



## HIGH RESOLUTION GRAPHICS RECORDING & STREAMING SYSTEM

HD GRAPHICS  
VIDEO  
AUDIO

### DGy 201 HD

**JPEG2000 Codec**

**NOW  
SUPPORTING  
FULL HD  
RESOLUTION  
RECORDING**

**Computer / radar / sonar / HD /  
FLIR / x-ray / audio**

**Up to 1600 x 1200 resolution**

**Multicast streaming**

**Interframe compression**

**Event marking**

**Random access**

**Simultaneous record /  
playback capability**

**External time code  
synchronization**

**Variable speed playback**

**Frame jog / shuttle**

**Multi-unit synchronization**

**Compact 1RU size**

The DGy™ recording family has expanded with the new high definition DGy HD model. The new codec records and replays imagery at up to 1920 x 1200 resolution. The DGy offers wavelet-based JPEG2000 compression to achieve almost lossless recording, which provides results superior to more common DCT based compression schemes.

The DGy HD codec captures and compresses real time computer imagery, radar, sonar, FLIR, X-ray, HD video and audio at up to 30 frames per second. The unit includes a removable hard disk and an optional fixed hard disk, offering from 10 to 32 hours of recordings per drive. An option allows use of external network attached storage devices, such as RAID's, for centralized recording with expanded capacity.

The DGy supports the transfer to and from a remote computer or file server using standard ftp protocol. Non-linear editing (NLE) capability is available using third party software.

The DGy HD's unparalleled feature set includes external time code synchronization (IRIG-B or Network Time Server), event marking and random access. Multiple DGy units can be interconnected to support simultaneous recording of multiple channels. Remote playback on a Windows PC is supported using a JPEG2000 plug-in to the standard Windows Media Player.

The combination of superb image quality, rich feature set, compact size, portability and robust performance makes the DGy HD the ideal solution for demanding, mission-critical applications.

## Specifications

### HD High & Resolution Graphics Input

Analog RGB	
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 1920 x 1200
Record Frame Rate	30 fps (60 Hz)
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	
Connector type	DVI-I single-link
Resolution	640 x 480 to 1920 x 1200
Record Frame Rate	Up to 30 fps
Pixel rate	Up to 165 MHz

### Audio Inputs

Analog	
Number	2 mono or 1 stereo
Sample rate	11.025, 22.05, or 44.1 kHz
Audio level (line)	1 V p-p nominal
Audio level (mic)	-40 dBV
Input impedance	47 k ohms
Connector type	RCA phono

### High Resolution Graphics Output

Analog RGB	
Connector type	DVI-I
Signal Format	RGB
Video level	Nominal 0.7 V p-p
Output impedance	75 ohms
Sample rate	Up to 240 MHz
Resolution	640 x 480 to 1920 x 1200
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	
Connector type	DVI-I single-link
Resolution	640 x 480 to 1920 x 1200
Pixel rate	Up to 165 MHz

### Audio Outputs

Analog	
Number	2 mono or 1 stereo
Audio level (line)	1 V p-p nominal
Output impedance	Low impedance suitable for 10 k ohm bridging load
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 1 kHz modulated

### 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
Enclosure Size:	17.5"/44.5 cm (W) x 19"/48.3 cm (D) x 1.75"/4.5 cm (H)
Rackmount	Included
Temperature	0° to 50° C

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

**Simulation**

**Command & control**

**Missile testing / telemetry**

**Mission analysis**

**Medicine**

**Training**

**Air traffic control**

**Security & monitoring**



DGy Model 201 HD Back Panel With Optional IRIG-B Time Code



950 Marina Village Parkway  
Alameda, California 94501  
TEL: (510) 814-7000  
FAX: (510) 814-7026  
WEB: www.rgb.com  
e-mail: sales@rgb.com