

*Thank you for purchasing our product. Please read this User Manual before using the product.*



CCT715 4-Way Digital Video Recorder

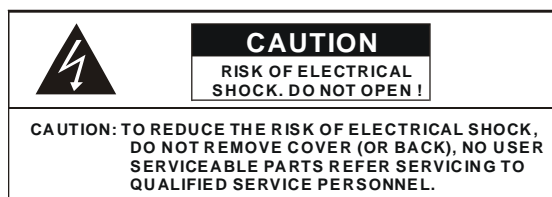
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## **User's Manual**

Version 002/AUG2005



## Safety Precautions



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 OUTDOOR USE TO RAIN OR MOISTURE.**



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 units.



“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.

## About this document

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

## 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. It is recommended that this unit is connected to a power surge protection 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 cover the opening (fresh air in-take) on the right side of the unit.
3. Put the DVR unit in a well-ventilated place and do not put heat generating objects on the unit. When it is installed in a mounting rack together with other devices, please check that the built-in ventilation fan in the rack is running properly.

# Unit Description of Front Panel



COMPACT FLASH CARD READER



4 QUAD SCREEN MODE BUTTON/ MODE FUNCTION KEY/ 4 OR 9 SPLIT DISPLAY ON PLAYBACK

**CHANNEL 1/2/3/4**

CHANNEL 1/2/3/4 FULL SCREEN BUTTONS

**FREEZE**

PICTURE FREEZE MODE BUTTON

**ZOOM**

PICTURE ZOOM x 2 MODE BUTTON

**W.MARK/AUTO**

WATER MARK FUNCTION BUTTON/AUTO SEQUENCE MODE

**BACKUP/PIP**

IMAGE BACKUP BUTTON/PICTURE IN PICTURE MODE BUTTON

DIRECTION BUTTON UP  
PLAYBACK STOP BUTTON

REVERSE PLAYBACK BUTTON

ENTER/AUDIO BUTTON SUB MENU ENTER  
AUDIO ON/OFF

STILL PLAYBACK



FORWARD  
PLAYBACK  
BUTTON

STILL  
PLAYBACK

DIRECTION BUTTON DOWN  
PLAYBACK PAUSE



**MENU** PRESS THIS BUTTON TO DISPLAY MENU SETUP

**ESC/LOCK** SUB MENU EXIT BUTTON - KEY LOCK FUNCTION

**PLAY** PLAYBACK BUTTON

**REC** RECORD BUTTON

# Unit Description of Rear Panel



ON



OFF

POWER 12v DC/5A ON/OFF

VGA NOT AVAILABLE



5A 12V DC POWER IN

CAMERAS IN 1 – 4

VIDEO LOOP THROUGH

75 OHM ON/OFF (HIGH/LOW ADJUST)

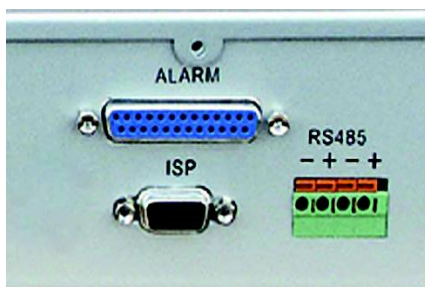
MONITOR OUTPUT

S – VIDEO (Y/C) MONITOR OUT



AUDIO CHANNEL OUTPUT

AUDIO CHANNEL INPUT



ALARM ALARM CONNECTOR

ISP RS232 CONNECTOR  
FIRMWARE UPGRADE PORT

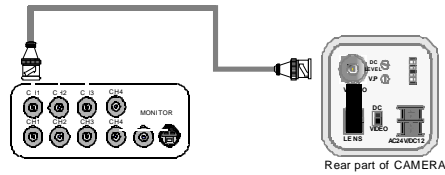
RS485 CONTROL KEYBOARD CONNECTOR

# Installation

## Procedure

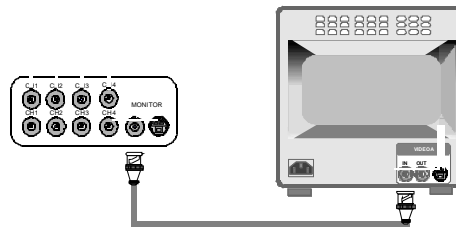
### 1) Camera Connection

Connect the camera to the CAMERA INPUT on the Rear Panel of the 4 CH DVR.



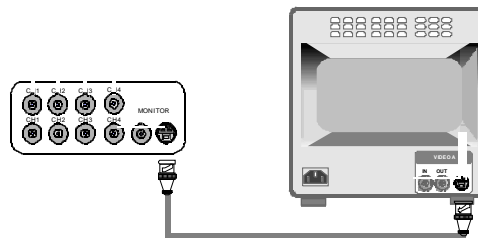
### 2) Monitor Connection (Composite Connection Method)

Connect the monitor to the MONITOR OUT on the Rear Panel of the 4 CH DVR.



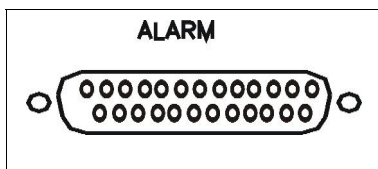
### 3) Monitor Connection

Connect S-VIDEO Monitor to MONITOR OUT on the Rear Panel of the 4 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.ALARM0
- 2.ALARM1
- 3.ALARM2
- 4.ALARM3
- 23.ALARM NC
- 24.ALARM NO
- 25.ALARM COM
5. ~ 19. GND

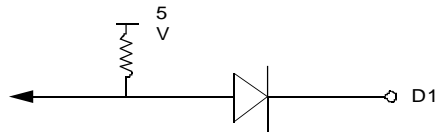
◆Relay output : COM+NC, COM+NO

◆Alarm input : Short-circuit between Alarm0, Alarm1, Alarm2 or Alarm3 and GND is recognized as alarm by default. Alarm0~3 will be corresponding to Camera1~4.

**NOTICE:** Sensor input is RECOGNIZED as LOW when alarm signal is on a level with GND, and it is

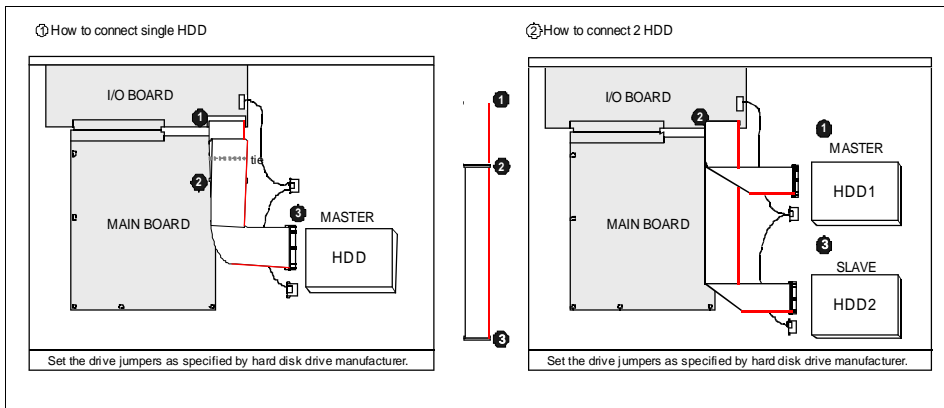
recognized as HIGH when alarm signal is FLOATING or 5V. Following is internal circuit.

Internal Circuit



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

### 5) HDD connection

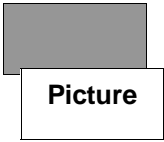


1. Make sure the HDD is MASTER.
2. Make sure the cable connector is correct.
3. Please check the HDD panel for Master set up.


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

#### Notice:

- This 4 CH DVR is capable of accomodating a maximum of 2 internal hard drives.
- Hard Disk Master and Slave jumper pins must be set correctly, otherwise DVR will not function.
- 400 Gb Hard Drives are not compatible with this unit. Unit takes 2 x 300 Gb Hard Drives maximum.




### Full screen or quad screen display

Press  quad button to display 4 quad screen.

Press numeric 1 / 2 / 3 / 4 buttons to display a desired camera image in full screen.

#### 1.) FREEZE Mode


1. In live and the quad mode press  (FREEZE) button to freeze image.

Press  again to cancel freeze mode.

2. On the full screen display, press  (FREEZE) button to freeze full screen image.

#### 2.) Zoom Mode(Display Enlargement.)

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

Use  button to move position.

#### 3.) Auto Mode

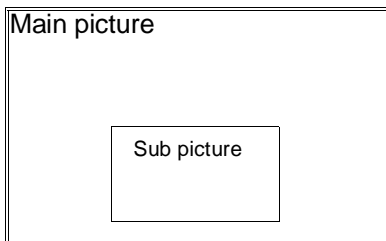
Press  (AUTO) button to start screen auto sequencing, and press it again to cancel auto mode.



#### 4.) W.MARK. Water Mark mode.

Water Mark protection function on or off. To prevent hacker using special software to modify the image data. System Setup → Watermark Check mode On. Press W.Mark button to on or off. (Playback mode only)

#### 5.) PIP (PICTURE IN PICTURE)

1.) Press  (PIP) button. Press  (AUTO) button to start sub-screen auto sequencing.



2) With  button, select the main channel screen, press  button to select desired camera channel in

small screen.



**6.) BACKUP / PIP.** Image backup mode.(Image backup works in playback mode only.)

Locate the playback point you want. Press BACKUP, the BACKUP CAUTION window pops up. Press ENTER to begin data back up. Capacity of CF card is not limited, but the maximum capacity display is 9999MB.

In playback mode, press BACKUP:

Lower-Right corner of the screen:

**\*\* BACKUP CAUTION \*\***  
ALL DATA IN THE CF CARD  
WILL BE CLEARED.  
PRESS [ENTER] TO BACKUP.  
PRESS [BACKUP] TO CANCEL.

0000M / 0256MB

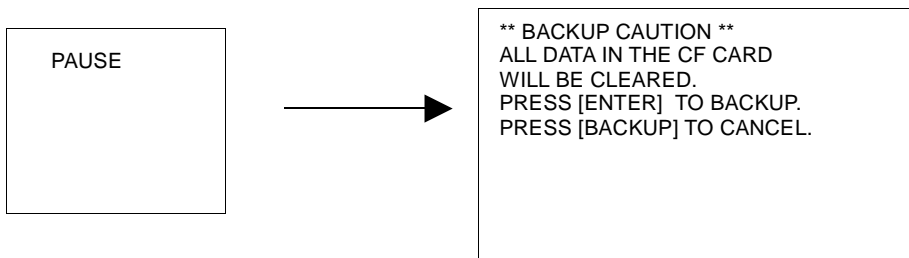
0000MB / 0256 (Presently back up progress / Total capacity of CF card)

**Important:**

If the CF card contains old data, please format CF card to FAT or FAT32 on a computer before inserting in DVR CF card slot. Otherwise, DVR will not detect correct CF card format. Any brand of CF card is acceptable.

**Additional:**

During playback, if a CF card is full or if user presses the BACKUP button, the screen will display a "PAUSE" caption. User then takes out the CF card then saves data to P.C hard disk using the USB connection. After this, re- insert the CF card in the DVR slot, and press BACKUP again. Press ENTER to continue backup or backup button to cancel.



**7.) Alarm Sensor Recording**

>See the alarm recording setup page

**8.) Scheduled Recording**

>See the scheduled recording setup page

**9.) Motion detection Recording**

>See the motion detection recording setup page

**10.) Key Lock function**



>In the Live or Playback mode, press (lock). Only numeric, freeze, auto, pip, and zoom buttons will work. Press lock key again to enter the login-in window. Enter admin or user password to unlock. Key lock function only accepts correct password log-in, even following a DVR reboot.

10.)

**11.) AUDIO function ))))**

)))))	XXXXXXXXXX




Audio playback: Press **AUDIO** / ENTER, ))))))) 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.

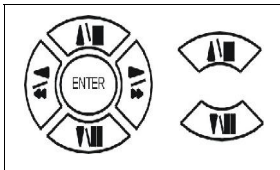
## Playback

### 1. Playback Mode

- 1) Press  button to begin playback. System plays back the images in reverse.

### 2. T-SRH button

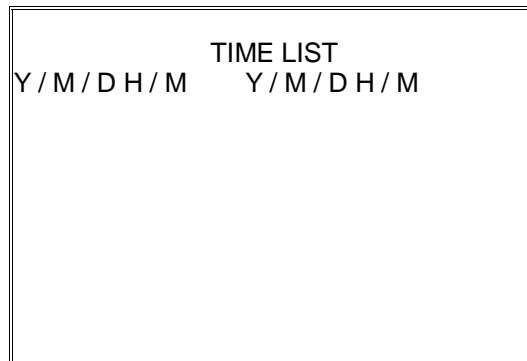
- 1) T-SRH: Playback by time search.  
Press T-SRH button to activate playback function.



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
```

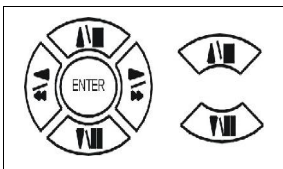
### 1) TIME LIST (Playback image by Time-Search): Recorded images list (by hours)



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

Every playback data list displays by the hour.

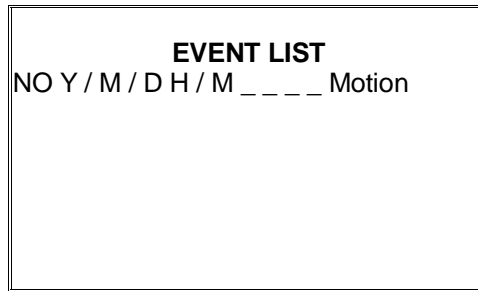
No page display limit. 10 items displayed on each page.



Press direction button UP/DOWN to choose items.

Press   values change button to change to previous / next page.

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



10 items displayed on each page. A total of 5000 items displayed across 500 pages. Note that a maximum of 5000 items are only displayed.

Time Format

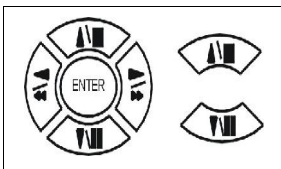
Y / M / D H / M : Year / Month / Day Hour / Minute

\_ \_ \_ \_ : Event Channel Display.

>1 CH, 2 CH, 3 CH, 4 CH.

Motion: Event type.

>Includes Motion / Alarm / V-Loss / Record



Press direction button UP/DOWN to choose items.

Press ◀▶ values change button to change page. Press ENTER to start playback.

### >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 ◀▶ to change value.

GOTO TIME: 12:12

-Choose hour and minute

>Press direction button Left / Right to choose items, press values change button ◀▶ to change value.


GOTO PLAY

-Press ENTER button to start playback.

Notice: Playback speed change by ◀▶. Speed is x 1, x 2, x 4, x 8, x 16.

## FUNCTION SETUP

LOGIN

1) Press  button to enter menu. You can do system function setup in MENU.

2) Enter Password Menu

CHECK PASSWORD MENU  
PASSWORD (\*\*\*\*\*)

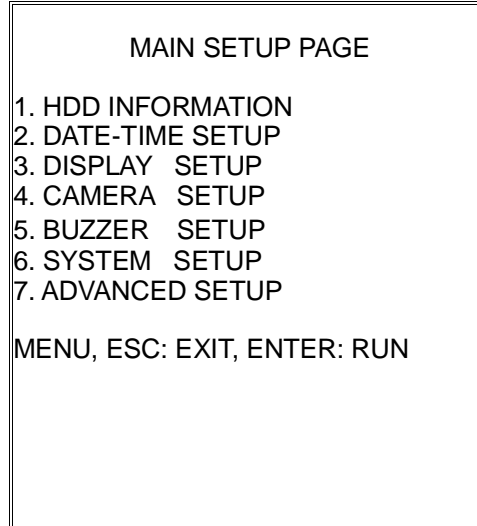
Default password (Account-Admin) : 44444  
Default password (Account-User) : 11111

3) Press numeric (1 ~ 4 )button or remote controller ( 0 ~ 9 )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.





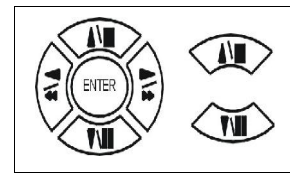
1) Use direction button up/down  button to select setup item.

2) Press  button to enter into sub-menu function setup.

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

or left/right  button.

And change the value with   values change button or turn inner-shuttle.



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.

## 1. HDD INFORMATION

