SONY

Multi Format Switcher System

MVS-6500 System

(With ICP-6520/6530 Control Panel)

MVS-6520
ICP-6511

MVS-6530
MKS-6550

ICP-6520
MKS-6570

ICP-6530

Startup Guide English

Software Version 1.00 and Later
1st Edition

MVS-6500 System
(SY)
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NOTICE TO USERS

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Overview

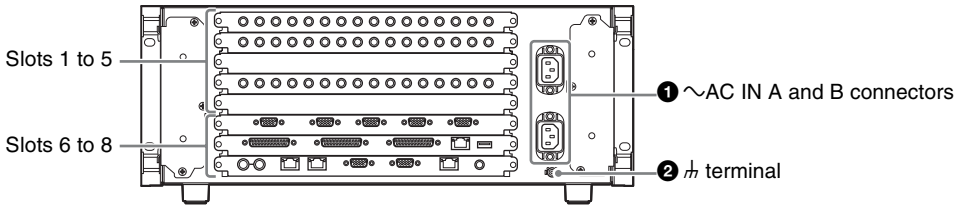
Introduction

The Startup Guide (this document) describes the basic settings and operations to begin using the MVS system. For details about settings and operations, refer to the User's Guide.

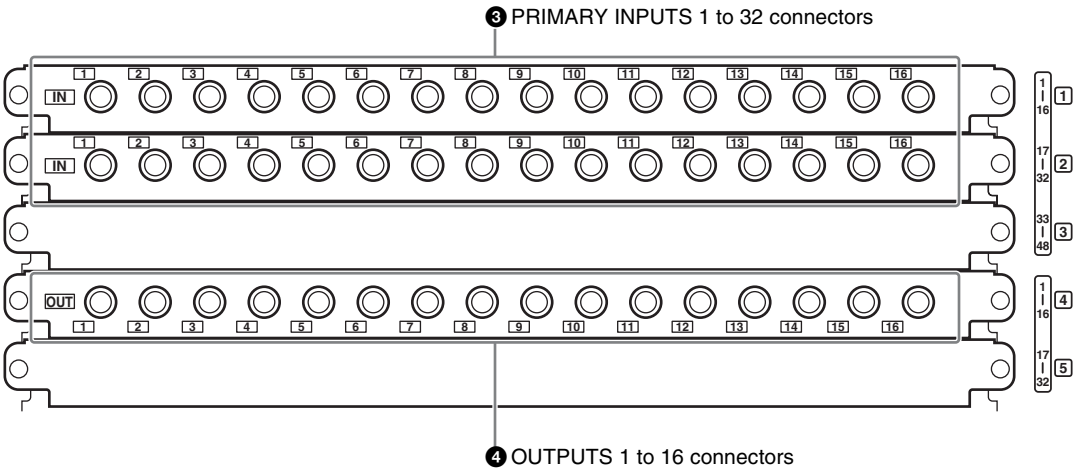
Names of Parts

MVS-6520/6530 Multi Format Switcher Processor

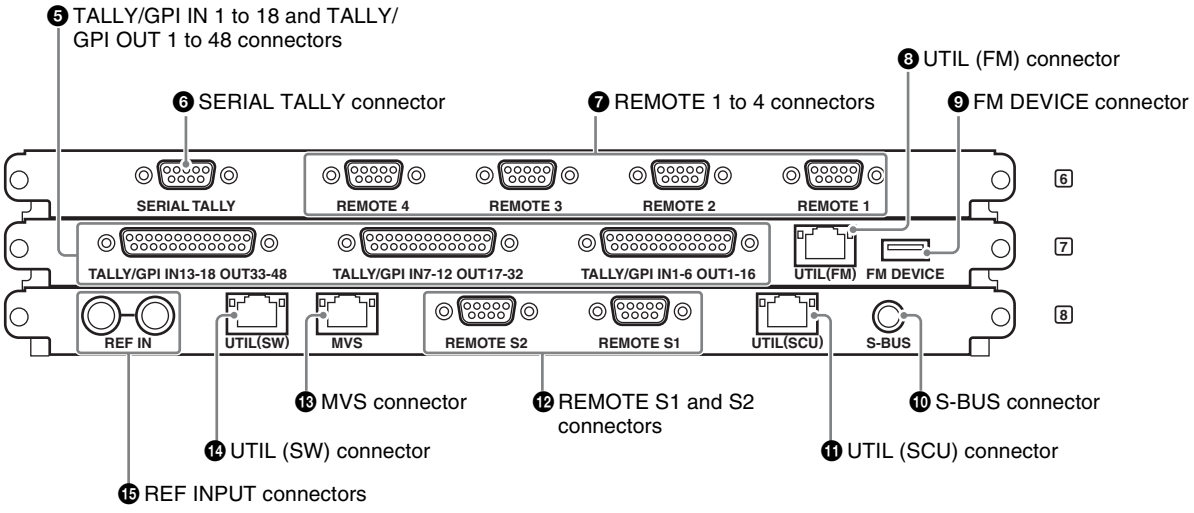
Rear panel: MVS-6520



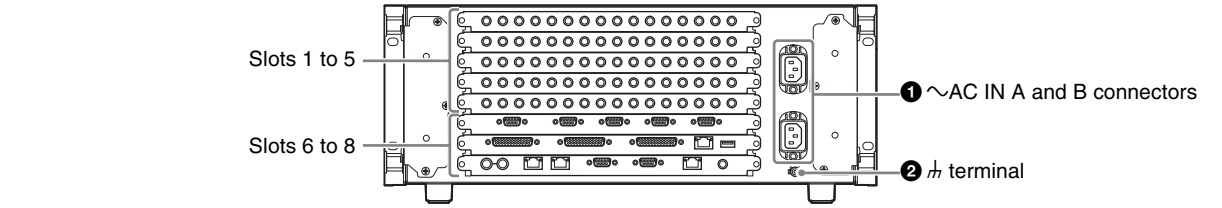
Slots 1 to 5



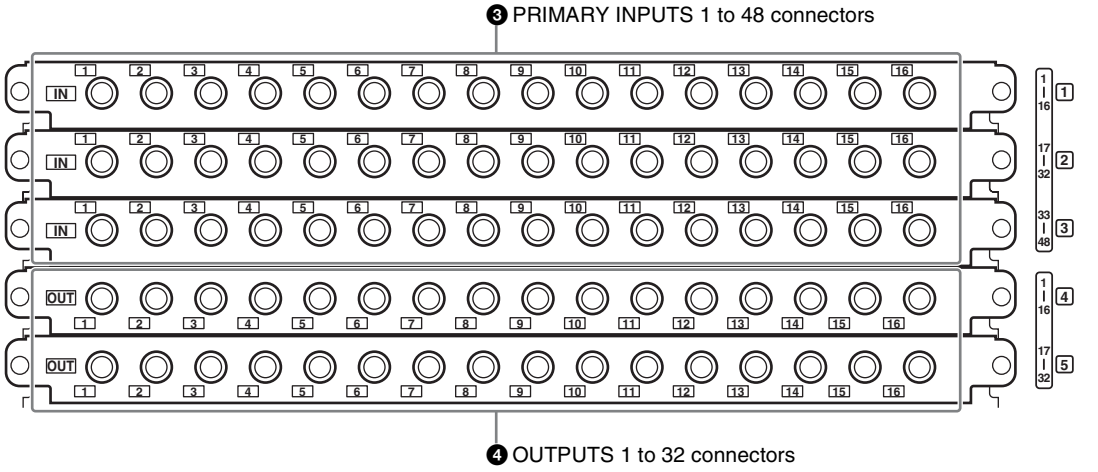
Slots 6 to 8



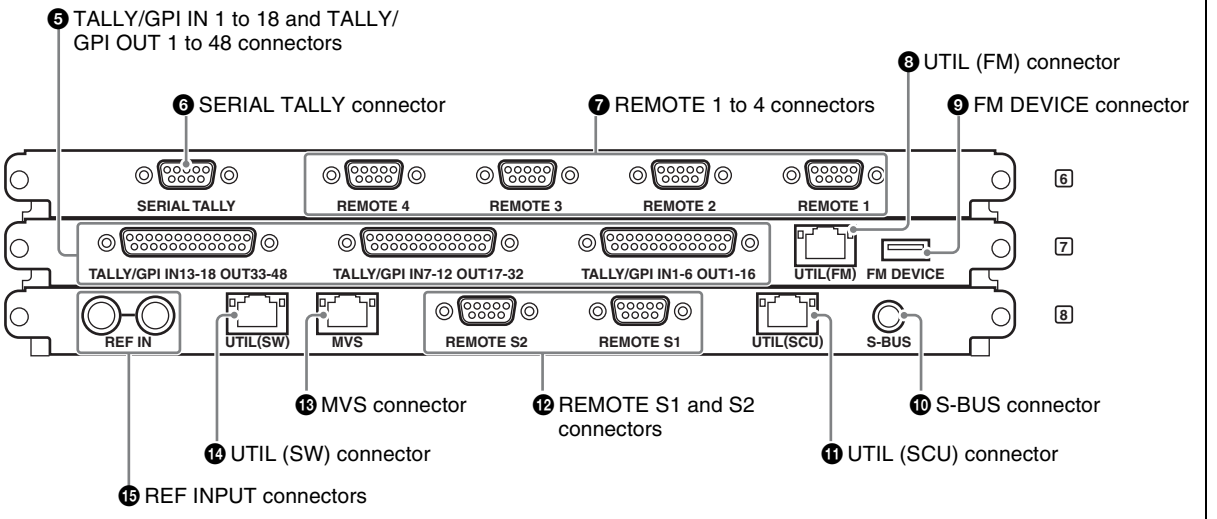
Rear panel: MVS-6530



Slots 1 to 5



Slots 6 to 8



❶ ∼ AC IN (AC power input) A and B connectors (3-pin)

Connect to 100 V to 240 V AC power supply with the optional AC power cords.

The unit is equipped with two power supplies. When A or B power supply is connected, unit operation can proceed.

❷ ⏚ (signal ground) terminal

Connect to the system ground.

❸ PRIMARY INPUTS

1 to 32 connectors (BNC-type)[1]: MVS-6520

1 to 48 connectors (BNC-type)[1]: MVS-6530

These connectors allow you to input up to 32 or up to 48 serial digital video signals to the MVS-6520 or MVS-6530 system, respectively.

❹ OUTPUTS
1 to 16 connectors (BNC-type)[1]: MVS-6520
1 to 32 connectors (BNC-type)[1]: MVS-6530
These connectors output serial digital signals. You can assign them as program output, preview output, AUX output, and so on.
Make output assignments on the MVS-6500 system control panel.

Types of output signal	Configurable connectors	
	MVS-6520	MVS-6530
Re-Entry Source	OUTPUTS 1 to 16	OUTPUTS 1 to 24
Aux Bus	OUTPUTS 1 to 16	OUTPUTS 1 to 24
Output/MV/FC/ DME	OUTPUTS 1 to 16 (FC: 15, 16 combination only)	OUTPUTS 1 to 32 (FC: 15, 16 and 31, 32 combinations only)

For details about output signals and settings, refer to the User's Guide.

❺ TALLY/GPI IN (tally/ general purpose interface input) 1 to 18 and TALLY/GPI OUT (tally/ general purpose interface output) 1 to 48 connectors (D-sub 25-pin)
Output tally data created with the control panel of the MVS-6500 system (open collector).
These connectors can also be used as GPI output ports. You can also input trigger signals as GPI inputs.
Input and output settings are made on the control panel of the MVS-6500 system.

❻ SERIAL TALLY connector (D-sub 9-pin, RS-422A)
Output tally data created with the control panel of the MVS-6500 system.

❼ REMOTE 1 to 4 connectors (D-sub 9-pin, RS-422A)
Connect devices supporting Sony 9-pin VTR, VDCP (Video Disk Communications Protocol), or P-Bus (Peripheral II Protocol) protocols.

❽ UTIL (FM) (utility (frame memory data)) connector (RJ-45 compliant)
Intended for future expansion.

❾ FM (frame memory) DEVICE connector (USB 2.0 compliant)
This connector is for attaching an external HDD for frame memory.[2]

❿ S-BUS connector (BNC-type)[1]
Connect this connector with a BNC cable to an S-Bus data link via a T bridge.
Connecting devices such as IXS series routing switchers and MKS-8080/8082 AUX bus remote panels via an S-Bus data link enables the following kinds of control.

- Returning to the S-Bus, tally data created by this unit on the basis of data received from other devices
- Switching the cross-points of a routing switcher from the control panel
- Switching the cross-points of a switcher from the remote panel
- Displaying on the control panel source names set on a routing switcher

⓫ UTIL (SCU) (utility (SCU)) connector (RJ-45 compliant)
Intended for future expansion.

⓬ REMOTE S1 and S2 connectors (D-sub 9-pin, RS-422A compliant)
These connectors are used to operate the MVS-6500 system from external devices or editing control systems such as the BVE-9100.
Define the types of the connected devices on the control panel.

⓭ MVS (multi format video switcher) connector (RJ-45 compliant)
Connect to an ICP-6520/6530 control panel.

For details about connecting a DCU and MVE-8000A/ 9000 multi format DME processor, refer to the User's Guide.

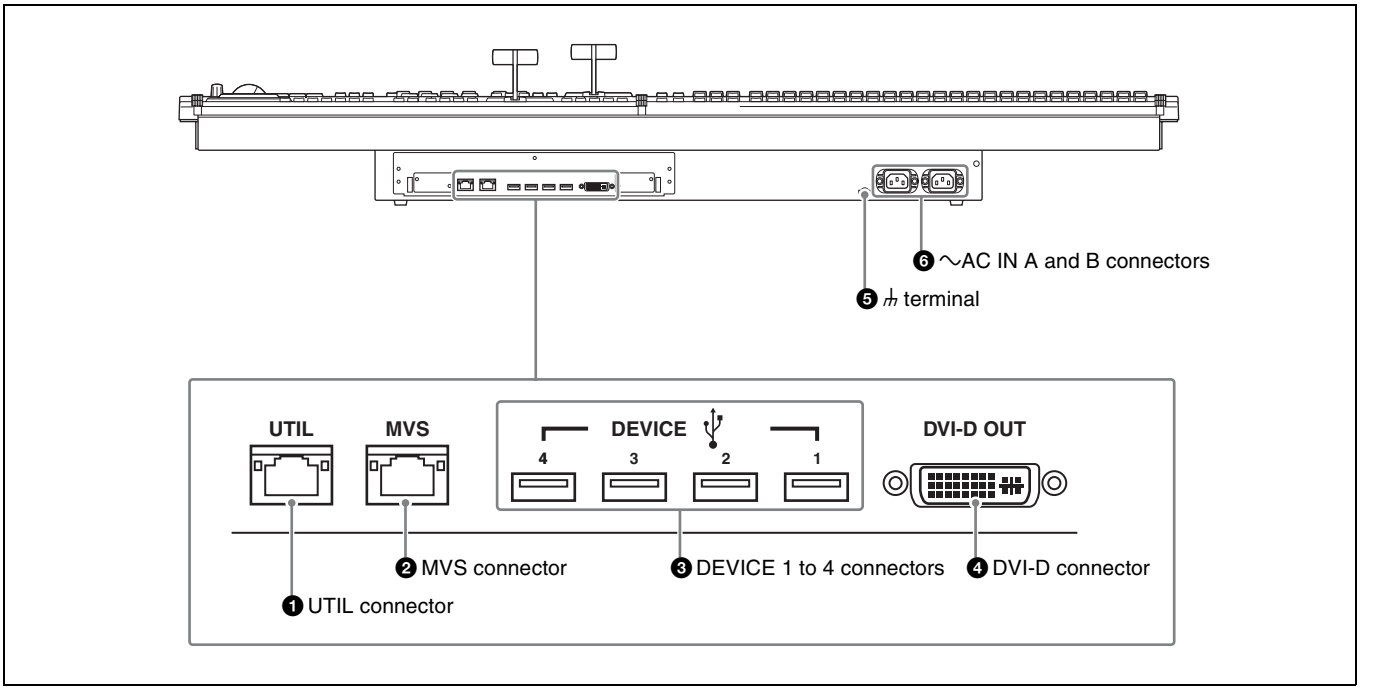
⓮ UTIL (SW) (utility (SW)) connector (RJ-45 compliant)
Intended for future expansion.

⓯ REF INPUT (reference video input) connectors (BNC-type)[1]
If you wish to synchronize this unit to an external reference signal, input the reference signal. For an HDTV system, input an HD tri-level sync signal, black burst signal, or analog sync signal. For an SDTV system, input a black burst signal or analog sync signal.
The two connectors have a loop-through configuration. Signal input to one connector can be output from the other connector. If you will not be using the loop-through output, be sure to terminate the unused connector with the supplied 75 ohm terminator.

1) Attach the cable connected to the BNC-type connectors to the rack or other support so there is no load on the connector. There is a risk of damage to the BNC-type connectors and cable.
2) For information about devices that can be connected, contact your Sony representative.

ICP-6520/6530 Control Panel

Rear panel



❶ UTIL (utility) connector (RJ-45 compliant)
Intended for future expansion.

❷ MVS (multi format video switcher) connector (RJ-45 compliant)
Connect to the MVS-6520/6530.

For details about connecting a DCU and MVE-8000A/9000 multi format DME processor, refer to the User's Guide.

❸ DEVICE 1 to 4 connectors (USB 2.0 compliant, USB Type-A)
Connect to an ICP-6511 or USB device.[1)]

❹ DVI-D connector
Connect to an ICP-6511 or external monitor.[1)]

❺ ⏚ (signal ground) terminal
Connect to the system ground.

