SONY

ES-7

3-856-429-**13**(1)

EditStation™

Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.

EDIT STATION™

ES-7

Owner's Record

The model and serial numbers are located at the rear. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. ES-7 Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

For the customers in the USA

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

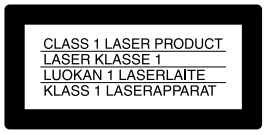
You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

CAUTION

The use of optical instruments with this product will increase eye hazard.

For the customers in Europe



This EditStation is classified as a CLASS 1 LASER PRODUCT. The CLASS 1 LASER PRODUCT label is located on the rear panel of the EditStation.

Voor de klanten in Nederland

- Deze set bevat een lithiumbatterij voor de memory back-up.
- De batterij voor memory back-up is vastgesoldeerd bij U23 op de printplaat.
- Raadpleeg uw leverancier over de verwijdering van de batterij op het moment dat u de set bij einde levensduur afdankt.
- Gooi de batterij niet weg, maar lever hem in als KCA.
- Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

NOTICE TO USERS

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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.

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Introduction to Editing Operations

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Features

The ES-7 EditStation™ is a video editing system that includes as built-in equipment all of the devices required for video editing. Powerful editing software running under the pre-installed Microsoft Windows NT[1)] operating system provides a graphical user interface that allows you to perform linear editing of video materials on tape and non-linear editing of materials on a disk recorder.[2)] The combination of easy-to-use editing software and expansion board developed especially for the EditStation enables the EditStation to function as an A/B roll editing system, video switcher, digital multi-effects, audio mixer, titler, and drawing platform. It supports a rich variety of analog and digital video signal formats and features a high-speed digital transfer function that enables you to transfer video data between the disk recorder and DSR-series VCRs at four times normal speed with no loss in video quality.

High-quality video compression

Dynamic video compression provides efficient storage of digital signals on the disk recorder. The compression ratio is adjusted to accommodate the amount of information in the data while preserving high video quality.

High-speed uploads and downloads

You can copy edit materials from DSR-series VCRs to the EditStation disk recorder (upload) and copy edit results from the EditStation disk recorder to DSR-series VCRs (download) at four times normal speed. The EditStation and DSR-series VCRs share a common internal format, eliminating the need for compression and decompression during uploads and downloads. This eliminates the deterioration in video quality which can result from copy operations.

Many advanced special effect functions

Optional special effects expansion boards with built-in video switcher functions are available to provide more than 300 high-quality special effects in real time. Installation of an additional optional expansion board provides advanced non-linear three-dimensional effects such as lighting, which depicts the object as if illuminated by a light source, and trail, which produces a trail across the video image.

Convenient graphics tools

Optional drawing software and an expansion board for drawing functions are available to provide superimposed graphics on video signals. This allows you to create graphics while checking the effect on the monitor. Lettering is provided by standard EditStation software (Text Composer) that can be used from the editing screen. This allows you to create titles and other lettering without the need to acquire a separate character generator. A file converter is also provided as a standard feature, allowing you to convert graphics data created with Photoshop[3)] and other graphics applications for use with this unit.

High-quality audio signal processing

The system features a digital audio mixer as standard equipment. If you install the optional digital input/output board, you can perform input and output of video and audio signals in completely digital formats. High-quality recording of analog audio input signals is also possible.

1) Windows NT is a trademark of Microsoft Corporation.
2) The disk recorder is a combination of the ESBK-7041 Disk Recorder Board and one or more ESBK-7045 Disk Units.
3) Photoshop is a registered trademark of Adobe Systems Incorporated.

Support for DSR-series VCRs

The EditStation can read and perform high-speed editing of MARK IN edit point video and MARK IN and MARK OUT edit point timecode recorded with DSR-series camcorders.

Easy operation

You can check the sequence of video clips in your EDL (Edit Decision List) in a single glance at the display on the computer monitor. Compared to conventional character-based systems, the visual display makes EDL operations easy and intuitive. You can move or insert video clips through simple drag-and-drop operations with the mouse, eliminating the need to learn complicated commands.

Compatible with wide variety of analog and digital systems

You can mix both analog and digital equipment in the same editing system, and combine linear and non-linear editing. This makes it easy to begin with an inexpensive analog editing system and upgrade it by adding digital and non-linear components.

Control panel

An optional control panel is available, featuring a jog/shuttle dial, a fader lever and other editing controls. Use of the control panel makes it easy to control VCR tape transport and perform fine adjustments of edit points.

Contents of the Package

The ES-7 EditStation package contains the following.

- ES-7 main unit (1)
- Power cord (1)
- Keyboard (1)
- Mouse (1)
- Extension cable for keyboard/mouse, length 4 m (2)
- Parallel GPD D-sub 15-pin connector (1)
- Software and online manual (CD-ROM disc) (1)
- Windows NT package (CD-ROM disc and manuals) (1)
- Operating Instructions (this manual) (1)
- Software License Agreement (1)
- User registration card (1)

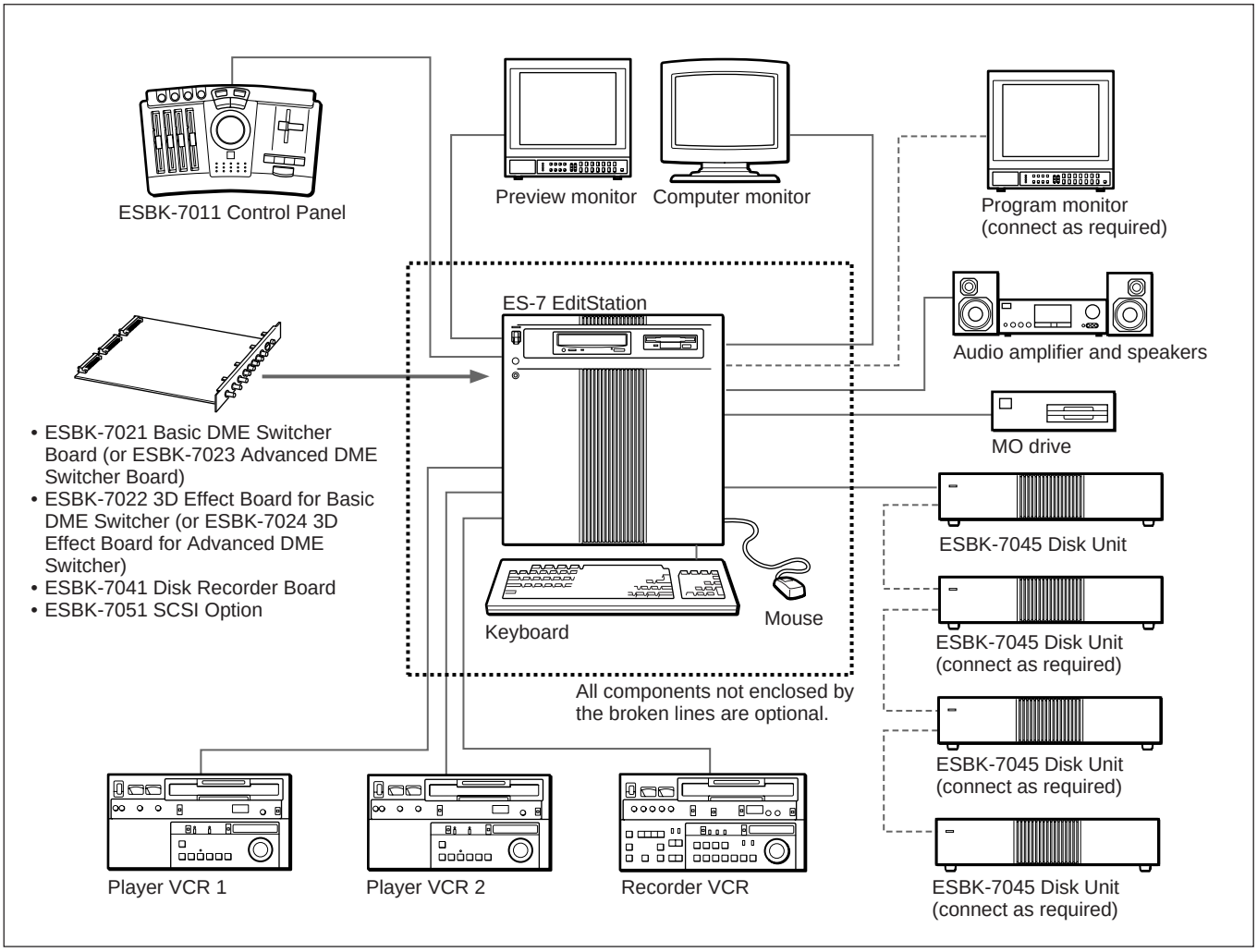
System Configuration

You can configure a variety of editing systems around the ES-7 EditStation. The main types are as follows.
• Analog hybrid editing system
• Digital hybrid editing system
• Digital non-linear editing system
• Analog linear editing system
The following sections show how each type of editing system is configured.

Analog Hybrid Editing System

As the video switcher, this system employs the optional ESBK-7021 Basic DME Switcher Board or ESBK-7023 Advanced DME Switcher Board. As the three-dimensional effects processor, it employs the optional ESBK-7022 3D Effect Board for Basic DME Switcher or ESBK-7024 3D Effect Board for Advanced DME Switcher.
The configuration includes two analog player VCRs and one analog recorder VCR. This enables hybrid editing, which is the application of special effects while switching between video stored on the disk recorder and video stored on tape.

For editing with a large number of short cuts, video clips can be copied from tape to the disk redorder. This improves editing efficiency by taking advantage of the rapid cue-up times for clips stored on disk. Longer cuts can be recorded directly from tape, saving the time required to copy clips to the disk recorder. Depending on the materials and contents of the edit, you can choose whichever method is most efficient.
The results of the edit are recorded on tape by the recorder VCR. The MO drive is used to store and access edit data.

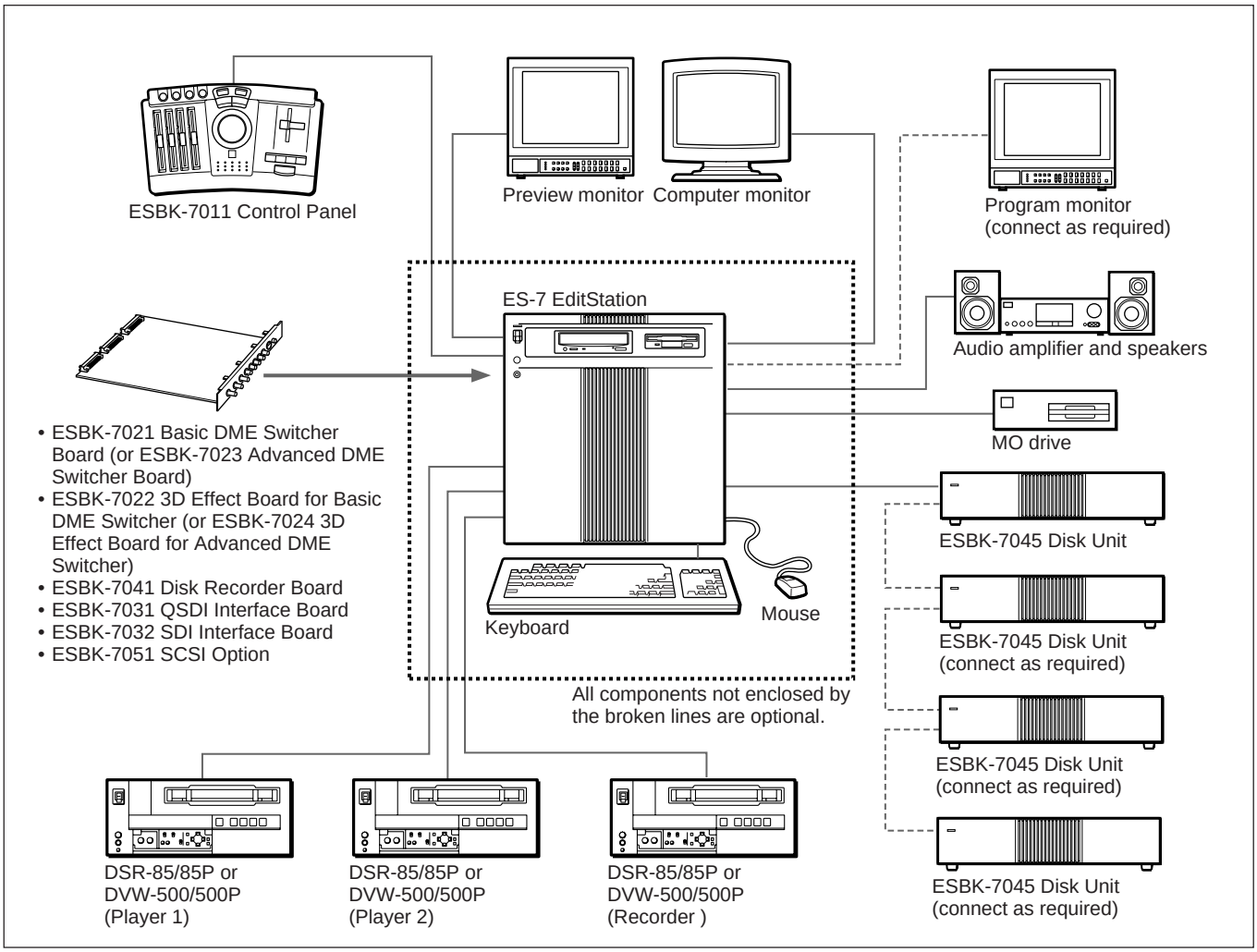


Analog hybrid editing system

Digital Hybrid Editing System

As the video switcher, this system employs the optional ESBK-7021 Basic DME Switcher Board or ESBK-7023 Advanced DME Switcher Board. As the three-dimensional effects processor, it employs the optional ESBK-7022 3D Effect Board for Basic DME Switcher or ESBK-7024 3D Effect Board for Advanced DME Switcher.

The configuration includes DSR-series or digital Betacam player and recorder VCRs. This enables hybrid editing, which is the application of special effects while switching between video stored on the disk recorder and video stored on tape.
The results of the edit are recorded on tape as digital data by a digital VCR. The MO drive is used to store and access edit data.

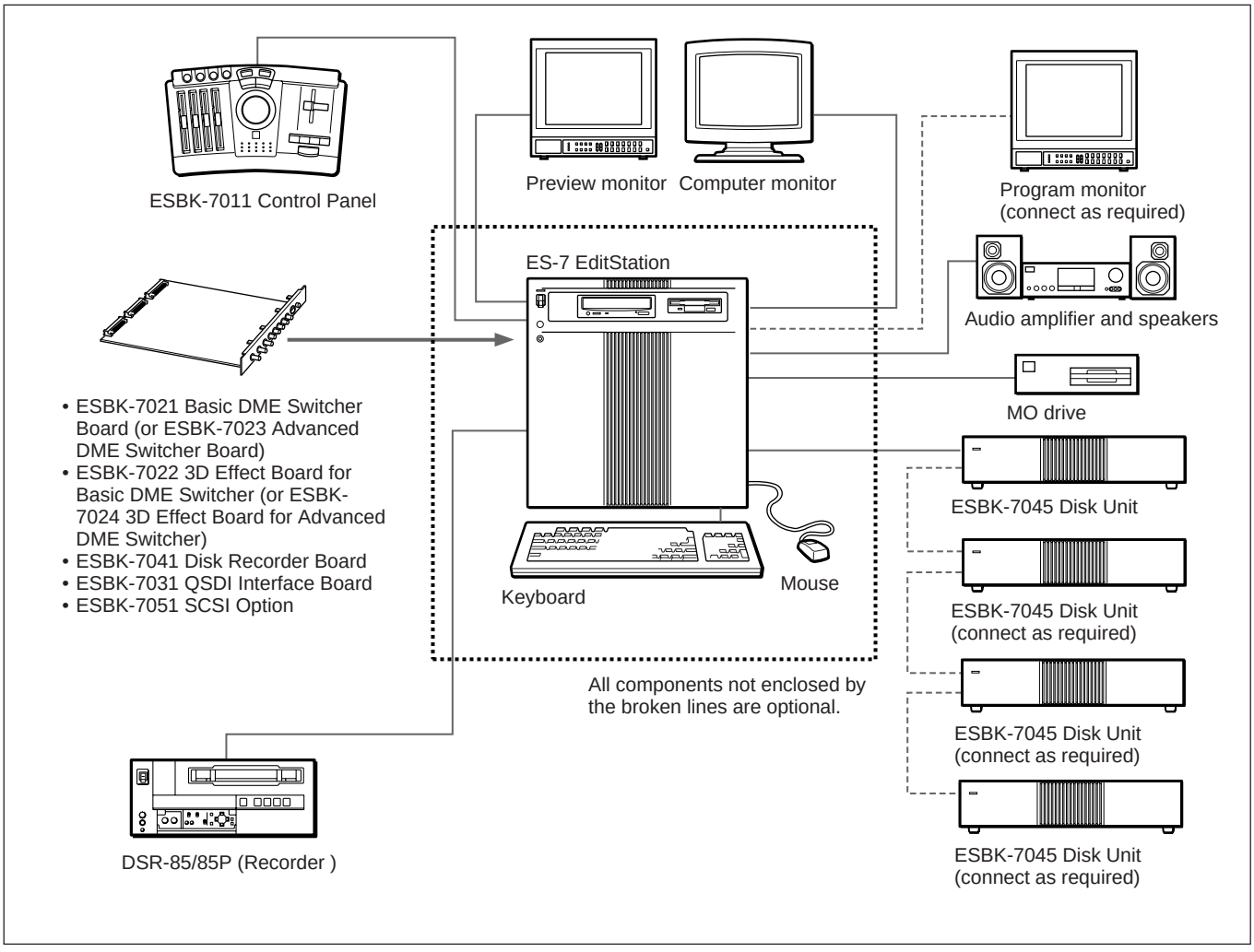


Digital hybrid editing system

Digital Non-Linear Editing System

As the video switcher, this system employs the optional ESBK-7021 Basic DME Switcher Board or ESBK-7023 Advanced DME Switcher Board. As the three-dimensional effects processor, it employs the optional ESBK-7022 3D Effect Board for Basic DME Switcher or ESBK-7024 3D Effect Board for Advanced DME Switcher.

A DSR-series digital VCR is connected as the recorder. Materials for editing are uploaded from the digital VCR to the system's hard disks at four times normal speed. Editing is non-linear, employing data stored on the disk recorder. The results of the edit are downloaded to the digital VCR at four times normal speed. The MO (magneto-optiocal disk) drive is used to store and access edit data.

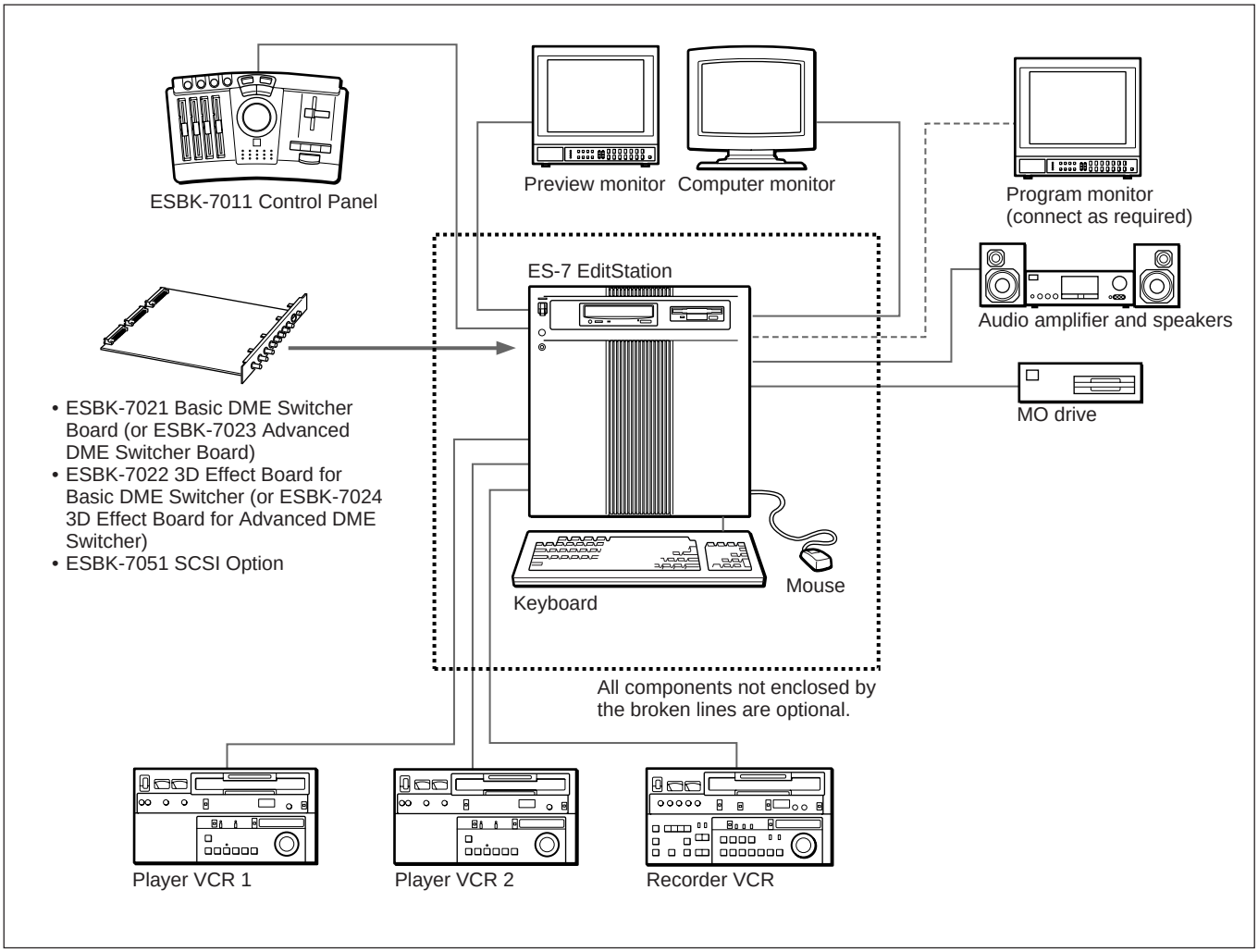


Digital non-linear editing system

Analog Linear Editing System

As the video switcher, this system employs the optional ESBK-7021 Basic DME Switcher Board or ESBK-7023 Advanced DME Switcher Board. As the three-dimensional effects processor, it employs the optional ESBK-7022 3D Effect Board for Basic DME Switcher or ESBK-7024 3D Effect Board for Advanced DME Switcher.

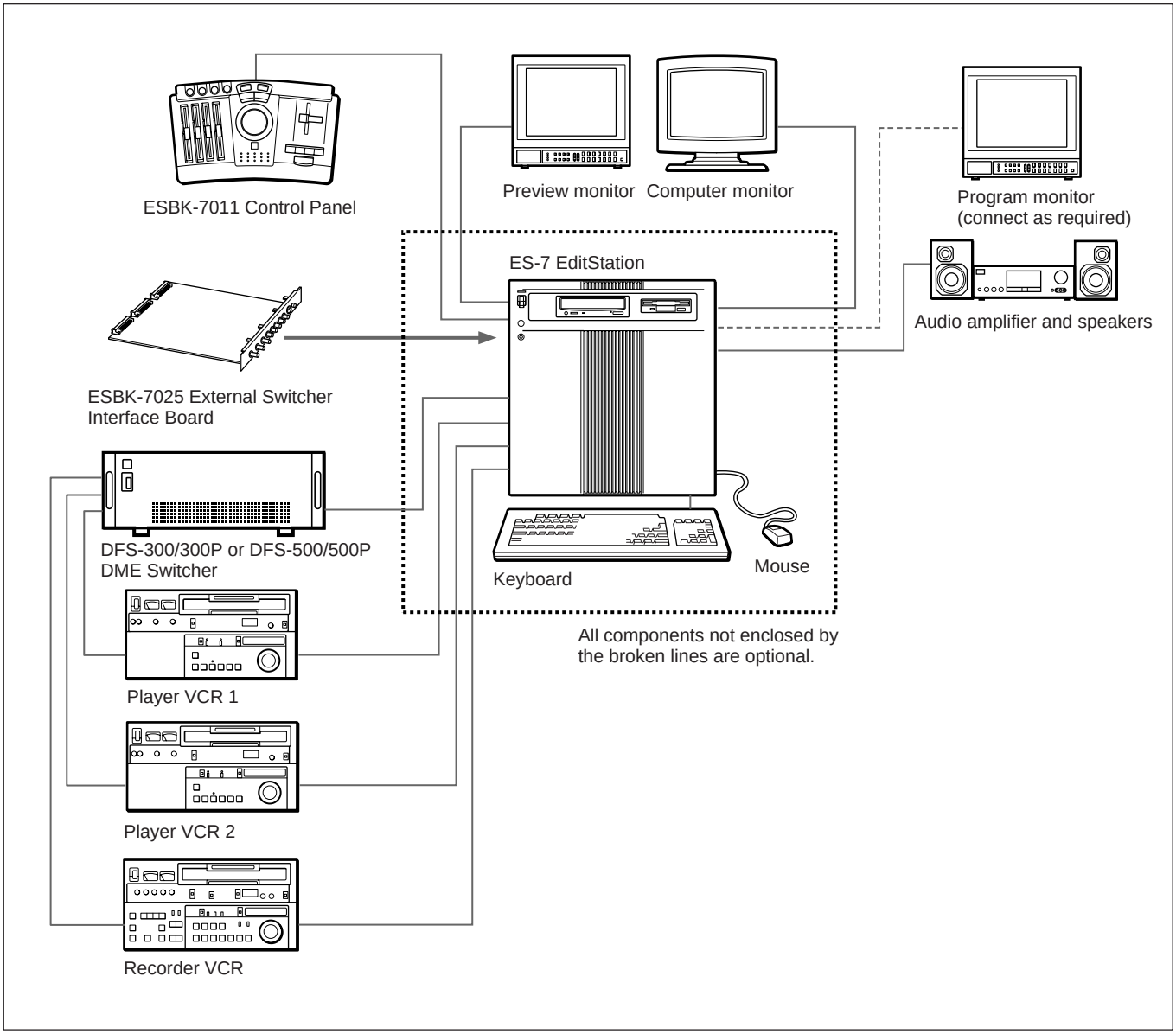
Two analog VCRs are connected as players, and one analog VCR is connected as the recorder.
This system permits tape-based linear editing only. The results of the edit are recorded on tape by the recorder. The MO drive is used to store and access edit data.



Analog linear editing system

Analog Linear Editing System With External Switcher

If you already own a DFS-300/300P or DFS-500/500P DME Switcher, you can combine the EditStation and your current switcher.
This system employs a DFS-300/300P or DFS-500/500P DME Switcher as the video switcher and effects processor. Two analog VCRs are connected as players, and one analog VCR is connected as the recorder. This system permits tape-based linear editing only.



Analog linear editing system with external switcher

Optional Components and Software

Optional System Upgrade Devices

ESBK-7045 Disk Unit

This is a hard disk drive for storage of video and audio signals. The fast random access of the hard disk means that any part of the data can be accessed quickly. Unlike clips stored on tape, clips stored on a disk unit can be cued up instantly. In high-quality mode, one disk unit can store up to one hour of video. Up to four disk units can be connected to the EditStation.

ESBK-7041 Disk Recorder Board

This board installs in a slot on the motherboard of the EditStation. It controls the ESBK-7045 Disk Unit and enables non-linear editing using data on the disk unit.

ESBK-7011 Control Panel

This is a control panel for the EditStation featuring a jog/shuttle dial, a fader lever, adjustment knobs, MARK IN and MARK OUT buttons, and other editing controls. Use of the control panel makes it easy to control tape transport, adjust edit points, and manually specify the timing of edit transitions.

Optional Expansion Boards

ESBK-7021 Basic DME Switcher Board

This is a set of two expansion boards that install in slots on the motherboard of the EditStation. The boards provide video and audio switcher functions and two-dimensional DME (Digital Multi-Effects) functions. They also provide color correction, a downstream keyer, and a chroma key function.

ESBK-7022 3D Effect Board for Basic DME Switcher

This is a daughter board that installs on the Basic DME Switcher Board. It provides linear and non-linear three-dimensional special effects.

ESBK-7023 Advanced DME Switcher Board

This is a set of two expansion boards that install in slots on the motherboard of the EditStation. The boards provide video and audio switcher functions and two-dimensional DME (Digital Multi-Effects) functions. They also provide color correction, a downstream keyer, and a chroma key function. Compared to the Basic DME Switcher Board, these boards provide even higher picture quality, enabling the addition of a wide variety of advanced special effects.

ESBK-7024 3D Effect Board for Advanced DME Switcher

This is a daughter board that installs on the Advanced DME Switcher Board. It provides linear and non-linear three-dimensional special effects.
It also provides lighting and trails effects.

ESBK-7025 External Switcher Interface Board

This is an expansion board that installs in a slot on the motherboard of the EditStation.
It enables control of DFS-500/500P or DFS-300/300P DME Switcher from the EditStation while playing back VCR tapes for linear editing.

ESBK-7031 QSDI Interface Board

This is an expansion board that installs in a slot on the motherboard of the EditStation. It enables input and output of QSDI video signals and AES/EBU digital audio signals. Install this board when you wish to connect equipment such as a DSR-series VCR, a CD player, or a DAT (Digital Audio Tape) recorder and player for input and output of digital audio signals.

ESBK-7032 SDI Interface Board

This is a daughter board that installs on the ESBK-7031 QSDI Interface Board. It provides input and output of digital video signals in the component digital format (D1 format). Install this board when you wish to connect equipment such as a DSR-series digital VCR or a DVW-series digital Betacam VCR. This board is required to perform digital linear editing with the EditStation and a DSR-series VCR.

ESBK-7051 SCSI Option

This is an expansion board that installs in an ISA slot of the EditStation to enable connection of an external MO drive (recommended connection cable: ESBK-7053). The MO drive is used to exchange edit data, including index pictures of video clips, with external equipment.

ESBK-7052 Ethernet Option

This is an expansion board that installs in an ISA slot of the EditStation. It enables you to connect the EditStation to an Ethernet[1)] network. Install this board when you wish to use a network to exchange graphics or index pictures and other edit data.

Additional Memory Set ESBK-7054

This is an expansion memory kit for the ES-7 EditStation. It is made up of two memory modules and provides a memory capacity of 64 MBytes.

Optional Software Products

ESBK-7071 ESDraw™

This is a drawing program for the EditStation, provided on CD-ROM (Compact Disc Read-Only Memory). It is supplied with an adapter board which, when installed in the EditStation, enables you to perform drawing operations and view the results on a video monitor while other processing is performed in the background. An online manual explaining how to use the software is provided together with the software on the CD-ROM disc.

ESBK-7092E Operation Manual

This is a printed manual that provides detailed information about how to use ESDraw.
The contents of this manual are also provided on the ESBK-7071 ESDraw CD-ROM disc.

Related Manuals

The EditStation is supplied with a CD-ROM disc that contains an online manual with detailed operating instructions. The online manual is also available in a printed version as the ESBK-7091E EditStation Operation Manual.
The contents of the EditStation manuals are as follows.

- **Operating Instructions (this manual)**

This manual provides an overview of the system, information about installation and connections, and basic operating instructions. It also explains how to use the online manual and provides information about specifications and other supplementary topics.
After purchasing the unit, read this manual for information about installation, connections, and basic operating procedures.

- **Online Manual (supplied on CD-ROM) and Operation Manual (optional printed manual)**

These manuals provide detailed instructions about how to operate the EditStation. Refer to these manuals for details of operation and installation which are not covered in the Operating Instructions.

1) Ethernet is a registered trademark of FUJI XEROX CO., LTD.

Starting and Shutting Down the System

This chapter explains how to start and shut down the system, how to use the mouse and keyboard, and how to perform window operations. The operations described here are used by all editing functions.

Note

The software must be set up when you use the unit for the first time.

For more information about setting up the software, see "Setting Up Windows NT (Using the Unit for the First Time)" (page 88).

Starting the System

When you power the system on, a screen appears asking you to enter your user name and password. This is the logon screen, designed to prevent unauthorized use by non-registered users.
In the factory default configuration, you can begin using the EditStation immediately, simply pressing the Enter key without entering a user name and password at the logon screen.
If you wish to limit use of the EditStation to specific users, you can register their user names and passwords.

For details, see "Registering User Names and Passwords" (page 91).

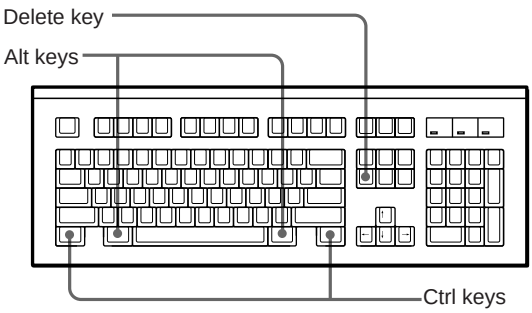
To launch the system software, proceed as follows.

1 Power on the system hardware in the following order.
1) Computer monitor, MO drive, printer and other peripherals, and VCRs, video monitor, audio amplifier or audio monitor system
2) EditStation main unit

Powering on (or off) the EditStation main unit causes the ESBK-7045 Disk Unit to be automatically powered on (or off).

After a few moments, the message "Press Ctrl + Alt + Del to log on." appears.

2 Press the Delete key while holding down the Ctrl and Alt keys.



(Continued)

The logon screen appears.
The meanings of the fields in the logon screen are as following.

Username: The name registered when the EditStation is shipped from the factory is “Administrator”. If other user names have been registered, the name of the user who used the system most recently is displayed.

Password: Nothing is registered for this field when the EditStation is shipped from the factory. If you have registered a password, enter it in this field.

3 Enter your user name.

When you move the pointer to the user name field, its shape changes from an arrow to a vertical line. When its shape changes, click the left mouse button. The cursor in the user name field begins to blink to indicate that you can enter your user name.
You do not need to carry out this step unless you have changed the factory default assignment and wish to use a user name other than the name displayed.

For more information about using the mouse, see page 20.
For more information about using the keyboard, see page 22.

4 Enter your password.

Move the pointer to the password field, click the left mouse button and enter your password. The characters that you type are masked on the screen, appearing as a row of asterisks (*****).
You do not need to carry out this step unless you have registered a password. No password is registered when the EditStation is shipped from the factory.

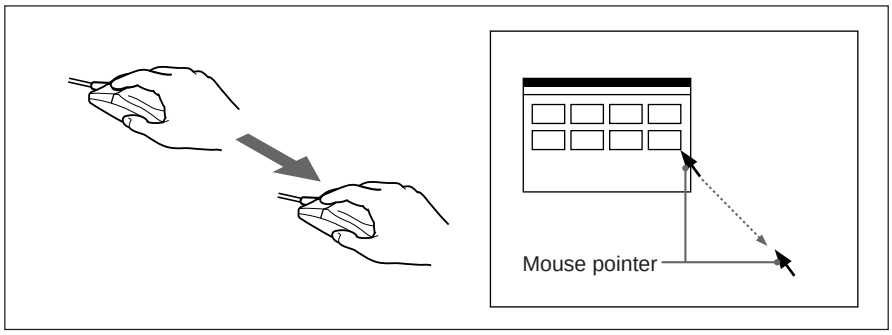
5 Press the Enter key on the keyboard, or move the pointer to the OK button and click.

The logon procedure is completed and the desktop appears on the screen.
You will use this window when you start to use the EditStation, and when you turn off the power after use.

Using the Mouse

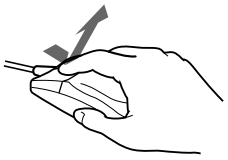
Moving the pointer

Learn how to use the mouse pointer by moving the mouse and checking the movement of the pointer on the screen.



