



# DynaGuard™ 200 Series

## Compact and Versatile MPEG-4

Ver. 1.1

**An Introduction to the DynaGuard™ 200 Series MPEG-4 Digital Video Recorder  
for Small to Medium Applications**

# What is a DynaGuard™ 200?

- Combined the features of a time-lapse audio / video recorder, a multiplexer, and a video server to create a single security CCTV solution.



Multiplexer



Time-Lapse VCR



Video Server



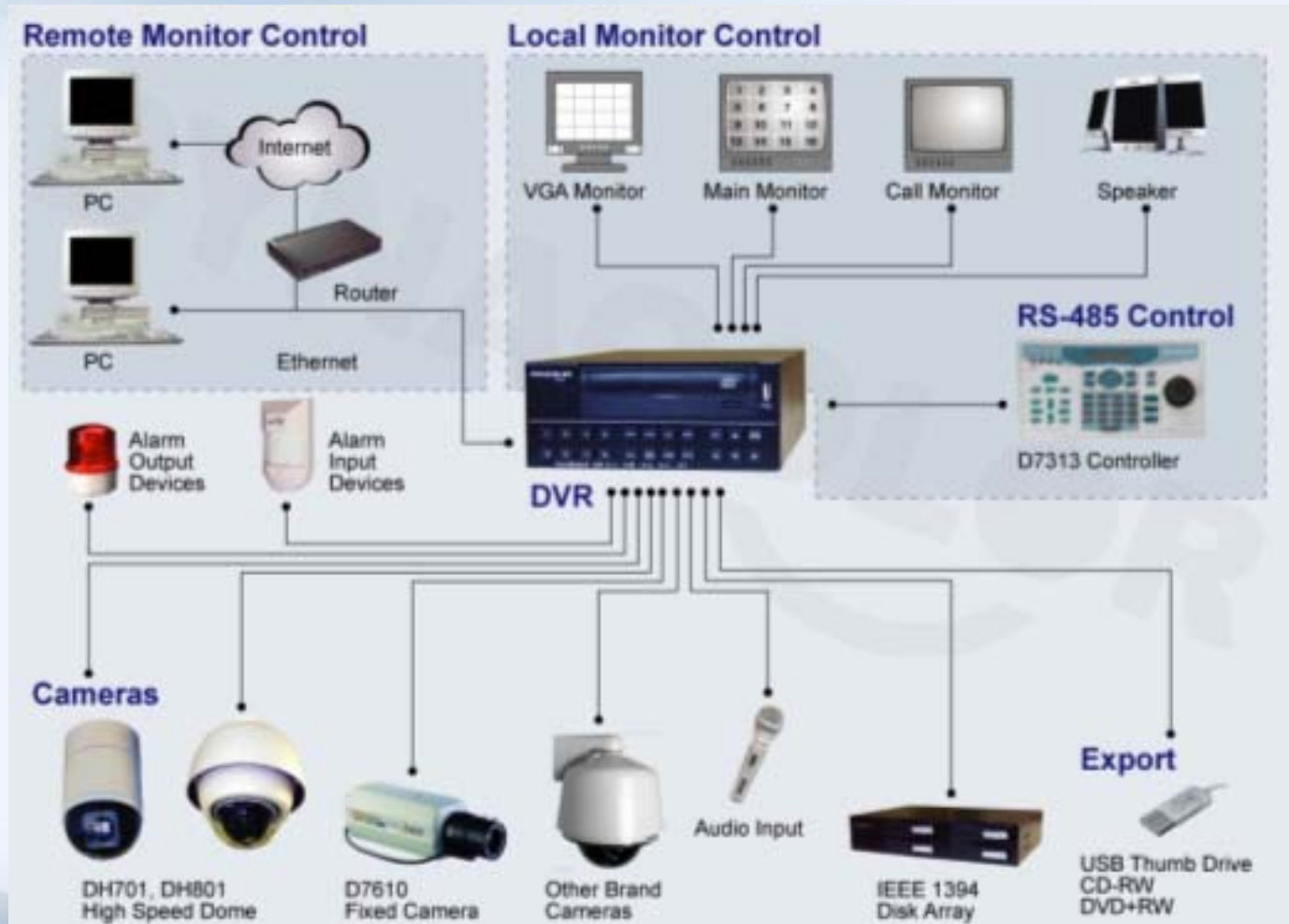
DynaGuard™ 200 Series DVR



# **Integrated video surveillance solution**

- ✓ **Compact and versatile**
- ✓ **Supports 4Ch/ 8Ch for small application**
- ✓ **Easy setup and configuration**
- ✓ **MPEG-4 high quality compression**
- ✓ **24 hours full-time recording**
- ✓ **Triplex+ operation**
- ✓ **Multiple Language**
- ✓ **Built-in dome control protocol**
- ✓ **Remote access**

