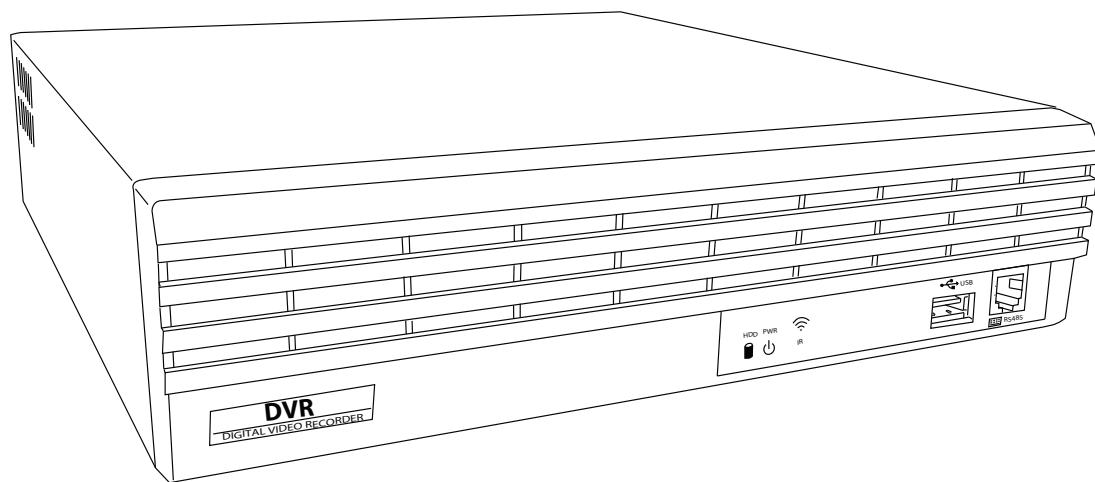
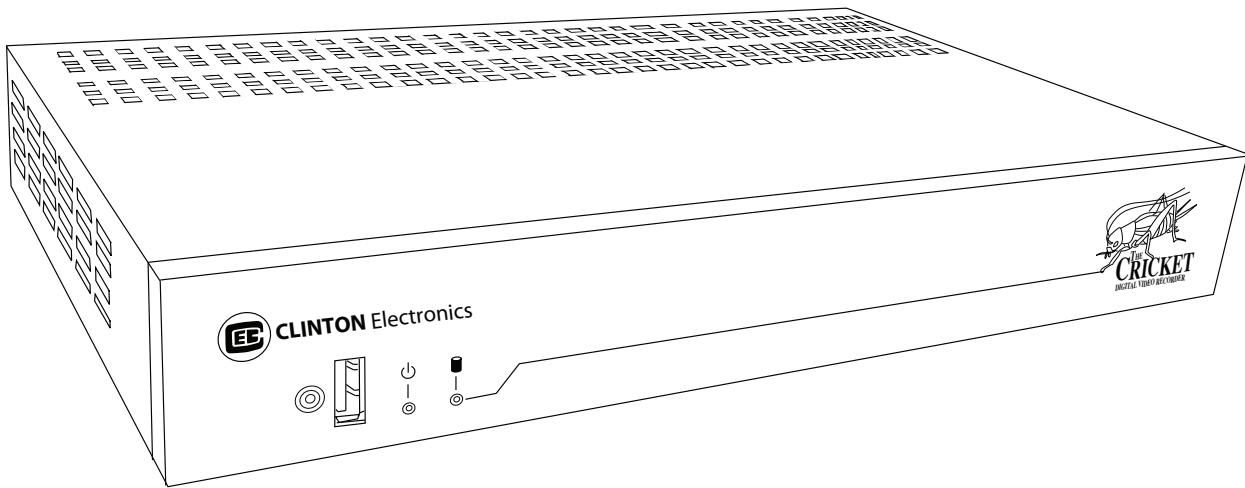


Digital Video Recorder

CRICKET DVR

User Manual



CLINTON Electronics

CLINTON Electronics
6701 Clinton Road
Loves Park, IL 61111

1.800.447.3306 **Sales**
1.800.549.6396 **Support**
1.800.633.8712 **Fax**

www.clintonelectronics.com



CAUTION :

TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK),
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED
SERVICE PERSONNEL



The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

COMPLIANCE NOTICE OF FCC:

This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at their own expense.

WARNING : Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

CAUTION : To prevent electric shock and risk of fire hazards:

- ◆ Do NOT use power sources other than that specified.
- ◆ Do NOT expose this appliance to rain or moisture.

This installation should be made by a qualified service person and should conform to all local codes.

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Chapter 1 Unpacking

1.1 Warning

To prevent fire or electric shock, do not expose this product to rain or moisture. Due to dangerous high voltage inside the enclosure, do not open the case.

1.2 Introduction

Familiarize yourself with the contents in this guide before using the DVR.



RoHS

This directive restricts the use of six hazardous materials in the manufacture of various types of electronic and electrical equipment.



USA (FCC)

This device has been tested and found to comply with the limits of Class A computing device pursuant to part 15 of the FCC rules.



Europe (CE)

By affixing the CE marking, the manufacturer assures that the item meets all the essential requirements of all applicable EU directives.

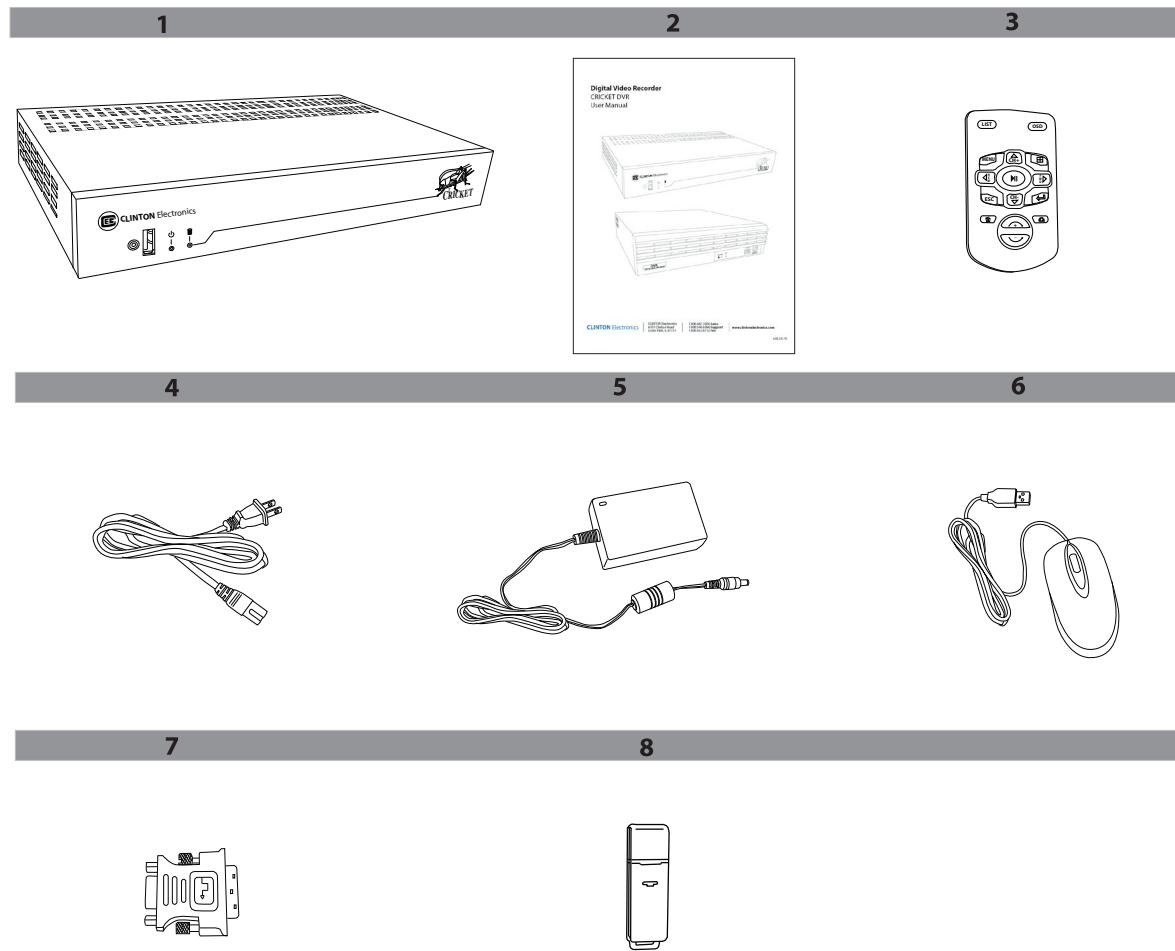


Japan (PSE)

The purpose of the Electrical Appliance and Material Safety Law is to prevent hazards and disturbances resulting from electrical appliances.

