Dyna**Guard**™ 200 Digital Video Recorder

&

Dyna**Remote**™ Software

Models: DG204 / DG208

User's Manual

Version 1.2
00-3DG200DSEA2

All rights reserved

Notice

The information given in this manual was current when published. DynaColor, Inc. reserves the right to revise and improve its products. All specifications are subject to change without notice.

Copyright

Under copyright laws, the contents of this user manual may not be copied, photocopied, translated, reproduced or reduced to any electronic medium or machine-readable format, in whole or in part, without prior written permission of DynaColor, Inc.

© Copyright 2005 DynaColor, Inc.

Trademarks

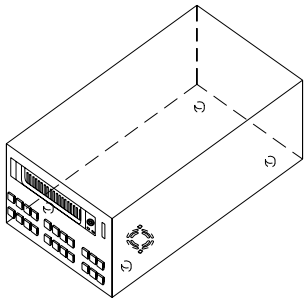
Dyna**Guard**™ and Dyna**Remote**™ are trademarks of DynaColor, Inc.
ThumbDrive® is a registered trademark of Trek 2000 International Ltd.
FireWire® is a registered trademark of Apple Computer, Inc.
Windows® is a registered trademark of Microsoft Corporation.

Trademarked names are used throughout this manual. Trademarked names are indicated with initial capitalization, rather than place a symbol at each occurrence. Inclusion or exclusion is not a judgment on the validity or legal status of the term.

www.dynacolor.com.tw
All rights reserved

Caution and Preventive Tips

- Take care not to drop the unit or subject the unit to major shocks or jolts.
- Do not place this unit on an unstable stand, bracket or mount.
- This unit is designed for indoor use only. Do not place the unit near water or in other extremely humid conditions.
- This unit should not be placed in a built-in installation unless proper ventilation is provided.
- Please check the used type of power source before you plug and operate the unit.
- Unplug the unit from the outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use only a damp cloth for cleaning.
- Always power down the system prior to connecting and disconnecting accessories, with the exception of USB devices.
- Lithium battery: Danger of explosion if battery is incorrectly replaced. Replace with the same or equivalent type recommended by the battery manufacturer. Dispose of used batteries according to the battery manufacturer's instructions.
- Do not block the fan on the bottom of the unit for air ventilation.



CE FC c UL us

All rights reserved

Important Information

Before proceeding, please read and observe all instructions and warnings in this manual. Retain this manual with the original bill of sale for future reference and, if necessary, warranty service. When unpacking your unit, check for missing or damaged items. If any item is missing, or if damage is evident, DO NOT INSTALL OR OPERATE THIS PRODUCT. Contact your dealer for assistance.

Rack Mounting

Consult with the supplier or manufacturer of your equipment rack for the proper hardware and procedure of mounting this product in a safe fashion. Avoid uneven loading or mechanical instability when rack-mounting units. Make sure that units are installed to get enough airflow for safe operation. The maximum temperature for rack-mounted units is 40 °C. Check product label for power supply requirements to assure that no overloading of supply circuits or over current protection occurs. Mains grounding must be reliable and uncompromised by any connections.

All rights reserved

End-user License Agreement

Read this License Agreement before opening the package or installing the software. The License Agreement describes your rights and obligations. By breaking the seal on the package or installing the software, you agree to all the terms in this agreement.

Software License

The Software includes the computer software, the associated media, any printed material, and any electronic documentation and may be provided to you installed on a hard drive (the media) as part of a system. The Software is licensed, not sold.

Grant of License

This agreement between you and DynaColor, Inc. allows you to use the Software you purchased. Once you have purchased the number of copies you require, you may use the Software and accompanying material no more than the licensed number of copies at one time. The Software is only licensed for use with specified DynaColor, Inc. supplied equipment.

Copyright

The Software is a proprietary product of DynaColor, Inc. and is protected by copyright laws.

Other Rights and Limitations

A demonstration copy of the Software is considered purchased and is covered by this license agreement.

- You may not sub-license, rent or lease the Software, but you may transfer the Software to another party by delivering the original disk and material as well as this license to the other party. Initial use of the Software and accompanying material by the new user transfers the license to the new user and constitutes the new user's acceptance of its terms and conditions.

- You may not de-compile, disassemble, reverse engineer, copy, transfer, or otherwise use the Software except as stated in this agreement.

- The hardware/software key, where applicable, is your proof of license to exercise the rights granted herein and must be retained by you.

- DynaColor, Inc. reserves the right to revoke this agreement if you fail to conform the terms and conditions of this agreement. In that case, you must destroy all copies of the Software, and all of its component parts (e.g., documentation, hardware box, software key).

- The Software may contain software from third parties that is licensed under a separate End User License Agreement. Read and retain any license documentation that may be included with the Software. Comply with the terms of any third party End User License Agreement is required as a condition of this agreement.

All rights reserved

Failure to comply with these restrictions will result in automatic termination of this license and will make available to DynaColor, Inc. other legal remedies.

Upgrades

If the Software is an upgrade from another software version, you may use or transfer the Software only as specified in this agreement. If the Software is an upgrade of a component of a package of Software programs that you licensed as a single product, the Software may be used and transferred only as part of that single product package and may not be separated for use on more than one computer.

Limited Warranty

Company's warranty for security product is limited to the repair or comparable replacement of any merchandise proved defective in material or workmanship (except normal wear and tear) for a period of two years, except for HDD and CD-RW component which carry a 6 month guarantee.

The warranty does not apply to the appearance of the product or accessory items and does not cover damage which occurs in shipment or failure which results from alternation, accident, misuse, neglect, voltage fluctuation, lightning water damage, faulty installation or adjustment of controls, interfacing with non-standard or custom equipment, or improper maintenance.

No Other Warranties

The above warranty substitutes for all other warranties, including express or implied, but not limited to the implied warranties of merchantability and fitness for a particular purpose. No oral or written information or advice given by DynaColor, Inc., its distributors or dealers shall create any other warranty, and you may not count on such information or advice.

No Liability for Consequential Damages

In no event will DynaColor, Inc. be liable to you for damages, including any loss of data, loss of profits or other incidental or consequential damages cause of your use of the Software or its documentation. This limitation will apply even if DynaColor, Inc. or an authorized distributor or dealer has been advised of the possibility of such damages. Further, DynaColor, Inc. does not warrant that the operation of the Software will be uninterrupted or error free.

General

If any clause of the agreement is found to be unlawful, void, or impracticable for any reason, then that clause shall be detached from this agreement and shall not affect the validity and enforceability of the remaining provisions.

You should keep proof of the license fee paid, including model number, serial number and date of payment, and present such proof of payment when service or assistance covered by this warranty is requested.

All rights reserved

Table of Content

DynaGuard™ 200 Unit

1. Overview 15
1.1 Product Key Features 15
1.2 Product Application Diagram 17
2. System Installation 18
2.1 Position the Unit 18
2.2 Selecting Video Format 18
2.3 Connecting Devices to the Unit 18
2.4 Rear Panel Connections 19
3. General System Setup 22
3.1 Front Panel 22
3.1.1 LED Definition 22
3.1.2 Function Buttons 23
3.2 Power Up / Down the Unit 25
3.3 Entering OSD Setup Menu 26
3.3.1 Button Usage in OSD Menu 27
3.3.2 Button Usage in Virtual Keyboard 27
3.4 System Date / Time Setting 28
3.4.1 Set Date / Time 28
3.4.2 Daylight Saving Time 29
3.5 Record Schedule / Quality Setting 30
3.5.1 Record Mode 30
3.5.2 Schedule Setup 31
3.5.3 Preset Record Configuration 31
3.5.4 Per Camera Configuration 33
4. Basic Operation 35
4.1 Viewing Live / Playback Video 35
4.1.1 Viewing Modes 35
4.1.2 Digital Zoom 35
4.1.3 Viewing Live Cameras 36
Viewing in Sequence Mode 36
To Freeze Live Image 36
4.1.4 Viewing Recorded Video 36
Button Usage in Playback 37
Pause Playback and Single Step Forward 37
Viewing Live Image in Playback Mode 37

All rights reserved

4.2 Call Monitor Control 38
4.3 Searching Recorded Video 38
Search by Time 39
Search by Event 39
4.4 Deleting Recorded Video 40
4.5 Exporting Recorded Video 41
4.5.1 Select Device 42
4.5.2 Select Video 42
4.5.3 Digital Signature 43
4.5.4 Erase Disc 44
4.6 Dome Control 44
4.6.1 Dome Connection 44
4.6.2 Dome Protocol Setup 45
4.6.3 RS485 Setup 45
4.6.4 Dome Controlling Button 46
4.6.5 Setting Preset Points 47
4.6.6 Calling Preset Points 48
5. Advanced System Configuration 50
5.1 System Setup 50
5.1.1 Version 51
5.1.1.1 Hardware Version 51
5.1.1.2 Software Version 51
5.1.1.3 Software Upgrade via Local Device 51
5.1.1.4 Software Upgrade via Internet 52
5.1.2 Language 52
5.1.3 Date / Time 52
5.1.3.1 Date / Time Setting 53
5.1.3.2 Date / Time Display 53
5.1.3.3 Date Display Mode 53
5.1.3.4 Time Display Mode 53
5.1.3.5 Date/Time Order 53
5.1.3.6 Daylight Saving Time 53
5.1.3.7 DST Start / End 54
5.1.3.8 DST Bias 54
5.1.4 Unit Name 54
5.1.5 Password 55
5.1.5.1 Admin / User Password 55
5.1.5.2 Enable Password 55
5.1.5.3 Load Factory Password 56
5.1.6 Network Setup 56

www.dynacolor.com.tw
All rights reserved

5.1.6.1 LAN/PPPoE Select 56
5.1.6.2 LAN/PPPoE Setup 56
- DHCP 57
- IP 57
- Netmask 57
- Gateway 58
- DNS 58
- PPPoE Account 58
- PPPoE Password 59
- PPPoE Max Idle 59
- Connect At Booting 59
- Network Restart 59
5.1.6.3 Dial-in Setup 59
- Dial-in Service 60
- Dial-in Account 60
- Dial-in Password 61
- Server IP 61
- Client IP 61
- Dial-in Idle Time 61
- Dial-in Max Time 61
5.1.6.4 Dial-out Setup 62
- Dial-out DHCP 62
- Dial-out IP 62
- Dial-out Netmask 63
- Dial-out Gateway 63
- Dial-out DNS 63
- Phone Number 63
- Dial-out Account 64
- Dial-out Password 64
- Dial-out Idle Time 65
- Dial-out Max Time 65
- Connect 65
5.1.6.5 Trigger Port 65
5.1.6.6 Email Address 65
5.1.6.7 SMTP Setup 66
- Email via SMTP 66
- SMTP Server 66
- SMTP Port 67
- SMTP Username 67
- SMTP Password 67

All rights reserved

5.1.6.8 DDNS Setup 68
- Enable DDNS....68
- Host Name 68
- DDNS Port 69
- Submit/Update 69
5.1.7 RS485 Setup 69
5.1.7.1 Unit ID 69
5.1.7.2 Baud Rate 69
5.1.7.3 Bits 70
5.1.7.4 Stop....70
5.1.7.5 Parity....70
5.1.8 Audio Output 70
5.1.9 Key Beep....70
5.2 Monitor Setup 70
5.2.1 Show Camera Title 71
5.2.3 Monitor Contrast....71
5.2.4 Monitor Chrominance 71
5.2.5 Screen Center Adjust 71
5.2.6 Show Color Bar 72
5.2.7 VGA Resolution 72
5.3 Camera Setup....72
5.3.1 Camera Select....73
5.3.2 Dome Protocol....73
5.3.3 Dome ID 73
5.3.4 Camera Title 73
5.3.5 Covert....74
5.3.6 Termination....74
5.3.7 Brightness 75
5.3.8 Contrast....75
5.3.9 Saturation 75
5.3.10 Hue....75
5.3.11 Audio Association 75
5.4 Record Setup....75
5.4.1 Record Mode....76
5.4.2 Schedule Setup 76
5.4.2.1 Day / Night Time Start 77
5.4.2.2 Weekend Schedule 77
5.4.2.3 Weekend Start / End 77
5.4.3 Preset Configuration....77
5.4.4 Per Camera Configuration....79

www.dynacolor.com.tw
All rights reserved

5.4.4.1 Camera Select 80
5.4.4.2 Normal PPS 80
5.4.4.3 Normal Size 80
5.4.4.4 Event Max PPS 80
5.4.4.5 Event Size 80
5.4.4.6 Event Active 81
5.4.5 Event Percentage 81
5.4.6 Data Lifetime 81
5.4.7 Pre-Alarm Recording 81
5.4.8 Circular Recording 82
5.4.9 Audio Recording 82
5.4.10 Purge Data 82
5.4.10.1 Purge All Normal Data 82
5.4.10.2 Purge All Event Data 83
5.4.10.3 Purge Event Before 83
5.4.10.4 Purge Event Items 83
5.4.10.5 Start to Purge 83
5.5 Sequence Setup 83
5.5.1 Main / Call Monitor Dwell 84
5.5.2 Main / Call Monitor Schedule 84
5.6 Event Setup 84
5.6.1 Internal Buzzer 85
5.6.2 Event Icon 85
5.6.3 Email Notice 85
5.6.4 Event Duration 85
5.6.5 Per Channel Config 86
5.6.5.1 Channel Select 86
5.6.5.2 Video Loss Detect 86
5.6.5.3 Motion Detect 86
5.6.5.4 Detection Configuration 86
- Detected Area Setup 87
- Sensitivity 87
- Area Threshold 87
- Detected Area Percentage 88
5.6.5.5 Alarm In 88
5.6.5.6 Alarm Out 88
5.7 Database Setup 88
5.7.1 Total / Free Size of HDD 89
5.7.2 Rest Normal / Event REC 89
5.7.3 Internal / External Disks 89

All rights reserved

5.8 Configuration 90
5.8.1 Load Factory Default 90
5.8.2 Import Configuration 90
5.8.3 Export Configuration 91
5.8.3.1 Copy Destination 91
5.8.3.2 Configuration Name 92
5.8.3.3 Begin Export 92
5.9 Video Export 92
5.9.1 Select Device 93
5.9.2 Select Channel 93
5.9.3 From / To Time 93
5.9.4 Select Events 94
5.9.5 Data Type 94
5.9.6 Export Format 94
5.9.7 Digital Signature 94
5.9.8 Erase Disc 95
5.9.9 Begin Export 95
5.10 Shutdown 95
Appendix A: Technical Specifications 96
Appendix B: Record Duration 98
Appendix C: Dial-up Connections via Modem 100
Establishing Dial-in Connection 100
Establishing Dial-out Connection 103
Appendix D: Verifying Digital Signature 108

DynaRemote™ Software

1. Overview 112
2. System Requirements 113
3. Getting Start of Installation 113
3.1 Changing Internet Settings 113
3.2 Installing Remote Software 115
3.2.1 Log in / Log off 116
3.2.2 Software Upgrades 117
4. Basic Operation 119
4.1 To View Live Video 119
4.1.1 Selecting Display Mode 120
4.1.2 Assigning Camera to Windows 120
4.1.3 Operating Cameras with Dome Control 121

www.dynacolor.com.tw
All rights reserved

4.2 Instant Recording 122
4.2.1 Recording Video Instantly 122
4.2.2 To Playback Instant Recording Video 122
4.3 To Playback Video 123
4.3.1 Playing Back Remote Video 123
4.3.2 To Playback Local *.drv Files 124
4.3.3 To Playback Local *.avi Files 125
4.3.4 Playback Controls 126
4.4 Verifying Digital Signature 126
5. Configuring the Remote Unit 129
Configuration Menu 129
Buttons in Configuration Screens 130
5.1 System Setup 130
5.1.1 Language 131
5.1.2 Date / Time 131
Date & Time 132
Date/Time Display 132
Date Display Mode 132
Time Display Mode 132
Date/Time Order 132
Daylight Saving Time 132
5.1.3 Unit Name 133
5.1.4 Password 133
Enable Password 133
Load Factory Password 133
5.1.5 Network Setup 133
Email Address 134
SMTP Setup 134
DDNS Setup 134
5.1.6 RS485 Setup 135
5.1.7 Audio Output 137
5.1.8 Key Beep 137
5.2 Monitor Setup 137
Show Camera Title 138
Monitor Brightness 138
Monitor Contrast 138
Monitor Chrominance 138
VGA Resolution 138
5.3 Camera Setup 138
Dome Protocol 139

All rights reserved

Dome ID 139
Camera Title 139
Covert 139
Termination 140
Brightness 140
Contrast 140
Saturation 140
Hue 140
Audio Association 140
5.4 Record Setup 140
5.4.1 Schedule Setup 141
5.4.2 Preset Configuration 142
5.4.3 Per Camera Configuration 144
5.4.4 Event Percentage 145
5.4.5 Data Lifetime 145
5.4.6 Pre-Alarm Recording 145
5.4.7 Circular Recording 145
5.4.8 Audio Recording 146
5.5 Event Setup 146
5.5.1 Internal Buzzer 146
5.5.2 Event Icon 146
5.5.3 Email Notice 147
5.5.4 Event Duration 147
5.5.5 Per Channel Configuration 147
Video Loss Detect 147
Motion Detect 147
Detection Configuration 148
Alarm In 148
Alarm Out 148
6. Trouble Shooting Guide 150
Appendix A: Setting up a DVR behind a Router 151

www.dynacolor.com.tw
All rights reserved

1. Overview

The Dyna**Guard**™ 200 series unit is an integrated digital video recorder that combines the features of a time-lapse audio / video recorder, a multiplexer, and a video server to create a single security CCTV solution.

Its outstanding triplex operation enables user to view live, playback recorded video, and remote access through network simultaneously, while recording other video, and to view wanted recorded video instantly by entering the time and date or selecting recorded video from the event list.

Dyna**Guard**™ 200 series includes Dyna**Remote**™**,** the remote viewing and configuration software that is a Web-browser plug-in, allows user to view live or recorded video images and enables remote configuration. The remote software is stored in Dyna**Guard**™ 200 series and deployed over a LAN, WAN or Internet connection to remote Windows-based computers. This simplifies the installation and maintenance of the software components so all remote users are kept up to date.

1.1 Product Key Features

The Dyna**Guard**™ 200 series offers advanced features not typically found in standard multiplexers; it integrates the full features of a DVR, multiplexer and video server (by using the software Dyna**Remote**™). The key features of Dyna**Guard**™ 200 series are listed as follows.

- MPEG-4 high quality compression
- Compact size, 4 or 8 channels video input
- Triplex operation enabling simultaneous viewing live or playback while continuing to record
- Dyna**Remote**™ web-based software for remote monitoring and control via LAN or Internet
- Embedded Linux operating system
- Real-time "live display" for each channel
- Recording frame rate up to 120 pps (NTSC) / 100pps (PAL)
- 2 Channels of audio recording/ playback
- Three USB2.0 ports for video clip export and/or backup
- Two IEEE-1394 (FireWire®) ports for storage extension
- Easy software upgrade via USB ThumbDrive® CD/RW, or Internet Remote Application

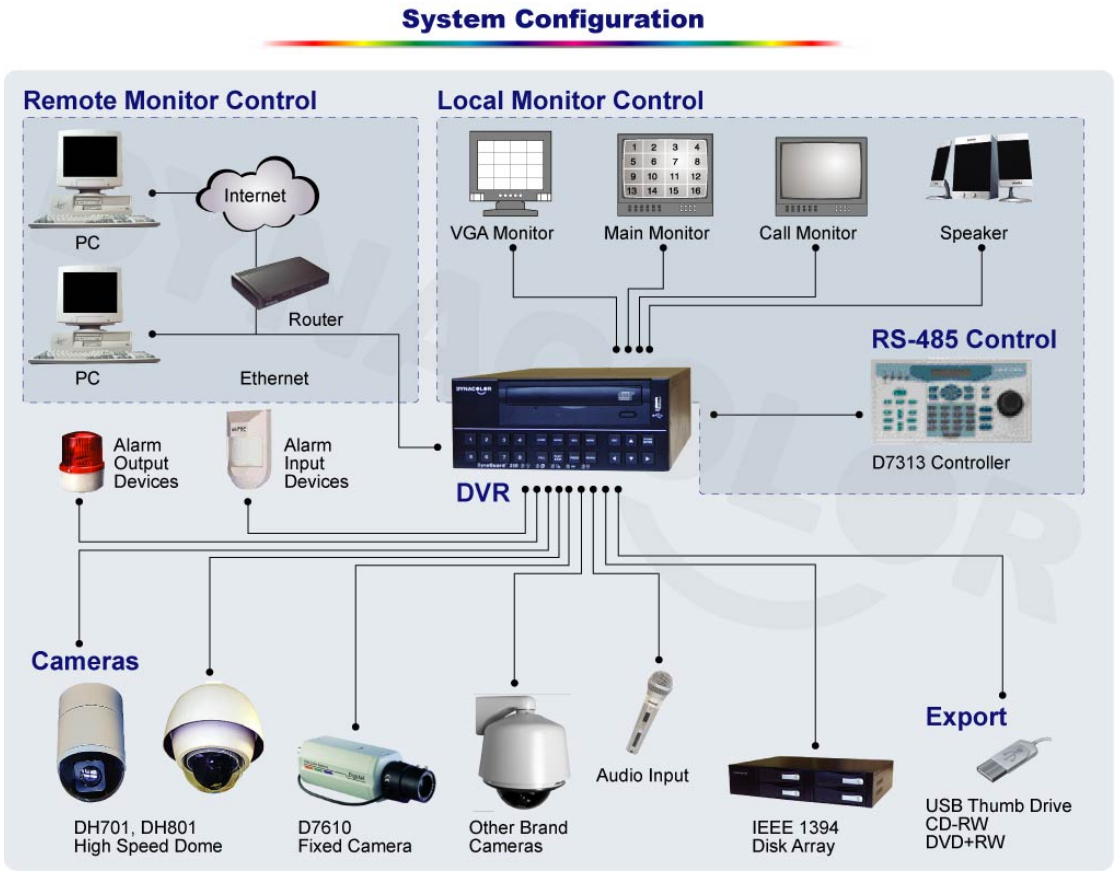
All rights reserved

- Two internal hard drives support up to 1TB capacity
- External storage device for external CD/RW, DVD dual, portable HDD, or disk array
- 2X Digital Zoom available in both live and playback mode
- Export video (AVI) with audio and digital Signature
- Exported AVI file can be played in any PC with DIVX decoder installed
- Automatic camera detection (Plug & Play)
- Covert camera operation provides enhanced security and administrator control
- Each camera configuration programmable for camera settings, frame rate, picture bit rate, alarms, motion detection.
- Programmable day/ night/ weekend scheduling
- Programmable main monitor/ call-monitor switching sequence
- Powerful alarm processor allows flexible alarm trigger and responses, including alarm, motion, and camera failure
- Dome control protocols: DynaColor, Pelco D, Pelco P, and AD422
- Supports multiple language on-screen menus
- Two levels of password security
- Universal power input, no external power unit

www.dynacolor.com.tw
All rights reserved

1.2 Product Application Diagram

Connect the unit with other devices as shown in the system diagram to complete a video surveillance solution. The figure shows also the expandability and flexibility of this digital recording system.



All rights reserved

2. System Installation

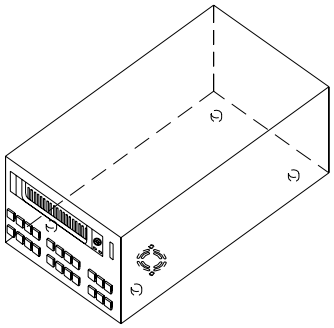
The notices and introduction on system installation will be described particularly in this chapter. Please follow the description to operate the unit.

In order to prevent the unit from data loss and system damage that caused by a sudden power fluctuation, use of an Uninterruptible Power Supply (UPS) is highly recommended

2.1 Position the Unit

Firstly, note to position / mount the Dyna**Guard**™ 200 series unit in a proper place and be sure to power off the unit before making connections. The placed location should avoid hindering or blocking the unit from airflow. Enough airflow is needed to protect the unit from overheating. The maximum allowable temperature of operating environment is 40°C.

The unit utilizes heat-conducting techniques to transfer internal heat to the case, especially to the bottom side of the unit.



NOTE: Be sure not to remove the rubber feet, and always leave a space for air ventilation on the unit's bottom side.

2.2 Selecting Video Format

The Dyna**Guard**™ 200 series unit is designed to operate under either NTSC or PAL video formats. Please contact with a qualified service person to perform the installation procedure.

2.3 Connecting Devices to the Unit

This section lists some notices that should be given before making any connections to the Dyna**Guard**™ 200 series unit.

www.dynacolor.com.tw
All rights reserved

NOTE: Connect short-term devices, such as USB ThumbDrive, USB CD-RW, USB Hard Disk Drive, etc., only after the unit is successfully powered up.

Connecting Required Devices

Before power up the unit, you should connect cameras and a main monitor to the unit for basic operation. If needed, connect a call monitor for displaying full screen video of all installed cameras in sequence.

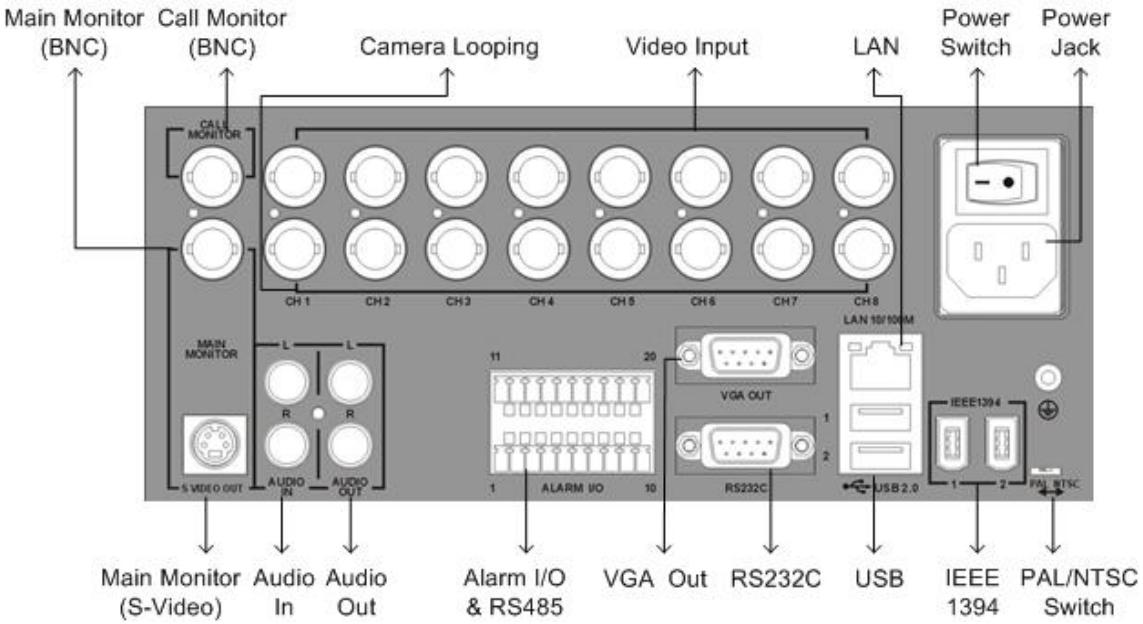
Connecting Short-term Device

If you plan to install any short-term devices to the Dyna**Guard**™ 200 series and use them as part of the unit system, such as USB CD-RW, USB Hard Disk Drive, etc. Make sure connecting those devices only during the unit is powered up. Because Dyna**Guard**™ 200 series unit can recognize the external devices only after the power-up process are completely.

2.4 Rear Panel Connections

There are various connectors on the rear panel used for Dyna**Guard**™ 200 series installations. The following figure shows the connectors by name; and followed by the detailed description of each connector.

Note that 8-channel Dyna**Guard**™ 200 series unit has 8 camera inputs and camera looping out connectors on the rear panel, respectively.



All rights reserved

Main Monitor (S-Video / BNC)

Both S-Video and BNC output connectors are offered for connecting to a main monitor. The main monitor displays live image and playback recorded video in full-screen or split-window format.

Call Monitor (BNC)

The call monitor is used to display full screen video of all installed cameras in sequence. The BNC call monitor connector allows user to connect the Dyna**Guard**™ 200 series unit with an optional call monitor.

Video Input

4 or 8 BNC connectors are offered for video input streams from installed cameras. The number of connectors is equal to the number of channels.

Camera Looping

Plenty of BNC connectors are positioned on the real panel for looping out the video input. The number of these connectors is equal to the number of channels; 4-channel / 8-channel Dyna**Guard**™ 200 series unit has 4 / 8 camera-looping connectors, respectively.

LAN Connector (RJ-45)

The Dyna**Guard**™ 200 series is capable of networking. The LAN port opens the door of Dyna**Guard**™ 200 series to Ethernet where by the Internet.

Power Jack

The Dyna**Guard**™ 200 series has a free voltage AC power connection jack. Please connect the power supply that ships with the unit.

WARNING: Use of other power supply may cause overloading.

Power Switch

Used to power up and shut down the unit.

Audio In / Out

The Dyna**Guard**™ 200 series unit provides two channels of audio recording and playback. Audio In RCA connector is offered for connecting an audio source device (e.g. external amplified microphone) to the unit; Audio Out RCA connector is offered for connecting an audio output device (e.g. amplified speakers) to the unit.

www.dynacolor.com.tw
All rights reserved

Alarm I/O & RS485

The unit provides an alarm I/O and RS485 port that offers user the flexibility required to connect the unit to the other device.

Pin	Definition	Pin	Definition
1	Normal Open 1	**11**	Normal Open 2
2	Common Node 1	**12**	Common Node 2
3	Normal Close 1	**13**	Normal Close 2
4	Ground	**14**	Ground
5	Alarm In 4	**15**	Alarm In 8
6	Alarm In 3	**16**	Alarm In 7
7	Alarm In 2	**17**	Alarm In 6
8	Alarm In 1	**18**	Alarm In 5
9	RS485 D-	**19**	RS485 D-
10	RS485 D+	**20**	RS485 D+

VGA Out

A VGA output connector is offered for connecting to a VGA main monitor. The source of image of VGA and BNC main monitor are the same.

RS-232C

The unit provides a RS-232C communication port for sending and receiving signals.

USB Connector (x2)

There are two USB2.0 ports on the rear panel for users to connect external USB devices to the unit, such as ThumbDrive or CD-RW.

IEEE 1394 FireWire® (x2)

The Dyna**Guard**™ 200 series is equipped with two IEEE 1394 (FireWire®) ports for extended connections.

PAL / NTSC Switch

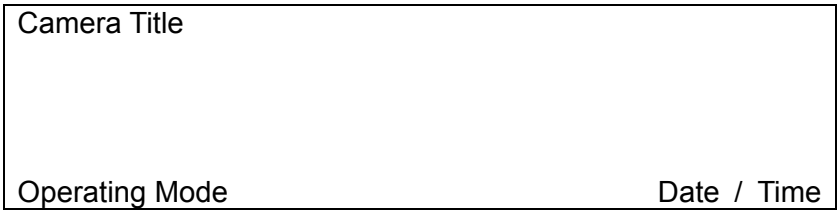
The video standard switch is for qualified service personnel only.

All rights reserved

3. General System Setup

The Dyna**Guard**™ 200 series allows user to access some general operations through the front panel easily. The following sections introduce the general operations of the unit.

The generally displayed OSD information and its position are shown in the following figure.



3.1 Front Panel

The unit's front panel controls enable user to control the unit and preset the programmable functions. The 8-channel Dyna**Guard**™ 200 series unit front panel has eight keys for eight channels, respectively. The LED and function keys will be introduced by name and function in following sections.

3.1.1 LED Definition

The Dyna**Guard**™ 200 series LEDs on the front panel are described as follows.

www.dynacolor.com.tw
All rights reserved

Power LED (Green)

The LED lit when the correct power is connected.

Network LED (Green)

The LED should be lit when Dyna**Guard**™ 200 series is connected to a network and blink when the data is being transferred.