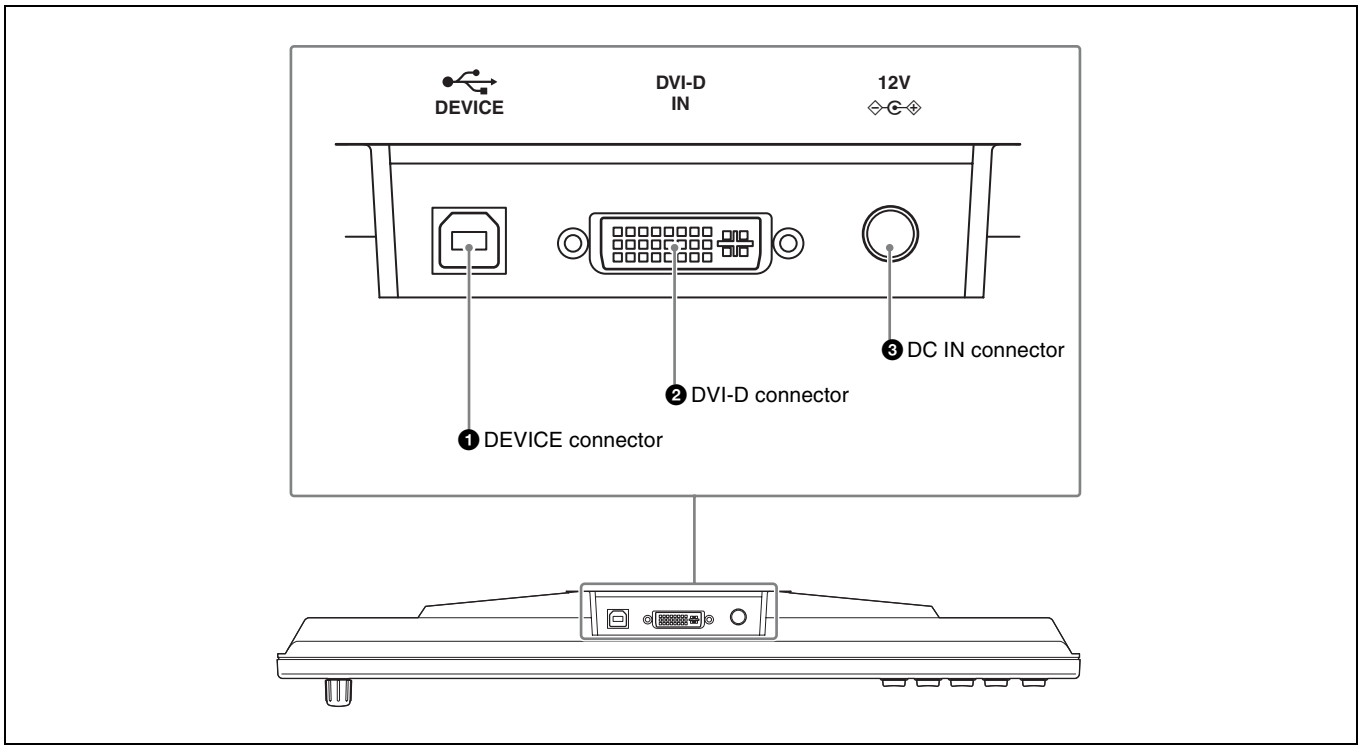
❻ ∼ AC IN (AC power input) A and B connectors (3-pin)
Connect to 100 V to 240 V AC power supply with the optional AC power cords.
The unit is equipped with two power supplies. When A or B power supply is connected, unit operation can proceed.

1) For information about devices that can be connected, contact your Sony representative.

ICP-6511 Menu Panel

The menu panel is optional.

Bottom panel

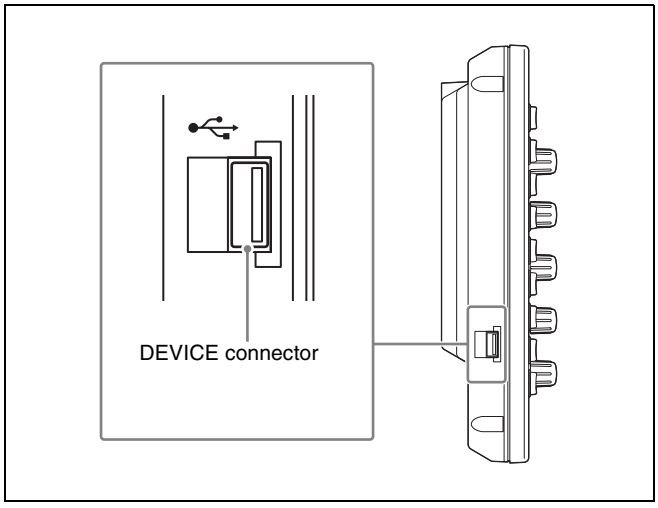


❶ DEVICE connector (USB 2.0, USB Type-B)
Connect to the DEVICE 1 connector of the ICP-6520/6530.

❷ DVI-D connector
Connect to the DVI-D output of the ICP-6520/6530.

❸ DC IN connector
Connect to the 12V DC connector of the supplied AC adaptor.

Side panel

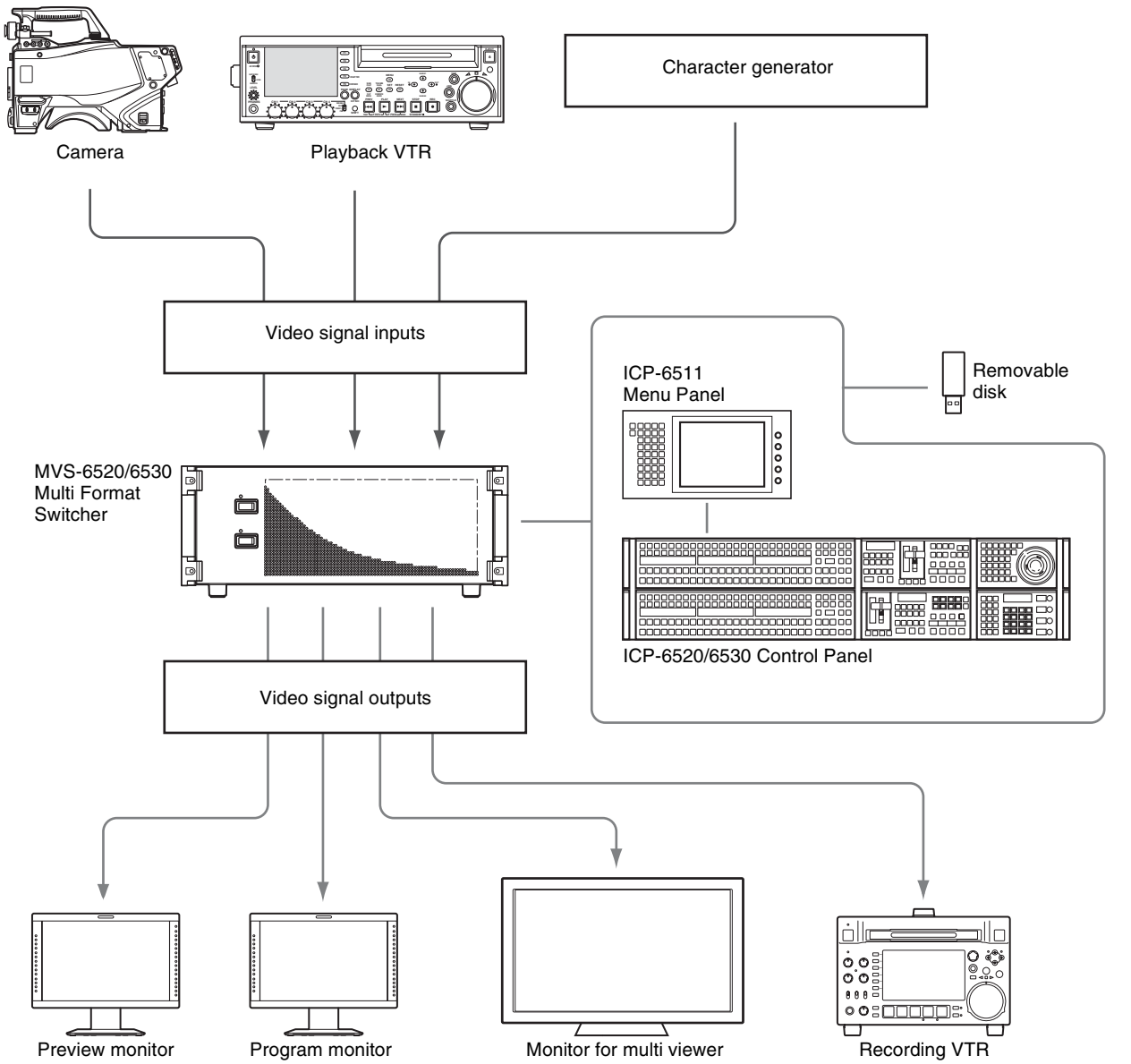


DEVICE connector (USB 2.0, USB Type-A)
In general, connect to a USB memory device, and input and output files.

Connection

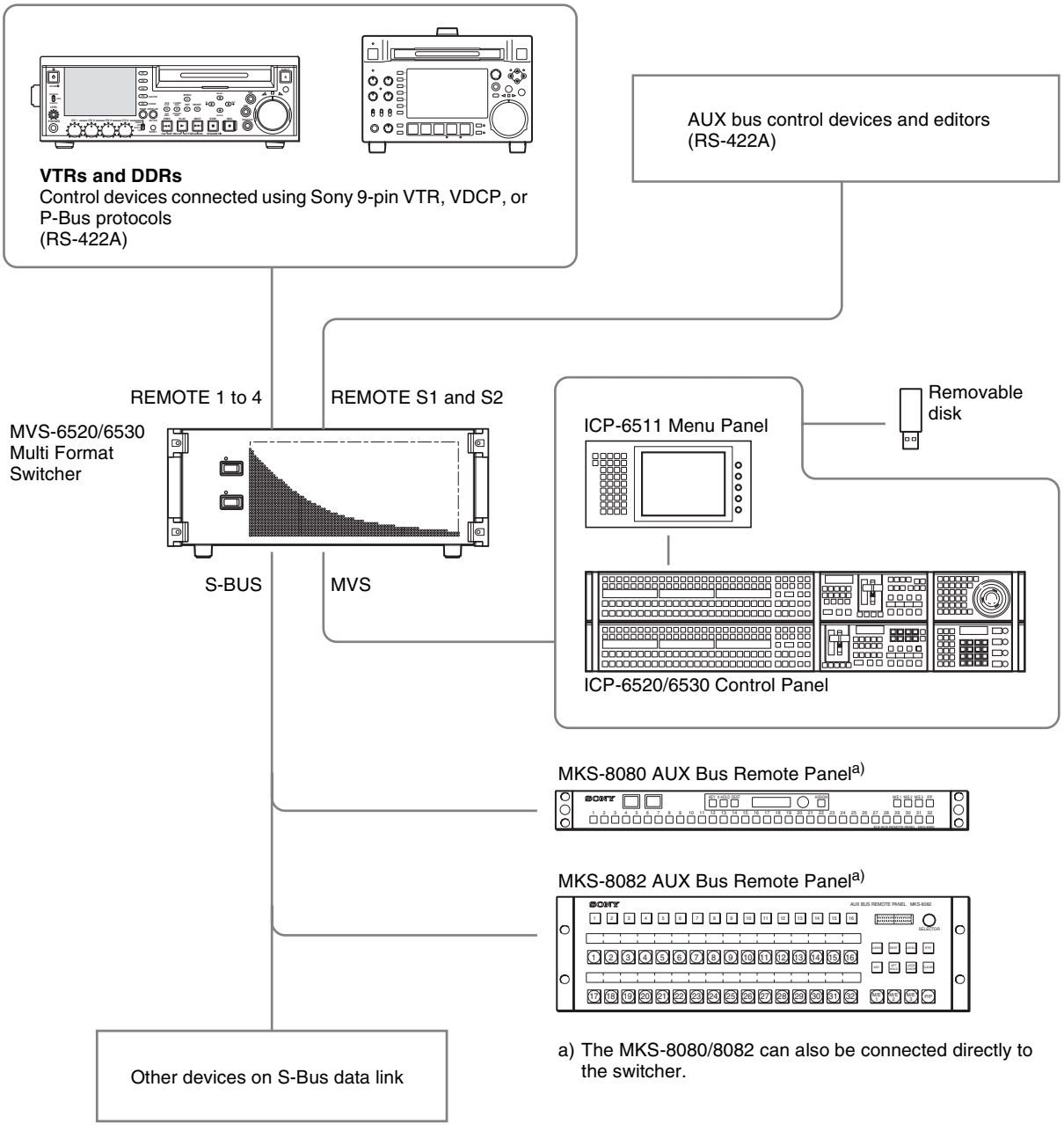
MVS-6500 System Configuration

Video Input/Output Systems



In addition to these devices, a DCU (MKS-8700/2700) or DME (MVE-8000A/9000) can be used to extend the system. For more information, refer to the User's Guide.

Device Control Systems



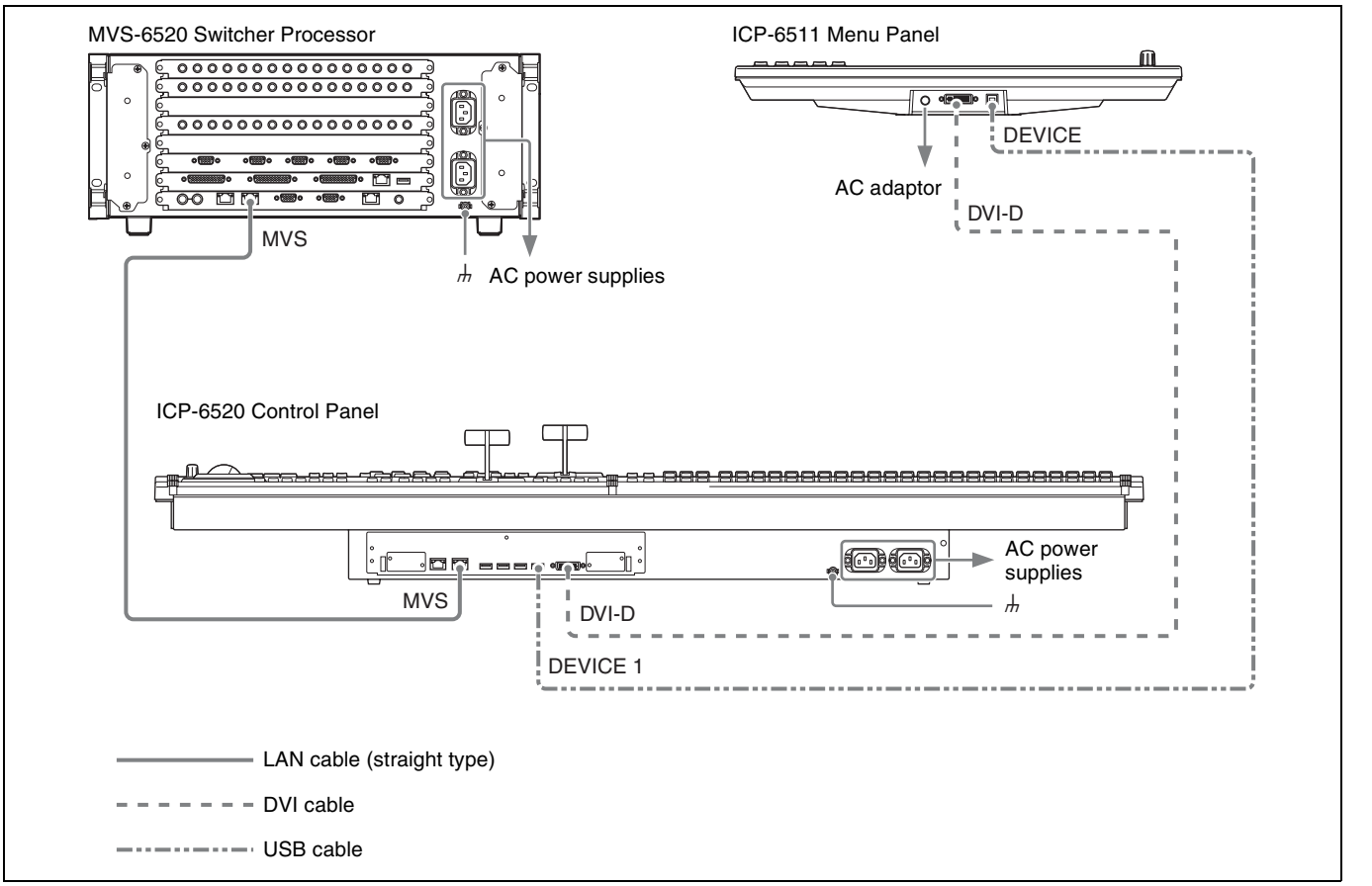
a) The MKS-8080/8082 can also be connected directly to the switcher.

Connecting Devices

This section describes the connection procedure for the following system configuration as an example.

- MVS-6520 Switcher Processor
  (with MKS-6550 Format Converter Board and MKS-6570 Digital Multi Effect Board installed)
- ICP-6520 Control Panel
- ICP-6511 Menu Panel
- Cameras for recording (4)
- VTRs for playback (2)
- Character generator (1)
- Video monitors (2)
- Monitor for multi viewer (1)

MVS System Connection



1 Connect the power supply.

Switcher processor

❶ Connect the ⏚ terminal to the system ground.
❷ Connect the ~AC IN A and B connectors to the 100 V to 240 V AC power supplies using power cords (not supplied).

Control panel

❶ Connect the ⏚ terminal to the system ground.
❷ Connect the ~AC IN A and B connectors to the 100 V to 240 V AC power supplies using power cords (not supplied).

Menu panel

❶ Connect the supplied AC adaptor to the DC IN connector, then connect the AC adaptor using a power cord (not supplied).

2 Connect the switcher processor and control panel.

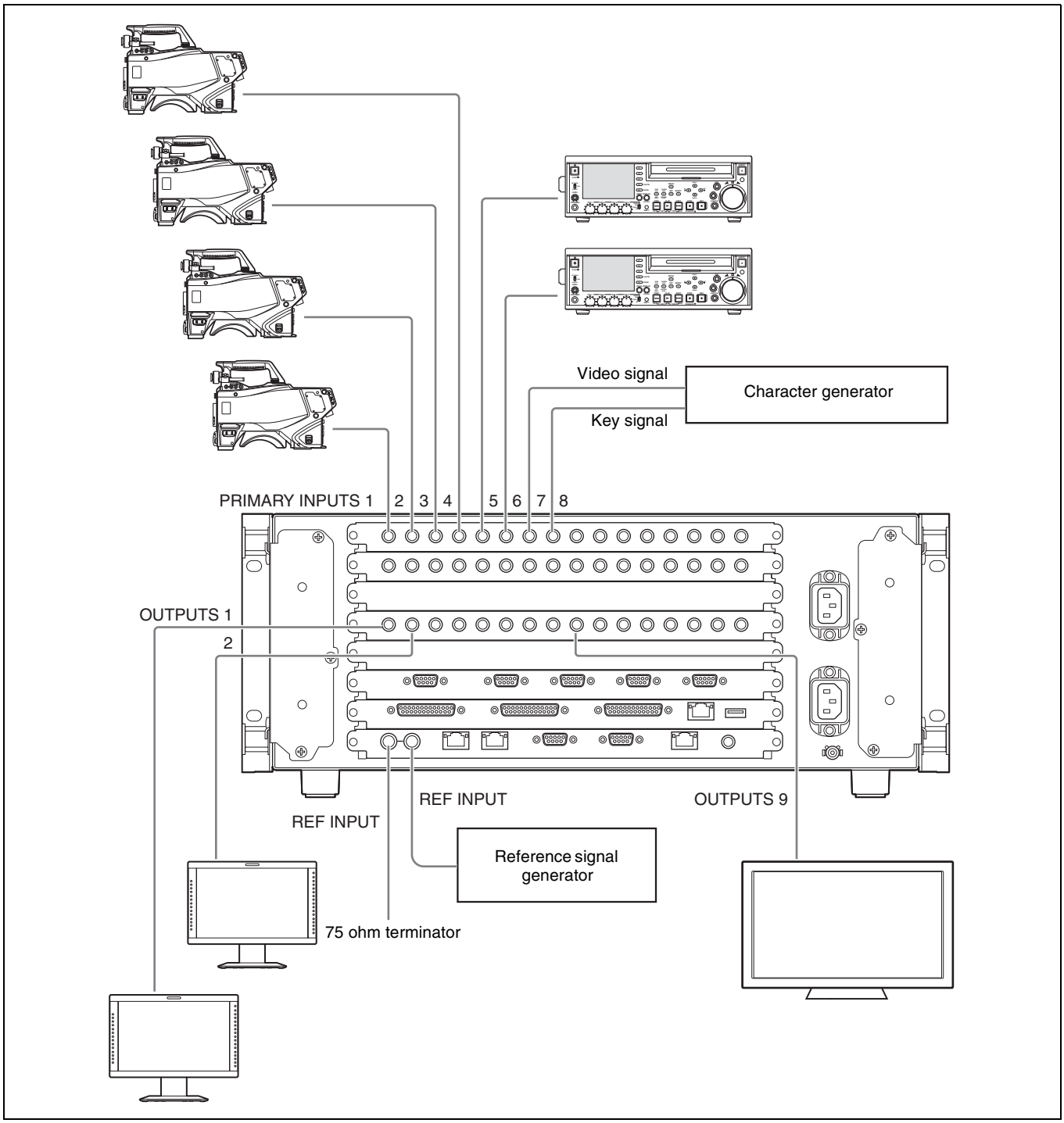
❶ Connect the MVS connector of the switcher processor and the MVS connector of the control panel using a LAN cable.

