

SONY

SONY®

**Multi Format
Switcher System**
MVS-8000X System (With CCP-8000 Series)

Multi Format Switcher System

MVS-8000X System
(With CCP-8000 Series Center Control Panel)

User's Guide
Volume 3
1st Edition (Revised 1)

English

User's Guide

English

Volume 3
1st Edition (Revised 1)

4-177-900-02 (1)

SONY®

MVS-8000X System

(With CCP-8000 Series Center Control Panel)

User's Guide

Multi Format Switcher System

Volume 3 English

1st Edition (Revised 1)

Software Version 10.00 and Later

NOTICE TO USERS

© 2010 Sony Corporation. All rights reserved. This manual or the software described herein, in whole or in part, may not be reproduced, translated or reduced to any machine readable form without prior written approval from Sony Corporation.

SONY CORPORATION PROVIDES NO WARRANTY WITH REGARD TO THIS MANUAL, THE SOFTWARE OR OTHER INFORMATION CONTAINED HEREIN AND HEREBY EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WITH REGARD TO THIS MANUAL, THE SOFTWARE OR SUCH OTHER INFORMATION. IN NO EVENT SHALL SONY CORPORATION BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, WHETHER BASED ON TORT, CONTRACT, OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THIS MANUAL, THE SOFTWARE OR OTHER INFORMATION CONTAINED HEREIN OR THE USE THEREOF.

Sony Corporation reserves the right to make any modification to this manual or the information contained herein at any time without notice.

The software described herein may also be governed by the terms of a separate user license agreement.

<Organization of This User's Guide>

The User's Guide for this system comprises Volumes 1 to 3.

Volume 1

The volume comprises the following chapters.

- Chapter 1 MVS-8000X Functions
- Chapter 2 Menus and Control Panel
- Chapter 3 Signal Selection and Transitions
- Chapter 4 Keys
- Chapter 5 Wipes
- Chapter 6 DME Wipes
- Chapter 7 Frame Memory
- Chapter 8 Color Backgrounds, Copy and Swap, and Other Settings
- Chapter 9 Color Corrector
- Chapter 10 Special Functions
- Appendix (Volume 1)
 - Wipe Pattern List
 - DME Wipe Pattern List
 - Resizer DME Wipe Pattern List
 - Menu Tree

Index

Volume 2

The volume comprises the following chapters.

- Chapter 11 DME Operations
- Chapter 12 External Devices
- Chapter 13 Keyframe Effects
- Chapter 14 Snapshots
- Chapter 15 Utility/Shotbox
- Chapter 16 Macros
- Chapter 17 Files
- Appendix (Volume 2)
 - SpotLighting
 - Functional Differences With Models of DME
 - Macro File Editing Rules
 - About the Macro Attachment List Display
 - Menu Operations Not Recorded in a Menu Macro

Index

Volume 3

This book. For the contents of this volume, see “Table of Contents” at the front.

- Chapter 18 System Setup (System)
- Chapter 19 Control Panel Setup (Panel)
- Chapter 20 Switcher Setup (Switcher)
- Chapter 21 DME Setup (DME)
- Chapter 22 DCU Setup (DCU)

Chapter 23	Setup Relating to Router Interface and Tally (Router/Tally)
Chapter 24	Simple Connection of the MKS-8080/8082 AUX Bus Remote Panel
Chapter 25	DIAGNOSIS
Appendix (Volume 3)	• Data Saved by [Setup Define] and [Initial Status Define] • Error Messages
Index	

Table of Contents

Chapter 18 System Setup (System)

Setup for the Whole System.....	12
Network Settings (Network Config Menu).....	13
Making the Network Settings.....	13
System Settings (System Config Menu).....	15
Specifying the Switcher Controlled by the Control Panel	15
Specifying the DME Connected to the Switcher.....	16
Enabling the FM Data Port of the Switcher	17
Setting the Signal Format (Format Menu).....	18
Setting the Signal Format	18
Switching the Input Reference Signal for HD System.....	19
Setting Conversion Formats	20
Setting the Screen Aspect Ratio (Format Menu).....	24
Selecting the State After Powering On (Start Up Menu).....	25
Saving and Recalling Setup Data	26
Selecting the State at Start-up	27
Saving User-Defined Settings	28
Setting Automatic Loading of Register Data at Power On (Autoload Function)	28
Reset and Initialization (Initialize Menu).....	29
Installation and Device Setup (Install/Unit Config Menu)	30
Installing Software	30
Making Settings Required to Use the Software	32
Adding User Texture Patterns	35
Setting the DME Input/Output Signal Format	42
System Maintenance (Maintenance Menu).....	43
Setting the Date and Time	43
Using a Memory Card	44
Carrying Out the Primary Setting.....	45
Reloading a USB Driver.....	45
Initializing the Hard Disk	45
Locking the Setup Menu Settings	46
Locking File Loading Operations.....	49

Chapter 19 Control Panel Setup (Panel)

Overall Control Panel Settings (Config Menu).....	52
Panel Setup	52
Interchanging the Bank Order or Disabling Operation	53
Assigning Two M/E Banks to One M/E Bank	54
Assigning the Key Delegation in the Downstream Key Control Block	55
Linking Switcher Bus and Router Destination	56
Linking Transitions Between Keyers	59
Linking the Next Transition Selection Buttons	59
Selecting the Module to be the Reference for Device Control Block ...	60
Assigning a Region to the Region Selection Buttons in the Numeric Keypad Control Block or Multifunction Flexi Pad Control Block	61
Setting Transition Control Block Button Assignments	63
Setting the Assignment of Macro Operation Buttons	64
Assigning the Dual Background Bus Mode Switching Function.....	65
Assigning the Utility/Shotbox Mode Switching Function	66
Assigning the Function to Disable Cross-Point Button Operations to a Button	66
Assigning the AUX Bus Control Mode Switching Function	67
Assigning Keys to the DSK1 and DSK2 Buttons in the Downstream Key/ Fade-to-Black Control Block	68
Assigning Keys to the Independent Key Transition Control Block (Simple Type)	68
Assigning Functions to Key Control Block Buttons	71
Assigning Preview Output to Preview Selection Buttons	72
Assigning Functions to the Device Control Block	73
Inhibiting Utility 2 Bus and Key Operations.....	75
Inhibiting DME Channel Selection Operations.....	76
Assigning Functions to the Menu Control Block Top Menu and User Preference Buttons	76
Assigning Functions to the Buttons in the Multifunction Flexi Pad Control Block	77
Assigning a Function to the Independent Key Transition Control Block (Simple Type)	80
Cross-Point Settings (Xpt Assign Menu)	83
Creating Cross-Point Assign Tables.....	84
Copying Cross-Point Assign Tables.....	89
Selecting Cross-Point Assign Tables	90

Exporting Source Names and Destination Names.....	91
Making Settings for Audio Mixer	92
Assigning a Cross-Point Button to Enable/Disable Side Flags	93
Auxiliary Bus Control Block Settings (Aux Assign Menu).....	94
Assigning a Bus to an AUX Delegation Button	94
Using the Auxiliary Bus Control Block for Router Control	95
Setting Button Assignments (Prefs/Utility Menu)	100
Assigning Functions to User Preference Buttons.....	100
Assigning a Function to a Memory Recall Button in the Utility/Shotbox Control Block	105
Assigning a Function to the Key 2 Row Cross-Point Buttons	111
Interfacing With External Devices (Device Interface Menu)	112
Making Control Panel GPI Input Settings.....	112
Making Control Panel GPI Output Settings	115
Setting the Control Mode for P-Bus Devices	117
Setting the SCU Editor Panel Port	117
Making DCU Serial Port Settings	118
Sharing Disk Recorder/Extended VTR File Lists	119
Setting the AUX Bus Override Operating Mode	120
Operation Settings (Operation Menu).....	121
Setting the On-Air Tally	122
Setting the Transition Rate Display Mode	122
Making Settings Relating to Effects.....	123
Setting the First Keyframe When a Rewind is Executed	123
Setting the Source and Destination Names	124
Settings for the Flexi Pad and Wipe Snapshot Menu	125
Setting the Button Operation Mode.....	125
Setting the Operation Mode of the [ALL] Button in the Transition Control Block	128
Setting Trackball, Joystick, Search Dial, and Double-Click Sensitivity	128
Specifying Main Split Fader.....	129
Setting the Macro Execution Mode.....	129
Screen Saver and Other Settings (Maintenance Menu).....	131
Screen Saver Settings	131
Adjusting the Brightness	131
Adjusting the Alarms.....	132
Calibrating the Touch Panel	132
Setting the Menu to be Shown When the Menus Are Started.....	133

Setting the Mouse Wheel Scrolling Direction for Parameter Setting..	133
Selecting the Mouse Button Used for Adjusting the Knob Parameters	133

Chapter 20 Switcher Setup (Switcher)

Settings for Switcher Configuration (Config Menu)	136
Adjusting the Reference Phase	137
Specifying the Video Switching Timing	137
Setting the Operation Mode	137
Setting User Regions	140
Assigning PGM/PST Logically to an M/E.....	141
Setting the Assignments of DME Channels to Use on the Individual M/E Banks.....	141
Setting the Side Flag Video Material and Operation	142
Signal Input Settings (Input Menu)	144
Making Through Mode Settings.....	144
Making Video Process Settings.....	145
Enabling the Illegal Color Limiter	145
Selecting the Format Converter Conversion	146
Signal Output Settings (Output Menu)	153
Assigning Output Signals	153
Setting the Output Signal	154
Settings Relating to Video Switching (Transition Menu)	158
Selecting the Bank to Make the Settings	158
Settings Relating to Keys, Wipes, Frame Memory and Color Correction (Key/Wipe/FM/CCR Menu).....	161
Switching Video Process Memory On or Off	162
Settings for the Show Key Function.....	162
Settings for Key Auto Drop Function	162
Automatically Naming and Saving to Frame Memory	163
Selecting the Bank to Make the Settings	163
Settings Relating to Function Links (Link Menu).....	166
Setting a Cross-Point Button Link.....	166
Making Link Table Settings	168
Linking Cross-Point Buttons and GPI Output Ports	168
Making a Setting for Linking Two M/E Banks.....	171
Making a Link Setting for Key Transition	172
Interfacing With External Devices (Device Interface Menu)	174
Making 9-Pin Port Device Interface Settings	174

Making Switcher Processor GPI Input Settings	175
Making Switcher Processor GPI Output Settings	178
Enabling or Disabling AUX Bus Control.....	179
Setting DME and Switcher Interfaces	180
Selecting the Mode for Turning Off Keys Upon Receiving the Editor Command	181

Chapter 21 DME Setup (DME)

Settings Relating to Signal Inputs (Input Menu).....	184
Setting the Initial Crop	184
Setting an Illegal Color Limit for Matte Signals	185
Making DME System Phase Adjustment	185
Settings Relating to Signal Outputs (Output Menu)	186
Setting the Monitor Output.....	186
Interfacing With External Devices (Device Interface Menu)	187
Making DME GPI Input Settings	188
Making DME GPI Output Settings	190

Chapter 22 DCU Setup (DCU)

Setup Relating to DCU	192
Settings Relating to Parallel Inputs (Input Config Menu).....	193
Assigning a GPI Input Port	193
Releasing the Assignment of a GPI Input Port.....	194
GPI Input Setting (GPI Input Assign Menu)	195
Making DCU GPI Input Settings	195
Parallel Output Settings (Output Config Menu)	199
Assigning a GPI Output Port	199
Releasing the Assignment of a GPI Output Port	200
GPI Output Setting (GPI Output Assign Menu)	201
Making DCU GPI Output Settings	201
Serial Port Settings (Serial Port Assign Menu)	204
Making Serial Port Settings	204
Making Detailed Settings on the External Device Connected to the Serial Port	206

Chapter 23 Setup Relating to Router Interface and Tally (Router/Tally)

Router Interface Settings (Router Menu)	216
Assigning Switcher Inputs and Outputs to S-Bus Space	216
Making an External Box Setting	217

Tally Group Settings (Group Tally Menu)	220
Wiring Settings (Wiring Menu)	221
Making New Wiring Settings	221
Changing the Wiring Settings	222
Deleting Wiring Settings	222
Sorting Wiring Settings	222
Tally Generation Settings (Tally Enable Menu)	224
Making New Tally Generation Settings	224
Modifying Tally Generation	225
Deleting Tally Generation Settings	225
Tally Copy Settings (Tally Copy Menu)	227
Making New Tally Copy Settings	227
Modifying Tally Copy Settings	228
Deleting Tally Copy Settings	228
Parallel Tally Settings (Parallel Tally Menu)	229
Making or Modifying Parallel Tally Settings	229
Deleting Parallel Tally Settings	230
Serial Tally Settings (Serial Tally Menu)	231
Setting or Changing the Serial Tally Settings	231
Making the Serial Tally Source Address Settings	231
Clearing a Source Address Setting	232
 Chapter 24 Simple Connection of the MKS-8080/8082 AUX Bus Remote Panel	
Procedure for Simple Connection	234
Setting Status of the MKS-8080/8082 in Simple Connection	235
 Chapter 25 DIAGNOSIS	
Checking the Communications Status	238
Communications Status Display	238
 Appendix (Volume 3)	
Data Saved by [Setup Define] and [Initial Status Define]	242
Data Saved by [Setup Define]	242
Data Saved by [Initial Status Define]	247
Error Messages	251
Error Messages Displayed in the Error Status/Error Log Menu	251
Error Messages Appearing in a Message Box	255
Error Messages Shown in the Error Information Menu	268
Index	270

Chapter 18 System Setup (System)

Setup for the Whole System

Carry out operations relating to setup for the whole system in the Engineering Setup menu.

To access the Engineering Setup menu, press the top menu selection button [ENG SETUP].

Here the “whole system” refers to all devices connected on the Control LAN. The DCU is connected through the control panel, but is also included in the “whole system.”

For an overview of setup, see “Setup” in Chapter 1 (Volume 1).

Setting the unit ID

When there are two switchers and connected DME units on the same network, it is necessary to set the unit ID on each device, as follows.

Switcher	ID
1st switcher	1
2nd switcher	2

DME	ID
DME1 for 1st switcher (channels 1 to 4)	1
DME2 for 1st switcher (channels 5 to 8)	2
DME1 for 2nd switcher (channels 1 to 4)	3
DME2 for 2nd switcher (channels 5 to 8)	4

When the signal format is 1080P

You can connect up to four MVE-8000A units to the first switcher. The unit IDs for these DMEs are assigned as follows.

DME	ID
DME1 for 1st switcher (Ch1/2)	1
DME2 for 1st switcher (Ch3/4)	2
DME3 for 1st switcher (Ch5/6)	3
DME4 for 1st switcher (Ch7/8)	4

Notes

The signal format for the second switcher cannot be changed to 1080P.

For more details of how to make the unit ID settings, refer to the installation manual for the particular device.

Network Settings (Network Config Menu)

This provides automatic configuration of all devices connected to the Data LAN (excluding the DCU), and displays a list of them.

To make the network settings, use System >Network Config menu.

To display the Network Config menu

In the Engineering Setup menu, select VF1 'System' and HF1 'Network Config.'

The status area shows the device ID, and Control LAN and Data LAN IP addresses for each device excluding the DCU.

Making the Network Settings

Checking IP address automatically

- 1 In the System >Network Config menu, press [Auto Config].

This automatically checks all devices (excluding the DCU) connected to the Data LAN.

- 2 Once switch to another menu, then display the Network Config menu again.

Now the status area of the System >Network Config menu shows the results of the automatic check.

Notes

Be sure to carry out this operation after reconfiguring the system, or after a software upgrade.

Using the NFS server

The address of the currently selected NFS server appears in the [NFS Server Address] box in the lower status area.

Notes

When the control panel is reset, no NFS server can be used via the Network Config menu. In this case, to use an NFS server, make sure to carry out the following procedure.



- 1** In the System >Network Config menu, press [NFS Server].
A keyboard window appears.
- 2** Enter the address of the server you want to use.
- 3** Press [NFS Mount].

System Settings (System Config Menu)

To make the system settings, use the System >System Config menu.
Specify the hierarchical relationship of the devices.

To display the System Config menu

In the Engineering Setup menu, select VF1 'System' and HF2 'System Config.'

Notes

After changing the following settings, be sure to press [Execute] to save the new values. If you want to cancel the setting changes without saving them, press [Clear].

Device hierarchical relationship setting

- **Panel Assign:** Specify the switcher controlled by a control panel.
- **Switcher Assign:** Specify the DME connected to a switcher.

Specifying the Switcher Controlled by the Control Panel

The number of control panels that can be connected to a single switcher depends on the signal format setting.

1080P: 2

Other than 1080P: 4

- 1** In the System >System Config menu, press the [Panel Assign] button.
The Panel Assign menu appears.
- 2** Select the switcher to be controlled by the selected control panel, as follows.

In the <1st Switcher> group, set either [SWR1] or [SWR2] to On to select the switcher to be operated.
In the <2nd Switcher> group, set both [SWR1] and [SWR2] to Off.
- 3** To set the selected control panel as tally control master panel, press [Tally Master], turning it on.

If there are multiple panels and processors, the control panel for which [Tally Master] is set to On carries out tally control for the whole system.

Notes

When there are multiple control panels, make sure that one of them has [Tally Master] set to On. When you change the master panel, be sure to copy and save the setup tally (TLY) and router (RTR) data in the File menu, and make the same settings for other panels.

If you load the master panel tally data into a panel with a different unit ID, then [Tally Master] changes to Off.

To select the lighting mode of the switcher bus selection buttons on the remote panel

When switching buses with the MKS-8080/8082 AUX Bus Remote Panel or other remote panel connected via S-Bus data link, you can select the lighting mode of the bus selection buttons.

In the System >System Config >Panel Assign menu, select either of the following in the <S-Bus Remote Sw'er Status> group.

Mode 1: The inhibited buttons do not light even when pressed, and the other buttons light after a longer delay time than in Mode 2.

Mode 2: The delay time for button lighting is reduced, but even the inhibited buttons may light for a moment when pressed.

Notes

- Make sure that [Tally Master] is set to On.
- When simple connection is used between the center control panel and remote panel (*see page 233*), this setting is disabled.

Specifying the DME Connected to the Switcher

- 1 In the System >System Config menu, press [Switcher Assign].
The Switcher Assign menu appears.
- 2 Using either of the following methods, select the switcher to which the settings apply.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.

The selected switcher appears in reverse video.
- 3 Make the DME settings as follows.
 - **When making DME settings for SWR1**, for the first DME, select [DME1] in the <1st DME> group. For the second DME, select [DME2] in the <2nd DME> group. When a second DME is not connected, turn all buttons in the <2nd DME> group off.

- **When making DME settings for SWR2**, for the first DME, select [DME3] in the <1st DME> group. For the second DME, select [DME4] in the <2nd DME> group. When a second DME is not connected, turn all buttons in the <2nd DME> group off.

When the signal format is 1080P

You can connect up to four MVE-8000A units to SWR1.

For SWR1, you can select a DME combination as follows, depending on the number of DMEs connected.

Only one DME connected: DME1

Two DMEs connected: DME1 and DME2

Three DMEs connected: DME1, DME2, and DME3

Four DMEs connected: DME1, DME2, DME3, and DME4

Depending on the selected DME combination, press [DME1] (first DME), [DME2] (second DME), [DME3] (third DME), or [DME4] (fourth DME), turning them on.

For SWR2, the signal format cannot be changed to 1080P.

Enabling the FM Data Port of the Switcher

With the FM data port enabled, frame memory data can be transferred in a short time between the switcher and the control panels.

Notes

If multiple control panels are in use, [FM Data Port Enbl] can be turned on for only one control panel per switcher.

- 1 In the System >System Config menu, press [Switcher Assign].
The Switcher Assign menu appears.
- 2 Using any of the following methods, select the switcher to be set.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.

The selected switcher is displayed in reverse video.

If there is only one switcher on the network, make the setting only for SWR1 (the first switcher).

- 3 Press [FM Data Port Enbl], turning it on.

Setting the Signal Format (Format Menu)

To set the format, that is, the frame frequency and number of scan lines handled by each device, use the System >Format menu.

To display the Format menu

In the Engineering Setup menu, select VF1 'System' and HF3 'Format.'

Notes

After changing any of the following settings, be sure to press [Execute] (or [FC Format Execute] for changing the format converter signal format) to save the new values. If you want to cancel the settings and return to the original state, press [Clear] without pressing [Execute] or [FC Format Execute]. When you press [Execute], some data is lost (such as frame memory images). If you press [FC Format Execute], memory is not initialized, and this data is not lost.

Restrictions on signal formats and re-entry

Re-entry restrictions for an M/E on which a selected signal format can be used depend on whether or not the color corrector is used. *For details, see Chapter 9 "Preparations" (Volume 1).*

Setting the Signal Format

Specify the signal format to be handled by the devices.

The combinations of signal formats that can be selected are as follows.

System	Field frequency	Effective number of scan lines
HD system	50	1080i
	59.94	
	50	1080P
	59.94	
	23.976	1080PsF
	24	
	25	
	29.97	
	50	720P
	59.94	

System	Field frequency	Effective number of scan lines
SD system	59.94	480i
	50	576i

1 In the System >Format menu, select the device for operations.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Device	Selection of device for operations	1 and upwards

2 Press [Signal Format].

A pop-up window appears.



3 Press the button for the desired signal format.

Switching the Input Reference Signal for HD System

This changes the input reference signal.

- **Tri Sync:** tri-level sync for an HD system
- **BB (Black Burst):** black burst or sync

The following table shows the relation between signal format and the frequency of a signal that can be used as the input reference signal.

Signal format	Input reference signal		
	Tri Sync	Black burst	
1080PsF/29.97 1080P/59.94, 1080i/59.94	59.94	Black Burst 59.94	Sync 59.94

Signal format	Input reference signal		
	Tri Sync	Black burst	
1080PsF/25 1080P/50, 1080i/50	50	Black Burst 50	Sync 50
1080PsF/23.976	47.952	Black Burst 59.94 ^{a)}	Sync 59.94 ^{a)}
1080PsF/24	48	—	
720P/59.94	59.94	Black Burst 59.94	Sync 59.94
720P/50	—	Black Burst 50	Sync 50

a) Interlock mode

Setting Conversion Formats

Installing the MKS-8450X Format Converter Board in the MVS-8000X enables signal video format conversions.

This operation is valid only when BB is selected in the <Ref Input Format> group.

Format converter

Installing the Format Converter Board in the switcher enables the following signal video format conversions.

- Up-conversion: from SD (4:3) to HD (16:9)
- Down-conversion: from HD (16:9) to SD (4:3)
- Cross-conversion: from HD (720P) to HD (1080i), or from HD (1080i) to HD (720P)

The maximum number of input signals for which format conversion is possible is 16 (or 8 when only one MKS-8450X board is installed), and the maximum number of output signals is 4 (two outputs when the MKS-8160X is not installed).

Notes

- After format conversion, input and output signals have one-frame delays with respect to the reference signals. To synchronize converted input signals and unconverted input signals, it is possible to delay the unconverted input signal by one frame.

For details, see “To delay unconverted input signals by one frame” (page 22).

- When the input reference signal for HD system is set to Tri Sync, the format converter function is not available.

For details, see “Switching the Input Reference Signal for HD System” (page 19).

Format combinations allowing conversion

The supported combinations of switcher signal format and format converter (inputs 1 to 8 and inputs 9 to 16) are as follows.

Notes

The format converter cannot be used when the signal format is 1080PsF.

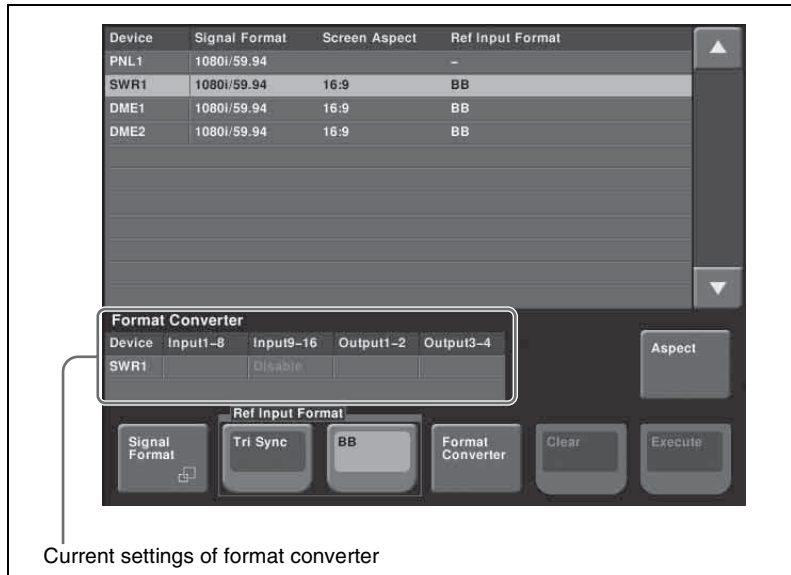
Switcher signal format setting	Format converter signal format setting			
	FC Input 1-8	FC Input 9-16	FC Output 1-2	FC Output 3-4
480i/59.94	720P/59.94 1080i/59.94	720P/59.94 1080i/59.94	720P/59.94 1080i/59.94	720P/59.94 1080i/59.94
576i/50	720P/50 1080i/50	720P/50 1080i/50	720P/50 1080i/50	720P/50 1080i/50
720P/50	576i/50 1080i/50	576i/50 1080i/50	576i/50 ^{a)} 1080i/50 ^{a)}	576i/50 ^{a)} 1080i/50 ^{a)}
720P/59.94	480i/59.94 1080i/59.94	480i/59.94 1080i/59.94	480i/59.94 ^{a)} 1080i/59.94 ^{a)}	480i/59.94 ^{a)} 1080i/59.94 ^{a)}
1080i/50	576i/50 720P/50 1080i/50	576i/50 720P/50 1080i/50	576i/50 720P/50	576i/50 720P/50
1080i/59.94	480i/59.94 720P/59.94 1080i/59.94	480i/59.94 720P/59.94 1080i/59.94	480i/59.94 720P/59.94	480i/59.94 720P/59.94

a) Output signals converted from 720P format are not synchronized to the switcher input reference signal.

On the destination device, do not use an external reference signal, but use an operation mode that can synch to the format converter output signal.

Setting the conversion format

- 1 Display the System >Format menu.



- 2 Click [Format converter].
The Format Converter menu appears.
- 3 To select the conversion format for format converter inputs 1 to 8, press [Input 1-8 Format] in the <FC Input> group.
A pop-up window appears.
- 4 Press the button for the desired signal format.
- 5 To select the conversion format for format converter inputs 9 to 16, press [Input 9-16 Format], then press the button for the desired signal format in the <FC Input> group.
- 6 To set the output format for format converters 1 and 2, in the <FC Output> group press [Output 1-2 Format], then press the button for the desired format.
- 7 To set the output format for format converters 3 and 4, in the <FC Output> group press [Output 3-4 Format], then press the button for the desired format.

To delay unconverted input signals by one frame

For the format converter input signal, select the same format as the system format.

Notes

This setting is only possible when the system format is 1080i.



Setting the Screen Aspect Ratio (Format Menu)

Switch the screen aspect ratio to 16:9 or 4:3.

To set the screen aspect ratio, use the System >Format menu.

Setting the screen aspect ratio

- 1 In the System >Format menu, press [Aspect].
The Aspect menu appears.
- 2 In the <Screen Aspect> group, select one of the following.
 - 16:9
 - 4:3
 - Independent: Set the screen aspect ratio separately for M/E, P/P, and USER on the switcher, and for each channel independently on the DME.
- 3 If you selected [Independent] in step 2, select from the following.
Switcher Aspect: Make the setting for the switcher.
DME Aspect: Make the setting for the DME.

 A menu appears according to the selection.
- 4 Carry out either of the following, depending on the selection you made in step 3.
When you selected [Switcher Aspect]: In each of the <M/E-1>, <M/E-2>, <M/E-3>, <M/E-4>, <P/P>, and <USER> groups, select either [16:9] or [4:3].
When you selected [DME Aspect]: For each of the <CH1> to <CH4> groups, select either [16:9] or [4:3].
- 5 To confirm the above setting, press [Aspect Execute].
To cancel the setting and return to the original state, press [Clear] without pressing [Aspect Execute].

When you press [Aspect Execute], a confirmation message appears.
- 6 Press [Yes].

This saves the screen aspect ratio setting.

Selecting the State After Powering On (Start Up Menu)

Set the initial state of the devices when the system is powered on. For each device, you can select Resume mode or Custom mode.

Resume mode

This resumes the setting state at the previous power-off operation. This setting is only available for the switcher processor and control panel.

Custom mode

This uses the settings saved in non-volatile memory or ROM within the device. In this mode, there are Setup and Initial Status settings which can be set separately.

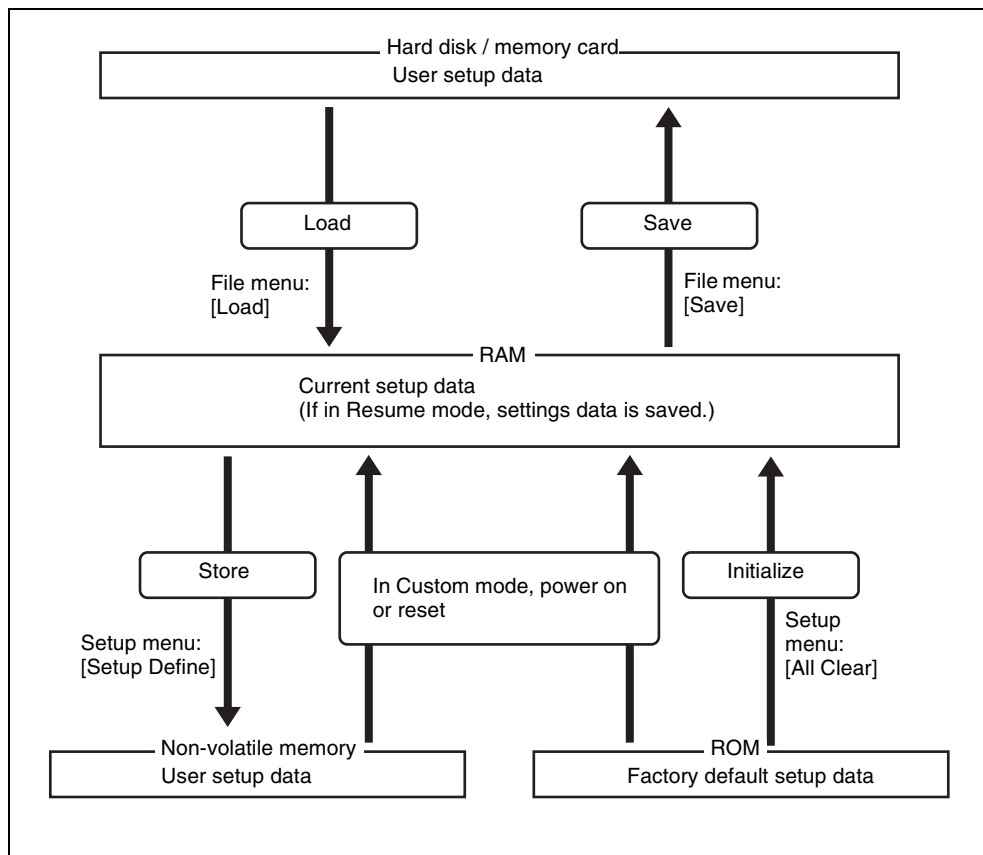
- **Setup mode:** Select the setup state to be used after powering on from the following.
 - User:** Start up using the user data previously saved with [Setup Define].
 - Factory:** Start up with the factory default settings.
- **Initial status mode:** Select the state of each device after powering on (excluding the settings to which “setup” applies).
 - User:** Start up using the user data previously saved with [Initial Status Define]. For the control panel, this applies to the key bus delegation buttons only.
 - Factory:** Start up with the factory default settings.

For details of saving and recalling setup data, see “Saving and Recalling Setup Data” (page 26) and the appendix “Data Saved by [Setup Define] and [Initial Status Define]” (page 242).

Autoload function

Switch on or off the function to automatically load predetermined register data or frame memory image data at power on. Set the data to be read in the File menu.

Saving and Recalling Setup Data



Concept of saving and recalling setup data

Updating the switcher or control panel setup data saves the updated setup data in RAM in each device.

- In Resume mode (*see page 25*), even if devices are reset or powered off, the data is preserved in RAM, and recalled when the power is turned back on.

Notes

The Resume mode cannot be used for DMEs and DCUs.

- In Custom mode (*see page 25*), the user-defined settings (user setup data) saved in non-volatile memory or factory default setup data held in ROM in each device is recalled when a reset is made or the power is turned back on. (*See “Selecting the State at Start-up” (page 27).*)

Note that the setup data in RAM can also be saved to the control panel hard disk or memory card.

To set the initial state at start-up, use the System >Start Up menu.

Notes

It is not possible to set the DCU state at start-up, but its settings can be saved in the control panel.

To display the Start Up menu

In the Engineering Setup menu, select VF1 'System' and HF4 'Start Up.'
The status area shows the current start-up mode settings of each device.

Selecting the State at Start-up

1 In the status area of the System >Start Up menu, select the device to which the settings are to apply.

2 In the <Start Up Mode> group, select one of the following modes.

Resume: When this is on, Resume mode is enabled.

Custom: When this is on, Custom mode is enabled.

Notes

The Resume mode is only valid when a switcher or control panel is selected for the setting.

3 When Custom mode is selected, in each of the <Setup> group and <Initial Status> group, select one of the following.

User: When this is on, user-defined settings are used for the Setup or Initial Status settings. For the method of saving the user-defined settings, *see the next item*.

Factory: When this is on, factory default settings are used for the Setup or Initial Status settings.

4 To confirm the settings, press [Execute]. If you want to cancel the setting changes without saving them, press [Clear].

When [Execute] is pressed, a confirmation message appears.

5 Select [Yes].

The start-up state settings are saved.

Saving User-Defined Settings

Saving the Setup settings

- 1 After selecting the devices to which the settings apply to, in the System >Start Up menu, press [Setup Define].

A confirmation message appears.

- 2 Press [Yes].

This saves the setup settings for the selected devices in non-volatile memory within the respective devices.

For details about the settings which will be saved, see “Data Saved by [Setup Define] and [Initial Status Define]” (page 242).

Saving the Initial Status settings

- 1 After selecting the devices to which the settings apply to, in the System >Start Up menu, press [Init Status Define].

A confirmation message appears.

- 2 Press [Yes].

This saves the initial status settings other than the “setup” settings for the selected devices in non-volatile memory within the respective devices.

For details about the settings which will be saved, see “Data Saved by [Setup Define] and [Initial Status Define]” (page 242).

Setting Automatic Loading of Register Data at Power On (Autoload Function)

To have specified data read in at power on, in the System >Start Up menu, press [Power On File Load], turning it on.

This enables the autoload function.

When the autoload function is enabled, a directory “PWON_LD” appears in the corresponding File menu.

About saving data which can be loaded by the autoload function, see “Saving Files Recalled by Autoload” in Chapter 17 (Volume 2).

Reset and Initialization (Initialize Menu)

To carry out a reset or memory initialization for a device, use the System >Initialize menu.

- **Reset:** Reset to state after powering on.
- **All Clear:** Clear the memory, and carry out initialization. The Network Config, System Config, Format, and Start Up setup values are set by reference to data stored in non-volatile memory, and the system automatically starts up. It is not necessary to reset the Date/Time settings.

For more details, see “Saving and Recalling Setup Data” (page 26).

To display the Initialize menu

In the Engineering Setup menu, select VF1 ‘System’ and HF5 ‘Initialize.’ The status area shows the current start-up mode settings.

Resetting the device and initializing memory

- 1 In the status area of the System >Initialize menu, select the device to which the settings are to apply.
- 2 In the <Initialize> group, select one of the following modes.
Reset: Reset the device.
All Clear: Initialize memory.
- 3 Press [Execute].
A confirmation message appears.
- 4 Select [Yes].

Depending on the selection in step 2, the following is the result.

- When you selected [Reset], a reset is applied to the device causing it to be restarted in the start-up state.
- When you selected [All Clear], all memory in the device is cleared, including snapshots, keyframe effects, setup, and so on, and the device returns to its factory default settings. However, the Network Config, Format, Start Up, and Date/Time settings are not initialized.

Installation and Device Setup (Install/Unit Config Menu)

To install software or firmware in a device, use the System >Install/Unit Config menu.

This installs the software and firmware in all devices (including the DCU) connected to the Data LAN.

To display the Install/Unit Config menu

In the Engineering Setup menu, select VF1 'System' and HF6 'Install/Unit Config.'

The status area shows the version of the software and the firm ware installed in each device.

The following functions are available here.

Install: Automatically detects the software that can be installed on each device, and installs the selected software.

Detail Information: Gives details of the software and firmware installed in each device.

Unit Config: Makes switcher processor settings and changes the DME input/output signal format.

License: Makes the license valid or invalid.

Displaying installation details

In the System >Install/Unit Config menu, press [Detail Information].

This accesses the Detail Information menu, and displays the detailed information on the software and firmware installed in the currently selected device.

Installing Software

- 1 Insert the memory card holding the software into the memory card slot.
- 2 In the System >Install/Unit Config menu, press [Install].

The Install menu appears; the status area shows the following information.

Upper list: For each connected device, this shows the device name, current software version (Current), and the latest version that can be installed (Install, Title).

OK: Installation already completed.

On: For installation, but not completed.

Error: An error occurred during installation.

Cancel: Installation canceled.

Lower list: For the device selected in the upper list, this shows an automatically detected list of software that can be installed on the particular device. Also, software selected as a candidate for installation in the upper list is marked in the lower list with an bullet.

- 3** If you are satisfied with the currently installed version of all items in the upper list, skip to step **6**.

To change the items to be installed, use any of the following methods to select the relevant device.

- Press directly on the list in the status area.
- Use the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Device	Device selection	1 and upwards

The display of the lower list changes according to the selected device.

To display all related software

Press [Display All Software], turning it on.

Not just the automatically detected software, but the names of all related software for the selected device appear.

- 4** In the lower list, select the software you want to install.

- Press directly on the list in the status area.
- Use the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
3	No	Software selection	1 and upwards

- 5** Press [Set].

The selection is reflected under “Install” and “Title” in the upper list.

- 6** Press [Install].

The “Install” box shows “On,” confirming that this is to be installed. To cancel this installation setting, press “Install” once more, making the box blank.

- 7** Repeat steps **3** to **6**, to confirm all software to be installed.

8 Press [Execute].

A confirmation message appears.

9 Press [Yes].

This carries out the installation, and when it completes normally, the “Install” box shows “OK.”

Making Settings Required to Use the Software

To use the software listed below, you are required to enter an install key which validates the software. (If the software has been factory installed, the install key is not required.)

For the method of obtaining an install key, contact your Sony representative. To obtain a key, you may be required to submit the unique device ID of the switcher you are using. You can check the unique device ID in the Install/Unit Config menu of the switcher, using the following procedure.

BZDM-9050	Texture Lighting Software (for MVE-9000)
BZS-8050	Editing Control Software
BZS-8200X	Multi Program 2 Software
BZS-8420X	Color Corrector Software
BZS-8560X	Switcher Upgrade Software
BZDM-8560	DME Upgrade Software ^{a)}

a) This can be used only on the MVE-8000A.

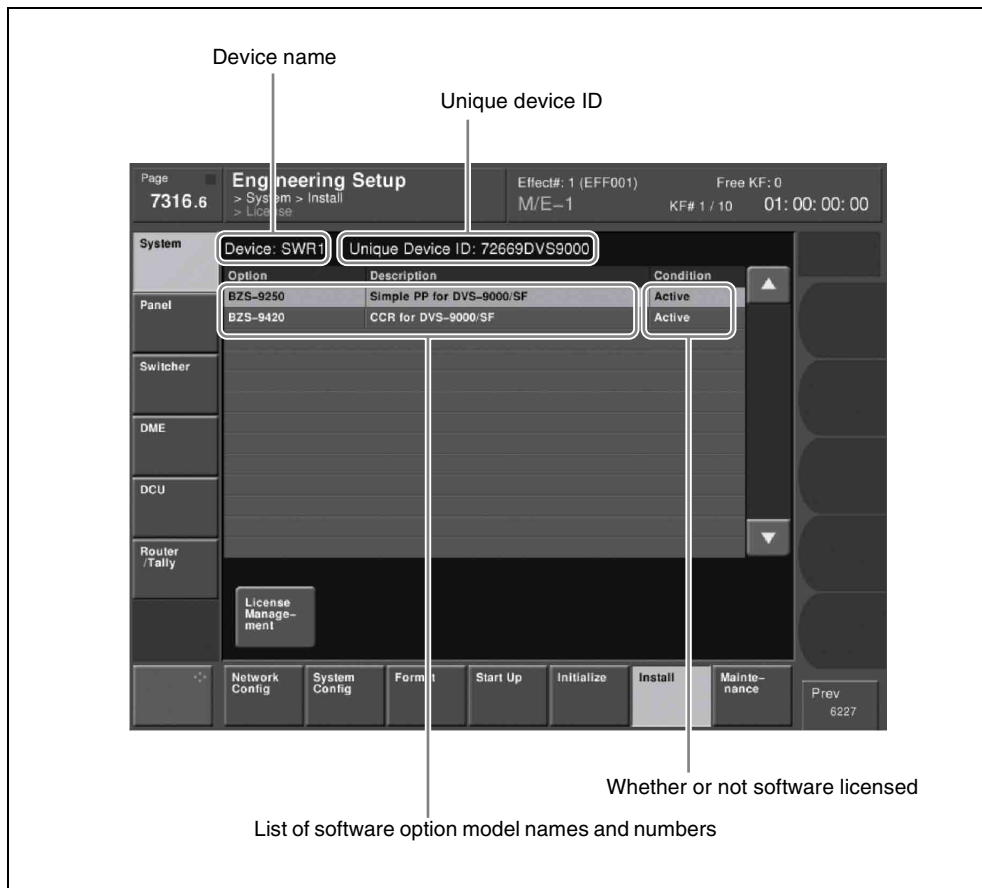
To display the unique device ID

1 In the System >Install/Unit Config menu, use either of the following methods to select the device for which you want to register the license.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.

2 Press [License].

The License menu appears as follows.



Entering the install key

When you have the install key, carry out the following procedure.

- 1** In the System > Install/Unit Config menu, use either of the following methods to select the device for which you want to register the license.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
- 2** Press [License].
The License menu appears.
- 3** Press directly on the name of the software you want to license (the Condition box is blank).

- 4** Press [License Management].
The License Management menu appears.
- 5** Press [Activate License].
A keyboard window appears.
- 6** Enter the 16-character install key you have been given, and press [Enter].
A license registration completed message appears.
- 7** Press [OK].
The status area Condition box shows “Active.”
- 8** Using either of the following methods, restart the device.
 - In the System >Initialize menu, with only the device for which you registered the license being selected, press [Reset] in the <Initialize> group and then press [Execute].
 - Power off and on again.
 After restarting, the licensed software is now available for use.

(In case it becomes necessary to cancel the license registration, you can use the following procedure.)

To cancel the license registration

- 1** In the System >Install/Unit Config menu, use either of the following methods to select the device for which you want to cancel the license registration.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
- 2** Press [License].
The License menu appears.
- 3** Press directly on the name of the software for which you want to cancel the license registration (the Condition box shows “Active”).
- 4** Press [License Management].
The License Management menu appears.
- 5** Press [Deactivate License].

A confirmation message appears.