```
MAIN SETUP PAGE

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

MENU, ESC: EXIT, ENTER: RUN
```

```
POSITION SIZE USED BRAND
MASTER
LAST TIME
SLAVE
LAST TIME

MENU, ESC: EXIT, < > :PAGE
```

Hard Disk Information Display.

Information display: POSITION SIZE USED BRAND

>POSITION: Master / Slave

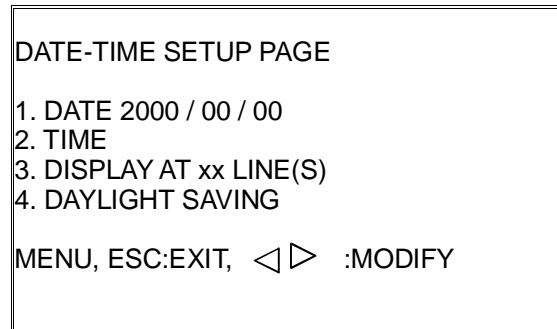
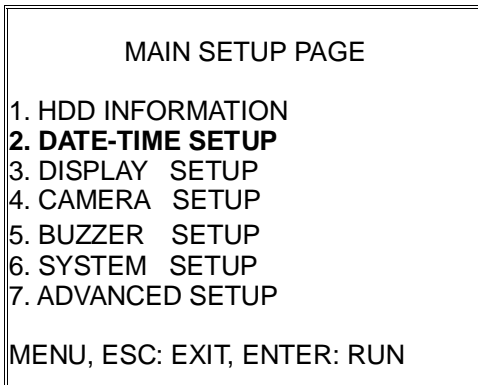
>SIZE: Hard Disk capacity. xxGB. Maximum display is 999GB

>USED: 00 ~ 100 %. Hard disk overwrites always on 100 %.

>BRAND: DVR auto detect hard disk brand.

>LAST TIME: The last record time display.

## 2. DATE-TIME SETUP



1. DATE: > YYYY/MM/DD
2. TIME: > Use direction button up/down to choose position & values change button to change date and time values.
3. DISPLAY AT xx LINE(S)
  - Date and Time position on screen xx line(s). 00 ~ 23.
4. DAY LIGHT SAVING:
  - Day light saving function on or off.

The Day light Savings function that enable two special updates when it is set to "ON".

On the first Sunday in April, the time increments from 1:59:59 AM to 3:00:00 AM.

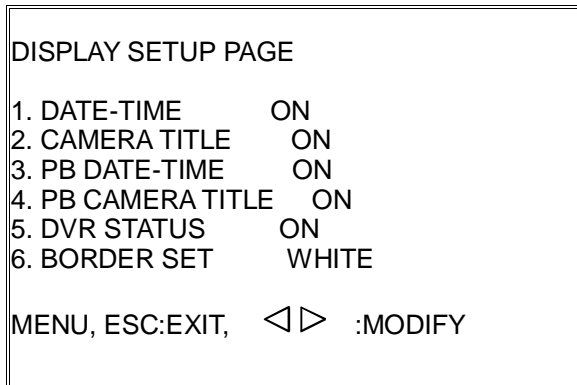
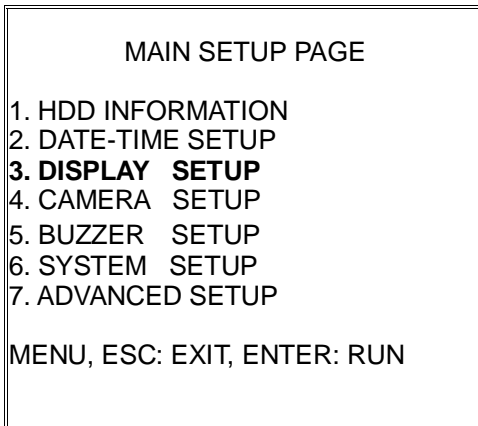
On the last Sunday in October when the time first reaches 1:59:59 AM, it changes to 1:00:00 AM.



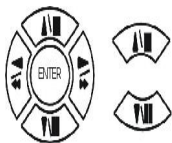
Press direction button up/down/left/right to choose items or move date-time position.



### 3. DISPLAY SETUP



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. DVR STATUS: DVR system, record, playback, audio caption display mode on or off setup.  
>ON / OFF
6. BORDER SET: Border colour WHITE / DARK / BLACK / GREY.



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

Press ◀▶ values change button to change values.

#### 4. CAMERA SETUP

MAIN SETUP PAGE

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

MENU, ESC: EXIT, ENTER: RUN

CAMERA SETUP PAGE

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

MENU, ESC: EXIT, ENTER: RUN

##### (1.) COLOUR SETUP

CAMERA SETUP

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

CAMERA-COLOUR SETUP PAGE  
\*\* CH CAMERA 01

1. BRIGHTNESS 00
2. CONTRAST 00
3. SATURATION 00
4. HUE 00
5. GAIN 00

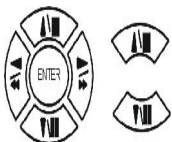
>>DEFAULT RESET<<

MENU,ESC:EXIT,           :MODIFY

CAMERA-COLOUR SETUP : Adjust Camera Image

- CH NUMBER           : Select camera
- BRIGHTNESS        : Adjust screen brightness     (-31~ +32)
- CONTRAST           : Adjust colour contrast         (-31~ +32)
- SATURATION         : Adjust colour saturation     (-31~ +32)
- HUE                 : Adjust colour hue             (-31~ +32)
- GAIN                : Adjust image signal level   (-31~ +32)