3 Connect the control panel and menu panel.

❶ Connect the DVI-D connector of the control panel and the DVI-D connector of the menu panel using the DVI cable supplied with the menu panel.

❷ Connect the DEVICE 1 connector of the control panel and the DEVICE connector on the bottom of the menu panel using the USB cable supplied with the menu panel.

Peripheral Device Connection



1 Connect devices to the PRIMARY INPUTS of the switcher processor.

❶ Connect the cameras for recording.
In this example, connect four cameras to PRIMARY INPUTS 1 to 4.
❷ Connect the playback VTRs.
In this example, connect two VTRs to PRIMARY INPUTS 5 and 6.
❸ Connect the character generator.
In this example, connect to PRIMARY INPUTS 7 and 8.

2 Connect devices to the OUTPUTS of the switcher processor.

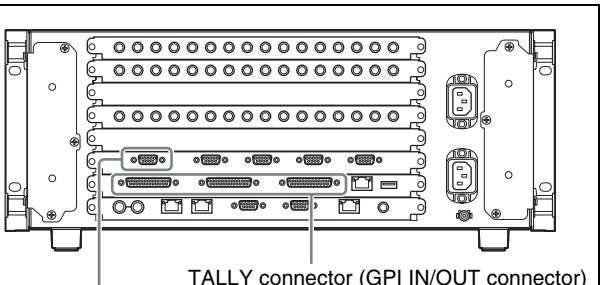
❶ Connect the video monitors.
In this example, connect two monitors to OUTPUTS 1 and 2.
❷ Connect the monitor for multi viewer.
In this example, connect to OUTPUTS 9.

3 Connect reference signals to the REF INPUT connectors of the switcher processor.

❶ Connect one REF INPUT connector to a reference signal generator.
❷ Terminate the other REF INPUT connector using the supplied 75 ohm terminator.

To use the tally

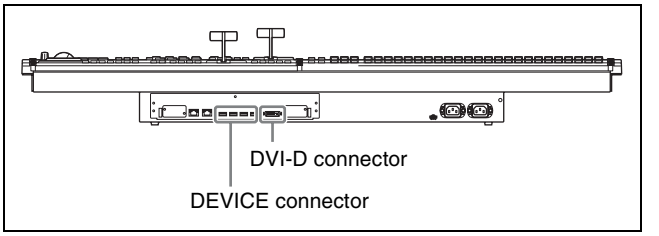
Set the tally output, using either the SERIAL TALLY connector or the TALLY connector (parallel tally) of the switcher processor



To use an external monitor for menu operations

Instead of the dedicated MVS system ICP-6511 menu panel, you can connect an external monitor and operate the menus from a touch panel or by mouse control.

External monitor connection



Connect the DVI-D connector of the control panel and the DVI-D connector of the external monitor using a DVI cable.
If using a touch panel, connect the DEVICE connector of the control panel and the USB connector of the external monitor using a USB cable.
If using a mouse, connect the mouse to the DEVICE connector of the control panel using a USB cable.

For details about connecting monitors, contact your Sony representative.

Preparation

Preparation Procedure

This section describes the setup required before operation in the MVS system.

Turn on the power *(☞ p. 16)*

↓

System settings

Configure the network *(☞ p. 19)*

↓

Set the signal format *(☞ p. 20)*

↓

Signal settings

Assign input signals *(☞ p. 21)*

↓

Assign output signals *(☞ p. 23)*

↓

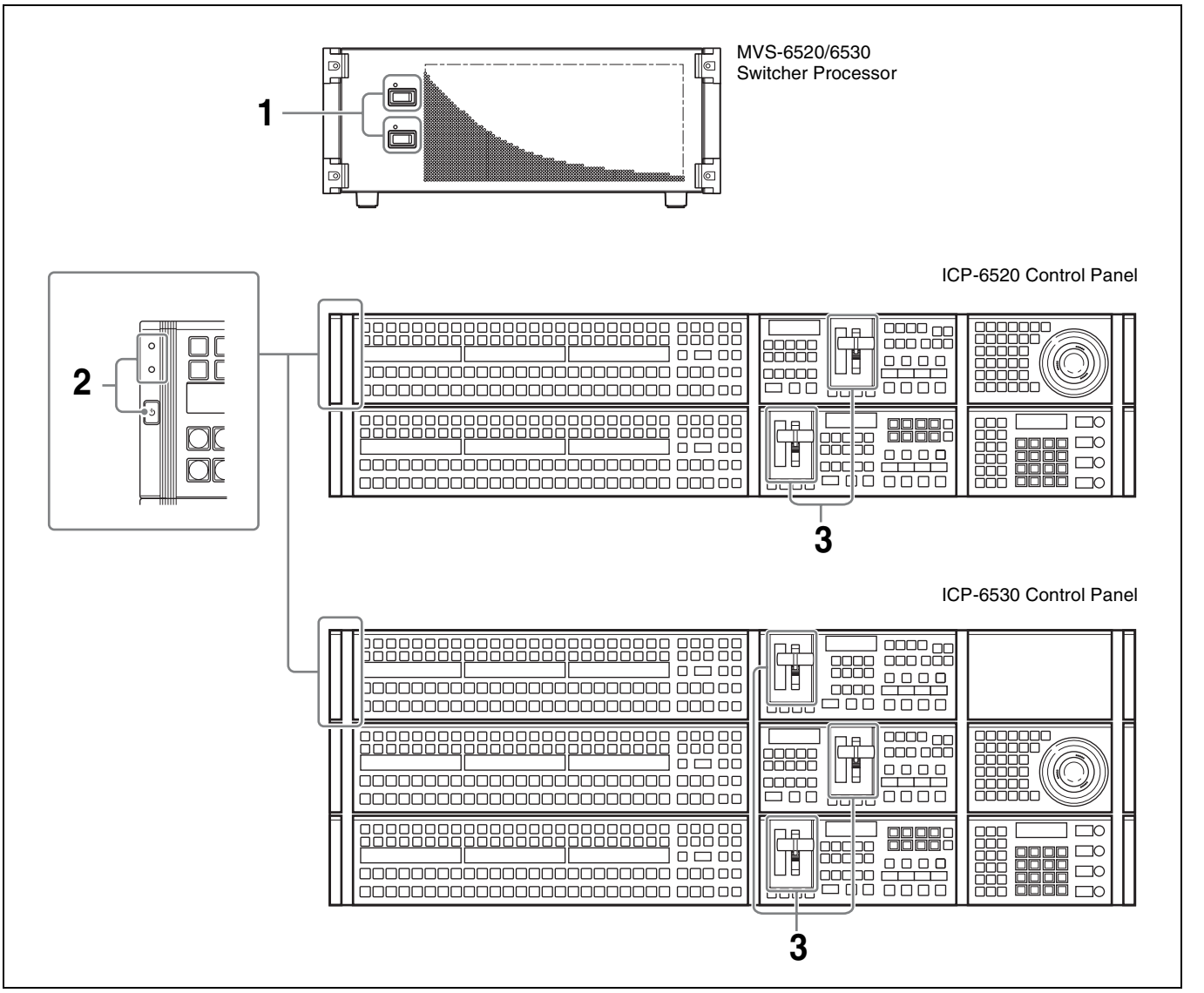
Other settings

Make the following system configuration and other settings, as required.

- **Configure multi viewer** *(☞ p. 24)*
- **Set tally** *(☞ p. 26)*
- **Assign buttons required for 8-keyer operation (MVS-6530 only)** *(☞ p. 36)*
- **Set startup mode** *(☞ p. 37)*
- **Save data to removable disk** *(☞ p. 39)*
- **Set simple connection of AUX bus remote panel** *(☞ p. 41)*

Turning Power On/Off

After connecting the system, turn on the power using the following procedure.



1 Set the POWER A and B switches of the switcher processor to ON ("**I**" side).

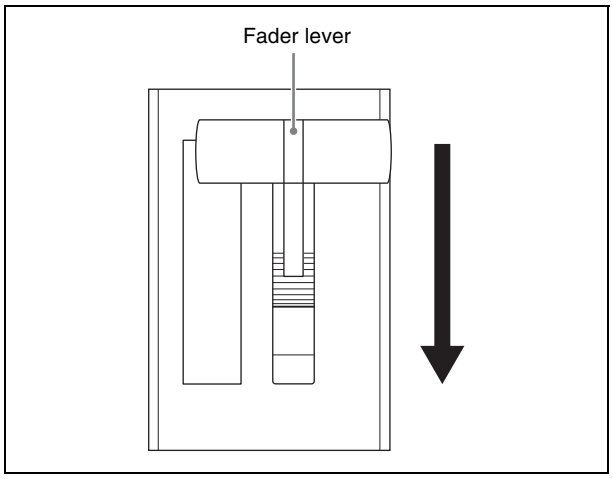
When the switcher processor is turned on, the status indicators for supplies A and B light green.

2 Check that the status indicators on the control panel are lit green, then press the POWER switch.

The POWER switch mark "⏻" lights green.
The control panel boots in approximately one minute, and the top menu list appears on the menu panel screen.

(ICP-6520 control panel display. The ICP-6530 also has an [M/E2] button.)

3 Pull the fader lever down from top to bottom.



When “Non Sync” or “Sync” appears at the top and bottom stops of the fader lever (non-sync state), the fader lever movement and transitions do not match. Pull the fader level from top to bottom to release non-sync state.

4 Turn on the power of other devices in the system.

Screen saver and panel sleep mode

If no operation is performed for a given time, the menu display screen saver starts. The brightness of all indicators and displays on the control panel also dims.

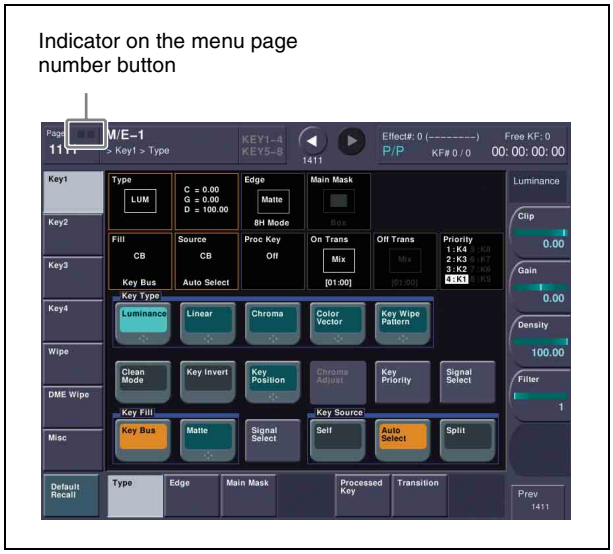
For details about settings, refer to the User’s Guide.

To turn the power off

1 On the menu screen, check that the local disk is not being accessed.

A “local disk” refers to the internal flash memory drive in a control panel.

While the system is accessing the local disk or frame memory external HDD, the indicator on the menu page number button lights red.
Check to make sure the indicator is not lit before turning off the power.

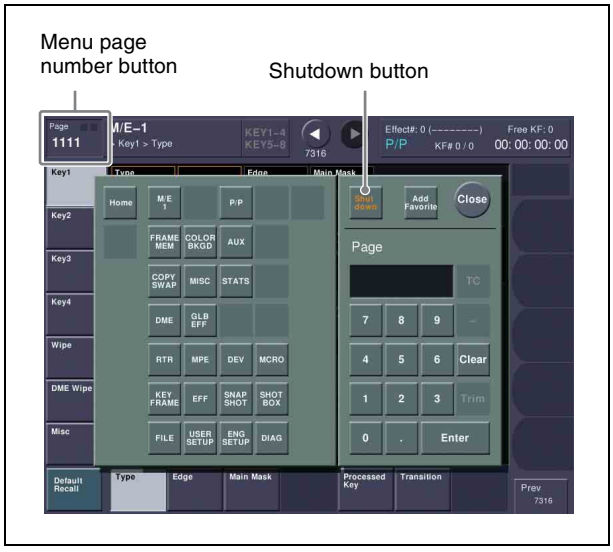


Notes

Remove all USB flash memory and other removable disks before turning off the power.

2 Shut down the control panel.

Press the menu page number button and display the top menu window, then press the [Shutdown] button.



(ICP-6520 control panel display. The ICP-6530 also has an [M/E2] button.)

A shutdown confirmation message appears.
Press [Yes] to commence shutdown. The process is completed when the menu screen goes completely black.
Check that the POWER switch indicator "⏻" on the control panel has gone out.

Notes

You can forcibly turn off the power to the control panel without following the normal shutdown procedure by pressing and holding the POWER switch for five seconds or longer. If you force shutdown, settings data may not be saved.

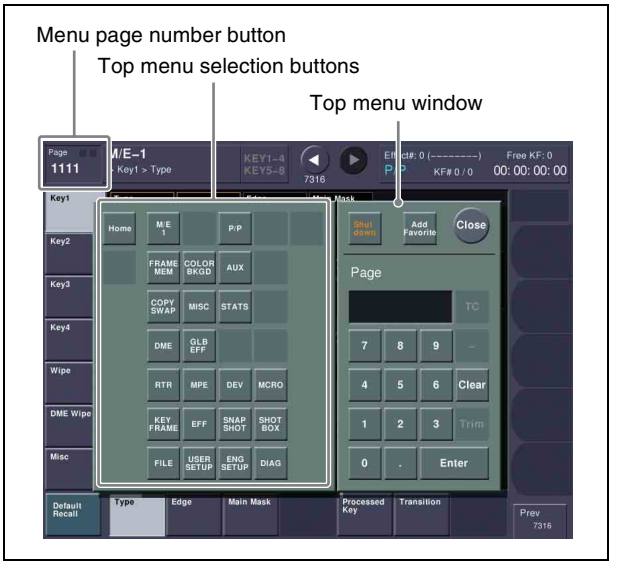
3 Set the POWER A and B switches of the switcher processor to OFF ("○" side).

Opening Menus

In the MVS system, basic operations and system setup can be done using the menu.
This section describes how to open the "M/E-1 >Key1 >Type menu (1111)" as an example. Other menus can be opened using the same procedure.

For details about menu operations, refer to the User's Guide.

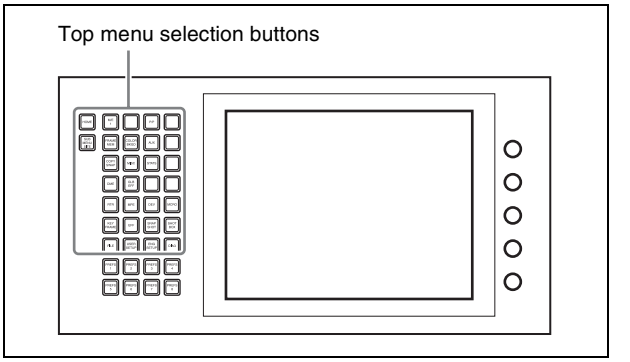
1 Recall the top menu (top level in menu hierarchy).



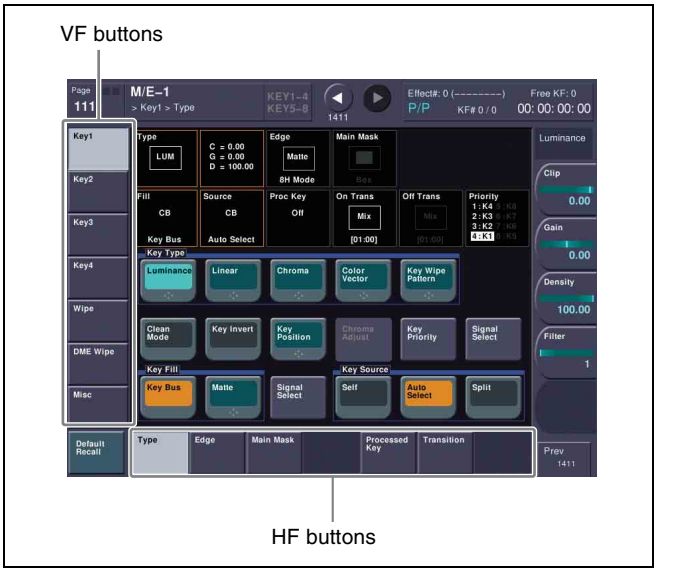
❶ Press the menu page number button.
The top menu window appears.
❷ Press a top menu selection button.
In this example, press [M/E1].

Memo

You can also open the top menus using the top menu selection buttons in the menu panel.



2 Select a menu.



❶ Select a submenu (level 2 in the menu hierarchy) using VF buttons on the left edge.
In this example, select [Key1].
❷ Select a submenu (level 3 in the menu hierarchy) using HF buttons on the bottom edge.
In this example, select [Type].
The M/E-1 >Key1 >Type menu appears.

Memo

You can also open the menu by entering the page number "1111" in the top menu window.

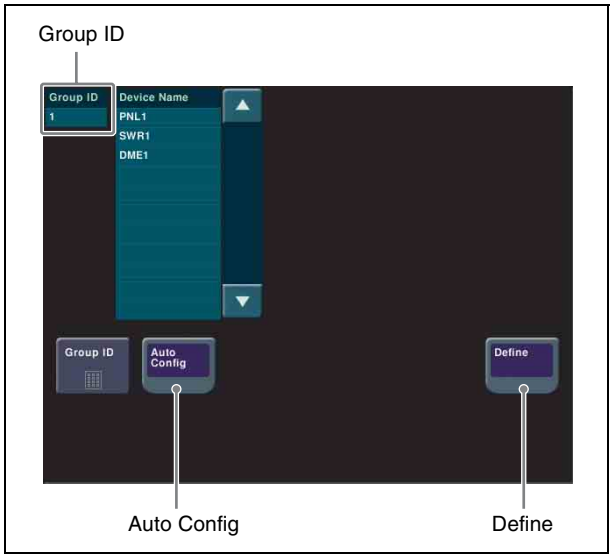
Configuring the Network

When power is turned on, all devices connected to the MVS system LAN are detected and corresponding settings are registered.

1 Display the menu.

❶ Open the Engineering Setup >System >Network Config menu (7311).