# System Diagram





# Three in one



## DynaGuard™:

- ✓ Digital Video Recorder
- ✓ 4, and 8 channel inputs
- ✓ From 160 GB to 600 GB internal storage



## DynaRemote™:

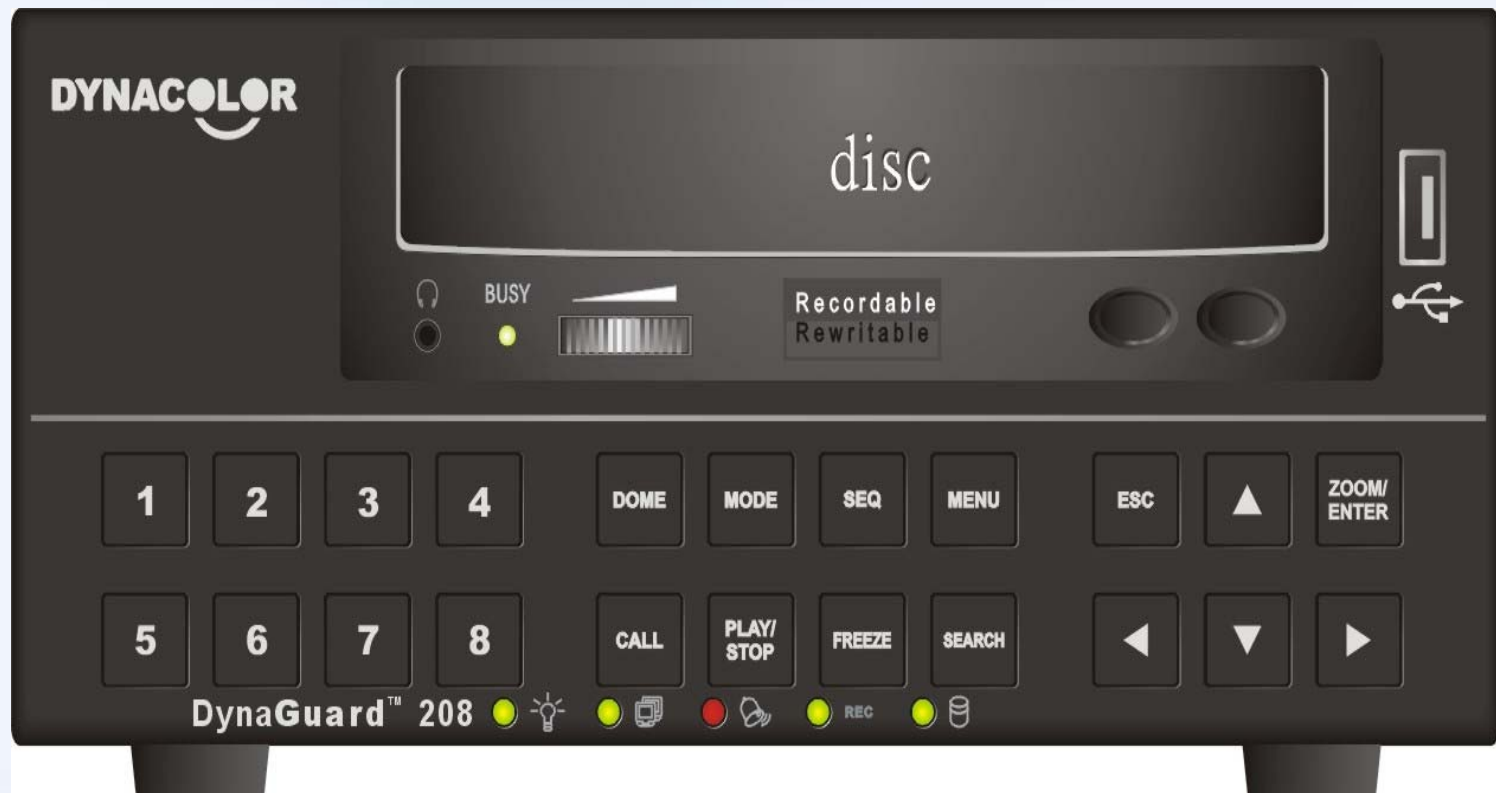
- ✓ Remote viewing and configuration software