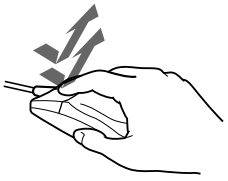
Clicking

Pressing the left button of the mouse and then releasing it immediately is called “clicking”. For example, “click the icon” means to move the pointer over an icon, press the left mouse button, and then release it. (Icons are pictures on the screen which represent programs and files.)
Unless an explanation specifically instructs you to “click the right mouse button”, clicking is always done with the left mouse button.



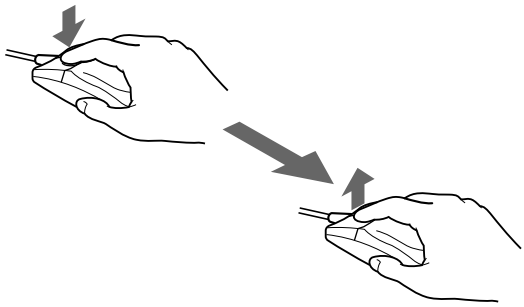
Double clicking

Pressing the left button of the mouse and releasing it twice in rapid succession is called “double clicking”. Note that if the interval between the two clicks is too long, they are treated as two separate clicks, not as a double click.
You launch the EditStation editing software by double clicking the EditStation icon.



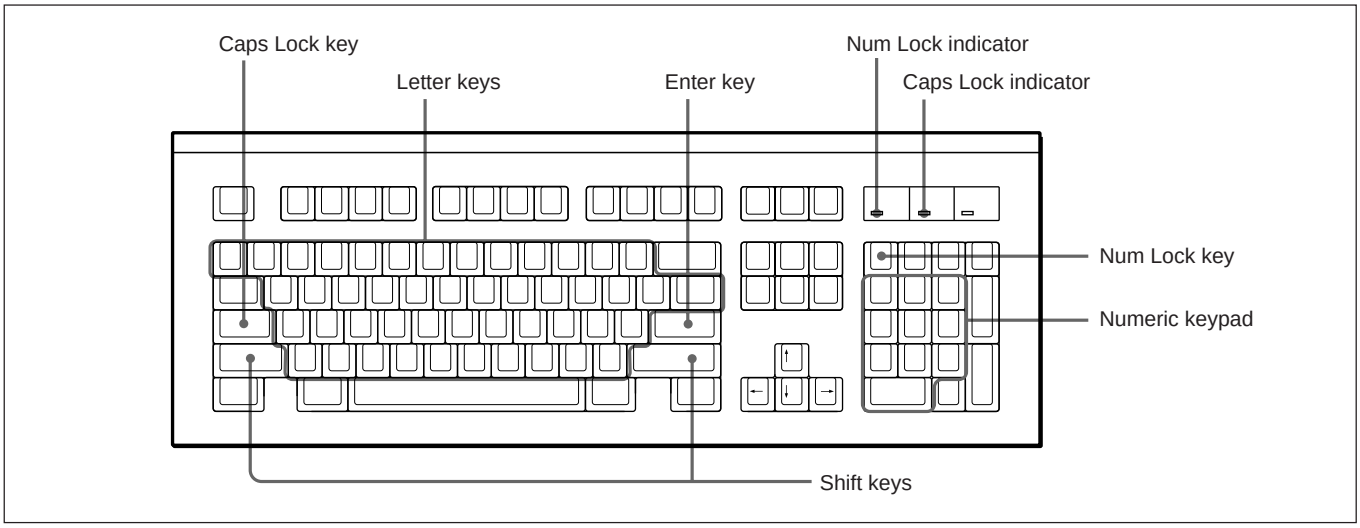
Dragging

Using the mouse to move icons and windows on the screen is called “dragging”. To drag an item on the screen, move the pointer over the item, press the left mouse button, and while keeping the mouse button pressed move the pointer to the location where you want to move the item. The movement stops at the point where you release the mouse button.
In the EditStation software, you can drag pictures of video clips to arrange them in the desired recording order.



Using the Keyboard

Entering text and numbers



Entering uppercase and lowercase letters

To enter a lowercase letter or number, press the corresponding key. To enter an uppercase letter, press the corresponding key while pressing the Shift key.

Entering all uppercase letters

To enter all uppercase letters, press the Caps Lock key while pressing the Shift key so that the Caps Lock indicator lights. All of the letters that you enter will be uppercase letters.

To cancel entry of all uppercase letters, press the Caps Lock key again while pressing the Shift key so that the Caps Lock indicator goes out.

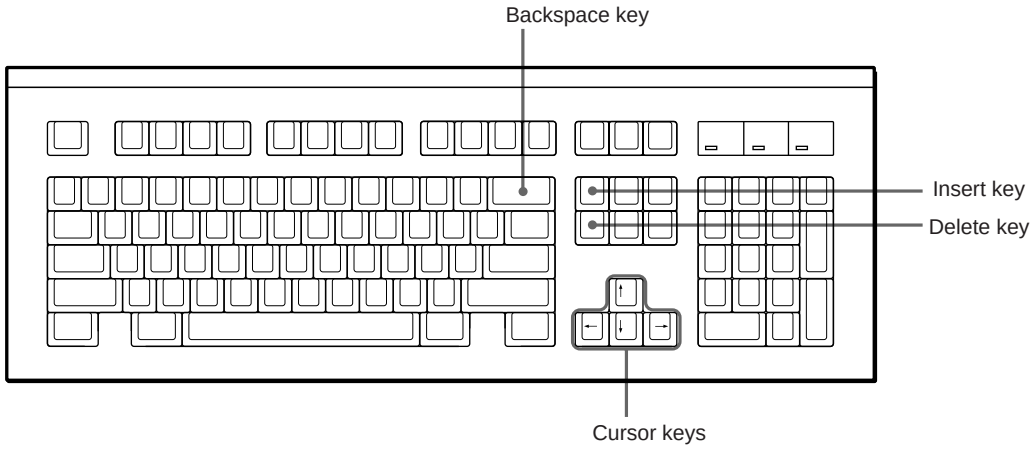
Entering new lines and confirming input

To enter a new line, press the Enter key. In dialog boxes, press the Enter key after entering a file name or other input text to confirm the input.

Entering a series of numbers

The numeric keypad is convenient for entering a series of numbers. To enter numbers with the numeric keypad, Press the Num Lock key so that the Num Lock indicator lights.

If you press the Num Lock key so that the Num Lock indicator goes out, the keys on the numeric keypad function as cursor keys, page movement keys, delete key and so on.



Deleting text

To delete the letter before the cursor, press the Backspace key.
To delete the letter after the cursor, press the Delete key.

Moving the cursor

To move the cursor, press the ←, →, ↑ and ↓ keys.

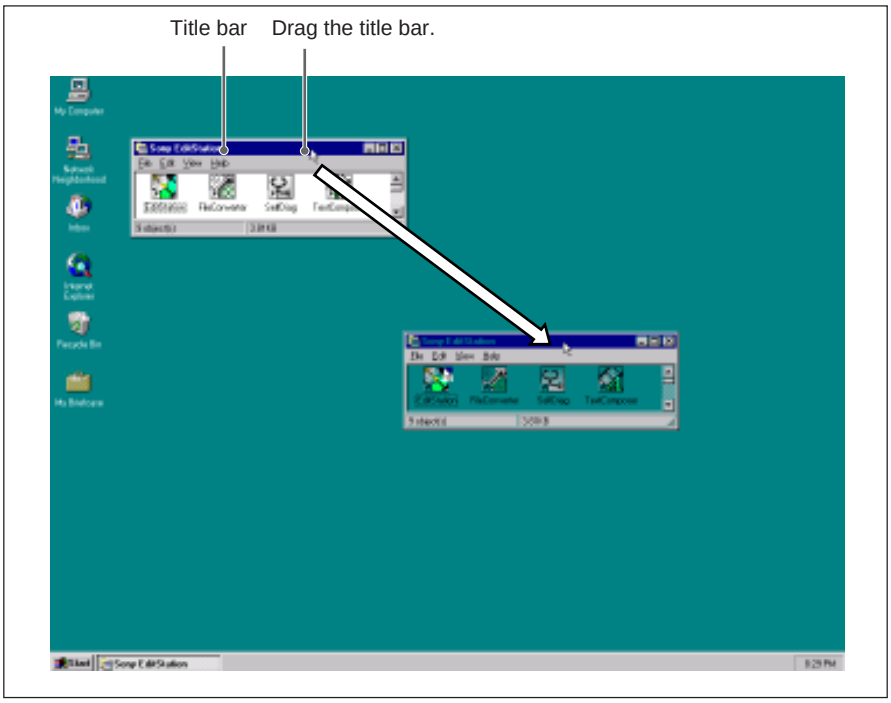
Switching between insert mode and overwrite mode

To switch between insert mode and overwrite mode, press the Insert key. Each press of the key selects insert mode or overwrite mode.
In insert mode, a letter is inserted at the cursor position when you press a key. The letter that was formerly at the cursor position is shifted to the right.
In overwrite mode, the letter that was formerly at the cursor position is replaced by the new letter when you press a key.

Using Windows

Moving windows

To move a window, move the pointer to the window's title bar and drag it to the desired position.



Changing the size of a window

Changing the window size by clicking the window size buttons

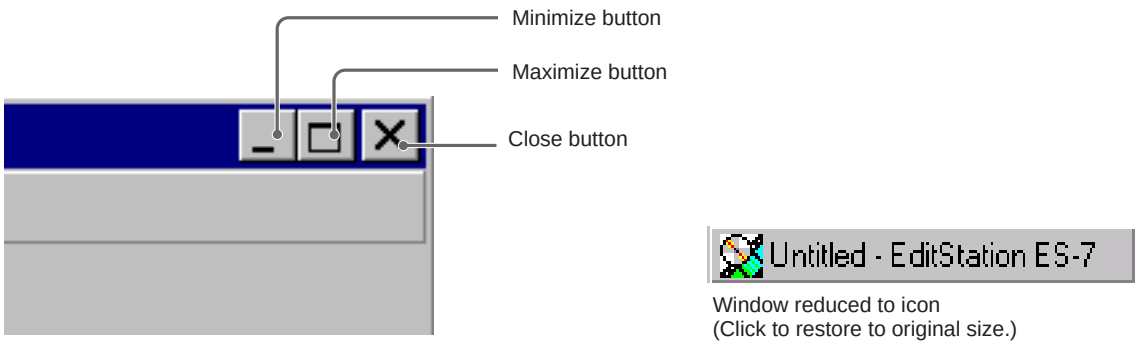
You can use the buttons in the upper right corner of a window to change the size of the window.

To maximize the window, click the □ button.

To restore the window to its original size, click the 🗗 button.

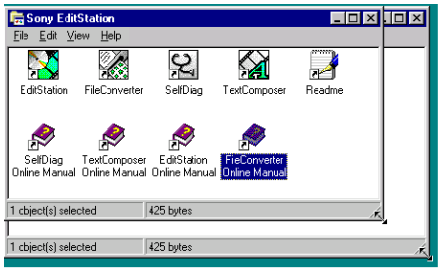
To reduce the window to an icon, click the _ button. The icon appears in the taskbar or near the lower edge of the screen. The window returns to its original size when you double click the icon.

To completely close the window, click the ✕ button.

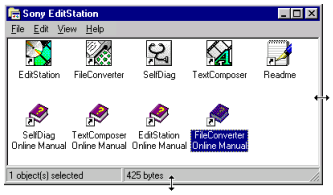


Changing the window size by dragging the borders

Whenever the window is not at maximum size, you can drag any of the four corners of the window to freely adjust its size.
You can also drag the left and right borders to change the window's width or drag the top and bottom borders to change its height.



Change the size



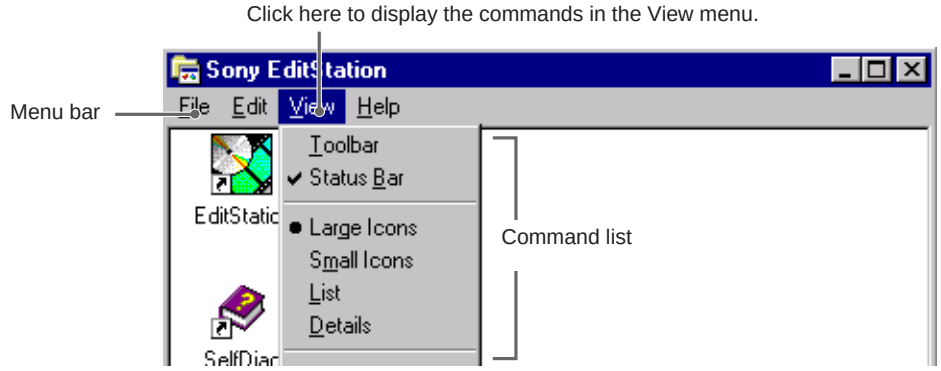
Change the width

Change the height

Selecting menu commands

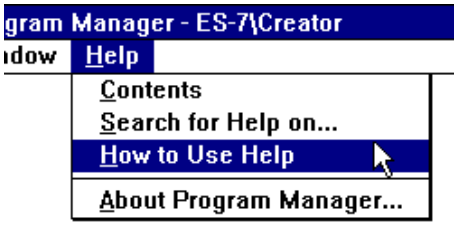
Displaying a menu command list

Directly below the title bar of a window is the menu bar. A list of menu commands appears when you click an item in the menu bar.



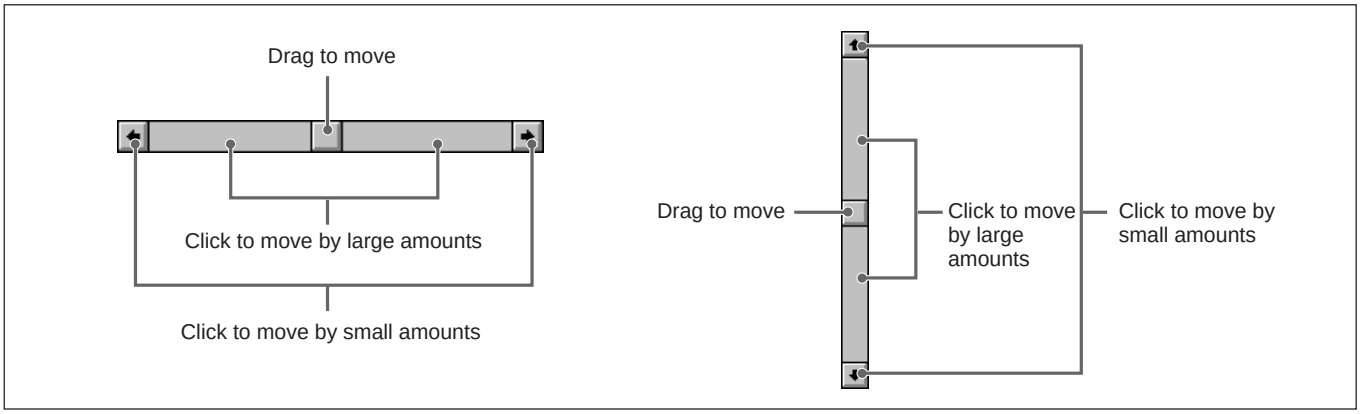
Selecting a menu command

With the command list displayed, keep the left mouse button pressed with the pointer over the command that you want to select. The command is highlighted and executed when you release the mouse button. This operation is called “selecting a menu command”.
The following example shows how to select the “How to Use Help” command from the Help menu.



Scrolling to view more information

If a picture or document is too large to fit on the screen, scroll bars like the ones shown below are displayed. You can use the scroll bars to move the display area up or down, or left and right.



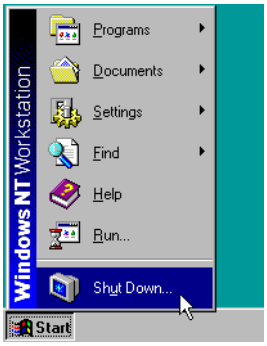
Shutting Down the System

When you have finished using the editing software, use the following procedure to turn off the power. In this manual, turning off the power is referred to as “shutting down” the system.

For more information about using the mouse, see page 20.

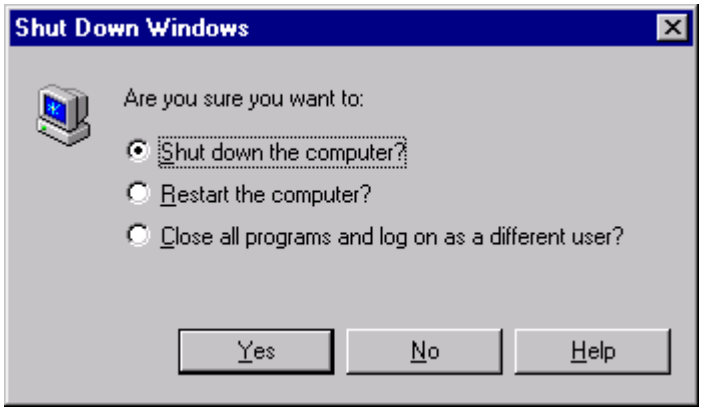
1 Move the pointer to the Start button on the taskbar and click the left mouse button.

The Start menu is displayed.



2 Move the pointer to “Shutdown” and click the left mouse button.

The Shut Down Windows dialog box appears.



3 Click “Shut down the computer?” and then click the Yes button.

After a few moments, the message “It is now safe to turn off your computer.” appears.

4 Turn off the power.

Note

This unit is equipped with an internal hard disk for storage of system files and data other than video clips. Do not turn off the power before the message “It’s now safe to turn off your computer.” appears. Doing so can damage the data on the unit’s hard disk. In the worst case, you may not be able to start the system again.

Backing up hard disk data

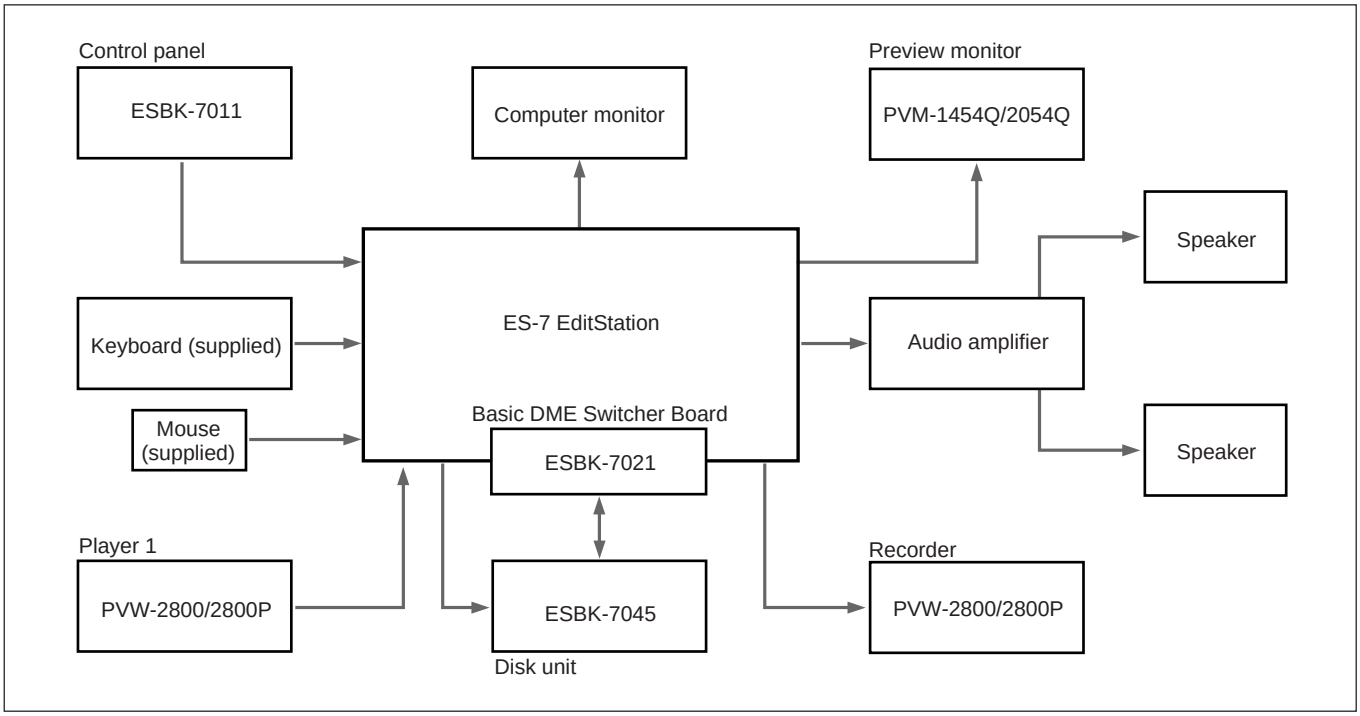
You should make periodic backup copies of the data on the unit’s internal hard disk. Sony cannot be responsible for loss of data or records stored on the hard disk because of hardware failures or any other reason.

The Basics of Editing With EditStation

This section will describe a typical editing session. It will show how to copy materials from tape to the disk recorder, how to specify the recording order, how to apply transitions between video clips, how to insert titles, and other common operations. Read this section as a guide to basic editing procedures before using the system for the first time.
This section is intended for readers who have experience in video editing but are not familiar with Windows[1)] or readers who are familiar with Windows but have no experience in video editing.
After learning the basic editing procedures, experiment by trying other editing operations while consulting the online manual.

Reference Editing System

The examples in this chapter assume the use of an editing system configured as follows.
- Player 1: PVW-2800/2800P (1)
- Recorder: PVW-2800/2800P (1)
- Disk recorder board: ESBK-7041 (1 set)
- Disk unit: ESBK-7045 (1)
- Preview monitor: PVM-1454Q/2054Q (1)
- DME switcher: ESBK-7021 Basic DME Switcher Board (1 set)
- Audio monitor: Audio amplifier (1) and speakers (2)
- Control panel: ESBK-7011 (1)



Reference editing system

1) Windows is a trademark of Microsoft Corporation.

The Flow of an Editing Session

The flow of the editing session described in this chapter is as follows.

Play back a tape on the player VCR and select video clips.

↓

Copy the selected video clips from the tape to the disk recorder.

↓

Specify the recording order of the video clips.

↓

Apply wipe effects for the transitions between video clips.

↓

Apply fade-in and fade-out effects at the start and end of the sequence.

↓

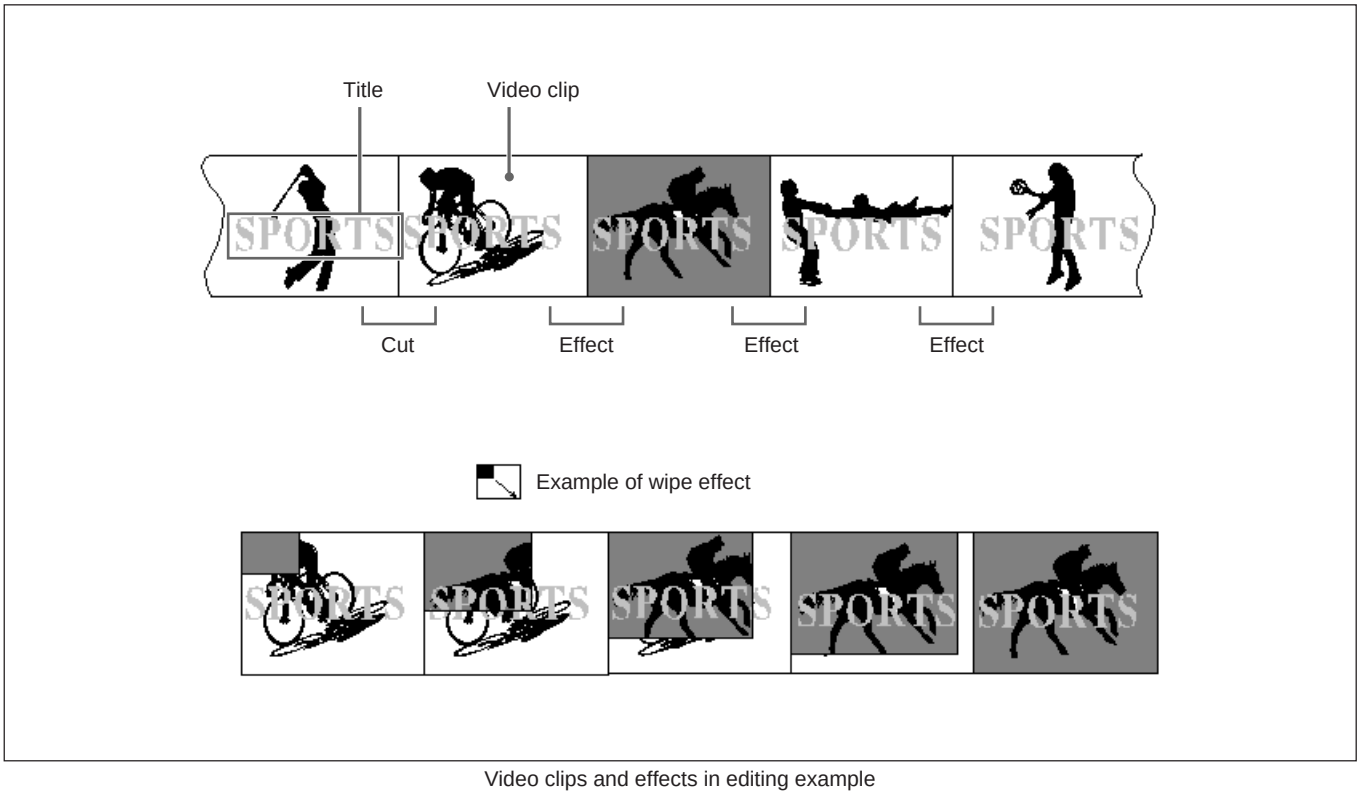
Insert titles over the video.

↓

Record the editing results on tape.

↓

Play back the recorded tape to check the finished edit.



Video clips and effects in editing example

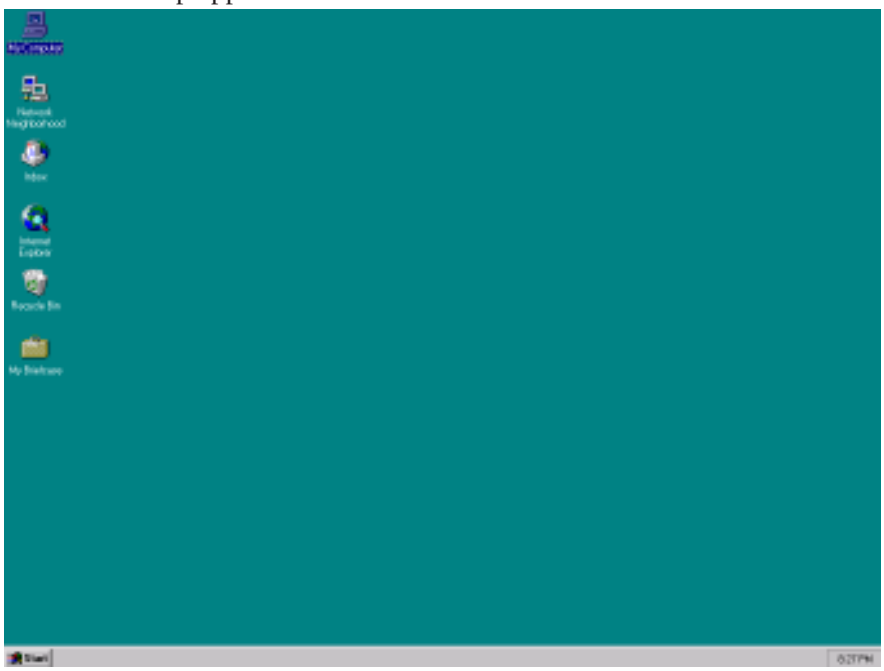
Starting EditStation

Proceed as follows to edit with the EditStation editing software.

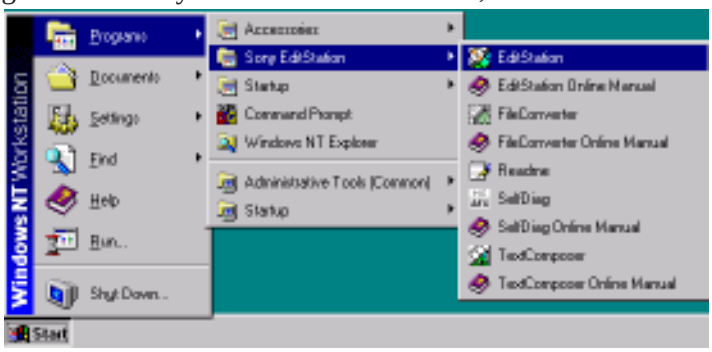
1 Start the system.

For more information about starting the system, see page 17.

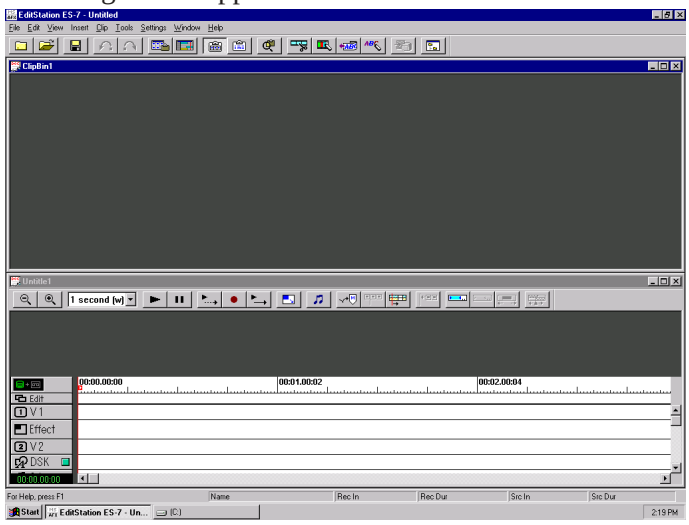
The desktop appears on the screen.



2 Click the Start button on the taskbar, move the mouse pointer to Programs and Sony EditStation in this order, and click EditStation.



The following screen appears.



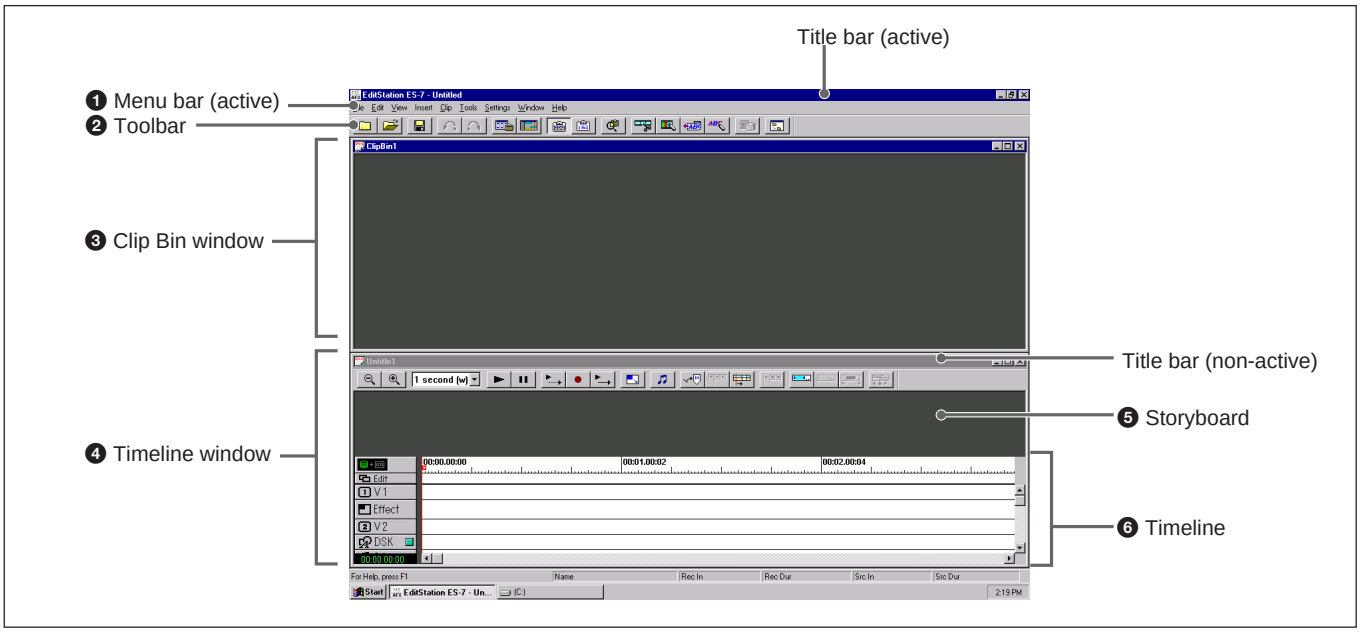
This screen is called the EditStation initial screen. Most edit operations are performed here.

To exit EditStation

See "Shutting Down the System" on page 26.

Identifying Parts of the EditStation Initial Screen

The following illustration identifies the parts of the screen that will be used in this chapter.



❶ Menu bar

Displays menu items, which you can click to display lists of menu commands. To close a menu, click somewhere else on the screen.

The items displayed in the menu bar and the commands in menu lists vary depending on whether the Clip Bin window or the Timeline window is the active window. The active window is the window affected by editing operations. Its title bar is highlighted. To make a window the active window, click somewhere in that window.

❷ Toolbar

The toolbar contains a group of toolbar buttons . Clicking one of the buttons has the same effect as selecting a menu command. The toolbar buttons are very convenient because they allow you to perform common editing operations with a single click of the mouse.

The online manual contains more information about the functions of the toolbar buttons.

❸ Clip Bin window

The Clip Bin window is a temporary storage area for video clips that you have created. You can assemble a group of clips in the Clip Bin window so that they are readily available when you are choosing clips to record.

❹ Timeline window

The timeline window is where you perform most editing operations, such as specifying the order of edits (the smallest unit of editing data), setting transitions between scenes, inserting titles, and so on.

❺ Storyboard

The storyboard is where you arrange edits in the order that you want to record. You can use the storyboard to delete and rearrange edits.

❻ Timeline

The timeline displays detailed information by track along the temporal axis of the recorder tape. This is where you arrange, modify, and delete edits, set up effects, insert titles, and execute editing operations such as preview and recording. The timeline contains several tracks for video, audio, effects and other kinds of signals or data.

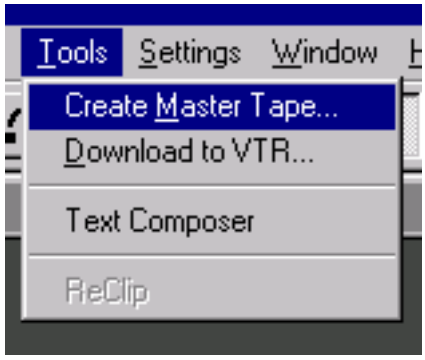
Preparing a Master Tape

To edit with the EditStation, you will need to prepare a tape with pre-recorded black burst signals, CTL (control) signals, and timecode. This tape is called the master tape. It is used to record the results of the edit.
If you already have a master tape, you can proceed to “Creating Video Clips” on page 34.
If you do not have a master tape, follow the procedure below to prepare one.

1 Insert a new tape into the recorder VCR.

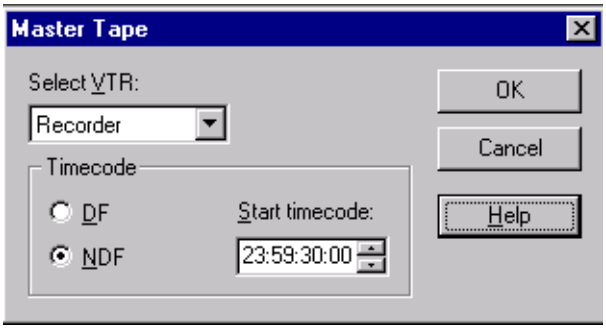
If the tape has been partially played back, rewind it to the start.

2 In the EditStation initial screen, select Create Master Tape from the Tools menu.



The Create Master Tape dialog box appears.

3 Select RECORDER in the Select VTR field, enter 23:59:30:00 in the Start timecode field, and click the OK button.



Timecode is expressed in units of Hours:Minutes:Seconds:Frames. Black burst signals, CTL signals, and timecode are recorded on the entire tape from the start to the end.