2 Set the group ID.



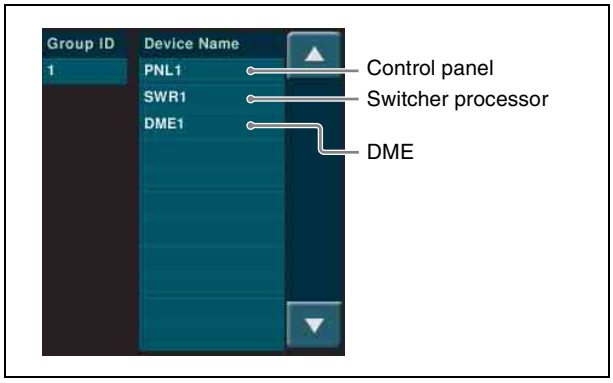
Network Config menu

❶ Check the group ID.
In this example, check that the group ID is set to "1".
If the group ID is not set to "1", press [Group ID] and change the setting.

For details about settings, refer to the User's Guide.

3 The connected devices are automatically detected.

❶ Press [Auto Config].
❷ Check the message, then press [Yes].
A list of detected devices appears.



4 Register the list of detected devices.

❶ Press [Define].
❷ Check the message, then press [Yes].
The list is registered as the network settings when power is turned on.

Setting Signal Formats

Setting the Signal Format

You can set the signal format and the input reference signal format of each device that is automatically detected. The combinations of signal formats and input reference signals that can be configured are as follows.

Signal format

System	Signal format	
	Field frequency	Effective number of scan lines
SD system	50	576i
	59.94	480i
HD system	50	720P
	59.94	
	50	1080i
	59.94	
	23.976	1080PsF
	24	

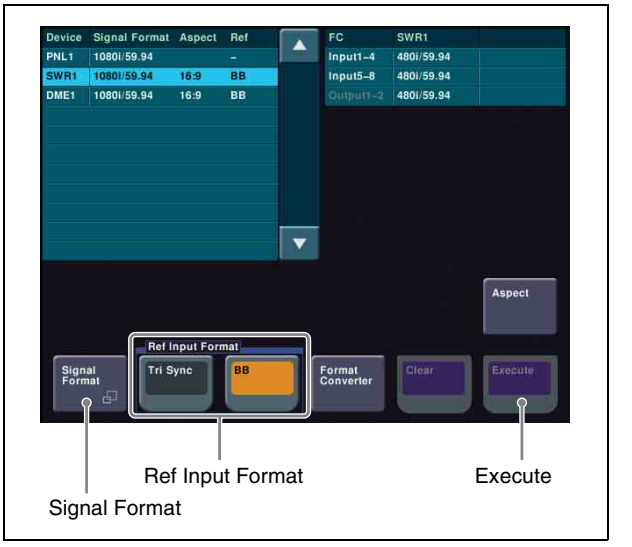
Input reference signal

Signal format (HD system)	Input reference signal		
	Tri Sync	BB	
720P/50	–	Black Burst 50	Sync 50
720P/59.94	59.94	Black Burst 59.94	Sync 59.94
1080i/50	50	Black Burst 50	Sync 50
1080i/59.94	59.94	Black Burst 59.94	Sync 59.94
1080PsF/23.976	47.952	–	
1080PsF/24	48	–	

1 Display the menu.

❶ Open the Engineering Setup >System >Format menu (7313).

2 Set the formats.



Format menu

❶ Press [Signal Format].
❷ Press the button for the desired format to set in the pop-up window.

3 Set the input reference signal.

❶ In the <Ref Input Format> group, select the input reference signal.
Tri Sync: Tri-level sync for an HD system
BB: Black burst or sync

Notes

This setting is available for HD systems only.

Memo

If [BB] is selected, you can set the signal format conversion in the format converter (when MKS-6550 Format Converter Board is installed). If [Tri Sync] is selected, the format converter cannot be used.

For details about format converter settings and operations, refer to the User's Guide.

4 Apply and save the settings.

❶ Press [Execute].

❷ Check the message, then press [Yes].
A progress bar is displayed during the configuration.
The system restarts when the configuration is completed.

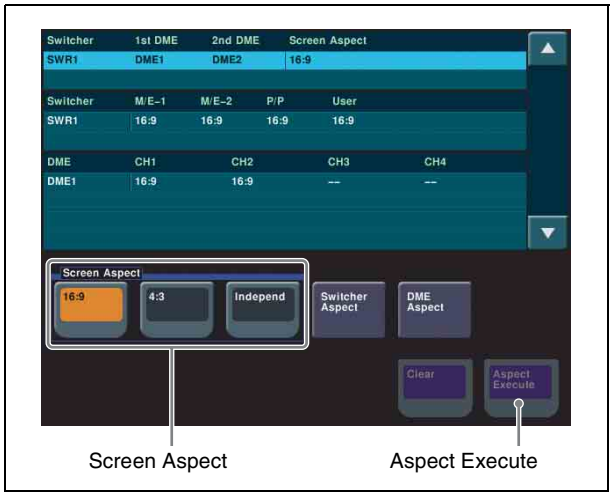
Setting the Screen Aspect Ratio

You can set the screen aspect ratio for signals handled by the switcher processor and DME to either 16:9 or 4:3.

1 Display the menu.

❶ Open the Engineering Setup >System >Format menu (7313).
❷ Press [Aspect].
The Aspect menu (7313.1) appears.

2 Set the aspect ratio.



Aspect menu

❶ In the <Screen Aspect> group, select the aspect ratio.
16:9: Sets 16:9 aspect ratio.
4:3: Sets 4:3 aspect ratio.
Independent: Sets the aspect ratio for each of the switcher processor banks and DME channels.

Memo

If [Independent] is selected, press [Switcher Aspect] or [DME Aspect] to set the aspect ratio.

3 Apply and save the settings.

❶ Press [Aspect Execute].
❷ Check the message, then press [Yes].

Assigning Signals to Cross-Point Buttons

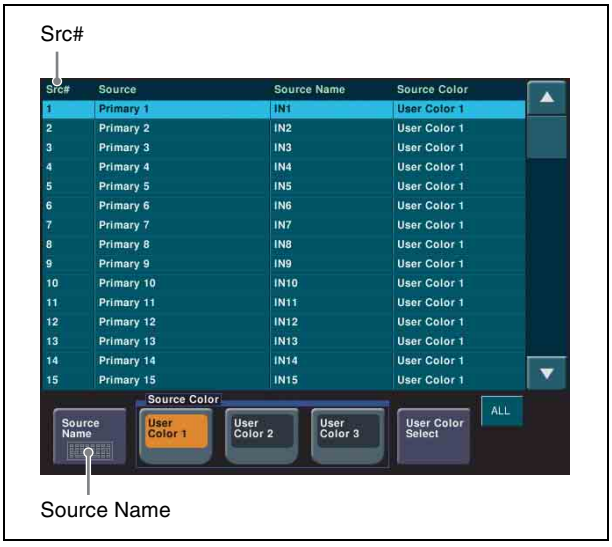
To select input signals using cross-point buttons, the signals must be assigned to each of the cross-point buttons in advance. You can assign two signals (video and key) as a pair to each cross-point button.

Setting the Signal Name

1 Display the menu.

❶ Open the Engineering Setup >Panel >Xpt Assign menu (7322).
❷ Press [Src Name/Src Color].
The Src Name/Src Color menu (7322.6) appears.

2 Set the signal name.



Src Name/Src Color menu

❶ Select the signal to be set in the [Src#] column.
In this example, select “1”.
❷ Press [Source Name].
❸ Enter the name of the source signal in the keyboard window.
In this example, enter “CAM1”.

Keyboard window

❹ Press [Enter].
❺ Repeat steps ❶ to ❹ as required to assign other signals.

Notes

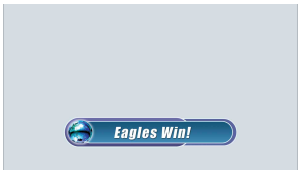
Up to 16 characters can be entered for signal names.

Memo

You can also set the color for cross-point buttons assigned with signals.

Assigning Pair Signals to Cross-Point Buttons

You can assign video and key signals, shown below, as a pair to each cross-point button.



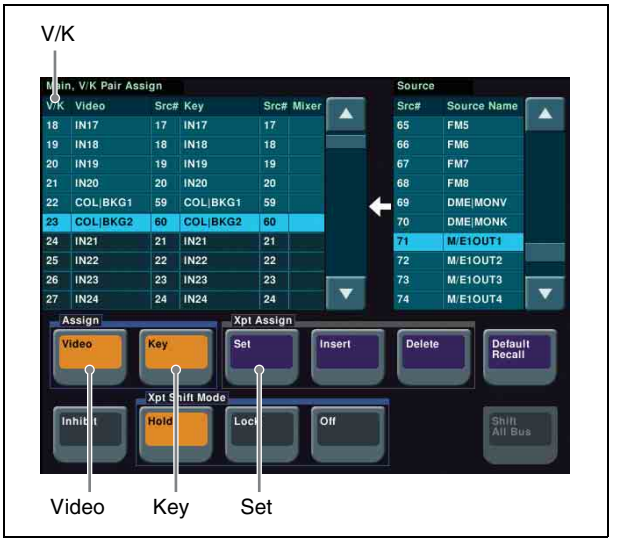
Video signal

Key signal

1 Display the menu.

❶ Open the Engineering Setup >Panel >Xpt Assign menu (7322).
❷ Press [Main, V/K Pair Assign].
The Main, V/K Pair Assign menu (7322.5) appears.

2 Assign a video signal to the cross-point button.



Main, V/K Pair Assign menu

❶ In the [V/K] column of the list on the left, select the number of the cross-point button.
In this example, select “1”.
❷ In the <Assign> group, press [Video], turning it on.
❸ In the list on the right, select the signal you want to assign as the video signal.
In this example, select “CAM1”.
❹ In the <Xpt Assign> group, press [Set].
The video is assigned.

3 Assign a key signal to the cross-point button.

❶ In the <Assign> group, press [Key], turning it on.
❷ In the list on the right, select the signal you want to assign as the key signal.
In this example, select “Key1”.
❸ In the <Xpt Assign> group, press [Set].
The key is assigned.

Memo

- In the <Assign> group, you can press [Video] and [Key], turning them both on, to assign signals at the same time.
- You can also edit the lists using [Insert] and [Delete] in the <Xpt Assign> group.

4 Repeat steps **2** and **3** as required to assign other signals.

For details about using assigned pair signals using a keyer, see *“Entering Titles using Luminance Keys” (☞ p. 51)*.

Assigning Output Signals

You can set the signals output to the connected devices on the OUTPUTS of the switcher processor.

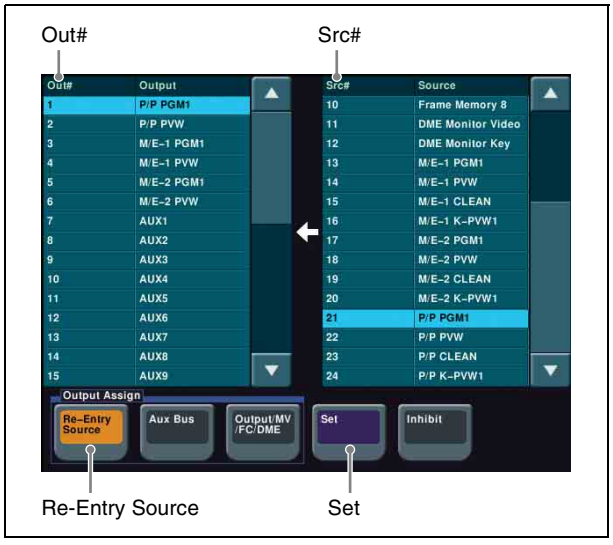
Setting Monitor Outputs

This section describes the procedure for setting up monitors for checking final program output video (program output) and for checking preview video (preview output).

1 Display the menu.

❶ Open the Engineering Setup >Switcher >Output menu (7333).
❷ Press [Output Assign].
The Output Assign menu (7333.1) appears.

2 Set a monitor for program output.



Output Assign menu

❶ In the <Output Assign> group, select [Re-Entry Source].
❷ In the [Out#] column in the list on the left, select the number for the OUTPUTS connector connected to the monitor.
In this example, select “1”.
❸ In the [Src#] column in the list on the right, select the program output.
In this example, select “P/P PGM1”.
❹ Press [Set].
The output signal is assigned, and “P/P PGM1” is displayed for output 1 in the [Out#] column.

3 Set a monitor for preview output.

❶ In the <Output Assign> group, select [Re-Entry Source].
❷ In the [Out#] column in the list on the left, select the number for the OUTPUTS connector connected to the monitor.
In this example, select “2”.
❸ In the [Src#] column in the list on the right, select the preview output.
In this example, select “P/P PVW”.
❹ Press [Set].
The output signal is assigned, and “P/P PVW” is displayed for output 2 in the [Out#] column.

Using Multi Viewer

The screen of a monitor connected to the MVS system can be split to view multiple video signals simultaneously. The screen can be split into four or ten subscreens.

Split into four

1	2
3	4

Subscreen signals

Split into ten

1		2	
3	4	5	6
7	8	9	10

Subscreen signals

There are two multi viewer systems, Multi Viewer 1 and 2, to which you can assign signals independently.
This section describes the procedure for setting Multi Viewer 1.

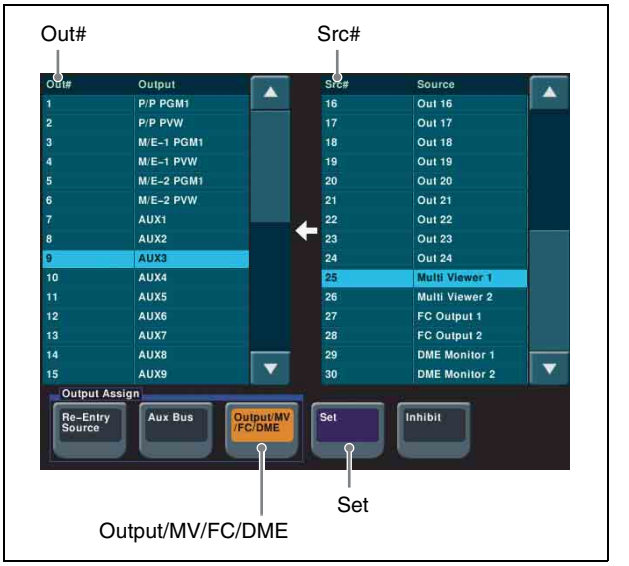
Setting Multi Viewer Output

To use multi viewer, you must assign the multi viewer output to the OUTPUTS connector connected to the monitor in advance.

1 Display the menu.

❶ Open the Engineering Setup >Switcher >Output menu (7333).
❷ Press [Output Assign].
The Output Assign menu (7333.1) appears.

2 Set the multi viewer outputs.



Output Assign menu

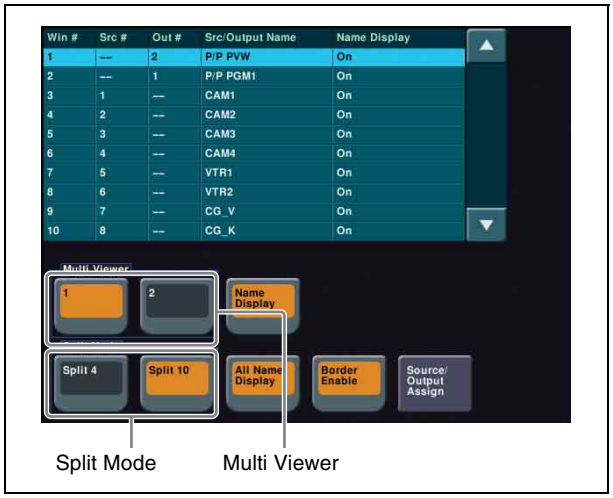
❶ In the <Output Assign> group, select [Output/MV/FC/DME].
❷ In the [Out#] column in the list on the left, select the number for the OUTPUTS connector connected to the monitor.
In this example, select “9”.
❸ In the [Src#] column in the list on the right, select the multi viewer output.
In this example, select “Multi Viewer 1”.
❹ Press [Set].
The output signal is assigned, and “Multi Viewer 1” is displayed for output 9 in the [Out#] column.

Configuring Multi Viewer

1 Display the menu.

❶ Open the Engineering Setup >Switcher >Output menu (7333).
❷ Press [Multi Viewer].
The Multi Viewer menu (7333.9) appears.

2 Set the display method of the screen.



Multi Viewer menu

❶ In the <Multi Viewer> group, select the target multi viewer.
In this example, select [1].
❷ In the <Split Mode> group, select the number of split windows.
Split 4: Splits the screen into four windows.
Split 10: Splits the screen into ten windows.

Memo

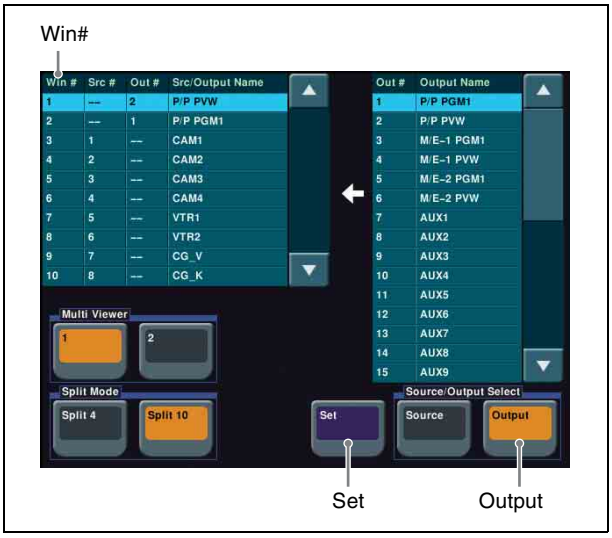
You can specify names and borders for subscreens using [Name Display] and [Border Enable].

Assigning Signals to Subscreens

1 Display the menu.

❶ Open the Engineering Setup >Switcher >Output menu (7333).
❷ Press [Multi Viewer].
❸ Press [Source/Output Assign].
The Source/Output Assign menu (7333.10) appears.

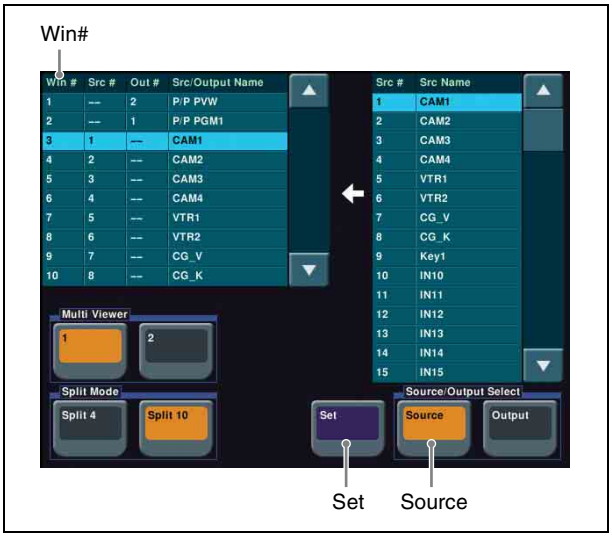
2 Assign an output signal to a subscreen.



Source/Output Assign menu

❶ In the <Source/Output Select> group, select [Output].
❷ In the [Win#] column of the list on the left, select the number of the subscreen.
In this example, select “1”.
❸ In the list on the right, select the signal you want to assign.
In this example, select “P/P PGM1”.
❹ Press [Set].

3 Assign an input signal to a subscreen.



Source/Output Assign menu

❶ In the <Source/Output Select> group, select [Source].
❷ In the [Win#] column of the list on the left, select the number of the subscreen.
In this example, select “3”.