Alarm LED (Red)

The LED should be lit during an alarm is triggered.

REC LED (Green)

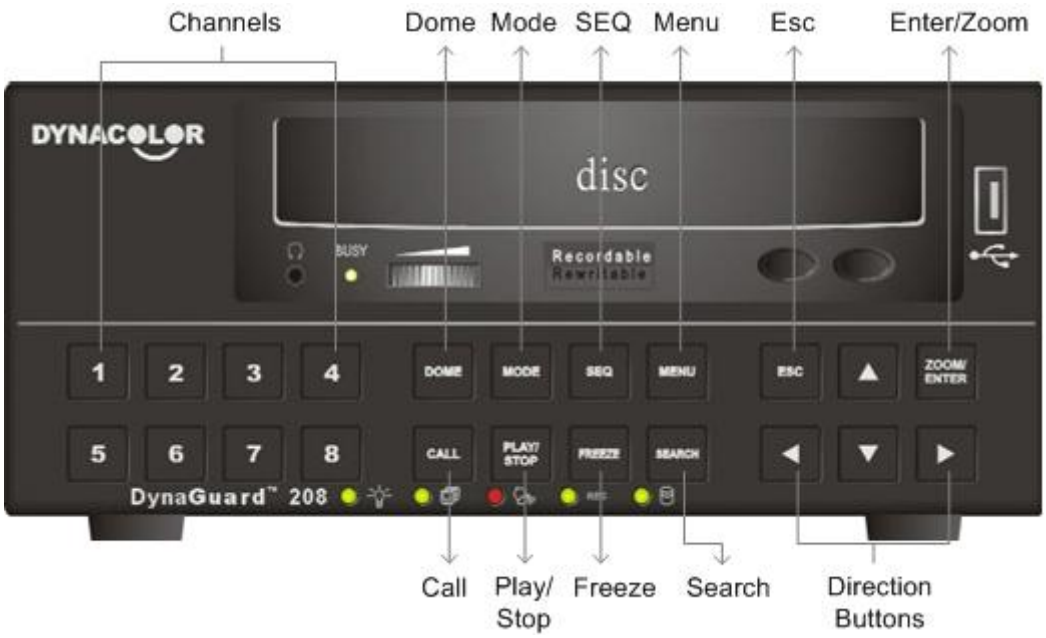
The LED should blink while the Dyna**Guard**™ 200 series is recording.

HDD LED (Yellow)

The LED should be lit while the HDD is processing data.

3.1.2 Function Buttons

The Dyna**Guard**™ 200 series functional buttons on the front panel for normal operation are described as follows.



CHANNEL

- When in both Live and Playback mode, press the CHANNEL button to view the corresponding video in full screen. The number of the CHANNEL buttons corresponds to the number of cameras supported by the unit.

All rights reserved

- When in dome control mode, the first button is used to access the Set/Go preset menu; the second button is used to hide or display the dome setting parameters.

DOME

Press the key to enter dome control mode.

MODE

Press repeatedly to select for wanted main monitor display format. There are three available view modes: full screen, 4-window (2×2) and 9-window (3×3).

SEQ (Sequence)

Press to start automatic sequencing of the video coming from the installed cameras.

MENU

Press the button to call the OSD setup menu.

CALL

Press to enter call monitor control mode.

PLAY/STOP

Press this button to switch between live image and playback video.

FREEZE

- The live video will be frozen if press FREEZE while viewing live image, but the date / time information shown on the monitor will continue updating. Press FREEZE again to return to live mode.
- The playback video will be paused If press FREEZE when playing the recorded video. Press LEFT / RIGHT to resume playback video single step reverse / forward, respectively. Press FREEZE again to continue playing video.

SEARCH

In both Playback and Live mode, user can press SEARCH to call the Search menu for searching and playing back recorded video by date and time or events.

www.dynacolor.com.tw
All rights reserved

ESC

Press to cancel or exit from certain mode or OSD menu without changing the settings.

Direction Buttons

- In Zoom mode, these keys function as Direction buttons.
- In the OSD menu, the Direction keys are used to move the cursor to previous or next fields. To change the value in the selected field, press UP / DOWN keys.

ZOOM/ENTER

- In OSD menu or selection interface, press the button to make the selection or save settings.
- In both live and playback full screen view mode, press to view a 2× zoom image; press it again to return.
- In playback mode, the recorded video can be zoomed and moved to view more area.

3.2 Power Up / Down the Unit

If you must shut down the Dyna**Guard**™ 200 series for any reason, please use the proper shut down and power up procedures to avoid damage to your unit.

To Power Up the Unit

Check the used type of power source before plug in the unit first, and turn on the unit using the power switch on the rear panel.

The color bar and system checking information are shown on the monitor until the unit is completely started.

To Restart / Shutdown the Unit

Press MENU and input the administrator password to access the OSD Main menu. Select <Shutdown> in Main Menu and press ENTER to enter the Shutdown menu, which displays as follows.

Shutdown
1. Power Off 2. Reboot

All rights reserved

<Power Off>

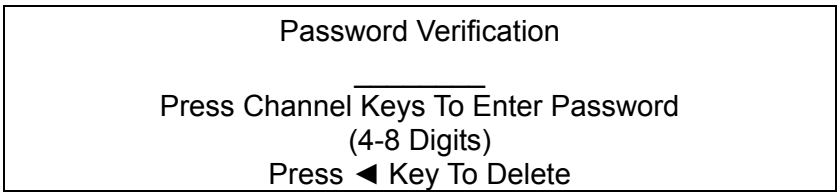
Select this item to shut down the unit. Do not remove the power during shut down until the message "You can safely turn off DVR now!" displays.

<Reboot>

Select this item to reboot the unit. The color bar and system checking information are displayed on the monitor until the unit is completely restarted.

3.3 Entering OSD Setup Menu

The OSD Main menu contains a list of items that are used to configure the Dyna**Guard**™ 200 series. To enter the Main menu, press MENU and then enter Administrator or User password. The Password Verification screen displays as follows.

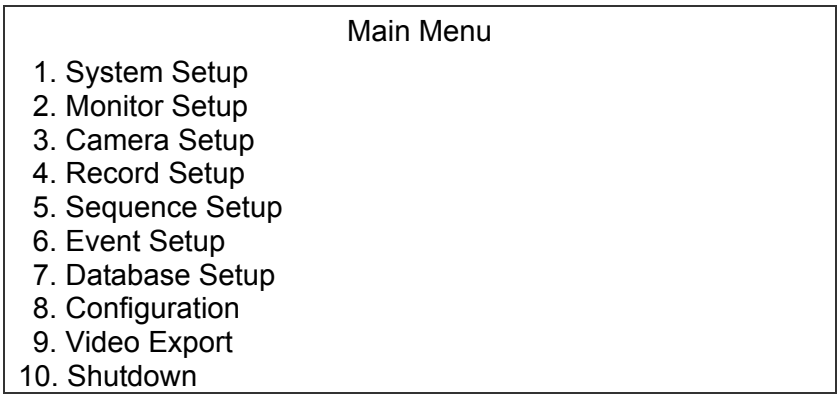


The default passwords are shown in the following table. The same passwords are used for entering the remote viewing software Dyna**Remote**™.

Administrator Password	User Password
1234	4321

It is strongly suggested to change the passwords to prevent unauthorized access to the unit.

After entering the correct password, the Main menu is displayed.



www.dynacolor.com.tw
All rights reserved

Move the cursor up / down over the OSD items using the Direction buttons and press ENTER to enter the selected sub-menu.

3.3.1 Button Usage in OSD Menu

Direction Buttons

In the OSD menu, Direction keys are used to move the cursor to previous or next fields. UP / DOWN are used to change the value in the selected field.

ENTER

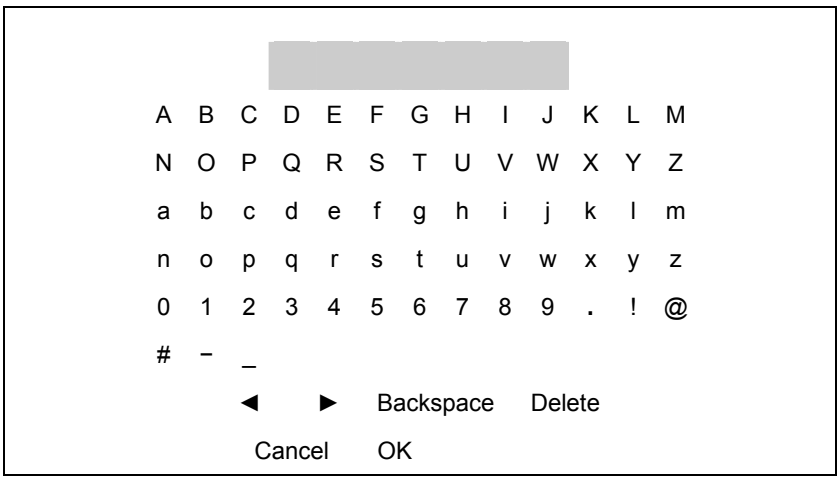
In OSD menu or selection interface, press the button to make selection or save settings.

ESC

Press to cancel or exit from certain OSD menu without saving any changes.

3.3.2 Button Usage in Virtual Keyboard

A virtual keyboard shows when edit the settings, such as camera title, e-mail address, etc. The virtual keyboard displays as follows.



To input characters

Move the cursor by pressing Direction keys and press ENTER to select characters.

To move the cursor in title entry

Press MODE and LEFT / RIGHT simultaneously to move the cursor to left / right in the title entry.

All rights reserved

To delete previous character

Select <Backspace> and press ENTER, or press MODE and UP simultaneously.

To delete current character

Select <Delete> and press ENTER, or press MODE and DOWN simultaneously.

To exit the virtual keyboard

Select <OK> and press ENTER to save the settings and exit, or press ESC to exit without saving changes

3.4 System Date / Time Setting

User can set the current date, time and other OSD parameters in Date/Time menu. The administrator's privileges are required for entering the submenu. In OSD Main menu, select <System Setup> and press ENTER, then select <Date/Time> to access the Date/Time menu; the menu displays as follows.

Date/Time	
1. Date	2005/02/21
2. Time	10:39:26
3. Date/Time Display	1 Row
4. Date Display Mode	Y/M/D
5. Time Display Mode	24 HR
6. Date/Time Order	Date First
7. Daylight Saving Time	ON
8. DST Start	Apr, 1 st Sun, 02:00
9. DST End	Apr, Last Sun, 02:00
10. DST Bias	60 Min

3.4.1 Set Date / Time

Set Date / Time

Select <Date> / <Time> and press ENTER for adjusting the settings. LEFT / RIGHT buttons are used to move the cursor to previous or next field, ENTER is for selecting, and UP / DOWN are used to change the value in the selected field.

NOTE: The reset date / time setting applies to record new video, the date and time of previously recorded video will not be changed.

www.dynacolor.com.tw
All rights reserved

NOTE: To avoid record database corruption, after changed date / time setting, clear the database is recommended.

Date / Time Display

Users are allowed to choose to set the date / time OSD displays in 1 or 2 rows. Use the UP / DOWN buttons to change the setting. The default is to display the date / time OSD in one row.

Date Display Mode

This function allows user to set the OSD display type of the date / time. There are three options to select from: <Y/M/D>, <M/D/Y> or <D/M/Y>. "Y" represents "Year", "M" represents "Month" and "D" represents "Day".

Use UP / DOWN keys to change the setting. The default setting is <Y/M/D> in both NTSC / PAL formats.

Time Display Mode

User can choose to set the time format to <12 hour> or <24 hour>. Use the UP / DOWN buttons to change the format. The default setting is <24 hour>.

Date / Time Order

The item is used to set the order of date / time display to <Date First> or <Time First>. Use UP / DOWN buttons to change the setting.

3.4.2 Daylight Saving Time

Daylight Saving Time

The item is for those people who live in certain regions to observe Daylight Saving Time. Select <ON> to enable, or <OFF> to disable the function.

If the function is disabled, the DST Start / End time and DST Bias will be grayed out and cannot be accessed.

NOTE: If this function is enabled, the date/time information will be shown on the screen with a DST icon when playing back recorded video or searching video in the event list. "S" indicates summer time and "W" indicates wintertime.

All rights reserved

DST Start / End

The items are used to program the daylight saving duration. Use Direction keys to move the cursor to the next or previous field, UP / DOWN to change the settings in the selected field.

DST Bias

The item allows user to set the amount of time to move forward from the standard time for daylight saving time. The available options are <30>, <60>, <90> and <120> minutes.

3.5 Record Schedule / Quality Setting

The Record Setup menu allows user to set recording quality, recording schedules, and other recording parameters. Administrator's password is required to use Record Setup menu. In the Main menu, move the cursor to <Record Setup> and press ENTER; the following menu is displayed.

Record Setup	
1. Record Mode	720x240@60PPS
2. Schedule Setup	
3. Preset Config	Standard
4. Per Camera Config	
5. Event Percentage	20%
6. Data Lifetime	7 Days
7. Pre-Alarm Recording	15 Sec
8. Circular Recording	ON
9. Audio Recording	ON
10. Purge Data	

3.5.1 Record Mode

The Record Mode is for selecting resolution and recording rate. The relative record settings, such as preset configuration, will follow the record mode setting. The options are <720x480@30PPS>, <720x240@60PPS> and <360 x240@120PPS> in NTSC (<720x576@25PPS>, <720x288@50PPS>, <360x 288@100PPS>in PAL).

Move the cursor to <Record Mode> and press ENTER, then select a Record mode using UP / DOWN buttons.

NOTE: If selecting the Record mode: <720x480@30PPS> (720x 576@25PPS) , only the image from channel 1~4 will be recorded.

www.dynacolor.com.tw
All rights reserved

NOTE: After changing the Record Mode setting, the warning message "This will FORMAT ALL HARDDISKS and LOAD THE FACTORY DEFAULT CONFIG!" will show. Press ENTER to confirm the selection, then the unit starts to format the hard disks and load the factory default settings, or press ESC to abort.

3.5.2 Schedule Setup

The Schedule Setup is used to set the day and night time, or weekend recording schedule. Select <Schedule Setup> from the Record Setup menu and press ENTER; the following menu is displayed.

Schedule Setup		
1. Day Time Start		06:00
2. Night Time Start		18:00
3. Weekend Schedule		YES
4. Weekend Start	Fri	18:00
5. Weekend End	Mon	06:00

- Make appropriate changes of the start time of Day and Night Time using Direction buttons.
- Press ENTER to confirm the settings or ESC to cancel.
- If you want to have a weekend record, choose <YES> to enable the Weekend Schedule in advance and then set the Weekend Start/End time.
- Press ESC to back to previous page.

3.5.3 Preset Record Configuration

The <Preset Config> is used to select the preset recording quality and frame rate. Different default recording quality levels are offered for user to choose: <Best Quality>, <Standard>, <Extended Record>, <Event Only>, <128Kbps DSL>, <256Kbps DSL>, <512Kbps DSL> and <OFF>. According to various Record modes, the preset configuration options for normal and event status are described in terms of relative recording rate (PPS) and recording size for each channel in the table below.

The preset conditions <Best Quality>, <Standard>, <Extended Record>, <Event Only>, <128Kbps DSL>, <256Kbps DSL> and <512Kbps DSL> override any other quality and rate settings. The default Preset Configuration setting is <Standard>.

All rights reserved

Record Mode: Full-D1 mode (NTSC: 720x480@30PPS) (PAL: 720x576@25PPS)					
Preset Configuration	**Normal PPS**	**Normal Size**	**Event PPS**	**Event Size**	**Event Active**
Best Quality	7.5 NTSC (6.25 PAL)	13 KB	30 NTSC (25 PAL)	13 KB	Both (Alarm+Motion)
Standard	7.5 NTSC (6.25 PAL)	9 KB	30 NTSC (25 PAL)	13 KB	Both
Extended Record	7.5 NTSC (6.25 PAL)	5 KB	30 NTSC (25 PAL)	13 KB	Both
Event Only	0 NTSC (0 PAL)	-	30 NTSC (25 PAL)	13 KB	Both
128Kbps DSL	1 NTSC (1 PAL)	2 KB	1 NTSC (1 PAL)	2 KB	Both
256Kbps DSL	4 NTSC (4 PAL)	2 KB	4 NTSC (4 PAL)	2 KB	Both
512Kbps DSL	4 NTSC (4 PAL)	3 KB	4 NTSC (4 PAL)	3 KB	Both
OFF	User Selected	User Selected	User Selected	User Selected	User selected

NOTE: If selecting this Record mode, only the image from channel 1~4 will be recorded.

Record Mode: Half-D1 mode (NTSC: 720x240@60PPS) (PAL: 720x288@50PPS)					
Preset Configuration	**Normal PPS**	**Normal Size**	**Event PPS**	**Event Size**	**Event Active**
Best Quality	7.5 NTSC (6.25 PAL)	11 KB	30 NTSC (25 PAL)	11 KB	Both (Alarm+Motion)
Standard	7.5 NTSC (6.25 PAL)	7 KB	30 NTSC (25 PAL)	11 KB	Both
Extended Record	7.5 NTSC (6.25 PAL)	3 KB	30 NTSC (25 PAL)	11 KB	Both
Event Only	0 NTSC (0 PAL)	-	30 NTSC (25 PAL)	11 KB	Both
128Kbps DSL	1 NTSC (1 PAL)	2 KB	1 NTSC (1 PAL)	2 KB	Both
256Kbps DSL	4 NTSC (4 PAL)	2 KB	4 NTSC (4 PAL)	2 KB	Both
512Kbps DSL	4 NTSC (4 PAL)	3 KB	4 NTSC (4 PAL)	3 KB	Both

www.dynacolor.com.tw
All rights reserved

OFF	User Selected	User Selected	User Selected	User Selected	User Selected

Record Mode: CIF mode (NTSC: 360x240@120PPS) (PAL: 360x288@100PPS)					
Preset Configuration	**Normal PPS**	**Normal Size**	**Event PPS**	**Event Size**	**Event Active**
Best Quality	15 NTSC (12.5 PAL)	9 KB	30 NTSC (25 PAL)	9 KB	Both (Alarm+Motion)
Standard	15 NTSC (12.5 PAL)	5 KB	30 NTSC (25 PAL)	9 KB	Both
Extended Record	15 NTSC (12.5 PAL)	1 KB	30 NTSC (25 PAL)	9 KB	Both
Event Only	0 NTSC (0 PAL)	-	30 NTSC (25 PAL)	9 KB	Both
128Kbps DSL	1 NTSC (1 PAL)	2 KB	1 NTSC (1 PAL)	2 KB	Both
256Kbps DSL	4 NTSC (4 PAL)	2 KB	4 NTSC (4 PAL)	2 KB	Both
512Kbps DSL	4 NTSC (4 PAL)	3 KB	4 NTSC (4 PAL)	3 KB	Both
OFF	User Selected	User Selected	User Selected	User Selected	User Selected

3.5.4 Per Camera Configuration

This function is used to set the Day / Night / Weekend PPS (Picture per Second) and Quality for each channel. The Preset Configuration must be set to <OFF> for accessing these schedules. The menu is displayed as below (Record Mode: 720x240@60PPS in NTSC / 720x288@50PPS in PAL).

Per Camera Config			
Cameral Select			CH1
	Day	**Night**	**Weekend**
Normal PPS	7.5	7.5	7.5
Normal Size	7KB	7KB	7KB
Event Max PPS	30	30	30
Event Size	11KB	11KB	11KB
Event Active	Both	Both	Both

All rights reserved

- Firstly, select a Camera for setting its record configuration. The image and recording settings from the selected camera will be displayed on the screen.
- Move the cursor using Direction buttons and press ENTER to select an item.
- Change the value using UP / DOWN buttons.
- Press ENTER to confirm the settings or ESC to abort.
- Press ESC to return to Record Setup menu.

Please note that the total normal pps for all channels cannot exceed 60 NTSC (720×240@60PPS) / 50 PAL (720×288@50PPS) . To increase one channel's pps, you may have to reduce other's first. Event pps is not restricted to this rule, since a smart event scheduler will handle to the total pps with a correct weighting.

www.dynacolor.com.tw
All rights reserved

4. Basic Operation

The Dyna**Guard**™ 200 series allows user to access some general operations through the front panel easily. The following sections introduce the general operations of the unit.

4.1 Viewing Live / Playback Video

The general functions in live and playback mode are described in the following sections.

4.1.1 Viewing Modes

The Dyna**Guard**™ 200 series supplies user versatile ways of viewing both live and recorded video. Following presents these view formats.

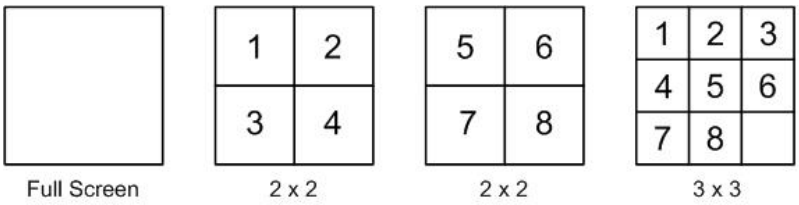
Viewing in Full Screen

Press any CHANNEL button directly to view the corresponding camera image in full view format.

Viewing in Multi-window

Various multi-window view formats are offered for selecting. To switch between available viewing formats, press MODE repeatedly.

The available view formats are illustrated as the following figure.



4.1.2 Digital Zoom

User can view a 2× full screen in live and playback mode. To view the 2× full screen, follow the steps.

- Press a CHANNEL button to view the corresponding camera in full screen.
- Press ZOOM to enter a 2× full screen zoom mode of the selected camera.
- If you need to view specific area of the 2× zoomed screen, use Direction buttons to pan / tilt the zoomed area around the original image.
- Either press ZOOM again or ESC to leave the zoom mode.

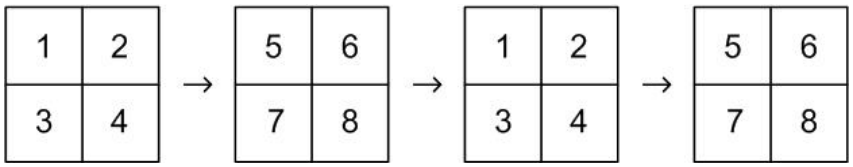
All rights reserved

4.1.3 Viewing Live Cameras

Users are allowed to view live camera in versatile view modes, such as full-screen, 2×2 and 3×3. The general operation under live mode is described as follows.

Viewing in Sequence Mode

Automatic sequence function can be used in any view mode. Select certain view format and press SEQ to toggle the automatic sequential sequence, press ESC to stop sequencing. The figure below displays the 4-camera sequencing view modes.



To Freeze Live Image

Press FREEZE while viewing live image, the image pauses but the date / time information does not, and the system clock continues running.

Press FREEZE to pause the live image; press FREEZE again to resume the live camera view.

4.1.4 Viewing Recorded Video

To view recorded video, user can press PLAY/STOP button directly. When press the PLAY/STOP button, the unit starts to continue playing back the recorded video from the suspended point of record. If it is the first time to use the PLAY/STOP key, the unit will playback from the very beginning of the record. Alternatively, user can select records from the Search menu to play specific video. Refer to section 4.3 Searching Recorded Video for more information.

The Forward or Reverse speed indicator will be shown on the bottom-left of the screen, when in the playback mode.

The general operation in playback mode is described as follows.

www.dynacolor.com.tw
All rights reserved

Button Usage in Playback

The button usage is slightly changed in playback mode. Following is the button usage found in playback mode.

LEFT (Reverse Playback)
The button is used to reverse the recorded video while the unit is playing back. Press the button repeatedly to increase the speed of reverse playback by 1x, 2x, 4x, 8x, 16x, or 32x.

RIGHT (Forward Playback)
The button is used to play the recorded video fast forward. Press the button repeatedly to increase the speed of forward playback by 1x, 2x, 4x, 8x, 16x, or 32x.

FREEZE
Press FREEZE to pause the playback video. When the recorded video is paused, press LEFT / RIGHT to resume playback video single step reverse / forward, respectively. Press FREEZE again to continue playing video.

ESC
Press to exit current mode or stop playing back video and back to live mode.

Pause Playback and Single Step Forward

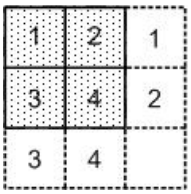
To pause and resume recorded video, follow these steps.

- Press one of the CHANNEL keys to display the corresponding camera in full screen.
- Press FREEZE to pause the current playback image.
- Press RIGHT / LEFT Direction buttons to move the video single step reverse / forward. Press and hold RIGHT / LEFT buttons to reverse / forward the video single step continuously.
- Press FREEZE again to resume the playback operation.

Viewing Live Image in Playback Mode

Press the MODE button repeatedly in playback mode, a 9-window viewing mode contains both live and playback image appears. This view mode is illustrated as the following figure.

All rights reserved



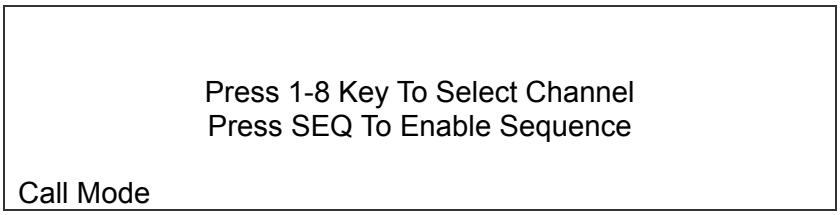
The four windows on the top-left of the screen playback the recorded video from channel 1 to channel 4 respectively, and the other windows allow user to view live image from channel 1 to channel 4.

4.2 Call Monitor Control

Users are allowed to use the Dyna**Guard**™ 200 series unit front panel to control a call monitor display without having to access the Main menu. Two viewing modes can be displayed on call monitor: Sequence display and Single camera display. To program the call monitor sequence, see section 5.5 Sequence Setup.

Follow the steps to control the call monitor.

- Press the CALL button on the front panel to enter call monitor control mode, the message "Call Mode" will be shown on the bottom-left of the screen.



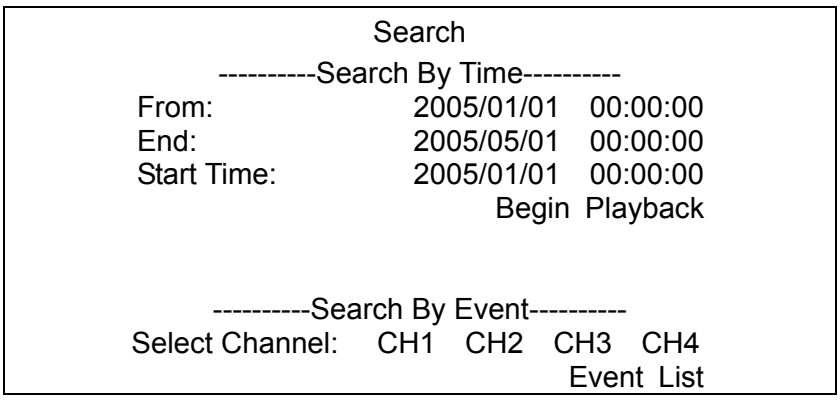
- Press CHANNEL button to display the associated camera on call monitor.
- Alternatively, press SEQ repeatedly to display the sequence of cameras previously programmed in Call Monitor Schedule menu.
- Press ESC to return the front panel to Main monitor control mode.

4.3 Searching Recorded Video

The Dyna**Guard**™ 200 series is capable of searching and playing back recorded video by date and time or events. Entering the specific date and time of the wanted video, the unit will then search for the matched video and play it on the monitor. Alternatively, user can search event video by selecting channel as well.

www.dynacolor.com.tw
All rights reserved

In live or playback mode, press SEARCH to enter the Search menu, which is shown as follows.



Search by Time

Follow the steps to search video by date and time.

- Press SEARCH button to enter the Search menu; the From Time and End Time of the available video is listed on top of the screen. The value is unchangeable.
- Use Direction buttons to move the cursor for setting the Start Time; adjusting the date and time values by UP / DOWN keys.
- Press ENTER to confirm the settings or ESC to abort.
- Move the cursor to <Begin Playback> and press ENTER to start playing back the selected video.
- Either press PLAY/STOP again or ESC to return to live video.

NOTE: If there is no available recorded video that matches your specified time and date, the unit starts playback from the next available video.

NOTE: The date/time information will be shown on the screen with a DST icon if the Daylight Saving Time function is enabled. "S" indicates summer time and "W" indicates wintertime.

Search by Event

Follow the steps to search video by event.

- Press SEARCH button to enter the Search menu.
- To search event video that was recorded on a specific camera, use LEFT / RIGHT to move the cursor and press ENTER to select or de-select a channel.

All rights reserved

- Move the cursor to <Event List> and press ENTER to list the event video of the selected channels. The Event List displays as follows.

Event List				
No.	Date	Time	Ch.	Type
1	2005/03/17	11:26:50	2	Motion
2	2005/03/17	09:53:03	5	Alarm
3	2005/03/16	16:14:42	3	Alarm
4	2005/03/15	03:45:31	1	Motion
5	2005/03/12	22:27:56	1	Alarm
6	2005/03/12	10:09:29	7	Motion
7	2005/03/11	12:18:20	6	Motion
8	2005/03/10	05:16:00	4	Alarm
9	2005/03/08	17:11:37	2	Motion
10	2005/03/08	16:29:10	8	Motion
11	2005/03/08	03:22:17	2	Alarm

The list displays each event by date, time, triggered camera and alarm type. Please note that the event list displays only the first 1024 events; as some events are deleted, others are displayed. The latest recorded event video will be listed on the top. To exit the event list, press ESC.

Follow the steps to playback video from event list.

- Use UP / DOWN to scroll through the Event List.
- Press ENTER to play back the selected event record.
- Press PLAY/STOP or ESC to return to live mode.

4.4 Deleting Recorded Video

User can delete the Normal and Event recorded video in Purge Data menu. The administrator password is required to access the function. Select <Record Setup> from Main menu, and then in Record Setup menu, move the cursor to <Purge Data> and press ENTER; the Purge Data menu is displayed.

Purge Data	
1. Purge All Normal Data	NO
2. Purge All Event Data	NO
3. Purge Event Before	2005/01/01
4. Purge Event Items	
5. Start to Purge	NO

The first four items are used to select the data that should be purged. The items are described as follows. After select the data you want to purge, set the fifth item <Start to Purge> to <YES> and press ENTER to start the deleting process.

www.dynacolor.com.tw
All rights reserved

Purge All Normal Data

Select the item to delete all normal recorded video from database.

Purge All Event Data

Select the item to delete all event video from database.

Purge Event Before

The item is used to delete event video that recorded before a specific date.

Purge Event items

The item is used to select the event video you want to delete. Select event item and confirm the deletion by pressing UP / DOWN and ENTER keys; choose <YES> to start the deleting or choose <NO> to abort the process.

4.5 Exporting Recorded Video

The Video Export menu enables the administrator to export recorded video with digital signature to a USB ThumbDrive, a CD-RW or to DVD+RW drive. Administrator's password is required to export video.

The exported video will be named by the exporting date and time, and classified by event type. Each recorded video will be exported into four files if exported with digital signature, including *.gpg, *.avi (*.drv), *.sig and readme txt.

Make sure an external storage device is available and connected to the appropriate port for video export.

From the Main menu, select <Video Export> and press ENTER. The menu is displayed.

Video Export	
1. Select Device	
2. Select Ch:	CH1 CH2 CH3 CH4
3. From	2005/03/19 AM 07:50:05
4. To	2005/03/28 PM 03:09:18
5. Select Events	
6. Data Type	Normal
7. Export Format	DRV

All rights reserved

8. Digital Signature	NO
9. Erase Disc	NO
10. Begin Export	NO

4.5.1 Select Device

The available external devices for exporting video will be listed by name and free size in Select Device menu. The Select Device menu displays as follows.

Select Device		
Device Name	Available	Sel
xxx-xxx-x-x-xx	256 MB	NO
xx-xxx-xx-xxxx	1.5 GB	NO

The Dyna**Guard**™ 200 series only supports EXT3 file system. If you connect an external HDD to the unit, ensure the format of HDD is EXT3.