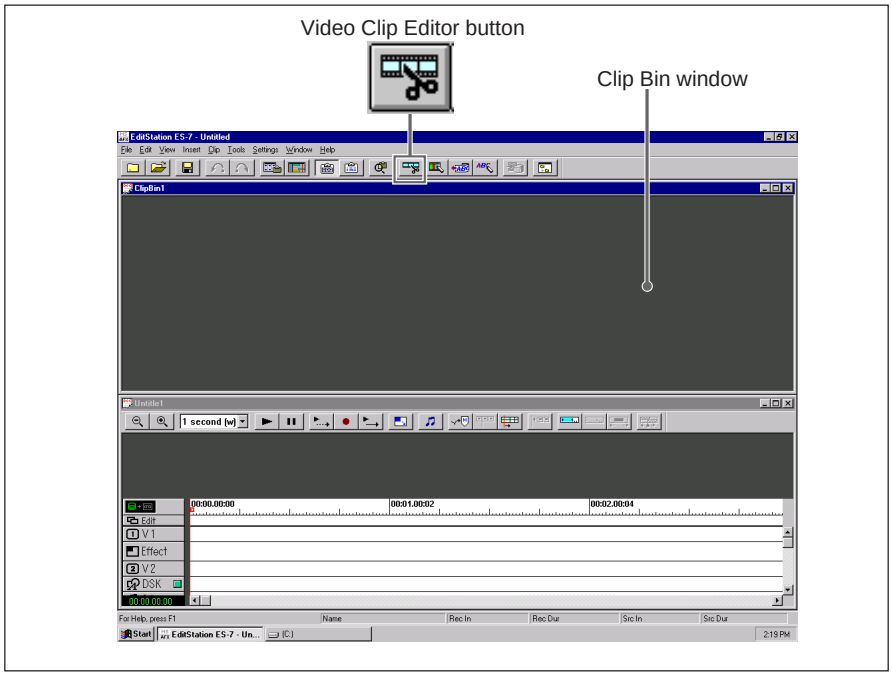
Creating Video Clips

Video clips are the materials that you will use to create your edit. The first step in an edit is to create video clips by using the following procedure.

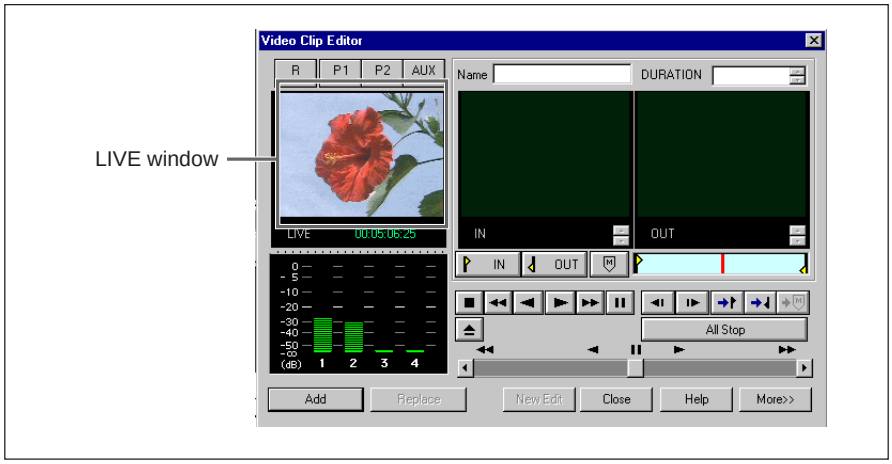
1 Insert a tape with source materials into the player VCR.

2 In the EditStation initial screen, click the Video Clip Editor button.

If the Video Clip Editor button is dimmed and cannot be selected, click somewhere in the Clip Bin window to make it the active window.



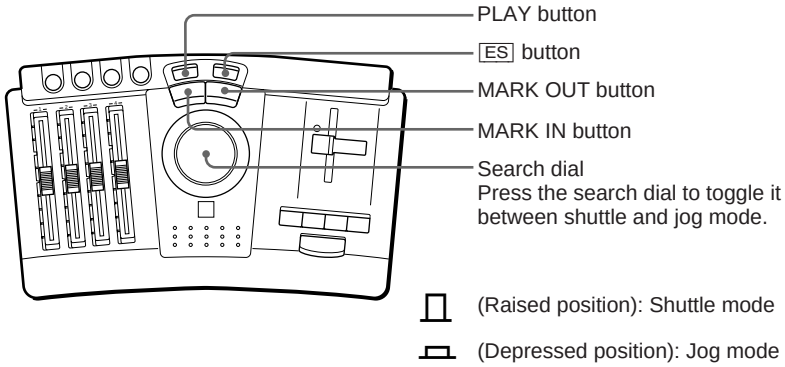
The following window appears. This is the Video Clip Editor dialog box.
P1 (player 1) is selected as the source VCR, and the video of player 1 is displayed in the LIVE window.



3 Play back the tape in player 1 to find the desired scene.

Use the following buttons.

You can also perform the same operations with the control panel.



Operation	Video Clip Editor operation	Control panel operation
Normal playback	Click ▶.	Press the PLAY button.
Reverse playback	Click ◀.	In shuttle mode, rotate the search dial slightly in the counterclockwise direction.
High-speed search	Click ◀◀ or ▶▶.	In shuttle mode, rotate the search dial all the way in the clockwise or counterclockwise direction.
Low-speed search	Click ⏮ or ⏭ for frame-by-frame playback.	In jog mode, rotate the search dial slowly.
Still playback	Click the STILL button.	Move the search dial to the center position. If the STILL function has been assigned to the ES button, press the ES button.

4 Specify the start (IN point) of the video clip.

Video Clip Editor: Click the MARK IN button at the desired scene.
Control panel: Press the MARK IN button at the desired scene.

(Continued)

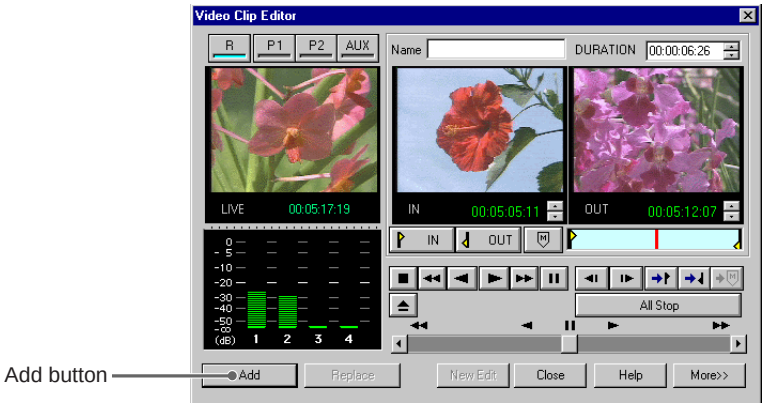
5 Specify the end (OUT point) of the video clip.

Video Clip Editor: Click the MARK OUT button at the desired scene.
Control panel: Press the MARK OUT button at the desired scene.

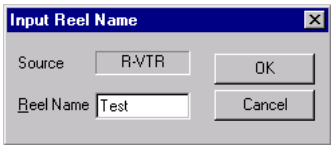
6 In the Video Clip Editor dialog box, click the Name field and enter the name of the video clip.

The name can be up to 64 characters long.

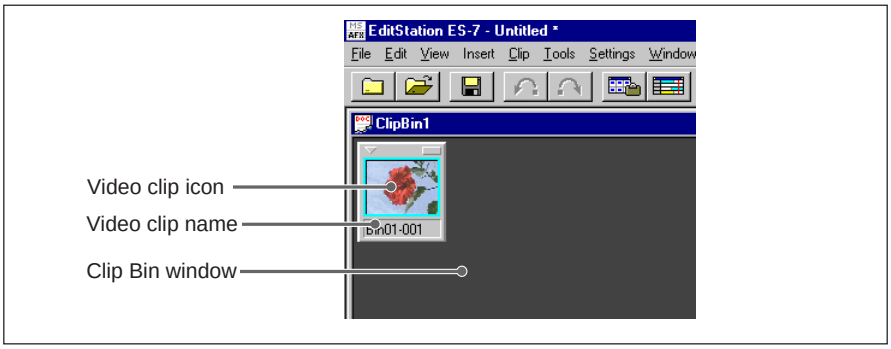
7 Click the Add button in the Video Clip Editor dialog box.



A reel name dialog box like the one shown below appears once when you create the first video clip after inserting a program materials cassette.

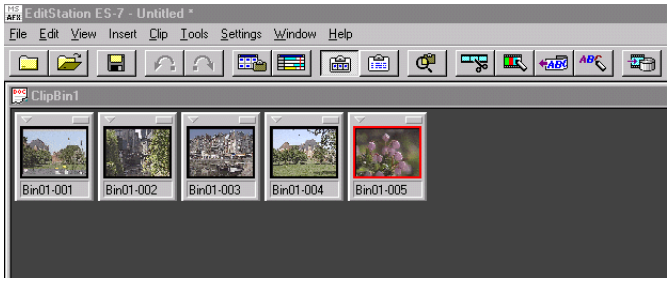


Enter a reel name up to 6 characters in length and click the OK button. An icon appears in the Clip Bin window, showing the video for the IN point of the clip you have created.



Once you have entered the reel name, you can simply click the Add button to add more clips. However, if you change the playback VCR or insert a new program materials cassette, you will have to enter a reel name again after clicking the Add button.

8 Repeat steps **3** to **7** to create more video clips.



9 Click the Close button in the Video Clip Editor dialog box.

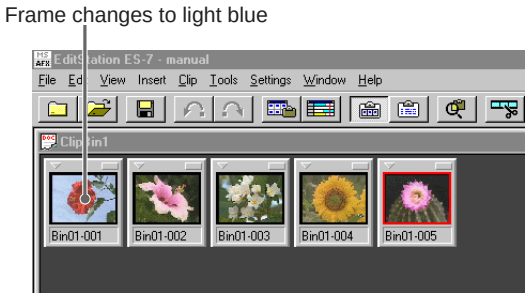
The Video Clip Editor dialog box closes.

Copying Video Clips to the Disk Recorder

The next step is to copy the newly created video clips to the EditStation's disk recorder. Copying the clips to the disk recorder is not mandatory, but clips located on the disk recorder can be cued up instantly, for greater editing efficiency.
Proceed as follows to copy the clips.

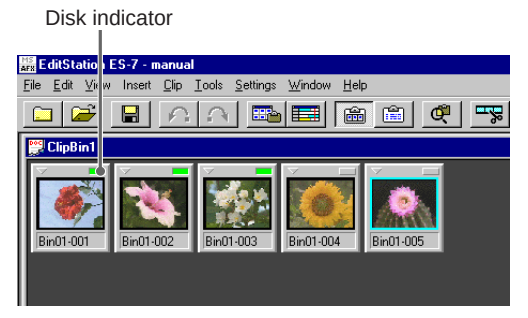
1 While holding down the Ctrl key on the keyboard, click the Clip Bin window icon for the clip that you want to copy.

The frame of the selected clip changes color from black to light blue. If you wish, you can select several clips at once.



2 Select Upload to Disk Recorder from the Clip menu, and then select Selected.

Player 1 begins to play back the tape and the clips selected in step 1 are copied to the disk recorder.
The disk indicators of the clips that have been copied to the disk recorder light in green.

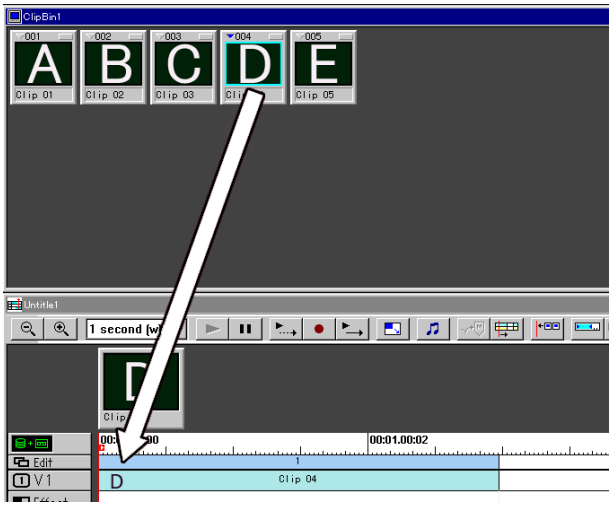


Editing With Cut Transitions

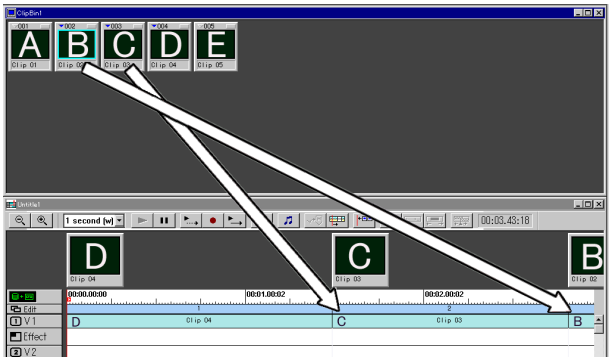
A cut is a transition in which one scene is replaced instantly by another scene. If you have arranged your clips in the timeline and have not specified otherwise, the transitions between scenes will be cuts.
The following procedure uses cuts to link scenes D, C, and B.

1 Drag video clip D from the Clip Bin window to the timeline.

See page 21 for more information about dragging.



2 Drag video clips C and B in that order from the Clip Bin window to the timeline.
To avoid that a gap is made on the timeline between the existing clip and a new clip, drag the new clip so that its left end portion overlaps the right end portion of the existing clip, then release the left mouse button.



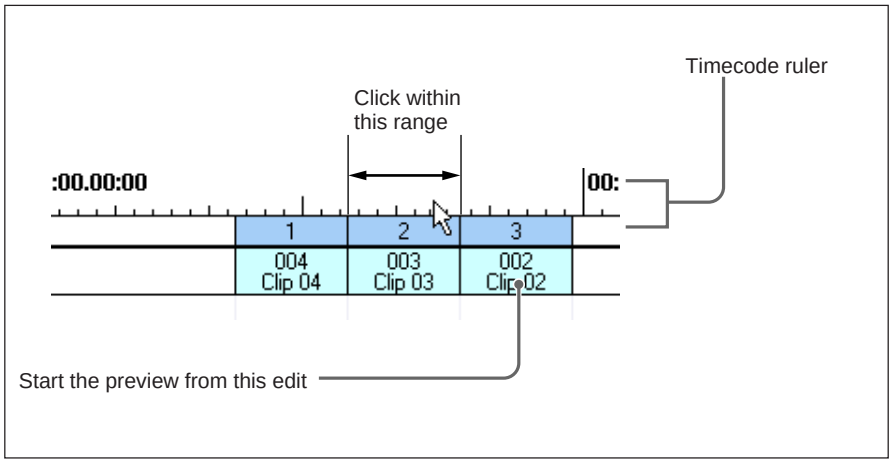
This specifies cut transitions between video clips D and C and video clips C and B.

Previewing the Edit Results

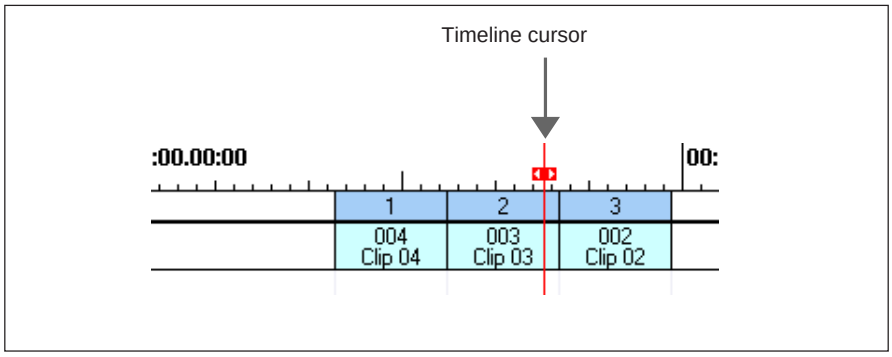
A preview is a rehearsal in which you play back the edited video to check whether you have achieved the results you want. A preview is not recorded by the recorder.
In this section we will conduct a preview to check the results of our cut editing.

To conduct a preview, proceed as follows.

1 Click the timecode ruler at any point above the edit[1] positioned immediately before the edit where you want to start the preview.



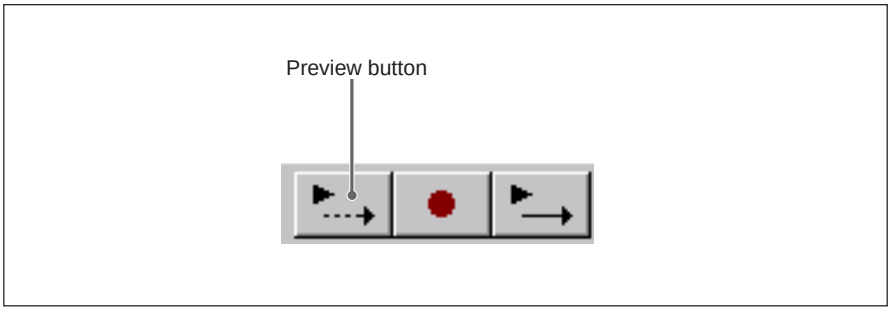
The timeline cursor[2] moves to the clicked position.



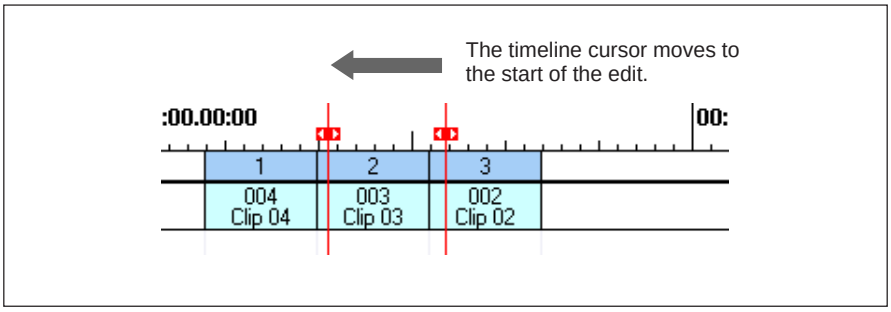
1) An edit is the smallest unit of editing data. Edits are shown on the timeline as rectangular frames. Each edit corresponds to a specific video clip in the Clip Bin window.

2) The timeline cursor is the cursor that shows the current position on the timeline. Video under the timeline cursor is displayed on the video monitor.

2 Click the Preview button.



The timeline cursor moves to the start of the next edit and the preview begins from that point. The preview video is displayed on the video monitor.

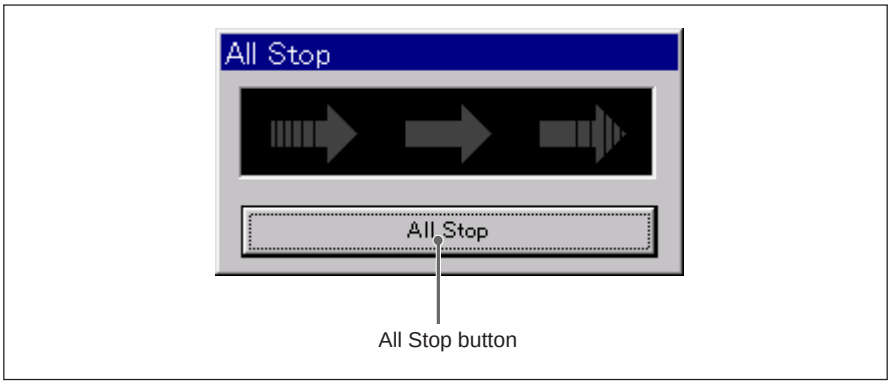


In the example on page 39, when a preview is executed from the first edit, D, C, and B are played back in order with a cut transition between each scene.

After conducting a preview, make any adjustments that may be necessary and proceed to the next stage in the editing.

Stopping a preview before it finishes

Click the All Stop button on the screen, or press the ALL STOP button on the control panel.



Adjusting Edit Points

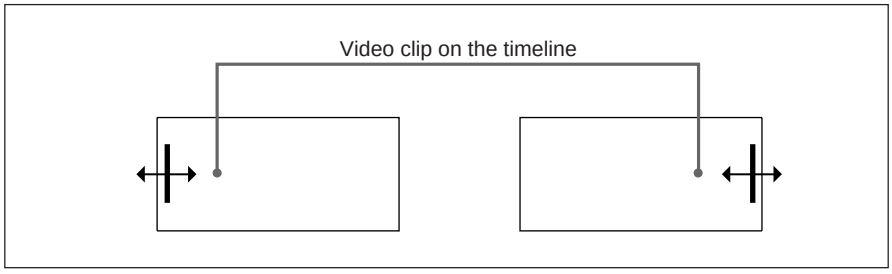
If a preview shows that you need to adjust the duration of a clip, adjust the clip's IN point or OUT point.

Adjusting the Positions of IN Points and Out Points

Proceed as follows.

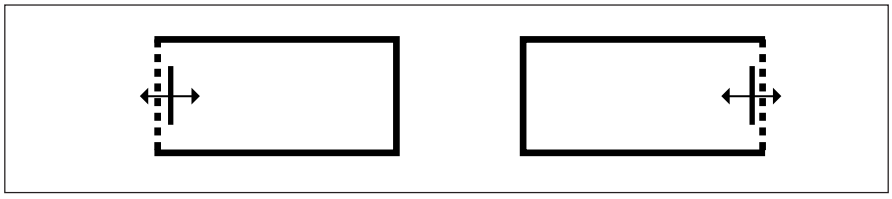
1 To adjust the IN point or OUT point, move the mouse pointer to a position, slightly inside the left edge or right edge of a clip on the timeline.

The pointer shape changes as shown below.

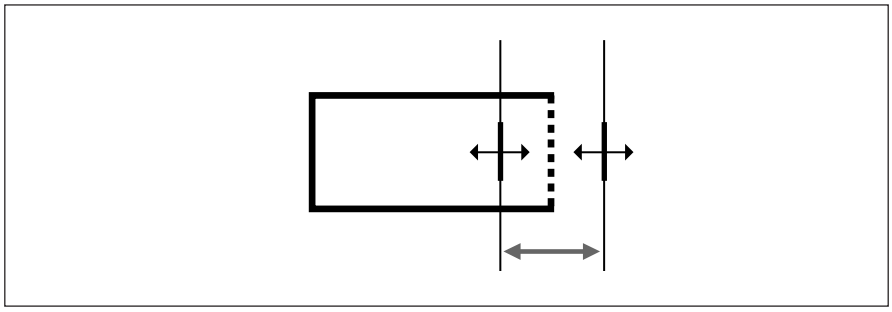


2 Click the left mouse button.

The clip frame becomes thicker, and the left edge or right edge changes to a broken line.



3 With the mouse left button pressed, drag to the left or right.



To adjust edit points in units of frames

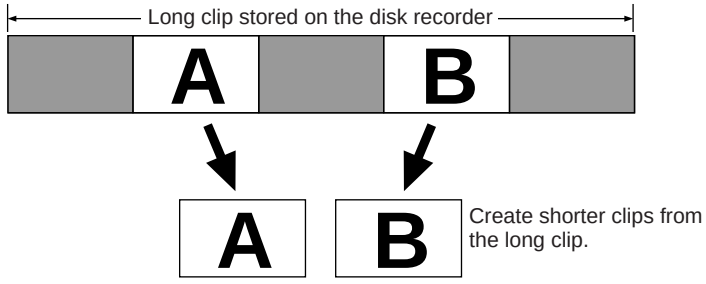
You can use the Trim Editor and Video Clip Editor dialog boxes to adjust edit points in units of frames. However, you cannot use the Video Clip Editor to adjust the edit points of clips on the timeline.

For more information about the Trim Editor and Video Clip Editor dialog boxes, refer to the online manual.

Points to note when increasing the duration of a video clip

In the factory default configuration, video from 2 seconds before the IN point to 2 seconds after the OUT point is copied to the disk recorder when you copy video clips from tape to the disk recorder. Therefore, you cannot add more than 2 seconds at the start and end of a clip when working with clips stored on the disk recorder.
If you wish, you can increase the length of video recorded at the start and end of a clip to more than 2 seconds. Make the Clip Bin window the active window, select Options from the Settings menu, and set the desired length.

As shown in the figure below, you can begin by copying a video clip with more than enough duration to the disk recorder and then create shorter clips from the longer clip. In this case there is no limitation on the adjustment of edit points, even when you are working with clips stored on the disk recorder.

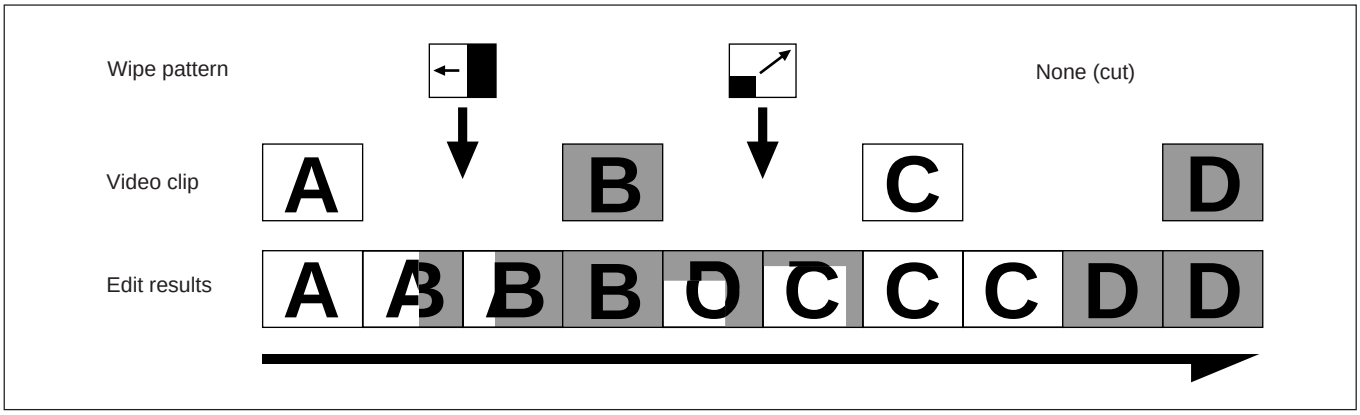


In this illustrated case, only the long clip is created on the disk recorder but neither clip A nor B is created there.

If you know in advance that you may want to change the edit points of a video clip, you should normally start by uploading a longer clip to the disk recorder, or use the Settings menu to change the factory default length.

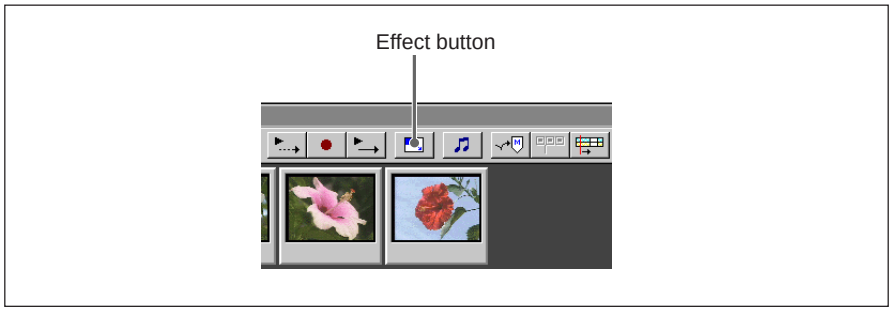
Adding Wipe Effects

A wipe is a transition effect in which one scene gradually expands to replace another scene. This section will explain an example that adds two types of wipe transition, and then uses a cut as the third transition. When you preview after adding the wipes, the scenes change as shown below.



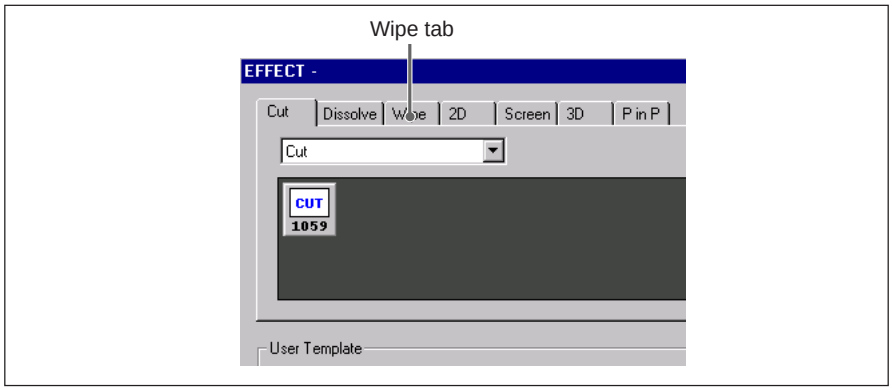
Proceed as follows.

1 Click the effect button at the top of the Timeline window.



The Effect dialog box opens.

2 Click the Wipe tab in the Effect dialog box.

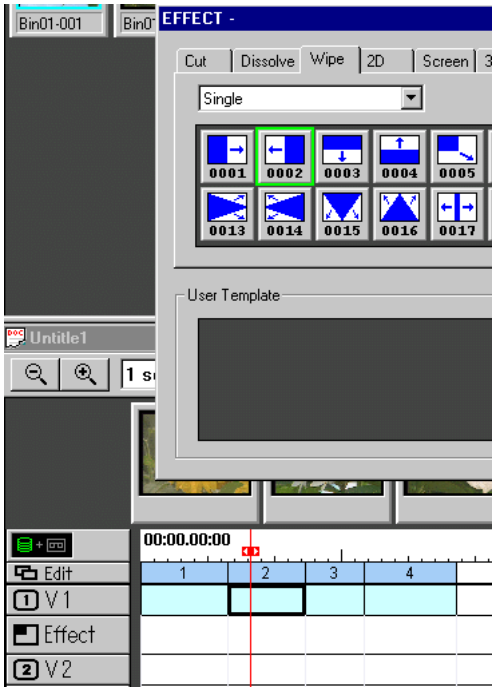


This shows wipe patterns.

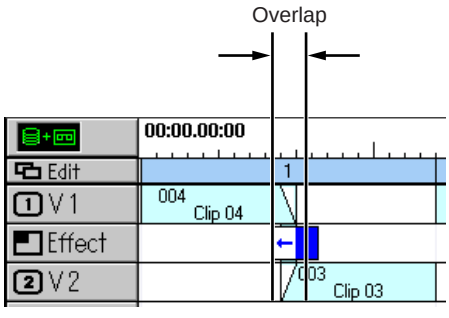
3 On video track V1 or V2, click the edit that you want to remain as the scene after the wipe transition.

The frame of the clicked edit becomes thicker to show that the edit is selected.

4 Select a wipe pattern and then click the Auto Add button.



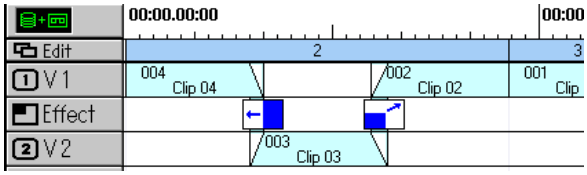
The wipe pattern is displayed on the Effect track. The edit that will be visible when the wipe finishes moves automatically to the V2 track. There is an overlap between the edits visible before and after the wipe. The length of the overlap is equivalent to the duration of the wipe.



(Continued)

5 Move the third clip leftwards so that an overlap is generated, and place the wipe pattern on the overlap.

The timeline now appears as shown below.

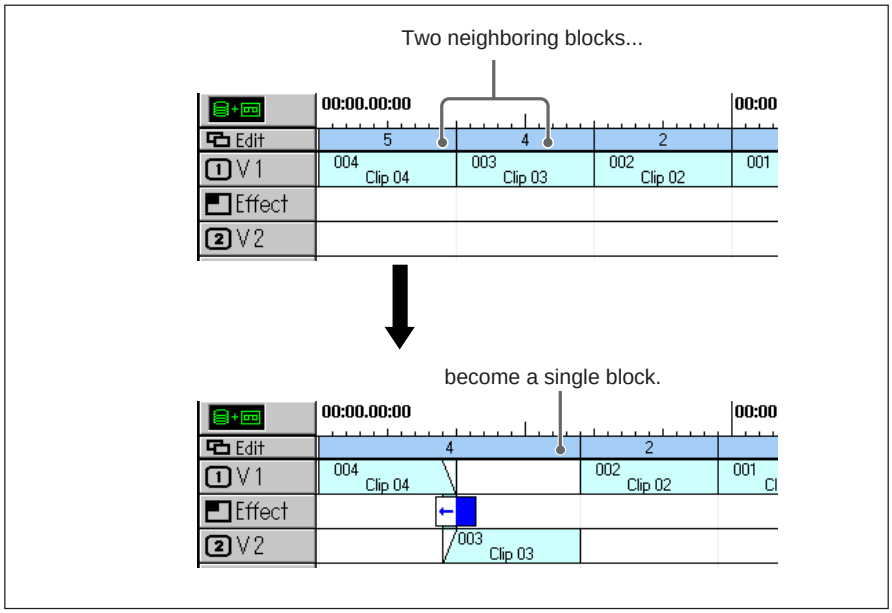


6 Click the Close button in the Effect dialog box.

The Effect dialog box closes.

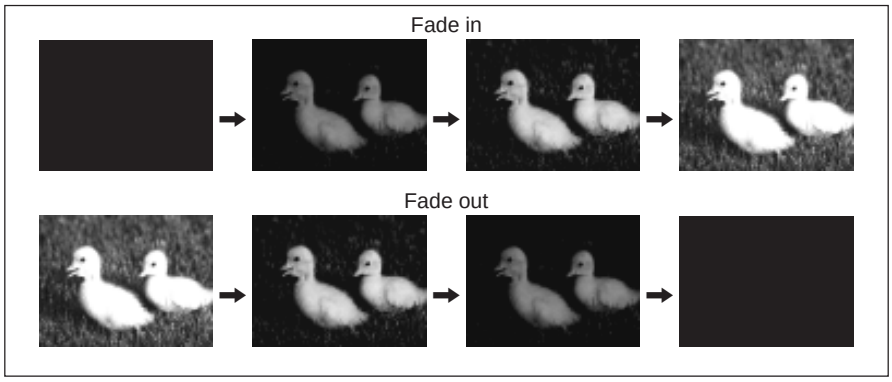
About edit blocks

When you add an effect, such as wipe, that involves a transition between scenes, neighboring blocks on the timeline are joined into a single block. This kind of block on the Edit track is called an edit block.



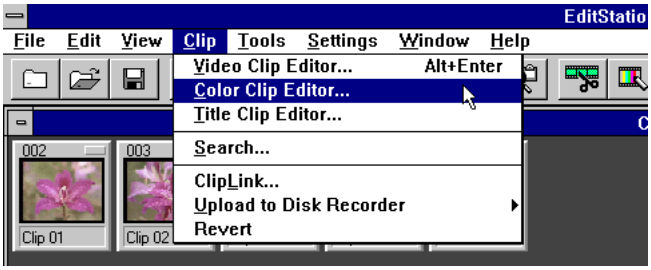
Adding Fade-in and Fade-out Effects

Fade in and fade out are effects in which the video appears or disappears gradually.
This section will explain an example that uses a black clip background to fade in from black and to fade out to black. The procedure uses the Dissolve tab of the Effect dialog box. Dissolve is another effect in which video appears or disappears gradually.



Proceed as follows.

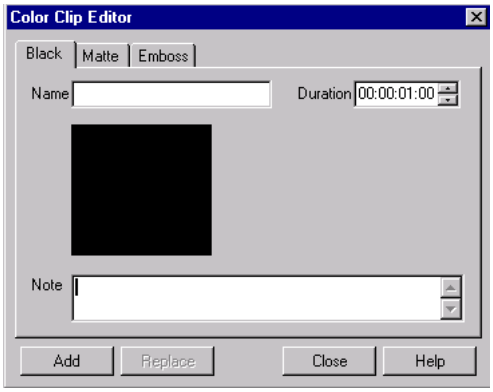
1 Make the Clip Bin window the active window and select Color Clip Editor from the Clip menu.