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

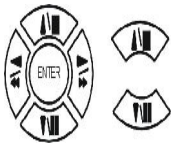
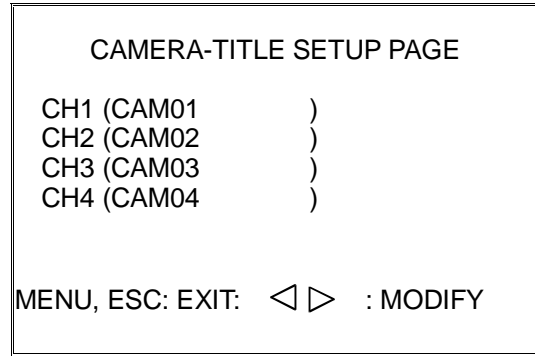
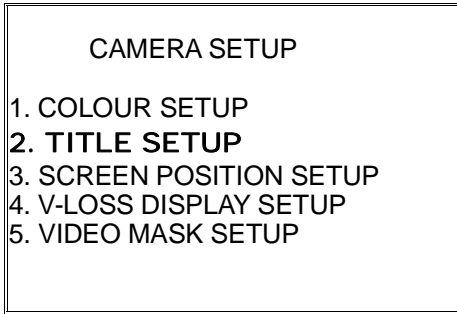


Press direction button up/down to choose items.

Press ◀ ▶ values change button to change values.

The correct adjustment in COLOUR setup will improve picture quality displayed. We recommend that each element of the colour adjustment is setup for each camera and monitor connected to the DVR.

**(2.) TITLE SETUP:** Input TITLE of each camera. 18 characters can be input.



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

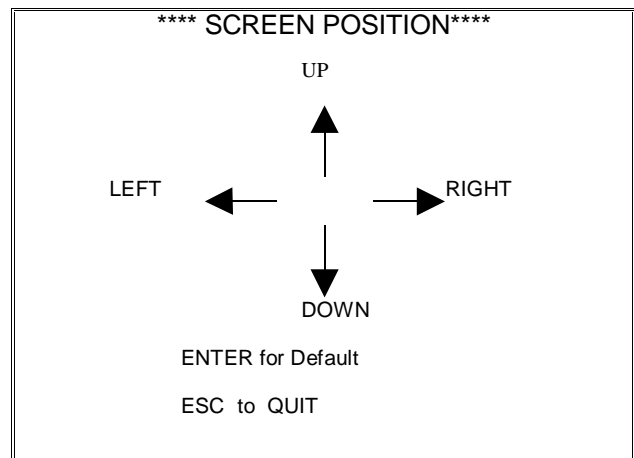
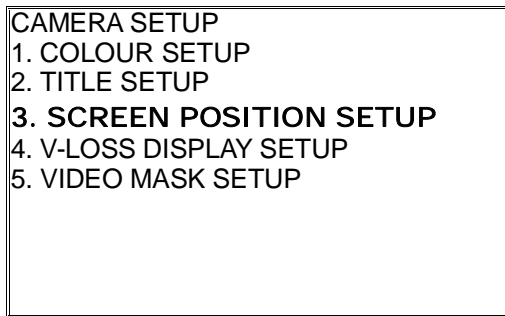
Press ◀▶ values change button to change values.

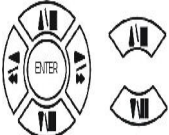
Characters choose:

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

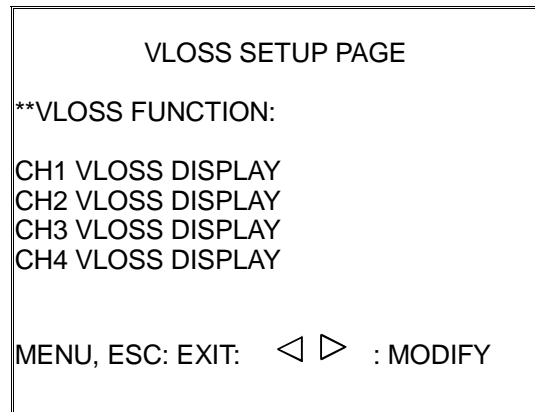
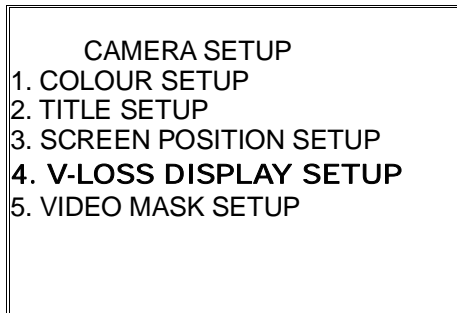


1.  Press direction buttons up/down/left/right to move screen position.

2. Press ENTER button for default.

3. Press ESC button to quit.

#### (4.) V-LOSS DISPLAY SETUP



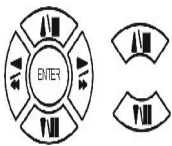
\*\* VLOSS FUNCTION: ON / OFF

CH1 VLOSS DISPLAY: ON / OFF

CH2 VLOSS DISPLAY: ON / OFF

CH3 VLOSS DISPLAY: ON / OFF

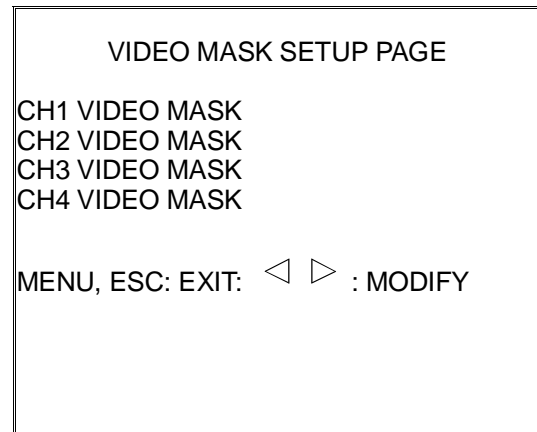
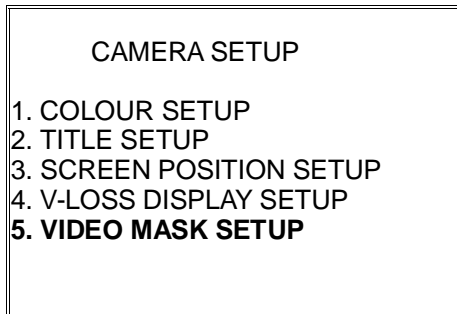
CH4 VLOSS DISPLAY: ON / OFF



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

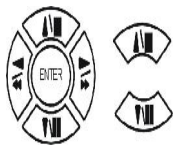
Press ◀ ▶ values change button to change values.

(5.) VIDEO MASK SETUP



- CH1 VIDEO MASK: ON / OFF
- CH2 VIDEO MASK: ON / OFF
- CH3 VIDEO MASK: ON / OFF
- CH4 VIDEO MASK: ON / OFF

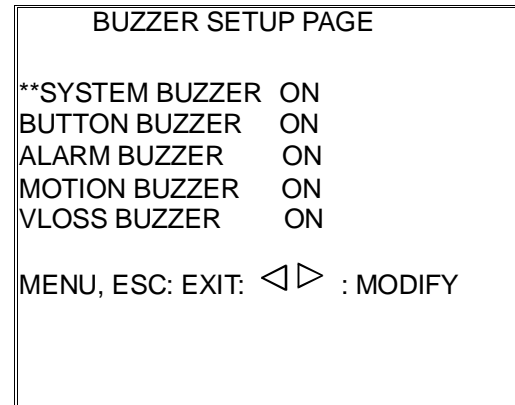
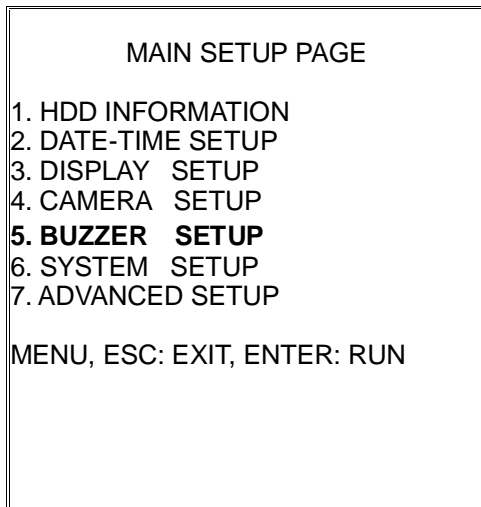
MASK means this channel would not display on the live screen, but it still recording.



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

Press ◀ ▶ values change button to change values.

## 5. BUZZER SETUP



\*\*SYSTEM BUZZER: Buzzer function

>ON / OFF

1. BUTTON BUZZER?

> ON / OFF

2. ALARM BUZZER?

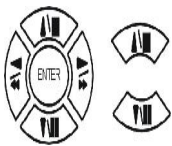
> ON / OFF

3. MOTION BUZZER?

> ON / OFF

4. VLOSS BUZZER?

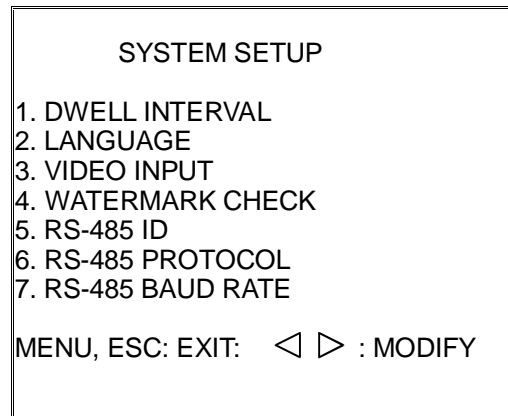
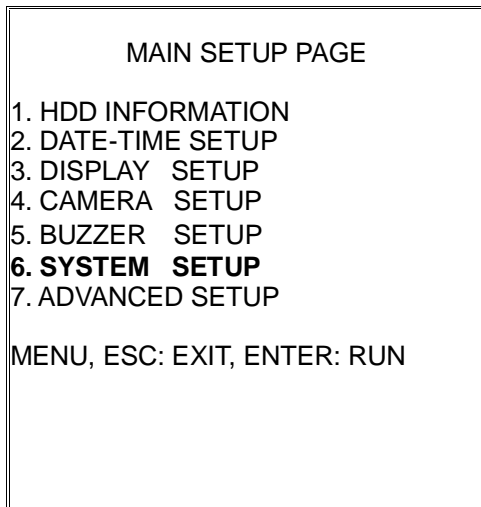
> ON / OFF



Press direction buttons up/down to BUZZER SETUP items.

Press ◀▶ values change button to change values.

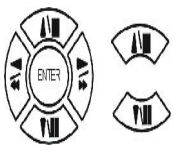
## 6. SYSTEM SETUP



### SYSTEM SETUP

1. DWELL INTERVAL:  
- 0 ~ 999SEC
2. LANGUAGE  
- ENGLISH / CHINESE / JAPANESE
3. VIDEO INPUT: NTSC / PAL system detection,  
- AUTO / NTSC / PAL
4. WATERMARK CHECK:  
-ON / OFF
5. RS-485 ID:  
- 01 ~ 16
6. RS-485 PROTOCOL  