1.3 Unpacking

For 4/8 channel

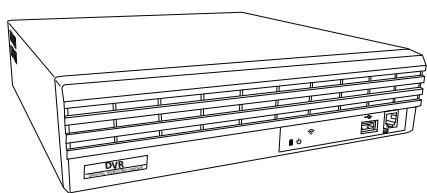


Item	Name and description	Pcs
1	DVR	1
2	Instruction manual	1
3	Remote control (including battery)	1
4	Power cord	1
5	Power adaptor (AC 100-240V In, DC12V Out)	1
6	Mouse	1
7	DVI - VGA converter (8 channel only)	1
8	2GB USB Drive	1

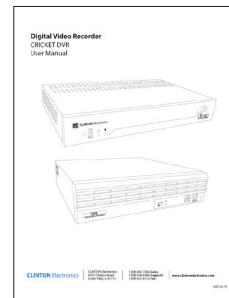
***NOTE: If any part is missing or damaged, contact your local dealer.**

For 16 channel

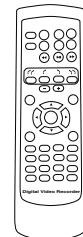
1



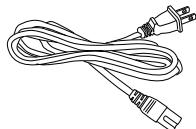
2



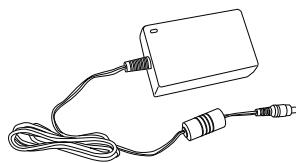
3



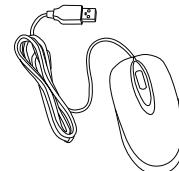
4



5



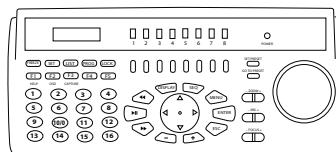
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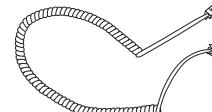
7



8



9



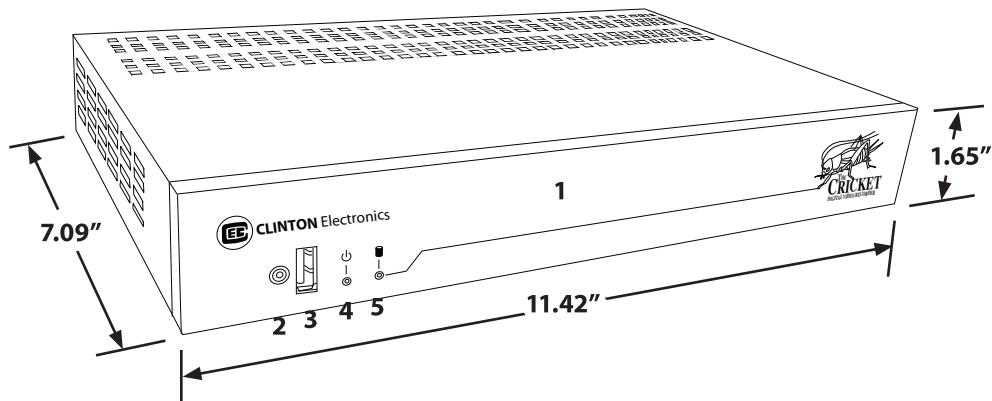
Item	Name and description	Pcs
1	DVR	1
2	Instruction manual	1
3	Remote control (including 2 AAA batteries)	1
4	Power cord	1
5	Power adaptor	1
6	Mouse	1
7	2GB USB drive	1
8	Keyboard (optional - packaged separately)	1
9	RS-485 (15.75"): to connect DVR and multi-keyboard (optional - packaged separately)	1

***NOTE: If any part is missing or damaged, contact your local dealer.**

Chapter 2 Installation

2.1 DVR Overview

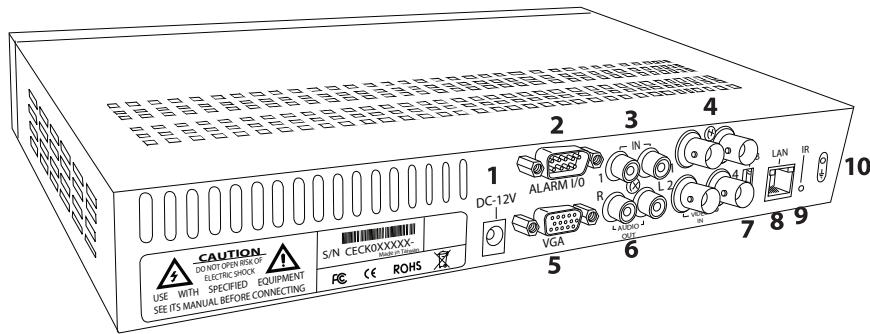
4/8 Channel- Front



Item	Name	Description
1	Front panel	Indicators and USB port
2	IR receiver	For IR remote control
3	USB port	For mouse control/USB backup
4	Power indicator	Indicator of power status
5	HDD indicator	Indicator of HDD status

2.2 DVR Overview

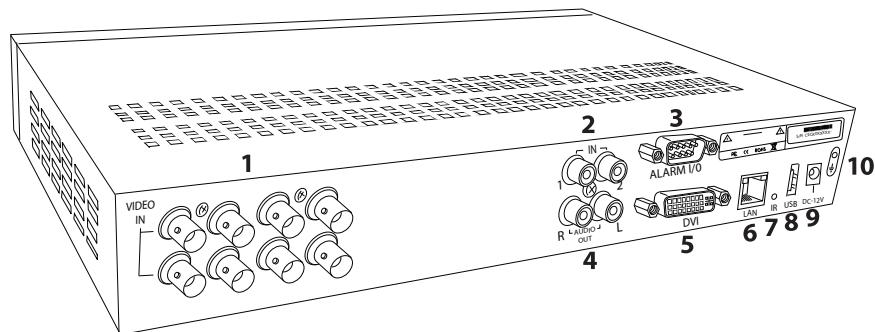
4 Channel- Rear



Item	Name	Description
1	Power	DC12V
2	Alarm I/O	Alarm Input/Output
3	Audio in	RCA x 2 (1Vp-p)
4	Video in	BNC video input x 4
5	VGA output	VGA video output
6	Audio out	RCA (L, R)
7	USB port	For mouse control/USB backup
8	LAN	RJ-45
9	IR	IR extension jack
10	GND	GND hole

2.3 DVR Overview

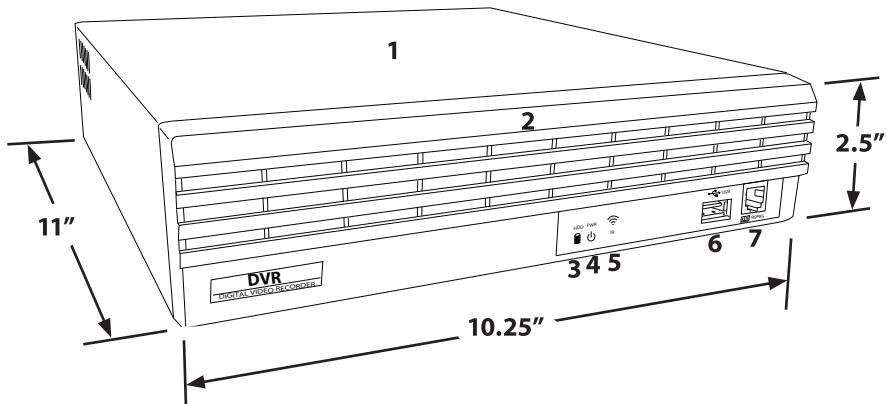
8 Channel- Rear



Item	Name	Description
1	Video in	BNC video input x 8
2	Audio in	RCA x 2 (1Vp-p)
3	Alarm I/O	Alarm Input/Output
4	Audio out	RCA (L, R)
5	DVI output	DVI video output
6	LAN	RJ45
7	IR	IR extension jack
8	USB port	For mouse control/USB backup
9	Power	DC12V
10	GND	GND hole

2.4 DVR Overview

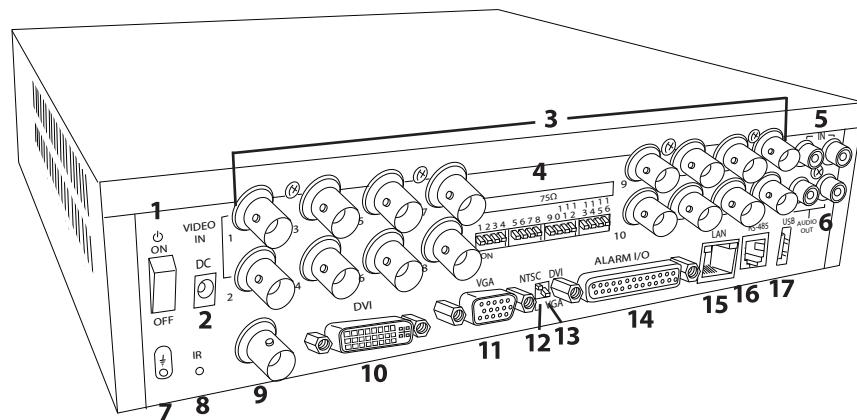
16 Channel- Front



Item	Name	Description
1	Cover	DVR Cover
2	Front panel	Indicators and connector ports
3	HDD indicator	Indicator of HDD status
4	Power indicator	Indicator of power status
5	IR receiver	For IR remote control
6	USB port	For mouse control/USB backup
7	RS-485 connector	For multi-keyboard connecting

2.5 DVR Overview

16 Channel- Rear

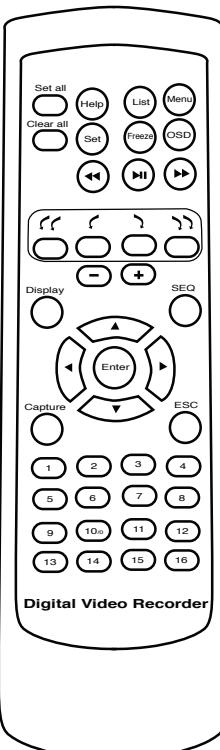


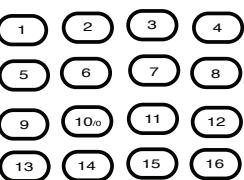
Item	Name	Description
1	Power switch	ON/OFF
2	Power jack	DC19V
3	Video in	BNC x 16
4	Dipswitch	75Ω
5	Audio in	RCA x 2
6	Audio out	RCA (L, R)
7	GND	GND hole
8	IR jack	IR extension jack
9	Video out	BNC x 1
10	DVI output	DVI Video Output
11	VGA output	VGA Video Output
12	System switch	NTSC/PAL
13	DVI/VGA Auto Detection	NOTE: DVR will automatically detect the Video output signal of DVI/VGA/BNC
14	Alarm I/O	Alarm Input/Output
15	LAN	RJ-45
16	RS-485	For PTZ cameras
17	USB port	For mouse control/USB backup