## DynaAlert™:

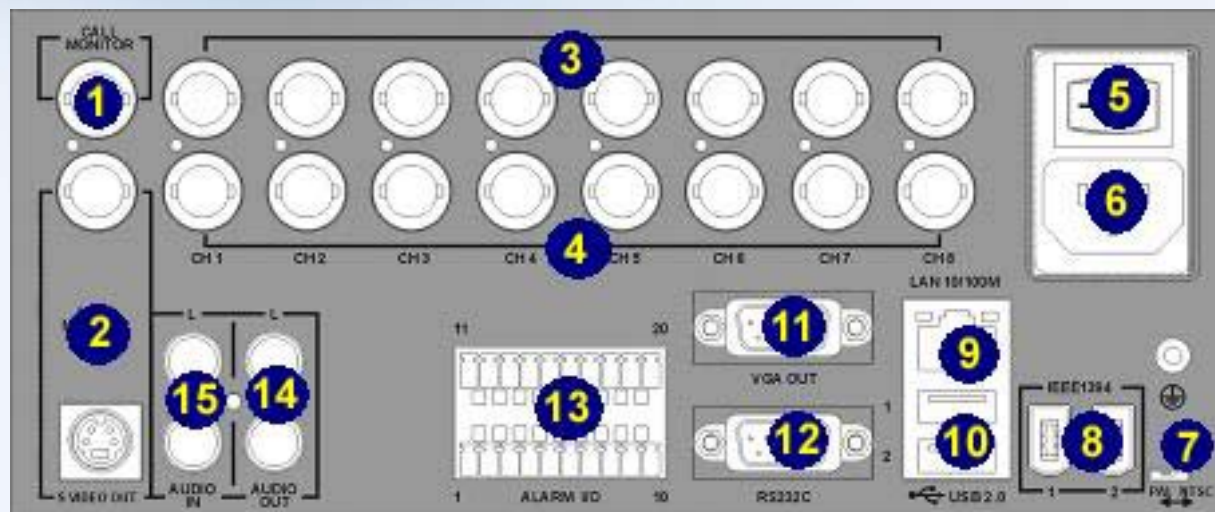
- ✓ The event manager component
- ✓ Sound a buzzer
- ✓ Flash a notice on the PC screen



# DynaGuard™ Front Panel



# DynaGuard™ Rear Panel



- |                                 |                  |
|---------------------------------|------------------|
| 1. Call Monitor                 | 9. LAN Port      |
| 2. Main Monitor (BNC & S-video) | 10. USB Ports    |
| 3. Video Input                  | 11. VGA Port     |
| 4. Camera Looping               | 12. RS-232C      |
| 5. Power Switch                 | 13. Alarm I/O    |
| 6. Power Jack                   | 14. Audio Output |
| 7. NTSC/ PAL Switch             | 15. Audio Input  |
| 8. IEEE-1394 (FireWire®) Ports  |                  |



# DynaGuard™ Features 1

## Compact & Versatile

- Support BNC, S-video, VGA monitor
- 2 channels audio
  - ✓ Live, Record, and Playback)
- Triplex+ Operation:
  - ✓ Real-time monitoring, search & playback, remote access, recording at same time.
- Motion detection
  - ✓ Adjustable by detect area, sensitivity, and threshold
- Automatic camera detection
  - ✓ Plug & Play





# DynaGuard™ Features 2

## Low Total Cost & High Quality

- **Half rack mountable size**
  - ✓ Saves spaces, especially for small installation
- **Advanced embedded operating system**
  - ✓ Low maintenance
- **MPEG-4 high quality compression**
  - ✓ Smoother and faster, especially for remote access
- **5 Levels of recording quality**
  - ✓ Image size: 1K – 13K Byte/ picture
- **24 hours full-time recording**
- **Each camera configuration**
  - ✓ performable for camera settings, frame rate, picture bit rate, alarms, motion detection.