- KEYBOARD / LILIN / PELCO-P / PELCO-D / NICECAM
7. RS-485 BAUD RATE  
- 1200 / 2400 / 4800 / 9600

**RS-485 ID and protocol is the command for system control keyboard. Currently PTZ equipment is not operational with this equipment.**

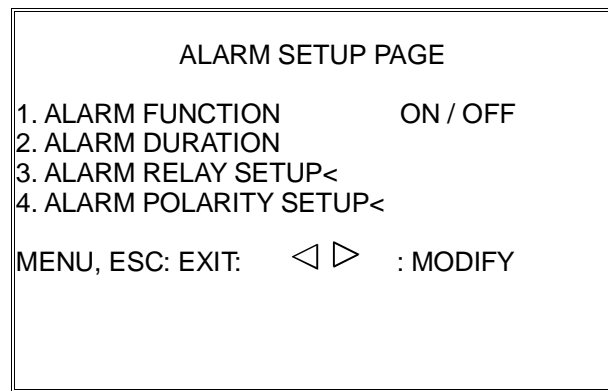
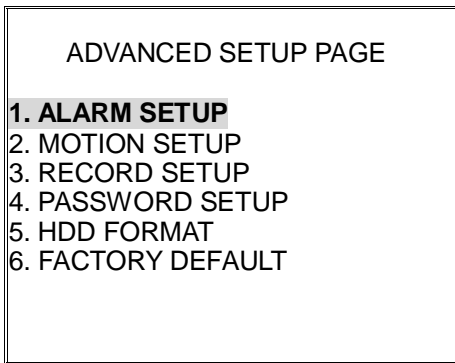
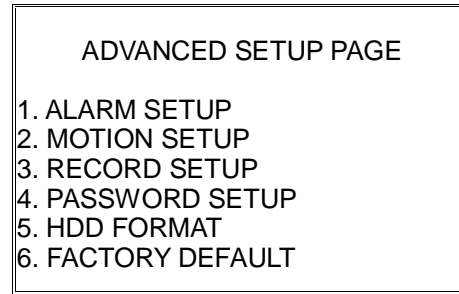
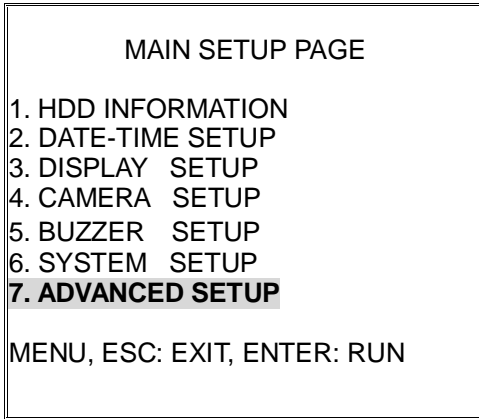


Press direction buttons up/down to choose items.

Press ◀ ▶ values change button to change values.



## 8. ADVANCED SETUP



1. Alarm function: ON / OFF

2. Alarm duration: 0 ~ 999 secs

ALARM RELAY SETUP PAGE

ALARM01 : ON / OFF

ALARM02 : ON / OFF

ALARM03 : ON / OFF

ALARM04 : ON / OFF

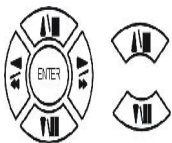
ALARM POLARITY SETUP PAGE

ALARM01: NO / NC / OFF

ALARM02: NO / NC / OFF

ALARM03: NO / NC / OFF

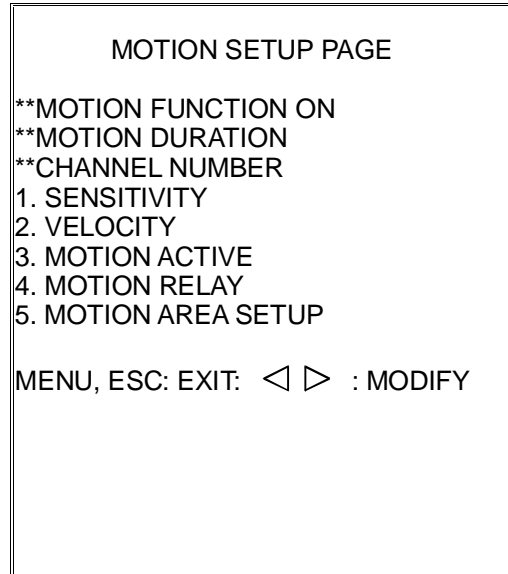
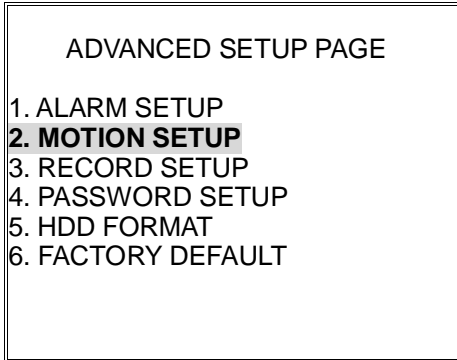
ALARM04: NO / NC / OFF



Press direction buttons up/down to choose items.

Press ◀ ▶ values change button to change values.

## 2. MOTION SETUP



### MOTION SETUP

\*\*MOTION FUNCTION (set for all channels)

-ON / OFF

\*\*MOTION DURATION

-0 ~ 999 secs

\*\*CHANNEL NUMBER

Ch 1 / Ch 2 / Ch 3 / Ch 4

1. SENSITIVITY Adjusts motion Detection Sensitivity.

-1 ~ 32 (low à high)

2. VELOCITY Adjusts motion object slow /fast speed detection

-1 ~ 10 (slow speed à fast speed)

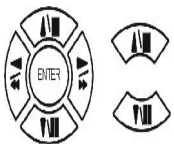
3. MOTION ACTIVE (For each channel)

-ON / OFF. Motion detect option for each channel.

4. MOTION RELAY

-ON / OFF

5. >MOTION AREA SETUP<



Press direction buttons up/down to choose items.

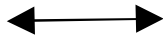
Press ◀ ▶ values change button to change values.

**> MOTION AREA SETUP <**

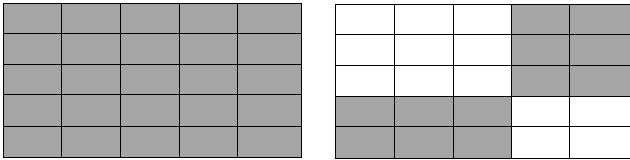
All area detect with factory default. Press quad button to change mode and then increase or reduce.

**For example:**

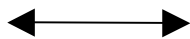
Clear lattices



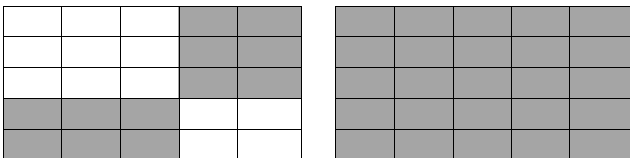
Press ◁ value change button to reduce.



Add lattices



Press ▷ value change button to reduce.



Icon:

Press ▷ to increase area, press ◁ to reduce area.

Icon:

Press Up / Down / Left / Right direction key to move, press ▷ to increase lattices; press ◁ to reduce lattices.

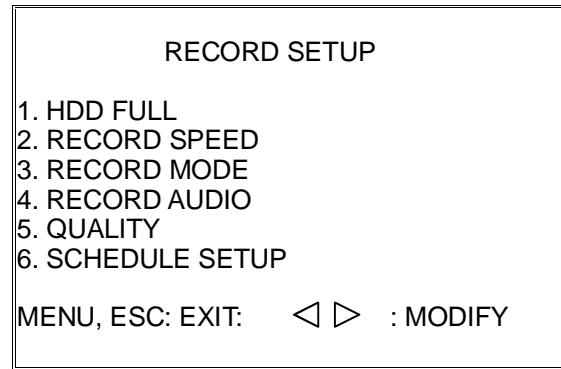
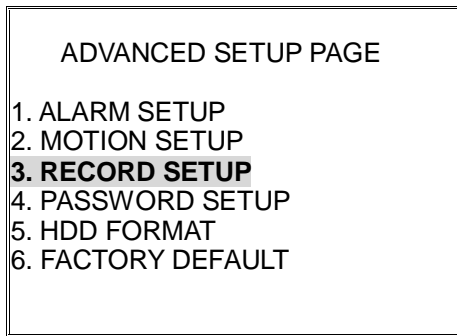
Icon: +

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

Icon: X

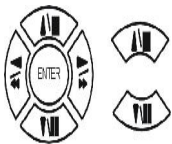
Press Up / Down / Left / Right direction key to move and reduce area.

### 3. RECORD SETUP



#### RECORD SETUP

- 1) **HDD FULL:** When hard disk is full, **OVERWRITE** will allow overwrite of earliest data files: **STOP REC** will halt machine.  
