



NETWORK VIDEO RECORDER SERIES

User Manual

Please read instructions thoroughly before operation and retain it for future reference.

IMPORTANT SAFEGUARD



All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly "lead-free" and without the hazardous substances cited in the directive.



The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste. Contact your local dealer for procedures for recycling this equipment.



This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Federal Communications Commission Interference Statement

This equipment has been tested and found to comply with the 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 his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device must not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Trademark Acknowledgements

iPad® & iPhone® are the registered trademarks of Apple Inc.

Android™ is a trademark of Google Inc. Use of this trademark is subject to Google Permissions.

Microsoft®, Windows® & Internet Explorer® are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Disclaimer

We reserve the right to revise or remove any content in this manual at any time. We do not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of this manual. The content of this manual is subject to change without notice.

This product doesn't have a standby / shutdown mode.

MPEG4 Licensing

THIS PRODUCT IS LICENSED UNDER THE MPEG4 VISUAL PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER FOR (i) ENCODING VIDEO IN COMPLIANCE WITH THE MPEG4 VISUAL STANDARD ("MPEG-4 VIDEO") AND/OR (ii) DECODING MPEG4 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED BY MPEG LA TO PROVIDE MPEG4 VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PROMOTIONAL INTERNAL AND COMMERCIAL USES AND LICENSING MAY BE OBTAINED FROM MPEG LA, LLC. SEE [HTTP://WWW.MPEGLA.COM](http://www.mpeg-la.com).

GPL Licensing



This product contains codes which are developed by Third-Party-Companies and which are subject to the GNU General Public License ("GPL") or the GNU Lesser Public License ("LGPL").

The GPL Code used in this product is released without warranty and is subject to the copyright of the corresponding author.

Further source codes which are subject to the GPL-licenses are available upon request.

We are pleased to provide our modifications to the Linux Kernel, as well as a few new commands, and some tools to get you into the code. The codes are provided on the FTP site, and please download them from the following site or you can refer to your distributor:

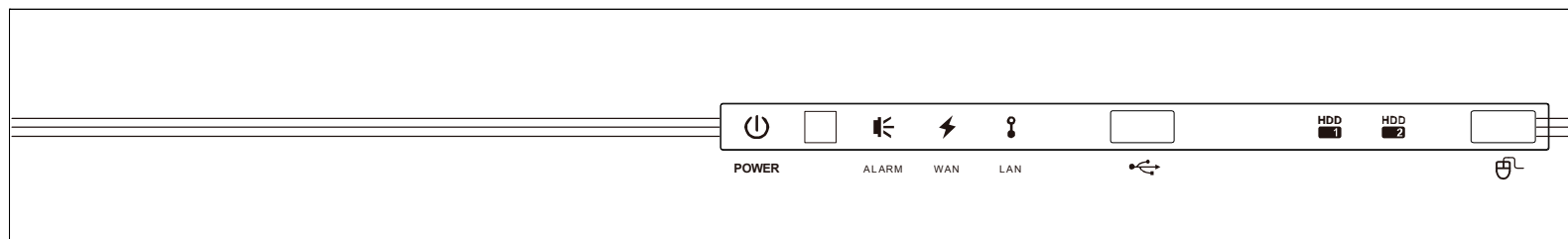
TABLE OF CONTENTS

1. HARDWARE OVERVIEW	1
1.1 Front Panel.....	1
1.2 Rear Panel	1
2. CONNECTION.....	2
2.1 Hard disk installation	2
2.2 Simple Connection Diagram.....	3
2.3 Camera IP Configurations by LAN	4
2.3.1 Automatically	4
2.3.2 Manually	4
3. USER INTERFACE.....	5
3.1 Local.....	5
3.1.1 NVR Status.....	5
3.1.2 Channel Status	5
3.1.3 Quick Operation	6
3.1.4 Main Menu.....	6
3.1.5 Playback Panel	6
3.2 Remote.....	7
4. FREQUENTLY-USED FUNCTIONS	8
4.1 Key Lock / Unlock	8
4.2 Channel Selection	8
4.3 IP Device Search.....	9
4.4 User Level Creation	10
4.5 Event Search.....	11
4.6 Video Backup	12
4.7 Video Playback on PC.....	12
4.7.1 Convert the file format to AVI	12
5. QUICK OPERATION.....	13
5.1 Power Switch	13
5.2 Channel Selection	13
5.3 Digital Zoom	13
5.4 PTZ Control.....	14
5.5 IP Device Search.....	14
6. MAIN MENU	16
6.1 QUICK START	16
6.1.1 GENERAL	16
6.1.2 TIME SETUP.....	17
6.1.3 BENCHMARK	18
6.2 SYSTEM	18
6.2.1 ACCOUNT.....	18
6.2.2 TOOLS	19
6.2.3 SYSTEM INFO.....	19
6.2.4 BACKUP DATA (USB).....	20
6.2.5 BACKUP LOG (USB).....	21
6.3 EVENT INFORMATION	22
6.3.1 QUICK SEARCH.....	22
6.3.2 EVENT SEARCH	22
6.3.3 HDD INFO.....	23
6.3.4 EVENT LOG.....	23
6.4 ADVANCED CONFIG.....	23
6.4.1 CONNECTION	23
6.4.2 CAMERA.....	24
6.4.3 DETECTION.....	25
6.4.4 ALERT	26
6.4.5 NETWORK.....	27

6.4.6 DISPLAY	27
6.4.7 RECORD.....	28
6.4.8 NOTIFY	29
6.5 SCHEDULE SETTING	29
6.5.1 RECORD.....	29
6.5.2 EVENT	30
APPENDIX 1 MOBILE SURVEILLANCE VIA EAGLEEYES	31
A2.1 Prerequisites	31
A2.2 Where to download	31
APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST	32
APPENDIX 3 COMPATIBLE HARD DISK LIST	33
APPENDIX 4 BATTERY REPLACEMENT	34
APPENDIX 5 SPECIFICATIONS	35

1. HARDWARE OVERVIEW

1.1 Front Panel



1) LED indicators

	The NVR is power-supplied.
	An alarm event occurs.
	The NVR is connected to Internet.
	The NVR is connected to LAN.
HDD	Up to two hard disks are installed in the NVR and connected well.

2) USB port (•⇄)

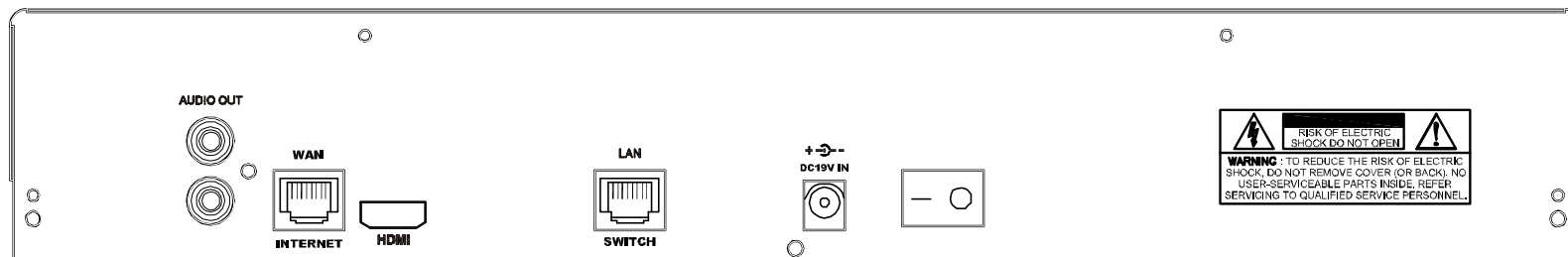
Insert a compatible USB flash drive for video backup.

Note: For the compatible list of USB flash drives, please refer to “APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST” at page 32.

3) Mouse port (Ⓜ)

Insert a mouse for function operation.

1.2 Rear Panel



1) AUDIO OUT

Connect to a speaker.

2) WAN

This port is used to connect your NVR to Internet via a RJ45 network cable.

3) HDMI

This port is used to connect the monitor which supports HDMI interface for high definition video output.

Note: Direct connection to the monitor which supports VGA or composite interface is not supported. Please prepare a converter in advance.

4) LAN

This port is used to connect your NVR to our brand’s IP cameras locally.

5) DC19V IN

Connect the NVR to power with the regulated adapter.

6) Power switch (—○)

Switch to “—” to turn on the power, and “○” to turn off the power.

2. CONNECTION

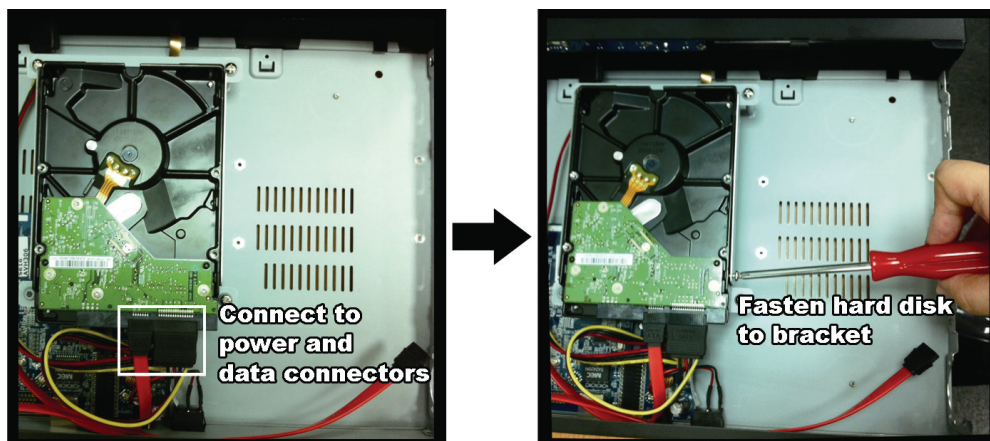
2.1 Hard disk installation

Step1: Remove the top cover.