2.6 Remote Overview: 4/8 Channel

	<table border="1"><tbody><tr><td></td><td>Call up the event list</td></tr><tr><td></td><td>Show/ Hide OSD</td></tr><tr><td></td><td>Access main menu</td></tr><tr><td></td><td>Rotate camera view/ Choose an item</td></tr><tr><td></td><td>Quad View</td></tr><tr><td></td><td>Rewind video/ Choose an item</td></tr><tr><td></td><td>Call up play list/ Playback</td></tr><tr><td></td><td>Fast forward video/ Choose an item</td></tr><tr><td></td><td>Quit</td></tr><tr><td></td><td>Rotate camera view/ Choose an item</td></tr><tr><td></td><td>Select an item</td></tr><tr><td></td><td>Delete an item</td></tr><tr><td></td><td>Increase a value</td></tr><tr><td></td><td>Decrease a value</td></tr><tr><td></td><td>JPEG snapshot of image (8-ch. only)</td></tr></tbody></table>		Call up the event list		Show/ Hide OSD		Access main menu		Rotate camera view/ Choose an item		Quad View		Rewind video/ Choose an item		Call up play list/ Playback		Fast forward video/ Choose an item		Quit		Rotate camera view/ Choose an item		Select an item		Delete an item		Increase a value		Decrease a value		JPEG snapshot of image (8-ch. only)
	Call up the event list																														
	Show/ Hide OSD																														
	Access main menu																														
	Rotate camera view/ Choose an item																														
	Quad View																														
	Rewind video/ Choose an item																														
	Call up play list/ Playback																														
	Fast forward video/ Choose an item																														
	Quit																														
	Rotate camera view/ Choose an item																														
	Select an item																														
	Delete an item																														
	Increase a value																														
	Decrease a value																														
	JPEG snapshot of image (8-ch. only)																														

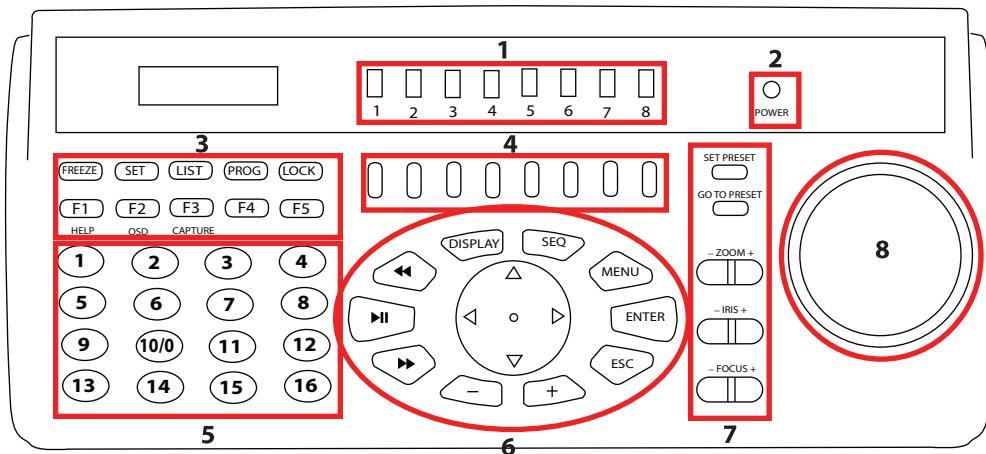
2.7 Remote Overview: 16 Channel



1. Function keys	3. Operation Buttons
Set all  Set all as working/ Non-working	 Decrease Value by 10/ Default to beginning
Clear all  Clear all as working/ Non-working	 Decrease Value by 1
Help  Call up on-screen help for current operation	 Increase Value by 1
List  Call up event list	 Increase Value by 10/ Default to end
Menu  Access main menu	 Increase a Value
Set  No Function (Function to be added)	 Decrease a Value
Freeze  Freeze image	Display  Display Mode
OSD  Show/ Hide OSD	SEQ  Sequence Mode
2. Playback Buttons	
 Rewind Video	 Navigation Buttons
 Play/Pause: Call Up play list/ Playback	
 Fast Forward Video	
4. Number Buttons	
 Select a channel or key in password	Capture  JPEG snapshot of an item
	ESC  Exit to last screen
	Enter  Enter selection

2.8 Keyboard Overview

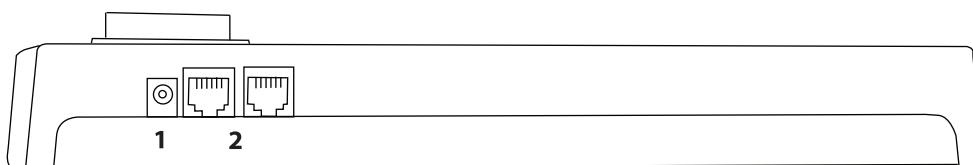
Control Panel - Optional



1. LED indicators	4. DVR ID selection buttons
2. Indicator of power status	5. Number buttons
3. Function buttons	6. Operation buttons (refer to overview on page 9).
FREEZE Freeze image SET No function (Function to be added) LIST Call up the event list PROGRAM Enable/ Disable specific control mode LOCK Lock/ Unlock the keyboard F1 Call up on-screen help for current operation F2 Show/ Hide OSD F3 JPEG snapshot of image F4 No function (Function to be added) F5 No function (Function to be added)	7. PTZ camera control buttons 8. Shuttle knob

2.9 Keyboard Overview

Rear

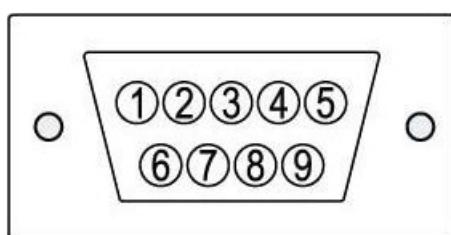


1. Power jack	DC12V (Optional)
2. RS-485 Ports	Connect keyboard to DVR(s)

2.10 RJ11 Connector Setup (For RS-485)

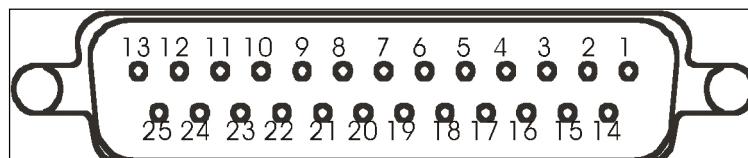
Pin No	Pin Definition
1	No connection
2	DC12V
3	GND
4	Data A (+)
5	Data B (-)
6	No connection

2.11 Alarm Pin Setup: 4/8 Channel



Pin No	Pin Definition
1	Alarm-in 1
2	Alarm-in 2
3	Alarm-in 3
4	Alarm-in 4
5	COM
6	NC
7	NO
8	Do not connect to any cable.
9	GND

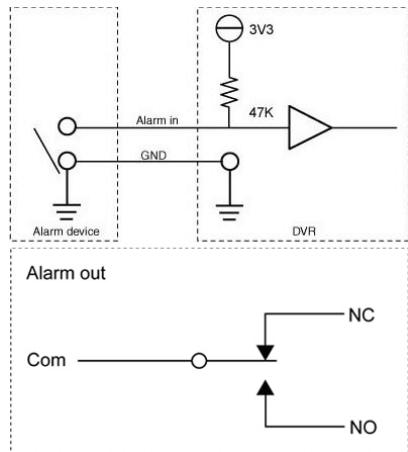
2.12 Alarm Pin Setup: 16 Channel



DB 25 PIN NO	NAME	FUNCTION	SPECIFICATION
1	ALM_IN1	SENSOR INPUT	SENSOR SIGNAL 1
2	ALM_IN3	SENSOR INPUT	SENSOR SIGNAL 3
3	ALM_IN5	SENSOR INPUT	SENSOR SIGNAL 5
4	ALM_IN7	SENSOR INPUT	SENSOR SIGNAL 7
5	ALM_IN9	SENSOR INPUT	SENSOR SIGNAL 9
6	ALM_IN11	SENSOR INPUT	SENSOR SIGNAL 11
7	ALM_IN13	SENSOR INPUT	SENSOR SIGNAL 13
8	ALM_IN15	SENSOR INPUT	SENSOR SIGNAL 15
9	GND_EARTH	SENSOR COMMON	GND EARTH PIN
10	ALM_OUT1	ALM OUTPUT	ALM OUTPUT 1
11	ALM_OUT3	ALM OUTPUT	ALM OUTPUT 3
12	ALMNC1	Relay	Relay NC PIN
13	ALMNO1	Relay	Relay NO PIN
14	ALM_IN2	SENSOR INPUT	SENSOR SIGNAL 2
15	ALM_IN4	SENSOR INPUT	SENSOR SIGNAL 4
16	ALM_IN6	SENSOR INPUT	SENSOR SIGNAL 6
17	ALM_IN8	SENSOR INPUT	SENSOR SIGNAL 8
18	ALM_IN10	SENSOR INPUT	SENSOR SIGNAL 10
19	ALM_IN12	SENSOR INPUT	SENSOR SIGNAL 12
20	ALM_IN14	SENSOR INPUT	SENSOR SIGNAL 14
21	ALM_IN16	SENSOR INPUT	SENSOR SIGNAL 16
22	5V_OUT	DC 5V OUTPUT	5V OUTPUT PIN
23	ALM_OUT2	ALM OUTPUT	ALM OUTPUT 2
24	X	X	X
25	ALMCOM1	Relay	Relay Common PIN

