The Sony ES-3 EditStation™ system is an extremely flexible, powerful and high picture quality non-linear video editing system. Its operating interface is easy to use, allowing the user to focus more on the creative aspects of video production. Its open architecture also supports popular third-party software for graphics, paint and effects applications.

Together with DV and DVCAM™ VTRs via standard digital interfaces such as i.LINK™* (DV IN/OUT), it forms an advanced digital post production system. This is because only the ES-3 system provides “Direct Digital Link” technology with virtually no signal degradation.

High Performance, yet low cost, makes the ES-3 an ideal editing system in a wide variety of applications where creativity and ease of use are priorities.

* i.LINK stands for IEEE1394-1995 standards and their revisions.
\( \text{i} \) is the logo for products that implement i.LINK.
**Direct Digital Link Technology**

Picture quality can sometimes diminish while signal transferring, even though a digital VTR and non-linear editing system are connected via digital interfaces. This is because of the adoption of different compression schemes between VTR and non-linear system. Sony’s advanced “Direct Digital Link” technology virtually eliminates the signal degradation that occurs due to repeated recompression between the VTR and hard drive. With the adoption of DV compression, as used in DVCAM and DV VTRs, uniformly compressed data can be directly transferred via i.LINK and SDTI (QSDI™) interfaces.

*SDTI is defined as SMPTE 305M.

**Powerful and Effective Editing Tools**

The ES-3 system provides a powerful environment for operational efficiency.

**ClipLink™ Operation**

The unique Sony ClipLink operation extends editing efficiency throughout the digital production process. While shooting with the Sony DSR-130/P, DSR-300/P or DSR-500WS/P camcorders, all of the In/Out time code data on a source tape is stored in the CM (Cassette Memory) of the DVCAM tape. Representative “Index Pictures” for each shot are also recorded on the tape. The ES-3 can create clips instantly and automatically when a tape with ClipLink data is loaded into the Sony DVCAM DSR-60/P, 70/P, 80/P or 85/P VTR. This can save considerable time in logging and organizing clip information and dramatically streamline the ‘pre’ editing process.

**Control Panel**

As well as traditionally controlling non-linear functions with a keyboard and mouse via a GUI, the user can use the dedicated-style Sony ESBK-7011 Control Panel. Familiar linear operation techniques such as jog/shuttle control, effects transition and audio fading can be combined with the convenience of non-linear editing to achieve more intuitive operation.
Greatly Simplified Editing with Easy-to-use GUI

The self-explanatory yet sophisticated GUI makes editing operations easy to use, even for newcomers to video editing. The GUI can be displayed in English, Japanese, German, French, Spanish or Italian. The titler application also offers these languages, both for the GUI and in the operation manuals.

Logging Tool

Use this to create both video and audio clips. The clips can be loaded onto the A/V drive in two ways:

- Log the selected clips by setting the Mark In/Out points, and batch digitize later.
- Digitize the material as you preview it. (Live upload is also available)

TimeLine Editing

Use the TimeLine feature to build your project, dropping video and audio clips, titles, effects and transitions onto each track in sequence. Various editing views are provided.

Trim Editor

The Trim Editor is available for more precise trimming on the TimeLine. It is opened as an independent window, which displays the video of the out point of the “outgoing” clip and the in point of the “incoming” clip. Both single and dual trimming can be performed.

Selectable Track Views

You can select any items displayed on the TimeLine track such as Index Pictures of the head or tail of a clip, marker, name, duration, reel number, Mark In/Out and so on.

Clips

The Rack is a storage area for the materials you create as clips in the Logging Tool. You can pick up the necessary clips and move them into the Sequence Editor for editing.

Alternative Views

The Rack has two main display modes, Picture and Table Text. In Picture Mode you can select from six different sub modes:

- small/medium/large Mark In picture.
- small/medium/large Mark In and Mark Out picture.

Table Text Mode

Clip Viewer

Clips can be played and trimmed directly in the Clip Viewer which is opened from the Rack.

Picture Mode (Mark IN/OUT, Small size)
A title application is included with the ES-3. Title objects and simple graphics can be created as Title clips. Fade In, Fade out, Crawl, Roll and Still are supported when a Title Clip is used on the TimeLine.

**Title Editing**

Customizing of tool icons is available for more effective operation. You can drag tools from the toolbox to the toolbar, and drag them around on the toolbar to rearrange them. Customizing function is also available in other operating modes and Keyboard/Control Panel buttons.

**Unlimited Video/Audio Tracks for Multilayering**

You can add as many tracks as you need. The TimeLine has an unlimited number of tracks, with an unlimited number of clips. The video track can be used either for video or for title clips, significantly enhancing the ES-3's layering capability. A virtually unlimited number of audio tracks can also be layered.

