Mounting and Operating Manual

Dear Customer!

By selecting this VC product you have chosen a professional device, which guarantees highest possible quality and reliability.

Please read the following instructions carefully before comissioning the product in order to be able to take full advantage of all quality features regarding this product line.

Digital Video Recorder

Art. Nr. 13180



CAUTION RISK OF ELECTRICAL SHOCK. DO NOT OPEN!

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

This label may appear on the bottom of the unit due to space limitations.



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



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

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE UNITS NOT SPECIFICALLY DESIGNED FOR



Attention: installation should be performed by qualified service Personnel only in accordance with the National Electrical Code or applicable local codes.



Power Disconnect. Units with or without ON-OFF switches have power supplied to the unit whenever the power cord is inserted into the power source; however, the unit is operational only when the ON-OFF switch is the ON position. The power cord is the main power disconnect for all unites.



"CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instruction."

Warranty and Service

During the warranty period (one year), we will repair or replace the DVR free of charge.

Be sure to have the model number, serial number and vendor stick on hard disk for service representative.

About this document

Before installing stand alone DVR, be sure to thoroughly review and follow the instructions in this Users Manual. Pay particular attention to the parts that are marked **NOTICE**.

Also, when connecting with external application, first turn the power OFF and follow manual instruction for appropriate installation.

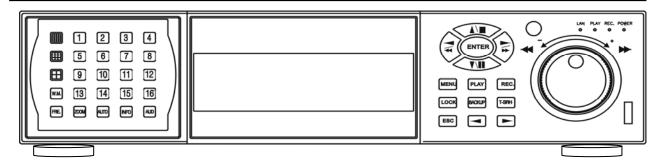
Before reading this document

- 1. This document is intended for both the administrator and users of stand alone DVR Model.
- 2. This manual contains information for configuring, managing and using stand alone DVR Model.
- 3. To prevent fire or electrical shock, do not expose the product to heat or moisture
- 4. Be sure to read this manual before using stand alone DVR Model.
- 5. For questions and technical assistance of this product, contact your local dealer.
 - ▶ Strong recommendation on installation of the DVR unit
- 1. Check electricity at the place you want to install the DVR unit is stable and meets our electricity requirements.
 - Unstable electricity will cause malfunction of the unit or give critical damage to the unit.
- 2. Several chips on the main board of the DVR unit and hard disk drive inside the unit generate heat, and it must be properly discharged.
 - Do not put any objects just beside exhaust port(fan) on the left side of the unit and do not close up an opening (fresh air in-take) on the right side of the unit..
- Put the DVR unit at well-ventilated place and do not put heat-generating objects on the unit.
 When it is installed inside 19 inch mounting rack together with other devices, please check built-in ventilation fan of the rack is properly running.

Content

| Safety Precautions | 2 |
|----------------------------------|----|
| About this document | 3 |
| Before reading this document | 3 |
| Jnite Description of Front Panel | 5 |
| Jnit Description of Rear Panel | 6 |
| nstallation | 7 |
| Function Setup | |
| Basic Operation. | |
| JSB Data Read and Networking | 39 |
| Record Time Table: 80 GB HD | 49 |
| /GA Description (Optional) | 50 |
| Additional | 51 |

Unit Description of Front Panel





16 / 9 / 4 split screen

1 ~ 16 full screen

10 11 14 [15]

W.M. Water Mark function







Freezer / Zoom / Sequence / Information / Audio

Menu button MENU: Play button PLAY: Record button REC: Key lock button LOCK:

Data back up button **BACKUP:**

Time search playback button T-SRH:

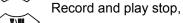
Function exit button ESC: Value change button







Direction UP / Down,



Playback pause / steps.



Direction Left / Right

Playback forward or reverse.



ENTER



Playback forward / reverse

Function item change shuttle.

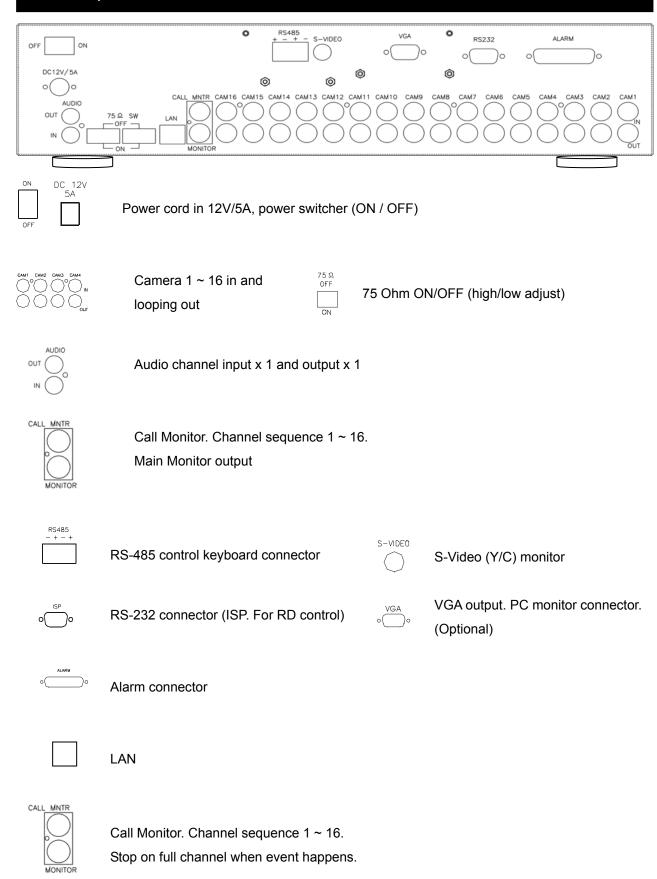


Remote controller IR

Function LED light display

USB. Data backup or firmware update

Unit Description of Rear Panel



Notice: Reboot DVR after installing any device.

Installation



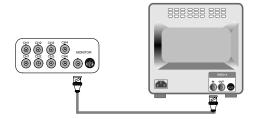
1) Camera Connection

Connect the camera to the CAMERA INPUT on the Rear Panel of the 16 CH DVR.



2) Monitor Connection (Composite Connection Method)

Connect the monitor to the MONITOR OUT on the Rear Panel of the 16 CH DVR.



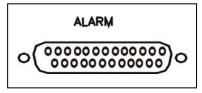
3) Monitor Connection

Connect S-VIDEO Monitor to MONITOR OUT on the Rear Panel of the 16 CH DVR.



4) Sensor Connection

Connect the Sensor to the SENSOR INPUT/ OUTPUT on the Rear Panel of the system



13,12,11,10,9,8,7,6,5,4,3,2,1

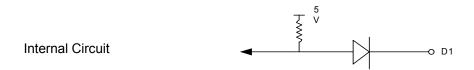
 $25,\!24,\!23,\!22,\!21,\!20,\!19,\!18,\!17,\!16,\!15,\!14$

1. ALARM 1 14. ALARM 13 2. ALARM 2 15. ALARM 14 3. ALARM 3 16. ALARM 15 4. ALARM 4 17. ALARM 16 5. ALARM 5 18. X 6. ALARM 6 19. X 20. DGND 7. ALARM 7 8. ALARM 8 21. ALARM COM 9. ALARM 9 22. ALARM NC 10.ALARM 10 23. ALARM NO 11. ALARM 11 **24. DGND** 12.ALARM 12 25. DGND

13. DGND

- ◆Relay output: COM+NC, COM+NO
- ◆Alarm input : Short-circuit between Alarm1 ~ 16 and GND is recognized as alarm by default.
 Alarm 1 ~ 16 will be corresponding to Camera 1 ~ 16.
 NC = Normal Close. NO = Normal Open.

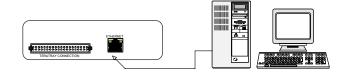
NOTICE: Sensor input is RECOGNIZED as LOW when alarm signal is on a level with GND, and it is recognized as HIGH when alarm signal is FLOATING or 5V. Following is internal circuit.



Thus, there is a danger of damage, when the sensor input goes to a Negative level or voltage higher than 5V.

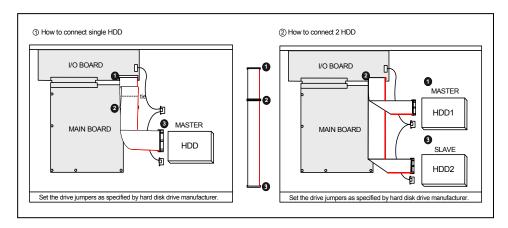
5) Network Connection

DVR connects to LAN



◆To view video image on the computer through internet with DVR view software.

5) HDD connection



- 1. Make sure the HDD is MASTER.
- Make sure the cable connector is correct.
- Please check the HDD panel for Master set up.
- 1. Make sure the HDD is MASTER and SLAVE.
- 2. Make sure the cable connector is correct.
- Please check the HDD panel for Master and Slave set up.

Notice:

-Hard Disk Master and Slave jumper pin must right, otherwise it makes DVR work fault.

Hard Disk testing table:

| Brand | Model | Capacity | Notice |
|------------------|------------------|----------|--------|
| Seagate | Barracuda | 80 GB | |
| IBM | DeskStar | 80 GB | |
| WD2000 | Caviar | 200 GB | |
| Hitachi DeskStar | | 80 GB | |
| Maxtor | Maxtor MaxLineII | | |



Full screen or split screen display

Press button, to display 16 / 9 / 4 quarterly split screen.

1.) FREEZE Mode

- 1. In live mode press (FREZE) button to freeze image.
- 2. Press again to cancel freeze mode.

2.) Zoom Mode(Display Enlargement.)

Go to full screen mode with numeric buttons at live or playback mode, then press ZOOM button to display screen Enlargement.



button to move position.

3.) Auto Mode

Press [AUTO] button to start screen auto sequencing, and press it again to cancel auto mode.

4.) W.MARK. Water Mark mode.

Water Mark on to check if the data has modify.

5.) INFO (System Information). Auto disappear after 2 minutes if no any button operating.

- ** SYSTEM INFORMATION **
- 1.IP ADDR:
- 2.GATEWAY:
- 3.NETMASK:
- 4.NET USER:
- 5.HDD SIZE:
- 6.HDD USED:
- 7.STATUS1
- 8.STATUS2
- 9.UPTIME
- 10.VERSION:

- 1. Network IP address
- 2. Network IP gateway
- 3. Network IP netmask
- 4. Network user amount
- 5. Hard disk capacity
- 6. Hard disk used percentage
- 7. First hard disk status
- 8. Video format
- 9. System running time
- 10. System version

6.) BACKUP. Image backup mode.(Image back up must be done on playback mode only.) Locate the playback point of which you want. Press BACKUP, back up menu shows:

BACKUP MENU
CDR WRITE SPEED
START BACKUP TO CDR
FORMAT USB
START BACKUP TO USB

CDRW
BACKUP MENU
BACKUP MENU

CDR WRITE SPEED x1,x2,x3
START BACKUP TO CDR
START BACKUP TO USB

USB:

The BACKUP CAUTION window pop-up. Press ENTER to begin data back up. Capacity of USB device is not limit.

On playback mode, presses BACKUP:

** BACKUP CAUTION **

THE ORIGINAL BACKUP FILE

WILL BE KILLED.

PRESS [ENTER] TO BACKUP.

PRESS [BACKUP] TO CANCEL.

Lower-Right corner of the screen:

xxx K

xxx K (Presently back up progress)

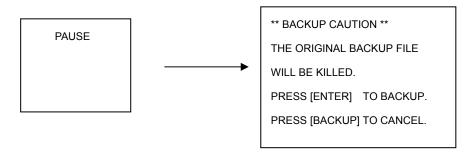
Important:

If DVR cannot detect USB device, please format it to FAT or FAT 32 on PC OS.

