

# Four Channel Multiplexed Digital Video Recorder



## Owner's Manual

Customer Support 1-800-774-0284

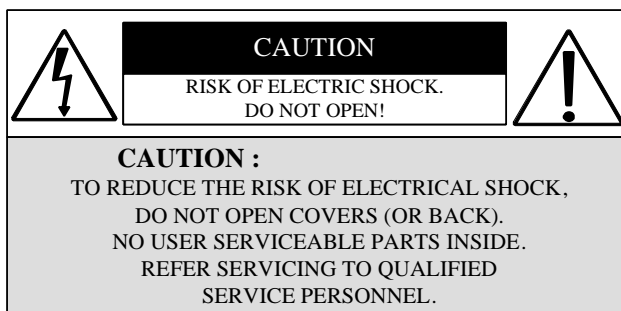
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# 1. SAFETY PRECAUTIONS

VER.:2.0, CD



Please read the Safety Precaution Guide through carefully before operating this product.

 **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 should 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 administration or your household waste disposal service.

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

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

**Keep the product out of direct sunlight.**

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

Disconnect power immediately if the product is exposed to liquid.

**Keep the product well ventilated.**

**Use the power adapter supplied with the product.**

## 2. INTRODUCTION

### 2.1 Product Introduction

The product is perfect for office safety, personnel home security, public

environments, industry surveillance, school, or any security application.

The 4-channel M-JPEG Network (optional) digital video recording, enables monitoring through the internet or local area network (LAN). Video can be searched by time and event. The administrator can setup an administrator password to prevent any user from randomly changing the setup.

## 2.2 Application

### **Security:**

ATM (auto teller machine), banks, convenience stores, shop and parking lots.

### **Factory/ Office:**

Factory, warehouse, remote technology support, conference room, and outdoor parking lots.

### **Education/ Military/ Government Organization:**

Important facilities, important areas, rapid transit system, and railroad safety.

### **Recreation/ Activities:**

Sports and news broadcast.

### **Home:** Monitor & record events while you are away.

## 3. FEATURES

### **Video system auto detection**

Auto detects video input (NTSC/ PAL) and supports combined use of color and BW cameras.

### **Supports high quality digital video recording**

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

### **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 video tapes.

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

Motion detection sensitivity is adjustable for your application.

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

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

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

Time & date search supports instant retrieval of video. Alarm event search



Allows the user to retrieve events created by motion detection or an alarm input.


**✂✂Live monitoring of the DVR via the internet from anywhere (optional).**

Built-in TCP/ IP network interface allows the user to view the DVR through the local area network (LAN) on a PC, or through the wide area network (WAN or internet). The DVR and your cable or DSL router will need to be configured to allow outside (internet) communication to your DVR.

## 4. PACKING LIST

Check to make sure all of the items shown below are included in your product package.

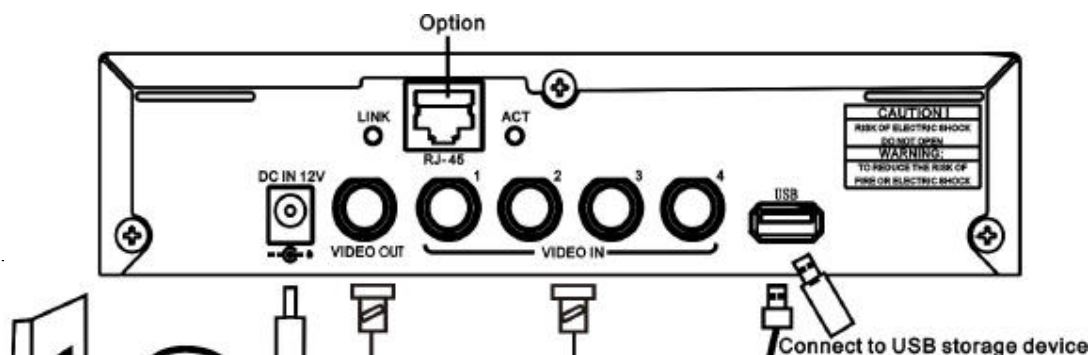
Item Description	Item Picture	QTY
DVR		1
DC 12V/410mA Power Adapter Input: AC 100~240V Output: DC 12V/410mA		1