- Source clips can be played back in this window, and then be added onto the TimeLine.
- To add the clips on the TimeLine as required, "Overwrite" and "Splice in" modes are provided.
- You can preview the TimeLine movie in this window.
- Transitions and effects can be made on each Track. Transitions are placed between two clips, effects are placed directly on a clip.
The ES-3 can execute many special effects because of its open architecture. Select from the effect groups in the FX tab, and modify these effects to suit your creative needs by using the appropriate Effect Editor.

**2D/3D Pattern Effects**

2D/3D DME, such as page turns and many others can be created with Plug-in effects software (third-party) as a rendering-based effect.

**Realtime Effects**

Dissolve, simple wipe patterns and slides can be performed in realtime.

**Motion/Wipe/Filter Editor**

The Motion/Wipe Editor can create keyframes for each effect or transition, and users can create unique transitions as they please. Various picture effects can be created with the Filter Editor.

**Color Editor**

Color correction for materials in A/V drive can be performed with the Color Editor.

**Keying Editor**

A luminance key and chromakey can be generated with the Keying Editor.

**Audio Meter**

An independent audio meter window can be activated to display the volume level of the Audio Clips on the TimeLine during playback.

**Audio Editing**

Eight channels of assigned audio signals can be monitored in realtime. Each input channel can be assigned to any track in the TimeLine. Three-band Equalizer, Echo, Maximizer and Crossfade are available with in the Audio Tool.

**Audio Mixer**

The Audio Mixer consists of eight identical fader which correspond to eight TimeLine tracks occupied by audio clips, or video clips with embedded audio.

**Slider Recorded Mode**

Use the slider on the fader to control the audio level. In the slider recorded mode, movements of the audio level sliders and pan dial during TimeLine playback can be recorded on the TimeLine track. When the optional ESBK-7011 is connected to the ES-3, the four sliders of the ESBK-7011 can be used.

**Rubber Band Control**

The Audio Level and Panning for each clip can be controlled directly on the TimeLine with the Rubber Band. Each track has its own Rubber Band control, which can be activated independently.

**Waveform**

Each TimeLine track containing audio can show a Waveform representation of the sounds. The Waveform can be activated simultaneously with the Rubber band, if desired.
Slow/Fast Motion Control
Slow and fast motion are available. The playback speed for each clip can be set and it will be played back with the desired motion effect. High quality field-interpolated slow motion is also provided.

16 : 9 Widescreen Support
The ES-3 can be switched to operate in either 4 : 3 mode or 16 : 9 wide screen mode.

Text EDL Conversion (BVE-9100 format)
Edits on the TimeLine are converted to the Sony BVE-9100 EDL format and displayed in an EDL window. The displayed EDL can be printed out and saved to disk.

Import Image Files
Image files created by an external computer can be imported into the ES-3 system as a BMP, TIFF and TGA file. Sequential graphic files (TGA) and AVI movie files are also supported for creating animations. The alpha channel of an imported graphic file (TGA) is also supported.

Movie File Format Export
The video and audio data stored in the disk drive of the ES-3 system can easily be converted to AVI or QuickTime file format and downloaded via the SCSI/Ethernet interfaces. This feature allows you to create multimedia materials for CD-ROMs, Web sites and many other applications.

Other Features

Slow/Fast Motion Control
Slow and fast motion are available. The playback speed for each clip can be set and it will be played back with the desired motion effect. High quality field-interpolated slow motion is also provided.

16 : 9 Widescreen Support
The ES-3 can be switched to operate in either 4 : 3 mode or 16 : 9 wide screen mode.

Text EDL Conversion (BVE-9100 format)
Edits on the TimeLine are converted to the Sony BVE-9100 EDL format and displayed in an EDL window. The displayed EDL can be printed out and saved to disk.
Product Configuration

The ES-3 provides exceptional flexibility and ease of operation. It can be configured with an appropriately configured PC and A/V hard disk drive.

Standard Items

The following items are included as standard in the ES-3:
• Main unit
• PCI interface board (PCI board for host PC)
• ES-3 application software
• Installation instructions
• AC power cord
• Modular cable
• Cable splitter

Optional Items

• SDI/SDTI (QSDI) Interface Option ESBK-3031
  QSDI (Compressed digital signal)/SDI (Serial digital signal) input/output for upload/download. Driver software and software protection key.
• Control Panel ESBK-7011
  Dedicated control panel for intuitive operation. Cable included.
• Operation Manual
  ESBK-3091E (English)  ESBK-3091J (Japanese)  ESBK-3091G (German)
  ESBK-3091S (Spanish)  ESBK-3091I (Italian)  ESBK-3091F (French)
  Printed manual available in English, Japanese, German, Spanish, Italian and French.
**Recommended Editing System**

1. **Digital Non-linear Editing with the i.LINK interface**
   A fully digital non-linear system can be configured via the i.LINK interface. Other Sony DVCAM Series equipment with an i.LINK connector can also be connected to the ES-3.