<Device Name>
The item shows the name of the available device.

<Available>
The item shows the free space of the available device.

<Select>
Set the item to <YES> to start the export, or <NO> to cancel.

4.5.2 Select Video

After selecting video clips, set the item <Begin Export> to <YES> and press ENTER to start exporting. Following are the items for selecting video.

Select Channel

Select the channel that the administrator wants to export. Move the cursor to the wanted channel using LEFT / RIGHT buttons, select or de-select a channel by pressing ENTER.

From / To Time

The items are used to set the time which data export begins and ends. Move the cursor using Direction buttons, and press ENTER to select the date / time items; adjust the selected date and time value by UP / DOWN buttons.

www.dynacolor.com.tw
All rights reserved

NOTE: The exported data between the Start Time and End Time includes both normal and event video.

Select Events

Select the item to display the event list for exporting event video. Move the cursor scroll the event list and press ENTER to select the event you want to export.

Data Type

The item is used to select exporting video type. The options are <Normal> (export normal video only), <Event> (export event video only) and <Both> (export both normal and event video).

Export Format

The item is for selecting exporting video format. The options are <DRV> and <AVI>.

The *.drv file can only be played back with Dyna**Remote**™ and Dyna**Player**™ and multiple camera video can be played from one file. The *.avi file can be played back with media players. Note that if multiple channels are exported, each channel is exported to a separate file.

4.5.3 Digital Signature

User can export video clip with or without a digital signature. Set the item to <YES> to export with the signature file, or <NO> exports without the signature file.

Each recorded video with digital signature will be exported into four files, including *.gpg, *.avi, *.sig and readme txt. The *.gpg file name is as the last eight MAC (Media Access Control) address of the unit.

Make sure that you have an external storage device, such as a USB Hard Drive or USB ThumbDrive, available and connected to the appropriate port for export.

For more information on verifying digital signature, see Appendix D: Verifying Digital Signature.

All rights reserved

4.5.4 Erase Disc

This function is used to remove information found on a CD-RW or DVD+RW disk prior to exporting new information to the drive. Select <YES> and press ENTER to start deleting data.

4.6 Dome Control

Dyna**Guard**™ 200 series unit allows user to control a dome camera by the front panel.

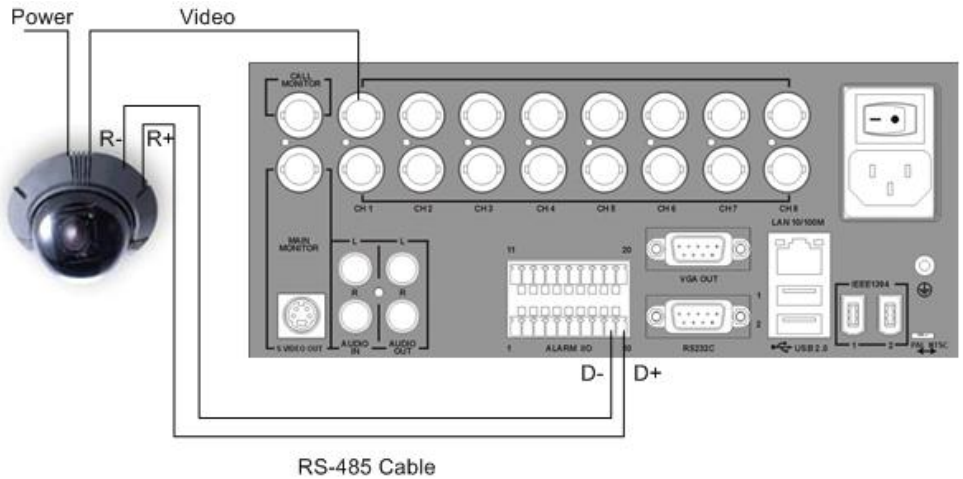
In Live mode, user can press CHANNEL button to display the desired dome camera in full view. To enter Dome Control mode, press the DOME button and press channel key 2 to display the hint screen; to exit the Dome Control mode and back to live mode, press ESC or DOME.

To configure the dome controls settings, see the following sections.

4.6.1 Dome Connection

Follow the steps to install dome camera.

- See section 2.4 Rear Panel Connections for RS-485 port pin definition.
- Refer to the following figure. Connect the R+, R- terminals on the dome camera to the D+, D- terminals on the RS-485 port by RS-485 cable respectively.



www.dynacolor.com.tw
All rights reserved

4.6.2 Dome Protocol Setup

The Dome Protocol item lists the available dome protocols for communicating with dome cameras connected to the Dyna**Guard**™ 200 series. From the Main menu, select <Camera Setup> and press ENTER. The following menu is displayed.

Camera Setup	
1. Camera Select	CH1
2. Dome Protocol	None
3. Dome ID	0
4. Camera Title	
5. Covert	NO
6. Termination	NO
7. Brightness	0
8. Contrast	0
9. Saturation	0
10. Hue	0
11. Audio Association	Both

To configure dome protocol, select a camera first and set the communications protocol associated with dome camera using the Direction buttons and ENTER. The available protocol includes <DynaColor>, <Pelco D>, <Pelco P>, <AD422> and <None> (default).

NOTE: The settings become effective after saving the changes and exiting from the menu.

4.6.3 RS485 Setup

Dyna**Guard**™ 200 series control the domes via RS-485 communication protocol. The RS-485 parameters in Dyna**Guard**™ 200 series must be set to the same parameters as the protocol for RS-422 setup of the dome.

Users are allowed to change the RS-485 settings of the Dyna**Guard**™ 200 series. Select <System Setup> in Main menu, then select <RS485 Setup> from the System Setup menu and press ENTER. The following menu is displayed.

RS485 Setup	
1 Unit ID	224
2 Baud Rate	9600
3 Bits	8
4 Stop	1
5 Parity	None

All rights reserved

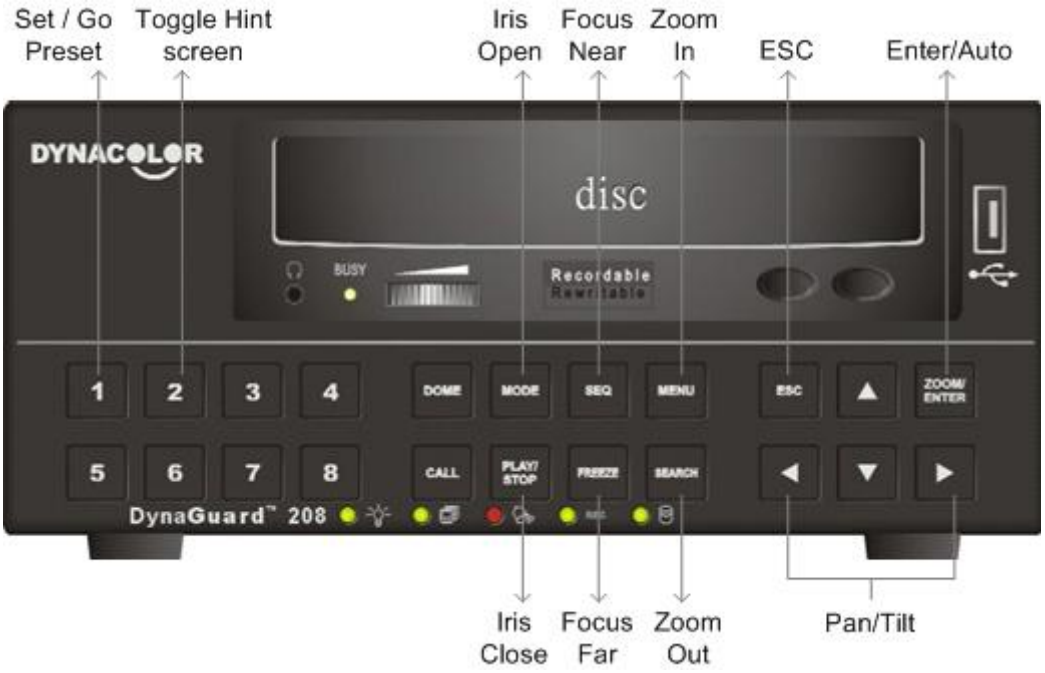
The ID number must match the ID address set by the dome. The Unit ID is in the range of 1 to 255. The default ID is 224. Note that no two devices on the same bus should be given the same ID address, or a conflict may occur.

The default Dyna**Guard**™ 200 series RS-485 settings are 9600 Baud, 8 Data Bits, 1 Stop Bit and No Parity.

NOTE: The settings become effective after saving the changes and exiting from the menu.

4.6.4 Dome Controlling Button

The function buttons used in Dome Control are described as follows.



Set / Go Preset

This button is used to enter the Dome Preset menu to set up certain position as a preset and go to the predetermined preset positions for viewing.

Toggle Hint Screen

This function is used to avoid viewing the dome parameter information while controlling dome camera. Press this button to hide the screen. Press it again to redisplay the screen.

www.dynacolor.com.tw
All rights reserved

Iris Open

Use to open the Iris on the dome camera.

Focus Far

Use to focus the selected dome camera far.

Zoom Out

Use to zoom the dome camera out. This function is for user to choose the viewing area, more or less of it.

ESC

Use to leave dome control mode and return to live and full screen viewing mode.

Auto / Enter

- In OSD Menu mode, the key is used to make selection.
- In dome control mode, this key is used to activate automatic focus and iris function.

Iris Close

Use to close the Iris on the dome camera.

Focus Near

Use to focus the dome camera near.

Zoom In

Use to zoom the dome camera in. This function is for user to choose the viewing area, more or less of it.

Pan / Tilt

Use to pan and tilt dome camera.

4.6.5 Setting Preset Points

The Dyna**Guard**™ 200 series unit allows user to set preset positions; the amount of preset points depends on the dome manufacturer.

Follow the steps to set preset points.

- Press a Channel key to view the corresponding camera in full screen.
- Then press DOME to enter dome control mode.

All rights reserved

- Use Direction buttons to position the dome camera to desired position.
- Press 2 to view the dome control Hint Screen; press 2 again to toggle the Hint Screen.

Hint Screen
DOME / ESC: Exit MODE / PLAY: Iris Open / Close SEQ / FREEZE: Focus Near / Far MENU / SEARCH: Zoom In / Out ENTER: Auto Focus / Iris ◄▲▼►: Pan / Tilt CH1: Set / Go Preset CH2: Hint Screen On / Off

Dome Control

- Press 1 to access the Set/Go Preset function. The Dome Preset menu is displayed.

Dome Preset

Index	Set Preset	Go Preset
1	NO	NO
2	NO	NO
3	NO	NO
4	NO	NO
5	NO	NO
6	NO	NO
7	NO	NO

- Use UP / DOWN buttons to select the desired preset number from the menu.
- Set the <Set Preset> of the selected preset number to <YES>, and press ENTER to save the position. Now the preset is set and ready to call.

4.6.6 Calling Preset Points

Follow the steps to call preset points.

- Press a Channel key to view the corresponding camera in full screen.
- Then press DOME to enter dome control mode.
- Press 2 to view the dome control Hint Screen; press 2 again to toggle the Hint Screen.
- Press 1 to access the Set/Go Preset function.

www.dynacolor.com.tw
All rights reserved

Dome Preset		
Index	Set Preset	Go Preset
1	NO	NO
2	NO	NO
3	NO	NO
4	NO	NO
5	NO	NO
6	NO	NO
7	NO	NO

- Use UP / DOWN buttons to select the desired preset number from the menu.
- Set the <Go Preset> of the selected preset number to <YES>, and press ENTER to call the preset point.
- Now the selected dome camera rotates to the preset position automatically.

All rights reserved

5. Advanced System Configuration

The detailed functions and settings of Dyna**Guard**™ 200 series can be set using the hierarchical OSD menu. This chapter particularizes the items and options in the OSD menu.

To enter the Main menu, press MENU and then enter Administrator or User password. The default passwords are shown in the following table. The same default passwords are used for entering the remote viewing software Dyna**Remote**™.

Administrator Password	User Password
1234	4321

It is strongly suggested to change the passwords to prevent unauthorized access to the unit.

After entering the correct password, the Main menu is displayed.

Main Menu

1. System Setup
2. Monitor Setup
3. Camera Setup
4. Record Setup
5. Sequence Setup
6. Event Setup
7. Database Setup
8. Configuration
9. Video Export
10. Shutdown

5.1 System Setup

Select <System Setup> from the Main Menu and press ENTER to enter the System Setup menu.

System Setup

1. Version	
2. Language	English
3. Date/Time	
4. Unit Name	DVR
5. Password	
6. Network Setup	
7. RS485 Setup	
8. Audio Output	Live/Playback
9. Key Beep	YES

www.dynacolor.com.tw
All rights reserved

The items in the System Setup menu are described in the following sections.

5.1.1 Version

The Version menu allows user to view system information such as hardware and software version. From the System Setup menu, select <Version> and press ENTER. The following menu is displayed.

Version	
Hardware	V1.0
Software	xxxx-xxxx-xxxx-xxxx
Software Upgrade via Local Device	
Software Upgrade via Internet	

The items in this menu are described in the following subsections.

5.1.1.1 Hardware Version

The item identifies the hardware version for this unit.

5.1.1.2 Software Version

The item identifies the software version installed on this unit.

5.1.1.3 Software Upgrade via Local Device

This item is used for updating the Dyna**Guard**™ 200 series software by local device. The menu is displayed as follows.

Software Upgrade via Local Device	
Upgrade Version	Select
xxxx-xxxx-xxxx-xxxx	NO

Connect an USB drive contains upgrade software to the unit; the available upgrade files will be listed in the menu. To update the system, select a file and use UP / DOWN buttons to choose <YES>. Press ENTER to confirm the selection and start the upgrade process. The Dyna**Guard**™ 200 series unit uploads the software, updates the system files, and reboots automatically.

The upgrade may take several minutes to save the changes in the memory of the system. After reboot the unit, please check the software version again.

All rights reserved

NOTE: No power interruption is allowed during the software update. Ensure that no power interruption can occur until the unit is completely rebooted.

NOTE: Do not remove the external USB Thumb drive/CD-ROM before the unit has completely shut down (hard drive and fan are off). Removing the external USB Thumb drive/CD-ROM before shut down can cause the system to update improperly.

5.1.1.4 Software Upgrade via Internet

The item is used to upgrade the unit's software via the internet. Select one of the listed software version and choose <YES>. The Dyna**Guard**™ 200 series uploads the software, updates the system files, and reboots automatically.

5.1.2 Language

The Language item allows user to select the language for the OSD menu and screen messages. Language selection takes effect immediately when the selection is done. Press UP / DOWN to select from listed languages and press ENTER to confirm.

5.1.3 Date / Time

User can set the current date, time and other OSD parameters in this menu. The Administrator's privileges are required for entering the submenu. In System Setup menu, select <Date/Time> and press ENTER; the Date/Time menu displays as follows.

Date/Time	
1. Date	2005/02/21
2. Time	10:39:26
3. Date/Time Display	1 Row
4. Date Display Mode	Y/M/D
5. Time Display Mode	24 HR
6. Date/Time Order	Date First
7. Daylight Saving Time	ON
8. DST Start	Apr, 1 st Sun, 02:00
9. DST End	Apr, Last Sun, 02:00
10. DST Bias	60 Min

NOTE: The reset date / time setting applies to record new video, the date and time of previously recorded video will not be changed.

www.dynacolor.com.tw
All rights reserved

NOTE: To avoid record database corruption, after changed Date/Time setting, clear the database is recommended.

5.1.3.1 Date / Time Setting

Select <Date> or <Time> and press ENTER for adjusting the settings. LEFT / RIGHT buttons are used to move the cursor to previous or next field, ENTER is for selecting, and UP / DOWN are used to change the value in the selected field.

5.1.3.2 Date / Time Display

Users are allowed to choose to set the date / time OSD displays in 1 or 2 rows. Use the UP / DOWN buttons to change the setting. The default is to display the date / time OSD in one row.

5.1.3.3 Date Display Mode

This function allows user to set the OSD display type of the date / time. There are three options to select from: <Y/M/D>, <M/D/Y> or <D/M/Y>. "Y" represents "Year", "M" represents "Month" and "D" represents "Day".

Use UP / DOWN keys to change the setting. The default setting is <Y/M/D> in both NTSC / PAL formats.

5.1.3.4 Time Display Mode

User can choose to set the time format to <12 hour> or <24 hour>. Use the UP / DOWN buttons to change the format. The default setting is <24 hour>.

5.1.3.5 Date/Time Order

The item is used to set the order of Date/Time display to <Date First> or <Time First>. Select this item and press ENTER, then use UP / DOWN buttons to change the setting.

5.1.3.6 Daylight Saving Time

The item is for people who live in certain regions to observe Daylight Saving Time. Select <ON> to enable, or <OFF> to disable the function.

All rights reserved

If the function is disabled, the DST Start / End time and DST Bias will be grayed out and cannot be accessed. If this function is enabled, the date/time information will be shown on the screen with a DST icon when playing back recorded video or searching video in the event list. "S" indicates summer time and "W" indicates wintertime.

5.1.3.7 DST Start / End

The items are used to set the daylight saving duration. Use LEFT / RIGHT to move the cursor to the next or previous field, UP / DOWN to change the settings.

5.1.3.8 DST Bias

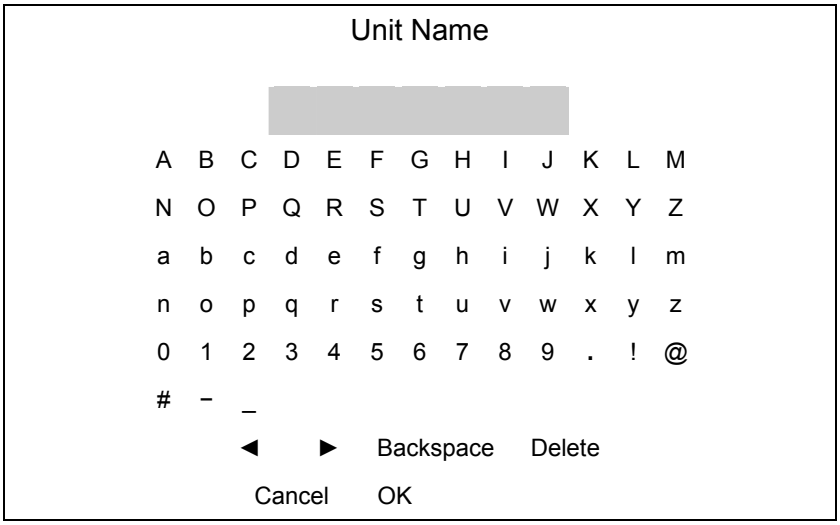
The item allows user to set the amount of time to move forward from the standard time for daylight saving time. Available options are <30>, <60>, <90> and <120> minutes.

5.1.4 Unit Name

Users are allowed to assign a name to the Dyna**Guard**™ 200 series unit.

Follow the steps to edit the unit name.

- Select <Unit Name> from System Setup menu and press ENTER. A virtual keyboard displays.



- Use Direction buttons to move the cursor to the wanted character.

www.dynacolor.com.tw
All rights reserved

- Press ENTER to add the character to the entry field (up to 11 characters).
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

5.1.5 Password

The Password menu allows administrator to change the password settings for accessing the unit. Select <Password> in System Setup menu and press ENTER; the menu displays as follows.

Password	
1. Admin Password	
2. User Password	
3. Enable Password	NO
4. Load Factory Password	None

5.1.5.1 Admin / User Password

Only the administrator is allowed to change the user and administrator password to any 4~8 digit number. Use the UP / DOWN Direction buttons to select the desired account and press ENTER, the following menu is displayed.

Admin Password

_____

Press Channel Keys To Enter Password
(4-8 Digits)
Press ◄ To Delete

Use CHANNEL buttons to input the new password and confirm the new password. After setting the new password, press ENTER to save the settings and exit.

5.1.5.2 Enable Password

The item is used to determine if the password is required for accessing the OSD menu. Select <YES> to demand entering password when accessing the OSD menu; if not, select <NO>.

All rights reserved

5.1.5.3 Load Factory Password

This item allows the administrator to reload the factory password in case that the administrator cannot remember or locate the password. There are three options to select from: <Admin> (reload the Admin password only), <User> (reload the User password only), and <All> (reload the Admin and User passwords). The factory password is 1234 for administrator and 4321 for user.

5.1.6 Network Setup

The Network Setup menu allows the administrator to configure the network by specifying the network related settings, such as IP address, Netmask, etc.

See your network administrator and/or network service provider for more specific information.

From the System Setup menu, select <Network Setup> and press ENTER. The following menu is displayed.

Network Setup	
1. LAN/PPPoE Select	LAN
2. LAN/PPPoE Setup	
3. Dial-in Setup	
4. Dial-out Setup	
5. Trigger Ort	80
6. Email Address	
7. SMTP Setup	
8. DDNS Setup	

Items in this menu are described in the following sections.

5.1.6.1 LAN/PPPoE Select

Select the service type between <LAN>, <PPPoE> or <None>, and access the LAN/PPPoE Setup menu for further settings.

5.1.6.2 LAN/PPPoE Setup

The network related settings in the LAN/PPPoE Setup menu should be associated with the network service type. Select <LAN/PPPoE Setup> in Network Setup menu and press ENTER for setting the parameters; the menu displays as follows.

www.dynacolor.com.tw
All rights reserved

LAN/PPPoE Setup	
1. DHCP	ON
2. IP	xxx.xxx.xxx.xxx
3. Netmask	xxx.xxx.xxx.xxx
4. Gateway	xxx.xxx.xxx.xxx
5. DNS	xxx.xxx.xxx.xxx
6. PPPoE Account	
7. PPPoE Password	
8. PPPoE Max Idle	35min
9. Connect At Booting	YES
10. Network Restart	NO

- DHCP

This item allows user to obtain a dynamic IP address from DHCP (Dynamic Host Configuration Protocol) server during the unit boots up. When using DHCP, the settings are dynamic and will change from time to time, depending on your network's setup.

If the item is enabled (ON), a dynamic IP will be assigned to Dyna**Guard**™ 200 series unit. In this case, user does not need to configure a static IP and the Ethernet settings including IP address, Netmask, Gateway, and DNS settings will be read only. The default setting is <ON>.

If you are using permanent addressing, set DHCP to <OFF> for setting the IP Address, Netmask, Gateway, and DNS. See your network system administrators or IT personnel for appropriate values for these settings.

- IP

The item is used to configure the IP (Internet Protocol) address of the unit. The IP address is the identifier for your computer or device on a TCP/IP LAN or WAN. Please note that to set a static IP address, DHCP must be set to <OFF>.

- Netmask

This item allows user to enter the 32-bit Netmask for the unit. To configure the item, DHCP must be set to <OFF>.

All rights reserved

- Gateway

Users are allowed to specify the IP address of the gateway or router associated with this unit. To configure this item, DHCP must be set to <OFF>.

- DNS

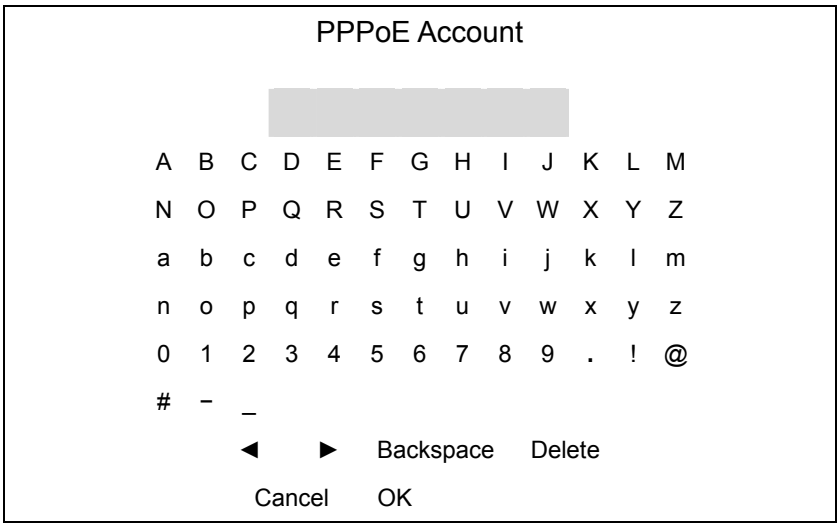
The item allows user to specify the IP address of the Domain Name System associated with the unit. To configure this item, DHCP must be set to <OFF>.

If the network server is unavailable when using DHCP, the unit searches for the network server and boots up more slowly. This network search continues until it times out.

- PPPoE Account

The item allows user to setup the PPPoE login username. To setup the login username, follow the steps.

- Select <PPPoE Account> from LAN/PPPoE Setup menu and press ENTER. A virtual keyboard displays.



- Use Direction buttons to move the cursor to the wanted character.
- Press ENTER to add the character to the username entry field.
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

NOTE: For accessing the PPPoE settings, select <PPPoE> as the Network Type in Network Setup menu

www.dynacolor.com.tw
All rights reserved

- PPPoE Password

The item allows user to setup the PPPoE password. Follow these steps to setup the login password.

- Select <PPPoE Password> from LAN/PPPoE Setup menu and press ENTER. A virtual keyboard displays.
- Use Direction buttons to select character.
- Press ENTER to add the selected character to the password entry field.
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

- PPPoE Max Idle

The item Indicates the time that the modem connection remains active if there is no acknowledgement from the remote PC. The default is 35 minutes.

- Connect At Booting

The unit is allowed to connect to the internet automatically when powered up. Select <YES> to connect at booting, otherwise select <NO>.

- Network Restart

Network restart is required after changing network settings. Select <YES> to restart the network connection.

5.1.6.3 Dial-in Setup

The Dial-in function enables user to establish dial-up modem communication to and from Dyna**Guard**™ 200 series unit for the remote software use. User can connect one modem to a Dyna**Guard**™ 200 series unit.

For more information on dial-up setting on PC, see Appendix C: Dial-up Connections via Modem.

NOTE: Do not enable the Dial-in Service if no modem connects to the unit.

In Network Setup menu, select <Dial-in Setup> and press ENTER to enter the Dial-in menu. The menu displays as follows.

All rights reserved

Dial-in Setup	
1. Dial-in Service	OFF
2. Dial-in Account	
3. Dial-in Password	
4. Server IP	0. 0. 0. 0
5. Client IP	0. 0. 0. 0
6. Dial-in Idle Time	OFF
7. Dial-in Max Time	OFF

- Dial-in Service

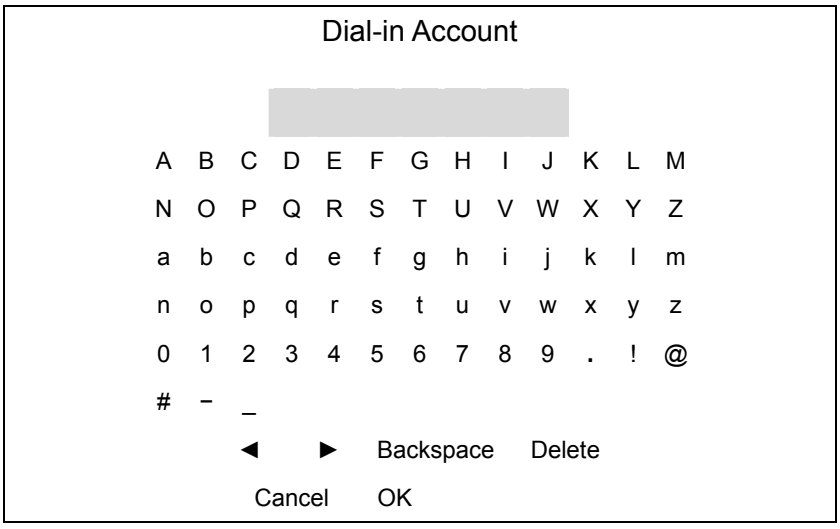
If the Dyna**Guard**™ 200 series unit does not connect to the Ethernet, user can communicate to the unit from remote PC through a modem as well. Select <ON> to enable the Dial-in function, or <OFF> to disable.

- Dial-in Account

This item enables user to protect the unit by establishing or changing a dial-in user name for modem connection.

To setup the Dial-in Account, follow the steps.

- Select <Dial-in Account> from Dial-in Setup menu and press ENTER. A virtual keyboard displays.



- Use Direction buttons to move the cursor to the wanted character.
- Press ENTER to add the selected character to the username entry field.
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

www.dynacolor.com.tw
All rights reserved

- Dial-in Password

The item allows user to setup the Dial-in password. Follow these steps to setup the login password.

- Select <Dial-in password> from Dial-in Setup menu and press ENTER. A virtual keyboard displays.
- Use Direction buttons to select character.
- Press ENTER to add the selected character to the password entry field.
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

- Server IP

The item is for setting the IP address that identifies the Dyna**Guard**™ 200 series unit over modem connection. Move the cursor over <Server IP> and press ENTER, and then press UP / DOWN buttons to change the values in the selected field.

- Client IP

The item determines the remote PC's IP address for connecting with the Dyna**Guard**™ 200 series unit. Move the cursor over <Client IP> and press ENTER, and then press UP / DOWN buttons to change the values in the selected field.

- Dial-in Idle Time

This item indicates the longest amount of time that the modem connection remains active if there is no acknowledgement from the remote pc. The value can be set in the range of 1 min to 600 min. If selecting <OFF>, the modem connection keeps active continuously.

- Dial-in Max Time

The item indicates the longest amount of time that the connection via modem remains active. The value can be set in the range of 1 min to 600 min, or <OFF> to keep the connection indefinitely.

All rights reserved

5.1.6.4 Dial-out Setup

The Dial-out function enables user to establish dial-up modem communication to and from Dyna**Guard**™ 200 series unit for remote notification use. User can connect one modem to Dyna**Guard**™ 200 series unit. For more information on dial-up setting on PC, see Appendix C: Dial-up Connections via Modem.

NOTE: Do not enable the Dial-out Service if no modem connects to the unit.

In Network Setup menu, select <Dial-out Setup> and press ENTER to enter the Dial-out menu. The menu displays as follows.

Dial-out Setup	
1. Dial-out DHCP	OFF
2. Dial-out IP	0. 0. 0. 0
3. Dial-out Netmask	0. 0. 0. 0
4. Dial-out Gateway	0. 0. 0. 0
5. Dial-out DNS	0. 0. 0. 0
6. Phone Number	
7. Dial-out Account	
8. Dial-out Password	
9. Dial-out Idle Time	OFF
10. Dial-out Max Time	OFF
11. Connect	NO

- Dial-out DHCP

This item allows user to obtain a dynamic IP address from DHCP (Dynamic Host Configuration Protocol) server over modem connection. If the item is enabled (ON), a dynamic IP will be assigned to Dyna**Guard**™ 200 series unit. In this case, user does not need to configure a static IP and the following settings will be read only.

Select <ON> to enable the DHCP function, or <OFF> to set the dial-out IP address, Netmask, Gateway and DNS manually. The default setting is <ON>.

- Dial-out IP

The item is for setting a static IP address that identifies the Dyna**Guard**™ 200 series unit over modem connection. Set the <Dial-out DHCP> to <OFF> for accessing this item.

www.dynacolor.com.tw
All rights reserved

Move the cursor over <Dial-out IP> and press ENTER, and then press UP / DOWN buttons to change the values in the selected field.

- Dial-out Netmask

The item is for setting the Netmask that identifies the Dyna**Guard**™ 200 series unit over modem connection. To configure the item, DHCP must be set to <OFF>.

Move the cursor over <Dial-out Netmask> and press ENTER, and then press UP / DOWN buttons to change the values in the selected field.

- Dial-out Gateway

Users are allowed to specify the IP address of the gateway or router associated with this unit. To configure this item, DHCP must be set to <OFF>.

Move the cursor over <Dial-out Gateway> and press ENTER, and then press UP / DOWN buttons to change the values in the selected field.

- Dial-out DNS

The item allows user to specify the IP address of the Domain Name System (DNS) associated with the unit. To configure this item, DHCP must be set to <OFF>.