6 Press [Yes].

A license registration canceled message appears.

7 Press [OK].

The status area Condition box showing “Active” changes to blank.

8 Using either of the following methods, restart the device.

- In the System >Initialize menu, select only the device for which you registered the license, and press [Reset] in the <Initialize> group.
- Power off and on again.

After restarting, the software for which the license registration has been canceled is no longer available.

Adding User Texture Patterns

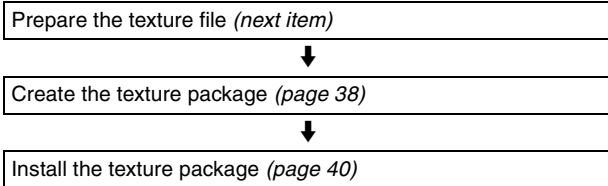
You can add user created texture patterns to the repertory of texture patterns with which the spotlighting function enables the light falls on the image surface.

Notes

This function is not supported on the MVE-8000A.

For details of spotlighting and texture patterns, see “Spotlighting Settings” in Chapter 11 (Volume 2).

The procedure for adding a texture pattern is as follows.



To prepare a texture file

Create a texture file meeting the following conditions, and save it on a memory card.

File format: Windows bmp (“bitmap”) (extension: bmp, 24-bit RGB)

File name: alphanumeric (maximum 8 characters) + extension (bmp)

Example: wood_01.bmp

Image size (horizontal × vertical): 128 × 128 to 1024 × 1024 pixels

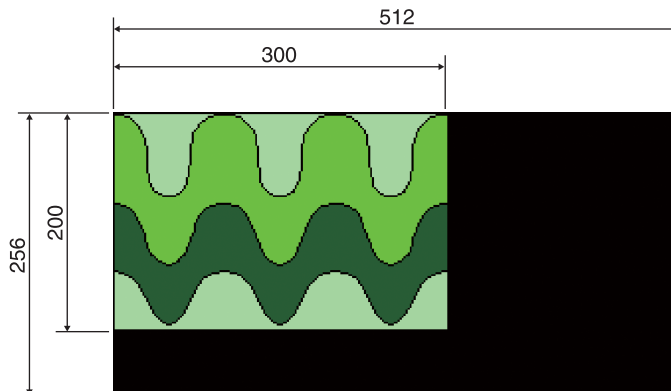
The maximum number of texture files that can be handled by the system is related to the image size of the texture files, as shown in the following table (when all images are the same size).

Dimension (horizontal) \ Dimension (vertical)	Maximum number of texture files handled			
	128 pixels	256 pixels	512 pixels	1024 pixels
128 pixels	64	32	16	8
256 pixels	32	16	8	4
512 pixels	16	8	4	2
1024 pixels	8	4	2	1

Notes

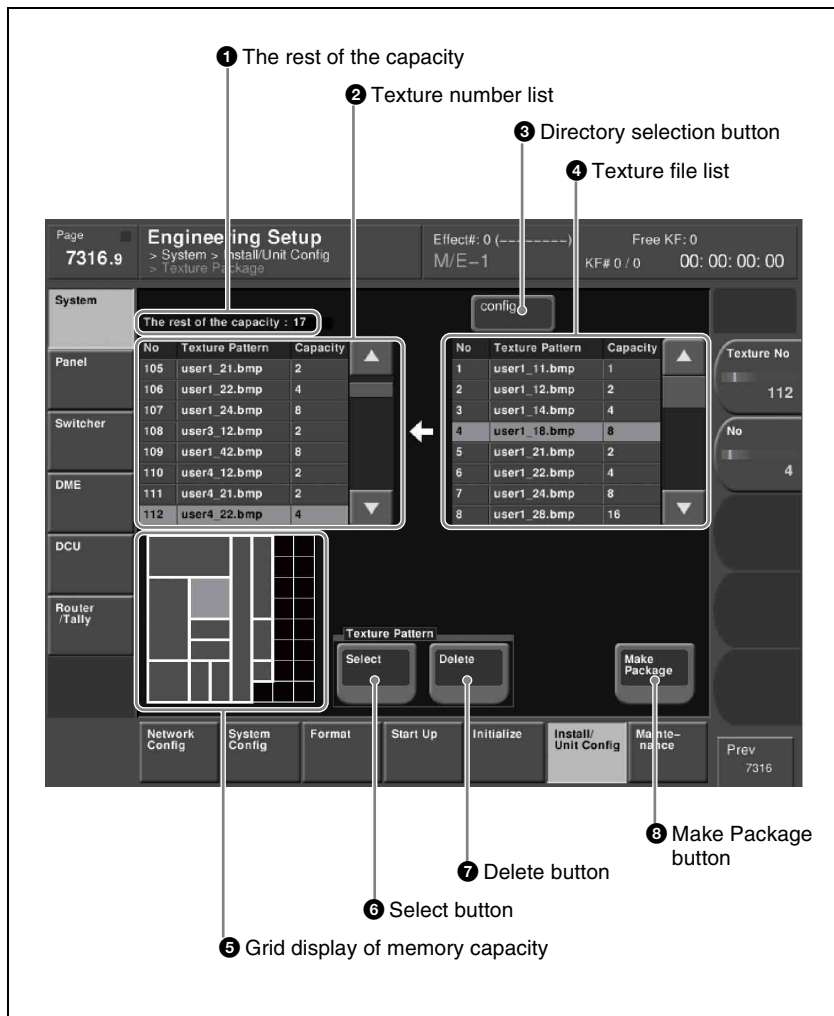
- Different image sizes can be combined, but this affects the total number of texture files that can be handled.
- The number of texture files that can be handled may be reduced, depending on the way in which they are stored in memory (*see “Texture Package menu” (page 36)*).
- For a texture file with an image size outside the specification, the minimum enclosing image size is applied (*see table above*), and the region below and to the right is filled with black.

Example: a 300 × 200 pixel texture file is treated as 512 × 256 pixels.



Texture Package menu

To create user texture patterns, use the Texture Package menu.



❶ The rest of the capacity (available memory space)

This shows an available memory space in units of 128×128 pixels (a maximum of 64 units of memory space is available).

❷ Texture number list

This shows the texture numbers (101 to 164) registered in the texture package. The list Capacity shows the file size in units of 128×128 pixels (a total maximum of 64 units of texture files can be registered).

③ Directory selection button

By pressing this button to display the popup window, you can select a directory on the memory card.

④ Texture file list

This shows the texture files stored on the memory card.

If a texture file is stored in a directory, press the directory selection button and select the directory in the popup window, to show a list of files.

The list Capacity shows the file size in units of 128×128 pixels.

⑤ Grid display of memory capacity

This shows how the texture files are stored in memory (an 8×8 grid, of 64 squares, each equivalent to 128×128 pixels).

And this shows the location where the texture files are stored in memory by bold frames. The grid for the texture file selected in the texture number list is shown in amber.

⑥ Select button

Pressing this button assigns the texture file selected in the texture file list to the number selected in the texture number list.

⑦ Delete button

Pressing this button deletes the texture file assigned to the number in the texture number list.

⑧ Make Package button

Pressing this button creates the texture package.

Creating a texture package

To use a user-provided texture pattern with the spotlighting function, it is necessary to convert the texture files to vector files for bump mapping. This operation is referred to as “creating a texture package.”

- 1** Insert the memory card holding the texture file into the memory card slot.
- 2** In the Engineering Setup menu, select VF1 ‘System’ and HF6 ‘Install/Unit Config.’

The Install/Unit Config menu appears; the status area shows the version information for the software installed on the various devices.

- 3** Using any of the following methods, select a DME for which the spotlighting license is valid.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.

- Turn the knob.

4 Press [Texture Package].

Notes

If you select a device for which the spotlighting license is not enabled, then [Texture Package] is not enabled.

The Texture Package menu appears.

For details of the Texture Package menu, see page 36.

5 In the texture number list, select the number for which you want to register the texture package, by any of the following methods.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Texture No	Texture number selection	101 to 164

6 In the texture file list, select the texture file by any of the following methods.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
2	No	Texture file selection	1 and upwards ^{a)}

a) The range of the setting values depends on the number of saved files on a memory card.

7 In the <Texture Pattern> group, press [Select].

This assigns the texture file selected in step **6** to the number selected in step **5**, and updates the texture number list.

The grid display of memory capacity shows the location where the texture files are stored in memory by bold frames. The grid portion for the texture file selected in the texture number list is shown in amber.

8 Repeat steps **5** to **7**, to assign all of the texture files to texture packages.

Notes

- If you assign a texture file that is already in the texture number list to a different texture number, then the previous assignment is deleted. (It is

not possible to assign the same texture file to two or more different texture numbers.)

- In the following cases, texture file assignment is not possible.
 - If there is no available memory space (“The rest of the capacity:0” appears)
 - If the selected texture file is too large to fit in the available memory space

To delete a texture file assignment

Select the texture file (multiple selections are not possible) you want to delete in the texture number list, and in the <Texture Pattern> group press [Delete].

- 9** To create the texture package, press [Make Package].

A confirmation message appears.

- 10** Select [OK].

The texture package is created in the same location that the texture file is stored on the memory card (extension: zsp, file name generated automatically).

Notes

- If you remove the memory card on which the texture file is stored, it is not possible to create the texture package.
- If a texture package is already present on the memory card, it is overwritten by a new texture package.
- If you carry out steps **9** and **10** without having assigned even one texture file, it is not possible to create a texture package.
- If there is insufficient space on the memory card to store the texture package, an error message appears, and the process is aborted. If this happens, delete unwanted files from the memory card using your computer, so that there is enough free space on the memory card, and repeat the process. (As a guide, the space required is approximately equal to total number of bytes of the texture files assigned in steps **5** to **8**.)

Installing the texture package

- 1** Insert the memory card holding the texture package into the memory card slot.
- 2** In the Engineering Setup menu, select VF1 ‘System’ and HF6 ‘Install/Unit Config.’

The Install/Unit Config menu appears; the status area shows the version information for the software installed on the various devices.

3 Press [Install].

The System >Install/Unit Config >Install menu appears; the status area shows the following information.

Upper list: For each connected device, this shows the device name, current software version (Current), and the information about the texture package that can be installed (Install, Title).

OK: Installation already completed.

On: For installation, but not completed.

Error: An error occurred during installation.

Cancel: Installation canceled.

Lower list: For the device selected in the upper list, this shows an automatically detected list of software that can be installed on the particular device. Also, software selected as a candidate for installation in the upper list is marked in the lower list with an asterisk.

4 Using any of the following methods, select in the upper list a DME for which the spotlighting license is valid.

- Press directly on the list in the status area.
- Use the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Device	Device selection	1 and upwards

5 Press [Display All Software], turning it on.

The lower list shows the texture packages.

6 Using any of the following methods, select the texture package you want to install from the lower list.

- Press directly on the list in the status area.
- Use the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
3	No	Package selection	1 and upwards

7 Press [Set].

The selection is reflected under “Install” and “Title” in the upper list.

8 Press [Install].

The “Install” box shows “On,” confirming that this is to be installed. To cancel this installation setting, press “Install” once more, making the box blank.

9 To carry out the installation, press [Execute].

A confirmation message appears.

10 Select [Yes].

This carries out the installation, and when it completes normally, the “Install” box shows “OK.”

Setting the DME Input/Output Signal Format

Notes

This setting is only valid when the system signal format is set to 1080P.

1 In the System >Install/Unit Config menu, select [SWRx], and press [Unit Config].

The Unit Config menu appears.

2 In the <DME I/F Type> group, press one of the following.

3G Mode: Use 3G mode (single 3G SDI signal) for DME input/output. ¹⁾

Dual Link Mode: Use dual link mode (two 1.5G SDI signals) for DME input/output. ²⁾

1) 3G SDI: Standard defined by SMPTE 424M

2) Dual link: Standard defined by SMPTE372M

Notes

When “Dual Link Mode” is selected, half as many DME units can be connected to the switcher. In this case, the available channels are DME1 channels 1 and 2, and DME2 channels 3 and 4.

3 Press [Execute].

A popup window appears, showing a message.

4 Check the message, and select [Yes].

System Maintenance (Maintenance Menu)

- Date and time setting
- Formatting a memory card
- Primary settings for USB external storage device
- Reloading a USB driver
- Formatting the hard disk
- Locking setup menu operations
 - For each VF button group, selecting a set of candidate menus to be locked, then locking all of the candidates using a password. Except for list scrolling, moving menus, and similar operations, menu operations for all settings can be locked.
 - Changing the password
- Locking file recall operations
 - Locking file recall operations by category
 - Locking and removing the lock using the password (You can change the password.)

To display the Maintenance menu

In the Engineering Setup menu, select VF1 'System' and HF7 'Maintenance.' In the status area, the current date and time, and details of the memory card appear.

Setting the Date and Time

For system date and time settings, use the following procedure.

- 1** In the System >Maintenance menu, turn the knobs to set the following parameters.

Parameter group [1/2]

Knob	Parameter	Adjustment	Setting values
1	Hour	Hour	0 to 23
2	Min	Minute	0 to 59
3	Sec	Second	0 to 59

Parameter group [2/2]

Knob	Parameter	Adjustment	Setting values
1	Month	Month	1 to 12
2	Day	Day	1 to 31

Knob	Parameter	Adjustment	Setting values
3	Year	Year	2000 to 2037

The set date and time appears in the “Set” box in the status area.

- 2** Press the [Set Date/Time] button.

This sets the current time to the date and time set in step **1**, and the setting in the “Current” box of the status area changes accordingly.

Using a Memory Card

Displaying memory card information

- 1** Insert the memory card into the memory card slot.
- 2** In the <USB Storage Device> group of the System >Maintenance menu, press [Refresh].

Formatting a memory card

Notes

Format a memory card before using it for the first time.

- 1** Insert the memory card in the memory card slot.
- 2** In the System >Maintenance menu, using either of the following methods, select the USB device.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
- 3** In the <USB Storage Device> group, press [Format].
A confirmation message appears.
- 4** To carry out the formatting, press [YES].
This formats the memory card.

Carrying Out the Primary Setting

To specify a USB device with a storage device connected as a primary device, use the following procedure.

Notes

Without this setting, you cannot use the “Memory Card” item in the File menu to access a memory card on a storage device connected to the USB device.

- 1** In the System >Maintenance menu, using any of the following methods, select the USB device you want to set as primary.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
5	Mount Point	USB device selection	1 to 18

- 2** In the <USB Storage Device> group, press [Set Primary].

Making the primary setting automatic

In the <USB Storage Device> group, press [Auto Detect].

Reloading a USB Driver

To reload a USB driver, in the System >Maintenance menu, press [Reload USB Driver].

Notes

If even after this operation the memory card is not recognized, remove the memory card and reinsert it, then try again.

Initializing the Hard Disk

If a file system corruption error has occurred on the hard disk, you should initialize the hard disk.

- 1** In the <HDD> group of the System >Maintenance menu, press [HDD Format].

Notes

When the hard disk is operating normally, pressing [HDD Format] has no effect.

An initialization confirmation message appears.

- 2** To execute the initialization operation, press [Yes]. To cancel, press [No].

If you have pressed [Yes], the hard disk initialization operation is executed, and a finished message appears. If you have pressed [No], the initialization operation is canceled, and the System >Maintenance menu appears again.

- 3** Press [OK].

The processor is reset.

Locking the Setup Menu Settings

To protect the data, you can inhibit operations in selected setup menus. Use the following procedure. (It is not possible to lock the Setup Operation Lock menu.)

- 1** In the System >Maintenance menu, press [Setup Operation Lock].

The Setup Operation Lock menu appears.

- 2** In the <VF Group> group, select the group including the desired menu.

The status area shows a list of menu numbers and menu names in the selected group.

Subsequent lock operations apply within the group selected here.

- 3** Using any of the following methods, select the menu or the set of menus as candidates for the locking operation.

- Press directly on the list in the status area.
- Use the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	No	Selection of a menu by its number in the list	1 and upwards
3	Num	Selection of number of menus in the list	1 and upwards

- To select all setup menus within the selected group, press [ALL].

You can also select a menu while it is open. *For details, see “Selecting an opened setup menu for locking” (page 48).*

4 Press [Lock Item Select].

This makes the selected menus candidates for locking, and a padlock icon appears in the “Lock” box (in the unlocked state) .

Notes

If there are already one or more locked menus, selection of lock candidates is not possible.

To deselect a lock candidate

After selecting a menu, press [Lock Item Select] once more, to clear the Lock box.

To deselect all lock candidates in the selected VF group

Press [Lock Item All Clear].

5 Repeat steps 2 to 4, to select all of the lock candidates.

6 Press [Lock].

A keyboard window appears.

7 Enter the password with a maximum of 16 characters, and press [Enter].

If the password is correct, the menus selected in the list of candidates are all locked. The padlock icon changes to the locked state .

Releasing the lock

When a lock is already applied, use the following procedure.

1 In the System >Maintenance >Setup Operation Lock menu, press [Lock].

A keyboard window appears.

2 Enter the password.

If the password is correct, the lock is released, and the padlock icon disappears.

Changing the lock password

1 In the System >Maintenance >Setup Operation Lock menu, press [Change Password].

A confirmation message appears.

2 Press [Yes].

A keyboard window labeled “Old Password” appears.

3 Enter the old password, and press [Enter].

If the password is correct, a keyboard window labeled “New Password” appears.

4 Enter the new password, and press [Enter].

A keyboard window labeled “New Password(Confirm)” appears.

5 Enter the new password once more for confirmation, and press [Enter].

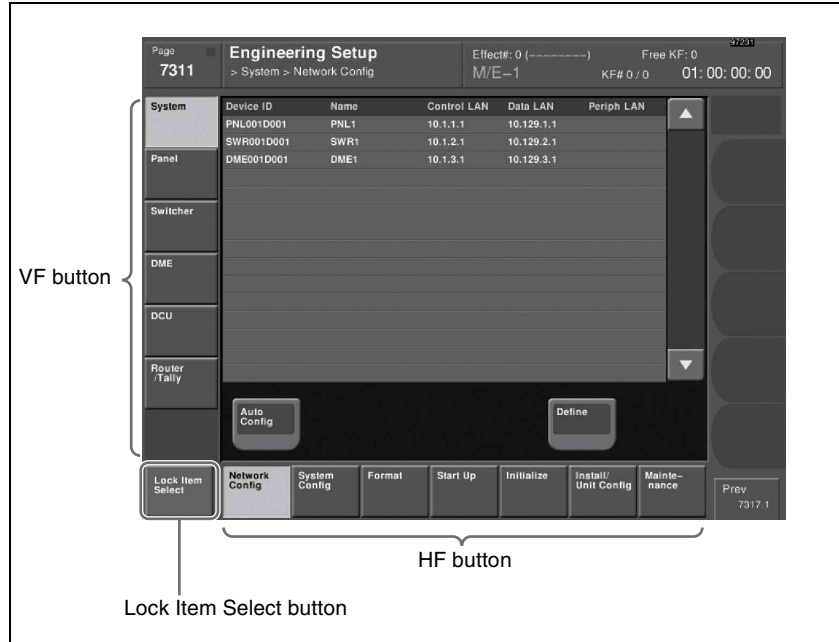
If the password is correct, the password change completed message appears.

6 Press [OK].

This sets the new password.

Selecting an opened setup menu for locking

With the menu you want to lock open, press [Lock Item Select] button at the lower left.



The [Lock Item Select] button turns red, and a padlock icon appears.

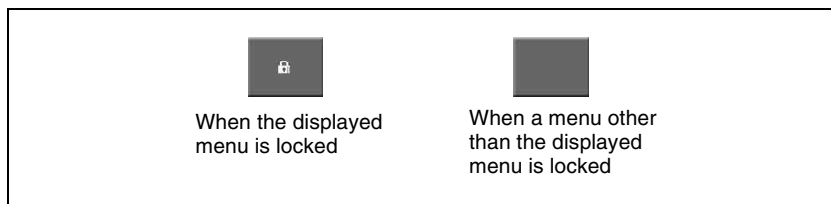


This selection is reflected in the lock candidate list in the Setup Operation Lock menu.

Notes

If there are already one or more locked menus, selection of lock candidates is not possible.

In this case, the indication of the [Lock Item Select] button changes as follows.



If you want to select lock candidates, first remove the lock in the Setup Operation Lock menu.

Locking File Loading Operations

You can inhibit load operations for a specified file category.

- 1** In the System >Maintenance menu, press [File Load Lock].

The File Load Lock menu appears.

The status area shows a list of file category numbers, category names, and the lock status.

Subsequent lock operations apply to the category selected here.

- 2** Using any of the following methods, select the category or the set of categories as candidates for the locking operation.

- Press directly on the desired list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	No	Selection of a category by its number in the list	1 to 13
3	Num	Selection of number of categories in the list	1 to 13

- To select all categories, press [ALL].

3 Press [Lock].

This makes the selected categories candidates for locking. The category name display color changes to yellow, and the indication “Lock” is displayed in yellow in the Lock box.

To deselect a lock candidate

After selecting a category, press [Clear] to clear the indication “Lock” in the Lock box.

4 Repeat steps 2 and 3, to select all of the lock candidates.

5 Press [Execute].

A keyboard window appears.

6 Enter the password with a maximum of 16 characters, and press [Enter].

If the password is correct, the categories selected in the list of candidates are all locked. The category name display color and the “Lock” indication color in the Lock box both change to white.

To release the lock

When a lock is already applied, use the following procedure.

1 In the System >Maintenance >File Load Lock menu, press [Lock].

A keyboard window appears.

2 Enter the password.

If the password is correct, the lock is released, and the indication “Lock” in the Lock box disappears.

To change the lock password

In the System >Maintenance >File Load Lock menu, press [Change Password], and carry out step 2 and following of “*Changing the lock password*” (page 47).

Chapter 19 Control Panel Setup (Panel)

Overall Control Panel Settings (Config Menu)

To carry out the overall control panel settings, use the Panel >Config menu.

To display the Config menu

In the Engineering Setup menu, select VF2 'Panel' and HF1 'Config.'

The status area shows the "Bank numbers 1 to 4" (physical locations) of the M/E and PGM/PST banks, the allocated bank names, and whether or not operation is enabled.

Panel Setup

In panel setup, you carry out settings particular to the control panel.

You can make the following settings.

Panel settings (Config)

- **M/E Assign:** Set the logical configuration of the M/E and PGM/PST banks.
- **M/E Operation:** For each of the M/E and PGM/PST banks, make operations possible, not possible, or disabled (Enable/Disable/Inhibit).
- **Dual M/E Assign:** Using two M/E banks, assign the shift and non-shift button rows of a single M/E bank.
- **Dual M/E Xpt Swap:** When a setting has been made for Dual M/E Assign, swap the shift and non-shift button rows.
- **DSK Fader Assign:** Carry out fader function assignment and key delegation for the key delegation buttons, in each of the maximum of four downstream key control blocks.
- **External Bus Link:** Make link settings relating internal switcher buses to routing switcher destinations.
- **Key Trans Link:** Select whether or not to link transitions between keys, and if so which keyer to link to. You can set the links between keyers for each M/E bank separately.
- **Joystick/Trackball User Setting:** When a trackball module and a joystick module are both connected as device control blocks, select which is used as the reference. Also select whether key wipe positioning applies to keys 1 to 8, or to keys 1 to 4.
- **10 Key Region Assign:** Assign any regions to the region selection buttons in the numeric keypad control block. Also used for setting the regions included in the selection when the [All] button is pressed.

- **Program Button:** Make assignments for buttons of some control blocks such as assigning the buttons in a transition control block for controlling a VTR and assigning the Flexi Pad control block to macro operation.
- **Compact Key Module Assign:** You can select which keys can be operated with an independent key transition control block (simple type).
- **M/E Operation Inhibit:** For each M/E or PGM/PST bank, enable or inhibit utility 2 bus-related and key-related operations.
- **Joystick/Trackball Module:** Enable or inhibit DME channel selection operations from the device control block (trackball) or device control block (joystick).

Interchanging the Bank Order or Disabling Operation

- 1 In the Panel >Config menu, select the Bank you want to set, using any of the following methods.

- Press directly on the status area display.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Bank	Select the position of the bank you want to set	1 to 7

The Bank selection here indicates the physical position on the control panel, numbering from the top as the 1st Row, 2nd Row, 3rd Row, and 4th Row.

This is followed by the system control unit extension interface ports 1, 2, and 3.

- 2 Select the bank that you want to assign to the selected Bank number in the <M/E Assign> group.

The status area shows the interchanged state of the banks.

Notes

- It is not possible to assign the same M/E logical bank to more than one physical bank. Be sure to make different M/E assignments.
- When the bank order is changed, the state of region selection button assignment in the numeric keypad control block also changes correspondingly.

- 3 For the selected Bank number, in the <M/E Operation> group, select one of the following.

Enable: Enable panel display and operation of the bank.

Disable: Enable only panel display, and disable operation of the bank.

Inhibit: Disable both the panel display and operation of the bank.

Notes

When this is set to Inhibit, snapshots of the bank are not recalled.

Assigning Two M/E Banks to One M/E Bank

- 1 In the Panel >Config menu, select the M/E bank for which you want to make the setting.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Bank	Selection of position of bank for which you want to make the setting	1 to 7 ^{a)}

a) Depends on the center control panel configuration. When 7 (Ext 3) is selected, or a switcher bank is selected which is immediately above a switcher bank to which nothing is assigned, then [Dual M/E Assign] is invalid.

For example, if the furthest bank from you is assigned to M/E-1, and you want no shift button operation for the bank, select 1 (1st Row) for Bank.

- 2 Press [Dual M/E Assign].

This assigns the furthest M/E bank from you to the unshifted (shifted) cross-points and the M/E bank in front of it to the shifted (unshifted) cross-points. For fader lever operations, only the M/E bank closer to you is enabled.

The shift/non-shift assignment is set by [Dual M/E Xpt Swap]. For more details, see the next section, "Interchanging shifted and non-shifted operations for a dual M/E."

To return to the original assignment

Interchange the bank order (*see page 53*).

Interchanging shifted and non-shifted operations for a dual M/E

- 1 In the Panel >Config menu, select the M/E bank for which the dual M/E setting is made.

- Press directly on the list in the status area.

- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Bank	Bank to be selected for dual M/E setting	1 to 7

2 Press [Dual M/E Xpt Swap], toggling it on or off.

On: The lower M/E bank is non-shifted, and the higher M/E bank is shifted.

Off: The lower M/E bank is shifted, and the higher M/E bank is non-shifted.

Assigning the Key Delegation in the Downstream Key Control Block

As an example, to assign key 4 of the M/E-1 bank to key delegation button 1 of the downstream key control block 1, use the following procedure.

- 1** In the Panel >Config menu, press the [DSK Fader Assign].
The DSK Fader Assign menu appears.
- 2** Directly press on the indications in the status area, to select the downstream key control block for which you want to make the setting, and select the key delegation.
Here, press on the intersection of the “1st Module” column and “Key1 Assign” row.
- 3** In the <M/E Select> group, select the bank of the key you want to assign.
Here, select [M/E-1] as an example.
- 4** In the <Key Link Select> group, select the key you want to assign.
Here, select [Key4] as an example.
- 5** Press [Fader Assign] in the DSK Fader Assign menu.
The Fader Assign menu appears.
- 6** To disable the fader lever of the selected downstream key control block, select [Disable] in the <Fader Assign> group.
To enable the fader lever, select one of the following in the <Fader Assign> group, determine the key to which the fader lever operation applies.

All: Key selected with one of the key delegation buttons

Key1 to Key4: Key assigned to key delegation buttons 1 to 4 ([DSK1] to [DSK4] buttons)

Linking Switcher Bus and Router Destination

To provide links between the switcher bus and router destination, make the following settings as required.

Matrix selection: Select the target of link setting from the eight matrices (1 to 8).

Matrix position definition: Set the start address and level for the source and destination on the S-Bus.

Link table setting: Link a switcher cross-point button and matrix source.

Link bus setting: Link a switcher bus address and router destination.

Selecting a matrix number

- 1** In the Panel >Config menu, press [Link/Program Button].

The Link/Program Button menu appears.

- 2** In the <Link> group, press [External Bus Link].

The External Bus Link menu appears.

The status area shows the current link status.

- 3** Turn the knobs to select the matrix.

Knob	Parameter	Adjustment	Setting values
1	Link No	Link number	1 to 64
2	Link Matrix	Matrix number	1 to 8

In the status area, the color of the selected part changes.

- 4** Press [Link Matrix Set].

This confirms the matrix selection and the selected part in the status area returns to the previous color.

To delete a link

With the link selected, press [Clear].

Defining the position of a matrix

Specify where in the 1024 × 1024 S-Bus space the link matrix is to be provided, by setting the source and destination start address.

For the matrix selected in the External Bus Link menu, use the following procedure.

- 1 In the Panel >Config >Link/Program Button >External Bus Link menu, press [Link Matrix Adjust].

The Link Matrix Adjust menu appears.

The status area shows the status of the currently selected matrix, and a list of the source and destination start addresses that can be selected.

In this menu too, you can use the knobs to select the link for the setting.

- 2 Using any of the following methods, define the position of the matrix to be linked.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
2	Source	Source start address	1 to 897
3	Destination	Destination start address	1 to 897
4	Level	Level	1 to 8

- 3 To confirm a source address selected in step 2, press [Source Set], to confirm a destination address press [Destination Set], and to confirm a level press [Level Set].

This confirms the selection, which is reflected in the status area.

Setting a link table

For the link selected in the External Bus Link menu, make the settings as follows.

- 1 In the Panel >Config >Link/Program Button >External Bus Link >Link Matrix Adjust menu, press [Link Table Adjust].

The Link Table Adjust menu appears.

The status area lists the status of the currently selected link, combinations of video signals and sources, and the sources that can be selected.

- 2 Using any of the following methods, select the switcher cross-point button and the matrix source to be linked to the button.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Main No	Switcher cross-point button	1 to 300
2	Source No	Matrix source selection	1 to 128

- 3** To confirm the matrix source selection made in step **2**, press [Link Source Set].

This confirms the selection, which is reflected in the status area.

- 4** As required, repeat steps **2** and **3** to select the matrix sources to be linked to other cross-point buttons.

To initialize the set links

In the Panel >Config >Link/Program Button >External Bus Link >Link Matrix Adjust menu, press [Init Link Table].

A confirmation message appears.

Press [Yes].

The links set using the above procedure are initialized to the default settings, and this is reflected in the status area.

Making link bus settings

For the link number selected in the External Bus Link menu, use the following procedure.

- 1** In the Panel >Config >Link/Program Button >External Bus Link menu, press [Link Bus Adjust].

The Link Bus Adjust menu appears. The status area lists the current link status, and the switcher buses and router destinations that can be selected. In this menu too, you can use knob 1 to select the link to be set.

- 2** Using any of the following methods, select the switcher bus and the router destination to be linked to the switcher bus.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
2	Internal Bus	Switcher bus selection	1 to 128
3	Destination	Router destination selection	1 to 128

- 3 To confirm the bus selected in step 2, press [Master Bus Set], and to confirm the destination press [Linked Dest Set].

This confirms the selection, which is reflected in the status area.

Linking Transitions Between Keyers

- 1 In the Panel >Config menu, press [Link/Program Button].
The Link/Program Button menu appears.
- 2 In the <Link> group, press [Key Trans Link].
The Key Trans Link menu appears.
The status area shows the keyers for each M/E bank and the linked keyers.
- 3 Using any of the following methods, select the keyer to be the master.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Master Key	Select keyer to be master	1 to 40

The selected keyer appears in reverse video.

- 4 In the <Key Select> group, select the keyer to be linked to the transition of the master.

Notes

Linking does not apply to a transition carried out with the downstream key control block.

Linking the Next Transition Selection Buttons

To the transition links between keyers, you can add a link for the next transition selection buttons in the transition control block. The effect of this additional link is such that if for example, two keyers (Key 2 and Key 3) are linked with the master keyer (Key 1), pressing the [KEY1] next transition selection button also selects the [KEY2] and [KEY3] buttons.

- 1 Set the transition links between keyers.

For details of the operation, see the previous section “Linking Transitions Between Keyers.”

2 Press [Next Trans Link], turning it on.

The [KEY1] to [KEY8] next transition selection buttons in the transition control block are now selected coupled to the settings in the Key Trans Link menu for transition links between keyers.

Notes

These settings apply to the whole Key Trans Link menu. It is not possible to make separate settings for each master keyer.

Selecting the Module to be the Reference for Device Control Block

When both trackball and joystick device control blocks are connected, select which is to be the reference. Also select the range to which key wipe positioning applies.

To select the reference module

- 1 In the Panel >Config menu, press [JS/TB User Setting].
The JS/TB User Setting menu appears.

- 2 In the <Reference Module> group, select one of the following.

Trackball: Trackball device control block

Joystick: Joystick device control block

To select the range to which key wipe positioning applies

In the Panel >Config menu <Wipe Pos Key Select Module> group, select one of the following.

KEY1-4: Applies to keys 1 to 4.

KEY1-8: Applies to keys 1 to 8.

Notes

When “KEY1-8” is selected, after selecting more than one key it is not possible to carry out key wipe positioning. There is no such restriction when “KEY1-4” is selected.

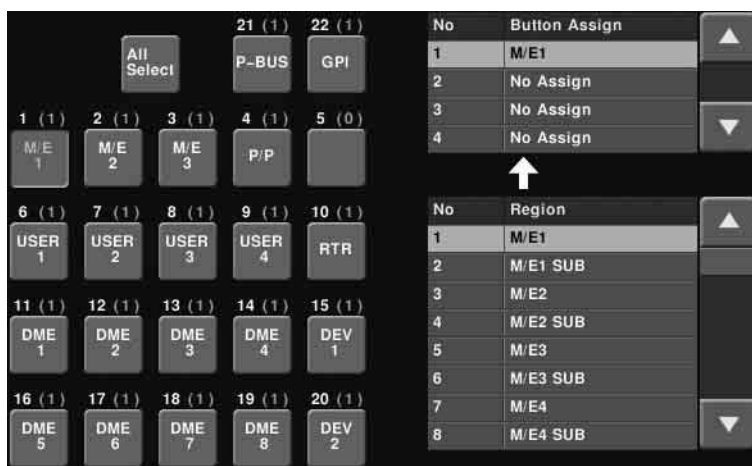
Assigning a Region to the Region Selection Buttons in the Numeric Keypad Control Block or Multifunction Flexi Pad Control Block

You can set a maximum of four regions to each of the region selection buttons in the numeric keypad control block or Multifunction Flexi Pad control block. In the Multifunction Flexi Pad control block, pressing the region selection button [MORE] displays the regions not assigned to the region selection buttons on the memory recall section numeric keypad buttons, so that you can select them, and set the assignment of regions to the numeric keypad buttons. However, in the Multifunction Flexi Pad control block, it is not possible to assign a region to the [EXIT] button.

For details of the Multifunction Flexi Pad control block, see “Multifunction Flexi Pad Control Block” in Chapter 2 (Volume 1).

- 1 In the Panel >Config menu, press [10 Key Region Assign].

The 10 Key Region Assign menu appears.



When a CCP-6224 or CCP-6324 control panel including a Multifunction Flexi Pad control block is connected, the display in the button area at the lower part of the status area changes as follows.



The left side of the status area shows region selection buttons; the upper part of the right side shows a list of regions assigned to region selection buttons, and the lower part shows a list of assignable regions.

2 To assign regions to the region selection buttons in the Multifunction Flexi Pad control block or the numeric keypad buttons in the memory recall section, press either of the following buttons in the <Flexi Pad Area Sel> group of the button area.

[Region Sel Btn Area] button: When assigning a region to the region selection buttons

[Mem Rcl Btn Area] button: When assigning a region to the numeric keypad buttons in the memory recall section

3 Press the indication of the button for the assignment.

The button you pressed appears in reverse video.

4 Using any of the following methods, select one of the four regions for the setting.

- Press directly on the list in the upper part of the right side.
- Press the arrow keys to scroll the reverse video cursor in the list in the upper part of the right side.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Button Assign	Selection to which setting applies	1 to 4

5 Using any of the following methods, select the region to be assigned.

- Press directly on the list in the lower part of the right side.
- Press the arrow keys to scroll the reverse video cursor in the list in the lower part of the right side.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
2	Region	Region selection	1 and upwards

6 Press [Set], to confirm the selection.

This assigns the region to the region selection button in the numeric keypad control block.

Notes

Only regions assigned here can be used for keyframe or snapshot recall. If an M/E bank is not assigned to a region selection button in the numeric keypad control block or Multifunction Flexi Pad control block, the M/E Flexi Pad control block or Multifunction Flexi Pad control block cannot be used to recall a snapshot.

To return the region assignment to the factory default state

In the Panel >Config >10 Key Region Assign menu, press [Default].
This returns the assignment of region selection buttons in the numeric keypad control block to the factory default state.

To delete a region assignment

In step **3** of the procedure “Assigning a Region to the Region Selection Buttons in the Numeric Keypad Control Block or Multifunction Flexi Pad Control Block” (page 61), make the selection to which the operation applies, then press [Clear].
This clears the assignment of the selected region.

Setting the region selection buttons selected when the [ALL] button is pressed

- 1
- In the Panel >Config >10 Key Region Assign menu, press [All Select] in the button area, or the [All Select] button indication in the status area, setting it to On.

The [All Select] button indication in the status area changes to orange, and the system switches to a mode for assigning region selection buttons to the [ALL] button. In the factory default state, all buttons appear in reverse video, and are assigned to the [ALL] button.
- 2
- If you do not want to assign any region selection button to the [ALL] button, press the corresponding button indication, setting it to Off.

The button you pressed returns to normal display.

Notes
Assignment to the [ALL] button is region by region. Changing the assignment of a region selection button does not change the regions assigned to the [ALL] button.

Setting Transition Control Block Button Assignments

There are three separate menus for these settings, for the left part of the transition control block (Transition Module1), upper right part (Transition Module2), and lower right part (Transition Module3).

The following example describes the operation for the left part (Transition Module1 menu), but operations in the Transition Module2 and Transition Module3 menus are similar.

- 1** In the Panel >Config menu, press [Link/Program Button].
The Link/Program Button menu appears.
- 2** Press [Transition Module1].
The Transition Module1 menu appears.
- 3** Select the bank of the transition control block you want to set in the <Bank Select> group.
The current assignment of the buttons appears at the left.
- 4** Press the transition type selection button for which you want to change the assignment.
The button you pressed appears in reverse video.
- 5** Using any of the following methods, select the function to be assigned, from the list on the right.
 - Press directly on the list.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Button Assign	Selection of function	1 and upwards

- 6** Press [Set].
The texts on the button illustrations change to reflect the selection.

To cancel the assignment

Press [Clear].

To make the assignment the default

Press [Default].

Setting the Assignment of Macro Operation Buttons

Notes

This setting applies to all simple type Flexi Pad control blocks on the control panel.

To switch the [UNDO] button on a simple type Flexi Pad control block to a [MCRO] button for macro operation, use the following procedure.

- 1 In the Panel >Config >Link/Program Button menu, press [Flexi Pad Module].

The Flexi Pad Module menu appears.

- 2 Select the assignment of the [UNDO] button in the simple type Flexi Pad control block from the <UNDO Button Assign> group.

UNDO: use as an [UNDO] button.

MACRO: use as a [MCRO] button.

Assigning the Dual Background Bus Mode Switching Function

The dual background bus mode is a mode in which the background A row shifted signal can be selected with the key 1 row, and the background B row shifted signal can be selected with the key 2 row. To switch this mode on and off, it is necessary to assign this function to the cross-point control block [PRE MCRO] button.

For details of the dual background bus, see “Signal Selection” in Chapter 3 (Volume 1).

- 1 In the Panel >Config menu, press [Link/Program Button].

The Link/Program Button menu appears.

- 2 Press [Xpt Module].

The Xpt Module menu appears.

- 3 Using any of the following methods, select the bank.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Bank	Bank selection	1 to 5

- 4 In the <PRE MCRO/POST MCRO> group, select [Dual Bkgd Bus].

This assigns the dual background mode to the [PRE MCRO] button, and disables the [POST MCRO] button.

Assigning the Utility/Shotbox Mode Switching Function

You can first assign functions to the key 2 row cross-point buttons, and then use them in the same way as the buttons in the utility/shotbox control block. To switch this mode on and off, it is necessary to assign this function to the cross-point control block [PRE MCRO] button.

For details of how to assign a function to this button, see “Assigning a Function to the Key 2 Row Cross-Point Buttons” (page 111).

- 1** In the Panel >Config menu, press [Link/Program Button].

The Link/Program Button menu appears.

- 2** Press [Xpt Module].

The Xpt Module menu appears.

- 3** Using any of the following methods, select the bank.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Bank	Bank selection	1 to 5

- 4** Select [Utility/Shotbox] in the <PRE MCRO/POST MCRO> group.

This assigns the utility/shotbox mode to the [PRE MCRO] button, and disables the [POST MCRO] button.

Assigning the Function to Disable Cross-Point Button Operations to a Button

- 1** In the Panel >Config menu, press [Link/Program Button].

The Link/Program Button menu appears.

- 2** Press [Xpt Module].

The Xpt Module menu appears.

- 3** Using any of the following methods, select the bank.

- Press directly on the list in the status area.

- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Bank	Bank selection	1 to 5

- 4** Press [Inhibit Set] in the <PRE MCRO/POST MCRO> group.

This assigns the function to disable cross-point button operations to the [PRE MCRO] button.

Assigning the AUX Bus Control Mode Switching Function

You can switch the cross-point control block of the CCP-6224/6324 control panel to AUX bus control mode (AUX panel-less function). You can display the names of the sources or buses for the AUX buses in the source name displays.

The function for switching to AUX control (AUX Ctrl) mode is assigned to the [PRE MCRO] button. And the function for switching the source name displays to the names of the sources or buses for the AUX buses is assigned to the [POST MCRO] button.

- 1** In the Panel >Config menu, press [Link/Program Button].

The Link/Program Button menu appears.

- 2** Press [Xpt Module].

The Xpt Module menu appears.

- 3** Using any of the following methods, select the bank.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Bank	Bank selection	1 to 5

- 4** Select [Aux Ctrl/Aux Disply] in the <PRE MCRO/POST MCRO> group.

This assigns the Aux Ctrl function to the [PRE MCRO] button, and the Aux Display function to the [POST MCRO] button.

Assigning Keys to the DSK1 and DSK2 Buttons in the Downstream Key/Fade-to-Black Control Block

It is possible to select the key used for downstream key/fade-to-black control block operations.

For details of the downstream key/fade-to-black control block, see Chapter 2 (Volume 1).

- 1 In the Panel >Config >Link/Program Button menu, press [DSK/FTB Module].

The DSK/FTB Module menu appears.

The left side of the status area shows the DSK1 and DSK2 buttons, and the right side shows a list of keys to be assigned.

- 2 Press the indication (DSK1, DSK2) of the button for the assignment.

The button you pressed changes to reverse video.

- 3 Using any of the following methods, select the key to be assigned.

- Press directly on the list.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Key No	Selection of key assigned to button	1 to 40

- 4 Press [Set], to confirm the selection.

This assigns the selected key to the key delegation button.

To return the key delegation button assignment to the factory default state

In the DSK/FTB Module menu, press [Default].

This returns the key delegation assignment to the factory default state.

Assigning Keys to the Independent Key Transition Control Block (Simple Type)

It is possible to select the keys that can be used in an independent key transition control block (simple type) operation.

For details of the independent key transition control block (simple type), see Chapter 2 (Volume 1).