When the file is opened from a CF card, only DVR images will appear, but without sounds.

Additional:

During playback, USB device is full or user press BACKUP button screen display a "PAUSE" caption, User takes out the USB device to computer USB slot then save data to hard disk. After re-insert USB device to DVR slot, user press BACKUP again. Press ENTER to continue backup or backup button to cancel.



PS: NetViewer software auto copied to USB device when data backup. See the USB Data Read and Networking pages.

Compatible USB: Transcend 256 MB, 1 GB / A-DATA, 512MB / USB Flash Drive 128 MB / Intelligent Stick 256 MB / SOLOMON 128 MB / ISTEC 1GB.



xxx K (Presently back up progress)

Press BACKUP to stop saving. Or wait for CD is full done.

Data only read in Netviewer.

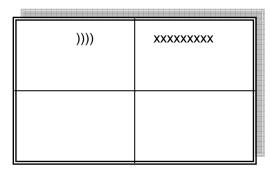
7.) Key Lock function

>On the Live mode, press (lock), Only, numeric, freeze, auto, and zoom buttons could work.

Press lock key again to enter the login-in window. Enter admin or user password to unlock.

Key lock function only accept password correct log in even re-boot DVR power.

8.) AUDIO function))))





Audio playback: AUD (Audio),

))))))))displays on the Upper-left of screen. At that time, audio will playback. Press it again to turn it off.

Notice

Audio playback only on normal(x 1) playback.

9. NETWORK Playing

NETWORK PLAYING PASSWORD : (*****)

ENTER PASSWORD TO TERMINATE

- 1. When the admin do playback mode on AP (Net Viewer), user can terminate it after into password of DVR. On AP client, admin needs to connect again.
- 2. When AP on playback mode, DVR is on playback mode also.



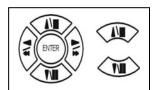
1. Playback Mode

1) Press PLAY button to begin playback. (System playback the images backward)

2. T-SRH button

1) T-SRH: Playback by time search.

Press T-SRH button to active playback function.

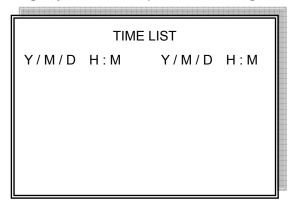


Press direction button UP/DOWN to choose items.

MAIN PLAY PAGE

- 1.MASTER TIME LIST
- 2.SLAVE TIME LIST
- 3.MASTER EVENT LIST
- **4.SLAVE EVENT LIST**
- 5.GOTO DATE: 2004/12/31
- 6.GOTO TIME: 12:12
- 7.GOTO PLAY

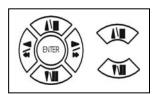
1) TIME LIST (Playback image by Time-Search): Recorded images list (by hours)



Y / M / D H : M (Beginning of recording time) Y / M / D H : M (End of recording time)

Every playback data list displays by an hour.

No page display limit. 10 items display on each page.



Press direction button UP/DOWN to choose items.

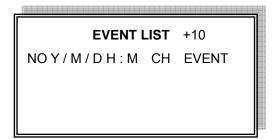
Notice:

Every playback data list displays by an hour, but if user finds out like:

- 1. 10:00 ~ 10:12
- 2. 10:12 ~ 11:00

Reason: 1. Hard disk is full. 2. User change record mode setup.

2) EVENT LIST (Alarm List): Event source- Video loss / Alarm trigger / Motion / Record



10 items display on each page / Total 5000 items display for 500 pages. When event list is out of compass, the total items are less then 5000.

NOY/M/DH:M CH EVENT

>Event happens time and list.

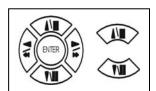
CH: Event Channel Display.

>1 CH ~ 16 CH

- +10: Display pages by 10 units / +100: Display pages by 100 units / +1000: Display pages by 1000 units.
- Press direction button left and right to change +10 / +100 / +1000

Event type.

>Includes Motion / Alarm / V-Loss / Record / Power On / Event Full / Network (Network total users, include log in and log out.)



Press direction button UP/DOWN to choose items.

>Special time search playback:

Go TO DATE: 2002/12/12

- -Choose year / month / day
- >Press direction button Left / Right to choose items, press values change button \bigcirc to change value.

GOTO TIME: 12:12

- -Choose hour and minute
- >Press direction button Left / Right to choose items, press values change button \cite{to} to change value.

GOTO PLAY

- -Press ENTER button to start playback.
- Notice: Playback speed change by $\triangleleft \triangleright$ or shuttle. Speed is x 1, x 2, x 4, x 8, x 16.

Function Setup



- 1) Press button to enter into menu. You could do the system function setup in MENU.
- 2) Password enter window pop-up:

CHECK PASSWORD MENU
PASSWORD (*****)

Default password (Account-Admin): 44444 Default password (Account-User): 11111

- 3) Press numeric (1 \sim 10)button or remote controller (1 \sim 10)to choose password.
- 4) Remote controller function buttons are same as DVR panel function buttons.

Basic Operation

Press MENU button to enter MAIN SETUP PAGE.

MAIN SETUP PAGE

- 1. HDD INFORMATION
- 2. DATE-TIME SETUP
- 3. DISPLAY SETUP
- 4. CAMERA SETUP
- 5. BUZZER SETUP
- 6. RELAY SETUP
- 7. SYSTEM SETUP
- 8. ADVANCED SETUP

MENU, ESC: EXIT, ENTER: RUN

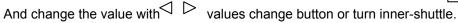
1) Use direction button up/down button to select setup item.





3) Press sub-menu item with direction button up/down

or left/right button.



4) Press ESC to go back to main / sub menu or exit menu.

Notice:

- 1. ADMIN level can setup all DVR menu functions.
- 2. USER level cannot setup ADVANCED page of DVR main menu function.
- 3. Auto disappear after 4 minutes if no any button operating.

1. HDD INFORMATION

MAIN SETUP PAGE

1. HDD INFORMATION

- 2. DATE-TIME SETUP
- 3. DISPLAY SETUP
- 4. CAMERA SETUP
- 5. BUZZER SETUP
- 6. RELAY SETUP
- 7. SYSTEM SETUP
- 8. ADVANCED SETUP

MENU, ESC: EXIT, ENTER: RUN

POSITION SIZE USED BRAND

MASTER

LAST TIME

SLAVE

LAST TIME

MENU, ESC: EXIT, < ▷ :PAGE

- 2 hard disk information display.

Information display: POSITION SIZE USED BRAND

>POSITON: Master / Slave

>SIZE: Hard Disk capacity. xxGB. Maximum display is 999MB

>USED: 00 ~ 100 %. Hard disk overwrites 100 ~ 199 %.

>BRAND: DVR auto detect hard disk brand.

>LAST TIME: The last record time display.

2. DATE-TIME SETUP

MAIN SETUP PAGE

1. HDD INFORMATION

2. DATE-TIME SETUP

- 3. DISPLAY SETUP
- 4. CAMERA SETUP
- 5. BUZZER SETUP
- 6. RELAY SETUP
- 7. SYSTEM SETUP
- 8. ADVANCED SETUP

MENU, ESC: EXIT, ENTER: RUN

DATE-TIME SETUP PAGE

- 1. DATE 2000 / 00 / 00
- 2. TIME
- 3. FORMAT
- 3. DISPLAY AT xx LINE(S)

MENU, ESC:EXIT, < ▷ :MODIFY

1. DATE

2. TIME: > Use direction button up/down choose position, values change button to change date and time values. Do not need to stop hard disk working (Play or record).

3. FORMAT:

YY/MM/DD, MM/DD/YY, DD/MM/YY, YY/ENG/DD, ENG/DD/YY, DD/ENG/YY, YYYY/MM/DD, MM/DD/YYYY, DD/MM/YYYY, YYYY/ENG/DD, ENG/DD/YYYY, DD/ENG/YYYY.

Y=Year. M=Month. D=Day. ENG=Month display in English.

4. DISPLAY AT xx LINE(S)

-Date and Time position on screen xx line(s). 00 ~ 23.

-. Day and time change



Press direction button up/down/left/right to choose items or move date-time position.

3. DISPLAY SETUP

| MAIN SETUP PAGE | | |
|-----------------------------|--|--|
| 1. HDD INFORMATION | | |
| 2. DATE-TIME SETUP | | |
| ETUP | | |
| TUP | | |
| 8. ADVANCED SETUP | | |
| | | |
| MENU, ESC: EXIT, ENTER: RUN | | |
| | | |

| DISPLAY SETUP PAGE | |
|--------------------|-----------|
| 1. DATE-TIME | ON |
| 2. CAMERA TITLE | ON |
| 3. PB DATE-TIME | ON |
| 4. PB CAMERA TITLE | ON |
| 5. PB DUMMY CAMERA | ON |
| 6. DVR STATUS | ON |
| 7. BORDER COLOR | WHITE |
| | |
| MENU, ESC:EXIT, | · :MODIFY |

- 1. DATE-TIME: Date and Time caption display mode on or off setup.
 - >ON / OFF
- 2. CAMERA TITLE: Camera Title caption display mode on or off setup.
 - >ON / OFF
- 3. PB DATE-TIME: Play back date and time caption display mode on or off setup.
 - >ON / OFF
- 4. PB CAMERA TITLE: Play back camera title caption display mode on or off setup.
 - >ON / OFF
- 5. PB DUMMY CAMERA: To clear dummy image if channel input not up to 16.
 - >ON / OFF
- 6. DVR STATUS: DVR system, record, playback, audio caption display mode on or off setup.
 - >ON / OFF
- 7. BORDER COLOR: Border color WHITE / DARK / BLACK / GRAY.



Press direction button up/down to choose the desired item.

4. CAMERA SETUP

MAIN SETUP PAGE

- 1. HDD INFORMATION
- 2. DATE-TIME SETUP
- 3. DISPLAY SETUP
- 4. CAMERA SETUP
- 5. BUZZER SETUP
- 6. RELAY SETUP
- 7. SYSTEM SETUP
- 8. ADVANCED SETUP

MENU, ESC: EXIT, ENTER: RUN

CAMERA SETUP PAGE

- 1. COLOR SETUP
- 2. TITLE SETUP
- 3. SCREEN POSITION SETUP
- 4. V-LOSS DISPLAY SETUP
- 5. VIDEO MASK SETUP

MENU, ESC: EXIT, ENTER: RUN

(1.) COLOR SETUP

CAMERA SETUP

1. COLOR SETUP

- 2. TITLE SETUP
- 3. SCREEN POSITION SETUP
- 4. V-LOSS DISPLAY SETUP
- 5. VIDEO MASK SETUP

COLOR SETUP PAGE

- ** CHANNEL NUMBER 01
- 1. BRIGHTNESS 00
- 2. CONTRAST 00
- 3. SATURATION 00
- 4. HUE
- 00
- 5. GAIN 00

>>DEFAULT RESET<<

MENU,ESC:EXIT, < ▷:MODIFY

COLOR SETUP: Adjust Camera Image. Only on live mode adjustable.

CHANNEL NUMBER : Select camera 01 ~ 16

BRIGHTNESS : Adjust screen brightness (-30 \sim +30) CONTRAST : Adjust color contrast (-20 \sim +42) SATURATION : Adjust color saturation (-34 \sim +22) HUE : Adjust color hue (-24 \sim +24) GAIN : Adjust image signal level (-32 \sim +32)

>>DEFAULT RESET<< : Press ENTER button to reset DVR values.



Press direction button up/down to choose items.

>Right adjustment of each element in COLOR setup will increase picture quarterly displayed. We recommend you to adjust each element of COLOR SETUP for cameras and monitor to be connected to the DVR unit.

