

Full-Featured MPEG-4 DVR



DynaGuard™ 216 Series

The DynaGuard™ 216 series is a full-featured MPEG-4 DVR. With 16 channel video configurations, it is designed for medium-sized installations, such as supermarkets, hospitals, train stations, commercial buildings and more. The DG216 series provides Triplex+ Operation that enables live display, playback, remote monitoring while recording. With Modular Upgrade Kits, users can expand DG216 application to real time recording, POS tracking, and audio monitoring. The DG216 series provides user-friendly interface such as jog/shuttle, IR remote control, mouse, compact control keyboard, and ezBurn™, ezRecord™, ezDDNS™ technologies. Furthermore, combining 4 internal HDDs and NAS devices with an efficient MPEG-4 compression engine, vast recording is available. The DynaRemote™ software also provides distant accessibility for remote system control.

Features

Advanced Functions

- Triplex+ Operation: Live, Record, Playback, Network
- Supports up to 4 internal HDDs
- Supports internal CD-RW/DVD+RW
- Dual-Main Output (DG216T) **NEW**
- Supports Modular Upgrade Kits
- Per Channel Configuration
- Multi-Language support
- Digital Zoom 2x2
- Multiple built-in dome camera control protocols
- Supports WLAN, SMS
- Supports Pre-Alarm Recording
- Built-in Pelco Coaxitron® Protocol **NEW**
- DynaRemote™ for remote monitoring

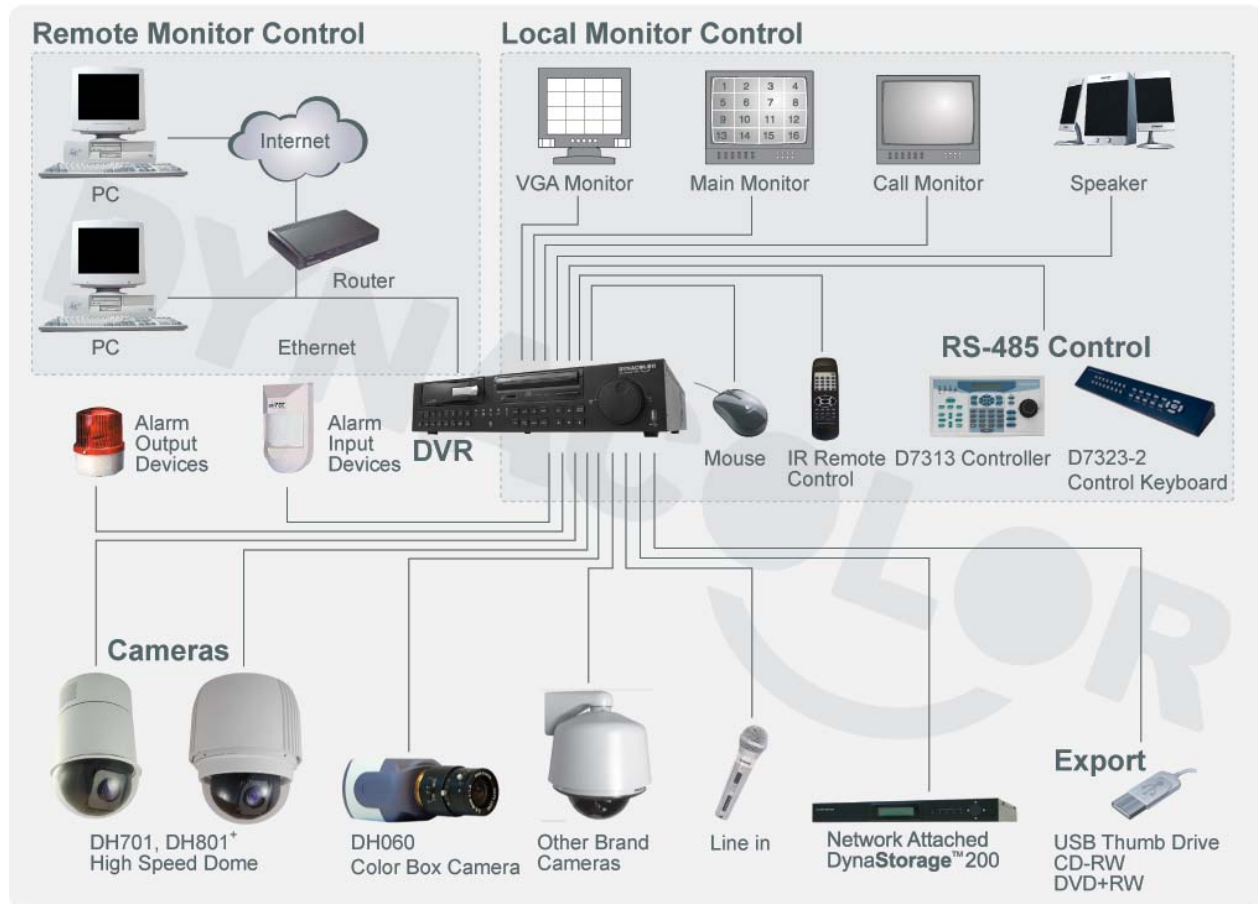
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- ezBurn™ for quick video export
- ezRecord™ for quick recording setting
- ezDDNS™ for automatic DDNS configuration **NEW**
- Exports AVI file for Microsoft® Media Player
- Jog / Shuttle
- IR Remote Control
- USB Mouse (Optional)
- Compact Control Keyboard (Optional)