-OVERWRITE / STOP REC
- 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). (Figs in brackets are NTSC format)
- 3) **RECORD MODE:** Record mode setup.  
-ALWAYS / SCHEDULE / EVENT / EVENT ON SCHEDULE / EVENT + SCHEDULE
- 4) **RECORD AUDIO:** Audio record setup  
-ON / OFF
- 5) **QUALITY:** Record image quality setup  
- SUPER / HIGH / FINE / NORMAL / LOW
- 6) **SCHEDULE SETUP**



Press direction buttons up/down to choose items.

Press ◀ ▶ values change button to change values.

**Additional:**

2. RECORD SPEED. 1/30, 1/15, 1/10, 1/5, 1/3, 1/2, 1, 2, 3.13, 5, 8.33, 12.5, 25, 50, 100.

Record speed of 100 is for Real Time recording. Playback displays 25 frames per channel on FULL screen and 12.5 frames per channel on a 4 – split screen.

3. RECORD MODE. ALWAYS / SCHEDULE / EVENT / EVENT ON SCHEDULE / EVENT + SCHEDULE.

-Always: 24 hours recording. Manual record or stop.

-Schedule: Date and time schedule recording mode.

-Event: Alarm / Motion / V-Loss event mode recording.

-Event on schedule: Event record only on schedule time.

-Event + Schedule: Event recording when schedule set. Events are recorded regardless of schedule time set.

4. RECORD AUDIO: ON / OFF.

-Set Audio to ON for audio recording.

**>SCHEDULE SETUP<**

RECORD SETUP  
 1. HDD FULL  
 2. RECORD SCHEDULE  
 3. RECORD MOTION  
 4. RECORD ALARM  
 5. RECORD POWER ON  
 6. RESOLUTION  
 >SCHEDULE SETUP<  
 >RECORD SPEED SETUP<



Press direction buttons up/down to SCHEDULE items.



Press values change button to change values.

Factory default is everyday all schedules time on recording.

**SCHEDULE SETUP**

CURSOR STEP

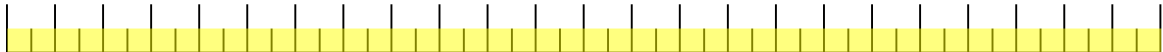
30MIN / 60MIN



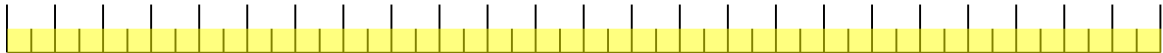
**SUN**



**MON**



**TUE**



**WED**



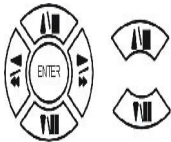
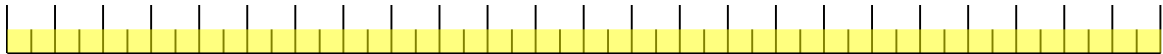
**THU**



**FRI**




**SAT**



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

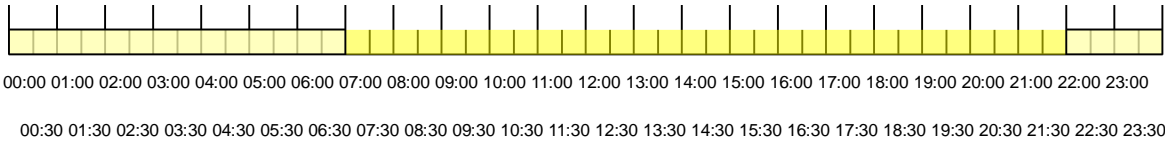
Press   values change left/right button to change 30MIN or 60 MIN

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

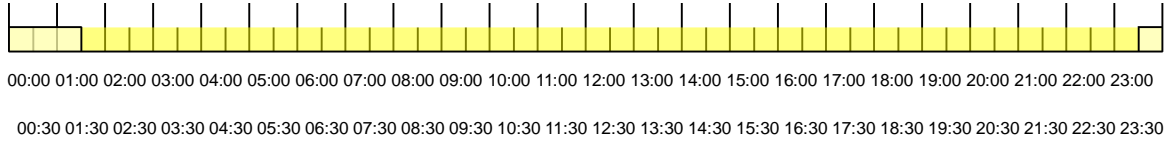


Mode function button  
 ++ increase  
 -- reduce

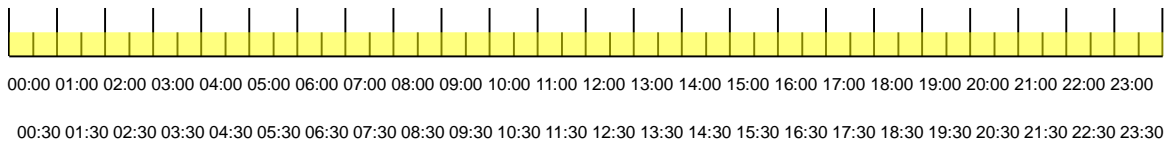
**SUN**



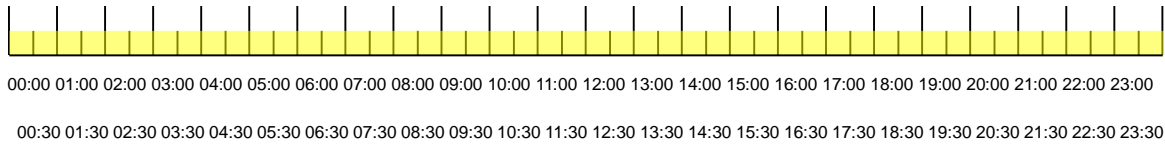
**MON**



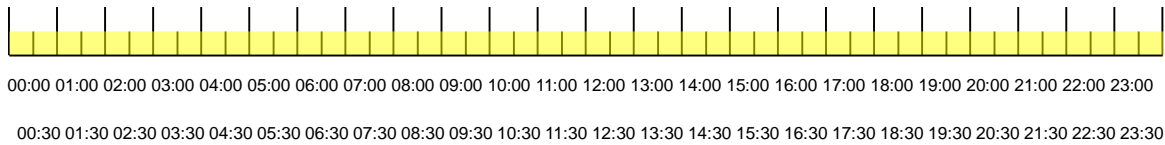
**TUE**



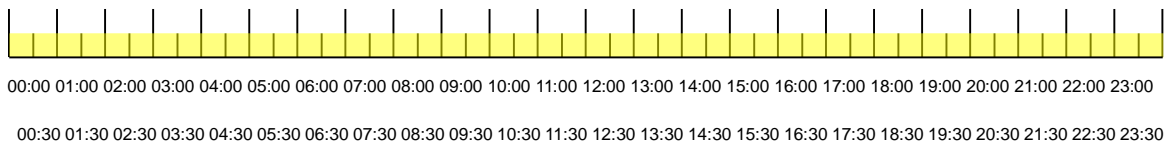
**WED**



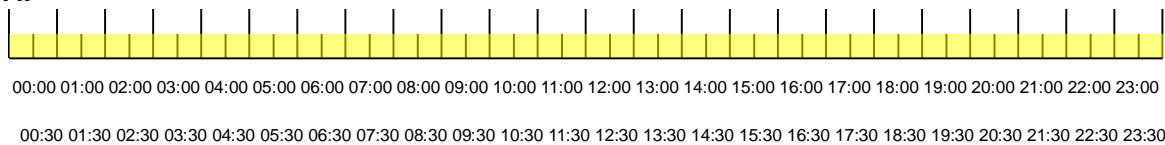
**THU**



**FRI**

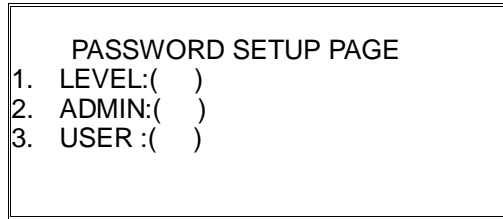
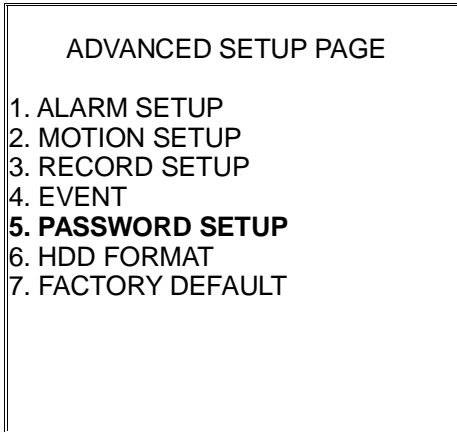





**SAT**



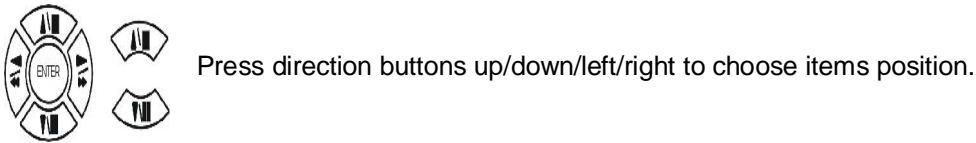
