

**4CH MJPEG DVR**  

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**USER MANUAL**  
**ARC-19821, ARC-19821N**



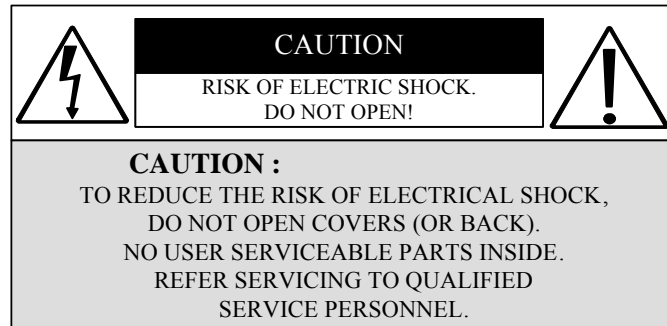
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The author assumes no responsibility for any errors or omissions that may appear in this document nor does it make a commitment to update the information herein.

# 1. SAFETY PRECAUTIONS



It is advised to read the Safety Precaution Guide through carefully before operating the product, to prevent any possible danger.

 **WARNING:** This symbol is intended to alert the user to the presence of un-insulated “dangerous voltage”.

 **CAUTION:** This symbol is intended to alert the user to presence of important operating and maintenance (Servicing) instructions in the literature accompanying the appliance.



**Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems).**

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office , your household waste disposal service or the shop where you purchased the product.

The power cord is the main power connection. Therefore, constantly plug and unplug of the power cord might result in malfunction of the product.

**Do not install the product in an environment where the humidity is high.**

Unless the product is waterproof or weatherproof, otherwise it can cause the image quality to be poor..

**Do not drop the product or subject them to physical shocks.**

Except for vandal-proof or shockproof product. Otherwise it will result malfunctions to occur.

**Never keep the product to direct strong light.**

It can damage the product.

**Do not spill liquid of any kind on the product.**

If it gets wet, wipe it dry immediately. Alcohol or beverage can contain minerals that corrode the electronic components.

**Do not expose to extreme temperatures.**

Use the product at temperatures within 5°C ~ 40°C.

## 2. INTRODUCTION

### 2.1 Product Introduction

The product is perfect for office safety, personnel home security, public environments, industry surveillance, school, and so on. Quick and simple installation, is the best choice for your own ultimate protection.

The state-of-art 4-channel M-JPEG Network (optional) digital video recording, enables monitoring simply through internet. Replaces the old conventional video recorders and supports Chinese user interface. Using time and event to playback recorded materials, efficient live recording and playback function, supports ATA hard disk and network transmission, and enables network remote control. The administrator can freely setup administrator password to prevent any user randomly changing the setup.

### 2.2 Application

- **Security:**  
ATM (auto teller machine), bank, gas station, shop and parking lot.
- **Factory/ Office:**  
Factory, warehouse, remote technology support, conference room, and outdoor parking lot.
- **Education/ Military/ Government Organization:**  
Important facilities, important areas, rapid transit system, and railroad safety.
- **Recreation/ Activities:**  
Sports and news broadcast.
- **Home:**  
Elevator, doorway, community safety, and hotels.
- **Hospital/ Kindergarten:**  
Hospital and isolated ward, home for the aged, kindergarten, and baby nourishing center.

## 3. FEATURES

- **Video system auto detection**

Auto detects video input (NTSC/ PAL) and supports combine use of color and b/w cameras.

- **Supports high quality digital video recording**

Adopts M-JPEG compression technology (NTSC: 30fps/ PAL: 25fps).

- **Video Size**

- **Video Resolution**

- NTSC: 640x 224
- PAL: 640x 272

- **Monitoring Resolution**

- NTSC: 720x 480
- PAL: 720x 576

- **Replaces the conventional VCR.**

Stores video on hard disks instead of VCR tapes, with large disk capacity, there is no need to replace the recording medium.

- **Built-in motion detection function.**

Motion detection sensitivity rate may be setup under motion detection function.

- **High efficient event recording, saving storage capacity.**

Motion detection function enables recording only when system detects motion, thus increases the amount of time available for recording.

- **Easy access to the desired record.**




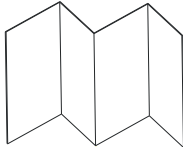
Time & date search supports instant retrieval of images and alarm event search makes searching simpler.

- **Live monitoring through internet from anywhere (optional).**

Built-in TCP/ IP network interface (auto detects and switches to 10/ 100Base T).

## 4. PACKING LIST

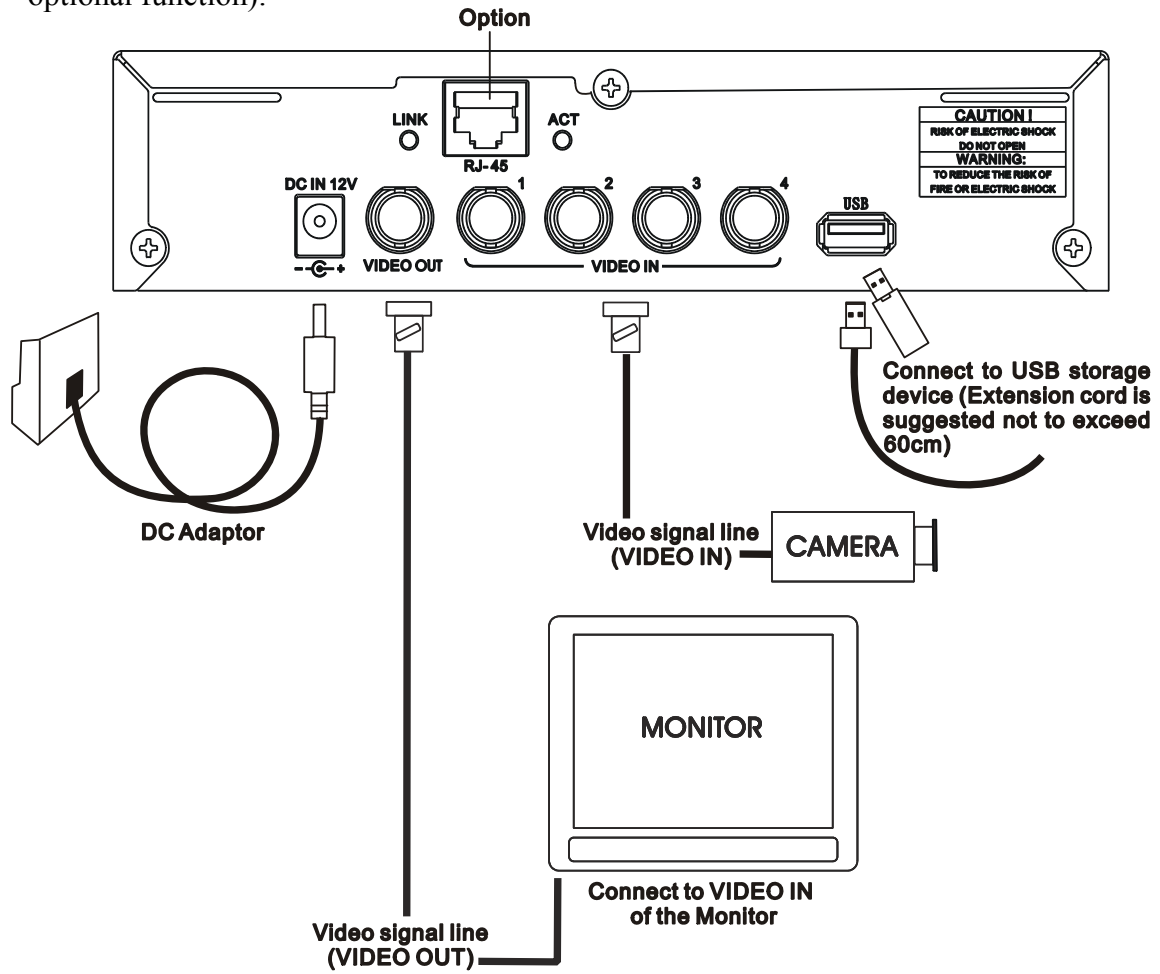
Check to make sure all of the items shown below are included in your product package. If something is missing, contact your dealer as soon as possible.

Item Description	Item Picture	QTY
DVR		1
DC 12V/410mA Power Adapter Input: AC 100~240V Output: DC 12V/410mA		1
Power Line		1
User Manual		1
Quick Guide		1

# 5. INSTALLATION

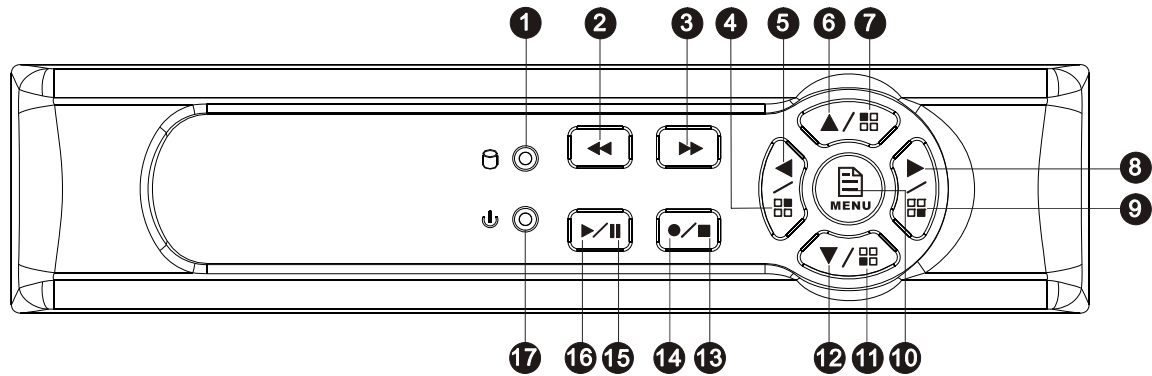
## Connectors on the Rear Panel












Please setup the connection by following the illustration shown below (network is an optional function):



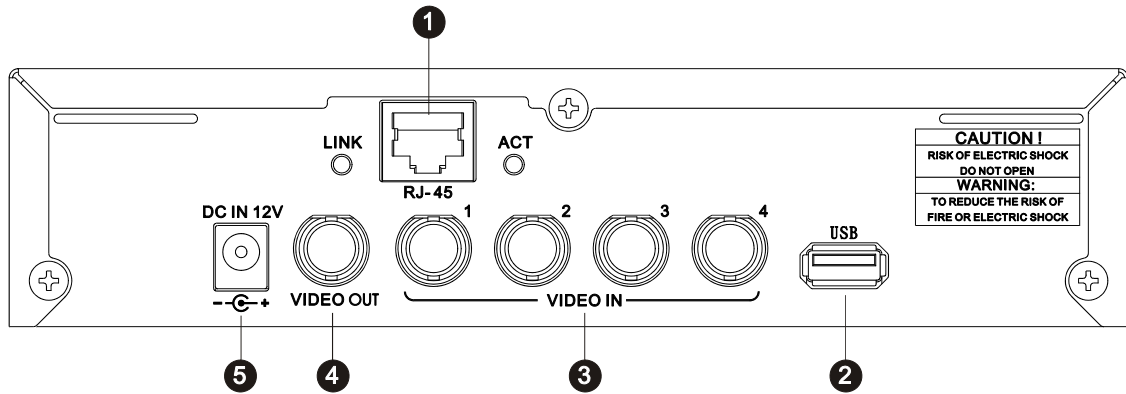
## 6. NAME and FUNCTION of EACH PART

### 6.1 Front Panel



- (1)  : Record LED indicator.
- (2)  : Rewind button.
- (3)  : Fast forward button.
- (4)  : Left direction button / CH 2 screen display / Number button 2
- (5)  : Up direction button / CH 1 screen display / Number button 1
- (6)  : Right direction button / Enter Selection/ CH 4 screen display / Number button 4
- (7)  : Enter / Exit Menu
- (8)  : Down direction button / CH 3 screen display / Number button 3
- (9)  : Record / Stop button
- (10)  : Play / Pause button
- (11)  : Power LED indicator

## 6.2 Rear Panel



- (1) RJ45: Internet connection terminal.
- (2) USB: Connect to external USB storage device (Plug and Play).
- (3) Video Input [VIDEO IN]: Connect to cameras.
- (4) Video Output [VIDEO OUT]: Connect to the monitor.
- (5) DC 12V [Power Input terminal]: power socket.

# 7. OPERATING PROCEDURE




## 7.1 Power On




After power on, DVR will auto-detect its peripherals (self-testing, auto detects the hard disk, and etc.)


The system will detect the video input and judge whether the video system is NTSC or PAL. When video input is unable to be detected (VIDEO LOSS), the system will send out an alarm, press any button to stop the alarm (it will not affect the actual recording, but when all (1CH-4CH) video images disappears, the DVR will stop recording).

## 7.2 Monitoring Mode

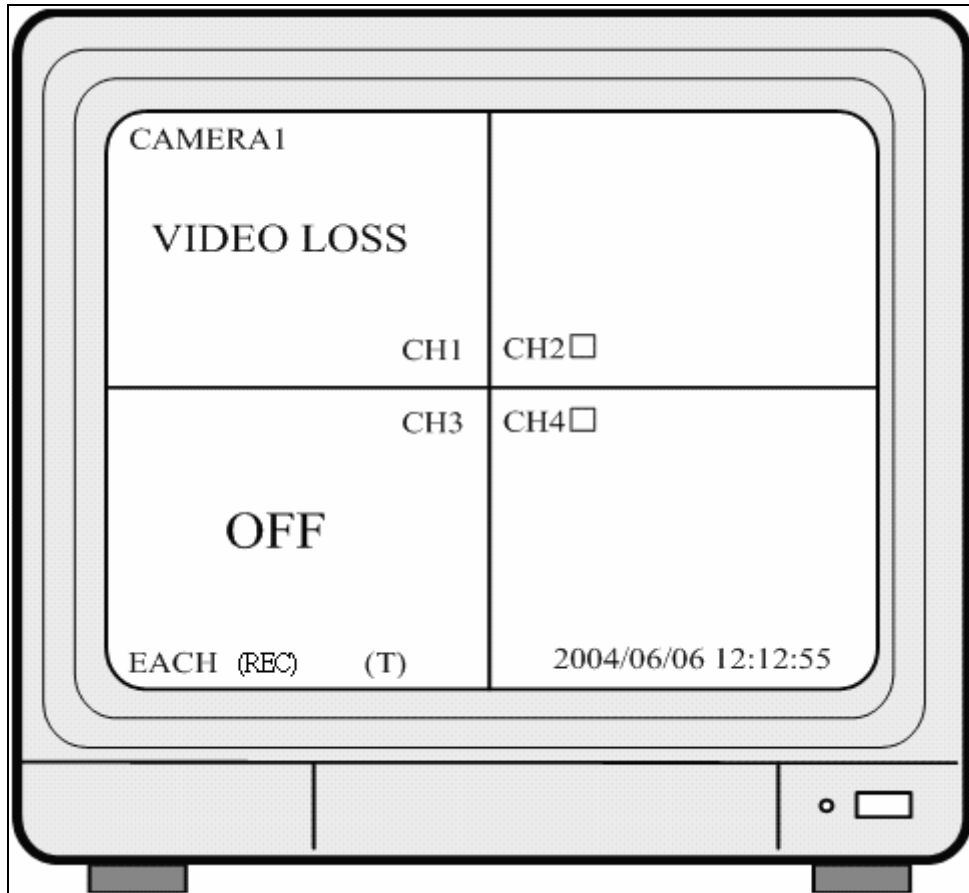
This mode is a default for our system after power on. Under this mode, system

supports live view for monitoring. Press  button, the system enters the record mode, press  button to start playback, press  button to enter the menu setup display.

During playback, press  button to return to monitoring mode. Press  to change the speed (FF1, FF2 or FF3), or press  button to start reverse playback.