Modular Upgrade Kits (Optional)

- DynaStorage™ 200 for extended recording storage
- POS Module for transaction monitoring **NEW**
- Turbo Module (DG216S only) for real time recording or transcoding
- Audio Hub (DG216T only) for synchronized 16CH audio recording




System Configuration



Product Description

Modular Upgrade Kits

The DynaGuard™ 216 series can be enhanced through a variety of Modular Upgrade Kits. The Turbo Module enables real time recording across 16 channels or encodes independent network video stream. The Audio Hub provides synchronized 16-channel audio recording capability. The POS Module will superimpose transaction data over video images and provide text based search for transaction data with synchronized video data. These modules reduce inventory overhead and allow users to tailor the DVR for their needs.

Module Upgradable Kits	Features	Compatible DVRs
 Turbo Module	<ul style="list-style-type: none"> Enable 16ch Real Time Recording: <ul style="list-style-type: none"> Recording Rate: 480pps Dual-Main Output Enable Transcoder: <ul style="list-style-type: none"> Remote Image Resolution Adjustable Remote Per Channel Configuration 	DynaGuard™ 216S
 Audio Hub	<ul style="list-style-type: none"> 16CH Audio-in Recording Real Time Audio Recording Remote Audio Surveillance RS232 Interface 	DynaGuard™ 216T
 POS Module	<ul style="list-style-type: none"> Local Text Overlay in Live/PB Remote Text Overlay in Live/PB Local Text Search Remote Text Search Exception Handling Export w/ Text Data 	DynaGuard™ 216T/S/L DynaGuard™ 204/208

MPEG-4 Compression Engine

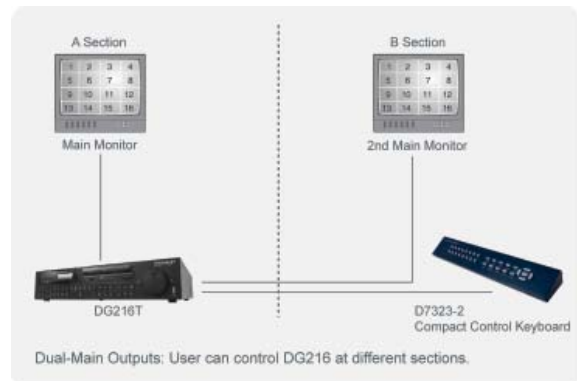
The DynaGuard™ 216 series applies an advanced high-compression MPEG-4 engine for efficient video management. With high image quality and small file size, the DynaGuard™ 216 series provides longer recording duration, faster data transmission, and reduces storage cost.