(2.) TITLE SETUP: Input TITLE of each camera. 9 characters can be input.

CAMERA SETUP

1. COLOR SETUP

2. TITLE SETUP

- 3. SCREEN POSITION SETUP
- 4. V-LOSS DISPLAY SETUP
- 5. VIDEO MASK SETUP

TITLE SETUP PAGE CH 01 (01 CH 09 (09)) CH 02 (02 CH 10 (10)) CH 11 (11) CH 03 (03 CH 04 (04) CH 12 (12) CH 05 (05) CH 13 (13)) CH 14 (14) CH 06 (06 CH 07 (07) CH 15 (15) CH 08 (08 CH 16 (16) MENU, ESC: EXIT: < ▷: MODIFY



Press direction button up/down/left/right to choose items and position.

Characters choose:

Space:

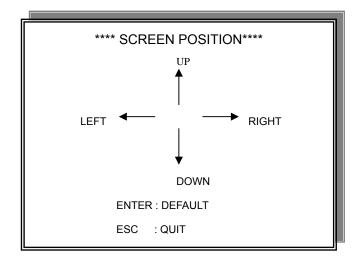
Numeric: 0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9

Capital letter: A/B/C/D/E/F/G/H/I/J/K/L/M/N/O/P/Q/R/S/T/U/V/W/X/Y/Z

(3.) SCREEN POSITION SETUP

CAMERA SETUP

- 1. COLOR SETUP
- 2. TITLE SETUP
- 3. SCREEN POSITION SETUP
- 4. V-LOSS DISPLAY SETUP
- 5. VIDEO MASK SETUP



1.



Press direction buttons up/down/left/right to move screen position.

- 2. Press ENTER button for default.
- 3. Press ESC button to quit.

(4.) V-LOSS DISPLAY SETUP

CAMERA SETUP

- 1. COLOR SETUP
- 2. TITLE SETUP
- 3. SCREEN POSITION SETUP
- 4. V-LOSS DISPLAY SETUP
- 5. VIDEO MASK SETUP

VLOSS SETUP PAGE

**V-LOSS FUNCTION:

CH 01: ON CH 09: ON

CH 02: ON CH 10: ON

CH 03: ON CH 11: ON

CH 04: ON CH 12: ON

CH 05: ON CH 13: ON

CH 06: ON CH 14: ON

CH 07 : ON CH 15 : ON

CH 08: ON CH 16: ON

MENU, ESC: EXIT: < ▷: MODIFY

** V-LOSS FUNCTION: ON / OFF

CH 06: ON / OFF CH 14: ON / OFF

PS. If choose on, X icon displays beside camera title.



Press direction buttons up/down/left/right to choose items.

(5.) VIDEO MASK SETUP

CAMERA SETUP

- 1. COLOR SETUP
- 2. TITLE SETUP
- 3. SCREEN POSITION SETUP
- 4. V-LOSS DISPLAY SETUP
- 5. VIDEO MASK SETUP

| | | _ |
|-------------------------------|-------|---|
| VIDEO MASK SETUP PAGE | | |
| **VIDEO MASK FUNCTION: | | |
| CH 01 | CH 09 | |
| CH 02 | CH 10 | |
| CH 03 | CH 11 | |
| CH 04 | CH 12 | |
| CH 05 | CH 13 | |
| CH 06 | CH 14 | |
| CH 07 | CH 15 | |
| CH 08 | CH 16 | |
| | | |
| MENU, ESC: EXIT: ☐ ▷ : MODIFY | | |

**VIDEO MASK FUNCTION: ON / OFF

MASK means the channel would not display on the live screen, but still can set it on recording.



Press direction buttons up/down/left/right to choose items.

5. BUZZER SETUP

MAIN SETUP PAGE

1. HDD INFORMATION

2. DATE-TIME SETUP

3. DISPLAY SETUP

4. CAMERA SETUP

5. BUZZER SETUP

6. RELAY SETUP

7. SYSTEM SETUP

8. ADVANCED SETUP

MENU, ESC: EXIT, ENTER: RUN

| BUZZER SETUP PAGE | | |
|----------------------|----------|----|
| **BUZZER FUNCTION ON | | |
| BUTTON | BUZZER | ON |
| ALARM | BUZZER | ON |
| MOTION | BUZZER | ON |
| V-LOSS | BUZZER | ON |
| HDD-FUL | L BUZZER | ON |
| CRASH | BUZZER | ON |
| | | |

MENU, ESC: EXIT: < ▷: MODIFY

**BUZZER FUNCTION: All buzzer function

>ON / OFF

1. BUTTON BUZZER?

> ON / OFF

2. ALARM BUZZER?

> ON / OFF

3. MOTION BUZZER?

> ON / OFF

4. VLOSS BUZZER?

> ON / OFF

5. HDD-FULL?

> ON / OFF (Buzzer on if hard disk record only once(Record setup→ HDD FULL→STOP REC.)

6. CRASH?

> ON / OFF (Buzzer on if DVR system or hard disk crash.)



Press direction buttons up/down to BUZZER SETUP items.

6. RELAY SETUP

MAIN SETUP PAGE

- 1. HDD INFORMATION
- 2. DATE-TIME SETUP
- 3. DISPLAY SETUP
- 4. CAMERA SETUP
- 5. BUZZER SETUP
- 6. RELAY SETUP
- 7. SYSTEM SETUP
- 8. ADVANCED SETUP

MENU, ESC: EXIT, ENTER: RUN

RELAY SETUP PAGE

**RELAY FUNCTION: ON

- 1. ALARM RELAY: ON
- 2. MOTION RELAY: ON
- 3. V-LOSS RELAY: ON
- 4. HDD-FULL RELAY: ON
- 5. CRASH RELAY: ON

**RELAY FUNCTION: ON

1. ALARM RELAY: ON

2. MOTION RELAY: ON

3. VLOSS RELAY: ON

4. HDD FULL RELAY: ON (Relay on if hard disk record only once.)

Record setup→ HDD FULL→STOP REC.

5. CRASH RELAY: ON (Relay on if DVR system or hard disk crash.)



Press direction buttons up/down to each item.

7. SYSTEM SETUP

MAIN SETUP PAGE

- 1. HDD INFORMATION
- 2. DATE-TIME SETUP
- 3. DISPLAY SETUP
- 4. CAMERA SETUP
- 5. BUZZER SETUP
- 6. RELAY SETUP
- 7. SYSTEM SETUP
- 8. ADVANCED SETUP

MENU, ESC: EXIT, ENTER: RUN

SYSTEM SETUP

- 1. DWELL INTERVAL
- 2. LANGUAGE
- 3. VIDEO INPUT
- 4. RS-485 ID
- 5. RS-485 PROTOCOL
- 6. RS-485 BAUD RATE

UPTIME: xx HRS

MENU, ESC: EXIT: < ▷: MODIFY

SYSTEM SETUP

- 1. DWELL INTERVAL:
 - 0 ~ 999SEC. Full channel and call monitor auto sequence time.
- 2. LANGUAGE:
 - ENGLISH / CHINESE / JAPANESE / FRENCH / RUSSIAN / POLISH / ITALIAN / SPANISH
 - After change language, user needs to exit menu. Language would change next time back to menu.
- 3. VIDEO INPUT: NTSC / PAL system detection.
 - AUTO / NTSC / PAL
 - User needs to re power on after change.
- 4. RS-485 ID:
 - 01 ~ 16
- 5. RS-485 PROTOCOL
 - KEYB / LILIN / PELCO-P / PELCO-D / NICECAM / DENTEC-D / DENTEC-P
- 6. RS-485 BAUD RATE
 - 1200 / 2400 / 4800 / 9600
- -UPTIME: xx HRS. This means the total system working time after DVR first power on.

RS-485 ID and protocol is the command for system control keyboard. If user has no keyboard to control then does not have to care.



Press direction buttons up/down to choose items.

8. ADVANCED SETUP

MAIN SETUP PAGE

- 1. HDD INFORMATION
- 2. DATE-TIME SETUP
- 3. DISPLAY SETUP
- 4. CAMERA SETUP
- 5. BUZZER SETUP
- 6. RELAY SETUP
- 7. SYSTEM SETUP
- 8. ADVANCED SETUP

MENU, ESC: EXIT, ENTER: RUN

ADVANCED SETUP PAGE

- 1. ALARM SETUP
- 2. MOTION SETUP
- 3. RECORD SETUP
- 4. PASSWORD SETUP
- 5. NETWORK SETUP
- 6. HDD FORMAT
- 7. FACTORY DEFAULT
- 8. SOFTWARE UPDATE

ADVANCED SETUP PAGE

- 1. ALARM SETUP
- 2. MOTION SETUP
- 3. RECORD SETUP
- 4. PASSWORD SETUP
- 5. NETWORK SETUP
- 6. HDD FORMAT
- 7. FACTORY DEFAULT
- 8. SOFTWARE UPDATE

ALARM SETUP PAGE

- 1. ALARM FUNCTION
- 2. ALARM DURATION
- 3. ALARM RELAY SETUP
- 4. ALARM POLARITY SETUP

MENU, ESC: EXIT: < ▷: MODIFY

- 1. Alarm function: ON / OFF. Alarm function on or off depends on alarm device includes in DVR system.
- 2. Alarm duration: 0 ~ 9999. Alarm buzzer and record duration time.

ALARM RELAY SETUP

>ALARM 01 ~ ALARM 16: ON / OFF

Even choose on, but RELAY SETUP→Alarm relay or relay function off, this function is still closed.

ALARM POLARITY SETUP

>ALARM 01 ~ ALARM 16: N.O. / N.C. / OFF



Press direction buttons up/down to choose items.

2. MOTION SETUP

ADVANCED SETUP PAGE

- 1. ALARM SETUP
- 2. MOTION SETUP
- 3. RECORD SETUP
- 4. PASSWORD SETUP
- 5. NETWORK SETUP
- 6. HDD FORMAT
- 7. FACTORY DEFAULT
- 8. SOFTWARE UPDATE

MOTION SETUP PAGE

- **MOTION FUNCTION ON
- **MOTION DURATION
- **CHANNEL NUMBER
- 1. SENSITIVITY
- 2. VELOCITY
- 3. ACTIVATION
- 4. RELAY
- 5. MOTION AREA SETUP

MENU, ESC: EXIT: < ▷: MODIFY

MOTION SETUP

- **MOTION FUNCTION (For all channels)
 - -ON / OFF
- **MOTION DURATION
 - -0 ~ 9999. Motion buzzer and record duration time.
- **CHANNEL NUMBER
 - -CH 01 ~ 16
- 1. SENSITIVITY Adjusts motion Detection Sensitivity.
 - -1 ~ 32 (low → high)
- 2. VELOCITY Adjusts motion object slow /fast speed detection
 - -1 ~ 10 (slow speed → fast speed)
- 3. ACTIVATION (For each channel)
 - -ON / OFF. The function only for channel motion detect active, not for motion record per each.
- 4. RELAY
 - -ON / OFF

Even choose on, but RELAY SETUP -> Motion relay or relay function off, this function is still closed.