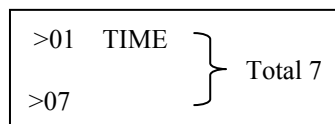
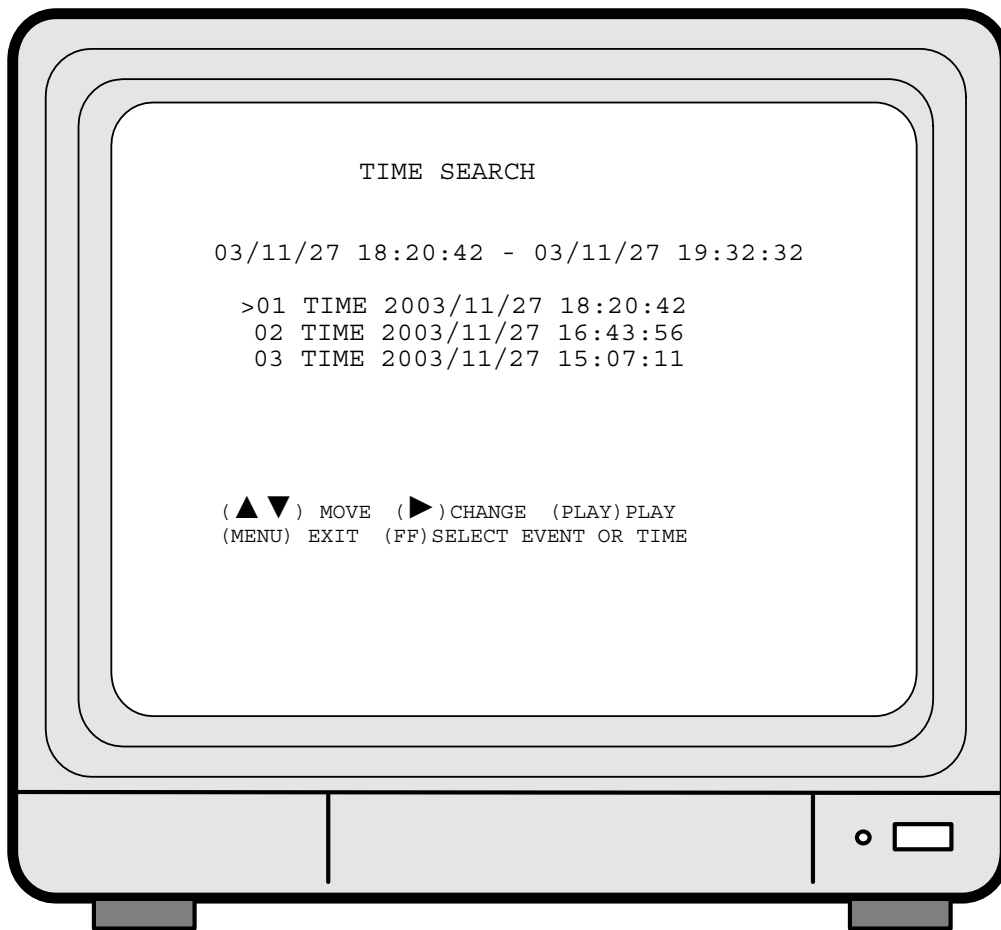
- To reset (under quad or single display), press  button 5 times, the message «ALL SETTING DATA IS INITIALIZED.» will be displayed by flashing 3 times, and after reset the password will be set as default value (11111).
- When reset procedure has been completed, the message “DVR RESET COMPLETED. TURN OFF AND ON THE DVR” will be displayed, then please restart the DVR.

## 7.3 Record Mode



- Note:** CH1: No block figure next to CH1 indicates that it is not recording.  
EACH: Record Type    QUAD: Record Type  
(T): TIMER RECORD    (A): MOTION RECORD    (M): MIX RECORD  
(□): Currently under recording.  
VIDEO LOSS: Video input unable to be detected.  
CAMERA1: Title for CH 1.  
OFF: Channel is set to “OFF”.

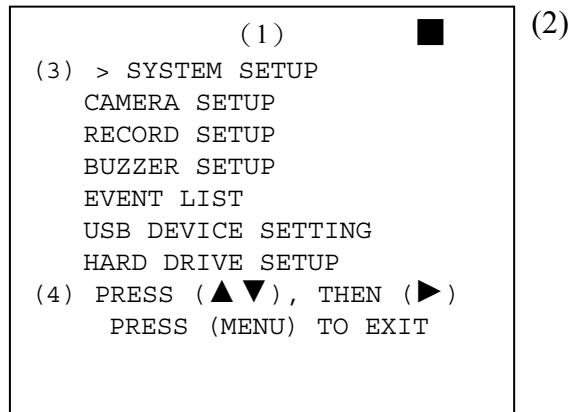
## 7.4 Playback Mode



1. First press 《STOP》 button to stop record, then press 《PLAY》 button to enter search display.
2. Press 《FAST FORWARD》 button, then 《PLAY》 button to playback data from old to new. Use up and down 《▲/▼》 button to move the cursor to the desired playback time, press 《▲/▼》 button to start playback.
3. When wish to view recorded videos of a specific time, use up/ down/ left/ right button and 《▶》 button to make changes.
4. During playback press 《PAUSE》 button to pause and press again to playback.
5. Press 《FAST FORWARD》 button to fast forward playback and 《REWIND》 to rewind.
6. Press 《STOP》 button to stop playback.

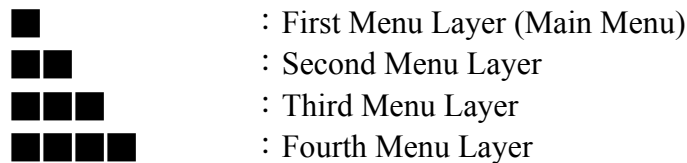
# 8. SYSTEM SETUP

## 8.1 Menu



(1) MAIN MENU: Item subject (First menu layer does not have a subject).

(2) Menu Layer Indication: The device consists of four menu layers.



(3) Menu Operation and Setup

Press 《▲》 or 《▼》 button to move the cursor (>).

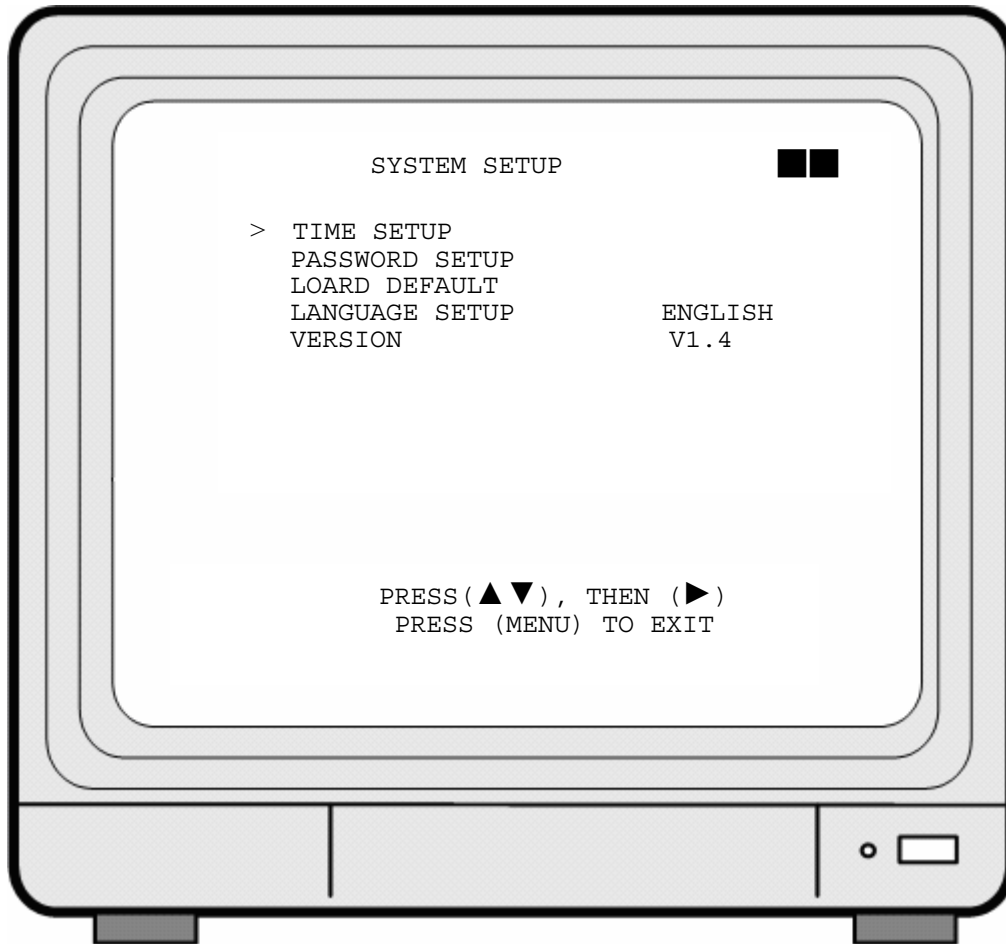
Press 《▶》 button enter the sub menu.

Press 《MENU》 button:

- Under second or third menu layer, the system will return to the previous menu layer (second layer to first layer or third layer to second layer) and auto updates the modified data.
- Under main menu (first menu layer), the system will enter live mode.  
Press 《▶》 button, to increase or decrease the setting values that has been highlighted.

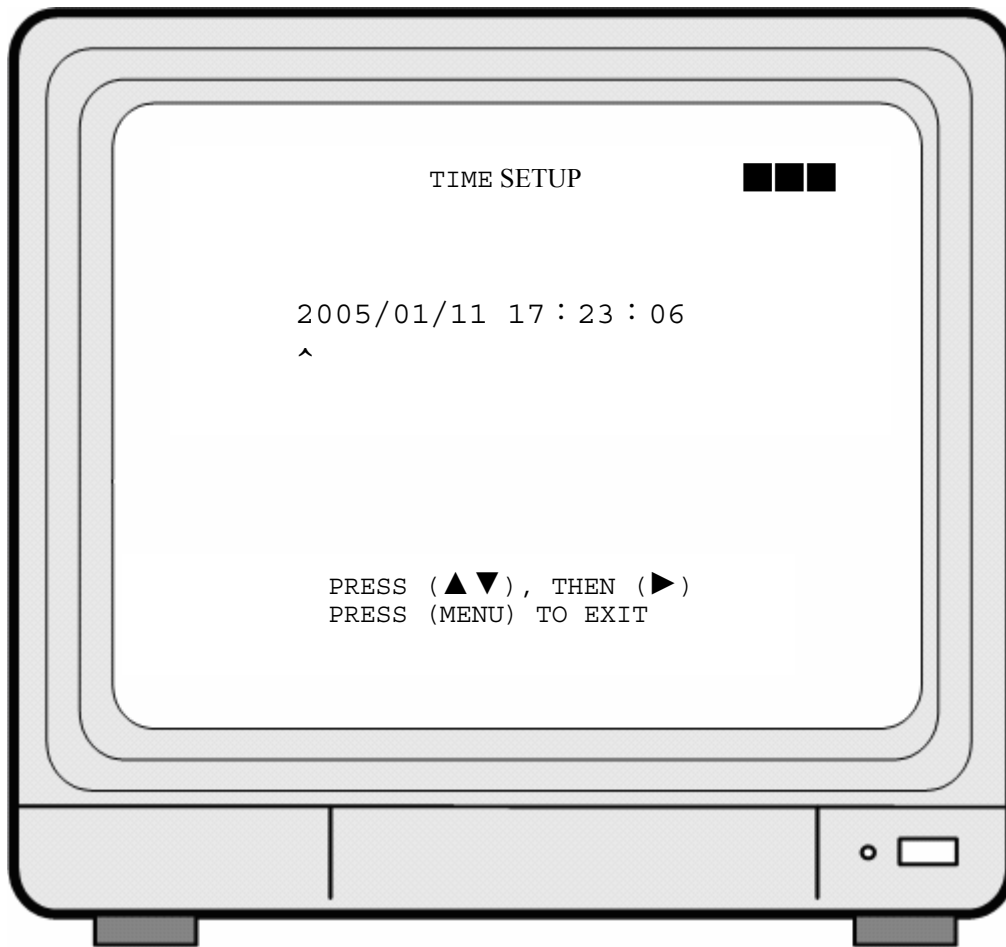
(4) Menu Layer Operation Guide

## 8.2 System Setup



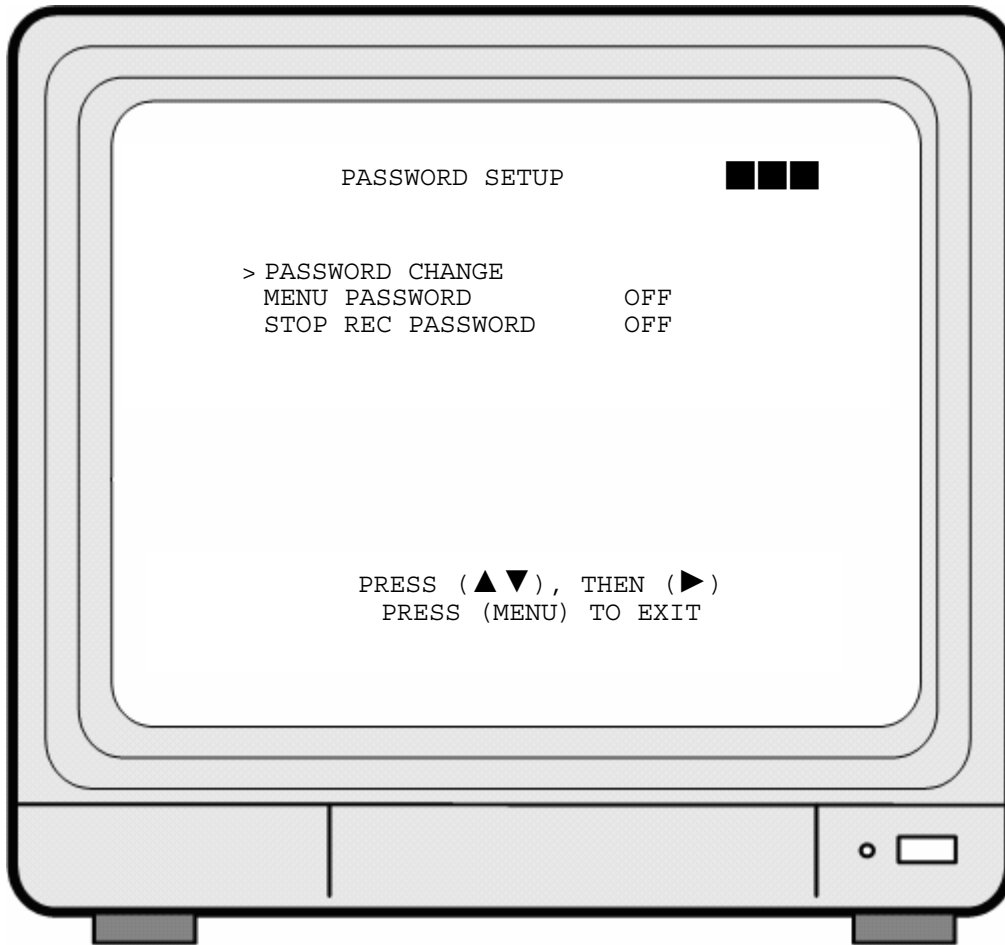
1. Cursor (>) position indicates the current function selected.
2. Press 《▲》 and 《▼》 button to move the cursor.
3. Press 《▶》 button to proceed.
4. Press 《MENU》 button to exit “System Setup”.
5. “System Setup” is situated on the second menu layer. Under this menu layer user may setup the system time, password, return system to default value, and language preference, etc (VERSION displayed represents the FIRMWARE version).

## 8.2.1 Time Setup



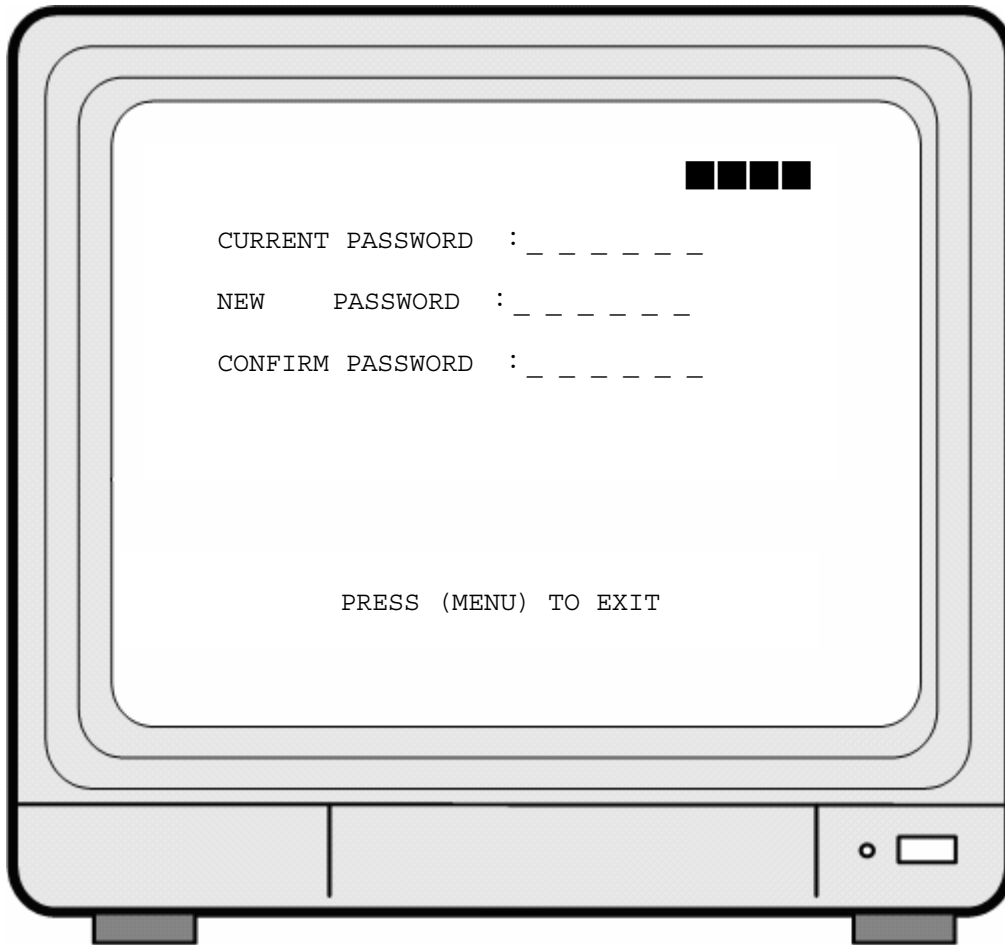
1. Cursor (^) position indicates the current time and date selected.
2. Use 《▲》 or 《▼》 button to move the cursor.
3. Use 《▶》 button to setup time and date.
4. Use 《MENU》 button to exit "Time Setup".