The Color Clip Editor dialog box appears.

(Continued)

2 Clip the Black tab and enter 00:00:02:00 in the Duration field.

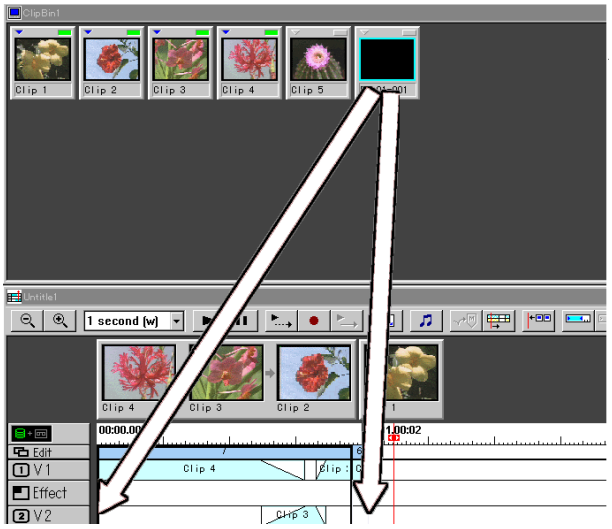


The duration is expressed in units of Hours:Minutes:Seconds:Frames. This example creates a clip that displays a black picture for 2 seconds.

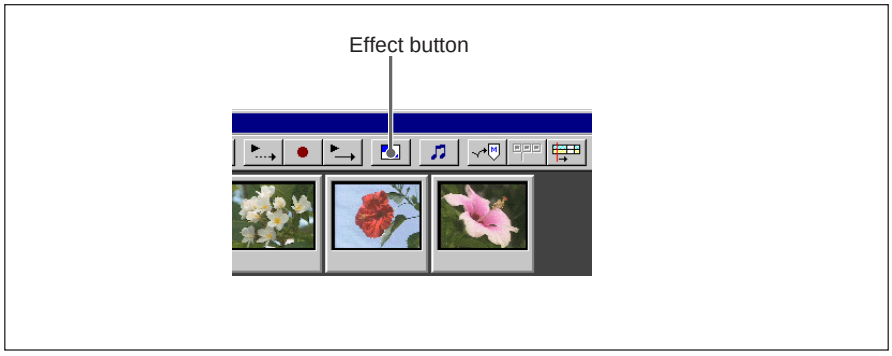
3 Click the Add button and then the Close button.

A black clip icon appears in the Clip Bin window and the Color Clip Editor dialog box closes.

4 Drag the black clip icon from the Clip Bin window to the beginning and end of the edits on the timeline so that overlaps are generated.

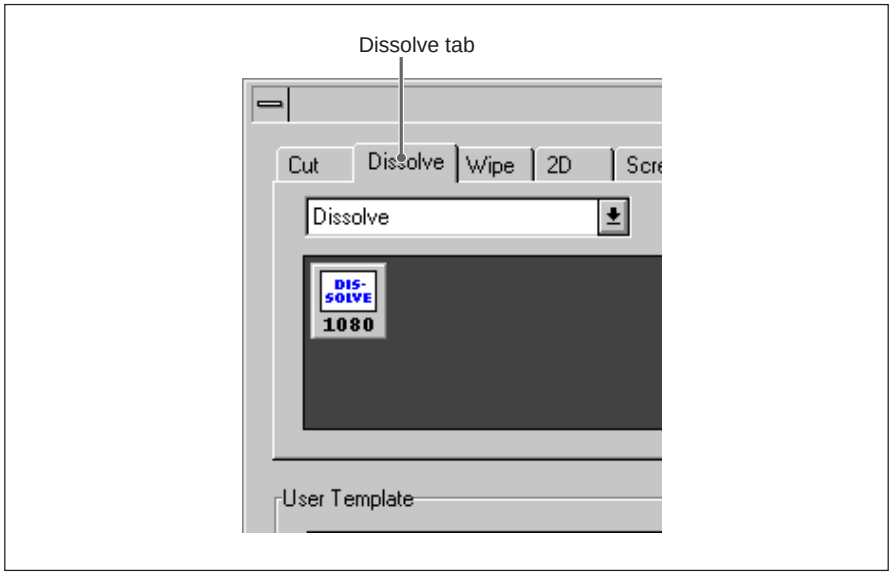


5 Click the effect button in the Timeline window.



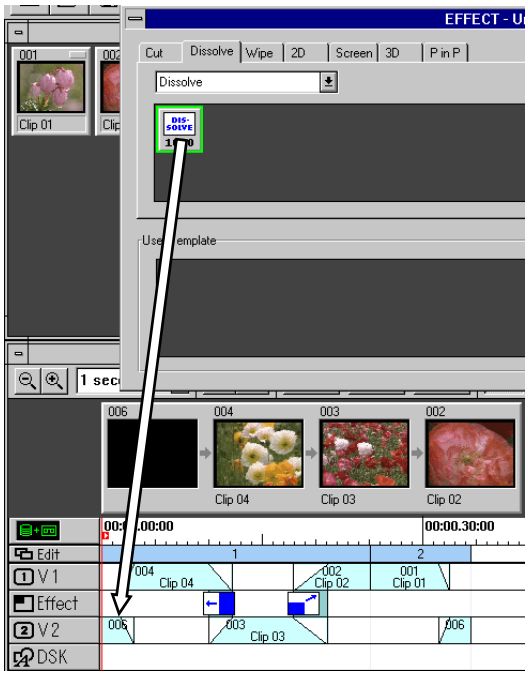
The Effect dialog box appears.

6 Click the Dissolve tab in the Effect dialog box.



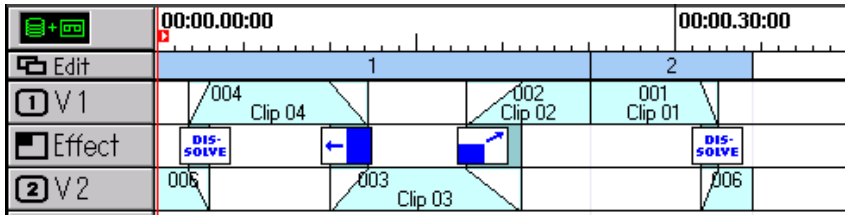
(Continued)

7 Drag the dissolve icon to the overlap at the beginning of the Effect track.



8 Drag the dissolve icon to the overlap at the end of the Effect track.

As shown below, a dissolve effect is set for the first and final edits.



9 Click the Close button of the Effect dialog box.

The Effect dialog box closes.

Inserting a Title

The flow of operations for inserting a title into video is as follows.
To prepare the title text, use the Text Composer software that comes pre-installed on the system. You can call Text Composer from within EditStation.

Launch the Text Composer software with an EditStation command.

↓

Create the title.

↓

Save the title on the internal hard disk and quit Text Composer.

↓

Open the Title Clip dialog box in EditStation and read in the newly created title.

↓

Specify a length of time to display the title.

↓

Drag the title icon to the DSK track.

Creating a title

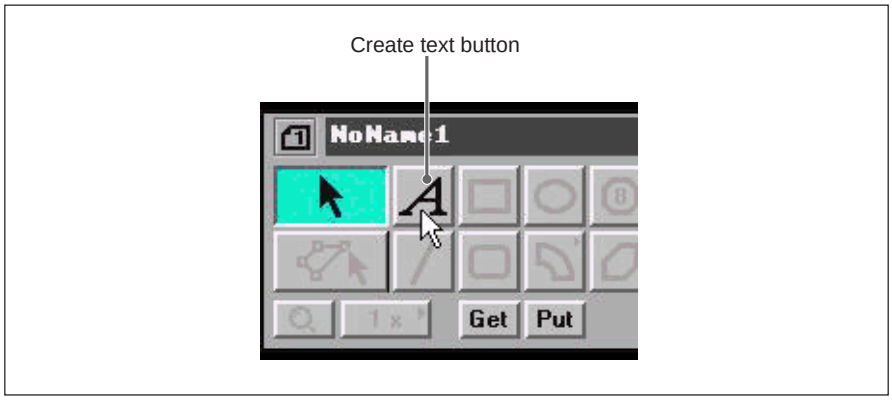
Proceed as follows to create a title.

1 Select Text Composer from the Tools menu.

Text Composer is launched, and the following screen appears on the video monitor. This is the Text Composer main screen.

(Continued)

2 Click the create text button on the main menu, use the mouse to move the text cursor (the vertical line) to the position on the screen where you want to insert the title, and click the position.



3 Enter the title from the keyboard and click somewhere on the screen away from the title text to confirm the input.

The title that you entered is displayed on the video monitor with edge and shadow effects.

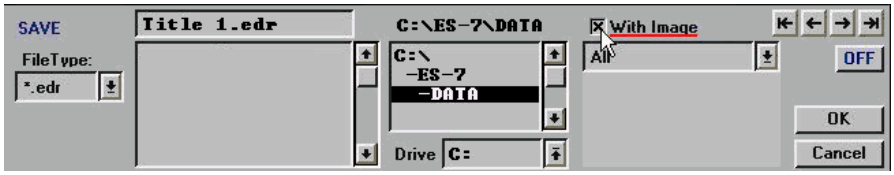
For details about changing the size and color of the title and adding or removing edge and shadow effects, refer to the online manual.

4 Click the File button on the main menu.

The File menu appears.

5 Click the Save button on the File menu.

The Save dialog box appears.



6 Click the With Image check box to make a check mark appear in the box, enter a file name for the title file in the name field, and click the OK button.

File names can be up to 256 characters in length, and can contain spaces. Uppercase letters are distinguished from lowercase letters. For this example, enter the file name “Title 1” and click the OK button.

When you click the OK button, the screen returns to the main menu.

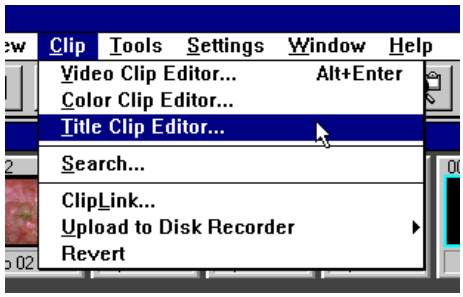
7 Click the File button on the main menu and click the Quit button on the File menu.

The Text Composer screen closes.

Inserting a title into the video

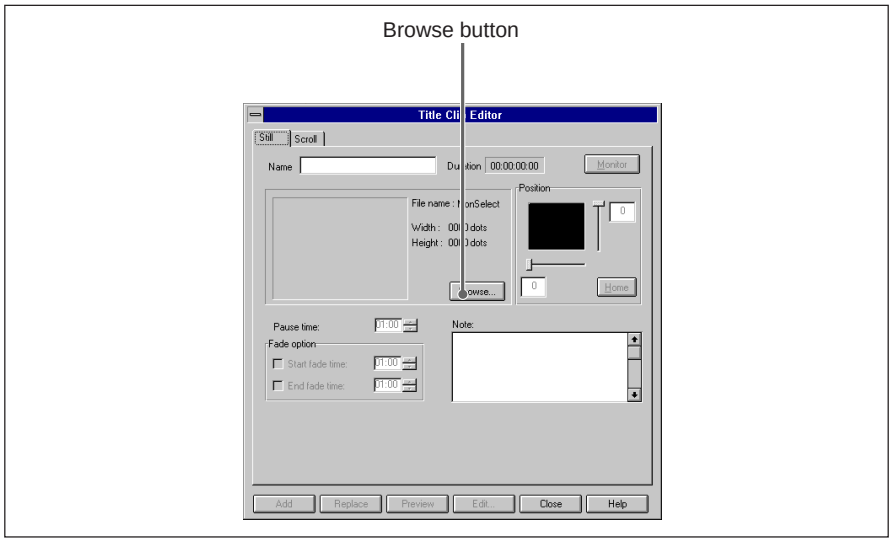
Proceed as follow to insert a title into the video.

1 Make the Clip Bin window the active window and select Title Clip Editor from the Clip menu.



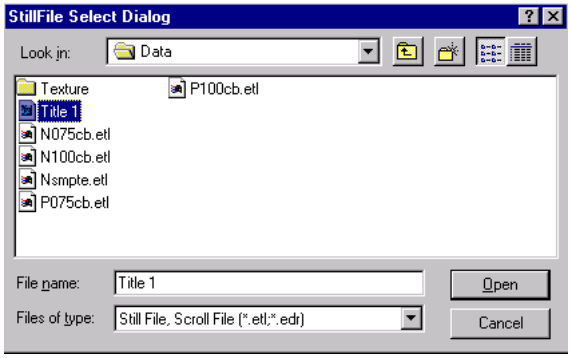
The Title Clip Editor dialog appears.

2 Click the Still tab, and then click the Browse button.



A dialog box appears so that you can browse the hard disk for the title file created earlier.

3 Select the DATA folder on drive C.



In the “Look in” field, double click the (C:) icon to show the folders under it. (If the icon displayed in the “Look in” field is not (C:), first click the down arrow button to the right of the field.) Find the ES-7 folder icon and doubl click it. Then find the Data icon and double click it.

4 Select “Title 1.edr” from the file list by clicking it, and then click the OK button.

The title that you created earlier is read in.

5 Enter 300 in the Pause Time box.

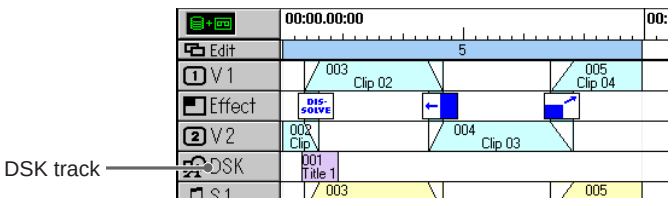
Enter the pause time value in units of “seconds: frames”. You do not need to enter the colon (:). The title will be displayed for the length of time specified in this field.

6 Click the Add button, and then the Close button.

A title clip icon appears in the Clip Bin window and the Title Clip Editor dialog box closes.

7 Drag the title clip icon from the Clip Bin window to the DSK track.

To adjust the position of the title clip on the DSK track, click the title clip icon, click the magnifying glass button in the Timeline window, and press the → and ← keys on the keyboard.
In the position shown below, the title will be superimposed over the video of clip 003 for about 3 seconds after completion of the fade in.



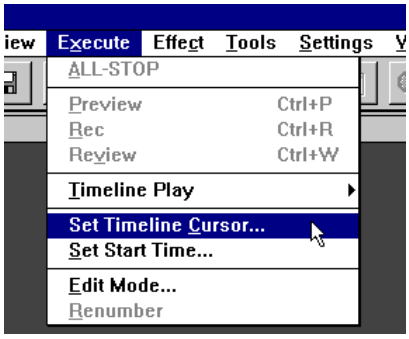
Previewing the edit results

The steps above complete the operations required for this example.

Before recording, it is a good idea to conduct a preview to check the overall contents and make sure that you achieved the results you wanted. If necessary, you can then go back and make any required adjustments.

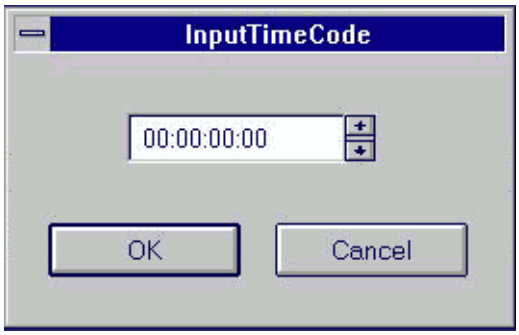
To conduct a complete preview, proceed as follows.

1 Make the Timeline window the active window and select Set Timeline Cursor from the Execute menu.



A timecode input dialog box appears.

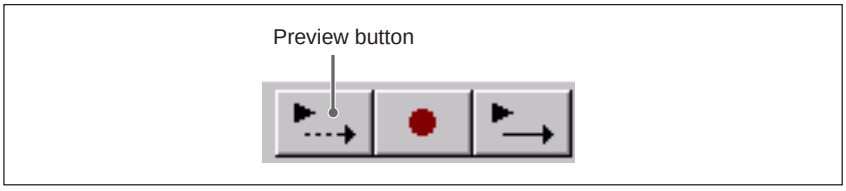
2 Enter 00:00:00:00 in the text box and click the OK button.



The timeline cursor moves to the left edge of the timeline.

You can click the left edge of the timeline ruler to move the timeline cursor all the way to the left.

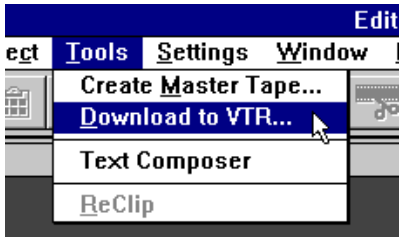
3 Click the Preview button.



The preview starts from the first edit on the timeline.

Recording the Edit Results

If the preview revealed no problems, you are ready to record the edit results on tape.
To record, make the Timeline window active and select Download to VTR from the Tools menu.



The recorder tape begins to run and the edit results are recorded. The recorder tape stops automatically when recording finishes.

Checking the recording

To check what you have recorded, proceed as follows.

1 Click the clip icon in the Clip Bin window.

The Video Clip Editor dialog box opens.

2 Click the R button above the LIVE window.

The recorder VCR becomes the source VCR.

3 Use the tape transport control buttons in the Video Clip Editor dialog box to rewind the tape to the beginning and play it back.

The video recorded on the tape appears on the video monitor.

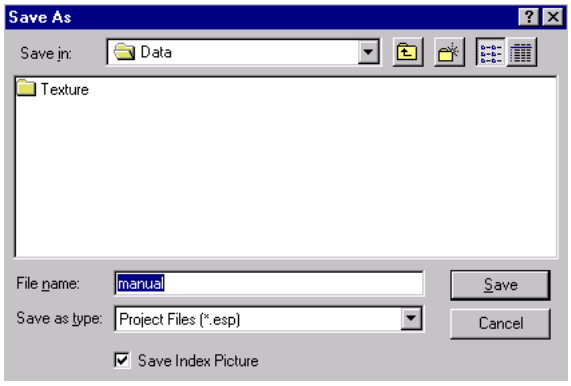
Saving the Edit File

After finishing the edit, you will want to save the edit file. The file saved at this point contains the video clips, effects, titles, and other data that were used in the editing. Saving the data in a file allows you to recreate the edit results. For example, you can work up to the preview stage, and come back the next day to record the edit results.

Proceed as follows to save the edit data in a file.

1 Select Save As from the EditStation File menu.

The Save As dialog box appears.



2 Enter the file name and click the OK button.

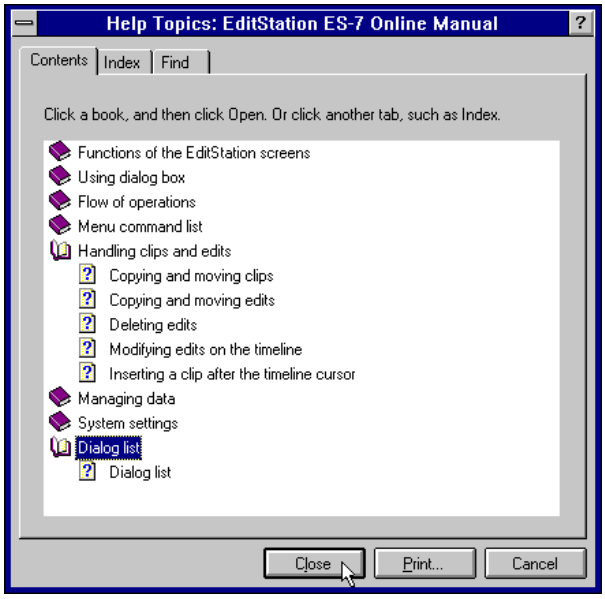
The file name can be up to 256 characters long. Specify ".esp" as the extension at the end of the file name.
The current state of every EditStation window is saved in the file, enabling you to come back and pick up where you left off.
To open the edit file, select Open from the EditStation File menu and enter the file name.

Using the Online Manual

In real-life editing situations, the basic operations described in this chapter will not be enough. You will need more detailed information about advanced operations and settings. The online manual is a detailed guide with information about every aspect of the EditStation.
To use the online manual, proceed as follows.

1 Select Contents from the EditStation Help menu.

The Contents tab of the Help Topics window appears.



The book icons represent topics organized by category. To view the topics in a category, click the book icon and then click the Open button. The book opens and the topics appear. To close a book and remove the topics from the screen, click the book and then click the Close button.

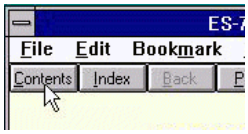
The [?] icons represent the help topics in a category.

2 To view the contents of a topic, click the [?] icon and then click the Display button.

The contents of the topic are displayed.

To return from a help topic to the Contents

Click the Contents button.

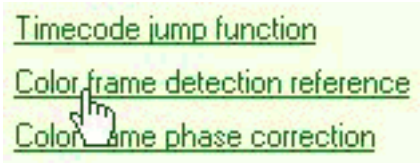


Using jumps and glossary definitions to find information

Most help topics contain jumps and glossary definitions: words that are underlined and displayed in green to indicate that they lead to further information.

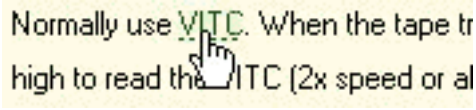
Jumps

Jumps are displayed in green with a solid underline. You can click a jump to go to another topic with related information. To return from a jump, click the Back button at the top of the Help window.



Glossary definitions

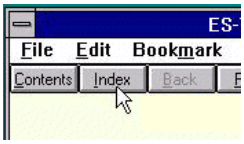
Glossary terms are displayed in green with a dotted underline. When you click a glossary term, a pop-up window appears with a definition of the term. To remove the definition from your screen, click anywhere on your screen, or press the ESC key.



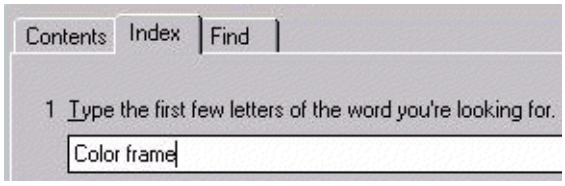
Using Index to find information

When you want to find information about a certain word, you can use the Index tab to display all topics associated with that word.
To search for information using Index, proceed as follows.

1 Click the Index button of the Help Topics window.

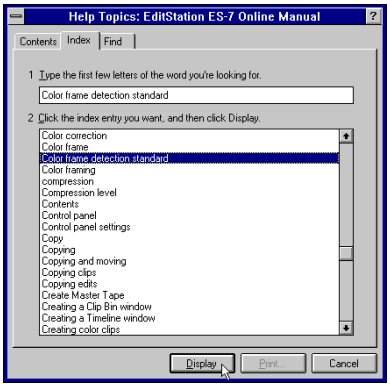


2 Type a word, or select one from the list of matching words. Then click Display.



A list of topics associated with that word is displayed.

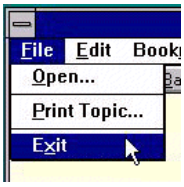
3 Select the topic that you want to view, then click Display.



The Help topic that you selected is displayed.

To close the online manual

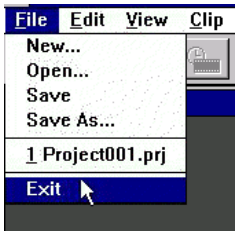
Select Exit from the File menu of the Help Topics window.



Exiting EditStation

This completes the introduction to EditStation.
To exit EditStation, proceed as follows.

From the File menu, select Exit.

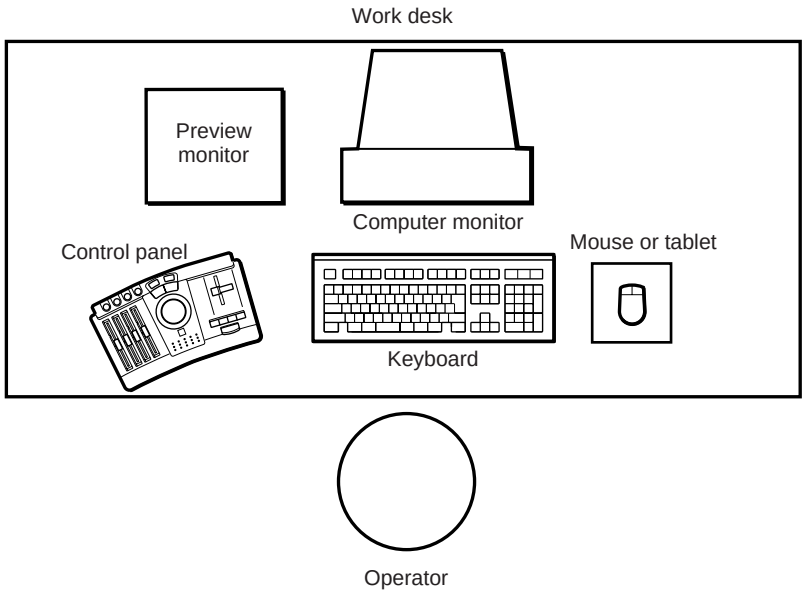


If you have made any editing changes and not yet saved them in a file, a dialog box appears asking whether you want to save them. Save the changes if necessary.
If there are no unsaved changes, the EditStation window closes immediately.

Arranging System Components

To increase editing efficiency, take the following points into consideration when installing the EditStation.

- Place the video monitor on the left side of the operator and the computer monitor[1] on the right side.
- Operate the control panel with the left hand and the mouse or tablet with the right hand.
- Place the ES-7 main unit[2] and VCRs where they will be easily accessible, according to the space available in your work environment.



Arrangement of system components

1) If you wish to install the ES-7 main unit at a distance from the computer monitor, use a multi-cable with a D-sub 15-pin connector on one end and 5 BNC cables on the other end. Use 5 BNC extension cables, connected to the BNC connectors of the multi-cable. Always use BNC extension cables of the same length and characteristics. If the cables are of different lengths, the phase of the output signals from the BNC connectors will not be the same. Use of a multi-cable extension cable is recommended. However, note that picture quality may decline if the extension cable is too long.

2) To allow the ES-7 main unit to be installed at a distance from the mouse and keyboard, connect the supplied 4-meter keyboard and mouse extension cables to the regular keyboard and mouse cables. A 5-meter connection cable is supplied for the control panel.

Using Floppy Disks

The EditStation uses floppy disks to share EDL data with other editing units. Software upgrades may also be provided on floppy disks. This section will explain the basics of handling floppy disks.

Types of floppy disks

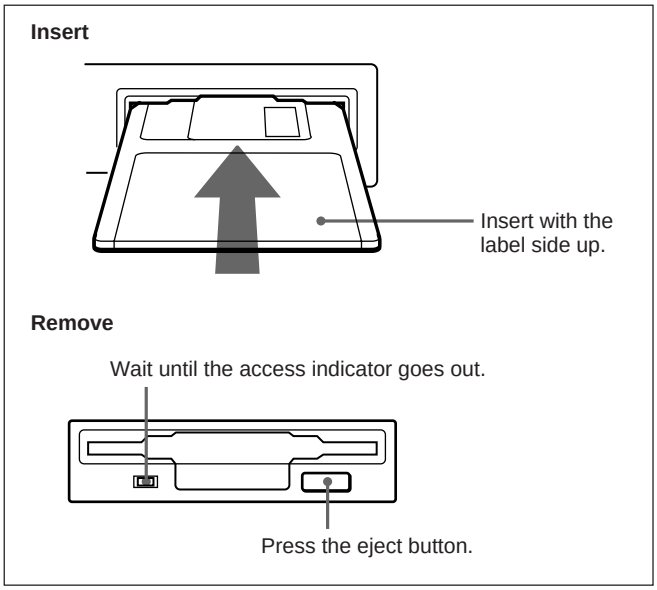
You can use 2DD and 2HD floppy disks with this unit. The differences between 2DD and 2HD floppy disks are as shown below.

Type	Recording capacity for formatting
2DD	720 KB
2HD	1.44 MB

Some editing units can read only 2DD floppy disks. To exchange editing data with these units, you will need to use 2DD floppy disks.

Inserting and removing floppy disks

Insert floppy disks with the label side up. Push the disk into the disk drive until you hear a click. To remove a floppy disk, wait until the access indicator goes out and then press the disk drive eject button.



Floppy disk drive names

To read the data from a floppy disk, you must specify the drive name of the floppy disk drive. The floppy disk drive of this unit has the drive name “A:”.

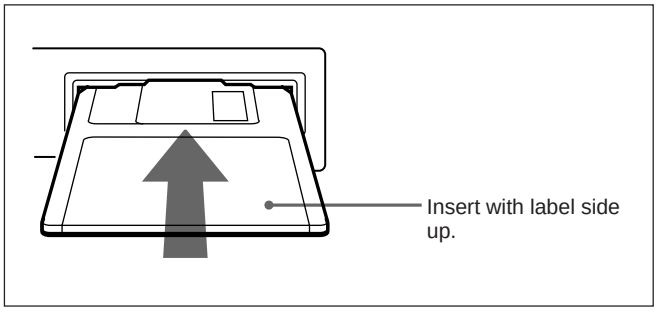
Formatting floppy disks

Before using a floppy disk, you will need to initialize it by formatting it.
Proceed as follows to format a floppy disk.

1 Log on using the procedure explained in “Starting the System” *(page 17)*.

The desktop appears on the screen.

2 Insert a floppy disk into the disk drive slot.

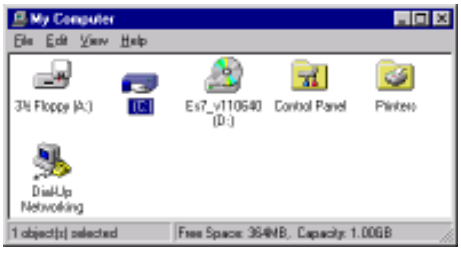


Note

When you format a floppy disk, any data that may have been stored on the disk is erased. Before formatting a floppy disk, check to be sure that it does not contain any valuable information.

3 Double click the My Computer icon.

The My Computer window appears.



4 Move the pointer to the 3½ Floppy (A:) icon, click the right mouse button, and select Format from the menu that appears.

The Format A: dialog box appears.

5 Select 1.44 MB (2HD) or 720K (2DD) from the Capacity list and click the Start button.

Disk formatting starts.

6 When the formatting is finished, click the Close button.

Using CD-ROM Discs

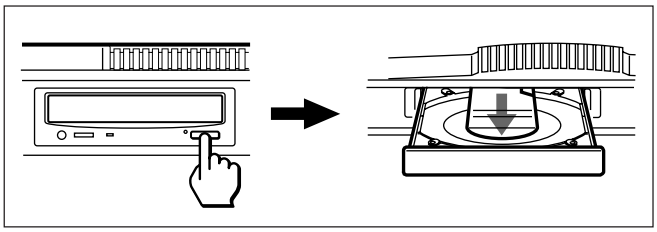
The software and online manual for this unit are supplied on a CD-ROM disc. Software upgrades may also be provided on CD-ROM discs.
This section will explain the basics of handling floppy disks.

Inserting and removing CD-ROM discs

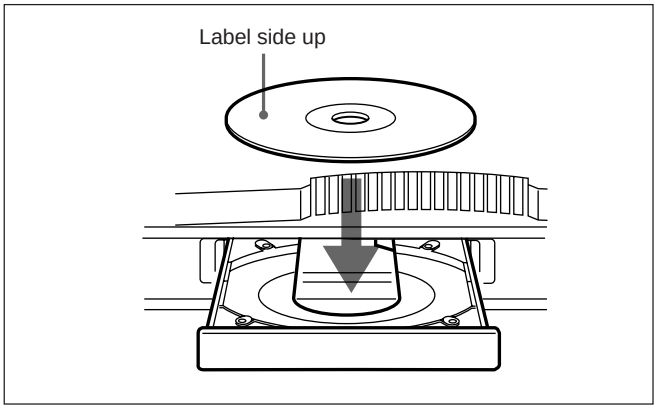
Inserting CD-ROM discs

Proceed as follows to insert a CD-ROM disc.

1 Press the EJECT button to bring the tray out.

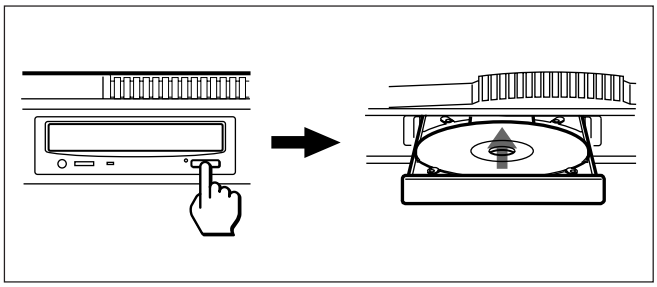


2 Place the CD-ROM disc on the tray with the label side up.



Be careful to place the disc so that it is level on the tray.

3 Press the EJECT button to close the tray.

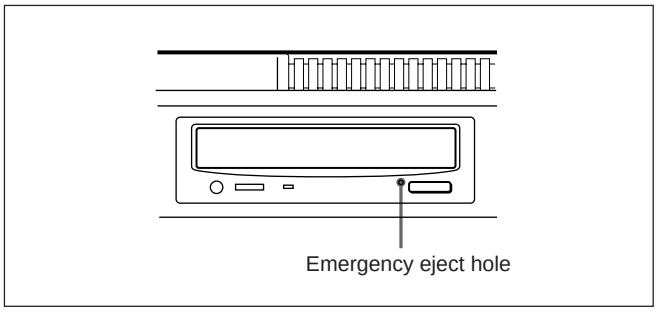


Removing CD-ROM discs

To remove a CD-ROM disc, press the EJECT button to bring the tray out, lift the disc from the tray, and press the EJECT button again to close the tray.

If the tray does not come out when you press the eject button

First shut down the system using the procedure explained in “Shutting Down the System” *(page 26)*. Then open the tray as follows.



Insert a tool with a long metal tip into the emergency eject hole, and push in until the tray cover opens slightly. When the tray cover opens, grasp it and pull the tray the rest of the way out.

CD-ROM drive names

To read the data from a CD-ROM disc, you must specify the drive name of the CD-ROM disc drive. The CD-ROM disc drive of this unit has the drive name “D:”.

Connecting System Components

This section provides examples that show how to connect the components in your editing system.