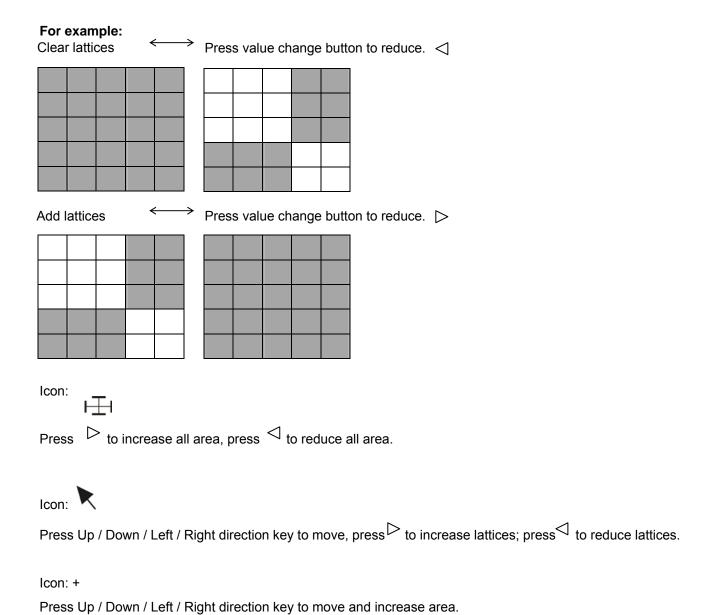
5. >MOTION AREA SETUP<



Press direction buttons up/down to choose items.

> MOTION AREA SETUP <

All area detect with factory default. Press ENTER button to change mode and then increase or reduce.



Icon: X

Press Up / Down / Left / Right direction key to move and reduce area.

3. RECORD SETUP

ADVANCED SETUP PAGE

- 1. ALARM SETUP
- 2. MOTION SETUP
- 3. RECORD SETUP
- 4. PASSWORD SETUP
- 5. NETWORK SETUP
- 6. HDD FORMAT
- 7. FACTORY DEFAULT
- 8. SOFTWARE UPDATE

RECORD SETUP

- 1. HDD FULL
- 2. RECORD SPEED
- 3. RECORD MODE
- 4. RECORD AUDIO
- 5. QUALITY
- 6. SCHEDULE SETUP
- 7. CHANNEL SETUP

MENU, ESC: EXIT: \triangleleft \triangleright : MODIFY

RECORD SETUP

HDD FULL: When hard disk is full, DVR next step is kept overwrite record or stop record?
 OVERWRITE / STOP REC

Notice: STOP REC: One hard disk record full, stop record. Two hard disk, both of them record full, stop record.

| Record process | OVERWRITE | STOP REC |
|------------------------------------|----------------------|----------------------|
| M(99%), S(0%) → M(100%), S(0%) | To second and record | To second and record |
| M(99%), S(100%) → M(100%), S(100%) | To second and record | To second and record |
| M(0%), S(99%) → M(0%), S(100%) | To first and record | To first and record |
| M(100%), S(99%) → M(100%), S(100%) | To first and record | Stop record |

Notice:

When hard disk is full, system buzzer on, and then presses ENTER to stop. Next to press REC, over write message window popup.

"** OVERWRITE CAUTION **"

"THE HDD ARE BOTH FULL,"

"RECORDING WILL DELETE"

"THE OLD IMAGE."

"PRESS [ENTER] TO OVERWRITE."

Press ENTER to continue record.

Over write from the first data area.

Press MENU to exit.

- 2) RECORD SPEED: Record FPS setup
 - -1/30(1/30), 1/15(1/15), 1/10(1/10), 1/5 (1/5), 1/3 (1/3), 1/2 (1/2), 1(1), 2(2), 3(3.13), 5(5), 10 (8.33), 15(12.5), 30(25), 60(50), 120(100). NTSC / (PAL)
- 3) RECORD MODE: Record mode setup.
 - -ALWAYS / SCHEDULE / EVENT / EVENT ON SCHEDULE / EVENT + SCHEDULE
- 4) RECORD AUDIO: Audio record setup
 - -ON / OFF. (Suggest not fewer than 5 fps.)
- 5) QUALITY: Record image quality setup
 - SUPER / HIGH / FINE / NORMAL / LOW
- 6) SCHEDULE SETUP



Press direction buttons up/down to choose item.

 $\triangleleft \triangleright$

Press values change button to change values.

Additional:

- 2. RECORD SPEED. 1/30(1/30), 1/15(1/15), 1/10(1/10), 1/5 (1/5), 1/3 (1/3), 1/2 (1/2), 1(1), 2(2), 3(3.13), 5(5), 10 (8.33), 15(12.5), 30(25), 60(50), 120(100).
- -120 is the maximum fps. Full screen playback with 120 frames per each.

Split screen playback with 60 frames.

- 3. RECORD MODE. ALWAYS / SCHEDULE / EVENT / EVENT ON SCHEDULE / EVENT + SCHEDULE.
- -Always: 24 hours recording.
- -Schedule: Date and time schedule recording mode.
- -Event: Alarm / Motion / V-Loss event mode recording. (Whatever which channel event, all channel record.)
- -Event on schedule: Event record only on schedule time.
- -Event + Schedule: Except event on schedule recording, it would still do record if event happens not on schedule time.

Notice:

After record mode setup, user needs to press REC button to start. Set on Always mode, DVR do record if user presses REC. Other record mode would ready on DVR idle status.

- 4. RECORD AUDIO: ON / OFF.
- -Choose on, DVR would do audio recording.

>SCHEDULE SETUP<

RECORD SETUP

- 1. HDD FULL
- 2. RECORD SPEED
- 3. RECORD MODE
- 4. RECORD AUDIO
- 5. QUALITY
- 6. SCHEDULE SETUP
- 7. CHANNEL SETUP



Press direction buttons up/down to SCHEDULE items.

 \triangleleft

Press values change button to change values.

Factory default is everyday all schedules time on recording.

SCHEDULE SETUP CURSOR STEP 30MIN / 6MIN SUN MON TUE THU FRI SAT



Press direction buttons up/down/left/right to see date and time difference.

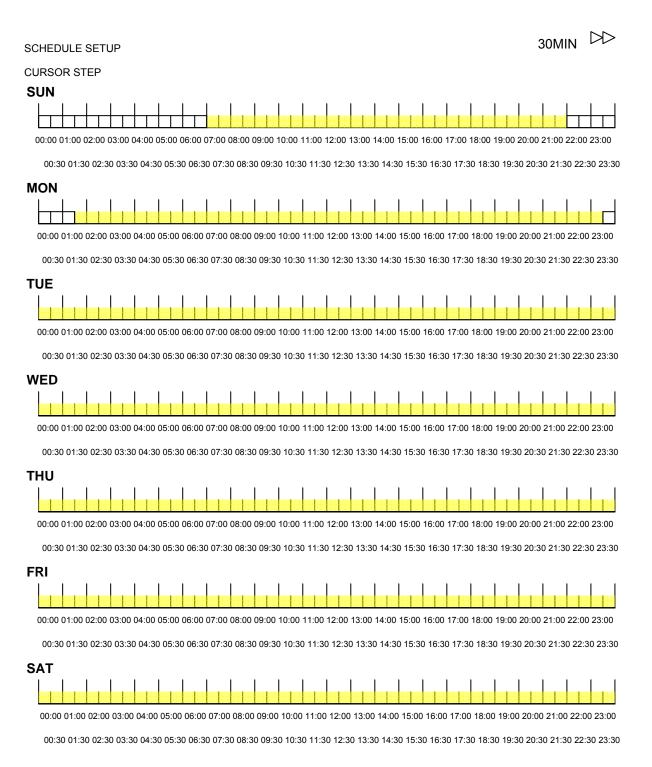
 $\triangleleft \triangleright$

Press values change left/right button to change 30MIN or 6 MIN

- ++ / - : Increase / Reduce. Every day record with factory default.
- On ▷▷, use up/down button to choose date, press < ▷ button to change on
- + + or -. After, use direction left / right button to start increase or reduce time area.

Mode function button

- + + increase
- - reduce



For example: TUE \sim SAT, all day schedule time recording, but SUN 07:00 \sim 22:00 and MON 01:30 \sim 11:30 do schedule recording. User can press ENTER to see the schedule time area difference.

7) RECORD CHANNEL SETUP PAGE

RECORD SETUP

- 1. HDD FULL
- 2. RECORD SPEED
- 3. RECORD MODE
- 4. RECORD AUDIO
- 5. QUALITY
- 6. SCHEDULE SETUP
- 7. CHANNEL SETUP

```
RECORD CHANNEL SETUP PAGE
CH 01
       CH 09
CH 02
       CH 10
CH 03
       CH 11
CH 04
       CH 12
CH 05
       CH 13
CH 06
       CH 14
CH 07
       CH 15
CH 08
       CH 16
               MENU, ESC: EXIT:
```

PS. Choose off if no video input channel or which channel would not do record.

According to channel record, record time would different.



Press direction buttons up/down to choose item.

4. PASSWORD SETUP

ADVANCED SETUP PAGE

- 1. ALARM SETUP
- 2. MOTION SETUP
- 3. RECORD SETUP

4. PASSWORD SETUP

- 5. NETWORK SETUP
- 6. HDD FORMAT
- 7. FACTORY DEFAULT
- 8. SOFTWARE UPDATE

| PASSWORD SETUP PAGE | | | | |
|---------------------|---------|---|--|--|
| 1. | LEVEL:(|) | | |
| 2. | ADMIN:(|) | | |
| 3. | USER :(|) | | |

LEVEL (Log In level ID type setup)
 NONE / ADMIN / USER



Press direction buttons up/down/left/right to Choose items position.

- -ADMIN
- -USER

- ⟨ ⟩ Press values change button to change values.
- -NONE, user does not need to insert password before enter in MENU.
- 2) ADMIN password

>44444 (Factory Default)

Notice:

3) USER password>11111 (Factory Default)

Password always 5 character input, cannot < 5 characters



Press direction buttons up/down/left/right to choose items position.

Press numeric (1 ~ 10)button or remote controller (1 ~ 10)to choose

Notice:

- 1. ADMIN level can setup all DVR menu functions.
- 2. USER level cannot setup ADVANCED page of DVR main menu function.
- 3. Auto disappear after 4 minutes if no any manual operate.

5. NETWORK SETUP

ADVANCED SETUP PAGE

- 1. ALARM SETUP
- 2. MOTION SETUP
- 3. RECORD SETUP
- 4. PASSWORD SETUP
- 5. NETWORK SETUP
- 6. HDD FORMAT
- 7. FACTORY DEFAULT
- 8. SOFTWARE UPDATE

1. SPEED: >512K / 512K / 256K / 128K / 64K

> Upload speed. Choose the close speed by applied.

2. DVR NAME: [x 15 space]

3. NET TYPE: STATIC / DHCP / PPPOE / OFF

4. STATIC IP SETUP

5. PPPOE ID SETUP

6. DNS/DDNS SETUP

7. SERVER PORT SETUP

-MAC ADDR

XX.XX.XX. Machine number, user cannot change.

- 2. DVR NAME: see DDNS apply.
- 3. NET TYPE:
- > choose network connecting type as user.
- 4. STATIC IP SETUP:
- > Depends on LAN or WAN. Input value witch get from network technician or ISP company.
- > Advice user apply network speed Upload 512K / Download 512K, to avoid image data too big influence the remote quality. The network traffic jam always make data transfer slow, it is normal.
- > Do not via IP sharing device or firewall.

STATIC IP SETUP

1. IP ADDR: 192.168.192.250

2. GATEWAY: 192.168.192.254

3. NETMASK: 255.255.255.000

4. INTERNAL MAPPING: OFF

TCP-IP SETUP PAGE

1. SPEED:>512K

2. DVR NAME:[dvr16]

3. NET TYPE: OFF

4. STATIC IP SETUP

5. PPPOE ID SETUP

6. DNS/DDNS SETUP

7. SERVER PORT SETUP

MAC ADDR: xx.xx.xx.xx.xx.xx



Press direction buttons up/down/left/right to TCP-IP items position.

 $\triangleleft \triangleright$

Press values change button to change values.