For example: TUE ~ SAT, all day schedule time recording, but SUN 07:00 ~ 22:00 and MON 01:30 ~ 23:30 schedule recording. User can press ENTER to see the schedule time area difference.

## 5. PASSWORD SETUP



- 1) LEVEL (Log In level ID type setup)   Press direction buttons up/down/left/right to Choose items position.
- >NONE / ADMIN / USER
- ADMIN:  Press values change button to change values.
- USER
- NONE, user does not need to insert password before enter in MENU.

- 2) ADMIN password
- >44444 (Factory Default) Notice:  
Password always 5 character input, cannot accept < 5 characters
- 3) USER password
- >11111 (Factory Default)



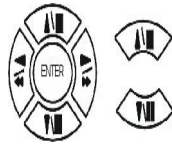
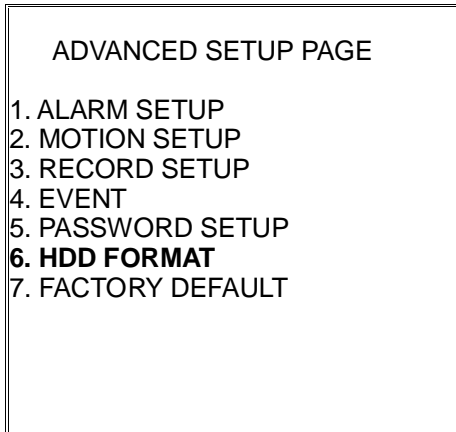
Press numeric (1 ~ 4 )button or remote controller ( 0 ~ 9 )to choose password.

Choose ADMIN: Only admin password can login to Advanced Menu.

Choose USER: Both user and admin passwords can login to menu but user password cannot access Advanced Menu.



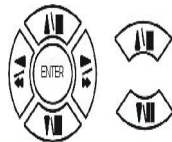
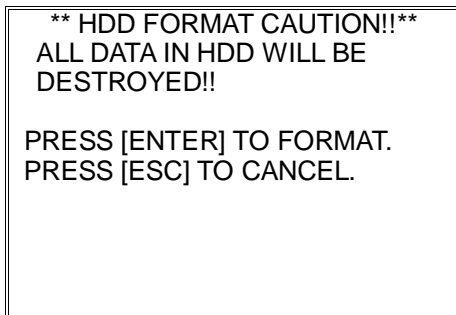
## 6. HDD FORMAT



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

Caution: User can only format HDD when record and playback halted.

à HDD FORMAT CAUTION!! :

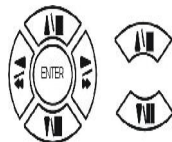
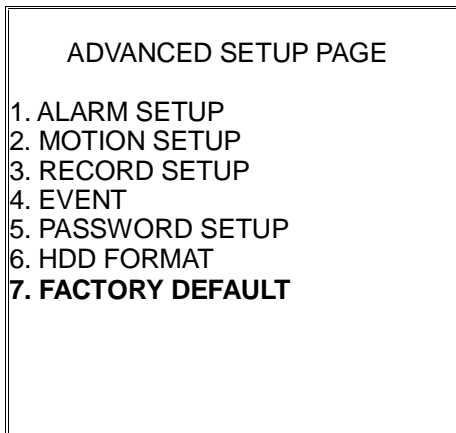


Press ENTER button to format hard disk.

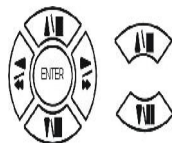
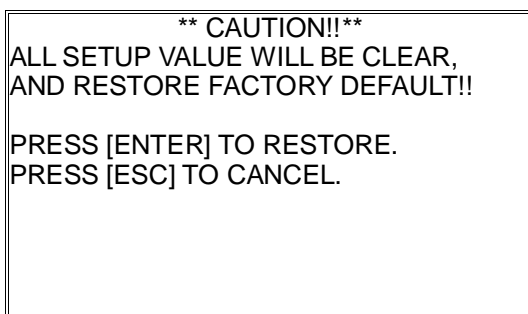


Press ESC button to cancel hard disk format

## 7. FACTORY DEFAULT



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



Press ENTER button to restore.



Press ESC button to cancel.

## CF card data read on PC

1. CD folder, save setup.exe to PC hard disk  
or double click it.



2. Install Shield Wizard processing.



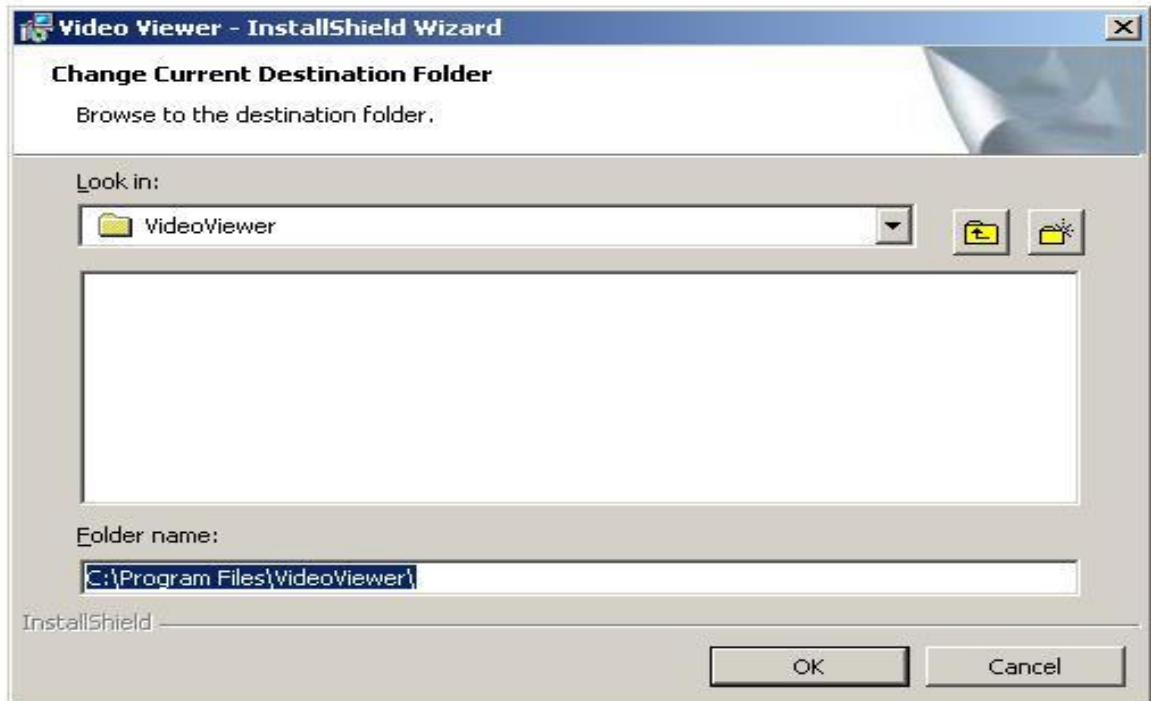
3. Click Next.



4. Choose folder.



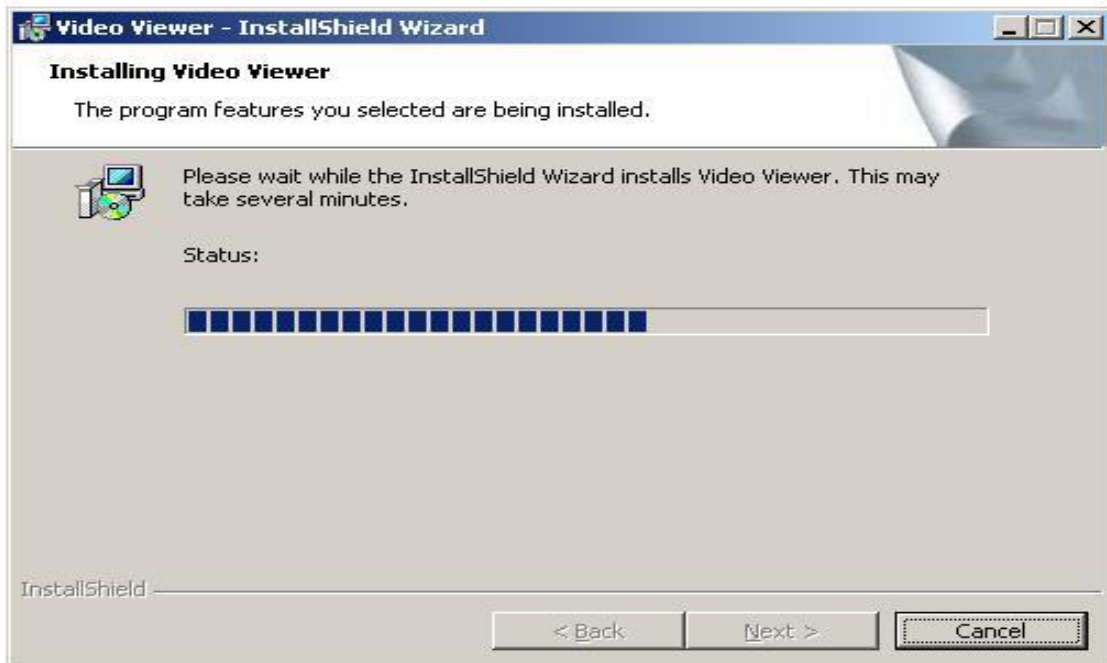
5. After choose folder, click OK.



6. Click install to start.



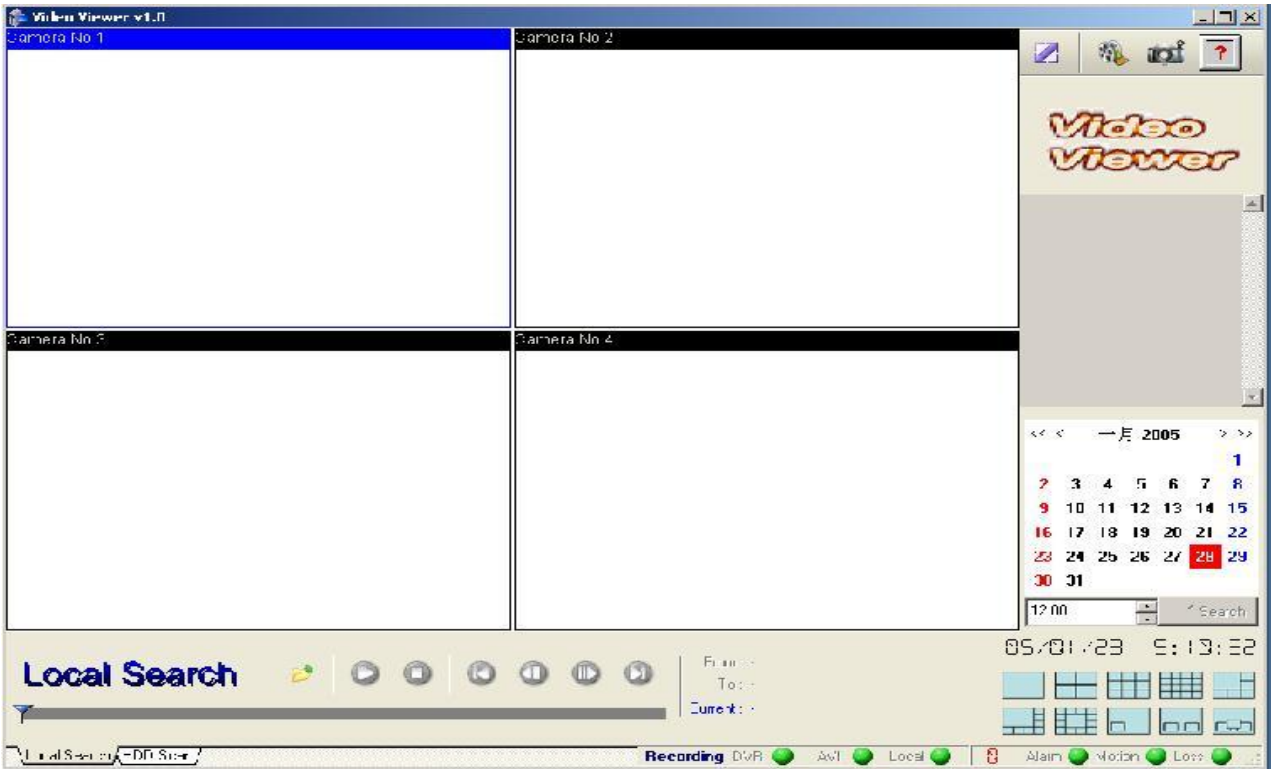
## 7. Installing



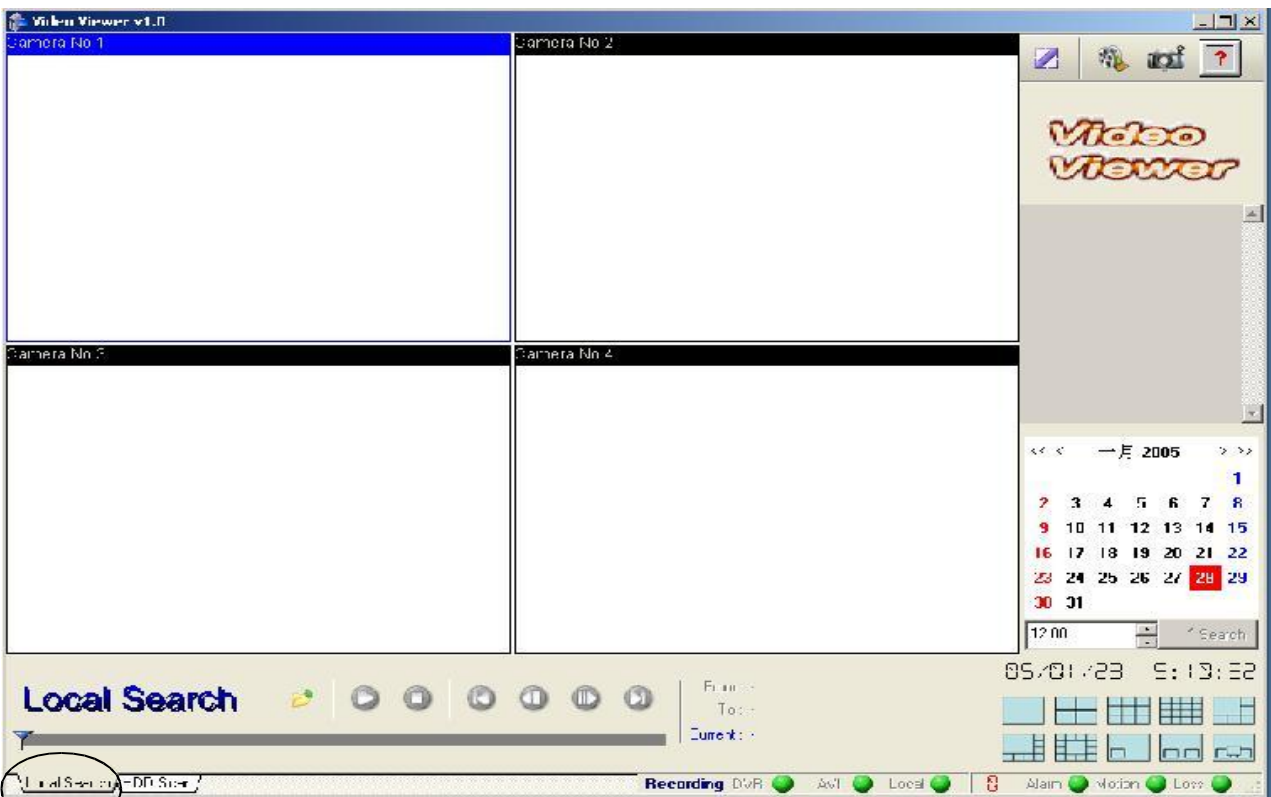
## 8. Click Finish



Startà Programà Video Viewerà Video Viewer

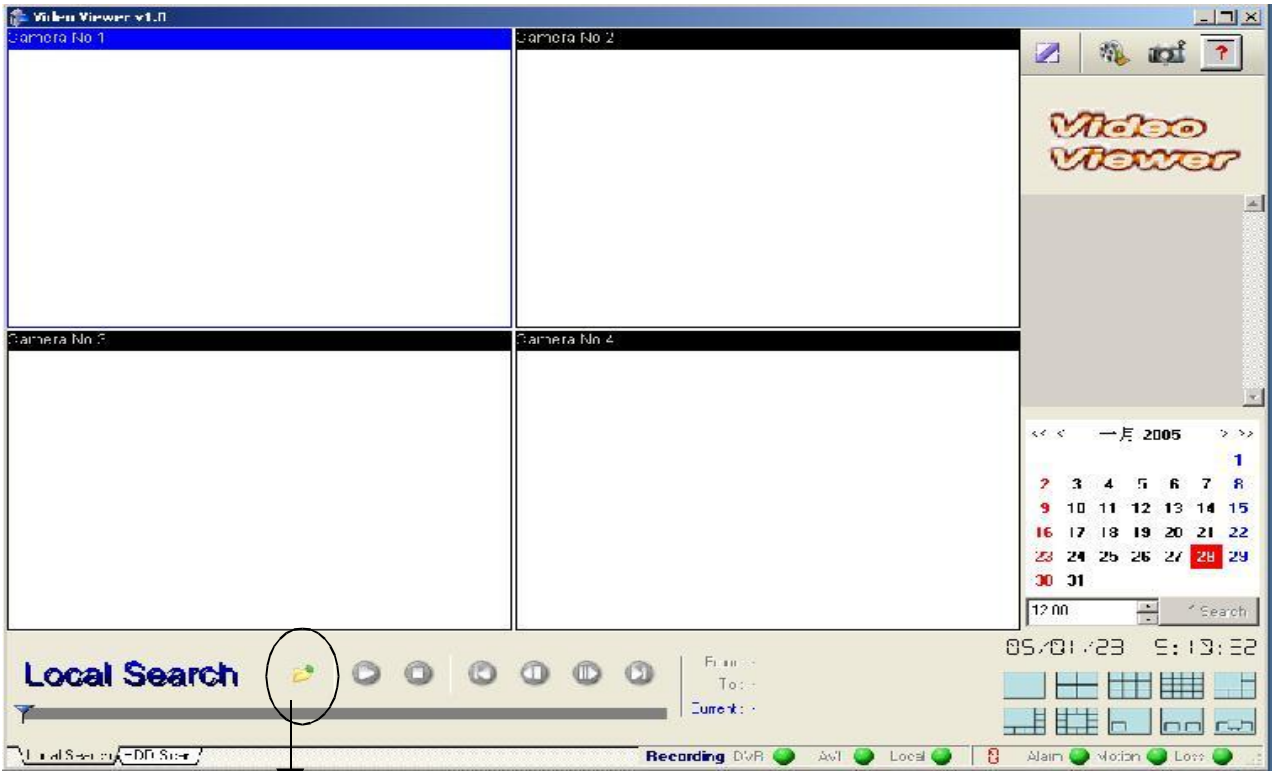


Click Local Search.



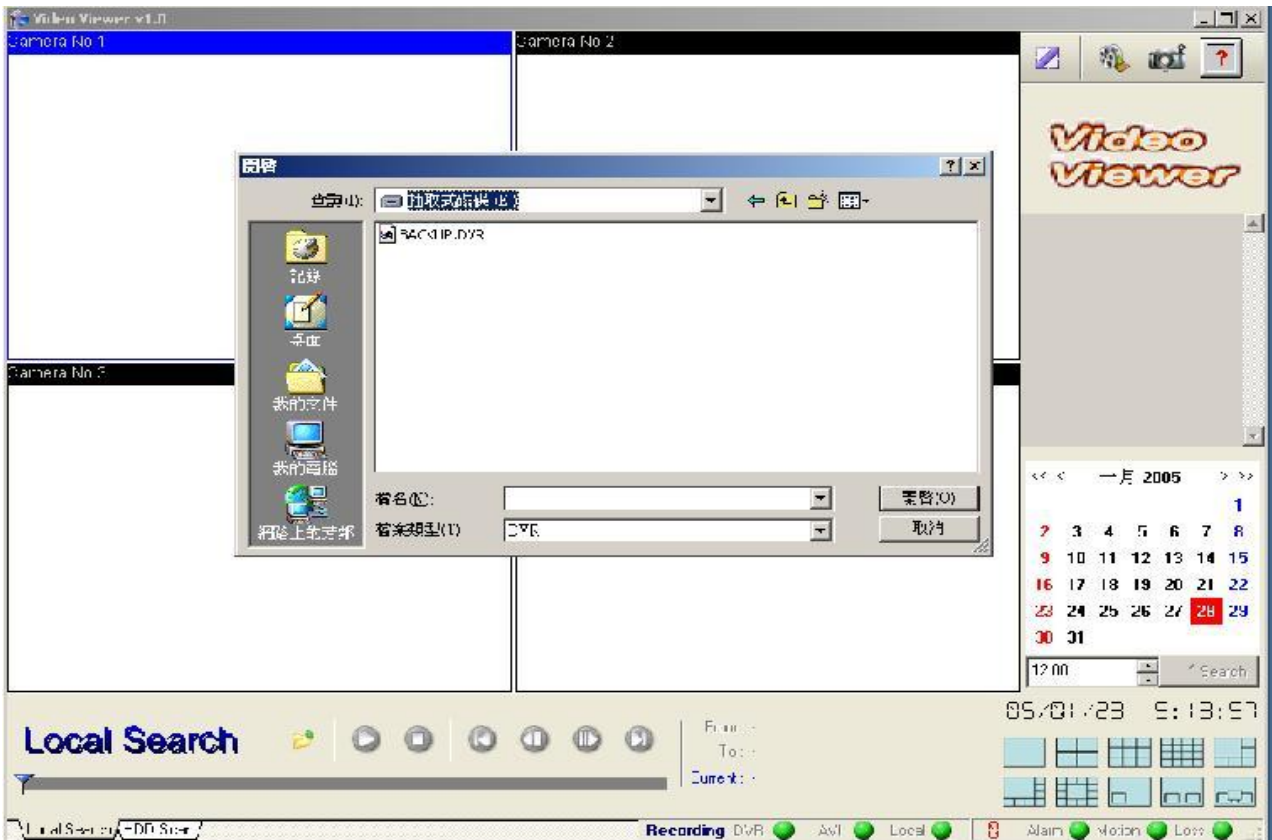
Left key of mouse click Local Search.

Choose folder

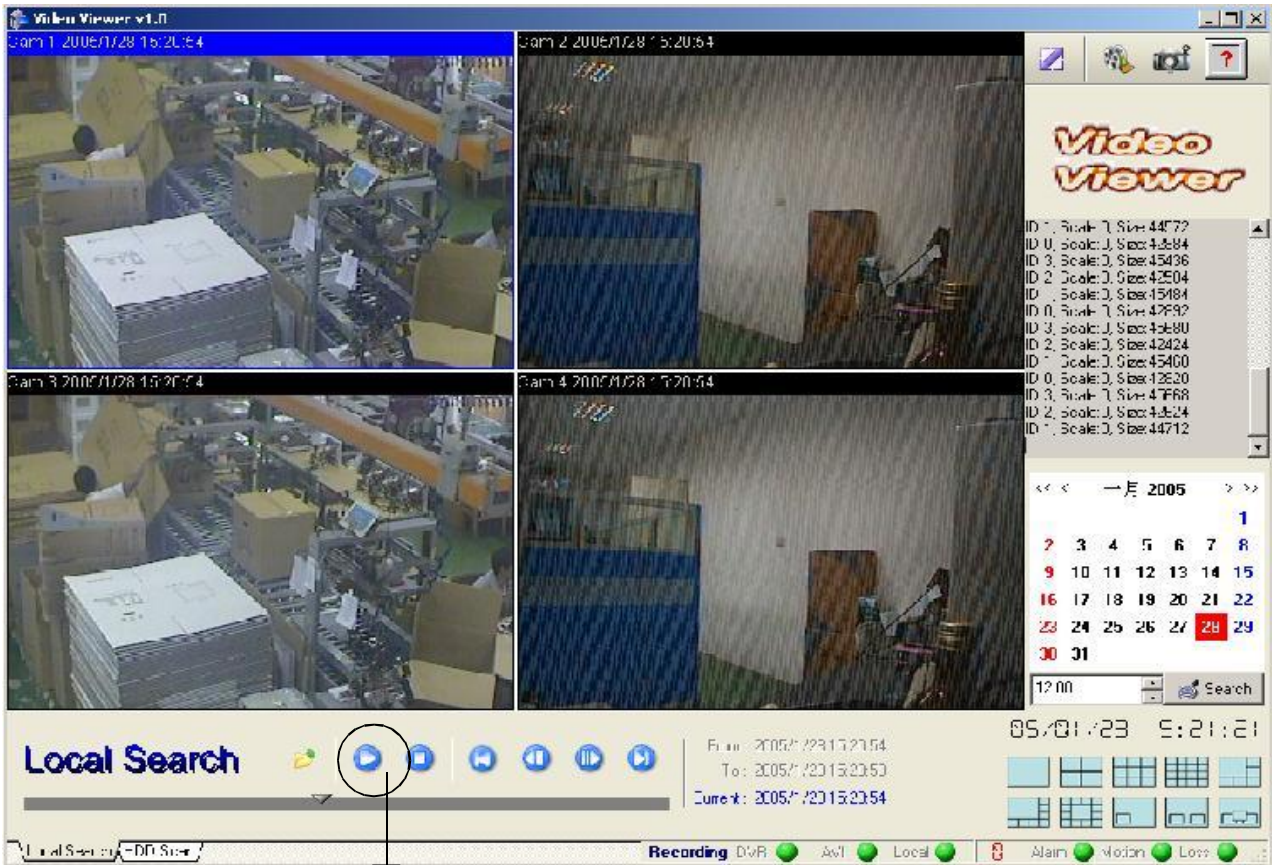


Click folder.

Choose new removable hard disk à BACKUP.DVR file. à OPEN.

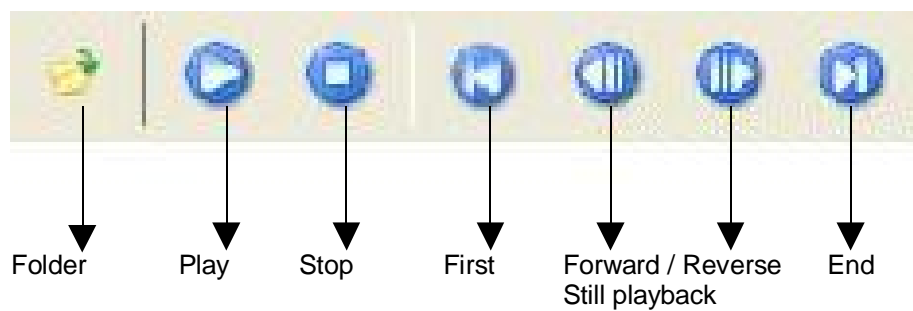


## Start to playback



Left key of mouse click play

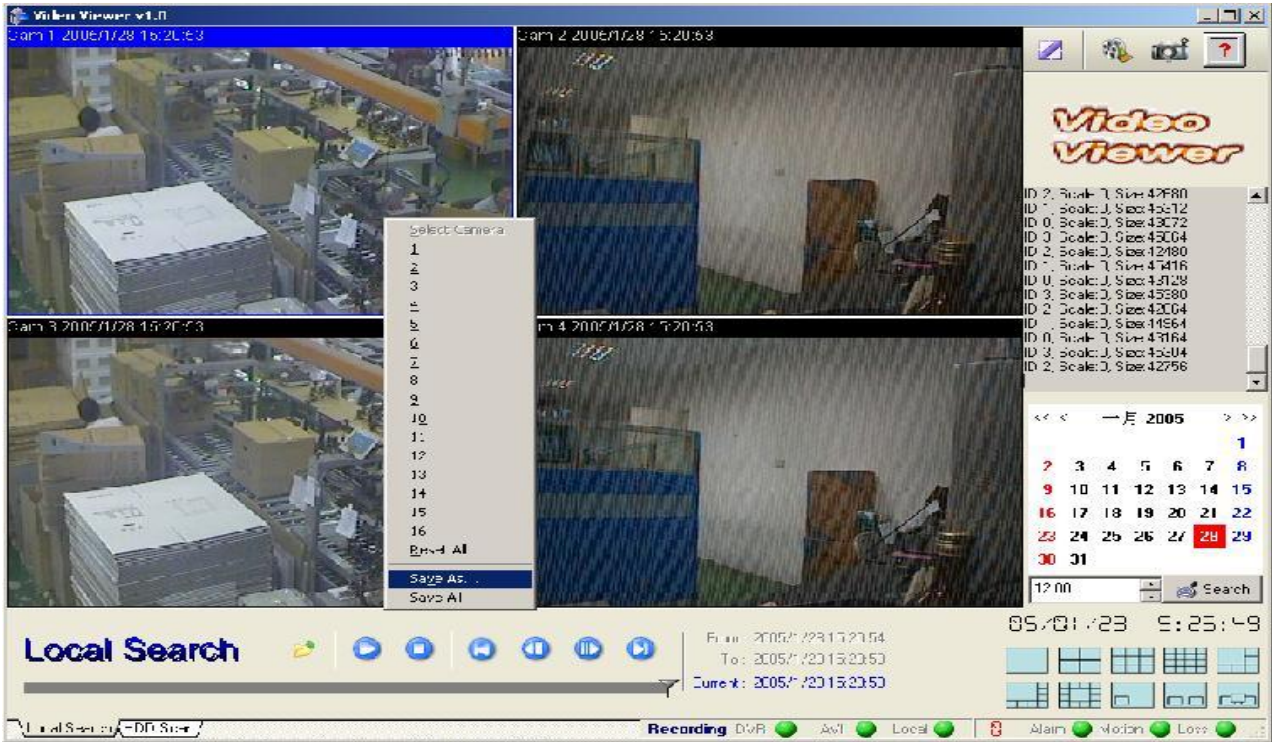
## Icon:





Picture capture save. (.JPG file saves.) Only camera full channel save, no quad picture save.

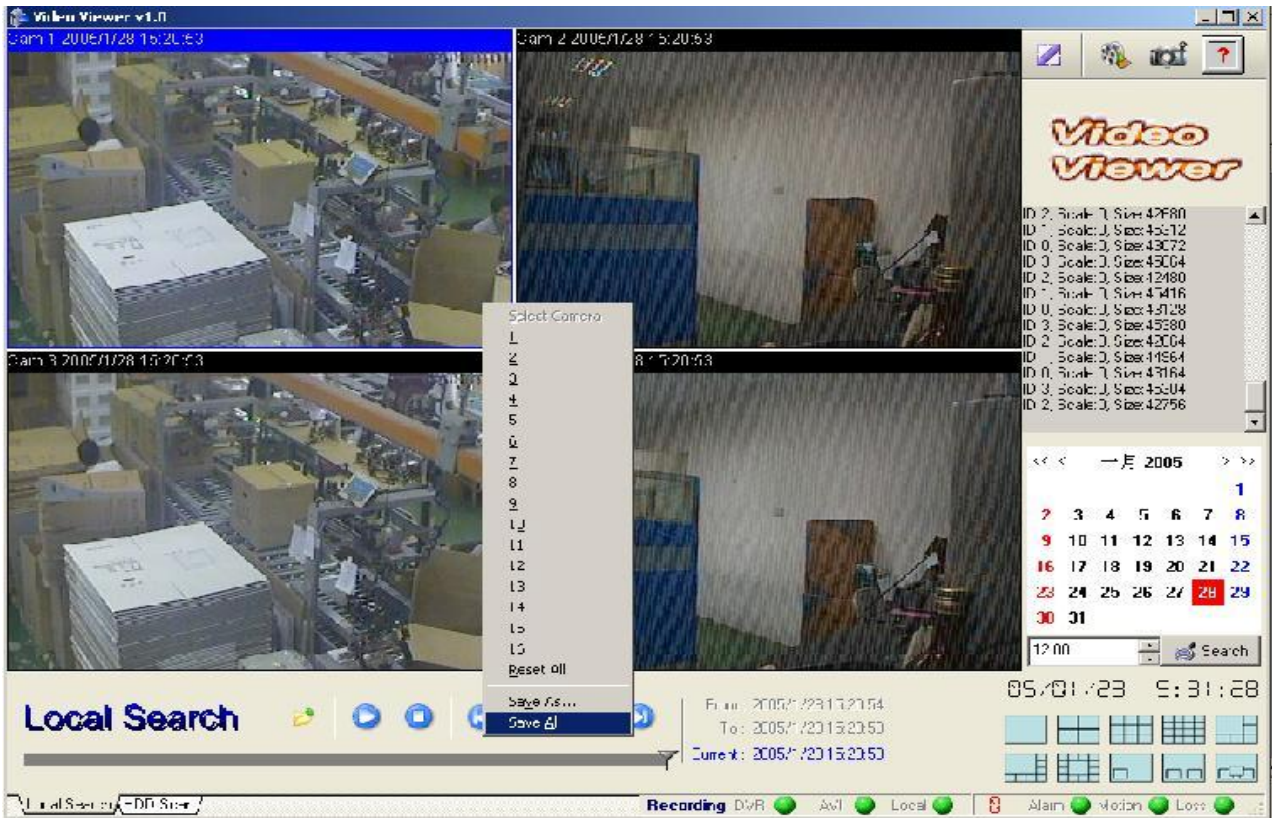