Connecting VCRs

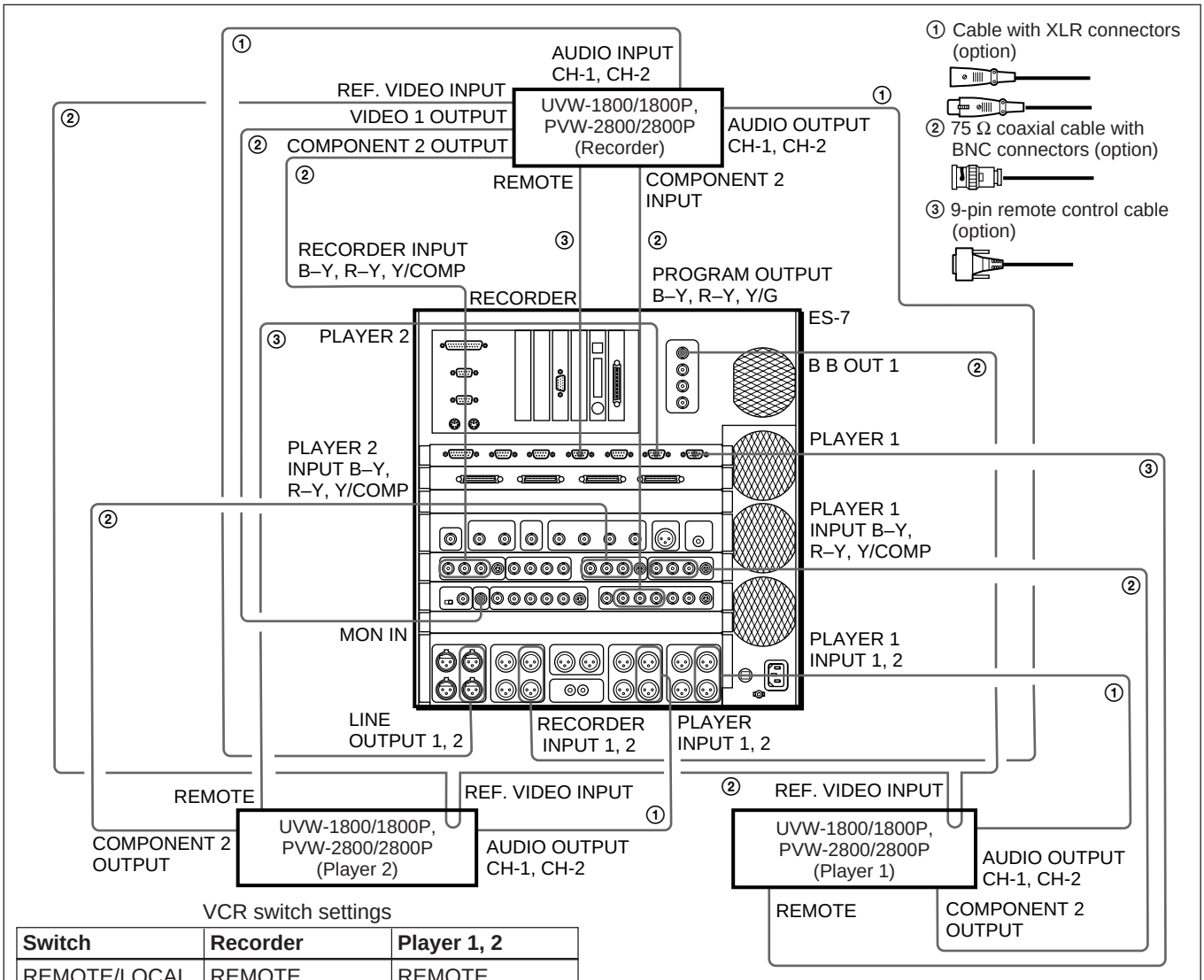
The VCR connection examples in this section assume that an ESBK-7045 Disk Unit has been connected to the EditStation.

For more information about connecting a disk unit, see page 71.

Connecting analog VCRs

You can do the following with a system configured as shown below.

- Do linear editing using materials stored on tape and VCR playback.
- Copy clips from tape to the disk recorder.
- Do non-linear editing using materials stored on the disk recorder.
- Record the results of the edit on tape as analog component video signals.



VCR switch settings

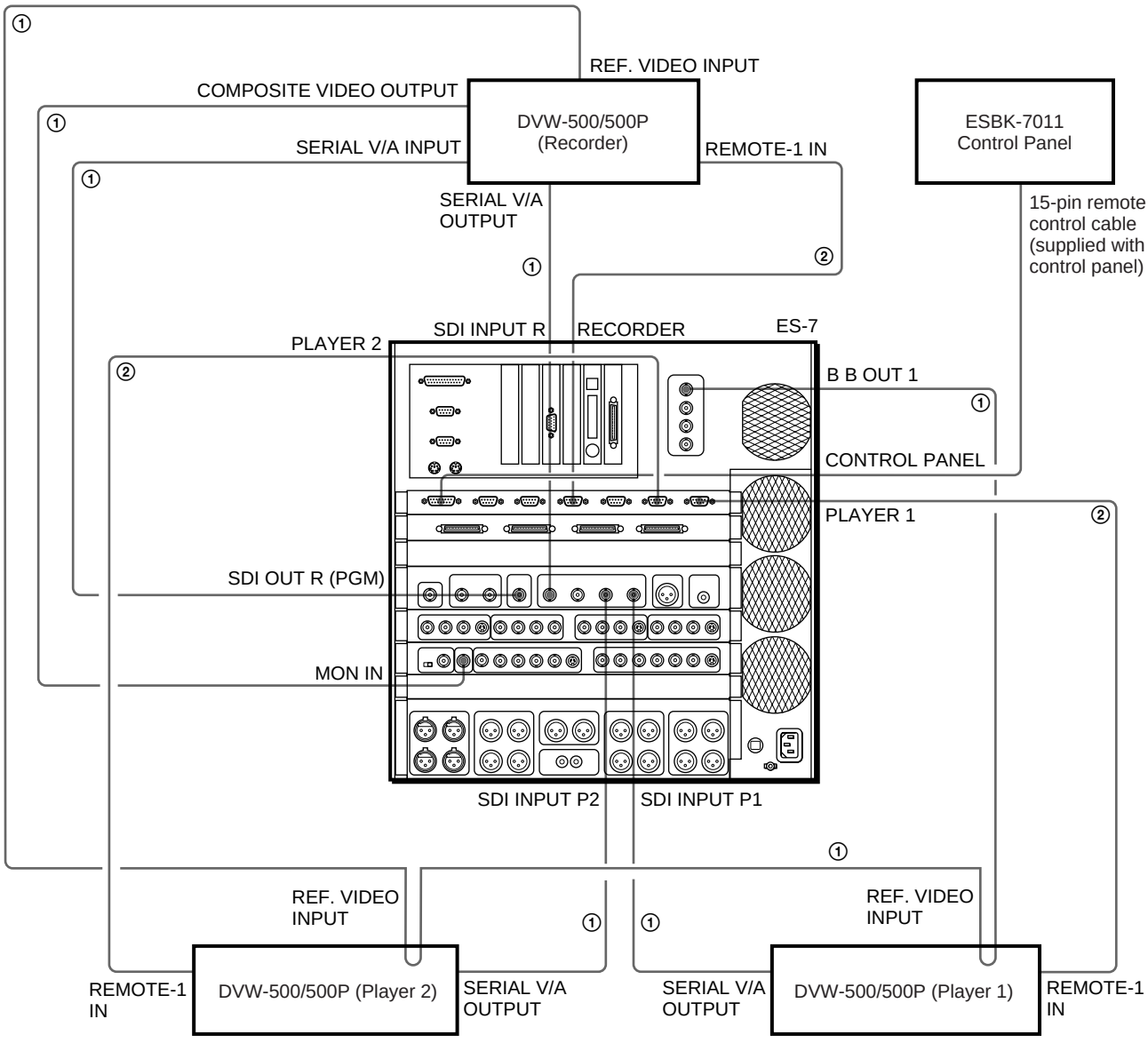
Switch	Recorder	Player 1, 2
REMOTE/LOCAL	REMOTE	REMOTE
VIDEO IN	Y–R, B	—
REF. VIDEO 75 Ω	ON	OFF

See the digital Betacam VCR connection example (page 68) for connecting a control panel.

Connecting digital Betacam VCRs

You can do the following with a system configured as shown below.

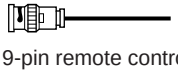
- Do linear editing using materials stored on tape and VCR playback.
- Copy clips from tape to the disk recorder.
- Do non-linear editing using materials stored on the disk recorder.
- Record the results of the edit on tape as digital Betacam video signals.



VCR switch settings

Switch	Recorder	Player 1, 2
REMOTE/LOCAL	1 (9P)	1 (9P)
VIDEO INPUT SELECT	SIF	—
REF. VIDEO INPUT 75 Ω	ON	OFF

① 75 Ω coaxial cable with BNC connectors (option)



② 9-pin remote control cable (option)

Connecting DSR-series digital VCRs

You can do the following with a system configured as shown below.

- Do linear editing using VCR playback of materials stored on tape.
- Copy clips from tape to the disk recorder at 4 times normal speed.
- Do non-linear editing using materials stored on the disk recorder.
- Record the results of the edit on tape as serial digital video signals at 4 times normal speed.

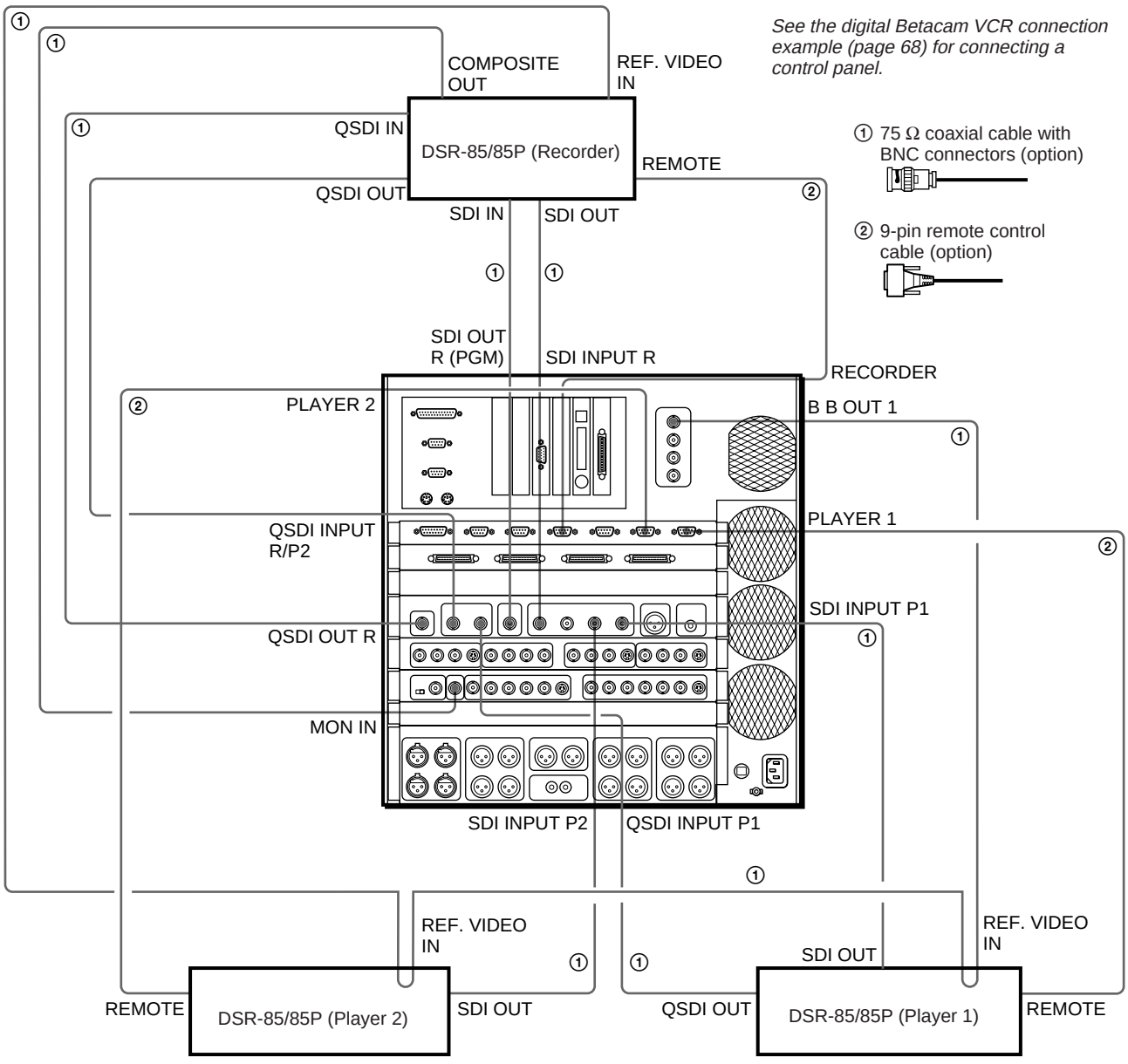
In this example, both SDI and QSDI signals are connected. The roles of the signals are as follows.

SDI signals: Used in linear editing and hybrid editing.

QSDI signals: Used in non-linear editing and for uploads and downloads at 4 times normal speed.

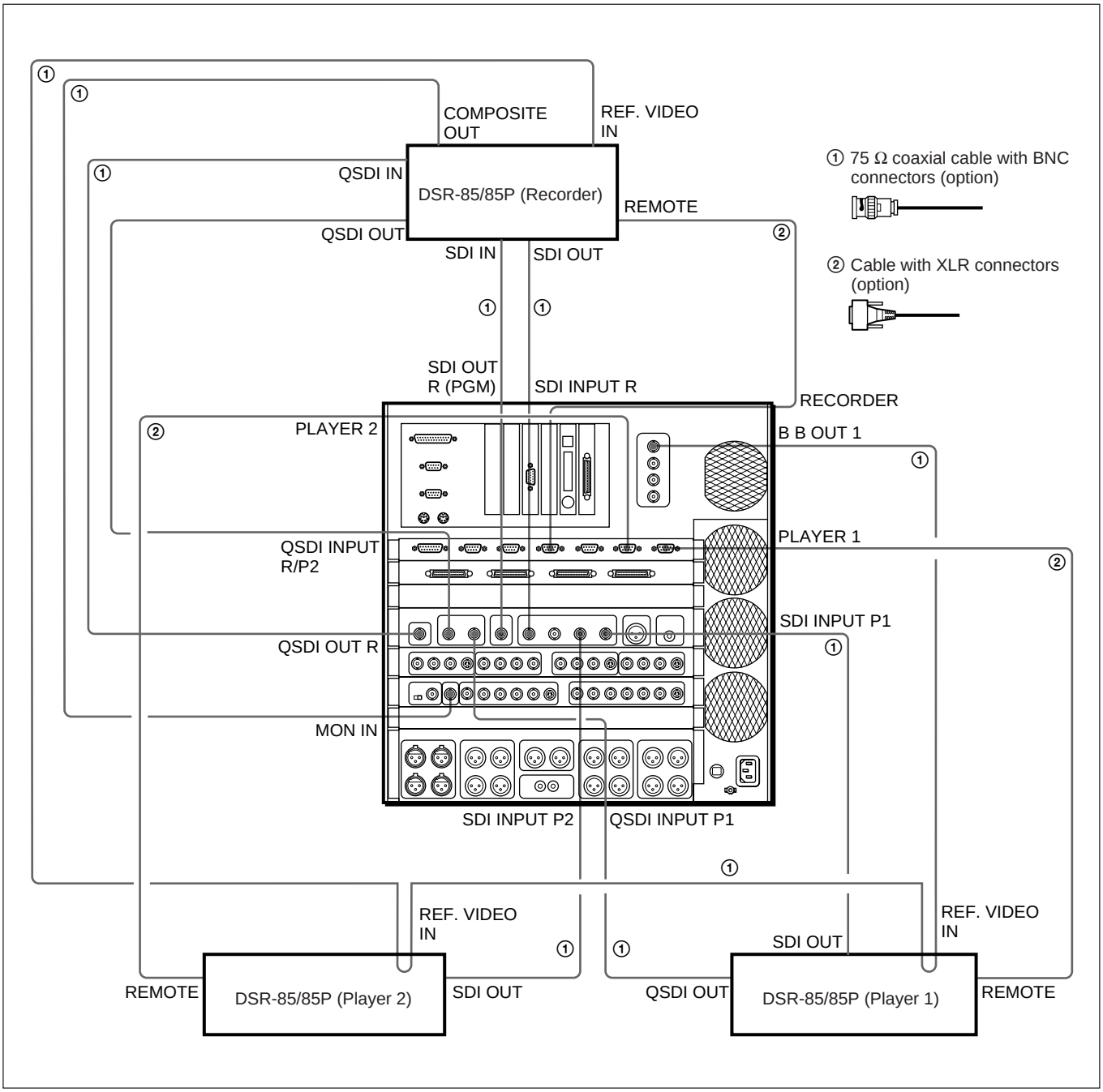
Note

When using QSDI input signals, analog video and audio input signals should also be connected. *(See the next page.)*



Connecting analog signals

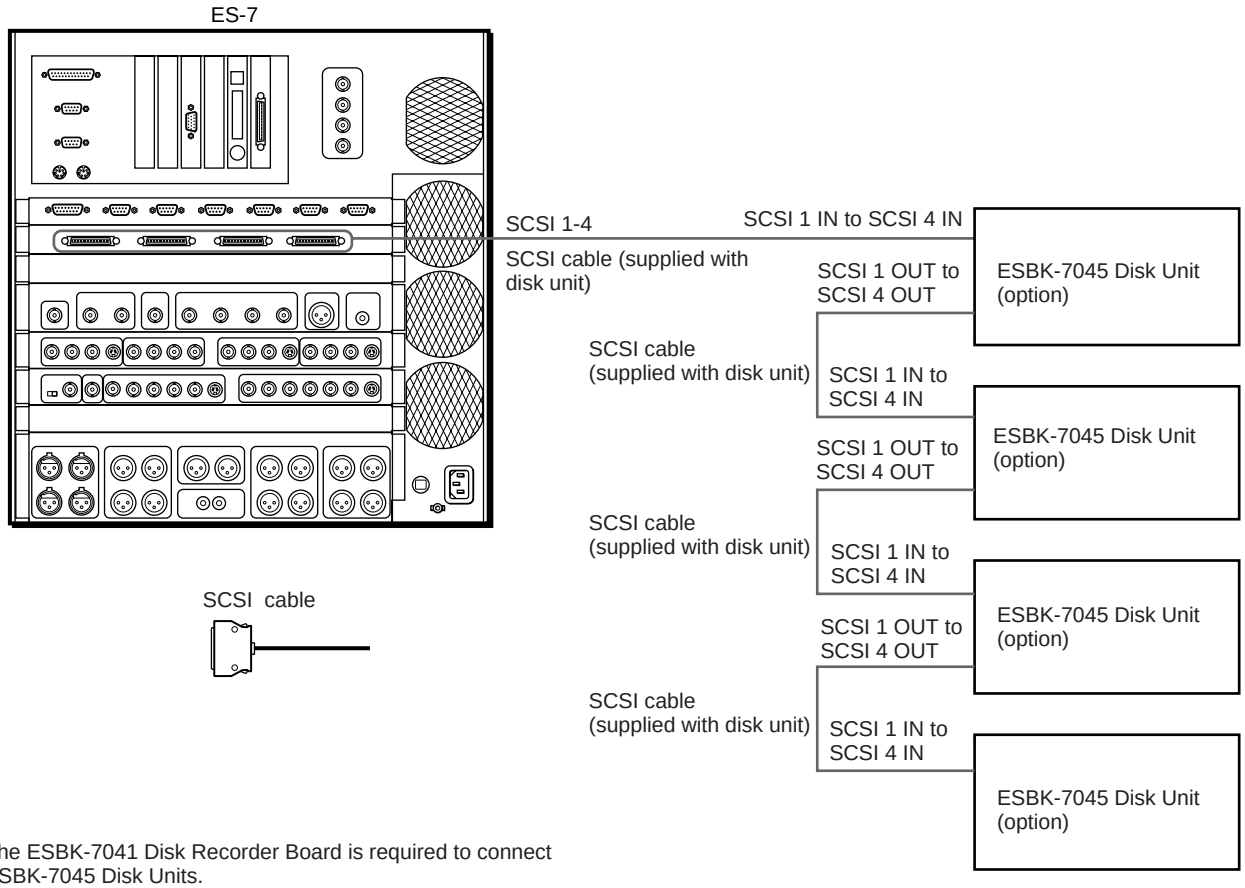
Connecting only QSDI signals causes problems such as not being able to monitor video and audio while using Video Clip Editor. For this reason, analog video and audio input signals should also be connected for monitoring video and audio performance when using QSDI input signals.



Connecting ESBK-7045 Disk Units

You can do the following with a system configured as shown below.

- Do non-linear editing using materials stored on the disk recorder.
- Record up to 4 hours of video on the disk recorder in high-quality mode.

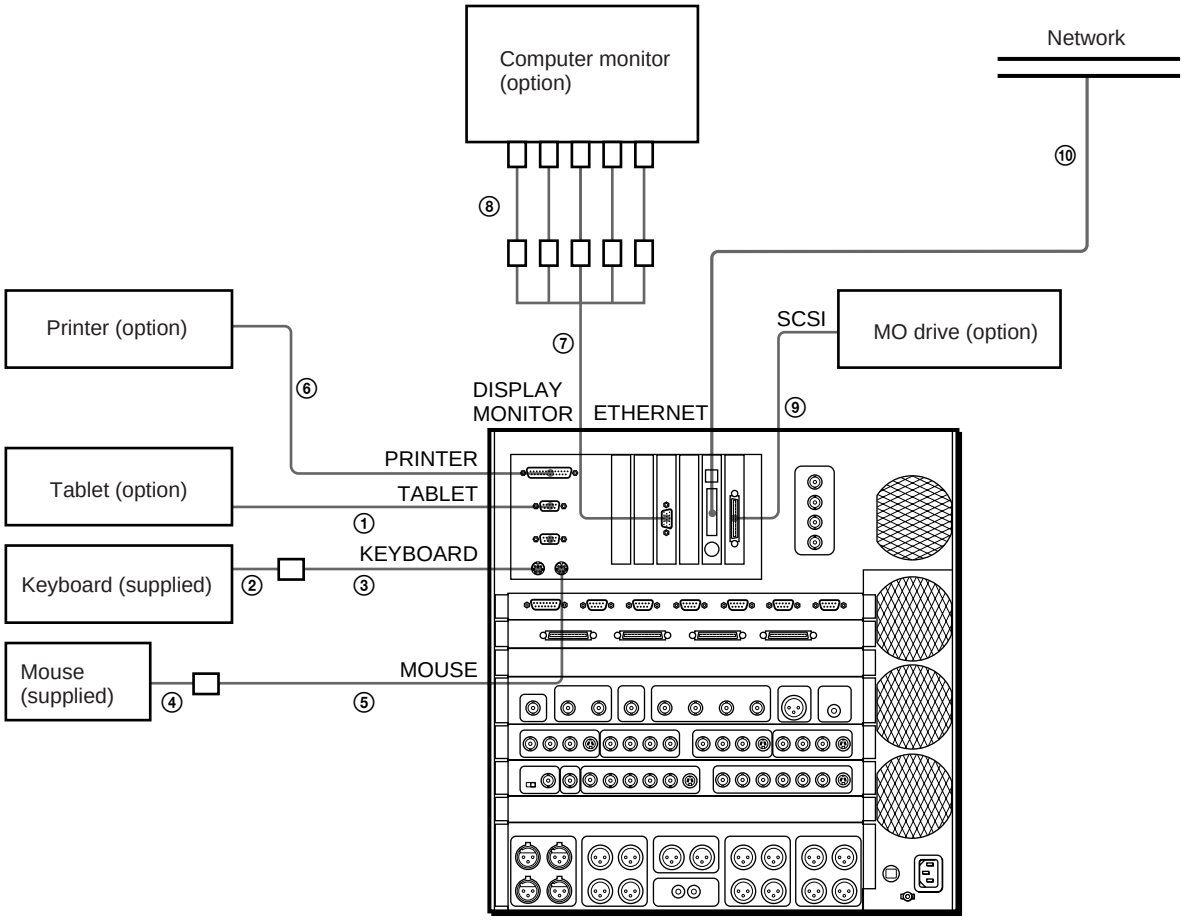


The ESBK-7041 Disk Recorder Board is required to connect ESBK-7045 Disk Units.

Connecting Computer Peripherals

You can do the following with a system configured as shown below.

- Use a tablet to create graphics.
- Send and receive video and editing data over a network.
- Store editing data on MO disks.
- Print editing data.



ES-7

① Tablet cable (supplied with tablet)

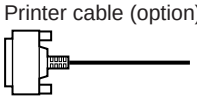
② Keyboard cable (1 m, supplied)

③ Keyboard extension cable (4 m, supplied)

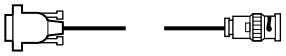
④ Mouse cable (1 m, supplied)

⑤ Mouse extension cable (4 m, supplied)

⑥ Printer cable (option)

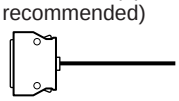


⑦ Display monitor multi-cable (D-sub 15-pin on one end, BNC connector × 5 on other end, option)



⑧ BNC extension cable × 5 (Option. Use 5 cables of same length.)

⑨ SCSI cable (option; ESBK-7053 recommended)

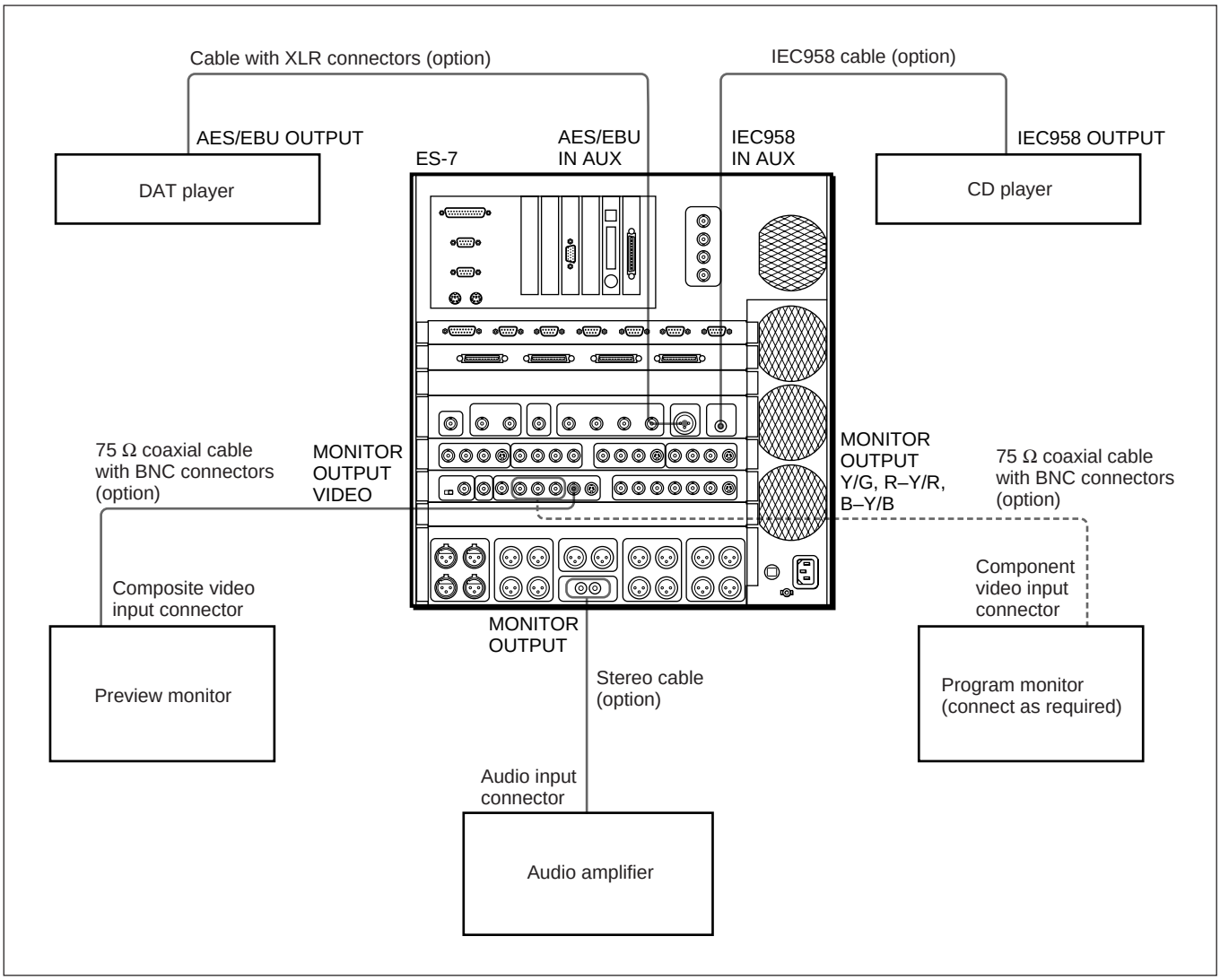


⑩ Ethernet connection cable (Option. Refer to the ESBK-7052 Ethernet Option operation manual for details.)

Connecting Video/Audio Monitors and Audio Equipment

You can do the following with a system configured as shown below.

- Record digital audio signals from CDs or DATs to videotape.
- Monitor audio signals.
- Monitor video signals before recording.
- Monitor signals input to the recorder.



Connecting an External DME Switcher

You can do the following with a system configured as shown below.

- Do linear editing using materials stored on tape and VCR playback.
- Use the DFS-300/300P/500/500P to apply effects and switch between scenes.
- Record the edit results as analog component video signals.

Setting the editor selection switch on the DME switcher

When connecting a DFS-300/300P/500/500P DME switcher, set the editor selection switch on the DME switcher as follows.

DFS-300/300P: PVE-500
DFS-500/500P: BVE-900

Types of editing that can be done

The only kind of editing that can be done with a system configured as shown below is linear editing of analog video signals. Non-linear editing and editing of digital signals are not possible.

Signal connections, settings, and limitations

- When you connect an external DME switcher, the outputs of the MONITOR OUTPUT and PROGRAM OUTPUT connectors of the ES-7 are as follows.

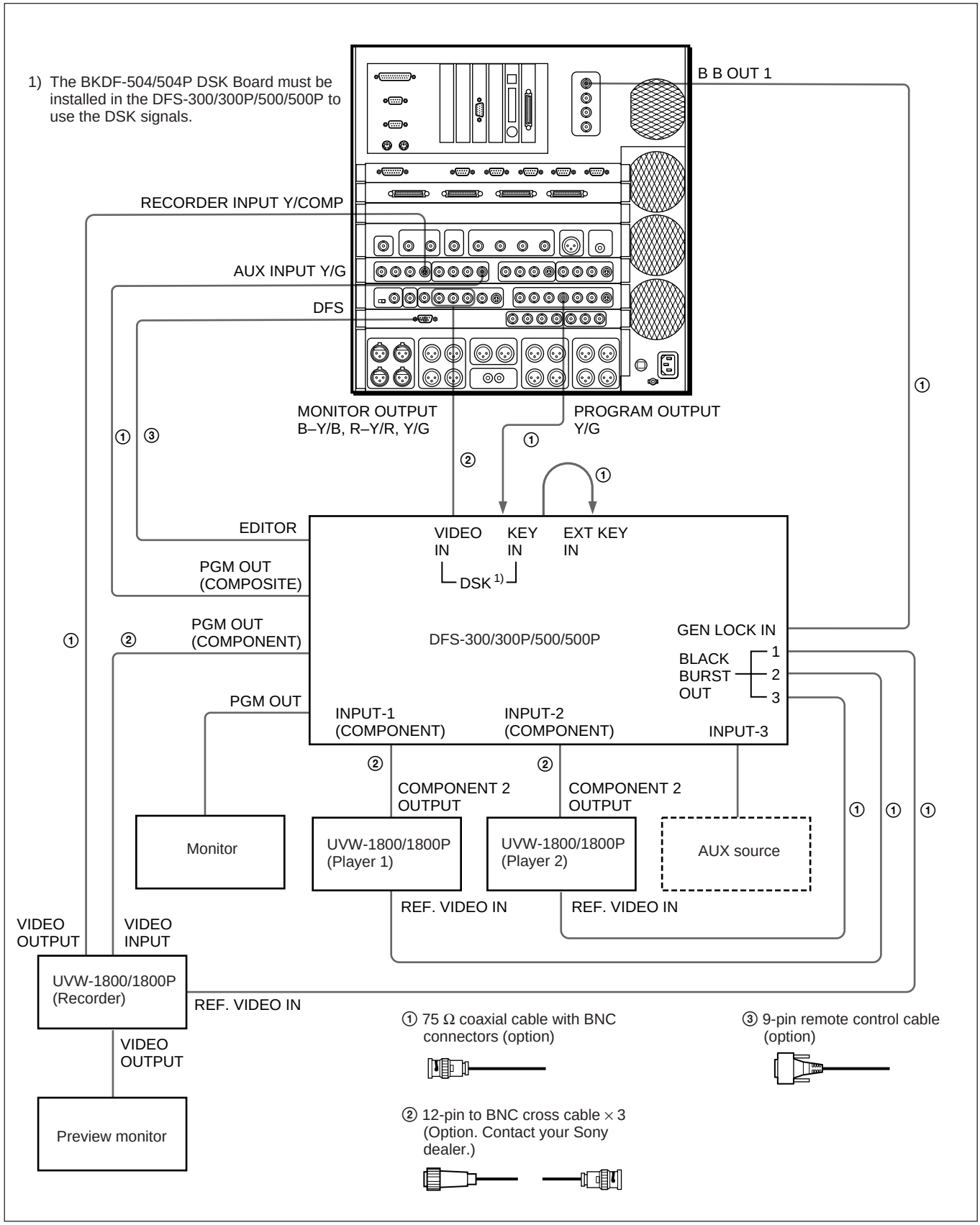
  MONITOR OUTPUT connector: The output is always the component key fill signal of the internal titler of the ES-7. Connect to the DSK VIDEO IN connector or the INPUT-4 connector of the DFS-300/300P/500/500P.

  PROGRAM OUTPUT connector: The output is always the key source signal of the internal titler of the ES-7.

- When inputting the key fill signal to both the DSK VIDEO IN and INPUT-4 connectors, an external signal distributor is required.
- When you connect an external DME switcher, connect the output of the PGM OUT connectors of the DFS-300/300P/500/500P to the AUX INPUT connectors of the ES-7.
- The correspondence between VCRs and the INPUT 1 to 4 connectors of the DFS-300/300P/500/500P is as follows.

  INPUT-1: PLAYER-1
  INPUT-2: PLAYER-2
  INPUT-3: AUX
  (**INPUT-4:** Titler key fill)

  Set the input signal formats with the input signal format selection switches on the AD board of the DFS-300/300P/500/500P. You cannot set the format from the ES-7 editing software.
- Connect the video monitor that you will use for previews to the VIDEO OUT connector of the recorder VCR.
- In the EditStation editing software, select Options from the Settings menu, and set Preview Mode to PB/EE.
- When you connect an external DME switcher, you cannot use the function that superimposes status information on the output of the MONITOR OUTPUT VIDEO connector.
- You can operate the DFS-300/300P/500/500P from the control panel supplied with the DFS-300/300P/500/500P. However, these operations will not be reflected in the screens of the EditStation editing software.


1) The BKDF-504/504P DSK Board must be installed in the DFS-300/300P/500/500P to use the DSK signals.
B B OUT 1
RECORDER INPUT Y/COMP
AUX INPUT Y/G
DFS
MONITOR OUTPUT
B–Y/B, R–Y/R, Y/G
PROGRAM OUTPUT
Y/G
EDITOR
VIDEO IN
KEY IN
EXT KEY IN
DSK 1)
PGM OUT (COMPOSITE)
PGM OUT (COMPONENT)
DFS-300/300P/500/500P
GEN LOCK IN
BLACK BURST OUT
1
2
3
PGM OUT
INPUT-1 (COMPONENT)
INPUT-2 (COMPONENT)
INPUT-3
COMPONENT 2 OUTPUT
COMPONENT 2 OUTPUT
Monitor
UVW-1800/1800P (Player 1)
UVW-1800/1800P (Player 2)
AUX source
REF. VIDEO IN
REF. VIDEO IN
VIDEO OUTPUT
VIDEO INPUT
UVW-1800/1800P (Recorder)
REF. VIDEO IN
VIDEO OUTPUT
Preview monitor
① 75 Ω coaxial cable with BNC connectors (option)
③ 9-pin remote control cable (option)
② 12-pin to BNC cross cable × 3 (Option. Contact your Sony dealer.)