Move the cursor over <Dial-out DNS> and press ENTER, and then press UP / DOWN buttons to change the values in the selected field.

- Phone Number

The item is used to set the dial-out phone number. Follow these steps to setup the phone number.

- Select <Phone Number> from Dial-out Setup menu and press ENTER. A virtual keyboard displays.
- Use Direction buttons to move the cursor for selecting number.
- Press ENTER to add the selected number to the password entry field.
- When done, press ENTER to save the settings and exit.

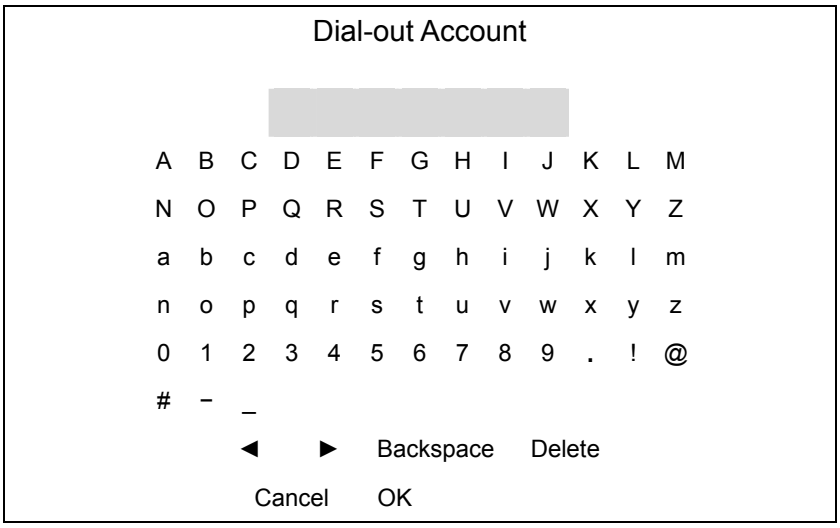
All rights reserved

- Dial-out Account

This item enables user to set the Dial-out user name, which is used for dialing out to ISP server. See your network service provider for more specific information.

To setup the Dial-out Account, follow the steps.

- Select <Dial-out Account> from Dial-out Setup menu and press ENTER. A virtual keyboard displays.



- Use Direction buttons to move the cursor to the wanted character.
- Press ENTER to add the selected character to the username entry field.
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

- Dial-out Password

The item allows user to setup the Dial-out password. Follow these steps to setup the login password.

- Select <Dial-out password> from Dial-out Setup menu and press ENTER. A virtual keyboard displays.
- Use Direction buttons to move the cursor for selecting character.
- Press ENTER to add the selected character to the password entry field.
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

www.dynacolor.com.tw
All rights reserved

- Dial-out Idle Time

This item indicates the longest amount of time that the modem connection remains active if there is no acknowledgement from the remote pc. The value can be set in the range of 1 min to 600 min. If selecting <OFF>, the modem connection keeps active continuously.

- Dial-out Max Time

The item indicates the longest amount of time that the connection via modem remains active. The value can be set in the range of 1 min to 600 min, or <OFF> to keep the connection indefinitely.

- Connect

When the Dial-out related settings are configured, set this item to <YES> to starting dial-out or select <NO> to disconnect.

5.1.6.5 Trigger Port

To avoid the default service port (port 80) to be blocked, the item enables user to change port 80 into another port.

To change the trigger port, move the cursor over <Trigger Port> and press ENTER, then adjust the setting by UP / DOWN buttons.

5.1.6.6 Email Address

This item is used to edit the e-mail address where alarm event information will be sent. Follow these steps to setup the e-mail address.

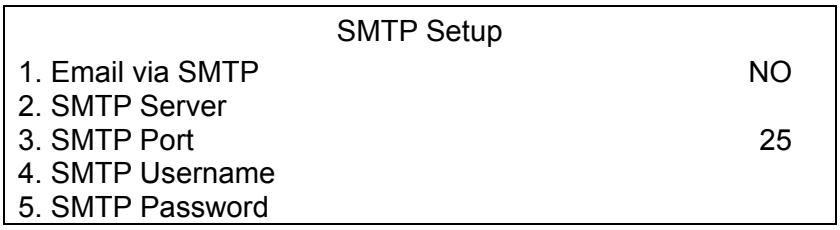
- Select <Email Address> from Network Setup menu and press ENTER. A virtual keyboard displays.
- Use Direction buttons to move the cursor for selecting character.
- Press ENTER to add the selected character to the password entry field.
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

All rights reserved

5.1.6.7 SMTP Setup

Simple Mail Transfer Protocol (SMTP), a protocol for sending e-mail messages between servers. SMTP is a relatively simple, text-based protocol, where one or more recipients of a message are specified and the message text is transferred.

Select < SMTP Setup> from Network Setup menu and press ENTER; the menu displays as follows.



- Email via SMTP

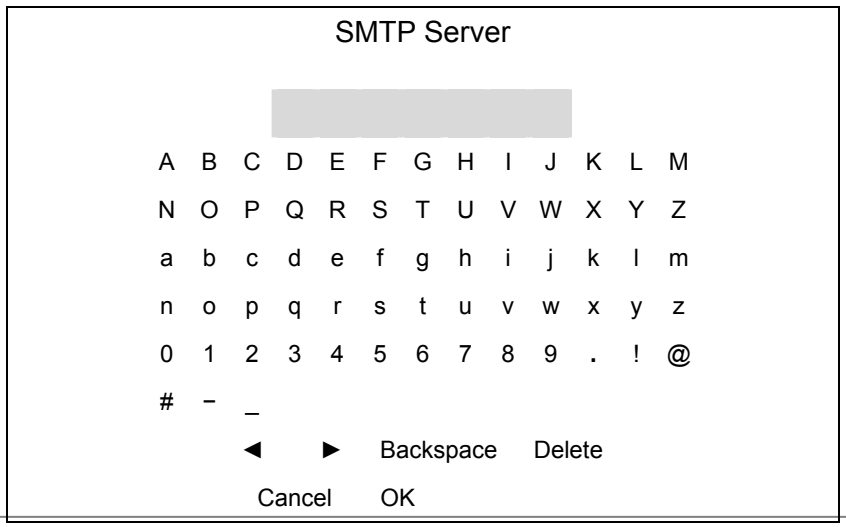
The item enables user to determine if the unit sends e-mail via SMTP. Select <YES> to send e-mail via SMTP using direction buttons; if not, select <NO>.

- SMTP Server

This item enables user to set the SMTP server. See your network service provider for more specific information.

Follow the steps to setup the SMTP Server.

- Select <SMTP Server> from SMTP Setup menu and press ENTER. A virtual keyboard displays.



www.dynacolor.com.tw
All rights reserved

- Use Direction buttons to move the cursor to the wanted character.
- Press ENTER to add the selected character to the username entry field.
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

- SMTP Port

The item is used to change SMTP port into another port, if necessary. SMTP usually is implemented to operate over Internet port 25.

To change the SMTP port, move the cursor to <SMTP Port> in SMTP Setup menu and press ENTER. Use UP / DOWN buttons to change the values in the selected field.

- SMTP Username

The item allows user to setup the SMTP username. Follow these steps to setup the login password.

- Select <SMTP Username> from SMTP Setup menu and press ENTER. A virtual keyboard displays.
- Use Direction buttons to move the cursor for selecting character.
- Press ENTER to add the selected character to the password entry field.
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

- SMTP Password

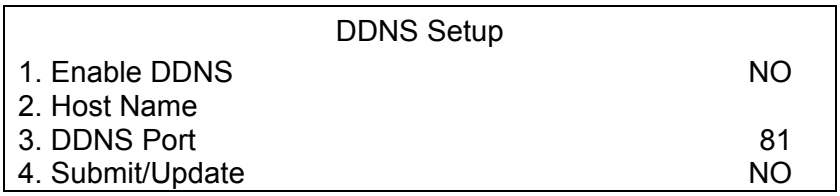
The item allows user to setup the SMTP password. Follow these steps to setup the password.

- Select <SMTP password> from SMTP Setup menu and press ENTER. A virtual keyboard displays.
- Use Direction buttons to move the cursor for selecting character.
- Press ENTER to add the selected character to the password entry field.
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

All rights reserved

5.1.6.8 DDNS Setup

Dynamic Domain Name System (DDNS) allows a DNS name to be constantly synchronized with a dynamic IP address. In other words, it allows those using a dynamic IP address to be registered centrally so others can connect to it by name. Select <DDNS Setup> from Network Setup and press ENTER. The menu displays as below figure.



- Enable DDNS

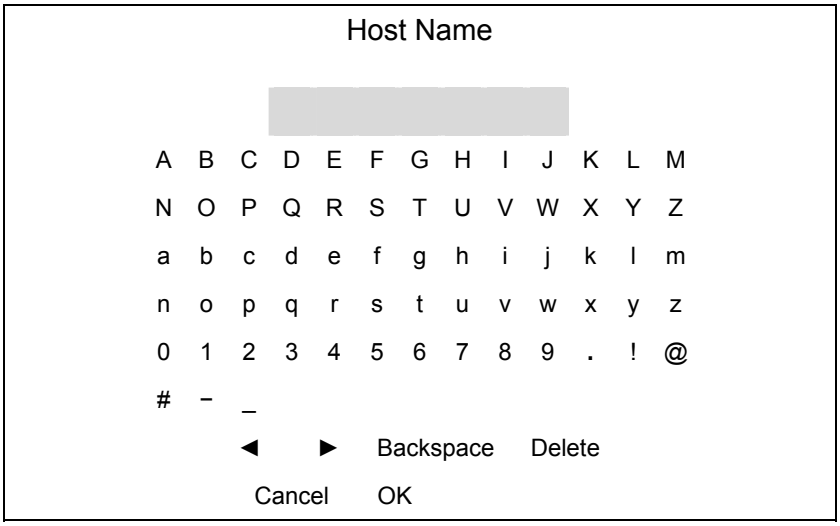
The item is used to enable or disable the Dynamic Domain Name Service. Select <YES> to enable the service, or <NO> to disable.

- Host Name

The item allows user to setup a domain name, which is used when entering the Dyna**Guard**™ 200 series unit through the net on your remote PC.

To setup the Host Name of the unit, follow the steps.

- Select <Host Name> from DDNS Setup menu and press ENTER. A virtual keyboard displays as below figure.



- Use Direction buttons to select character.

www.dynacolor.com.tw
All rights reserved

- Press ENTER to add the selected character to the password entry field.
- When done, move the cursor to <OK> and press ENTER to save the settings and exit.

NOTE: No any two Dyna**Guard**TM 200 series units should be set the same Host Name.

- DDNS Port

The item allows user to setup the port for DDNS. Press UP / DOWN Direction buttons to change the port.

- Submit/Update

When done, move the cursor to this item and press ENTER to submit the settings.

NOTE: If there are two Dyna**Guard**TM 200 series units set the same domain name, the later setting will not be submit successfully.

5.1.7 RS485 Setup

This menu allows setting up the parameters of the unit's RS-485 communications port. From the Main menu, select <RS485 Setup> and press ENTER. The following menu is displayed.

RS485 Setup	
1. Unit ID	224
2. Baud Rate	9600
3. Bits	8
4. Stop	1
5. Parity	None

5.1.7.1 Unit ID

This item is used to change the RS-485 ID address of the unit. The ID is in the range of <1> to <255>. The default is <224>.

5.1.7.2 Baud Rate

The Baud rate options for associated with the protocol are <2400>, <4800>, <9600>, <19200> and <38400>. The default is <9600> baud.

All rights reserved

5.1.7.3 Bits

User can specify the bits in a word that are associated with this protocol. The available options are <6>, <7> and <8> bits. The default is <8> bits.

5.1.7.4 Stop

User can specify the stop bit associated with this protocol. Options are <1> and <2> stop bits. The default is <1> stop bit.

5.1.7.5 Parity

This item is used to specify the parity associated with this protocol. Options are <ODD>, <EVEN>, and <NONE>. The default is <NONE>.

5.1.8 Audio Output

The item is used to set the audio output mode. The available options are as follows.

<Live/Playback>
Select the item to export sounds of live image in live mode, and sounds of recorded video in playback mode respectively.

<Always Live>
Select the item to export always sounds of live image in both live and playback mode.

<OFF>
Select the item to disable the audio output function.

5.1.9 Key Beep

The item is used to enable or disable the key tone. Select <YES> to enable the key tone, or <NO> to disable.

5.2 Monitor Setup

The Monitor Setup menu allows user to tune the quality of the displayed image. Select <Monitor Setup> from the Main menu and press ENTER. The

www.dynacolor.com.tw
All rights reserved

following menu is displayed.

Monitor Setup	
1. Show Camera Title	YES
2. Monitor Brightness	0
3. Monitor Contrast	0
4. Monitor Chrominance	0
5. Screen Center Adjust	
6. Show Color Bar	
7. VGA Resolution	800x600

The following sections describe the items found in the Monitor Setup menu.

5.2.1 Show Camera Title

This item allows user to choose whether to display the camera title on the screen or not. The default is <YES>, which displays the camera titles with the video from each camera.

5.2.2 Monitor Brightness

The function allows user to adjust the brightness / darkness of image displayed on the monitor. Move the cursor to the item then press ENTER, and use UP / DOWN buttons to adjust the numeric value. The range of brightness values is <-128> to <127>. The default setting is <0>.

5.2.3 Monitor Contrast

The item is used to adjust the color contrast of image. The range of contrast values is <-128> to <127>; the default setting is <0>.

5.2.4 Monitor Chrominance

Move the cursor over the item and press ENTER for adjusting the chrominance of image displayed on the monitor. Use UP / DOWN buttons to adjust the numeric value. The range of chrominance values is <-128> to <127>; the default setting is <0>.

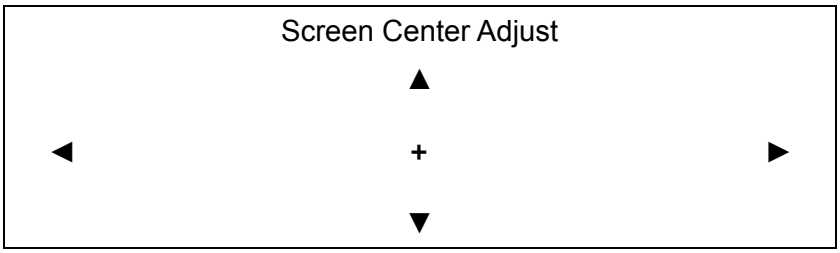
5.2.5 Screen Center Adjust

The item is used to adjust the screen center of the main monitor display area. Follow the steps to set the center point.

- Select <Screen Center Adjust> from the Monitor Setup menu and press

All rights reserved

ENTER. The adjusting screen is as follows.



- Position the screen center position using the Direction buttons.
- Press ENTER to exit when finished.

5.2.6 Show Color Bar

Choose this item to display a color bar pattern on the screen. The color bar helps to adjust the monitor hue, saturation, text color, and display options. Press ESC to exit the color bar pattern and return to the OSD menu.

5.2.7 VGA Resolution

The item allows user to select appropriate VGA resolution for the VGA monitor connected to the unit. The options are <800×600> (default), <1024×768> and <1280× 1024>.

NOTE: If the selected VGA resolution is too high for the monitor, the message "No Signal" will be shown on screen.

5.3 Camera Setup

The items in the Camera Setup menu enable user to set camera parameters, including camera title, dome protocol and ID for each connected camera. The menu is shown as below.

Camera Setup	
1. Camera Select	CH1
2. Dome Protocol	None
3. Dome ID	0
4. Camera Title	
5. Covert	NO
6. Termination	NO
7. Brightness	0
8. Contrast	0
9. Saturation	0
10. Hue	0
11. Audio Association	Both

www.dynacolor.com.tw
All rights reserved

Items in this menu are described in the following subsections.

5.3.1 Camera Select

The item is used to select a desired camera for setting the parameters. The related settings will follow the selected camera, such as dome protocol and camera title.

Move the cursor to <Camera Select> and press ENTER, then select a channel using UP / DOWN buttons.

5.3.2 Dome Protocol

Select the communications protocol associated with your dome camera using the ENTER and Direction buttons. The available protocol includes <DynaColor>, <Pelco D>, <Pelco P>, <AD422> and <None> (default).

5.3.3 Dome ID

This item is used to assign an ID number to the selected dome camera. Note that ID number must match the ID address set by the dome.

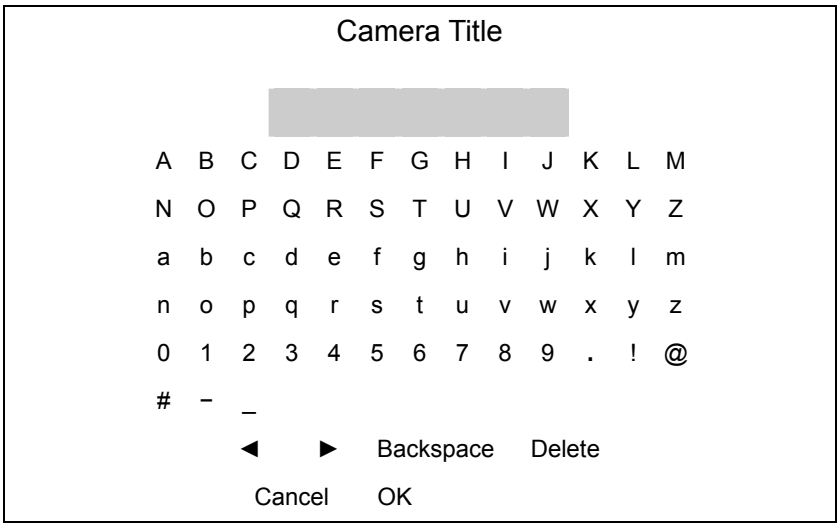
5.3.4 Camera Title

This item allows the user to change the title of each camera connected to the unit. By default, the titles of cameras are numbered from 1 through 8 respectively. The title is displayed on screen after changes from this menu are entered.

Follow these steps to enter a new title for a camera.

- In the Camera setup Menu, move the cursor to Camera Title and press ENTER. A virtual keyboard with alphanumeric characters is displayed.

All rights reserved



- Use Direction buttons to position the cursor in the title entry field above the virtual keyboard.
- Use Direction buttons to move the cursor through the lists of characters to the one you need. Press ENTER to select a character. Continue until the name is established. You can enter up to 11 characters from those listed in the virtual keyboard.
- After title entry is finished, move the cursor to <OK> and press ENTER; otherwise, either press ESC, or move the cursor to <Cancel> and press ENTER to abort.

5.3.5 Covert

This function allows user to choose certain camera to be covert while the unit is continuing recording video. Choose a desired channel by <Channel Select> first and then move the cursor to <Covert> and press ENTER; following that, use UP / DOWN buttons to select <YES> (camera covert) or <NO> (camera non-covert). The default setting is <NO>.

5.3.6 Termination

This item is used to enable / disable the 75-termination resistor inside the unit to adjust the image quality of each camera. <YES>= termination resistor enabled (default), <NO> = termination resistor disabled.

NOTE: If the camera loop-out connectors have not been used, the termination resistor should be enabled for appropriate signal termination.

www.dynacolor.com.tw
All rights reserved

5.3.7 Brightness

Move the cursor to the item and press ENTER for adjusting the brightness / darkness of image displayed on the monitor. Use UP / DOWN buttons to adjust the numeric value. The range of brightness values is <-128> to <127>. The default setting is <0>.

5.3.8 Contrast

Move the cursor to the item and press ENTER for adjusting the contrast of image displayed on the monitor. Use UP / DOWN buttons to adjust the value.

5.3.9 Saturation

Move the cursor to the item and press ENTER to adjust the color saturation displayed on color monitor using UP / DOWN buttons. This value is ignored on monochrome monitors. The range of saturation values is <-128> to <127>. The default setting is <0>.

5.3.10 Hue

Move the cursor to the item and press ENTER for adjusting the hue of image displayed on the monitor. Use UP / DOWN buttons to adjust the value.

5.3.11 Audio Association

The item is used to establish the connection between the selected camera and the two audio-in channels. Move the cursor to <Audio Association> in Camera Setup menu and press ENTER, then select <Both>, <Left Only>, <Right Only> or <None> by UP / DOWN keys to set up the connection.

5.4 Record Setup

There are three factors that effect the total record time of Dyna**Guard**™ 200 series unit: HDD capacity, recording rate (Picture per Second), and image quality settings. The greater the recording rate and the higher the quality setting, the shorter the recording time. Most of the related factors can be set here in this submenu.

The Record Setup menu allows user to set recording quality, recording schedules, and other recording parameters. Administrator's password is

All rights reserved

required to use Record Setup menu. In the Main menu, move the cursor to <Record Setup> and press ENTER. The following menu is displayed.

Record Setup	
1. Record Mode	720x240@60PPS
2. Schedule Setup	
3. Preset Config	Standard
4. Per Camera Config	
5. Event Percentage	20%
6. Data Lifetime	7 Days
7. Pre-Alarm Recording	15 Sec
8. Circular Recording	ON
9. Audio Recording	ON
10. Purge Data	

5.4.1 Record Mode

The item is for selecting resolution and recording rate. The relative record settings, such as preset configuration, will follow the record mode setting. The options are <720 x 480@30PPS>, <720 x 240@60PPS> and <360 x 240@120PPS> in NTSC (<720x576@25PPS>, <720x288@50PPS>, <360x 288@100PPS>in PAL).

Move the cursor to this item and press ENTER, then select a Record mode using UP / DOWN buttons.

NOTE: If selecting the Record mode: <720x480@30PPS> (720x 576@25PPS) , only the image from channel 1~4 will be recorded.

NOTE: After changing the Record Mode setting, the warning message "This will FORMAT ALL HARDDISKS and LOAD THE FACTORY DEFAULT CONFIG!" will show. Press ENTER to confirm the selection, then the unit starts to format the hard disks and load the factory default settings, or press ESC to abort.

5.4.2 Schedule Setup

This submenu is used to set the day and night time, or weekend recording schedule.
The Night and Day schedules are used to define daytime and nighttime; the Weekend schedule is tailored for weekends and holidays.

Select <Schedule Setup> from the Record Setup menu and press ENTER;

www.dynacolor.com.tw
All rights reserved

the following menu is displayed.

Schedule Setup		
1. Day Time Start		06:00
2. Night Time Start		18:00
3. Weekend Schedule		YES
4. Weekend Start	Fri	18:00
5. Weekend End	Mon	06:00

5.4.2.1 Day / Night Time Start

The Day/Night Start Time determines the beginning of day/night recording time. Time is indicated in 1-minute increments. The time display format in this menu is based on the setting of Time Display Mode.

5.4.2.2 Weekend Schedule

The Weekend Schedule determines whether a weekend schedule is in effect. Choose <YES> to take effect the related weekend settings.

5.4.2.3 Weekend Start / End

The Weekend Start Time indicates the specific day and time that a weekend begins, for example, FRI 18:00. The Weekend End Time indicates the specific time and day that a weekend ends, for example, MON 06:00. Time is indicated in 1-minute increments.

Note that the value you have set indicates when the regular Day and Night scheduling ends, and Weekend recording begins.

5.4.3 Preset Configuration

The <Preset Config> is used to select the preset recording quality and frame rate. Different default recording quality levels are offered for user to choose: <Best Quality>, <Standard>, <Extended Record>, <Event Only>, <128Kbps DSL>, <256Kbps DSL>, <512Kbps DSL> and <OFF>. According to various Record modes, the preset configuration options for normal and event status are described in terms of relative recording rate (PPS) and recording size for each channel in the table below.

All rights reserved

The preset conditions <Best Quality>, <Standard>, <Extended Record>, <Event Only>, <128Kbps DSL>, <256Kbps DSL> and <512Kbps DSL> override any other quality and rate settings. The default Preset Configuration setting is <Standard>.

Record Mode: Full-D1 mode (NTSC: 720x480@30PPS) (PAL: 720x576@25PPS)					
Preset Configuration	**Normal PPS**	**Normal Size**	**Event PPS**	**Event Size**	**Event Active**
Best Quality	7.5 NTSC (6.25 PAL)	13 KB	30 NTSC (25 PAL)	13 KB	Both (Alarm+Motion)
Standard	7.5 NTSC (6.25 PAL)	9 KB	30 NTSC (25 PAL)	13 KB	Both
Extended Record	7.5 NTSC (6.25 PAL)	5 KB	30 NTSC (25 PAL)	13 KB	Both
Event Only	0 NTSC (0 PAL)	-	30 NTSC (25 PAL)	13 KB	Both
128Kbps DSL	1 NTSC (1 PAL)	2 KB	1 NTSC (1 PAL)	2 KB	Both
256Kbps DSL	4 NTSC (4 PAL)	2 KB	4 NTSC (4 PAL)	2 KB	Both
512Kbps DSL	4 NTSC (4 PAL)	3 KB	4 NTSC (4 PAL)	3 KB	Both
OFF	User Selected	User Selected	User Selected	User Selected	User selected

NOTE: If selecting this Record mode, only the image from channel 1~4 will be recorded.

Record Mode: Half-D1 mode (NTSC: 720x240@60PPS) (PAL: 720x288@50PPS)					
Preset Configuration	**Normal PPS**	**Normal Size**	**Event PPS**	**Event Size**	**Event Active**
Best Quality	7.5 NTSC (6.25 PAL)	11 KB	30 NTSC (25 PAL)	11 KB	Both (Alarm+Motion)
Standard	7.5 NTSC (6.25 PAL)	7 KB	30 NTSC (25 PAL)	11 KB	Both
Extended Record	7.5 NTSC (6.25 PAL)	3 KB	30 NTSC (25 PAL)	11 KB	Both
Event Only	0 NTSC (0 PAL)	-	30 NTSC (25 PAL)	11 KB	Both

www.dynacolor.com.tw
All rights reserved

128Kbps DSL	1 NTSC (1 PAL)	2 KB	1 NTSC (1 PAL)	2 KB	Both
256Kbps DSL	4 NTSC (4 PAL)	2 KB	4 NTSC (4 PAL)	2 KB	Both
512Kbps DSL	4 NTSC (4 PAL)	3 KB	4 NTSC (4 PAL)	3 KB	Both
OFF	User Selected	User Selected	User Selected	User Selected	User Selected

Record Mode: CIF mode (NTSC: 360x240@120PPS) (PAL: 360x288@100PPS)					
Preset Configuration	**Normal PPS**	**Normal Size**	**Event PPS**	**Event Size**	**Event Active**
Best Quality	15 NTSC (12.5 PAL)	9 KB	30 NTSC (25 PAL)	9 KB	Both (Alarm+Motion)
Standard	15 NTSC (12.5 PAL)	5 KB	30 NTSC (25 PAL)	9 KB	Both
Extended Record	15 NTSC (12.5 PAL)	1 KB	30 NTSC (25 PAL)	9 KB	Both
Event Only	0 NTSC (0 PAL)	-	30 NTSC (25 PAL)	9 KB	Both
128Kbps DSL	1 NTSC (1 PAL)	2 KB	1 NTSC (1 PAL)	2 KB	Both
256Kbps DSL	4 NTSC (4 PAL)	2 KB	4 NTSC (4 PAL)	2 KB	Both
512Kbps DSL	4 NTSC (4 PAL)	3 KB	4 NTSC (4 PAL)	3 KB	Both
OFF	User Selected	User Selected	User Selected	User Selected	User Selected

5.4.4 Per Camera Configuration

This submenu is used to set the Day / Night / Weekend PPS (Picture per Second) and recording quality for each channel. The <Preset Configuration> must be set to <OFF> for accessing these schedules.

The menu is displayed as below in Record mode: 720x240@60PPS in NTSC / 720x288@50PPS in PAL).

All rights reserved

Per Camera Config			
Cameral Select			CH1
	Day	**Night**	**Weekend**
Normal PPS	7.5	7.5	7.5
Normal Size	7KB	7KB	7KB
Event Max PPS	30	30	30
Event Size	11KB	11KB	11KB
Event Active	Both	Both	Both

5.4.4.1 Camera Select

The item is used to select a desired channel for setting the parameters. Move the cursor to <Camera Select> and press ENTER, then select a channel using UP / DOWN buttons. Press ENTER again to confirm the setting.

5.4.4.2 Normal PPS

Normal PPS (Picture per Second) is used to set the recording rate for normal status.

Please note that the total normal pps for all channels is limited under the maximum PPS for each Record mode. To increase one channel's pps, you may have to reduce other's first. Event pps is not restricted to this rule, since a smart event scheduler will handle to the total pps with a correct weighting.

5.4.4.3 Normal Size

The item is used to set the picture size for normal status recording. The available options are <3>, <5>, <7>, <9> and <11> KB.

5.4.4.4 Event Max PPS

Event Max PPS is used to set the event recording rate for Event status. Normally, the Event PPS is set to equal or greater than Normal PPS; the setting is depending on your application. If the Event PPS is set to <0>, Dyna**Guard**™ 200 series unit stops recording event video during alarms.

5.4.4.5 Event Size

The item is used to set the picture size for event status recording. The available options are <3>, <5>, <7>, <9> and <11> KB.

www.dynacolor.com.tw
All rights reserved

5.4.4.6 Event Active

Users are allowed to choose which alarm type needs to be recorded. The available options are <Alarm> (alarm events), <Motion> (motion detection events), <Both> (alarm event + motion detection), and <None> (no events active). The default setting is <Both>, which includes Alarm and Motion event recording.

5.4.5 Event Percentage

The item is used to set the event recording percentage of total capacity. The unit stops recording event video when the event space is full.

To set the event percentage, select <Event Percentage> in Record Setup menu and press ENTER, and then use UP / DOWN buttons to set the event percentage.

5.4.6 Data Lifetime

Data Lifetime indicates the time that a recording is saved and remained in the HDD, between the creation and deletion of a record. Only those video recorded during Data Lifetime will be displayed on the screen and can be played back; those video recorded outside the duration time will be deleted.

Press ENTER to select this item in Record Setup menu, and then use UP / DOWN buttons to set the data lifetime. The value ranges from <1> to <365> days, or select <0> to disable the function.

5.4.7 Pre-Alarm Recording

This item is used to set the duration of pre-alarm recording video. The pre-alarm recording function aims to make user viewing a more complete event video; what user can view is not only the video recorded after the alarm is triggered, but also the video recorded ahead the alarm.

When an event is triggered while normal recording is in effect, the unit will start copying the pre-alarm and the post-alarm video to the event video. The pre-alarm duration can be set from 0~30 seconds. The default setting is 15 seconds.

All rights reserved

The quality of the pre-alarm video is the same as the quality setting for normal record video; and the quality of the post-alarm video is the same as the quality setting for event record video.

5.4.8 Circular Recording

User can choose to record video in circular mode or in linear mode. If you choose to record in circular mode, then the unit begins to overwrite the oldest previously recorded video; and stores new video over the HDD spaces. If you choose to record in linear mode in stead, the unit stops recording when the HDD is full.

From the Record Setup menu, move the cursor to <Circular Recording> and press ENTER, then select <ON> / <OFF> using UP / DOWN buttons.

5.4.9 Audio Recording

This item allows user to enable / disable Audio recording function of the unit. When set to <ON>, audio input is recorded and saved with the video. When set to <OFF>, audio is ignored. The default setting is <ON>.

5.4.10 Purge Data

This item is used to delete the Normal or Event recording video. In Record Setup menu, move the cursor to <Purge Data> and press ENTER; the Purge Data menu is displayed.

Purge Data	
1. Purge All Normal Data	NO
2. Purge All Event Data	NO
3. Purge Event Before	2005/01/01
4. Purge Event Items	
5. Start to Purge	NO

5.4.10.1 Purge All Normal Data

The item is used to delete all normal recorded video from database(s). Set this item to <YES> using UP / DOWN buttons, and start the deleting by enable (YES) the <Start to Purge> function.

www.dynacolor.com.tw
All rights reserved

5.4.10.2 Purge All Event Data

The item is used to delete all event video from database(s). Using UP / DOWN buttons to select <YES> and start the deleting by setting the <Start to Purge> to <YES>.