2.13 Alarm Figures: 4/8 Channel

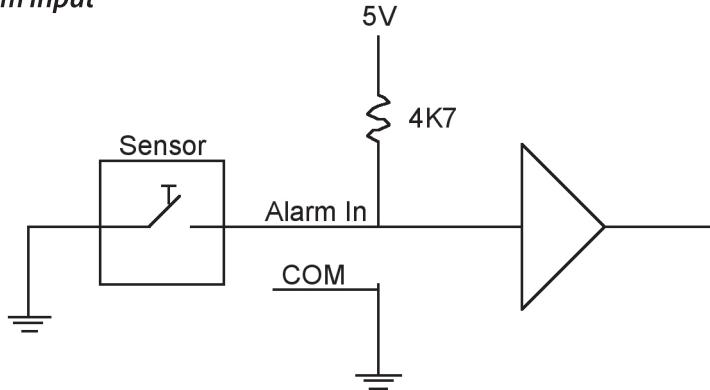
Connect to NO (normal open) or NC (normal close) alarm device:



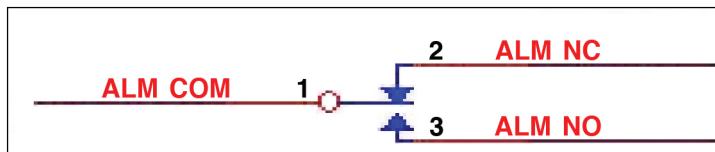
2.14 Alarm Figures: 16 Channel

Connect to NO (normally open) or NC (normally closed) alarm device:

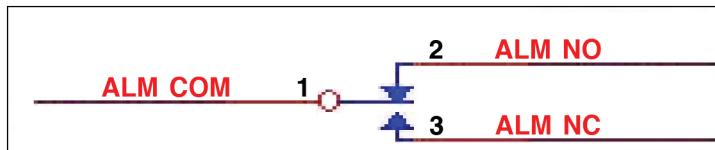
1. Alarm Input



2. Alarm Output (Normally Closed)



3. Alarm Output (Normally Open)



Chapter 3 DVR Interface Overview

3.1 Full Screen Overview:

4 Channel



Letter	DVR Status
A	System Status
B	Password Level
C	Recording Mode
D	OSD Language
Letter	Device Status
E	USB Drive Status
F	HDD Status
G	Network Status
H	HDD Space Status
Letter	DVR Toolbar
I	Full Screen Mode by Channel
J	Quad Mode
K	Access Main Menu
L	Rewind (Playback mode only)
M	Play/ Pause (Enter play back mode)
N	Fast Forward (Playback mode only)
O	List (Enter event list mode)
P	Trash (Delete an Item)
Q	OSD (Show/ Hide OSD)
Letter	Camera Status (Shown Screen Center)
R	Channel Number
S	Recording Mode
T	Frame Rate
U	Image Quality
Letter	System Date/Time
V	System Date
W	System Time

(A) System Status

The icon will change when you're viewing in different mode as below.

	Live display		Pause
	Main menu		Fast forward
	Event list		Rewind
			Playback

(B) Password Level

The icon will change when you input the password.

	ID0 (guest)		ID1 (user)
	ID2 (administrator)		

*NOTE: The password level status will return to ID0 after 17 seconds without any operation.

(C) Recording Mode

The icon will change when you change the recording mode. (Refer to Section 4.4 on page 21.)

	No recording		Single way
			Overwrite

(D) OSD Language

The icon will change when you change the language. (Refer to 4.3 on pg.18)

T. Chinese	English	Polish	Swedish
S. Chinese	Spanish	Russian	Finnish
Japanese	French	Hebrew	Vietnamese
Czech	Italian	Thai	Korean
Dutch	German	Danish	Turkish

(E) USB Status

	USB is detected		USB is not detected
--	-----------------	--	---------------------

(F) HDD Status

	HDD is installed		HDD is not installed
--	------------------	--	----------------------

(G) Network Status

	Network is working		Network is not working
--	--------------------	--	------------------------

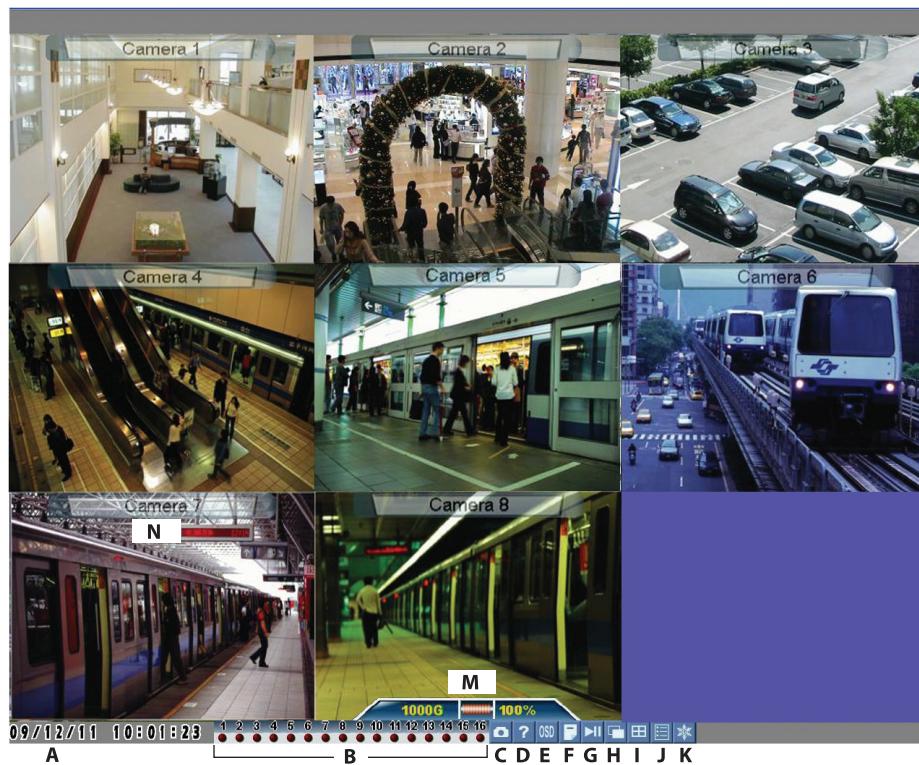
(H) Status Bar of HDD Space



This bar shows the HDD storage and consumption percentage. The estimate of recording time will be more accurate after at least one day of recording.

3.2 Full Screen Overview:

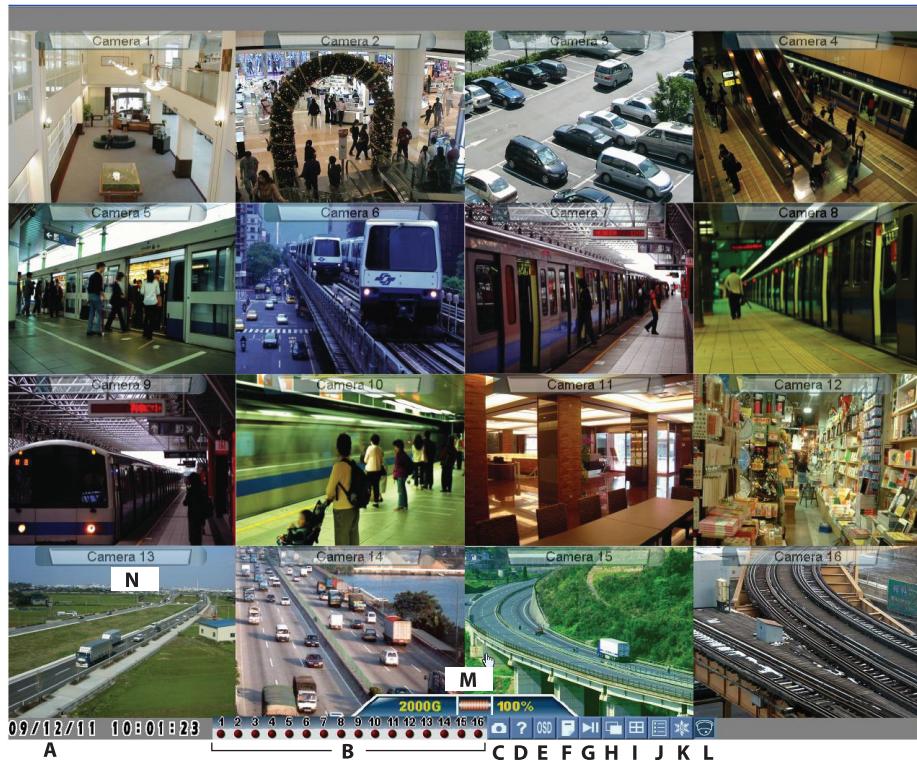
8 Channel



Letter	Home Screen
A	System Date/Time
B	Full Screen Mode by Channel
C	JPEG (snapshot of image)
D	Help (call up on-screen help for current operation)
E	OSD (Show/ Hide OSD)
F	Access Main Menu
G	Play/ Pause (Enter playback mode)
H	Sequence (Single channel, 4-channel, 9-channel)
I	Quad View (1-4, 5-8)
J	List (Enter event list mode)
K	Freeze
M	HDD Space Status
N	Camera Label

3.3 Full Screen Overview:

16 Channel



Letter	Home Screen
A	System Date/ Time
B	Full Screen Mode by Channel
C	JPEG (snapshot of image)
D	Help (call up on-screen help for current operation)
E	OSD (Show/ Hide OSD)
F	Access Main Menu
G	Play/ Pause (Enter playback mode)
H	Sequence (Single channel, 4-channel, 9-channel)
I	Quad View (1-4, 5-8, 9-12, 13-16, 1-9, 10-16, 1-16)
J	List (Enter event list mode)
K	Freeze
L	PTZ (only in full-screen mode)
M	HDD Space Status
N	Camera Label

Chapter 4 Main Menu

4.1 Icon Description



Click to enter the Main Menu screen.