The control panel comprises a main base for installing the principal switcher bank control blocks, and an extension section for extended control blocks. The independent key transition control block (simple type) can be installed in either, but the assignable keys differ as follows.

When the independent key transition control block (simple type) is installed in the main base

Select the keys to be assigned from the following.

- Key1,2 (keys 1 and 2) ¹⁾
- Key3,4 (keys 3 and 4) ¹⁾
- Key5, 6 (keys 5 and 6) ¹⁾
- Key7, 8 (keys 7 and 8) ¹⁾
- 1) The M/E bank depends on the settings in the M/E Assign menu where the independent key transition control block is installed.
- DSK1,2 (downstream keys 1 and 2)
- DSK3,4 (downstream keys 3 and 4)
- DSK5, 6 (downstream keys 5 and 6)
- DSK7, 8 (downstream keys 7 and 8)
- N/A (no assignment)

When the independent key transition control block (simple type) is installed in the extension section

Select the keys to be assigned from the following.

- M/E-1 Key1,2
- M/E-1 Key3,4
- M/E-1 Key5, 6
- M/E-1 Key7, 8
- M/E-2 Key1,2
- M/E-2 Key3,4
- M/E-2 Key3, 4
- M/E-2 Key5, 6
- M/E-2 Key7, 8
- M/E-3 Key1, 2
- M/E-3 Key3, 4
- M/E-3 Key5, 6
- M/E-3 Key7, 8
- M/E-4 Key1, 2
- M/E-4 Key3, 4
- M/E-4 Key5, 6
- M/E-4 Key7, 8
- DSK1, 2
- DSK3, 4
- DSK5, 6
- DSK7, 8

- Key1, 2 ¹⁾
- Key3, 4 ¹⁾
- Key5, 6 ¹⁾
- Key7, 8 ¹⁾

1) These keys are the keys of the M/E-1, M/E-2, M/E-3, M/E-4 or PGM/PST bank depending on the settings of the M/E Assign menu of the interface port for the extension section in which the independent key transition control block is installed.

- N/A (no assignment)

To assign a key to the main base

To assign a key to the independent key transition control block (simple type), use the following procedure. Here the example shown is the case in which keys 3 and 4 (“Key3,4”) are assigned to the second row switcher bank of the main base.

- 1** In the Panel >Config menu, press [Compact Key Module Assign].
The Compact Key Module Assign menu appears.
The left side of the status area shows data for the main base (physical layout and switcher bank names and key assignment).
- 2** Press directly on the display on the left, to select the control block for the assignment.
Here, press on the intersection of the “2nd Row” column and “Module” row.
- 3** Select the key from the table on the right.
- 4** Press [Set].

To return the key assignment to the default

In the Compact Key Module Assign menu, press [Default].

This returns all key assignments for the main base to their factory default state.

To assign a key to an extension

Press [Extension Port], to display the Extension Port menu, then continue as for the main base.

To return the extension assignments to their original values, press [Default].

Assigning Functions to Key Control Block Buttons

Select one of the four key control blocks installed in the main base and extension, then assign functions to the 30 buttons.

- 1 In the Panel >Config menu, press [Link/Program Button].

The Link/Program Button menu appears.

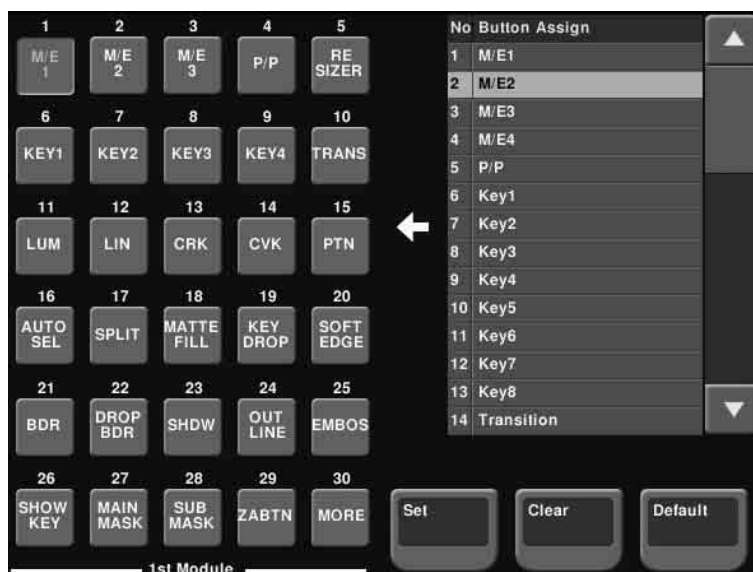
- 2 Press [Key Control Module].

The Key Control Module menu appears.

- 3 Press one of [1st], [2nd], [3rd], and [4th], to select the key control block.

- 4 Press [Button Assign].

The assignment status of the control block you selected in step 3 above appears.



- 5 Press the button to which you want to assign a function, displaying it in reverse video.

- 6 Using any of the following methods, select the function you want to assign from the Button Assign list.

- Press directly on the list.

- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Button Assign	Select function to be assigned to button	1 to maximum value

7 When you have completed the required assignments, press [Set].

Assigning Preview Output to Preview Selection Buttons

It is possible to assign any preview output to a preview selection button. This applies to the preview selection buttons in the fade-to-black control block and the downstream key/fade-to-black control block.

For details of these control blocks, see Chapter 2 (Volume 1).

1 In the Panel >Config menu, press [Link/Program Button].

The Link/Program Button menu appears.

2 Press [Fade To Black Module].

The Fade To Black Module menu appears.

On the left of the status area, preview selection buttons (1 to 11) appear.

On the right side a list of signals to be assigned appears.

3 In the button indications on the left, press the button for the assignment.

4 Using any of the following methods, select the signal to be assigned.

- Press directly on the list on the right.
- In the list on the right, press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Button	Button selection	1 and upwards

5 Press [Set].

This assigns the signal selected in the list to the button.

To cancel an assignment

Select the button, then press [Clear].

This leaves nothing assigned.

To return all preview selection button assignments to the factory default state

In the Fade To Black Module menu, press [Default].

Assigning Functions to the Device Control Block

Assigning devices or functions to the device selection buttons and other buttons of the device control block (search dial)

You can assign devices and functions to the device selection buttons, SBOX buttons and [DELAY] button of the device control block (search dial).

For details of the device control block (search dial), see Chapter 2 (Volume 1).

- 1

In the Panel >Config menu, press [Link/Program Button].
The Link/Program Button menu appears.
- 2

Press [Device Control Module].
The Device Control Module menu appears.
The left of the status area shows the device selection buttons, SBOX buttons and [DELAY] button of the device control block (search dial). The list on the right shows the devices and functions that can be assigned.
- 3

In the button displays on the left, press the button for the assignment.
- 4

Using any of the following methods, select the device or function to be assigned.
 - Press directly on the list on the right.
 - In the list on the right, press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Device Function	Selection of device or function to be assigned	1 and upwards

- 5

Press [Set].
This assigns the device or function selected in the list to the button.

To cancel an assignment

Select the button, then press [Clear].

This removes the assignment to that button.

To return all device selection button assignments to the factory default state

In the Device Control Module menu, press [Default].

Assigning devices and functions to the region selection buttons of the device control block (trackball)/device control block (joystick)

You can assign devices and functions to the region selection buttons of the device control block (trackball)/device control block (joystick).

For details of the device control block (trackball)/device control block (joystick), see Chapter 2 (Volume 1).

- 1

In the Panel >Config menu, press [Link/Program Button].
The Link/Program Button menu appears.
- 2

Press [Joystick/Trackball Module].
The Joystick/Trackball Module menu appears.
- 3

In the lower right <Mode Select> group, select [Device/Clip] or [Wipe/RSZR].
Device/Clip: Assignment while the device control block DEV button is lit
Wipe/RSZR: Assignment while no button is lit on the device control block or the RSZR button is lit
According to the selection, the left of the status area shows the region selection buttons of the device control block. The list on the right shows the devices and functions that can be assigned.
- 4

In the button displays on the left, press the button for the assignment.
- 5

Using any of the following methods, select the device or function to be assigned.
 - Press directly on the list on the right.
 - In the list on the right, press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Function	Selection of device or function to be assigned	1 and upwards

- 6

Press [Set].

This assigns the device or function selected in the list to the button.

To cancel an assignment

Select the button, then press [Clear].

This removes the assignment to that button.

To return all device selection button assignments to the factory default state

In the Joystick/Trackball Module menu, press [Default].

Inhibiting Utility 2 Bus and Key Operations

You can inhibit operations on the utility 2 bus and keys 1 to 8 of the M/E and PGM/PST banks by menu operations.

This inhibitions apply for the following control blocks.

- Cross-point control block
- Transition control block
- Independent key transition control block ¹⁾

1) Only when the Key1, 2, Key 3, 4, Key5, 6 or Key7, 8 are assigned by the Compact Key Module Assign menu.

Notes

In the auxiliary bus control block and other control blocks which are excluded from M/E and PGM/PST banks, the operations on the utility 2 bus and keys 1 to 8 are not inhibited.

1 In the Panel >Config menu, press [Operation Inhibit].

Operation Inhibit menu appears.

2 Press [M/E Operation Inhibit].

The M/E Operation Inhibit menu appears.

3 In the list in the status area, using any of the following methods, select the switcher bank for which operations are to be inhibited.

- Press directly on the desired switcher bank in the list.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Bank	Switcher bank selection for inhibiting operations	1 and upwards

- 4 In the <M/E Operation Inhibit> group, press the utility 2 bus or key button ([Util2 Bus] or [Key1] to [Key8]) for which operations are to be inhibited.

Inhibiting DME Channel Selection Operations

You can inhibit DME channel selection operations from the device control block (trackball) or device control block (joystick).

- 1 In the Panel >Config menu, press [Operation Inhibit].
The Operation Inhibit menu appears.
- 2 Press [Joystick/Trackball Module].
The Joystick/Trackball Module menu appears.
- 3 In the list in the status area, using any of the following methods, select the DME channel for which operations are to be inhibited.
 - Press directly on the desired DME channel in the list.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	DME Ch	DME channel selection for inhibiting operations	1 to 8

- 4 Press [Inhibit].

Assigning Functions to the Menu Control Block Top Menu and User Preference Buttons

To these 41 buttons, you can freely assign a menu recall or user preference button function.

For details of the menu control block, see Chapter 2 (Volume 1).

- 1 In the Panel >Config menu, press [Link/Program Button].
The Link/Program Button menu appears.
- 2 Press [Menu Panel].
The Menu Panel menu appears.

The left side of the status area shows the Top menu selection buttons and user preference buttons, and the right side shows a list of menus and actions to be assigned.

3 Using any of the following methods, scroll the display.

- Press the arrow keys.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Scroll	Scroll	1 to 5

4 In the button indications on the left, press the button for the assignment.

5 Using any of the following methods, select the menu or action to be assigned.

- Press directly on the right list.
- Press the arrow keys on the right list to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
3	Menu/Action	Select the menu or action	1 to 43

6 Press [Set] you confirm the setting.

This assigns the menu or action selected in the list to the button.

To cancel an assignment, select the button, then press [Clear].

To return all button assignments to the factory default state, in the Menu Panel menu, press [Default].

Assigning Functions to the Buttons in the Multifunction Flexi Pad Control Block

You can assign functions to the buttons in the various parts of the Multifunction Flexi Pad control block in the following menus.

Mode selection buttons: Multi Function Module menu

Region selection buttons: 10 Key Region Assign menu

Memory recall buttons: Multi Function Module menu

For details of the Multifunction Flexi Pad control block, see “Multifunction Flexi Pad Control Block” in Chapter 2 (Volume 1).

For details of assignment of regions to the region selection buttons, see “Assigning a Region to the Region Selection Buttons in the Numeric Keypad Control Block or Multifunction Flexi Pad Control Block” (page 61).

- 1 In the Panel >Config menu, press [Link/Program Button].
The Link/Program Button menu appears.
- 2 Press [Multi Function Module].
The Multi Function Module menu appears.
- 3 Press one of the following three buttons displayed in the button area.
[Mode Sel Assign] button: To assign a function to the mode selection buttons
[Eff Edit Assign] button: To assign a function to a button in the memory recall section for effect editing (when the [EFF] and [EDIT ENBL] buttons are pressed)
[Macro Edit Assign] button: To assign a function to a button in the memory recall section for macro editing (when the [MCRO] and [EDIT ENBL] buttons are pressed)
 The left side of the status area shows an image of each button, and the right side shows a list of menus and actions to be assigned.
- 4 In the button indications on the left, press the button for the assignment.
- 5 Using any of the following methods, select the mode or action to be assigned.
 - Press directly on the right list.
 - Press the arrow keys on the right list to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
3	Button Assign	Select the mode or action	1 and upwards ^{a)}

a) The following modes and functions can be selected.

• **Mode selection buttons**

Mode	Button indication
Effect	EFF
Snapshot	SNAP SHOT
Shotbox	SHOT BOX
Macro	MCRO
Wipe snapshot	WIPE

Mode	Button indication
DME wipe snapshot	DME WIPE
Transition rate	TRANS RATE
Key adjust	KEY ADJ
Key snapshot	KEY SS

• **Buttons in the memory recall section during effect editing**

Function	Button indication
Undo	UNDO
Pause setting	PAUS
Copy	COPY
Paste	PSTE
Select all	ALL
Insert	INS
Modify	MOD
Delete	DEL
Keyframe loop count setting	KF LOOP
Effect duration setting	EFF DUR
Keyframe duration setting	KF DUR
Delay setting	DLY
Constant duration mode on or off	CNST DUR
Go to specified timecode	GOTO TC
Go to specified keyframe	GOTO KF
Set range	FROM TO
Return the button display to that before effect was executed	EXIT
Switch to numeric keypad input mode	STOR
Go to first keyframe	REWIND
Switch to shifted functions	SHFT
Go to previous keyframe	<<PREV
Go to next keyframe	>>NEXT
Execute effect	RUN

The functions of the buttons in the memory recall section during effect editing are on two pages; to set the functions of buttons on the second page, press the [2] button in the < PageSelect > group in the button area.

- **Buttons in the memory recall section during macro editing**

Function	Button indication
Undo	UNDO
Pause setting	PAUS
Auto insert mode on or off	AUTO INS
Copy	COPY
Paste	PSTE
Select all	ALL
Insert	INS
Modify	MOD
Delete	DEL
Set range	FROM TO
Go to specified event	GOTO EVNT

6 Press [Set] to confirm the setting.

This assigns the menu or action selected in the list to the button.

To cancel an assignment

Select the button, then press [Clear].

To return all button assignments to the factory default state, press [Default].

Assigning a Function to the Independent Key Transition Control Block (Simple Type)

You can assign a function to the buttons in the independent key transition control block (simple type).

The assignment may be to the independent key transition type selection buttons and buttons in the independent key transition execution section.

1 In the Panel >Config menu, press [Link/Program Button].

The Link/Program Button menu appears.

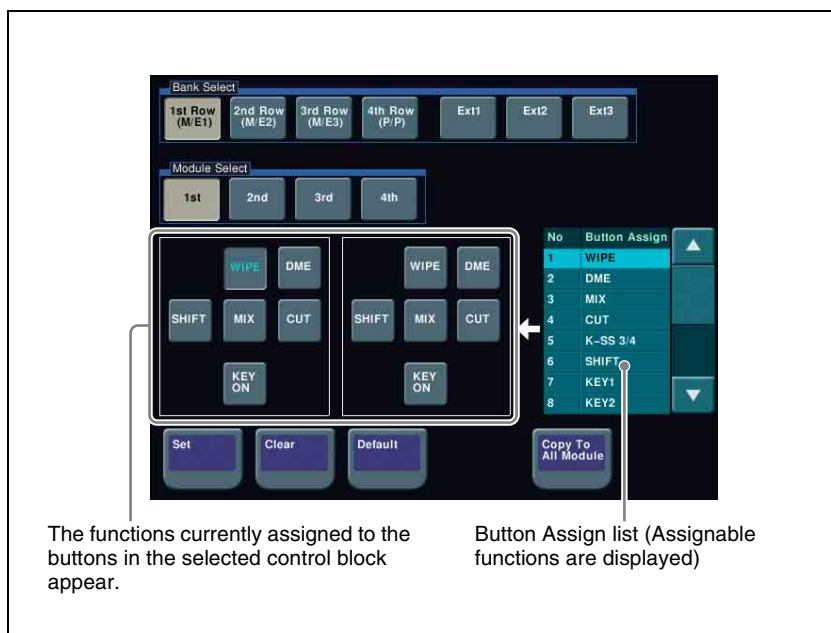
2 Press [Compact Key Trans Module].

The Compact Key Transition Mode menu appears.

3 In the <Bank Select> group, select the bank you want to manipulate.

4 According to the selected bank, select the control block to be assigned, in the <Module Select> group.

The currently assigned function is displayed in the area that displays the buttons in the selected control block.



- 5** Press a button to which to assign a function so that the button is displayed in reverse video.
- 6** Using any of the following methods, select a desired function to be assigned in the Button Assign list.
 - Press directly on the desired list.
 - Press the reverse video keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Button Assign No	Selection of a function to assign to the selected button	1 to 15

- 7** Press [Set].

The function selected in step **6** is assigned to the selected button.

To remove a function assignment

In step **5**, select the button whose function assignment you want to remove, and press [Clear].

To return the function assignments to the factory default state
Press [Default].

To make the same assignment for all control blocks on all banks
Press [Copy To All Module].



Cross-Point Settings (Xpt Assign Menu)

To carry out the cross-point settings, use the Panel >Xpt Assign menu.

To display the Xpt Assign menu

In the Engineering Setup menu, select VF2 'Panel' and HF2 'Xpt Assign.' The status area shows a list of "cross-point assign tables" to use for the M/E banks, PGM/PST bank, and various buses.

The following functions are available here.

- **Xpt Assign:** For each control block or bus, display and set the assignments to the main table and tables 1 to 14. You can also carry out settings to link switcher signal selection to the audio mixer.
- **Main, V/K Pair Assign:** Make cross-point settings for the main table.
 - Assign video/key sources for button numbers 1 to 300.
 - For each table, specify whether the rightmost cross-point button in each row is used as a shift button, and the operation mode when it is used as a shift button.
 - For the [SHIFT] button in the cross-point control block and for each table, select the mode in which this is a shift button dedicated to the source name displays, or the mode in which it is a shift button for all buses.
 - Disable cross-point buttons to work.
- **Mixer Xpt Assign:** Assign audio mixer cross-points to cross-point buttons in the main table.
- **Table Button Assign:** Create tables 1 to 14 in the same way as the main table.
- **Src Name:** Set source names of up to 16 characters.
- **LCD Color:** Set the LCD color for source name display.
- **Table Copy:** Copy table contents from the main table to tables 1 to 14 or between tables 1 to 14 (it is not possible to copy tables 1 to 14 to the main table).
- **Name Export:** This function sends the source name and destination name to the S-Bus.
- **Side Flags Button Assign:** Assign the rightmost button in the background A/B row to the side flag function (inserting a selected image on both sides of a 4:3 image).

Creating Cross-Point Assign Tables

As cross-point assign tables, you can create a “main” table and up to 14 other tables (table 1 to table 14). However, you can only carry out assignment of the video and key combinations in the main table.

Creating the main table

In the main table, a pair consisting of a video signal and a key signal is assigned to each button number. You can also assign the same signal to another button number at the same time. Further, you can delete currently assigned signals from the main table.

- 1 In the Panel >Xpt Assign menu or Panel >Xpt Assign >Table1 (Table2, Table3, or Table4) menu, press [Main, V/K Pair Assign].

The Main, V/K Pair Assign menu appears.

The left of the status area shows the video and key signal names, source number, and audio mixer cross-points (machine numbers) currently assigned in the main table. On the right is a list of the source numbers and signals that can be assigned. When the shift button is pressed, the number column is distinguished by color.

For details of audio mixer cross-point assignment operations, see “Setting the audio mixer cross-points” (page 92).

- 2 Using any of the following methods, select the button number.

- Press an auxiliary bus control block cross-point button.
(The auxiliary bus control block is in selection mode, only when the menu for cross-point button selection is showing.)
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	V/K Pair No	Selection of video and key pair number	1 to 300

- 3 When assigning a video signal, press [Video] in the <Assign> group. When assigning a key signal, press [Key]. (You can select a video signal and a key signal at the same time.)

Notes

[Video] and [Key] in the <Assign> group cannot be turned off at the same time. At least the one or the other is always on.

- 4 Use any of the following methods to select the signal to assign.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
3	Source No	Selection of source to be assigned	1 to 228

5 Using the buttons in the <Xpt Assign> group, assign the selected signal to the button number currently selected in the main table.

Set: Delete the signal currently assigned to the selected button number and make a new assignment.

Insert: Move down one line the signal currently assigned to the selected button number and following signals, and make a new assignment.

Notes

When a button number upper than 121 is selected, execution of “Insert” is impossible. The signal assignments to button numbers upper than 121 cannot be changed. When “Insert” is executed for any other number, moving down of signals ends at number 120, and the signals assigned to numbers upper than 121 are maintained in their original lines.

To disable a button

In the Panel >Xpt Assign >Main, V/K Pair Assign menu, select the button you want to disable, and press [Inhibit].

To delete any currently assigned signal

In the Panel >Xpt Assign >Main, V/K Pair Assign menu, select the button corresponding to the signal you want to delete, and press [Delete] in the <Xpt Assign> group.

Signal deletion is executed in accordance with the selection in the <Assign> group, and the signal assigned to the button number next to the selected button number and following signals move up one line.

Notes

When a button number upper than 121 is selected, execution of “Delete” is impossible. The signal assignments to button numbers upper than 121 cannot be changed. When a signal assigned to any other button number is deleted, moving up of signals ends when the signal assigned to number 120 has moved to number 119, and the signals assigned to numbers upper than 121 are maintained in their original lines.

Creating tables 1 to 14

When creating tables 1 to 14, in the same way as when creating the main table, you can assign the same signal to more than one button number, or delete currently assigned signals. However, assignment of video and key combinations is impossible.

- 1 In the Panel >Xpt Assign menu, press [Table Button Assign].

The Table Button Assign menu appears.

The table number appears on the upper left part of the status area.

The left part of the status area shows the cross-point button numbers, video and key pair numbers, video signal source names and source numbers, and key signal source names and source numbers. When the shift button is pressed, the number column is distinguished by color.

The right part shows the video and key pair numbers, and the names of video signals and key signals set in the main table.

The Table Button Assign menu also allows you to access the Main, V/K Pair Assign menu and the Src Name/LCD Color menu.

- 2 Using the knob, select the table number.

Knob	Parameter	Adjustment	Setting values
1	Table No	Selection of the table to be set	1 to 14

- 3 Using any of the following methods, select the button number.

- Press an auxiliary bus control block cross-point button.
(The auxiliary bus control block is in selection mode, only when the menu for cross-point button selection is showing.)
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
2	Button No	Cross-point button selection	1 to 300

- 4 Using any of the following methods, select the pair number.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
3	V/K Pair No	Selection of video and key pair number to be assigned	1 to 300

- 5 Using the buttons in the <Button Assign> group, assign the selected pair number to the button number currently selected in table 1.

Set: Delete the signal currently assigned to the selected button number and make a new assignment.

Insert: Move down one line the signal currently assigned to the selected button number and following signals, and make a new assignment.

Notes

When a button number upper than 121 is selected, execution of “Insert” is impossible. The signal assignments to button numbers upper than 121 cannot be changed. When “Insert” is executed for any other number, moving down of signals ends at number 120, and the signals assigned to numbers upper than 121 are maintained in their original lines.

To disable a button

In the Panel >Xpt Assign >Table Button Assign menu, select the button you want to disable, and press [Inhibit].

To delete any currently assigned signal

In the Panel >Xpt Assign >Table Button Assign menu, select the button corresponding to the signal you want to delete, and press [Delete] in the <Button Assign> group.

The signal assigned to the button number next to the selected button number and following signals move up one line.

Notes

When a button number upper than 121 is selected, execution of “Delete” is impossible. The signal assignments to button numbers upper than 121 cannot be changed. When a signal assigned to any other button number is deleted, moving up of signals ends when the signal assigned to number 120 has moved to number 119, and the signals assigned to numbers upper than 121 are maintained in their original lines.

Returning the table to its default state

- 1 In the Panel >Xpt Assign >Main, V/K Pair Assign menu or Panel >Xpt Assign >Table Button Assign menu, press [Default Recall].

A confirmation message appears, asking whether or not to return to the default state.

- 2 To return to the default state, press [Yes], and to cancel the operation, press [No].

Setting the cross-point button shift operation

You can set the operation of the rightmost button in each row of cross-point buttons excluding the reentry buttons.

In the <Xpt Shift Mode> group of the Panel >Xpt Assign >Main, V/K Pair Assign menu or Panel >Xpt Assign >Table Button Assign menu, select one of the following for each cross-point table.

Hold: Acts as a shift button, and the shifted version of the cross-point buttons is enabled while the button is held down.

Lock: Acts as a shift button, and pressing the button toggles between the shifted version and the unshifted version.

Off: Acts as a cross-point button, in a 16-button system as button number 16, in a 24-button system as button number 24, and in a 32-button system as button number 32.

Setting the action of the [SHIFT] button in the cross-point control block

In the <Display Shift Mode> group of the Panel >Xpt Assign >Main, V/K Pair Assign menu or Panel >Xpt Assign >Table Button Assign menu, select either of the following.

Shift All Bus: When this is On, it functions as a shift button for all buses.

Key5-8 Select: This functions as a shift button dedicated to the key 1 and key 2 rows. When On, keys 5 to 8 are selected, and when Off, keys 1 to 4 are selected.

Notes

- It is not possible to make this setting separately for each of the M/E and PGM/PST banks.
- “Shift All Bus” is only valid when the cross-point button shift operation (*see previous item*) is set to “Lock” or “Off.”
- If both Shift All Bus and Key5-8 Select are off, this button functions as a shift button for the source name display. It is not possible to set both Shift All Bus and Key5-8 Select to On.

Setting the source signal name

- 1 In the Panel >Xpt Assign menu or Panel >Xpt Assign >Table Button Assign menu, press [Src Name/LCD Color].

The Src Name/LCD Color menu appears.

- 2 Turn the knob to select the signal to be set.

Knob	Parameter	Adjustment	Setting values
1	Source No	Source signal selection	1 to 228
2	Num	Number of source signals to be selected	1 to 228

3 Press [Source Name].

A keyboard window appears.

4 Enter any name of not more than 16 characters, then press [Enter].

For details of keyboard window operation, see “Menu Operations” in Chapter 2 (Volume 1).

Sequential names for multiple signals

When you specify a number at the end of a signal name, all of the signals in the range selected by knobs 1 and 2 are automatically assigned names ending with sequential numbers.

Example: To assign sequential names to source signal 2 through source signal 4

1. In step **2** above, set knob 1 to “2,” and set knob 2 to “3.”
2. Set the name of source signal 2 to “CAM2.”

The name “CAM3” is assigned automatically to source signal 3, and the name “CAM4” is assigned automatically to source signal 4.

Setting the source name display color

- 1 In the Panel >Xpt Assign >Table Button Assign >Src Name/LCD Color menu, turn the knobs to select the setting target.

Knob	Parameter	Adjustment	Setting values
1	Source No	Source signal selection	1 to 228
2	Num	Number of source signals to be selected	1 to 228

- 2 In the <LCD Color> group, select the color (Orange/Green/Yellow).

Copying Cross-Point Assign Tables

The contents of a cross-point assign table can be copied to another cross-point assign table, and vice versa.

Notes

The contents of a sub table cannot be copied to the main table.

- 1** In the Panel >Xpt Assign menu, press [Table Copy].

The Table Copy menu appears.

The status area shows a list of copy sources and a list of copy destinations.

- 2** Using any of the following methods, select the number of the table to use as the copy source and the number of the table you want to be the copy destination.

- Press directly on the list of copy sources (left-side list) or the list of copy destinations (right-side list) in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Left No	Selection of copy source	1 to 15
2	Right No	Selection of copy destination	1 to 14

- 3** Press [Copy].

A confirmation message appears, asking whether or not to execute the copy.

- 4** To execute the copy, press [Yes], and to cancel the operation, press [No].

Selecting Cross-Point Assign Tables

You can select the cross-point assign table to be used for each of the following banks or buses.

- M/E-1 to M/E-4 banks and PGM/PST bank
- Buses assignable to AUX delegation buttons

Notes

It is not possible to assign cross-point tables 5 to 14 to a bus of a switcher operated by an MKS-8080/8082 AUX Bus Remote Panel.

- 1** In the Panel >Xpt Assign menu, using any of the following methods, select the switcher bank or bus.

- Press directly on the list on the left of the status area.
- Press the arrow keys on the list on the left to scroll the reverse video cursor.

- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Bank/Bus No	Switcher bank or bus selection	1 and upwards
2	Num	Number of selected switcher banks or buses	1 and upwards

2 Using any of the following methods, select the table.

- Press directly on the list on the right of the status area.
- Press the arrow keys on the list on the right to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Values
3	Table No	Selection of table to be assigned	1 to 15

3 Press [Table Assign Set].

This sets the table for the selected switcher bank or bus.

Exporting Source Names and Destination Names

To send the source names and destination names to the S-Bus, use the following procedure.

1 In the Panel >XPT Assign menu, press [Name Export].

The Name Export menu appears.

2 Turn the knob to set the station ID.

Knob	Parameter	Adjustment	Setting values
1	Station ID	Station ID setting	1 to 255 ^{a)}

a) If set to 255, the information is sent to all stations (with display of "All").

3 Press [Src Name Export].

This exports the source names to the station selected in step **2**.

4 Press [Dest Name Export].

This exports the destination names to the station selected in step **2**.

Notes

Since destination names cannot be selected freely, fixed names are used.

Making Settings for Audio Mixer

Enabling the function to link the audio mixer

Notes

For audio mixer operations in this system, it is necessary to set Mixer ESAM-II for the DCU 9-pin serial port.

For details, see “Serial Port Settings (Serial Port Assign Menu)” (page 204).

- 1** In the Panel >Xpt Assign menu, using any of the following methods, select the M/E bank or bus.
 - Press directly on the list on the left of the status area.
 - Press the arrow keys in the list on the left, to scroll the reverse video cursor.
 - Turn the knob.
- 2** Press [Audio Follow].

“Enable” appears in the “Audio Follow” column.

Setting the audio mixer cross-points

To assign an audio mixer cross-point to a switcher cross-point pair (video/key), carry out the following procedure.

- 1** In the Panel >Xpt Assign menu, press [Mixer Xpt Assign].

The Mixer Xpt Assign menu appears.
- 2** In the list on the left, select the number for the setting.
- 3** In the list on the right, select the audio mixer cross-point (machine number).
- 4** Press [Set].

The audio mixer number appears in the “Mixer Xpt” column.

Assigning a Cross-Point Button to Enable/Disable Side Flags

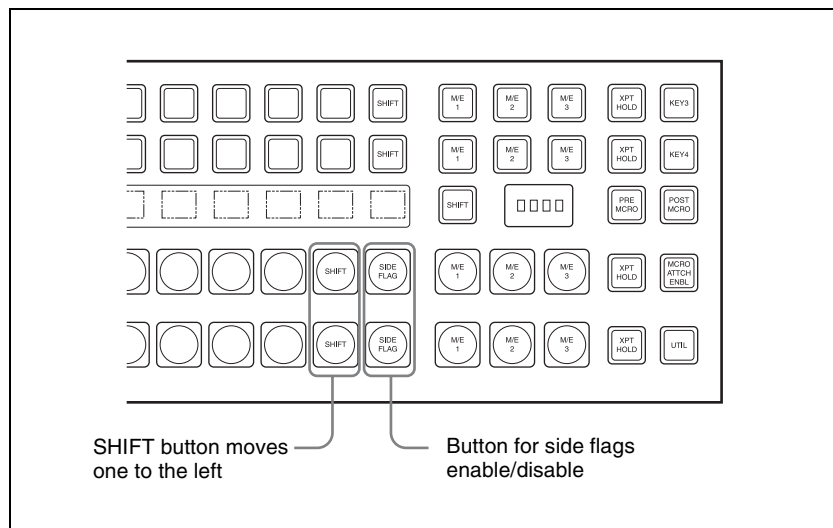
By assigning the side flag function to the rightmost button in a cross-point button row, you can use this button to enable/disable side flags for each of the M/E and PGM/PST banks.

This setting applies to all of the M/E and PGM/PST banks.

When you make this assignment, the SHIFT button (the button assigned to the shift function) is moved one to the left.

Notes

If a macro attachment is set, when you assign the button to the side flag function, the button numbers are offset, and therefore when you press the button this does not execute the macro. The settings, however, are maintained, so that when you cancel the side flag assignment, the macro can be accessed once more.



For details of side flag operations, see “Side Flag Settings” in Chapter 10 (Volume 1).

- 1 In the Panel >XPT Assign menu, press [Side Flags Button Assign].

The Side Flags Button Assign menu appears.

- 2 Press [Side Flags Btn Assign], turning it on.

This assigns the rightmost cross-point button to enabling/disabling the side flag function.

Auxiliary Bus Control Block Settings (Aux Assign Menu)

To carry out the settings of the AUX delegation buttons in the auxiliary bus control block, use the Panel >Aux Assign menu.

When using the AUX panel-less function with the CCP-6224/6324, use this menu to assign the AUX delegation buttons.

To display the Aux Assign menu

In the Engineering Setup menu, select VF2 'Panel' and HF3 'Aux Assign.' The left side of the status area shows the delegation numbers, and the list of buses set; the right side shows a list of buses that can be assigned.

The following functions are available here.

- **Aux Assign:** Assign the AUX delegation buttons in the auxiliary bus control block to any bus.
- **Shift Mode:** Specify whether the rightmost button of the AUX delegation buttons is used as a shift button, and when it is used as a shift button, the operation mode.
- **RTR Mode Setting:** Carry out the following settings for using the auxiliary bus control block for router control.
 - Assigning destinations
 - Setting the shift operation in the destination selection button rows
 - Source table settings
 - Setting the shift operation in the source selection button rows
 - Assigning levels to the level selection buttons
 - Setting destination selection buttons to be used for snapshots

Notes

When using the AUX panel-less function with the CCP-6224/6324, these settings are invalid.

Assigning a Bus to an AUX Delegation Button

- 1 In the Panel >Aux Assign menu, using any of the following methods, select the delegation button and the bus to be assigned.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Deleg No	Selection of AUX delegation button	1 to 128 ^{a)}
2	Bus No	Selection of bus to be assigned	1 to 166 ^{b)}

a) The setting can be from 1 to 62. The valid settings, however, depend on the number of buttons and the delegation button shift mode.

Number of buttons	Shift mode	Valid settings
16	OFF	1 to 16
	ON	1 to 30
24	OFF	1 to 24
	ON	1 to 46
32	OFF	1 to 32
	ON	1 to 62

b) The buses that can be assigned are as follows.

(In M/E-x, the x is the M/E bank number (1 to 4); in DSKx the x is the DSK number (1 to 8); in Keyx the x is the key number (1 to 8).)

Edit Preview, Aux1 to Aux48, Frame Memory Source1 and Frame Memory Source2, DME1V to DME8V, DME1K to DME8K, P/P Utility1 and P/P Utility2, M/E-x Utility1 to M/E-x Utility2, DSKx Fill/Source, M/E-x Keyx Fill/Source, PP EXT DME, M/Ex EXT DME, DME Utility1 and DME Utility2, CCR1 and CCR2

- For a button for which you want to disable operation, press [Inhibit].

2 Press [Set] to confirm the selection.

To set the AUX delegation button shift operation

To set the operation mode of the rightmost button in the row of AUX delegation buttons, select one of the following in the <Shift Mode> group of the Panel >Aux Assign menu.

Hold: Acts as a shift button, and the shifted version of the AUX delegation buttons is enabled while the button is held down.

Lock: Acts as a shift button, and pressing the button toggles between the shifted version and the unshifted version of the AUX delegation buttons.

Off: Acts as an AUX delegation button. In a 16-button system it acts as button number 16, in a 24-button system as button number 24, and in a 32-button system as button number 32.

Using the Auxiliary Bus Control Block for Router Control

To make router control settings, display the Setup >Panel >Aux Assign >RTR Mode Setting menu.

To display the RTR Mode Setting menu

1 In the Engineering Setup menu, select VF2 'Panel' and HF3 'Aux Assign.'
The Aux Assign menu appears.

2 Press [RTR Mode Setting].

The RTR Mode Setting menu appears. The left of the status area shows the destination number assignment status and source table, and the right side lists the destinations that can be assigned.

Assigning a destination to a destination selection button

In the Panel >Aux Assign >RTR Mode Setting menu, use the following procedure.

1 Using any of the following methods, select a destination selection button and the destination to be assigned to the button.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Dest No	Destination selection button selection	1 to 128
2	No	Destination selection in S-Bus space	1 to 1024

For a button whose operation you want to disable, press [Inhibit].

Notes

When a destination selection button having a number in the range 65 to 128 is selected, source table selection automatically becomes invalid, and therefore the Inhibit function also becomes invalid.

2 Press [Dest Set] to confirm the selection.

3 If in step **1** you selected a value in the range 1 to 64, turn the knob to select the source table.

Knob	Parameter	Adjustment	Setting values
3	Source Table	Source table selection	1 to 5

4 Press [Source Table Set] to confirm the selection.

- 5** Repeat steps **1** to **4** as required.

To set the shift operation of the destination selection buttons

To set the operation mode of the rightmost button in the destination selection button row, select one of the following in the <Dest Shift Mode> group of the Panel >Aux Assign >RTR Mode Setting menu.

Hold: Acts as a shift button, and the shifted destination selection buttons are enabled while the button is held down.

Lock: Acts as a shift button, and pressing the button toggles between the shifted and unshifted states of the destination selection buttons.

Off: Acts as a destination selection button, that is, button number 16 on a 16-button system, button number 24 on a 24-button system, and button number 32 on a 32-button system.

Setting the source table

- 1** In the Panel >Aux Assign >RTR Mode Setting menu, press [Source Table Assign].

The Source Table Assign menu appears.

- 2** In the <Source Table Select> group, select the source table you want to manipulate.

- 3** Press [Table Assign].

The Table Assign menu appears.

The left of the status area lists the button numbers and set sources, and the right side lists the source that can be assigned.

- 4** Using any of the following methods, select a source selection button and the source you want to assign.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Source No	Source selection button selection	1 to 128
2	No	Source selection in S-Bus space	1 to 1024

For a button whose operation you want to disable, press [Inhibit].

- 5** Press [Source Set] to confirm the selection.

To set the shift operation of the source selection buttons

To set the operation mode of the rightmost button in the source selection button row with different destinations assigned to the 1st and 2nd rows, select the source table in the Source Table Assign menu, then in the <Xpt Shift Mode> group select one of the following.

Hold: Acts as a shift button, and the shifted source selection buttons are enabled while the button is held down.

Lock: Acts as a shift button, and pressing the button toggles between the shifted and unshifted states of the source selection buttons.

Off: Acts as a cross-point button, that is, button number 16 on a 16-button system, button number 24 on a 24-button system, and button number 32 on a 32-button system.

To expand the shift function

To set the [KEY] button as a shift operation expansion button, in the Source Table Assign menu select the source table, then in the <Expand Xpt Shift Assign> group, press [Key Button].

In order not to expand the shift operation, press [No Assign] in the <Expand Xpt Shift Assign> group.

Assigning levels to a level selection button

To assign levels to the [LEVEL1] to [LEVEL4] buttons in the auxiliary bus control block, use the following procedure.

- 1** In the Panel >Aux Assign >RTR Mode Setting menu, press [Level Button Assign].

The Level Button Assign menu appears. The status area shows a list of the assignment status of levels to each button.

- 2** In the <Level Button Select> group, select the button you want to set.

- 3** In the <Level Assign> group, press the levels you want to assign to the button, turning them on.

You can select plural of levels. You can also make a selection that overlaps that of another button.

Selecting a destination selection button for a snapshot

To set whether snapshots are recalled for each destination selection button individually, use the Panel >Aux Assign >RTR Mode Setting menu as follows.

- 1** Use any of the following methods to select the destination selection button to which the setting applies.

- Press directly on the list on the left of the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Dest No	Selection of destination selection button	1 to 128

2 Press [SS Enable], turning it on or off.

On: When a snapshot applying to the router is recalled, the recall also applies to the selected destination selection button.

Off: When a snapshot applying to the router is recalled, the recall does not apply to the selected destination selection button.

Notes

When a destination selection button is set to Inhibit, then even if SS Enable is on, the snapshot for that destination is not recalled.

Setting Button Assignments (Prefs/Utility Menu)

Assign the [PREFS 1] to [PREFS 16] buttons in the menu control block, the utility/shotbox control block buttons, and the cross-Point control block. This assigns recalling frequently used menus (menu shortcuts), enabling/disabling functions (recalling utility commands) and recalling shotbox registers or macro registers.

- **User Preference:** Make the settings for the user preference buttons in the menu control block.
- **Utility Module Assign:** Make the utility/shotbox control block settings.
- **KEY 2/4 Bus Button Assign:** Make the settings for the key 2 row buttons in the cross-point control block.

To display the Prefs/Utility menu

In the Engineering Setup menu, select VF2 'Panel' and HF4 'Prefs/Utility.' The status area shows the settings of the user preference buttons.

Assigning Functions to User Preference Buttons

- 1 In the Panel > Prefs/Utility menu, using any of the following methods, select the button to be assigned.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	No	User preference button selection	1 to 16

- 2 In the <Action> group, select the function to be assigned.

Menu Shortcut: Assign a frequently used menu to be recalled (menu shortcut).

Utility Command: Assign a function enable/disable or similar operation (utility command).

Macro Recall: Assign a macro register recall.

Shotbox Recall: Assign a shotbox register recall.

- 3 Depending on the selection in step 2, make the following settings.

When Menu Shortcut is selected: For the subsequent operations, *see the next item “Assigning a menu shortcut to a user preference button” (page 105).*

When Utility Command is selected: A list of commands appears on the right of the status area; using any of the following methods, select the command you want to assign.

- Press directly on the list.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
3	Command	Utility command selection	1 and upwards
4 a)	GPI No	GPI port number	1 and upwards

a) When the Command parameter is set to Sw’er GPI Test Fire, Panel GPI Test Fire, DCU GPI, or Test Fire

When Macro Recall is selected: Turn the knob to select the macro register you want to assign.

Knob	Parameter	Adjustment	Setting values
3	Macro	Macro register selection	1 to 250

When Shotbox Recall is selected: Turn the knob to select the shotbox register you want to assign.

Knob	Parameter	Adjustment	Setting values
3	Shotbox	Shotbox register selection	1 to 99

4 Press [Action Set].

This assigns the selected action, which is reflected in the status area.

To cancel an assignment

After selecting the relevant button, press [Clear].

To display register names in the Utility Command column

If in step 2 you select [Macro Recall] or [Shotbox Recall], press the [Reg Name Display] button to select whether or not register names appear in the Utility Command column.

Using the [PREFS 9] to [PREFS 16] settings

There are sixteen user preference buttons that can be set, [PREFS 1] to [PREFS 16], but there are only eight user preference buttons present in the menu control block. By default these buttons are assigned to the [PREFS 1] to [PREFS 8] settings. Therefore, to use the settings of [PREFS 9] to [PREFS 16], it is

necessary to access the Engineering Setup >Panel >Config >Link/Program Button >Menu Panel menu, and assign these settings to buttons in the menu control block.

List of utility commands and user preference button status

The following table shows the utility commands that can be assigned to user preference buttons.