MPEG-4 compression engine provides longer recording duration and faster data transmission.

Dual-Main Output

The DynaGuard™ 216T provides Dual-Main Output function, which enables two main monitors for system control. Both main monitors can be used to modify system settings, view live video, or playback video. The DVR can manage control priority for different users. System administrators can control the DVR at different locations.



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The DynaGuard™ 216 series provides intuitive control through user-friendly interfaces. With accessories such as D7323-2 Compact Control Keyboard and mouse support, the DynaGuard™ 216 series offers system control beyond the conventional front panel keys. The ezRecord™ and ezBurn™ features reduce recording configurations and video exporting tasks down to a few keystrokes. The DynaGuard™ 216 series comes with jog/shuttle and IR controller for video tracking and remote operation.



Coaxial Control

The DynaGuard™ 216 series supports speed dome camera control through coaxial cable. The DVR can be configured to control 16 dome cameras that supports Pelco Coaxitron®, or conventional speed dome cameras through the Coaxial Telemetry for signal translation.



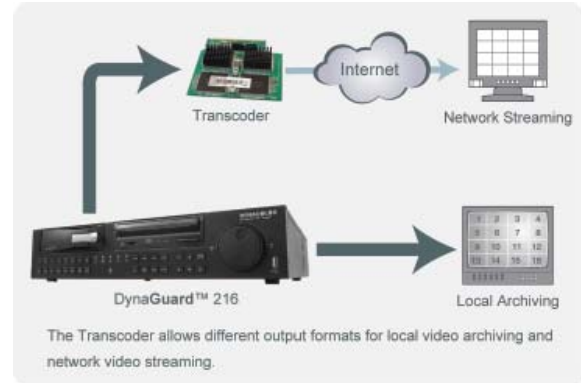
NAS Solution: Extended Recording Capacity

The DynaStorage™ 200, a NAS (Network Attached Storage) device, is designed to provide extended recording capacity for the DynaGuard™ 216 series via the Gigabit Ethernet interface. Its plug-and-play interface allows the DynaStorage™ 200 to directly connect to the DVR and instantly increases storage capacity. Multiple units of DynaStorage™ 200 can be connected with a hub for even more storage.



Transcoder

Built in the Turbo Module, the Transcoder improves users' remote monitoring experience while maintaining detailed local video data. The Transcoder allows different network video streaming format from local video archiving. The DynaGuard™ 216T will record local video at a high quality, high frame rate setting, but stream network video at a lower bit , reduced frame rate to ensure smooth monitoring at remote site.



Specification Table

Features		DG200 Series					DG100 Series		DG90 Series		
		DG216T	DG216S	DG216L	DG208	DG204	DG116	DG108	DG96	DG98	DG94
Recording Rate	Pictures Per Second	480	240	120	120	120	120	120	120	120	120
Internal Storage	Max. Hard Drive(s)	4	4	4	2	2	3	3	2	2	2
External Storage	DS100 IEEE1394 Disk Array	-	-	-	■	■	-	-	-	-	-
	DS200 NAS	■	■	■	-	-	-	-	-	-	-
Operation Interface	Jog/Shuttle	■	■	■	-	-	-	-	-	-	-
	Mouse	□	□	□	□	□	□	□	-	-	-
	IR Remote Control	■	■	■	-	-	□	□	□	□	□
	Compact Control Keyboard	□	□	□	□	□	□	□	□	□	□
	Quick Exporting via ezBurn™	■	■	■	■	■	■	■	■	■	■
Record Setting	Per Camera Configuration	■	■	■	■	■	-	-	-	-	-
	Recording Config Preset	9	9	9	9	9	8	8	8	8	8
	Event Recording Configuration	■	■	■	■	■	-	-	-	-	-
Remote Network	Remote Live, Playback, Recording	■	■	■	■	■	■	■	■	■	■
	Remote System Configuration	■	■	■	■	■	■	■	■	■	■
	Remote Archive/Search	■	■	■	■	■	-	-	-	-	-
	Player for PC	■	■	■	■	■	■	■	■	■	■
Dome Control	Multiple Protocols	■	■	■	■	■	■	■	■	■	
Upgrade Kits	16 ch Audio Recording	■	-	-	-	-	-	-	-	-	-
	Dual-Main Output	■	-	-	-	-	-	-	-	-	-
	POS System Integration	■	■	■	■	■	■	■	■	■	■
	CD Burner for Exporting	■	■	■	■	■	■	■	■	■	■
	DVD Burner for Exporting	■	■	■	■	■	■	■	-	-	-