5.4.10.3 Purge Event Before

The item is used to delete event video before a specific date. Use LEFT / RIGHT buttons to move the cursor to next or previous field, ENTER to select the item and UP / DOWN to adjust the value.

5.4.10.4 Purge Event Items

Select the event video you want to delete and confirm the deletion by pressing UP / DOWN and ENTER keys; choose <YES> to start the deleting or choose <NO> to abort the process.

5.4.10.5 Start to Purge

After selecting the video you want to delete or setting the date for deletion, set this item to <YES> for start the deleting or choose <NO> to cancel.

5.5 Sequence Setup

The Sequence Setup menu allows setting the camera sequence schedule and dwell time for main and call monitor. Select <Sequence Setup> in Main menu and press ENTER; the menu displays as follows.

Sequence Setup	
1. Main Monitor Dwell	5 Sec
2. Main Monitor Schedule	
3. Call Monitor Dwell	5 Sec
4. Call Monitor Schedule	

Items in the Sequence Setup menu are described in the following subsections.

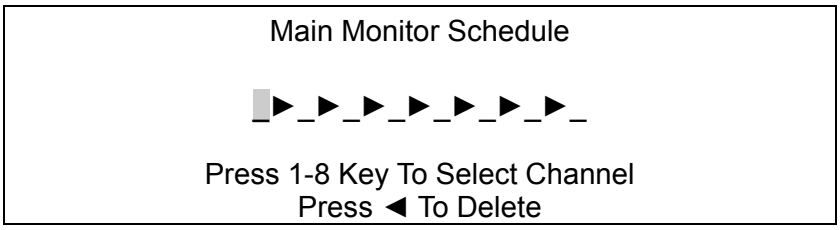
All rights reserved

5.5.1 Main / Call Monitor Dwell

The Main / Call Monitor can be set to display full screen video of all installed cameras in sequence. This item is used to set the Main / Call Monitor dwell time, which is the amount of time elapsed between switching images. The dwell time is in the range of 1 to 120 seconds. The default value is 5 seconds.

5.5.2 Main / Call Monitor Schedule

This item is used to set the Main / Call Monitor camera sequence in full screen format. Move the cursor to <Main Monitor Schedule> and press ENTER; the menu is displayed as follows.



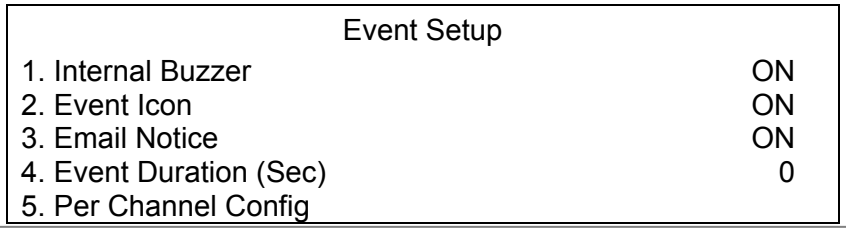
Follow these steps to set a sequence:

- Press LEFT direction button to delete the original setting.
-
- Press the desired Channel buttons to assign a camera to that location in the sequence.
- Continue the steps until the sequence is completed.

A sequence can have up to eight entries. User can select fewer than eight entries for camera sequence and leave the remaining entries blank. The sequence can include a specific camera or cameras multiple times.

5.6 Event Setup

This menu allows user to determine Dyna**Guard**™ 200 series behavior in response to an alarm event. In the Main menu, move the cursor to <Event Setup> and press ENTER. The following menu is displayed.



www.dynacolor.com.tw
All rights reserved

Items in the Event Setup menu are described in the following subsections.

5.6.1 Internal Buzzer

This item allows user to enable / disable the Dyna**Guard**^{TM} 200 series internal buzzer. If set to <ON>, the buzzer is activated in response to an alarm. If set to <OFF>, the buzzer is not activated. The default setting is <ON>.

5.6.2 Event Icon

The item enables (ON) / disables (OFF) the display of Event Icon on the main monitor when an alarm event occurs. The default setting is <ON> (enable).

The event types are represented by a character respectively; the descriptions are as below table.

Event type	Description
A	Alarm in event
M	Motion detection event
L	Video loss event

5.6.3 Email Notice

The item enables (ON) / disables (OFF) the Email notification of an event. When an alarm event is triggered and <Email Notice> is enabled, an e-mail concerning the alarm event will be dispatched. The default setting is <OFF>.

NOTE: In order to send an event notification e-mail successfully, ensure that the unit connects to the internet.

5.6.4 Event Duration

This item determines the duration of the buzzer and Alarm Out relay function after an alarm is triggered. The available event duration range is from 1 second to 100 seconds. The default setting is 5 seconds.

All rights reserved

5.6.5 Per Channel Config

This menu is used to set the Video Loss Detect, Motion Detect and Alarm In / Out function for each channel. The menu is displayed as below.

Per Channel Config	
1. Channel Select	CH1
2. Video Loss Detect	ON
3. Motion Detect	ON
4. Detection Config	
5. Alarm In	OFF
6. Alarm Out	None

5.6.5.1 Channel Select

The item is used to select a desired channel for setting the parameters. Move the cursor to <Channel Select> and press ENTER, then select a channel using UP / DOWN buttons. Press ENTER again to confirm the setting.

5.6.5.2 Video Loss Detect

This item allows user to enable / disable Video Loss as an alarm event. Select <ON> to enable Video Loss alarm events, <OFF> to disable. The default setting is <ON>.

5.6.5.3 Motion Detect

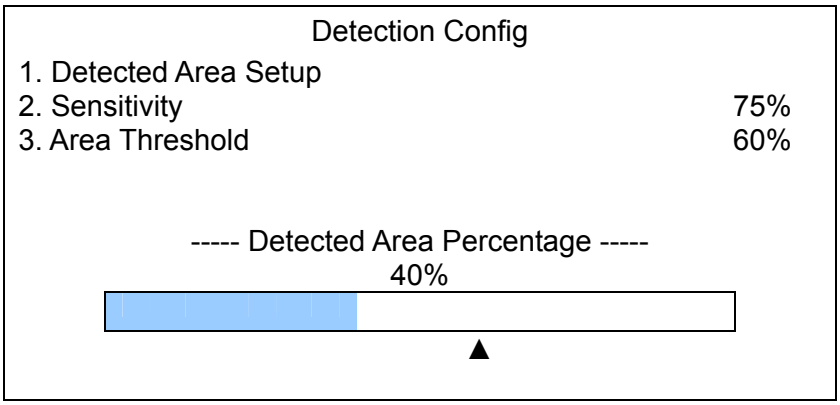
Use to enable or disable the motion detection function of the Dyna**Guard**™ 200 series. By default, the value is <OFF>.

If motion detection function is enabled, it is required to define the motion detection parameters such as detection area and sensitivity settings.

5.6.5.4 Detection Configuration

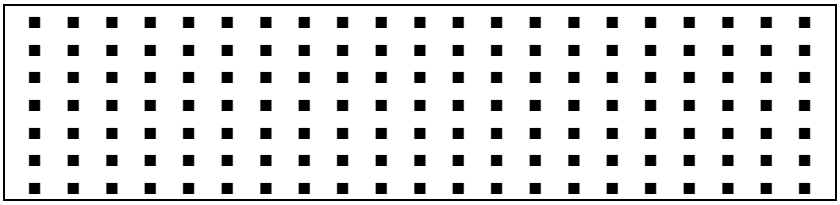
If motion detection function is enabled, it is required to define the motion detection parameters such as detection area and sensitivity settings. Select a desired channel for setting the parameters, move the cursor to <Detection Config>, and press ENTER. The Detection Configuration menu displays as follows.

www.dynacolor.com.tw
All rights reserved



- Detected Area Setup

The Detect Area is displayed as follows after selecting this item. The detection area consists of 273 (21×13) detection grids in NTSC video format or 336 (21 ×16) grids in PAL format.



Use the Direction buttons to move the cursor and press ENTER to enable or disable a grid. Press MODE to select all of the grids for detection; press MODE again to de-select all of the grids.

- Sensitivity

The item is used to set the sensitivity of detection grids for the camera. A greater value indicates more sensitive motion detection. A motion alarm will be triggered, once the amount of motion detected exceeds the Threshold value

Move the cursor to <Sensitivity> and press ENTER, and then use UP / DOWN buttons to adjust the value. The value is indicated in 4% increment.

- Area Threshold

<Area Threshold> means the motion alarm triggered level; if the percentage of triggered grids to total detection area is greater than the set value, the motion alarm will be triggered.

All rights reserved

For example, if 10 grids are selected and the < Area Threshold > value is 70%, the motion alarm will be triggered when seven grids are motion detected.

Move the cursor to < Area Threshold > and press ENTER, and then use UP / DOWN buttons to adjust the value. The value is indicated in 4% increment.

- **Detected Area Percentage**

The part shows the percentage and variation of the detected volume.

5.6.5.5 Alarm In

This item allows user to enable / disable alarm input detection. According to your application, select <N/O> (Normal Open) or <N/C> (Normal Close) to enable the alarm input detection or select <OFF> to disable the detection. The default setting is <OFF>.

If you set this item to <N/C> but did not install any device to the unit, the alarm will be triggered and the Event Icon displayed continually until this item is changed to <N/O>, <OFF> or install a device to the unit.

5.6.5.6 Alarm Out

This item allows user to assign an alarm on certain channel to activate the relays. These signals can be used to drive a light or siren to caution an alarm event.

Select from the options: <A Only > indicates "Alarm Out A", <B Only> indicates "Alarm Out B", <Both> indicates "Both Alarm Out" and <None> indicates "No Alarm Out". The default setting is <None>.

5.7 Database Setup

The menu displays information of internal and external disks. In the Main menu, move the cursor to <Database Setup> and press ENTER. The following menu is displayed.

www.dynacolor.com.tw
All rights reserved

Database Setup	
1. Total Size	xxx GB
2. Free Size	xxx GB
3. Rest Normal REC	3Days 7Hrs
4. Rest Event REC	15Hrs
5. Internal Disks	
6. External Disks	

NOTE: If the hard disk is failed detected, the message "HDD fail" will display.

5.7.1 Total / Free Size of HDD

The Total Size of HDD shows the total capacity of HDD that has been added into database. The Free Size of HDD indicates the free space for recording of the HDD added in database. The information is read-only.

5.7.2 Rest Normal / Event REC

The Rest Normal / Event REC indicate the rest duration for normal and event recording, respectively. If recording video in circular mode, the item will show "Circular". The information is read-only.

5.7.3 Internal / External Disks

Select <Internal Disks> or <External Disks> to see information on the storage devices connected to the unit. The submenu is displayed as below.

Internal Disks		
Name	Active	Action
xxx xxxxxxx-xxxxxx	YES	None

The information of built-in HDD and external storage device will be listed by model name and status. If no storage device connects to the unit, the message "No Available Items!" will show on screen.

NOTE: If the file system of the internal HDD is not compatible for the DVR, the system will format the internal HDD automatically without notice.

<Active>

The item indicates if the storage device is added into database or not. <YES> means the device has been added into database.

All rights reserved

<Action>

The item allows user to add storage device into database or remove device from database.

The options are <None> (no action), <Add> (add the selected device into database), <Remove> (remove the selected device from database), <Repair> (repair the damaged database of the selected device), <Format> (format the selected device).

NOTE: Before removing external devices from the unit, remember to remove the device from database.

5.8 Configuration

The Configuration menu can be used to restore the default factory settings, import and export configuration.

Select <Configuration> from the Main menu and press ENTER. The following menu is displayed.

Configuration	
1. Load Factory Default	NO
2. Import Config	
3. Export Config	

Items in this menu are described in the following subsections.

5.8.1 Load Factory Default

This item is used to load the factory setting; select <YES> to recall the factory default setup configuration from the read-only memory, or <NO> to cancel.

5.8.2 Import Configuration

This item allows user to load a unit configuration that was saved in an external drive. To import a configuration that was previously exported, make sure the device that saved the configuration is connected to the unit. Select <Import Config> from the Configuration menu and press ENTER. The following menu is displayed.

www.dynacolor.com.tw
All rights reserved

Import Config	
Config Name	Select
xxxx-xxxx	NO
xxx-xx	NO

Press UP / DOWN to select one of the listed available configuration files, and choose <YES> to start import.

NOTE: If the imported configuration has different record mode from the unit's, the warning message "This config has different record mode. This will FORMAT ALL HARDDISKS." will show.

NOTE: Remove the ThumbDrive used for import configuration after the unit restarts, or it will be formatted as well.

5.8.3 Export Configuration

The Administrator is allowed to save a unit configuration by exporting it to an external drive, such as a USB Flash Drive. Before exporting the configuration, make sure the device in which the configuration will be saved is attached to the unit appropriately. Select <Export Config> from the Configuration menu and press ENTER. The following menu is displayed.

Export Config	
1. Copy Destination	
2. Config Name	
3. Begin Export	NO

Items in this menu are described in the following sections.

5.8.3.1 Copy Destination

Select this item to list available destinations (external memory devices) to which the configuration can be exported. Press UP / DOWN to set a destination. Please note that saving a different configuration to the same copy destination with the same file name will overwrite the previous configuration file without warning.

NOTE: Users are not allowed to select any CD-R/W or DVD+RW as a copy destination, including built-in CD-R/W and DVD+RW.

All rights reserved

5.8.3.2 Configuration Name

This item allows user to assign the exported configuration file a name. Use the virtual keyboard to enter the configuration file name.

Note that the file name can contain up to 15 characters, with no spaces.

5.8.3.3 Begin Export

Select <YES> to begin exporting the configuration file, or <NO> to abort the export.

5.9 Video Export

The Video Export menu enables the administrator to export recorded video with digital signature to a USB Thumb drive, a CD-RW or to DVD+RW drive. Make sure an external storage device is available and connected to the appropriate port for video export. Administrator's password is required to export video.

If the <Pre-Alarm Recording> function is enabled, the event video will be exported into two files, including pre-alarm video and video recorded after the alarm is triggered.

Each recorded video will be exported into four files when exporting with digital signature, including *.gpg, *.avi (*.drv), *.sig and readme txt. To export 1GB file with digital signature may take you about 30 minutes.

From the Main menu, select <Video Export> and press ENTER. The following menu is displayed.

Video Export	
1. Select Device	
2. Select Ch:	CH1 CH2 CH3 CH4
3. From	2005/03/19 AM 07:50:05
4. To	2005/03/28 PM 03:09:18
5. Select Events	
6. Data Type	Normal
7. Export Format	DRV
8. Digital Signature	NO
9. Erase Disc	NO
10. Begin Export	NO

www.dynacolor.com.tw
All rights reserved

Items in the menu will be described in the following section.

5.9.1 Select Device

The available external devices for exporting video will be listed by name and free size in Select Device menu. The Select Device menu displays as follows.

Select Device		
Device Name	Available	Sel
xxx-xxx-x-x-xx	256 MB	NO
xx-xxx-xx-xxxx	1.5 GB	NO

The Dyna**Guard**™ 200 series only supports EXT3 file system. If you connect an external HDD to the unit, ensure the format of HDD is EXT3.

<Device Name>
The item shows the name of the available device.

<Available>
The item shows the free space of the available device.

<Select>
Set the item to <YES> to start the export, or <NO> to cancel.

5.9.2 Select Channel

The item is used to select channels for export. Move the cursor to the wanted channel using LEFT / RIGHT buttons, select or de-select a channel by pressing ENTER.

5.9.3 From / To Time

The items are used to set the time which data export begins and ends. Move the cursor using Direction buttons, and press ENTER to select the date / time items; adjust the selected date and time value by UP / DOWN buttons.

NOTE: When the Start / End Time are set, remember to select the exporting Data Type.

All rights reserved

5.9.4 Select Events

Select the item to display the event list for exporting event video. Move the cursor scroll the event list and press ENTER to select the event you want to export.

5.9.5 Data Type

The item is used to select exporting video type. The options are <Normal> (export normal video only), <Event> (export event video only) and <Both> (export both normal and event video).

NOTE: You will not be allowed to access the <Select Events> if the Data Type is set to <Normal>.

5.9.6 Export Format

The item is for selecting exporting video format. The options are <DRV> and <AVI>.

The *.drv file can only be played back with Dyna**Remote**™ and Dyna**Player**™ and multiple camera video can be played from one file. The *.avi file can be played back with media players. Note that if multiple channels are exported, each channel is exported to a separate file.

5.9.7 Digital Signature

The Digital Signature function enables user to export video clip with the unit's unique signature key. It aims to authenticate a video clip exported from the unit. User can export video clip with or without a digital signature file (*.sig). Set the item to <YES> to export with the signature file, or <NO> exports without the signature file.

Make sure that you have an external storage device, such as a USB Hard Drive or USB ThumbDrive®, available and connected to the appropriate port for export.

For more information on verifying digital signature, see Appendix D: Verifying Digital Signature.

www.dynacolor.com.tw
All rights reserved

5.9.8 Erase Disc

This function is used to remove information found on a CD-RW or DVD+RW disk prior to exporting new information to the drive. Select <YES> and press ENTER to start deleting data.

5.9.9 Begin Export

Select <YES> and press ENTER to start exporting.

5.10 Shutdown

The item is used to shut down or reboot the unit. If you must shut down the Dyna**Guard**™ 200 series for any reason, please use the proper shut down and power up procedures to avoid damage to your unit.

Select <Shutdown> in Main menu and press ENTER to access the Shutdown menu, which displays as follows.

Shutdown
1. Power Off 2. Reboot

Power Off

Select this item to shut down the unit. Do not remove the power during shut down until the message "You can safely turn off DVR now!" displays.

Reboot

Select this item to reboot the unit. The color bar and system checking information are displayed on the monitor until the unit is completely restarted.

All rights reserved

Appendix A: Technical Specifications

All specifications are subject to change without notice.

Specifications		
Compact size	Half rack mountable size	
Video Operation	Triplex operation	
Operating system	Embedded	
Compression algorithm	MPEG-4	
Video Input	4, 8 Channels, Vp-p/75 ohm	
Main Monitor Output	1 BNC, S-video, Vp-p/75 ohm	
Call Monitor Output	1 BNC	
VGA Output	Yes	
Alarm Input	4 alarm inputs	
Alarm Output	2 relay outputs	
Video Loss Detection	Automatic	
Covert camera	Yes	
Display options	1, 2x2, 3x3	
View live or playback while recording	Yes	
Live update speed	4CH: 120 pps (NTSC) / 100 pps (PAL) 8CH: 240 pps (NTSC) / 200 pps (PAL)	
Live image resolution	720x480 (NTSC) / 720x576 (PAL)	
Record resolution & Record speed	NTSC	PAL
	(selectable) 720x480@30pps 720x240@60pps 360x240@120pps	(selectable) 720x576@25pps 720x288@50pps 360x288@100pps
Audio capability	2 channels record & playback, 8 KHz/16 bits, ADPCM Compression	
Image size	1K ~ 13K Byte/picture	
Pre-alarm recording	5 to 30 sec	
Motion detection	Yes	
Record modes	Linear/ circular	
Internal Storage	x2 ATA 133 HDD / UDMA133 / IDE HDD	
External off-line storage	USB 2.0 port (x3) or IEEE-1394 (FireWire®) for ThumbDrive®, CD/RW, DVD dual	
Dome Control Protocols	DynaColor, Pelco P, Pelco D, AD422.	
Ethernet	10/100M, RJ45, DHCP / PPPoE / DDNS full support	

www.dynacolor.com.tw
All rights reserved

RS232C	D-Sub 9 pin female
RS485	Terminal block
Authentication	Digital signature on export
Remote Software	Dyna**Remote**™ software included
Operating Temperature	0~40 °C
Unit Dimension (WxHxD)	210x88x330 mm (8.3x3.4x13 inches)
Unit Weight	Approximate 4 kg (8.8 lbs)
Shipping Dimension (WxHxD)	350x180x420 mm (13.8x7.1x16.5 inches)
Shipping Weight	Approximate 5 kg (11 lbs)
Power Consumption & Input	AC 100~240V, 35W, 50~60Hz

All rights reserved

Appendix B: Record Duration

The record duration relates to recording rate, image quality and HDD capacity. Refer to the following table.

NOTE: Record duration times are based on actual tests and represent average file sizes. Performance may vary depending on specific installations and use. Audio recording requires 8 KB per second (or 0.7 GB per day) for data storage.

Please refer to our recording time calculator on the DynaColor website for other possible calculations. **http://www.dynacolor.com.tw** → Support→Tools

Number of Days of Recording @30PPS (without Audio)

Recording Rate		Recording Picture Quality Mode									
Total Images Per Second NTSC	Total Images Per Second PAL	Extended		Basic		Normal		High		Superior	
		NTSC (5 KB)	PAL (5 KB)	NTSC (7 KB)	PAL (7 KB)	NTSC (9 KB)	PAL (9 KB)	NTSC (11 KB)	PAL (11 KB)	NTSC (13 KB)	PAL (13 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

Number of Days of Recording @60PPS (without Audio)

Recording Rate		Recording Picture Quality Mode									
Total Images Per Second NTSC	Total Images Per Second PAL	Extended		Basic		Normal		High		Superior	
		NTSC (3 KB)	PAL (3 KB)	NTSC (5 KB)	PAL (5 KB)	NTSC (7 KB)	PAL (7 KB)	NTSC (9 KB)	PAL (9 KB)	NTSC (11 KB)	PAL (11 KB)

www.dynacolor.com.tw
All rights reserved

160 GB Internal Storage											
60	50	9.5	11.4	5.9	7.1	4.3	5.1	3.3	4.0	2.7	3.3
30	25	19.0	22.8	11.8	14.1	8.5	10.2	6.7	8.0	5.5	6.6
15	12.5	38.0	45.6	23.5	28.2	17.0	20.4	13.3	16.0	11.0	13.2
7.5	6.25	76.0	91.2	47.0	56.4	34.1	40.9	26.7	32.0	21.9	26.3
300 GB Internal Storage											
60	50	17.8	21.4	11.0	13.2	8.0	9.6	6.3	7.5	5.1	6.2
30	25	35.6	42.7	22.0	26.5	16.0	19.2	12.5	15.0	10.3	12.3
15	12.5	71.2	85.5	44.1	52.9	31.9	38.3	25.0	30.0	20.6	24.7
7.5	6.25	142.5	170.9	88.2	105.8	63.9	76.6	50.1	60.1	41.2	49.4
600 GB Internal Storage											
60	50	35.6	42.7	22.0	26.5	16.0	19.2	12.5	15.0	10.3	12.3
30	25	71.2	85.5	44.1	52.9	31.9	38.3	25.0	30.0	20.6	24.7
15	12.5	142.5	170.9	88.2	105.8	63.9	76.6	50.1	60.1	41.2	49.4
7.5	6.25	284.9	341.9	176.4	211.6	127.7	153.3	100.1	120.1	82.3	98.8

Number of Days of Recording @120PPS (without Audio)

Recording Rate		**Recording Picture Quality Mode**									
Total Images Per Second NTSC	Total Images Per Second PAL	**Extended**		**Basic**		**Normal**		**High**		**Superior**	
		NTSC (1 KB)	PAL (1 KB)	NTSC (3 KB)	PAL (3 KB)	NTSC (5 KB)	PAL (5 KB)	NTSC (7 KB)	PAL (7 KB)	NTSC (9 KB)	PAL (9 KB)
160 GB Internal Storage											
60	50	24.7	29.6	9.5	11.4	5.9	7.1	4.3	5.1	3.3	4.0
30	25	49.4	59.3	19.0	22.8	11.8	14.1	8.5	10.2	6.7	8.0
15	12.5	98.8	118.5	38.0	45.6	23.5	28.2	17.0	20.4	13.3	16.0
7.5	6.25	197.5	237.0	76.0	91.2	47.0	56.4	34.1	40.9	26.7	32.0
300 GB Internal Storage											
60	50	46.3	55.6	17.8	21.4	11.0	13.2	8.0	9.6	6.3	7.5
30	25	92.6	111.1	35.6	42.7	22.0	26.5	16.0	19.2	12.5	15.0
15	12.5	185.2	222.2	71.2	85.5	44.1	52.9	31.9	38.3	25.0	30.0
7.5	6.25	370.4	444.4	142.5	170.9	88.2	105.8	63.9	76.6	50.1	60.1
600 GB Internal Storage											
60	50	92.6	111.1	35.6	42.7	22.0	26.5	16.0	19.2	12.5	15.0
30	25	185.2	222.2	71.2	85.5	44.1	52.9	31.9	38.3	25.0	30.0
15	12.5	370.4	444.4	142.5	170.9	88.2	105.8	63.9	76.6	50.1	60.1
7.5	6.25	740.7	888.9	284.9	341.9	176.4	211.6	127.7	153.3	100.1	120.1

All rights reserved

Appendix C: Dial-up Connections via Modem

A dial-up modem connection allows user to use the remote software and receive alarm notice without an internet connection. Following are the steps for establishing the connection between a Dyna**Guard**™ 200 series unit and a PC.

Establishing Dial-in Connection

The Dial-in function enables user to establish dial-up modem communication to and from Dyna**Guard**™ 200 series unit for the remote software use. Follow the description to set up your DVR and PC.

DVR Configuration:

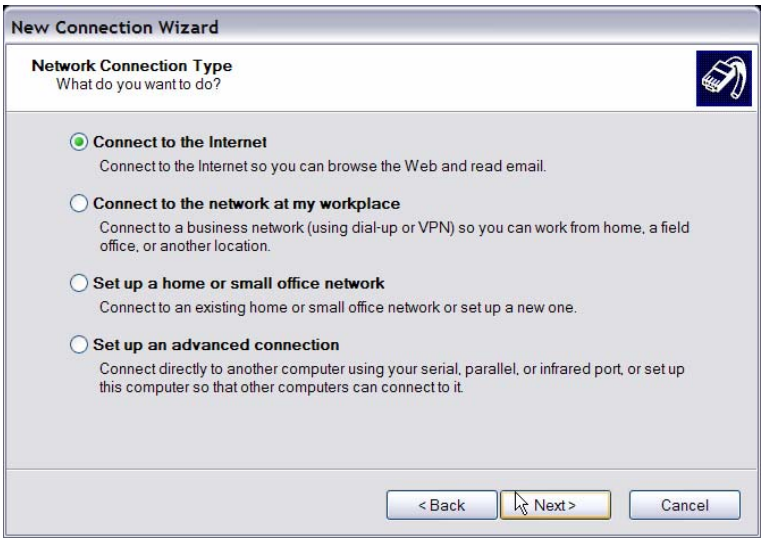
- Connect an USB modem to the USB socket and connect a working phone line to the modem.
- Press MENU and input the Administrator password to access the OSD Main menu. Select <Network Setup> and then <Dial-in Setup> to set up the Dial-In settings, including Dial-in Account and password, etc.
- For more information on dial-in settings, see section 5.1.6.3 Dial-in Setup.

PC Configuration:

- Click <Start>, <My Network Places>, <View Network Connections> and then select <Create New Connection>. The New Connection Wizard is displayed. Click <Next> to continue.

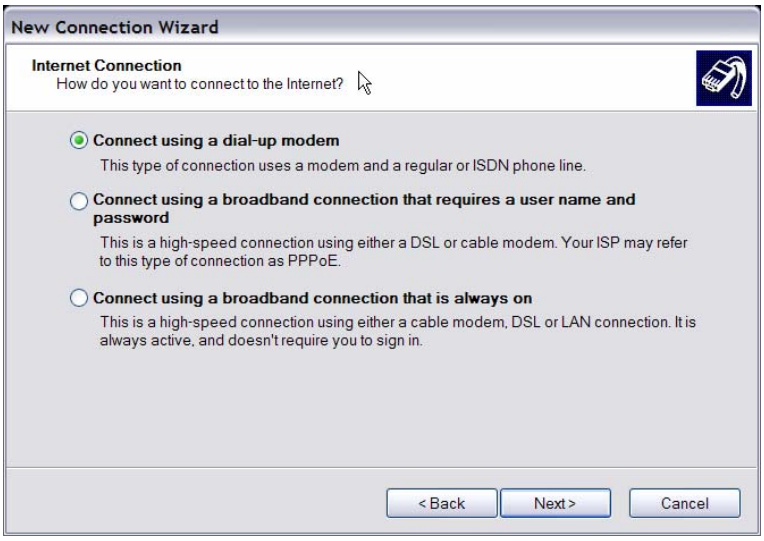
- Set up the network connection type. Select <Connect to the Internet> and click <Next> to continue.

www.dynacolor.com.tw
All rights reserved



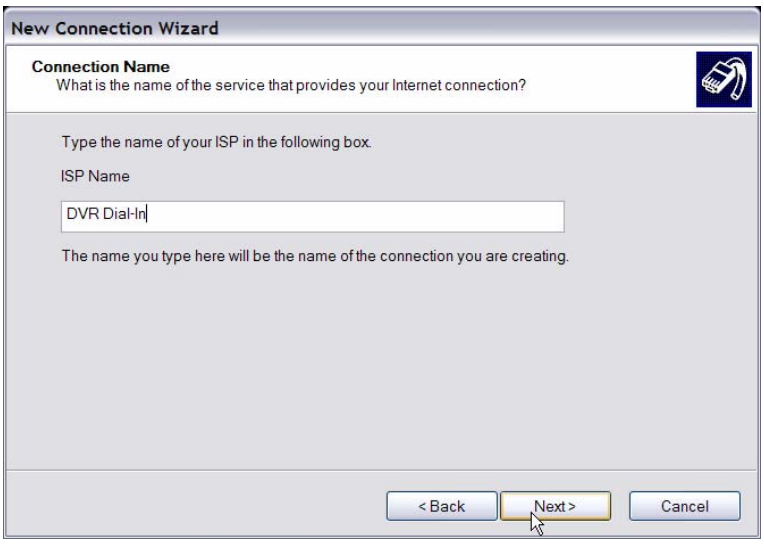
- Select <Set up my connection manually> and click <Next> to continue.

- Select <Connect using a dial-up modem> to connect to the internet through phone line and a modem. Click <Next> to continue.

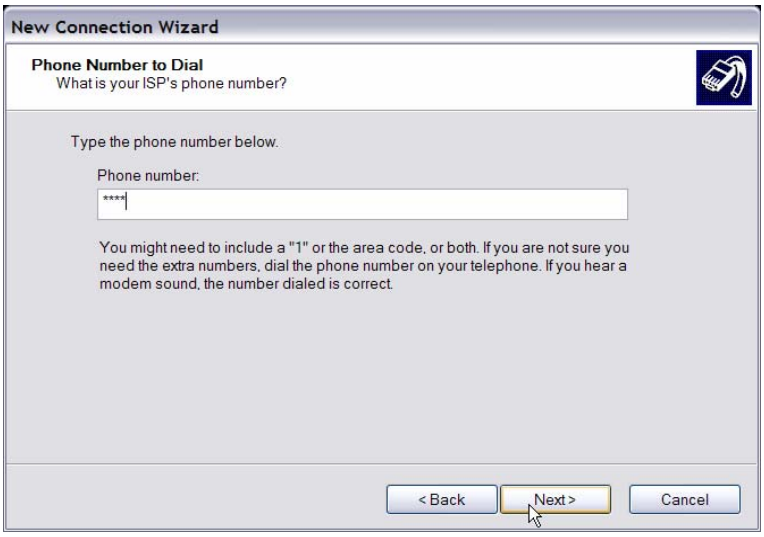


All rights reserved

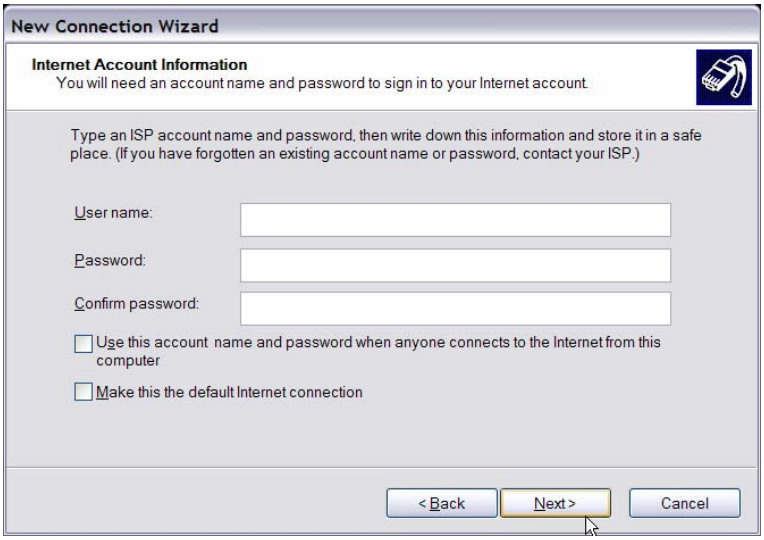
- Type the name of the connection you are creating.