No.	Description
1	Camera: Configure camera settings
2	Setup: Configure system settings
3	Record: Configure recording parameters
4	Alarm: Configure alarm and motion settings
5	USB: Configure USB backup
6	LAN: Configure network settings

4.2 Camera Settings

Color

Click and select camera number. Roll mouse scroll wheel to adjust parameters.

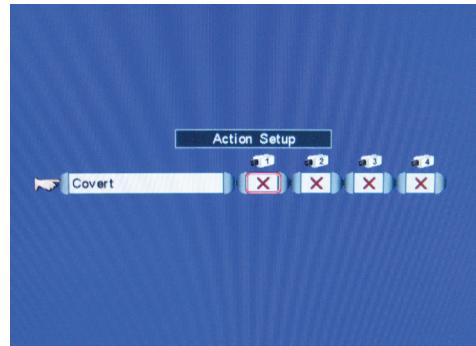
Brightness: Adjust the brightness in the image

Contrast: Adjust the darkness in the image

Hue: Adjust the levels of green and blue in the image

Saturation: Adjust the amount of color in the image

Camera Action Setup:



Set cameras to "Covert" to hide the live view image.

***NOTE: Only users of ID2 (4ch) or ID3 (8-16ch) can access this setting.**

Camera Title Type: 8/16 channel

: Camera Title can be edited via Netview only. See chapter 8 on page 33 for details.

Sequence Time: 16 channel only

Sequence time can be set between 1 ~ 255 seconds.

RS-485: 16 channel only

Baud Rate

Baud Rate can be set as 2400, 4800, 9600, 19200 or 38400 according to the settings of the PTZ camera.

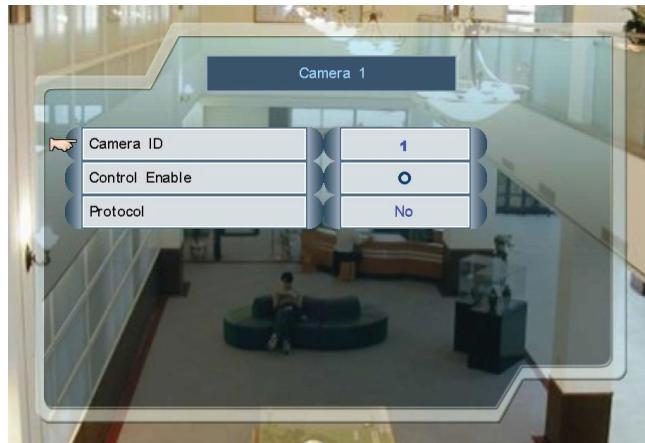


DVR ID

DVR ID can be set between 0 ~ 255 for use with keyboard (optional).

PTZ Camera Setup

Once you have pulled the camera up full screen, you may adjust the settings.

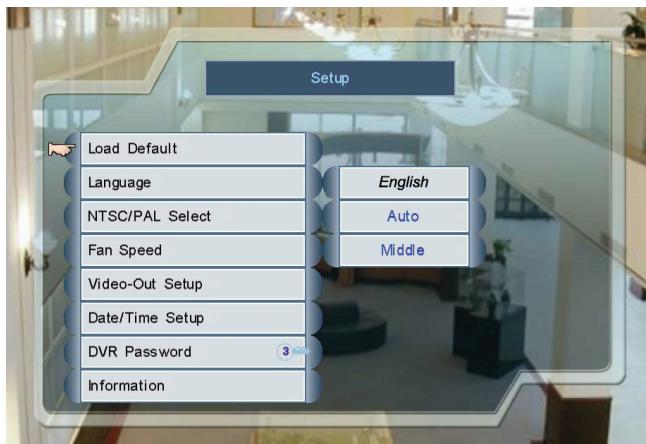


Camera ID: Camera ID can be set between 0 ~ 255 according to the settings of the PTZ camera.

Control Enable: Enable PTZ control by changing the "X" to an "O". This will allow you to control the PTZ using on screen commands or the keyboard (optional).

Protocol: Protocol can be set as Dynacolor, Pelco P, Pelco D, Honeywell, System AV, Eastel, Lilin, Elitar, Panasonic, Eyeview, TOA, or Clinton, according to the settings of the PTZ camera.

4.3 System Settings



Load Default

No : Do not load factory's default settings.

Yes : Load factory's default settings.

*NOTE: **Load Default will NOT change the password or the setting of [Password Enable/Disable].**

Language

This DVR supports 20 versions of OSD language:



NTSC/PAL

Select to choose Auto, NTSC, or PAL system.

Auto The DVR will detect the camera's system automatically when the DVR is powered on.

NTSC The DVR will be set to NTSC even if PAL cameras are connected.

PAL The DVR will be set to PAL even if NTSC cameras are connected.

Fan Speed: 8/16 channel

The lower the fan speed, the quieter the fan noise. However, the lower the fan speed, the higher the HDD temperature.

Video-Out Setup

Select to change the video-out setup of the DVR.



Video-Out Resolution

Video-out resolution can be set to 1280x1024, 1024x768 or 800x600.

Video-Out Update

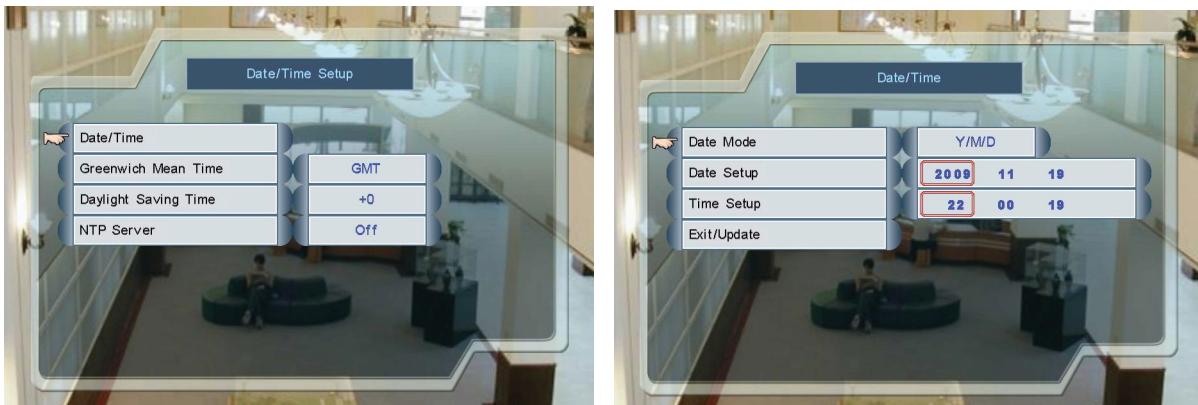
Select this to save changes made to Video-out setup.

Date/Time Setup

Change system date/time settings

Date/Time

Set date mode, date and time for DVR.



Greenwich Mean Time

Set GMT for local time zone.

Daylight Saving Time

Set daylight savings time for local time zone

NTP (Network Time Protocol) server

Set DVR to communicate with National Standard (NIST) or Microsoft Standard (MIST) NPT server.

DVR Password

Enable/Disable and setup DVR passwords

*NOTE: Only users of ID2 (4ch) or ID3 (8/16ch) have DVR password authority.



Password Enable

Select password enabled (O) or disabled (X).

*NOTE: If you enable the password function, the DVR will request a password to enter main menu, playback mode, and event list. Users without a password are limited to live camera view only.

For 4 Channel

1) User (ID1):

Users can enter main menu, playback mode and event list. (Default password: 1111)

2) Admin (ID2):

Admin can enter main menu, playback mode, and event list. Admin can also manage DVR and LAN passwords. (Default password: 2222)

For 8 Channel

1) Guest (ID1):

User can enter playback mode and event list. (Default password: 1111)

2) User (ID2):

User can enter main menu, playback mode and event list. (Default password: 2222)

3) Admin (ID3):

Admin can enter main menu, playback mode, and event list. Admin can also manage DVR and LAN passwords. (Default password: 3333)

For 16 Channel

1) Guest (ID1):

User can enter playback mode and event list. (Default password: 11111111)

2) User (ID2):

User can enter main menu, playback mode and event list. (Default password: 22222222)

3) Admin (ID3):

Admin can enter main menu, playback mode, and event list. Admin can also manage DVR and LAN passwords. (Default password: 33333333)

To Change Password

Step 1: Input new password in the top box.