Command name ^{a)}	Function	Button status	
		Lit amber	Off
SWR Remote1 Enbl SWR Remote4 Enbl	Switcher Remote 1 enabled/disabled Switcher Remote 4 enabled/disabled	Enabled	Disabled
DME1 Editor Port Enbl	DME1 editor port enabled/disabled	Enabled	Disabled
DME2 Editor Port Enbl	DME2 editor port enabled/disabled	Enabled	Disabled
DME3 Editor Port Enbl	DME3 editor port enabled/disabled	Enabled	Disabled
DME4 Editor Port Enbl	DME4 editor port enabled/disabled	Enabled	Disabled
ME1 PGM1 ST ME1 PGM4 ST	M/E-1 PGM1 output safe title on/off M/E-1 PGM4 output safe title on/off	On	Off
ME1 PVW ST	M/E-1 preview output safe title on/off	On	Off
ME1 Clean ST	M/E-1 clean output safe title on/off	On	Off
ME1 K-PVW ST	M/E-1 key preview output safe title on/off	On	Off
ME2 PGM1 ST ME2 PGM4 ST	M/E-2 PGM1 output safe title on/off M/E-2 PGM4 output safe title on/off	On	Off
ME2 PVW ST	M/E-2 preview output safe title on/off	On	Off
ME2 Clean ST	M/E-2 clean output safe title on/off	On	Off
ME2 K-PVW ST	M/E-2 key preview output safe title on/off	On	Off
ME3 PGM1 ST ME3 PGM4 ST	M/E-3 PGM1 output safe title on/off M/E-3 PGM4 output safe title on/off	On	Off
ME3 PVW ST	M/E-3 preview output safe title on/off	On	Off
ME3 Clean ST	M/E-3 clean output safe title on/off	On	Off
ME3 K-PVW ST	ME-3 key preview output safe title on/off	On	Off
ME4 PGM1 ST ME4 PGM4 ST	M/E-4 PGM1 output safe title On/Off M/E-4 PGM4 output safe title On/Off	On	Off
ME4 PVW ST	M/E-4 preview output safe title On/Off	On	Off
ME4 Clean ST	M/E-4 clean output safe title On/Off	On	Off

Command name ^{a)}	Function	Button status	
		Lit amber	Off
ME4 K-PVW ST	ME-4 key preview output safe title On/Off	On	Off
PP PGM1 ST PP PGM4 ST	P/P PGM1 output safe title on/off P/P PGM4 output safe title on/off	On	Off
PP PVW ST	P/P preview output safe title on/off	On	Off
PP Clean ST	P/P clean output safe title on/off	On	Off
PP K-PVW ST	P/P key preview output safe title on/off	On	Off
DME MON1 ST	DME Monitor 1 output safe title on/off	On	Off
DME MON2 ST	DME Monitor 2 output safe title on/off	On	Off
Edit PVW ST	Edit preview output safe title on/off	On	Off
Preset ST	Preset output safe title on/off	On	Off
AUX1 ST AUX48 ST	AUX1 output safe title on/off AUX48 output safe title on/off	On	Off
FM Src1 Frame Freeze	Frame freeze of frame memory source 1	During frame freeze	Either of the other two states
FM Src1 Filed Freeze	Field freeze of frame memory source 1	During field freeze	Either of the other two states
FM Src1 Freeze Off	Release freeze of frame memory source 1	While freeze being released	Either of the other two states
FM Src2 Frame Freeze	Frame freeze of frame memory source 2	During frame freeze	Either of the other two states
FM Src2 Field Freeze	Field freeze of frame memory source 2	During field freeze	Either of the other two states
FM Src2 Freeze Off	Release freeze of frame memory source 2	While freeze being released	Either of the other two states
SWR GPI Enbl	Enable/disable switcher GPI	Enabled	Disabled
DME1 GPI Enbl	Enable/disable DME1 GPI	Enabled	Disabled
DME2 GPI Enbl	Enable/disable DME2 GPI	Enabled	Disabled
DME3 GPI Enbl	Enable/disable DME3 GPI	Enabled	Disabled
DME4 GPI Enbl	Enable/disable DME4 GPI	Enabled	Disabled
Panel GPI Enbl	Enable/disable panel GPI	Enabled	Disabled
SWR GPI1 Test Fire SWR GPI8 Test Fire	Output test trigger from switcher GPI1 Output test trigger from switcher GPI8	Output (lights only at the instant the button is pressed)	When the output is assigned
Panel GPI1 Test Fire Panel GPI8 Test Fire	Output test trigger from panel GPI1 Output test trigger from panel GPI8	Output (lights only at the instant the button is pressed)	When the output is assigned

Command name ^{a)}	Function	Button status	
		Lit amber	Off
DCU GPI1 Test Fire DCU GPI50 Test Fire	Output test trigger from port assigned to DCU GPI1 Output test trigger from port assigned to DCU GPI50	Output (lights only at the instant the button is pressed)	When the output is assigned
Macro Attachment Enbl	Enable/disable macro attachment	Enabled	Disabled
Macro Only Set	Macro only mode on/off	On	Off
Pre Macro	Set macro attachment in pre macro mode	Can be set only while pressed (lit)	When the function is assigned
Post Macro	Set macro attachment in post macro mode	Can be set only while pressed (lit)	When the function is assigned
Macro Take	Macro execution	During execution	When the function is assigned
Macro Auto Ins	Macro auto insert mode on/off	On	Off
Macro AT with Rate	When registering an auto transition macro event, on/off setting of mode to save transition rate	On	Off
Macro AT with A/B Bus	When registering an auto transition macro event for the transition control block, on/off setting of mode to save A/B Bus cross-point settings	On	Off
Macro TL with Region	When registering a timeline macro event, on/off setting of mode to save applicable region	On	Off
DME Override	DME override on/off	On	Off
DME Graphic	DME graphics on/off (Applies to graphics for channel selected in device control block)	On	Off
System Manager Enbl	Enable/disable operation from System Manager	Enabled	Disabled
Plug-In Editor Enbl	Enable/disable operation from an editing keyboard	Enabled	Disabled
Inhibit Set	Inhibit cross-point button	Can be set only while pressed (lit)	When the function is assigned
Inhibit All Clear	Clear all cross-point button inhibit settings	Can be set only while pressed (lit)	When the function is assigned
K-SS Store	Enable/disable key snapshot saving ^{b)}	Enabled	Disabled

a) For the safe title on/off commands (from ME1 PGM1 ST-ME1 PGM4 ST to AUX1 ST-AUX48 ST), the name of the assigned output signal is shown.

b) Pressing this button to turn it on enables key snapshot operations for all control blocks.

Assigning a menu shortcut to a user preference button

- 1 Referring to the procedure up to step 2 of “Assigning Functions to User Preference Buttons” (page 100), select [Menu Shortcut].
The user preference buttons [PREFS 1] to [PREFS 16] flash amber.
- 2 Using any of the following methods, display the menu to which you want to make a shortcut.
 - In the menu control block, press the relevant top menu selection button, then select VF and HF.
 - Press the menu page number button in the upper left corner of the menu screen, then enter a menu number from the numeric keypad window.
 - Press a particular control panel button twice in rapid succession.
- 3 Press the user preference button to which you want to assign the shortcut.
The menu screen goes back to the Prefs/Utility menu, and the selection is reflected in the status area. The user preference buttons [PREFS 1] to [PREFS 16] flash amber.
- 4 Repeat steps 2 and 3 as required, to assign all desired menu shortcuts to the user preference buttons.

To abandon the process of menu shortcut assignment

In the Prefs/Utility menu, press [Menu Shortcut] once more.
This exits the menu shortcut assignment mode.

Assigning a Function to a Memory Recall Button in the Utility/Shotbox Control Block

- 1 In the Prefs/Utility menu, press [Utility Module Assign].
The Prefs/Utility >Utility Module Assign menu appears. The status area shows the settings in the utility/shotbox control block.
- 2 Using any of the following methods, select the button to be assigned.
 - Press directly on the list.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Bank	Bank selection	1 to 4

Knob	Parameter	Adjustment	Setting values
2	Button No	Control block button selection	1 to 24

3 In the <Action> group, select the function you want to assign.

Menu Shortcut: Assign a frequently used menu to be recalled (menu shortcut).

Utility Command: Assign a function on/off or similar operation (utility command).

Macro Recall: Assign a macro register recall.

Shotbox Recall: Assign a shotbox register recall.

4 Depending on the selection in step **3**, make the following settings.

When Menu Shortcut is selected: For the subsequent operations, *see the next item “Assigning a menu shortcut to a memory recall button” (page 110).*

When Utility Command is selected: A list of commands appears on the right of the status area; using any of the following methods, select the command you want to assign.

- Press directly on the list.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
3	Command	Utility command selection	1 and upwards
4 a)	GPI No	GPI port number	1 and upwards

a) When the Command parameter is set to Sw’er GPI Test Fire, Panel GPI Test Fire, DCU GPI, or Test Fire

When Macro Recall is selected: Turn the knob to select the macro register you want to assign.

Knob	Parameter	Adjustment	Setting values
3	Macro	Macro register selection	1 to 250

When Shotbox Recall is selected: Turn the knob to select the shotbox register you want to assign.

Knob	Parameter	Adjustment	Setting values
3	Shotbox	Shotbox register selection	1 to 99

5 Press [Action Set].

This assigns the selected action, which is reflected in the status area. In the utility/shotbox control block, the assigned button lights orange.

If a shotbox register was assigned, the register name appears.

To cancel an assignment

After selecting the relevant button, press [Clear].

To display register names in the Utility Command column

If in step **3** you select [Macro Recall] or [Shotbox Recall], press the [Reg Name Display] button to select whether or not register names appear in the Utility Command column.

List of utility commands and memory recall button status

The following table shows the utility commands that can be assigned to memory recall buttons.

Command name ^{a)}	Function	Button status	
		Lit green	Lit orange
SWR Remote1 Enbl SWR Remote4 Enbl	Switcher Remote 1 enabled/disabled Switcher Remote 4 enabled/disabled	Enabled	Disabled
DME1 Editor Port Enbl	DME1 editor port enabled/disabled	Enabled	Disabled
DME2 Editor Port Enbl	DME2 editor port enabled/disabled	Enabled	Disabled
DME3 Editor Port Enbl	DME3 editor port enabled/disabled	Enabled	Disabled
DME4 Editor Port Enbl	DME4 editor port enabled/disabled	Enabled	Disabled
ME1 PGM1 ST ME1 PGM4 ST	M/E-1 PGM1 output safe title on/off M/E-1 PGM4 output safe title on/off	On	Off
ME1 PVW ST	M/E-1 preview output safe title on/off	On	Off
ME1 Clean ST	M/E-1 clean output safe title on/off	On	Off
ME1 K-PVW ST	M/E-1 key preview output safe title on/off	On	Off
ME2 PGM1 ST ME2 PGM4 ST	M/E-2 PGM1 output safe title on/off M/E-2 PGM4 output safe title on/off	On	Off
ME2 PVW ST	M/E-2 preview output safe title on/off	On	Off
ME2 Clean ST	M/E-2 clean output safe title on/off	On	Off
ME2 K-PVW ST	M/E-2 key preview output safe title on/off	On	Off
ME3 PGM1 ST ME3 PGM4 ST	M/E-3 PGM1 output safe title on/off M/E-3 PGM4 output safe title on/off	On	Off
ME3 PVW ST	M/E-3 preview output safe title on/off	On	Off
ME3 Clean ST	M/E-3 clean output safe title on/off	On	Off

Command name ^{a)}	Function	Button status	
		Lit green	Lit orange
ME3 K-PVW ST	ME-3 key preview output safe title on/off	On	Off
ME4 PGM1 ST ME4 PGM4 ST	M/E-4 PGM1 output safe title On/Off M/E-4 PGM4 output safe title On/Off	On	Off
ME4 PVW ST	M/E-4 preview output safe title On/Off	On	Off
ME4 Clean ST	M/E-4 clean output safe title On/Off	On	Off
ME4 K-PVW ST	ME-4 key preview output safe title On/Off	On	Off
PP PGM1 ST PP PGM4 ST	PP PGM1 output safe title on/off PP PGM4 output safe title on/off	On	Off
PP PVW ST	P/P preview output safe title on/off	On	Off
PP Clean ST	P/P clean output safe title on/off	On	Off
PP K-PVW ST	P/P key preview output safe title on/off	On	Off
DME MON1 ST	DME Monitor 1 output safe title on/off	On	Off
DME MON2 ST	DME Monitor 2 output safe title on/off	On	Off
Edit PVW ST	Edit preview output safe title on/off	On	Off
Preset ST	Preset output safe title on/off	On	Off
AUX1 ST AUX48 ST	AUX1 output safe title on/off AUX48 output safe title on/off	On	Off
FM Src1 Frame Freeze	Frame freeze of frame memory source 1	During frame freeze	Either of the other two states
FM Src1 Filed Freeze	Field freeze of frame memory source 1	During field freeze	Either of the other two states
FM Src1 Freeze Off	Release freeze of frame memory source 1	While freeze being released	Either of the other two states
FM Src2 Frame Freeze	Frame freeze of frame memory source 2	During frame freeze	Either of the other two states
FM Src2 Field Freeze	Field freeze of frame memory source 2	During field freeze	Either of the other two states
FM Src2 Freeze Off	Release freeze of frame memory source 2	While freeze being released	Either of the other two states
SWR GPI Enbl	Enable/disable switcher GPI	Enabled	Disabled
DME1 GPI Enbl	Enable/disable DME1 GPI	Enabled	Disabled
DME2 GPI Enbl	Enable/disable DME2 GPI	Enabled	Disabled
DME3 GPI Enbl	Enable/disable DME3 GPI	Enabled	Disabled
DME4 GPI Enbl	Enable/disable DME4 GPI	Enabled	Disabled
Panel GPI Enbl	Enable/disable panel GPI	Enabled	Disabled

Command name ^{a)}	Function	Button status	
		Lit green	Lit orange
SWR GPI1 Test Fire SWR GPI8 Test Fire	Output test trigger from switcher GPI1 Output test trigger from switcher GPI8	Output (lights only at the instant the button is pressed)	When the output is assigned
Panel GPI1 Test Fire Panel GPI8 Test Fire	Output test trigger from panel GPI1 Output test trigger from panel GPI8	Output (lights only at the instant the button is pressed)	When the output is assigned
DCU GPI1 Test Fire DCU GPI50 Test Fire	Output test trigger from port assigned to DCU GPI1 Output test trigger from port assigned to DCU GPI50	Output (lights only at the instant the button is pressed)	When the output is assigned
Macro Attachment Enbl	Enable/disable macro attachment	Enabled	Disabled
Macro Only Set	Macro only mode on/off	On	Off
Pre Macro	Set macro attachment in pre macro mode	Can be set only while pressed (lit)	When the function is assigned
Post Macro	Set macro attachment in post macro mode	Can be set only while pressed (lit)	When the function is assigned
Macro Take	Macro execution	During execution	When the function is assigned
Macro Auto Ins	Macro auto insert mode on/off	On	Off
Macro AT with Rate	When registering an auto transition macro event, on/off setting of mode to save transition rate	On	Off
Macro AT with A/B Bus	When registering an auto transition macro event for the transition control block, on/off setting of mode to save A/B Bus cross-point settings	On	Off
Macro TL with Region	When registering a timeline macro event, on/off setting of mode to save applicable region	On	Off
DME Override	DME override on/off	On	Off
DME Graphic	DME graphics on/off (Applies to graphics for channel selected in device control block)	On	Off
Plug-In Editor Enbl	Enable/disable operation from an editing keyboard	Enabled	Disabled
Inhibit Set	Inhibit cross-point button	Can be set only while pressed (lit)	When the function is assigned
Inhibit All Clear	Clear all cross-point button inhibit settings	Can be set only while pressed (lit)	When the function is assigned
K-SS Store	Enable/disable key snapshot saving ^{b)}	Enabled	Disabled

- a) For the safe title on/off commands (from ME1 PGM1 ST-ME1 PGM4 ST to AUX1 ST-AUX48 ST), the name of the assigned output signal is shown.
- b) Pressing this button to turn it on enables key snapshot operations for all control blocks.

Assigning a menu shortcut to a memory recall button

- 1** Referring to the procedure up to step **3** on “*Assigning a Function to a Memory Recall Button in the Utility/Shotbox Control Block*” (page 105) , select [Menu Shortcut].

The memory recall buttons in the utility/shotbox control block flash orange.

- 2** Using any of the following methods, display the menu to which you want to make a shortcut.

- In the menu control block, press the relevant top menu selection button, then select VF and HF.
- Press the menu page number button in the upper left corner of the menu screen, then enter a menu number from the numeric keypad window.
- Press a particular control panel button twice in rapid succession.

- 3** In the utility/shotbox control block, select the bank, and press the button to which you want to assign the shortcut.

The menu screen goes back to the Prefs/Utility >Utility Module Assign menu, and the selection is reflected in the status area.
The buttons in the utility/shotbox control block flash.

- 4** Repeat steps **2** and **3** as required, to assign all desired menu shortcuts to the buttons in the utility/shotbox control block.

To abandon the process of menu shortcut assignment

In the Prefs/Utility >Utility Module Assign menu, press [Menu Shortcut]. This exits the menu shortcut assignment mode.

Setting names to be displayed in memory recall buttons

Notes

The name you set using the following procedure is displayed only when “Menu Shortcut” or “Utility Command” has been assigned to the selected memory recall button. To set a name for display in a memory recall button to which “Shotbox Recall” or “Macro Recall” has been assigned, use the Shotbox menu or Macro menu.

- 1 In the Prefs/Utility >Utility Module Assign menu, select the button using any of the following methods.
 - Press directly on the list.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Bank	Bank selection	1 to 4
2	Button No	Control block button selection	1 to 24

- 2 Press [Name].
A keyboard window appears.
- 3 Enter a name of not more than eight characters, and press [Enter].

The name you have set is reflected in the status area and on the memory recall button in the utility/shotbox control block.

Assigning a Function to the Key 2 Row Cross-Point Buttons

You can assign a function to the key 2 row cross-point buttons of each of the M/E-1 to M/E-4, or PGM/PST banks, and use them in the same way as the buttons in the utility/shotbox control block.

- 1 In the Prefs/Utility menu, press [Key2/4 Bus Button Assign].
The Key2/4 Bus Button Assign menu appears. The cross-point settings for the key 2 row appear.
- 2 Refer to “Assigning a Function to a Memory Recall Button in the Utility/Shotbox Control Block” (page 105) to make the assignment. Note, however, the following differences.
 - The bank setting of knob 1 is from 1 to 5.
 - The adjustment range of knob 2 is from 1 to the number of cross-point buttons.
 - The character string for a button name is a maximum of four characters.

For details of executing a utility/shotbox function with the key 2 row, see “Executing Utilities With the Cross-Point Buttons in the Key 2 Row” (Volume 2) and “Executing a Shotbox Function With the Key 2 Row Cross-Point Buttons” (Volume 2).

Interfacing With External Devices (Device Interface Menu)

To carry out setup relating to connections with external devices, display the Panel >Device Interface menu.

To display the Device Interface menu

In the Engineering Setup menu, select VF2 'Panel' and HF5 'Device Interface.'

The following functions are available here.

- **GPI Input:** Set the GPI input ports and trigger type, and make the action settings.
- **GPI Output:** Set the GPI output ports and trigger type, and make the action settings.
- **P-Bus Control:** Set the control mode for P-Bus devices.
- **DCU Serial Port Assign:** Assign the devices (disk recorder/VTR/Extended VTR) connected to a DCU and accessible from the control panel to the [DEV1] to [DEV12] buttons which become operative when you press the [DEV] button on the device control block. For a disk recorder or Extended VTR, you can also make settings relating to sharing of file lists. Further, you can make settings for devices (disk recorder/VTR/Extended VTR) operable from an editing keyboard.
- **Editor Port Assign:** When the BZS-8050 license is valid, make settings for the SCU editor panel port.
- **Aux Bus Override Mode:** Set the operating mode when "Aux ? O'ride Src ?? " is selected as the GPI input action.

Making Control Panel GPI Input Settings

- 1 In the Panel >Device Interface menu, press [GPI Input].

The GPI Input menu appears.

- 2 Using any of the following methods, select the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Port	Port selection	1 to 8

3 In the <Trigger Type> group, select the trigger type.

 **(Rising Edge):** Apply the trigger on a rising edge of an input pulse.

 **(Falling Edge):** Apply the trigger on a falling edge of an input pulse.

 **(Any Edge):** Apply the trigger on a change in the polarity of the input signal.

 **(Level):** Carry out the specified operation when the input is low or high.

No Operation: Apply no trigger on an input pulse.

4 In the <Target> group, select the action block.

M/E-1, M/E-2, M/E-3, M/E-4, P/P: Set the action for one of the banks.

Common/Setup: Set an action for something other than the above, or a setup action.

5 Using any of the following methods, select the action to be set.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
2	Action	Action selection	1 and upwards ^{a)}
4	Aux Bus No	AUX bus selection	1 to 48 ^{b)}
5	Reg No	Register number	1 to 4 ^{c)} 1 to 99 ^{d)} 1 to 250 ^{e)} 1 to 399 ^{f)}
5	Src No	Source signal selection	1 and upwards ^{b)}
5	No	User preference button selection	1 to 16 ^{g)}

a) As for the setting values, see “Selectable actions for various trigger types” (page 114).

b) When knob 2 selection is “Aux ? O’ride Src ??”

c) When knob 2 selection is “Key Snapshot”

d) When knob 2 selection is “Snapshot” or “Shotbox”

e) When knob 2 selection is “Macro”

f) When knob 2 selection is “Effect”

g) When knob 2 selection is “Prefs Button?”

h) For primary inputs: 1 to 144

For premium inputs: 145 to 164 ((PREM1) to (PREM20) indicated after the number)

6 Press [Action Set] to confirm the action selection.

The selected setting appears in the status area.

Selectable actions for various trigger types

- **When the trigger type is other than “Level”**

(In M/E-x, the x is the M/E bank number (1 to 4); in DSKx the x is the DSK number (1 to 8); in Keyx the x is the key number (1 to 8)).

When Target is M/E-x: Cut, Auto Trans, Keyx Cut, Keyx Auto Trans, Keyx SS ? Recall

When Target is P/P: Cut, Auto Trans, DSKx Cut, DSKx Auto Trans, DSKx SS ? Recall, FTB Auto Trans, FTB Cut

When Target is Common/Setup:

Master SS ? Recall, Master Effect ? Recall, SS ? Recall, Effect ? Recall, Effect ? Recall & Run, KF Run, KF Stop, KF Rewind, FM Src1 Frame Freeze, FM Src1 Field Freeze, FM Src1 Freeze Off, FM Src2 Frame Freeze, FM Src2 Field Freeze, FM Src2 Freeze Off, FM Src1 Clip Record, FM Src1 Clip Stop, FM Src2 Clip Record, FM Src2 Clip Stop, FM1 to FM8 Clip Cueup, FM1 to FM8 Clip Play, FM1 to FM8 Clip Stop, Shotbox ? Recall, Macro Take, Prefs Button?, Macro ? Recall, No Action

- **When the trigger type is only “Rising Edge” or “Falling Edge”**

Aux? O’ride Src??

- **When the trigger type is “Level”**

When Target is M/E-1, M/E-2, M/E-3, M/E-4 or P/P: No Action

When Target is Common/Setup: System Format

Aspect (overall system settings), Level Enable, No Action

Notes

- “Level Enable” is a function that determines whether GPI inputs are enabled (“Enable”) or disabled (“Disable”) for the “Aspect” and “Format” actions that can be used when the trigger type is Level. When Level Enable is used, if the input is “Disable” then it is not possible to switch “Aspect” or “Format” by GPI input.

If a GPI to switch “Aspect” or “Format” occurs when powering the system off, the action triggered by the GPI may start immediately before the power goes off and the power may go off before the action is completed. This may corrupt the setup settings. It is therefore recommended to use Level Enable to avoid such a situation.

- As for “Aux ? O’ride Src ??,” when “Rising Edge” is selected, on a rising edge the set AUX bus input is used. On a falling edge, the original state of the cross-point is restored. If the GPI trigger is applied repeatedly at short intervals (0.5 second or less), the cross-point switching may not be carried out correctly. In this case, apply the GPI trigger again.

- If “System Format” is selected for “Action” when the format converter is used on the switcher, you can set the conversion formats of the format converter for “FC Input 1-8”, “FC Input 9-16”, “FC Output 1-2” and “FC Output 3-4”.

Carrying out level settings

To set the low level and high level, first set the trigger type to “Level,” then use the following procedure.

- 1** In the Panel >Device Interface menu, select the action to be set, and press [H/L Set].

The H/L Set menu appears.

- 2** Using any of the following methods, select the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	No	Signal format/screen aspect ratio selection	1 and upwards

- 3** To apply the selection made in step **2** when the input is the GPI high level, press [H Set]. To apply the selection made in step **2** when the input is low, press [L Set].

This confirms the setting, which appears in the status area.

Making Control Panel GPI Output Settings

- 1** In the Panel >Device Interface menu, press [GPI Output].

The GPI Output menu appears.

- 2** Using any of the following methods, select the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Port	Port selection	1 to 8

3 In the <Trigger Type> group, select the trigger polarity.

-  **(Rising Edge):** The trigger causes the relay contacts to be open-circuit or drives the output high, and holds this state for the specified pulse width.
-  **(Falling Edge):** The trigger causes the relay contacts to be shorted or drives the output low, and holds this state for the specified pulse width.
-  **(Any Edge):** Each time the trigger occurs, the relay contacts are alternately closed or opened, or the output is switched between high and low.

Status: Depending on the status, the relay contacts are closed or opened, or the output is switched between high and low.

No Operation: The trigger has no effect on the relay state or output level.

4 Turning the knobs, select the pulse width and timing to be set.

Knob	Parameter	Adjustment	Setting values
3	Pulse Width	Pulse width	1 to 60 (fields)
4	Timing	Output timing	1 to 3 ^{a)}

a) 1: Field 1, 2: Field 2, 3: Any

When “∞” is selected as the trigger polarity, there is no Pulse Width setting. When “Status” is selected, there is no Pulse Width or Timing setting.

5 In the <Source> group, select the action block.

M/E-1 to M/E-4 and P/P: Set an action for the M/E or PGM/PST bank.

Common: Set an action for error status.

6 Using any of the following methods, select the action to be set.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
2	Action	Action selection	1 and upwards ^{a)}
5	Reg No	Register number	1 to 4 ^{b)}

a) • **Action list when the trigger type is other than “Status”**

(In M/E-x, the x is the M/E bank number (1 to 4); in DSKx the x is the DSK number (1 to 8); in Keyx the x is the key number (1 to 8)).

When Source is M/E-x: Keyx SS ? Recall, No Action

When Source is P/P: DSKx SS ? Recall, No Action

When Source is Common: KF Run, No Action

- **Action list when the trigger type is “Status”**

(In M/E-x, the x is the M/E bank number (1 to 4); in DSKx the x is the DSK number (1 to 8); in Keyx the x is the key number (1 to 8)).

When Source is M/E-x: Keyx SS ? Recall, Keyx On, No Action

When Source is P/P: DSKx SS ? Recall, DSKx On, No Action

When Source is Common: Error Make, Error Break, Keep Break, Keep Make, PREFS1, PREFS2, PREFS3, PREFS4, PREFS5, PREFS6, PREFS7, PREFS8, PREFS9, PREFS10, PREFS11, PREFS12, PREFS13, PREFS14, PREFS15, PREFS16, Device Recording, No Action

b) When knob 2 selection is “Key Snapshot”

7 Press [Action Set] to confirm the action selection.

The selected setting appears in the status area.

Test firing the trigger

To test fire the trigger, press [Test Fire].

This outputs a trigger from the selected output port. This is not output when the trigger type is “Status.”

Setting the Control Mode for P-Bus Devices

In the <P-Bus Control> group of the Panel >Device Interface menu, select the mode.

Trigger: When a predetermined button is pressed, the action command assigned to that button is output, to control an external device.

Timeline: The external device is controlled as a keyframe effect controlled by the center control panel.

Setting the SCU Editor Panel Port

When an editing keyboard is used, this port setting is for the editing keyboard if the license for the BZS-8050 is valid (*see page 32*), and for the serial tally if the license for the BZS-8050 is invalid.

If you want to use the port setting for the serial tally when the license for the BZS-8050 is valid, select [Serial Tally] from the <Editor Port Assign> group in the Panel >Device Interface menu.

Serial Tally: Use the SCU editor panel port for the serial tally.

Editor Keyboard: Use the SCU editor panel port for the editing keyboard.

Making DCU Serial Port Settings

You can assign buttons in the device control block (DEV1 to DEV12) to DCU serial ports, to operate the devices (disk recorder/VTR/Extended VTR) connected to these ports. For a disk recorder/Extended VTR, you can also set the sharing of file lists.

For details of DCU serial port settings, see “Serial Port Settings (Serial Port Assign Menu)” (page 204).

Associating a serial port with a device selection button

- 1 In the Panel >Device Interface menu, press [DCU Serial Port/MPE Assign].

The DCU Serial Port/MPE Assign menu appears.

- 2 Using any of the following methods, select the DCU serial port.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	No	Serial port selection	1 and upwards ^{a)}

a) The range of the setting value depends on the DCU port settings.

The DCU number, slot number, and serial port number appear.

- 3 Select the device selection button to be assigned from the <Assign> group.

Notes

- It is not possible to assign more than one device selection button to the same port. The later assigned device selection button takes priority, and the previous selection is invalidated.
- If P-Bus/Mixer ESAM-II is assigned to a serial port, it is not possible to assign a device selection button to that port.

- 4 Repeat steps 2 and 3 as required to make assignments to other ports.

To select whether to use an editing keyboard

If you want to use an editing keyboard for the selected device, select a port using the same operation as in step 2, then press [Plug-In Editor Enbl] to display “Enbl” in the Editor column. If you do not want to use an editing keyboard, press [Plug-In Editor Enbl] to make the “Enbl” display disappear.

Notes

- This selection is possible when the BZS-8050 license is valid (*see page 32*).
- A port to which Mixer ESAM-II is assigned is automatically set to Enbl, and you cannot change this setting.

Sharing Disk Recorder/Extended VTR File Lists

To share files between devices connected to the same disk recorder/Extended VTR, use the following procedure.

Notes

The following operation can only be carried out for the ports to which a disk recorder or Extended VTR is assigned.

- 1 In the Panel >Device Interface >DCU Serial Port/MPE Assign menu, select the target disk recorder/Extended VTR.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	No	Serial port selection	1 and upwards ^{a)}

a) The range of the setting value depends on the DCU port settings.

- 2 Turn the knob to select the device selection button (DEV1 to DEV12) for sharing the file list.

Knob	Parameter	Adjustment	Setting values
2	File List	Device selection button for sharing the file list	1 to 12

- 3 Press [Same File List Set].

This is reflected in the file list in the status area.
- 4 Repeat steps 1 to 3 as required to select other devices for sharing the file list.

Setting the AUX Bus Override Operating Mode

Set the operating mode when the trigger type is “Rising Edge” or “Falling Edge,” and “Aux ? O’ride Src ??” is selected as the GPI input action.

In the <Aux Bus Override Mode> group of the Panel >Device Interface menu, select one of the following modes.

Momentary: On an input pulse rising (falling) edge, the input of the selected AUX bus is used, and on a falling (rising) edge this returns to the original cross-point.

Latch: On an input pulse rising (falling) edge, the input of the selected AUX bus is used, and this does not return to the original cross-point change even on a falling (rising) edge.

This setting is also valid when AUX bus override is selected as the DCU GPI input (*see page 195*).

Operation Settings (Operation Menu)

To make settings relating to panel operation, use the Panel >Operation menu.

To display the Operation menu

In the Engineering Setup menu, select VF2 'Panel' and HF6 'Operation.'
The status area shows the items that can be set and a list of the settings.

The following functions are available here.

- **Button Tally:** Set whether or not the system tally generation results are reflected in the panel tally.
- **Trans Rate Display:** Select whether the transition rate display mode is in frames or timecode units.
- **S-Bus Name Link:** Copy the S-Bus description name to the source name.
- **Effect:** For keyframe effects, you can make the following settings. (See Chapter 13 "Keyframe Effects" (Volume 2).)
 - Recall mode
 - Automatically turning off the [EDIT ENBL] button when an effect is recalled
 - Automatic insertion of a first keyframe when an empty register is recalled
 - Effect Auto Save
 - Default KF Duration
 - Setting whether or not to replay the first keyframe after rewinding a GPI/P-Bus/disk recorder/VTR/Extended VTR/Macro effect
- **Source/Dest Name:** For the Source/Dest (source/destination) names used by the system, select one of the following:
 - Source name set by cross-point assignment or fixed bus name
 - Description name set on routing switcher
 - "Type + Num" name set on routing switcherNames assigned with Xpt Assign can be replaced later with description names.
- **Name Display:** Specify the number of characters for display of the names selected in Source/Dest Name above, as two characters, four characters, or Auto.
- **Flexi Pad Mode:** Carry out Flexi Pad settings. Specify the delegation selection coupling, and display mode for the LCD buttons. You can also make menu settings for wipe snapshots.
- **Custom Button:** Set the following button operation modes.
 - [ALL] button for next transition selection
 - [AUTO TRANS], [TAKE] or [FTB] button during auto transition execution
 - [RUN] button during keyframe execution
 - [AUTO TRANS] and [CUT] button replacement

- [TRANS PVW] button
- [UTIL] button
- [XPT HOLD] button in key rows
- Selection of signal assigned to the auxiliary bus control block key source bus (either key signal only, or either video signal or key signal selectable)
- **Sensitivity:** Adjust trackball, joystick and double-click sensitivity, or set the relationship between the angle of the search dial and the playback speed or the sensitivity for the search dial in jog mode.
- **Main Split Fader:** When the split fader is active, specify whether the fader to control other than mix is the left side or the right side.
- **Macro:** Set the macro execution mode and the mode in which to edit macros using the standard type Flexi Pad control block.

Setting the On-Air Tally

To set the high tally state reflected on the control panel, use the following procedure.

- 1** In the Panel >Operation menu, press [Button Tally].
The Button Tally menu appears.
- 2** In the <Tally Type> group, select either of the following.
[R1] to [R8]: Reflect any of tally groups 1 to 8 as the tally state.
Independent: Reflect only the switcher tally state.
- 3** Press [Execute].
A popup window appears and shows the progress of the operation.

Setting the Transition Rate Display Mode

To determine whether to display transition rate values in menus and on the control panel in frames or as timecode values, select either of the following in the <Trans Rate Display> group.

Frame: display in frames.

Timecode: display as timecode (SS:FF).

Making Settings Relating to Effects

To make settings relating to the functions used when carrying out keyframe effect operations, use the following procedure.

- 1 In the Panel >Operation menu, press [Effect Mode].

The Effect Mode menu appears.

The status area shows a list of the items with their settings.

- 2 Make the following settings as required.

Effect recall mode: To select the state of the first keyframe when an effect is recalled, select [Recall] (the first keyframe is not recalled) or [Recall&Rewind] (the first keyframe is recalled) in the <Recall Mode> group.

Automatically turning [EDIT ENBL] off: When an effect is recalled with the [EDIT ENBL] button on, to automatically turn this button off, disabling keyframe editing, turn [Edit Enable Auto Off] on.

Automatic first keyframe insertion: When an empty register is recalled, to automatically insert a first keyframe of the state at that point, turn [1st KF Auto Insert] on.

Automatic effect saving: To automatically save an effected when it is recalled after being edited, turn [Effect Auto Save] on.

Keyframe duration default value: Press [Default KF Duration], then enter the default value from the numeric keypad window.

Setting the First Keyframe When a Rewind is Executed

For P-Bus, GPI, and DDR/VTR timeline operations, to execute the first keyframe when a rewind is carried out, set each external device on in the <REWIND&1st KF> group in the Effect Mode menu.

Notes

When an effect is executed by pressing the [RUN] button with this setting on, the first keyframe action is not executed.

GPI: setting for the GPI timeline

P-Bus: setting for the P-Bus timeline

DDR/VTR: setting for the VTR/disk recorder/Extended VTR timeline

Macro: setting for the macro timeline

Setting the Source and Destination Names

To set the Source and Destination names used in the control panel, use the following procedure.

Notes

Before carrying out these settings, it is necessary to set the number of the S-Bus description name.

For details of the operation, see “Setting the group number of an S-Bus description name” (page 218).

- 1 In the <Source/Dest Name> group of the Panel >Operation menu, select the names to be used from the following.

Sw’er Local: Source names set in the Xpt Assign menu, and fixed bus names

S-Bus Descript: Description names set in the router

S-Bus Type + Num: Type + Num set in the router (In this case always eight characters.)

- 2 In the <Name Display Mode> group, select the method of display in the source name displays.

Auto: Optimize display according to number of characters. A name of up to two characters appears as two characters in one line. A name of up to four characters appears as four characters in one line.

Otherwise, up to the first eight characters are shown in two lines.

2 Character: The first two characters appear.

4 Character: The first four characters appear.

To replace a name set in the Xpt Assign menu with an S-Bus description name

Turn [S-Bus Name Link] on.

This has such effect that each time a description name is changed on the router, the corresponding source name is automatically changed. Thus, the same description name can always be used both on the router and the switcher.

Even when [Sw’er Local] is selected, the same name as when [S-Bus Descript] is selected can be displayed. The S-Bus description name can also be displayed in the Xpt Assign menu.

Settings for the Flexi Pad and Wipe Snapshot Menu

You can select the pattern numbers or register names as the button indications for Flexi Pad control block and the following menus.

- M/E-1 > Wipe > Wipe Snapshot menu
- M/E-1 > DME Wipe > DME Wipe Snapshot menu
- Misc > Snapshot menu

This setting is also valid in the Multifunction Flexi Pad control block.

- 1 In the Panel > Operation menu, press [Flexi Pad Mode].

The Flexi Pad Mode menu appears.

The status area shows a list of the items with their settings.

- 2 Make the following settings as required.

Coupling the transition type selection with the Flexi Pad control block mode selection:

To make the Flexi Pad mode selection change automatically when [WIPE] or [DME] is selected in the transition control block, press [Wipe/DME Auto Deleg], turning it on.

Button indications in the memory recall section: When the Flexi Pad control block mode is [WIPE] or [DME], for the button indications in the memory recall section, select [Pattern] or [Register Name] in the <Wipe/DME Display> group. When the mode is [Snapshot], [Effect], or [MCRO], select [Register No] or [Register Name] in the <Snapshot/Effect Display> group.

For details, see the following.

- “Wipe Snapshots” in Chapter 5 (Volume 1)
- “DME Wipe Snapshots” in Chapter 6 (Volume 1)
- the figure of the memory recall section in “Recalling the master timeline in the Flexi Pad control block” in Chapter 13 (Volume 2)
- the figure of the memory recall section in “Saving and Recalling Snapshots” in Chapter 14 (Volume 2)
- the figure of the memory recall section in “Recalling a Macro Register and Executing a Macro” in Chapter 16 (Volume 2).

Setting the Button Operation Mode

- 1 In the Panel > Operation menu, press [Custom Button].

The Custom Button menu appears.

The status area shows a list of the items with their settings.

- 2 Make the following settings as required.

Operation mode during an auto transition: For the operation mode when the [AUTO TRANS] or [TAKE] button is pressed once more during an auto transition, select [Continue] or [Cancel] in the <Auto Trans/Take> group.

Continue: Continue the auto transition.

Cancel: Cancel the auto transition and return to the state before starting the auto transition.

Operation mode during keyframe execution: For the operation mode when the [RUN] button is pressed once more during effect execution, select [Continue] or [Cancel] in the <Run> group.

Continue: Continue the execution.

Cancel: Cancel the execution and return to the state before starting the execution.

Status display for auto transition execution button: When the [AUTO TRANS] or [TAKE] button is pressed to carry out an auto transition, select how the button is lit or off in the <Auto Trans/Take Key On Stats> group.

Disable: Lights amber during the transition, and goes off at the end of the transition.

Enable: Lights green during the transition, and at the end of the transition lights red if on air and amber if not on air.

Notes

This setting is only valid in the independent key transition execution section of the following control block.

- Transition control block (standard)
- Downstream key control block (DSK Fader Module)
- Independent key transition control block (simple type)
- Downstream key/fade-to-black control block

Interchanging the [AUTO TRANS] and [CUT] buttons: To interchange the [AUTO TRANS] and [CUT] buttons in the transition control block, press the [Auto Trans/Cut Swap] button, turning it on.

Transition preview operation mode: For the operation mode of the [TRANS PVW] button, select [Lock] or [Hold] in the <Trans Pvw> group. The setting as to whether to use the “One-time mode” in which the transition preview terminates when the transition completes, or to use button control, is made on the switcher side (*see page 159*).

[KEY] button operation mode for key source bus operations: When the key source bus is selected with the delegation buttons in the auxiliary bus control block, specify the [KEY] button operation mode in the <Key Source Bus Select Mode> group, as follows.

Key: If you select this, the [KEY] button is always lit, and this mode allows only key signals to be selected with the cross-point buttons.

Video & Key: The [KEY] button is enabled, and either video or key signals can be selected.

CCP-6000/8000-specific button settings: Press [CCP-6000/8000 Button], and skip to step **3**. (This setting is enabled when the CCP-6224/6324 is used.)

3 If required, make the following settings.

Operation mode during a fade-to-black: To set the operation mode if the [FTB] button is pressed once more during a fade-to-black, select either of the following in the <FTB> group.

Continue: Continue the fade-to-black.

Cancel: Cancel the fade-to-black, and return to the state before executing the fade-to-black.

Operation mode of the [XPT HOLD] buttons in the key rows: Set the operation mode of the [XPT HOLD] buttons in the key rows in the <Key Bus Xpt Hold> group, as follows.

Normal: The <Xpt Hold Mode> in the Switcher >Key/Wipe/FM/CCR menu is enabled.

Protect: In this mode, pressing a panel button cannot change the cross-point settings.

Notes

The button On/Off state is preserved in each of the “Normal” and “Protect” modes. For example, if the [XPT HOLD] buttons are “On” in the Normal mode, and you switch to Protect mode, then if the [XPT HOLD] buttons were “Off” in this mode the previous time, the [XPT HOLD] buttons go off, and if they were “On” they light.

[UTIL] button operation mode: To set the operation mode of the [UTIL] button in the cross-point control block, press either of the following in the <Util Button> group.

Hold: Acts as a utility button while held down, changing the assignment of the cross-point button rows.

Lock: For the key rows, each time the button is pressed the cross-point button assignment toggles between the utility assignment and the normal assignment. The background A and B rows are fixedly assigned to the A and B rows, even if the [UTIL] button is pressed. (For details, see “Menus and Control Panel” in Chapter 2 (Volume 1).)

Setting the Operation Mode of the [ALL] Button in the Transition Control Block

Specify the next transition selected by pressing the [ALL] button in the transition control block.

Notes

If everything here is set to Off, then pressing the [ALL] button does not change the specification of the next transition.

- 1** In the Panel >Operation >Custom Button menu, press [Next Trans All].
The Next Trans All menu appears.
- 2** Press the button for the next transition you want to select with the [ALL] button, turning it On.

Setting Trackball, Joystick, Search Dial, and Double-Click Sensitivity

You can set the operational sensitivity for trackball, joystick and the buttons which recall the relevant menus when pressed twice, and the relation of the rotation angle of search dial with the playback speed.