# Video Compression & Quality



# Recording Time

| Recording Rate                     |                                   | Recording Picture Quality Mode |               |                |               |                |               |                    |                   |                    |                   |
|------------------------------------|-----------------------------------|--------------------------------|---------------|----------------|---------------|----------------|---------------|--------------------|-------------------|--------------------|-------------------|
| Total Images<br>Per Second<br>NTSC | Total Images<br>Per Second<br>PAL | Extended                       |               | Basic          |               | Normal         |               | High               |                   | Superior           |                   |
|                                    |                                   | NTSC<br>(5 KB)                 | PAL<br>(5 KB) | NTSC<br>(7 KB) | PAL<br>(7 KB) | NTSC<br>(9 KB) | PAL<br>(9 KB) | NTSC<br>(11<br>KB) | PAL<br>(11<br>KB) | NTSC<br>(13<br>KB) | PAL<br>(13<br>KB) |
| 160 GB Internal Storage            |                                   |                                |               |                |               |                |               |                    |                   |                    |                   |
| 60                                 | 50                                | 5.9                            | 7.1           | 4.3            | 5.1           | 3.3            | 4.0           | 2.7                | 3.3               | 2.3                | 2.8               |
| 30                                 | 25                                | 11.8                           | 14.1          | 8.5            | 10.2          | 6.7            | 8.0           | 5.5                | 6.6               | 4.7                | 5.6               |
| 15                                 | 12.5                              | 23.5                           | 28.2          | 17.0           | 20.4          | 13.3           | 16.0          | 11.0               | 13.2              | 9.3                | 11.2              |
| 7.5                                | 6.25                              | 47.0                           | 56.4          | 34.1           | 40.9          | 26.7           | 32.0          | 21.9               | 26.3              | 18.6               | 22.4              |
| 300 GB Internal Storage            |                                   |                                |               |                |               |                |               |                    |                   |                    |                   |
| 60                                 | 50                                | 11.0                           | 13.2          | 8.0            | 9.6           | 6.3            | 7.5           | 5.1                | 6.2               | 4.4                | 5.2               |
| 30                                 | 25                                | 22.0                           | 26.5          | 16.0           | 19.2          | 12.5           | 15.0          | 10.3               | 12.3              | 8.7                | 10.5              |
| 15                                 | 12.5                              | 44.1                           | 52.9          | 31.9           | 38.3          | 25.0           | 30.0          | 20.6               | 24.7              | 17.5               | 21.0              |
| 7.5                                | 6.25                              | 88.2                           | 105.8         | 63.9           | 76.6          | 50.1           | 60.1          | 41.2               | 49.4              | 34.9               | 41.9              |
| 600 GB Internal Storage            |                                   |                                |               |                |               |                |               |                    |                   |                    |                   |
| 60                                 | 50                                | 22.0                           | 26.5          | 16.0           | 19.2          | 12.5           | 15.0          | 10.3               | 12.3              | 8.7                | 10.5              |
| 30                                 | 25                                | 44.1                           | 52.9          | 31.9           | 38.3          | 25.0           | 30.0          | 20.6               | 24.7              | 17.5               | 21.0              |
| 15                                 | 12.5                              | 88.2                           | 105.8         | 63.9           | 76.6          | 50.1           | 60.1          | 41.2               | 49.4              | 34.9               | 41.9              |
| 7.5                                | 6.25                              | 176.4                          | 211.6         | 127.7          | 153.3         | 100.1          | 120.1         | 82.3               | 98.8              | 69.9               | 83.9              |



# DynaGuard™ Features 3

## Large Video Storage & Export

- 2 internal HDD storage support up to 1TB capacity
- Video backup/ export  
(via USB2.0 or IEEE-1394 ports)
  - ✓ External Hard Drive
  - ✓ External CD-RW or DVD RW
  - ✓ USB ThumbDrive®
- Export video (AVI) with audio and digital signature
- Exported AVI file can be played in any PC with DIVX decoder installed