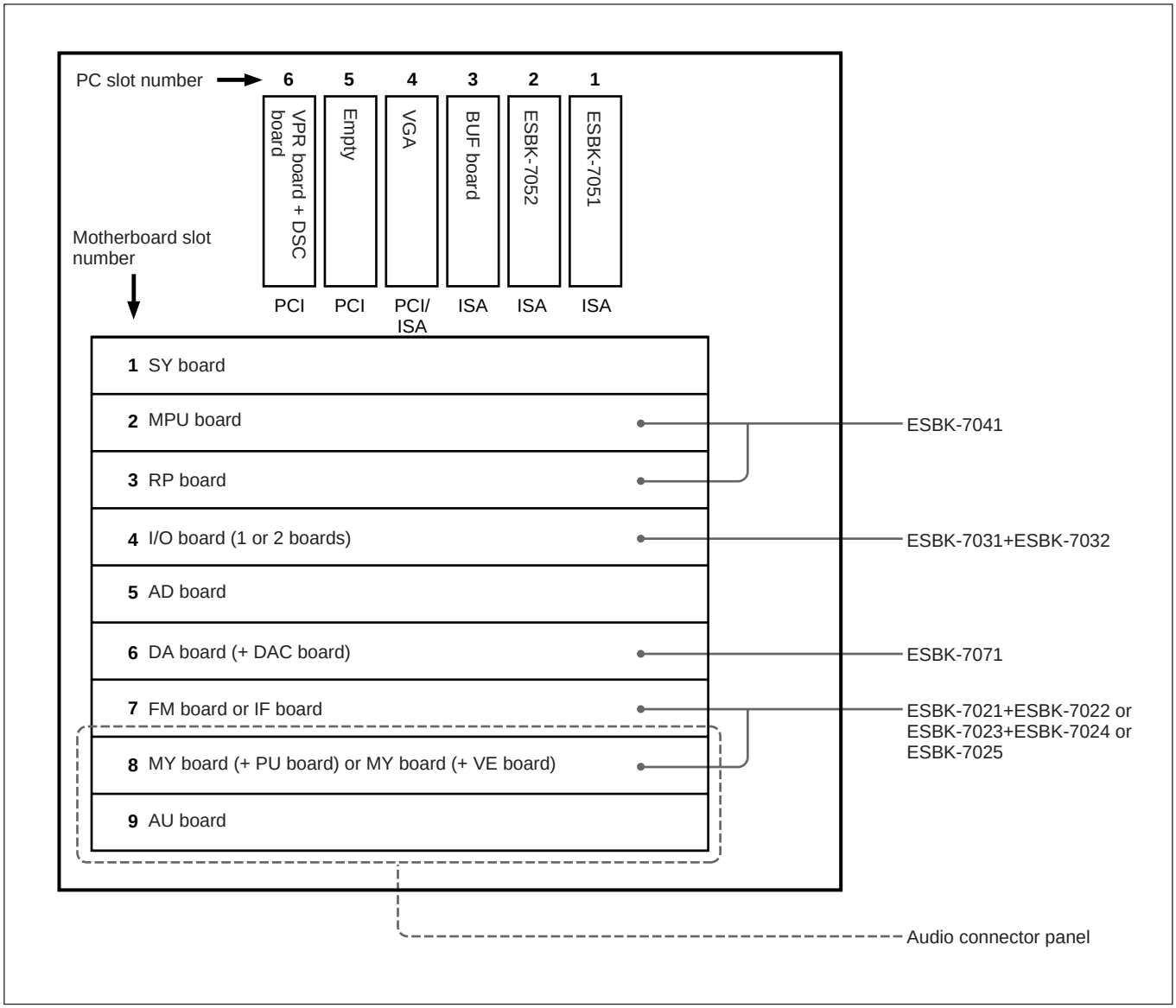
Installing Optional Boards

A variety of expansion boards are available for use with the ES-7. This section explains how to install the optional expansion boards.

Warning

- Always power the unit off before installing an expansion board. Installing boards with the power on risks fire and electric shock.
- Be careful not to injure your hands or fingers by cutting them on the edges of expansion boards or other components.

When installing an optional board, be sure to install it in the correct slot, as shown in the figure below. Installation in the wrong slot can result in damage to the unit.



Installing Expansion Boards on the Motherboard

Use the procedure described below to install the following expansion boards on the motherboard.

- ESBK-7041 Disk Recorder Board
- ESBK-7031 QSDI Interface Board
- ESBK-7021 Basic DME Switcher Board
- ESBK-7023 Advanced DME Switcher Board
- ESBK-7025 External Switcher Interface Board

Note

The following optional boards are daughter boards that install on another optional board (parent board). Before installing the parent board on the motherboard, install the daughter board on the parent board.

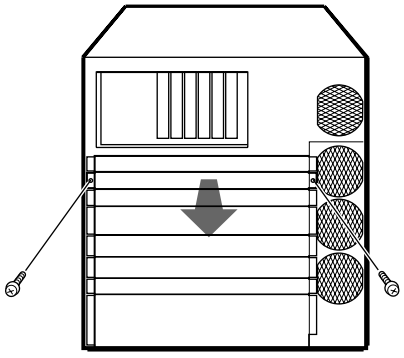
If you want to install a daughter board on a parent board that has already been installed on the motherboard, remove the parent board from the motherboard and reinstall it after installing the daughter board.

- ESBK-7022 3D Effect Board for Basic DME Switcher *(see page 81)*
- ESBK-7024 3D Effect Board for Advanced DME Switcher *(see page 82)*
- ESBK-7032 SDI Interface Board *(see page 83)*
- DAC Board for ESBK-7071/7025 *(see page 84)*

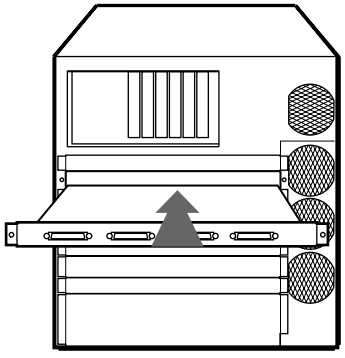
1 Remove the two screws and remove the blank panel.

Caution

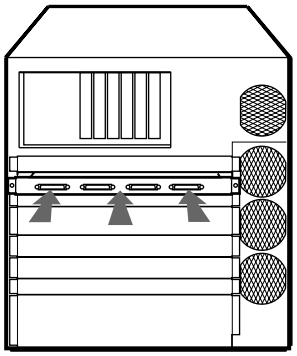
Before removing the blank panel, loosen the screws of the blank panels or connector panels in the slots above and below it, so that these panels can be moved slightly. If this is not done, force is required to remove the blank panel and injury can result.



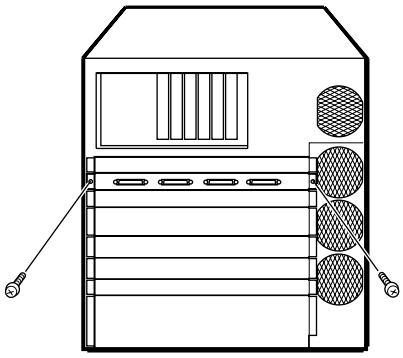
2 Insert the optional board into the specified slot.



3 Firmly push the board all the way in.

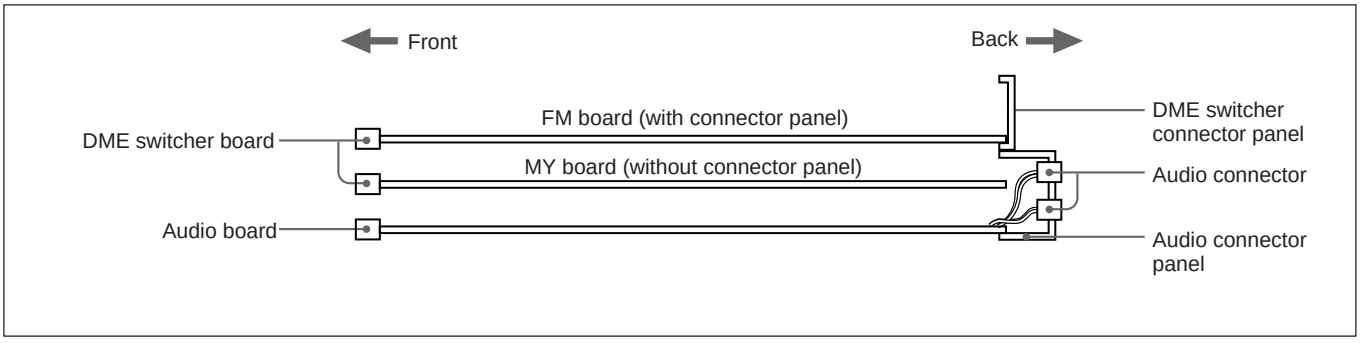


4 Replace the blank panel and fasten with the screws removed in step **1**.



Notes on installing the DME switcher boards

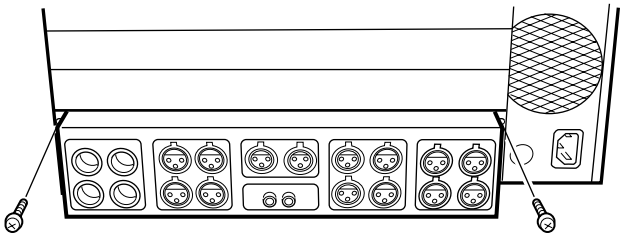
The ESBK-7021/7023 DME switcher boards are supplied as 2-board sets.
Before attaching the DME switcher boards, remove the audio connector panels.



Side view of ES-7

Installing the ESBK-7021/7023 MY board

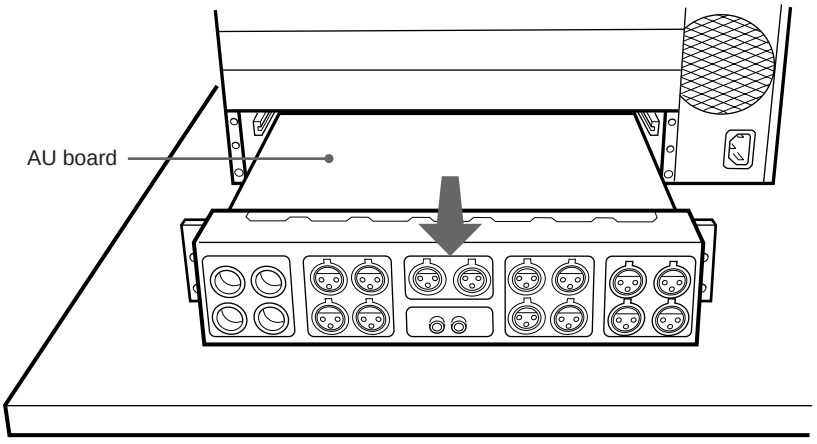
1 Remove the two screws from the audio connector panel.



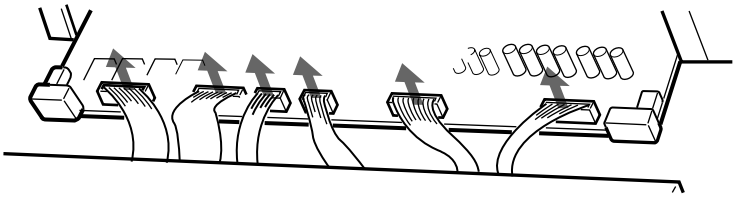
2 Pull the audio connector panel and the AU board halfway out.

Note

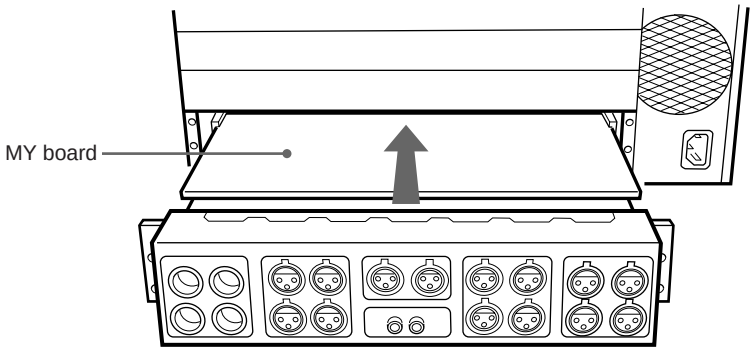
Place the ES-7 on a desk or table with enough working space to avoid applying excessive force to the cables connecting the AU board to the audio connector panel.



3 Remove the cables connecting the AU board to the audio connector panel.



4 Install the MY board of ESBK-7021 or ESBK-7023 in motherboard slot 8, the slot located just above the AU board slot.



5 Repeat steps **1** to **3** in reverse to return the AU board and audio connector panel to their original positions.

For the positions of the motherboard slots for the following boards, see page 76.

ESBK-7021 Basic DME Switcher Board or ESBK-7023 Advanced DME Switcher Board

Install the two boards of the ESBK-7021/7023 in the motherboard slots shown below.

Board name	Position
FM board	Motherboard slot 7
MY board	Motherboard slot 8

Installation Notes

- When installing the ESBK-7022/7024 3D Effect Board together with the DME switcher board, mount the 3D Effect Board on the MY board of the DME switcher board before installing the DME switcher board in the motherboard slot.

For installation of the 3D effect boards, see "Installing the ESBK-7022 3D Effect Board for Basic DME Switcher" (page 81), or "Installing the ESBK-7024 3D Effect Board for Advanced DME Switcher" (page 82).

- The motherboard slot for the MY board is located behind the audio connector panel. The audio connector panel must be removed before installing the board.

For installation of the MY board, see "Installing the ESBK-7021/7023 MY board" (page 79).

- The EditStation is shipped from the factory with the software version installed in it to use the Advanced DME Switcher. To use the Basic DME Switcher, it is necessary to carry out software reinstallation.

ESBK-7025 External Switcher Interface Board

Install the two boards of the ESBK-7025 in the positions shown below.

Board name	Position
DAC board	On the video output (DA) board
IF board	Motherboard slot 7

For more information about installing the DAC board, see "Installing the adapter board (DAC) supplied with ESBK-7071 ESDraw" (page 84).

Note

If ESDraw and the ESBK-7071 DAC board are already installed, you do not need to install the DAC board on the external switcher video output (DA) board.

ESBK-7041 Disk Recorder Board

Install the two boards of the ESBK-7041 in the motherboard slots shown below.

Board name	Position
MPU board	Motherboard slot 2
RP board	Motherboard slot 3

ESBK-7031 QSDI Interface Board

Install the ESBK-7031 QSDI Interface Board in motherboard slot 4.

Note

When installing both the ESBK-7031 and the ESBK-7032 SDI Interface Board, mount the SDI Interface Board on the IO board before installing the ESBK-7031 in the motherboard slot.

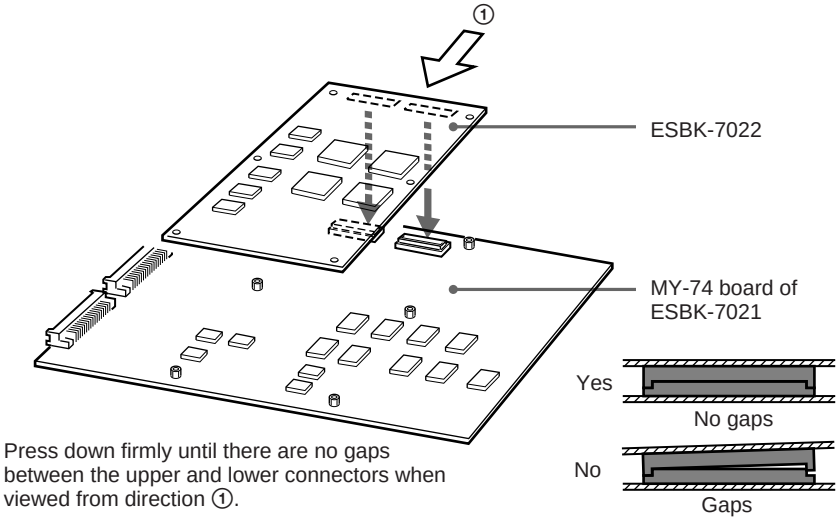
For more information about installing the ESBK-7032, see "Installing the ESBK-7032 SDI Interface Board" (page 83).

Installing Daughter Boards

Installing the ESBK-7022 3D Effect Board for Basic DME Switcher

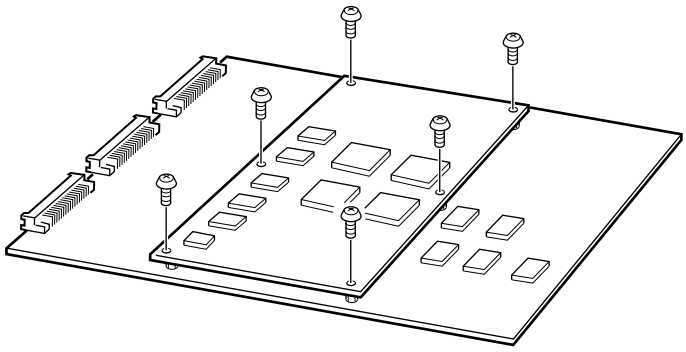
Proceed as follows to install the ESBK-7022 board on the MY-74 board of the ESBK-7021 Basic DME Switcher Board. (The MY-74 board is the board without a connector panel.)

1 Press the ESBK-7022 board down onto the MY-74 board until the two connectors on the ESBK-7022 are firmly seated in the two connectors on the MY-74 board.

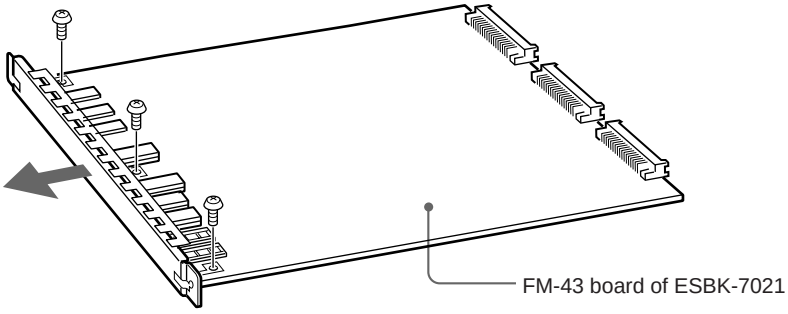


Press down firmly until there are no gaps between the upper and lower connectors when viewed from direction ①.

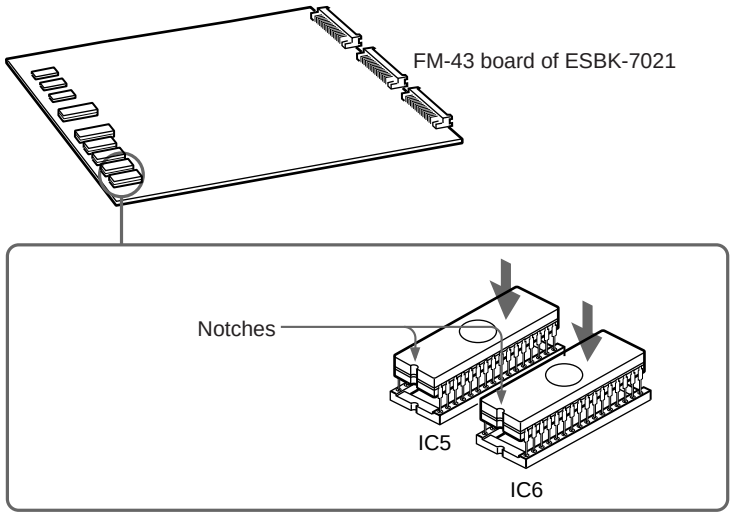
2 Using the supplied screws, fasten the ESBK-7022 board to the MY-74 board.



3 Remove the connector panel of the FM-43 board of the ESBK-7021.



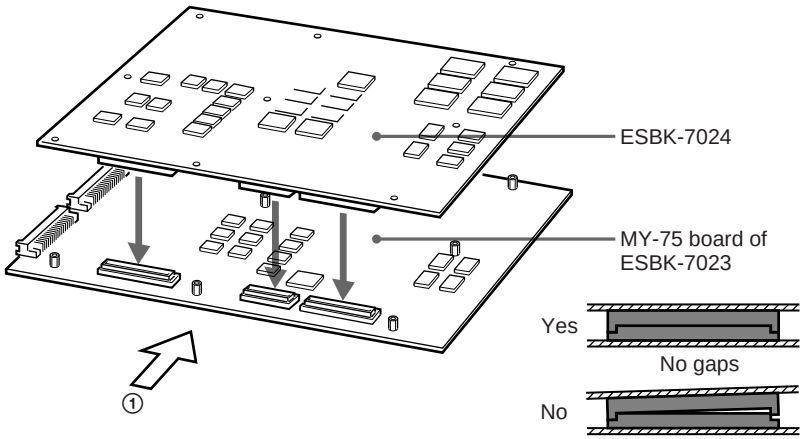
4 Insert the two ROMs (IC5 and IC6) supplied with the ESBK-7022 into the sockets of the FM-43 board of the ESBK-7021 board. When inserting, align the notches on the ROMs with the notches in the sockets. After inserting the ROMs, attach the connector panel of the FM-43 board in its original position.



Installing the ESBK-7024 3D Effect Board for Advanced DME Switcher

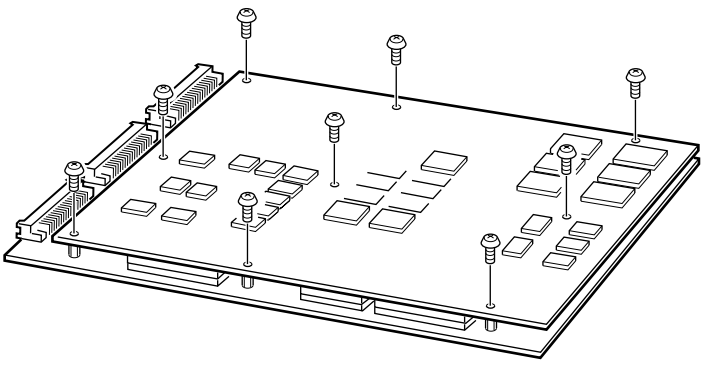
Proceed as follows to install the ESBK-7024 board on the MY-75 board of the ESBK-7023 Advanced DME Switcher Board. (The MY-75 board is the board without a connector panel.)

1 Press the ESBK-7024 board down onto the MY-75 board until the three connectors on the ESBK-7024 are firmly seated in the three connectors on the MY-75 board.



Press down firmly until there are no gaps between the upper and lower connectors when viewed from direction ①.

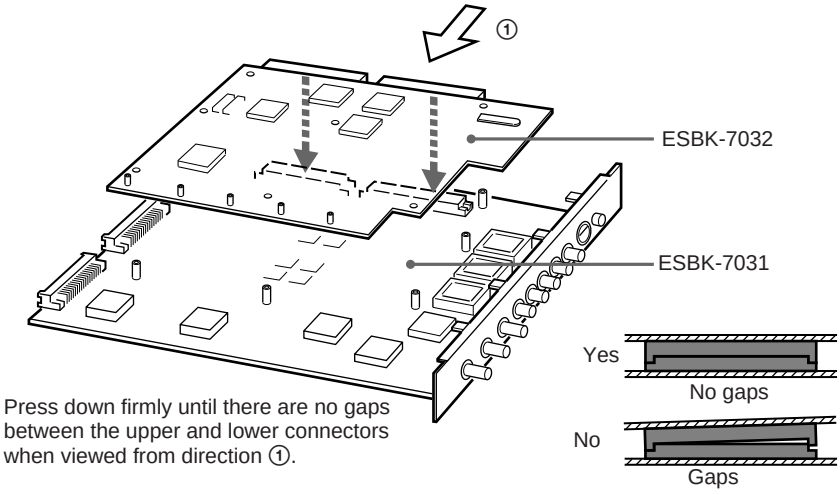
2 Using the supplied screws, fasten the ESBK-7024 board to the MY-75 board.



Installing the ESBK-7032 SDI Interface Board

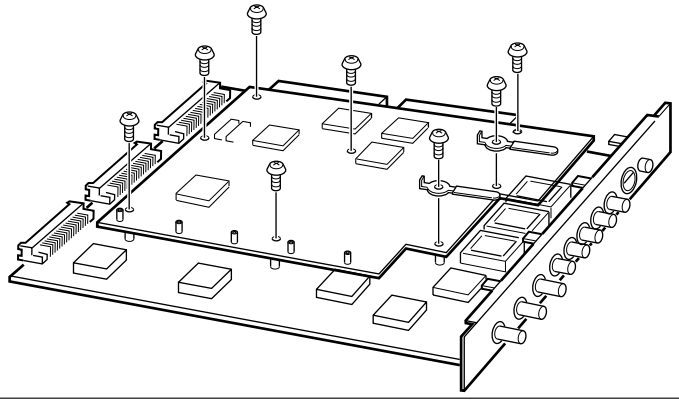
Proceed as follows to install the ESBK-7032 board on the ESBK-7031 QSDI Interface Board.

1 Press the ESBK-7032 board down onto the ESBK-7031 board until the two connectors on the ESBK-7032 are firmly seated in the two connectors on the ESBK-7031 board.



Press down firmly until there are no gaps between the upper and lower connectors when viewed from direction ①.

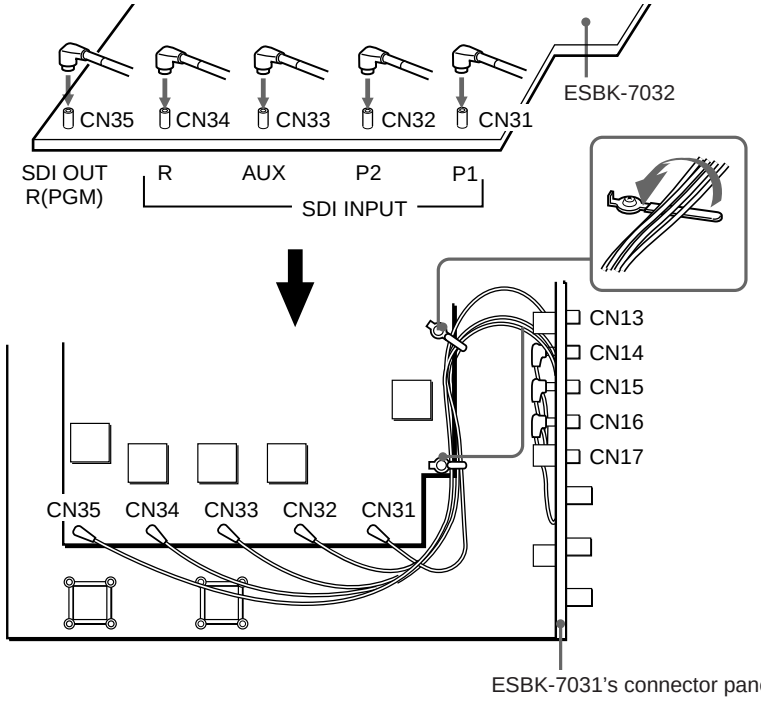
2 Using the supplied screws, fasten the ESBK-7032 board to the ESBK-7031 board.



3 Using the coaxial cables supplied with the ESBK-7032, connect the SDI input and output connectors on the ESBK-7031 connector panel to the mini BNC connectors on the ESBK-7032 board.

Connect to the destinations shown in the illustration. The connector combinations and calbe length are as follows.

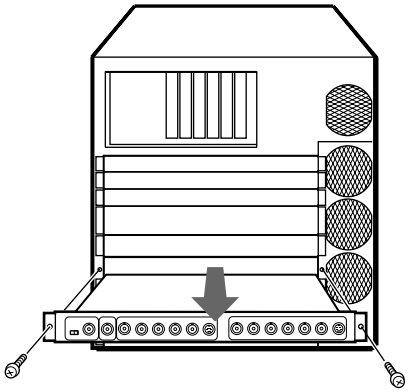
ESBK-7032	ESBK-7031	Cable length
CN31 CN32	CN13 CN14	380 mm
CN33 CN34 CN35	CN15 CN16 CN17	580 mm



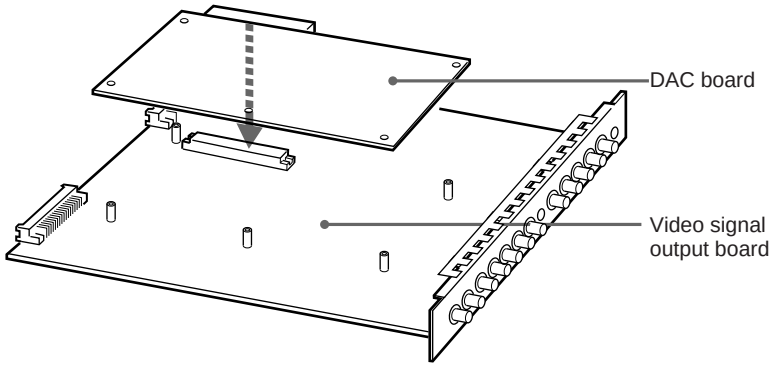
Installing the adapter board (DAC) supplied with ESBK-7071 ESDraw

An adapter board (DAC) is supplied with the ESBK-7071 ESDraw drawing software. Install this board on the video signal output board.

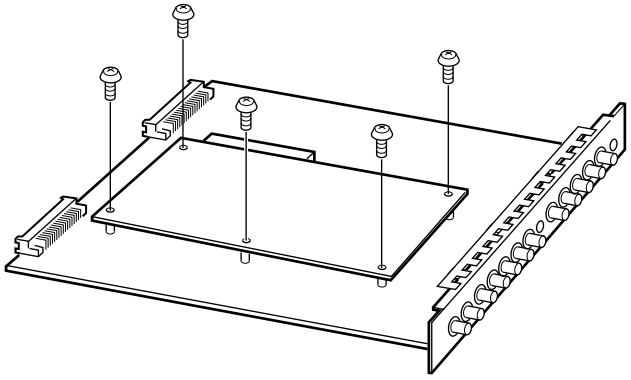
1 Remove the video signal output board.



2 Press down firmly until the connectors of the DAC board are completely seated in the connectors of the video signal output board.



3 Using the supplied screws, fasten the DAC adapter board to the video signal output board.

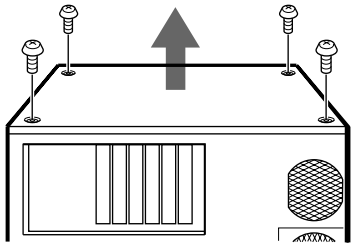


Installing Expansion Boards in ISA Slots

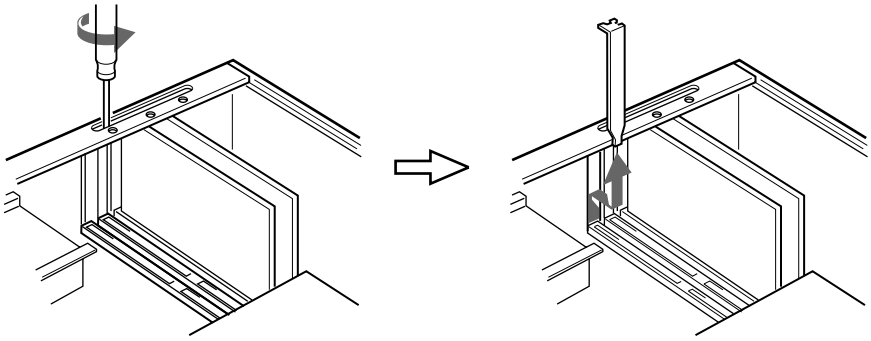
Proceed as follows to install the following optional expansion boards in the ISA slots of the ES-7.

- ESBK-7051 SCSI Option
- ESBK-7052 Ethernet Option

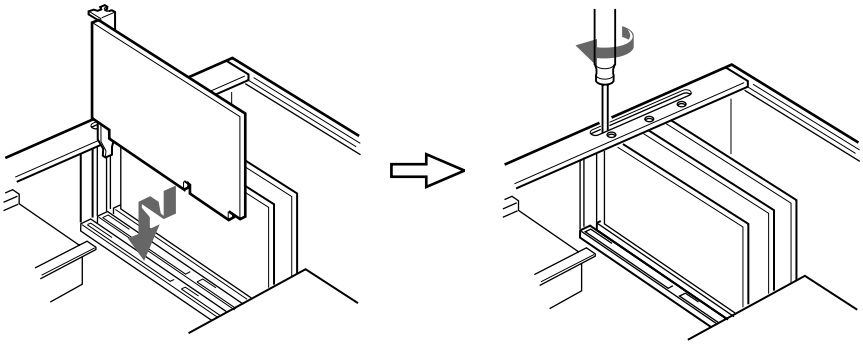
1 Remove the cover of the ES-7 main unit.



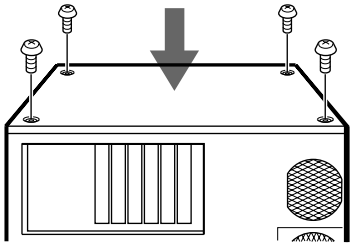
2 Remove the slot cover screw and remove the slot cover.



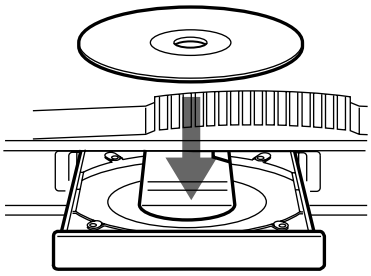
3 Press the expansion board down firmly into the specified slot, and fasten with the screw removed in step **2**.



4 Replace the cover of the ES-7 main unit.



5 Refer to the operation manual of the expansion board and install the required driver software.



Recommended Connectable Video Equipment

The ES-7 can use status signals sent from video equipment connected to the remote control connectors (PLAYER 1, PLAYER 2, RECORDER, AUX) of the rear panel system control section to automatically detect the device type of the connected equipment, and control the operation of the connected equipment using device constants for the detected device types. The ES-7 has built-in device constants for the following video equipment.

Equipment type	Model
S-VHS VCR	SVO-5800/5800P, SVP-5600/5600P
Betacam VCR	BVW-60/60P/65/65P/70/70P/75/75P, UVW-1600/1600P/1700G/1700GP/1800/1800P, PVW-2600/2600P/2650/2650P/2800/2800P
DVCAM™ VCR	DSR-60/60P/80/80P/85/85P

Setting the Video Signal Format

After connecting the VCRs and other peripheral equipment in your system, use the EditStation Settings menu to set their video signal formats.

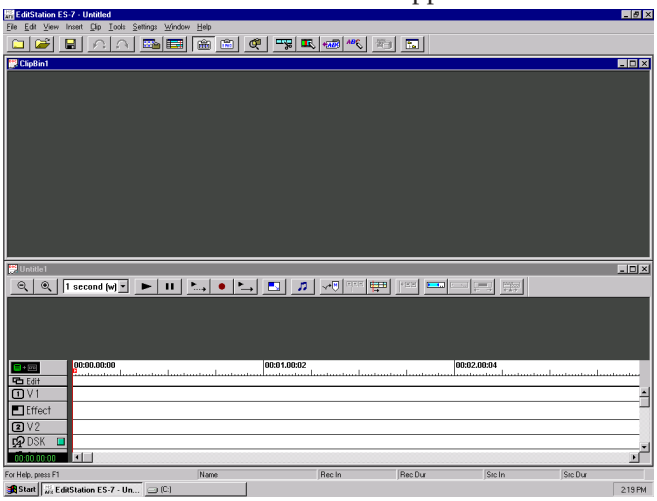
Note

The software must be set up when you use the unit for the first time.

For more information about setting up the software, see "Setting Up Windows NT (Using the Unit for the First Time)" (page 88).

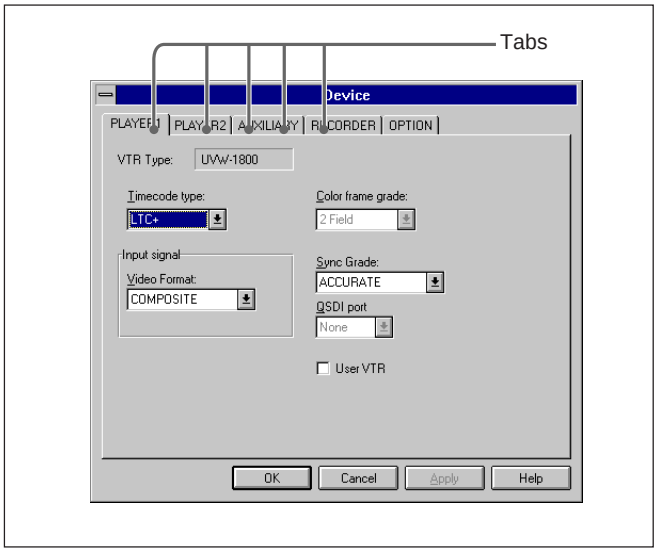
1 Log on and start EditStation using the procedures explained in "Starting the System" *(page 17)* and "Starting EditStation" *(page 30)*.