For example: Channel 1 .jpg save. Mouse click channel 1 once, then click mouse right button.  
Choose save as → choose the folder you want to save.



Type any file name you want, and then click save.



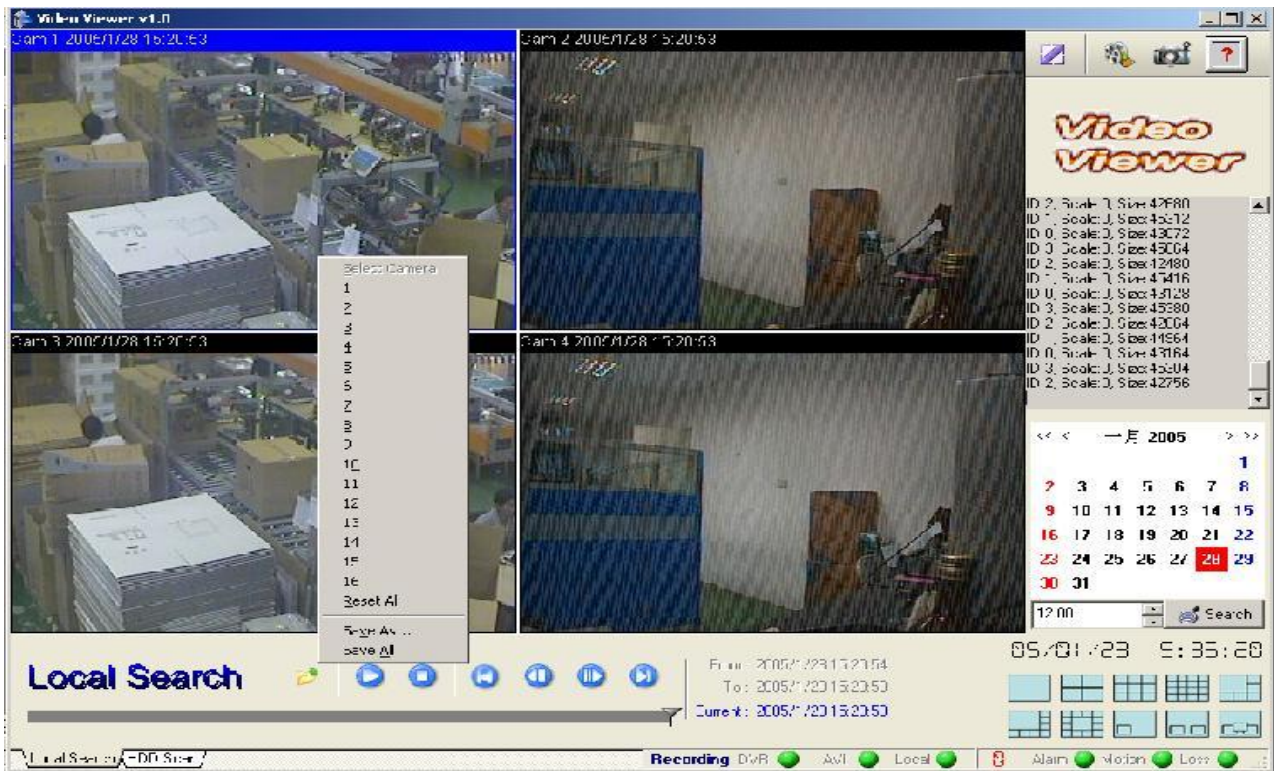
Or choose save all. Save all cameras full channel picture.



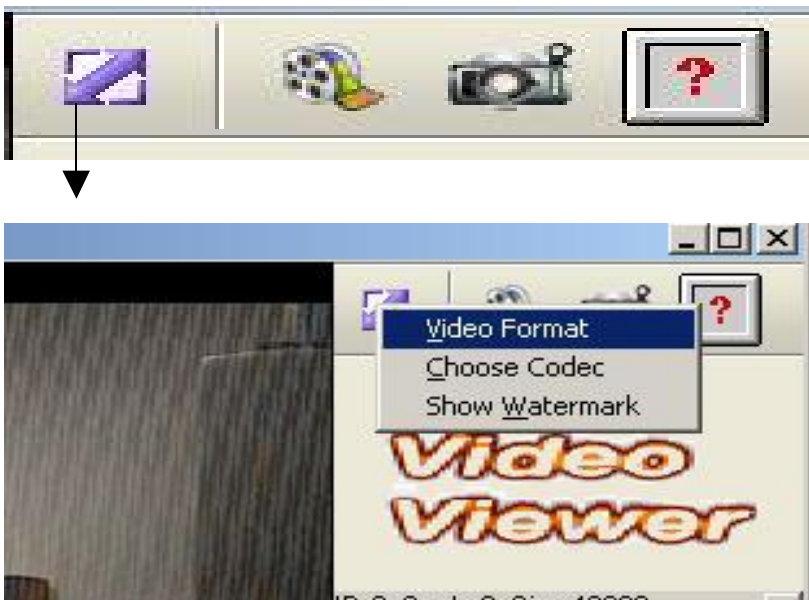
Choose folder and type file name.



Click mouse left button, blue bar display. Click mouse right button to choose 1 ~ 4 cameras to change position.



Icon function:



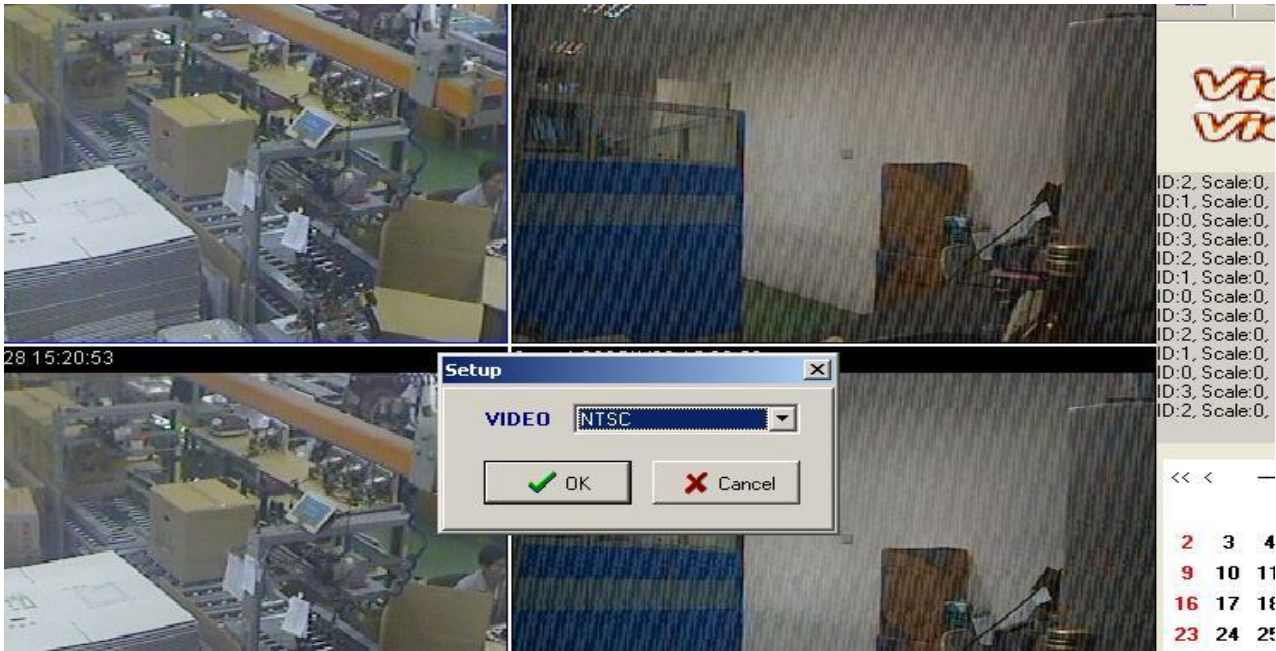
Setting:

Video Format: NTSC or PAL.

Choose Codec: AVI encode format.

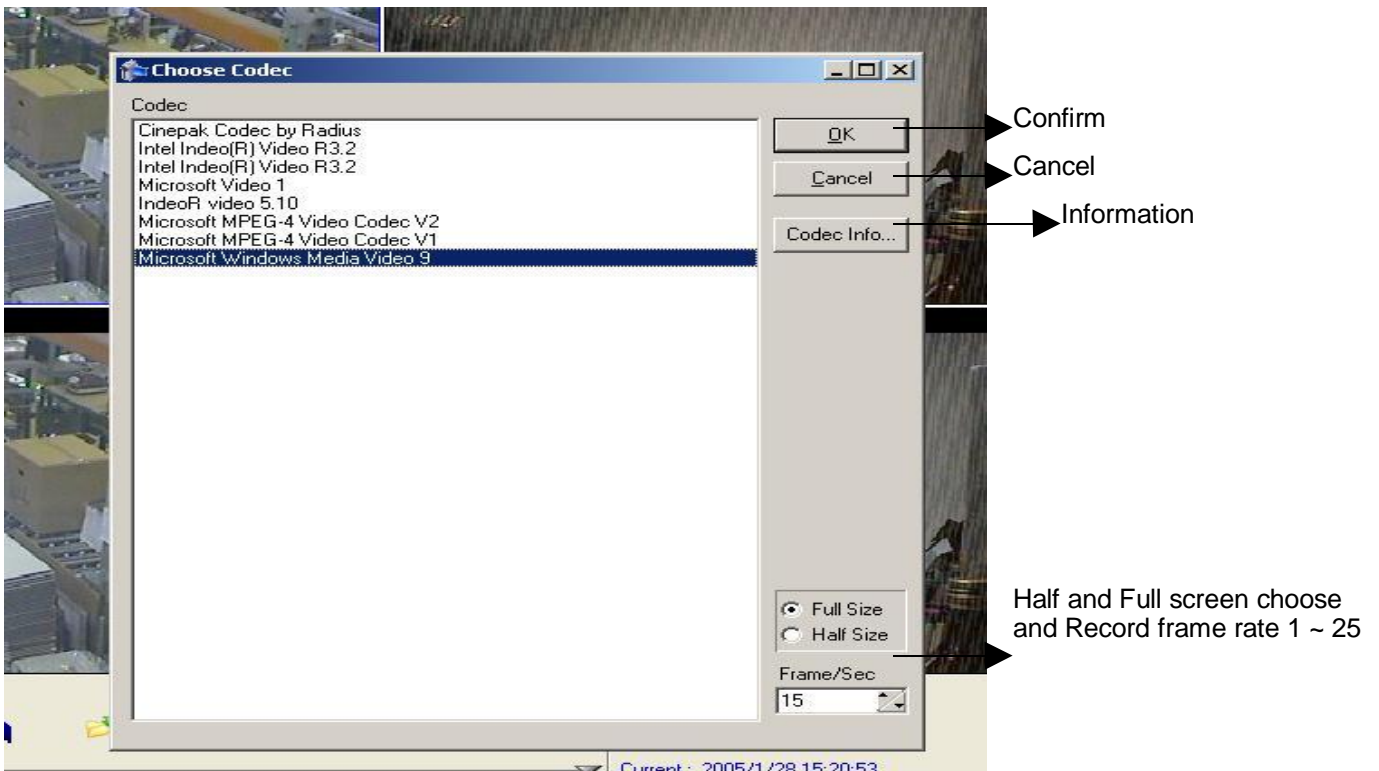
Show Watermark: Water mark function on or off.

**Video Format: Chose NTSC or PAL.**



**Choose Codec: File format.**

We strongly recommend user to choose Microsoft Windows Media Video 9.

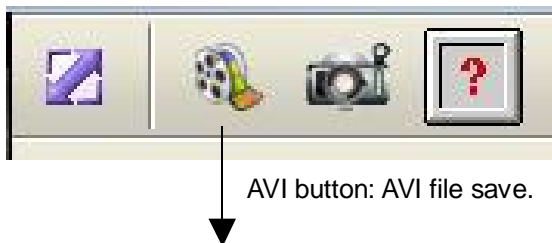


### Show Watermark: Watermark function on or off.

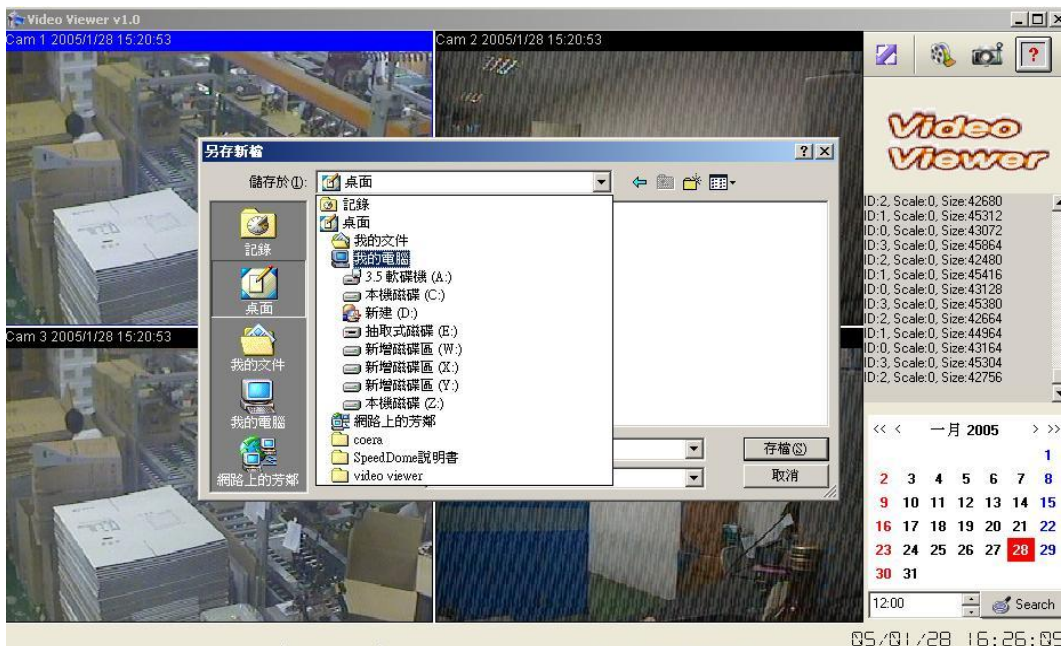
To check file has been modified or not.



### AVI file save:

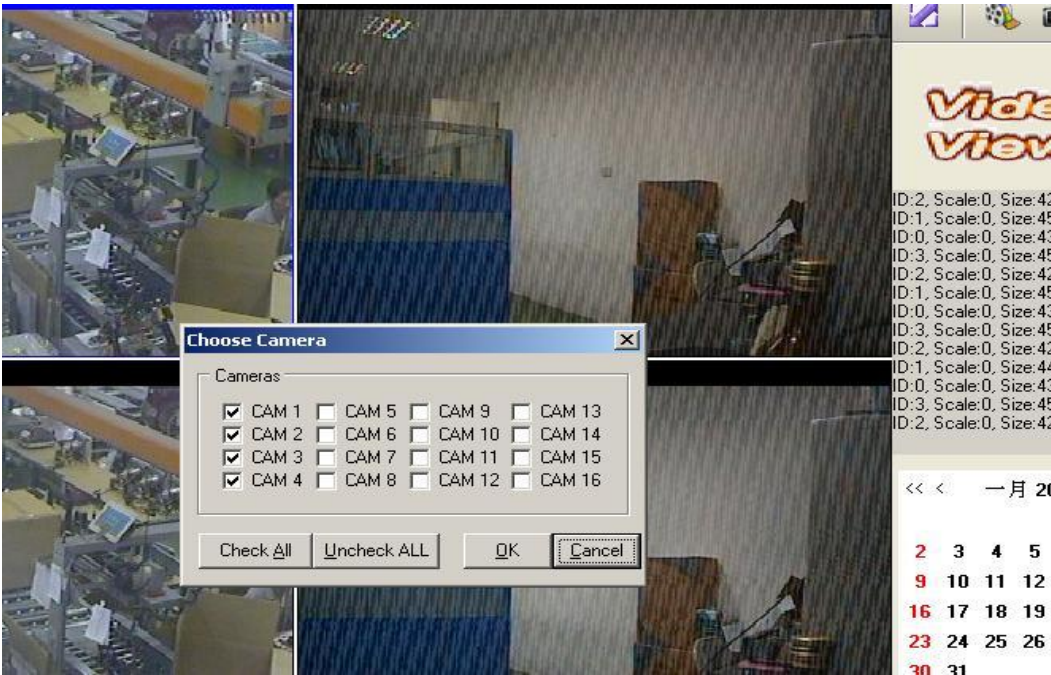


AVI button: AVI file save.



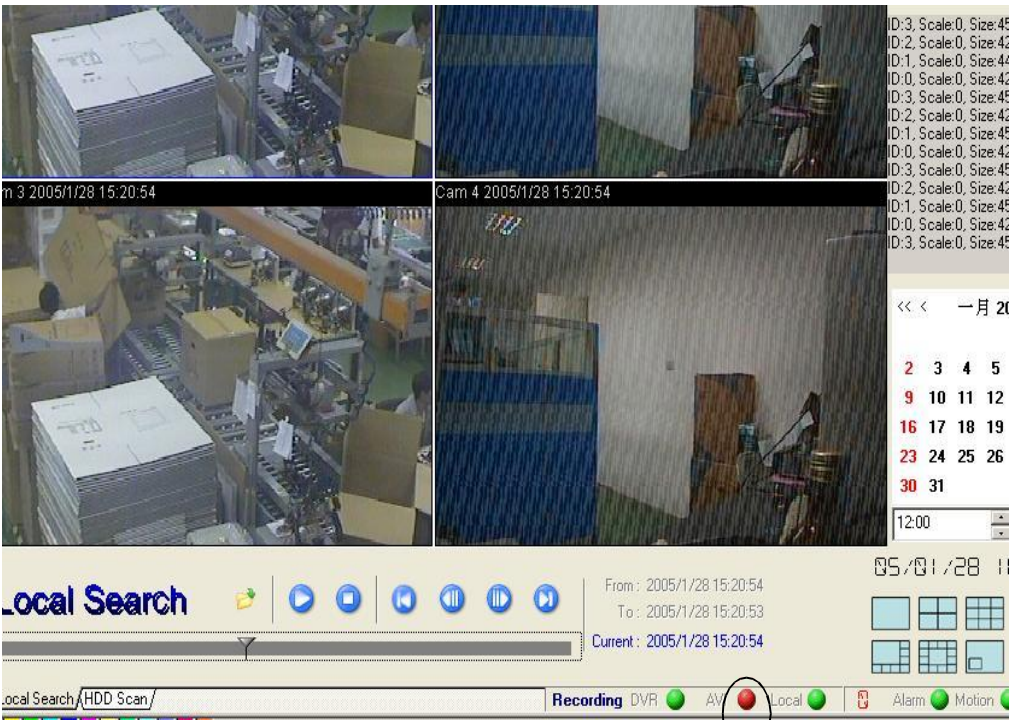
Choose folder and type file name

Click save:



Choose 1 ~ 4,  
and then click OK.

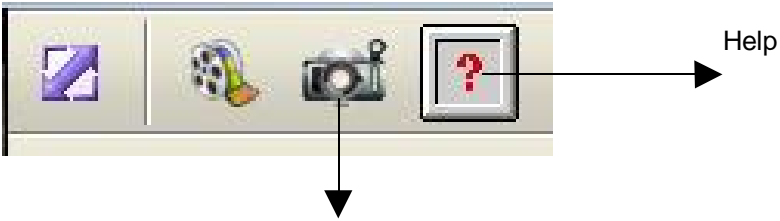
Click OK, and then AVI red light on:



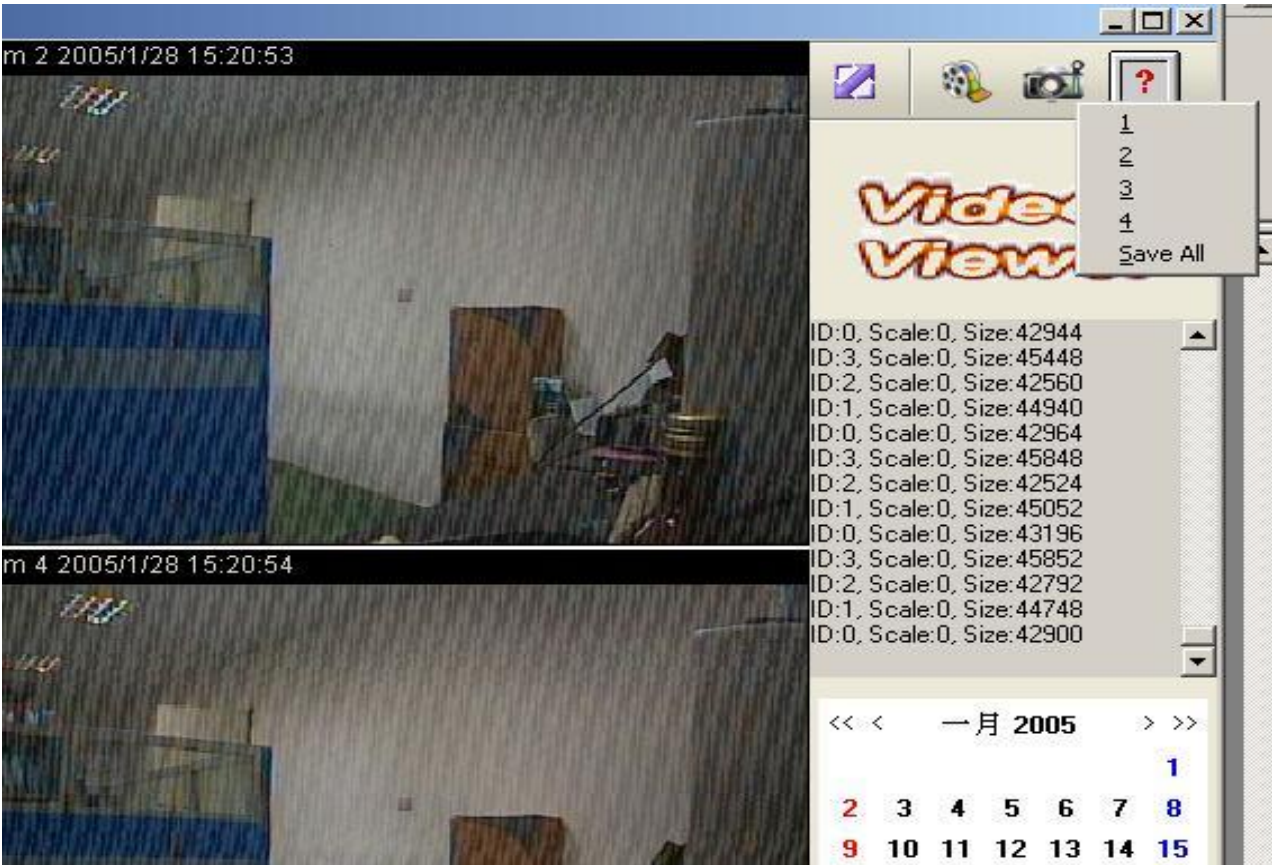
Click play button to start record,  
Click AVI button to stop.

AVI red light on, start to record.

JPG file save:

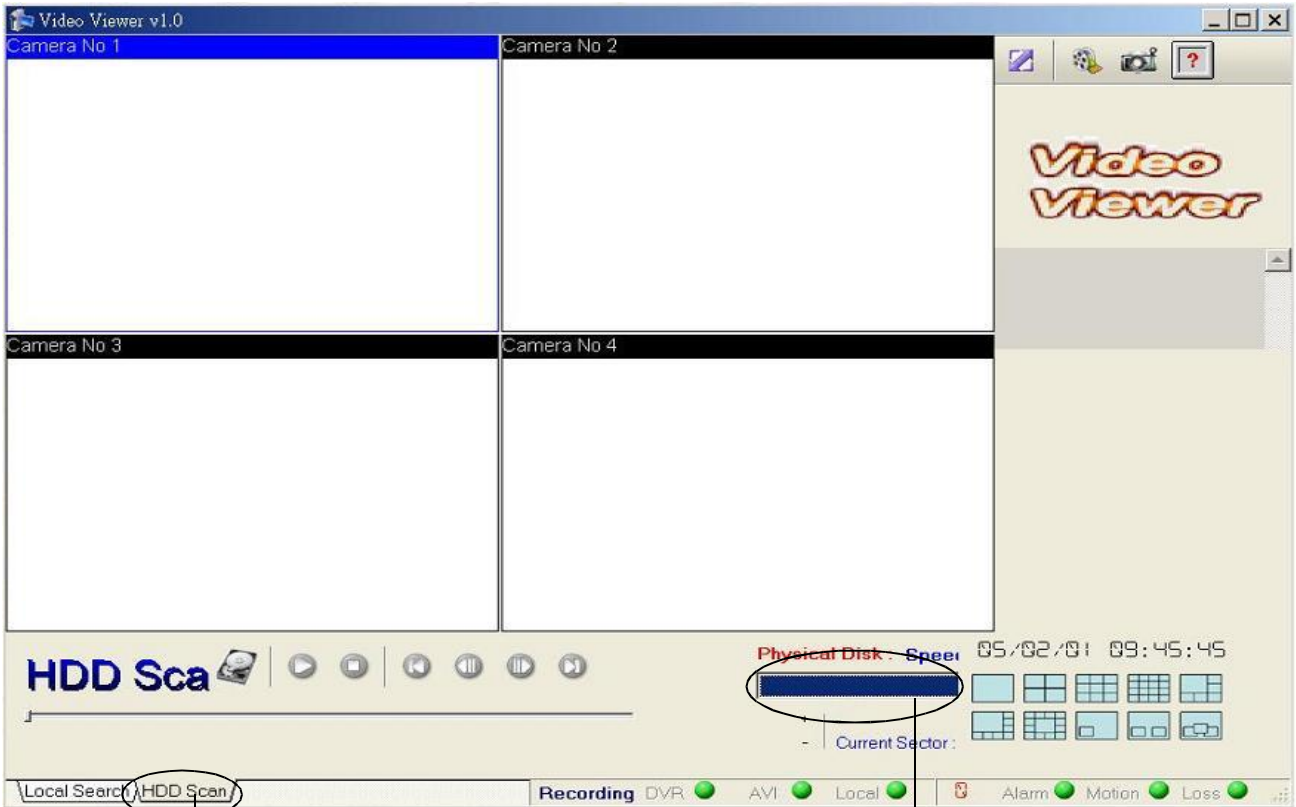


Choose folder and type file name  
Choose camera 1 ~ 4 or save all.



## Hard Disk Data Read

1. Take HDD out of DVR to a personal computer. Make sure hard disk in P.C is Master or Slave, switch Hard disk jumper to Master or Slave.
2. Power on computer. You do not need to setup BIOS, just login to windows system.
3. Start > Program > Video Viewer
4. Click HDD scan



Left click mouse button

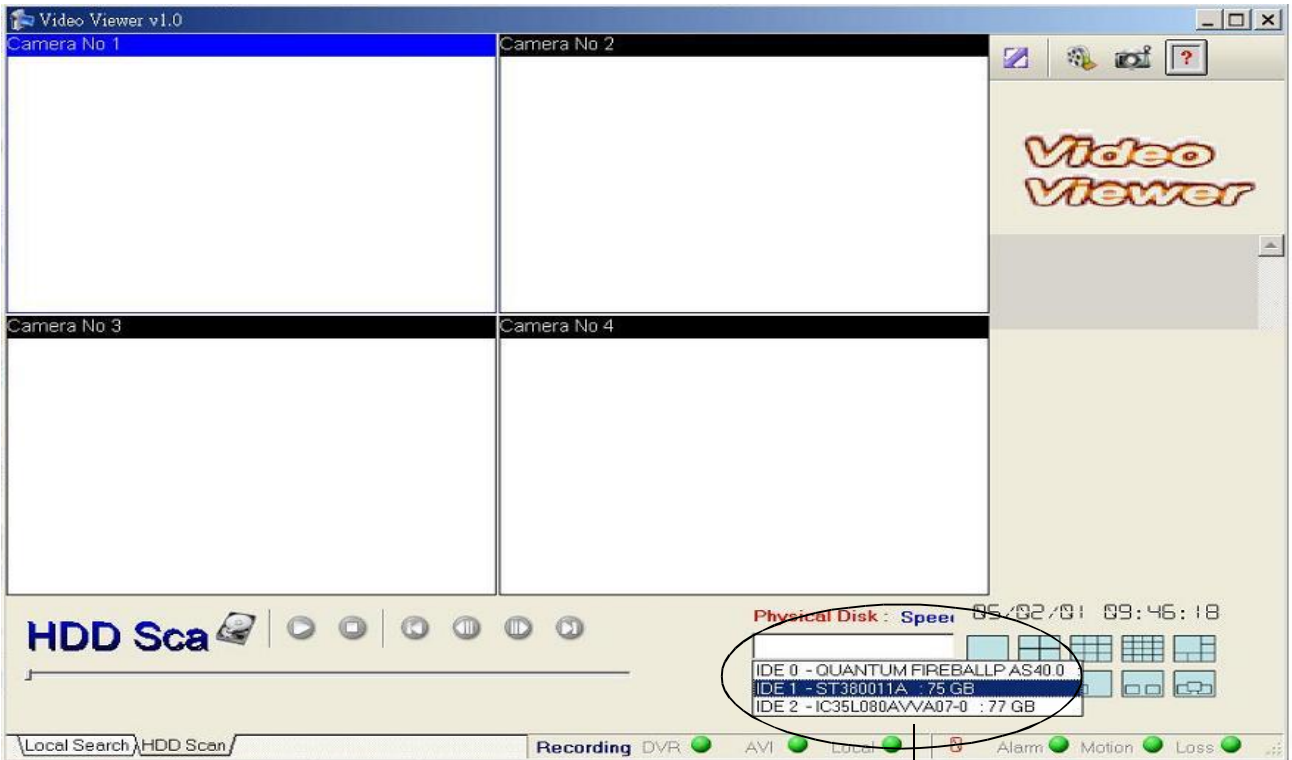
Click here for hard disk list.

Click the correct DVR hard disk.

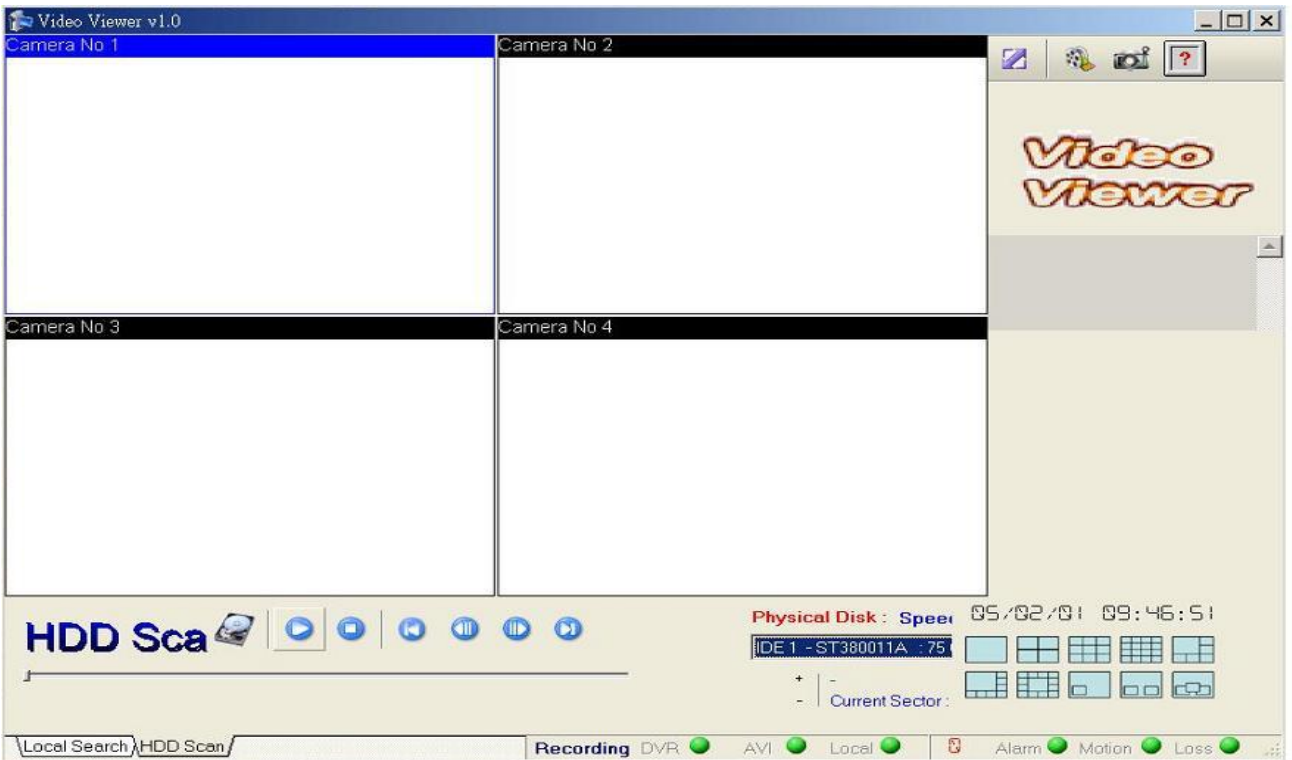
Data will not be lost if wrong HDD selected.



Hard Disk list on:



After selecting the correct hard disk, user can read data as per the previous instructions.



**Record Time Table: 80GB HD/GB PER HOUR**

**Multiply GB Per Hour (figure in brackets) by hours required to estimate HDD size**

**Record Quality: Low.** KB Range: Lowest: 13, Highest: 20. Average: 17.

REC FPS	100	50	25	12.5	8.33
REC Hour	21.7 (3.6)	21.7 (3.6)	43.5 (1.83)	87.1 (.91)	130.7 (.61)
REC FPS	5	3.13	2	1	1/2
REC Hour	261.4 (.30)	435.7 (.18)	653.5 (.126)	1307.1 (.062)	2614.3 (.031)
REC FPS	1/3	1/5	1/10	1/15	1/30