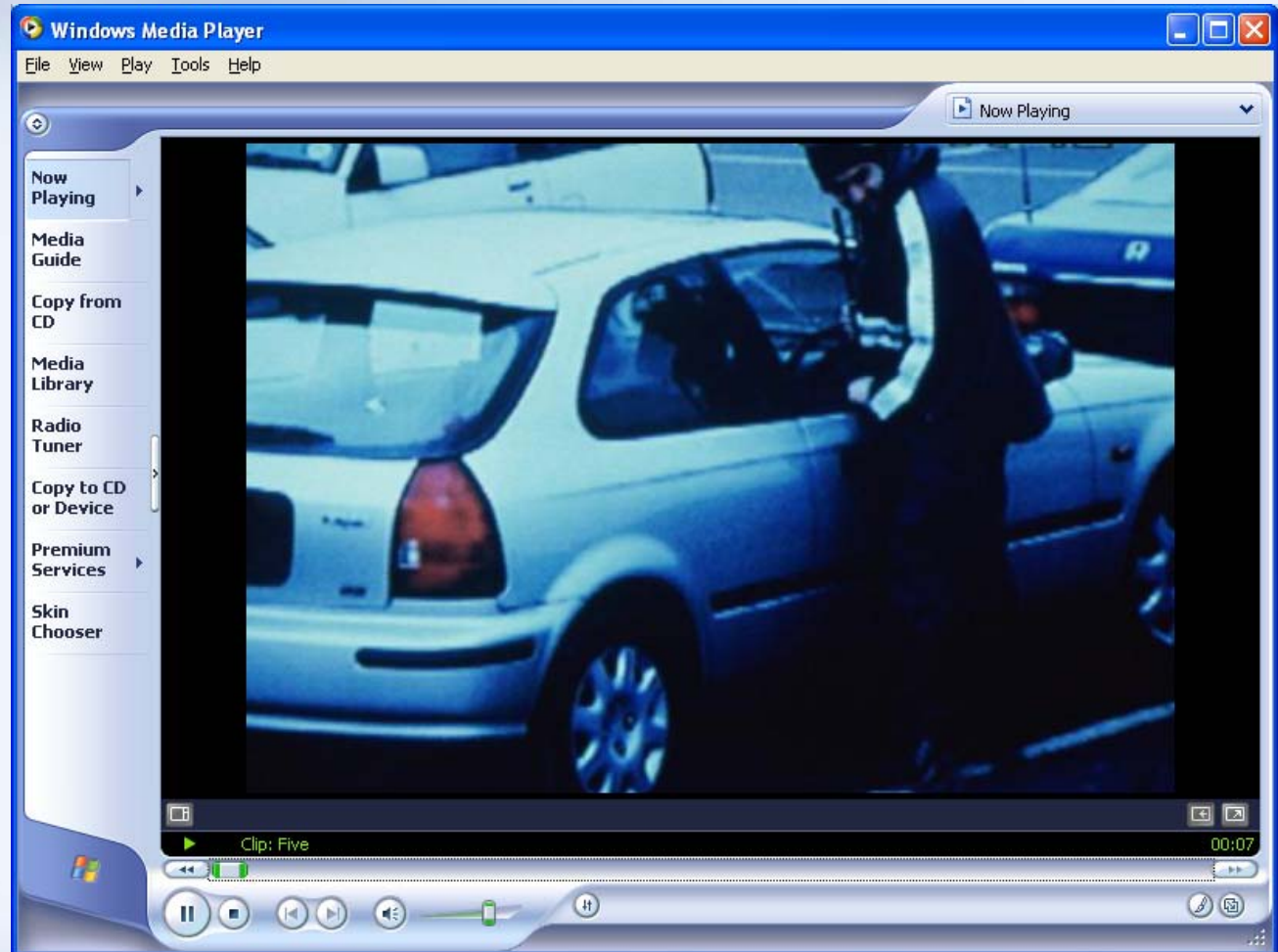
# DynaGuard™ Features 3

## User Friendly Recording and Playback

- **Programmable Recording**
  - ✓ day/night/ weekend scheduling
  - ✓ Pre-alarm and post alarm recording time and quality adjustable
- **Convenient Playback Function**
  - ✓ Multiple Playback speed
  - ✓ Fast forward and rewinding
  - ✓ Playback Player Exported AVI files via Media
- **2X Digital Zoom**
  - ✓ Available in both live and playback mode
- **Covered Camera**

# View Video in Media Player

**Export or download video remotely as AVI file format. Play in any media player application with DIVX decoder installed**



# Covert Camera

- Record areas of concern such as cash registers, loading docks, etc without displaying camera on security monitors
- Increase security on specific areas to reduce internal fraud
- “Public Display” of selected cameras only



For Example:

The covert camera appears as a blank camera...

No one knows that this camera is actually being recorded.