The EditStation initial screen appears.



2 Make the Clip Bin window the active window and select Device from the Setting menu.

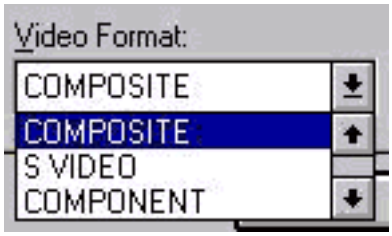
The Device dialog box appears.



3 Click the tab for the VCR whose signal format you want to set.

4 Click the ▼ button for Video Format.

A list of video formats appears. Click the ▼ or ▲ scroll button to scroll the list and display other formats.



5 Select the desired video signal format from the list and click it.

The selected format is highlighted in the list box.

6 Click the OK button.

This completes the selection of the video signal format. You can begin editing with the selected format.

For more information about the other items in the Settings menu, see the online manual.

Setting Up Windows NT (Using the Unit for the First Time)

When you use the unit for the first time, Windows NT must be set up.
Proceed as follows.

1 Power the unit on.

2 Follow the instructions on the computer monitor and agree to the terms of the licensing agreement.

3 Enter the Product ID.

You can find the Product ID on the Certificate of Authenticity supplied with the operating system package.

4 Set the date and time.

*For details, see step **3** of "Setting the Date and Time" on the following page.*

5 Follow the instructions on the computer monitor to complete the setup.

At Network Setup, click the Next button.
When the setup finishes, a message appears to alert you that all settings have been made.
You will be able to use the unit after it is restarted.

Setting the Date and Time

Whenever you save data with this unit, the current date and time are saved together with the data. The correct date and time are not set when the unit is shipped from the factory, so be sure to carry out the following procedure to set the date and time before saving your data.

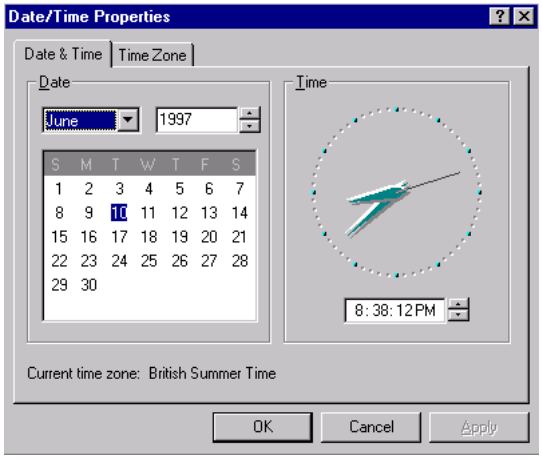
1 In the desktop, double click the My Computer icon to open the My Computer folder, and double click the Control Panel icon.

The Control Panel window opens.

2 In the Control Panel window, double click the Date/Time icon.

The Date/Time Properties dialog box opens.

3 Use the following procedure to set the date and time.



1) Click Time Zone and set the time zone.
If you do not change the time zone setting, click the Date & Time tab.
If you do change the time zone setting, click the Apply button and then click the Date & Time tab.

2) Under the Date & Time tab, set the year, month, day, hour, minute, second, and AM/PM. You can select the year and month from the drop-down list or enter them from the keyboard. Set the day by clicking on the calendar.
Set the hour, minute, second, and AM/PM by clicking on the item to change and then clicking the up or down arrow button. You can also enter the hour, minute, and second from the keyboard.

3) Click the OK button.

4 In the Control Panel window, click the ✕ button in the upper right corner to close the Control Panel window.

5 In the My Computer window, click the ✕ button to close the My Computer folder window.

Reinstalling the Software

If the EditStation software fails to operate because of corrupt program files, reinstall the software using the following procedure.

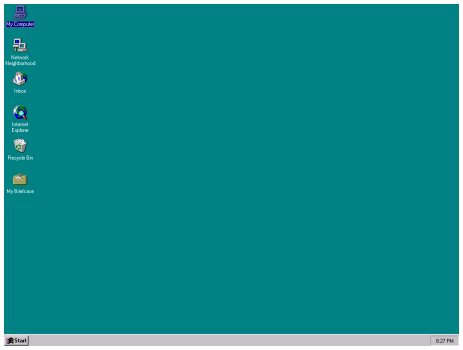
Note

Software reinstallation is also necessary to:

- use the ESBK-7021 Basic DME Switcher Board.
- use a French or German version of menu screen display. (The EditStation is shipped from the factory with an English version of menu system installed in it.)

1 Log on using the procedure explained in “Starting the System” *(page 17)*.

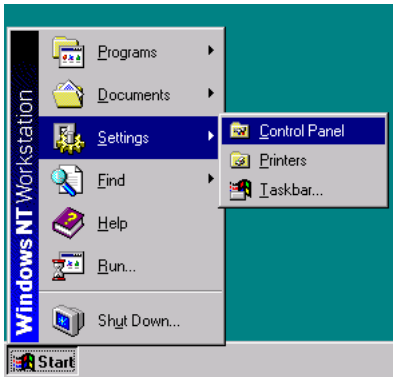
The desktop appears on the screen.



2 Insert the supplied CD-ROM disc.

For more information about inserting CD-ROM discs, see “Inserting and removing CD-ROM discs” (page 66).

3 Click the Start button in the taskbar, move the pointer to Settings and click Control Panel.



The Control Panel window opens.

4 Click the Add/Remove Programs icon and carry out steps **1)** to **3)** below.

1) Click the Install/Uninstall tab and then click the Install button.
2) Click the Next button.
3) Check to be sure that D:\SETUP.EXE is displayed in the command line, and then click the Finish button.

The setup program starts.
Follow the instructions on the screen to complete the installation.

5 When the installation of the software is complete, press the CD-ROM EJECT button to remove the CD-ROM disc.

Registering User Names and Passwords

You can register users and passwords to prevent persons who do not have user names and passwords from using the system.
The following operations can be performed by users who belong to the Administrators group or the Power Users group. Users who log on using the factory default configuration (user name: “Administrator”; password: none), belong to the Administrators group.

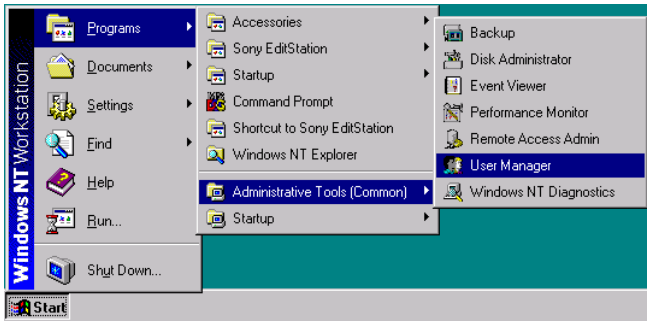
For more information about user groups, click the Help menu in the User Manager window.

To register user names and passwords, proceed as follows.

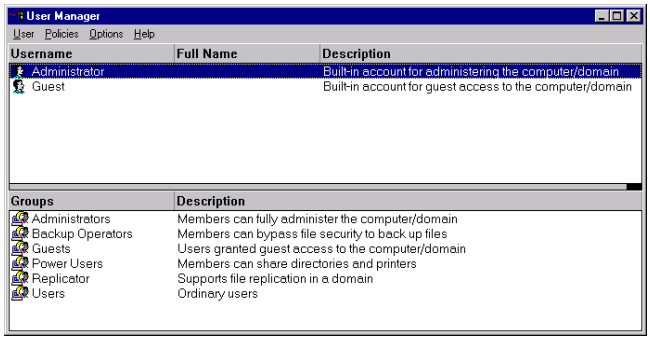
1 Log on using the procedure explained in “Starting the System” *(page 17)*.

The desktop appears on the screen.

2 Click the Start button on the taskbar, point to Programs and Administrative Tools in this order, and click User Manager.



The User Manager window opens.



3 Select New User from the User menu.

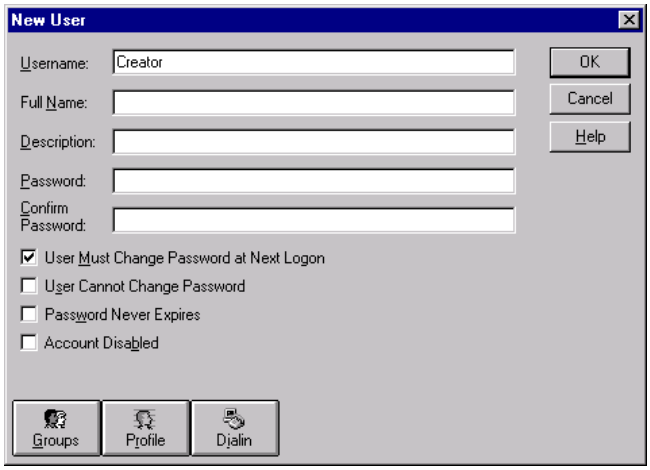
The New User dialog box appears.

4 Enter a user name in the Username field.

User names can be up to 20 characters long. You can use any combination of uppercase and lowercase letters and any other characters except the following:

” / \ [ ] : ; | = , + * ? < >

You cannot assign a user name that has already been registered.



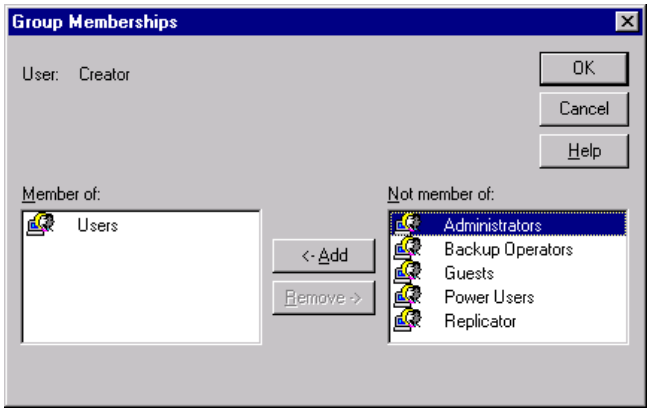
5 Enter a password in the Password field and the Confirm Password field.

Passwords can be up to 14 characters long. Uppercase letters are distinguished from lowercase letters.

(Continued)

6 Click the Groups button.

A Group Memberships dialog box like the one below appears.



7 From the “Not member of” list, select the Administrators, highlighting it, and click the Add button.

“Administrators” is added to the “Member of” list.

8 Select Users in the “Member of” list, and then click the Remove button.

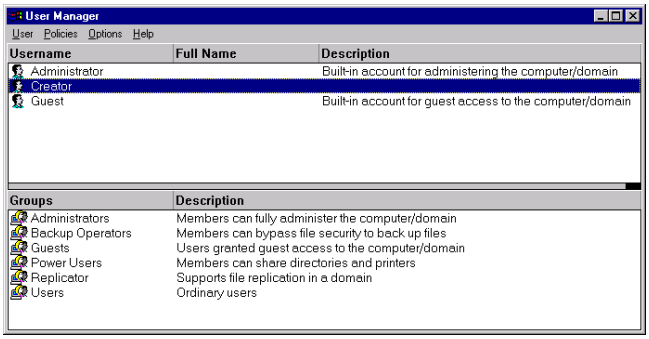
“Users” is removed from the “Member of” list.

9 Click the OK button.

The Group Memberships dialog box closes.

10 Click the OK button of the New User dialog box.

The New User dialog box closes.
The user name that you just registered is displayed in the Username list of the User Manager window.



11 Select Exit from the User menu.

The User Manager window closes.

Executing the Self Diagnostics

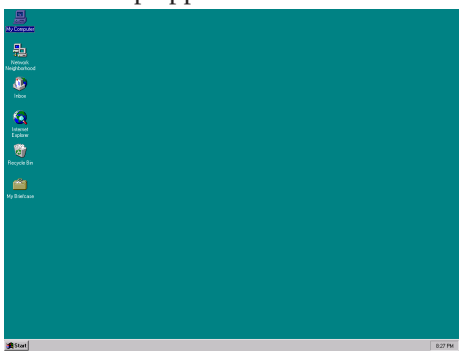
The ES-7 has a self-diagnostics function that helps you to locate the cause of the problem when trouble occurs in the system.
Technical service will be able to assist you more rapidly if you report the results of self diagnostics when requesting repairs for the system.
This section will explain the basics of using the self diagnostics function.

For more detailed information, refer to the online manual.

Proceed as follows to execute the self diagnostics.

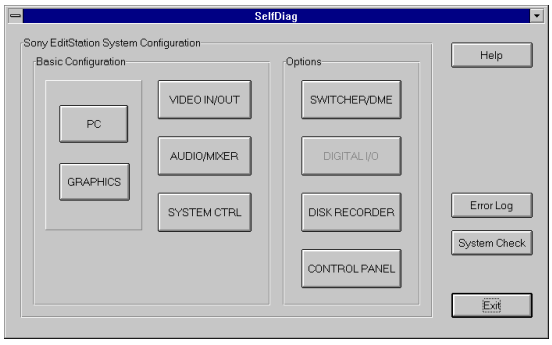
1 Log on using the procedure explained in “Starting the System” *(page 17)*.

The desktop appears on the screen.



2 Click the Start button on the taskbar, point to Programs and Sony EditStation in this order, and click SelfDiag.

The initial screen of the self diagnostics software appears.



3 Click the System Check button.

The self diagnostics start, and the operation of each block in the system is checked.
If any errors are discovered by the self diagnostics, they are recorded in an error log[1)].

To check a specific block

In the initial screen of the self diagnostics software, click the button for the block you want to check.

To view the error log

In the initial screen of the self diagnostics software, click the Error Log button.

For information about the contents of the error log, refer to the online manual.

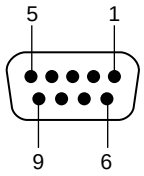
1) A file that records the date and time of the self diagnostics and the error status of each block.

Pin Assignments

GPI Pin Assignments

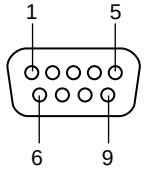
To connect external equipment to the GPI connectors on the rear panel of the ES-7, attach the supplied GPI connectors to the connection cables.
The GPI pin assignments on the ES-7 side are as follows.

GPI (PARALLEL) connector



Pin no.	Signal
1	TTL1 OUT
2	RELAY1
3	RETURN1
4	TTL3 OUT
5	GND
6	TTL2 OUT
7	RELAY2
8	RETURN2
9	TTL4 OUT

GPI (232) connector

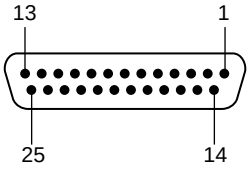


Pin no.	Signal
1	N.C.
2	GPI RXD IN
3	GPI TXD OUT
4	(DTR)
5	SIGNAL GND
6	(DSR)
7	(RTS)
8	(CTS)
9	N.C.

Pins 4 and 6 are connected internally.
Pins 7 and 8 are connected internally.

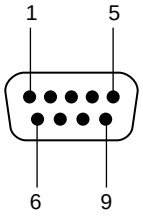
Computer Connection Section Pin Assigments

PRINTER connector



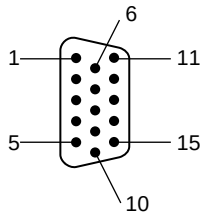
Pin no.	Signal	Pin no.	Signal
1	STROBE	10	ACKNLG
2	DATA1	11	BUSY
3	DATA2	12	PE
4	DATA3	13	SLCT
5	DATA4	14	AUTOFD
6	DATA5	15	ERROR
7	DATA6	16	INIT
8	DATA7	17	SLCTIN
9	DATA8	18 to 25	GND

COM 1 and COM 2 connectors



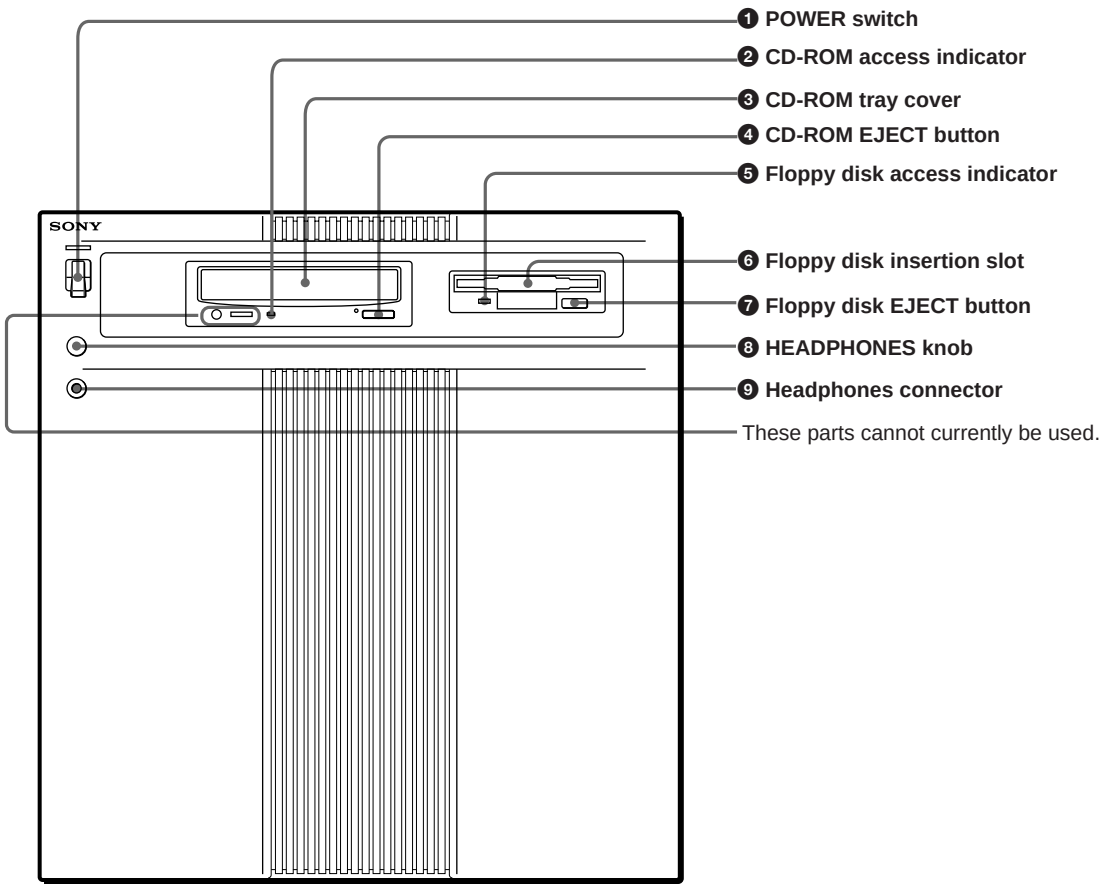
Pin no.	Signal
1	CD
2	RD
3	TD
4	ER
5	SG
6	DR
7	RS
8	CS
9	RI

DISPLAY MONITOR connector



Pin no.	Signal
1	Red Video
2	Green Video
3	Blue Video
4	Not Used
5	Ground
6	Red Return
7	Green Return
8	Blue Return
9	No Connection
10	Sync Return
11	Not Used
12	Not Used
13	Horizontal Sync
14	Vertical Sync
15	Not Used

Front Panel



❶ POWER switch
Turns the power on and off. Be sure to carry out the Windows NT shutdown procedure before turning the power off.

For the Windows NT shutdown procedure, see "Shutting Down the System" (page 26).

❷ CD-ROM access indicator
Normally lights in green, and lights in orange to indicate that the unit is reading from a CD-ROM disc.

❸ CD-ROM tray cover
This is the cover of the tray where CD-ROM discs are placed.

❹ CD-ROM EJECT button
Press this button to open the CD-ROM tray to insert or remove a disc. To close the tray, push it in.

❺ Floppy disk access indicator
Lights to indicate that the unit is writing to or reading from a floppy disk.

❻ Floppy disk insertion slot
Insert 3.5-inch floppy disks here.

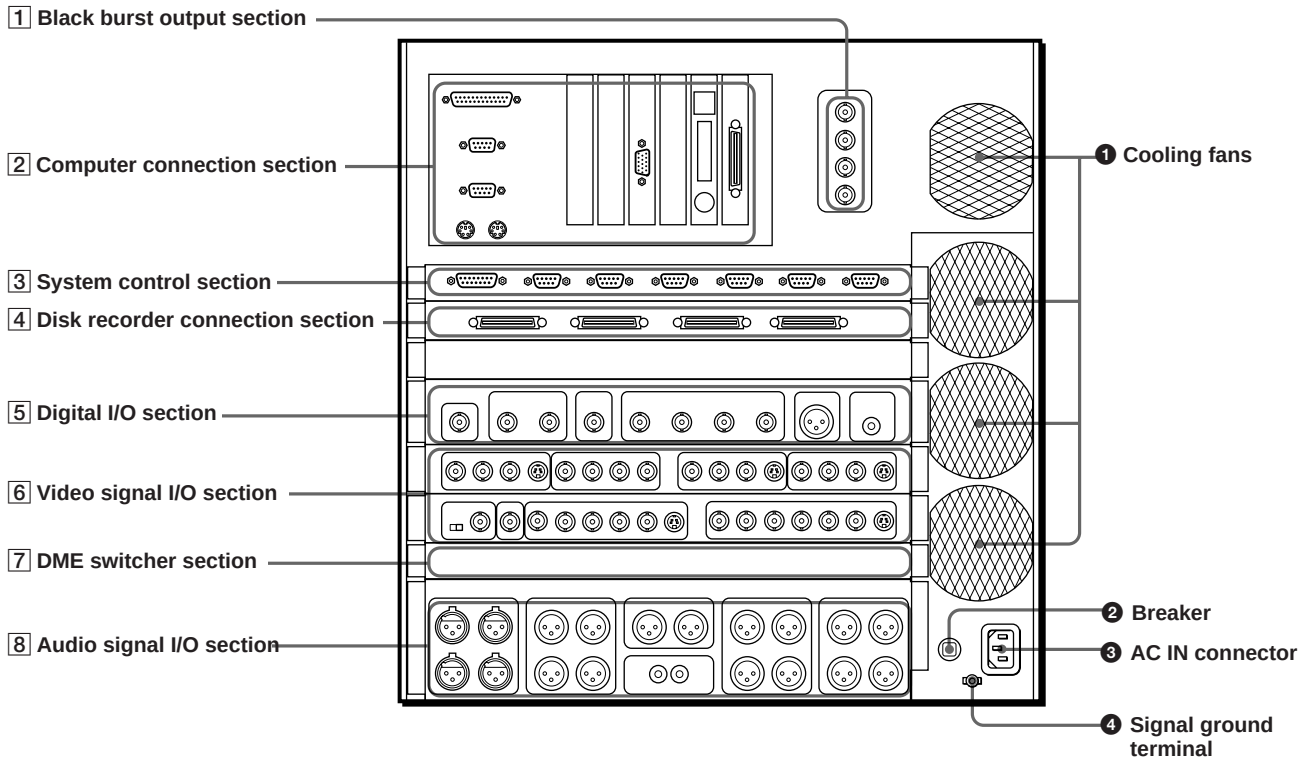
❼ Floppy disk EJECT button
Press to eject a floppy disk.

Note
Do not press this button while the floppy disk access indicator is lit.

❽ HEADPHONES knob
Controls the volume of the headphones connected to the headphones connector ❾.

❾ Headphones connector (stereo phone jack)
Connect headphones. This connector outputs the same signals as the MONITOR OUTPUT 1/3, 2/4 connectors on the rear panel.

Rear Panel



Common Section

❶ Cooling fans

These provide air circulation and prevent temperatures from rising inside the unit.

Note

When installing the unit, be sure not to block the vents of the cooling fans.

❷ Breaker

Excessive current flows in the internal circuits trip this breaker, shutting off the power supply. If this occurs, contact your Sony dealer or Sony service representative.

❸ AC IN connector

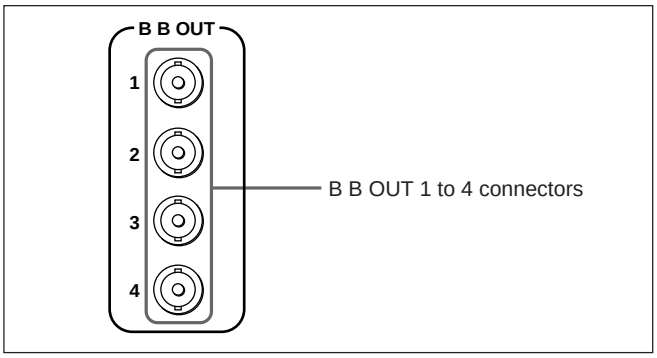
Connect the supplied AC power cord.

❹ Signal ground terminal

Connect to the ground terminal of a rack or other equipment.

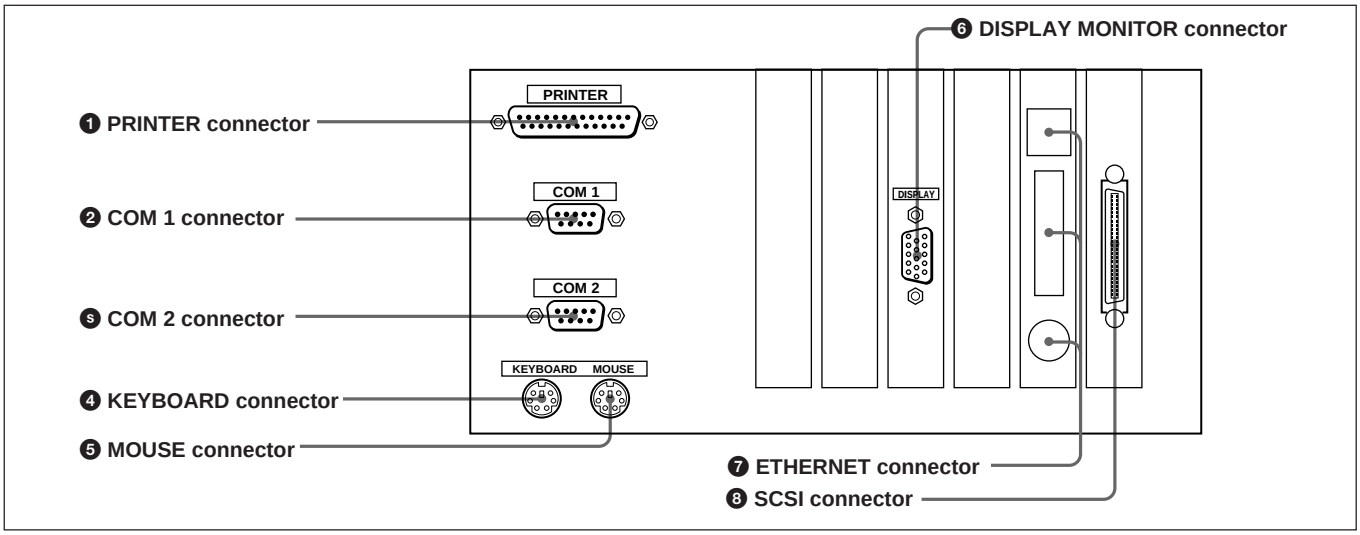
Connector Sections

1 Black burst output section



B B OUT 1 to 4 (black burst output signal 1 to 4) connectors (BNC type)
Output black burst signals generated by the built-in sync signal generator.
The same signals are output from all 4 connectors.
Connect these signals to the reference video input connectors (REF. VIDEO IN, GENLOCK IN, SYNC IN, etc.) of your source VCRs to synchronize the source VCRs and this unit.

2 Computer connection section



❶ PRINTER connector (D-sub 25-pin)
Connect a printer to print edit data. Connect a printer equipped with a Centronics compatible interface. Printer driver software is required to control the printer. For details refer to the operating instructions of your printer and the descriptions of the Print Manager in your Windows NT manual.

❷ COM 1 (serial COM port 1) connector (D-sub 9-pin)
Connect a tablet for use as a drawing input device.

❸ COM 2 (serial COM port 2) connector (D-sub 9-pin)
Connect an external computer or modem. Use to exchange data with external equipment over the RS-232C interface.

❹ KEYBOARD connector (mini DIN 6-pin)
Connect the supplied keyboard.

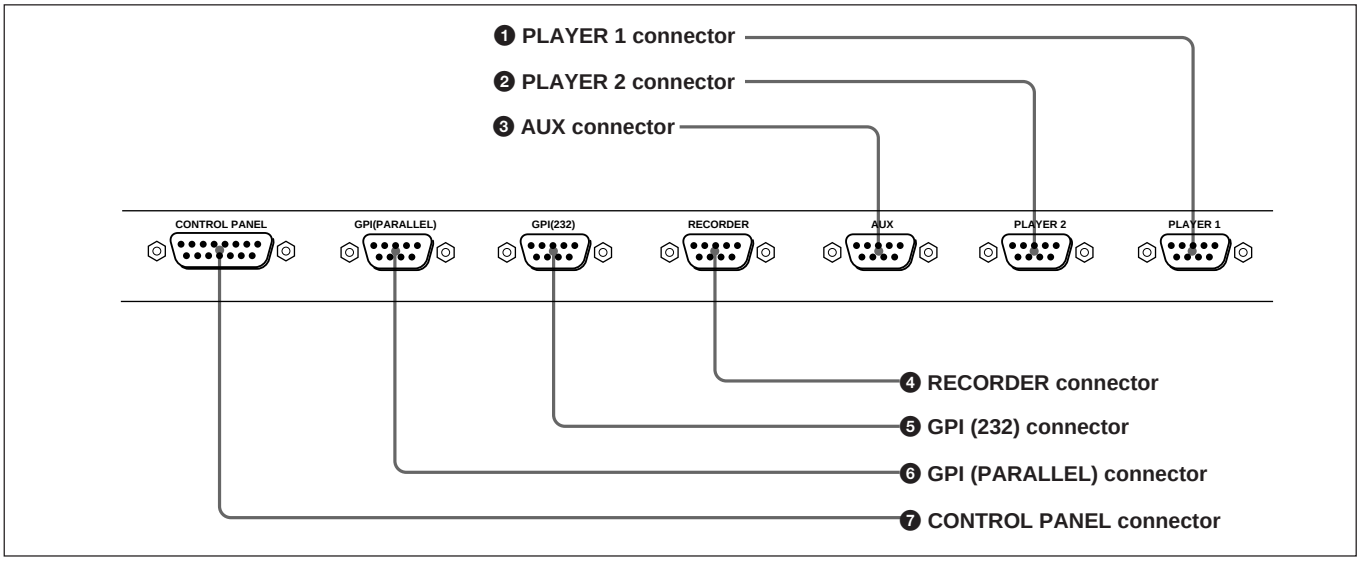
❺ MOUSE connector (mini DIN 6-pin)
Connect the supplied mouse.

❻ DISPLAY MONITOR connector (D-sub 15-pin)
Connect an optional computer monitor.
Connect a monitor that supports a vertical refresh rate of 75 Hz at a resolution of 1024 × 768 pixels.

❼ ETHERNET connector (option)
This connector is attached to the ESBK-7052 Ethernet Option board. Connect an Ethernet cable to exchange graphics and edit data with other equipment over an Ethernet network.

❽ SCSI connector (option)
This connector is attached to the ESBK-7051 SCSI Option board. It allows you to connect an MO drive. The MO drive is used to store edit data with index pictures, and to exchange edit data with other equipment.

3 System control section



❶ PLAYER 1 connector (D-sub 9-pin)
Outputs control signals for the player 1 VCR. Connect to the REMOTE connector of the player 1 VCR.

❷ PLAYER 2 connector (D-sub 9-pin)
Outputs control signals for the player 2 VCR. Connect to the REMOTE connector of the player 2 VCR.

❸ AUX (auxiliary) connector (D-sub 9-pin)
Outputs control signals for an auxiliary VCR. Connect to the REMOTE connector of the VCR connected to the AUX connector..

❹ RECORDER connector (D-sub 9-pin)
Outputs control signals for the recorder VCR. Connect to the REMOTE connector of the recorder VCR.

❺ GPI (232) connector (D-sub 9-pin)
Outputs commands to control external equipment. This connector complies with the RS-232C standard.

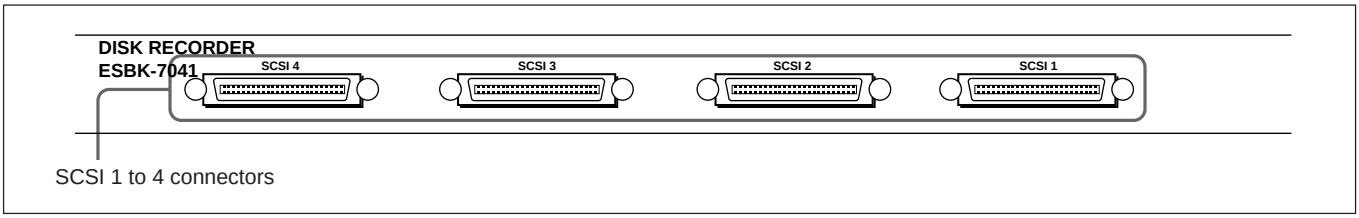
See page 94 for the pin assignments.

❻ GPI (PARALLEL) connector (D-sub 9-pin)
Outputs timing pulses to control external equipment. Connect to the GPI input connector of the external equipment. There are 4 ports. The signals output by the 4 ports are as follows.
Ports 1, 2: TTL output and relay output
Ports 3, 4: TTL output

See page 94 for the pin assignments.

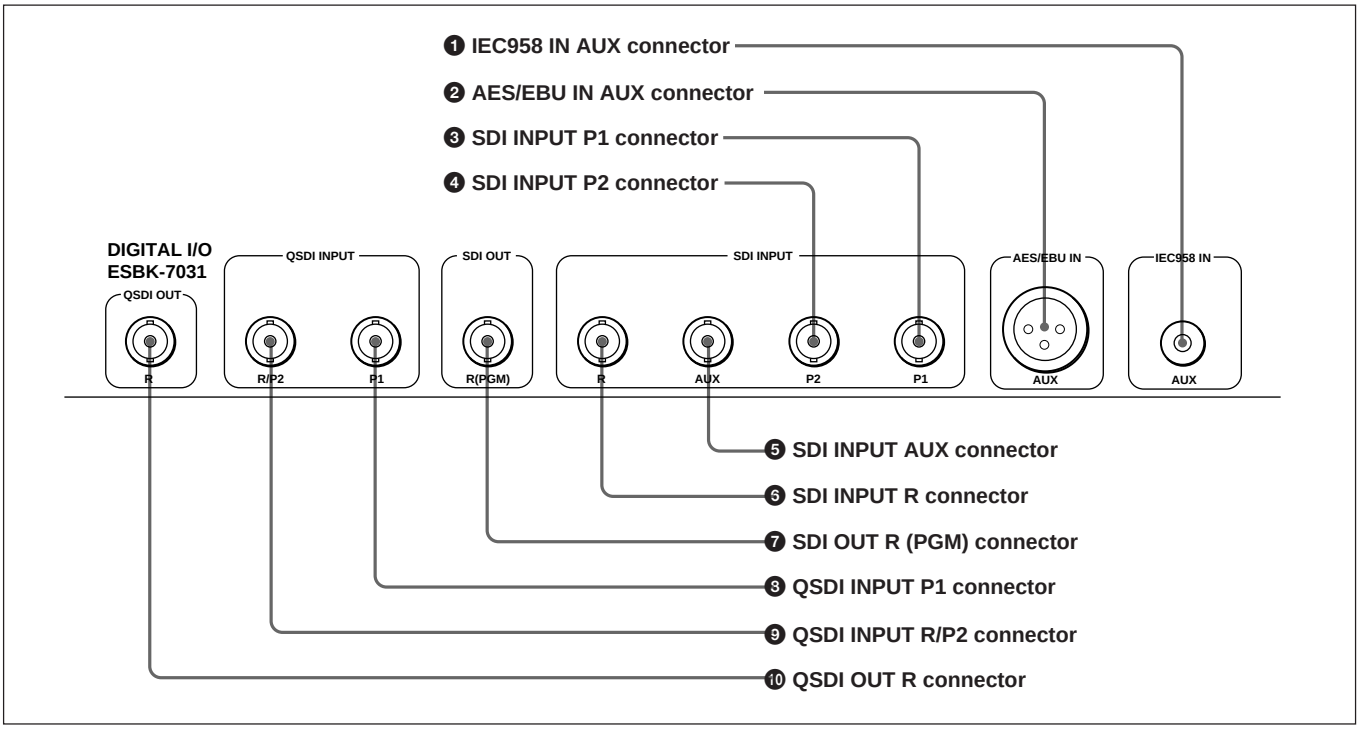
❼ CONTROL PANEL connector (D-sub 15-pin)
Connect the optional ESBK-7011 Control Panel.