## 8.2.2 Password Setup



1. Cursor (>) position indicates the current function selected.
  2. Use 《▲》 and 《▼》 button to move the cursor to the desired item .
  3. Use 《▶》 button to make changes.
  4. Use 《MENU》 button to exit “Password Setup”.
  5. When the password is setup to “ON”, user will be requested to enter the correct password for entering from live display to menu selection (Default Password: 111111).
  6. When the password is setup to “ON”, user will be requested to enter the correct password to stop recording (Default Password: 111111).
- ※ When incorrect password has been entered, “PASSWORD INCORRECT” will be shown on the display. To disable the message, press button: QUAD, CH1, CH2, CH3, or CH4.

### 8.2.2.1 Change Password



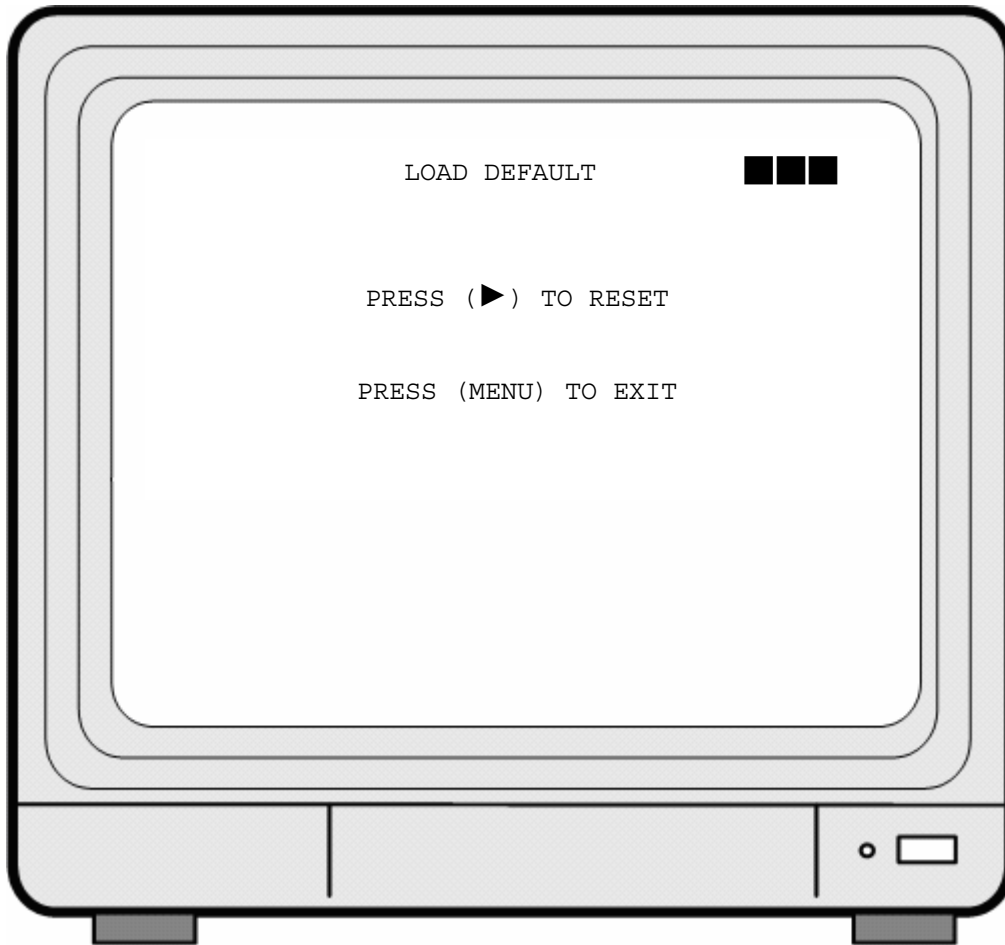
1. Press 《▶》 button to show the display above.
2. Enter the current password (CURRENT PASSWORD).
3. Enter new password (NEW PASSWORD).
4. Confirm the new password (CONFIRM PASSWORD).
5. When password change is successful, the system will display “PASSWORD CHANGED”.

※ Default Value: 11111

If password entered is incorrect, you will receive a message “NO PASSWORD CHANGED” to inform you (message flashes three times) and the system returns to “Password setup” selection.

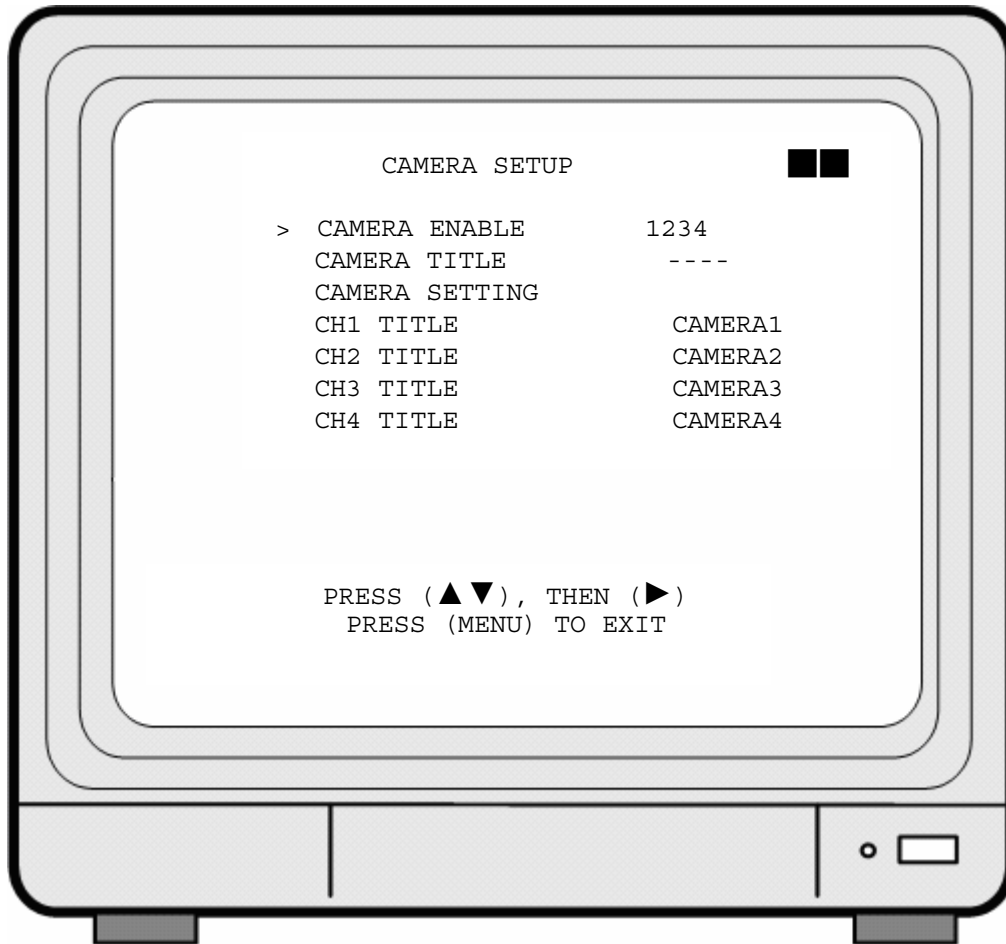
※ All buttons may be used as a password during password setup, except for the MENU button.

### 8.2.3 Load Default



1. Press 《▶》 button to show the display above.
2. Press 《▶》 button the message 《ALL SETTING DATA IS INITIALIZED》 will be displayed by flashing 3 times, and returns to default value. When reset procedure has been completed, the message “DVR RESET COMPLETED TURN OFF AND ON THE DVR” will be displayed, please restart the DVR.
3. Press 《MENU》 button to exit “Load Default Setup” selection.

## 8.3 Camera Setup



1. Cursor (>) position indicates the current function selected.
2. Press 《▲》 and 《▼》 button to move the cursor.
3. Press 《▶》 button to proceed.
4. Press 《MENU》 button to exit.
5. “Camera Setup” is situated on the second menu layer. Under this menu layer user may setup camera title (camera title for CH1, CH2, CH3 and CH4), standard camera setup, etc.
6. Press 《▲》 or 《▼》 button to move up and down and 《▶》 button to change the camera view combination (select to view the desired channel).  
(It consists of 16 different optional camera view combinations)
  - 1) Select (- - - -), all cameras are disabled (no image display).
  - 2) Select (1 2 3 4), all cameras are operational (quad image display).
  - 3) Select (- - - 4), only camera four is operational (CH4 image display only).

7. When proceeding “CH1 TITLE”, press 《▶》 button to show the display below:

```

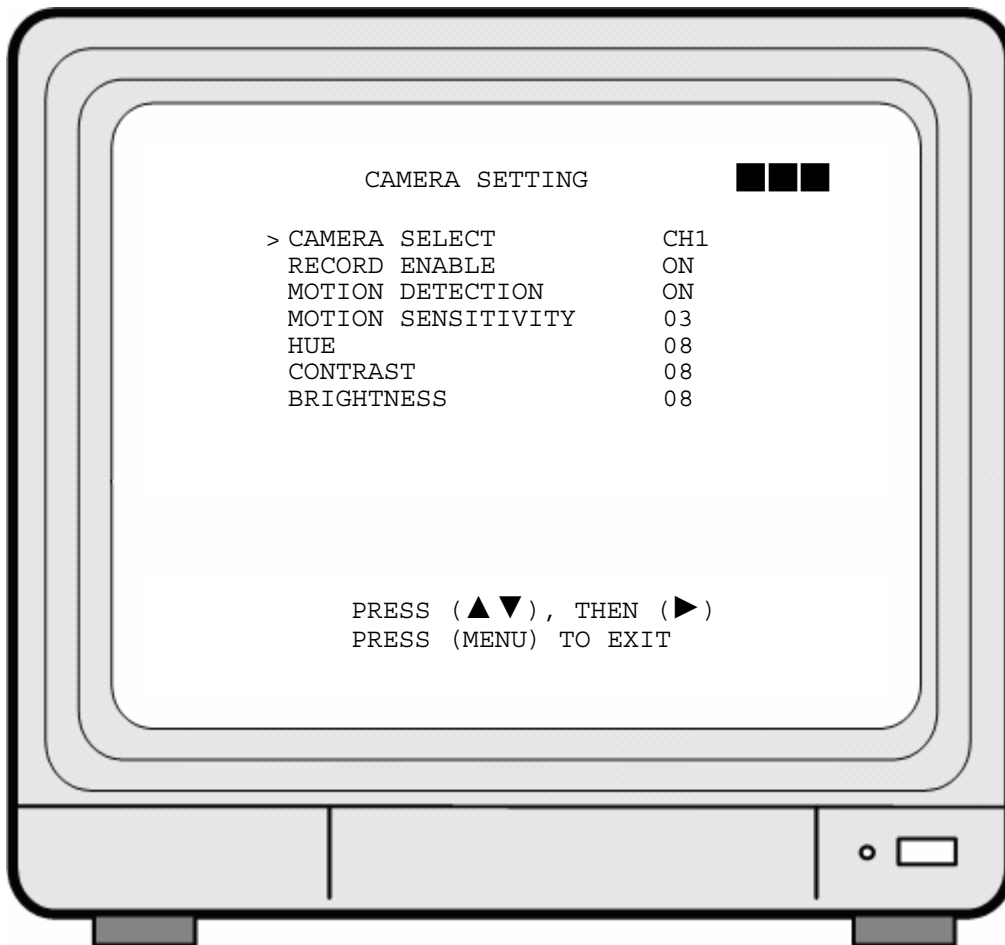
          V
CH1  TITLE      CAMERA1
                    12345678
```

“V” indicates the position of the cursor. Press 《▲》 or 《▼》 button to move the cursor, and press 《▶》 button to change the title (maximum 8 characters).

8. All channel titles are setup in the same way.

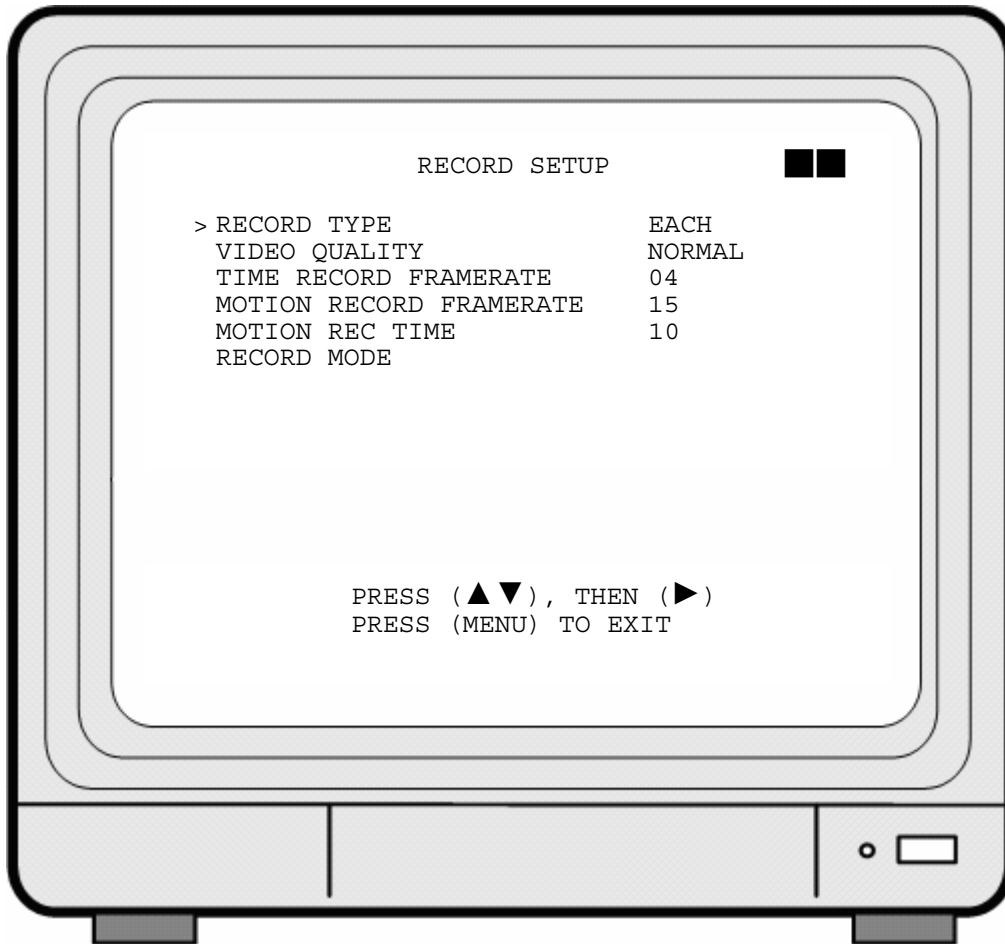
Once the user formats the hard disk drive, the camera title returns to its default setting (CAMERA1/ CAMERA2/ CAMERA3/ CAMERA4). It is because this setup is stored in the hard disk drive.

### 8.3.1 Camera Setup



1. Cursor (>) position indicates the current function selected.
2. Press 《▲》 and 《▼》 button to move the cursor to the desired item.
3. Press 《▶》 button to make changes.
4. Press 《MENU》 button to exit “CAMERA SETUP” selection.
5. CAMERA SELECT: Press 《▶》 button to select the desired channel.
6. RECORD ENABLE: Press 《▶》 button to switch the channel recording ON/OFF.
7. MOTION DETECTION: Press 《▶》 button to switch the motion detection function ON/OFF.
8. MOTION SENSITIVITY: Press 《▶》 button to setup the motion sensitivity rate (5 sensitivity rate values, 01 most sensitive).
9. HUE: Press 《ENTER》 button to adjust the color of cameras (15 color adjustment values, default value: 08).
10. CONTRAST: Press 《▶》 button to adjust the camera contrast (15 contrast adjustment values, default value: 08).
11. BRIGHTNESS: Press 《▶》 button to adjust camera brightness (15 color adjustment values, default value: 08).