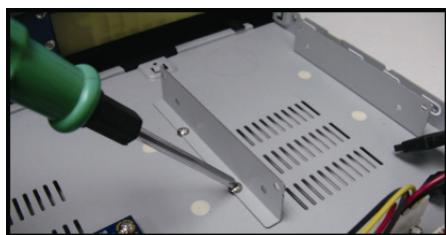
Step2: Find the hard disk bracket in the DVR, and place the compatible hard disk in the bracket.

Step3: With the PCB side facing up, connect the hard disk to the power connector and data connector.

Step4: Fasten the hard disk with the supplied screws, two for each side.



Step5: To install another hard disk, find the supplied hard disk brackets in the package, and fix them onto the NVR base.



Step6: With the PCB side facing up, connect the hard disk to the power connector and data connector.

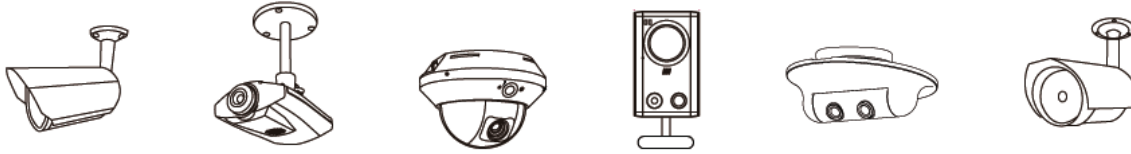
Step7: Then, put the hard disk in the bracket, and fasten it with the supplied screws, two for each side.

Step8: Replace the top cover and fasten the screws you loosened in Step1.

2.2 Simple Connection Diagram

Note: It's recommended to power on the NVR after the IP cameras are connected and powered on. This ensures the auto IP configuration works well.

Connect up to 6 IP devices:

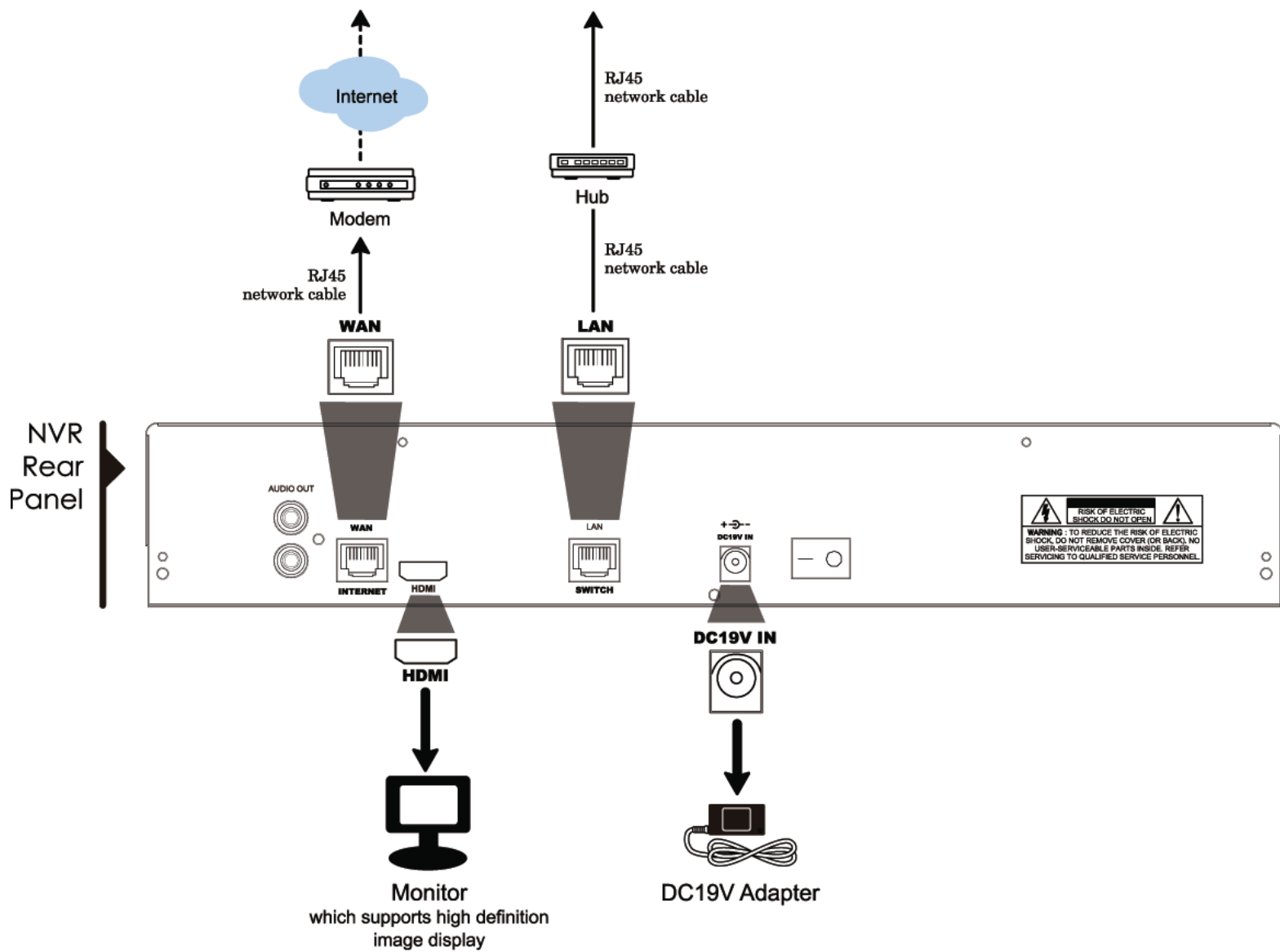


Remote connection**

1. Enter the IP address and access information of the IP camera or DVR in the NVR.
2. Wait till you can see images on the monitor.

Local connection*

1. Connect the camera to a hub.
2. Wait till the camera is configured automatically and you will see camera images on the monitor soon.***



* Local connection only allows monitoring locally. To monitor from anywhere other than the NVR is installed, please connect your NVR to Internet. For details, please refer to "3. NETWORK CONFIGURATIONS".

** Remote connection is available only when the NVR is connected to Internet. To connect your NVR to Internet, please refer to "3. NETWORK CONFIGURATIONS".

*** If you don't see camera images, change the IP address of your camera to "10.1.1.xx" (xx ranges from 11 ~ 253). For details, please refer to "2.2 Camera IP Configurations by LAN".

2.3 Camera IP Configurations by LAN

2.3.1 Automatically

The NVR will automatically configure the IP address of a camera connected by LAN if:

- The connected IP camera is our brand's IP camera.
- The default IP configuration method of the camera is "DHCP".
- The camera is powered on before the NVR is powered on.


If not, you may also configure the IP address of your camera manually as described in "2.3.2 Manually".

2.3.2 Manually

If the NVR doesn't configure the IP address of your camera automatically as described above, your IP camera might **NOT** be:

- Our brand's IP camera.
- Set to "DHCP" as its default IP configuration method.

To solve this, use our brand's IP camera, and reconfigure its IP address to 10.1.1.xx (xx ranges from 11 ~ 253), in the same network segment as the NVR.

- a) Select  on the bottom of the screen, You'll see the list of every connected IP camera with its connection status to this NVR and MAC address.
- b) Select the IP address which is not used, and select "SETUP".

IP SEARCH			
IP	PORT	MAC	STATUS
10.1.1.12	88	00:0e:53:e5:9a:f1	BE CONNECTED ON CH1
10.1.1.13	88	00:0e:53:a6:91:18	BE CONNECTED ON CH2
10.1.2.14	88	00:0e:53:a5:9f:a2	UNUSE
10.1.1.15	88	00:0e:53:e1:4e:k5	BE CONNECTED ON CH3
10.1.1.16	88	00:0e:53:s5:3e:h6	BE CONNECTED ON CH4
10.1.1.17	88	00:0e:53:e6:4b:26	BE CONNECTED ON CH5

↑↓	CONNECT	SETUP	EXIT
----	---------	-------	------

- c) Select "STATIC" in "NETWORK TYPE", and change the IP address to 10.1.1.xx (xx ranges from 11 ~ 253)
- d) Click "APPLY" and "EXIT" to save your changes.

