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Software
Product
Description

PRODUCT NAME: AlphaStudio Broadcast REV Station Software, Version 1.0   SPD 54.00.00

DESCRIPTION

The AlphaStudio Broadcast Record/Edit/View (REV) Station Software is a component of the AlphaStudio Broadcast System. The AlphaStudio Broadcast System is an integrated solution for the Broadcast and Production market.

AlphaStudio Broadcast REV Station Software enables the associated standard hardware to operate as an equivalent Video Tape Recorder (VTR).

AlphaStudio Broadcast REV Station Software accomplish the above by combining computer, disk and tape storage, and digital video technologies. Together, they provide a reliable video recording, storage, and playback system that eliminates many of the costly, labor intensive, maintenance critical of traditional analog systems.

The AlphaStudio Broadcast REV Station Software enable the following features:

- Disk Storage Capacity for Video/Audio data storage

- Bidirectional audio/video lines

- Simultaneos access to video/audio data material

- SPMTE 259M digital component video and AES/EBU digital audio

- High quality compressed (MJPEG) or uncompressed video/audio based on the hardware configuration

- Standard Network connectivity

- Support PAL/NTSC formats

- Graphical User Interface (GUI) to easily access key system functions

The AlphaStudio Broadcast REV Station Software is broken down into four key software components. The following are the components that comprise the AlphaStudio Broadcast REV Station Software.

- 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 comprise of four Graphical User Interfaces that provide the control to the AlphaStudio REV Station.

— Video Tape Recorder (VTR) GUI, to record and play video clips

— System Management GUI, to configure and manage lines

— Inventory Management GUI, to manage the storage and network transmision of video material

— Video Synchronization GUI, to synchronize the horizontal and vertical video signals

The Internal Control Sub-system permits the configuration of the system as well as record, play, and edit (cut only) 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 REV Station software using familiar Motif (tm) (X Window System) screens and dialog boxes.

Additionally, the user or system manager can configure a video interface module with a specific JPEG compression ratio prior to the capture of the video and audio signal.

Digital Video Recorder (DVR)

The Digital Video Recorder is a software application interface, analogous to a video recorder, that initiates and control the airplay, transfer and recording of broadcast video data. The Digital Video Recorder contains two components:

— A video sub-system which functions like a video recorder with cue, play record, and pause functions

— A video file sub-system which performs the open, close and create functions for the data files.

Functionally, the DVR transfer data from the video file system to the video subsystem where the user specifies the action for a video clip. Conversely, the DVR records data by transferring data from the video sub-system to the video file sub-system.

The DVR interacts with the video interface module driver to transmit and receive video and audio signals. It reads video frames at the rate of 25 frames per second (fps) to suppor the PAL format, or 30 fps to support the NTSC format. The DVR can read simultaneously from each video module interface modules installed in the AlphaServer system. Frames can vary in depending on the compression ratio specified for each video interface module used in the AlphaStudio REV Station.

Once a request toplay a previously recorded video file is made, the DVR plays back that file immediately from local disk. Another key feature is that 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 REV Station to process the requests received from the remote application. These requests provide real-time control of the system. The interface provides the follwing 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 REV Station. The VFS consists of the Video Disk sub-system, and a Software Interface (SI) that performs the high speed, high volume data transfer operations required to record and play bcak broadcast quality video and audio. The VFS maintains large 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 at the basic device level.

HARDWARE REQUIREMENTS

Processors Supported:

The AlphaStudio REV Station Software is supported on

• The Digital AlphaServer 2100A LP

Memory Requirements:

256MBytes RAM

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 REV Station Software for AlphaServers, Version 1.0, is supported on Digital UNIX, Version 3.2F.

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 only on CD–ROM.

ORDERING INFORMATION

Software License: Q2-4EWA*-3B (Concurrent License)
Software Media: Q2-4EWAA-H8 (on CD–ROM)
Software Documentation: Q2-4EWAA-GZ
Software Services: QT-4EV**-**

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.