- 1** In the Panel >Operation menu, press the [Sensitivity].
The Sensitivity menu appears.
The status area shows a list of the items with their settings.

- 2** Make the following settings as required.

Trackball and Z-ring sensitivity in normal mode: In the <Trackball Normal Mode> group, select [$\times 1$], [$\times 2$], or [$\times 4$].

Trackball and Z-ring sensitivity in fine mode: In the <Trackball Fine Mode> group, select [$1/2$], [$1/4$], or [$1/8$].

Joystick sensitivity in normal mode: In the <Joystick Normal Mode> group, select [$\times 1$], [$\times 2$], or [$\times 4$].

Joystick sensitivity in fine mode: In the <Joystick Fine Mode> group, select [$1/2$], [$1/4$], or [$1/8$].

Touch sensitivity for recalling menus by double-clicking buttons: In the <Double Click> group, select [Fast], [Normal], or [Slow].

Making advanced settings for the search dial

- 1 In the Panel >Operation >Sensitivity menu, press [Search Dial].
The Search Dial menu appears.
The status area shows a list of the settings and their content.
- 2 Set the sensitivity for the search dial in jog mode.
When operated with the [JOG] button pressed to be lit amber: In the <Jog Sensitivity> group, press one of [1 (Slow)] to [6 (Fast)].
When operated with the [JOG] button held down: In the <Jog Sensitivity (While pressing [JOG] button)> group, press one of [1 (Slow)] to [6 (Fast)].
- 3 In the <SHTL/VAR Dial Range> group, select [Narrow] or [Wide] to set the sensitivity for the search dial in shuttle mode or variable mode.
Narrow: The search speed varies in a relatively narrow range.
Wide: The search speed varies in a relatively wide range.

For details of search dial operations, see “Controlling the Tape/Disk Transport” in Chapter 12 (Volume 2).

Specifying Main Split Fader

In the <Main Split Fader> group of the Panel >Operation menu, select [Left] or [Right].

Setting the Macro Execution Mode

- 1 Press [Macro] in the Panel >Operation menu.
The Macro menu appears.
- 2 In the <Macro Execution Mode> group, select the macro execution mode.
Normal: normal execution mode
Step: step execution mode
- 3 In the <Flexi Pad Edit Mode> group, set the macro editing mode of the standard type Flexi Pad to [Pause Only] or [Full Editing].

This enables the standard type Flexi Pad control block to be used for macro editing. Depending on the macro editing mode setting, functions are assigned to the memory recall buttons as shown in the following figure.

When the setting is [Pause Only]			When the setting is [Full Editing]		
			EXIT	AUTO INS	STOR ??
			PAUS		ALL
			INS	MOD	DEL
	PAUS	STOR ??		<PREV	>NEXT

- 4** When making a macro attachment setting, select whether or not to enable cross-point button operations in the <Attachment Setting Mode> group.

With Btn Function: enable cross-point button operations

W/o Btn Function: disable cross-point button operations

- 5** Using the <Macro 2nd Recall Mode> group, set the action to occur during macro execution or when a macro is stopped, if the cross-point button with the macro attachment set is pressed again.

Continue: Execution of a macro that has been stopped is resumed, and an executing macro continues.

Cancel: A stopped macro, or a macro during execution is terminated.

- 6** Using the <Macro Recall Override> group buttons, set the action to occur during macro execution or when a macro is stopped, if another macro is recalled.

Disable: Ignore the other macro recall.

Enable: Execute the other macro.

To have a cross-point button with a macro attachment set lit continuously

Press [Attchd Btn Indication], turning it on.

When the [MCRO ATTCH ENBL] button in the cross-point control block is on, the cross-point button with a macro attachment is constantly lit green.

Screen Saver and Other Settings (Maintenance Menu)

To make settings relating to the screen saver, etc., use the Panel >Maintenance menu.

- **Screen Saver:** Make the menu screen saver settings.
- **LCD Brightness:** Adjust the LCD brightness.
- **LED Brightness:** Adjust the LED brightness.
- **Switch Brightness:** Adjust the switch brightness.
- **Touch Beep:** Select whether or not to sound a beep when a menu operation is carried out.
- **Touch Panel Calibration:** Calibrate the touch panel.
- **Initial Menu Set:** Specify the menu to be displayed at menu startup.
- **Scrl Down = Clockwise/ Scrl Up = Clockwise:** Set the mouse wheel scrolling direction for parameter setting.
- **Mouse Slider Control:** Select the mouse button used for adjusting the bar positions of the knob parameters.

To display the Maintenance menu

In the Engineering Setup menu, select VF2 'Panel' and HF7 'Maintenance.' The status area shows a list of the items with their settings.

Screen Saver Settings

To enable the menu screen saver, use the following procedure.

- 1 In the Panel >Maintenance menu, press [Screen Saver], turning it on.
- 2 Adjust the following parameter.

Knob	Parameter	Adjustment	Setting values
1	Sleep Time	Time until screen saver starts operation	1 to 300 (minutes)

Adjusting the Brightness

You can adjust the brightness of the following hardware parts.

LCD: Adjust the brightness of the source name displays and the LCD buttons in the Flexi Pad control block.

LED: Adjust the brightness of the LED displays in the numeric keypad control block and so forth.

Switch: Adjust the brightness of the panel switches.

The following description takes the LCD brightness as an example. Use a similar process for the other adjustments.

1 In the Panel >Maintenance menu, press [LCD Brightness].

2 Adjust the following parameter.

Knob	Parameter	Adjustment	Setting values
1	Brightness	Menu screen brightness	1 to 5 ^{a)}

a) The larger the value, the brighter the screen.

Adjusting the Alarms

In the Panel >Maintenance menu, make the following settings.

To give audible feedback from menu touch screen operations: Press [Touch Beep], turning it on.

Calibrating the Touch Panel

1 In the Panel >Maintenance menu, press [Touch Panel Calibration].

The following message appears.

“To Perform Calibration, please touch the center of each plus sign.”

2 Press [Yes].

3 Press the center of the plus sign displayed on the screen.

When you press on the plus sign, it disappears and a diagonally opposite plus sign appears.

4 Press the center of the plus sign.

A confirmation message appears.

- Select “Yes” to restart the panel reflecting the new setting.
- Select “No” to cancel the setting and return to the Maintenance menu.

Setting the Menu to be Shown When the Menus Are Started

- 1 In the Panel >Maintenance menu, press [Initial Menu Set].
A popup window appears.
- 2 Enter the page number of the desired menu.
The next time the menus are started, the menu specified by this number appears.

Notes

To enable this setting, the initial state of the control panel when powered on must be set to one of the following.

- Set to Resume mode
- Set to Custom mode, with “User” selected in the <Setup> group.

For details of these settings, see “Selecting the State After Powering On (Start Up Menu)” (page 25).

Setting the Mouse Wheel Scrolling Direction for Parameter Setting

In the < Mouse Wheel Direction > group of the Panel >Maintenance menu, press one of the following buttons.

Scrl Down = Clockwise: Turning the mouse wheel in the direction to scroll down is the same as turning the parameter setting knob clockwise.

Scrl Up = Clockwise: Turning the mouse wheel in the direction to scroll up is the same as turning the parameter setting knob clockwise.

Selecting the Mouse Button Used for Adjusting the Knob Parameters

In the Panel >Maintenance menu, press either of the following buttons in the <Mouse Sliding Control> group.

Left Button: Dragging the bar while holding down the left mouse button adjusts the parameter assigned to the knob.

Right Button: Dragging the bar while holding down the right mouse button adjusts the parameter assigned to the knob.

Notes

When Left Button selected, even pressing one of the knob parameter buttons in the menu control block does not display a numeric keypad window.



Chapter 20 Switcher Setup (Switcher)

Settings for Switcher Configuration (Config Menu)

To make settings for the switcher processor configuration, use the Switcher >Config menu.

To display the Config menu

In the Engineering Setup menu, select VF3 'Switcher' and HF1 'Config.' The status area shows the output signal assignment for each of the M/E and PGM/PST banks.

The following functions are available here.

- **System Phase:** Adjust the switcher internal reference phase.
- **Switching Timing:** Specify the timing of video switching.
- **M/E Config:** Set the configuration for the M/E and PGM/PST outputs.
 - **Standard mode:** Fix the output configuration for the maximum of four outputs (Out1 to 4) as follows.
 - Out1: Program output
 - Out2: Preview output
 - Out3: Clean output
 - Out4: Key preview outputThe program output is: clean output + key1 to key8
For the key preview output, you can select either video mode (background and key) or key mode (key only), and select the background and key (K-PVW Config).
 - **Multi-program mode:** Increase the number of M/E or PGM/PST programs, and assign any of the following to the maximum of six outputs (Out1 to 6). (M/E Output Assign)
 - Program outputs 1 to 4, preview output, key preview outputs 1 and 2, clean output.Further, you can select the program background from Clean or Utility2, and change the combination of signals from which the program output is configured. (PGM Config)
 - **DSK mode:** Treat P/P as four DSKs, with no background transitions.
From among backgrounds 1 to 4, select one for which to make settings for program output configuration. (PGM Config) The signals which can be selected as the background are limited to Out1 to 6 from M/E-1 to M/E-4.
- **User 1 to 8 Config:** Assign the User regions, being color backgrounds 1 and 2, AUX1 to 48, frame memory 1 to 8, and color correctors 1 and 2, to any of User1 to User8.
- **Logical M/E Assign:** Make settings for handling PGM/PST hardware logically as an M/E.

- **DME Config:** Set the DME channel assignments used on the individual M/E and PGM/PST banks.
- **Side Flags:** Make settings relating to the side flag function (inserting a selected image on both sides of a 4:3 image).

Adjusting the Reference Phase

To adjust the switcher internal reference phase, in the Switcher >Config menu, set the following parameter.

Knob	Parameter	Adjustment	Setting values
3	Phase	Switcher internal reference phase	–32.00 to +96.00

Specifying the Video Switching Timing

- 1 In the Switcher >Config menu, press [Switching Timing].

The Switching Timing menu appears.

- 2 Select any of the following.

Any: Not specified

Field 1: Field 1 (odd fields)

Field 2: Field 2 (even fields)

Notes

When the signal format is set to 720P, 1080PsF or 1080P, this selection is not possible.

Setting the Operation Mode

In the <M/E Config> group of the Switcher >Config menu, select the operation mode for each M/E or PGM/PST bank from the following.

- Standard mode
- Multi Program mode
- DSK mode (PGM/PST only)

For details of the modes, see the explanation of the M/E Config function (page 136).

Notes

When Multi Program mode is selected, two or more transition type indication may light. It is also possible that more than one “Transition Type” has been selected in the Misc >Transition menu for each M/E.

Assigning the output of each bank in Multi Program mode

When you selected [Multi Program] as the operation mode, use the following procedure.

- 1 In the Switcher >Config menu, press [M/E Output Assign].
The M/E Output Assign menu appears.
- 2 On the list in the status area, select the bank output to be assigned.
The selected output appears in reverse video.
- 3 In the <M/E Output Assign> group, select the output signal to be assigned.

Setting the output configuration for each bank

When you selected [Multi Program] or [DSK] as the operation mode, use the following procedure.

- 1 In the Switcher >Config menu, press [PGM Config].
The PGM Config menu appears.
The status area shows the background and key configuration assigned to the output of each bank.
- 2 Using either of the following methods, select the output for which you want to make the setting.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	No (PGM)	Output to which setting applies	1 to 20

The selected output appears in reverse video.

- 3 In the <Bkgd> group, select the background.
In Multi Program mode, select [Clean] or [Utility2], then skip to step 5.
In DSK mode, select one of [Bkgd1] to [Bkgd4].

- 4** In DSK mode, turn the knobs to select the background signal.

Knob	Parameter	Adjustment	Setting values
2 to 5	Bkgd1 to 4	Background signal selection	1 to 24 ^{a)}

a) 1 to 6: M/E1 OUT1 to 6
7 to 12: M/E2 OUT1 to 6
13 to 18: M/E3 OUT1 to 6
19 to 24: M/E4 OUT1 to 6

- 5** In each of the <Key1> to <Key8> groups, select [Enable] or [Disable].

Setting the key preview configuration

You can make this setting at any time, regardless of the operation mode.

- 1** In the Switcher >Config menu, press [K-PVW Config].

The K-PVW Config menu appears.

The status area shows the key preview configuration for each bank.

- 2** Using either of the following methods, select the key preview to which the settings apply.

- Press directly on the list in the status area to make the selection.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	No (K-PVW)	Key preview to which setting applies	1 to 10

The selected key preview appears in reverse video.

- 3** In the <Mode> group, select [Video] mode or [Key] mode.

If you select Key mode, skip to step **6**.

- 4** In the <Bkgd> group, select the background.

In standard mode or Multi Program mode, select [Clean] or [Utility2], then skip to step **6**.

In DSK mode, select any of [Bkgd1] to [Bkgd4].

- 5** In DSK mode, turn the knobs to select the background signal.

Knob	Parameter	Adjustment	Setting values
2 to 5	Bkgd1 to 4	Background signal selection	1 to 24 ^{a)}

- a) 1 to 6: M/E1 OUT1 to 6
7 to 12: M/E2 OUT1 to 6
13 to 18: M/E3 OUT1 to 6
19 to 24: M/E4 OUT1 to 66

6 In the <Key 1> to <Key 8> groups, select the corresponding key status from the following.

Link: Follow the key on/off setting.

On: Key is always on.

Off: Key is always off.

Setting User Regions

Notes

If you change the user region settings, the previously stored snapshot data and keyframe effect data can no longer be used.

1 In the Switcher >Config menu, press [User1-8 Config].

The User1-8 Config menu appears. The status area shows the region names and assigned user region numbers.

2 Using any of the following methods, select the region you want to set.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Region	Region selection	1 and upwards

3 In the <User Region Assign> group, select the user region you want to assign. If you do not want to assign a user region, select [No Assign].

4 Repeat steps **2** and **3** as required to make the settings for other regions.

5 To confirm the setting, press [Execute]. To cancel the setting and return to the original state, press [Clear] before pressing [Execute].

When you press [Execute], a confirmation message appears.

6 Press [Yes].

This assigns a region to a user region.

Assigning PGM/PST Logically to an M/E

- 1** In the Switcher >Config menu, press [Logical M/E Assign].
The Logical M/E Assign menu appears. The status area shows the physical M/E and logical M/E organization.
- 2** Select the M/E you want to logically set to the PGM/PST from the <Logical M/E to Physical P/P> group.

P/P: Assign the physical PGM/PST as logical PGM/PST.
M/E-1: Assign the physical PGM/PST as logical M/E-1.
M/E-2: Assign the physical PGM/PST as logical M/E-2.
M/E-3: Assign the physical PGM/PST as logical M/E-3.
M/E-4: Assign the physical PGM/PST as logical M/E-4.

Setting the Assignments of DME Channels to Use on the Individual M/E Banks

The Switcher >Config >DME Config menu allows you to select the DME channels to use on the M/E and PGM/PST banks for processed keys or DME wipes.

- 1** In the Switcher >Config menu, press [DME Config].
The DME Config menu appears.
- 2** Using either of the following methods, select the M/E or PGM/PST bank for which you want to set a DME channel assignment.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
- 3** In the <DME Channel> group, press one of the [Ch1] to [Ch8] buttons turning it on to select the channel which you want to assign to the bank selected in step **2**.
- 4** Repeat steps **2** and **3** to assign DME channels to other banks.

Setting the Side Flag Video Material and Operation

Make settings relating to the video material (4:3 aspect ratio) for applying side flags.

For details of side flag operations, see “Side Flag Settings” in Chapter 10 (Volume 1).

Setting the aspect ratio (4:3/16:9)

- 1** In the Switcher >Config menu, press [Side Flags].
The Side Flags menu appears.
The status area lists the video/key pair numbers, video signal source names, and aspect ratio settings (16:9/4:3).
- 2** Using any of the following methods, select the pair number for which you want to make the setting.
 - Press directly on the list in the status area.
 - Use the arrow keys to scroll the reverse video cursor.
 - Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	V/K Pair No	Selection of a V/K pair by its number in the list	1 to 300
2	Num	Selection of number of V/K pairs in the list	1 to 300

- To select all of the pair numbers, press [ALL].

- 3** In the <Aspect> group, press [4:3].

If you select [16:9], no side flags are applied.

To set 4:3 video material to have side flags applied automatically

You can make a setting so that when a signal with aspect ratio set to 4:3 is selected in the cross-point control block, side flags are automatically applied. To do so, in the Switcher >Config >Side Flags menu press [Auto Side Flags]. Pressing this button toggles the setting on and off.

This setting applies to all of the M/E and PGM/PST banks.

To set to crop to 4:3 when a DME wipe is executed

When side flags are enabled, you can automatically crop an image as set to be a 4:3 image when executing a DME wipe.

To do so, in the Switcher >Config >Side Flags menu press [Auto Crop].
Pressing this button toggles the setting on and off.
This setting applies to all of the M/E and PGM/PST banks.

Adjusting the width of the side flags

You can adjust the width of the side flags.

- 1** In the Switcher >Config >Side Flags menu, press [Width].
- 2** Adjust the following parameters.

Knob	Parameter	Adjustment	Setting values
3	Left	Width of left side flag	−100.00 to +100.00
4	Right	Width of right side flag	−100.00 to +100.00
5	All	Width of both side flags	Left value shown

Displaying the menu for enabling/disabling the side flags

In the Switcher >Config >Side Flags menu, press [Misc >Enbl >Setup Flags].

Displaying the menu for assigning the side flags on/off function to a cross-point button

In the Switcher >Config >Side Flags menu, press [Side Flags Button Assign].

Signal Input Settings (Input Menu)

For setup relating to signal inputs, use the Switcher >Input menu.

To display the Input menu

In the Engineering Setup menu, select VF3 'Switcher' and HF2 'Input.'
The status area shows source numbers and source names and through mode on/off setting.

The following functions are available here.

- **Through Mode:** Set the through mode for input. You can set this independently for each primary input or premium input.
- **Video Process:** Switch video processing on or off for each input signal, and adjust the brightness, hue and so forth.
- **Matte Illeg. Color Limit:** Switch the illegal limiter on or off for the signal generated by the switcher internal matte generator.
- **FC Adjust:** Select the conversion (up-conversion, cross-conversion, or down-conversion) when the format converter is applied to an input.

Making Through Mode Settings

Notes

For a format converter dedicated input, it is not possible to select through mode.

- 1 In the Switcher >Input menu, select the input signal to which the settings apply.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Src No	Input signal selection	1 and upwards ^{a)}

a) For primary inputs: 1 to 144

For premium inputs: 145 to 164 ((PREM1) to (PREM20) indicated after the number)

The selected input signal appears in reverse video.

- 2 To enable through mode, press [Through Mode], turning it on.

Making Video Process Settings

- 1 In the Switcher >Input menu, press [Video Process].

The Video Process menu appears.

The status area shows the source number, source name, and video process adjustment settings.

- 2 Using any of the following methods, select the input signal to which the settings apply.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Src No	Input signal selection	1 and upwards ^{a)}

a) For primary inputs: 1 to 144

For premium inputs: 145 to 164 ((PREM1) to (PREM20) indicated after the number)

For format converter dedicated inputs: 165 to 180 ((FC1) to (FC16) indicated after the number)

- 3 Press [Video Process], turning it on.

- 4 Adjust the following parameters.

Knob	Parameter	Adjustment	Setting values
1	Video Gain	Video signal gain	−200.00 to +200.00
2	Y Gain	Y signal gain	−200.00 to +200.00
3	C Gain	Chrominance signal gain	−200.00 to +200.00
4	Hue Delay	Hue delay	−180.00 to +180.00
5	Black Level	Black level	−7.31 to +109.59

To set the parameter settings to their defaults, press [Unity].

Enabling the Illegal Color Limiter

To enable the illegal color limiter for the signals generated by the switcher internal matte generator, press [Matte Illeg Col Limit] in the Switcher >Input menu, turning it on.

Selecting the Format Converter Conversion

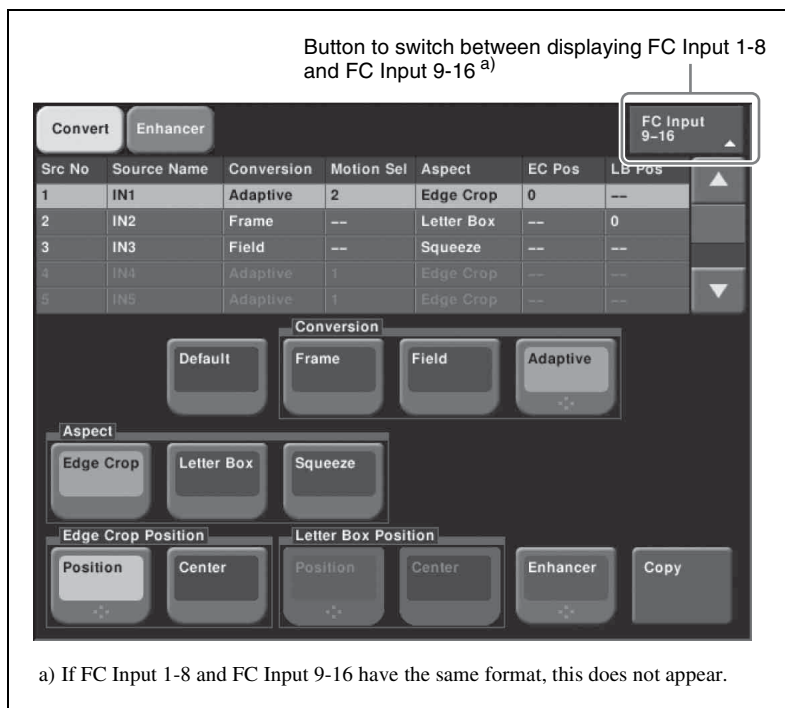
Selecting the format converter inputs to be set (inputs 1 to 8 or inputs 9 to 16)

- 1 Display the Switcher >Input >FC Adjust menu.

Notes

When the conversion format and system signal format are the same, this operation is not possible.

The following figure illustrates the case when FC Input 1-8 are set to up-conversion, and FC Input 9-16 are set to cross-conversion.



- 2 Press [FC Input 1-8] or [FC Input 9-16] as required.
- 3 Using any of the following methods, select what the setting applies to.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.

- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Source No	Input selection	1 and upwards ^{a)}

a) If you pressed [FC Input 9-16] in step 2, the value is from 9 to 16 inclusive.

Making detailed settings for up-conversion

- 1 In the Switcher >Input >FC Adjust menu, select the input to which the setting applies.

- 2 In the <Conversion> group, select one of the following.

Frame: Conversion in frame units

Field: Conversion in field units

Adaptive: Automatically switching between the above two modes

When Adaptive is selected, adjust the following parameter.

Knob	Parameter	Adjustment	Setting values
2	Motion Select	Motion detection sensitivity	1 to 3 ^{a)}

a) 1: Still priority mode, 2: Standard mode, 3: Motion priority mode

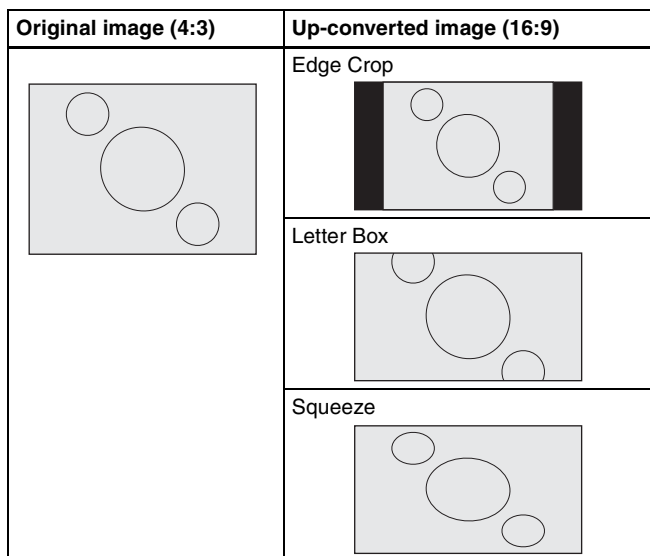
- 3 In the <Aspect> group, select one of the following.

Edge Crop: Add black bars on the left and right sides of a 4:3 aspect ratio image to convert it to a 16:9 image.

Letter Box: Crop the top and bottom of a 4:3 aspect ratio image to convert it to a 16:9 image.

Squeeze: Stretch a 4:3 image horizontally to convert it to a 16:9 image.

(For details of the image transformations, see the following figure.)



Setting the image position in edge crop up-conversion mode

- 1 In the <Edge Crop Position> group of the Switcher >Input >FC Adjust menu, press [Position], turning it on.
- 2 Adjust the following parameter.

Knob	Parameter	Adjustment	Setting format	Setting values
2	EC Position	Image position ^{a)}	1080	–120 to +120
			720	–80 to +80

a) For down-conversion, the value is from –30 to +30 inclusive.

To return the edge crop image to the center

In the <Edge Crop Position> group, press [Center].

Setting the image position in letter box up-conversion mode

- 1 In the <Letter Box Position> group of the Switcher >Input >FC Adjust menu, press [Position], turning it on.

- 2 Adjust the following parameter.

Knob	Parameter	Adjustment	Setting format	Setting values
2	LB Position	Image position	1080i/59.94	–31 to +32
			1080i/50	–36 to + 36
			720P/59.94, 720P/50	–30 to +30

To return the letterbox image to the center

In the <Letter Box Position> group, press [Center].

Making enhancer settings

- 1 In the Switcher >Input >FC Adjust menu, press [Enhancer], turning it on.
- 2 Set the following parameters.

Parameter group [1/2]

Knob	Parameter	Adjustment	Setting values
2	Detail Gain	Adjust the edge enhancement sharpness	0 to 127
3	Limiter	Adjust the maximum signal level to be added to the original signal	0 to 63
4	Crisp	Set the amplitude value for which a low-amplitude signal is not emphasized	0 to 15
5	Level Depend	Set the luminance range for edge enhancement	0 to 15

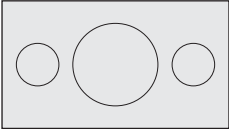
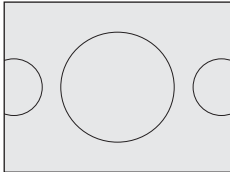
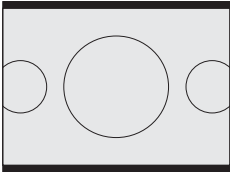
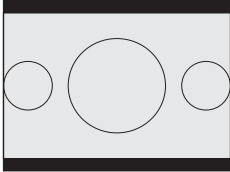
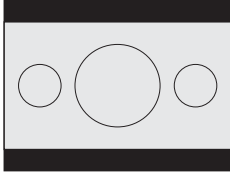
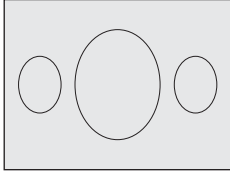
Parameter group [2/2]

Knob	Parameter	Adjustment	Setting values
2	Frequency	Set the central frequency for edge enhancement	0 to 3
3	H/V Ratio	Set the horizontal/vertical ratio for edge enhancement	0 to 7

Making detailed settings for down-conversion

- 1** In the Switcher >Input >FC Adjust menu, select the input to which the setting applies.
- 2** In the <Aspect> group, select one of the following.
 - Edge Crop:** Crop the left and right sides of a 16:9 image to convert it to a 4:3 image.
 - Letter Box 13:9:** Crop the left and right sides of a 16:9 image to make a 13:9 image and add black bars at the top and bottom of the 13:9 image to make a 4:3 image.
 - Letter Box 14:9:** Crop the left and right sides of a 16:9 image to make a 14:9 image and add black bars on the top and bottom of the 14:9 image to make a 4:3 image.
 - Letter Box 16:9:** Add black bars on the top and bottom of a 16:9 image to convert it to a 4:3 image.
 - Squeeze:** Compress a 16:9 image horizontally to convert it to a 4:3 image.

(For details of the image transformations, see the following figure.)

Original image (16:9)	Down-converted image (4:3)
	Edge Crop 
	Letter Box 13:9 
	Letter Box 14:9 
	Letter Box 16:9 
	Squeeze 

For down-conversion, the image position setting in edge crop mode is the same as for up-conversion. The value is from -30 to +30 inclusive. For more details, see “Setting the image position in edge crop up-conversion mode” (page 148).

For down-conversion, the enhancer settings are the same as for up-conversion. For more details, see “Making enhancer settings” (page 149).

Making cross-conversion settings

To make the cross-conversion settings, carry out steps **1** and **2** described in “*Making detailed settings for up-conversion*” (page 147). No other settings are required.

Copying format converter input data

- 1** In the Switcher >Input >FC Adjust menu, press [Copy].

The Copy/Swap >Copy >Format Converter menu appears.

The status area shows lists of the copy source on the left, and the copy destination on the right.

- 2** Select [Input] in the <Data Select> group.

- 3** Using any of the following methods, select the data.

- Press directly on the list.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Left No	Select the copy source data	1 and upwards
2	Right No	Select the copy destination data	1 and upwards
3	Num	Select the number of items	1 and upwards

- 4** Press [Copy].

This copies the data.

Signal Output Settings (Output Menu)

For setup relating to signal outputs, use the Switcher >Output menu.

To display the Output menu

In the Engineering Setup menu, select VF3 'Switcher' and HF3 'Output.'

The status area shows the output signal numbers and names, and output signal phase for the signals output from Output 1 to 48.

The following functions are available here.

Notes

For a format converter dedicated output, Video Clip, V Blank, Through, Safe Title, and 4:3 Crop settings are not possible.

- **Output Assign:** Assign the signals output from the Output1 to 48 ports.
- **Video Clip:** Adjust the clip levels (White Clip, Dark Clip, and Chroma Clip) for the output signals from each of the Output1 to 48 ports.
- **V Blank:** Adjust the vertical blanking width for the output signals from each of the Output1 to 48 ports. The setting is the number of scan lines from the reference blanking position of field 1 for the particular format which should be masked.
- **Through:** Enable or disable through mode. Through mode can be enabled for AUX1 to 48 outputs, M/E and PGM/PST program outputs, and clean output.
- **Safe Title:** Enable or disable safe title, and carry out settings for box 1 and 2, cross and grid.
- **4:3 Crop:** Set the actual video image to be cropped to a 4:3 aspect ratio when an HD system has a screen aspect ratio of 4:3.
- **FC Adjust:** Set the format converter outputs.

Assigning Output Signals

To assign a signal to output from an output port, use the following procedure.

- 1 In the Switcher >Output menu, press [Output Assign].

The Output Assign menu appears.

The status area shows the output ports and assigned signals on the left, and a list of signals that can be assigned on the right.

2 In the <Output Assign> group, select either of the following.

[Re-Entry Source]: It is possible to make duplicate assignments.

M/E-1 Output 1 to 6 ^{a)}
 M/E-2 Output 1 to 6 ^{a)}
 M/E-3 Output 1 to 6 ^{a)}
 M/E-4 Output 1 to 6 ^{a)}
 PGM/PST 1 to 6 ^{a)}
 M/E-1 to 4 Proc Video
 P/P Proc Video
 M/E-1 to 4 Proc Key
 P/P Proc Key
 DME Monitor Video
 DME Monitor Key
 Color Corrector 1 and 2
 Undefined
 Color Bkgd 2

a) M/E output signals selected in the M/E Output Assign menu.

[Aux Bus]: It is not possible to make duplicate assignments.

Preset
 Edit Preview
 AUX 1 to 48

3 Using any of the following methods, select the output port number and signal to be assigned.

- Press directly on the list in the status area to make the selection.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Output No	Output port number	1 to 48
2	Source No	Selection of signal to be assigned	1 and upwards

- For output ports not to be assigned, press [Inhibit].

The selected signal appears in reverse video.

4 Press [Set] to confirm the assignment.

Setting the Output Signal

In the following adjustment/setting operations, use any of the following methods to select the output signal before making the setting.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Output No	Output port number selection	1 to 48

The selected output signal appears in reverse video.

Adjusting the video clip

To adjust the clip value for each of the output signals from the Output 1 to 48 ports, use the following procedure.

- 1 In the Switcher >Output menu, press [Video Clip].

The Video Clip menu appears.

The status area shows the output ports and assigned signals, and the white clip, dark clip, and chrominance clip values.

- 2 Adjust the following parameters.

Knob	Parameter	Adjustment	Setting values
2	White Clip	Luminance signal white clip value	90.00 to 109.02
3	Dark Clip	Luminance signal dark clip value	-6.85 to +10.00
4	Chroma Clip	Chrominance signal clip value	90.00 to 113.17

To set the values to the default values, press [Default].

Making vertical blanking interval adjustment and through mode settings

- 1 In the Switcher >Output menu, press [V Blank/Through].

The V Blank/Through menu appears.

The status area shows the output ports and the assigned signals, the vertical blanking interval, and the through mode Enable/Disable status.

- 2 Press [V Blank Mask].

- 3 Adjust the parameter.

Knob	Parameter	Adjustment	Setting values
2	Mask End	Final value for vertical blanking interval	See note a) below

a) Depending on the signal format, the adjustment range varies as follows.

- **480i:** 10 to 19
- **576i:** 6 to 22
- **1080i/1080PsF:** 7 to 20
- **720P:** 7 to 25
- **1080P:** 15 to 41

To return the values to their defaults, press [Default].

- 4 To enable the through mode, press [Through Mode], setting it to Enable. The through mode can be applied to the following outputs.

- Aux 1 to 48 outputs
- Program outputs of the M/E and PGM/PST rows
- Clean outputs of the M/E and PGM/PST rows

Making safe title settings

- 1 In the Switcher >Output menu, press [Safe Title].

The Safe Title menu appears.

The status area shows the output ports and the assigned signals, with the box 1, box 2, cross, and grid states.

- 2 To enable the safe title on/off setting made in the Misc menu, press [Safe Title], turning it on.

- 3 Carry out either of the following operations.

To display a box: Press [Box1] or [Box2], turning it on.

In this case, carry out the following steps **4** and **5**.

To display a cross: Press [Cross], turning it on.

To display a grid: Press [Grid], turning it on.

In this case, carry out the following steps **4** and **5**.

- 4 When you selected [Box1] or [Box2] in step **3**, adjust the following parameters.

Knob	Parameter	Adjustment	Setting values
2	Box Size	Box size	50.00 to 100.00
3	Luminance	Display brightness	0.00 to 100.00 ^{a)}

a) Adjustable for Box2

When in step **3** you selected [Grid], in the <Grid Size> group, select one of the following.

80.00%: Set the grid size to 80% of the screen frame

85.00%: Set the grid size to 85% of the screen frame

90.00%: Set the grid size to 90% of the screen frame

100.00%: Set the grid size to the full-screen size (100% of the screen frame)

- 5** When in step **3** you selected [Box1] or [Box2], in the <Box1 Adjust> or <Box2 Adjust> group, select the screen aspect ratio (16:9/14:9/4:3).

When in step **3** you selected [Grid], in the <Grid Adjust> group, select the screen aspect ratio (16:9/4:3).

Cropping the image to a 4:3 aspect ratio in an HD system

In an HD system, to crop an image having a screen aspect ratio of 4:3 to an aspect ratio of 4:3, use the following procedure.

- 1** In the Switcher >Output menu, press [4:3 Crop].

The 4:3 Crop menu appears.

The status area shows the output ports and respective 4:3 Crop mode settings.

- 2** Press [4:3 Crop], turning it on.

This enables the crop setting, and this is reflected in the status area.

Notes

When the screen aspect ratio of 16:9 is selected for all M/E banks in the System >Format >Active Line/Aspect menu, the setting of 4:3 Crop is disabled.

Setting the format converter outputs

To set the format converter

Display the Switcher >Output >FC Adjust menu. The subsequent operations are the same as for the format converter input settings.

For details of the operations, see “Selecting the Format Converter Conversion” (page 146).

To copy format converter output data

- 1** In the Switcher >Output >FC Adjust menu, press [Copy].

The Copy/Swap >Copy >Format Converter menu appears.

- 2** In the <Data Select> group, press [Output].

- 3** Use the same operations as in steps **3** and **4** of “Copying format converter input data” (page 152) to copy the data.

Settings Relating to Video Switching (Transition Menu)

For settings relating to video switching, use the Switcher >Transition menu.

To display the Transition menu

In the Engineering Setup menu, select VF3 'Switcher' and HF4 'Transition.' The status area shows the transition preview, key transition, bus toggle, and split fader settings for each M/E and PGM/PST bank.

The following functions are available here.

- **Transition Preview:** Specify the operation mode for transition preview for each of the M/E and PGM/PST banks.
- **Key Transition:** Specify the operation mode for independent key transitions.
- **Bus Toggle:** Switch the bus toggle for each of the M/E and PGM/PST banks on or off.
- **Split Fader:** When the bus toggle is off, the split fader settings are enabled. For each of the M/E and PGM/PST banks, select enable or disable.
- **Fade To Black:** Enable or disable fade-to-black for each final program output.
- **Preset Color Mix:** Set the stroke mode for a preset color mix, the key status for a transition including a key, and the mode in which the transition type after a transition ends returns to the previous setting.
- **Transition Curve:** Set the relationship when carrying out a transition, between the fader lever position and the advancement state of the transition.

Selecting the Bank to Make the Settings

In the Transition menu, using any of the following methods, select the bank to which the settings apply, then make the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Bank	M/E or P/P selection to which settings apply	1 to 5

The selected bank appears in reverse video.

Setting the transition preview mode

To select the transition preview mode, in the <Transition Preview> group of the Transition menu, select either of the following.

One Time: The transition preview ends after a single transition.

Normal: Switching the [TRANS PVW] button on or off switches between the transition preview mode and the normal mode.

Selecting the transition mode of the independent key transition control block

To select the key transition mode, select either of the following in the <Key Transition> group of the Transition menu.

Same: The transition settings for the On and Off directions are the same.

Independent: The transition settings for the On and Off directions can be set separately.

Selecting the background transition flip-flop mode

In the Transition menu, press [Bus Toggle], to switch between on and off.

On: Flip-flop mode

Off: Bus fixed mode

For more details, see “Fader Lever Operation in Bus Fixed Mode” in Chapter 3 (Volume 1).

Setting the split fader to be enabled or disabled

In the Transition menu, press [Split Fader] to switch between Enable and Disable. This setting is only valid when using a simple transition module with Bus Toggle set to Off.

Enable: When the fader lever is split, the split fader effect is enabled.

Disable: Even when the fader lever is split, the normal fader lever effect is obtained.

Enabling or disabling the fade-to-black function

In the <FTB> group of the Transition menu, press the program output name to toggle between On and Off.

On: When the [FTB] button is pressed, a fade-to-black is carried out.

Off: Even when the [FTB] button is pressed, no fade-to-black is carried out.

Notes

The PGM2 to PGM4 settings are only valid in Multi Program mode or DSK mode.

Setting a preset color mix

- 1 In the Switcher >Transition menu, press [Preset Color Mix].
The Preset Color Mix menu appears.
The status area shows the stroke mode setting for each M/E bank, the setting for whether or not the key status is maintained, and the one-time mode setting.
- 2 In the <Stroke Mode> group, select whether to carry out a transition in one stroke or two strokes.
Normal: Carry out a preset color mix with two transition operations.
Single: Carry out a preset color mix with a single transition operation.

Notes

In bus fixed mode (*see page 159*), the setting is fixed to “Single.”

- 3 In the <Non Drop Key> group, select the key setting for a transition including a key.
To carry out the transition with the key state maintained, press [Key1] to [Key8], turning them on. (*See “Transitions” in Chapter 1 (Volume 1).*)
- 4 If each time a transition ends the transition type is to return to the previous setting, press [One Time Enable].

Settings relating to fader lever operations

To select the way in which the fader lever position and the transition progress are related, use the following procedure.

- 1 In the Switcher >Transition menu, press [Transition Curve].
The Transition Curve menu appears.
- 2 In the <Fader Curve> group, select the fader lever operation mode.
Normal: The transition progress is linear, according to the fader lever position. (Factory default setting)
Adv Tally Mode: When the fader lever is moved from the end of its travel, the tally is output slightly before the transition starts.

Chapter 20 Switcher Setup (Switcher)

To display the Key/Wipe/FM/CCR menu

The status area shows the key memory settings, mask and border processing order, key priority, cross-point hold, pattern limit transition, and wipe edge settings for each of the M/E and PGM/PST banks.

- **Key Memory:** Set the key memory operation mode for each of the M/E and PGM/PST banks.
- **Video Proc Memory:** Enable or disable video process memory.
- **Show Key:** Enable or disable show key for edit preview, M/E and Pvw/K-Pvw of P/P.
- **Key Auto Drop:** For each switcher bank (M/E-1 to M/E-4, PGM/PST), specify a key to be turned off automatically when you press a cross-point button for the bus to be output as the background.
- **Mask/Border Process:** Set the processing order of masks and borders for each M/E or PGM/PST bank.
- **Key Priority:** Set the key priority operation mode for each of the M/E and PGM/PST banks. In DSK mode, the key priority is fixed.
- **Xpt Hold mode:** Set the operation mode for the cross-point hold button provided on the key bus for each of the M/E and PGM/PST banks.
- **Pattern Limit Transition:** Set the operation mode when the pattern limit is released for each of the M/E and PGM/PST banks.
- **Wipe Edge Default:** Adjust the wipe edge softness for each of the M/E and PGM/PST banks.
- **CCR Internal Signal Enable:** Select whether signals generated internally to the switcher can be selected as input material to the color corrector.
- **FM Auto Store:** Switch on or off the function to automatically attach a name and save in frame memory.

Switching Video Process Memory On or Off

In the Switcher >Key/Wipe/FM/CCR menu, press [Video Proc Memory], turning it on.

Settings for the Show Key Function

- 1** In the Switcher >Key/Wipe/FM/CCR menu, press [Show Key].
The Show Key menu appears.
- 2** In the <Show Key Enable> group, press the signal for which “show key” is enabled, turning it on.
- 3** To set the time for which “show key” is held, press [Hold Time].
- 4** Adjust the following parameter.

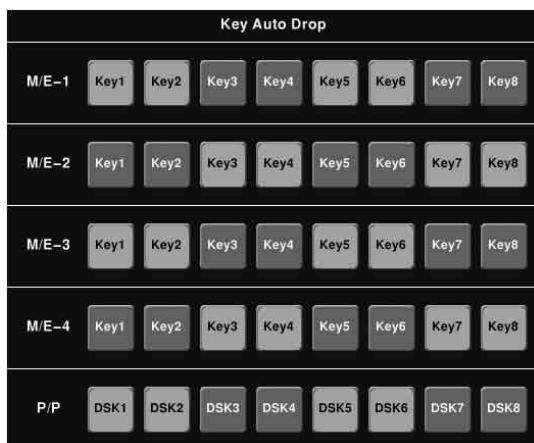
Knob	Parameter	Adjustment	Setting values
1	Hold Time	Show key hold time	0 to 999 (frames)

Settings for Key Auto Drop Function

The “key auto drop” function automatically switches off a particular key when you press a cross-point button in a bus that outputs the background on the particular switcher bank (PGM/PST, or M/E-1 to M/E-4).
When the background output bus is in flip-flop mode, this is always the A bus. In bus-fixed mode, it is either the A bus or the B bus depending on the fader lever position.

For details of bus-fixed mode, see “Executing a Transition” in Chapter 3 (Volume 1).

- 1** In the Switcher >Key/Wipe/FM/CCR menu, press [Key Auto Drop].
The Key Auto Drop menu appears.



- 2** In the <Key Auto Drop> group, press the name of the keyer for which you want the key to be deleted automatically, turning it on.