## 8.4 Record Setup

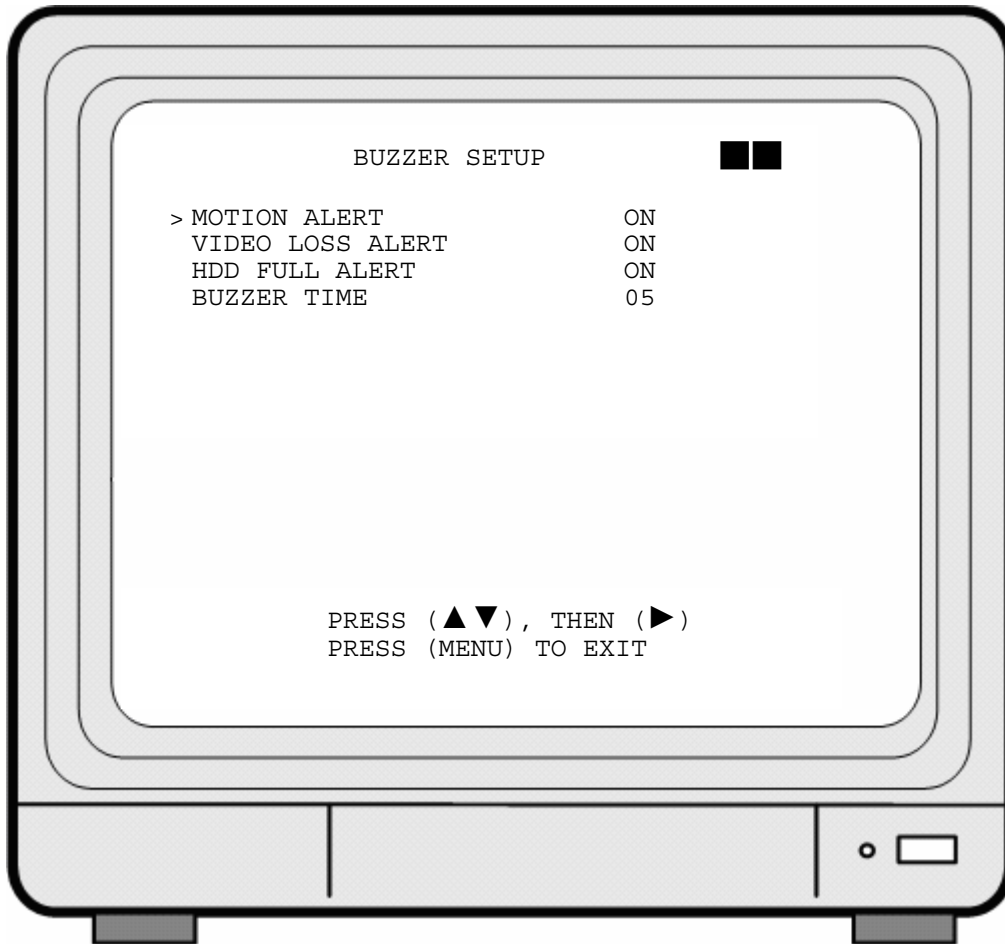


1. Cursor (>) position indicates the current function selected.
2. Use 《▲》 and 《▼》 button to move the cursor to the desired item.
3. Use 《▶》 button to make changes.
4. Use 《MENU》 button to exit “RECORD SETUP” selection.
5. “Record Setup” is situated on the second menu layer. Under this selection user may setup the following function: Record Type, Video Quality, Time Record Frame rate, Motion Record Frame rate, Motion Record Time, and Record Mode.
6. RECORD TYPE: Press 《▶》 button to select between “QUAD” and “EACH” mode.
7. VIDEO QUALITY: Press 《▶》 button to select different quality recordings (HIGH/ NORMAL/ LOW).
8. TIME RECORD FRAMERATE: Press 《▶》 button to setup the recording speed when “T” mode is setup under schedule record mode.



5. T: Time, indicates continuous record.
6. A: MOTION  
When motion has been detected, it will be recorded by “Motion Record Speed”.
7. M: TIME+MOTION  
When motion has been detected, it will be recorded by “Motion Record Speed”. Otherwise, it is recorded by “Time Record Speed”.

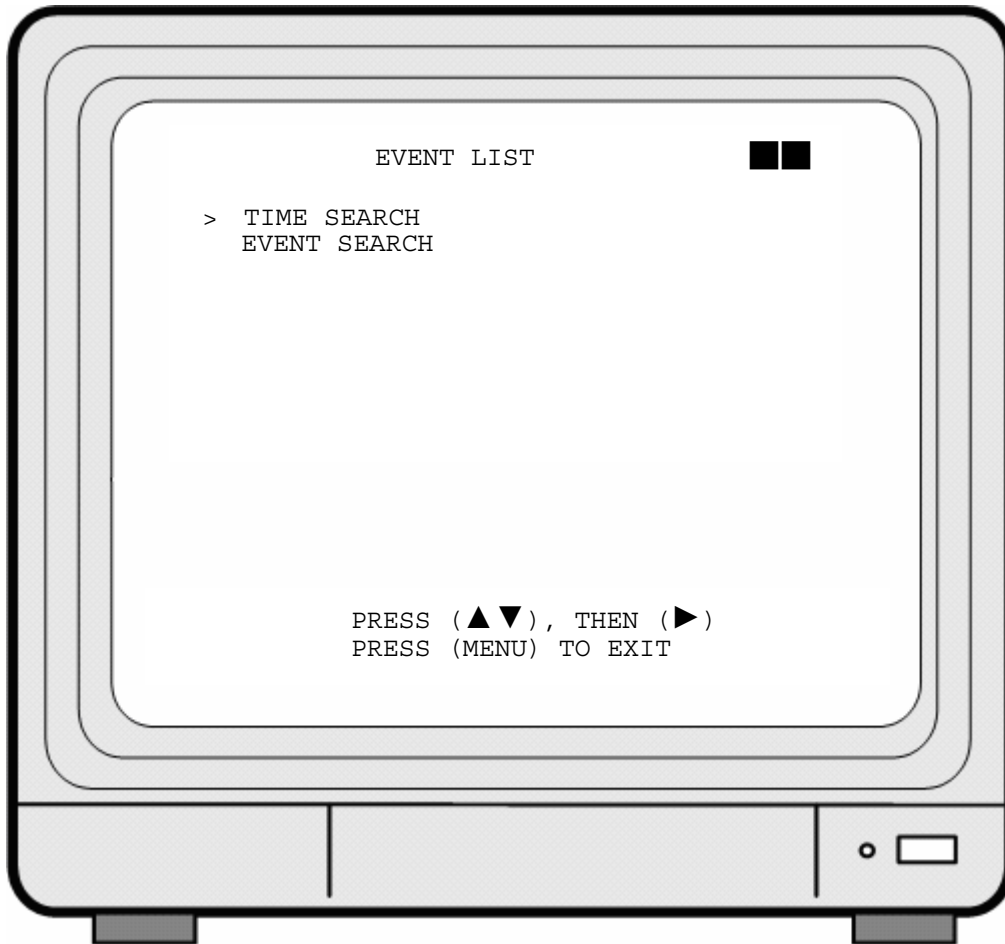
## 8.5 Buzzer Setup



1. Cursor (>) position indicates the current selected position.
2. Press 《▲》 and 《▼》 button to move the cursor to the desired item (time).
3. Press 《▶》 button to proceed.
4. Press 《MENU》 button to exit “BUZZER SETUP” selection.
5. “BUZZER SETUP” is situated on the second menu layer. Under this menu layer user may setup “MOTION ALERT”, “ VIDEO LOSS ALERT”, “HDD FULL ALERT”, and “BUZZER TIME”.
6. MOTION ALERT: Press 《▶》 button to setup “ON” or “OFF”, whether to trigger the alarm when motion or sensor event has been detected (this setup is only active when the system is under record status and schedule record is setup to “M” (Mix) or “A” (Motion)).
7. VIDEO LOSS ALERT: Press 《▶》 button to setup “ON” or “OFF”, whether to trigger the alarm when video loss has been detected (this setup is only active when the system is under record or live status).

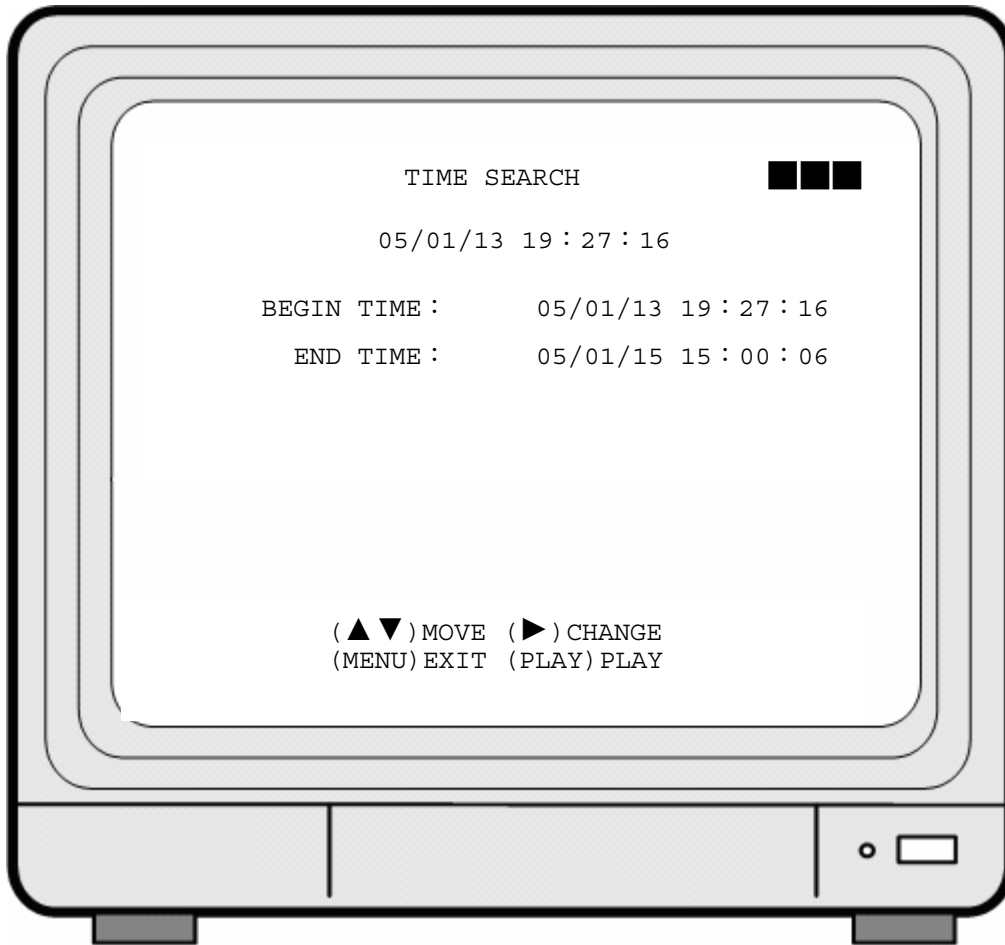
8. HDD FULL ALERT: Press 《▶》 button to setup “ON” or “OFF”, whether to trigger the alarm when hard disk is full (this setup is only active when the system is under record status).
9. BUZZER TIME: Press 《▶》 button to setup the buzzer time to continuous (CONT), and press any button to release this setup.

## 8.6 Event List



1. Cursor (>) position indicates the current function selected.
2. Press 《▲》 and 《▼》 button to move the cursor to the desired item.
3. Press 《▶》 button to proceed.
4. Press 《MENU》 button to exit "EVENT LIST" selection.
5. "EVENT LIST" is situated on the second menu layer. Under this menu layer user may setup "TIME SERACH" or "EVENT SEARCH".

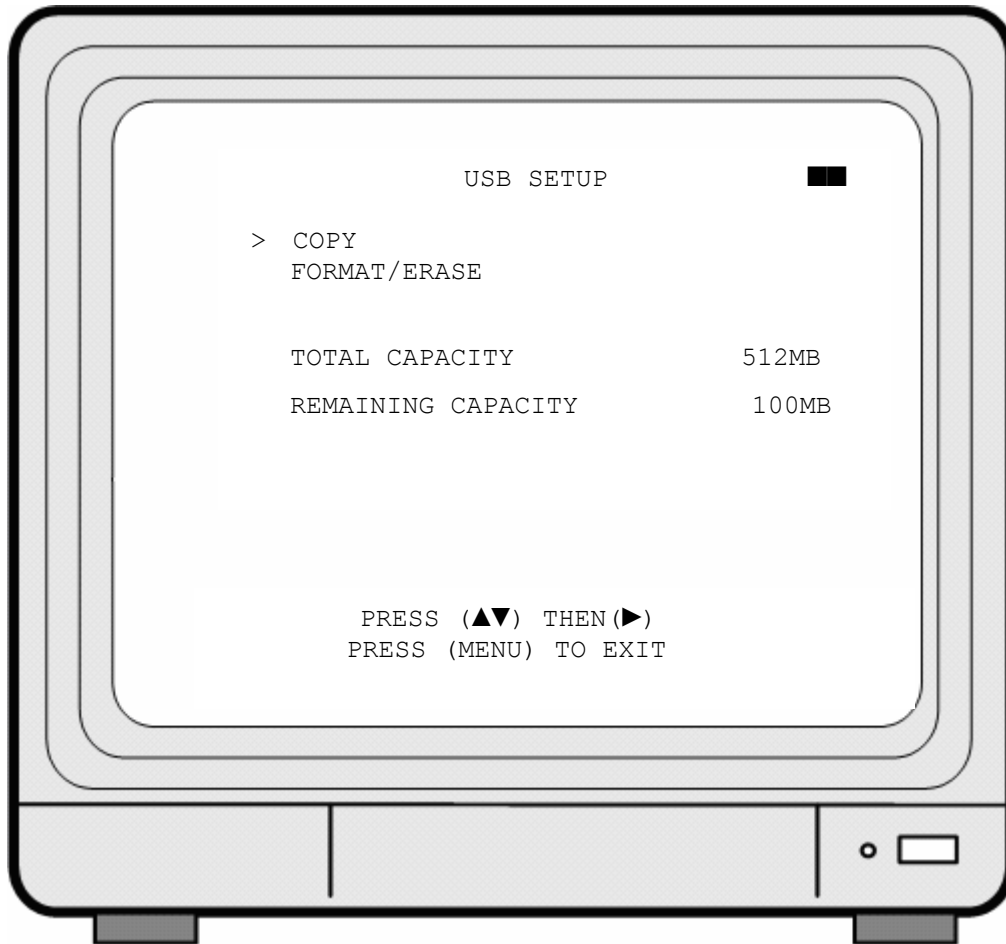
## 8.6.1 TIME SEARCH



1. TIME SEARCH: Displays system recording time (begin and end).
2. Press 《▲》 and 《▼》 button to select the desired time and date.
3. Press 《▶》 button to setup playback starting time and date.
4. Press 《MENU》 button to exit “TIME SEARCH” selection.
5. Press 《PLAY》 button to play.

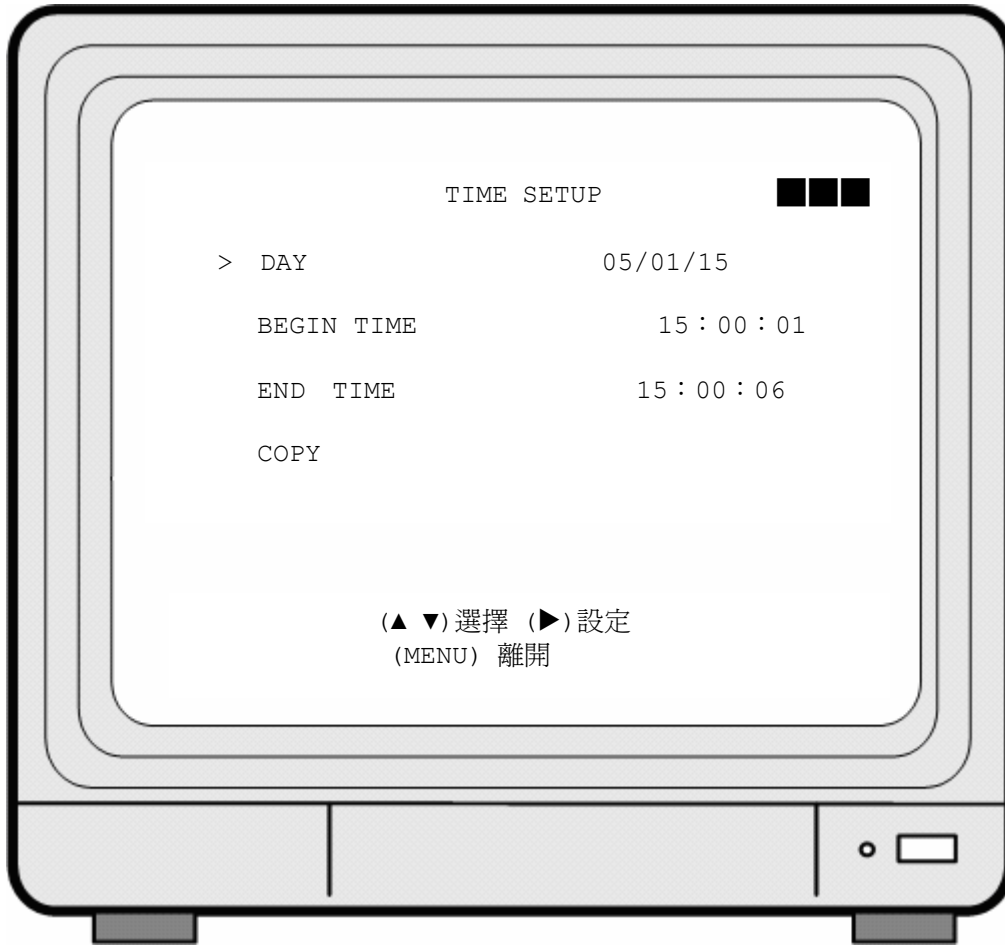


## 8.7 USB SETUP



1. Cursor (>) position indicates the current function selected.
  2. Press 《▲》 and 《▼》 button to select the desired event to playback.
  3. Press 《▶》 button to proceed.
  4. Press 《MENU》 button to exit “CF CARD SETUP” selection.
  5. “USB SETUP” is situated on the second menu layer. This selection enables user to setup COPY or FORMAT/ERASE functions etc.
  6. TOTAL CAPACITY: Total USB storage capacity.
  7. REMAINING CAPACITY: Remaining USB storage capacity.
  8. When remaining capacity equals zero, indicates that there are no more space left for storage. Therefore, please precede FORMAT/ ERASE function.
- 
- ※ When message “NO USB DEVICE” appears indicates that the USB has not been identified.
  - ※ When message “USB STORAGE NOT SUPPORT” appears indicates that the USB is not supported by the DVR.
  - ※ When applying COPY function for the first time, please proceed FORMAT/ERASE function and initialize the USB storage device.
  - ※ Please do not use your PC to format the USB storage device as data loss may occur.