Internal Mapping:

LAN IP corresponding

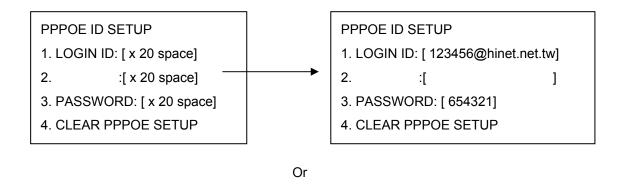
5. PPPOE ID SETUP

If users apply the dynamic IP from ISP, then should input ID and password that from ISP information list. And then go to set DNS/DDNS SETUP

For example:

Address name is <u>123456@hinet.net.tw</u>

Password is 654321



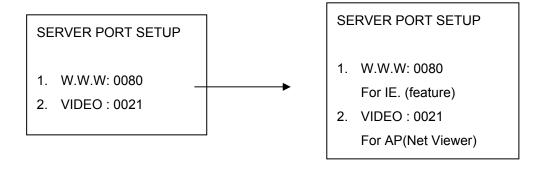
Notice:

- Please "CLEAR PPPOE SETUP" if data is changed.
- 2. PASSWORD shows "*" icon.

PPPOE ID SETUP

- 1. LOGIN ID: [123456]
- 2. :[@hinet.net.tw]
- 3. PASSWORD: [654321]
- 4. CLEAR PPPOE SETUP

7. SERVER PORT SETUP



6. DNS/DDNS SETUP

Whatever user apply a free or pay DDNS, user needs to input every thing below.

DDNS apply: User can get a free hostname or pay from website below.

- 1. http://www.3322.net/ (China)
- 2. http://www.changeip.org/
- 3. http://www.dyndns.com/
- 4. http://www.no-ip.com/
- 5. http://www.dhs.org/
- 6. http://www.dtdns.com/index.cfm?fuseaction=info.hosts

For example:

Go to: http://www.dtdns.com/index.cfm?fuseaction=info.hosts



MX records for your hostname. Define up to 4 MX records for your hostname and point them any server you would prefer your e-mail to be delivered to. This feature is fully compatible with web-based e-mail service from providers like Everyone.net.

- Heartbeat Monitor If you have an unreliable Internet connection, DtDNS can automatically set your hostname as being "offline" if an IP update is not sent to our server within a specified time limit. This will cause your web visitors to see your offline notice instead of not being able to connect at all.
- Cloaked URL Redirection Hostnames also have the ability to cloak the offline URL redirection using a frameset. You can also define the title and meta tags for the main frame.

Don't want a hostname? DtDNS also offers DNS service for full domain names.

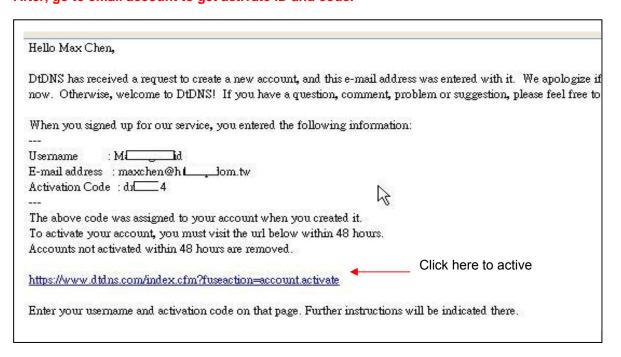


Click sign up to create an account.

Fill your information to sign up paper.



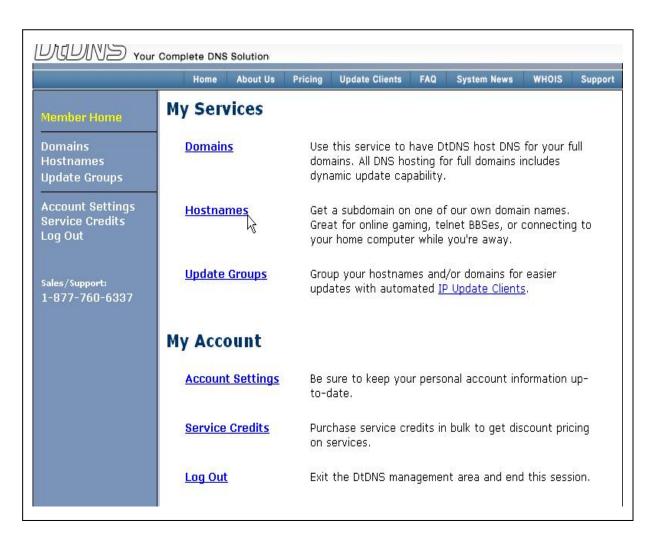
After, go to email account to get activate ID and code.



Fill ID and code.

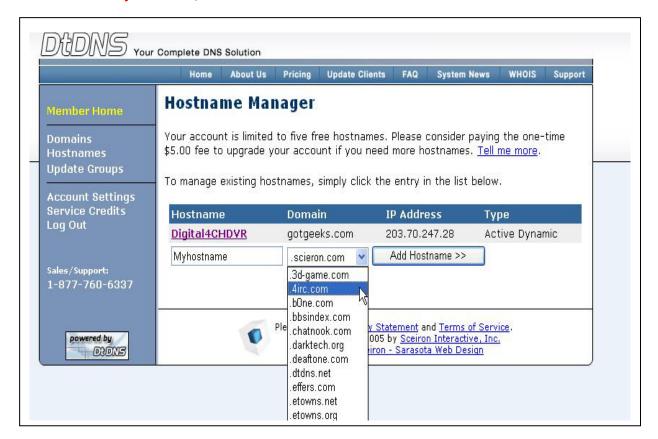
Step 2 - Activate Account Now that you have signed up with DtDNS and we have sent you a verification message via e-mail, you must activate your account. The message we sent you contained an activation code, which you will need to enter below. If it has been more than 48 hours since you signed up, you will need to sign up again and get a new activation code. Please enter your activation information: Username: Activation Code: Lose or forget your code? Activate Account >> Please read our Privacy Statement and Terms of Service.

Click hostnames

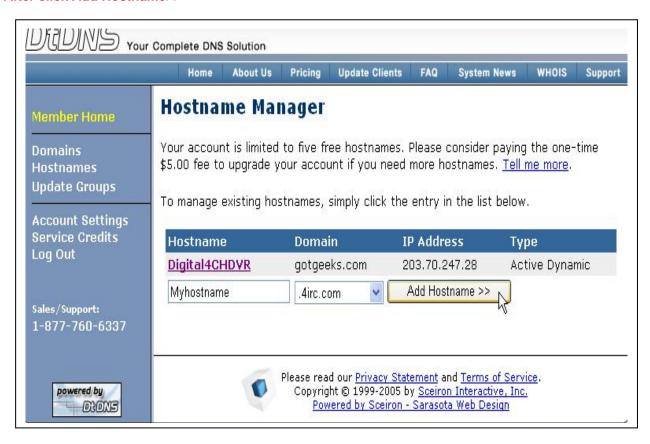


Type Hostname and choose a domain name, and then click Add Hostname.

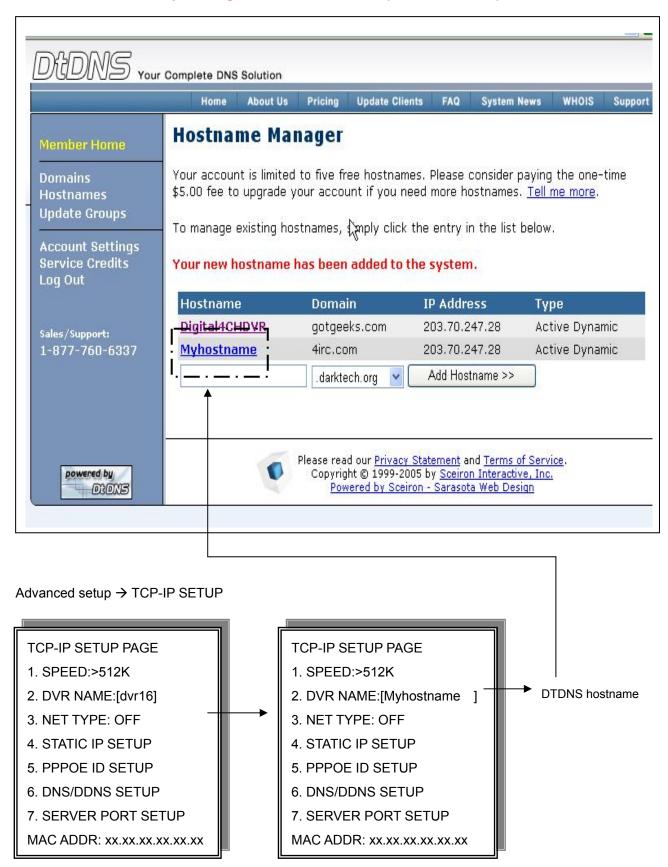
EX: Hostname = Myhostname, Domain = 4irc.com



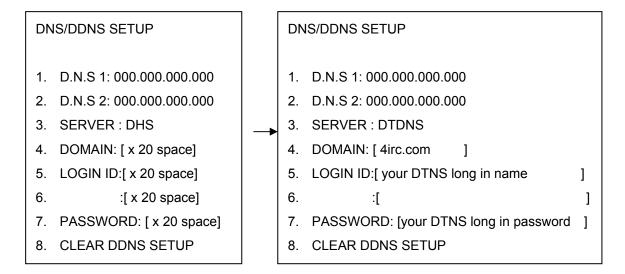
After click Add Hostname>>



Data confirm done, then you can go to DVR advanced setup→ Network setup now.



6. DNS/DDNS SETUP



Important:

LOGIN ID: This is your DTDNS apply login user name! Not Hostname!

PASSWORD: This is your DTDNS apply login password, not Activation Code!

6. HDD FORMAT

ADVANCED SETUP PAGE

- 1. ALARM SETUP
- 2. MOTION SETUP
- 3. RECORD SETUP
- 4. PASSWORD SETUP
- 5. NETWORK SETUP

6. HDD FORMAT

- 7. FACTORY DEFAULT
- 8. SOFTWARE UPDATE



Press direction buttons up/down to HDD FORMAT items position.
Press ENTER to format all HDD.

Caution: User can format HDD only when all HDD stop record or playback.

→ HDD FORMAT CAUTION!! :

** HDD FORMAT CAUTION!!**
ALL DATA IN HDD WILL BE
DESTROYED!!

PRESS [ENTER] TO FORMAT.
PRESS [ESC] TO CANCEL.



Press ENTER button to format hard disk.



Press ESC button to cancel hard disk format

Notice:

New hard disk detect: When DVR power, system would detect new hard disk install. If the hard disk is in different format, then the message popup. User needs to press ENTER to format, if press MENU, and then this hard disk would not be detected.

** NEW HDD CAUTION **"
"THE NEW HDD IS DETECTED."
"FORMAT THE NEW HDD??"
"PRESS [ENTER] TO FORMAT."
"PRESS [MENU] TO CANCEL."



MENU

Press FORMAT to format.

Press MENU to exit.

7. FACTORY DEFAULT

ADVANCED SETUP PAGE

- 1. ALARM SETUP
- 2. MOTION SETUP
- 3. RECORD SETUP
- 4. PASSWORD SETUP
- 5. NETWORK SETUP
- 6. HDD FORMAT
- 7. FACTORY DEFAULT
- 8. SOFTWARE UPDATE



Press direction buttons up/down to FACTORY DEFAULT items position. Press ENTER to restore.

** CAUTION!! **

ALL SETUP VALUE WILL BE CLEAR,
AND RESTORE FACTORY DEFAULT!!

PRESS [ENTER] TO RESTORE.
PRESS [ESC] TO CANCEL.



Press ENTER button to restore.



Press ESC button to cancel.