❸ In the list on the right, select the signal you want to assign.
In this example, select “CAM1”.
❹ Press [Set].

4 Repeat steps **2** and **3** as required to assign other signals to other subscreens.

Setting Multi Viewer Tally Output

To display the tally on the multi viewer screen, you must set the same tally type as specified in step **2** of *“Setting Serial Tally” (☞ p. 26)*.

1 Display the menu.

❶ Open the Engineering Setup >Panel >Operation menu (7326).
❷ Press [Button Tally].
The Button Tally menu (7326.9) appears.

2 Set the tally type.

Button Tally menu

❶ In the <Tally Type> group, select the tally type.
In this example, select [R1].
❷ Press [Execute].

Notes

To display a tally on the multi viewer screen, select the tally type from [R1] to [R8]. If you set [Independ], the tally is not shown.
When any of the red tally types [R1] to [R8] is selected, the corresponding green tally is automatically set. For example, when [R1] is selected, [G1] is automatically set as green tally. Note that you must set the tally type [G1] in step **2** of *“Setting Serial Tally” (☞ p. 26)* beforehand.

Setting Tally

Setting Parallel Tally

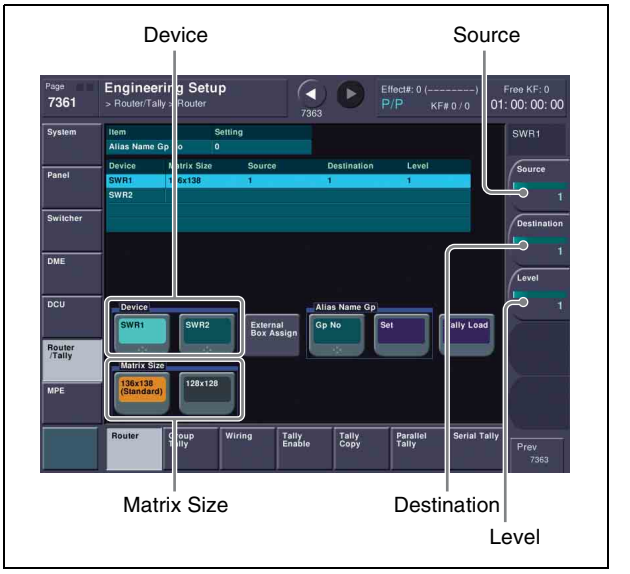
The red tallies for PRIMARY INPUTS 1 to 48 are assigned to the TALLY connector on the switcher processor by default.

For details about changing the assignment settings, refer to the User’s Guide.

Setting Serial Tally

Set the red tally of the program output (P/P PGM1) and the green tally of the preview output (P/P PVW) to be output from the SERIAL TALLY connector of the switcher processor.
This section describes the procedure when “P/P PGM1” is assigned to the OUTPUTS 1 connector and “P/P PVW” is assigned to the OUTPUTS 2 connector.

1 Set the position of the MVS system in S-Bus space.

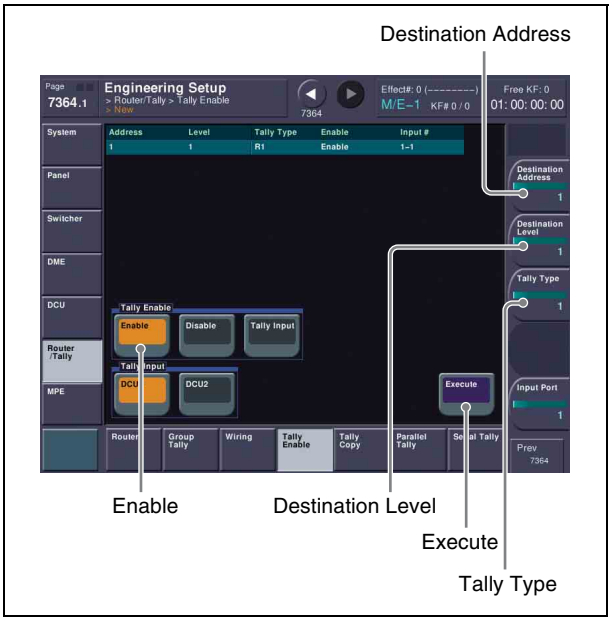


Router menu

❶ Open the Engineering Setup >Router/Tally >Router menu (7361).
❷ In the <Device> group, select the target device.
In this example, select [SWR1].
❸ In the <Matrix Size> group, select the matrix size.
In this example, select [136x138 (Standard)].
❹ Set each of the [Source], [Destination], and [Level] parameters to “1”.

2 Set the tally generation reference.

Tally Enable menu



New menu

❶ Open the Engineering Setup >Router/Tally >Tally Enable menu (7364).

❷ Check the tally settings for the program output.
If the settings of “OUT001” are as follows, you do not need to change the settings. Proceed to step ❼.

Setting	Destination	Level	Tally Type	Enable
Value	OUT001	1	R1	Enable

❸ Press [New].
The New menu (7364.1) appears.

❹ Set each of the [Destination Address], [Destination Level], and [Tally Type] parameters to “1”.

❺ In the <Tally Enable> group, select [Enable].

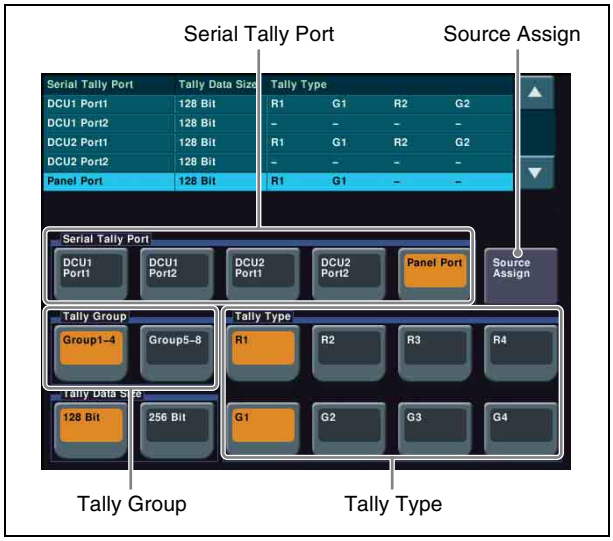
❻ Press [Execute].

❼ In the Tally Enable menu (7364), check the tally settings for the preview output.
If the settings of “OUT002” are as follows, you do not need to change the settings. Proceed to step **3**.

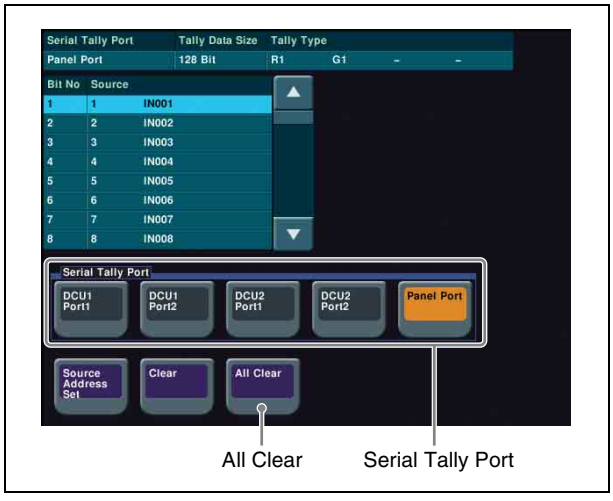
Setting	Destination	Level	Tally Type	Enable
Value	OUT002	1	G1	Enable

❽ Repeat steps ❸ to ❻ to make settings for the preview output.
In step ❹, set the [Destination Address] parameter to “2”, [Destination Level] parameter to “1”, and [Tally Type] parameter to “2”.

3 Set the serial tally output.



Serial Tally menu



Source Assign menu

❶ Open the Engineering Setup >Router/Tally >Serial Tally menu (7367).

❷ In the <Serial Tally Port> group, select the target port.
In this example, select [Panel Port].

❸ Set the tally type.
In this example, select [Group1-4] in the <Tally Group> group, and [R1] and [G1] in the <Tally Type> group, turning them on.
Turn off [R2] to [R4] and [G2] to [G4] in [Group1-4], and [R5] to [R8] and [G5] to [G8] in [Group 5-8].

❹ Press [Source Assign].
The Source Assign menu (7367.1) appears.

❺ In the <Serial Tally Port> group, select the target port.
In this example, select [Panel Port].

❻ Press [All Clear].

❼ Check the message, then press [Yes].
The source addresses assigned to each of the serial tally bits are set to the default.
If you use other than the default values for serial tally bits, change the source address settings.

For details about settings, refer to the User's Guide.

Memo

To output parallel tallies from a DCU, display the Engineering Setup >Router/Tally >Parallel Tally menu (7366) in step **3** and make settings.

For details about settings, refer to the User's Guide.

Input/outputs for MVS-6500 system assigned to S-Bus matrix

Matrix size: 136 x 138

- **Source**

No.	Source
1	Primary 1
2	Primary 2
3	Primary 3
4	Primary 4
5	Primary 5
6	Primary 6
7	Primary 7
8	Primary 8
9	Primary 9
10	Primary 10
11	Primary 11
12	Primary 12
13	Primary 13
14	Primary 14
15	Primary 15
16	Primary 16
17	Primary 17
18	Primary 18
19	Primary 19
20	Primary 20
21	Primary 21
22	Primary 22
23	Primary 23
24	Primary 24
25	Primary 25
26	Primary 26
27	Primary 27
28	Primary 28
29	Primary 29
30	Primary 30
31	Primary 31
32	Primary 32
33	Primary 33
34	Primary 34
35	Primary 35
36	Primary 36
37	Primary 37
38	Primary 38
39	Primary 39
40	Primary 40
41	Primary 41
42	Primary 42
43	Primary 43
44	Primary 44
45	Primary 45
46	Primary 46
47	Primary 47
48	Primary 48
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	

No.	Source
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	FC 1
74	FC 2
75	FC 3
76	FC 4
77	FC 5
78	FC 6
79	FC 7
80	FC 8
81	Black
82	White
83	Color Bkgd 1
84	Color Bkgd 2
85	Frame Memory 1
86	Frame Memory 2
87	Frame Memory 3
88	Frame Memory 4
89	Frame Memory 5
90	Frame Memory 6
91	Frame Memory 7
92	Frame Memory 8
93	
94	
95	DME Monitor Video
96	DME Monitor Key
97	M/E-1 Out 1
98	M/E-1 Out 2
99	M/E-1 Out 3
100	M/E-1 Out 4
101	
102	
103	
104	
105	M/E-2 Out 1
106	M/E-2 Out 2
107	M/E-2 Out 3
108	M/E-2 Out 4
109	
110	
111	
112	
113	
114	
115	
116	
117	
118	
119	
120	
121	P/P Out 1
122	P/P Out 2
123	P/P Out 3
124	P/P Out 4
125	
126	
127	
128	
129	DME 1 a)
130	DME 2 a)
131	
132	
133	DME 5 a)
134	DME 6 a)
135	DME 7 a)
136	DME 8 a)
137	
138	

a) Virtual DME output signals for tally.

- **Destination (Bus)**

No.	Destination
1	Out 1 a)
2	Out 2 a)
3	Out 3 a)
4	Out 4 a)
5	Out 5 a)
6	Out 6 a)
7	Out 7 a)
8	Out 8 a)
9	Out 9 a)

No.	Destination
10	Out 10 [a)]
11	Out 11 [a)]
12	Out 12 [a)]
13	Out 13 [a)]
14	Out 14 [a)]
15	Out 15 [a)]
16	Out 16 [a)]
17	Out 17 [a)]
18	Out 18 [a)]
19	Out 19 [a)]
20	Out 20 [a)]
21	Out 21 [a)]
22	Out 22 [a)]
23	Out 23 [a)]
24	Out 24 [a)]
25	Out 25
26	Out 26
27	Out 27
28	Out 28
29	Out 29
30	Out 30
31	Out 31
32	Out 32
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	

No.	Destination
55	
56	
57	M/E-1 Bkgd A
58	M/E-1 Bkgd B
59	M/E-1 Utility 1
60	
61	M/E-1 Key 1 Fill
62	M/E-1 Key 1 Source
63	M/E-1 Key 2 Fill
64	M/E-1 Key 2 Source
65	M/E-1 Key 3 Fill
66	M/E-1 Key 3 Source
67	M/E-1 Key 4 Fill
68	M/E-1 Key 4 Source
69	
70	
71	M/E-1 DME External
72	M/E-2 Bkgd A
73	M/E-2 Bkgd B
74	M/E-2 Utility 1
75	
76	M/E-2 Key 1 Fill
77	M/E-2 Key 1 Source
78	M/E-2 Key 2 Fill
79	M/E-2 Key 2 Source
80	M/E-2 Key 3 Fill
81	M/E-2 Key 3 Source
82	M/E-2 Key 4 Fill
83	M/E-2 Key 4 Source
84	
85	
86	M/E-2 DME External
87	
88	
89	
90	
91	P/P Key 5 Fill
92	P/P Key 5 Source
93	P/P Key 6 Fill
94	P/P Key 6 Source
95	P/P Key 7 Fill
96	P/P Key 7 Source
97	P/P Key 8 Fill
98	P/P Key 8 Source
99	

No.	Destination
100	
101	
102	P/P Bkgd A
103	P/P Bkgd B
104	P/P Utility 1
105	
106	P/P Key 1 Fill
107	P/P Key 1 Source
108	P/P Key 2 Fill
109	P/P Key 2 Source
110	P/P Key 3 Fill
111	P/P Key 3 Source
112	P/P Key 4 Fill
113	P/P Key 4 Source
114	
115	
116	P/P DME External
117	
118	
119	Frame Memory Source 1
120	Frame Memory Source 2
121	
122	
123	DME 1 Video
124	DME 1 Key
125	DME 2 Video
126	DME 2 Key
127	
128	
129	
130	
131	DME 5 Video
132	DME 5 Key
133	DME 6 Video
134	DME 6 Key
135	DME 7 Video
136	DME 7 Key
137	DME 8 Video
138	DME 8 Key

a) If AUX or Edit Preview is assigned to outputs 1 to 24, the outputs act as a bus (destination) controlled by the router remote panel.

Matrix size: 128 x 128

(Numbers in parentheses indicate the number for 136 x 138 matrix size.)

- **Source**

No.	Source
1	Primary 1
2	Primary 2
3	Primary 3
4	Primary 4
5	Primary 5
6	Primary 6
7	Primary 7
8	Primary 8
9	Primary 9
10	Primary 10
11	Primary 11
12	Primary 12
13	Primary 13
14	Primary 14
15	Primary 15
16	Primary 16
17	Primary 17
18	Primary 18
19	Primary 19
20	Primary 20
21	Primary 21
22	Primary 22
23	Primary 23
24	Primary 24
25	Primary 25
26	Primary 26
27	Primary 27
28	Primary 28
29	Primary 29
30	Primary 30
31	Primary 31
32	Primary 32
33	Primary 33
34	Primary 34
35	Primary 35
36	Primary 36
37	Primary 37
38	Primary 38
39	Primary 39
40	Primary 40

No.	Source
41	Primary 41
42	Primary 42
43	Primary 43
44	Primary 44
45	Primary 45
46	Primary 46
47	Primary 47
48	Primary 48
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	FC 1
74	FC 2
75	FC 3
76	FC 4
77	FC 5
78	FC 6
79	FC 7
80	FC 8
81	Black
82	White
83	Color Bkgd 1
84	Color Bkgd 2
85	Frame Memory 1

No.	Source
86	Frame Memory 2
87	Frame Memory 3
88	Frame Memory 4
89	Frame Memory 5
90	Frame Memory 6
91	Frame Memory 7
92	Frame Memory 8
93	
94	
95	DME Monitor Video
96	DME Monitor Key
97	M/E-1 Out 1
98	M/E-1 Out 2
99	M/E-1 Out 3
100	M/E-1 Out 4
101	
102	
103	M/E-2 Out 1 (105)
104	M/E-2 Out 2 (106)
105	M/E-2 Out 3 (107)
106	M/E-2 Out 4 (108)
107	
108	
109	
110	
111	
112	
113	
114	
115	P/P Out 1 (121)
116	P/P Out 2 (122)
117	P/P Out 3 (123)
118	P/P Out 4 (124)
119	
120	
121	DME 1 [a] (129)
122	DME 2 [a] (130)
123	
124	
125	DME 5 [a] (133)
126	DME 6 [a] (134)
127	DME 7 [a] (135)
128	DME 8 [a] (136)

a) Virtual DME output signals for tally.

• **Destination (Bus)**

No.	Destination
1	Out 1 a)
2	Out 2 a)
3	Out 3 a)
4	Out 4 a)
5	Out 5 a)
6	Out 6 a)
7	Out 7 a)
8	Out 8 a)
9	Out 9 a)
10	Out 10 a)
11	Out 11 a)
12	Out 12 a)
13	Out 13 a)
14	Out 14 a)
15	Out 15 a)
16	Out 16 a)
17	Out 17 a)
18	Out 18 a)
19	Out 19 a)
20	Out 20 a)
21	Out 21 a)
22	Out 22 a)
23	Out 23 a)
24	Out 24 a)
25	Out 25
26	Out 26
27	Out 27
28	Out 28
29	Out 29
30	Out 30
31	Out 31
32	Out 32
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	M/E-1 Bkgd A
58	M/E-1 Bkgd B
59	M/E-1 Utility 1
60	
61	M/E-1 Key 1 Fill
62	M/E-1 Key 1 Source
63	M/E-1 Key 2 Fill
64	M/E-1 Key 2 Source
65	M/E-1 Key 3 Fill
66	M/E-1 Key 3 Source
67	M/E-1 Key 4 Fill
68	M/E-1 Key 4 Source
69	M/E-2 Bkgd A (72)
70	M/E-2 Bkgd B (73)
71	M/E-2 Utility 1 (74)
72	
73	M/E-2 Key 1 Fill (76)
74	M/E-2 Key 1 Source (77)
75	M/E-2 Key 2 Fill (78)
76	M/E-2 Key 2 Source (79)
77	M/E-2 Key 3 Fill (80)
78	M/E-2 Key 3 Source (81)
79	M/E-2 Key 4 Fill (82)
80	M/E-2 Key 4 Source (83)
81	
82	
83	
84	
85	P/P Key 5 Fill (91)
86	P/P Key 5 Source (92)
87	P/P Key 6 Fill (93)
88	P/P Key 6 Source (94)
89	P/P Key 7 Fill (95)

No.	Destination
90	P/P Key 7 Source (96)
91	P/P Key 8 Fill (97)
92	P/P Key 8 Source (98)
93	P/P Bkgd A (102)
94	P/P Bkgd B (103)
95	P/P Utility 1 (104)
96	
97	P/P Key 1 Fill (106)
98	P/P Key 1 Source (107)
99	P/P Key 2 Fill (108)
100	P/P Key 2 Source (109)
101	P/P Key 3 Fill (110)
102	P/P Key 3 Source (111)
103	P/P Key 4 Fill (112)
104	P/P Key 4 Source (113)
105	
106	
107	
108	Frame Memory Source 1 (119)
109	Frame Memory Source 2 (120)
110	
111	
112	DME 1 Video (123)
113	DME 1 Key (124)
114	DME 2 Video (125)
115	DME 2 Key (126)
116	
117	
118	
119	
120	DME 5 Video (131)
121	DME 5 Key (132)
122	DME 6 Video (133)
123	DME 6 Key (134)
124	DME 7 Video (135)
125	DME 7 Key (136)
126	DME 8 Video (137)
127	DME 8 Key (138)
128	

a) If AUX or Edit Preview is assigned to outputs 1 to 24, the outputs act as a bus (destination) controlled by the router remote panel.