4 Disk recorder connection section (option)



SCSI 1 to 4 connectors (50-pin high-density SCSI-2, option)
Connect to the SCSI IN 1 to 4 connectors of optional ESBK-7045 Disk Units.

5 Digital I/O section (option)



❶ IEC958 IN AUX (IEC958 format digital audio input) connector (IEC958 connector)
Input IEC958 format digital audio signals. Connect to the IEC958 output connector of a CD player.

❷ AES/EBU IN AUX (AES/EBU format digital audio input) connector (XLR 3-pin)
Input AES/EBU format digital audio signals. Connect to the AES/EBU output connector of a DAT player or other audio equipment.

❸ SDI INPUT P1 (serial digital interface player 1 input) connector (BNC type)
Input D1 format video and audio signals. Connect to the serial digital video and audio signal output connector of the VCR, when connecting a DVR-series or DVW-series VCR as player 1. When connecting a DSR-series VCR to perform linear editing with digital signals, connect to the SDI output connector of the DSR-series VCR.

❹ SDI INPUT P2 (serial digital interface player 2 input) connector (BNC type)
Input D1 format video and audio signals. Connect to the serial digital video and audio signal output connector of the VCR, when connecting a DVR-series or DVW-series VCR as player 2. When connecting a DSR-series VCR to perform linear editing with digital signals, connect to the SDI output connector of the DSR-series VCR.

❺ SDI INPUT AUX (serial digital interface auxiliary input) connector (BNC type)
Input D1 format video and audio signals. Connect to the serial digital video and audio signal output connector of the VCR when connecting a DVR-series or DVW-series VCR as an auxiliary VCR. When connecting a DSR-series VCR to perform linear editing with digital signals, connect to the SDI output connector of the DSR-series VCR.

❻ SDI INPUT R (serial digital interface recorder input) connector (BNC type)
Input D1 format video and audio signals. Connect to the serial digital video and audio signal output connector of the VCR when connecting a DVR-series or DVW-series VCR as the recorder VCR. When connecting a DSR-series VCR to perform linear editing with digital signals, connect to the SDI output connector of the DSR-series VCR.

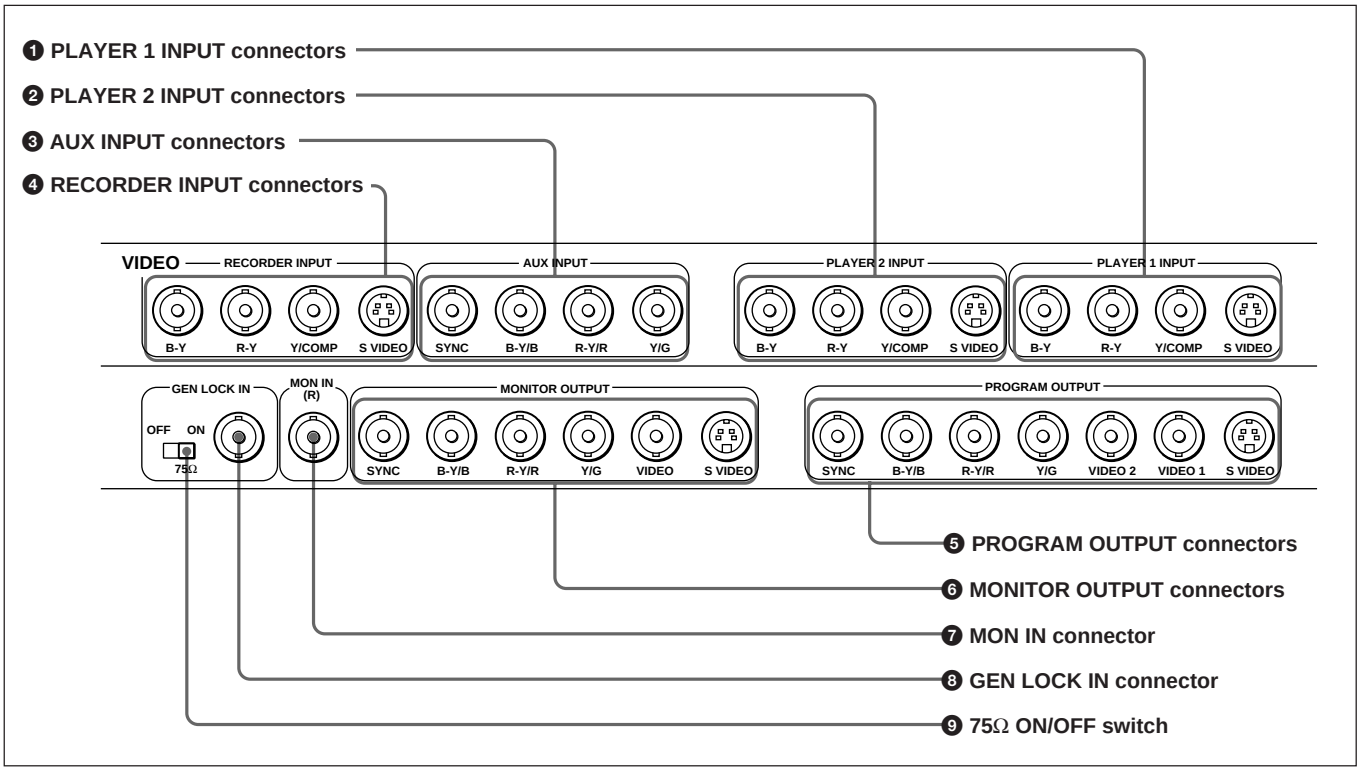
❼ SDI OUT R (PGM) (serial digital interface recorder (program) output) connector (BNC type)
Output D1 format video and audio signals to the recorder. Connect to the serial digital video and audio signal input connector of the VCR when using a DVR-series or DVW-series VCR as the recorder.

❽ QSDI INPUT P1 (QSDI player 1 input) connector (BNC type)
Input QSDI format video and audio signals. Connect to the QSDI output connector of the VCR when using a DSR-series VCR as player 1.

❾ QSDI INPUT R/P2 (QSDI recorder/player 2 input) connector (BNC type)
Input QSDI format video and audio signals. Use for uploading in non-linear editing. Connect to the QSDI output connector of the VCR when using a DSR-series VCR as the recorder or player 2.

❿ QSDI OUT R (QSDI recorder output) connector (BNC type)
Output QSDI format video and audio signals to the recorder. Use to download edit results and for backup recording. Connect to the QSDI input connector of the VCR when using a DSR-series VCR as the recorder. When using a DSR-series VCR on the player side only in non-linear editing, connect to the QSDI input connector of the DSR-series VCR for backup recording.

6 Video signal I/O section



When the component video input and output connectors of a connected VCR are multi-connectors, connect with a cable having a 12-pin multi-connector on one end and 3, 4, or 5 BNC connectors on the other end. For more information about these cables, contact your Sony dealer or Sony service representative.

Depending on the utilized connectors, an EditStation software setting may be required to specify the input signal format. For details, see "Setting the Video Signal Format" (page 87).

❶ PLAYER 1 INPUT connectors

Input video signals from an external VCR. Connect to the video signal output connectors of the player 1 VCR.

S VIDEO connector (mini DIN 4-pin): Connect to the S-video output connector of the player 1 VCR.

Y/COMP (composite) connector (BNC type): Connect to the Y output connector or the composite video output connector of the player 1 VCR. Specify whether to input Y signals or composite signals by an EditStation software setting.

R–Y connector (BNC type): Connect to the R–Y output connector of the player 1 VCR.

B–Y connector (BNC type): Connect to the B–Y output connector of the player 1 VCR.

❷ PLAYER 2 INPUT connectors

Input video signals from an external VCR. Connect to the video signal output connectors of the player 2 VCR.

S VIDEO connector (mini DIN 4-pin): Connect to the S-video output connector of the player 2 VCR.

Y/COMP (composite) connector (BNC type): Connect to the Y output connector or the composite video output connector of the player 2 VCR. Specify whether to input Y signals or composite signals by an EditStation software setting.

R–Y connector (BNC type): Connect to the R–Y output connector of the player 2 VCR.

B–Y connector (BNC type): Connect to the B–Y output connector of the player 2 VCR.

❸ AUX INPUT (auxiliary input) connectors

Input video signals from an external VCR. Connect to the video signal output connectors of auxiliary video equipment.

Y/G connector (BNC type): Connect to the Y output connector, composite video output connector, or G output connector of auxiliary video equipment. Specify whether to input Y signals, composite signals, or G signals by an EditStation software setting.

R–Y/R connector (BNC type): Connect to the R–Y or R output connector of auxiliary video equipment.

B–Y/B connector (BNC type): Connect to the B–Y or B output connector of auxiliary video equipment.

SYNC connector (BNC type): Connect to the reference video signal output connector of auxiliary video equipment (in RGB mode only).

❹ RECORDER INPUT connectors

Input video signals from an external recorder VCR. Connect to the video signal output connectors of the recorder VCR.

S VIDEO connector (mini DIN 4-pin): Connect to the S-video output connector of the recorder VCR.

Y/COMP (composite) connector (BNC type): Connect to the Y output connector or the composite video output connector of the recorder VCR. Specify whether to input Y signals or composite signals by an EditStation software setting.

R–Y connector (BNC type): Connect to the R–Y output connector of the recorder VCR.

B–Y connector (BNC type): Connect to the B–Y output connector of the recorder VCR.

❺ PROGRAM OUTPUT connectors

Output the video signals recorded by the recorder. Connect to the video input connector of the video equipment used as the recorder or of a video monitor.

S VIDEO connector (mini DIN 4-pin): Connect to the S-video input connector of the recorder.

VIDEO 1, 2 connectors (BNC type): Connect to the composite video input connectors of the recorder or video monitor.

Y/G connector (BNC type): Connect to the Y input connector or the G input connector of the recorder. Specify whether to output Y signals or G signals by an EditStation software setting.

R–Y/R connector (BNC type): Connect to the R–Y input connector or the R input connector of the recorder. Specify whether to output R–Y signals or R signals by an EditStation software setting

B–Y/B connector (BNC type): Connect to the B–Y input connector or the B input connector of the recorder. Specify whether to output B–Y signals or B signals by an EditStation software setting.

SYNC connector (BNC type): Output sync signals generated by the built-in sync signal generator. Connect to the reference video input connector of the recorder only when you output signals from this unit to the recorder in RGB mode.

❻ MONITOR OUTPUT connectors

Output the video signals of the VCR selected automatically by this unit during a preview, recording, or playback. At other times, output the video signals of the VCR selected with this unit as the source VCR. Connect composite or S-video output to the video input connector of the preview monitor. Normally, connect composite video output to the preview monitor to check video output. When you want to check video output with high video quality, connect Y/R–Y/B–Y component signal output or RGB output to a program monitor.

S VIDEO connector (mini DIN 4-pin): Connect to the S-video input connector of a video monitor.

VIDEO connector (BNC type): Connect to the composite video input connectors of a video monitor. Timecode and other status information is superimposed on the video output from this connector.

Y/G connector (BNC type): Connect to the Y input connector or the G input connector of a video monitor. Specify whether to output Y signals or G signals by an EditStation software setting.

R–Y/R connector (BNC type): Connect to the R–Y input connector or the R input connector of a video monitor. Specify whether to output R–Y signals or R signals by an EditStation software setting.

B–Y/B connector (BNC type): Connect to the B–Y input connector or the B input connector of a video monitor. Specify whether to output B–Y signals or B signals by an EditStation software setting.

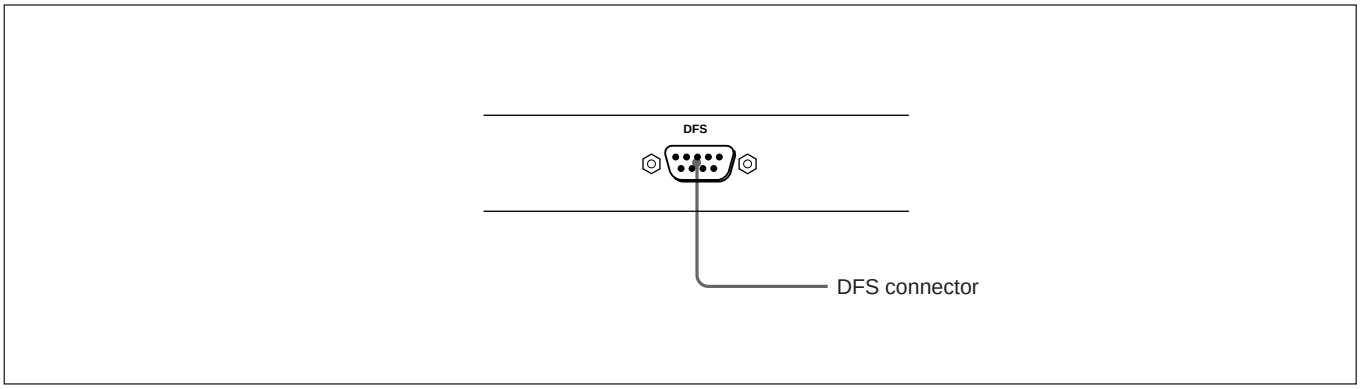
SYNC connector (BNC type): Output sync signals generated by the built-in sync signal generator. Connect to the reference video input connector of a video monitor only when you output signals from this unit to the video monitor in RGB mode.

❼ MON IN connector
Input composite video signals for the buit-in monitor switcher. Connect to the composite video output connector of the recorder VCR.

❽ GEN LOCK IN connector
Input an external reference video signal. Use a T connector for a through connection not terminated at this unit.

❾ 75Ω ON/OFF switch
Specify whether or not to terminate with a 75Ω terminator the external reference video signal input to the GEN LOCK IN connector ❽.
ON: Terminate.
OFF: Do not terminate.

7 DME switcher section (option)



DFS connector (D-sub 9-PIN)
Outputs signals to control an external DME switcher. Connect to the EDITOR connector of the DFS-300/300P/500/500P.

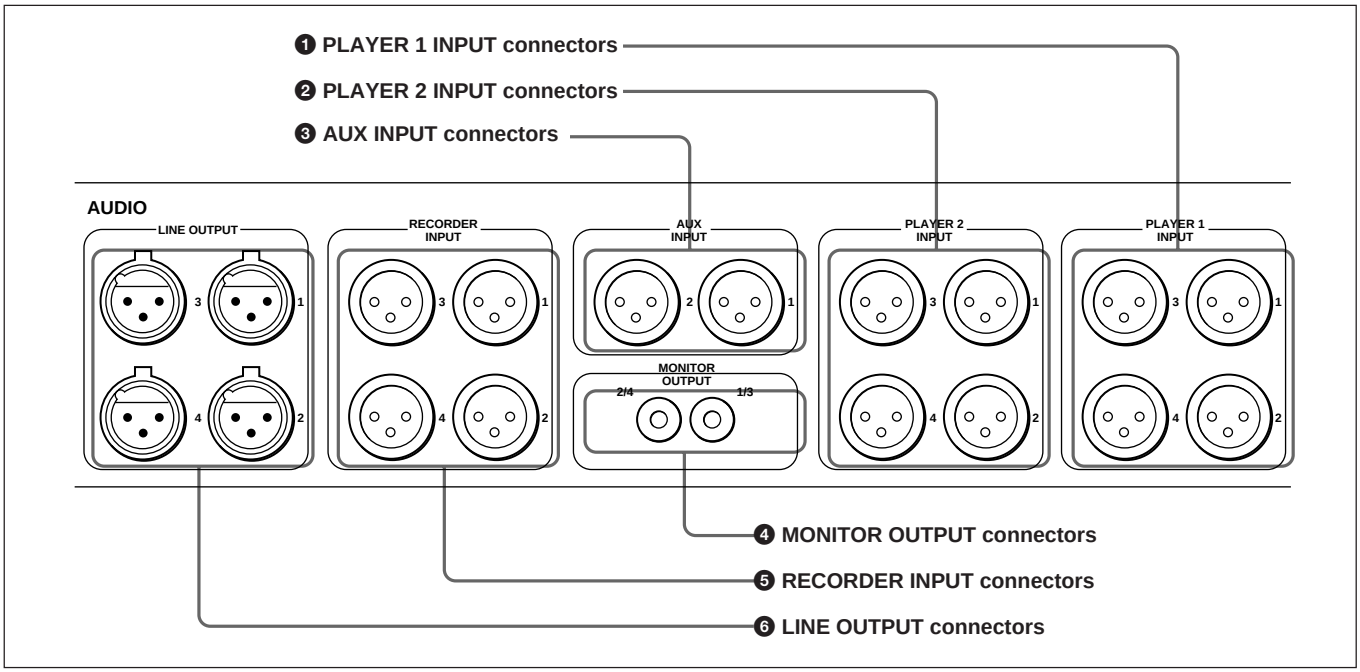
Note

When connecting the ES-7 and the DFS-300/300P/500/500P, set the editor selection switch on the system control board of the DFS-300/300P/500/500P as follows.
DFS-300/300P: PVE-500
DFS-500/500P: BVE-900

About the ROM version number of the DFS-500/500P

To connect a DFS-500/500P switcher to this unit, the version of the ROM on the SY board of the DFS-500/500P must be 1.04 or higher. The following DFS-500/500P switchers meet this requirement.
• DFS-500 with serial number 12000 or higher
• DFS-500P with serial number 24000 or higher
• DFS-500 with BKDF-504/504P installed
To connect a DFS-500/500P other than those listed above, a ROM update is required. For details, contact your Sony dealer or a Sony service representative.

8 Audio signal I/O section



❶ PLAYER 1 INPUT 1 to 4 connectors (XLR 3-pin)
Input analog audio signals from external equipment. Connect to the audio channel 1 to 4 output connectors of the player 1 VCR.

❷ PLAYER 2 INPUT 1 to 4 connectors (XLR 3-pin)
Input analog audio signals from external equipment. Connect to the audio channel 1 to 4 output connectors of the player 2 VCR.

❸ AUX INPUT (auxiliary input) 1 to 2 connectors (XLR 3-pin)
Input analog audio signals from external equipment. Connect to the audio channel 1 to 2 output connectors of auxiliary audio equipment.

❹ MONITOR OUTPUT connectors (phono jack)
Output the analog audio signals of the equipment currently selected as the source by this unit. Connect to the audio input connectors of the audio amplifier used as a monitor. Specify output of channels 1/2 or channels 3/4 by an EditStation software setting.

Refer to the online manual for details about the software setting.

White connector: channel 1 or channel 3
Red connector: channel 2 or channel 4

❺ RECORDER INPUT 1 to 4 connectors (XLR 3-pin)
Input analog audio signals from external equipment. Connect to the audio channel 1 to 4 output connectors of the recorder VCR.

❻ LINE OUTPUT connectors (XLR 3-pin)
Output the analog audio signals recorded by the recorder. Connect to the audio channel 1 to 4 input connectors of the recorder VCR.

Error Messages

The EditStation displays an error message when a problem occurs.
The meaning of the error messages and the steps to take to correct the problem are as follows. If the problem persists after you have taken the steps indicated below, contact your Sony dealer or Sony service representative.

Message	Meaning	Steps to Take
Couldn't initialize graphics device.	A graphics device initialization error occurred.	Shut the system down and launch EditStation again after restarting the system.
MARK IN necessary.	An IN point setting is required.	Click the MARK IN button to set an IN point.
MARK OUT necessary.	An OUT point setting is required.	Click the MARK OUT button to set an OUT point.
Delete all clips?	An operation that will delete all clips is about to be performed.	If you really want to delete all clips, click the Yes button. Otherwise click the No button.
Can't close device.	A graphics board access error occurred.	Shut the system down and launch EditStation again after restarting the system.
Can't get pixel clock. Check cable between graphics board and PC.	The cable between the graphics board and PC may be loose.	Check the cable connection on the VPR board. *For the location of the VPR board, see page 76.*
Can't open device. Check whether other process is using graphics board.	A graphics board access error occurred.	Shut the system down and launch EditStation again after restarting the system.
Mismatch between Device ID and DLL. Use correct DLL.	A graphics board access error occurred.	Shut the system down and launch EditStation again after restarting the system.
Invalid mode.	A graphics board access error occurred.	Shut the system down and launch EditStation again after restarting the system.
Can't map physical memory.	A graphics board access error occurred.	Shut the system down and launch EditStation again after restarting the system.
Can't unmap physical memory.	A graphics board access error occurred.	Shut the system down and launch EditStation again after restarting the system.

Maintaining the Performance of This Unit

Operating and storage conditions

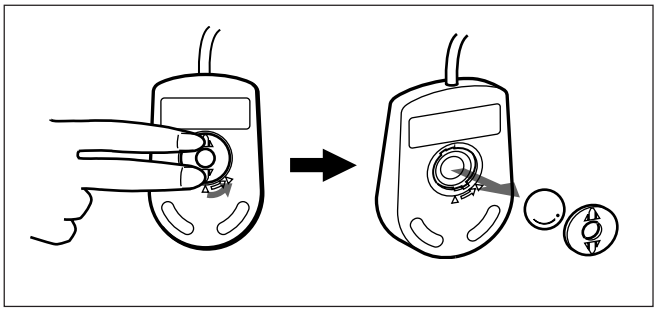
Avoid using or storing the unit in places which are:
- very hot or cold
- damp or dusty
- subject to severe vibrations
- near equipment generating strong electromagnetic currents
- near television or radio transmitting stations or sources of strong radio waves
- subject to severe interference

Maintenance of this unit

Clean the cabinet, panels, keyboard, and mouse by wiping with a soft, dry cloth. Remove severe stains by wiping with a cloth moistened with a neutral solvent, then wipe dry with a soft, dry cloth. Do not clean with alcohol, benzene, thinner, or other volatile liquids. Doing so may damage the finish.

Cleaning the mouse ball

When the ball inside the mouse becomes dirty, remove the ball as shown in the illustration and clean by wiping with a cloth that has been soaked with a neutral solvent. Before cleaning wring the cloth well to remove excess solvent. After cleaning, wipe the ball dry with a soft, dry cloth.



Protecting Data on the Hard Disk

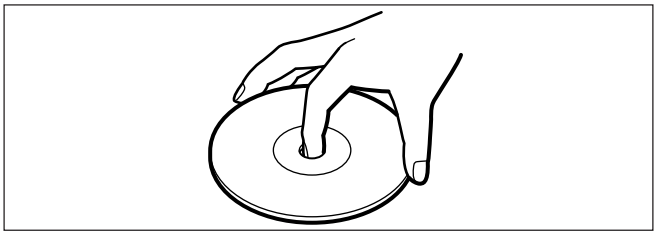
The ES-7 EditStation is equipped with an internal hard disk. Observe the following precautions to protect the data on the internal hard disk.
- Do not install the unit in an unstable location or where it will be subject to vibrations.
- Never move the unit while it is powered on.
- Make periodic backups of the data on the internal hard disk. Data on the hard disk cannot be recovered if it is lost because of accidents or hardware malfunctions.

Handling CD-ROM Discs

The EditStation is supplied with a CD-ROM disc containing software and an online manual. If proper care is not exercised when handling the CD-ROM disc, the data may become unreadable or other errors may occur. Observe the following precautions when handling the CD-ROM disc.

CD-ROM disc handling precautions

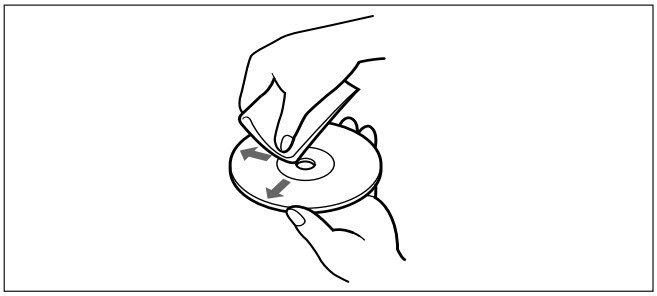
- Do not touch the disc surface directly with your hands. Hold the disc by the edge and do not touch the data surface.



- Do not attach paper notes or stickers to the disc surface.
- Be careful not to drop the disc. Protect it from severe shocks.
- Always store the disc in its case to protect the valuable data it contains.
- Do not store the disc in places which are damp, dusty, exposed to direct sunlight, or near heaters.
- Never place the CD-ROM disc on the dashboard or tray of a car.

Cleaning CD-ROM discs

Dust and fingerprints on the disc surface can result in read errors. Clean the disc by wiping lightly from the center out with a soft, dry cloth.
To remove severe stains, soak a cloth in a neutral solvent, wring the cloth well to remove excess solvent, and wipe the disc lightly. After cleaning, wipe the disc dry with a soft, dry cloth.
Do not clean with benzene, record cleaner or anti-static spray. Doing so may damage the disc.



Usable CD-ROM discs

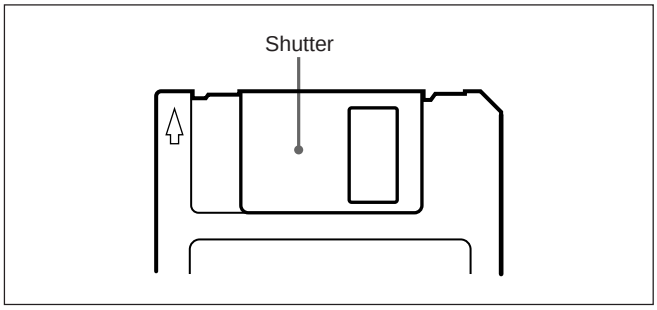
When playing compact discs in this unit's built-in CD-ROM drive, use discs with the follow mark.

Handling Floppy Disks

The EditStation uses floppy disks to store EDL data. Software upgrades may also be provided on floppy disks. Observe the following precautions when handling floppy disks.

Floppy disk handling precautions

Floppy disks are a convenient and easy to handle, but certain precautions are required to protect the data on the disk.



- Do not open the shutter by hand or touch the surface of the disk media. Data errors can result from dirt or scratches on the disk surface.
- Keep floppy disks away from televisions, speakers, and other sources of magnetism. The contents of the disk can be erased by magnets.
- Do not leave floppy disks near heaters or in locations exposed to direct sunlight. Excessive heat can deform the disk and render it unusable.
- Do not leave floppy disks near ashtrays or cups filled with liquid. Data errors can result from dust or liquids that contact the disk surface.
- To protect the data on floppy disks, store them in a case or other safe place.

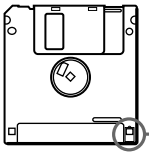
To protect floppy disk data

Floppy disks have a write inhibit tab to prevent inadvertent erasure of valuable data. You can slide the tab up and down to enable or inhibit recording of data on the floppy disk.

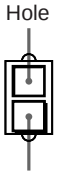
Write enabled

When the tab is in this position, data can be written to the floppy disk. Set the tab to this position to perform operations such as the following.

- Formatting the floppy disk
- Copying the contents of another floppy disk



Write inhibited



The disk is write inhibited when you slide the tab so that the hole becomes visible. When the tab is in this position, data cannot be written to the floppy disk. Set the tab to this position in times such as the following.

- When data needs to be read from but not written to the floppy disk
- When copying the contents of the floppy disk to another floppy disk

Backing up floppy disk data

When handled properly, floppy disks will not lose their data. Nevertheless, it is wise to make backup copies of disks containing valuable data.

Specifications

General

Signal format NTSC (model for U.S.A. and Canada)
PAL (model for other countries)

Power requirements
In U.S.A. and Canada
120 V AC, 50/60 Hz
In Other countries
220/240 V AC, 50/60 Hz

Power consumption
450 W

Operating temperature
5˚C to 35˚C (41˚F to 95˚F)

Dimensions (w/h/d)
424 × 443 × 450 mm
(16 3/4 × 17 1/2 × 17 3/4 inches)

Mass 40 kg (88 lb 2 oz)

Video signal processing

Sampling method Y:B–Y:R–Y = 4:2:2, 13.5 MHz, 8 bits

Compression method
DV compression

Audio signal processing

Sampling 48 kHz, 16 bits, linear

Channels 4

Input connectors

Analog video input

PLAYER 1 INPUT, PLAYER 2 INPUT
- Y/COMP: BNC type, 75Ω, 1.0 Vp-p
- B–Y, R–Y: BNC type, 75Ω
  - B–Y: 0.7 Vp-p (NTSC) or 0.525 Vp-p (PAL), 100/7.5/77/7.5 (NTSC) or 100/0/75/0 (PAL) color bar
  - R–Y: 0.7 Vp-p (NTSC) or 0.525 Vp-p (PAL), 100/7.5/77/7.5 (NTSC) or 100/0/75/0 (PAL) color bar
- S-VIDEO: Mini DIN 4-pin, 75Ω
  - Y: 1.0 Vp-p
  - C: 0.286 Vp-p (NTSC) or 0.3 Vp-p (PAL)

RECORDER INPUT
- Y/COMP: BNC type, 75Ω, 1.0 Vp-p
- B–Y, R–Y: BNC type, 75Ω
  - B–Y: 0.7 Vp-p (NTSC) or 0.525 Vp-p (PAL), 100/7.5/77/7.5 (NTSC) or 100/0/75/0 (PAL) color bar
  - R–Y: 0.7 Vp-p (NTSC) or 0.525 Vp-p (PAL), 100/7.5/77/7.5 (NTSC) or 100/0/75/0 (PAL) color bar
- S-VIDEO: Mini DIN 4-pin, 75Ω
  - Y: 1.0 Vp-p
  - C: 0.286 Vp-p (NTSC) or 0.3 Vp-p (PAL)

AUX IN
- Y/G: BNC type, 75Ω
  - Y: 1.0 Vp-p
  - G: 0.7 Vp-p
- B–Y/B: BNC type, 75Ω
  - B–Y: 0.7 Vp-p (NTSC) or 0.525 Vp-p (PAL), 100/7.5/77/7.5 (NTSC) or 100/0/75/0 (PAL) color bar
  - B: 0.7 Vp-p
- R–Y/R: BNC type, 75Ω
  - R–Y: 0.7 Vp-p (NTSC) or 0.525 Vp-p (PAL), 100/7.5/77/7.5 (NTSC) or 100/0/75/0 (PAL) color bar
  - R: 0.7 Vp-p
- SYNC: BNC type, 75Ω, 0.286 to 4.0 Vp-p (NTSC) or 0.3 to 4.0 Vp-p (PAL)

GEN LOCK IN BNC type, 75Ω, 1.0 Vp-p

Analog audio input

PLAYER 1 INPUT, PLAYER 2 INPUT, RECORDER INPUT XLR 3-pin × 4, +4 dBm

AUX INPUT XLR 3-pin × 2, +4 dBm

Digital input

SDI INPUT P1, SDI INPUT P2, SDI INPUT AUX, SDI INPUT R, QSDI INPUT P1, QSDI INPUT P2/R (option) BNC type, 75Ω, 0.8 Vp-p, bitrate 270 Mbps, with SDI audio

AES/EBU IN AUX
XLR 3-pin

IEC-958 Phono jack

Output connectors

Analog video output

PROGRAM OUTPUT, MONITOR OUTPUT

Y/G	BNC type, 75Ω Y: 1.0 Vp-p G (with sync): 1.0 Vp-p G (without sync): 0.7 Vp-p
B–Y/B	BNC type, 75Ω B–Y: 0.7 Vp-p (NTSC) or 0.525 Vp-p (PAL), 100/7.5/77/7.5 (NTSC) or 100/0/75/0 (PAL) color bar B: 0.7 Vp-p
R–Y/R	BNC type, 75Ω R–Y: 0.7 Vp-p (NTSC) or 0.525 Vp-p (PAL), 100/7.5/77/7.5 (NTSC) or 100/0/75/0 (PAL) color bar R: 0.7 Vp-p
S VIDEO	Mini DIN 4-pin, 75Ω Y: 1.0 Vp-p C: 0.286 Vp-p (NTSC) or 0.3 Vp-p (PAL)
SYNC	BNC type, 75Ω, 0.286 to 4.0 Vp-p (NTSC) or 0.3 to 4.0 Vp-p (PAL)
B B OUT	Black burst output BNC type × 4, 75Ω, 0.286 Vp-p

Analog audio output

LINE OUTPUT	XLR 3-pin, +4 dBm
MONITOR OUTPUT	Phono jack, –10 dBm

Digital output

SDI OUT R (PGM), QSDI OUT R (option)
BNC type, 75Ω, 0.8 Vp-p, bitrate 270 Mbps, with audio

Computer connection section input and output connectors

PRINTER	D-sub 25-pin, Centronics interface
COM 1, COM 2	D-sub 9-pin, RS-232C
KEYBOARD	Mini DIN 6-pin
MOUSE	Mini DIN 6-pin
DISPLAY MONITOR	D-sub 15-pin Resolution: 1024 × 768 pixels, 65000 colors Vertical frequency: 75 Hz

Control connectors

PLAYER 1, PLAYER 2, RECORDER, AUX	D-sub 9-pin, RS-422A
GPI (232)	D-sub 9-pin, RS-232C
GPI (PARALLEL)	D-sub 9-pin, active low TTL output LOW: 0 to 0.5 V HIGH: 3.5 to 5 V
CONTROL PANEL	D-sub 15-pin

Laser Diode Properties

Material	Ga Al As
Wave length	780 nm
Emission duration	Continuous
Laser output power	0.6 mW (max)
Beam divergence	53.4˚ ±1.5˚

Supplied accessories

Power cord (1)
Mouse (1)
Keyboard (1)
Extension cables for keyboard and mouse, 4 m (2)
Parallel GPI D-sub 15-pin connector (1)
Software and online manual (CD-ROM disc) (1)
Windows NT package (CD-ROM disc and manuals) (1)
Operating Instructions (1)
Software License Agreement (1)
User registration card (1)

Optional accessories

9-pin remote control cables RCC-5G/10G/30G (5 m/10 m/30 m)
ESBK-7091E EditStation Operation Manual (Printed version of online manual contained in CD-ROM disc)

Design and specifications are subject to change without notice.

Glossary

This appendix explains some important terms in video editing, including terms that are used in a special sense in this manual.

A/B roll editing
Editing in which special effects such as wipe and dissolve are applied to the playback of two playback VCRs and recorded on a master tape by a recorder VCR.

Dissolve
A type of transition effect in which one scene gradually fades out as another scene fades in. Also called “mix”.

Edit
In the EditStation editing software, a rectangle on a time line that represents a specific video clip in the ClipBin window. In conventional editing systems, the smallest unit of editing data, composed of a reel name, IN point, OUT point, effect type and so on.

Edit block
A block of one or more edits, represented as a single rectangle on the Edit track of the Timeline window. When you specify an effect that involves a transition between neighboring edits, the edits are joined in a single edit block.

EDL
Abbreviation of Edit Decision List. A list that records IN points, OUT points, effects and so on in a standard format.

GUI
Abbreviation of Graphical User Interface. A type of user interface that uses pictures and easily understood graphical elements to represent commands and program states.

Linear editing
Editing while playing back video and audio signals recorded on video tape.

Non-linear editing
Editing while playing back video and audio signals recorded on hard disks. Video scenes stored on disk can be cued up quickly, for increased editing efficiency.

Video clip
In the EditStation editing software, the smallest unit of editing data, composed of a reel name, IN point, OUT point and so on. Video clips that have been dragged to a timeline are referred to as edits.

Wipe
A type of transition effect in which old video is wiped off the screen by new video, usually in the order defined by a geometric pattern.

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