Power Cord		1
CD-Viewing and configuration software		1
Quick Start Guide		1

## 5. INSTALLATION

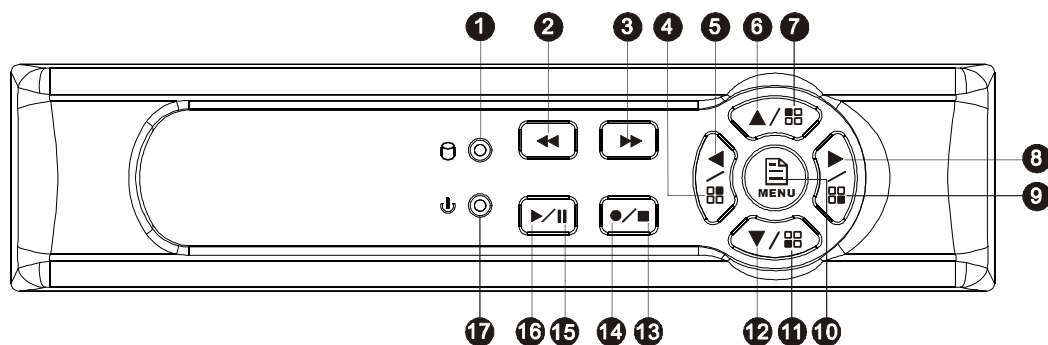
### Rear Panel Connections





Connect your system components to the DVR according to the following illustration (network is an optional feature and may not be on your DVR):










## 6. Connections & Panel Buttons

### 6.1 Front Panel

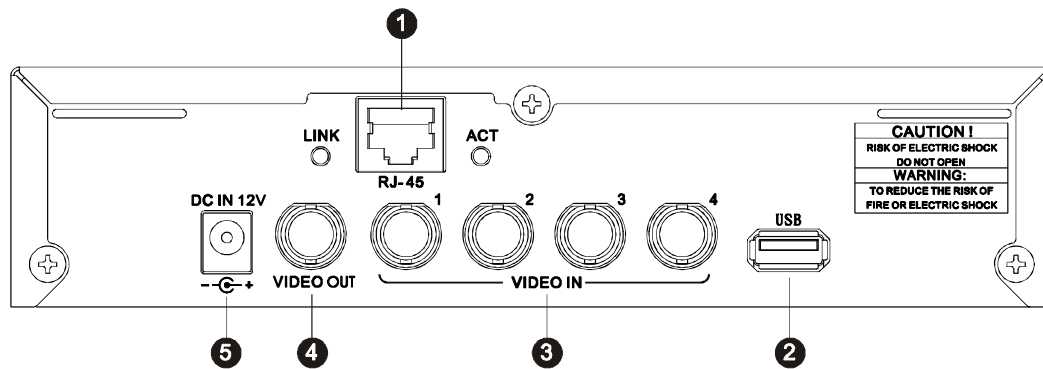


- (1)  : Record LED indicator.
- (2)  : Rewind button.
- (3)  : Fast forward button.
- (4)  : Left direction button / CH 2 screen display / Number button 2



- (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 (optional).
- (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 the optional network connection).

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. This alarm will not affect the actual recording. If the DVR senses no video inputs, the DVR will stop recording.

### 7.2 Monitoring Mode

This mode is the default after power on. During this mode, the system supports live view for monitoring. Press  button, the system will enter the record mode.

Press  button to start playback. Press  button to enter the menu setup display.