Automatically Naming and Saving to Frame Memory

In the Switcher >Key/Wipe/FM/CCR menu, press [FM Auto Store], turning it on.

Selecting the Bank to Make the Settings

In the following procedures, select the bank to which the settings apply using any of the following methods, then make the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Bank	M/E or P/P selection to which settings apply	1 to 5

The selected bank appears in reverse video.

Selecting the key memory mode

In the <Key Memory> group of the Switcher >Key/Wipe/FM/CCR menu, select one from Full (full mode)/Simple (simple mode)/Off.

For more details, see “Key Memory” in Chapter 4 (Volume 1).

Selecting the processing order of masks and borders

In the <Mask/Border Process> group of the Switcher >Key/Wipe/FM/CCR menu, select one of the following.

Mask >Border: Apply the Mask effect, then apply the Border effect.

Border >Mask: Apply the Border effect, then apply the Mask effect.

Selecting the key priority operation mode

In the <Key Priority> group of the Switcher >Key/Wipe/FM/CCR menu, select one of the following.

Normal: The key priority sequence can be varied freely.

Fix: Fixed at currently set priority sequence.

Setting the operation mode of the key bus [XPT HOLD] button

In the <Xpt Hold Mode> group of the Switcher >Key/Wipe/FM/CCR menu, select any of the following. This setting is applied for the attributes of snapshots as well as the operation mode of [XPT HOLD] button.

Key Disable: The [XPT HOLD] button of the key bus functions not only as a cross-point hold button but also as a key disable button. When the [XPT HOLD] button is on, recalling a snapshot or keyframe effect does not reflect the key settings, including the cross-point selection information.

Key Disable with Status: Same as [Key Disable], and further disables the reflection of the key on/off status.

Xpt Hold: The [XPT HOLD] button of the key bus functions as a cross-point hold button. When the [XPT HOLD] is on, recalling a snapshot or keyframe effect does not reflect the cross-point selection information.

To change the cross-point hold attribute of a snapshot

If you select “Key Disable” above, this also applies key disable to the cross-point hold attribute.

If you select “Key Disable With Status,” the key disable function is applied, including the key on/off status.

Setting the operation mode when the pattern limit is released

In the <Pattern Limit Transition> group of the Switcher >Key/Wipe/FM/CCR menu, select either of the following operation modes.

Auto: When the pattern limit is released, the remainder of the transition is carried out automatically at a special-purpose transition rate.

Manual: After the pattern limit is released, the transition waits for the next operation, then executes. Until you move the fader lever or press [AUTO TRANS], the transition is not executed.

Setting the default wipe edge softness

- 1 In the Switcher >Key/Wipe/FM/CCR menu, press [Wipe Edge Default], turning it on.
- 2 Set the following parameter.

Knob	Parameter	Adjustment	Setting values
3	Soft	Default value of wipe edge softness	−50.00 to +50.00

Setting the mode in which all signals can be selected for input to the color corrector

Press [CCR Intrnl Signl Enbl] in the Switcher > Key/Wipe/FM/CCR menu, turning it on.

You can select signals generated internally to the switcher as material for input to the color corrector.

Notes

When you select an M/E reentry signal as material for input to the color corrector, 1H delay occurs to the output signal of M/E.

Settings Relating to Function Links (Link Menu)

Carry out setup relating to links by displaying the Switcher >Link menu.

To display the Link menu

In the Engineering Setup menu, select VF3 'Switcher' and HF6 'Link.'
The status area shows the current link information.

The following functions are available here.

- **Internal Bus Link:** Make a setting of the bus link function that links together two buses internal to the switcher.
- **GPI Link:** Make settings for linking any cross-point buttons or [CUT] and [AUTO TRANS] buttons in the cross-point control block and GPI output ports.
- **M/E Link:** Make settings to link together two M/E banks.
- **Key Trans Link:** Make settings to link key transitions.

Setting a Cross-Point Button Link

To link together two buses internal to the switcher, use the following procedure.

- 1 In the Switcher >Link menu, press [Internal Bus Link].

The Internal Bus Link menu appears.

The status area shows the link source and link destination buses, and link table information.

- 2 Using any of the following methods, select what setting applies to.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Link No	Link number	1 to 64

- 3 Press [Link Bus Select].

The Link Bus Select menu appears.

The status area lists the current setting status of the selected link and the buses that can be selected.

- 4** In the <Bus Select> group, select [Master Bus] (link source bus).
- 5** Using any of the following methods, select the bus to be the link source, and press [Bus Set].
 - Press directly on the list appearing in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
2	No	Bus selection	1 and upwards ^{a)}

a) Only when [Master Bus] is selected, M/E-1 to M/E-4 Trans PGM, and P/P Trans PGM are available.
Only when [Linked Bus] is selected, AUX 1 to AUX 48 as Key are available.

Notes

With one of M/E-1 to M/E-4 Trans PGM and P/P Trans PGM selected for [Master Bus], the link setting become effective as soon as you start moving the fader lever.

- 6** In the <Bus Select> group, select [Linked Bus] (link destination bus).
- 7** Referring to step **5**, select the bus to be the link destination, and press [Bus Set].
- 8** Turn the knob to select the link table, and press [Link Table Set].

Knob	Parameter	Adjustment	Setting values
3	Link Table No	Link table selection	1 to 8

For more information about link tables, see the following item.

The selected link table number is confirmed, and this is reflected in the status area.

To delete a link

Select the link you want to delete, then press [Clear] in the Switcher >Link >Internal Bus Link menu.

Making Link Table Settings

- 1 In the Switcher >Link >Internal Bus Link menu, press [Link Table Select].
The Link Table Select menu appears.

- 2 Using any of the following methods, select the link source and link destination signals.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knobs.

Knob	Parameter	Adjustment	Setting values
4	Main No	Video/key signal for link source	1 to 300
5	No	Video/key signal for link destination	1 to 300

- 3 To confirm the selection, press [Link Src Set].

This links the link destination signal to the signal selected as Main No.

To initialize the set source address

In the Switcher >Link >Link Table Select menu, press [Init Link Table].

A confirmation message appears; press [Yes].

The source addresses are reassigned, and this is reflected in the status area.

To change the link number and link table number

In this menu too, you can change the link number and link table number. To do this, turn the knobs as follows to make the setting, then press [Link Table Set].

Knob	Parameter	Adjustment	Setting values
1	Link No	Link to which setting applies	1 to 64
3	Link Table No	Link table selection	1 to 8

Linking Cross-Point Buttons and GPI Output Ports

To link cross-point buttons or the [CUT] and [AUTO TRANS] buttons in the cross-point control block, and GPI output ports, use the following procedure.

- 1 In the Switcher >Link menu, press [GPI Link], to display the Switcher >Link >GPI Link menu.

The status area shows the output ports and the link status, and delay value information.

2 Using any of the following methods, select the GPI output port.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	GPI Port	GPI output port selection	1 to 8

3 Press [GPI Link Adjust].

The GPI Link Adjust menu appears.

The status area shows the current setting state of the selected link, and a list of the selectable video names or button names, together with the GPI link Enable/Disable setting for each bus.

4 Using any of the following methods, select what the setting applies to. For each GPI port there can be up to eight links.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	GPI Port	GPI output port selection	1 to 8
2	Link No	Link number selection	1 to 8
3	Video/Button No	Selection of video or button name to be linked	1 and upwards ^{a)}

a) These include main pair numbers 1 to 300, and “Cut” and “Auto Trans” on each bank.

5 In the <Video/Button> group, press [Select].

The selected video or button name is reflected in the status area.

To clear a video/button name link

Make the selection to which the setting applies, then in the <Video/Button> group press [Clear].

6 To select for each bus whether the GPI link setting is enabled or disabled, use any of the following methods to select the bus to which the setting applies.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
4	Bus	Bus selection	1 and upwards

7 In the <Bus> group, select any of the following.

Enable: Enable the GPI link setting for the selected bus.

Disable: Disable the GPI link setting for the selected bus.

All Enable: Enable the GPI link setting for all buses.

Setting the delay value

1 In the Switcher >Link >GPI Link Adjust menu, turn the knobs to select the output port for which you want to set the delay value, and the corresponding delay value.

Knob	Parameter	Adjustment	Setting values
1	GPI Port	GPI output port for the setting	1 to 8
5	Delay	Delay value for the output port	0 to 300 (fields)

2 Press [Delay Set].

This confirms the delay value, which is reflected in the status area.

Setting the Re-entry Button Operation Mode

When you select a re-entry button in the cross-point control block of an M/E block (downstream M/E block), the output of the upstream M/E block is read in. You can set the system so that when a GPI link is set for the cross-point selected on the A ^{a)} bus of the upstream M/E block this triggers the GPI output. In the Switcher >Link >GPI Link menu, set [Re-Entry Enable] to On or Off. When this is On, the GPI is executed upstream.

a) When the bus toggle is set to Off, the applicable bus depends on the position of the fader lever.

Notes

- For re-entry, “upstream” applies to a single stage only.
- This setting is common to all GPI output ports.
- GPI output execution on the upstream M/E block is only possible on buses for which GPI Link is set to “Enable” in the GPI Link Adjust menu.
- GPI output occurs when you press a re-entry button, the re-entry button is selected by a macro execution, or you press the re-entry button on the AUX bus remote panel.

Making a Setting for Linking Two M/E Banks

You can link any two M/E banks for some operations by using the Switcher >Link >M/E Link menu.

The operations for which you can link two M/E banks are as follows.

- Transition execution (auto transition, cut, and fader lever operation)
- Next transition selection
- Transition type selection

1 In the Switcher >Link menu, press [M/E Link].

The M/E Link menu appears.

The status area displays a link list showing link source banks (M/E and PGM/PST) and link destination banks, and a selection list.

2 Using any of the following methods, select the link number you want to set.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Link No	Link number selection	1 to 8

3 In the <M/E Select> group, select [Master M/E] (link source).

4 Using any of the following methods, select the M/E or PGM/PST bank you want to be the link source, then press [M/E Set].

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
2	No	Bank selection	1 to 5 ^{a)}

- a) 1: M/E-1
 2: M/E-2
 3: M/E-3
 4: M/E-4
 5: PGM/PST

5 In the <M/E Select> group, select [Linked M/E] (link destination).

6 In the same way as in step **4**, select the M/E or PGM/PST bank you want to be the link destination, then press [M/E Set].

To link the banks not only for transition execution but also for the other operations

Press [Transition Only] and turn it off.

To release the link setting

Use the same operation as in step 2 to select the link number for which you want to release the link setting, then press [Clear].

Making a Link Setting for Key Transition

You can make a link setting for key transition by using the Switcher >Link >Key Transition Link menu.

The operations for which you can link two banks are the following independent key transition operations.

- Auto transition
- Turning the key on or off
- Fader lever operation (on the downstream key control block)

1 In the Switcher >Link menu, press [Key Trans Link].

The Key Transition Link menu appears.

The status area displays a link list showing link sources and link destinations, and a key selection list.

2 Using any of the following methods, select the link number you want to set.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Link No	Link number selection	1 to 32

3 In the <Key Select> group, select [Master Key] (link source).

4 Using any of the following, select the key you want to be the link source, then press [Key Set].

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
2	No	Key number selection	1 to 40 ^{a)}

- a) The keys and their numbers selectable as link source/link destination are as follows.
M/E-x Keyx?DSKx
(In M/E-x, the x is the M/E bank number (1 to 4); in DSKx the x is the DSK number (1 to 8); in Keyx the x is the key number (1 to 8)).

- 5** In the <Key Select> group, select [Linked Key] (link destination).
- 6** In the same way as in step **4**, select the key you want to be the link destination, then press [Key Set].

To release the link setting

Use the same operation as in step **2** to select the link number for which you want to release the link setting, then press [Clear].

Interfacing With External Devices (Device Interface Menu)

To carry out setup relating to connections with external devices, display the Switcher >Device Interface menu.

To display the Device Interface menu

In the Engineering Setup menu, select VF3 'Switcher' and HF7 'Device Interface.'

The following functions are available here.

- **Remote Assign:** Set the use of the four 9-pin ports.
- **GPI Input:** Set the GPI input ports and trigger polarities, and make the action settings.
- **GPI Output:** Set the GPI output ports and trigger polarities, and make the action settings.
- **Aux Control:** Set whether operations on the AUX buses from the four 9-pin ports are inhibited.
- **DME SDI Interface:** Make AUX bus output and re-entry input settings.
- **Editor I/F:** Set the key off mode for control from an editor.

Making 9-Pin Port Device Interface Settings

The description in this section takes the REMOTE1 port as an example. For other REMOTE ports, carry out the same process as required.

- 1** In the Switcher >Device Interface menu, press [Remote Assign].

The Remote Assign menu appears.

- 2** Select the device interface you want to set for the REMOTE1 port from the <Remote1> group.

Editor A: assign Editor A to the REMOTE1 port.

Editor B: assign Editor B to the REMOTE1 port.

AUX: assign AUX to the REMOTE1 port.

The device interfaces which can be selected for REMOTE2 are the same as for REMOTE1. For REMOTE3 you can also select DME1, and for REMOTE4 you can also select DME2.

Notes

When REMOTE3 and REMOTE4 are respectively assigned to DME1 and DME2, you can switch the AUX bus from the DME (DME-3000/7000) connected to these ports.

At this time, connect the DME input video signals and key signals as follows.

- DME1 video input: AUX1 output
- DME1 key input: AUX2 output
- DME2 video input: AUX4 output
- DME2 key input: AUX5 output

Note that for a DME external video signal, you can select any of AUX1 to AUX14 on the DME. Connect to the selected AUX bus.

Making Switcher Processor GPI Input Settings

- 1 In the Switcher >Device Interface menu, press [GPI Input].

The GPI Input menu appears.

- 2 Using any of the following methods, select the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Port	Port selection	1 to 8
2	No	Selection of number for action to be assigned	1 to 8

- 3 In the <Trigger Type> group, select the trigger type.

 **(Rising Edge):** Apply the trigger on a rising edge of an input pulse.

 **(Falling Edge):** Apply the trigger on a falling edge of an input pulse.

 **(Any Edge):** Apply the trigger on a change in the polarity of the input signal.

 **(Level):** Carry out the specified operation when the input is low or high.

No Operation: Apply no trigger on an input pulse.

- 4 In the <Target> group, select the action block.

M/E-1, M/E-2, M/E-3, M/E-4, P/P: Set the action for one of the banks.

Common/Setup: Set an action for something other than the above, or a setup action.

5 Using any of the following methods, select the action to be set.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
3	Action	Action selection	1 and upwards ^{a)}
4	Reg No	Register number	1 to 4 ^{b)} 1 to 99 ^{c)}

a) As for the setting values, see “Selectable actions for various trigger types” (page 176).

b) When knob 3 selection is “Key Snapshot”

c) When knob 3 selection is “Snapshot” or “Effect”

6 Press [Action Set] to confirm the action selection.

The selected setting appears in the status area.

Selectable actions for various trigger types

• When the trigger type is other than “Level”

(In M/E-x, the x is the M/E bank number (1 to 4); in DSKx the x is the DSK number (1 to 8); in Keyx the x is the key number (1 to 8)).

When Target is M/E-x: Cut, Auto Trans, Keyx Cut, Keyx Auto Trans, SS ? Recall, Keyx SS ? Recall, Effect ? Recall, Effect ? Recall & Run, KF Run, KF Stop, KF Rewind, KF Rev Run, No Action

When Target is P/P: Cut, Auto Trans, DSKx Cut, DSKx Auto Trans, FTB Cut, FTB Auto Trans, SS ? Recall, DSKx SS ? Recall, Effect ? Recall, Effect ? Recall & Run, KF Run, KF Stop, KF Rewind, KF Rev Run, No Action

When Target is Common/Setup: FM Src1 Field Freeze, FM Src1 Frame Freeze, FM Src2 Field Freeze, FM Src2 Frame Freeze, FM Src1 Freeze Off, FM Src2 Freeze Off, FM Src1 Clip Record, FM Src1 Clip Stop, FM Src2 Clip Record, FM Src2 Clip Stop, FM1 to FM8 Clip Cueup, FM1 to FM8 Clip Play, FM1 to FM8 Clip Stop, User1 to 8 SS ? Recall, User1 to 8 EFF ? Recall, User1 to 8 EFF ? Recall & Run, User1 to 8 KF Run, User1 to 8 KF Stop, User1 to 8 KF Rewind, User1 to 8 KF Reverse Run, No Action

• When the trigger type is “Level”

(In M/E-x, the x is the M/E bank number (1 to 4)).

When Target is M/E-x or P/P: Aspect, Bkgd A Side Flags, Bkgd B Side Flags, No Action

When Target is Common/Setup: Format, Aspect, Level Enable, No Action

Notes

- “Level Enable” is a function that determines whether GPI inputs are enabled (“Enable”) or disabled (“Disable”) for the “Aspect” and “Format” actions that can be used when the trigger type is Level. When Level Enable is used, if the input is “Disable” then it is not possible to switch “Aspect” or “Format” by GPI input.

If a GPI to switch “Aspect” or “Format” occurs when powering the system off, the action triggered by the GPI may start immediately before the power goes off and the power may go off before the action is completed. This may corrupt the setup settings. It is therefore recommended to use Level Enable to avoid such a situation.

- If “Format” is selected for “Action” when the format converter is used on the switcher, you can set the conversion formats of the format converter for “FC Input 1-8”, “FC Input 9-16”, “FC Output 1-2” and “FC Output 3-4”.

Carrying out level settings

To set the low level and high level, first set the trigger type to “Level,” then use the following procedure.

- 1** In the Switcher >Device Interface menu, select the action to be set, and press [H/L Set].

The H/L Set menu appears.

- 2** Using any of the following methods, select the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	No	Selection of setting for action	1 and upwards

- 3** To apply the selection made in step **2** when the input is high, press [H Set]. To apply the selection made in step **2** when the input is low, press [L Set].

This confirms the setting, which appears in the status area.

Notes

- When the action is “Format,” these settings conflict with the current settings, but after making the settings, agreement is restored after a pulse change or power off/on.
- When the Action is “Bkgd A Side Flags” or “Bkgd B Side Flags,” the levels are fixed, as follows.
High level: Off
Low level: On

Making Switcher Processor GPI Output Settings

- 1 In the Switcher >Device Interface menu, press [GPI Output].
The GPI Output menu appears.

- 2 Using any of the following methods, select the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Port	Port selection	1 to 8

- 3 In the <Trigger Type> group, select the trigger polarity.

 **(Rising Edge):** The trigger causes the relay contacts to be open-circuit or drives the output high, and holds this state for the specified pulse width.

 **(Falling Edge):** The trigger causes the relay contacts to be shorted or drives the output low, and holds this state for the specified pulse width.

 **(Any Edge):** Each time the trigger occurs, the relay contacts are alternately closed or opened, or the output is switched between high and low.

Status: Depending on the status, the relay contacts are closed or opened, or the output is switched between high and low.

No Operation: The trigger has no effect on the output.

- 4 Turn the knobs to select the pulse width and timing to be set.

Knob	Parameter	Adjustment	Setting values
3	Pulse Width	Pulse width	1 to 60 (fields)
4	Timing	Output timing	1 to 3 ^{a)}

a) 1: Field 1, 2: Field 2, 3: Any

When “∞” is selected as the trigger polarity, there is no Pulse Width setting. When “Status” is selected, there is no Pulse Width or Timing setting.

- 5 In the <Source> group, select the action block.

M/E-1 to M/E-4 and P/P: Set an action for the M/E or PGM/PST bank.

Common: Set an action for error status.

6 Using any of the following methods, select the action to be set.

- Press directly on the list appearing in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
2	Action	Action selection	1 and upwards ^{a)}
5	Reg No	Register number	1 to 4 ^{b)} 1 to 99 ^{c)}

a) • Action list when the trigger type is other than “Status”

(In M/E-x, the x is the M/E bank number (1 to 4); in DSKx the x is the DSK number (1 to 8); in Keyx the x is the key number (1 to 8)).

When Source is M/E-x: Cut, Auto Trans, Keyx Cut, Keyx Auto Trans, Keyx SS ?

Recall, Effect ? Recall, Effect ? Recall & Run, KF Run, KF Stop, KF Rewind, No Action

When Source is P/P: Cut, Auto Trans, DSKx Cut, DSKx Auto Trans, FTB Cut, FTB Auto Trans, DSKx SS ? Recall, Effect ? Recall, Effect ? Recall & Run, KF Run, KF Stop, KF Rewind, No Action

When Source is Common: No Action

• Action list when the trigger type is “Status”

(In M/E-x, the x is the M/E bank number (1 to 4); in DSKx the x is the DSK number (1 to 8); in Keyx the x is the key number (1 to 8)).

When Source is M/E-x: Keyx On, No Action

When Source is P/P: DSKx On, No Action

When Source is Common: Error Make, Error Break, No Action

b) When knob 2 selection is “Key Snapshot”

c) When knob 2 selection is “Snapshot” or “Effect”

7 Press [Action Set] to confirm the action selection.

The selected setting appears in the status area.

Test firing the trigger

To test fire the trigger, press [Test Fire].

This outputs a trigger from the selected output port. This is not output when the trigger type is “Status.”

Enabling or Disabling AUX Bus Control

1 In the Switcher >Device Interface menu, press [Aux Control].

The Aux Control menu appears.

2 Select the 9-pin port for the setting, from the <Control> group.

Remote1: Make the settings for the REMOTE1 port.

Remote2: Make the settings for the REMOTE2 port.

Remote3: Make the settings for the REMOTE3 port.

Remote4: Make the settings for the REMOTE4 port.

3 Using any of the following methods, select the AUX bus.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	No	AUX bus selection	0 to 48 ^{a)}

a) 0: EDIT PVW

1 to 48: AUX1 to AUX48

4 Select whether to enable or disable AUX bus control from the <Control Mode> group.

Enable: enable control of the port selected in step 2.

Disable: disable control of the port selected in step 2.

Manual: make whether control of the port selected in step 2 is possible or not depend on the setting in the Misc menu.

5 Repeat steps 2 to 4 as required to make the settings for other ports.

Setting DME and Switcher Interfaces

Select the signals (AUX bus output signals) input to the DME as follows.

Notes

When using the MVE-8000A, it is not necessary to make this setting.

1 Press [DME SDI Interface] in the Switcher >Device interface menu.

The DME SDI Interface menu appears.

2 Using any of the following methods, select the DME channel to which operations apply.

- Press directly on the list on the left of the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	DME Ch No	DME channel selection	1 to 24

- 3** Depending on the selection in step **3**, use any of the following methods to make the setting.
- Press directly on the list on the right of the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
2	Src No	AUX bus number	0 to 48

- 4** Press [Set].

In the list on the right of the status area, the selected content is reflected in the specified DME channel.

Repeat steps **3** to **6** as required.

Selecting the Mode for Turning Off Keys Upon Receiving the Editor Command

Selects the mode for turning off keys when an “All Stop” command is received from the editor.

- 1** In the Switcher >Device Interface menu, press [Editor I/F].

The Editor I/F menu appears.

- 2** Select one of the following modes.

All: When an “All Stop” command is received, all keys for the selected regions are turned off.

Specified: When an “All Stop” command is received, among all the keys for the selected regions, only the keys specified by the editor are turned off.

Notes

When an “All Stop” command is received in the process of a transition, the keys selected for the next transition are also turned off.



Chapter 21 DME Setup (DME)

Settings Relating to Signal Inputs (Input Menu)

To make settings relating to DME input signals, display the DME >Input menu.

To display the Input menu

In the Engineering Setup menu, select VF4 'DME' and HF1 'Input.'

The status area shows the initial crop information and the DME system phase.

The following functions are available here.

- **Initial Crop:** Make the initial crop setting.
- **Matte Illeg. Color Limit:** Switch the illegal limiter for the signal generated by the DME internal matte generator on or off.
- **System Phase:** Adjust the operation timing of the whole system with respect to the reference signal.

When the signal format is 1080P, up to four DMEs can be operated (DME1 to DME4).

In the following description, the settings for DME1 are given by way of example, but the settings for DME2 to DME4 are carried out in a similar way.

Setting the Initial Crop

1 In the DME1 <Aspect> group of the DME >Input menu, select the screen aspect ratio (16:9 or 4:3).

2 In the DME1 <Crop> group, press [Initial Crop] and adjust the following parameters.

- **If you selected 4:3 in step 1**

Knob	Parameter	Adjustment	Setting values
1	Top	Position of top side	-3.00 to +3.00
2	Left	Position of left side	-4.00 to +4.00
3	Right	Position of right side	-4.00 to +4.00
4	Bottom	Position of bottom side	-3.00 to +3.00

- If you selected 16:9 in step 1

Knob	Parameter	Adjustment	Setting values
1	Top	Position of top side	–9.00 to +9.00
2	Left	Position of left side	–16.00 to +16.00
3	Right	Position of right side	–16.00 to +16.00
4	Bottom	Position of bottom side	–9.00 to +9.00

To return the parameter values to their default values

Press [Unity] in the <Crop> group.

Setting an Illegal Color Limit for Matte Signals

To enable the illegal color limiter for the signals generated by the DME internal matte generator, press [Matte Illeg Col Limit] for DME1 in the DME >Input menu, turning it on.

Making DME System Phase Adjustment

To adjust the DME reference phase, use the following procedure.

- 1** In the DME >Input menu, press [System Phase].
- 2** Set the following parameters.

Knob	Parameter	Adjustment	Setting values
1	DME1 Phase	DME1 system phase adjustment	–32.00 to +96.00
2	DME2 Phase	DME2 system phase adjustment	–32.00 to +96.00

Settings Relating to Signal Outputs (Output Menu)

To make settings relating to DME output signals, display the DME >Output menu.

You can select the signals output from the four monitor output connectors.

To display the Output menu

In the Engineering Setup menu, select VF4 'DME' and HF3 'Output.'

Setting the Monitor Output

To set the signals output from the four monitor output connectors, use the following procedure.

- 1** In the DME >Output menu, press [Monitor Output].
The Monitor Output menu appears.
- 2** In the <Select> group, select the DME to which the setting applies.
DME1: Select DME1.
DME2: Select DME2.
When the signal format is 1080P, you can also select DME3 or DME4 similarly.
- 3** In the list on the left of the status area, press directly on the monitor output for which you want to make setting.

Notes

When the signal format is 1080P, you cannot select MONI OUT#2 and MONI OUT#4.

- 4** In the list on the right of the status area, press directly on the signal you want to output.
- 5** Press [Set].
The selection is reflected in the monitor output.

Interfacing With External Devices (Device Interface Menu)

To carry out setup relating to DME connections with external devices, display the DME >Device Interface menu.

To display the Device Interface menu

In the Engineering Setup menu, select VF4 'DME' and HF4 'Device Interface.'

The following functions are available here.

- **Editor Protocol:** Set the protocol to be used on the Editor port.
- **Editor Port Setting:** Make settings relating to the control of the four editor ports installed in the DME.
- **GPI Input:** Set the GPI input ports and trigger polarities, and make the action settings.
- **GPI Output:** Set the GPI output ports and trigger polarities, and make the action settings.

When the signal format is 1080P, up to four DMEs can be operated (DME1 to DME4).

In the following description, the settings for DME1 are given by way of example, but the settings for DME2 to DME4 are carried out in a similar way.

Notes

For the GPI Input and GPI Output settings, the settings apply to Ch1/Ch2 for DME1/DME3, and Ch3/Ch4 for DME2/DME4.

Setting the editor protocol

In the <DME1 Editor Protocol> group of the DME >Device Interface menu, press the following buttons to make the setting.

DME: Control by DME protocol through the editor port.

VTR: Control by VTR protocol through the editor port.

Making editor port settings

In the <DME1 Editor Port Setting> group of the DME >Device Interface menu, press either of the following to select the way in which the editor ports are used.

Common: Control all of channels 1 to 4 through Editor ports 1 to 4.

Independ: Control channels 1 to 4 individually through Editor ports 1 to 4.

Making DME GPI Input Settings

- 1 In the DME >Device Interface menu, press [DME1 GPI Input].
The DME1 GPI Input menu appears.

- 2 Using any of the following methods, select the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Port	Input port selection	1 to 8
2	No	Selection of number for action to be assigned	1 to 8

- 3 In the <Trigger Type> group, select the trigger polarity.



(Rising Edge): Apply the trigger on a rising edge of an input pulse.



(Falling Edge): Apply the trigger on a falling edge of an input pulse.



(Any Edge): Apply the trigger on a change in the polarity of the input signal.



(Level): Carry out the specified operation when the input is low or high.

No Operation: Apply no trigger on an input pulse.

- 4 In the <Target> group, select what this applies to (channels 1 to 4, or Proc).

- 5 Using any of the following methods, select the action to be set.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
3	Action	Action selection	1 and upwards ^{a)}
4	Reg No	Register number	1 to 99 ^{b)} 1 to 399 ^{c)}

a) As for the setting values, see “Selectable actions for various trigger types” (page 189).

b) When knob 3 selection is “Snapshot”

c) When knob 3 selection is “Effect”

- 6 Press [Action Set] to confirm the action selection.

The selected setting appears in the status area.

Selectable actions for various trigger types

- **When the trigger type is other than “Level”**

When Target is Ch1, Ch2, Ch3, or Ch4: Freeze, SS ? Recall

Effect ? Recall, Effect ? Recall & Run, KF Run, KF Stop, KF Rewind,
KF Reverse Run, No Action

When Target is Proc: No Action

- **When the trigger type is “Level”**

When Target is Ch1, Ch2, Ch3, or Ch4: Aspect, No Action

When Target is Proc: Format Aspect, Level Enable, No Action

Notes

“Level Enable” is a function that determines whether GPI inputs are enabled (“Enable”) or disabled (“Disable”) for the “Aspect” and “Format” actions that can be used when the trigger type is Level. When Level Enable is used, if the input is “Disable” then it is not possible to switch “Aspect” or “Format” by GPI input.

If a GPI to switch “Aspect” or “Format” occurs when powering the system off, the action triggered by the GPI may start immediately before the power goes off and the power may go off before the action is completed. This may corrupt the setup settings. It is therefore recommended to use Level Enable to avoid such a situation.

Carrying out level settings

To set the low level and high level, first set the trigger type to “Level,” then use the following procedure.

- 1** In the DME >Device Interface menu, select the action to be set, and press [H/L Set].

The H/L Set menu appears.

- 2** Using any of the following methods, select the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	No	Signal format/screen aspect ratio selection	1 and upwards

- 3** To apply the selection made in step **2** when the input is high, press [H Set].
To apply the selection made in step **2** when the input is low, press [L Set].

This confirms the setting, which appears in the status area.

Making DME GPI Output Settings

- 1** In the DME >Device Interface menu, press [DME1 GPI Output].
The DME1 GPI Output menu appears.
The output port selection is fixed at 1.
- 2** In the <Trigger Type> group, select the trigger polarity.
Status: Depending on the status, the relay contacts are closed or opened, or the output is switched between high and low.
No Operation: The trigger has no effect on the relay state or output level.
- 3** Using any of the following methods, select the action you want to set.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
2	Action	Action selection	1 to 3 ^{a)}

a) Error Make, Error Break, No Action

- 4** Press [Action Set] to confirm the action selection.
The selected setting appears in the status area.



Chapter 22 DCU Setup (DCU)

Setup Relating to DCU

In DCU setup, carry out settings particular to the DCU.

You can make the following settings.

- **Input Config:** Assign GPI inputs to Parallel input ports.
- **GPI Input Assign:** Make GPI input settings.
- **Output Config:** Assign GPI outputs to parallel output ports inserted in an option slot.
- **GPI Output Assign:** Make GPI output settings.
- **Serial Port Assign:** Set the protocol to match the devices connected to a 9-pin serial port. You can also select the control panel used to control each device.

Notes

For setup relating to DCU, it is necessary to make the same settings on multiple control panels (maximum three units) that are sharing the DCU. After carrying out the DCU setup on one control panel, make the same settings on the other control panels.

Settings Relating to Parallel Inputs (Input Config Menu)

To assign GPI inputs to DCU parallel input ports, display the DCU >Input Config menu.

The DCU parallel input ports are assigned with the following priority sequence.

1. When external boxes are set in the Router/Tally >Router >External Box Assign menu, the parallel inputs are assigned to the external box inputs in order.
2. When tally settings are carried out in the Router/Tally >Tally Enable menu, tally inputs are assigned automatically.

In this menu, you set only the input ports which are unused after making the above assignments.

To display the Input Config menu

In the Engineering Setup menu, select VF5 'DCU' and HF1 'Input Config.' The status area shows input port information.

Assigning a GPI Input Port

- 1 In the DCU >Input Config menu, select what the setting applies to (DCU1 or DCU2) from the <DCU Select> group.
- 2 In the <Parallel Input Assign> group, press [GPI Input].
- 3 Using any of the following methods, assign the number of the GPI input to the input port.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Parallel Input	Input port	1 to 102 ^{a)}
3	GPI Input	GPI input	1 to 50

a) When the MKS-2700 is connected, select a value in the range 1 to 34.

- 4** To confirm the assignment in step **3**, press [GPI Input Set].
- This assigns the GPI input, and this is reflected in the status area.

Releasing the Assignment of a GPI Input Port

- 1** In the DCU >Input Config menu, select what the setting applies to (DCU1 or DCU2) from the <DCU Select> group.
- 2** In the <Parallel Input Assign> group, if [GPI Input] is on, press it to turn it off.
- 3** Turn the knobs to adjust the following parameters.

Knob	Parameter	Adjustment	Setting values
1	From No	First port number	1 to To No
2	To No	Last port number	From No to 102

- 4** In the <Parallel Input Assign> group, press [No Assign].

GPI Input Setting (GPI Input Assign Menu)

To set the trigger type and so on for each GPI input, display the DCU >GPI Input Assign menu.

To display the GPI Input Assign menu

In the Engineering Setup menu, select VF5 'DCU' and HF2 'GPI Input Assign.'

The GPI input port setting status appears in the status area.

Making DCU GPI Input Settings

- 1 In the DCU >GPI Input Assign menu, using any of the following methods select what the setting applies to.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	No	GPI input	1 to 50

- 2 In the <Trigger Type> group, select the trigger polarity.
 - ☐ **(Rising Edge):** Apply the trigger on a rising edge of an input pulse.
 - ☐ **(Falling Edge):** Apply the trigger on a falling edge of an input pulse.
 - ☐ **(Any Edge):** Apply the trigger on a change in the polarity of the input signal.
 - ☐ **(Level):** Carry out the specified operation when the input is low or high.

No Operation: Apply no trigger on an input pulse.

- 3 In the <Target Device> group, select the control panel to handle the GPI input.

SCU1: ID1 control panel (PNL1)

SCU2: ID2 control panel (PNL2)

SCU3: ID3 control panel (PNL3)

The action set in the following step **4** is executed for the switcher and DME controlled by the selected control panel.

4 Using any of the following methods, select the action you want to set.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
2	Action	Action selection	1 and upwards ^{a)}
4	Aux Bus No	AUX bus selection	1 to 48 ^{b)}
5	Reg No	Register number	1 to 4 ^{c)} 1 to 99 ^{d)} 1 to 250 ^{e)} 1 to 399 ^{f)}
5	Src No	Source signal selection	1 and upwards ^{b)}

a) As for the setting values, see “Selectable actions for various trigger types” (page 196)

b) When knob 2 selection is “Aux ? O’ride Src ???”

c) When knob 2 selection is “Key Snapshot”

d) When knob 2 selection is “Snapshot” or “Shotbox”

e) When knob 2 selection is “Macro”

f) When knob 2 selection is “Effect”

g) For primary inputs: 1 to 144

For premium inputs: 145 to 164 ((PREM1) to (PREM20) indicated after the number)

For format converter dedicated inputs: 165 to 180 ((FC1) to (FC16) indicated after the number)

5 To confirm the setting in step **4**, press [Action Set].

This confirms the setting, which appears in the status area.

Selectable actions for various trigger types

• When the trigger type is other than “Level”

(In M/E-x, the x is the M/E bank number (1 to 4); in DSKx the x is the DSK number (1 to 8); in Keyx the x is the key number (1 to 8)).

M/E-x Cut, M/E-x Auto Trans, P/P Cut, PP Auto Trans, M/E-x Keyx Cut, M/E-x Keyx Auto Trans, P/P DSKx Cut, P/P DSKx Auto Trans, FTB Auto Trans, FTB Cut, Master SS ? Recall, SS ? Recall, M/E-x Keyx SS ? Recall, P/P DSKx SS ? Recall, Master Effect ? Recall, Effect ? Recall, Effect ? Recall & Run, KF Run, KF Stop, KF Rewind, FM Src1 Field Freeze, FM Src1 Frame Freeze, FM Src1 Freeze Off, FM Src2 Field Freeze, FM Src2 Frame Freeze, FM Src2 Freeze Off, FM Src1 Clip Record, FM Src1 Clip Stop, FM Src2 Clip Record, FM Src2 Clip Stop, FM1 to FM8 Clip Cueup, FM1 to FM8 Clip Play, FM1 to FM8 Clip Stop, Shotbox ? Recall, Macro Take, Macro ? Recall, No Action

• When the trigger type is only “Rising Edge” or “Falling Edge”

Aux? O'ride Src??

- **When the trigger type is “Level”**

(In M/E-x, the x is the M/E bank number (1 to 4)).

System Format, System Aspect, M/E-x Aspect, P/P Aspect, DME Ch1 Aspect, DME Ch2 Aspect, DME Ch3 Aspect, DME Ch4 Aspect, DME Ch5 Aspect, DME Ch6 Aspect, DME Ch7 Aspect, DME Ch8 Aspect, Level Enable, No Action

Notes

- “Level Enable” is a function that determines whether GPI inputs are enabled (“Enable”) or disabled (“Disable”) for the Aspect and Format actions that can be used when the trigger type is Level. When Level Enable is used, if the input is “Disable” then it is not possible to switch Aspect or Format by GPI input.
If a GPI to switch Aspect or Format occurs when powering the system off, the action triggered by the GPI may start immediately before the power goes off and the power may go off before the action is completed. This may corrupt the setup settings. It is therefore recommended to use Level Enable to avoid such a situation.
- As for “Aux ? O'ride Src ??,” when “Rising Edge” is selected, on a rising edge the set AUX bus input is used. On a falling edge, the original state of the cross-point is restored. If the GPI trigger is applied repeatedly at short intervals (0.5 second or less), the cross-point switching may not be carried out correctly. In this case, apply the GPI trigger again.
- If “SWR Format” or “System Format” is selected for “Action” when the format converter is used, you can set the conversion formats of the format converter for “FC Input 1-8” and “FC Input 9-16” “FC Output 1-2” and “FC Output 3-4”.

Carrying out level settings

To set the low level and high level, first set the trigger type to “Level,” then use the following procedure.

- 1 In the DCU >GPI Input Assign menu, select the action to be set, and press [H/L Set].

The H/L Set menu appears.

- 2 Using any of the following methods, select the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.



Knob	Parameter	Adjustment	Setting values
1	No	Signal format/screen aspect ratio selection	1 and upwards

- 3** To apply the selection made in step **2** when the input is the GPI high level, press [H Set]. To apply the selection made in step **2** when the input is low, press [L Set].

This confirms the setting, which appears in the status area.

Parallel Output Settings (Output Config Menu)

For the DCU parallel output ports, after carrying out tally settings in the Router/Tally >Tally Enable menu, you can assign GPI outputs to output ports that are still unused.

To assign DCU outputs to DCU parallel output ports, display the DCU >Output Config menu.

To display the Output Config menu

In the Engineering Setup menu, select VF5 'DCU' and HF3 'Output Config.' The status area shows output port information.

Assigning a GPI Output Port

- 1** In the DCU >Output Config menu, select what the setting applies to (DCU1 or DCU2) from the <DCU Select> group.
- 2** In the <Parallel Output Assign> group, press [GPI Output].
- 3** Using any of the following methods, select the output port and GPI output number.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Parallel Output Slot	Output port slot	2 to 6 ^{a)}
2	Parallel Output Port	Output port	1 to 54 ^{b)}
5	GPI Output	GPI output	1 to 50

a) When the MKS-2700 is connected, select 2.

b) When the MKS-2700 is connected, select a value in the range 1 to 36.

- 4** To confirm the selected setting, press [GPI Output Set].

This confirms the selection, which is reflected in the status area.

GPI Output Setting (GPI Output Assign Menu)

To set the trigger type and so on for each GPI output, display the DCU >GPI Output Assign menu.

To display the GPI Output Assign menu

In the Engineering Setup menu, select VF5 'DCU' and HF4 'GPI Output Assign.'

The GPI output port setting status appears in the status area.

Making DCU GPI Output Settings

- 1 In the DCU >GPI Output Assign menu, using any of the following methods select what the setting applies to.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	No	GPI output	1 to 50

- 2 In the <Trigger Type> group, select the trigger polarity.

-  **(Rising Edge):** The trigger causes the relay contacts to be open-circuit or drives the output high, and holds this state for the specified pulse width.
-  **(Falling Edge):** The trigger causes the relay contacts to be shorted or drives the output low, and holds this state for the specified pulse width.
-  **(Any Edge):** Each time the trigger occurs, the relay contacts are alternately closed or opened, or the output is switched between high and low.

Status: Depending on the status, the relay contacts are closed or opened, or the output is switched between high and low.

No Operation: The trigger has no effect on the relay state or output level.

- 3 Turning the knobs, select the pulse width and timing to be set.

Knob	Parameter	Adjustment	Setting values
3	Pulse Width	Pulse width	1 to 60 (fields)
4	Timing	Output timing	1 to 3 ^{a)}

a) 1: Field 1, 2: Field 2, 3: Any

When “∞” is selected as the trigger polarity, there is no Pulse Width setting. When “Status” is selected, there is no Pulse Width or Timing setting.

- 4** In the <Source Device> group, select the control panel or DCU to handle the GPI output.

SCU1: ID1 control panel (PNL1)

SCU2: ID2 control panel (PNL2)

SCU3: ID3 control panel (PNL3)

DCU1: ID1 DCU

DCU2: ID2 DCU

When the action set in the following step **5** is carried out on the control panel selected here, this causes a GPI output. It is also possible to output error information. When the DCU is selected, you can output error information by means of the action set in step **5**.

- 5** Using any of the following methods, select the action you want to set.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
2	Action	Action selection	1 and upwards ^{a)}
5	Reg No	Snapshot register number	1 to 4 ^{b)}
5	GPI No	GPI number selection	1 to 32 ^{c)}

- a) • **Action list when the trigger type is other than “Status”**

(In M/E-x, the x is the M/E bank number (1 to 4); in Keyx the x is the key number (1 to 8); in DSKx the x is the DSK number (1 to 8)).

When Source Device is SCU: M/E-x Keyx SS ? Recall, P/P DSKx SS ? Recall, Editor GPI-?? (only when BZS-8050 license is valid), No Action

When Source Device is DCU: No Action

- **Action list when the trigger type is “Status”**

(In M/E-x, the x is the M/E bank number (1 to 4); in Keyx the x is the key number (1 to 8); in DSKx the x is the DSK number (1 to 8)).

When Source Device is SCU: M/E-x Keyx SS ? Recall, P/P DSKx SS ? Recall, M/E-x Keyx On, P/P DSKx On, Error Make, Error Break, Keep Make, Keep Break, Device Recording, No Action

When Source Device is DCU: Error Make, Error Break, No Action

- b) When knob 2 selection is “Key Snapshot”

c) When knob 2 selection is “GPI”

6 To confirm the selection, press [Action Set].

This confirms the selection, which appears in the status area.