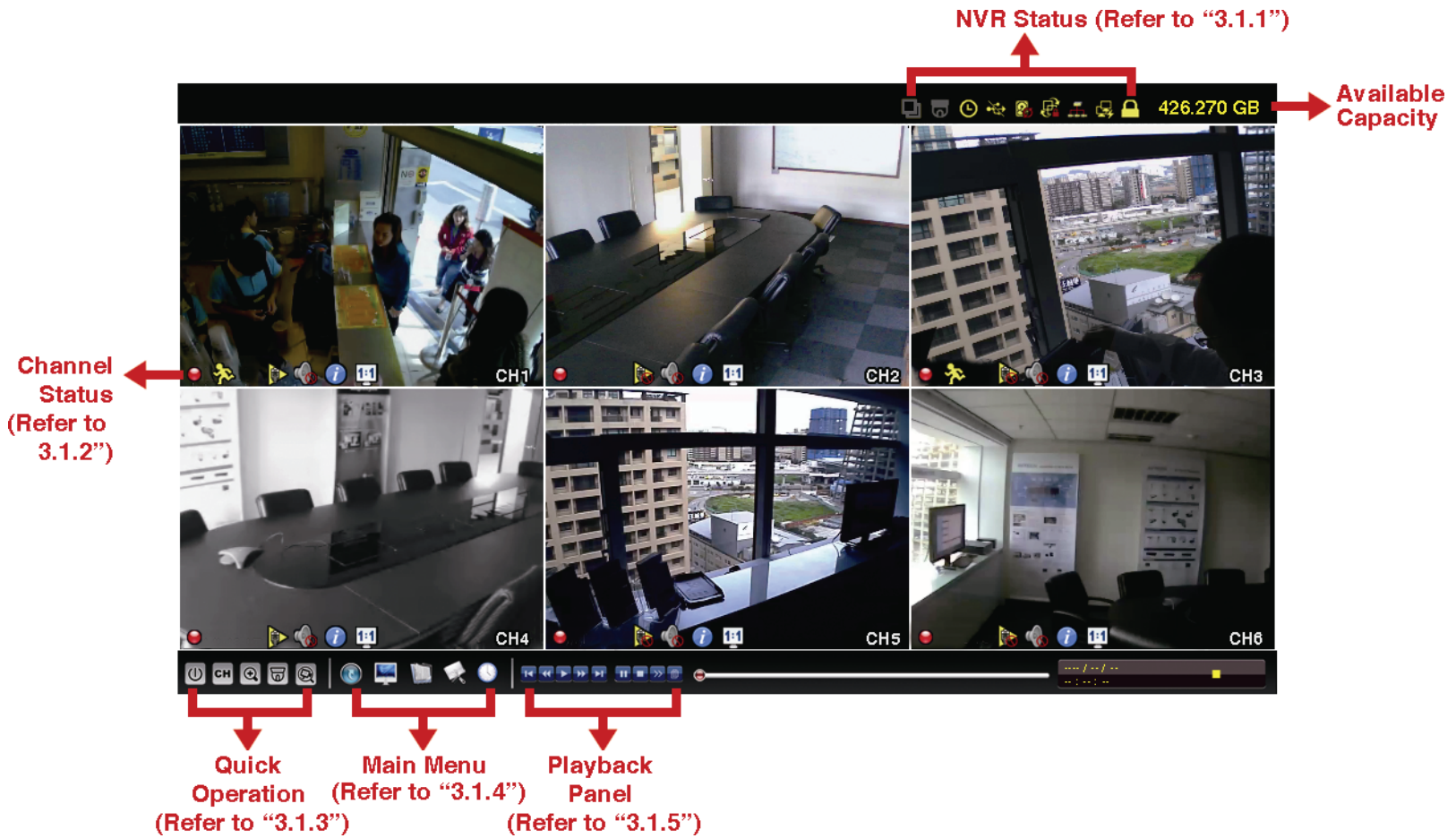
SETUP	
NETWORK TYPE	STATIC
IP	10.1.1.14
PORT	88
USER NAME	admin
PASSWORD	*****
NETMASK	255.0.0.0
GATEWAY	10.1.1.10
PRIMARY DNS	168.95.1.1

APPLY	EXIT
-------	------

- e) The NVR will then detect the IP camera and display images soon.

3. USER INTERFACE

3.1 Local



3.1.1 NVR Status

	Key lock		Key unlock
	Channel lock		Channel unlock
	USB flash drive / device connected		No USB device connected
	Timer record on		Timer record off
	Overwrite on		Overwrite off
	Sequence mode on		Sequence mode off
	PTZ mode on		PTZ mode off
	CPU loading		

Network Status:







	(WAN) Internet connected		(WAN) Internet disconnected
	(WAN) Local connection		
	(LAN) Auto mode –Mbit/s		(LAN) Auto mode – Gbit/s
	(LAN) DHCP / Static IP mode		(LAN) Camera disconnected

3.1.2 Channel Status

	Auto search on		Auto search off		Original size		Fit to screen
	Live audio on		Audio off		Audio playback on		Audio playback off
	Recording		Human detection event		Alarm event		Motion event
	Live information		Playback information				






3.1.3 Quick Operation

For details, please refer to “5. QUICK OPERATION” at page 13.










	Click to show the power off panel to either halt or reboot the system.
	Click to show the channel switch panel and select the channel you want.
	Switch to the channel you want first, and click  to enter the zoom-in mode. In this mode, click and drag the red frame on the bottom left of the screen to move to the place you want to see.
	Click to enter the PTZ mode and show the PTZ camera control panel.
	Click to open the IP search window and check the current connection status of each channel.

3.1.4 Main Menu

For details, please refer to “6. MAIN MENU” at page 16.

	QUICK START	Click to set the status display, image settings, and date & time.
	SYSTEM	Click to set the system configurations.
	EVENT INFORMATION	Click to enter the event search menu.
	ADVANCED CONFIG	Click to set CONNECTION, CAMERA, DETECTION, ALERT, NETWORK, DISPLAY, RECORD and NOTIFY.
	SCHEDULE SETTING	Click to set record timer.

3.1.5 Playback Panel

	Fast Forward	Increase the speed for fast forward from 4X to 32X.
	Fast Rewind	Increase the speed for fast rewind from 4X to 32X.
	Play / Pause	Click to play the latest recorded video clip immediately, and click again to pause. In the pause mode, click  once to get one frame forward, and click  to get one frame rewind.
	Stop	Click to stop the video playback.
	Slow Playback	Click once to get 1/4X speed playback, and click twice to get 1/8X speed playback.
	Previous / Next Hour	Click to jump to the next / previous time interval in an hour, for example, 11:00 ~ 12:00 or 14:00 ~ 15:00, and start playing the earliest event video clip recorded during this whole hour.
	Quick Search	Click to enter the quick search menu for specific record data search.

3.2 Remote

Current Streaming Information:





FR: Frame rate
DR: Data rate
DATE TIME: Current system time

The screenshot displays a remote monitoring interface with the following components:

- Streaming Information:** Located at the top left, it shows 'FR: 2.00 fps', 'DR: 1444 kbps', 'DATE TIME: 2011/12/07 07:53:14', and 'MOTION TRIGGER!'.
- Channel Status:** A red arrow points to the 'INTERNET' status indicator in the top-left camera feed.
- Camera Feeds:** A 2x3 grid of video feeds. The top row shows a kitchen area (AVM317), a meeting room (AVM217), and a window view (AVN257). The bottom row shows another view of the meeting room (AVM317), a different angle of the meeting room (AVM328A), and another window view (AVM357A).
- Control Bar:** A horizontal bar at the bottom containing icons for settings, channel selection (CH), zoom, pan, tilt, and playback controls.
- Navigation Labels:** Red arrows at the bottom point to 'Quick Operation' (under settings), 'Main Menu' (under CH), and 'Playback Panel' (under playback controls).

4. FREQUENTLY-USED FUNCTIONS

4.1 Key Lock / Unlock

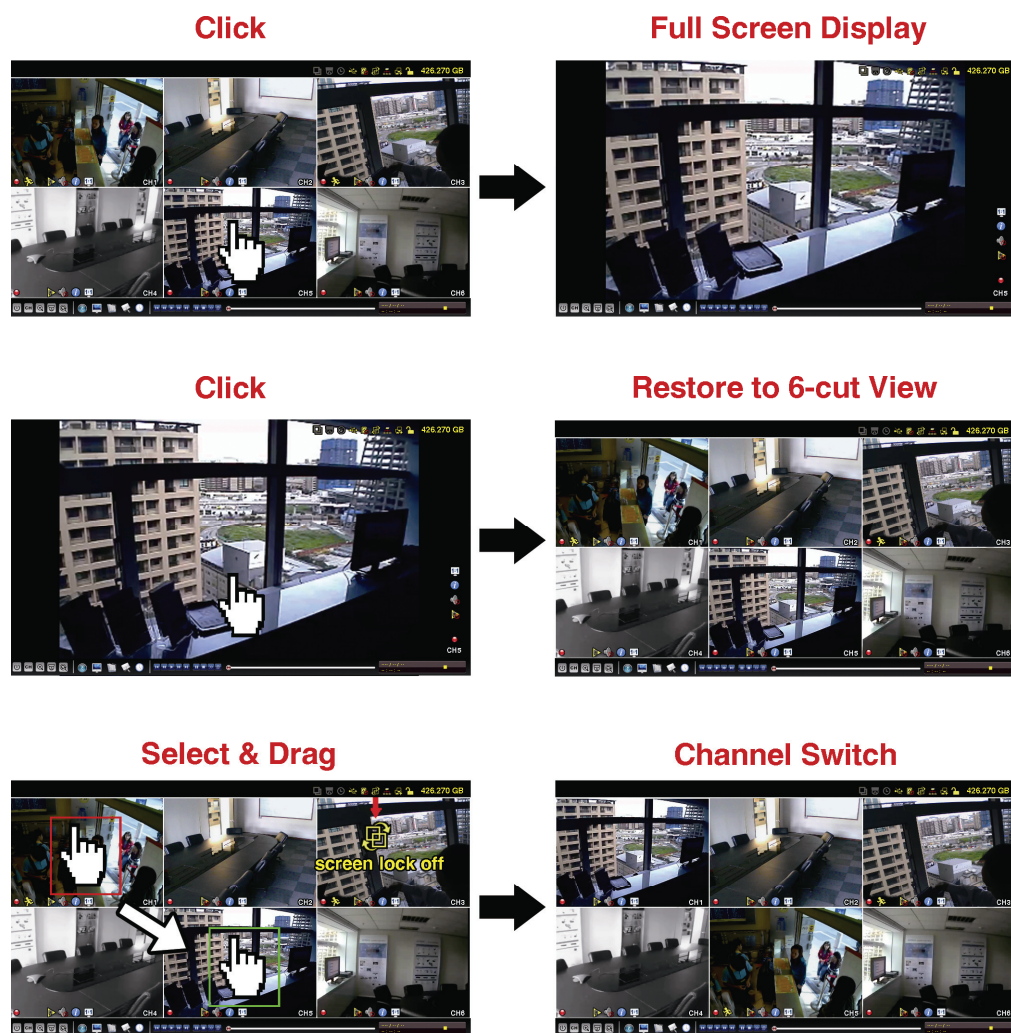
To lock or unlock NVR local operation, click  (unlock) or  (lock) on the NVR status bar to change the status to  (lock) or  (unlock).