- Enter the phone number of the modem that is connected to the unit.



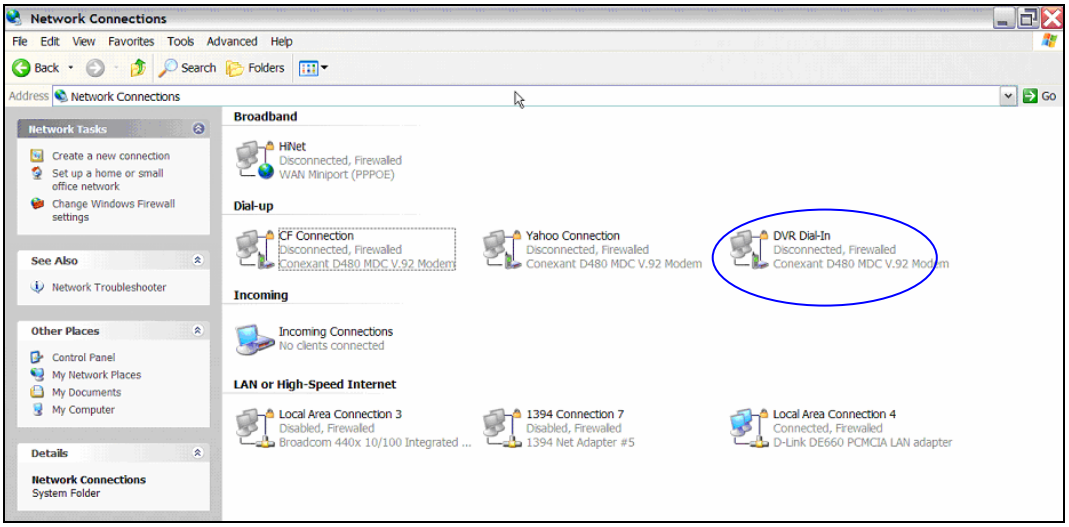
- Enter the Username and Password that is set in the Dial-in Setup menu.



www.dynacolor.com.tw
All rights reserved

- Click <Finish> to complete the dial-in connection.

- Now the dial-in connection is established.



Establishing Dial-out Connection

The Dial-out function enables user to establish dial-up modem communication to and from Dyna**Guard**™ 200 series unit for remote notification use. Follow the description to set up your DVR and PC.

DVR Configuration:

- Connect an USB modem to the USB socket and connect a working phone line to the modem.
- Press MENU and input the Administrator password to access the OSD Main menu. Select <Network Setup> and then <Dial-out Setup> to set up the Dial-out settings.

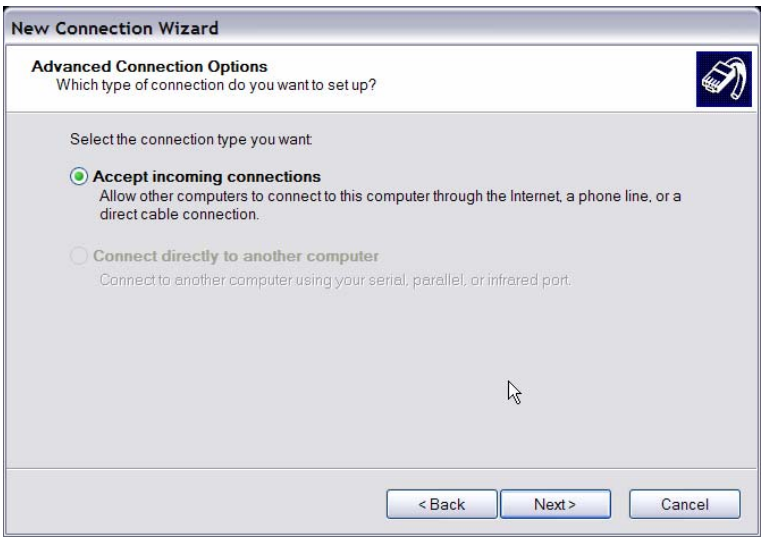
All rights reserved

- Select the <Email Address> in Network Setup menu to edit an e-mail address for alarm notification.
- Select <Event Setup> in Main menu and set the Email Notice function to <ON> (enabled).
- Exit the OSD menu and save the configuration.
- For more information on dial-out settings, see section 5.1.6.4 Dial-out Setup.

PC Configuration:

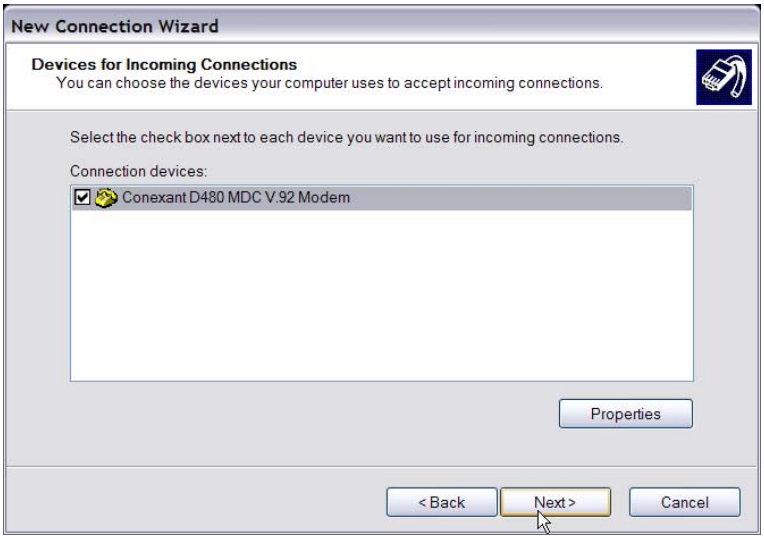
- Click <Start>, <My Network Places>, <View Network Connections> and then select <Create New Connection>. The New Connection Wizard is displayed. Click <Next> to continue.

- Set up the network connection type. Select <Set up an advanced connection> and then <Accept incoming connections>. Click <Next> to continue.

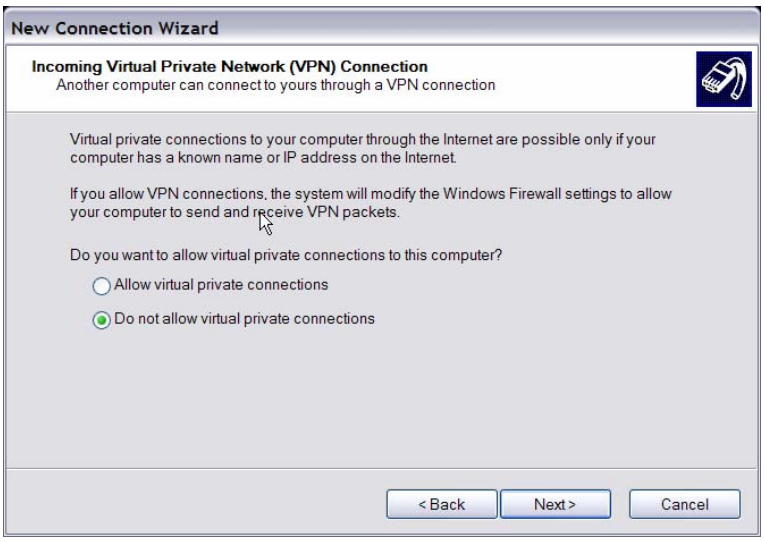


www.dynacolor.com.tw
All rights reserved

- Choose the modem device that will be used by the PC and click <Next>.

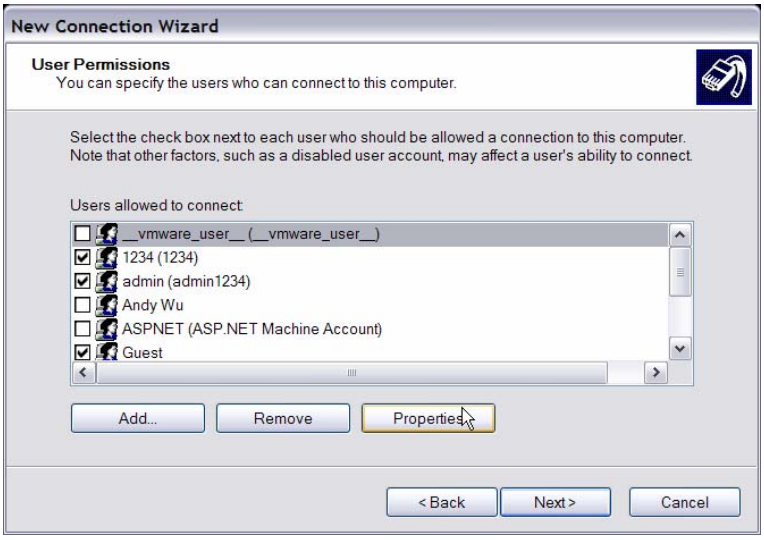


- In Incoming VPN Connection menu, choose <Do Not allow virtual private connections> and click on <Next>.

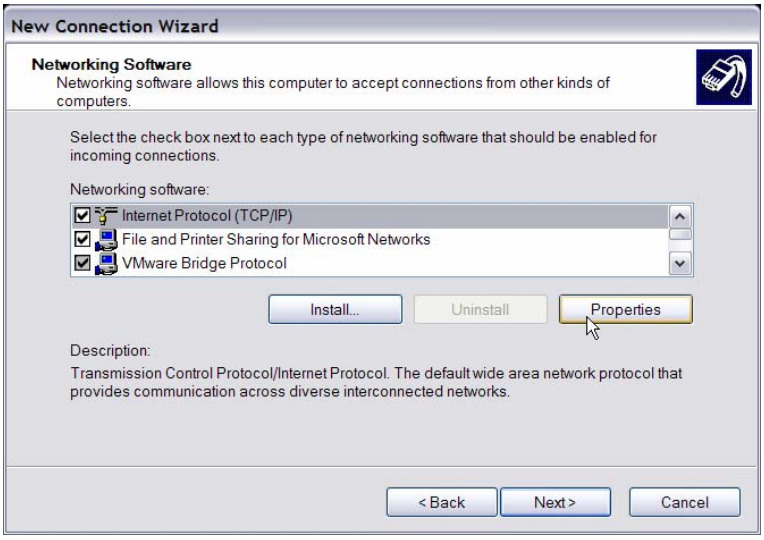


- In User Permission menu, select the users that will be using this connection. If needed, add a new user with the same user password that is set up in Dial-out Setup menu in local DVR. When done, click <Next> to continue.

All rights reserved

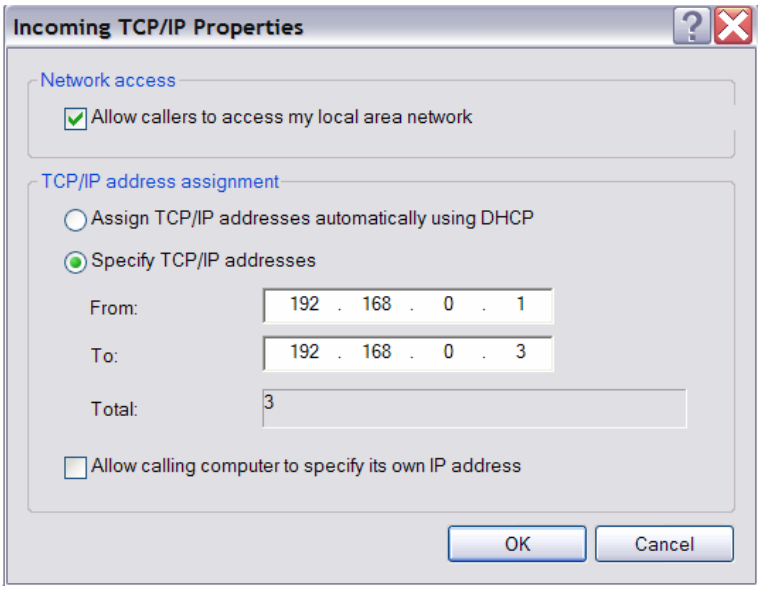


- In Networking Software menu, select <TCP/IP> and click on <Properties>.



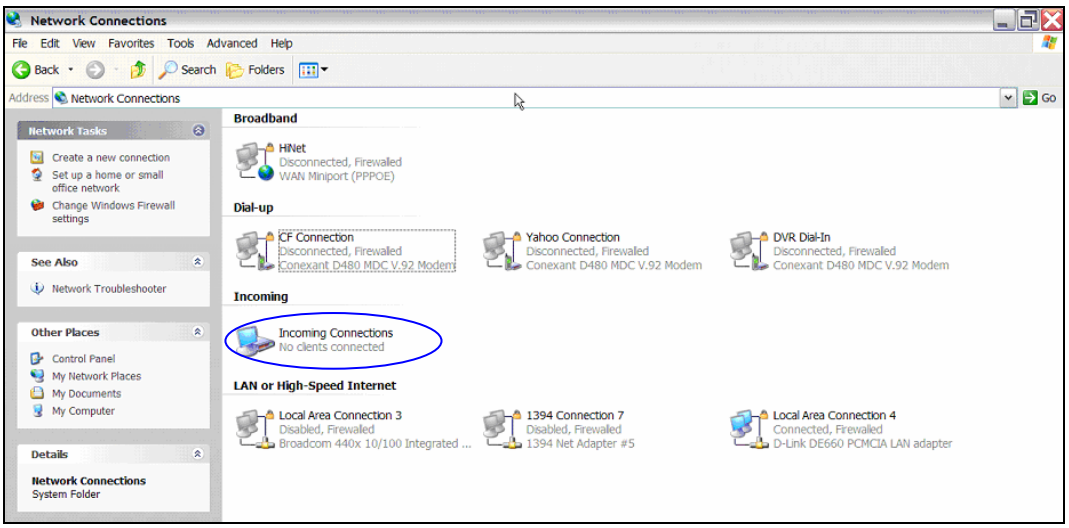
- In TCP/IP address assignment, if the PC has DHCP server, then choose <Assign TCP/IP addresses automatically using DHCP>, else choose <Specify TCP/IP addresses> and enter the range of IP addresses that you wish to use. Once done, click <OK> to confirm and back to Networking Software menu. Click on <Next> to continue.

www.dynacolor.com.tw
All rights reserved



- Click <Finish> to complete the process.

- The Incoming connection is established.



All rights reserved

Appendix D: Verifying Digital Signature

The digital signature aims to authenticate a video file exported from the unit. Follow the description to export video with digital signature and verify the digital signature.

To export recorded video with digital signature:

To export recorded video with digital signature to a USB hard drive or CD-RW drive / DVD+RW drive, follow these steps.

- In <Video Export> menu, select copy device, data type, expected channel and start/end time, or event video clips.
- Set the <Digital Signature> function to <YES>.
- Start exporting process by setting <Begin Export> to <YES>.

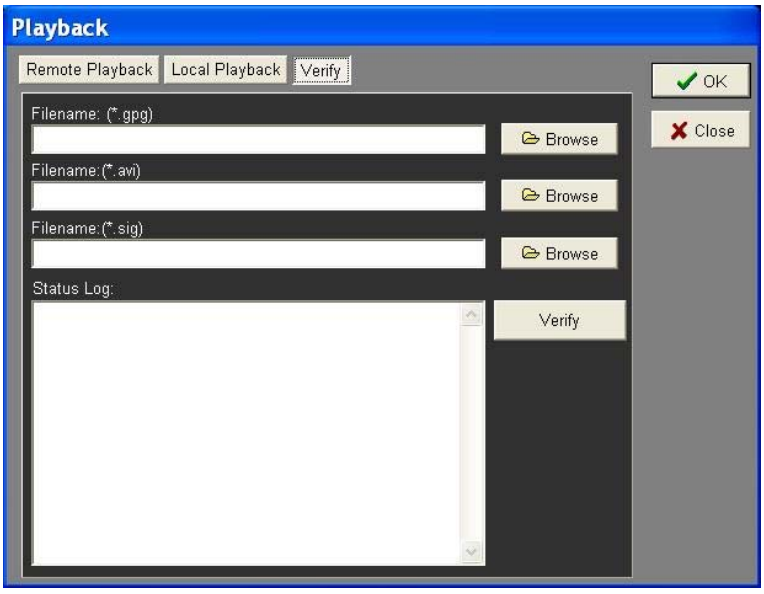
Video Export	
1. Select Device	
2. Select Ch:	CH1 CH2 CH3 CH4
3. Start Time	2005/03/19 AM 07:50:05
4. End Time	2005/03/28 PM 03:09:18
5. Select Events	
6. Data Type	Normal
7. Digital Signature	NO
8. Erase Disc	NO
9. Begin Export	NO

Each recorded video will be exported into four files with different filenames, including *.gpg, *.avi, *.sig and readme.txt.

To verify the exported recorded video:

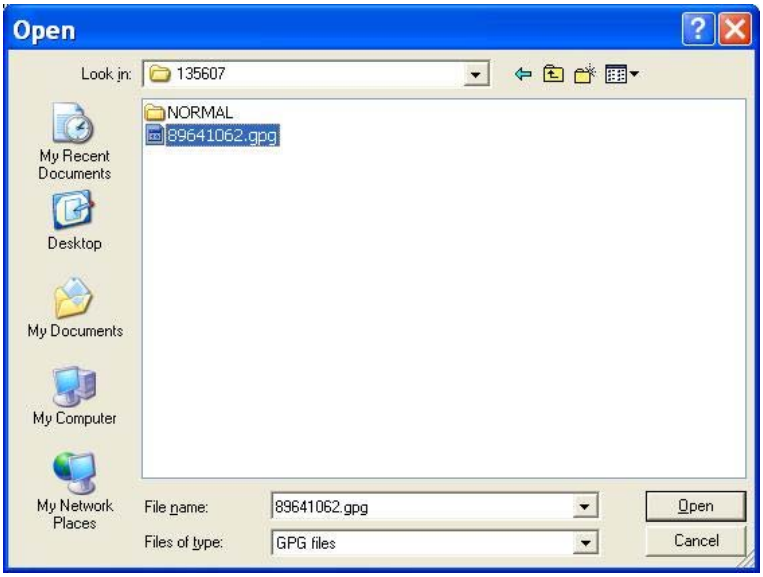
Following are the procedures for digital signature verification.

- Start your Dyna**Remote**™ and click <Play> on the main window tool bar.
- Click <Verify> tab to display the Verify window.

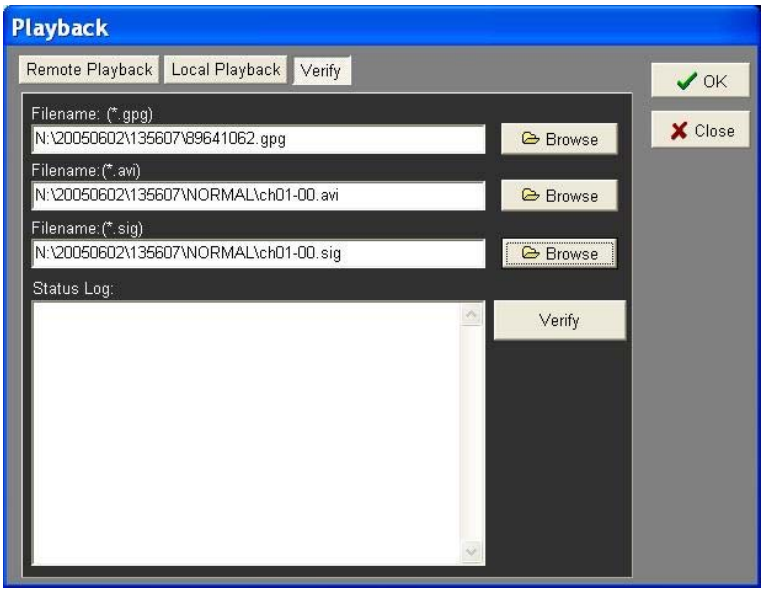


www.dynacolor.com.tw
All rights reserved

- Click <Browse> to select the *.gpg, *.avi, *.sig files respectively, which belong to the exported video you want to authenticate.

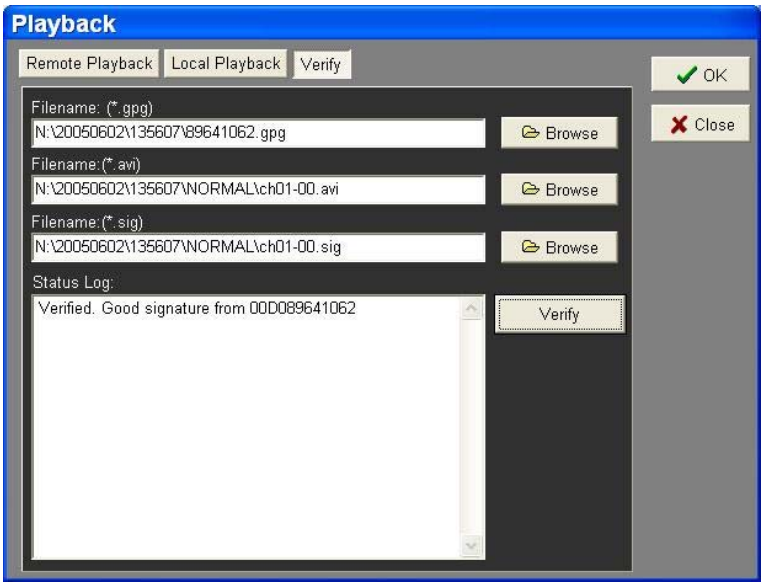


- Click <Verify> to start verifying digital signature.

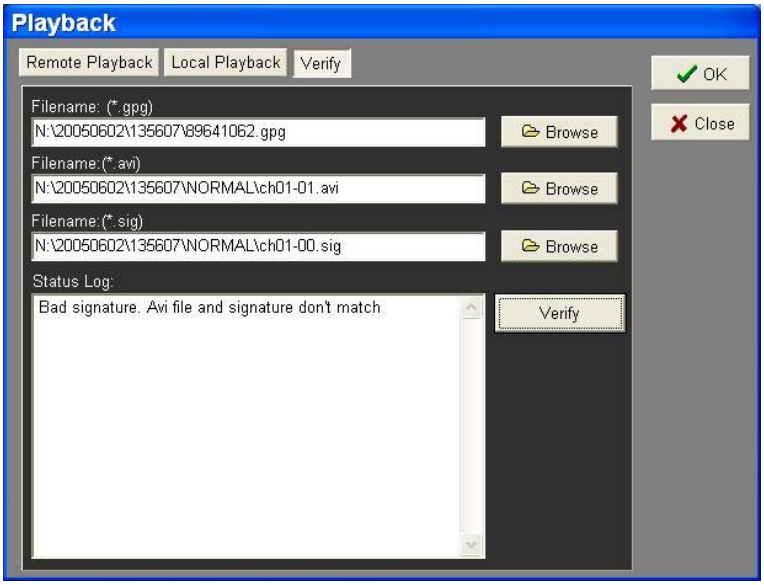


- The result of verify shows in the <Status Log> field. It returns a GOOD or BAD signature result. A GOOD signature indicates the exported clip has not been altered.

All rights reserved



<GOOD> Signature



<BAD> Signature

www.dynacolor.com.tw
All rights reserved

All rights reserved

1. Overview

Dyna**Remote**™ is a remote browser-based software application designed to operate with Dyna**Guard**™ 200 series products. Using the software, users are allowed to view live and recorded video, and also to configure Dyna**Guard**™ 200 series units remotely via a LAN, WAN, Internet on your personal computer.

The Dyna**Guard**™ 200 series unit automatically downloads the Dyna**Remote**™ plug-ins to the connected PC when you connect to Dyna**Guard**™ 200 series unit by entering the IP address of the unit in the address field on the browser.

The tasks can be performed with Dyna**Remote**™ are listed below:

- Remote viewing of live / recorded video.
- Remote setup of Dyna**Guard**™ 200 series unit.
- Remote control of dome cameras.
- Alarm notification from the Dyna**Guard**™ 200 series unit.
- Up to five connections to one Dyna**Guard**™ 200 series using Dyna**Remote**™, including one Administrator and four User operators.

www.dynacolor.com.tw
All rights reserved

2. System Requirements

Items	Minimum Requirements
Personal Computer	Pentium-3 600 MHz processor (Pentium Celeron or Pentium-4 1.5GHz processor preferred). RAM 256 MB minimum Hard Drive 20 MB available for software installation
Operating System	Windows XP, 2003 Windows 2000
Web Browser	Microsoft Internet Explorer version 6.0 or above
Monitor	The minimum monitor screen resolution requirement is 1024 x 768 with 16-bit color.
Video Card	XVGA with 16 MB video RAM
Network Card	10Base-T (10 Mbps) or 100Base-TX (100 Mbps) operation; must match the network configuration

3. Getting Start of Installation

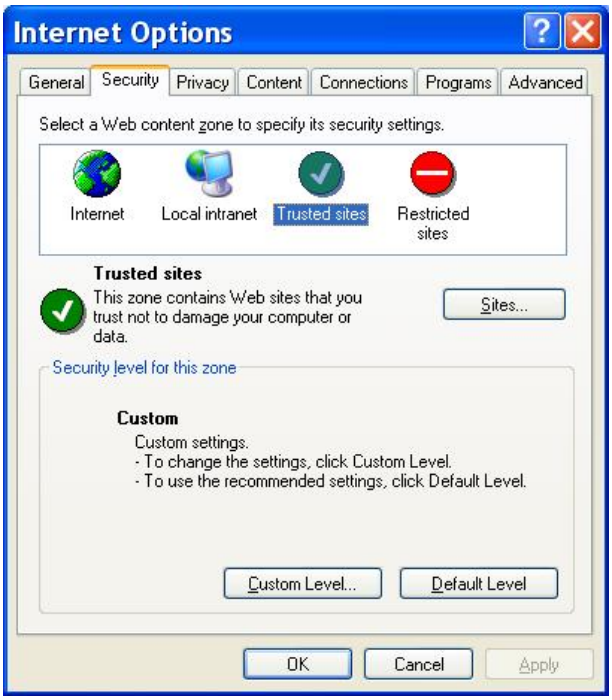
Refer to the following description to install the Dyna**Remote**™ remote control software.

3.1 Changing Internet Settings

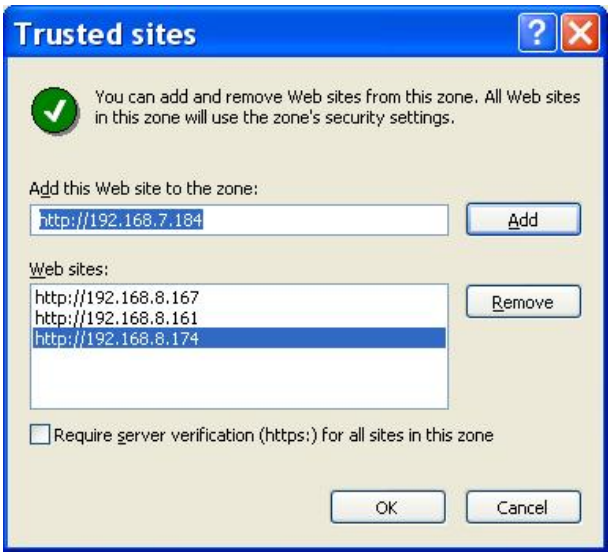
The PC you want to operate with Dyna**Remote**™ should be set to accept ActiveX plug-ins. Please follow the steps to set the Internet security settings appropriately.

- Before you operate the remote software, please check the IP address of your Dyna**Guard**™ 200 series unit. To check the IP address, press MENU key on the unit and enter password to access OSD Main menu; select <System Setup>, <Network Setup>, then <LAN/PPPoE Setup> to check the IP.
- Start the IE; you may start it either by clicking on the desktop icon, or by using the Start menu to access it.
- Select <Tools> from the main menu of the browser, then <Internet Options>, and then click the <Security> tab.
- Select <Trusted sites> and click <Sites> to specify its security setting.

All rights reserved

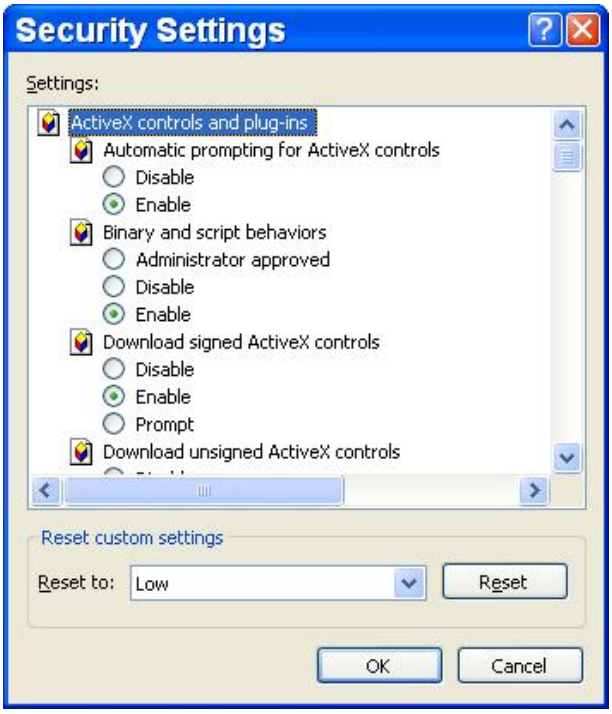


- Disable Require server verification (https:) for all sites in this zone. Type the IP address of the unit in field and click <Add> to add this web site to the zone.



- Click <OK> to confirm the setting and close Trusted sites dialog.
- In the Security Level area, click <Custom Level>. The Security Settings screen is displayed.

www.dynacolor.com.tw
All rights reserved



- Under <All ActiveX controls and plug-ins>, set all items to <Enable> or <Prompt>.
- Click <OK> to accept the settings and close the <Security> screen.
- Click <OK> to close Internet Options dialog.

Now, you can continue with the rest of the Dyna**Remote**TM installation.

3.2 Installing Remote Software

Start the browser to initiate the installation of Dyna**Remote**TM on your personal computer. You can save the IP address of the remote unit as a Favorites item in your web browser to have easy access next time.

- Start the IE; you may start it either by clicking on the desktop icon, or by using the Start menu to access it.
- Enter the IP address of your Dyna**Guard**TM 200 series unit in the address field where is at the top of the browser.
- The ActiveX controls and plug-ins dialog will show twice for confirmation, click <YES> to accept ActiveX plug-ins. The Dyna**Remote**TM plug-ins will be downloaded and installed on your PC automatically when the connection is successfully made.

NOTE: Do not enter any leading 0 characters in the address, for example, "192.068.080.006" should be entered as "192.68.80.6". If

All rights reserved

the default trigger port 80 is changed into another one, port 81 for example, you should enter the IP address as "192.68.80.6:81".

- A version check starts to verify whether Dyna**Remote**TM was installed already, and also check if the version is the same as that stored on that particular Dyna**Guard**TM 200 series unit. This process may take up to 30 seconds.
- When the software is completely downloaded, the Login Screen is now displayed.

3.2.1 Log in / Log off

You can log in using the <Admin> or <User> account. <Admin> accounts can perform unit configuration freely, while <User> account has more limitation on remote access to the unit.