## 8.7.1 TIME SETUP

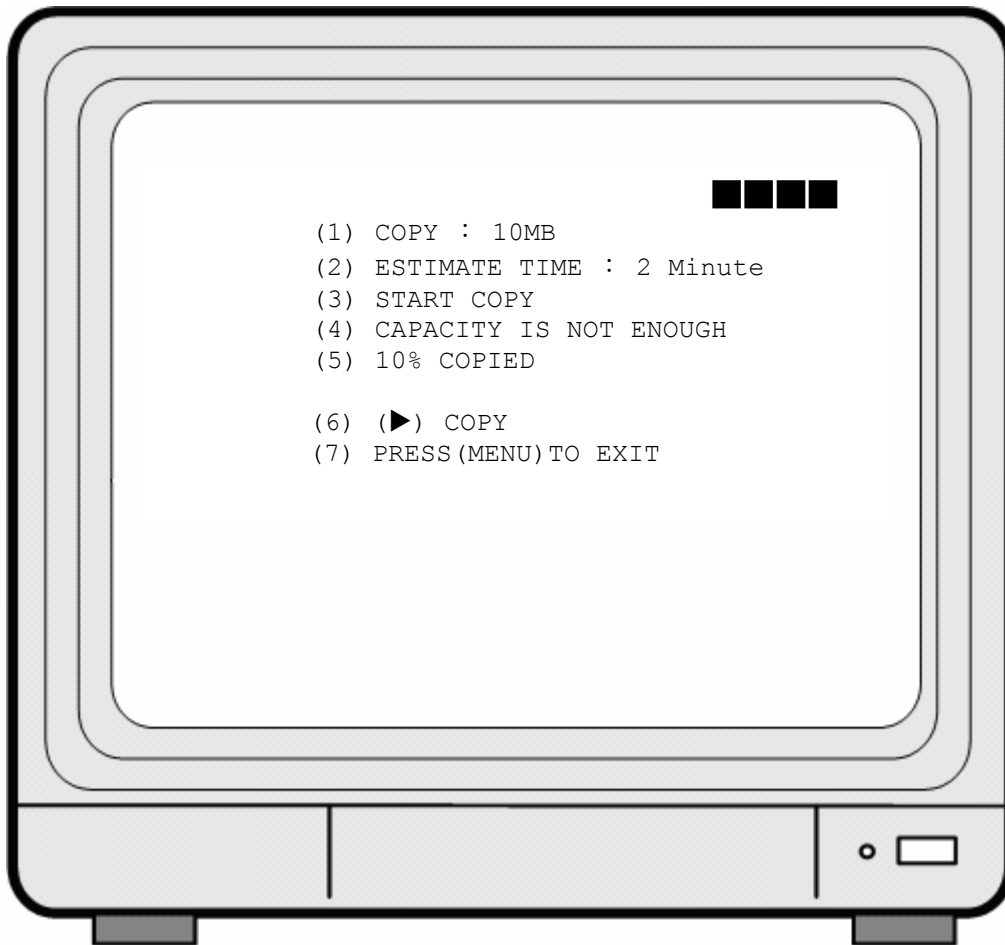


1. Cursor (>) position indicates the current function selected.
2. Press 《▲》 and 《▼》 button to select the desired item.
3. Press 《▶》 button to setup data copy date and time, or to enable COPY.
4. Press 《MENU》 button to exit “COPY” selection.

※ When message “USB DEVICE FULL” appears indicates that there is no more space left for storage. The system will auto return to “USB SETUP” selection. If you wish to copy data, you must first proceed FORMAT/ERASE function.

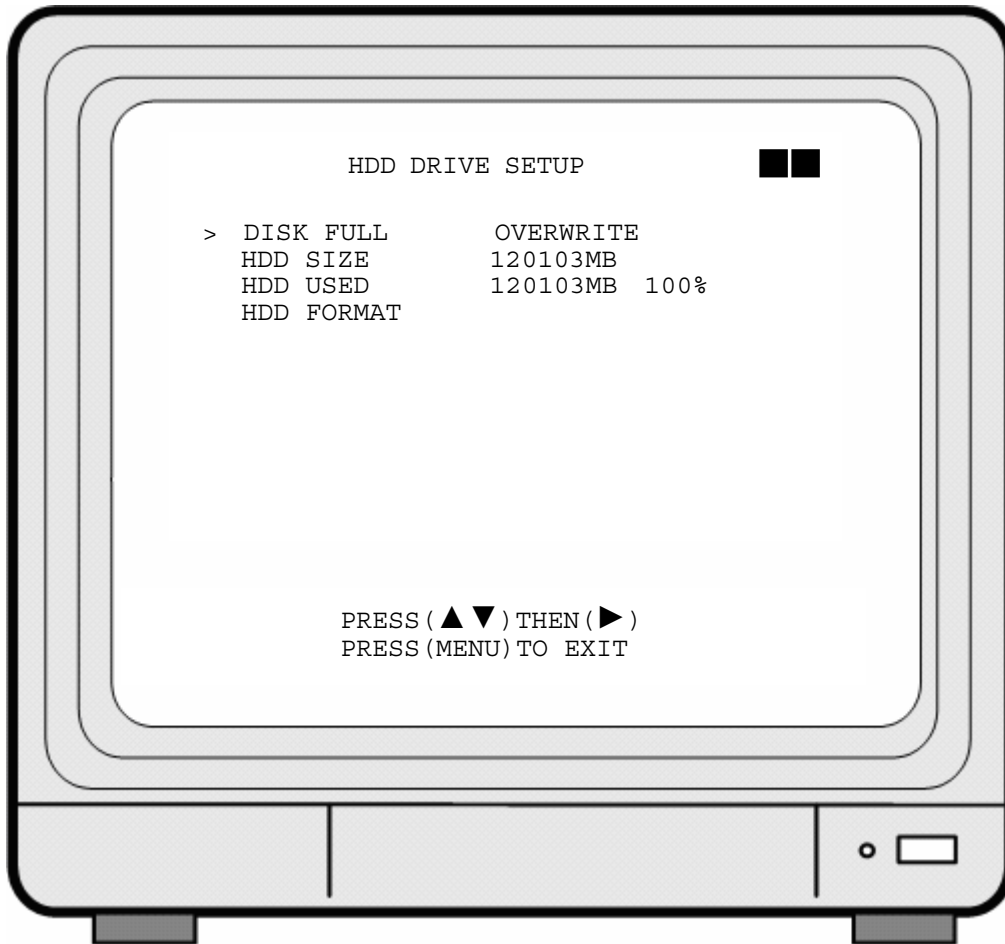
※ When message “TIME INPUT ERROR” appears indicates that the time entered by the user is incorrect. The system will auto return to “USB SETUP” selection.

### 8.7.1.1 COPY



- (1) Capacity of the copied data.
- (2) Time required to make a data copy.
- (3) Request to start data copy.
- (4) Message “CAPACITY IS NOT ENOUGH” indicates that the data to be copied exceeds the USB storage capacity available.
- (5) Status / percentage complete of COPY process
- (6) Press 《▶》 button to copy.
- (7) Press 《MENU》 button to exit COPY selection.

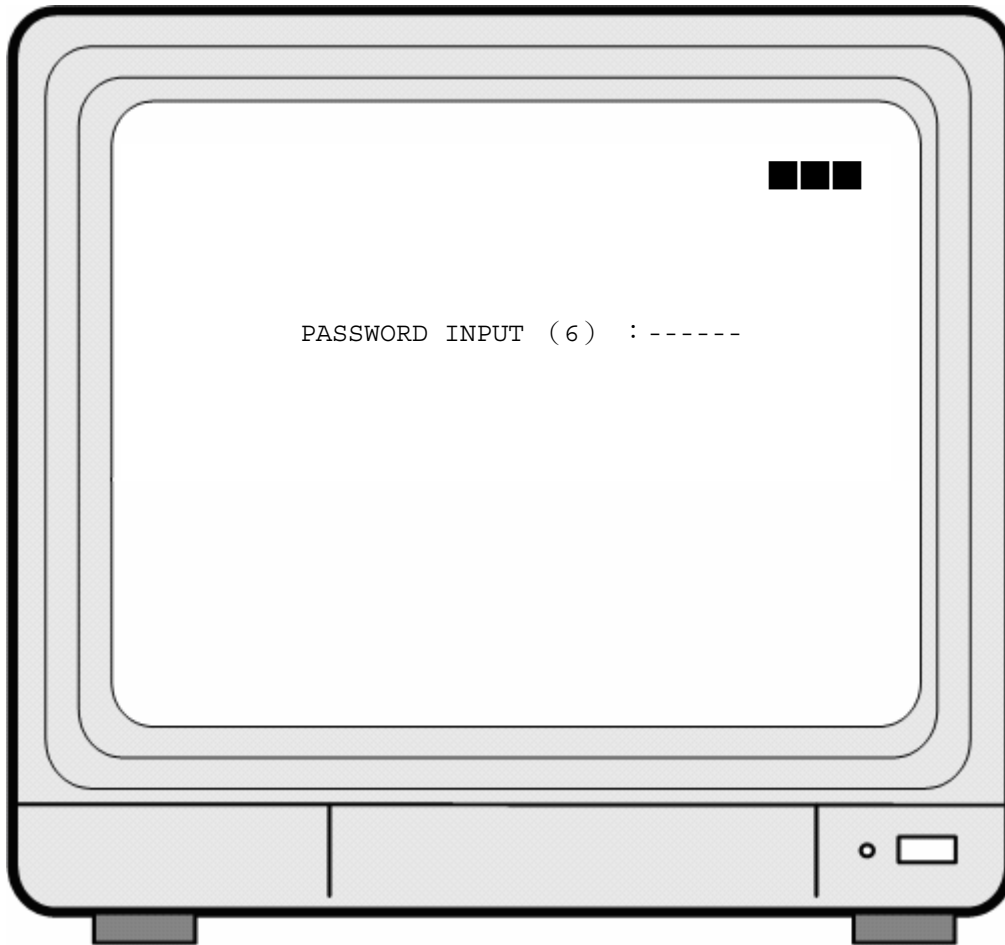
## 8.8 Hard Drive Setup



1. Cursor (>) position indicates the current function selected.
2. Press 《▲》 and 《▼》 button to select the desired item.
3. Press 《▶》 button to proceed.
4. Press 《MENU》 button to exit “HARD DRIVE SETUP” selection.
5. “HDD DRIVE SETUP” is situated on the second menu layer. Under this menu layer user may setup to “OVERWRITE” or “STOP”.
6. When item “OVERWRITE” has been selected, press 《▶》 button to enable overwrite when the HDD is full (2 options: OVERWRITE or STOP).
7. HDD SIZE: displays the capacity of the HDD.
8. HDD USED: displays the capacity of the HDD already used.

※ N/A indicates HDD not installed or unable to be detected.

## 8.8.1 FORMAT/ ERASE



1. When proceeding “FORMAT/ ERASE” function, the above display will be shown.
2. When password entered is correct, the screen will display the message “PASSWORD CORRECT”, “HDD FORMATED” (flashes 3 times), indicates hard disk format is successful.
3. When password entered is incorrect, the screen will display “PASSWORD INCORRECT” (flashes 3 times), and returns to “HARD DRIVE” selection.

## 9. NETWORK REMOTE CONTROL (Optional)

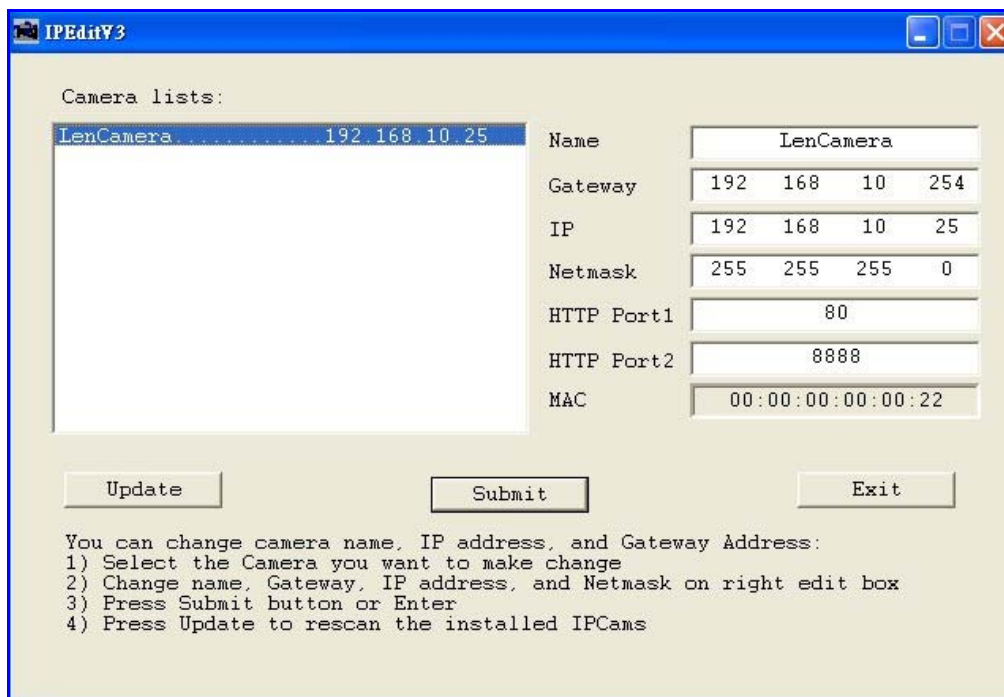
### 9.1 Network DVR Setup

Before installing the Network DVR, you need to first setup an IP Address, connect it to the ADSL Modem or LAN Hub, and use IPedit.exe to test the DVR.

Note: Before using PPPoE and DDNS connection method, one must first setup an IP Address (using IPEDIT.exe).

#### 9.1.1 Online with DHCP Server

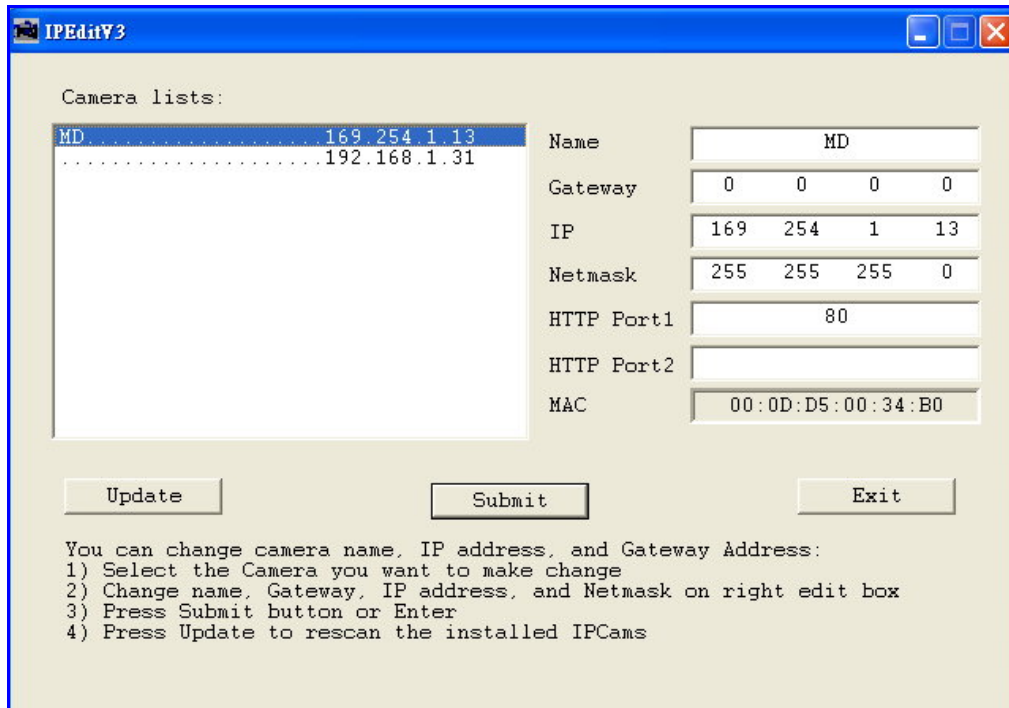
Use IPEDIT.exe to find the installed Network DVR. Select this Network DVR in the Camera List Window. The default configuration will be shown on the right window. Update the IP status.



