



MULTICAST VIDEO/GRAPHIC SERVER (MVS)

Graphics Resolution – JPEG 2000 Compression

Records, stores, & streams

4 to 24 channels of high resolution imagery

JPEG2000 compression

Interframe compression

Event marking

Random acces

Time code synchronization

Variable speed playback

Frame advance/reverse

Simulation

Command & Control

Missile Testing/Telemetry

Mission Analysis

Medical

Training

Security & Monitoring

The Multicast Video Server (MVS) is a fully integrated, custom configurable system for recording, storing, and distributing multiple channels of high resolution, real-time imagery using the JPEG2000 compression standard. It is part of RGB Spectrum's extensive line of JPEG2000 recording and streaming solutions supporting resolutions up to 1600 x 1200.

The Multicast Video Server offers the powerful capability to record and store multiple channels while simultaneously streaming the same imagery out to remote locations. It is used with RGB Spectrum's DGy codecs for encoding at origination and decoding at destination points to provide a complete solution.

The Multicast Video Server provides a centralized mechanism for handling incoming streams to be recorded and stored while simultaneously streaming out the same or pre-recorded imagery for remote viewing, supporting 4 to 24 simultaneous streams in any combination of incoming and outgoing streams.

In a simulator application, for example, the instructor can view critical data as seen by the pilot on a real time basis while the same information is being recorded on the MVS. Observers in remote locations can view the same data, real-time or afterwards. The MVS offers a complete solution for even the most complex simulator. For example, while a simulation is being recorded and streamed to an Instructor's Operating Station, previously recorded simulations can be recalled and streamed out to a debriefing room.

The Multicast Video Server provides innovative interframe compression support to minimize network bandwidth requirements. Interframe compression allows the user to increase compression levels to reduce streaming bandwidth. Interframe compression functions by analyzing interframe redundancy and content changes. It exploits the similarities between successive frames, known as temporal redundancy, to reduce the volume of data required in a sequence of frames. The result is reduced data bandwidth during transmission.

Advanced features include event marking, random access, time code synchronization, variable speed playback, and jog/shuttle frame advance/reverse. The Multicast Video Server's combination of superb image quality, rich feature set, and outstanding performance make it the ideal solution for demanding, mission critical applications.

RGB Spectrum's recording and streaming technology has become the de facto standard in mission critical applications such as simulation, command-and-control, emergency operations centers, missile testing, security, and telemetry. Noteworthy installations include the F-35 Lightning III Joint Strike Fighter simulator program, the U.S. Army Future Combat Systems program, the U.S. Army Space and Strategic Defense Command, the U.S. Army Operational Test Command, and deployments on the U.S. Navy destroyer fleet, the Canada Navy frigate fleet, and the U.S. Missile Defense Agency.

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Specifications

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Specifications subject
to change without notice
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High Resolution Graphics Systems Input & Output

Number of supported channels:	4 to 24, configurable
Supported resolutions:	Up to 1600 x 1200 pixel resolution
Signal formats	Interlaced or non-interlaced
Signal transmission	10/100/1000 Base-T Ethernet

Server Hardware Specifications

CPU:	Quad Core Xeon Processors X5355 4MB Cache, 2.66GHz, 1333MHz FSB
Memory:	8GB memory
Data Storage:	Custom configurable with single and multiple drives, fixed and removable
Network Communication:	10/100/1000 Ethernet
Operating System:	SUSE Linux Enterprise Server 10

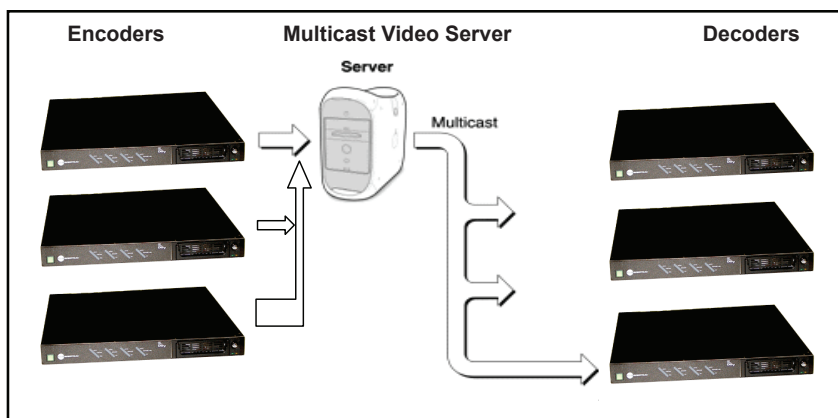
Control & External Time Code Synchronization

Network Connection:	10/100/1000 Base-T Ethernet, RJ45 connector
Command line:	Internal telnet server
Network Time Server	Format: Network Time Protocol (NTP) User selectable polling intervals.

Physical & Environmental

Size:	2U rackmount chassis 29.31" (74.4cm) D x 17.5" (44.43cm) W x 3.4" (8.64cm) H
Weight:	Rack Weight 50.71 lbs (23 Kg), maximum configuration
Operating Temperature:	10° C to 35° C (50° F to 95° F)
Storage Temperature:	-40° C to 65° C (-40° F to 149° F)
Operating Relative Humidity:	20% to 80% non-condensing
Operating Vibration:	0.26G at 5Hz to 350Hz for 2 minutes
Operating Shock:	1 shock pulse of 41G for up to 2ms
Operating Altitude:	-16 to 3,048m (-50 ft to 10,000 ft)

System Configuration



RGB Spectrum's Multicast Video Server (MVS) simultaneously records, stores, and multicast streams from 4 to 24 channels, offering the powerful capability to record and store multiple channels while viewing the same imagery at multiple locations.

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