Serial tally bit assignment

Bit No.	Source
1	Primary 1
2	Primary 2
3	Primary 3
4	Primary 4
5	Primary 5
6	Primary 6
7	Primary 7
8	Primary 8
9	Primary 9
10	Primary 10
11	Primary 11
12	Primary 12
13	Primary 13
14	Primary 14
15	Primary 15
16	Primary 16
17	Primary 17
18	Primary 18
19	Primary 19
20	Primary 20
21	Primary 21
22	Primary 22
23	Primary 23
24	Primary 24
25	Primary 25
26	Primary 26
27	Primary 27
28	Primary 28
29	Primary 29
30	Primary 30
31	Primary 31
32	Primary 32
33	Primary 33
34	Primary 34
35	Primary 35
36	Primary 36
37	Primary 37
38	Primary 38
39	Primary 39
40	Primary 40
41	Primary 41
42	Primary 42
43	Primary 43
44	Primary 44
45	Primary 45
46	Primary 46

Bit No.	Source
47	Primary 47
48	Primary 48
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	FC 1
74	FC 2
75	FC 3
76	FC 4
77	FC 5
78	FC 6
79	FC 7
80	FC 8
81	Black
82	White
83	Color Bkgd 1
84	Color Bkgd 2
85	Frame Memory 1
86	Frame Memory 2
87	Frame Memory 3
88	Frame Memory 4
89	Frame Memory 5
90	Frame Memory 6
91	Frame Memory 7

Bit No.	Source
92	Frame Memory 8
93	
94	
95	DME Monitor Video
96	DME Monitor Key
97	M/E-1 Out 1
98	M/E-1 Out 2
99	M/E-1 Out 3
100	M/E-1 Out 4
101	
102	
103	M/E-2 Out 1
104	M/E-2 Out 2
105	M/E-2 Out 3
106	M/E-2 Out 4
107	
108	
109	
110	
111	
112	
113	
114	
115	P/P Out 1
116	P/P Out 2
117	P/P Out 3
118	P/P Out 4
119	
120	
121	DME 1 a)
122	DME 2 a)
123	
124	
125	DME 5 a)
126	DME 6 a)
127	DME 7 a)
128	DME 8 a)

a) Virtual DME output signals for tally.

Assigning 8-Keyer Buttons

In the MVS-6530 (3M/E processor), eight keyers can be used in the PGM/PST banks. The buttons required for key 5 to 8 operation are not pre-assigned by default, and must be assigned using the following procedure.

For details about operations using assigned buttons, refer to the User's Guide.

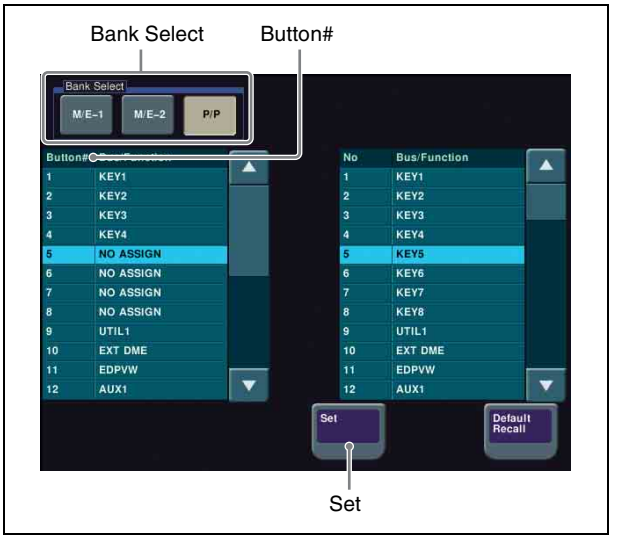
Assigning Key 5 to Key 8 to 1st Row Buttons

You can make assignments so that key 5 to key 8 can be selected using buttons in the 1st row of the cross-point control block *(☞ p. 44)*.

1 Display the menu.

❶ Open the Engineering Setup >Panel >Operation >Key/AUX/Function Assign menu (7326.13).

2 Select the target bank.



Key/AUX/Function Assign menu

❶ In the <Bank Select> group, select [P/P].

3 Assign a key to a button number.

❶ In the [Button#] column of the list on the left, select the button number.
In this example, select "5".
Numbers "5" to "8" are set to "No Assign" by factory default.

❷ In the list on the right, select the key to assign.
In this example, select [KEY5].

❸ Press [Set].

❹ Repeat steps ❶ to ❸ to assign [KEY6] to [KEY8] to button numbers "6" to "8", respectively.

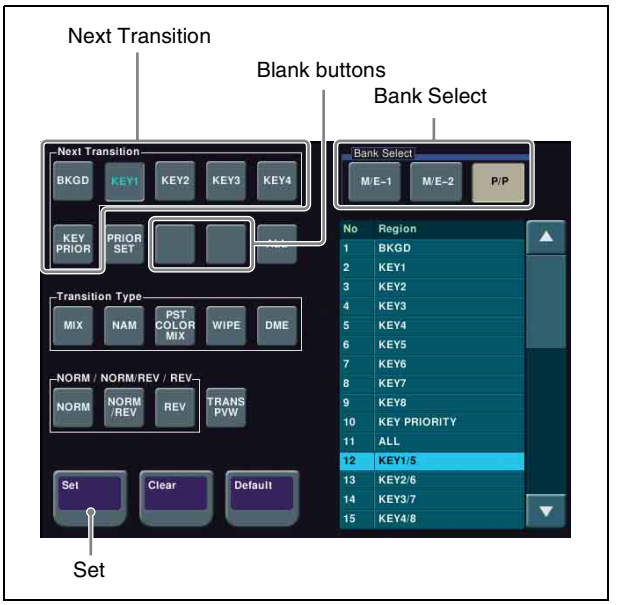
Assigning Key Selection Functions to Next Transition Selection Buttons

You can make assignments so that key 1 to key 8 can be selected using next transition selection buttons in the transition control block.

1 Display the menu.

❶ Open the Engineering Setup >Panel >Config >Transition Module menu (7321.9).

2 Select the target bank.



Transition Module menu

❶ In the <Bank Select> group, select [P/P].

3 Assign a key to a button.

❶ In the button diagram on the left, select the target button.
In this example, select [KEY1] in [Next Transition].

❷ In the list on the right, select the key to assign.
In this example, select [KEY1/5].

❸ Press [Set].

❹ Repeat steps ❶ to ❸ to assign [KEY2/6], [KEY3/7], and [KEY4/8] to buttons [KEY2], [KEY3], and [KEY4], respectively.

4 Assign the [SHIFT] and [ADD] functions to buttons.

❶ In the button diagram on the left, select the target button.
In this example, select a blank button.
❷ In the list on the right, select [SHIFT].
❸ Press [Set].
❹ Repeat steps ❶ to ❸ to assign [ADD].

Setting the Startup State

Selecting the Startup Mode at Power On

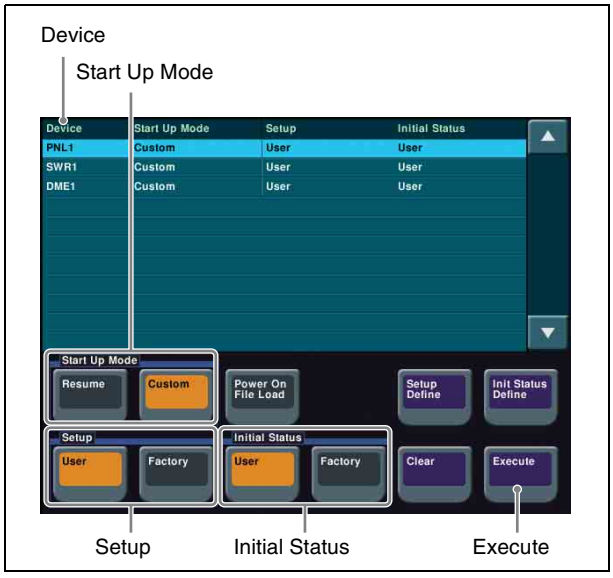
You can set the startup mode when power is turned on to one of the following three options.
- Settings valid when power is last turned off
- User default settings
- Factory default settings

This setting is available for the switcher processor, control panel, and DME.

1 Display the menu.

❶ Open the Engineering Setup >System >Start Up menu (7314).

2 Select the device to set.



Start Up menu

❶ Select switcher processor (SWR), control panel (PNL), or DME in the [Device] column.

3 Set the startup mode.

Settings valid when power is last turned off
❶ In the <Start Up Mode> group, select [Resume].

User default settings
❶ In the <Start Up Mode> group, select [Custom].
❷ In the <Setup> or <Initial Status> group, select [User].
For details about settings for the startup state when

power is applied, see *“Customizing the User Default Settings” (☞ p. 38).*

Factory default settings

❶ In the <Start Up Mode> group, select [Custom].
❷ In the <Setup> or <Initial Status> group, select [Factory].

Notes

[Resume] can be set only when switcher processor or control panel is selected.

4 Repeat steps **2** and **3** as required to set other devices.

5 Apply and save the settings.

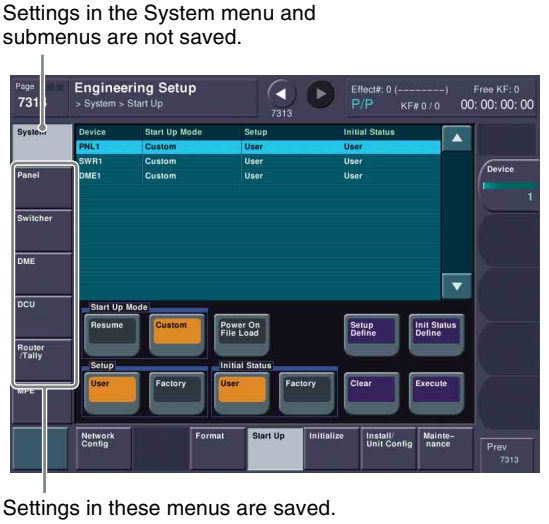
❶ Press [Execute].
❷ Check the message, then press [Yes].

Customizing the User Default Settings

User default settings are one option for startup mode when power is turned on.
There are two user default settings available, stored in flash memory in the switcher processor.

- Setup
- Initial Status

The data saved as “Setup” is data relating to menus other than the Engineering Setup >System menu.



The data saved as “Initial Status” is data relating to the state of each device, excluding the “Setup” settings.

For details about the data that is saved, refer to the User’s Guide.

You can customize and save user default settings to recall the same operation state when power is turned on. Or you can recall saved user settings to return to a known state if an error occurs. Data settings can also be saved as a backup on USB flash memory or other removable disks.

Notes

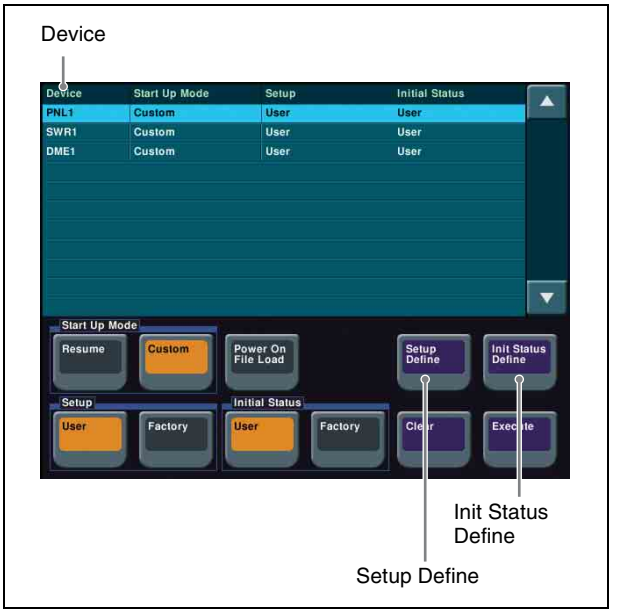
When shipped, the contents of user default settings in flash memory is the same as the [Factory] settings.

1 Set the state you want to save as a user default settings.

2 Display the menu.

❶ Open the Engineering Setup >System >Start Up menu (7314).

3 Select the target device to save.



Start Up menu

❶ Select switcher processor (SWR), control panel (PNL), or DME in the [Device] column.

4 Save customized data.

To save “Setup” data

❶ Press [Setup Define].
❷ Check the message, then press [Yes].

To save “Initial Status” data

❶ Press [Init Status Define].
❷ Check the message, then press [Yes].

5 Repeat steps **1** to **4** as required to set other devices.

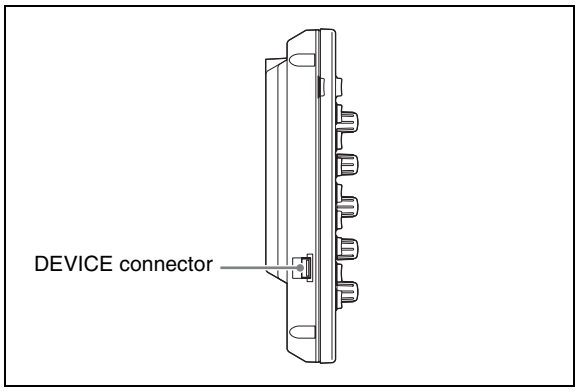
Saving Data to Removable Disk

Setting Up a Removable Disk for Use

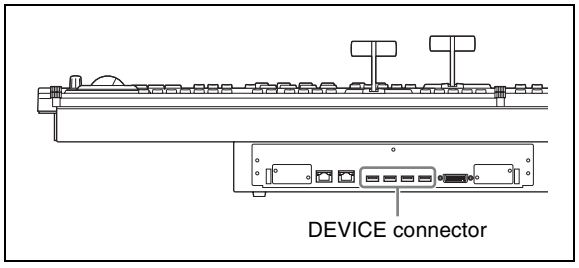
To use USB flash memory or other removable disk with the MVS system, you must register it as a primary device beforehand.

1 Insert the removable disk.

❶ Connect the USB flash memory or other removable disk to the DEVICE connector on the side of the menu panel or on the rear of the control panel.

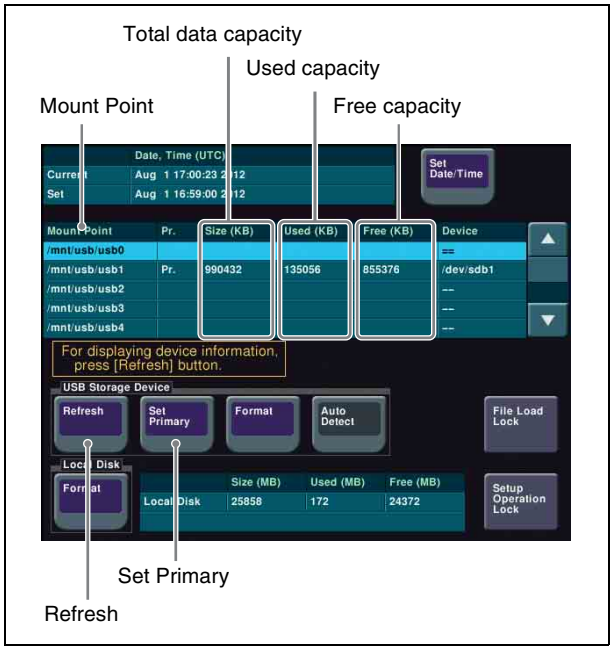


Menu panel (side view)



Control panel (rear view)

2 Displaying the removable disk information.



Maintenance menu

❶ Open the Engineering Setup >System >Maintenance menu (7317).
❷ In the <USB Storage Device> group, press [Refresh].
The data capacity information of the connected removable disk appears.

3 Set the removable disk as a primary device.

❶ Select the removable disk to be set in the [Mount Point] column.
❷ In the <USB Storage Device> group, press [Set Primary].

Notes

If the removable disk is not set as a primary device, [Removable Disk] cannot be selected in the File menu.

Memo

In the <USB Storage Device> group, select [Auto Detect] to set the primary device automatically. This is convenient when only one removable disk is connected.

Saving/Recalling User Settings on Removable Disks

You can save customized user default (“Setup” and “Initial Status”) data to USB flash memory or other removable disk and recall it when required.

This section describes the procedure for operations for the “Setup” data file.

Memo

You can save register data containing snapshots, keyframes, macros and other data on a removable disk and then recall that data.

For details about operation, refer to the User’s Guide.

1 Prepare a removable disk.

For details about configuring a removable disk for use in the MVS system, see *“Setting Up a Removable Disk for Use” (☞ p. 39)*.

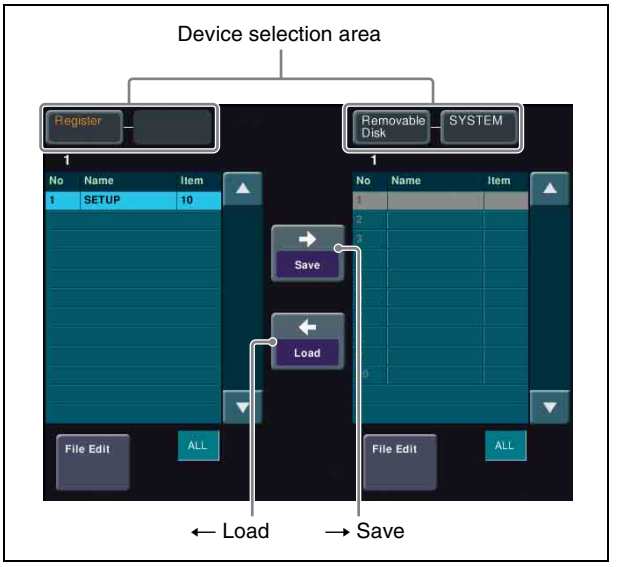
2 Display the menu.

❶ Open the File >Setup, Init, KMem >Setup menu (7111).

Memo

For operations for the “Initial Status” data file, open the File >Setup, Init, KMem >Initial Status menu (7112).

3 Select the target device.



Setup menu

❶ In the device selection area on the left, select [Register].
❷ In the device selection area on the right, select [Removable Disk] and then select [SYSTEM] (default directory).

Memo

You can also create an arbitrary directory on the removable disk.

4 Execute a save or recall operation.

To save data

❶ Press [→ Save].

To recall data

❶ In the [Removable Disk] list on the right, select the file you want to recall.
❷ Press [← Load].

Setting Simple Connection of AUX Bus Remote Panel

Connecting the MKS-8080/8082 AUX Bus Remote Panel to the control panel using an S-Bus data link normally requires an HKSP-R80 Routing Switcher Controller Board or similar primary station and various connection settings. However, using a simple connection, the MKS-8080/8082 can be connected directly without the need for an S-Bus data link primary station.
A simple connection is possible if the following conditions are satisfied.

- There are no devices other than the 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.

For information about the input signals and buses that can be controlled by the MKS-8080/8082, see *"Input/outputs for MVS-6500 system assigned to S-Bus matrix" (☞ p. 28)*.