To unlock NVR local operation, you'll be prompted to enter the user level and password to access.

Note: The default user level and password are both "admin".

Note: Different user level has different access privilege for certain NVR functions. For details, please refer to "4.4 User Level Creation" at page 10.


4.2 Channel Selection



Note: Channel switch is available only for "SUPERVISOR". To know more details, please refer to "4.4 User Level Creation" at page 10.

4.3 IP Device Search

Note: This function is available only for “SUPERVISOR”. To know more details, please refer to “4.4 User Level Creation” at page 10.

Click  (IP Search) to start search IP camera(s) connected in the same network segment as the NVR (i.e. 10.1.1.xx by default).

You'll see the list of every connected IP camera with its connection status to this NVR and MAC address.

IP SEARCH			
IP	PORT	MAC	STATUS
10.1.1.12	88	00:0e:53:e5:9a:f1	BE CONNECTED ON CH1
10.1.1.13	88	00:0e:53:a6:91:18	BE CONNECTED ON CH2
10.1.1.14	88	00:0e:53:a5:9f:a2	UNUSE
10.1.1.15	88	00:0e:53:e1:4e:k5	BE CONNECTED ON CH3
10.1.1.16	88	00:0e:53:s5:3e:h6	BE CONNECTED ON CH4
10.1.1.17	88	00:0e:53:e6:4b:26	BE CONNECTED ON CH5
10.1.1.18	88	00:0e:53:g2:3b:e7	BE CONNECTED ON CH6

To fix the camera IP address, or allow the NVR to assign an IP address to your IP camera, select “SETUP”, and select “STATIC IP “ or “DHCP” for “NETWORK TYPE”.

Click “APPLY” and “EXIT” to save your changes.


SETUP	
NETWORK TYPE	DHCP
IP	10.1.1.14
PORT	80
USER NAME	admin
PASSWORD	*****
NETMASK	255.0.0.0
GATEWAY	10.1.1.10
PRIMARY DNS	168.085.1.1

To connect to another IP camera, select the unused IP camera from the IP search list, and select “CONNECT”. Select the channel you want to display the camera images, and click “SAVE” to start connection.

CONNECT	
IP	10.1.1.14
PORT	88
CHANNEL	CH5
USER NAME	admin
PASSWORD	*****


















4.4 User Level Creation








Note: This function is available only for “SUPERVISOR”.

To create different user account for different access privilege, click  (SYSTEM), and select “ACCOUNT” to enter “USER LIST”.

ADVANCED CONFIG			
ACCOUNT	USER LIST		
TOOLS	USER NAME	LEVEL	
SYSTEM INFO	admin	SUPERVISOR	
BACKUP DATA (USB)	power	POWER USER	
BACKUP LOG (USB)	normal	NORMAL	
	guest	GUEST	
EXIT	ADD	EDIT	DEL

Different user level has different access privilege for certain functions as described below:

	Function	User Level
■ NVR status		
	Key lock / unlock	SUPERVISOR / POWER / NORMAL
	Channel switch lock / unlock	SUPERVISOR
■ Channel status		
	Auto search on / off	SUPERVISOR
	Live audio on / off	SUPERVISOR
	Playback audio on / off	SUPERVISOR
	Original size / Fit to screen	SUPERVISOR
	Live / Playback information	SUPERVISOR
■ Quick operation		
	Power	SUPERVISOR
	Channel Switch	SUPERVISOR / POWER / NORMAL / GUEST
	Digital Zoom	SUPERVISOR / POWER / NORMAL / GUEST
	PTZ Control	SUPERVISOR / POWER
	IP Search	SUPERVISOR
■ Main menu		
	Quick Start	SUPERVISOR
	System	SUPERVISOR
	Event Information	SUPERVISOR
	Advanced Config.	SUPERVISOR
	Schedule Setting	SUPERVISOR

	Function	User Level
■ Playback control		
	Fast Forward	SUPERVISOR / POWER / NORMAL
	Fast Rewind	SUPERVISOR / POWER / NORMAL
	Play / Pause	SUPERVISOR / POWER / NORMAL
	Stop	SUPERVISOR / POWER / NORMAL
	Slow Playback	SUPERVISOR / POWER / NORMAL
	Previous / Next Hour	SUPERVISOR / POWER / NORMAL
	Quick Search	SUPERVISOR / POWER / NORMAL

4.5 Event Search

Note: This function is not available for "GUEST". For details, please refer to "4.4 User Level Creation" at page 10.

In the playback control bar, click  to enter the search list.

EVENT INFORMATION

QUICK SEARCH	HARD DISK				ALL HDD
RECORD	CHANNEL	<input checked="" type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0	<input type="checkbox"/> 0
MOTION		1	2	3	4
ALARM		<input checked="" type="checkbox"/> 0	<input type="checkbox"/> 0		
TIME		5	6		
FULL					

2009 ▶ NOV

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					



00 06 12 18 24

15 : 20

SUBMIT

EXIT

- To quickly search the time within which might include the recorded data you want to see:
 - Select the channel(s) and month you want to search. You'll see the date(s) with recorded data is highlighted.
 - Select the date you want to search. You'll see the time with recorded data is highlighted from the timeline bar.
 - Click the time to start playback.
- To search the recorded data by event, select RECORD / MOTION / ALARM / TIME, or select FULL to show all the event logs. Select the log you want to start playback.

Note: During video playback, you might click  to check the recorded data details, or click  to play the recorded audio (if any) on the channel you want.

4.6 Video Backup

Note: This function is available for “SUPERVISOR”. For details, please refer to “4.4 User Level Creation” at page 10.

Note: Before using the USB flash drive, please use your PC to format the USB flash drive to FAT32 format first. For the list of compatible USB flash drives, please refer to “APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST at page 32.

To copy recorded data for video backup, click  (SYSTEM), and select “BACKUP DATA (USB)”.

SYSTEM	
ACCOUNT	START DATE 2009/NOV/19
TOOLS	START TIME 08:30:21
SYSTEM INFO	END DATE 2009/NOV/19
BACKUP DATA (USB)	END TIME 17:59:29
BACKUP LOG (USB)	CHANNEL <input checked="" type="checkbox"/> 01 <input type="checkbox"/> 02 <input type="checkbox"/> 03 <input type="checkbox"/> 04 <input checked="" type="checkbox"/> 05 <input type="checkbox"/> 06
	HARD DISK ALL HDD
	BACKUP SUBMIT
	REQUIRE SIZE: 554MB SUBMIT
EXIT	AVAILABLE SIZE: 3788.0MB

Step1: Select the time within which includes the video data you want to backup.

Step2: Select the channel(s) within which includes the video data you want to backup.

Step3: In “REQUIRE SIZE”, select “SUBMIT” to know the file size of the selected data.

Step4: In “BACKUP”, select “SUBMIT” to start backup to your USB flash drive, and wait till the backup successful message appears.

4.7 Video Playback on PC

The backup file is the unique video format for security reasons, and you can only use our own player to play.

To play video backup on your PC:

Step1: Insert the USB flash drive with recorded data into your PC.

Note: The supported PC operating systems are Windows 7, Vista & XP.

Step2: Find the program “PLAYER.EXE” in the USB flash drive, and double-click it to install.

Step3: Run the program, *VideoPlayer_NVR*, and browse to where you save the recorded data.

Step4: Select the file you want to start video playback.

4.7.1 Convert the file format to AVI

To convert the video file format to AVI, click “AVI” from the playback panel to start file conversion.

Note: The recorded audio (if any) will be removed when the file format is converted to AVI.







5. QUICK OPERATION

5.1 Power Switch

Note: This function is available only for “SUPERVISOR”. To know more details, please refer to “4.4 User Level Creation” at page 10.



To power off or reboot the NVR, you may:

- Turn the power switch () directly on the NVR rear panel (refer to “1.2 Rear Panel” at page 1), or
- Go to , and select  (power off) or  (reboot).




5.2 Channel Selection

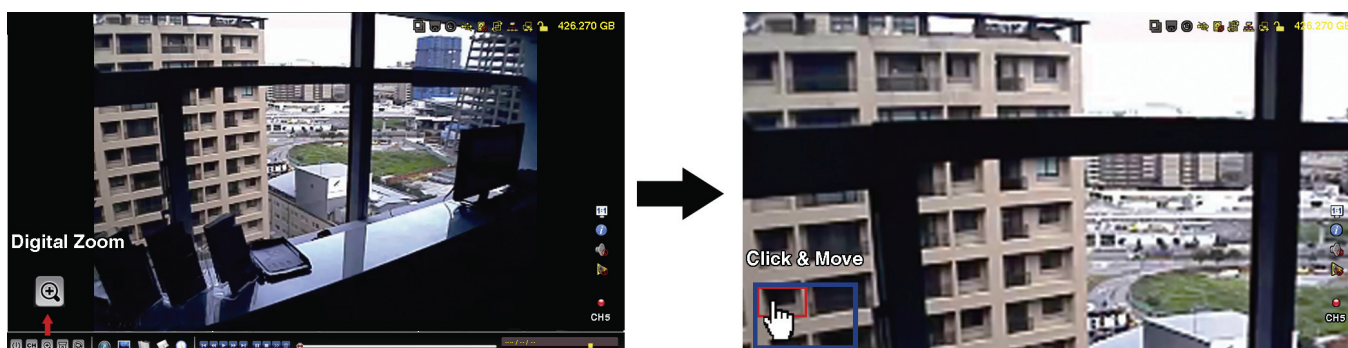
To display a specific channel in full screen and restore to the 6-cut view, you may:

- Directly click the channel you want on the screen, and click it twice to restore to the 6-cut view (refer to “4.2 Channel Selection” at page 8), or
- Go to , and select the channel you want to display in full screen from 1 ~ 6, and select  to restore to the 6-cut view.