Online with DHCP Server

## 9.1.2 Online without DHCP Server

1. Use IPedit.exe to find the installed Network DVR.
2. The Internet DVR without IP allocated by DHCP will have a default IP Address of 169.254.1.13.
3. Select this Internet DVR on Camera List Window.
4. The default configuration will be shown on the right window.
5. Under DOS mode enter "IPCONFIG" to access Gateway, IP, and Netmask setting values.



Online without DHCP Server

After the "Submit" button is clicked, the IP information of this Network DVR will be updated.

## 9.2 Connecting Network DVR

3 methods for connecting Network DVR:

1. Online using Intranet or Fixed IP
2. Online using ADSL (PPPoE) Router
3. Online using DDNS Server

### 9.2.1 Online using Intranet or Fixed IP

Setup similar to “9.1 Network DVR Setup” .

### 9.2.2 Online using ADSL (PPPoE) Router

Setup similar to “9.4.3.3 Connect to ADSL by PPPoE mode”.

### 9.2.3 Online using DDNS Server

The DDNS service provides the dynamic IP to users to gain access to resources connected to the Internet via a cable or DSL connection. Once you’ve decided to apply this function, please register your domain name at <http://www.dyndns.org> (this website supports register free service). Paid DDNS service is applied to long-term users. For more information, please refer to “9.4.4 DDNS Setup”.

### 9.2.4 Online Connection

Start the Internet Explorer, enter the IP Address of the Network DVR into the Address field, such as 192.168.1.31 or click twice on IPedit.

Before connection, “User name” and “Password” will be requested:

Default User Name: **admin**

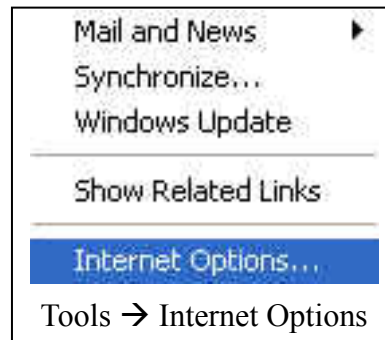
Default Password: **1234**



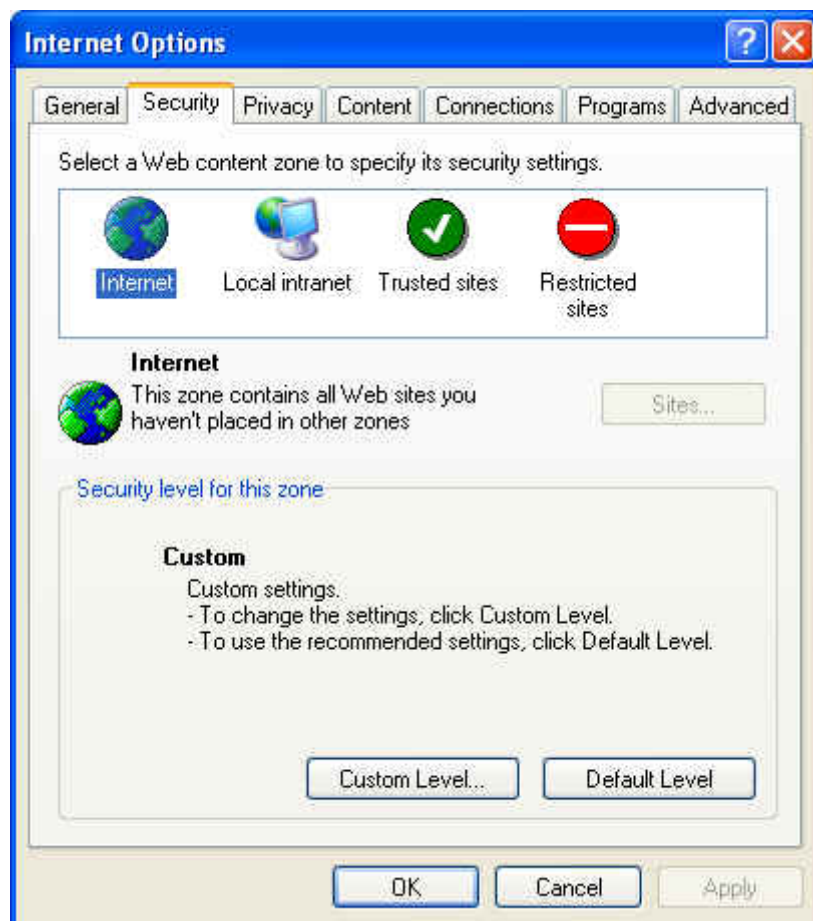
### 9.2.4.1 Install ActiveX

Before entering remote connection, please install ActiveX and check your browser setup by following the procedures below:

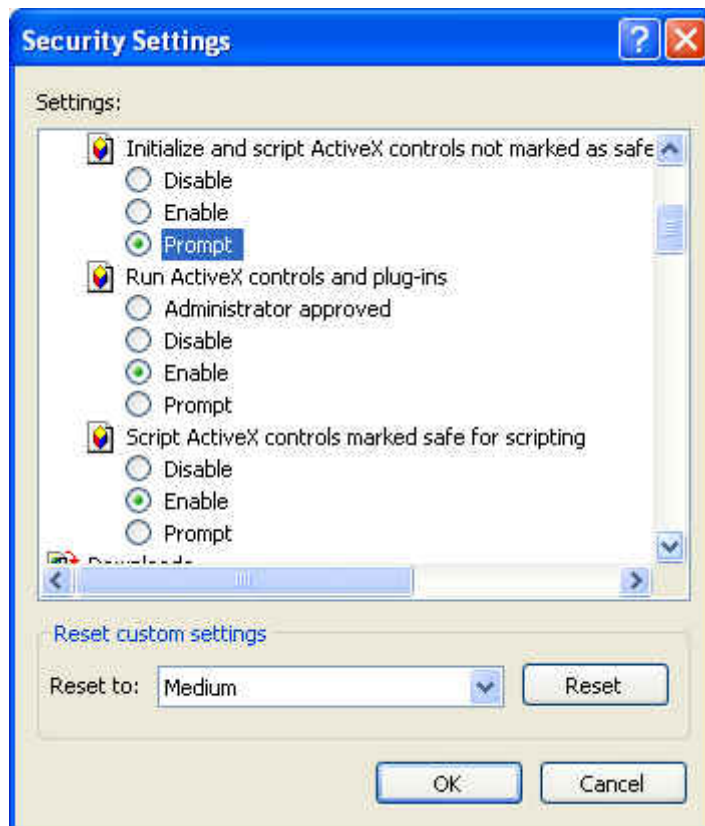
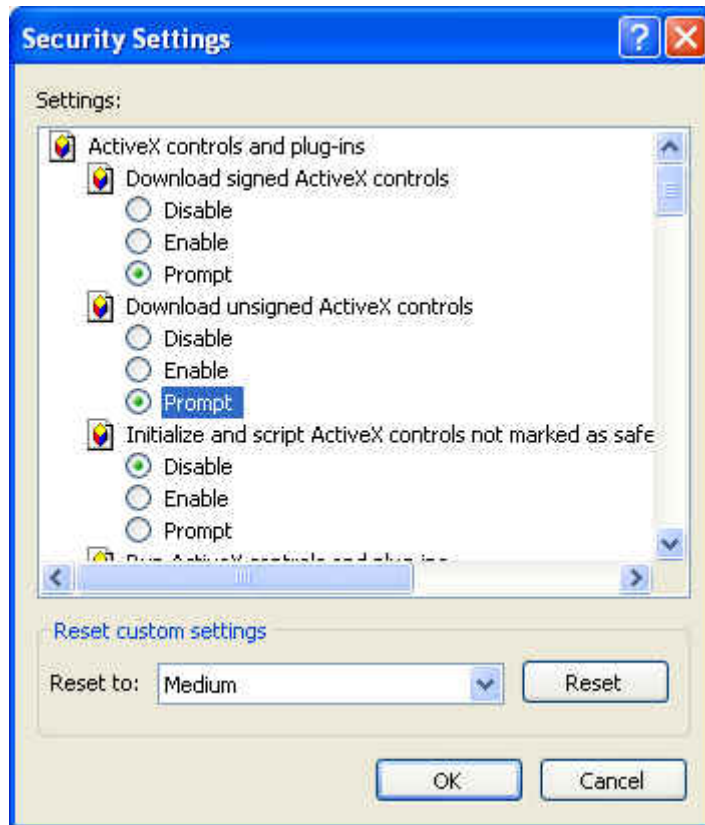
- a. Open Internet Explorer under “Tools”, select “Internet Options”.



- b. Select “Security”, and then press “Custom Level”.

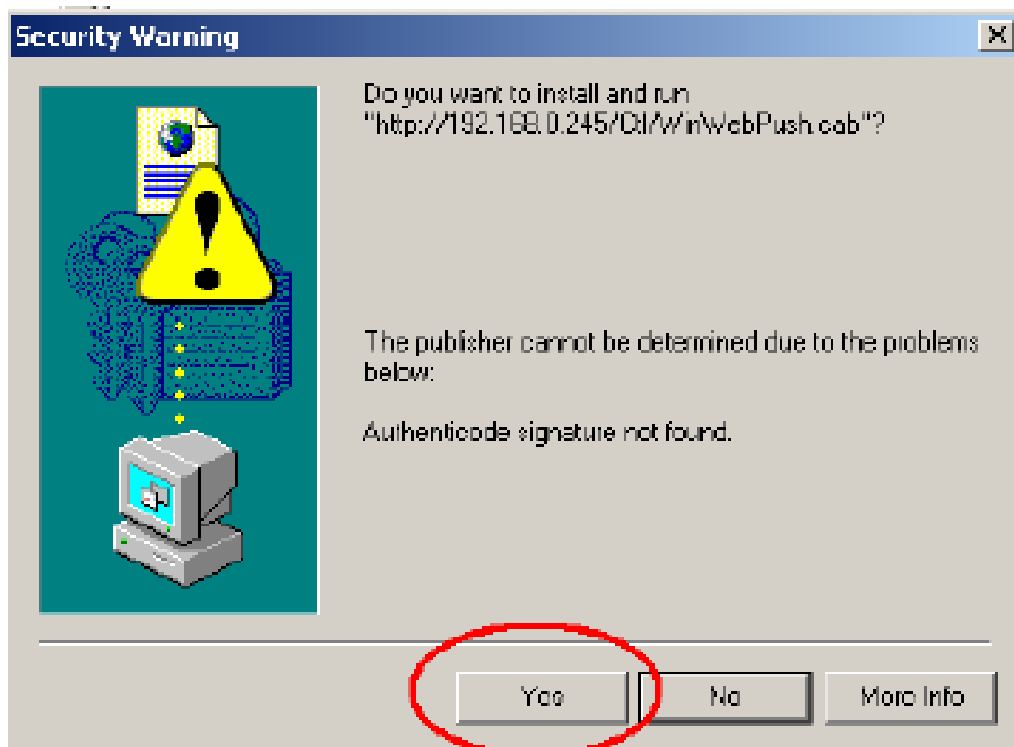


Security -> Custom Level



Start-up ActiveX Control

The graphic below will be shown when first time installing ActiveX Mode. Please, select “Yes” to accept installation.



Download ActiveX Control

Live view will be displayed when installation is successful.



Live display under ActiveX mode

## 9.3 Main Display



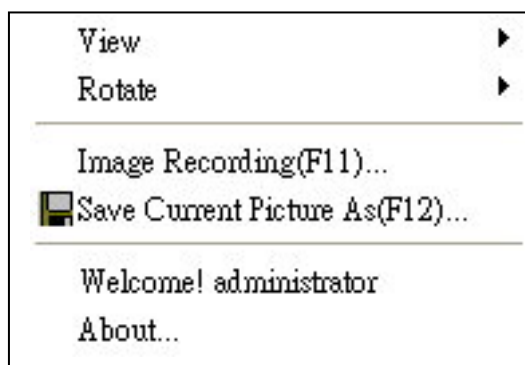
Remote control DVR - Main Menu

- ① Live Display
  - ② DVR Control Button
  - ③ Video Setup
  - ④ Configuration: Enter detail setup
    - Recording: Displays recording setup menu (for video recording).
    - Snapshot: Pop-up window displays live images, right mouse click to save.
- Note! To view complete interface, PC resolution must be adjusted to 1024\*768.

### 9.3.1 Live Display

- View/ Make changes on image display
- Rotate/ Make changes on image direction
- Image Recording/ Record function setup
- Save Current Picture/ Save the current image
- Welcome! Administrator/ Display current user name
- About/ Version description

Move the cursor inside the image range, right mouse click to display 9 function selections:



### **9.3.2 View**

Two types of display method:

- a. Resizable: Adjustable image size.
- b. Actual size: The actual image size.

### **9.3.3 Rotate**

Four types of rotate settings:

- a. Rotate 0: Default state
- b. Rotate 180: Rotate the image by 180 degrees.
- c. Flip horizontal: Image flips horizontally
- d. Flip vertical: Image flips vertically

### **9.3.4 Image Recording**

#### **Image Recording Setup Display:**

Save as JPEG: Save as picture file

Save as AVI: Save as AVI animation file

#### **Save as JPEG:**

No Limit: Unrestricted image storage (continuous).

Number: Image storage according to “number”.

Save interval: Image storage according to “1/10 second” (e.g.: Enter “10”, then 1 frame is stored per second. Enter “50”, then 1 frame is stored in 5 seconds).

Size: Image storage according to “size”.

Time: Image storage according to “time”.

Save Path: Image storage according to “Save Path”.

Pre Name: Image storage according to “Prefix Name”.

#### **Save as AVI:**

No Limit: Unrestricted image storage (continuous).

Number: Image storage according to “number”.

Save interval: Image storage according to “1/10 second” (e.g.: Enter “10”, then 1 avi file is stored per second. Enter “50”, then 5 avi files are stored in 5 seconds).

Size: Image storage according to “size”.

Frame Rate: Image storage according to “frame rate”.

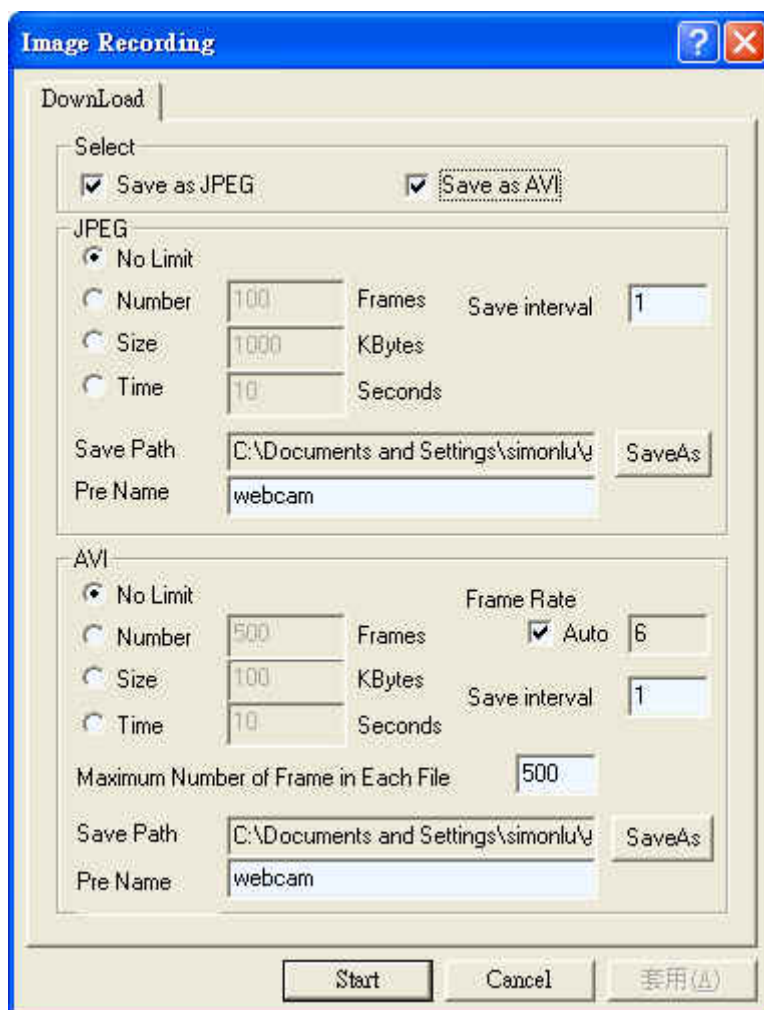
Time: Image storage according to “time”.

Maximum Number of Frame in Each File: Image storage according to “maximum frame”.

Save Path: Image storage according to “Save Path”.

Pre Name: Image storage according to “Prefix Name”.

Note: Only one storage format may be selected, either by JPEG or AVI.



### 9.3.5 Save Current Picture

Select to save live images.

### 9.3.6 DVR Control Setup

Supports DVR remote control function (Please refer to 6-1 Front Panel Buttons and Controls, on page 8).

### 9.3.7 Quality Setting

Network DVR provides 5 image quality settings. The user can select the quality setting from the “Quality” list box.

- Highest
- High
- Medium
- Low
- Lowest

### 9.3.8 Resolution Setting

Network DVR provides six resolution settings. The user can select the quality setting from the “Resolution” list box.