For details about the setting status of the AUX bus remote panel for a simple connection, refer to the User's Guide.

For details about the settings on the AUX bus remote panel, refer to the Operation Manual for the MKS-8080/8082.

1 Initialize the MKS-8080/8082 settings.

This can be executed on the MKS-8080/8082.

2 Set the MKS-8080/8082 station number.

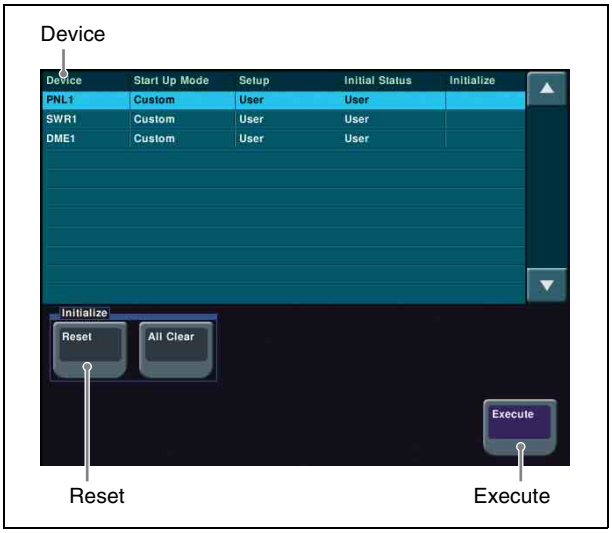
Set a number in the range 2 to 17.
This can be executed on the MKS-8080/8082.

3 Set the S-Bus data link primary station role to the control panel.

Set the STATION ID switches on the front of the board in the MVS-6520/6530 SLOT 8 to 001 (switch 1 only to the OPEN position).

Switcher processor	Board	STATION ID switch
MVS-6520/6530	CA-85	S3801

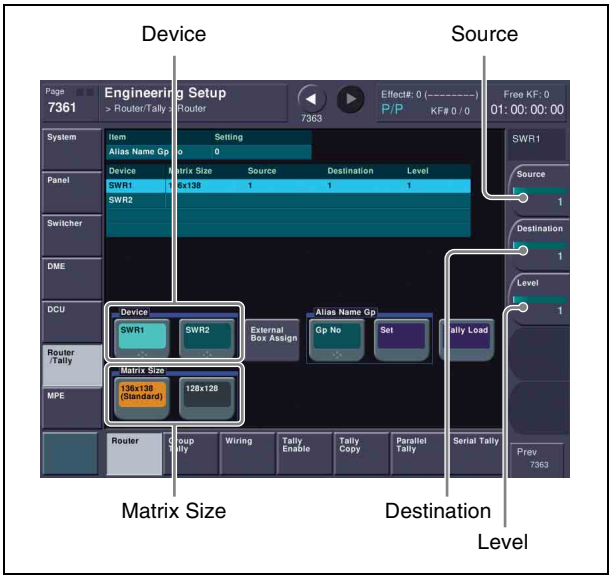
4 Carry out a reset.



Initialize menu

❶ Open the Engineering Setup >System >Initialize menu (7315).
❷ Select the control panel "PNL1" in the [Device] column.
❸ In the <Initialize> group, select [Reset].
❹ Press [Execute].
❺ Check the message, then press [Yes].
This reboots the system, and connection to the MKS-8080/8082 becomes possible after the system starts.

5 Set the position of the MVS system in S-Bus space.



Router menu

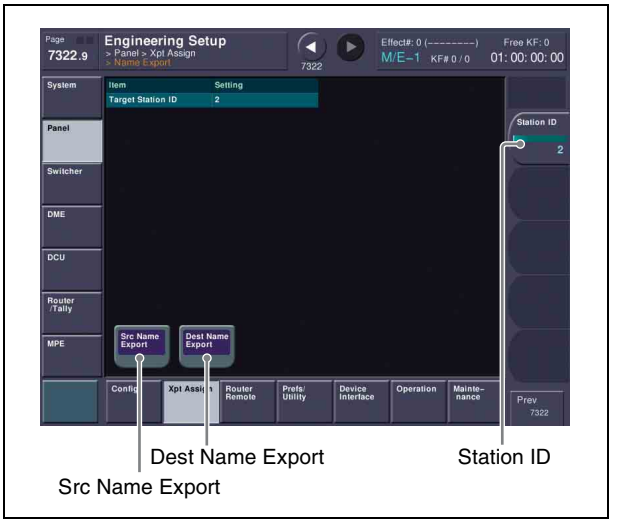
❶ Open the Engineering Setup >Router/Tally >Router menu (7361).
❷ In the <Device> group, select the target device.
In this example, select [SWR1].

❸ In the <Matrix Size> group, select the matrix size.
In this example, select [136x138 (Standard)].
❹ Set each of the [Source], [Destination], and [Level] parameters to “1”.

Notes

After changing the settings, save the user default settings as required.
For details about saving data, see *“Setting the Startup State” (☞ p. 37)* and *“Saving Data to Removable Disk” (☞ p. 39)*.

6 Export input and output signal names.



Name Export menu

❶ Open the Engineering Setup >Panel >Xpt Assign menu (7322).
❷ Press [Name Export].
The Name Export menu (7322.9) appears.
❸ Select the MKS-8080/8082 station ID using the [Station ID] parameter.
Select the number (2 to 17) specified in step **2**.
❹ Press [Src Name Export].
The names of the switcher processor input signals are reflected on the MKS-8080/8082.
❺ Press [Dest Name Export].
The names of the switcher processor output signals are reflected on the MKS-8080/8082.

Video Switching (Transitions)

Types of Transitions (Mix/NAM/Wipe/DME Wipe)

Mix

A separate video progressively fades in over the current video. The whole of the source video gradually fades out while the new video gradually fades in. The output comprises 50% of each video when the fader lever is in the center position.

Background A | 50% A and 50% B output | Background B

NAM (non-additive mix)

The source video and the new video images are compared, and whichever source has the highest luminance is output. The output comprises 100% of either video at each point when the fader lever is in the center position.

Background A | A or B is output, whichever is brighter | Background B

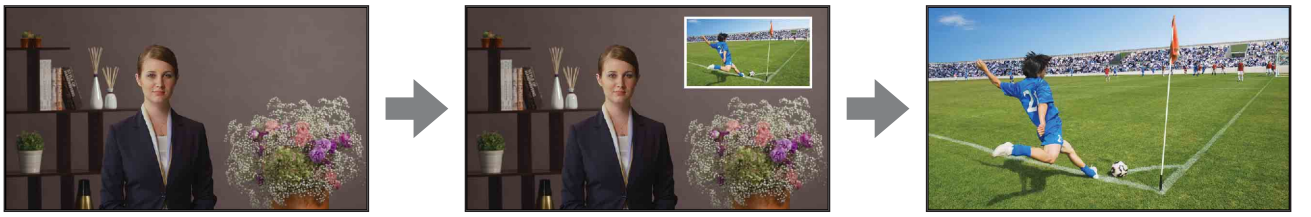
Wipe

The new video wipes across the screen using a wipe pattern.

Background A | Background B

DME wipe

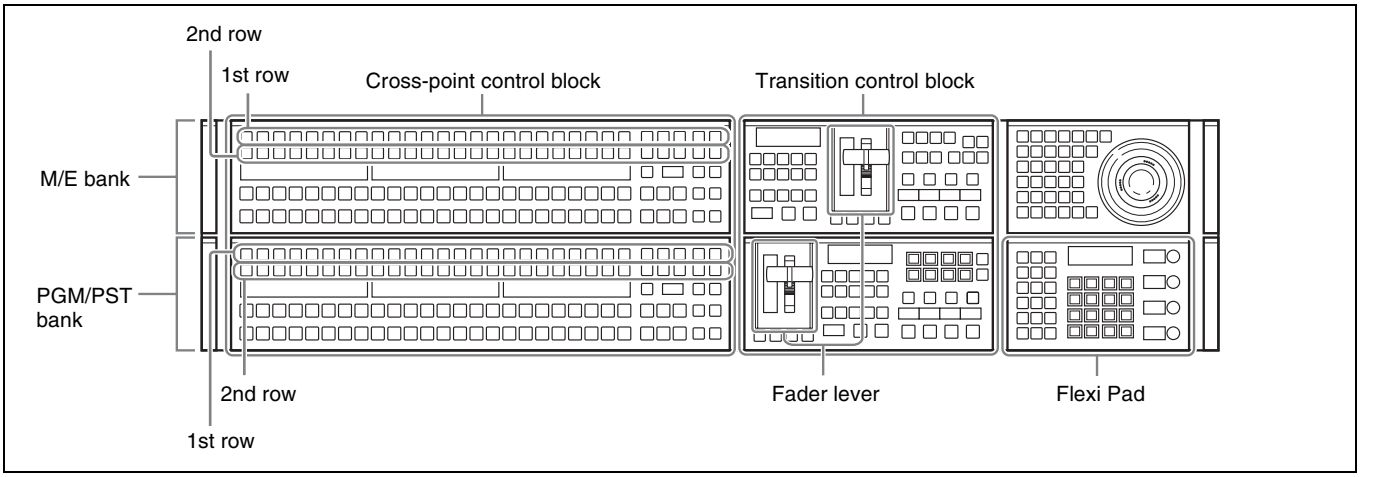
The video changes in a DME wipe pattern that uses image shrinking/magnification or other DME effects.



Background A　　Background B

Names of Parts in the Control Panel

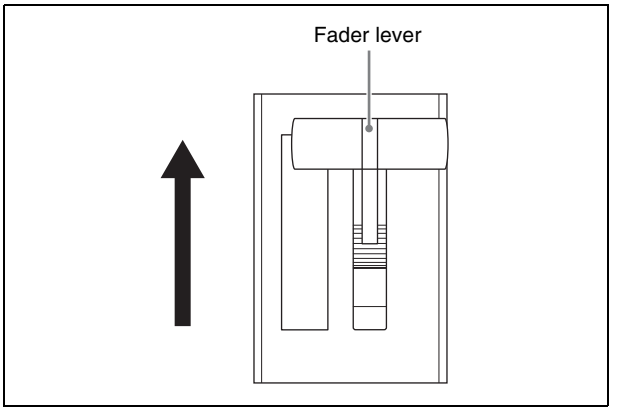
The positions of the principal parts and fader lever used in the following description are shown in the following figure.



Video Transitions using Cuts

In a cut, the video changes with the single press of a button. (The following describes the M/E bank, as an example.)

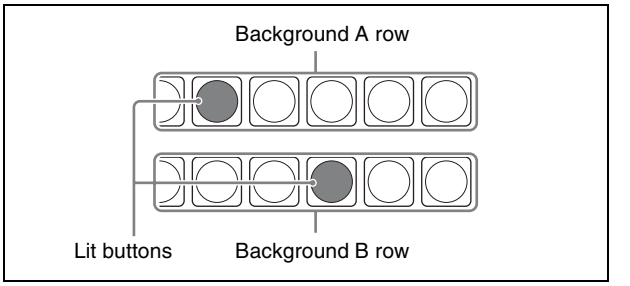
1 Push the fader level up.
(The background A video is displayed on the whole screen.)



Transition control block

2 Select the video you want to display first.

❶ In the background A row of the cross-point control block, press the cross-point button assigned with the selected video.



Cross-point control block

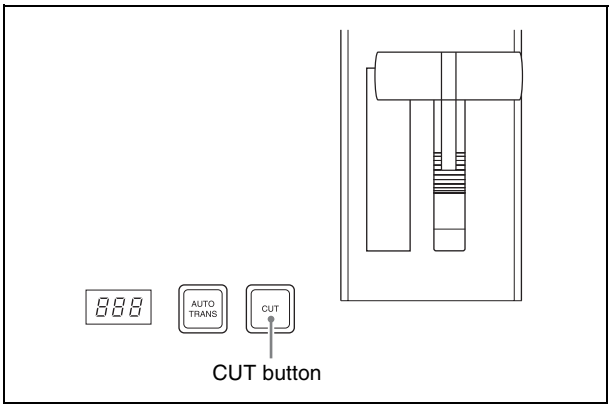
Background A video before the transition

3 Select the video you want to display after the transition.

❶ In the background B row of the cross-point control block, press the cross-point button assigned with the video for post-transition.

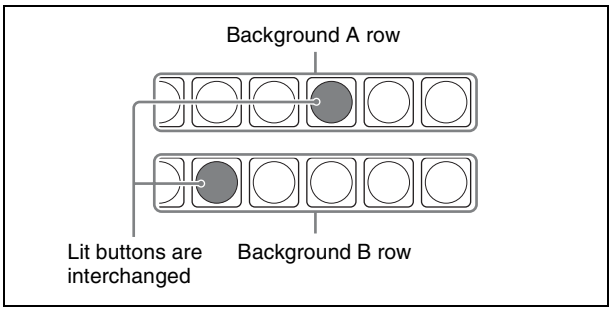
4 Execute the transition.

❶ Press the [CUT] button in the transition control block.



Transition control block

The transition is executed, interchanging the cross-points in the background A and B rows.



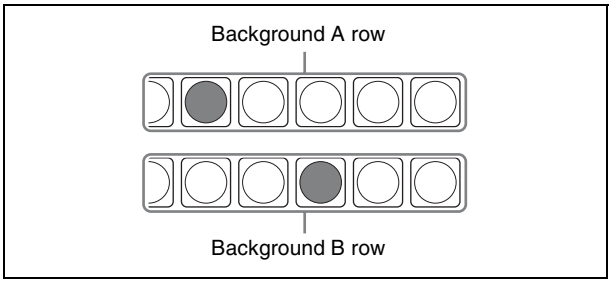
Cross-point control block

Background A video after the transition

Video Transitions using Wipes or Mixes

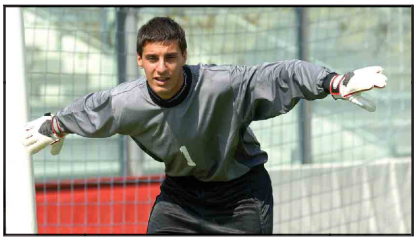
In a wipe or mix, the video changes gradually. (The following describes the M/E bank, as an example.)

1 Select the video you want to display first in the background A row, and then select the video to display post-transition in the background B row.



Cross-point control block

Background A video

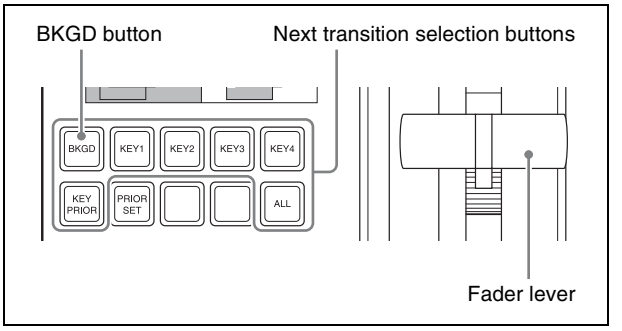


Background B video

2 Select the portion of the image to change using the transition.

Press one of the next transition selection buttons in the transition control block, turning it on.
- [BKGD] button: Changes the background.
- [KEY1] to [KEY4] buttons: Inserts (or deletes) key 1 to key 4, respectively.

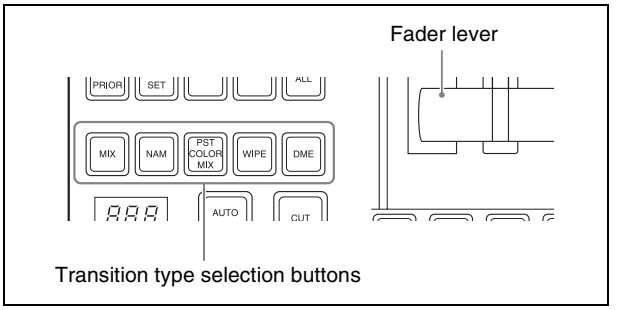
In this example, press the [BKGD] button.



Transition control block

3 Select the type of transition *(☞ p. 43)*.

Press one of the following transition type selection buttons, turning it on.
- [MIX] button: Go to step **5**.
- [NAM] button: Go to step **5**.
- [WIPE] button: Go to step **4**.
- [DME] (DME wipe) button: ☞ *p. 48*.



Transition control block

4 If WIPE is selected in step **3**, choose a wipe pattern.

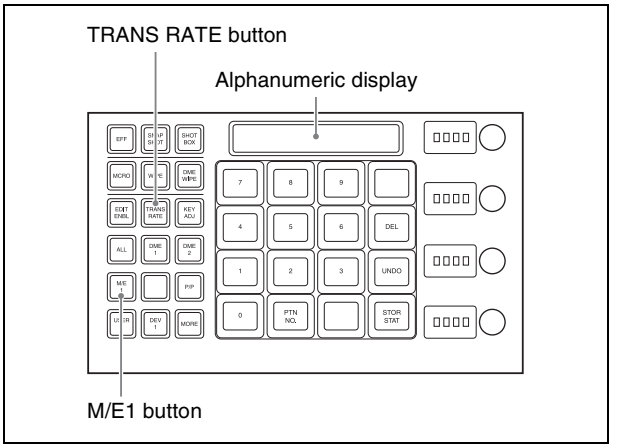
❶ Open the M/E-1 >Wipe >Main Pattern menu (1151).

Main Pattern menu

❷ Press the desired pattern to select it.
In this example, select “12”.

5 Set the transition rate.

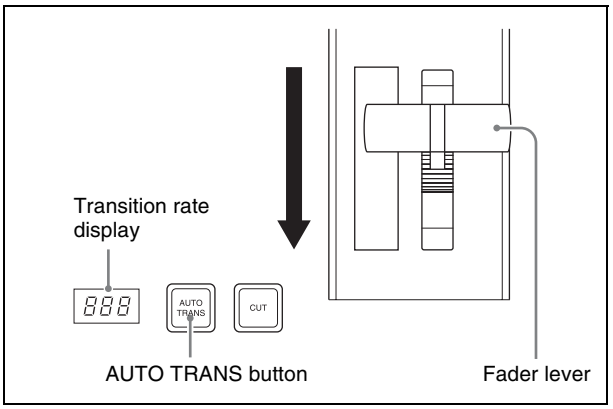
❶ In the Flexi Pad, press the [TRANS RATE] button.
❷ Press the [M/E1] button, turning it on.
❸ While viewing the alphanumeric display, enter the transition rate you want to set.
As an example, enter “20” (frames).
❹ Press the [ENTR] button.



Flexi Pad

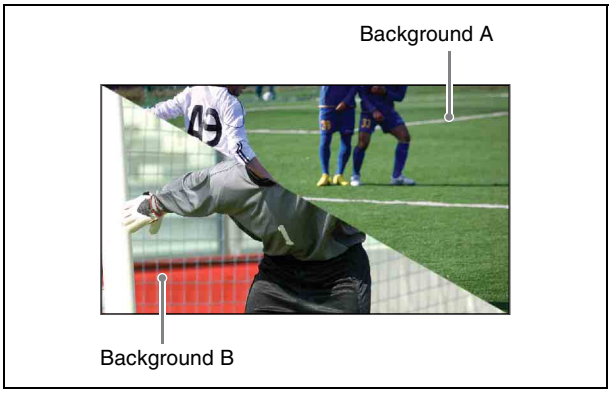
6 Execute the transition.