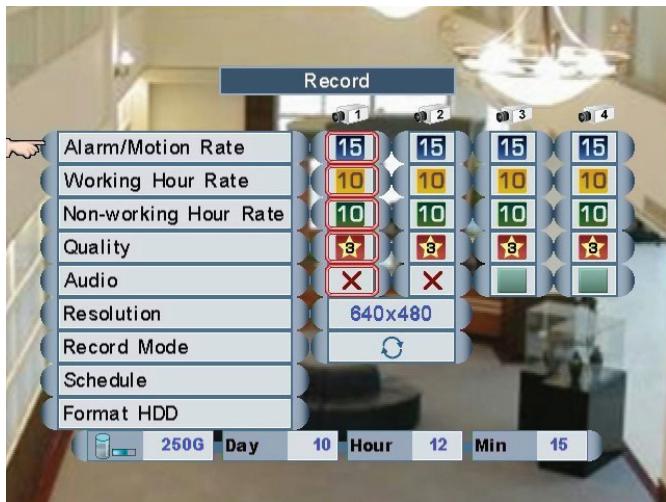
Step 2: Confirm new password in bottom box.

Information

Check the DVR information including software version, hardware version, earliest and latest record time, size of HDD, and LAN information.

4.4 Record Settings: 4 channel

Record Menu



Alarm/Motion Rate

The recording frame rate when the DVR senses motion or an alarm is triggered.

Working Hour Rate

The recording frame rate during working hours as determined by the schedule.

Non-working Hour Rate

The recording frame rate during non-working hours as determined by the schedule.

Quality

The video quality of a recorded image

Audio

Select to enable or disable audio recording

Resolution

The recorded video resolution. This cannot be changed

Record Mode



Not Recording:
The DVR is not recording



Single Way:
The DVR stops recording
when the HDD is full



Overwrite:
The DVR continues recording when
the HDD is full by overwriting the
oldest recorded data

Schedule

Set working and non-working hour fields for defined recording rate.

Format HDD

Select "YES" to erase all data stored on HDD.

WARNING:

All recorded data, including the event list will be deleted
upon formatting.

HDD Status Bar

Calculates how much HDD is being used at current settings. *NOTE: This setting needs 48 hours to properly calibrate.

4.5 Record Settings: 8/16 Channel

Record Menu:



Video Information

Select to see the video size of a camera at each hour:

"I" represents the static images (images that do not change from frame to frame)

"P" represents the changing images from frame to frame.



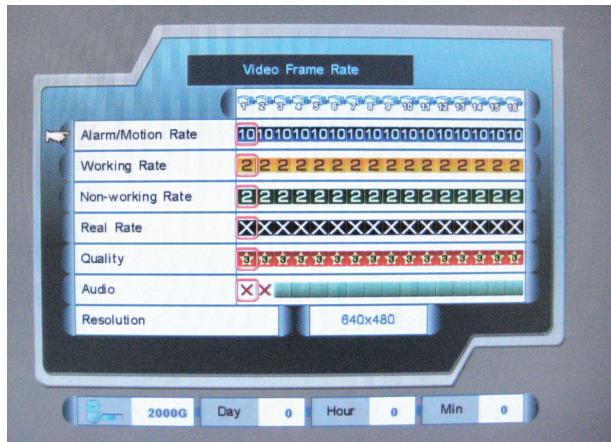
Record Mode

No recording : The DVR does NOT record.

Single way : The DVR stops recording when the HDD is full.

Overwrite : The DVR continues recording when the HDD is full by overwriting the oldest recorded data.

Video Frame Rate



Alarm/Motion Rate

The recording frame rate when the DVR senses motion or an alarm is triggered.

Working Hour Rate

The recording frame rate during working hours as determined by the schedule.

Non-working Hour Rate

The recording frame rate during non-working hours as determined by the schedule.

Real Rate

Shows the actual frame per second the DVR is recording at the moment.

Quality

The video quality of a recorded image

Audio

Select to enable or disable audio recording

Resolution

The recorded video resolution.

HDD Status Bar

Calculates how much HDD is being used at current settings. **NOTE: This setting needs 48 hours to properly calibrate.*

Schedule

Set working and non-working hour fields

Format HDD

Select "YES" to erase all data stored on HDD.

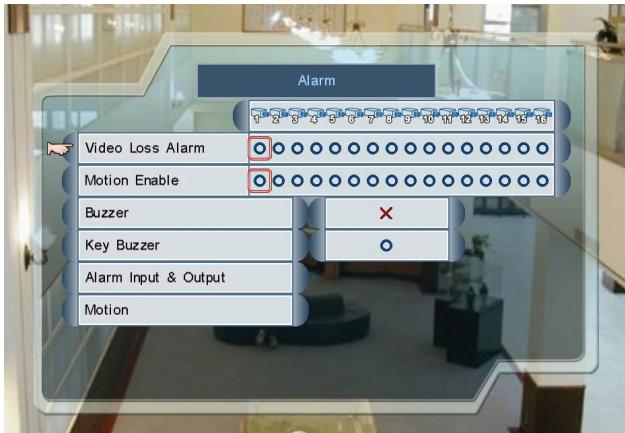
WARNING:

All recorded data, including the event list will be deleted upon formatting.

4.6 Alarm

Video Loss Alarm

Enable or disable a video loss alarm for each camera



Motion Enable

Enable or disable motion detection for each camera

Buzzer

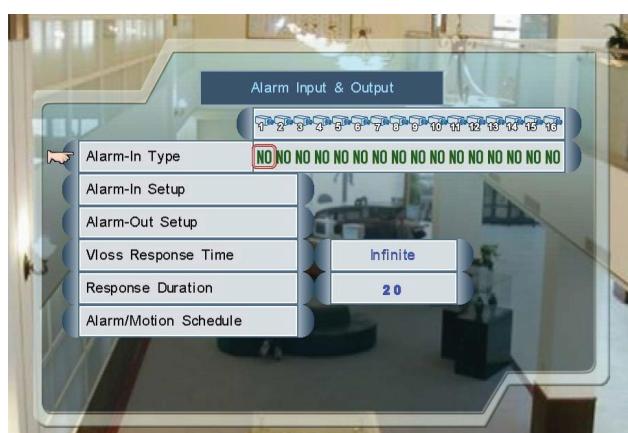
Enable or disable the alarm/motion buzzer noise.

Key Buzzer

Enable or disable the “chirp” sound when selecting items or changing values.

Alarm Input & Output

Defines the type of alarm input



Alarm-In Type

Click and roll the mouse define the types of Alarm-In.

OFF : Off

NC : Normal Close

NO : Normal Open

Alarm-In Setup

Enable (O), or disable (X) the alarm input for each camera.

Alarm-Out Setup

The 4/8 channel DVR has 1 alarm output. The 16 channel DVR has 3 alarm outputs.



Buzzer

Enable (O), or disable (X) the buzzer noise for motion/video loss/alarm.

Alarm Full Screen

Enable (O), or disable (X) the full screen function for motion/video loss/alarm.

Label

Enable (O), or disable (X) the on-screen label for motion/video loss/alarm.

Alarm Out 1

Enable (O), or disable (X) the alarm output 1 for motion/video loss/alarm.

Alarm Out 2

Enable (O), or disable (X) the alarm output 2 for motion/video loss/alarm.

Alarm Out 3

Enable (O), or disable (X) the alarm output 3 for motion/video loss/alarm.

***NOTE: Alarm Out 1,2,3 use 0V and 3.3V to trigger an alarm.**

Relay

Enable (O), or disable (X) relay for motion/video loss/alarm.

***NOTE: Relay uses an NO or NC contact switch to trigger an alarm.**

Video Loss Response Time

Set the video loss alarm to sound for 3, 5, 10, 30, 60, 120, 180, or infinite seconds when video loss occurs.

Response Duration

When alarm/motion is triggered, the post-recording time will last for 1 ~ 255 seconds with an alarm or motion on-screen message. If a new alarm/motion event has occurred, the post-recording will restart for 1 ~ 255 seconds.

Alarm/Motion Schedule: 8/16 channel only

Select to set schedule for alarm/motion detection.



: Working hour : Non-working hour

Click to set all divisions as working hours.

Click to set all divisions as non-working hours.

Motion

Select to set motion detection areas and sensitivity for each camera.

Click to enable all divisions for motion detection.

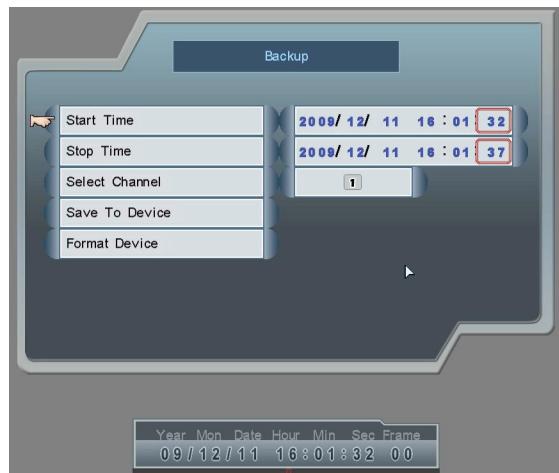
Click to disable all divisions for motion detection.

Scroll mouse wheel to change sensitivity.

***NOTE: To mask off certain areas, you must make the image CLEAR. To detect motion in areas, you must make the image GRAY.**



4.7 USB Backup



Start Time

The beginning date and time of your event.

Stop Time

The ending date and time of your event.

Select Channel

Choose which camera the event occurred on.

Save To Device

Select to save video clip to USB.

Format Device

Select to format USB device.

Please refer to Chapter 7 on page 32 for step by step instructions on how to save video.

4.8 Network Settings

IP: Input network IP address.

***NOTE:** The DVR will come with a default IP address of 10.1.3.216. This number CANNOT be used with an existing network. Please change the IP address to comply with the network.

Mask: Input network subnet mask.

Gateway: Input network default gateway.

DNS Server: Input network DNS server.