5.3 Digital Zoom

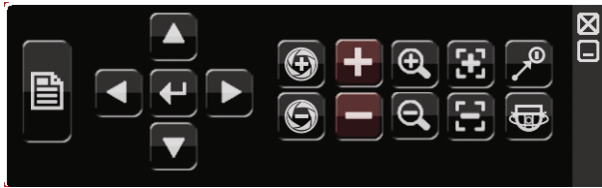
Switch to the channel you want to zoom in, and click  to enter the zoom-in mode. In this mode, click and drag the red frame on the bottom left of the screen to move to the place you want to see.












5.4 PTZ Control

Note: This function is available only for “SUPERVISOR” and “POWER USER”. To know more details, please refer to “4.4 User Level Creation” at page 10.


Click  on the quick menu bar to display the panel as follows:




	Camera Menu	Click to enter the camera main menu. For details about each camera menu, please refer to its own user manual.
	Enter	Click to confirm your selection / enter the menu.
	Up / Down / Left / Right	Click to move your selection up / down / left / right, or change settings.
	Iris + / Iris -	This two buttons are designed for the PTZ camera which uses Pelco-D to control. To know the actions after clicking Iris + and Iris -, please refer to the camera's user manual.
	Zoom in / out max	Click to zoom in on the image to the largest / zoom out on the image to its original size.
	Zoom in / out	Click to zoom in / out the image.
	Focus near / far	Click to adjust the focus of the image.
	Auto mode	Click to activate the auto function. Before using it, you need to assign a specific function that will be enabled when “AUTO” is clicked. For details, please refer to the user manual of the PTZ camera.
	Preset point	Click to enter the PTZ preset point you want to see.

5.5 IP Device Search

Note: This function is available only for “SUPERVISOR”. To know more details, please refer to “4.4 User Level Creation” at page 10.

Click  (IP Search) to start search IP camera(s) connected in the same network segment as the NVR (i.e. 10.1.1.xx by default).

You'll see the list of every connected IP camera with its connection status to this NVR and MAC address.

IP SEARCH				
IP	PORT	MAC	STATUS	
10.1.1.12	88	00:0e:53:e5:9a:f1	BE CONNECTED ON CH1	
10.1.1.13	88	00:0e:53:a6:91:18	BE CONNECTED ON CH2	
10.1.1.14	88	00:0e:53:a5:9f:a2	UNUSE	
10.1.1.15	88	00:0e:53:e1:4e:k5	BE CONNECTED ON CH3	
10.1.1.16	88	00:0e:53:s5:3e:h6	BE CONNECTED ON CH4	
10.1.1.17	88	00:0e:53:e6:4b:26	BE CONNECTED ON CH5	
10.1.1.18	88	00:0e:53:g2:3b:e7	BE CONNECTED ON CH6	
		CONNECT	SETUP	EXIT

To fix the camera IP address, or allow the NVR to assign an IP address to your IP camera, select "SETUP", and select "STATIC IP " or DHCP" for "NETWORK TYPE".

Click "APPLY" and "EXIT" to save your changes.

SETUP	
NETWORK TYPE	DHCP
IP	10.1.1.14
PORT	00080
USER NAME	admin
PASSWORD	*****
NETMASK	255.0.0.0
GATEWAY	10.1.1.10
PRIMARY DNS	168.085.1.1
<input type="button" value="APPLY"/> <input type="button" value="EXIT"/>	

To connect to another IP camera, select the unused IP camera from the IP search list, and select "CONNECT". Select the channel you want to display the camera images, and click "SAVE" to start connection.

CONNECT	
IP	10.1.1.14
PORT	88
CHANNEL	CH5
USER NAME	admin
PASSWORD	*****
<input type="button" value="SAVE"/> <input type="button" value="CANCEL"/>	

6. MAIN MENU

Note: This menu is available only for “SUPERVISOR”. To know more details, please refer to “4.4 User Level Creation” at page 10.

6.1 QUICK START

6.1.1 GENERAL

QUICK START		
GENERAL	CHANNEL TITLE	ON
TIME SETUP	EVENT STATUS	ON
BENCHMARK	DATE DISPLAY	ON
	MOUSE SENSITIVITY	0 5 10 ■■■■■▲■■■■■ SETUP
	RECORD CONFIG	
EXIT		

1) CHANNEL TITLE

Select to display the channel title or not (ON / OFF).

2) EVENT STATUS

Select to display the event icons or not (ON / OFF).

Note: For details about each event icon, please refer to “3.1 Local” at page 5.

3) DATE DISPLAY

Select to display the date or not (ON / OFF).

4) MOUSE SENSITIVITY

Select the mouse sensitivity by 9 levels.

5) RECORD CONFIG

Click “SETUP” to enter the setting page individually for manual record, event record and timer record.

Note: The options selectable for “IMAGE SIZE” and “I.P.S.” depends on the camera you’re intended to connect.

■ MANUAL & TIMER

QUICK START					
MANUAL	EVENT	TIMER			
CHANNEL	PROFILE	TYPE	IMAGE SIZE	QUALITY	I.P.S.
CH1	PROFILE-1	H264	720 X 480	0 5 10 ■■■■■▲■■■■■	30
CH2	PROFILE-1	H264	1280 x 1024	0 5 10 ■■■■■▲■■■■■	30
CH3	PROFILE-1	H264	1280 x 1024	0 5 10 ■■■■■▲■■■■■	30
CH4	PROFILE-1	H264	1280 x 1024	0 5 10 ■■■■■▲■■■■■	30
CH5	PROFILE-1	H264	720 X 480	0 5 10 ■■■■■▲■■■■■	30
CH6	PROFILE-1	H264	720 X 480	0 5 10 ■■■■■▲■■■■■	30
					EXIT

■ EVENT

QUICK START				
MANUAL	EVENT	TIMER		
CHANNEL	IMAGE SIZE	QUALITY	I.P.S.	EVENT
CH1	720 X 480	0 5 10 ■■■■■▲■■■■■	30	MOTION
CH2	1280 x 1024	0 5 10 ■■■■■▲■■■■■	30	MOTION / ALARM
CH3	1280 x 1024	0 5 10 ■■■■■▲■■■■■	30	MOTION / ALARM
CH4	1280 x 1024	0 5 10 ■■■■■▲■■■■■	30	MOTION
CH5	720 X 480	0 5 10 ■■■■■▲■■■■■	30	MOTION / ALARM
CH6	720 X 480	0 5 10 ■■■■■▲■■■■■	30	MOTION
				EXIT

6.1.2 TIME SETUP

QUICK START		
GENERAL	DATE	2009 / NOV / 17
TIME SETUP	TIME	15 : 35 : 53
BENCHMARK	NTP SERVER	Tock.stdtime.gov.tw
	SYNC PERIOD	DAILY
	GMT	(UTC+08:00)TAIPEI
EXIT		

1) DATE

Set the current date. The default display format is YEAR – MONTH – DATE (Y-M-D).

Note: To change the date display format, please refer to “5.2.1 DATE INFO”.

2) TIME

Set the current time in HOUR : MIN : SEC.

3) NTP SERVER

Click to change the default NTP server to another server they're familiar with, or keep the default NTP server.

4) SYNC PERIOD

Select to synchronize the DVR time everyday (DAILY), or turn this function off (OFF).

5) GMT

Select your time zone. There are 75 time zones for you to choose.

6.1.3 BENCHMARK

“BENCHMARK” is where you can see CPU loading and performance when certain functions are enabled and how the number of online users affects the performance of the device.

Note: Setting in “MAX ONLINE USER NUMBER” doesn’t really change and limit the online user number to the value you selected. This option is used for simulating the performance of the device when certain number of users are connected to this device.

QUICK START		
GENERAL	LIVE PARAMETER SETUP	SETUP
TIME SETUP	MANUAL RECORD SETUP	SETUP
BENCHMARK	EVENT RECORD SETUP	SETUP
	TIMER RECORD SETUP	SETUP
	RECORD TIMER	OFF
	EVENT TIMER	OFF
	MAX ONLINE USER NUMBER	5
CPU LOADING SIMULATION		
	LIVE	35%
	MANUAL	30%
	EVENT	30%
	TIMER	30%
EXIT		

6.2 SYSTEM

6.2.1 ACCOUNT

This function is used to create a new user account, or modify or delete an existing account for different access privilege.

Note: For details about available local operations of each user level, please refer to “4.4 User Level Creation” at page 10.

ADVANCED CONFIG		
ACCOUNT	USER LIST	
TOOLS	USER NAME	LEVEL
SYSTEM INFO	admin	SUPERVISOR
BACKUP DATA (USB)	power	POWER USER
BACKUP LOG (USB)	normal	NORMAL
	guest	GUEST
EXIT ADD EDIT DEL		

6.2.2 TOOLS

SYSTEM		
ACCOUNT	LANGUAGE	ENGLISH
TOOLS	UPGRADE	SUBMIT
SYSTEM INFO	BACKUP CONFIG	SUBMIT
BACKUP DATA (USB)	RESTORE CONFIG	SUBMIT
BACKUP LOG (USB)		
EXIT		

1) LANGUAGE

Select the language of the OSD.

2) UPGRADE

Save the upgrade files obtained from your installer or distributor in a compatible USB flash drive, and insert it into the USB port at the front panel. Then, click “SUBMIT” to start upgrading.

Note: Before using the USB flash drive, please use your PC to format the USB flash drive to FAT32 format first. For the list of compatible USB flash drives, please refer to “APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST” at page 32.