8. SOFTWARE UPDATE

ADVANCED SETUP PAGE

- 1. ALARM SETUP
- 2. MOTION SETUP
- 3. RECORD SETUP
- 4. PASSWORD SETUP
- 5. NETWORK SETUP
- 6. HDD FORMAT
- 7. FACTORY DEFAULT
- 8. SOFTWARE UPDATE

SOFTWARE UPDATE UPDATE METHOD:

START UPDATE

UPDATE METHOD: USB / HTTP / UNIX

USB: Copy firmware to USB device, and then plug in DVR USB interface. Choose START UPDATE and then press ENTER to start. Or save the update version to USB device, DVR system would do data update automatically. USB ERROR displays if no any USB device plug.

NETWORK: Press START UPDATE to link. 80 Port must open in your network server.

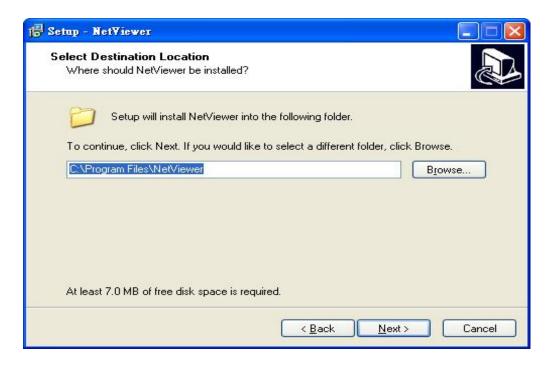
UNIX: For R&D testing.

USB Data Read and Networking

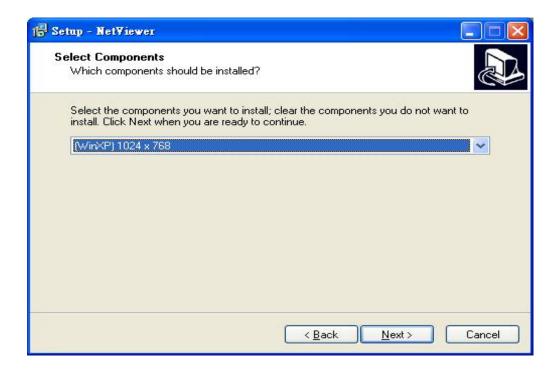
- 1. Windows 2000 / XP, select small character display.
- 2. Resolution 1024 x 768.
- 3. RAM up to 128 MB, system up to PIII-800.
- 4. Double click SETUP.EXE of CD, and then start to install.
- 5. User can go to company server to download AP software.



6. Browse install path and then click Next.



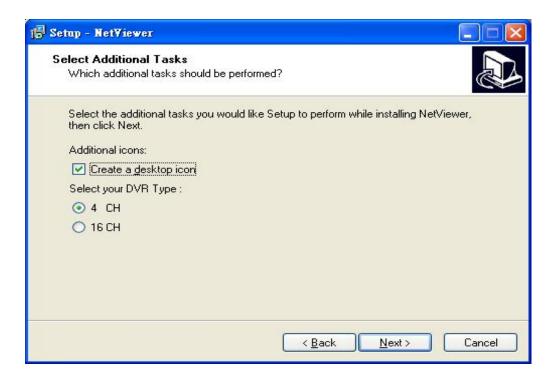
7. Advice resolution 1024 x 768. According computer equipment, please choose suitable resolution



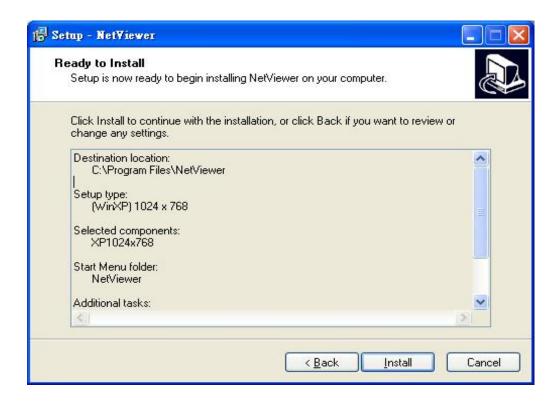
8. Select Start Menu Folder, and then click Next.



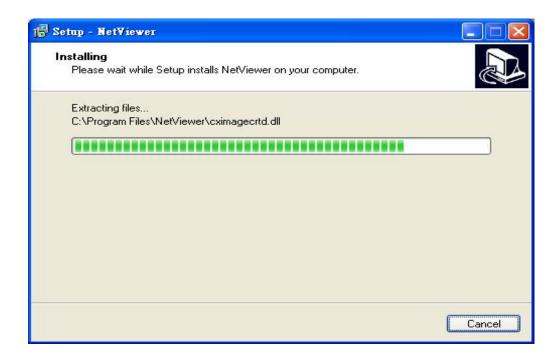
- 9. Click create a desktop icon or not, select DVR type, and then click Next.
 - 4 CH and 16 CH DVR Net viewer is suitable. Only some split screen can not display.

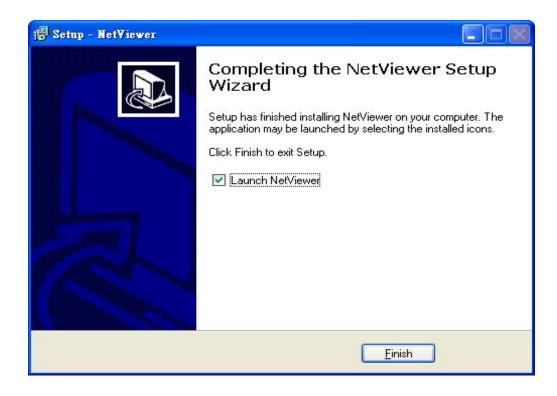


10. Click INSTALL to start install.

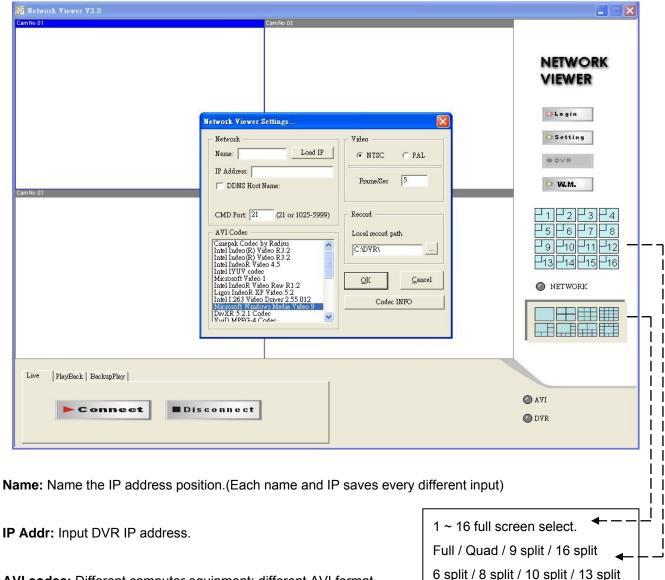


11. Click Launch NetViewer and click Finish to done.





12. Click Setting.



AVI codec: Different computer equipment; different AVI format.

Microsoft Windows Media video 9 is better.

Or Cinepak Codec by Radius(Slow transmission, better quality) /

Microsoft Video 1(Fast transmission, bad quality).

Video: Fullsize, Halfsize: screen size choose.

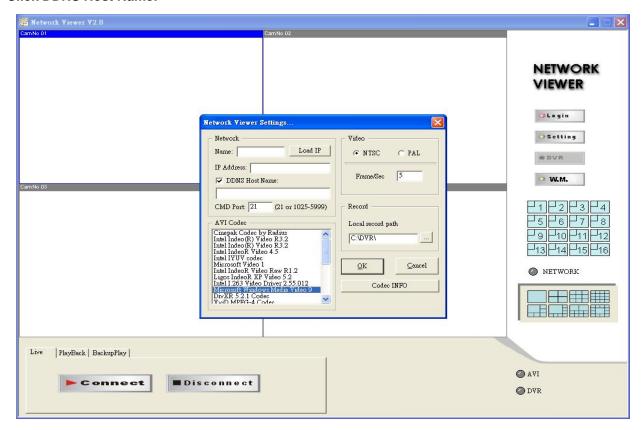
NTSC, PAL. Frame/Sec: Video system choose. Record frame choose.

Click OK to confirm.

On Live / PlayBack, click DVR to save action pictures, *.DVR file. It needs this software to play. Browser, Local record path could change. The path user changes is for .DVR save, *JPG file is always C:\DVR

- Press DVR to start record .DVR file(DVR LED green on.), press again to stop.

Click DDNS Host Name:



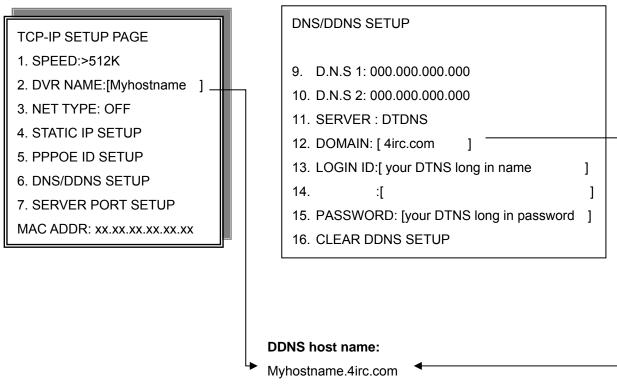


Type DVR DDNS host name: Myhostname.4irc.com

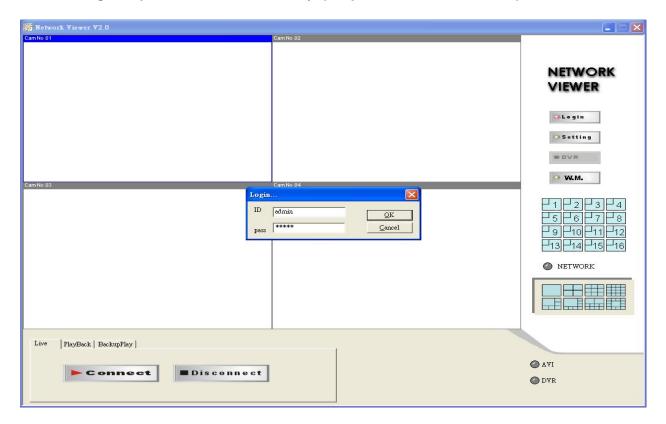
CMD Port: command port 21 or 1025 ~ 5999.

It is same as DVR network setup.

Which is same DVR MENU → ADVANCED SETUP → NETWORK SETUP → DVR NAME:



13. Click Login, depends on limits of authority. (ID / password is same as DVR)

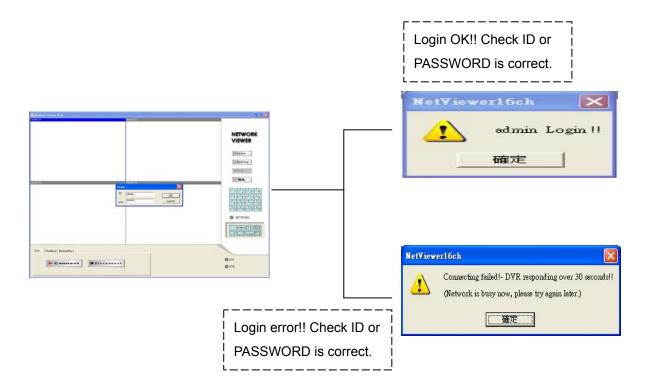


Factory ID is user login. Input admin if you are an administer. Must input on little character.

 $Factory: Password, admin: 444444, user: 111111. \ Password \ displays \ when \ log \ in, \ user \ just \ needs \ to \ input \ ID.$

User log in, no PlayBack function authority. Total 6 people log in. Admin x 1, user x 5.