![Diagram of i.LINK interface]

2. **Digital Non-linear Editing with the SDTI(QSDI) interface**
   A fully digital non-linear system can be configured via the SDTI(QSDI)* interface.
   *SDI/SDTI Option ESBK-3031 is required.

![Diagram of SDTI(QSDI) interface]

3. **Analog Component Non-linear Editing**
   An analog component non-linear system can be configured with any type of professional VTR equipped with an RS-422A interface.

![Diagram of RS-422A interface]

**Optional Equipment**

- **DSR-20/20P** Digital Video Cassette Recorder
- **DSR-30/30P** Digital Video Cassette Recorder
- **DSR-70/70P** Digital Video Cassette Recorder
- **DSR-80/80P** Digital Video Cassette Recorder
- **UVW-1800/1800P** Betacam SP Editing Recorder
- **DSR-200A/200AP** Digital Camcorder
- **DSR-300/300P** Digital Camcorder
- **VMC-IL4415** i.LINK Cable (1.5m type, 4pin-4pin)
- **IL4435** i.LINK Cable (3.5m type, 4pin-4pin)
- **IL4615** i.LINK Cable (1.5m type, 4pin-6pin)
- **IL4635** i.LINK Cable (3.5m type, 4pin-6pin)
### Specifications

#### 1. General

**1-1. Main Unit**
- **Power Requirements**: AC 120 V (UC model), AC 220-240 V (CE model)
- **Power Consumption**: 100 W
- **Operating Temperature**: 5~35°C (41~95° F)
- **Dimensions**: 442 (W) x 134 (H) x 365 (H) mm (without projection) (17 1/2 x 5 3/8 x 14 3/8 inches)
- **Weight**: 11 kg (24 lb 4 oz)
- **Video Signal Standard**: NTSC (UC model), PAL (CE model)
- **Video Processing**: Y:R-Y:B-Y=4:2:2, 13.5 MHz, 8-bit
- **Audio Processing**: 48 kHz, 16-bit
- **Compression Scheme**: DV compression (fixed 25 Mbit/s)

**1-2. PCI Interface Board**
- **Standard**: PC/AT PCI Rev 2.1
- **Dimensions**: PCI Full size

#### 2. Signal Connectors

**2-1. Analog Inputs**
- **COMPOSITE**: BNC
- **Y, R-Y, B-Y**: BNC
- **S VIDEO**: Mini-DIN 4-pin
- **GEN LOCK IN, THRU OUT**: BNC
- **AUDIO CH-1,2,3,4**: XLR 3-pin

**2-2. Analog Outputs**
- **COMPOSITE**: BNC
- **Y, R-Y, B-Y**: BNC
- **S VIDEO**: Mini-DIN 4-pin
- **B.B. OUT**: BNC
- **MONITOR**: Mini-DIN 4-pin (at PCI interface board)
- **AUDIO CH-1, 2**: XLR 3-pin x 2
- **AUDIO MONITOR**: Stereo Mini Jack (at Cable splitter)

**2-3. Digital Inputs**
- **SDI/SDTI(QSDI)**: BNC * ESBK-3031 is required.
- **DV IN**: DV-type 4-pin Jack
- **AES/EBU**: XLR 3-pin

**2-4. Digital Outputs**
- **SDI/SDTI(QSDI)**: BNC * ESBK-3031 is required.
- **AES/EBU**: XLR 3-pin

**2-5. Digital Input/Output**
- **DV IN/OUT**: DV-type 4-pin Jack

#### 3. Control Connectors

- **PLAYER REMOTE**: D-sub 9-pin, RS-422A
- **RECORDER REMOTE**: D-sub 9-pin, RS-422A
- **PC INTERFACE**: Modular Jack 8-pin
- **MAIN UNIT I/F**: Modular Jack 8-pin (at PCI interface board)
- **CONTROL PANEL**: D-sub 16-pin (at PCI interface board)

#### 4. Tilter

- **Pixel Format**: Y/R-Y/B-Y/Alpha=4:2:2:4
- **Display Area**: 720x486 for NTSC, 720x576 for PAL
- **Font**: True type™
- **Import Format**: BMP, TGA, TIFF

#### Dimensions

![Dimensions Diagram](image)

**unit: mm (inches)**

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