

DIGITAL RECORDING

GRAPHICS, VIDEO, & AUDIO

DGx

Digital Recording System



The DGx™ digital recording system captures, compresses, stores, and plays back imagery at up to 1280 x 1024 pixel resolution. It can record computer, radar, sonar, FLIR, and other high resolution signals, NTSC/PAL video and stereo audio. The DGx preserves the original resolution of all inputs.

The DGx offers real time recording of up to four images simultaneously, with all inputs multiplexed on a single storage device. This makes the DGx particularly cost effective for recording multiple signals as well as solving the problem of synchronized playback.

With its broad range of input signals, multiple signal recording capability, digital storage, and event marking, the DGx is an extremely flexible and complete recording system. In addition, audio and video inputs can provide data on operator performance, making the DGx a complete solution for applications in monitoring, training, simulation, and incident investigation.

RECORDING MODES: Recording rates from real time to one frame per second, depending on the number of inputs and resolution. Full 1280 x 1024 pixel recording is available at six frames per second; real time recording is at 720 x 575 pixels.

PLAYBACK MODES: Fully synchronized playback of multiple signals. Up to four images can be displayed simultaneously in quad mode on a single monitor, or any two, full screen on separate monitors. All frames are time stamped and can be event marked for random access.

STORAGE OPTIONS: Various recorder options are available, including digital tape and disk. Three hour recording is standard for tape. The DSS (Digital Storage Subsystem) provides up to 9 hours recording and random access on a removable 120GB disk drive.

Simultaneous recording
of up to 4 inputs

Computer / radar / sonar /
video / FLIR / audio

1280 x 1024 image
resolution

Stereo audio

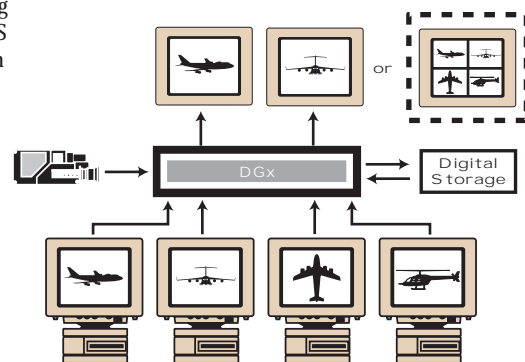
Event marking

Random Access

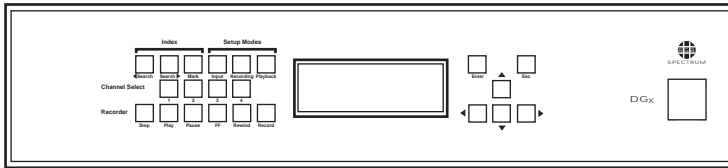
3 hour recording to tape

9+ hour recording to disk

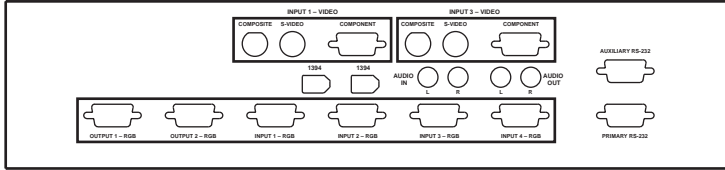
**RECORD IT ALL!
WHAT'S ON
EVERY SCREEN
WHO'S WATCHING
WHAT'S SAID**



SIMULATION • TRAINING • COMMAND & CONTROL • DEBRIEFING • MISSION ANALYSIS • SURVEILLANCE



Front Panel Configuration



Back Panel Configuration

Specifications

High Resolution Input

Input channels	1 primary, 3 auxiliary channels
Video and sync format	RGB, RGBS, RGBHV
Horizontal scan rate	15 kHz to 90 kHz
Vertical scan rate	20 Hz to 100 Hz
Maximum resolution	1280 x 1024 @ 85 Hz; 1600 x 1200 @ 60 Hz
Connectors	15-pin HD D-Sub (female)

Video Input

Input channels	2 (uses 2 auxiliary channels)
Standard	NTSC/PAL composite, S-Video, component video
Connectors	BNC, 4 pin mini-DIN, 15 pin HD D-Sub (female)

Audio Input/Output

Input channels	Stereo pair
Connectors	RCA

Output (playback)

Output channels	2
Maximum resolution	1280 x 1024 @ 85 Hz
Connectors	15-pin HD D-Sub (female)

Digital Output (to/from recorder)

Compression format	DV standard with proprietary multiplexing
Interface	IEEE 1394
Recorders (external)	DVCAM tape decks (consult RGB Spectrum for models) Digital Storage Subsystem (DSS), 120GB removable media

User Interfaces

Front panel	LCD display with keypad (option)
RS-232C	Asynchronous serial port on DB9 (female) connector Virtual Control Panel (VCP) software (option)

Physical (excluding storage device)

Size	17.5" (W) x 3.5" (H) x 18.5" (D)
Weight	18 lbs
Power	<60 watts

	Inputs			Output		
	Type	Max Image Resolution (Pixels)	Number	Max Image Resolution (Pixels)	Update Rate Single Input (FPS)	Update Rate 4 Inputs (FPS)
Hi-Res Mode	Graphics	1280 x 1024	1 - 4	1280 x 1024	6.25	1.5
Standard Mode	Graphics/Video	720 x 575	1 - 4	720 x 575	25	6
Standard Mode with Down Conversion	Graphics	1280 x 1024	1 - 4	720 x 575	25	6