Note: After upgrading firmware, it’s recommended to clear all hard disk data for the system to work more stably. Before clearing all hard disk data, please remember to make video backup.

3) BACKUP CONFIG / RESTORE CONFIG

To keep the current configurations after DVR upgrade, insert a compatible USB flash drive into the USB port, and select “SUBMIT” in “BACKUP CONFIG” to copy the current DVR configurations to a file “System.bin” and save to your USB flash drive.

To restore the DVR configurations, insert the USB flash drive including “System.bin” to the USB port, and select “SUBMIT” in “RESTORE CONFIG”.

6.2.3 SYSTEM INFO

SYSTEM		
ACCOUNT	AUTO KEY LOCK	NEVER
TOOLS	CLEAR HDD	HDD-0
SYSTEM INFO	RESET DEFAULT	SUBMIT
BACKUP DATA (USB)	REMOTE CONTROL ID	000
BACKUP LOG (USB)		
EXIT		
	VERSION	T413-T413-T413-T413

1) AUTO KEY LOCK

Set the time-out in second after which the key lock function is activated (NEVER / 30 / 60 / 120).

2) CLEAR HDD

Select the hard disk you want to clear, and click “YES” to confirm or “NO” to cancel.

It’s recommended to clear all data in the hard disk when:

- It’s the first time to use this NVR to ensure the recorded data are not mixed with other data previously saved in the same hard disk.
- The NVR firmware is upgraded for the system to work more stably. Before clearing all HDD data, please remember to make video backup.
- NVR date and time are changed accidentally when the recording function is activated. Otherwise, the recorded data will be disordered and you will not be able to find the recorded file to backup by time search.

3) RESET DEFAULT

Click "SUBMIT" to reset all settings as default, and select "YES" to confirm or "NO" to cancel. The DVR will reboot after reset.

6.2.4 BACKUP DATA (USB)

This function is used to copy recorded video data from the NVR hard disk to a USB flash drive.

Insert a compatible USB flash drive to the USB port at the front panel, and you're able to start video backup.

Note: Before using the USB flash drive, please use your PC to format the USB flash drive to FAT32 format first. For the list of compatible USB flash drives, please refer to "APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST" at page 32.

Note: The backup video can be played on the PC. For details, please refer to "4.7 Video Playback on PC" at page 12.

SYSTEM	
ACCOUNT	START DATE 2009/NOV/19
TOOLS	START TIME 08:30:21
SYSTEM INFO	END DATE 2009/NOV/19
BACKUP DATA (USB)	END TIME 17:59:29
BACKUP LOG (USB)	CHANNEL <input checked="" type="checkbox"/> 01 <input type="checkbox"/> 02 <input type="checkbox"/> 03 <input type="checkbox"/> 04 <input checked="" type="checkbox"/> 05 <input type="checkbox"/> 06
	HARD DISK ALL HDD
	BACKUP SUBMIT
	REQUIRE SIZE: 554MB SUBMIT
EXIT	AVAILABLE SIZE: 3788.0MB

1) START DATE / START TIME

Select the start date & time.

2) END DATE / TIME

Select the end date & time.

3) CHANNEL

Click to select the channel(s).

4) HARD DISK

Select the hard disk containing the video data you need or "ALL HDD".

5) BACKUP

Click "SUBMIT" to start backup.

6) REQUIRE SIZE

To know the size of the expected backup video before backup, click "SUBMIT" to start calculating.

6.2.5 BACKUP LOG (USB)

This function is used to copy the event log list from the NVR to a USB flash drive.

Insert a compatible USB flash drive to the USB port at the front panel.

Note: Before using the USB flash drive, please use your PC to format the USB flash drive to FAT32 format first. For the list of compatible USB flash drives, please refer to “APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST” at page 32.

SYSTEM	
ACCOUNT	START DATE 2009/NOV/19
TOOLS	START TIME 08:30:21
SYSTEM INFO	END DATE 2009/NOV/19
BACKUP DATA (USB)	END TIME 17:59:29
BACKUP LOG (USB)	CHANNEL <input checked="" type="checkbox"/> 01 <input type="checkbox"/> 02 <input type="checkbox"/> 03 <input type="checkbox"/> 04 <input checked="" type="checkbox"/> 05 <input type="checkbox"/> 06
	DATA TYPE SETUP
	BACKUP SUBMIT
	REQUIRE SIZE: 554MB SUBMIT
EXIT	AVAILABLE SIZE: 3788.0MB

1) START DATE / START TIME

Select the start date & time.

2) END DATE / TIME

Select the end date & time.

3) CHANNEL

Click to select the channel(s).

4) DATA TYPE

Click “SETUP” to select the event type you want: MANUAL / MOTION / ALARM / SYSTEM / TIMER / HUMAN DETECTION, or select “SELECT ALL” to choose all event types.

5) BACKUP

Click “SUBMIT” to start backup. You’ll see a log file (.csv) in the flash drive.

6.3 EVENT INFORMATION

6.3.1 QUICK SEARCH

EVENT INFORMATION																																												
QUICK SEARCH EVENT SEARCH HDD INFO EVENT LOG	HARD DISK CHANNEL	ALL HDD <input checked="" type="checkbox"/> 01 <input type="checkbox"/> 02 <input type="checkbox"/> 03 <input type="checkbox"/> 04 <input checked="" type="checkbox"/> 05 <input type="checkbox"/> 06																																										
	<div style="text-align: center;"> <input type="button" value="◀"/> 2009 <input type="button" value="▶"/> NOV </div> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>SUN</th> <th>MON</th> <th>TUE</th> <th>WED</th> <th>THU</th> <th>FRI</th> <th>SAT</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> </tr> <tr> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> </tr> <tr> <td>22</td> <td style="background-color: #cccccc;">23</td> <td>24</td> <td>25</td> <td>26</td> <td>27</td> <td>28</td> </tr> <tr> <td>29</td> <td>30</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		SUN	MON	TUE	WED	THU	FRI	SAT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
	SUN	MON	TUE	WED	THU	FRI	SAT																																					
	1	2	3	4	5	6	7																																					
8	9	10	11	12	13	14																																						
15	16	17	18	19	20	21																																						
22	23	24	25	26	27	28																																						
29	30																																											
<div style="text-align: center;"> <table border="1" style="width: 100%;"> <tr> <td style="width: 25%;">00</td> <td style="width: 25%;">06</td> <td style="width: 25%;">12</td> <td style="width: 25%;">18</td> <td style="width: 25%;">24</td> </tr> <tr> <td colspan="5" style="text-align: center;"> </td> </tr> </table> </div>		00	06	12	18	24																																						
00	06	12	18	24																																								
EXIT	15 : 20	SUBMIT																																										

Step1: Select the hard disk and channel including the video data you want to search.

Step2: Select the month including the video data you want to search from the calendar, and the date with recorded data will be highlighted.

Step3: Select the date you want from the calendar, and the time with recorded data will be highlighted from the time scale bar.

Step4: To immediately play the video clip, click "SUBMIT".

To choose the start time for video playback, move your mouse cursor to the highlighted time, and click to confirm the time when the time display below is the time you want. The video playback is activated right away when you confirm the time.

Note: For video playback operations, please refer to "3.1.5 Playback Panel" at page 6.

6.3.2 EVENT SEARCH

EVENT INFORMATION	
QUICK SEARCH EVENT SEARCH HDD INFO EVENT LOG BACKUP LIST	DATE 2009/NOV/19 TIME 16:13:16 CHANNEL 1 HARD DISK ALL HDD EVENT TYPE MOTION SEARCH START
EXIT	

1) DATE / TIME

Select the specific time period that you want to search.

2) CHANNEL

Select the video channel you want to search.

3) HARD DISK

Select the hard disk including the video data you want to search, or select "ALL HDD".

4) EVENT TYPE

Select the event type you want to search: MOTION / ALARM.

5) SEARCH

Click "START" to start search and play the video data immediately.

6.3.3 HDD INFO

You can check the information of the connected hard disk(s) in the NVR.

EVENT INFORMATION								
QUICK SEARCH	NUMBER	MODEL	°C	SIZE	FREE	FORMAT TIME	SERIAL NUMBER	F.W.
EVENT SEARCH	HDD-0	ST31000526SV	46	890.562GB	864.832GB	2011/DEC/13 18:18:53	9V0DN5WS	ST31000526SV
HDD INFO								
EVENT LOG								
BACKUP LIST								
EXIT								

6.3.4 EVENT LOG

You can check all the event information (event type, time and channel), or clear all log records.

EVENT INFORMATION			
QUICK SEARCH	SYSTEM	BACKUP	
EVENT SEARCH	EVENT	TIME	COMMENT
HDD INFO	KEY UNLOCK	2011/NOV/19 15:49:07	
EVENT LOG	VIDEO LOSS	2011/NOV/19 15:32:05	04
	POWER ON	2011/NOV/19 15:32:02	
	PREV	NEXT	CLEAN
EXIT			

6.4 ADVANCED CONFIG

6.4.1 CONNECTION

To assign any channel to connect to the IP camera remotely, click "URL" to enter the address of the camera, and enter its port number.

ADVANCED CONFIG				
CONNECTION	CHANNEL	URL	PORT	CONFIG
CAMERA	CH1	ip_office.ddns.eagleeyes.tw	00080	SETUP
DETECTION	CH2	10.1.1.14	00088	SETUP
ALERT	CH3	10.1.1.30	00088	SETUP
NETWORK	CH4	10.1.1.12	00088	SETUP
DISPLAY	CH5	10.1.1.16	00088	SETUP
RECORD	CH6	10.1.1.13	00088	SETUP
NOTIFY				
EXIT				

Then, click "SETUP" to enter the access information of the camera:

CONFIG-CH1	
USERNAME	admin
PASSWORD	*****
CACHE TIME (MSEC)	0 5 20 ----- -----
MODEL	DIGITUS
GET TYPE	IP CAMERA
PROFILE	PROFILE-3
TYPE	H264
IMAGE SIZE	720 X 480
QUALITY	0 5 10 ----- -----
I.P.S.	30
AUDIO	ON
EXIT	

Step1: Enter the user name and password to access the IP camera.