REC Hour	4357.2 (.019)	6535.9 (.013)	13071.8 (.006)	21786.4 (.0037)	43572.8 (.0018)

**Multiply GB Per Hour (figure in brackets) by hours required to estimate HDD size**

**Record Quality: Normal.** KB Range: Lowest: 14, Highest: 25. Average: 20.

REC FPS	100	50	25	12.5	8.33
REC Hour	18.5	18.5	37 (2.16)	74 (1.08)	111.1 (.72)
REC FPS	5	3.13	2	1	1/2
REC Hour	222.2 (.36)	370.3 (.216)	555.5 (.144)	1111.1 (.072)	2222.2 (.036)
REC FPS	1/3	1/5	1/10	1/15	1/30
REC Hour	3703.7 (.022)	5555.5 (.014)	11111.1 (.007)	18518.5 (.004)	37037 (.002)

**Hour conversion table**

**96 hours = 4 days**

**168 hours = 7 days**

**336 hours = 14 days**

**504 hours = 21 days**

**744 hours = 31 days**

**Example: Normal 25 FPS = 2.16 GB per hour**

**7 days requires 168 x 2.16 = 362.88 GB**

**Record Time Table: 80GB HD/GB PER HOUR**

**Multiply GB Per Hour (figure in brackets) by hours required to estimate HDD size**

**Record Quality: Fine.** KB Range: Lowest: 15, Highest: 28. Average: 22.

REC FPS	100	50	25	12.5	8.33
REC Hour	16.8	16.8	33.6 (2.38)	67.3 (1.19)	101 (.79)
REC FPS	5	3.13	2	1	1/2
REC Hour	202 (.4)	336.7 (.23)	505 (.16)	1010.1 (.079)	2020.2 (.04)
REC FPS	1/3	1/5	1/10	1/15	1/30
REC Hour	3367 (.023)	5050.5 (.016)	10101 (.008)	16835 (.005)	33670 (.002)

**Multiply GB Per Hour (figure in brackets) by hours required to estimate HDD size**

**Record Quality: High** KB Range: Lowest: 17, Highest: 30. Average: 24.

REC FPS	100	50	25	12.5	8.33
REC Hour	15.4	15.4	30.8 (2.6)	61.7 (1.3)	92.5 (.87)
REC FPS	5	3.13	2	1	1/2
REC Hour	185.1 (.43)	308.6 (.26)	462.9 (.173)	925.9 (.086)	1851.8 (.043)
REC FPS	1/3	1/5	1/10	1/15	1/30
REC Hour	3086.4 (.026)	4629.6 (.017)	9259.2 (.008)	15432 (.005)	30864.1 (.003)

**Hour conversion table**

**96 hours = 4 days**

**168 hours = 7 days**

**336 hours = 14 days**

**504 hours = 21 days**

**744 hours = 31 days**

**Example: High 25 FPS = 2.6 GB per hour**

**7 days requires 168 x 2.6 = 436.8 GB**

**Record Time Table: 80GB HD/GB PER HOUR**

**Multiply GB Per Hour (figure in brackets) by hours required to estimate HDD size**

**Record Quality: Super** KB Range: Lowest: 19, Highest: 45. Average: 32.

REC FPS	100	50	25	12.5	8.33
REC Hour	11.5	11.5	23.1 (3.46)	46.2 (1.73)	69.4 (1.15)
REC FPS	5	3.13	2	1	1/2
REC Hour	138.8 (.577)	231.4 (.346)	347.2 (.23)	694.4 (.115)	1388.8 (.058)
REC FPS	1/3	1/5	1/10	1/15	1/30
REC Hour	2314.8 (.035)	3472.2 (.023)	6944.4 (.011)	11574 (.007)	23148.1 (.003)

**Hour conversion table**

**96 hours = 4 days**

**168 hours = 7 days**

**336 hours = 14 days**

**504 hours = 21 days**

**744 hours = 31 days**

**Example: Super 25 FPS = 3.46 GB per hour**

**7 days requires 168 x 3.46 = 581.28 GB**