Click OK, after about 5 seconds, admin login!! Message popup. And then click Connect to start.



14. Click Connect, after about 2 ~ 3 seconds to start connect LAN or WAN. Click Disconnect to stop. If the NETWORK is connecting success, the blue light would keep glisten

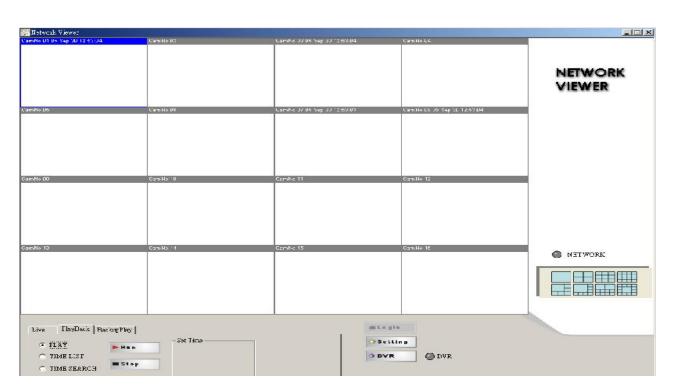


NETWORK

Click live / PlayBack / BackPlay mode.

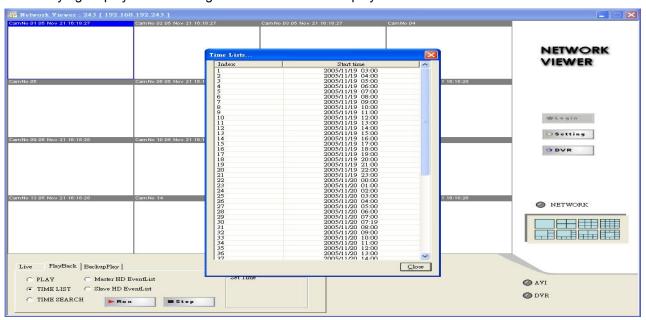
Live: DVR live watching.

PlayBack: Change to playback mode. After 2 ~3 seconds to change.

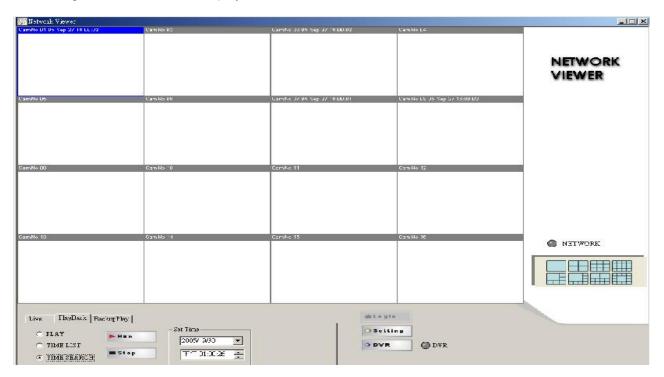


PLAY: Click RUN around 2 ~ 30 seconds to start play first record. If over 30 seconds, cannot find any file or network disconnect, Time out message popup. Please try again play or connect again. Click STOP to end playback.

TIME LIST: Click RUN, time lists popup. On the item, double click date and time to start play, around 2 ~ 30 to start play first record. If over 30 seconds, cannot find any file or network disconnect, Time out message popup. Please try again play or connect again. Click STOP to end playback.

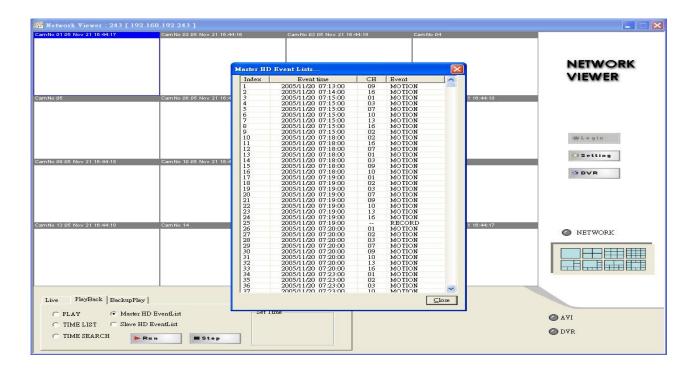


TIME SEARCH: Chose date and time, click RUN, around 2 ~ 30 seconds to start play first record. If over 30 seconds, cannot find any file or network disconnect, Time out message popup. Please try again play or connect again. Click STOP to end playback.

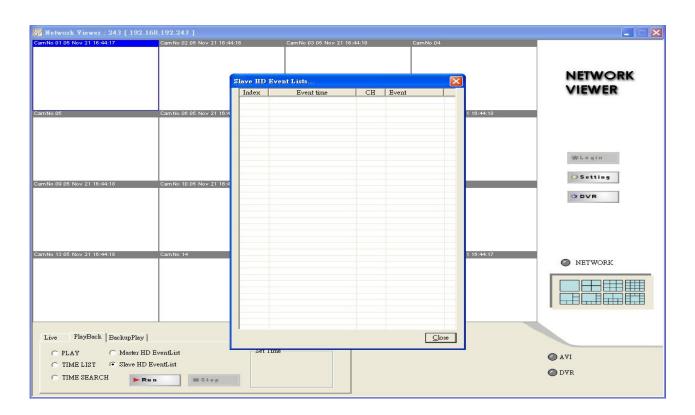


Notice: PLAY / TIME LIST / TIME SEARCH change, needs to stop play first.

-Master HDD Event Lists:

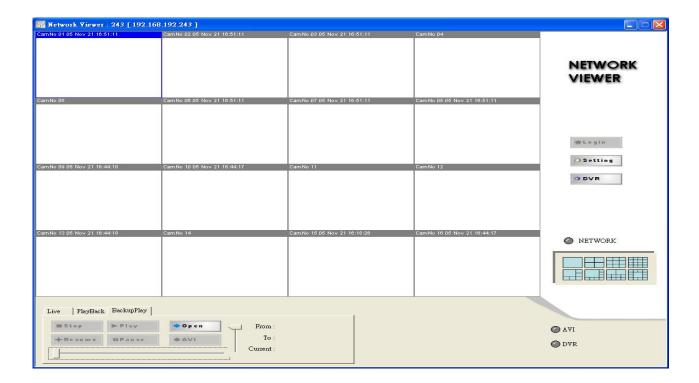


-Slave HDD Event Lists:

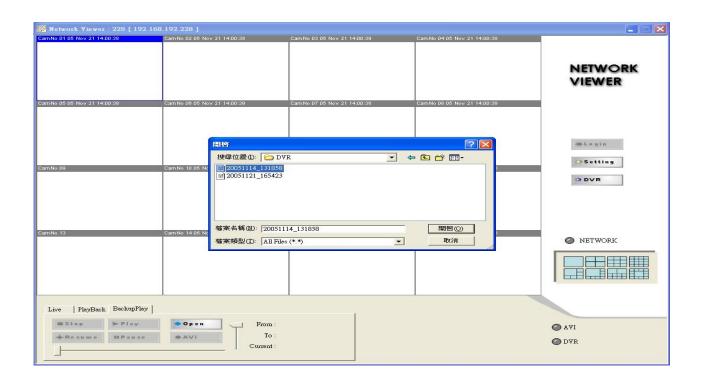


Click RUN, time lists popup. On the item, double click date and time to start play, around $2 \sim 30$ to start play first record. If over 30 seconds, cannot find any file or network disconnect, Time out message popup. Please try again play or connect again. Click STOP to end playback.

15. BackupPlay:



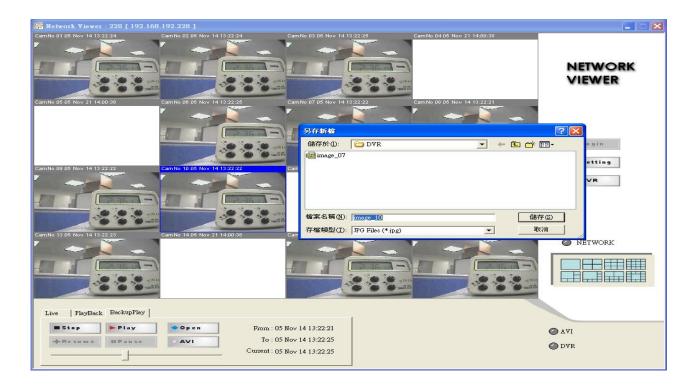
- Click Open to choose file path.



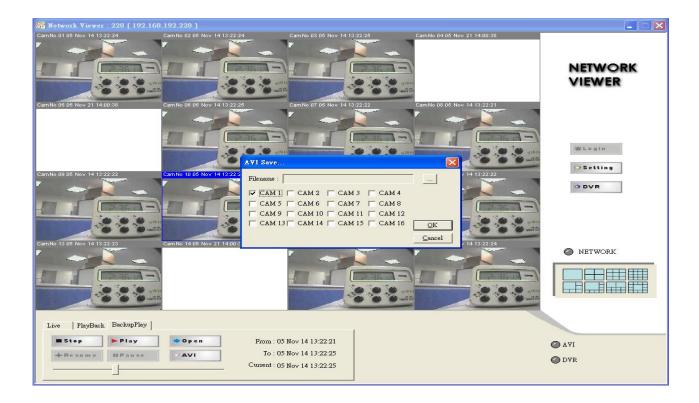
Click Play to start backup data play. Click Stop to end. Click Pause to temporary stop playback. Click Resume to restart.



Choose camera, click mouse right button. Camera $1 \sim 4$ switches or reset all. Click Save "CamNo xx image . / save image all to save current image. Save path is C:\DVR.

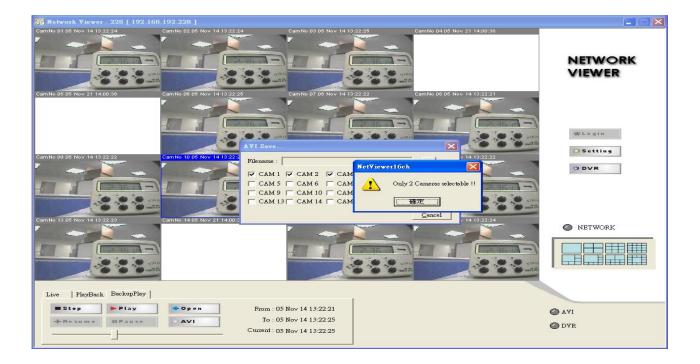


4. AVI transfer: Click BackupPlay



AVI : On live or playback mode, save files to .DVR file. And then OPEN file, press play to start playback. Press AVI button to start record AVI file. Press again to stop.

Only 2 cameras selectable. A warning message appears if user selects over 3 cameras,



Net Viewer P / T / Z Dome control mode

For the setting details please refer to the remark on page 64 / 65 of the P/T/Z dome mode. Click the left button of mouse to choose the PTZ dome channel, and then press PTZ icon.



PTZ Control function:

Click the left button of mouse on direction arrowhead, on each click, the PTZ dome will move 16 +/- 4 degree.

The Numeral presents for camera channel not PTZ ID.