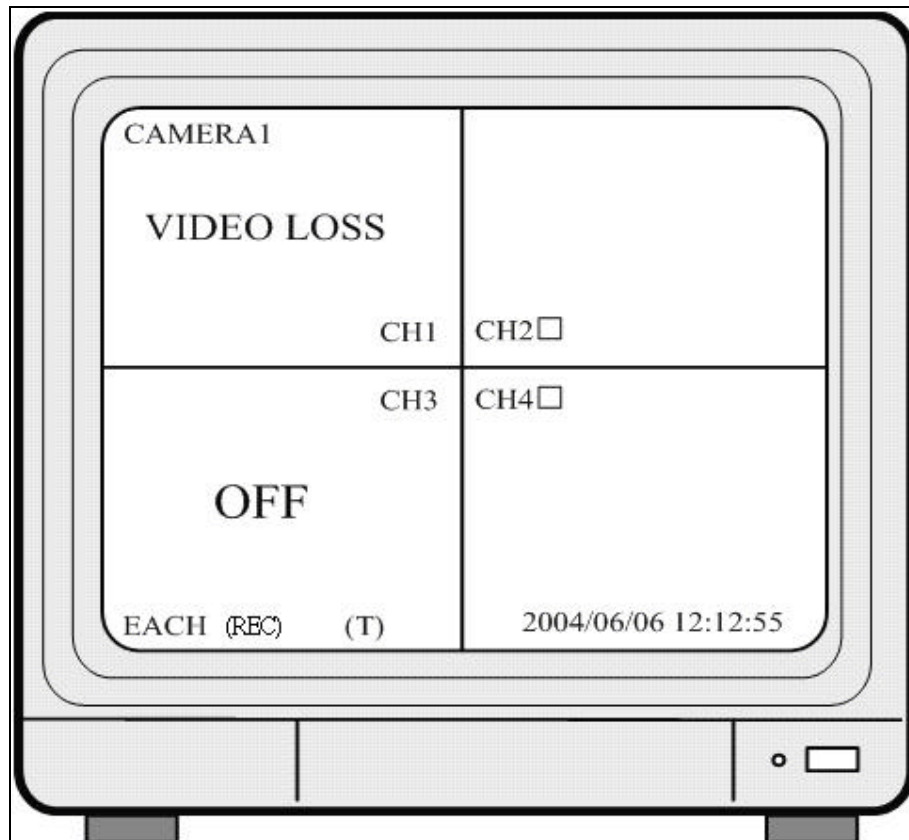
During playback, press  button to return to the monitoring mode. Press  to change the speed (FF1, FF2 or FF3), or press  button to start reverse playback.

✂ To reset the system (while in quad or single display), press the « ? » button 5 times and the message « ALL SETTING DATA IS INITIALIZED. » will be displayed by flashing 3 times. After reset the password will be set as default value (11111).

✂ When the reset procedure has been completed, the message "DVR RESET COMPLETED. TURN OFF AND ON THE DVR" will be displayed. Re-start the DVR.



## 7.3 Record Mode



**Note:** CH1: A square block next to the CH number indicates it is recording that channel

EACH: Record Type    QUAD: Record Type

(T): TIMER RECORD    (A): MOTION RECORD    (M): MIX RECORD

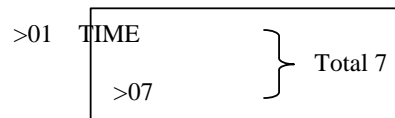
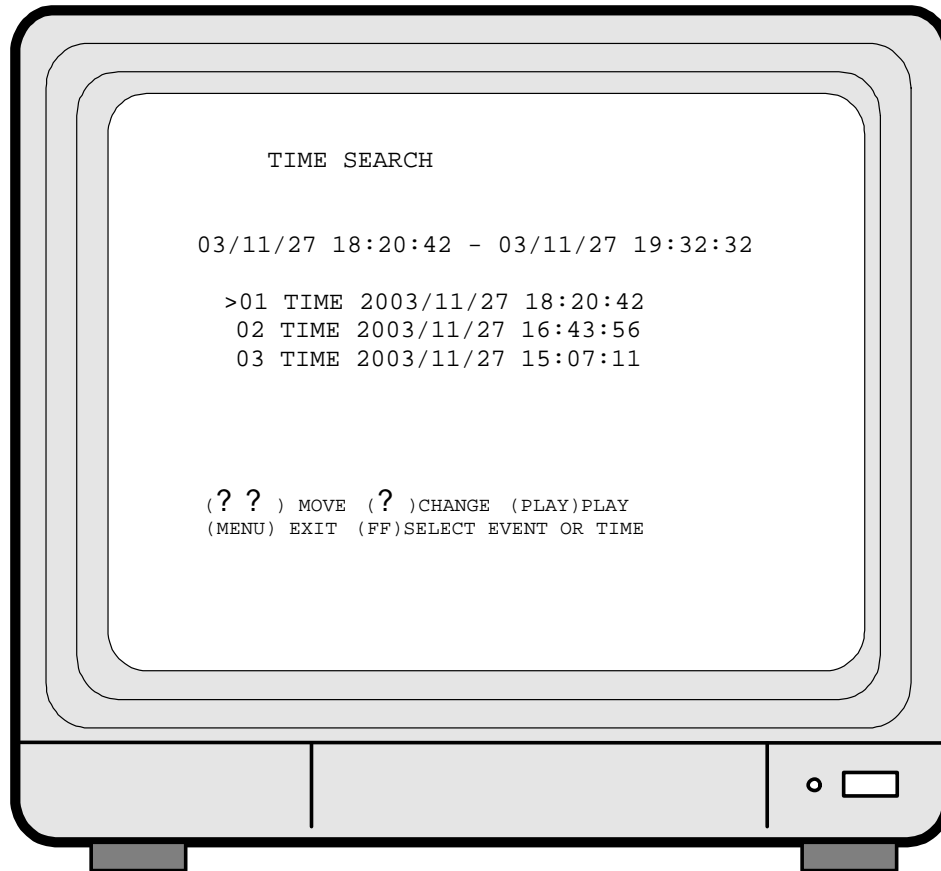
(? ): Currently recording.