■ Support □ Option - Not Support

DynaGuard™ Series achieves a high compression ratio by using advanced MPEG-4 algorithm for an effective video management system. With high image quality and small file size, DynaGuard™ Series provides longer recording duration and faster data transmission.

DynaRemote™, our free bundled remote software package, enables users to remotely monitor, record, playback, modify system settings, and even control dome cameras over the network.

DynaGuard™ Series is designed with modular upgrades that will reduce inventory overhead and allow flexible applications such as POS, real-time recording, and full channel audio recording. Combined with our DynaStorage™ external storage devices, users can expand recording capability with data redundancy.

Technical Specifications

Item	DG216L	DG216S	DG216T	
Video				
Operation System	Embedded (Linux)			
Video Standard	NTSC / PAL Switch Selectable			
Video Operation	Triplex™ (Live, Record, Playback, and Network)			
Resolution – Live Video	NTSC: 720 x 480 pixels PAL: 720 x 576 pixels			
Input	BNC x 16, 1.0 Vp-p / 75 ohm			
Outputs	Main Monitor	BNC x 1, S-Video x 1, 1.0Vp-p / 75 ohm		
	Call Monitor	BNC x 1, 1.0 Vp-p / 75 ohm		
	Loop	BNC x 16, 1.0 Vp-p / 75 ohm		
VGA Output	800 x 600, 1024 x 768, 1280 x 1024 pixels @ 60Hz			
Picture Refresh Rate	NTSC: 480 PPS (16CH) PAL: 400 PPS (16CH)			
Digital Zoom	2 x 2			
Camera Installation	Plug & Play			
Audio				
Input	RCA x 2, Line-In			
Output	RCA x 2, Line-Out			
Recording Mode	Always Real Time Record, Synchronized with Video			
Compression Method	ADPCM, G.726			
Data Rate	4KB/s, per CH			
Operation	Remote + VCR Mode			
Playback	Only for Video Original Speed			
Recording				
Compression Method	MPEG-4 Advanced Simple Profile			
Recording Mode	Schedule, Alarm, Motion Detection			
Pre-Alarm	1 ~ 30 sec			
Resolution & Rate	NTSC 720X480	Max 30 pps	Max 60 pps	Max 120 pps
		Max 60 pps	Max 120 pps	Max 240 pps
	PAL 720X576	Max 25 pps	Max 50 pps	Max 100 pps
		Max 50 pps	Max 100 pps	Max 200 pps
Recording Quality	8 Levels Presets, Adjustable			
Image Size	2KB to 20KB / Picture			
Storage Mode	Linear / Circular			
Playback				
Playback	Play, Stop, Pause, Rewind, Forward, Search			
Playback Speed Adjustment	Yes 1x, 2x...32x			
Retrieve	Date / Time, Event			
Data Life Time	Yes (Programmable)			
Storage				
Build-in Storage	x2 ATA 133 / UDMA 133 IDE, HDD / CD-RW / DVD+RW			
Built-in HDD	Up to 4 built-in HDDs			
External Storage	DynaStorage™ 200 (Gigabit LAN)			
Export	x3 USB2.0 Ports, Supports ThumbDrive, CD-RW, or DVD+RW			
Alarm				
Alarm Input	x16, Terminal Block (TTL)			
Alarm Detection	N.C./ N.O., Programmable			
Auditory Alert	Built-in Buzzer			
Motion Detection	21 x 13 (NTSC), 21 x 16 (PAL) Grid Array, Sensitivity, Trigger Level Adjustable			
Video Loss Detection	Programmable			
Alarm Relay Output	x3, Terminal Block, 3.0 A/30 VDC or 3.0 A/125 VAC			
Communication				
Network Connectivity	Ethernet RJ-45 connector, 10/100 Mbps, Supports DHCP / PPPoE / DDNS			
Remote Control Software	DynaRemote™			
Access Control	2 Level Password			
Remote Operation	Monitor, Playback, Recording, System Setup, Dome Camera Control, Archive			
RS232C	D-Sub 9 Pin Female			
RS485	Terminal Block			
Dome Control Protocol	DynaColor, Pelco P, Pelco D, AD422, Fastrax 2, Panasonic			
General				
Unit Dimension (W x H x D)	440 x 90 x 413 mm (17.3 x 3.54 x 16.3 inches)			
Unit Weight	6 kg (12.33 lbs) with CD-RW			
Package Dimension (W x H x D)	590 x 210 x 460 mm (23.2 x 8.27 x 18.1 inches)			
Package Weight	8.5 kg (18.72 lbs)			
Operation Temperature	0°C ~ 40°C (32°F ~ 104 °F)			
Relative Humidity	5% ~ 85% Non-condensing			
Power Consumption & Input	AC 100 ~ 240V, 50-60 Hz, 100 W (Manual Select)			