**Main Monitor (2 x 2 Mode)**



# DynaGuard™ Features 4

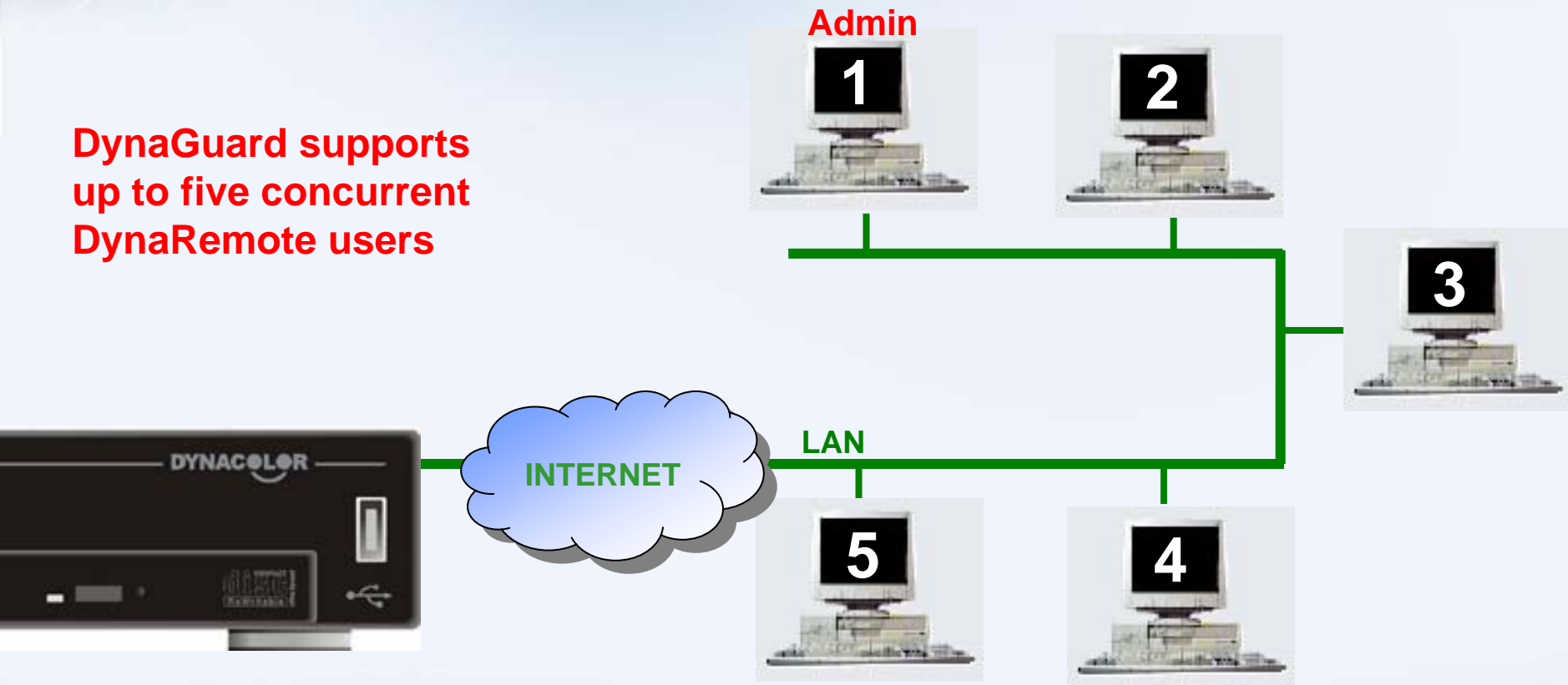
## Powerful System Compatibility

- **Software upgrade via**
  - ✓ USB ThumbDrive®
  - ✓ CD-RW
  - ✓ Remote --- via PC with DynaRemote™
- **System Integration**
  - ✓ Dome Control with multiple build-in protocols:
    - DynaColor, Pelco D, Pelco P, and AD422
  - ✓ Alarm devices (8 input/ 2 output)
  - ✓ External Storage Management
    - via USB, IEEE-1394, Network access



# DynaRemote™

**DynaGuard supports  
up to five concurrent  
DynaRemote users**





# What is DynaRemote™?

- **Software allows remote connection to a DynaGuard**
  - ✓ Works over a LAN, WAN or Internet
  - ✓ Included with DynaGuard
  - ✓ Deployed from DynaGuard to remote computer
- **Web-browser based application**
  - ✓ No need to install additional software at the remote computer
  - ✓ Requires Internet Explorer 6.0 (or higher)
  - ✓ Supports client systems running Windows XP or 2000
- **Allow users to**
  - ✓ View live video
  - ✓ View recorded video
  - ✓ Download video and audio (AVI files)
  - ✓ Configure the DynaGuard unit
  - ✓ Control attached Dome camera
  - ✓ Perform software upgrade



# DynaRemote™ Key Features

- Easy to install
  - ✓ No license key required
  - ✓ No CD-ROM required
  - ✓ Just enter the IP address of the DynaGuard you want to connect to
- Easy-to-use drag and drop web-browser interface
- Remote viewing of live video
- Remote downloading and viewing of recorded video and audio
- Remote set up of: motion detection, camera recording schedule, cameras, ips, resolution, etc.
- Remote dome control
- Remote search
- DynaRemote provides remote access to DynaGuard...anytime, anywhere!