***NOTE:** You must have a DNS server number before using e-mail notification function, NPT, or a DDNS account.

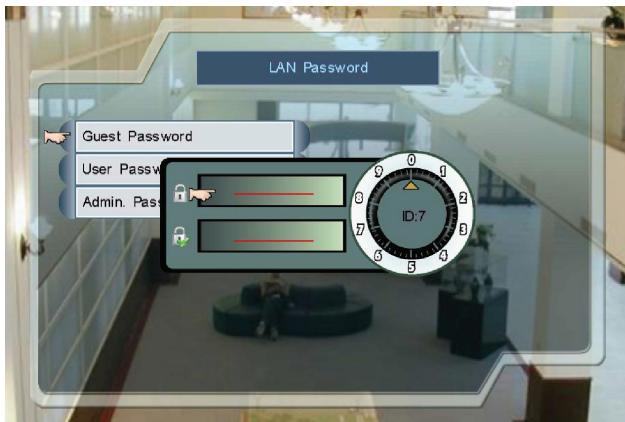
DHCP Enable: (8/16ch) : Enable or disable DHCP

***NOTE:** Enabling DHCP will allow the DVR to retrieve IP address automatically. The DHCP IP address can be found in the "information" section of 

HTTP Port: The web port on which the DVR will broadcast a video signal.

LAN Password: Select to change LAN passwords

***NOTE:** Only users of ID2 (4 ch) or ID3 (8/16 ch) are able to manage LAN passwords.



Guest ID7:

User can view live video remotely.

Default password (4/8ch): 1111

Default password (16ch): 11111111

User ID8:

User can view live video, enter playback, and backup video remotely.

Default password (4/8ch): 2222

Default password (16ch): 22222222

Admin ID9:

Admin can view live video, enter playback, and backup video remotely. Admin can make changes to the Setup.

Default password (4/8ch): 3333

Default password (16ch): 33333333



Chapter 5 Initial Setup Checklist

Please follow this checklist for step by step details on how to setup DVR.

5.1 Date/Time/Time Zone Set

Select  to set the date, time, and time zone.



Setting the date, time, and time zone is the first step in setup process. Setting these parameters before the DVR starts to record any information is vital to proper HDD function. If these are not set prior to information being written to the HDD, the HDD will need to be re-formatted after correct date, time, time zone is set. Please refer to section 4.4 on page 21 for instructions on how to re-format HDD. Be sure to account for correct daylight savings time for your time zone.

***NOTE: The use of an NPT server will increase the chances of the DVR displaying the correct time. The DVR will receive updated time information twice a day from the NPT server selected.**

5.2 Language Set

Select  to set the DVR language. The DVR has 20 languages built in. Please refer to section 3.1 on page 13, or section 4.3 on page 18 for the list of supported languages.

5.3 DVR Password Set

Select  to enable/disable and edit a DVR password.

The 4 channel DVR has two levels of authority.

ID1: User login ID2: Admin login

The 8/16channel DVR has three levels of authority.

ID1: Guest login ID2: User login ID3: Admin login

A guest login can access live video, playback mode, and event list. A user login can enter main menu, access live video, playback mode, and event list. An admin login has full access to features and settings within the DVR. Please refer to "DVR Password" section on page 20.

5.4 Record Setup

The DVR is set by default to record continuously and on motion. The DVR recording settings are set to optimize HDD space. If you need to change the recording frame rates or video quality, select  . Here you can change the frame rates and quality for each camera.

***NOTE: The higher the frame rates and/or quality, the faster the HDD capacity is used.**

5.5 Set a Schedule

Select  to setup a recording schedule. The schedule is split between working and non-working hours. Working hour rate corresponds to daytime, and non-working hour rate corresponds with nighttime. You can also set a schedule for an alarm/motion recording by selecting  (8/16ch.) Please refer to section 4.6 on page 26.

5.6 PTZ Setup: 16 channel

Please refer to section 2.10 on page 10 for RJ11 connector setup (for RS-485). Bring the desired camera up full screen and select  to setup a PTZ camera. Select  to configure DVR to communicate with the PTZ. The baud rate, camera ID, and protocol must match what is programmed into the PTZ camera.

Set a Preset:



After configuring the PTZ settings, the DVR will display  in the bottom right corner of the screen and the Set Preset box will appear.

Step 1: Click  to setup a preset.

Step 2: Move the PTZ into position by clicking the direction buttons or by dragging the red circle in the desired direction.

Step 3: Set the speed by moving the cursor on 

Step 4: Click on a number to set the preset.

Step 5: Set the dwell time by moving the cursor on  (maximum 1 minute per preset)

Step 6: Click  to start the tour.

Clear a Preset:

Step 1: Click  to clear a preset.

Step 2: Click the preset number to clear.

5.7 Network Setup

Select  to set network settings. You will need to enter a NEW IP address, Mask, and Gateway into the DVR. The default numbers the DVR comes with will NOT work. A DNS server number must be included when using NPT, DDNS, or email notification function. Please refer to section 4.8 on page 28 for a complete overview of network settings.

Chapter 6 Playback

6.1 Time Search

*NOTE: If you enable the "Password Enable" function, the DVR will request at least ID1 to enter Playback mode. (Refer to Section 4.3 DVR password on page 20)

Click  to enter Playback Mode.



This will allow you to manually enter in date and time to search. A motion event will show as . An image mark will show as .

Turbo Search

Select  to quickly search through recorded data by motion events.

6.2 Event List

Select  to search for specific events.



Click  to enter the event list. Users are able to search events by channel or event filters. Click  to play a selected event.

Section 1: Channel Select



Section 2: Event Filters

All Filters	Motion	Video Loss	Alarm	HDD ON/OFF	Power ON/OFF	Mark	USB
							

Section 3: Event Details

Event No.	Camera ON/OFF	Filter	Date/Time	Event Source HDD/USB
				

Chapter 7 Backup Video

7.1 Requirements

The USB drive that comes with the DVR is 2GB.

The DVR supports 128MB-8GB capacity USB drives.

Before backing up data to the device, insert USB drive into the USB port. Once inserted, the DVR must display "USB Check Ok!" on screen. If the DVR displays "Unformatted USB!" format the USB. Please refer to section 4.7 on page 27 for instructions on how to format a USB device. The computer used for viewing data must have Quicktime Media Player installed. Please go to www.apple.com/quicktime for a free download.

7.2 Start/Stop Time

Enter in start/stop date and times for the data you wish to copy to USB.

***NOTE: One USB drive can store a maximum of 16 files (up to 8GB) or 30 minutes per clip.**

7.3 Select Channel

Select the camera you wish to copy data from.

***NOTE: You can copy one camera per clip. If you need data from two cameras, you must create two clips to copy to USB.**

7.4 Save to Device

Once all information is entered, select to save data to USB.

***NOTE: The DVR will take approximately the same time to copy the clip to USB for the length of clip.**

Example: A five minute clip will take approximately five minutes to copy to USB, etc. The DVR will display "USB Check Ok!" once the clip has finished copying to USB device.

7.5 Save File Format

File Name	Definition
Ch	Channel No. (ex. ch01)
YYYY	Year (ex. 2009)
MM	Month (ex. 01)
DD	Date (ex. 02)
hh	Hour (ex. 11)
mm	Minute (ex. 22)
ss	Second (ex. 33)
For Example: ch01_20090102112233.mov	

Chapter 8 Remote View

8.1 Requirements

The following are the requirements for a PC with qualified versions of hardware and software to make an Internet Explorer connection.

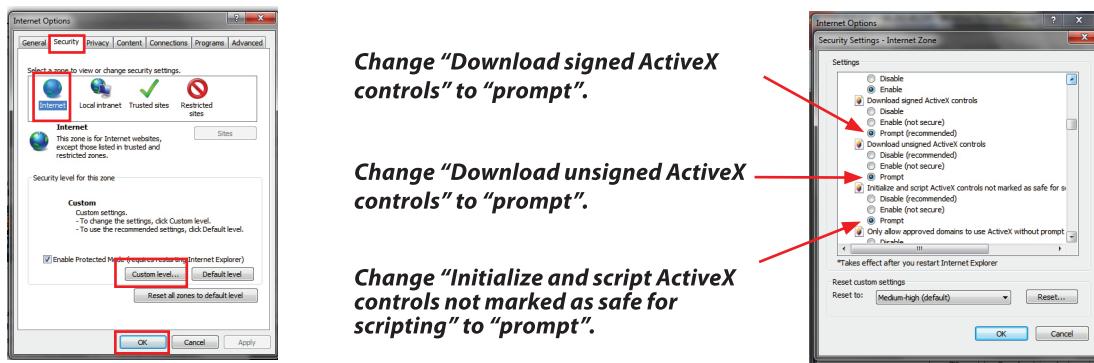
PC: Intel Pentium III or higher, 512MB RAM, 1GB HDD space

Operating System: Microsoft Windows 2000, XP, Vista, or Windows 7

Web Browser: Internet Explorer 6.0 or above with ActiveX controls enabled.

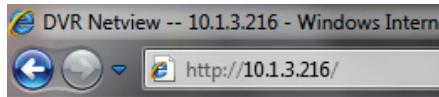
Viewer: Windows Media Player 10 or above

To enable ActiveX controls:



8.2 Local Connection:

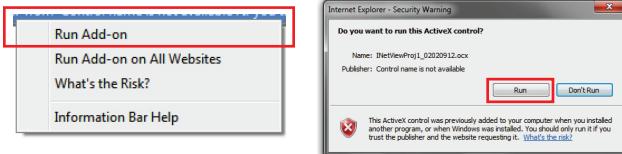
Step 1: Open Internet Explorer, enter IP address of DVR, and press enter.



