



Software Product Description

PRODUCT NAME: AlphaStudio Broadcast Software for
MPEG-2, Version 1.0

SPD 56.54.00

DESCRIPTION

The AlphaStudio Broadcast Software for MPEG-2 is a component of the AlphaStudio Broadcast System, which is an integrated solution for the Broadcast and post-Production market.

AlphaStudio Broadcast Software for MPEG-2 enables the associated standard hardware to operate as an equivalent MPEG-2 Video and audio Playback Station.

AlphaStudio Broadcast Software for MPEG-2 accomplishes the above by combining computer, disk and tape storage, and digital video technologies. Together, they provide a reliable video input, storage, and playback system that eliminates many of the costly, labor intensive maintenance required with traditional analog video tape systems.

The AlphaStudio Broadcast Software for MPEG-2 enables the following features:

- Computer Disk Storage for video/audio content
- Simultaneous access to video/audio content
- SPMTE 259M digital component video and AES/EBU digital audio
- High quality MPEG-2 compressed video/audio storage and playback
- Standard Network connectivity
- Support PAL/NTSC formats
- Graphical User Interface (GUI) to easily access key system functions

The AlphaStudio Broadcast Software for MPEG-2 is broken down into four key software components. The following are the components that comprise the AlphaStudio Broadcast Software for MPEG-2:

- Internal Control Sub-system
- Digital Video Recorder (DVR)
- Automation Interface (AI)
- Video File System (VFS)

Internal Control Sub-System

The Internal Control Sub-system is comprised of four Graphical User Interfaces that provide the control to the AlphaStudio MPEG-2 Station.

- Video Tape Recorder (VTR) GUI, to cue and play video clips
- System Management GUI, to configure and manage lines
- Inventory Management GUI, to manage the storage and network transmission of video material, in addition to import of MPEG-2 video/audio clips from network attached encoders

The Internal Control Sub-system permits the configuration of the system as well as queue and play of video material, using a graphical user interface (GUI). The graphical user interface permits local and remote users to connect to the system and run the AlphaStudio Software for MPEG-2 using familiar Motif™ (X Window System) screens and dialog boxes.

Digital Video Recorder (DVR)

The Digital Video Recorder is a software application interface, analogous to a video tape player, that initiates and controls the airplay of broadcast video data. The Digital Video Recorder contains two components:

- A video sub-system which functions like a video recorder with cue, play and pause functions
- A video file sub-system which performs the open, close and create functions for the data files

Functionally, the DVR transfers data from the video file system to the video subsystem where the user specifies the action for a video clip.

The DVR interacts with the SCSI MPEG-2 decoder module driver to transmit video and audio signals. It reads video frames at the rate of 25 frames per second (fps) to support the PAL format, or 30 fps to support the NTSC format. The DVR can read simultaneously from each video module interface installed in the AlphaServer system.

Once a request to play a previously recorded video file is made, the DVR plays back that file immediately from local disk. Another key feature is the ability to share the same file during simultaneous requests.

Automation Interface

The Automation Interface communicates with a remote Automation Control System (ACS) application over a serial communication line using the Louth Video Disk Communication protocol. This allows the AlphaStudio MPEG-2 Station to process the requests received from the remote application. These requests provide real-time control of the system. The interface provides the following basic functionality:

- Receives requests from external automation control systems over a serial line
- Checks each request packet for valid data
- Passes the request packet to the command interpreter
- Dispatches requests to the appropriate software sub-component
- Formats the response packet for the external automation system
- Send responses to the external automation system over the RS-422 communication line.

Video File System (VFS)

The Video File System stores and retrieves video data that has been recorded by the AlphaStudio MPEG-2 Station. The VFS consists of the Video Disk subsystem, and a Software Interface (SI) that performs the high speed, high volume data transfer operations required to transfer and play back broadcast quality video and audio. The VFS maintains memory buffers to facilitate the efficient handling of the video and audio data stream. The VFS performs the Input/Output operations on the video disk through the Digital UNIX Advanced File System. The Logical Storage Manager is required for the software when configured on the AlphaStation 2100A LP.

HARDWARE REQUIREMENTS

Processors Supported

The AlphaStudio Software for MPEG-2 is supported on:

- The Digital AlphaServer 2100A LP
- The Digital AlphaStation 255 Model 300

Memory Requirements:

- 128 MBytes RAM (AlphaServer 2100A LP)
- 64 MBytes RAM (AlphaStation 255 Model 300)

Disk Requirements:

The following values refer to the space required on the Digital Unix system disk. Note that the values are approximate; actual values may vary depending on your system environment, configuration and software options.

- Disk space required for installation: 300 MBytes
- Permanent disk space required for use: 2.0 GBytes

SOFTWARE REQUIREMENTS

The AlphaStudio Software for MPEG-2, Version 1.0, is supported on Digital UNIX, Version 3.2G.

SOFTWARE LICENSING INFORMATION

The software is furnished under the licensing provisions of Digital Equipment Corporation's Standard Terms and Conditions. For more information about Digital's licensing terms and policies, contact your local Digital office.

DISTRIBUTION MEDIA

The software is available through factory installation or on CDROM

ORDERING INFORMATION

Software License: Q2-5LLA9-AA

Software Media: Q2-5LLAA-H8

Software Documentation: Q2-5LLAA-GZ

Software Services: QT-*****-**

SOFTWARE PRODUCT SERVICES

A variety of service options are available from Digital.
For more information, contact your local Digital office.

SOFTWARE WARRANTY

Warranty for this software product is provided by Digital with the purchase of a license for the product as defined in the Software Warranty Addendum of this Software Product Description.

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