Step2: Click "GET TYPE" to detect and make sure the access information you're intended to connect is correct.

Step3: Select the image size, image quality, and I.P.S. Click "GET TYPE" to detect and make sure the access information you're intended to connect is correct.

Note: The options selectable for "IMAGE SIZE" and "I.P.S." depends on the camera you're intended to connect.

Step4: (Optional) For the camera with audio recording, select "ON" or "OFF".

6.4.2 CAMERA

ADVANCED CONFIG						
CONNECTION	CH1	CH2	CH3	CH4	CH5	CH6
CAMERA	BRIGHTNESS					128
DETECTION	CONTRAST					128
ALERT	SATURATION					128
NETWORK	HUE					128
DISPLAY	COV.					OFF
RECORD	REC					ON
NOTIFY	REC AUDIO					ON
	CHANNEL TITLE					EDIT
	PORT FORWARD					81
	PORT FORWARD ENABLE					ON
EXIT						

1) BRIGHTNESS / CONTRAST / SATURATION / HUE

Click the current value to manually adjust the brightness/contrast/saturation/hue of each channel here.

2) COV.

Select if you want to mask the selected channel under recording (ON / OFF). When this function is activated, the wording "COV." will be shown on the channel screen.

Note: To hide the wording "COV." When this function is on, go to "DISPLAY", and set "DISPLAY COVERT" to "OFF". For details, please refer to "6.4.6 DISPLAY" at page 27.

3) REC

Select if you want to enable recording for the selected channel (ON / OFF).

Note: When this function is disabled, no manual, event or timer recording will be activated even if any of these three record functions is set to "ON".

4) REC AUDIO

Select if you want to enable audio recording for the selected channel (ON / OFF).

Note: This function is available only when your connected device supports audio recording.

5) CHANNEL TITLE

Click "EDIT" to input the channel title (up to six characters). The default title is the channel number.

6) PORT FORWARD / PORT FORWARD ENABLE

These two functions are used when you only want to see a single channel of this NVR remotely.

a) Set the port number for the channel in "PORT FORWARD". The default value for CH1 is 81, and the default value for CH2 is 82... etc. If you want to change the port number to other value, the range is from 1 ~ 65535.

b) Select "ON" in "PORT FORWARD ENABLE".

c) The address of the channel will be "http://NVR_address:port_number". Enter the address in Internet Explorer, and see if you can access the device (IP cameras or DVR) connected channel individually.

Note: The user name and password are still required to access the device connected to the channel. Make sure you know the user name and password to access the device. For details, please refer to its user manual.

6.4.3 DETECTION

ADVANCED CONFIG						
CONNECTION	CH1	CH2	CH3	CH4	CH5	CH6
CAMERA	ALARM					OFF
DETECTION	SENSITIVITY					0
ALERT	MOTION					ON
NETWORK	AREA					EDIT
DISPLAY						
RECORD						
NOTIFY						
EXIT						

1) ALARM

Select N.C./ N.O depending on your installation need. The default alarm value is OFF.

2) SENSITIVITY

Select the detection sensitivity of the selected channel, the lower the value, the higher the sensitivity.

3) MOTION

Select if you want to activate the motion detection function for the selected channel (ON/OFF).

4) AREA

Click "EDIT" to set the motion detection area.

There are 16 × 12 grids per camera for all channels. Pink blocks represent the area that is not being detected while the transparent blocks are the area under detection.

Note: To exit area setting and return to the detection page, right click your mouse.

6.4.4 ALERT

ADVANCED CONFIG		
CONNECTION	EXT. ALERT	ON
CAMERA	INT. BUZZER	OFF
DETECTION	KEY BUZZER	ON
ALERT	VLOSS BUZZER	ON
NETWORK	MOTION BUZZER	ON
DISPLAY	ALARM BUZZER	ON
RECORD	HDD BUZZER	ON
NOTIFY	ALARM DURATION (SEC)	5
	HDD NEARLY FULL (GB)	5
EXIT		

1) EXT. ALERT

Select to enable or disable the sound when any external alarm is triggered (ON / OFF).

2) INT. BUZZER

Select to enable or disable the sound (ON / OFF) for all internal buzzers: KEY BUZZER, VLOSS BUZZER, MOTION BUZZER, ALARM BUZZER, and HDD BUZZER.

Note: When this item is set to "OFF", item 3) to item 7) will be disabled even though they are set to ON.

3) KEY BUZZER

Select to enable or disable the sound when pressing the buttons on the front panel (ON / OFF).

4) VLOSS BUZZERD

Select to enable or disable the sound when video loss happened (ON / OFF).

5) MOTION BUZZER

Select to enable or disable the sound when any motion alarm is triggered (ON / OFF).

6) ALARM BUZZER

Select to enable or disable the sound when any internal alarm is triggered (ON / OFF).

7) HDD BUZZER

Select to enable or disable the sound (ON / OFF) when the HDD remaining capacity reaches to the value set in "HDD NEARLY FULL (GB)".

8) ALARM DURATION (SEC)

Select the duration time for alarm buzzer in second (5 / 10 / 20 / 40).

9) HDD NEARLY FULL (GB)

If HDD BUZZER is enabled, select the duration time for buzzer notifications when the hard disk available capacity is 5/10/15/20 GB left.

6.4.5 NETWORK

There are two RJ45 ports on the DVR rear panel: WAN and LAN.

- **WAN** is used to connect this NVR to Internet for remote access from anywhere as long as Internet access is available.
- **LAN** is used to connect to IP cameras locally.

ADVANCED CONFIG					
CONNECTION CAMERA DETECTION ALERT NETWORK DISPLAY RECORD NOTIFY	WAN	LAN	E-MAIL	DDNS	
	NETWORK TYPE			DHCP	
	IP			192.168.001.112	
	GATEWAY			192.168.001.254	
	NETMASK			255.255.255.000	
	PRIMARY DNS			168.095.001.001	
	SECONDARY DNS			139.175.055.244	
	PORT			00088	
	EXIT				

6.4.6 DISPLAY

ADVANCED CONFIG		
CONNECTION CAMERA DETECTION ALERT NETWORK DISPLAY RECORD NOTIFY	FULL SCREEN DURATION	03
	DISPLAY COVERT	ON
	HDD DISPLAY MODE	SIZE
	BRIGHTNESS	128
	CONTRAST	128
	SATURATION	128
	EXIT	

1) FULL SCREEN DURATION

Select the full screen dwell duration time in second (03 / 05 / 10 / 15).

2) DISPLAY COVERT

Select "ON" or "OFF" to display or hide the wording "COV." When covert recording is activated in "CAMERA".

3) HDD DISPLAY MODE

Select "SIZE" to show the remaining hard disk capacity for recording in GB, or "TIME" to show the remaining recording time.

4) BRIGHTNESS / CONTRAST / SATURATION

Click the current value to manually adjust the brightness/contrast/saturation/ of the screen.

6.4.7 RECORD

Note: Please DO NOT change the date or time of your NVR after the recording function is activated. Otherwise, the recorded data will be disordered and you will not be able to find the recorded file to backup by time search. If users change the date or time accidentally when the recording function is activated, it's recommended to clear all hard disk data, and start recording again.

ADVANCED CONFIG		
CONNECTION	MANUAL RECORD	OFF
CAMERA	EVENT RECORD	ON
DETECTION	TIMER RECORD	OFF
ALERT	PRE-ALARM RECORD	ON
NETWORK	OVERWRITE	ON
DISPLAY	KEEP DATA LIMIT (DAYS)	OFF
RECORD	RECORD CONFIG	SETUP
NOTIFY		
EXIT		

1) MANUAL RECORD

Set the manual recording function on / off.

2) EVENT RECORD

Set the event recording function on / off.

3) TIMER RECORD

Set the timer recording function on / off.

4) PRE-ALARM RECORD

Select to enable or disable the pre-alarm function (ON / OFF).

When pre-alarm and event recording functions are both activated, the DVR will record 8MB data before an alarm / motion event is triggered.

5) OVERWRITE

Select "ON" to overwrite previous recorded data in your HDD when the HDD is full. When this function is on and the HDD is full, the DVR will clear 8GB data from the oldest for continuous recording without notice.

6) KEEP DATA LIMITS (DAYS)

Assign the maximum recording days from 01 to 31 after which all the recorded data will be removed, or select "OFF" to disable this function.

7) RECORD CONFIG

Click "SETUP" to enter the setting page individually for manual record, event record and timer record.

For details, please refer to "6.1.1 GENERAL" at page 16.

6.4.8 NOTIFY

You can send notifications for certain events to the E-mail address(es) specified.

Note: Make sure you have configured an E-mail account in “NETWORK” → “E-MAIL” to send the notifications.

Enable this function in “ACTION”, select the event type(s) you want to send notifications in “EVENT”, and add the E-mail address(es) to which you want to send notifications in “RECEIVER”.

ADVANCED CONFIG	
CONNECTION	E-MAIL
CAMERA	ACTION ON
DETECTION	EVENT <input type="checkbox"/> ALL
ALERT	<input type="checkbox"/> VIDEO LOSS
NETWORK	<input type="checkbox"/> POWER ON
DISPLAY	<input type="checkbox"/> CLEAN HDD
RECORD	<input type="checkbox"/> NET LOGIN
NOTIFY	<input type="checkbox"/> LEY UNLOCK
	<input type="checkbox"/> NETWORK
	<input type="checkbox"/> UPS
	<input type="checkbox"/> SYSTEM ABNORMAL
	RECEIVER SETUP
EXIT	

6.5 SCHEDULE SETTING

6.5.1 RECORD

Select “ON” to enable record timer, and select the day and time for this function.