Record Time Table: 80GB HD

| Record Qualit | J: Low. KB Range: Lowest: 13, Highest: 20. Average: 17 | |
|---------------|--|--|
| | | |

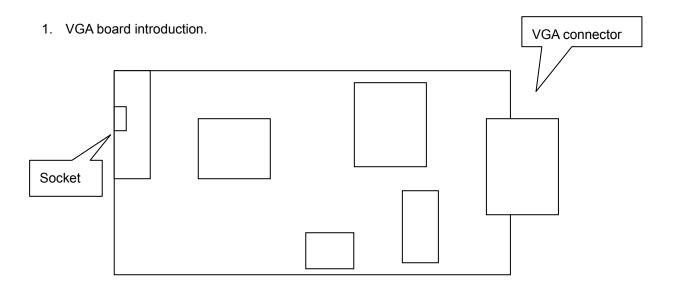
| Record Quality: | Low. KB Range: L | owest: 13, Hignes | t: 20. Average: 17. | | |
|-----------------|-------------------|-------------------------|---------------------|-------|-------|
| REC FPS | 120 | 60 | 30 | 15 | 10 |
| REC Hour | 11 | 22 | 45 | 91 | 137 |
| REC FPS | 5 | 3 | 2 | 1 | 1/2 |
| REC Hour | 274 | 456 | 685 | 1370 | 2741 |
| REC FPS | 1/3 | 1/5 | 1/10 | 1/15 | 1/30 |
| REC Hour | 4112 | 6853 | 13706 | 20565 | 41140 |
| ecord Quality: | Normal. KB Range | e: Lowest: 14, High | nest: 25. Average: | 20. | |
| REC FPS | 120 | 60 | 30 | 15 | 10 |
| REC Hour | 9 | 19 | 38 | 77 | 116 |
| REC FPS | 5 | 3 | 2 | 1 | 1/2 |
| REC Hour | 233 | 388 | 582 | 1165 | 2330 |
| REC FPS | 1/3 | 1/5 | 1/10 | 1/15 | 1/30 |
| REC Hour | 3495 | 5825 | 11650 | 17479 | 34967 |
| ecord Quality: | Fine. KB Range: L | ı ₋owest: 15, Highes | t: 28. Average: 22 | | |
| REC FPS | 120 | 60 | 30 | 15 | 10 |
| REC Hour | 8 | 17 | 35 | 70 | 105 |
| REC FPS | 5 | 3 | 2 | 1 | 1/2 |
| REC Hour | 211 | 353 | 529 | 1059 | 2118 |
| REC FPS | 1/3 | 1/5 | 1/10 | 1/15 | 1/30 |
| REC Hour | 3177 | 5295 | 10591 | 15890 | 31787 |
| ecord Quality: | High. KB Range: L | _owest: 17, Highes | st: 30. Average: 24 | | |
| REC FPS | 120 | 60 | 30 | 15 | 10 |
| REC Hour | 7 | 16 | 32 | 64 | 97 |
| REC FPS | 5 | 3 | 2 | 1 | 1/2 |
| REC Hour | 194 | 323 | 485 | 970 | 1941 |
| REC FPS | 1/3 | 1/5 | 1/10 | 1/15 | 1/30 |
| REC Hour | 2912 | 4854 | 9709 | 14563 | 29127 |
| Record Quality: | Super. KB Range: | Lowest: 19, Highe | est: 45. Average: 3 | 2. | |
| REC FPS | 120 | 60 | 30 | 15 | 10 |
| REC Hour | 6 | 12 | 24 | 48 | 72 |
| REC FPS | 5 | 3 | 2 | 1 | 1/2 |
| REC Hour | 145 | 242 | 364 | 728 | 1456 |
| REC FPS | 1/3 | 1/5 | 1/10 | 1/15 | 1/30 |
| REC Hour | 2184 | 3640 | 7281 | 10922 | 21845 |
| | | | | · · | |

Actual recording time is base on live environment. This table only for reference.

VGA Description (Optional)

Accessories:

- 1. 20 PIN Male to Female D-SUB pin cable X 1
- 2. VGA PCB bracket X1
- 3. Screws X4



2. Resolution switcher table

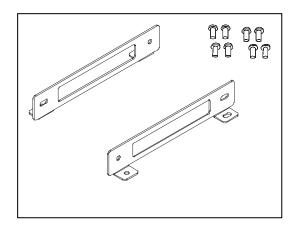
| Pin 4 | Resolution | Pin 1 | Pin 2 | Pin 3 | |
|--------------------------------------|--|-------|-------|-------|--|
| | 640X480 60HZ | ON | ON | ON | |
| | 800X600 60HZ | ON | ON | OFF | |
| | 1024X768 60HZ | ON | OFF | ON | |
| | 640X480 75HZ | ON | OFF | OFF | |
| | 800X600 75HZ | OFF | ON | ON | |
| | 1024X768 75HZ | OFF | ON | OFF | |
| Resolution and switcher description. | | | | | |
| Step. 1 | DVR Power on. NTSC / PAL auto detects. | | | | |
| Step. 2 | Pin 4 no used | | | | |
| Step. 3 | Pin 1 ~ 3 switcher resolution. Do not need to power off DVR. | | | | |

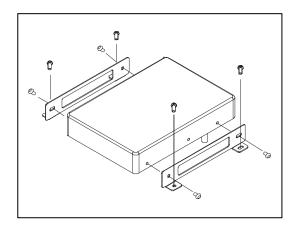
Additional

Hard Disk x 2 can be installed on DVR base. Both are 2-iron slices immobile type.

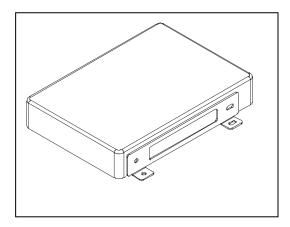
2 Iron slices are in the accessories box, please tell supplier if slices are not exist

2-iron slices immobile type:





Slices immobile type: 4 screws hole on each slice. 2 for DVR base fixed. Another 2 for hard disk fixed.



Hard disk install.: Locking hard disk screws, then locking DVR base screws to fixed on.

P/T/Z Dome mode.

6. ADVNACED SETUP PAGE → P.T.Z SETUP

ADVANCED SETUP PAGE

- 1. ALARM SETUP
- 2. MOTION SETUP
- 3. RECORD SETUP
- 4. PASSWORD SETUP
- 5. NETWORK SETUP
- 6. P.T.Z SETUP
- 7. HDD FORMAT
- 8. FACTORY DEFAULT
- 9. SOFTWARE UPDATE

PTZ SETUP PAGE

CHANNEL NUMBER

- 1. ID
- 2. PROTOCOL
- 3. BAUDRATE
- 4. AUTO TOUR
- 5. LINE SCAN
- 6. AUTO FOCUS
- 7. AUTO IRIS

PTZ SETUP PAGE

CHANNEL NUMBER: CH01 ~ CH16

1. ID: 01 ~ 16

2. PROTOCOL: PELCO-P / PELCO-D / LILIN / ABC / ELITAR / DENTEC-D / DENTEC-P / OFF

3. BAUDRATE: 1200 / 2400 / 4800 / 9600

4. AUTO TOUR: ON / OFF

5. LINE SCAN: ON / OFF

6. AUTO FOCUS: ON / OFF

7. AUTO IRIS: ON / OFF

After PTZ setup done, go back to live mode. Press W.M. button to PTZ mode.

Icon displays beside date and time caption. To use direction button left/right/up/down

to move PTZ Dome. PTZ Dome can not be control on split screen.

PS. Because the P/T/Z Dome setup is independent by channel and ID, user does not worry about the different ID / Protocol / Baud Rate would affect DVR controls P/T/Z dome error. Just make sure channel and ID / Protocol / Baud Rate corresponding is correct.

Front Panel Button Comparison:

W.M.: Press W.M button To P / T / Z mode

PLAY / REC = IRIS off / IRIS open

BACKUP / T-SRH = ZOOM IN / ZOOM OUT

MENU = P / T / Z Dome Menu

FRE. : To Preset mode. PRESET: 000 glisten on left-up corner. Moves P / T / Z dome to the position user wants.

When "PRESET: glistening", press number button.

EX: $1 \sim 9$. 10 = 1 + 10, 11 = 1 + 1, 12 = 1 + 2, 21 = 2 + 1, 132 = 1 + 3 + 2.

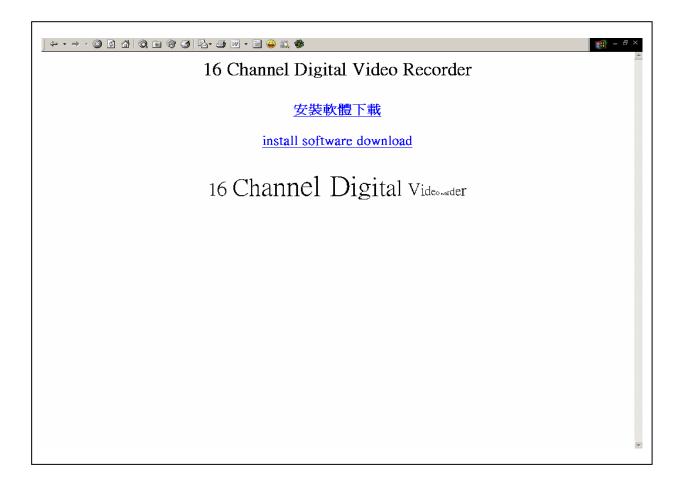
ZOOM: After press ZOOM button to save the presets.

INFO: Press FRE. button into preset mode. When "PRESET: glistening", press number button, and then press INFO to call preset.

AUTO: Press FRE. button into preset mode. When "PRESET: glistening", press number button, and then press AUTO to clear preset.

IE Networking Software

- 1. This web is for preliminary IE browser.
- 2. User can download the network viewer from this web page or view the DVR video image in the future.
- 3. The AP software is already saved to DVR system IC. User needs to do is:
- a.) Go to Advanced Setup→ Network Setup→Sets LAN or WAN IP address of DVR.
- b.) Open IE browser, and then into your IP on the IE address bar.
- c.) If LAN or WAN connects ok, the 16 Channel Digital Video Recorder web page displays like under:



Recording condition

A: Solution 1 for residual image

16 channel: channels are divided into 4 groups as:

$$(1 \cdot 5 \cdot 9 \cdot 13) (2 \cdot 6 \cdot 10 \cdot 14)$$

$$(3 \cdot 7 \cdot 11 \cdot 15) (4 \cdot 8 \cdot 12 \cdot 16)$$

Recording with one input from each group

B: Solution 2 for playback image pasting

| Record Chanel \ Record Rate | | 30fps or less | 60fps | |
|-----------------------------|----|---------------|-------|--|
| | 1 | 1 | 2 | |
| | 2 | 2 | 2 | |
| | 3 | 4 | 4 | |
| | 4 | 4 | 4 | |
| | 5 | 7 | | |
| Channel for | 6 | 7 | 8 | |
| Video input | 7 | 7 | O | |
| | 8 | 8 | | |
| | 9 | 11 | | |
| | 10 | 11 | | |
| | 11 | 11 | 14 | |
| | 12 | 13 | 14 | |
| | 13 | 13 | | |
| | 14 | 14 | | |
| | 15 | 16 | 16 | |
| | 16 | 16 | 10 | |

Remark A:

- 1. Under 30fps, the recording channel can not be the multiple of 3, 5, and 9
- 2. At 60fps, the recording channel can not be the even multiple of 3, 5, and 9
- 3. 120fps recording under 16 channel

The channels are divided: $(1 \cdot 2 \cdot 3 \cdot 4)$ in one group / $(5 \cdot 6 \cdot 7 \cdot 8)$ in one group

 $(9 \cdot 10 \cdot 11 \cdot 12)$ in one group / $(13 \cdot 14 \cdot 15 \cdot 16)$ in one group

As long as there is one input in either group, all the 4 channels will be recorded



VC Videocomponents GmbH Brachenfelder Str. 45 D-24534 Neumünster

> Tel.: ++ 49 (0) 4321 - 39 05 40 Fax: ++ 49 (0) 4321 - 28 04 82

e-mail: mail@vcvideo.de Internet: www.vcvideo.de Service

Tel.: ++ 49 (0) 4321 - 3 90 54 33 e-mail: technik@vcvideo.de

All contents of this document may change without prior notice All rights are reserved.