Test firing the trigger

To test fire the trigger, in the DCU >GPI Output menu press [Test Fire].

This outputs a trigger from the selected output port. This is not output when the trigger type is “Status.”

Serial Port Settings (Serial Port Assign Menu)

To set the protocol to match a device connected to a 9-pin serial port, display the DCU >Serial Port Assign menu.

To display the Serial Port Assign menu

In the Engineering Setup menu, select VF5 'DCU' and HF5 'Serial Port Assign.'

The serial port setting status appears in the status area.

Making Serial Port Settings

1 In the DCU >Serial Port Assign menu, select the target for the setting (DCU1 or DCU2) from the <DCU Select> group.

2 Using any of the following methods, select the serial port.

- Press directly on the list on the left of the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Port No	Serial port	1 and upwards ^{a)}

a) The setting value range depends on the DCU port setting. (When the MKS-2700 is connected, select 2 for the slot and a value in the range 1 to 6 for the port.)

3 Using any of the following methods, select the protocol for the connected device.

- Press directly on the list on the right of the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
2	Device Type	Protocol selection	1 to 9 ^{a)}

- a) 1. No Assign: nothing is connected to the serial port.
2. P-Bus: P-Bus device.
3. VTR: VTR
4. DDR SD9P: disk recorder (Sony disk 9-pin protocol)
5. DDR VDCP: disk recorder (video disk communication protocol)

6. Simple VDCP: disk recorder with low-performance communications (video disk communications protocol)
7. Extended VTR (Abekas A53 protocol)
8. Mixer ESAM-II
9. AS ES-BUS: device supporting the AS ES bus protocol

Notes

Mixer ESAM-II cannot be operated from this system. It can only be operated from an editing keyboard.

4 Press [Device Type Set].

The selected protocol is reflected on the left of the status area.

5 To enter the name of the serial port, press [Set] in the <Name> group.

A keyboard window appears. You can enter a name of not more than 16 characters.

If no name is set for the serial port, it is displayed as “DCUd_PORTS-p.”

d: 1 or 2 (DCU No.)

s: 2 to 6 (Slot No.)

p: 1 to 6 (Port No.)

6 Press [Enter].

To return the set name to the default name

Press [Clear] in the <Name> group.

7 From the <SCU Select> group, select the control panel (SCU1, SCU2 or SCU3) assigned to operations on the external device connected to the serial port.

Deleting the serial port assignment

1 In the DCU >Serial Port Assign menu, select the target for the setting (DCU1 or DCU2) from the <DCU Select> group.

2 Using any of the following methods, specify the serial port.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Port No	Serial port	1 and upwards ^{a)}

a) The range of setting values depends on the DCU port setting. (When the MKS-2700 is connected, select 2 for the slot and a value in the range 1 to 6 for the port.)

3 Press [Clear].

Making Detailed Settings on the External Device Connected to the Serial Port

After setting the external device for each serial port, it is necessary to make further detailed settings for operation of the external device.

Making detailed settings for a P-Bus device

- 1 In the DCU >Serial Port Assign menu, select the setting target (DCU1 or DCU2) from the <DCU Select> group.
- 2 Using any of the following methods, select the serial port connected to the P-Bus device for which you want to make the settings.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Port No	Serial port number	1 and upwards ^{a)}

a) The range of setting values depends on the DCU port setting. (When the MKS-2700 is connected, select 2 for the slot and a value in the range 1 to 6 for the port.)

- 3 Press [Port Setting].

The DCU >Serial Port Assign >P-Bus Setting menu appears.

At the top of the status area, the relevant serial port, slot number, protocol, serial port name, and SCU number appear. In the lower part of the status area, the device name and response speed settings appear.

- 4 Using any of the following methods, select the ID for which you want to make a device name setting.
 - Press directly on the device name list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	ID	ID selection	0 to 23

- 5 In the <Name> group, press [Set] to display a numeric keypad window.

- 6** Input the desired name, and press [Enter].

The input device name appears in the device name list.

To return the device name for the selected ID to the default name

Press [Clear] in the <Name> group.

- 7** Using any of the following methods, specify the command to which the response speed setting applies.

- Press directly on the delay list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
2	No	Command number selection	1 to 18

- 8** Turn the knob to set the response speed (in field units) of the device.

Knob	Parameter	Adjustment	Setting values
3	Delay	Response speed setting	0 to 60

- 9** Press [Delay Set].

This confirms the setting.

- 10** Repeat steps **4** to **9** as required to make the settings for other commands.

Making detailed settings for a VTR

- 1** In the <DCU Select> group of the DCU >Serial Port Assign menu, select the target for the setting (DCU1 or DCU2).

- 2** Using any of the following methods, select the serial port connected to the VTR for which you want to make the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Port No	Serial port	1 and upwards ^{a)}

a) The range of setting values depends on the DCU port setting. (When the MKS-2700 is connected, select 2 for the slot and a value in the range 1 to 6 for the port.)

- 3** Press [Port Setting].

The DCU >Serial Port Assign >VTR Setting menu appears.

At the top of the status area, the relevant serial port, slot number, protocol, serial port name, SCU number, and timecode source appear. In the lower part of the status area, the VTR constants appear.

- 4** In the <TC Source> group, select the timecode source (reference signal for determining the tape position) from the following.

LTC (Longitudinal Time Code): Use LTC. When interpolation data is returned from a VTR, use that interpolation data.

LTC: VITC (Vertical Interval Time Code): Normally use LTC, but when the tape is moving at speeds at which LTC cannot be read, use VITC.

When interpolation data is returned from a VTR, use that interpolation data.

VITC: Use VITC.

CTL (Control): CTL pulses or timer counter pulses are used. Use this only for a tape on which no timecode is recorded.

The displayed tape position is based on the reference signal specified here.

- 5** Using any of the following methods, specify the VTR constants.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Item	Item selection	1 to 16

- 6** Press [Set].

A numeric keypad window for hexadecimal input appears.

- 7** Set the VTR constants using values in the range 00 to FF.

Block	Byte	Setting item
BLOCK 1	1	HI-BYTE (DEVICE TYPE)
	2	LO-BYTE (DEVICE TYPE)
	3	HI-BYTE (FRAME) (PREROLL TIME)
	4	LO-BYTE (FRAME) (PREROLL TIME)
	5	EDIT DELAY (FRAME)
	6	EE DELAY (FRAME)
	7	OVER RUN (FRAME)
	8	TRAJECTORY

Block	Byte	Setting item
BLOCK 2	1	TC READ DELAY (FRAME)
	2	START DELAY (FRAME)
	3	AFTER SYNC DELAY-
	4	AFTER SYNC DELAY+
	5	MODE1
	6	MODE2
	7	MAX PRRL SPEED
	8	QUICK PVW PRRL TIME (FRAME)

- 8** Press [Enter].
This confirms the settings.
- 9** Repeat steps **5** to **8** as required to set the constants for other VTRs.

Making detailed settings for a disk recorder (Sony disk 9-pin protocol)

- 1** In the <DCU Select> group of the DCU >Serial Port Assign menu, select the target for the setting (DCU1 or DCU2).
- 2** Using any of the following methods, select the serial port connected to the disk recorder for which you want to make the settings.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Port No	Serial port	1 and upwards ^{a)}

a) The range of setting values depends on the DCU port setting. (When the MKS-2700 is connected, select 2 for the slot and a value in the range 1 to 6 for the port.)

- 3** Press [Port Setting].
The DCU >Serial Port Assign >DDR SD9P Setting menu appears.
At the top of the status area, the relevant serial port, slot number, protocol, serial port name, SCU number, and disk recorder type appear. In the lower part of the status area, the response speed settings appear.
- 4** Using any of the following methods, specify the item to which the response speed setting applies.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Item No	Item selection	1 to 4 ^{a)}

- a) 1. Maximum Open Delay: maximum time required to open a file
 2. Maximum Cueup Delay: maximum time required to cue up a file
 3. Play After Cueup Delay: delay time from the cued-up state to begin playback
 4. Play After Open Next Delay: delay time from the Open Next state to begin playback

5 Turn the knob to set the disk recorder response speed.

Knob	Parameter	Adjustment	Setting values
2	Setting	Response speed setting	0 to 255

6 Press [Set].

This confirms the setting.

7 Repeat steps 4 to 6 as required to make the settings for other items.

Making detailed settings for a disk recorder (video disk communications protocol)

1 In the <DCU Select> group of the DCU >Serial Port Assign menu, select the target for the setting (DCU1 or DCU2).

2 Using any of the following methods, select the serial port connected to the disk recorder for which you want to make settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Port No	Serial port	1 and upwards ^{a)}

a) The range of setting values depends on the DCU port setting. (When the MKS-2700 is connected, select 2 for the slot and a value in the range 1 to 6 for the port.)

3 Press [Port Setting].

When “DDR VDCP” is selected as the protocol, the DCU >Serial Port Assign >DDR VDCP Setting menu appears.



When “Simple VDCP” is selected as the protocol, the Simple VDCP Setting menu appears.



- 4 In the <DDR Type> group, select the type of disk recorder.
Player: Functioning as a player.
Recorder: Functioning as a recorder.
- 5 In the <Name Mode> group, select the file name character count mode.
Fixed 8 Character: Use 8-character file names.

Variable Length: Use variable-length file names. (The file name is limited to 23 characters.)

6 In the <TC Sense> group, select the type of timecode sensing.

Zero based: Mode in which timecode is detected taking the first frame of the recalled file as 00:00:00:00

SOM based: Mode in which timecode saved in the recalled file is detected

Notes

The details of the above operation modes depend on the connected device. For more information, consult the documentation for the connected device.

7 When using a disk recorder that does not support the timecode drop frame bit, in the <Frame Control Mode> group, select the drop frame mode or non-drop frame mode.

Drop Frame: Drop frame mode.

Non Drop Frame: Non-drop frame mode.

Notes

This setting is only valid when the system field frequency is one of the following values.

29.97, 30, 59.94, 60

8 Using any of the following methods, specify the item to which the video port number or response speed setting applies.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Item No	Item selection	DDR VDCP Setting menu: 1 to 8 ^{a)} Simple VDCP Setting menu: 1 to 9 ^{a)}

- a) 1. Video Port: Number of the video port associated with the serial port to which the setting applies
For a player, the output port setting
For a recorder, the input port setting
2. Maximum Open Delay: maximum time required to open a file
3. Maximum Cueup Delay: maximum time required to cue up a file
4. Play After Cueup Delay: delay time from the cued-up state to begin playback
5. Stop Delay: delay time from issuing the stop command until actually stopping
6. Still Delay: delay time from issuing the still command until actually stopping
7. Continue Delay: delay time from issuing the continue command until actually stopping
8. Idle Delay: delay time from unloading a file until entering the idle state
(The idle state is a state wherein a file has been unloaded but a new file has not been loaded yet, that is, a state wherein no file is loaded.)

9. Status Sense Interval: time until the next Status Sense command is issued (Simple VDCP Setting menu only)

9 Turn the knob to set the disk recorder video port number or response speed.

When setting the video port number

Knob	Parameter	Adjustment	Setting values
2	Setting	Video port number	0 to 127 ^{a)}

a) 0: No assignment

When setting the response speed

Knob	Parameter	Adjustment	Setting values
2	Setting	Response speed	0 to 255

10 Press [Set].

This confirms the setting.

11 If required, repeat steps 4 to 10, to set other items.

To enable or disable the loop and recue functions

Press the [Loop] and [Recue] buttons, respectively.

Loop: Replay the recalled file in a continuous loop.

Recue: After playing the recalled file, recue to the beginning and then stop.

Making detailed settings for an Extended VTR

1 In the DCU >Serial Port Assign menu, select the setting target (DCU1 or DCU2) from the <DCU Select> group.

2 Using any of the following methods, select the serial port connected to the Extended VTR for which you want to make the settings.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Port No	Serial port number	1 and upwards ^{a)}

a) The range of setting values depends on the DCU port setting. (When the MKS-2700 is connected, select 2 for the slot and a value in the range 1 to 6 for the port.)

3 Press [Port Setting].

The DCU >Serial Port Assign >Extended VTR Setting menu appears.

At the top of the status area, the relevant serial port, slot number, protocol, serial port name, and SCU number appear. In the lower part of the status area, the response speed settings appear.

4 Using any of the following methods, specify the command to which the response speed setting applies.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Item No	Item selection	1 to 4 ^{a)}

- a) 1. Maximum Open Delay: maximum time required to open a file
 2. Maximum Cueup Delay: maximum time required to cue up a file
 3. Play After Cueup Delay: maximum delay time from the cued-up state to begin playback
 4. Stop Delay: delay time from issuing the stop command until actually stopping

5 Turn the knob to set the response speed of the Extended VTR.

Knob	Parameter	Adjustment	Setting values
2	Setting	Response speed setting	0 to 255

6 Press [Set].

This confirms the setting.

7 Repeat steps 4 to 6 as required to make the settings for other items.

Chapter 23 Setup Relating to Router Interface and Tally (Router/Tally)

Router Interface Settings (Router Menu)

In this system, the interface with a router (routing switcher) uses the S-Bus protocol. It is therefore necessary to assign inputs and outputs of the switcher and so on to an S-Bus space.

To carry out this assignment, use the Router/Tally >Router menu. The assignment is common to the parallel and serial tallies.

To display the Router menu

In the Engineering Setup menu, select VF6 'Router/Tally' and HF1 'Router.' The status area shows the device names to be assigned to the S-Bus space, the matrix size, source address, destination address, and level.

The following functions are available here.

- **Matrix Size:** Assign the switcher matrix of each switcher processor to S-Bus space, and select the matrix size and positioning level, source address settings, and so on.
- **External Box:** To obtain the signal selection status of external devices with a parallel input, assign a matrix as an external selector in the S-Bus space. Make the matrix size, assignment level, source address, and other settings.
- **Alias Name Gp:** Set the group number for an S-Bus description name to be displayed in the source name displays for a cross-point operation.

Assigning Switcher Inputs and Outputs to S-Bus Space

- 1 In the <Device> group of the Router/Tally >Router menu, select the device to which the settings apply.

SWR1: Settings apply to switcher 1.

SWR2: Settings apply to switcher 2.

Notes

When there are two switchers on the same network, the SWR2 (second switcher) settings are required. If there is only one switcher, the settings are not required.

- 2 In the <Matrix Size> group, select the matrix size.

320 × 348 (Standard): Assign to S-Bus space with the switcher input/output at 320×348 size.

272 × 274: Assign to S-Bus space with the switcher input/output at 272×274 size.

136 × 138: Assign to S-Bus space with the switcher input/output at 136×138 size.

128 × 128: Assign to S-Bus space with the switcher input/output at 128×128 size.

3 Turn the knobs to set the parameters for the following items.

Source: Specify the start address of the matrix source.

Destination: Specify the start address of the matrix destination.

Level: Specify the level in the S-Bus space.

Knob	Parameter	Adjustment	Setting values
1	Source	Source start address	1 and upwards ^{a)}
2	Destination	Destination start address	1 and upwards ^{b)}
3	Level	Level	1 to 8

a) When the matrix size is Standard, the maximum value is 889. For the Compact size, the maximum value is 897.

b) When the matrix size is Standard, the maximum value is 887. For the Compact size, the maximum value is 897.

Making an External Box Setting

1 In the Router/Tally >Router menu, press [External Box Assign].

The External Box Assign menu appears.

The status area shows the external box size, address, and other settings.

2 In the <Device> group, select what the setting applies to (one of External Box 1 to 4).

3 In the <Matrix Size> group, select the number of inputs.

No Assign: Do not use.

8×1: Select an external box with 8 inputs and 1 output.

16×1: Select an external box with 16 inputs and 1 output.

32×1: Select an external box with 32 inputs and 1 output.

4 Turn the knobs to make adjustments.



Knob	Parameter	Adjustment	Setting values
1	Source	Source start address	1 to 1017 ^{a)} 1 to 1009 ^{b)} 1 to 993 ^{c)}
2	Destination	Destination start address	1 to 1024
3	Level	Level	1 to 8

a) When Matrix Size is 8×1

b) When Matrix Size is 16×1

c) When Matrix Size is 32×1

Coupling external boxes

By coupling a number of external boxes, the number of inputs can be increased. Here the example of coupling External Box1 and External Box2 is described.

- 1 In the Router/Tally >Router >External Box Assign menu, select [External box1] from the <Device> group.
- 2 In the <Matrix Size> group, select [8×1].
- 3 Turn the knobs to make adjustments.

Knob	Parameter	Adjustment	Setting values
1	Source	Source start address	1 to 1017
2	Destination	Destination start address	1 to 1024
3	Level	Level	1 to 8

- 4 In the <Device> group, select [External box2].
- 5 In the <Matrix Size> group, select [32×1].
- 6 Turn the knobs to make adjustments.
At this point make the settings of Destination and Level the same as in step 3.

This automatically couples External Box1 and External Box2, forming an external box with 40 (8+32) inputs.

Setting the group number of an S-Bus description name

- 1 In the <Alias Name Gp> group of the Router/Tally >Router menu, press [Gp No].

2 Turn the knob to set the following parameter.

Knob	Parameter	Adjustment	Setting values
1	Gp No	Group number of S-Bus description name	0 to 7 ^{a)}

a) When setting values 1 to 7 are selected: If the name is not set, the description name for “0” appears.
If the description name for “0” is not registered either, the Type and No values appear.

3 In the <Alias Name Gp> group, press [Set].

This confirms the setting, which is reflected in the status area.

Notes

Transmit the description name selected here from the router.

Tally Group Settings (Group Tally Menu)

With the S-Bus protocol, tally control is possible for groups 1 to 8, but in this system you can use either groups 1 to 4 or groups 5 to 8.

You can also select whether or not to transfer the tally information over the S-Bus.

To select the tally groups, use the Router/Tally >Group Tally menu.

To display the Group Tally menu

In the Engineering Setup menu, select VF6 'Router/Tally' and HF2 'Group Tally.'

The following functions are available here.

- **Tally Group:** Select the group tally (Gp1 to 4 or Gp5 to 8) which can be used. (For the parallel tally, all groups can be used regardless of this setting.)
- **SBus Tally Enable:** Specify S-Bus tally enabled or disabled.

Setting the tally groups

- 1** To select a consecutive sequence of groups from each of groups 1 to 4 and groups 5 to 8, set [All Group Enable] to On in the Group Tally menu.
- 2** In the <Tally Group> group, select the desired groups.

Wiring Settings (Wiring Menu)

When configuring a system in which the switcher inputs and outputs are connected to a router, setting this connection configuration (referred to as “wiring”) in the S-Bus space, or inputting the information which specifies the physical wiring, is necessary.

To make the wiring settings, use the Router/Tally > Wiring menu. The settings are common to the parallel and serial tallies.

To display the Wiring menu

In the Engineering Setup menu, select VF6 ‘Router/Tally’ and HF3 ‘Wiring.’ The status area shows the wiring settings.

Making New Wiring Settings

- 1 In the Router/Tally > Wiring menu, press [New].

The New menu appears.

- 2 With a knob or menu operation, set the destination.

When switcher inputs and outputs are connected to the router in a group, you can specify the start and end destination addresses.

Destination From: Specify the start destination address for the wiring configuration.

Destination To: When the wiring configuration is multiple, specify the end destination address. For a single wiring connection, this setting is not required.

Destination Level: Specify the destination level of the wiring configuration.

Knob	Parameter	Adjustment	Setting values
1	Destination (From)	Destination start address	1 to 1024
2	Destination (To)	Destination end address	From start address to 1024
3	Destination (Level)	Destination level	1 to 8

- 3 Set the source.

Source From: Specify the source start address for the wiring configuration.

Source Level: Specify the source level for the wiring configuration.

Knob	Parameter	Adjustment	Setting values
4	Source (From)	Source start address	1 to 1024
5	Source (Level)	Source level	1 to 8

4 Press [Execute].

This makes the wiring setting according to the specifications in steps **2** and **3**.

Changing the Wiring Settings

1 In the Router/Tally >Wiring menu, press [Modify].

The Modify menu appears.

2 Referring to steps **2** and **3** in the preceding section “Making new wiring settings,” change the parameters as required. In this case, however, it is not possible to specify multiple destinations in a single operation, and a single “Destination Address” must be specified.

3 Press [Execute].

This updates the wiring settings.

Deleting Wiring Settings

1 In the Router/Tally >Wiring menu, using either of the following methods, select the wiring whose settings you want to delete.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.

2 Press [Delete].

This deletes the selected wiring entry.

Sorting Wiring Settings

In the Router/Tally >Wiring menu, press [Sort].

The sorting of wiring settings are executed in the following order.

Destination level order (ascending)→Destination address order
(ascending)→Source level order (ascending)

Tally Generation Settings (Tally Enable Menu)

For settings relating to tally generation, use the Router/Tally >Tally Enable menu.

Specify the destination to be the reference for tally generation, and make various settings.

The settings are common to the parallel and serial tallies.

To display the Tally Enable menu

In the Engineering Setup menu, select VF6 'Router/Tally' and HF4 'Tally Enable.'

The status area shows the tally generation settings.

The following functions are available here.

- **Tally Type:** Specify the tally type.
- **Destination:** Specify the address and level.
- **Tally Enable:** Specify the timing at which a tally is enabled.
 - **Enable:** Always enabled.
 - **Disable:** Always disabled.
 - **Tally Input:** Follow the tally input status.

Making New Tally Generation Settings

- 1 In the Router/Tally >Tally Enable menu, press [New].

The New menu appears.

- 2 Turn the knobs to set the following parameters.

Knob	Parameter	Adjustment	Setting values
1	Destination Address	Destination address	1 to 1024
2	Destination Level	Destination level	1 to 8
3	Tally Type	Tally type	1 to 16 ^{a)}

a) 1:R1, 2:G1, 3:R2, 4:G2, 5:R3, 6:G3, 7:R4, 8:G4, 9:R5, 10:G5, 11:R6, 12:G6, 13:R7, 14:G7, 15:R8, and 16:G8. (R is an abbreviation of "Red Tally," and G of "Green Tally.")

- 3 In the <Tally Enable> group, specify the tally generation mode.

Enable: Always generate a tally.

Disable: Never generate a tally.

Tally Input: Generate a tally from the tally input state.

- 4** When you selected Tally Input as the tally generation mode in step **3**, select either of the following in the <Tally Input> group.

DCU1: Generate tally with reference to signal input to DCU1 port. Set the port number with the knob.

DCU2: Generate tally with reference to signal input to DCU2 port. Set the port number with the knob.

- 5** Turn the knob to select the tally input port number.

Knob	Parameter	Adjustment	Setting values
5	Input No	Tally input port number	1 to 102

- 6** Press [Execute].

This sets the settings made in steps **2** to **5** as the settings for tally generation.

Modifying Tally Generation

- 1** In the Router/Tally >Tally Enable menu, press [Modify].
The Modify menu appears.
- 2** With reference to steps **2** to **5** in the preceding section “Making new tally generation settings,” change the parameters as required.
- 3** Press [Execute].
This modifies the tally generation settings.

Deleting Tally Generation Settings

- 1** Using either of the following methods in the Router/Tally >Tally Enable menu, select the tally generation entry you want to delete.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
- 2** Press [Delete].

This deletes the selected tally generation entry.



Tally Copy Settings (Tally Copy Menu)

You can copy the tally information pertaining to a particular source to a different source.

For settings relating to the tally copy function, use the Router/Tally >Tally Copy menu. The settings are common to the parallel and serial tallies.

To display the Tally Copy menu

In the Engineering Setup menu, select VF6 'Router/Tally' and HF5 'Tally Copy.'

The status area shows the tally copy status.

Making New Tally Copy Settings

- 1 In the Router/Tally >Tally Copy menu, select [New].

The New menu appears.

- 2 Turn the knob to select the copy-from source.
When setting more than one tally copy, you can specify the copy-from source start and end addresses.

Knob	Parameter	Adjustment	Setting values
1	Copy From (From)	Copy-from source start address	1 to 1024
2	Copy From (To)	Copy-from source end address	1 to 1024

- 3 Specify the copy-to source address.

Knob	Parameter	Adjustment	Setting values
3	Copy To (From)	Copy-to source (start) address	1 to 1024
4	Copy To (To)	Copy-to source (end) address	1 to 1024

- 4 Press [Execute].

This makes the tally copy setting according to the specifications in steps 2 and 3.

Modifying Tally Copy Settings

- 1 In the Router/Tally >Tally Copy menu, press [Modify].
The Modify menu appears.

- 2 Use the knobs to select the copy source and copy destination.

Knob	Parameter	Adjustment	Setting values
1	Copy From	Copy-from source	1 to 1024
2	Copy To	Copy-to source	1 to 1024

- 3 Press [Execute].
This updates the tally copy settings.

Deleting Tally Copy Settings

- 1 In the Router/Tally >Tally Copy menu, using any of the following methods, select the tally copy whose settings you want to delete.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Copy No	Tally copy setting selection for deletion	1 and upwards

- 2 Press [Delete].
This deletes the selected tally copy entry.

Parallel Tally Settings (Parallel Tally Menu)

For settings relating to parallel tally, use the Router/Tally >Parallel Tally menu.

Make the parallel port settings for output of tally information pertaining to sources and destinations.

For each of the tally output terminal numbers, specify the tally type, and source address or destination level and address.

To display the Parallel Tally menu

In the Engineering Setup menu, select VF6 'Router/Tally' and HF6 'Parallel Tally.'

The status area shows the parallel tally settings.

Making or Modifying Parallel Tally Settings

- 1 In the <Device> group of the Router/Tally >Parallel Tally menu, select DCU1 or DCU2.
- 2 Using any of the following methods, select the slot number and port number.
 - Press directly on the list in the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Slot No	Parallel tally slot number	2 to 6 ^{a)}
2	Port No	Parallel tally port number	1 to 54 ^{b)}

a) When the MKS-2700 is connected, select 2 for the slot and a value in the range 1 to 36 for the port.

b) When the MKS-2700 is connected, select a value in the range 1 to 36.

- 3 Press [Set].

The Set menu appears.

- 4 In the <Source/Destination> group, select the tally type.

Src: Return a tally to all sources output to the destination.

Dest: Return a tally to the destination outputting the source to which a source tally is returned.

5 Set the destination address and level.

The level setting is only required when in step **4** you selected Destination.

Knob	Parameter	Adjustment	Setting values
1	Address	Destination address	1 to 1024
2	Level	Destination level	1 to 8

6 When setting the tally type, set the following parameter.

Knob	Parameter	Adjustment	Setting values
3	Type	Tally type	1 to 16 ^{a)}

a) 1:R1, 2:G1, 3:R2, 4:G2, 5:R3, 6:G3, 7:R4, 8:G4, 9:R5, 10:G5, 11:R6, 12:G6, 13:R7, 14:G7, 15:R8, and 16:G8. (R is an abbreviation of “Red Tally,” and G of “Green Tally.”)

7 Press [Execute].

This makes the parallel tally settings, in accordance with the settings in steps **1** to **6**.

Deleting Parallel Tally Settings

1 In the Router/Tally >Parallel Tally menu, using any of the following methods, select the parallel tally whose settings you want to delete.

- Press directly on the list in the status area.
- Press the arrow keys to scroll the reverse video cursor.
- Turn the knobs.

Knob	Parameter	Adjustment	Setting values
1	Slot No	Parallel tally slot number	2 to 6
2	Port No	Parallel tally port number	1 to 54

2 Press [Clear].

This deletes the selected parallel tally entry.

Serial Tally Settings (Serial Tally Menu)

To make serial tally settings, display the Router/Tally >Serial Tally menu. Make the serial tally settings, including tally type and source address for each serial tally port.

To display the Serial Tally menu

In the Engineering Setup menu, select VF6 'Router/Tally' and HF7 'Serial Tally.'

The serial tally settings appear in the status area.

Setting or Changing the Serial Tally Settings

- 1 In the <Serial Tally Port> group of the Router/Tally >Serial Tally menu, select the port to which the setting applies.
- 2 In the <Tally Group> group, select the tally group.
- 3 In the <Tally Type> group, press the tally types to select. (You can select up to four.)

Notes

The selectable tally types depend on the settings in step 2.

- 4 In the <Tally Data Size> group, press one of the following to select the data size.

128 Bit: 128 bits

256 Bit: 256 bits

Making the Serial Tally Source Address Settings

To set the serial tally source address for each port, use the following procedure.

- 1 In the Router/Tally >Serial Tally menu, press [Source Assign].

The Source Assign menu appears.

In the status area, the tally types and source address set for the serial tally port appear.

- 2** In the <Serial Tally Port> group, select the port to which the setting applies.
- 3** Using any of the following methods, select the port bit number.
 - Press directly on the list on the left of the status area.
 - Press the arrow keys to scroll the reverse video cursor.
 - Turn the knob.

Knob	Parameter	Adjustment	Setting values
1	Bit No	Bit selection	1 and upwards

- 4** Turn the knob to select the source address.

Knob	Parameter	Adjustment	Setting values
2	Source Addr	Source address selection	1 to 1024

- 5** Press [Source Address Set].

This confirms the setting.

Clearing a Source Address Setting

To clear a source address setting for a particular bit

In the Router/Tally >Serial Tally >Source Assign menu, select the serial tally port and bit number (*see steps 2 and 3 in the previous item*), then press [Clear]. This clears the source address setting for the selected bit.

To clear all source address settings

In the Router/Tally >Serial Tally >Source Assign menu, select the serial tally port, then press [All Clear].

A confirmation message appears.

- If you select “Yes,” this clears all source address settings for the selected serial tally port.
- If you select “No,” the clear operation is canceled.

Chapter 24 Simple Connection of the MKS-8080/8082 AUX Bus Remote Panel

Procedure for Simple Connection

To connect the MKS-8080/8082 AUX Bus Remote Panel to the center control panel using an S-Bus data link requires a BKPF-R70A Routing Switcher Controller Board or similar primary station and various settings for connection. However, using a simple connection, the need for an S-Bus data link primary station is avoided, and direct connection to the MKS-8080/8082 is possible. A simple connection is possible if the following conditions are met:

- There are no devices other than the center control panel and MKS-8080/8082 connected on the S-Bus data link.
- There are no more than 16 MKS-8080/8082 units connected on the S-Bus data link.

To carry out simple connection of the MKS-8080/8082 AUX Bus Remote Panel, use the following procedure.

For settings on the MKS-8080/8082, see the section “Making the Setting With Buttons (Setup Function)” in the Operation Manual for the MKS-8080/8082.

- 1** Carry out initialization of the MKS-8080/8082 settings.
This can be done on the MKS-8080/8082 separately.
- 2** Set the MKS-8080/8082 station number in the range 2 to 17.
This can be done on the MKS-8080/8082 separately.
- 3** Set the S-Bus data link primary station to the center control panel by setting the STATION ID switches on the front of the board in the SCU SLOT 1 to 001 (switch 1 only to the OPEN position).

System control unit	Board	STATION ID switches
MKS-8010A	FP-141	S108
MKS-8010B	CA-76	S9108

- 4** In the Engineering Setup >System >Initialize menu, select PNL, and carry out a reset.

This carries out a restart, and when the restart is completed connection to the MKS-8080/8082 is possible.

- 5** In the Engineering Setup >Router/Tally >Router menu, set the position of the MVS-8000X system in S-Bus space.

Select the setting from SWR1 and SWR2, and set each of Source, Destination, and Level to 1.

Setting Status of the MKS-8080/8082 in Simple Connection

As a result of making the simple connection, the MKS-8080/8082 operates in AUX bus mode, and the settings are the following factory defaults.

With regard to the meaning of the following settings, see the section “Menu Operations” in the Operation Manual for the MKS-8080/8082.

C: SET SWITCHER ID (for AUX mode)

This is set to 001, which is the station number of the center control panel.

D: SET AUX DESTINATION/SOURCE (for AUX mode)

The source is set to IN001 and following, and destination is set to OUT001 and following.

H: SET PHANTOM TABLE (for Router mode)

This is unset, since the unit does not operate in router mode.

N: SET PANEL TABLE (for Router mode)

The source is set to IN001 and following, and destination is set to OUT001 and following. However, since the unit does not operate in router mode, these settings are not used.

R: SET ROUTE

Since when using the simple connection the switcher and router cannot be connected in cascade, no route setting is required, and this is unset.

O: SET AVAILABLE SOURCE/DESTINATION

Set the source and destination ranges so that the MVS-8000X inputs and outputs can be selected.

Y: SET DISPLAY MODES

The DISPLAY MODES/PANEL FUNCTION setting is set to NORMAL.
The TALLY GROUP setting is set to be the same as the setting in Engineering Setup >Router/Tally >Tally Group on the MVS-8000X.

Z: SET PANEL STATUS

The various settings are the same as the factory default settings.



Chapter 25 DIAGNOSIS

Checking the Communications Status

In the Diagnosis menu, you can check the communications status of the control LAN and data LAN within the system.

Communications Status Display

To display the communications status, in the Diagnosis menu select VF3 'System Info' and HF1 'LAN Status'.
The following communications status screen appears.



Devices constituting the system only appear if they are connected.
You can check connection information in the Engineering Setup >System >System Config menu (See “System Settings (System Config Menu)” (page 15)).
Even if a DCU is connected, if there is a communications error, it does not appear.

The LAN communications status is shown as follows.

- Control LAN (CTRL LAN)
When connected: White
When not connected: Red and white flashing
- Data LAN (DATA LAN)
When connected: Blue

When not connected: Red and blue flashing

- Peripheral LAN (PERIPH LAN)

When connected: Amber

When not connected: Not shown

If the connection between the menu panel and another panel is broken, it does not appear.



Appendix (Volume 3)

Data Saved by [Setup Define] and [Initial Status Define]

This section lists the data saved in the Engineering Setup >System >Start Up menu, by each of [Setup Define] and [Initial Status Define].

Data Saved by [Setup Define]

Type	Menu number	Menu path	Saved data
Included in Panel Setup	0022	Home >Favorites >Group Edit	All data relating to Group Edit menu
	0023	Home >Favorites >Button Edit	All data relating to Button Edit menu
	7321	Engineering Setup >Panel >Config	All data relating to Config menu
	7321.1	Engineering Setup >Panel >Config >DSK Fader Assign	All data relating to DSK Fader Assign menu
	7321.2	Engineering Setup >Panel >Config >Link/Program Button >Key Trans Link	All data relating to Key Trans Link menu
	7321.3	Engineering Setup >Panel >Config >Link/Program Button >External Bus Link	All data relating to External Bus Link menu
	7321.7	Engineering Setup >Panel >Config >10 Key Region Assign	All data relating to 10 Key Region Assign menu
	7321.8	Engineering Setup >Panel >Config >Link/Program Button	All data relating to Link/Program Button menu
	7321.11	Engineering Setup >Panel >Config >MP2 Main/Sub Assign	All data relating to MP2 Main/Sub Assign menu
	7321.15	Engineering Setup >Panel >Config >Compact Key Module Assign	All data relating to Compact Key Module Assign menu
	7321.26	Engineering Setup >Panel >Config >M/E Operation Inhibit	All data relating to M/E Operation Inhibit menu
	7321.31	Engineering Setup >Panel >Config >JS/TB User Setting	All data relating to JS/TB User Setting menu
	7322	Engineering Setup >Panel >Xpt Assign	Data relating to Table assignments for each bus [Audio Follow] setting

Type	Menu number	Menu path	Saved data
Included in Panel Setup	7322.1	Engineering Setup >Panel >Xpt Assign >Table Button Assign	All data relating to Table Button Assign menu
	7322.5	Engineering Setup >Panel >Xpt Assign >Main,V/K Pair Assign	<Xpt Shift Mode> And <Display Shift Mode> Group Data
	7322.10	Engineering Setup >Panel >Side Flags Button Assign	All data relating to Side Flags Button Assign menu
	7322.11	Engineering Setup >Panel >Xpt Assign >Mixer Xpt Assign	All data relating to Mixer Xpt Assign menu
	7323	Engineering Setup >Panel >Aux Assign	Data relating to bus assignment to AUX delegation buttons
	7323.1	Engineering Setup >Panel >Aux Assign >RTR Mode Setting	All data relating to RTR Mode Setting menu
	7324	Engineering Setup >Panel >Prefs/Utility	All data relating to function assignment to user preference buttons
	7324.1	Engineering Setup >Panel >Prefs/Utility >Utility Module Assign	All data relating to function assignment to utility/shotbox control block
	7324.2	Engineering Setup >Panel >Prefs/Utility >Key 2/4 Bus Button Assign	All data relating to utility/shotbox assignment to cross-point buttons in the key 2 row
	7325	Engineering Setup >Panel >Device Interface	All data relating to Device Interface menu
	7325.1	Engineering Setup >Panel >Device Interface >GPI Input	All data relating to GPI Input menu
	7325.3	Engineering Setup >Panel >Device Interface >GPI Output	All data relating to GPI Output menu
	7325.4	Engineering Setup >Panel >Device Interface >DCU Serial Port/MPE Assign	All data relating to DCU Serial Port/MPE Assign menu
	7326	Engineering Setup >Panel >Operation	All data relating to Operation menu
	7326.2	Engineering Setup >Panel >Operation >Effect Mode	All data relating to Effect Mode menu (excluding [Default KF Duration] setting values)
	7326.3	Engineering Setup >Panel >Operation >Flexi Pad Mode	All data relating to Flexi Pad Mode menu
	7326.4	Engineering Setup >Panel >Operation >Custom Button	All data relating to Custom Button menu
	7326.5	Engineering Setup >Panel >Operation >Sensitivity	All data relating to Sensitivity menu
	7326.6	Engineering Setup >Panel >Operation >Macro	All data relating to Macro menu



Type	Menu number	Menu path	Saved data
Included in Panel Setup	7326.7	Engineering Setup >Panel >Operation >Custom Button >CCP-6000/8000 Button	All data relating to CCP-6000/8000 Button menu
	7326.9	Engineering Setup >Panel >Operation >ButtonTally	All data relating to ButtonTally menu
	7327	Engineering Setup >Panel >Maintenance	- Setting data for the following buttons: [Screen Saver] [LCD Brightness] [LED Brightness] [Switch Brightness] [Touch Beep] - Setting data for Initial Menu
	7351 to 7355	Engineering Setup >DCU	All data relating to DCU
	7361 to 7367	Engineering Setup >Router/Tally	All data relating to router interface and tally interface
	7371 to 7373	Engineering Setup >MPE	All data relating to MPE
	—	—	Data of Color Palette window
Included in Switcher Setup	7331 7331.1 7331.2 7331.3	- Engineering Setup >Switcher >Config - Engineering Setup >Switcher >Config >M/E Output Assign - Engineering Setup >Switcher >Config >PGM Config - Engineering Setup >Switcher >Config >K-PVW Config	- All data relating to Config menu - All data relating to M/E Output Assign menu - All data relating to PGM Config menu - All data relating to K-PVW Config menu
	7331.4	Engineering Setup >Switcher >Config >User1-8 Config	All data relating to User1-8 Config menu
	7331.5	Engineering Setup >Switcher >Config >Logical M/E Assign	All data relating to Logical M/E Assign menu
	7331.6	Engineering Setup >Switcher >Config >DME Config	All data relating to DME Config menu
	7331.7	Engineering Setup >Switcher >Config >Side Flags	All data relating to Side Flags menu
	7331.8	Engineering Setup >Switcher >Config >Switch Timing	All data relating to Switch Timing menu
	7332	Engineering Setup >Switcher >Input	All data relating to Input menu
	7332.1	Engineering Setup >Switcher >Input >Video Process	All data relating to Video Process menu
	7333.1	Engineering Setup >Switcher >Output >Output Assign	All data relating to Output Assign menu
	7333.2	Engineering Setup >Switcher >Output >Video Clip	All data relating to Video Clip menu
	7333.3	Engineering Setup >Switcher >Output >V Blank/Through	Setting of [V Blank Mask], and [Through Mode] setting data for each output

Type	Menu number	Menu path	Saved data
Included in Switcher Setup	7333.4	Engineering Setup >Switcher >Output >Safe Title	All data relating to Safe Title menu
	7333.5	Engineering Setup >Switcher >Output >4:3 Crop	All data relating to 4:3 Crop menu
	7333.6	Engineering Setup >Switcher >Output >FC Adjust	All data relating to FC Adjust menu
	7334	Engineering Setup >Switcher >Transition	All data relating to Transition menu
	7334.1	Engineering Setup >Switcher >Transition >Preset Color Mix	All data relating to Preset Color Mix menu
	7334.2	Engineering Setup >Switcher >Transition >Transition Curve	Setting data for <Fader Curve> group
	7335	Engineering Setup >Switcher >Key/Wipe/FM/CCR	All data relating to Key/Wipe/FM/CCR menu
	7335.1	Engineering Setup >Switcher >Key/Wipe/FM/CCR >Show Key	All data relating to Show Key menu
	7335.2	Engineering Setup >Switcher >Key/Wipe/FM/CCR >Key Auto Drop	All data relating to Key Auto Drop menu
	7336.1	Engineering Setup >Switcher >Link >Internal Bus Link	All data relating to Internal Bus Link menu
	7336.4	Engineering Setup >Switcher >Link >GPI Link	All data relating to GPI Link menu
	7336.6	Engineering Setup >Switcher >Link >M/E Link	All data relating to M/E Link menu
	7336.7	Engineering Setup >Switcher >Link >Key Transition Link	All data relating to Key Transition Link menu
	7337.1	Engineering Setup >Switcher >Device Interface >Remote Assign	All data relating to Remote Assign menu
	7337.2	Engineering Setup >Switcher >Device Interface >GPI Input	All data relating to GPI Input menu
	7337.4	Engineering Setup >Switcher >Device Interface >GPI Output	All data relating to GPI Output menu
	7337.5	Engineering Setup >Switcher >Device Interface >AUX Control	All data relating to AUX Control menu
	7337.7	Engineering Setup >Switcher >Device Interface >DME Type Setting >DME SDI Interface menu	All data relating to DME SDI Interface menu ^{a)}
	7337.8	Engineering Setup >Switcher >Device Interface >Editor I/F	All data relating to Editor I/F menu
	7322.5	Engineering Setup >Panel >Xpt Assign >Main,V/K Pair Assign	Cross-point assignment settings (excluding <Xpt Shift Mode> and <Display Shift Mode> groups)



Type	Menu number	Menu path	Saved data
Included in Switcher Setup	7322.6	Engineering Setup >Panel >Xpt Assign >Src Name/LCD Color	- Names of source signals - Color of source name display for each source signal
	7326.2	Engineering Setup >Panel >Operation >Effect Mode	Setting of [Default KF Duration] for switcher keyframes
	3221	Misc >Safe Title	All data relating to Safe Title menu
Included in DME Setup	7341	Engineering Setup >DME >Input	All data relating to Input menu
	7343.1	Engineering Setup >DME >Output >Monitor Output	All data relating to Monitor Output menu ^{a)}
	7344	Engineering Setup >DME >Device Interface	All data relating to Device Interface menu
	7344.1	Engineering Setup >DME >Device Interface >DME1 GPI Input	All data relating to DME1 GPI Input menu
	7344.3	Engineering Setup >DME >Device Interface >DME1 GPI Output	All settings relating to DME1 GPI Output menu
	7344.4	Engineering Setup >DME >Device Interface >DME2 GPI Input	All settings relating to DME2 GPI Input menu
	7344.6	Engineering Setup >DME >Device Interface >DME2 GPI Output	All settings relating to DME2 GPI Output menu
	7326.2	Engineering Setup >Panel >Operation >Effect Mode	- Settings relating to [Default KF Duration] for DME keyframes - Setting data for [Effect Auto Save] button

a) Only when using the MVE-9000

Data Saved by [Initial Status Define]

Type	Menu number	Menu path	Saved data
Included in Panel	—	—	• Key Control Block: Delegation buttons, [AUTO DELEG] • Numeric Keypad Control Block: Mode selection buttons, [TC], [RCALL], [STORE] • Menu Control Block: User preference buttons assigned for Plug-in Editor Enbl and System Manager Enbl functions • [SUB MENU SITE] • Utility/Shotbox Control Block: [BANK1] to [BANK4], memory recall button • Downstream Key Control Block: [DSK1] to [DSK4], [K-SS], key source name display/key snapshot buttons



Type	Menu number	Menu path	Saved data
Included in Panel	—	—	• Device Control Block: [RSZR], [ASP], [LOC] • Cross-Point Control Block: [KEY3], [KEY4], Delegation buttons for bus assigned to key 1 row, [DISPLAY], [DEST], [KEY], [SHIFT], [UTIL], [MCRO ATTCH ENBL], [DUAL BKGD BUS], [UTIL/SBOX] • Keyframe Control Block: [EDIT ENBL] • Auxiliary Bus Control Block: Bus delegation buttons, [SHIFT], [DEST], [2ND], [KEY], [RTR], [LEVEL1] to [LEVEL4] • Transition Control Block (standard type): [SHIFT], [ADD], [KEY1] to [KEY8], [K-MOD ENBL], [K-TR ENBL], [K-SS], key source name display/key snapshot buttons • Flexi Pad Control Block: [WIPE], [DME], [SNAP SHOT], [EFF], [SHOT BOX], [MCRO], [TRANS RATE], [BANK0], [BANK1], memory recall buttons • Transition Control Block and Flexi Pad Control Block (simple type): [WIPE], [DME], [SNAP SHOT], [INH], memory recall section • Independent Key Transition Control Block (simple type): [K-SS], key source name display/key snapshot buttons • Downstream Key/Fade-to-Black Control Block: [DSK1], [DSK2], [K-SS], key source name display/key snapshot buttons, Edit PVW Shift ON/OFF • Multifunction Flexi Pad Control Block: [WIPE], [DME WIPE], [SNAP SHOT], [EFF], [SHOT BOX], [MCRO], [TRANS RATE], [KEY ADJ], [KEY SS], memory recall buttons
	3211	Misc >Enable >Port Enable >System Manager	All data relating to System Manager menu
	3212	Misc >Enable >Plug-In Editor	All data relating to Plug-In Editor menu
	6351	Snapshot >Key Snapshot >Attribute	Settings of <Recall Mode> group

Type	Menu number	Menu path	Saved data
Included in Switcher (Same as data saved in Snapshots) ^{b)}	—	—	- For each M/E, setting data relating to the following: cross-points, transitions, Key1 to Key8 (including settings in the independent key transition control block), wipes, DME wipes, video processing - Color backgrounds 1/2 - Frame memory - AUX bus (including video processing settings)
	3213	Misc >Enable >Side Flags	All data relating to Side Flags menu
	3211	Misc >Enable >Port Enable	Setting data for <Switcher> group
Included in DME	4100	DME >Status	Three-dimensional transformation data
	4111	DME >Edge >Border/ Crop	All data relating to Border/Crop menu
	4112	DME >Edge >Beveled Edge	All data relating to Beveled Edge menu
	4121 to 4124	DME >Video Modify	All data relating to Video Modify menu
	4131	DME >Freeze >Freeze	All data relating to Freeze menu
	4141 (4141.1 to 4141.28)	DME >Non Linear	All data relating to Non Linear menu
	4151	DME >Light/Trail >Lighting	All data relating to Lighting menu
	4152	DME >Light/Trail >Trail	All data relating to Trail menu
	4153	DME >Light/Trail >Motion Decay	All data relating to Motion Decay menu
	4154	DME >Light/Trail >KF Strobe	All data relating to KF Strobe menu
	4161	DME >Input/Output >Bkgd	All data relating to Bkgd menu
	4162	DME >Input/Output >Video/Key	All data relating to Video/Key menu
	4163	DME >Input/Output >Process	All data relating to Process menu
	4164	DME >Input/Output >Graphic	All data relating to Graphic menu
	4211, 4221	Global Effect >Ch1-Ch4 >Combine Priority Global Effect >Ch5-Ch8 >Combine Priority	All data relating to Combine Priority menu
	4212, 4222	Global Effect >Ch1-Ch4 >Brick Global Effect >Ch5-Ch8 >Brick	All data relating to Brick menu



Type	Menu number	Menu path	Saved data
Included in DME	4213, 4223	Global Effect >Ch1-Ch4 >Shadow Global Effect >Ch5-Ch8 >Shadow	All data relating to Shadow menu
	4113	DME >Edge >Key Border	All data relating to Key Border menu ^{a)}
	4114	DME > Edge> Art Edge	All data relating to Art Edge menu ^{a)}
	4115	DME >Edge >Flex Shadow	All data relating to Flex Shadow menu ^{a)}
	4116	DME >Edge >Wipe Crop	All data relating to Wipe Crop menu ^{a)}
	4117	DME >Edge >Color Mix	All data relating to Color Mix menu ^{a)}
	4127	DME >Video Modify >Mask	All data relating to Mask menu
	4155	DME >Light/Trail >Wind	All data relating to Wind menu ^{a)}
	4156	DME >Light/Trail >Spot Lighting	All data relating to Spot Lighting menu ^{a)}
	4171	DME >Enhanced Video Modify >Sketch	All data relating to Sketch menu
	4172	DME >Enhanced Video Modify >Metal	All data relating to Metal menu
	4173	DME >Enhanced Video Modify >Dim & Fade	All data relating to Dim & Fade menu ^{a)}
	4174	DME >Enhanced Video Modify >Glow	All data relating to Glow menu
	3211	Misc >Enable >Port Enable	<DME1> and <DME2> group data

a) For MVE-9000 only

b) In Multi Program 2 mode, M/E Config settings are saved in a snapshot when [Recall M/E Config] is set to ON, but are not saved by [Initial Status Define].

