON WORLD ——

Customer Service

If you experience any problems with our products and require any servicing, or have any questions about TAMURA product line, please contact your TAMURA sales representative or TAMURA at the following locations.
To help speed up servicing and readjustment, please be ready to describe the problem accurately, what operations you were performing before and after it happened, or the history of usage.

NT110 NT Mix V1.xx **Operation Manual (EN)**
June, 2017 First Edition
Part No. 2D-53-00027900

TAMURA CORPORATION

(Head Office) 1-19-43, Higashi-Oizumi, Nerima-ku, Tokyo, 178-8511 Japan
Phone: +81-3-3978-2111 Fax: +81-3-3923-0230

(Contact)
International Sales Broadcom Business Unit
Phone: +81-3-3978-2242 Fax: +81-3-3978-2005