SCHEDULE SETTING	
RECORD	RECORD TIMER ON
EVENT	0 2 4 6 8 1 1 1 1 1 2 22 2 0 2 4 6 8 0
SUN	
MON	
TUE	
WED	
THU	
FRI	
SAT	
EXIT	

X axis: 0 ~ 24 hours. Each time bar is 30 minutes.

Y axis: Monday ~ Sunday.

6.5.2 EVENT

Select "ON" to enable event timer, and select the day and time for this function.

SCHEDULE SETTING	
RECORD	EVENT TIMER
EVENT	ON
	0 2 4 6 8 1 1 1 1 1 2 22 2 0 2 4 6 8 0 4
SUN	
MON	
TUE	
WED	
THU	
FRI	
SAT	
EXIT	

X axis: 0 ~ 24 hours. Each time bar is 30 minutes.

Y axis: Monday ~ Sunday.

APPENDIX 1 MOBILE SURVEILLANCE VIA EAGLEEYES

EagleEyes is a mobile phone program used with our surveillance system for remote surveillance. It has several advantages:

- It's free (Except *EagleEyes Plus* for iPhone).
- It's compatible with several popular mobile platforms, such as iPhone, iPad and Android.

It's easy to download, install and configure. For more details about configuring and operating this program, please visit our official website www.eagleeyesccctv.com.

A2.1 Prerequisites

Before installing *EagleEyes* to your mobile phone for remote surveillance, make sure you have checked the following:

- ✓ Your mobile platform is iPhone, iPad & Android.
- ✓ Mobile Internet services are subscribed and available to use for your mobile phone.

Note: You might be charged for Internet access via wireless or 3G networks. For the Internet access rate details, please check with your local network operator or service provider.

- ✓ You have noted down the IP address, port number, user name and password used to access your network camera from Internet.

A2.2 Where to download

Connect to www.eagleeyesccctv.com from your mobile phone, and sign in.

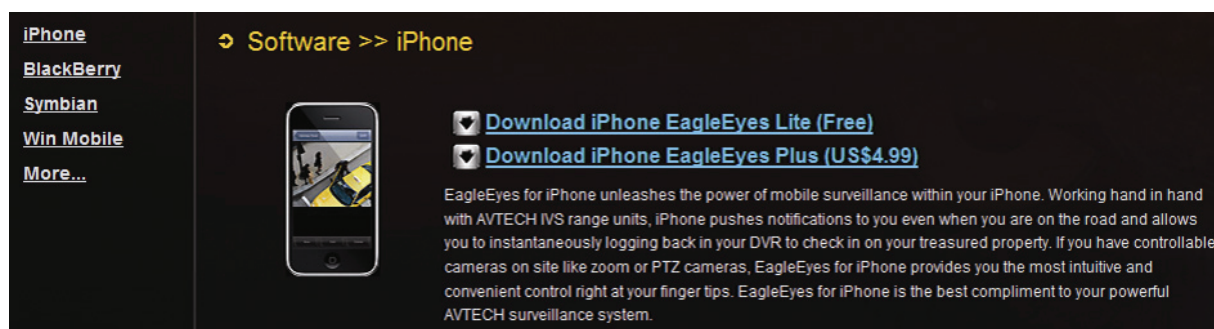
Note: Please **DO NOT** try to download *EagleEyes* from your computer.

Then, select "Software" and the mobile platform of your phone to download *EagleEyes* to your phone.

- For Android & iPad, select the download link from the website to start downloading.
- For iPhone, two versions of *EagleEyes* are available:
 - *EagleEyes Plus* (US\$4.99), and
 - *EagleEyes Lite* (Free).

Select the version you want, and you'll be directed to "App Store" to download the application.

Note: You can also find *EagleEyes* on "App Store" from your iPhone. Go to "App Store", and select "Search". Enter the keyword "eagleeyes" to find and download the version you want.



When the download is completed, *EagleEyes* will be installed automatically to the location where all applications are saved in your phone by default, or where you specify.

Note: For more details about configuring and operating this program, please visit our official website www.eagleeyesccctv.com.

APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST

Please upgrade the firmware of the NVR to the latest version to ensure the accuracy of the following table. If the USB flash drive is not supported by the NVR, the “USB ERROR” message will be shown on the screen.

Note: Please use your PC to format the USB flash drive as “FAT32”.

Note: You can backup up to 2GB video data for one-time USB backup. To backup more data, please set the time & channel(s) you want, and start USB backup again.

MANUFACTURER	MODEL	CAPACITY
Transcend	JFV35	4G
	JFV30	8G
Kingston	DataTraveler	1G
PQI	U172P	4G
Apacer	AH320	2GB
	AH320A	8GB
	AH220	1GB
	AH320	4GB
A-data	RB-18	1GB
Sandisk	Cruzer Micro	2G
	Cruzer Micro	4G
	Cruzer4-pk	2G
Netac	U208	1G
MSI	F200	4G
SONY	Micro Vault Tiny 2G	2G
	Micro Vault Tiny 4G	4G
	Micro Vault Tiny	1G

APPENDIX 3 COMPATIBLE HARD DISK LIST

Please upgrade the firmware of the device to the latest version to ensure the accuracy of the following table.

MANUFACTURER	MODEL	CAPACITY	ROTATION
Seagate	ST3320613AS	320GB	7200 rpm
	ST33500320AS	500GB	7200 rpm
	ST3500410SV	500GB	7200 rpm
	ST3750330AS	750GB	7200 rpm
	ST31000525SV	1000GB	7200 rpm
	ST31000340AS	1000GB	7200 rpm
WD	WD3200AAKS	320GB	7200 rpm
	WD5000AACS	500GB	7200 rpm
	WD6400AAKS	640GB	7200 rpm
	WD7500AAKS	750GB	7200 rpm
	WD10EADS	1TB	7200 rpm
	WD15EADS	1.5TB	7200 rpm
	WD20EADS	2TB	7200 rpm
Maxtor	STM3500320AS	500GB	7200 rpm
	STM3750330AS	750GB	7200 rpm
HITACHI	HDT725032VLA360	320GB	7200 rpm
	HDS721010KLA330	1000GB	7200 rpm

APPENDIX 4 BATTERY REPLACEMENT

The time reset after power failure, for example, caused by a power outage, will cause the disorder of the recorded data, and users may have problems in searching the event clip they want. To keep the device time from resetting, a non-chargeable lithium battery, CR2032, is installed in the device.

However, the device time might still get reset when the battery is low or even running out of power. If so, please replace the device battery, CR2032, **right away** as instructed below.

➤ How to replace CR2032

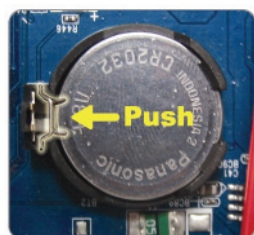
Note: The lithium battery, CR2032, is a non-chargeable battery, and should be purchased separately. Please replace only with the same or equivalent type battery in case of danger.

Step1: Stop all recording **immediately** to prevent the disorder of the recorded data. Then, back up the recorded data if necessary.

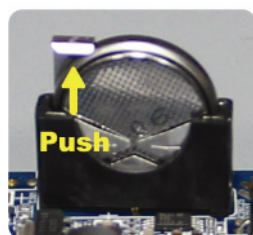
Step2: Power off the device, and disconnect the power.

Step3: Remove the device cover, and find the battery on the mainboard.

Step4: Push the release as indicated below to remove the battery.



Type1



Type 2

Step5: Get a new battery and install it to its slot on the mainboard.

- For Type 1, install it with the side of "CR2032" facing up as shown above.
- For Type 2, install it without the side of "CR2032" facing you as shown above.

Step6: Replace the cover and connect to power.

Step7: Set the date & time, and resume recording.

APPENDIX 5 SPECIFICATIONS

Hardware		
Video Input	One LAN port Up to 6 Channels with a 6-port hub	
Video Output	HDMI	
Video Output Resolution	1920 x 1080	
Audio Input	YES	
Audio Output	YES (Line Out / HDMI)	
HDD Storage**	Up to two 3TB HDDs	
USB Ports	Two on the front panel: one for video backup to USB flash drive, and another for NVR control via a USB mouse	
IR Remote Control	YES	
Ethernet	LAN port	1000Mbps
	Internet port	10Mbps / 100Mbps
Software		
Video Compression Format	H.264 / MPEG4 / MJPEG	
Recording Mode	Manual / Event / Alarm / Schedule	
Recording Throughput	50Hz IP camera	Up to 150 @ 720P, 32 Mbps
	60Hz IP camera	Up to 180 @ 720P, 32 Mbps
Pre-alarm Recording	YES	
Quick Search	Time / Motion / Alarm	
Security	Multiple user access levels with password	
Remote Access	(1) Internet Explorer on Windows operating system (2) EagleEyes on iPhone, iPad & Android mobile devices (3) Our self-developed program, Video Viewer	
General		
Power Source (±10%)	DC 19V / 2.1A	
Operating Temperature	10°C ~ 40°C (50°F~104°F)	
Dimensions (mm)**	375(W) × 55(H) × 264(D)	
Minimum PC Browsing Requirements	<ul style="list-style-type: none"> · Pentium 4 CPU 1.3 GHz or higher, or equivalent AMD · 256 MB RAM · AGP graphics card, Direct Draw, 32MB RAM · Windows 7, Vista & XP, DirectX 9.0 or later · Internet Explorer 7.x or later 	
Peripherals	<ul style="list-style-type: none"> (1) EoC converter (2) High Resolution Display Extender (3) Video Server 	

* Specifications are subject to change without notice.

** Dimensional tolerance: ±5mm