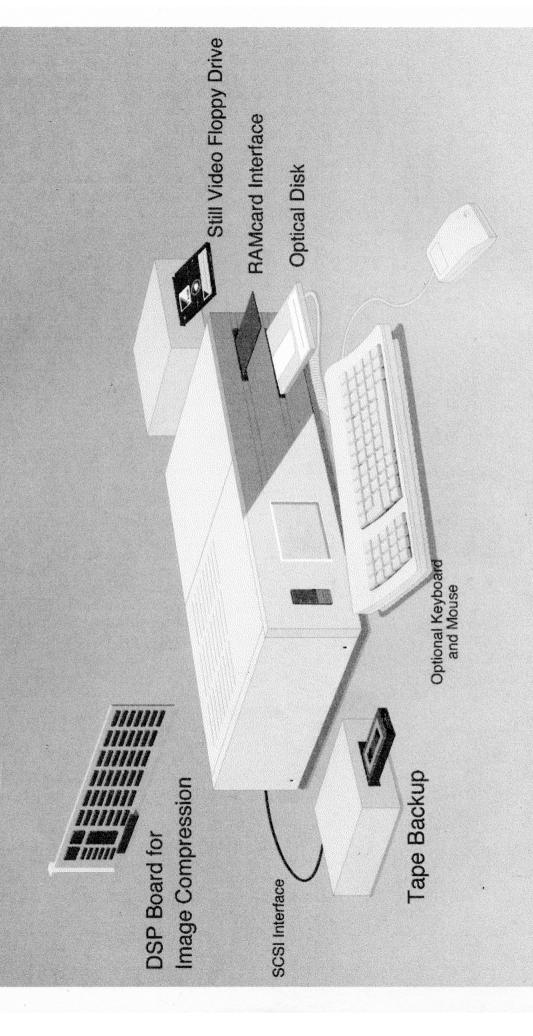
DIGITAL STORAGE DEVICE



DIGITAL STORAGE UNIT

PROTOCOL DOCUMENT

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Protocol Document - Digital Storage Device

General Description -

The Digital Storage Device is an optical disk based storage device optimized for storing digital images and audio sequences. Integral compression helps store images and sound in a more compact form for better utilization of the storage media. The unit features an easy to use interface and a flexible design that allows additional capabilities to be added by simply installing a plug-in board. The Digital Storage Device has analog video inputs and outputs as well as SCSI and RS-232 digital interfaces to allow it to communicate with most computers and peripherals. The multiple interfaces and flexible design allow the unit to be configured to meet a variety of users' needs. (i.e. Image database, Image processing, presentations, interactive training applications, image distribution (transmission), CD ROM production, etc.)

Performance & Features -

- COMPANDER BOARD FOR COMPRESSING STORED IMAGES
- STORES > 1500 640 X 484 IMAGES COMPRESSED (58 MB)
- STORES >50 640 X 484 IMAGES UNCOMPRESSED (46 MB)
- SUPPORTS THE FOLLOWING RESOLUTIONS:

 $512\ X\ 512\ -\ 640\ X\ 484\ -\ 768\ X\ 484\ -\ 1280\ X\ 1024$ (or any other resolution images via the SCSI interface when connected to a computer)

- BUILT-IN FRAMESTORE
- <1 SEC. IMAGE ACCESS & DISPLAY
- NO BLANKING BETWEEN IMAGES
- IMAGE TRANSITION EFFECTS (FADES, WIPES, ETC.)

- AUDIO RECORDING AND PLAYBACK CAPABILITY TO SUPPORT ANY LENGTH OF AUDIO WITH AN IMAGE UP TO THE STORAGE SPACE LIMITATION. FOR STORAGE CAPACITY CONSIDERATIONS, 20 SECONDS OF AUDIO PER IMAGE CAN BE CONSIDERED TYPICAL. FOR 1500 IMAGES USING THE 10 SECOND/TRACK SVF AUDIO COMPRESSION
- RAM CARD INTERFACE OPTION
- BACKUP USING OFF THE SHELF TAPE BACKUP SYSTEMS VIA SCSI (I.E. 8MM, RDAT, STREAMING TAPE, ETC.)
- TRANSMISSION CAPABILITY AS AN OPTION

Analog Signal Inputs -

NTSC composite video - (BNC Connector)
RGB video - (4-BNC Connectors)
Y-C video - (S Connector)
Broadcast Standard Compatible Genlock - (BNC connector)

Analog Signal Outputs -

NTSC composite video - (BNC Connector) RGB video - (4-BNC Connectors) Y-C video - (S Connector)

Digital Interfaces -

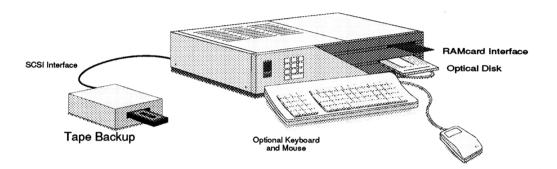
SCSI parallel digital interface for image data backup and transfer. RS-232 serial interface for control or low data rate image transfer. Keyboard/mouse/remote interface for image annotation, control and file functions.

Power Requirements -

UNITED STATES 120 V, 60 Hz nominal. Operate to specification over 108-132 V, 57-63 Hz.

JAPAN 100 V, 50 or 60 Hz nominal. Operate to specification over 90-110 V, 47-63 Hz.

Gen. Il Digital Storage Device



The Gen. Il Digital Storage Device is a mass storage device that has been optimized for efficient storage and fast retreival of digital images and audio sequences. An integral framestore provides analog outputs for viewing the images on a standard television or an RGB monitor. A simple user interface allows the operator to create presentations which can combine images from standard video sources or graphics from computers. The unit is compact and sets up quickly for use in conference rooms, it needs only to be plugged into an AC outlet and cabled to the room monitor and sound system.

Features

- Compander board for compressing images prior to storage.
- Built-in framestore for grabbing images from standard video sources
- Accepts composite video and RGB video signals
- Outputs composite video and RGB video signals
- Audio recording capability allows any length of audio to be associated with an image.
- Image transition effects between images (fades, wipes, etc.)
- Less than 1 second image access and display.
- SCSI interface allows off the shelf backup systems such as streaming tape cartridge, RDAT or removeable magnetic storage media to be connected.

Note: The storage media for this product has not been determined at this point, however optical disk is a prime candidate at this time.