One "Admin" and up to four "Users" can access a Dyna**Guard**TM 200 series unit at the same time. Furthermore, if the "Admin" account is currently accessing the unit OSD menu via front panel of the unit, then you cannot save information as an "Admin" on Dyna**Remote**TM. The Dyna**Guard**TM 200 series unit Admin account has priority.

www.dynacolor.com.tw
All rights reserved

The following steps demonstrate procedures to view video from remote unit:

- Start Dyna**Remote**™ by entering the IP Address of the remote Dyna**Guard**™ 200 series unit in the Address field of the browser. Or you may click on the Favorite entry for the unit (if the IP address of the unit has been set).
- Enter your Username and password. You can save password in the list if needed. The default usernames and passwords are listed as below.

	Login Type	
Default User name	admin	user
Default Password	1234	4321

- Click <OK> to log in to the remote Dyna**Guard**™ 200 series unit. The process may take a few seconds.
- If the connection is made successfully, the main window displays live video of the attached cameras.

If you close the IE browser, you log off the system at the same time.

3.2.2 Software Upgrades

When a new version of Dyna**Remote**™ software is available on your Dyna**Guard**™ 200 series unit, it will be automatically installed when you access the unit. Follow the steps to upgrade the software.

All rights reserved

- The message "Browser will be closed" is now displayed. Click <Yes> to accept to version upgrade.
- Start your IE again and enter the IP address of the remote Dyna**Guard**™ 200 series unit in the Address field of the browser; or, if you have set a Favorite for the unit address, click the Favorites entry for your unit.
- When the software is completely downloaded, the Login Screen will be displayed.

www.dynacolor.com.tw
All rights reserved

4. Basic Operation

When you successfully connect to a unit, the Dyna**Remote**TM main window displays as follows. The connected cameras of the remote unit will be listed on the left and an array of camera output windows displayed on the right of the main window.

To view the main window in full-screen view, press <F11> on your keyboard.

The features on Dyna**Remote**TM main window will be described in the following sections.

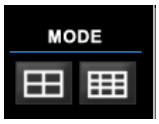
4.1 To View Live Video

You can view live video from the cameras attached to the remote unit by clicking <Live> button on the main window toolbar.

You can select desired display mode and assign wanted camera view to the window(s) after the view on the Dyna**Guard**TM series unit is displayed on the main window. To select wanted display mode and assign camera, refer to the following sections.

All rights reserved

4.1.1 Selecting Display Mode

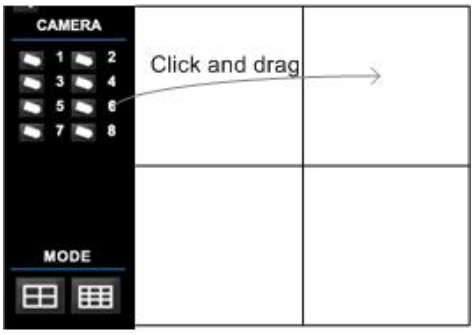


You can indicate the number of windows displayed on the main window. Click one of the display buttons on the left-bottom corner of the main window. You can select from 4 and 9 camera displays. To view certain window in full screen, you may either double-click on the wanted window, or click on the corresponding CAMERA button.

4.1.2 Assigning Camera to Windows

To assign a camera to a specific window in a multi-window display mode, follow the steps:

- Select the desired display mode first by pressing the corresponding MODE button.
- Click on the corresponding CAMERA number and drag the cursor onto the wanted display cameo. The assignment you make will not be saved when you exit Dyna**Remote**™.



NOTE: The CAMERA button displays with a dome icon when the corresponding camera is equipped with dome control.

www.dynacolor.com.tw
All rights reserved

4.1.3 Operating Cameras with Dome Control

Dyna**Remote**TM allows you to control and configure a dome camera remotely.

Click on any CAMERA button to view the camera in full screen display. Then click on a CAMERA button which is displayed with a dome icon. The Dome Control Panel (shown as right) will be displayed in the left side of the main window. The items on the dome control panel are described as follows.

Set Preset Points

This item is used to set up preset positions. Dyna**Remote**TM allow setting up to 255 preset positions with DynaColor, American Dynamics, and Pelco (Pelco P & Pelco D) domes.

Use Direction buttons to move dome camera to an appropriate position, and then click the button and choose wanted number from the pull-down list. The preset position is named as the selected number.

Go Preset Point

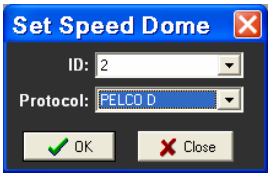
This item is used to call the camera preset point which was set up with the set preset function. Click and choose a number to call the preset for viewing.

A.F. (Auto Focus)

Click to focus the camera automatically for a clear view.

ID (Dome ID Setup)

Click for changing the dome ID and protocol. User privileges in not allowed to change the dome ID and protocol; Admin privileges is needed to access this function.



All rights reserved

Focus

Use to adjust the camera lens to focus on objects for a clear view. Click the adjusting buttons to modify the focus setting.

Iris

This item is used to open and close the iris to let more or less light into the camera. Click the adjusting buttons to modify the iris setting.

Zoom

You are allowed to zoom-in or zoom-out using the adjusting buttons. Zoom-in to view less area and zoom-out to view more area.

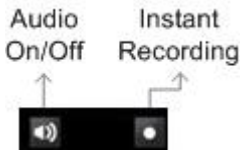
Direction Buttons

These buttons are used to pan and/or tilt the dome camera. Click the arrow button in the direction you want to view.

4.2 Instant Recording

The Instant Recording function allows you to record video quickly on your PC.

4.2.1 Recording Video Instantly



Follow the steps to start recording instantly:

- Click on the <Instant Recording> button.
- Select the destination you want to save the video.
- Click on the button again to stop recording.

NOTE: The instant recording video will be saved as *.drv file.

4.2.2 To Playback Instant Recording Video

Follow the steps to playback a video recording instantly:

- Click <Play> on main window toolbar and click <Local Playback> tab.
- Click <Open> to choose a file recorded.
- Click <OK> to start playing the recorded video.

www.dynacolor.com.tw
All rights reserved

4.3 To Playback Video

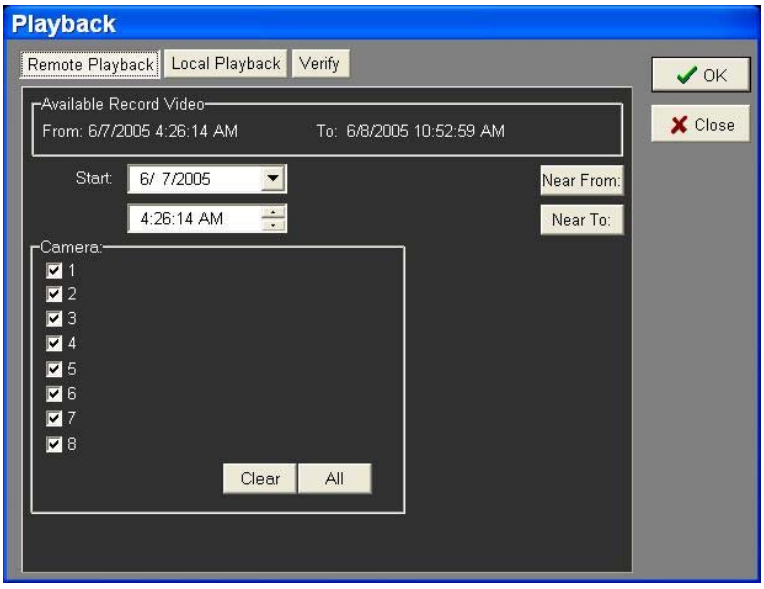
Dyna**Remote**TM allows you to view recorded video either from the remote Dyna**Guard**TM 200 series unit, or remote playback from the hard disk drive of your PC

To access the Playback screens, click <Play> button on the main window toolbar. There are three tabbed screens are contained in the Playback screens: <Remote Playback>, <Local Playback> and <Verify> tabs. The <Remote Playback> allows you to play back from a remote unit. The <Local Playback> enables you to play back a recorded video file with Dyna**Remote**TM that was downloaded and stored on the hard disk drive of your PC. The <Verify> allows verify the digital signature to authenticate a video file exported from the unit

The remote unit continues recording while you are playing back recorded video on your PC, either remote playback or local playback.

4.3.1 Playing Back Remote Video

To view remote video, click <Play> on the top of the main window toolbar, and then <Remote Playback> tab. The <Remote Playback> screen will then be displayed.



The <From> and <To> on the top of the screen display the date and time from which recorded video is available for playback.

All rights reserved

To play back remote video segments, follow these steps:

- Select the date and time of the segment to play back from the <Start> field. You can change the date and time either by typing desired numbers directly or using the arrow buttons.

  To type directly:
  Click on day, month and year of date field respectively, and type the desired numbers directly. Follow above steps to adjust the hour, minute and second of time field.

  To use the arrow buttons:
  Click on the arrow button next to the date field to display the calendar; then click the left and right arrow at the top of the calendar to change the date. Use up and down arrow in the right side of the time field to change to the wanted time.

  To click <Near From>:
  Click <Near From> button to set the date and time as the <From> time.

  To click <Near To>:
  Click <Near To> to set the date and time to five minutes ahead the <To> time.

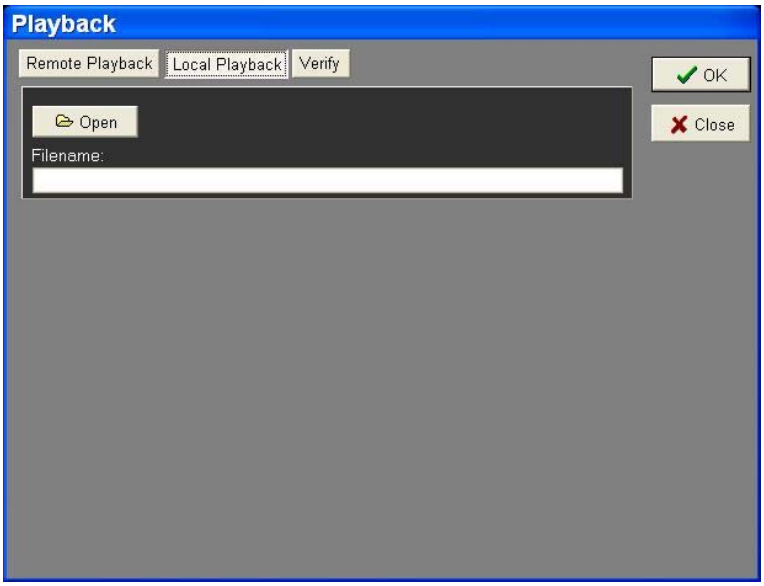
- Select the camera(s) you want to play back. Click <Clear> to clear all of the camera entry selections, and click <All> to select all of the camera entries.
- Click <OK> to start the operation, or click <Close> to abort.

4.3.2 To Playback Local *.drv Files

The <Local Playback> tab allows you to play back *.drv video files that stored on your PC's hard drive.

Click the <Local Playback> tab in the <Playback> screen for displaying downloaded video. The Local Playback screen is shown as below.

www.dynacolor.com.tw
All rights reserved



Follow below steps to play back a downloaded *.drv file with Dyna**Remote**TM.

- Click <Open> and the file selection screen is displayed.
- Select the *.drv video file to play back and click <OK>.
- Click <OK> in the <Local Playback> Screen to start the operation, or click <Cancel> to abort the playback.
- View the video playback using the Playback controls.
- After playback, click <Live> to return to live video.

4.3.3 To Playback Local *.avi Files

To play back the *.avi video files that you downloaded and stored on the PC's hard drive, use Windows Media player, or other media players, follow these steps:

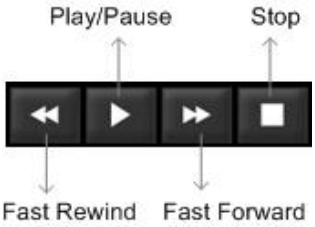
- Start your Windows Media Player, Real One player, or other media player from <Start> menu (or any other possible access).
- Select <File> and then <Open>.
- Select the wanted *.avi file, and then click <Open>.

NOTE: The *.avi video can be played back in single channel, full screen mode only, because the files stored for each channel are separated.

All rights reserved

4.3.4 Playback Controls

When playing back local or remote video, Dyna**Remote**^{TM} is in Playback Mode. The playback controls toolbar is on the main window, as shown in the following figure.



The Playback controls and indicators are described below.

Fast Rewind

Click to play the recorded video in reverse direction. Click repeatedly to select the rewind speed: 1x, 2x, 4x, 8x, 16x, or 32x.

Play / Pause

Click once to play the recorded video, click again to pause the playback.

Fast Playback

Click to play the recorded video forward. Click repeatedly to select the playback speed: 1x, 2x, 4x, 8x, 16x, or 32x.

Stop

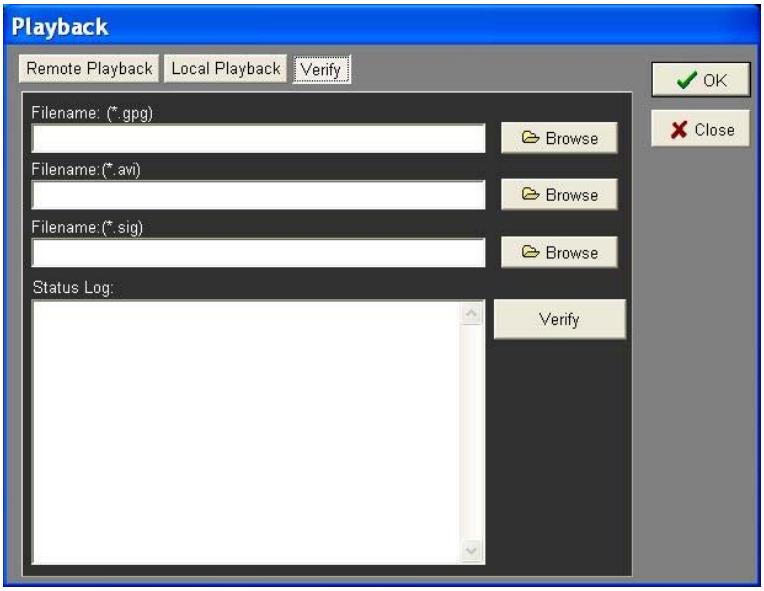
Stop playing the recorded video.

4.4 Verifying Digital Signature

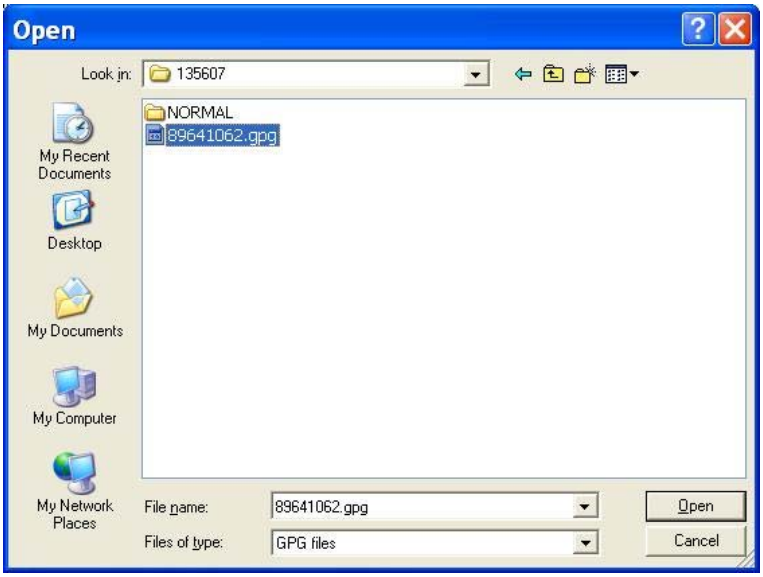
The digital signature aims to authenticate a video file exported from the unit. Follow the description to verify the digital signature.

- Click <Play> on the main window tool bar.
- Click <Verify> tab to display the Verify window.

www.dynacolor.com.tw
All rights reserved

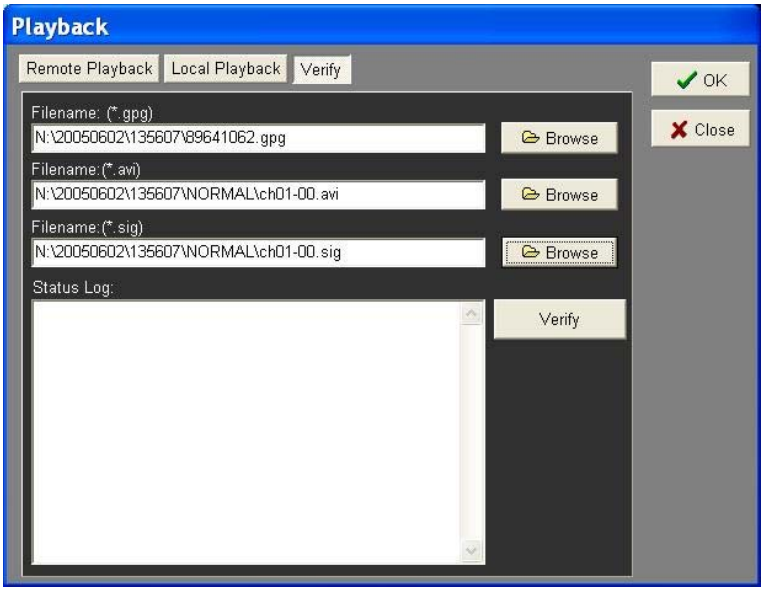


- Click <Browse> to select the *.gpg, *.avi, *.sig files respectively, which belong to the exported video you want to authenticate.

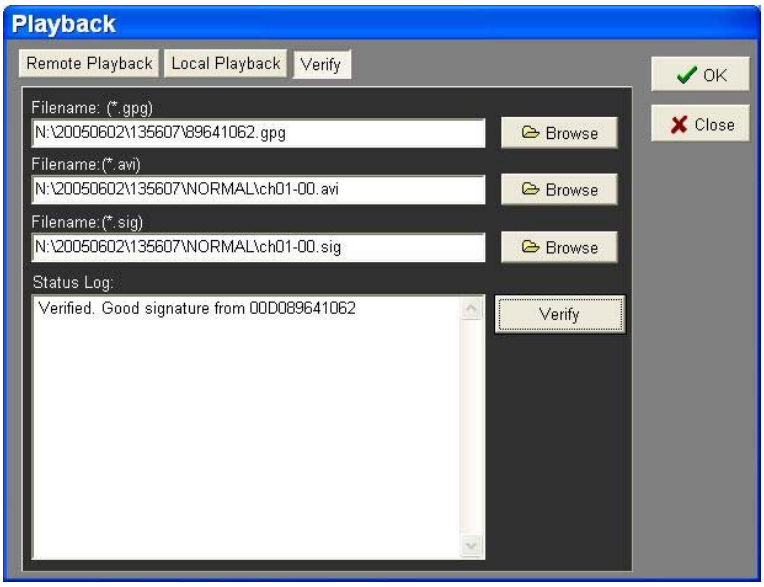


- Click <Verify> to start verifying digital signature.

All rights reserved



- The result of verify shows in the <Status Log> field. It returns a GOOD or BAD signature result. A GOOD signature indicates the exported clip has not been altered.

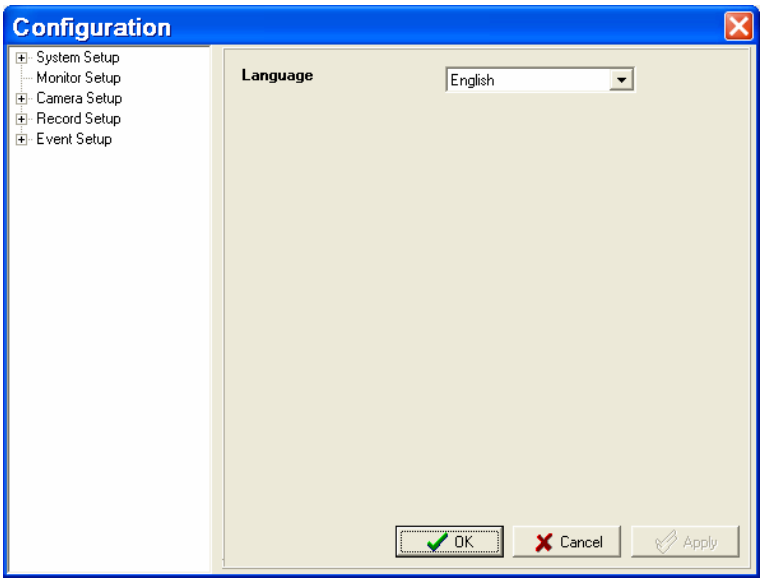


<GOOD> Signature

www.dynacolor.com.tw
All rights reserved

5. Configuring the Remote Unit

Click <MENU> button on the toolbar to configure a Dyna**Guard**TM 200 series unit remotely. The Configuration menu displays as below.



Configuration Menu

The Configuration menu contains a list of items that are used to configure Dyna**Guard**TM 200 series units remotely. The following subsections describe the configuration items and buttons used in the OSD menu.

NOTE: The settings in Configuration menu only apply to the unit.

The Administrator can perform unit configuration freely. If you log in Dyna**Remote**TM using User account, the most settings will be read only and cannot be configured.

NOTE: If an Administrator account is currently accessing the unit OSD setup menu, you are not allowed to save the configuration as an Admin on Dyna**Remote**TM. The Dyna**Guard**TM unit administrator account has priority.

The items in Configuration menu are described in the table below.

All rights reserved

Item	Description
System Setup	Configures the system related items on the remote unit, such as password, date/time and network settings.
Monitor Setup	Configures monitor-related items, such as brightness and saturation, etc.
Camera Setup	Configures camera titles and other camera-related items on the remote unit.
Record Setup	Configures record-related items on the remote unit, such as event and audio recording parameters.
Event Setup	Configures the way in which the remote unit handles events.

Buttons in Configuration Screens

The configuration screen contains several buttons that enable you to save and close the settings. These buttons are shown as below.

The functions of these buttons are described below.

- **<OK>**

  You can save just the settings in the section of the Configuration screen in which you are working, click <OK> to save the settings and close the Configuration screen.

- **<Cancel>**

  Click to close the screen without saving any changes.

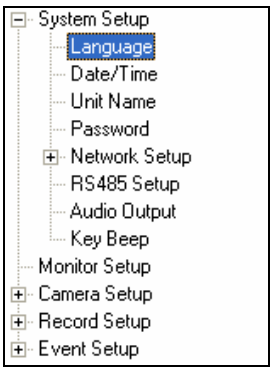
- **<Apply>**

  Click <Apply> to save all of the settings in the Configuration screen and apply them to the remote unit.

5.1 System Setup

The System setup screen allows user to set language, date/time, password, and network and RS-485 settings on the remote unit. Click <MENU> button on the main window toolbar, and expand the System setup menu by clicking the plus icon. The expanded System Setup menu displays as below.

www.dynacolor.com.tw
All rights reserved



Items in the System Setup menu are described as follows

5.1.1 Language

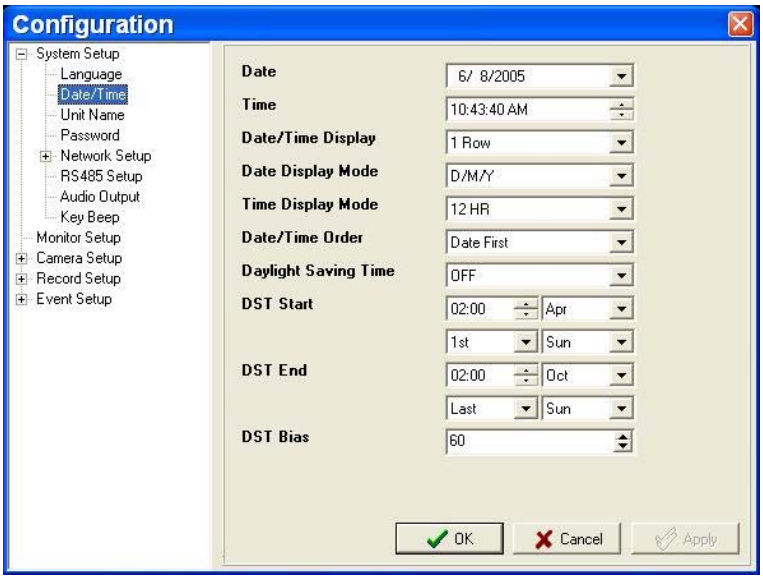
The Language item allows user to select the system language for OSD menu and screen messages. Language selection takes effect immediately when the selection is done.

NOTE: The selection only takes effect on the unit, but does not affect Dyna**Remote**TM language selection.

5.1.2 Date / Time

Click <Date/Time> to display the Date/Time menu (shown as follows). It allows user to configure the date/time related settings.

NOTE: The Date/Time Display, Date/Time Display Mode and Date/Time Order settings only apply to the remote unit.



All rights reserved

Date & Time

These items are used to set the date and time for the remote unit. Enter the date and time information into the fields using the keyboard directly, or use the pull-down list next to the <Date> and <Time> fields to select the desired date and time with the displayed calendar.

Date/Time Display

User can set the date and time information to display in one or two rows. The default is <1 Row>.

Date Display Mode

Users are allowed to set the display mode for the remote unit from the pull-down menu. The date is comprised of Year (Y), Month (M), and Day (D). The default display mode is <Y/M/D> in NTSC and PAL format.

Time Display Mode

You can set the remote unit's time format in 12 hour or 24 hour. The default setting is <24 HR>.

Date/Time Order

The item is used to set the order of Date/Time display to <Date First> or <Time First>.

Daylight Saving Time

The item is for those people who live in certain regions to observe Daylight Saving Time. Select <ON> to enable, or <OFF> to disable the function.

- **DST Start/End Time**
  The items are used to set the daylight saving duration. Enter the date and time information into the fields using the keyboard directly, or use the pull-down menu to select the desired date and time.

- **DST Bias**
  The item is used to set the amount of time to move forward from the standard time for daylight saving time. Available options are <30>, <60>, <90> and <120> minutes.

When you complete the settings, remember to take one of the following actions.

- Click <OK> to save the modified settings.

www.dynacolor.com.tw
All rights reserved

- Click <Apply > to save all modified settings set in the configuration menu.
- Click <Cancel> to abort and leave all settings unchanged.

5.1.3 Unit Name

The item is used to change the unit name using the keyboard directly.

5.1.4 Password

The Password menu allows administrator to change the password settings for accessing the unit. Click <Password> in System Setup menu to display the screen.

Enable Password

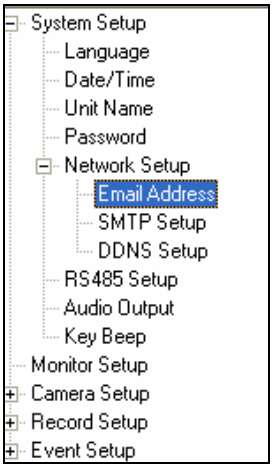
The item is used to determine if the password is required for accessing the OSD menu. Select <YES> to demand entering password when accessing the OSD menu; if not, select <NO>.

Load Factory Password

This item allows the administrator to reload the factory password in case that the administrator cannot remember or locate the password. There are three options to select from: <Admin> (reload the Admin password only), <User> (reload the User password only), and <All> (reload the Admin and User passwords). The factory password is 1234 for administrator and 4321 for user.

5.1.5 Network Setup

Expand the Network setup menu by clicking the plus icon. The expanded Network Setup menu displays as below.



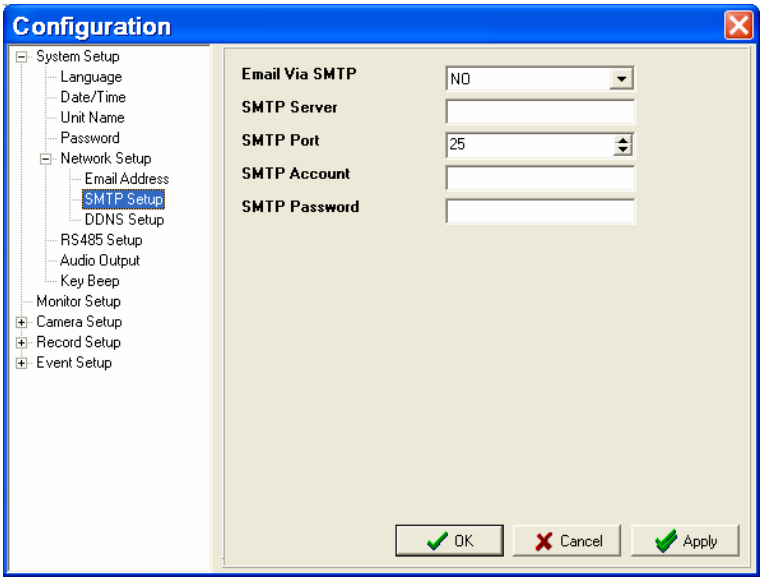
All rights reserved

Email Address

This item is used to edit the e-mail address where alarm event information will be sent. Enter the e-mail address directly using keyboard.

SMTP Setup

Click <SMTP Setup> to display the SMTP Setup menu. It allows user to configure the SMTP related settings.



- **Email via SMTP**

  The item enables user to determine if the unit sends e-mail via SMTP. Select <YES> to send e-mail via SMTP; if not, select <NO>.

- **SMTP Server**

  The item allows user to setup the SMTP server.

- **SMTP Port**

  The item is used to change SMTP port into another port, if necessary. SMTP usually is implemented to operate over Internet port 25. Click the UP and DOWN arrows in the box to adjust the value.

- **SMTP Account**

  The item allows user to setup the SMTP username.

- **SMTP Password**

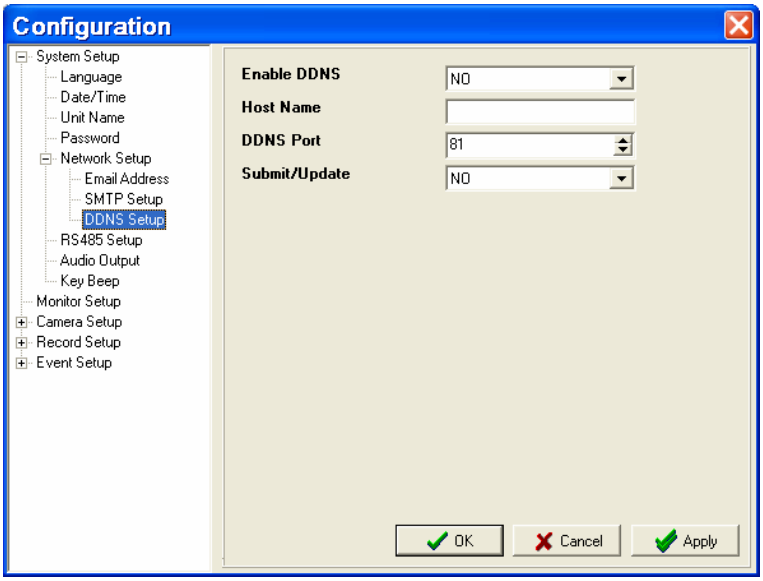
  The item allows user to setup the SMTP password.

DDNS Setup

Click <DDNS Setup> to display the DDNS Setup menu. It allows user to

www.dynacolor.com.tw
All rights reserved

configure the DDNS related settings.



- **Enable DDNS**

  The item is used to enable or disable the Dynamic Domain Name Service. Select <YES> to enable the service, or <NO> to disable.

- **Host Name**

  The item allows user to setup a domain name, which is used when entering the Dyna**Guard**TM 200 series unit through the internet on your remote PC.

- **DDNS Port**

  The item allows user to setup the port for DDNS. Click the UP and DOWN arrows in the box to adjust the value.