- 176x144
- 160x120
- 320x240
- 352x288
- 640x480
- 704x576

Note! The device supports auto video system detection (NTSC/ PAL).

### 9.3.9 Advance Settings

Network DVR provides the advanced settings for the following:

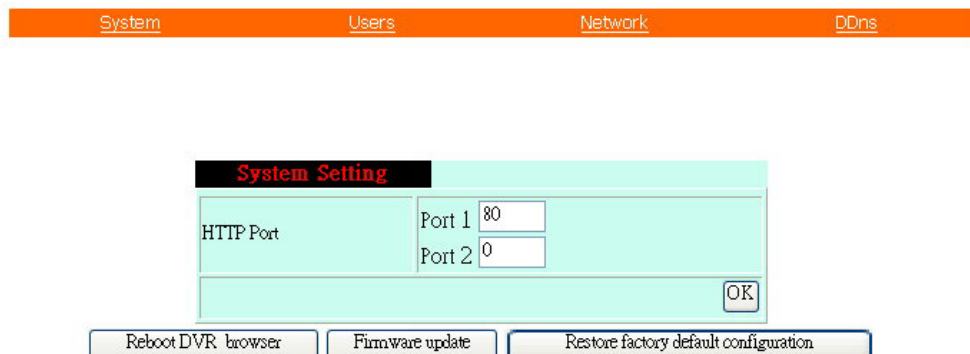
- Brightness
- Contrast
- Saturation
- Hue

## 9.4. Configuration

Only the administrator can select the “Configuration”; the ordinary user account does not have this privilege to access this function.

### 9.4.1 System Setting

The number on Port 1 and Port 2 may be changed, press “OK” button to save the setting.



System Setting Display

- Reboot DVR: The system need 20 seconds to reboot the DVR (Rebooting does not effect the recording function).
- FirmWare update (Please refer to 6.7).
- ReStore Factory Default

## 9.4.2 User Setting

- User Authorization Setting
- Add User or Change Password
- Delete User Account
- Current Users

The screenshot displays the 'Users Setting' interface. At the top, there is a navigation bar with 'System', 'Users', 'Network', and 'DDns'. The 'Users' tab is selected. On the left side, there is a vertical menu with four items: 'Users Setting', 'Authorization', 'New user / Change Password', 'Delete User', and 'Current Users'. The main content area is divided into four sections corresponding to these menu items. The 'Authorization' section contains two radio buttons: 'Needed' (which is selected) and 'No Need', followed by an 'OK' button. The 'New user / Change Password' section contains three input fields labeled 'Username', 'Password', and 'Confirm', and a 'SetChange' button. The 'Delete User' section contains a dropdown menu for 'Username' with 'jiann' selected and a 'Delete' button. The 'Current Users' section contains a list box showing '0:jiann' and '1:administrator'.

User Setting Display

### 9.4.2.1 User Authorization Setting

Select item “Needed” to enable user authorization function, then each time before login to Network DVR the Login window will request for “Username” and “Password”. To disable user authorization function, select item “No Need”.

### 9.4.2.2 New user/ Change Password

Enter a new user name and password information to create a new user account, or enter an existing user account, then set a new password to replace the old password, and select “OK” to create the account or change password. After selecting “OK” button, the “Current User List” would display the newly created user account (Maximum 20 users, user name and password setup are limited to 10 characters).

### 9.4.2.3 Delete User

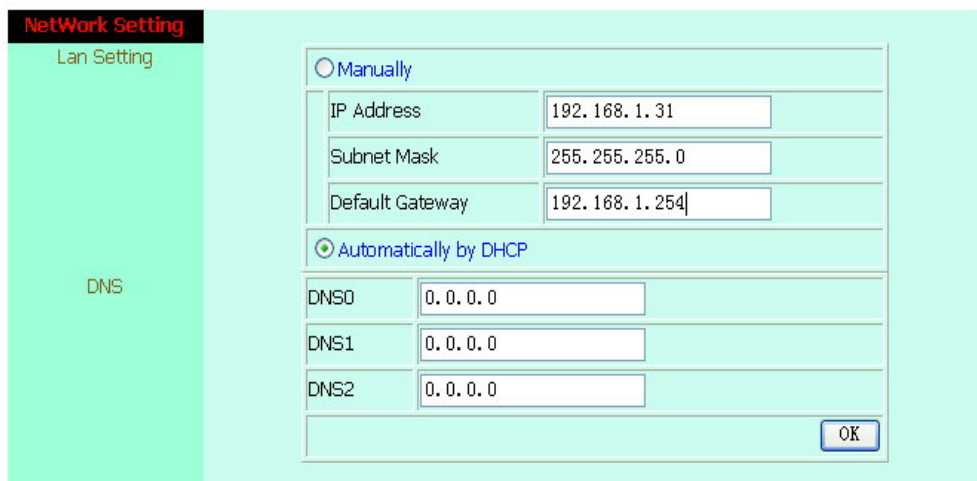
Enter the user account that you wish to delete, click “OK” to delete the account. After selecting “OK” button, the selected user account will be deleted from the “Current User List”.

## 9.4.3 Network Setting

### 9.4.3.1 Fixed IP

To setup follow the steps below:

1. Select item “Manually”.
2. Enter “IP Address”, “Subnet mask”, and ”DNS”.
3. Click “OK” button to save the setting.



The screenshot shows a 'Network Setting' dialog box with a light blue background. On the left, there is a vertical sidebar with 'Lan Setting' and 'DNS' options. The main area contains two radio buttons: 'Manually' (selected) and 'Automatically by DHCP'. Under 'Manually', there are three input fields: 'IP Address' (192.168.1.31), 'Subnet Mask' (255.255.255.0), and 'Default Gateway' (192.168.1.254). Under 'Automatically by DHCP', there are three input fields for 'DNS0', 'DNS1', and 'DNS2', all containing '0.0.0.0'. An 'OK' button is located at the bottom right of the dialog box.

Network Setting Display

### 9.4.3.2 DHCP

The “DHCP” is automatically set as the default network setting of the Network DVR. When a Network DVR is connected into the LAN, it will issue DHCP packets to request an IP address that is dynamically assigned by the DHCP server. If it is unable to get a DHCP address on a limited tries, the Network DVR will assign a default IP address such as “169.254.1.13”.

### 9.4.3.3 Connect to ADSL by PPPoE mode

To setup follow the steps below:

1. After setup, rebooting enables automatic connection to ADSL.
2. Enter the “Username” and “Password” fields with the account and password provided by the ISP.
3. If item “Send mail after connected” is selected, the mail will be automatically sent when connected to the ISP.
4. Click “OK” button to save the settings.

Note: In order to activate the function, it is necessary to reboot the device after the setup.

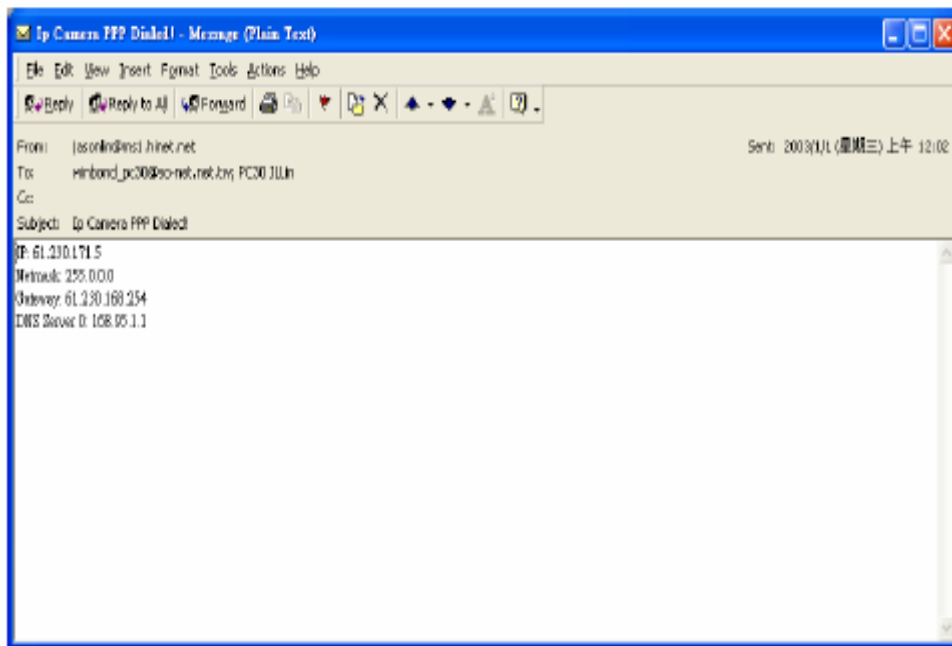
PPPoE		Save & Dial Now
<input checked="" type="checkbox"/>	Dial On Power Up	
Username	89456215@hinet.net	
Password	••••••	
<input checked="" type="checkbox"/>	Send mail (about new IP) after connected	
Mail Server	dsf@msa.hinet.net	
Username	jiann	
<input checked="" type="checkbox"/>	Password	••••••
Sender's Mail Box	jiann@hotmail.com	
Receiver's Mail Box	jiule@msa.hinet.net	
Subject	IP Camera PPP Dialed!	
		OK

ADSL Setting Display

If the Network DVR and ADSL modem are connected by a hub, the user can select item “Dial On Power Up” to perform the connect operation. On contrary, if the Network DVR and ADSL modem are connected directly, then please note the following steps below:

1. Power off Network DVR.
2. Connect Network DVR directly to the ADSL modem (using RJ-45 Ethernet port).
3. Power-up Network DVR.
4. Network DVR start dialing.
5. Once connected, mail the IP address information to the preset e-mail address.
6. After 10 times of connection failure, it aborts the operation and the user can reconnect it by LAN to find the cause.

Note: If item “Send mail after connected” is selected, then the Network DVR will send a mail that contains the message “Dial Up IP Address/ Netmask/ Gateway/ DNS Server” will be mailed to the preset e-mail address.



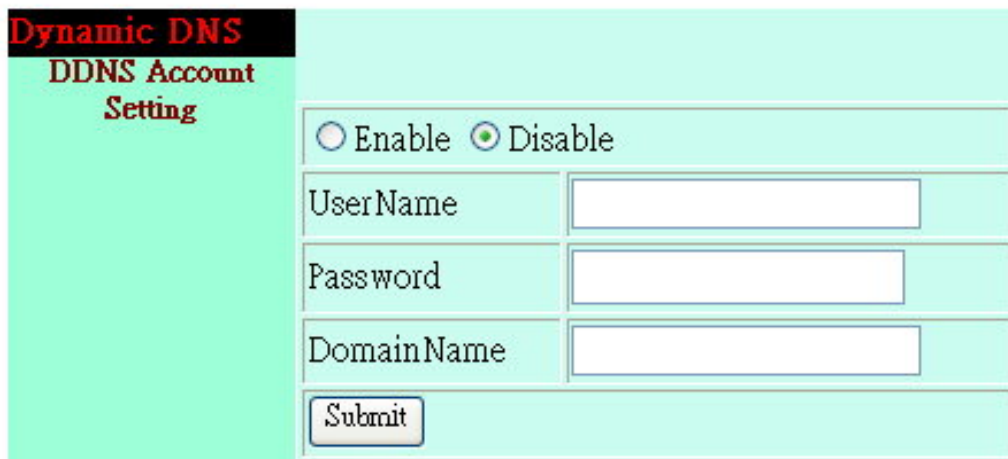
Connection Message Send to User

#### 9.4.4 DDNS Setting

Press “DDNS” server connection to start-up the function. It can autonomously and automatically contact DDNS provider service whenever the router detects that its public IP address has changed. The router logs on to an account you setup and maintain, and updates the account with its latest public IP address. You may register at DDNS Server: <http://www.dyndns.org>.

To setup follow the steps below:

1. Register at DDNS Server: <http://www.dyndns.org>.
2. Apply domain name.
3. Click the “Enable” button. Enter “UserName” and “Password” with “DomainName”.



The image shows a web form titled "Dynamic DNS DDNS Account Setting". The form has a light blue background. At the top left, there is a black box with the text "Dynamic DNS" in red, and below it, "DDNS Account Setting" in black. The form contains the following elements:

- A row with two radio buttons: "Enable" (unselected) and "Disable" (selected).
- A row with a label "UserName" and an empty text input field.
- A row with a label "Password" and an empty text input field.
- A row with a label "DomainName" and an empty text input field.
- A "Submit" button at the bottom left.

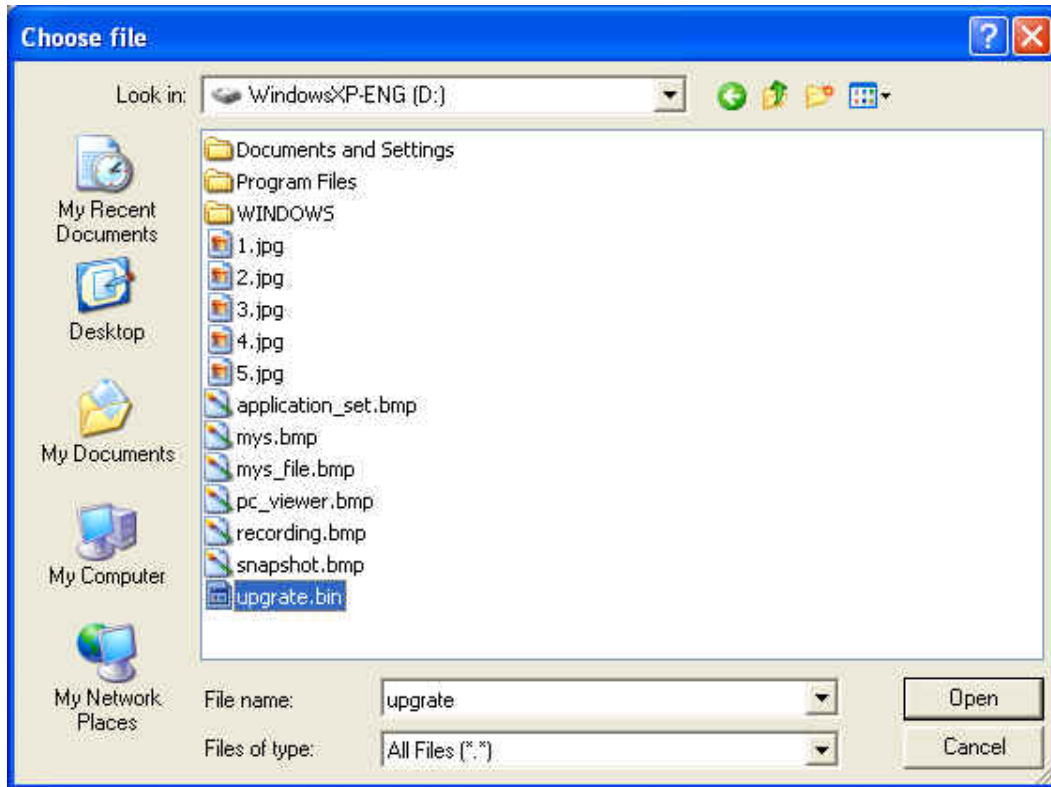
DDNS Setting

After registering the domain name, please enter the information supplied by the administrator to the Network DVR DDNS Account Setting. Select “Enable” button to start-up DDNS server, and press “Submit” button to save the setting.

Note: To enable “Disable” function, please reboot the device after disable function has been setup.

## 9.4.5 Firmware Update

When new firmware (bin file) is supplied, you may update the new version firmware (bin file) to your PC by following the procedures below:



Select the Firmware to be Updated



Uploading the Selected Firmware

Press “Upload” button to display the message below, and follow the instruction to make the necessary setup.

*It is strongly recommended to stop any unnecessary jobs while updating firmware. Please be patient and the updating process may take a long time.*

- (1) → Click [here](#) to begin to update firmware.
- (2) → Click [here](#) to ignore and delete the file uploaded just now.

Firmware Update

Press “here” button (1) to update Firmware. Press “here” button (2) to delete the file. The message below displays the writing progress of the firmware update. When Firmware update is completed, it will show 100%, and a message “Click here to reboot DVR browser” will be displayed, requesting to restart the Network DVR.

*It is strongly recommended to stop any unnecessary jobs while updating firmware. Please be patient and the updating process may take a long time.*

Click [here](#) to begin to update firmware.

Click [here](#) to ignore and delete the file uploaded just now.



Writing Progress: 34%

Firmware Update Display

*It is strongly recommended to stop any unnecessary jobs while updating firmware. Please be patient and the updating process may take a long time.*

Click [here](#) to begin to update firmware.

Click [here](#) to ignore and delete the file uploaded just now.



Writing Progress: 100%

[Click here to reboot DVR browser.](#)

Firmware Update Completed, prompt to restart the device.

# 10. HDD Player Software Description

## PC Player Software

### System Requirement

- ※ OS (Operating System) Windows XP or later.
- ※ Use your PC to install DirectX (version DirectX 7.0 or above).
- ※ Using remote control software, please setup the resolution to 1024x768 or above.

### Hardware Requirement

- ※CPU 1.0 GHz or higher.
- ※RAM 512 Mbyte or higher.

## 1. Installation

### A. Hardware Installation

Make sure that HDD is connected through IDE or USB interface to the PC.