Remark ①: DynaRemote™ Software Requirements:
Windows 2000 or XP, Intel® PIII or faster, 256MB RAM (512 MB RAM recommended),
Microsoft® Internet Explorer 6.0 SP2, LAN or Internet connection.

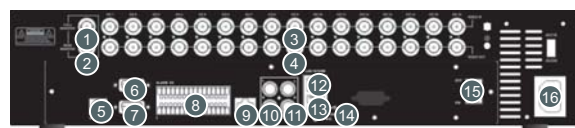
Major Operating Controls

Front Panel



- ① Cartridge (Optional)
- ② CD-RW or DVD+RW (Optional)
- ③ Channel Keys
- ④ LEDs
- ⑤ IR
- ⑥ Function Keys
- ⑦ Direction Keys
- ⑧ Shuttle Jog
- ⑨ USB2.0 Port

Rear Panel



- ① Call Monitor Output
- ② Main Monitor Output
- ③ Video Input
- ④ Video Looping
- ⑤ S-Video Output
- ⑥ VGA Port
- ⑦ RS-232C
- ⑧ Alarm I/O & RS485
- ⑨ NAS Port (RJ45)
- ⑩ Audio Input
- ⑪ Audio Output
- ⑫ LAN Port (RJ45)
- ⑬ USB2.0 Port
- ⑭ NTSC/PAL Switch
- ⑮ Power Switch
- ⑯ Power Jack

Extended Storage System: DS200

Front Panel



Rear Panel



The addition of high quality storage devices extends DVR usability and recording capacity.

Recommended HDDs

1. Maxtor:	DiamondMax 16	80G/160G/300G
	DiamondMax Plus 9	80G/160G
2. Seagate:	Barracuda 7200.10	320G/750G
	SV35.1	160G/250G/500G
3. Hitachi:	Deskstar 7200rpm	250G/300G/400G

Product Selection

Model	HDD	Cartridge	Drive Option	Video System
T: Turbo	000: None	0: None	0: None	P: PAL
S: Standard	016: 160GB	M: Cartridge	C: CD-RW	N: NTSC
L: Lite	020: 200GB		D: DVD+RW	
	050: 500GB			

Product specifications and availability subject to change without notice.
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