- **Submit/Update**

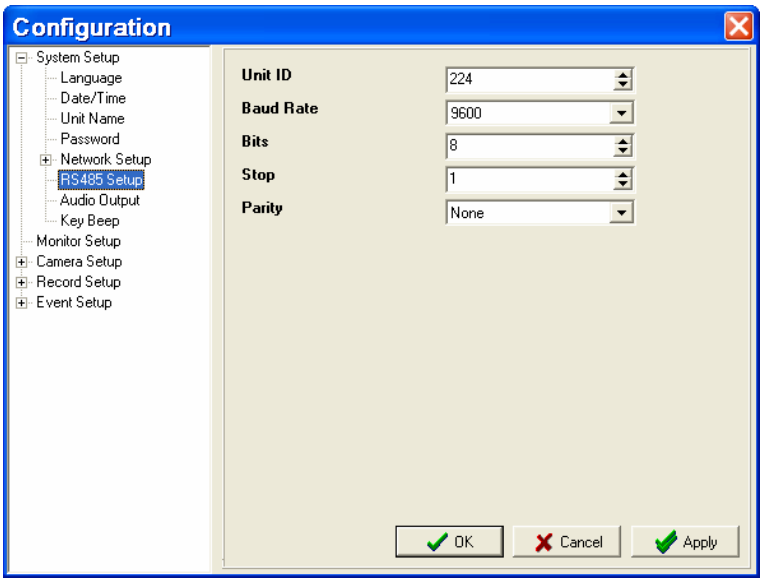
  When done, select <YES> to update the settings.

NOTE: If there are two Dyna**Guard**TM 200 series units set the same domain name, the later setting will not be submit successfully.

5.1.6 RS485 Setup

This menu allows setting up the parameters of the unit's RS-485 communications port. Click <RS485 Setup> to display the RS485 Setup menu.

All rights reserved



- **Unit ID**

  This item is used to change the RS-485 ID address of the unit. The ID is in the range of <1> to <255>. The default is <224>.

  NOTE: NO two units on the same bus should have the same RS485 ID.

- **Baud Rate**

  The item allows user to specify the baud rate for RS485 port. The options for associated with the protocol are <2400>, <4800>, <9600>, <19200> and <38400>. The default is <9600> baud.

- **Bits**

  User can specify the bits that are associated with the protocol. The available options are <6>, <7> and <8> bits. The default is <8> bits.

- **Stop**

  User can specify the stop bit associated with this protocol. Options are <1> and <2> stop bits. The default is <1> stop bit.

- **Parity**

  This item is used to specify the parity associated with this protocol. Options are <ODD>, <EVEN>, and <NONE>. The default is <NONE>.

www.dynacolor.com.tw
All rights reserved

5.1.7 Audio Output

The item is used to set the audio output mode. The available options are as follows.

<Live/Playback>

Select the item to export sounds of live image in live mode, and sounds of recorded video in playback mode respectively.

<Always Live>

Select the item to export always sounds of live image in both live and playback mode.

<OFF>

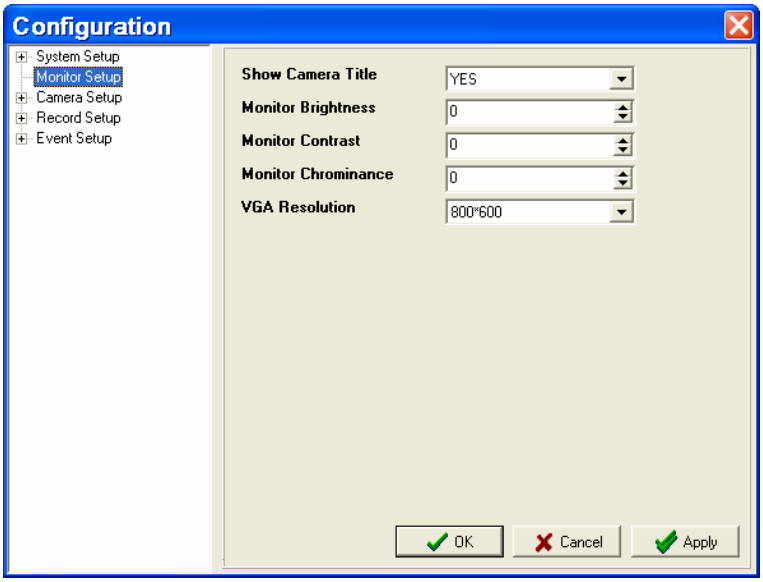
Select the item to disable the audio output function.

5.1.8 Key Beep

The item is used to enable or disable the unit's key tone. Select <YES> to enable the key tone, or <NO> to disable.

5.2 Monitor Setup

The Monitor Setup menu allows user to tune the quality of the displayed image. Click <MENU> button on the main window toolbar, and click on <Monitor Setup> to display the menu.



Items listed in Monitor Setup menu are described as below.

All rights reserved

Show Camera Title

This item allows user to choose whether to display the camera title on the screen or not. The default is <YES>, which displays the camera titles with the video from each camera.

Monitor Brightness

The function allows user to adjust the brightness / darkness of image displayed on the monitor. Click UP / DOWN arrows in the box to adjust the numeric value. The range of brightness values is <-128> to <127>.

Monitor Contrast

The function allows user to adjust the color contrast of image displayed on the monitor. The range of brightness values is <-128> to <127>.

Monitor Chrominance

The function allows user to adjust the chrominance of image displayed on the monitor. The range of brightness values is <-128> to <127>.

VGA Resolution

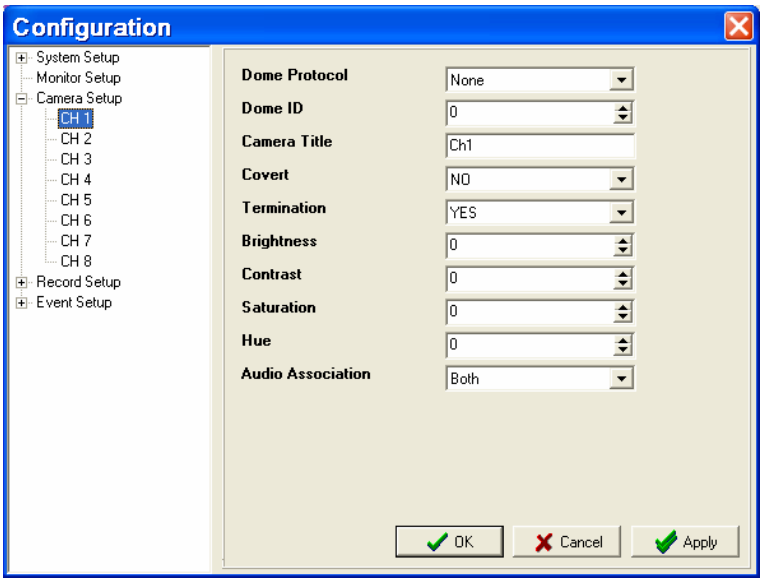
The item allows user to select appropriate VGA resolution for the VGA monitor connected to the unit. The options are <800×600> (default), <1024×768> and <1280×1024>.

NOTE: If the selected VGA resolution is too high for the monitor, the message "No Signal" will be shown on screen.

5.3 Camera Setup

The screen allows user to configure camera-related items on the remote unit. Click <MENU> button on the main window toolbar, click <Camera Setup> to expand the menu, and then select a channel to set its corresponding parameters.

www.dynacolor.com.tw
All rights reserved



Items listed in the menu are described as follows.

Dome Protocol

The item is for selecting the communications protocol associated with your dome camera. The available protocol includes <DynaColor>, <Pelco D>, <Pelco P>, <AD422> and <None> (default).

Dome ID

This item is used to assign an ID number to the selected dome camera. Note that ID number must match the ID address set by the dome.

Camera Title

The item allows user to set a title of camera connected to the unit (up to 11 characters). The title will be displayed both on the remote unit's main monitor and the Dyna**Remote**^{TM} main window.

Enter a camera title to the entry field using keyboard directly. By default, the titles of cameras are numbered from 1 through 8 respectively.

Covert

This function allows user to choose certain camera to be covert while the unit is continuing recording video. Choose a desired channel first and set the item <Covert> to <YES>. <YES>= (camera covert), <NO>= (camera non-covert). The default setting is <NO>.

All rights reserved

Termination

This item is used to enable / disable the 75Ω termination resistor inside the unit to adjust the image quality of each camera channel. <YES>= termination resistor enabled (default), <NO> = termination resistor disabled.

NOTE: If the camera loop-out connectors have not been used, the termination resistor should be enabled for appropriate signal termination.

Brightness

The item is for adjusting the image's brightness / darkness of the selected camera displayed on the monitor.

Contrast

The item is for adjusting the image's contrast displayed on the monitor of the selected camera.

Saturation

The item is for adjusting the image's saturation displayed on the monitor of the selected camera.

Hue

The item is for adjusting the image's hue displayed on the monitor of the selected camera.

Audio Association

The item is used to establish the connection between the selected camera and the two audio-in channels. Select <Both>, <Left Only>, <Right Only> or <None> to set up the connection.

5.4 Record Setup

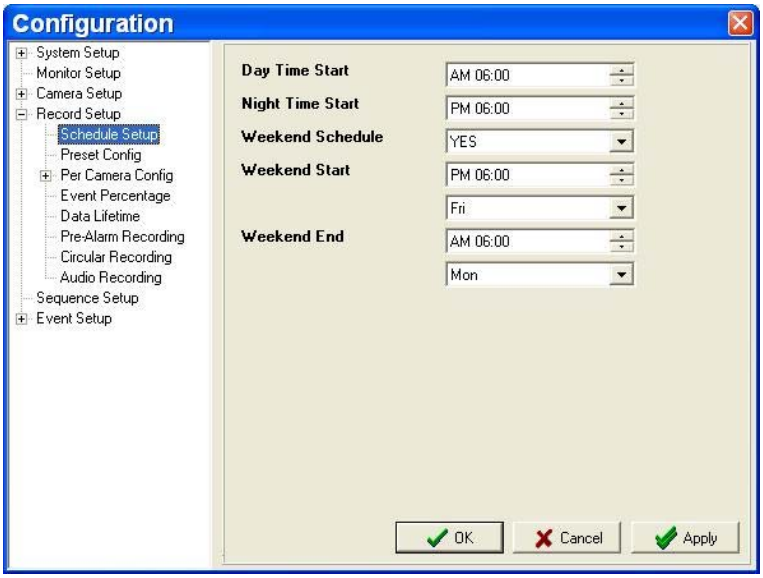
The Record Setup menu allows user to set record-related items, such as recording schedule, pre-set configuration, pre-alarm recording time, or circular / linear recording, etc. Click <MENU> button on the main window toolbar, and click the plus icon to expand Record Setup menu.

www.dynacolor.com.tw
All rights reserved

5.4.1 Schedule Setup

This submenu is used to set the day and night time, or weekend recording schedule.

The Night and Day schedules are used to define daytime and nighttime; the Weekend schedule is tailored for weekends and holidays.



- **Day/Night Time Start**

  The Day/Night Start Time determines the beginning of day/night recording time. Time is indicated in 1-minute increments. The time display format is based on the setting of Time Display Mode.

- **Weekend Schedule**

  The Weekend Schedule determines whether a weekend schedule is in effect. Choose <YES> to take effect the related weekend settings.

- **Weekend Start/End**

  The Weekend Start Time indicates the specific day and time that a weekend begins, for example, FRI 18:00. The Weekend End Time

All rights reserved

indicates the specific time and day that a weekend ends, for example, MON 06:00. Time is indicated in 1-minute increments.

Note that the value you have set indicates when the regular Day and Night scheduling ends, and Weekend recording begins.

5.4.2 Preset Configuration

The <Preset Config> is used to select the preset recording quality and frame rate. Different default recording quality levels are offered for user to choose: <Best Quality>, <Standard>, <Extended Record>, <Event Only>, <128Kbps DSL>, <256Kbps DSL>, <512Kbps DSL> and <OFF>. According to various Record modes, the preset configuration options for normal and event status are described in terms of relative recording rate (PPS) and recording size for each channel in the table below.

The preset conditions <Best Quality>, <Standard>, <Extended Record>, <Event Only>, <128Kbps DSL>, <256Kbps DSL> and <512Kbps DSL> override any other quality and rate settings. The default Preset Configuration setting is <Standard>.

Record Mode: Full-D1 mode (NTSC: 720x480@30PPS) (PAL: 720x576@25PPS)					
Preset Configuration	**Normal PPS**	**Normal Size**	**Event PPS**	**Event Size**	**Event Active**
Best Quality	7.5 NTSC (6.25 PAL)	13 KB	30 NTSC (25 PAL)	13 KB	Both (Alarm+Motion)
Standard	7.5 NTSC (6.25 PAL)	9 KB	30 NTSC (25 PAL)	13 KB	Both
Extended Record	7.5 NTSC (6.25 PAL)	5 KB	30 NTSC (25 PAL)	13 KB	Both
Event Only	0 NTSC (0 PAL)	-	30 NTSC (25 PAL)	13 KB	Both
128Kbps DSL	1 NTSC (1 PAL)	2 KB	1 NTSC (1 PAL)	2 KB	Both
256Kbps DSL	4 NTSC (4 PAL)	2 KB	4 NTSC (4 PAL)	2 KB	Both
512Kbps DSL	4 NTSC (4 PAL)	3 KB	4 NTSC (4 PAL)	3 KB	Both

www.dynacolor.com.tw
All rights reserved

OFF	User Selected	User Selected	User Selected	User Selected	User selected

NOTE: If selecting this Record mode, only the image from channel 1~4 will be recorded.

Record Mode: Half-D1 mode (NTSC: 720x240@60PPS) (PAL: 720x288@50PPS)					
Preset Configuration	**Normal PPS**	**Normal Size**	**Event PPS**	**Event Size**	**Event Active**
Best Quality	7.5 NTSC (6.25 PAL)	11 KB	30 NTSC (25 PAL)	11 KB	Both (Alarm+Motion)
Standard	7.5 NTSC (6.25 PAL)	7 KB	30 NTSC (25 PAL)	11 KB	Both
Extended Record	7.5 NTSC (6.25 PAL)	3 KB	30 NTSC (25 PAL)	11 KB	Both
Event Only	0 NTSC (0 PAL)	-	30 NTSC (25 PAL)	11 KB	Both
128Kbps DSL	1 NTSC (1 PAL)	2 KB	1 NTSC (1 PAL)	2 KB	Both
256Kbps DSL	4 NTSC (4 PAL)	2 KB	4 NTSC (4 PAL)	2 KB	Both
512Kbps DSL	4 NTSC (4 PAL)	3 KB	4 NTSC (4 PAL)	3 KB	Both
OFF	User Selected	User Selected	User Selected	User Selected	User Selected

Record Mode: CIF mode (NTSC: 360x240@120PPS) (PAL: 360x288@100PPS)					
Preset Configuration	**Normal PPS**	**Normal Size**	**Event PPS**	**Event Size**	**Event Active**
Best Quality	15 NTSC (12.5 PAL)	9 KB	30 NTSC (25 PAL)	9 KB	Both (Alarm+Motion)
Standard	15 NTSC (12.5 PAL)	5 KB	30 NTSC (25 PAL)	9 KB	Both
Extended Record	15 NTSC (12.5 PAL)	1 KB	30 NTSC (25 PAL)	9 KB	Both
Event Only	0 NTSC (0 PAL)	-	30 NTSC (25 PAL)	9 KB	Both
128Kbps DSL	1 NTSC (1 PAL)	2 KB	1 NTSC (1 PAL)	2 KB	Both

All rights reserved

256Kbps DSL	4 NTSC (4 PAL)	2 KB	4 NTSC (4 PAL)	2 KB	Both
512Kbps DSL	4 NTSC (4 PAL)	3 KB	4 NTSC (4 PAL)	3 KB	Both
OFF	User Selected	User Selected	User Selected	User Selected	User Selected

5.4.3 Per Camera Configuration

This submenu is used to set the Day / Night / Weekend PPS (Picture per Second) and recording quality for each channel. The <Preset Configuration> must be set to <OFF> for accessing these schedules.

- **Normal PPS**

  Normal PPS (Picture per Second) is used to set the recording rate for normal status.

  Please note that the total normal pps for all channels is limited under the maximum PPS for each Record mode. To increase one channel's pps, you may have to reduce other's first. Event pps is not restricted to this rule, since a smart event scheduler will handle to the total pps with a correct weighting.

- **Normal Size**

  The item is used to set the picture size for normal status recording. The available options are <3>, <5>, <7>, <9> and <11> KB.

- **Event Max PPS**

  Event Max PPS is used to set the event recording rate for Event status. Normally, the Event PPS is set to equal or greater than Normal PPS; the setting is depending on your application. If the Event PPS is set to <0>, Dyna**Guard**™ 200 series unit stops recording event video during alarms.

- **Event Size**

  The item is used to set the picture size for event status recording. The available options are <3>, <5>, <7>, <9> and <11> KB.

- **Event Active**

  Users are allowed to choose which alarm type needs to be recorded. The available options are <Alarm> (alarm events), <Motion> (motion

www.dynacolor.com.tw
All rights reserved

detection events), <Both> (alarm event + motion detection), and <None> (no events active). The default setting is <Both>, which includes Alarm and Motion event recording.

5.4.4 Event Percentage

The item is used to set the event recording percentage of total capacity. The unit stops recording event video when the event space is full. Set the event data percentage by clicking the UP and DOWN arrows in the box.

5.4.5 Data Lifetime

Data Lifetime indicates the time that a recording is saved and remained in the HDD, between the creation and deletion of a record. Only those video recorded during Data Lifetime will be displayed on the screen and can be played back; those video recorded outside the duration time will be deleted.

Set the data lifetime by clicking the UP and DOWN arrows in the box. The value ranges from <1> to <365> days, or select <0> to disable the function.

5.4.6 Pre-Alarm Recording

This item is used to set the duration of pre-alarm recording video. The pre-alarm recording function aims to make user viewing a more complete event video; what user can view is not only the video recorded after the alarm is triggered, but also the video recorded ahead the alarm.

When an event is triggered while normal recording is in effect, the unit will start copying the pre-alarm and the post-alarm video to the event video. The pre-alarm duration can be set from 0~30 seconds. The default setting is 15 seconds.

The quality of the pre-alarm video is the same as the quality setting for normal record video; and the quality of the post-alarm video is the same as the quality setting for event record video.

5.4.7 Circular Recording

User can choose to record video in circular mode or in linear mode. If you choose to record in circular mode, then the unit begins to overwrite the oldest

All rights reserved

previously recorded video; and stores new video over the HDD spaces. If you choose to record in linear mode in stead, the unit stops recording when the HDD is full.

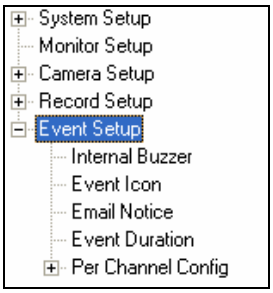
Select <ON> to record video in circular mode, or <OFF> in linear mode.

5.4.8 Audio Recording

This item allows user to enable / disable Audio recording function of the unit. When set to <ON>, audio input is recorded and saved with the video. When set to <OFF>, audio is ignored. The default setting is <ON>.

5.5 Event Setup

The Event Setup menu allows user to determine Dyna**Guard**™ 200 series unit's behavior in response to an alarm event. Click <MENU> button on the main window toolbar, and click the plus icon to expand the Event Setup menu.



5.5.1 Internal Buzzer

This item allows user to enable / disable the unit's internal buzzer.

If set to <ON>, the buzzer is activated in response to an alarm. If set to <OFF>, the buzzer is not activated. The default setting is <ON>.

5.5.2 Event Icon

The item enables (ON) / disables (OFF) the display of Event Icon on the monitor when an alarm event occurs. The default setting is <ON>.

The event types are represented by a character respectively; the descriptions are as below table.

www.dynacolor.com.tw
All rights reserved

Event type	Description
A	Alarm in event
M	Motion detection event
L	Video loss event

5.5.3 Email Notice

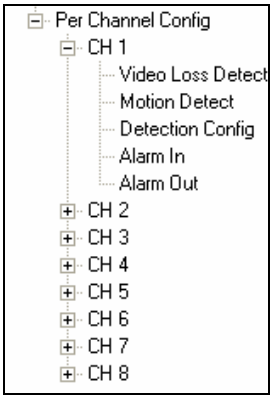
The item enables (ON) / disables (OFF) the Email notification of an event. When an alarm event is triggered and <Email Notice> is enabled, an e-mail concerning the alarm event will be dispatched.

5.5.4 Event Duration

This item determines the duration of the buzzer and Alarm Out relay function after an alarm is triggered. The available event duration range is from 1 second to 100 seconds. The default is 5 seconds.

5.5.5 Per Channel Configuration

This item is used to set how alarm conditions are handled. Select a desired channel and configure its settings, such as Video Loss Detect, Motion Detect and Alarm In / Out functions.



Video Loss Detect

This item allows user to enable / disable Video Loss as an alarm event. Select <ON> to enable Video Loss alarm events, <OFF> to disable.

Motion Detect

Use to enable or disable the motion detection function of the Dyna**Guard**^{TM} 200 series. By default, the value is <OFF>.

All rights reserved

If motion detection function is enabled, it is required to define the motion detection parameters such as detection area and sensitivity settings.

Detection Configuration

- **Sensitivity**

  The item is used to set the sensitivity of detection grids for the camera. A greater value indicates more sensitive motion detection. A motion alarm will be triggered, once the amount of motion detected exceeds the Threshold value

  Click UP / DOWN arrow buttons to adjust the value. The value is indicated in 4% increment.

- **Area Threshold**

  <Area Threshold> means the motion alarm triggered level; if the percentage of triggered grids to total detection area is greater than the set value, the motion alarm will be triggered.

  For example, if 10 grids are selected and the <Area Threshold> value is 70%, the motion alarm will be triggered when seven grids are motion detected.

  Click UP / DOWN arrow buttons to adjust the value. The value is indicated in 4% increment.

Alarm In

This item allows user to enable / disable alarm input detection. According to your application, select <N/O> (Normal Open) or <N/C> (Normal Close) to enable the alarm input detection or select <OFF> to disable the detection. The default setting is <OFF>.

If you set this item to <N/C> but did not install any device to the unit, the alarm will be triggered and the Event Icon displayed continually until this item is changed to <N/O>, <OFF> or install a device to the unit.

Alarm Out

This item allows user to assign an alarm on certain channel to activate the relays. These signals can be used to drive a light or siren to caution an alarm event.

www.dynacolor.com.tw
All rights reserved

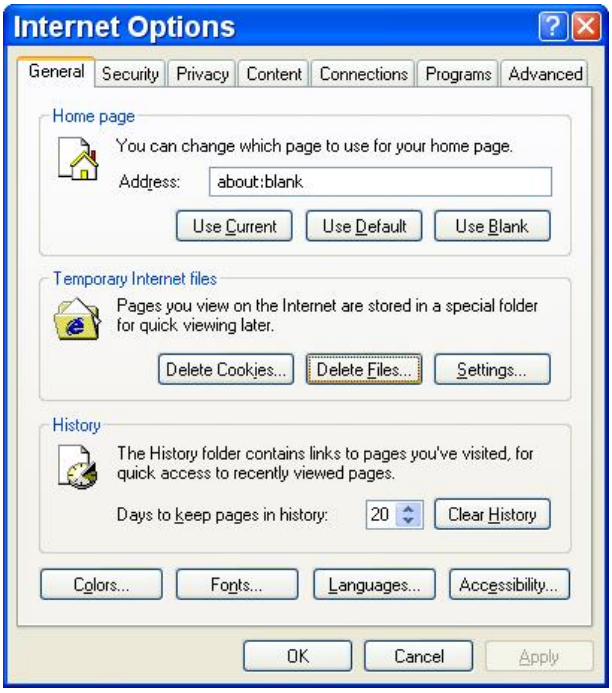
Select from the options: <A Only> indicates "Alarm Out A", <B Only> indicates "Alarm Out B", <Both> indicates "Both Alarm Out" and <None> indicates "No Alarm Out". The default setting is <None>.

All rights reserved

6. Trouble Shooting Guide

What if the server ask for .ocx renewal all the time when you trying to connect to the remote software? If the following screen displays repeatedly, please follow the steps to delete the temporary internet files.

- Select <Tools> from the main menu of the web browser, then <Internet Options>, and then click the <General> tab.



- Click the <Delete Files> button in the Temporary Internet Files field; the screen displays as below.

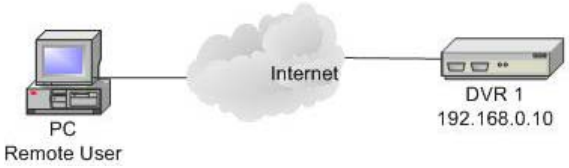
- Enable the <Delete all offline content> and click <OK>.
- Now, enter the IP address of your Dyna**Guard**™ 200 series unit to make the connection again.

www.dynacolor.com.tw
All rights reserved

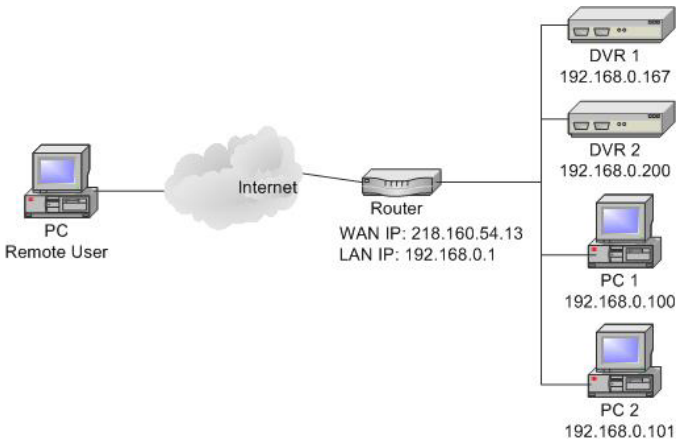
Appendix A: Setting up a DVR behind a Router

This appendix describes how to set up a router if the DVR connects to the internet via a router.

To properly operate a web server, e.g. a DVR, the user has to set up both the IP and port of the DVR, which are essential for data and command transmission. The port setting is adjustable in OSD setup menu of DVR and only one port is needed to do remote operation. Typically and by the default, the DVR operates on port 80, which is well known as the http port. Please make sure that port 80 is not blocked by your ISP or you will have to find another available port and change the setting of the DVR.



In case a router, or sometimes a DSL modem is in place, the real IP is now assigned to the router instead of the DVR. The DVR is located behind the wall (router) and operates on virtual IP. In most cases, virtual IP starts with 192.168.x.x. The router has two IPs- one is real IP (WAN IP), the other is virtual IP (LAN IP). The virtual IP would be 192.168.x.1. When the remote user wants to operate the DVR, he will have to send command to the real IP, i.e. the router, the router has to map (forward the command to the DVR. Thus it is required to set up the router for port mapping (forwarding) before you can see image remotely from your DVR.



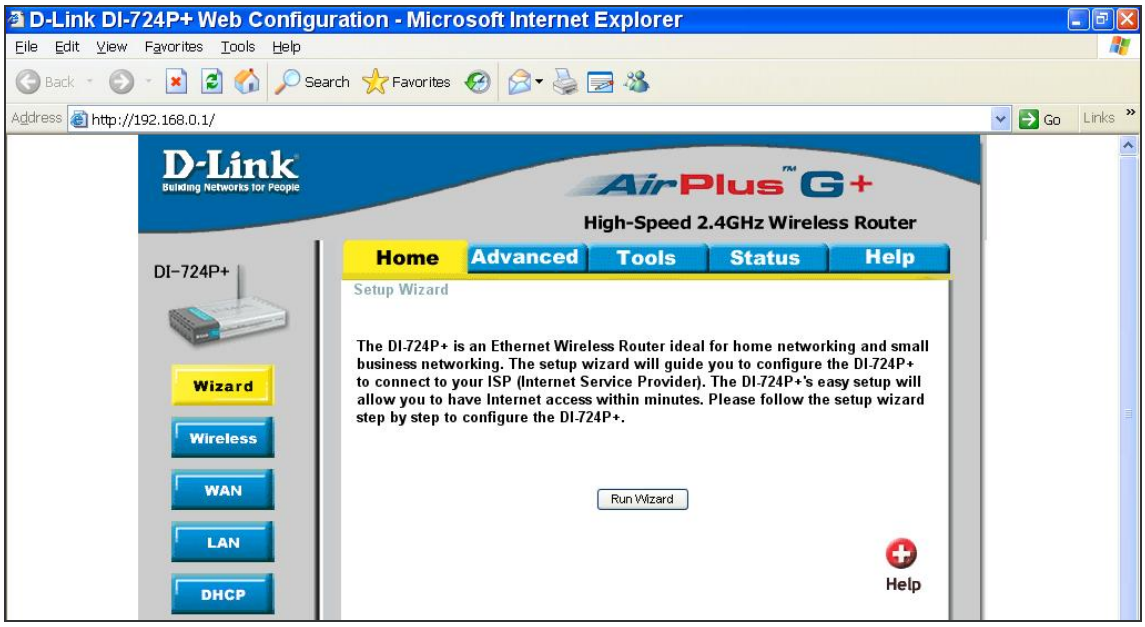
See your router manufacturer's websites for more instructions on port mapping.

Following is an example of how the router should be set.

All rights reserved

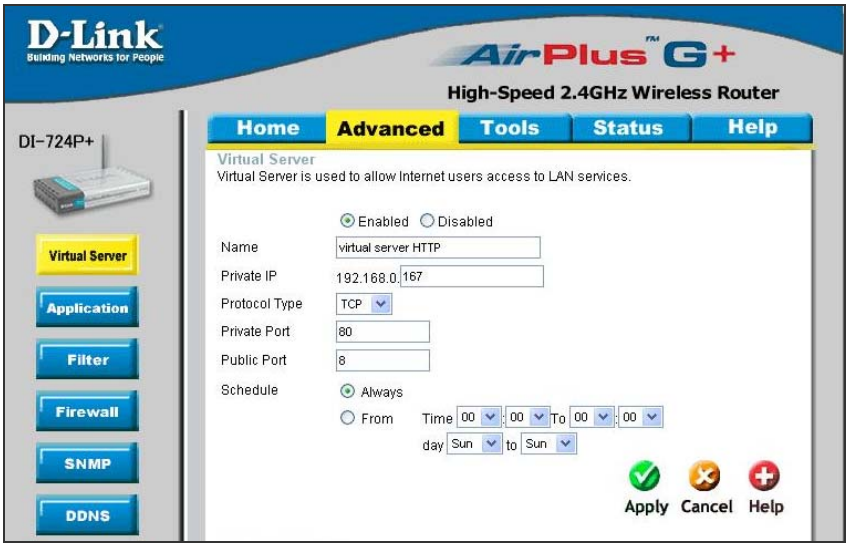
Router	PC	DVR 1	DVR 2
(D-Link DI-724P+) WAN IP: 218.160.54.13 LAN IP: 192.168.0.1	IP: 192.168.0.100	IP: 192.168.0.167 Trigger port: 80	IP: 192.168.0.200 Trigger port: 81

- To change the setting of the router, you need a PC with web browser.
- Connect to D-Link DI-724P+ from PC via IE. The setup screen will show after entering the correct user name and password.



- Click the <Advanced> tab and follow the steps to set up web port forward to DVR 1.
  A. Select the <Enabled> to set up the service.
  B. Enter the name of the setting in the Name field: DVR 1.
  C. Enter Private IP: 167
  D. Choose <TCP> as the Protocol Type.
  E. Enter Private Port: 80.
  F. Enter Public Port: 80.
  G. Click <Always> for the Schedule setting.
  H. Click <Apply>.

www.dynacolor.com.tw
All rights reserved



- Click <Continue> to go on when the following screen displays.

- Follow the steps to set up web port forward to DVR 2.
  A. Click <Enabled> to set up the service.
  B. Enter the name of the setting in the Name field: DVR 2.
  C. Enter Private IP: 200
  D. Choose <TCP> as the Protocol Type.
  E. Enter Private Port: 81.
  F. Enter Public Port: 81.
  G. Click <Always> for the Schedule setting.
  H. Click <Apply>.

- Now you can see DVR 1 via http://218.160.54.13:80 and DVR 2 via http://218.160.54.13:81.

- If there are more than one DVR behind the router, repeat the steps for port mapping setting.

All rights reserved