



HIGH RESOLUTION DIGITAL GRAPHICS RECORDERS

DGy 201HD, 201x, 401x

**Computer / Radar / Sonar /
HD / FLIR / X-Ray**

**Highest fidelity JPEG2000
reproduction**

**Up to HD and 1920 x 1200
resolution**

Multicast streaming

Interframe compression

Event marking

Instant random access

**Simultaneous record
and playback**

**External time code
synchronization**

Variable speed playback

Automatic back-up

Frame jog / shuttle

Multi-unit synchronization

Compact 1RU size

DGy™ codecs record, transmit, and stream high scan rate images. The DGy sets a new standard in terms of image quality, using JPEG2000 compression to achieve visually lossless recording to internal disk drives or network attached storage devices such as RAIDs.

The system captures, compresses, stores, replays, and streams imagery at up to 1920 x 1200 pixel resolution. It supports recording of computer, radar, sonar, FLIR, X-Ray, and HD signals at up to 30 frames per second, plus stereo audio. Models are available with a removable hard disk and an optional fixed drive offering recording storage from 8 to 32 hours per drive. They also offer the option to use external network attached storage for centralized, higher capacity storage. The DGy 401x can record two inputs at half rates with fully synchronized playback.

All DGy recorders offer standard JPEG2000, plus interframe compression making them an ideal solution for streaming graphics across networks where higher compression rates are necessary to avoid overtaxing network bandwidth. The recorders also support file transfer with remote computers or file servers using standard FTP protocol.

Features include external time code synchronization (IRIG-B or Network Time Server), event marking, and random access. Multiple DGy units can be interconnected to support simultaneous, synchronized recording of multiple channels. Remote playback on a Windows PC is supported using a JPEG2000 plug-in to the standard Windows Media Player. A simultaneous record/replay option allows review of imagery while recording is still in process.

A combination of superb image quality, rich feature set, and outstanding performance make DGy recorders the ideal solution for demanding, mission critical applications.

	201HD	201x	401x
Maximum record/replay resolution	1920x1200	1600x1200	1600x1200
Frame rate at maximum resolution	30fps	20fps	20fps
Frame rate at 1280x1024 resolution	30 fps	30fps	30fps
Recording/playback channels	1	1	2

Specifications

High Resolution Graphics Input

Specifications subject to
change without notice
Made in the USA
©2008 RGB Spectrum

Analog RGB	
Number	1
Connector type	DVI-I single-link
Signal formats	Interlaced or non-interlaced
Video level	Nominal 0.7 V p-p (1.0 V composite p-p)
Input impedance	75 ohms
Sample rate	Up to 170 MHz
Resolution	640 x 480 to 1600 x 1200 (Models 201x & 401x), up to 1920 x 1200 (Model 201HD)
Sync	3 wire (sync on green), 4 wire (separate composite sync), 5 wire (separate H and V sync)
Sync level	0.3 V p-p (3 wire), 1 to 5 V (4 and 5 wire)
DVI	
Number	Models 201HD & 201x: 1 Model 401x: 2 (with one active DVI loop)
Connector type	DVI-I single-link
Resolution	640 x 480 to 1600 x 1200 (Models 201x & 401x), up to 1920 x 1200 (Model 201HD)
Pixel rate	Up to 165 MHz

Simulation

Command & control

Missile testing / telemetry

Mission analysis

Medical

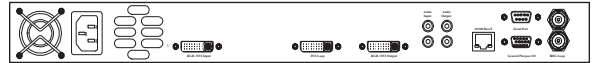
Training

Air traffic control

Security & monitoring

Audio Inputs

Analog	
Number	Single Channel Mode: 2 mono or 1 stereo Dual Channel Mode: 2 mono or 1 stereo (DGy 401x)
Sample rate	11.025, 22.05, or 44.1 kHz
Audio level (line)	1 Vpp nominal
Audio level (mic)	-40 dBV
Input impedance	47 k ohms (unbalanced)
Connector type	RCA phono
External Time Code Synchronization	
Network Time Server	Format: Network Time Protocol (NTP), User selectable polling intervals.
IRIG (Option)	Format: B123, DCLS or 1kHz modulated



DGy model 201HD/201x back panel with optional IRIG-B time code

High Resolution Graphics Output

Analog RGB	
Number	1
Connector type	DVI-I single-link
Video level	Nominal 0.7 V p-p
Output impedance	75 ohms
Sample rate	Up to 240 MHz
Resolution	640 x 480 to 1600 x 1200 (Models 201x & 401x), up to 1920 x 1200 (Model 201HD)
Sync	3 wire (sync on green), 4 wire (separate composite sync), 5 wire (separate H and V sync)
Sync level	0.3 V p-p (3 wire), 5 V p-p (4 and 5 wire)
DVI	
Number	Models 201HD & 201x: 1 Model 401x: 2
Resolution	640 x 480 to 1600 x 1200 (Models 201x & 401x), up to 1920 x 1200 (Model 201HD)
Connector type	DVI-I

Audio Outputs

Analog	
Number	Single Channel Mode: 2 mono or 1 stereo Dual Channel Mode: 2 mono or 1 stereo (DGy 401x)
Audio level (line)	1 Vpp nominal
Output impedance	Low impedance suitable for 10 k ohm bridging load (unbalanced)
Connector type	RCA phono

Control

Network Connection	
Type	10/100/1000 Base-T Ethernet
Connector type	RJ 45
Command line	Internal telnet server
Graphical interface	Internal web server for browser based control panel software
RS-232 Serial	
Connector type	9 pin D sub female
Baud rate	9600 baud to 115 k baud
Function	Command line control of all system functions

Other

Power	< 60 W
Size	17.5"/44.45 cm (w) x 19"/28.26 cm (d) x 1.75"/4.45 cm (h), excluding rack mount adapters
Rackmount	Included
Weight	16.0 lbs (7.26 kg)