# Configurations

| Features          | DG204                       |       |        | DG208                      |       |        |
|-------------------|-----------------------------|-------|--------|----------------------------|-------|--------|
|                   | None                        | CD-RW | DVD RW | None                       | CD-RW | DVD RW |
| Channels          | 4                           |       |        | 8                          |       |        |
| Live Update Speed | 120pps (NTSC) 100 pps (PAL) |       |        | 240pps (NTSC) 200pps (PAL) |       |        |
| Recording Rate    | 60pps (NTSC) 50pps (PAL)    |       |        | 60pps (NTSC) 50pps (PAL)   |       |        |
| VGA Output        | No                          | Yes   |        | No                         | Yes   |        |
| Dome Control      | Yes                         |       |        | Yes                        |       |        |
| Motion Detection  | Yes                         |       |        | Yes                        |       |        |
| Remote Software   | Yes                         |       |        | Yes                        |       |        |
| LAN               | Yes                         |       |        | Yes                        |       |        |
| Max. Built-in HDD | 1 HDD                       |       |        | 1 HDD                      |       |        |
| Built-in CD-RW    | No                          | Yes   | No     | No                         | Yes   | No     |
| Built-in DVD RW   | No                          | No    | Yes    | No                         | No    | Yes    |
| Swappable HDD     | 1                           | No    | No     | 1                          | No    | No     |





# Benefits

- **Continuous 24 Hour Recording**
  - ✓ Triplex DVR Operation eliminates the need to stop recording to search for events or exchange of tapes.
- **Delivers Crisp Image at all time**
  - ✓ DVR eliminates the problems of unreadable or wear and tear of tapes over times.
- **Instant Access to Recorded Video**
  - ✓ Transfer from analog to digital, DVR solves the problem of having to rewind hours of video tapes to search for an event.
  - ✓ Search by time, date, or event, event List provides quick access to all motion events.
- **Longer and More Efficient Data Recording**
  - ✓ New MPEG-4 compression technology compresses recorded video memory and enhances the video quality for better use of HDD space.
  - ✓ Simple and easy to configure day/ night/ weekend configuration maximizes the use of HDD space.
- **Windows Compatible Data**
  - ✓ Exported video files are in AVI format and can be viewed on any computer with a media player application.



# Benefits- cont.

- **Monitoring Video From Around the World**
  - ✓ Use DynaRemote™ web-base remote software that provides powerful remote control functions, including live view, playback, record and system configuration.
- **Audio Recording**
  - ✓ Two channels of audio recording with real time playback.
- **Multiple User Accessibility**
  - ✓ DynaRemote™ software supports up to five simultaneous remote (authorized) users.
- **Export Data Quick and Easy**
  - ✓ External storage devices for export via USB2.0 and IEEE-1394 (FireWire®) include ThumbDrives®, CD-RW, DVD dual, portable HDD or disk array.
- **Simple Software Upgrade**
  - ✓ Software upgrades are simple and fast with a USB ThumbDrive®, CD-RW, or Remote Application via the Internet.
- **Quick and Easy to Install**
  - ✓ Plug-and-Play, just plug a camera into the DynaGuard™ 200 and it begins recording video automatically, thus simplifying installation.



# Key Markets

## ■ Ideal for small to medium applications:

- ✓ Retail stores
- ✓ Gas stations
- ✓ Homes
- ✓ Convenient stores
- ✓ Schools
- ✓ Hospitals
- ✓ ATMs



# Ideal Customer Environments

- Remote configuration and viewing software
- Easy-to-use and easy-to-learn surveillance solution
- Where video transmission over a LAN or WAN is not constrained
- Need simple scheduler
- May need dome control
- Limited space, i.e. half rack unit
- Only need two levels of security
- Requires up to 60 pps recording
- Alarm notification via remote software







# Thank You

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