Step 2: Click the attention bar at the top of the main page and select Install ActiveX Control. Netview will reset.



Step 3: Click Run Add-on



Step 4: Enter the LAN ID and password (please refer to section 4.8 on page 28 for default ID and password)

LOGIN PASSWORD	
ID:	9
Password:	*****
<input type="button" value="LOGIN"/>	

8.3 Netview Overview: 4 Channel



Live Mode:

Click **Live** to view live video.

Click **1-4** to view quad screen

Click **1** to **4** to view the selected camera full screen

8.4 Netview Overview: 8/16 Channel



Live Mode:

Click **Live** to view live video.

Click **1-4**, **5-8**, **9-12**, **13-16** to view quad screen

Click **1-9**, **10-2** to view nine channel screen

Click **1-16** to view all channel screen

Click **1** to **16** to view selected camera full screen

8.5 Playback



Click the **Playback** button to use remote playback.

***Note:** Only users ID8 and ID9 are able to enter playback mode.

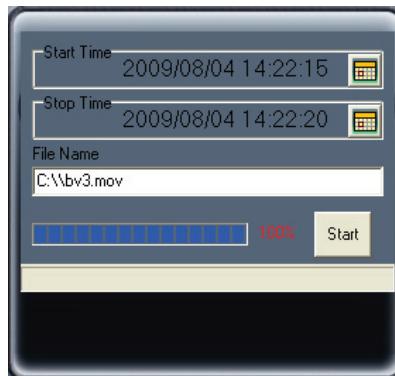
Click the channel you want to view

Click to open a pop-up calendar to select the date and time.

- 1) Click to change the month.
- 2) Click the desired date.
- 3) Click to change the hour/minute/seconds.
- 4) Click [OK] to close the calendar.

Click , , , to rewind, pause, play, and fast forward video.

8.6 Backup



Click **Backup** to copy recorded video from your DVR to your PC.

***NOTE:** Only users of ID8 and ID9 are able to enter backup mode.

Click the Channel you want to backup.

Under [Start Time], click to open the calendar to select start date and time.

Under [Stop Time], click to open the calendar to select stop date and time.

The file will be saved to PC HDD with the default file name, **bv3.mov**. To select the save location and create a custom file name, click the text field under File Name. Click **Start** to begin file backup. Depending on your connection and file size, this could take several minutes to complete.

8.7 Setup

Click **Setup** to set the network settings.

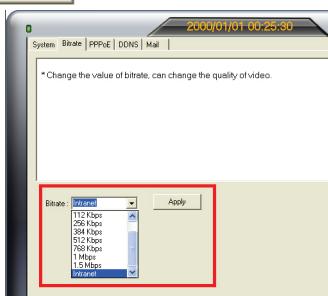
***NOTE: Only user ID9 is able to enter setup mode.**

System: The system tab shows the DVR information



Bitrate: The bitrate tab allows you to change the bitrate speed. Select a bitrate speed that best matches your connection speed. The higher the bitrate speed, the better quality of video stream.

Click **Apply** to save the settings to the system.



PPPoE: The PPPoE tab allows you to input PPPoE account information. Under the PPPoE status, select "ON".

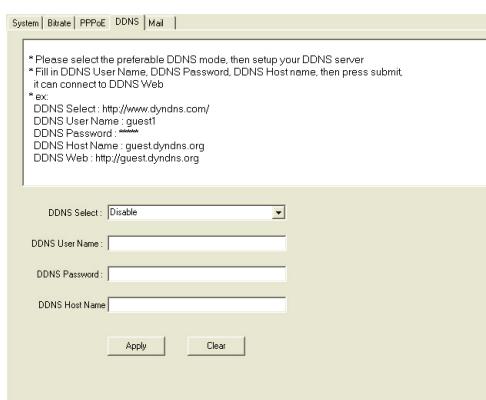
In the corresponding text fields, enter PPPoE, username and password.

Click **Apply** to save the settings to the system.



DDNS: The DDNS tab allows you to input DDNS account information. Under DDNS Select, choose enable. In the corresponding text fields, enter DDNS username, DDNS password, and DDNS host name.

***NOTE: The DVR only supports DDNS accounts from www.dyndns.com and www.noip.com.**



Email: The email tab allows you to input email notification information.

The screenshot shows the 'Email' configuration page. At the top, there is a note: "When using E-mail notification mode, please select 'ON' and fill the values in all fields". Below this are fields for 'Send Mail Status' (set to 'OFF'), 'Sender's E-mail', 'Receiver's E-mail 1', 'Receiver's E-mail 2', 'Receiver's E-mail 3', 'Subject', and 'Location'. There are also fields for 'SMTP Server', 'SMTP Port' (set to 25), 'SMTP User', 'SMTP Password', and a checkbox for 'Log on using Secure Password Authentication'. At the bottom are 'Apply', 'Clear', and 'Test Mail' buttons.

Under Send mail status, select "ON"

In the corresponding text fields, enter SMTP server address, SMTP port, SMTP username, SMTP password, sender's email, receiver's email, mail subject, and location name.

***NOTE: Any field marked * is required information**

Click **Apply** to save the settings to the system.

Click **Test Mail** to send a test email to your email inbox.

Title (8/16ch): The title tab allows you to create custom camera titles on the DVR.

The screenshot shows the 'Title' configuration page for Camera 16. It features a grid of 16 text boxes labeled CH1 through CH16, each containing a camera title. On the left side, there are settings for 'Font Option', 'Font Size' (set to 'Medium'), and 'Language' (set to 'English'). At the bottom are 'Load File' and 'Save File' buttons, and an 'Apply' button.

Set Font option, font size, and language.

Input camera title in each box.

Click save file to save the camera titles to the computer. To upload the camera titles without inputting again, click load file.

Click **Apply** to save settings to the system.

Appendix

Specifications

	Model		4CH	8CH	16CH		
Function	No. of cameras		4	8	16		
User interface	Animated GUI						
Multiplex mode	Pentaplex (Live, Record, Playback, Backup, Ethernet)						
Display resolution	1280x1024, 1024x768, 800x600						
Display mode	1/4		1/4/9	1/4/9/16			
Picture per second	NTSC	60/120fps	60/120/240fps	60/120/270/480fps			
	PAL	50/100fps	50/100/200fps	50/100/225/400fps			
Color	16M colors (Y:8, U:8, V:8) 4:2:2						
Sequence	No		3 sets				
PTZ control	No		Yes				
Auto zoom	No		Yes				
Watch dog	Yes						
Daylight Saving Time	Yes						
Record	Resolution	NTSC	640x480	640x480, 640x240, 320x240			
		PAL	640x512, 640x256	640x512, 640x256, 320x256			
Frame per second	NTSC	60fps		60/120/240fps	120/240/480fps		
	PAL	50/100fps		50/100/200fps	100/200/400fps		
Recording quality	5 levels						
Compression algorithm	H.264 enhanced						
Average compression rate	More than 300:1						
Programmable Schedule	Yes						
Motion recording	Yes						
Pre-recording	3 sec ~ 5 sec						
Post-recording	1 sec ~ 255 sec (programmable)						

Specifications

Model		4CH	8CH	16CH
Playback	Search mode	Smart search by file/event/time/frame		
	Search speed	Date, hour, min, sec, frame, pause		
	Playback speed	Pause, x1, x5, x15, x60		
Connector	Video in BNC	4	8	16
	Video out DVI	No	Yes	
	DVI to VGA converter	No	Yes	No
	Video out VGA	Yes		
	Video out BNC	No		x1
	Audio in	RCA x 2		
	Audio out	RCA(L,R)		
	Ethernet 10/100M	RJ45 x 1		
	RS-485	No		RJ11 x 1
	Keyboard	No		RJ11 x 1
	DC jack	1		
Alarm / Motion	Alarm port	1 (alarm-in x16, alarm-out x3, relay-out x1)		
	USB	x 2 (Mouse x1, Flash Drive x1)		
	IR remote control	Yes		
	Motion detection	48 motion zones		1200 motion zones
	Motion detection sensitivity	100 levels		
Event	No. of alarm outputs	1		3
	No. of alarm inputs	4		16
Alarm type		NO (Normal Open), NC (Normal Close), Relay		
	Size of event list	4096	8192	
	Event source	Alarm, motion, video loss, power on/off, discontinued record, mark, USB		

Specifications

	Model	4CH	8CH	16CH
Ethernet	10/100M LAN		Yes	
	Remote viewing		IE browser, suggested resolution: 1024x768	
	PPPoE		Yes	
	DHCP	No		Yes
	DDNS		Yes	
	CMS	No		Yes
	Email notification of events		Yes	
	NTP (Network Time Protocol)		Yes	
HDD	SATA HDD bay	1		2
	HDD capacity	500GB	1000GB	2000GB
Backup	USB Flash Drive		Yes	
	JPEG photo capture	No		Yes
Specification	Voltage	DC 12 V		DC19 V
	Voltage range		100~240V	
	Power MAX	30W		60W
	Operating temperature		41 ~ 104°F	
	Operating relative humidity		10 ~ 75 %	
	Net weight	7 lbs		7 lbs
	Shipping weight	7 lbs		7 lbs
	Dimension (inches)	11.42" (L) x 7.09" (D) x 1.65" (H)	10.24" (L) x 10.90" (D) x 2.64" (H)	

If you have trouble operating your DVR and the guidelines in this manual do not enable you to solve the problem, contact Clinton Electronics Technical Support at 1-800-549-6393 or 815-633-1444.

MEMO



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