❶ Check the post-transition video on the preview monitor.
❷ Operate the fader lever.
In this example, pull the lever from top to bottom.



Transition control block

The output comprises 50% each of both background A and background B video when the fader lever is in the center position.



Mid transition state

Memo

When you press the [AUTO TRANS] button, the transition is executed automatically according to the set transition rate.

Saving DME Wipe Settings in a DME Wipe Snapshot

Notes

The optional DME board (MKS-6570) is required for DME wipes.

Setting Picture-in-Picture (DME Wipe)

Apply a border to the picture-in-picture pattern. (The following describes the M/E bank, as an example.)

1 Press the [BKGD] next transition selection button, turning it on *(☞ p. 46)*.

2 Press the [DME] transition type selection button, turning it on *(☞ p. 46)*.

3 Select a DME wipe pattern.

❶ Open the M/E-1 >DME Wipe >1ch menu (1161).

1 ch menu

❷ Select the DME wipe pattern group.
In this example, select [Frame I/O/P in P].

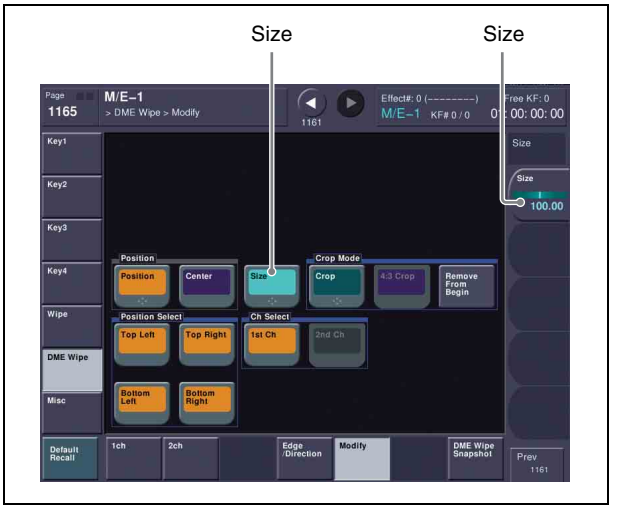
❸ Press the desired pattern to select it.
In this example, select “1251” (picture in picture) pattern.

❹ Move the fader lever to the top to check the DME effects video.

Before adjustment

4 Set the size of the DME wipe pattern.

❶ Open the M/E-1 >DME Wipe >Modify menu (1165).



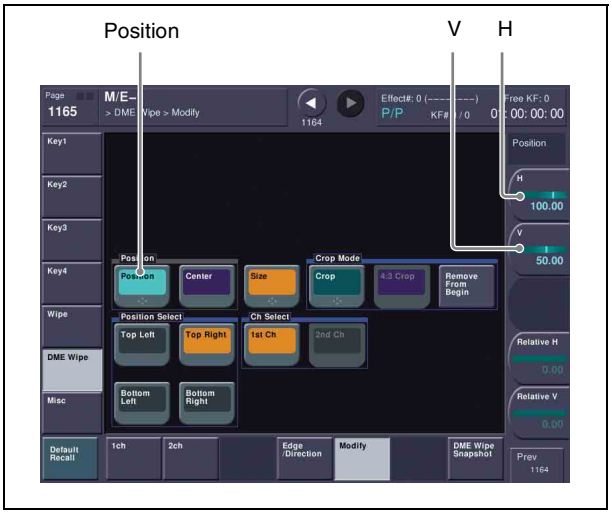
Modify menu

❷ Press [Size], turning it on.

❸ Adjust the [Size] parameter.

5 Set the position of the DME wipe pattern.

❶ In the <Position> group of the Modify menu, press [Position], turning it on.



Modify menu

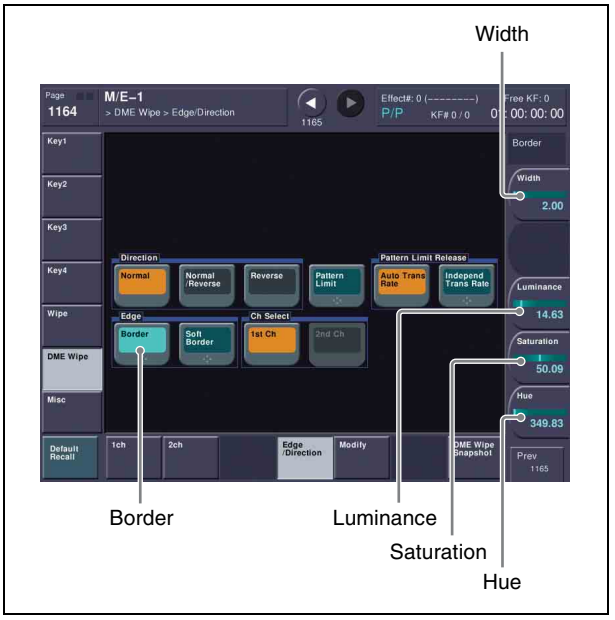
❷ Adjust the [H] parameter to set the horizontal position.

❸ Adjust the [V] parameter to set the vertical position.

Size and position adjustment

6 Set the border.

❶ Open the M/E-1 >DME Wipe >Edge/Direction menu (1164).

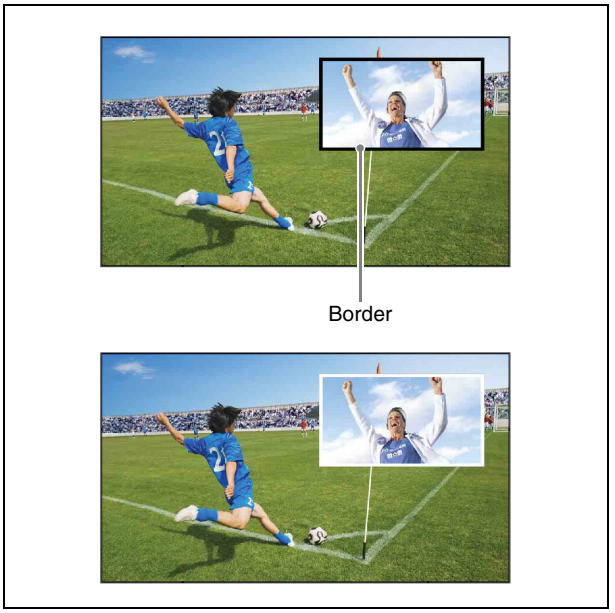


Edge/Direction menu

❷ In the <Edge> group , press [Border], turning it on.

❸ Adjust the [Width] parameter to set the width of the border.

❹ Adjust the [Luminance], [Saturation], and [Hue] parameters to set the color of the border.



Border color setting example

Saving/Recalling a DME Wipe Snapshot

A “snapshot” is a function where the various settings required to apply a particular effect to an image are saved in memory as a set of data, for recall as required, to reproduce the original conditions.
There are various kinds of snapshot. The description in this section uses a DME wipe snapshot.

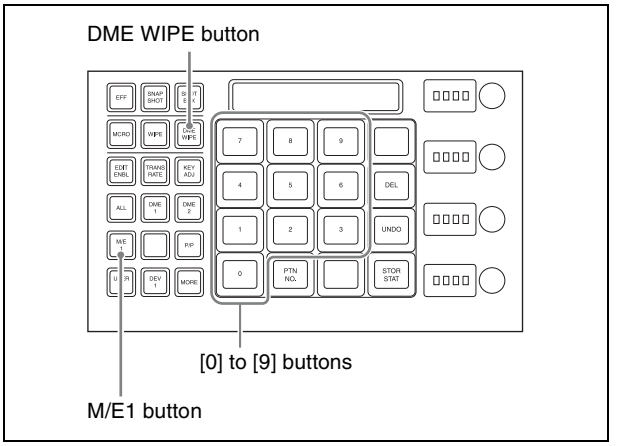
As an example, the picture-in-picture data configured in the previous section is registered as a DME wipe snapshot and then recalled to reproduce the image.
(The following describes the M/E bank, as an example.)

1 Register the DME wipe snapshot in a button.

❶ In the Flexi Pad, press the [DME WIPE] button.
❷ Press the [M/E1] button.
❸ Holding down the [DME WIPE] button, press the button you want to register (0 to 9).
The button lights yellow when successfully registered.

Notes

Buttons that are lit already have a registered DME wipe snapshot. Pressing one of these buttons will overwrite the existing contents.



Flexi Pad

2 To check that the DME wipe snapshot is registered correctly, use another operation to alter the settings and then recall the registered DME wipe snapshot.

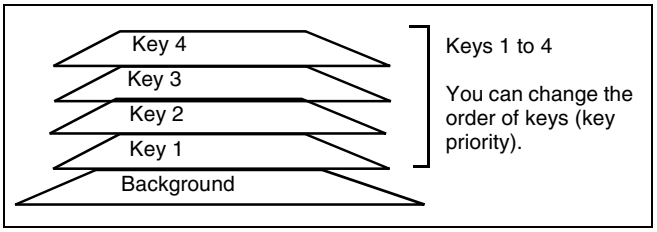
❶ Press the [DME WIPE] button.
❷ Press the [M/E1] button.
❸ Press the button registered in step **1**.
The registered DME wipe settings are immediately recalled.

Recalled DME wipe pattern and border setting

Inserting Titles (Keys)

What is a Key?

On the switcher, you can overlay video containing a title or other material occupying part of the screen (key) over the the video displayed on the whole screen (background). The component that processes keys is called a keyer.
There are four keyers available on each of the M/E and PGM/PST banks.
(There are eight keyers available on the MVS-6530 PGM/PST bank only.)



A key is comprised by a signal that describes how the background is cut out (key source) and the video signal that is inserted into that space (key fill).

Luminance keys and linear keys

These are keys that cut backgrounds using key sources generated by differences in luminance (for example, black and white).

Other keys

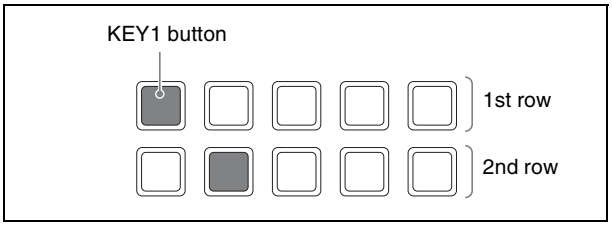
Chroma keys (keys that use differences in color), color vector keys (keys that use differences in color and brightness), and pattern keys (keys that use wipe patterns) are available.

Entering Titles using Luminance Keys

To insert a key, use the following procedure. (The following describes key 1 on the M/E bank, as an example.)

1 Select the title image.

❶ In the 1st row of the cross-point control block, press the [KEY1] button (the button assigned to KEY1 in the Setup menu), turning it on.
❷ In the 2nd row, select the title image (key fill).



Cross-point control block

Title image

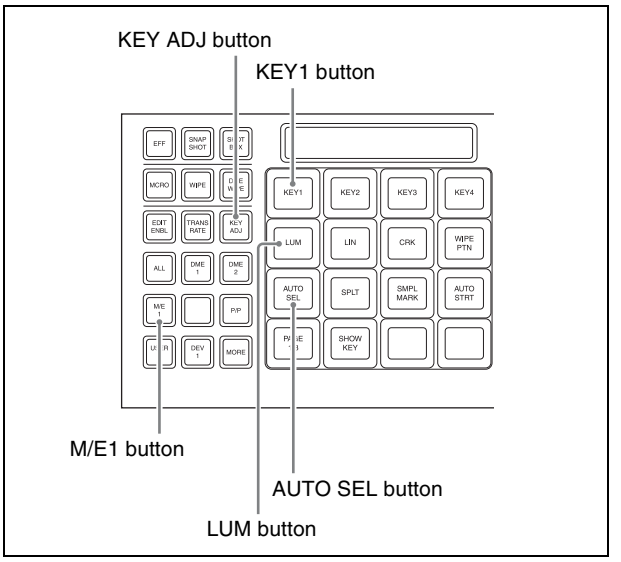
2 Select the background.

❶ In the background A row, press a cross-point button to select a background.

Background

3 Select the keyer, key source, and key type.

❶ In the Flexi Pad, press the [M/E1] button, turning it on.
❷ Press the [KEY ADJ] button, turning it on.
❸ Press the [KEY1] button, turning it on.
❹ Press the [LUM] button, turning it on.
❺ Press the [AUTO SEL] button, turning it on. (Uses key sources assigned in pairs.)



Flexi Pad

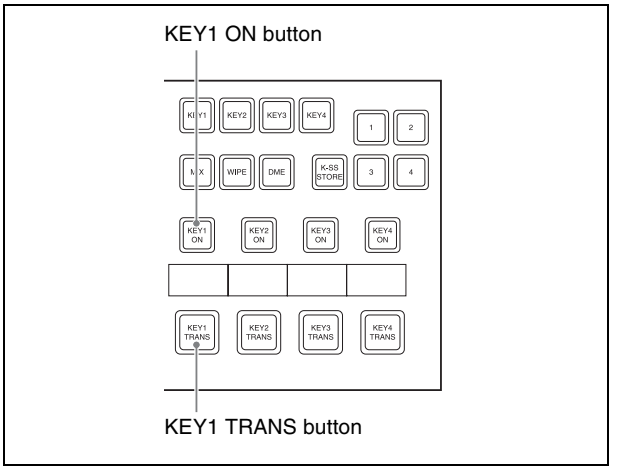
Key source (assigned in signal pair) for title video

4 Insert the key.

❶ Check the post-insertion video on the monitor assigned beforehand for key preview output.
❷ Press the [KEY1 ON] button in the transition control block.

Memo

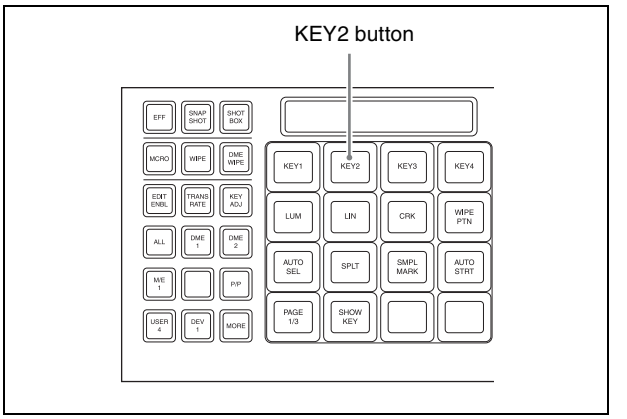
To insert the key using an auto transition, press the [KEY1 TRANS] button.



Transition control block

5 Insert keys 2 to 4.

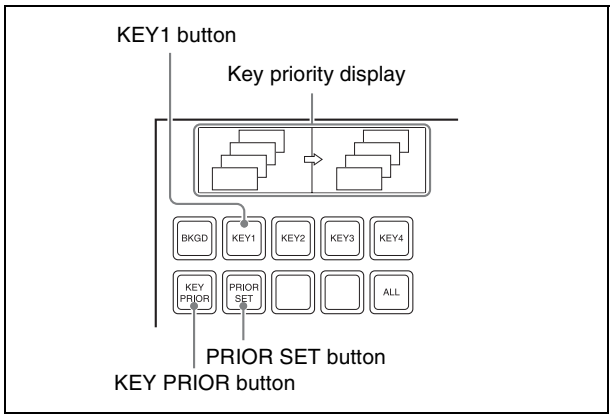
❶ Press the [KEY2] button, turning it on.
❷ Repeat steps **3** and **4** to insert key 2.
❸ Set key 3 and key 4, as required.



Flexi Pad

6 Change the key display priority.

❶ In the transition control block, press the [KEY PRIOR] button, turning it off.
❷ Holding down the [PRIOR SET] button, press the [KEY1] button.



Transition control block

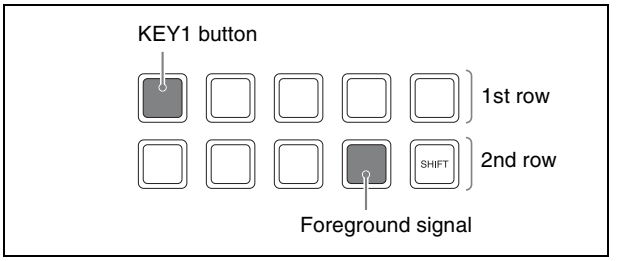
Key 1 and key 2 priority changed

Composing Images using Chroma Keys

Combine images of people and scenery using keys. (The following describes key 1 on the M/E bank, as an example.)

1 Select the key video.

❶ In the 1st row of the cross-point control block, press the [KEY1] button, turning it on.
❷ In the 2nd row, select the key video (foreground).



Cross-point control block

Foreground video

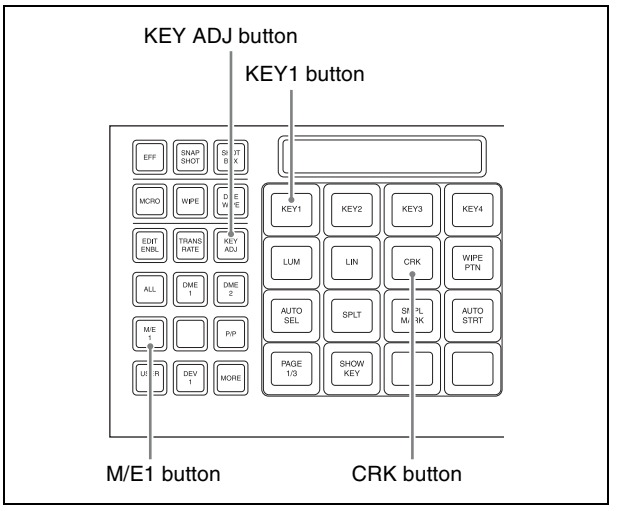
2 Select the background.

❶ In the background A row, press a cross-point button to select a background.

Background video

3 Select the keyer, key signal, and key type.

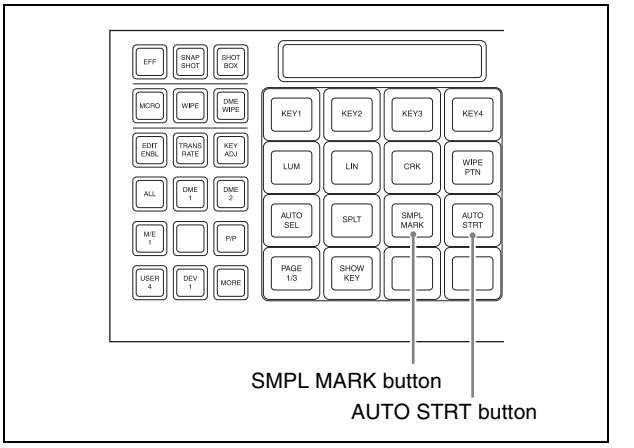
❶ In the Flexi Pad, press the [M/E1] button, turning it on.
❷ Press the [KEY ADJ] button, turning it on.
❸ Press the [KEY1] button, turning it on.
❹ Press the [CRK] button, turning it on.



Flexi Pad

4 Execute auto chroma key.

❶ Press the [SMPL MARK] button, turning it on. The foreground video only is output.
❷ Adjust the size and position of the sample mark using the knobs to specify the blue portion of the background.
❸ Press the [AUTO STRT] button.



Flexi Pad

Composited video using chroma keying

Memo

It is possible to move and magnify/shrink the key using a resizer or DME.

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