### B. Software Installation

1. During installation, you will need a desktop or laptop computer that meets these minimum requirements: Windows XP.
2. Copy the PC Player Software to your PC (under any directory, e.g.: C:\ ). When user start-up PC Player Software, it will auto create a directory “\_config”, the purpose is to store all parameter setup supplied by the PC Player Software.

## 2. Operation

Move the cursor to PC Player Software and double left mouse click to proceed. When proceeding PC Player Software, it auto-detects the HDD (about 1 min. to auto detect, and may differ depending on file size).

- ※ Network DVR does not support player software other then PC Player software.

### 3. Software Playback Interface Description

#### A. User Interface

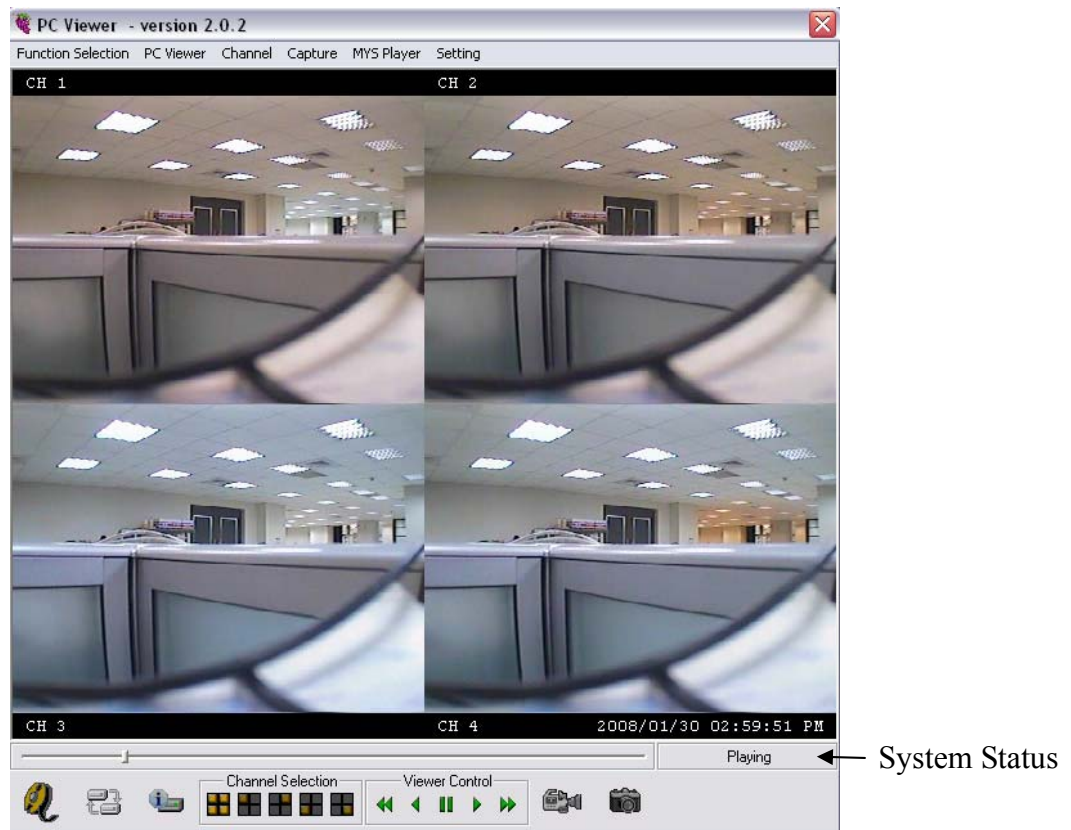











Figure 1

When the system detects stored materials (HDD), the above graphic (Figure 1) will be shown. User may operate the function buttons to make necessary playback adjustment or store recordings onto the PC.

-  : Fast Rewind
-  : Pause Playback
-  : Fast Forward
-  : CH1 Full Screen Display
-  : CH3 Full Screen Display
-  : Click this button to capture images as BMP file, graphic shown by “Figure 2” will be shown and PC Player Software auto creates storage content “9821”.
-  : When recording videos onto the PC, first click the “Pause” button, then “Now Recording” button on the graphic shown by “Figure 3”. Click again to stop recording (shown on the graphic by “Figure 4”) and the PC Player Software auto creates storage content “Capture MYS”.
-  : Click this button to playback recorded materials (stored on PC); graphic show by “Figure 5” will be displayed. Please select the file to playback, press “open” to playback. This button function is similar to “File Player” function.
-  : Click this button to shut the system.

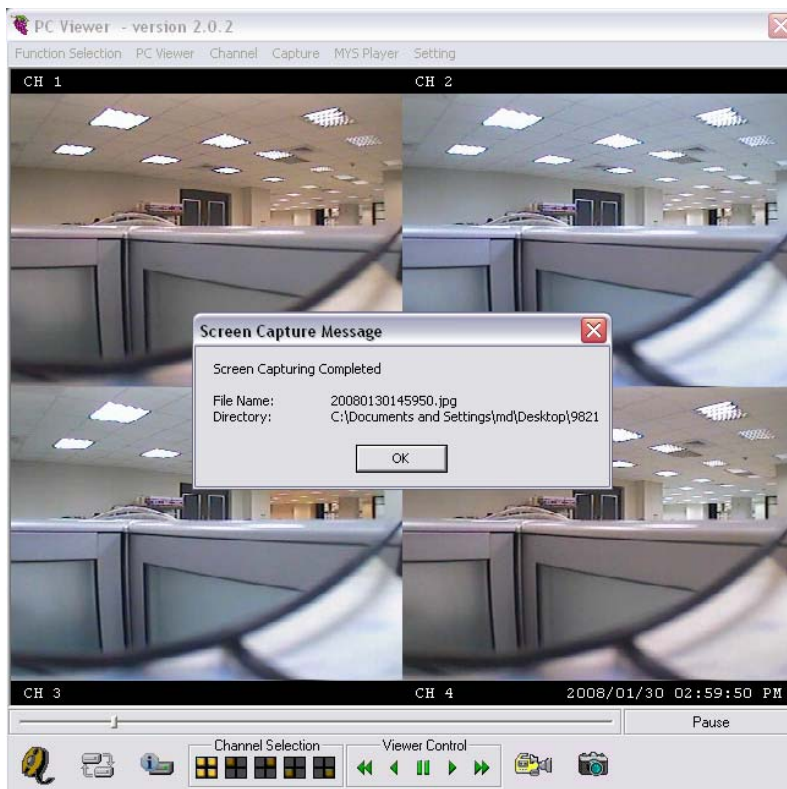


Figure 2

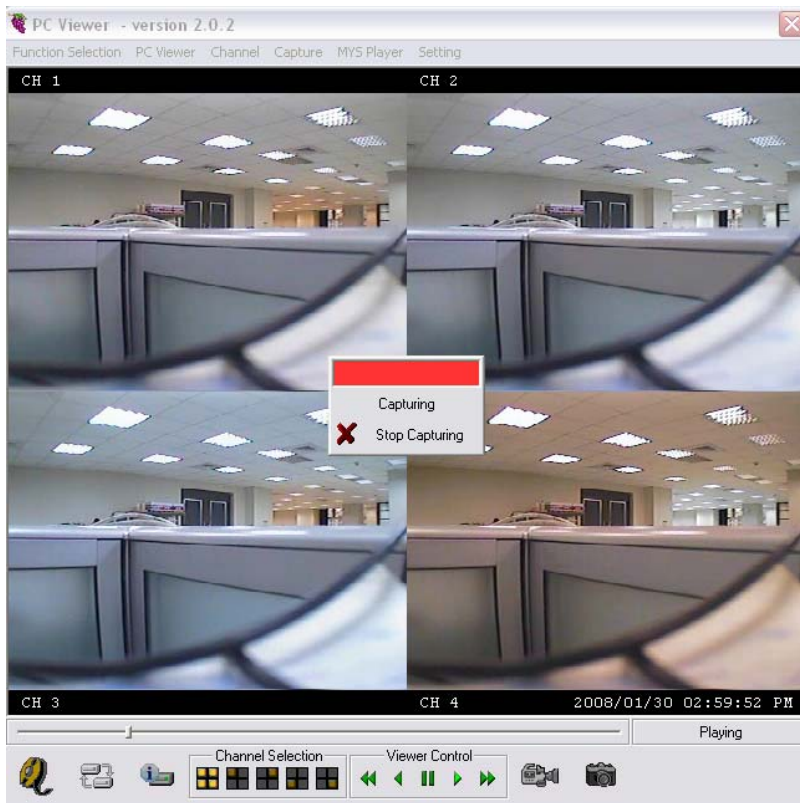


Figure 3

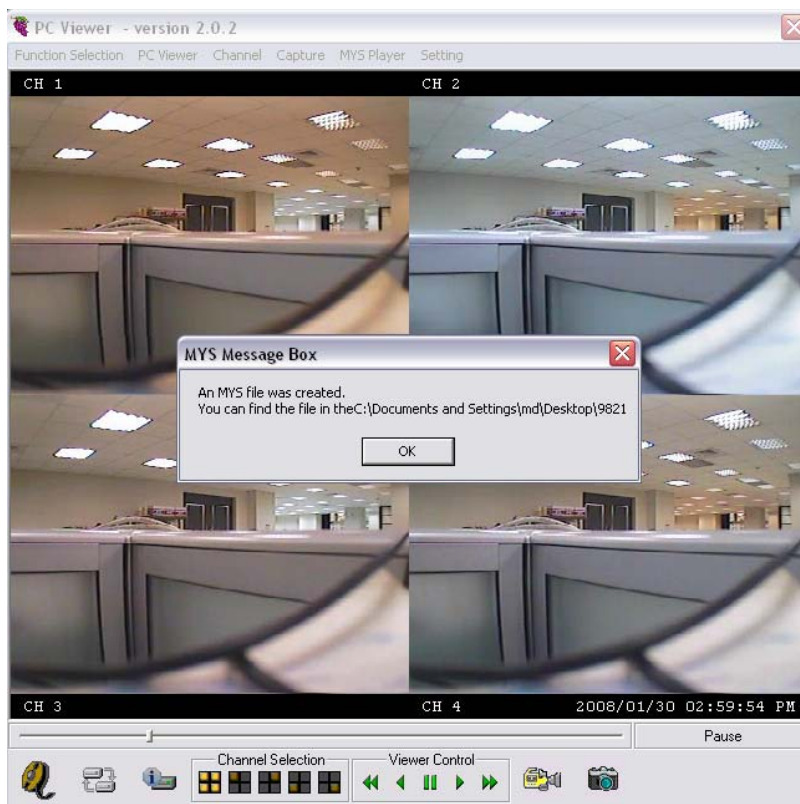


Figure 4

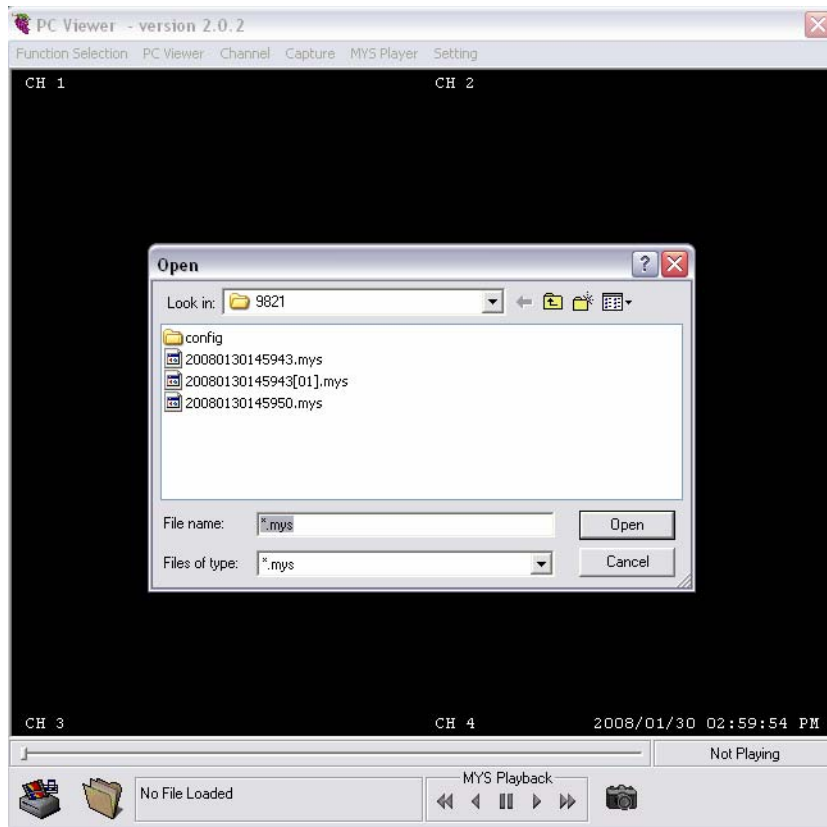


Figure 5

## B. Parameter Setup

Click “Standard Setup” button to show the graphic display below (Figure 6). User may use “Change” button to setup MYS and JPEG file storage directory:

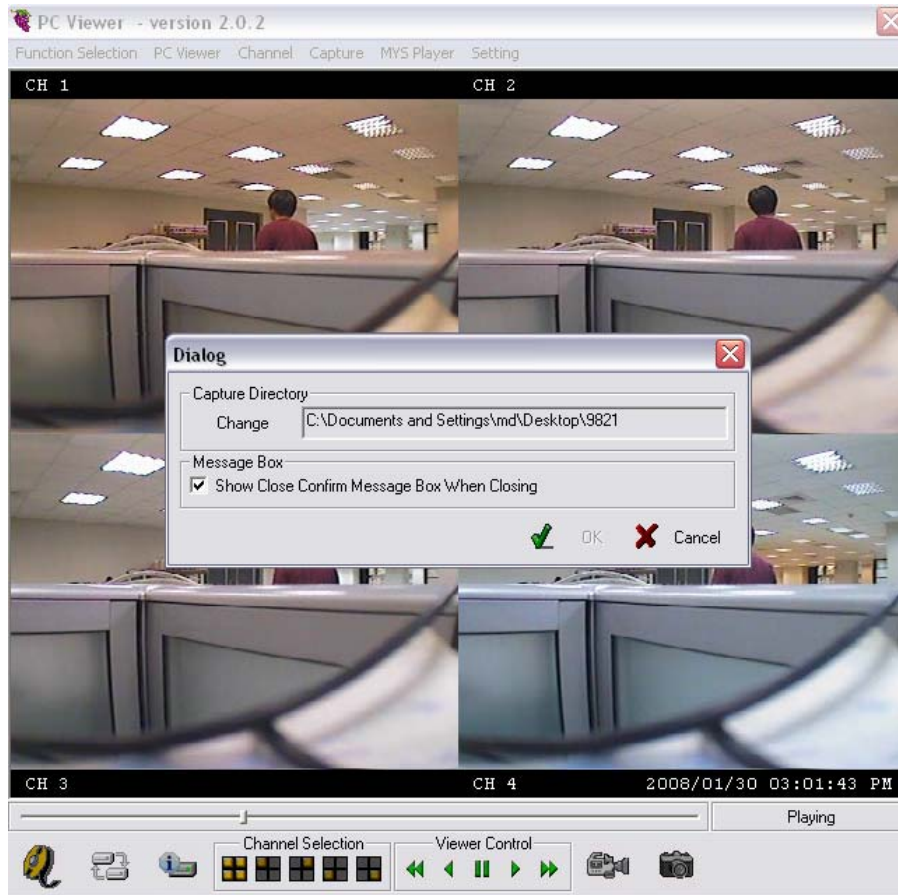


Figure 6

## 11. TROUBLESHOOTING

<b>Question</b>	<b>Answer</b>
Suggested HDD Brand	Maxtor, Seagate, and Hitachi.

## 12. SPECIFICATIONS

Video	Format	NTSC/EIA or PAL/CCIR
	Compression	Modified M-JPEG
	Input	4CH, BNC
	Output	1 x BNC, 1 x S-Video
Display	Resolution	720 x 480 (NTSC), 720 x 576 (PAL)
	Frame Rate	Max. 120/100 fps (NTSC/PAL)
	Division	Single, Quad
Recording	Resolution	Max. 640 x 224 (NTSC), 640 x 272 (PAL)
	Frame Rate	Max. 30/25 fps (NTSC/ PAL)
	Quality	High / Normal / Low
	Mode	Manual / Schedule / Motion Detection
Alarm	Trigger Mode	Motion Detection
	Function	Recording, Sound Alert
HDD	1 x 3.5" IDE HDD (Max. 500GB)	
Post Alarm	5~30sec	
Search Method	By Date, Time, Event	
Network (optional)	10/100BaseT Ethernet(RJ45)	
Backup Device	HDD, VCR	
Power Supply	DC 12V 2A	
Weight	2.5kg (without HDD)	
Dimension (W*H*D)	320mm x 270mm x 45mm	
Operating Environment	30 ~ 80% RH, 5 ° C ~ 40 ° C (40 ° F ~ 104 ° F)	

# MEMO

A large, empty rounded rectangular frame with a thin black border, intended for writing a memo. The frame is centered on the page and has a height that occupies most of the page's vertical space.