Error Messages

Error messages appear in the following three formats.

- A list display in the Error Status menu (7411)/Error Log menu (7412)
- Message boxes
- List based on the Error Information menu (9900)

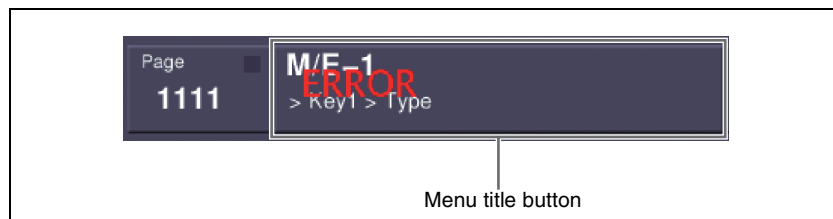
Error Messages Displayed in the Error Status/Error Log Menu

When an error occurs, the word “ERROR” appears in red on the menu title button.

When “ERROR” is displayed, pressing the menu title button displays the Error Status menu or Error Log menu.

When an error is current effective: the Error Status menu appears (*see page 252*).

When an error has already been cleared: the Error Log menu appears (*see page 253*).



You can select whether or not to indicate the occurrence of an error by the word “ERROR” shown on the menu title button, by setting [Error Popup] in the Error Status menu or Error Log menu. For details, see “Error Status menu” (page 252) or “Error Log menu” (page 253).

To display the error status or error log regardless of whether there is currently an error

1 Carry out either of the following.

- Press the [DIAG] button of the top menu selection buttons.
- Press the menu page number button at the upper left of the menu screen, to display the top menu window, then enter 7411 or 7412, and press [Enter].

The Diagnostic menu appears.

2 Press VF1 'Error Info.'

The error information menu appears.

3 Press either of the following buttons.

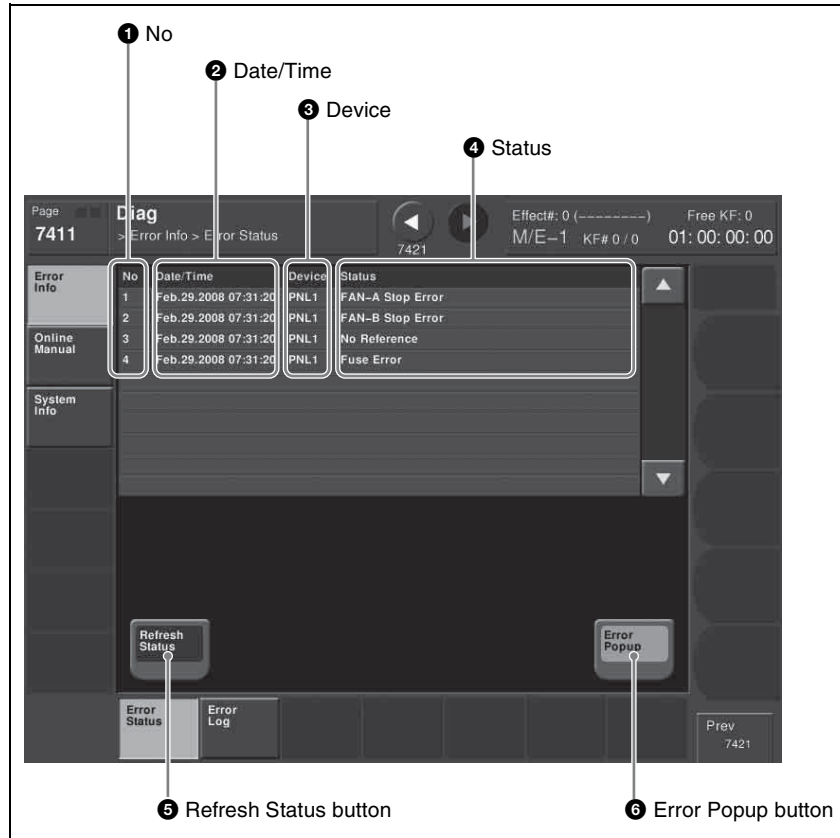
HF1 'Error Status': display the Error Status menu

HF2 'Error Log': display the Error Log menu

Error Status menu

The Error Status menu lists currently occurring error information, listed with the most recent information at the top.

When an error has been cleared, the error disappears from the list.



1 No

This is a sequential number assigned to the error status.

② Date/Time

This shows the date and time the error occurred.

③ Device

This shows the device on which the error occurred.

④ Status

This shows the details of the error.

⑤ Refresh Status button

This refreshes the list display.

⑥ Error Popup button

This selects whether or not to display “ERROR” on the menu title button when an error occurs. This button is linked to the Error Popup button in the error log menu.

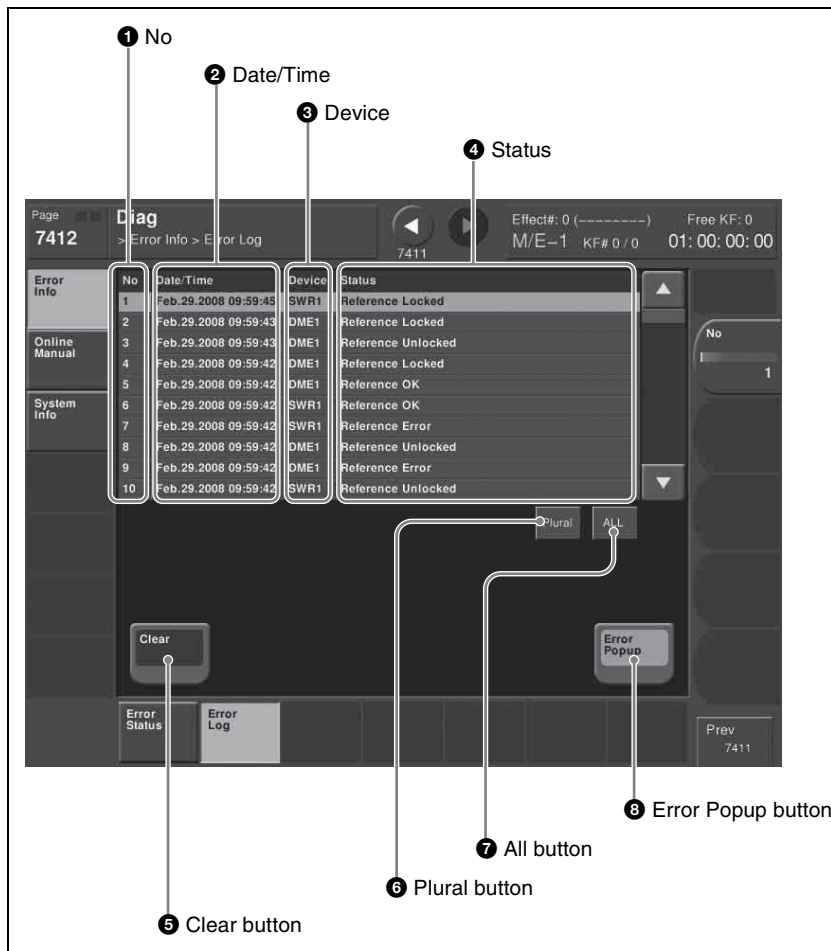
On: if a device error occurs, display “ERROR” on the menu title button.

Off: if a device error occurs, do not display “ERROR” on the menu title button.

Error Log menu

The Error Log menu lists changes in the error status from the time that the menu display in the menu operating section is started up, listed with the most recent information at the top.

A maximum of 1024 error status changes appear, and when the number exceeds 1024, the oldest items disappear from the list.



❶ No

This is a sequential number assigned to the items in the error log.

❷ Date/Time

This shows the date and time the status change occurred.

❸ Device

This shows the device on which the status change occurred.

❹ Status

This shows the details of the status change.

If you press on the list, this switches the display to reverse video, and selects the item. You can also select items in the error log by turning the knob.

⑤ Clear button

This deletes the selected error log item from the list.

⑥ Plural button

When this is on, you can select more than one error log. To cancel the selection, press once again to return to the normal display.

⑦ All button

When this is on, all error log items are selected. To cancel the selection, press once again to return to the normal display.

⑧ Error Popup button

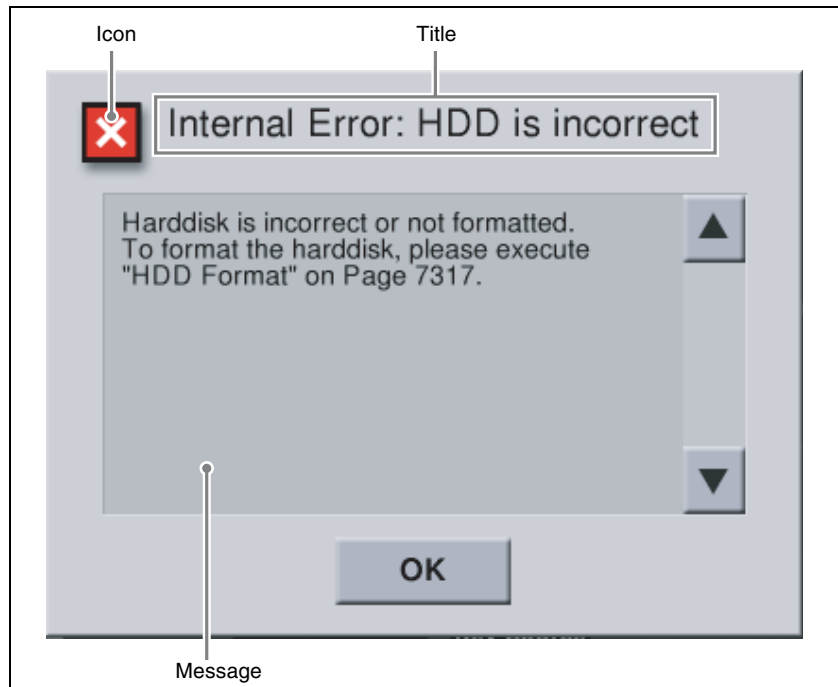
This selects whether or not to display “ERROR” on the menu title button when an error occurs. This button is linked to the Error Popup button in the error status menu.

On: if a device error occurs, display “ERROR” on the menu title button.

Off: if a device error occurs, do not display “ERROR” on the menu title button.

Error Messages Appearing in a Message Box

Corresponding to the content of the message, an icon appears.





Icon	Title	Message	Description
	Activate License	The license key you entered is invalid. Please check and enter again.	7316.7: Engineering Setup >System >Install/Unit Config >License >License Management In the above menu, since the entered information was incorrect, the Activate License procedure failed. Check the license key, and enter again.
	Activate License	License key was successfully entered. The license will be activated after rebooting your system.	7316.7: Engineering Setup >System >Install/Unit Config >License >License Management In the above menu, the Activate License procedure completed successfully.
	Append Key Frame	[Append Key Frame] cannot be executed. FMx is not assigned to a user region.	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to execute [Append Key Frame], but it failed because the frame memory output (FMx) is not assigned to a user region. 7331.4: Make the assignment in the Engineering Setup >Switcher >Config >User1-8 Config menu, and try again.
		[Append Key Frame] cannot be executed. Key Frame Register is locked. (UserX)	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to execute [Append Key Frame] using a locked register (UserX region). Unlock the register.
		[Append Key Frame] cannot be executed. Key Frame Register is busy. (UserX)	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to execute [Append Key Frame] using a register (UserX region) into which files are being loaded. Try again after file loading has finished.
		[Append Key Frame] cannot be executed. Key Frame Register is being edited. (UserX)	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to execute [Append Key Frame] using a register (UserX region) with which a keyframe creating or editing operation is proceeding. Try again after the keyframe operation has finished.
		[Append Key Frame] cannot be executed. Key Frame Register is full. (UserX)	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to execute [Append Key Frame] using a register (UserX region) in which no keyframe remains.
		[Append Key Frame] cannot be executed. Key Frame Register is not active.(UserX)	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to execute [Append Key Frame] using a register for which the appropriate region selection button in the numeric keypad control block is not selected. Try again after you select the region selection button [UserX] in the numeric keypad control block.
	Backup	FM file auto extraction is running (-3).	2564:Frame Memory >External Device >Backup to DDR/VTR When [Backup Start] was pressed in the above menu, extraction of frame memory file data onto the VTR was being executed.

Icon	Title	Message	Description
	Backup	Clip is recording (–4).	2564:Frame Memory >External Device >Backup to DDR/VTR In the above menu, an external device is recording clips.
		FM DDR/VTR Backup/Restore is running (–5).	2564:Frame Memory >External Device >Backup to DDR/VTR When [Backup Start] was pressed in the above menu, a backup/restore operation was being executed with the VTR/DDR.
	Backup	Invalid FM OutCh (–6).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if the specified frame memory output channel cannot be used.
		Specified FM OutCh was locked (–7).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if the specified frame memory output channel is locked.
		Not enough free register area for Backup or Restore process (–10).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if there is not enough space to carry out the backup.
		Prepare failed, not any file was found on this board (–11).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if no image is present.
		Backup failed, not prepared yet (–12).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if not yet ready.
		Backup failed, Clip recall failed (–13).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if All One Clip ID Recall failed (internal processing error).
		Prepare failed, Clip create failed (–14).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if All One Clip creation failed (internal processing error).
		Prepare failed, insufficient Clip id (–15).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if there are not enough Clip IDs (internal processing error).

Icon	Title	Message	Description
	Backup	Prepare failed, symbol files create failed (-16).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if marker frame file creation failed (internal processing error).
		Prepare failed, all one Clip recall failed (-17).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if All One Clip Recall failed (internal processing error).
		ERROR (-19). Bad register number.	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if Register Number is invalid (internal processing error).
		Prepare failed, because there is clip playing (-22).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Backup] is pressed, this message appears if processing failed during clip playback.
	Change Password	The password has been successfully changed.	7317.1: Engineering Setup >System >Maintenance >Setup Operation Lock In the above menu, the password was successfully changed.
	Change Password	Failed. The password was not changed.	7317.1: Engineering Setup >System >Maintenance >Setup Operation Lock In the above menu, the password was not changed.
	Create Key Frame	[Create Key Frame] cannot be executed. FMx is not assigned to a user region.	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to execute [Create Key Frame], but it failed because the frame memory output (FMx) is not assigned to a user region. 7331.4: Make the assignment in the Engineering Setup >Switcher >Config >User1-8 Config menu, and try again.
		[Create Key Frame] cannot be executed. Key Frame Register is locked. (UserX)	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to execute [Create Key Frame] using a locked register (UserX region). Unlock the register.
		[Create Key Frame] cannot be executed. Key Frame Register is busy. (UserX)	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to [Create Key Frame] using a register (UserX region) into which files are being loaded. Try again after file loading has finished.
		[Create Key Frame] cannot be executed. Key Frame Register is being edited. (UserX)	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to execute [Create Key Frame] using a register (UserX region) with which a keyframe creating or editing operation is proceeding. Try again after the keyframe operation has finished.

Icon	Title	Message	Description
	Create Key Frame	[Create Key Frame] cannot be executed. There is no free Key Frame. (UserX)	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to execute [Create Key Frame] for a UserX region with insufficient usable keyframes.
		[Create Key Frame] cannot be executed. Key Frame Register is not active. (UserX)	2515: Frame Memory >Still >Create Key Frame In the above menu, an attempt was made to execute [Create Key Frame] using a register for which the appropriate region selection button in the numeric keypad control block is not selected. Try again after you select the region selection button [UserX] in the numeric keypad control block.
	Deactivate License	The license will be deactivated after rebooting your system.	7316.7: Engineering Setup >System >Install/Unit Config >License >License Management In the above menu, the Deactivate License procedure completed successfully.
	Disk Format	Success!!	7317: Engineering Setup >System >Maintenance In the above menu, removable disk formatting procedure completed successfully.
		Failure. Make sure of the memory card.	7317: Engineering Setup >System >Maintenance In the above menu, removable disk formatting procedure failed. Check that the memory card is correctly inserted.
	Error	This operation is cancelled, because the register is locked. Please change the register status to be unlocked first.	6211.1: Effect >Master Timeline >Store >Edit 6311.1: Snapshot >Master Snapshot >Store >Edit 6411.1: Shotbox >Register >Store/Recall >Edit In the above menu, an attempt was made to assign to a register that is locked. Unlock the register before carrying out the assignment.
		The file was not able to be read.	7142.1: File >Shotbox, Macro >File Edit In the above menu, [Off Line Edit] was pressed but the selected file could not be read. Select the file again, and press [Off Line Edit] once more.
		It was not possible to make a file.	7142.3: File >Shotbox, Macro >File Edit >Off Line Edit In the above menu, when storing, the file could not be written. Try the store once more.
		Failed...	7162: File >All, External File >Import/Export In the above menu, importing a file failed. Check the format of the original file, and try again.
		The Source and the target are the same directory. Please change the source or the target directory.	7172: File >Configure >Unit ID Copy In the above menu, the same directory and ID were selected for source and target. Select a different directory and ID.



Icon	Title	Message	Description
	Extraction	FM file auto extraction is running (-9).	2542:Frame Memory >File >Auto Extraction In the above menu, when the [Extraction Start] button is pressed, this message appears if the CG wipe extraction function is already being executed.
		FM DDR/VTR Backup/Restore is running (-16).	2542:Frame Memory >File >Auto Extraction In the above menu, when the [Extraction Start] button is pressed, this message appears if a backup/restore operation using the VTR/DDR is in progress.
	Extraction	ERROR (-1).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if an internal processing error occurs.
		Create thumbnail failed (-2).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if thumbnail creation failed (internal processing error).
		Red Symbol file not match (-3).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if a red marker frame file is invalid.
		Blue Symbol file not match (-4).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if a blue marker frame file is invalid.
		No data between two symbol files (-5).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if there is no data between two marker frames.
		Cannot find symbol file (-8).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if a marker frame file was not found.
		Clip frame error (-10).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if a clip frame count is invalid (internal processing error).
		Clip not found (-12).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if the specified clip does not exist.
		Clip is playing or being edited (-13).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if the specified clip is being played back or edited.

Icon	Title	Message	Description
	Extraction	Clip register error (–14).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if the specified register number data cannot be processed (internal processing error).
		Can't extract pair clip (–15).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if an attempt is made to extract a pair clip.
		Clip id not enough (–50).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if there are 100 clips or more.
		Still frame on FM 2nd board (–51).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if a still image was extracted from an external clip.
		Clip frame number can't be ODD in 720P format (–9).	2542:Frame Memory >File >Auto Extraction In the above menu, when [Extraction Start] is pressed, this message appears if an odd number of clips are extracted (720P format only).
	File Frame Memory	Some requests are skipped. Following operation is not permitted. — Loading that will cause duplicate register name.	7151: File >Frame Memory 7162: File >All, External File >Import/Export In the above menu, an attempt was made to load a file of a name already existing in the register.
	File Open Status	ERROR (01)	533X: Device >DDR/VTR When an error is returned from the DDR/VTR, one of these messages appears, depending on the error number. Use Menu 7355: Engineering Setup >DCU >Serial Port Assign or Menu 7325.4: Engineering Setup >Panel >Device Interface >Serial Port/MPE Assign to check the device settings.
		ERROR (02)	
		ERROR (FF): No target device has been assigned	
	GPI Input	Please set Target.	7325.1/2: Engineering Setup >Panel >Device Interface >GPI Input 7344.1/2: Engineering Setup >DME >Device Interface >DME1 GPI Input 7344.5/6: Engineering Setup >DME >Device Interface >DME2 GPI Input 7352/7352.1: Engineering Setup >DCU >GPI Input Assign In the above menus, when making a setting, a parameter setting value was incorrect. Check the settings, and try again.
		Please set Trigger Type.	
		Please set Reg No.	
		Please set Aux Bus No.	
		Please set Src No.	
		Please set Pulse Width.	
		Please set Pulse Timing.	



Icon	Title	Message	Description
	GPI Output	Please set Target.	7325.3/4: Engineering Setup >Panel >Device Interface >GPI Output
		Please set Trigger Type.	7337.2/3: Engineering Setup >Switcher >Device Interface >GPI Output
		Please set Reg No.	7337.4/5: Engineering Setup >Switcher >Device Interface >GPI Output
		Please set Aux Bus No.	7344.3/4: Engineering Setup >DME >Device Interface >DME1 GPI Output
		Please set Src No.	7344.7/8: Engineering Setup >DME >Device Interface >DME2 GPI Output
		Please set Pulse Width.	7354/7354.1: Engineering Setup >DCU >GPI Output Assign
		Please set Pulse Timing.	In the above menus, when making a setting, a parameter setting value was incorrect. Check the settings, and try again.
	HDD Format	Failure. HDD device is busy. In order to complete HDD format, System needs to be restarted and formatted again. System will be restarted, then please execute HDD format again.	7317: Engineering Setup >System >Maintenance In the above menu, the hard disk formatting procedure failed. If the hard disk is functioning correctly, or in some cases when there is damage to the disk, it may not be possible to format the disk correctly in a single attempt. In such cases, it is necessary to restart the system, and then carry out formatting again. Press [OK] to restart the system.
	HDD Format	Success!! System will be restarted.	7317: Engineering Setup >System >Maintenance In the above menu, the hard disk formatting procedure completed successfully. Press [OK] to restart the system.
		Success!! But some partitions cannot be created because the capacity of the HDD is not enough.	7317: Engineering Setup >System >Maintenance In the above menu, hard disk formatting was completed normally, but because of insufficient hard disk capacity, only the possible number of partitions were created.
	Import	Cannot create the clip file, because the number of selected files is insufficient.	7162:File >All, External File >Import/Export In the above menu, when importing a clip file, this message appears if insufficient files are selected to make up the clip.
	Initial Read	Initializing now...	This popup message appears during menu startup, while system information is being read in.
	Install	No Task. Select a package on the list.	7316.10: Engineering Setup >System >Install/Unit Config >Install In the above menu, the package for installation was not selected. Select a package to be installed.

Icon	Title	Message	Description
	Install	An error occurred during the install process. For more details, see Page 9900.	7316.10: Engineering Setup >System >Install/Unit Config >Install In the above menu, the menu software installation package does not match the model on which it is to be installed.
		Not Found. The software package does not exist on the removable disk.	7316.10: Engineering Setup >System >Install/Unit Config >Install In the above menu, the software package to be installed was not found. Check that the memory card is correctly inserted, and try the installation once more.
	Install	All processes have succeeded.	7316.10: Engineering Setup >System >Install/Unit Config >Install In the above menu, the installation procedure completed successfully.
	Internal Error: Data HDD	The user data partition of hard disk drive is damaged, and all data is lost. The hard disk drive needs to be reformatted. Please execute HDD format on Page 7317.	When starting up the menu system, an error was found on the hard disk. In Menu 7317: Engineering Setup >System >Maintenance, execute [HDD Format].
	Internal Error: HDD is incorrect	Hard disk is incorrect or not formatted. To format the hard disk, please execute "HDD Format" on Page 7317.	
	Internal Error: Recovery HDD	The recovery data partition of hard disk is damaged, and all data is lost. The data needs to be recovered. Please execute Restore Data on Page 9999.	During menu startup, an error was found in the recovery data partition of the hard disk. Restore the recovery data using menu 9999. ^{a)}
	Internal Error: Temporary HDD	The system data partition of hard disk drive is damaged. The hard disk drive needs to be reformatted. Please execute HDD format on Page 7317. Please make sure to save all data in the user data partition of hard disk drive to any other device or media, before reformatted.	When starting up the menu system, an error was found on the hard disk. In Menu 7317: Engineering Setup >System >Maintenance, execute [HDD Format].
	Invalid Name	Empty...	2512: Frame Memory >Still >Freeze/Store In the above menu, a Store was carried out without specifying a name. Alternatively: 71XX: File Menu 7171: File >Configure >Directory In the above menu, when renaming a file or creating a directory, the name was not entered. Enter the name correctly.



Icon	Title	Message	Description
	Invalid Name	The file exists already...	2512: Frame Memory >Still >Freeze/Store In the above menu, the file name specified for a store operation already exists in the switcher. Specify a different name.
	Loading Texture Pattern	Target File: XXXXX Failed to load target bmp file./ Illegal Name. This operation is canceled.	7316.9: Engineering Setup >System >Install/ Unit Config >Texture Package In the above menu, an error occurred when loading a texture file. Delete texture files with an illegal size or illegal file name, then try again.
		Target File: XXXXX Failed to load target bmp file./ Illegal Size. This operation is canceled.	
	Make Package	Texture file: XXXXX Not Found. This texture file does not exist on the removable disk.	7316.9: Engineering Setup >System >Install/ Unit Config >Texture Package In the above menu, when loading an already created texture package, a texture file within the texture package was not found.
		This operation is cancelled, because capacity is full. Please clear texture pattern.	7316.9: Engineering Setup >System >Install/ Unit Config >Texture Package In the above menu, when making a texture package, there was insufficient space on a memory card.
	Password	Password Incorrect	7317.1: Engineering Setup >System >Maintenance >Setup Operation Lock In the above menu, the wrong password was entered. Enter the correct password.
	Record	Cannot be executed. Maximum number of clips are created.	2523: Frame Memory >Clip >Record In the above menu, an attempt was made to execute [Rec Start] but the number of recorded clips had already reached its upper limit.
	Recovery Complete	System disk has been damaged, and then recovered. Shutdown and restart the system is recommended to exit from recovery mode.	Corruption has been detected in the flash memory for starting the menu CPU, but this has been recovered. Since the system is operating in recovery mode, shut down and restart as soon as practicable. ^{a)}
	Rename	This operation is inhibited because of the illegal combination in the selected files.	7151.1: File >Frame Memory >Frame Memory >File Edit This appears if you press [Rename] when files of different types are selected in the above menu. Check that all selected files are of the same type.
		Files currently used for playback cannot be renamed.	2546: Frame Memory >File >Rename In the above menu, an attempt was made to execute [Rename], but a movie (clip) currently being played back is included in the selected files.

Icon	Title	Message	Description
	Restore	Success!! But the number of folder exceeds the max limit (12) and the files expected for the folders were restored in the default folder (–50)!	2565: Frame Memory >External Device >Restore from DDR/VTR In the above menu, restoring of files from the external device was completed, but the limit on the number of folders was reached, and therefore files were restored to the default folder.
		Success!! But some still files had been renamed because the same file name already existed (–51)!	2565: Frame Memory >External Device >Restore from DDR/VTR In the above menu, restoring of files from the external device was completed, but some files were renamed because of still image file name conflicts.
		Success!! But some Clip files had been renamed because the same Clip name already existed (–52)!	2565: Frame Memory >External Device >Restore from DDR/VTR In the above menu, restoring of files from the external device was completed, but some clips were renamed because of clip name conflicts.
		External HDD Backup/Restore is running (–2).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when the [Restore Start] button is pressed, this message appears if the external hard disk is already active in a frame memory file data backup/restore operation.
		FM file auto extraction is running (–3).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when the [Restore Start] button is pressed, this message appears if the function for frame memory file extraction to VTR function is running.
		Clip is recording (–4).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, this message appears if an external device is recording a clip.
		FM DDR/VTR Backup/Restore is running (–5).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when the [Restore Start] button is pressed, this message appears if a backup/restore operation using the VTR/DDR is in progress.
	Restore	Invalid FM OutCh (–6).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Restore] is pressed, this message appears if the specified frame memory output channel cannot be used.
		Specified FM OutCh was locked (–7).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Restore] is pressed, this message appears if the specified frame memory output channel is locked.



Icon	Title	Message	Description
	Restore	Restore failed, some Clip files cannot be deleted on this board (–8).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Restore] is pressed, this message appears if the restore failed because a clip file cannot be deleted.
		FM 2nd board not exist (–9).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Restore] is pressed, this message appears if there is no second board.
		Not enough free register area for Backup or Restore process (–10).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Restore] is pressed, this message appears if there is not enough space to carry out the backup.
		Prepare failed, not any file was found on this board (–11).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Restore] is pressed, this message appears if no image is present.
		Prepare failed, insufficient Clip id (–15).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Restore] is pressed, this message appears if there are not enough Clip IDs (internal processing error).
		Restore failed, Cannot find symbol files on this tape (–18).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Restore] is pressed, this message appears if a marker frame file was not found.
		ERROR (–19). Bad register number.	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Restore] is pressed, this message appears if Register Number is invalid (internal processing error)
		Restore failed, file name already exist, try to rename but unsuccessful (–20).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Restore] is pressed, this message appears if renaming failed.
		Cannot find the File Name Data, please load the File Name Data first (–21).	2565:Frame Memory >External Device >Restore from DDR/VTR In the above menu, when [Restore] is pressed, this message appears if the file list was not loaded.

Icon	Title	Message	Description
	Restore Data	Restoring...	Appears while restoring recovery data using Menu 9999. ^{a)}
		Success!!	Appears when recovery data has been successfully restored using Menu 9999. ^{a)}
		Recovery binary on the USB storage device is not found.	Recovery data for restoring using Menu 9999 cannot be found on the memory card. Check that the recovery data has been correctly copied to the memory card, and restart the system to retry. ^{a)}
	Restore Data	Failure. Copying recovery data hasn't finished.	Restoring recovery data using Menu 9999 failed. Check that the recovery data has been correctly copied to the memory card, and restart the system to retry. ^{a)}
	Set Time/Date	Error: Wrong Format.	7317: Engineering Setup >System >Maintenance In the above menu, an incorrect date and time was specified. Specify the date and time correctly.
	Trim	The Start TC or Stop TC is not properly set.	2522:Frame Memory >Clip >Play In the above menu, when [Trim] is pressed, this message appears if neither Start TC not Stop TC is set.
			2522:Frame Memory >Clip >Play In the above menu, when [Trim] is pressed, this message appears if the interval between Start TC (or Clip Begin) and Stop TC (or Clip End) is the entire clip.
			2522:Frame Memory >Clip >Play In the above menu, when [Trim] is pressed, this message appears if the Start TC (or Clip Begin) value is greater than the Stop TC (or Clip End) value.
		This file is locked.	2522:Frame Memory >Clip >Play In the above menu, when [Trim] is pressed, this message appears if the file is locked.
		This file is using for playback.	2522:Frame Memory >Clip >Play In the above menu, when [Trim] is pressed, this message appears if the file is being played back.
	Warning	No Switcher information available. Please confirm "Network Configuration" on Page 7311.	When starting up the menu system, the switcher is not present in the system information. Check the Data LAN connections, and in Menu 7311: Engineering Setup >System >Network Config, retry [Auto Config].

Icon	Title	Message	Description
	Warning	This operation will be cancelled, because the register is locked. Please change the register status to be unlocked first.	6211.1: Effect >Master Timeline >Store >Edit 6311.1: Snapshot >Master Snapshot >Store >Edit 6411.1: Shotbox >Register >Store >Edit In the above menus, an attempt was made to store in a locked register. Unlock the register before carrying out the store.
	Warning (System Config)	Illegal Network Config Information (Page 7311) Illegal Panel Assign Information for Dual Simul Operation (Page 7312) No Panel Assign Information (Page 7312) No Switcher Assign Information (Page 7312) No System Operation Mode Information (Page 7312) No DME Channel Information	When starting up the menu system, if the system information read from the control panel is not correct, one of these messages, that corresponds to the situation appears. Following the message, use Menu 7311: Engineering Setup >System >Network Config or 7312: Engineering Setup >System >System Config to retry the operation.

a) MKS-8010A only

Error Messages Shown in the Error Information Menu

If a file transfer related error occurs, the Error Information menu appears to the following error messages.

Error message	Error description/measures
[Error] Packet Format	Load/save the data again. Still then the message is displayed, contact a Sony service representative.
[Error] No Request	
[Error] No Request File	
[Error] Illegal Host	
[Error] Not Supported	
[Error] USB Access	
[Error] Get File System Info	
[Error] Copy Result	
[Error] Remove Result	
[Error] Move Result	
[Error] Make Dir Result	
[Error] Path Info	
[Error] Dir Operation	
[Error] Command Result	

Error message	Error description/measures
[Error] Transfer Result	Load/save the data again. Still then the message is displayed, contact a Sony service representative.
[Error] Source File Name	
[Error] Source File Open	
[Error] Source File Read	
[Error] Destination File Name	
[Error] Destination File Open	
[Error] Destination File Read	
[Error] Destination File Write	
[Error] Illegal Format	
[Error] Edit Header	
[Error] Local File Access	
[Error] FTP Connect	
[Error] FTP Busy	
[Error] FTP Access	
[Error] FTP No Result	
[Error] FTP Put Command	
[Error] FTP Delete	
[Error] FTP Delete Command	
[Error] FTP Delete Result	
[Error] Control Table No Space	
[Error] Control Table Same Name	
[Error] No Queue	
[Error] Resize BMP	
[Error] Make Vector	
[Error] Uncompress	
[Error] Compress	
[Error] Server Not Respond	No reactions are returned from the processor. Check your Data-LAN connections and the power source of the processor.
[Error] No Space	There is not sufficient space in the memory card or hard disk.

Index

A

- Alarm adjustment 132
- Autoload function 28
- AUX bus control enable/
disable 179
- AUX bus control mode
switching function 67
- AUX bus override 120
- AUX bus remote panel 233
- AUX delegation button
settings 94
shift operation 95

B

- Background
transition flip-flop mode
159
- Beep 131
- Border
processing order 164
- Brightness adjustment 131
- Button
assignment settings 100
operation mode 125
- Button assignments 100

C

- Calibration 132
- Communications status 238
- Control panel settings 52
- Cross-point
assign tables 84
button shift operation 88
settings 83

- Cross-point assign tables 90
- Custom mode 25

D

- Date and time 43
- DCU
serial port settings 118
setup 192
- Default wipe edge softness
165
- Destination names 124
- Device
interface 112, 174, 187
setup 30
- Device interface 187
- Device management 43
- Diagnosis 237
- Disk recorder
settings 209, 210
- DME setup 183
- Double-click sensitivity 128
- Dual background bus mode
65

E

- Editing keyboard 117
- Effect
settings 123
- Engineering setup 11, 51,
135, 183, 191, 215, 233
- Error messages 251
- Error Information menu
268
- error status/log 251
- message box 255
- Extended VTR 213
- External
box setting 217

F

- Fader lever operations 160
- Fade-to-black function 159
- File
locking load operations
49
- Flexi Pad
settings 125
- Format converter 20
conversion 146
outputs 157
- Formatting a memory card 44
- Formatting the hard disk 45
- Function
assignment user
preference buttons 100
links 166

G

- GPI input settings
for control panel 112
for DCU 195
for DME 188
for switcher processor
175
- GPI output settings
for control panel 115
for DCU 201
for DME 190
for switcher processor
178

I

- Illegal color limiter 145, 185
- Initialization
hard disk 45

Input reference signal 19
Installation 30

J

Joystick sensitivity 128

K

Key
 auto drop 162
 delegation assign 55
 memory mode 163
 priority operation mode 164
 settings 161
Key/Wipe/FM/CCR menu 161

L

Link
 cross-point buttons 166, 168
 key transition 172
 M/E banks 171
Locking the setup data 46

M

Macro
 assignment of operation buttons 64
 execution mode 129
Mask processing order 164
Memory card formatting 44
Menu shortcut assignment
 memory recall button 110
 user preference buttons 105
MKS-8080/8082
 setting status 235
 simple connection 234
Mouse wheel setting 133
Multifunction flexi pad control block
 assigning functions 77

N

Network settings 13
NFS server 13

O

On-air tally 122
Operation mode setting 137
Operation settings 121

P

Parallel
 input settings 193
 output settings 199
 tally settings 229
Pattern limit 164
P-Bus devices
 control mode setting 117
PGM/PST
 logical assignment to M/E 141
Power-on state 25
Preset color mix setting 160
Primary setting 45

R

Reference
 phase adjustment 137
Reset 29
Reset/initialization 29
Resume mode 25
Router destination 56
Router interface settings 216
Router interface/tally setup 215

S

Safe title settings 156
Screen
 saver 131
SCU editor panel port 117
Search dial
 advanced settings 129
Serial
 port settings 204
 tally setting 231

Setup

 for control panel 52
 for DCU 192
 for the whole switcher system 12
 locking the data 46
Setup data saving/recalling 26
Show key function 162
Side flags 93
 aspect ratio 142
 assigning a cross-point button 93
 auto crop 142
 auto side flags 142
 cropping 142
Signal format setting 18
Signal input settings
 for DME 184
 for switcher processor 144
Signal output settings
 for DME 186
 for switcher processor 153
Software
 installation 30
 setting required 32
Source name 124
Source signal name 88
Split
 fader setting 159
Spotlighting settings
 user texture patterns 35
Start-up state 27
Switcher configuration 136
Switcher setup 135
System
 maintenance 43
 settings 15

T

Tally
 copy settings 227
 generation settings 224
 group settings 220

- Through mode settings 155
- Touch panel calibration 132
- Trackball sensitivity 128
- Transition
 - mode 159
 - preview mode setting 159

U

- USB driver reloading 45
- User region setting 140
- User-defined settings 28

V

- Vertical blanking interval
 - adjustment 155
- Video
 - clip adjustment 155
 - switching settings 158
 - switching timing 137
- Video process memory 162

W

- Wipe
 - settings 161
- Wiring settings 221

X

- XPT HOLD button operation
 - mode 164



The material contained in this manual consists of information that is the property of Sony Corporation and is intended solely for use by the purchasers of the equipment described in this manual.

Sony Corporation expressly prohibits the duplication of any portion of this manual or the use thereof for any purpose other than the operation or maintenance of the equipment described in this manual without the express written permission of Sony Corporation.

MVS-8000X
System (SY)
4-177-900-02 (1)

Sony Corporation

<http://www.sony.net/>

Printed on recycled paper.

Printed in Japan
2011.01 32
©2010