VIDEO LOSS: The DVR does not detect video on that CH.

CAMERA1: Title for CH 1.

OFF: Channel is set to “OFF”.

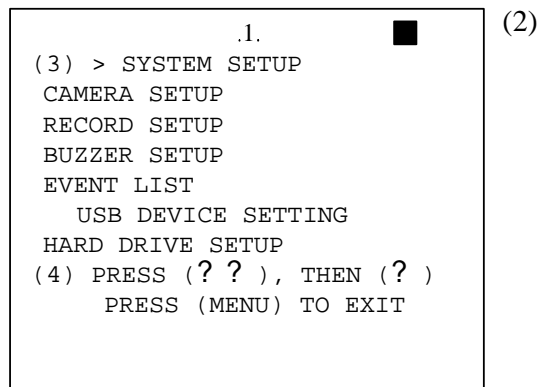
## 7.4 Playback Mode



1. First press the « STOP » button to stop recording, then press the « PLAY » button to enter the search display.
2. Press the « FAST FORWARD » button, then the « PLAY » button to playback video from old to new. Use the up and down « ? / ? » button to move the cursor to the desired playback time. Press the « ? / ? » 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 the « PAUSE » button to pause and press again to playback.
5. Press the « FAST FORWARD » button to fast forward playback and the « REWIND » button to rewind.
6. Press the « STOP » button to stop playback.

## 8. SYSTEM SETUP

### 8.1 Menu



(1) MAIN MENU: Root directory of the setup menu

(2) Sub-menu Indicators:

	: First Menu Layer (Main Menu)
	: Second Menu Layer
	: Third Menu Layer
	: Fourth Menu Layer

(3) Menu Operation and Setup

Press the« ? » or« ? » button to move the cursor ( > ).

Press the« ? » button enter the sub menu.

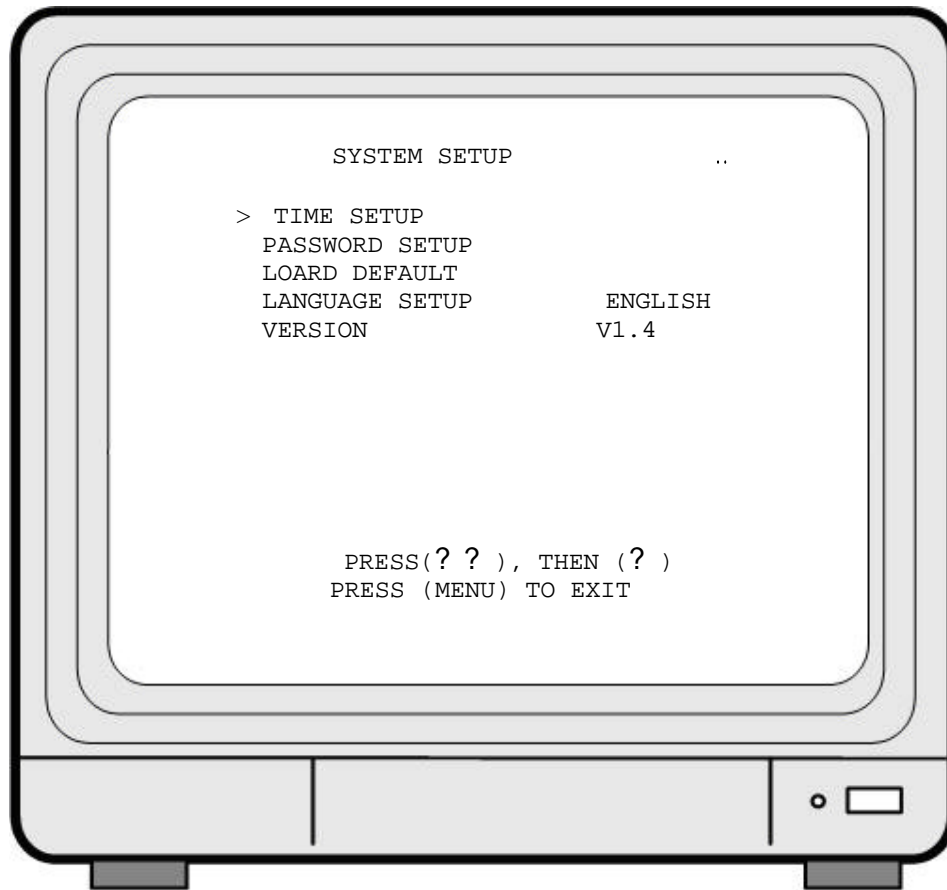
Press the« MENU» button:

⚡ 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 update the modified/changed setting.

⚡ Under the main menu (first menu layer), the system will enter the live mode.

Press the« ? » button, to increase or decrease the setting values that has been highlighted/selected.

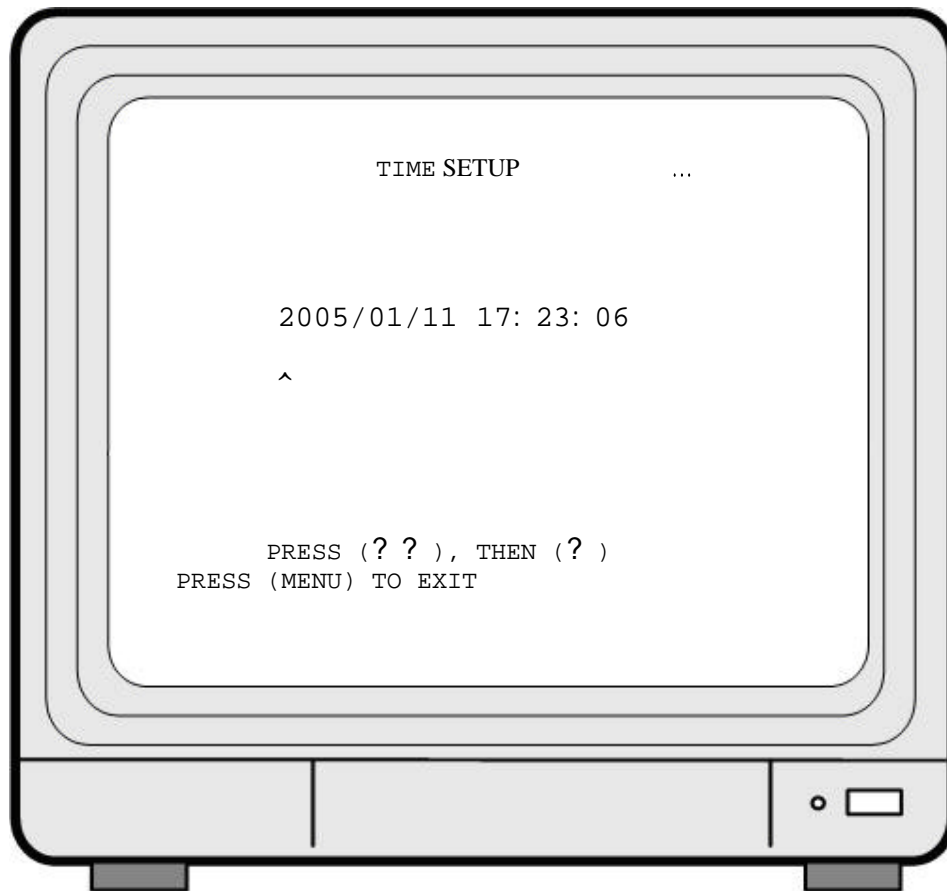
## 8.2 System Setup



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

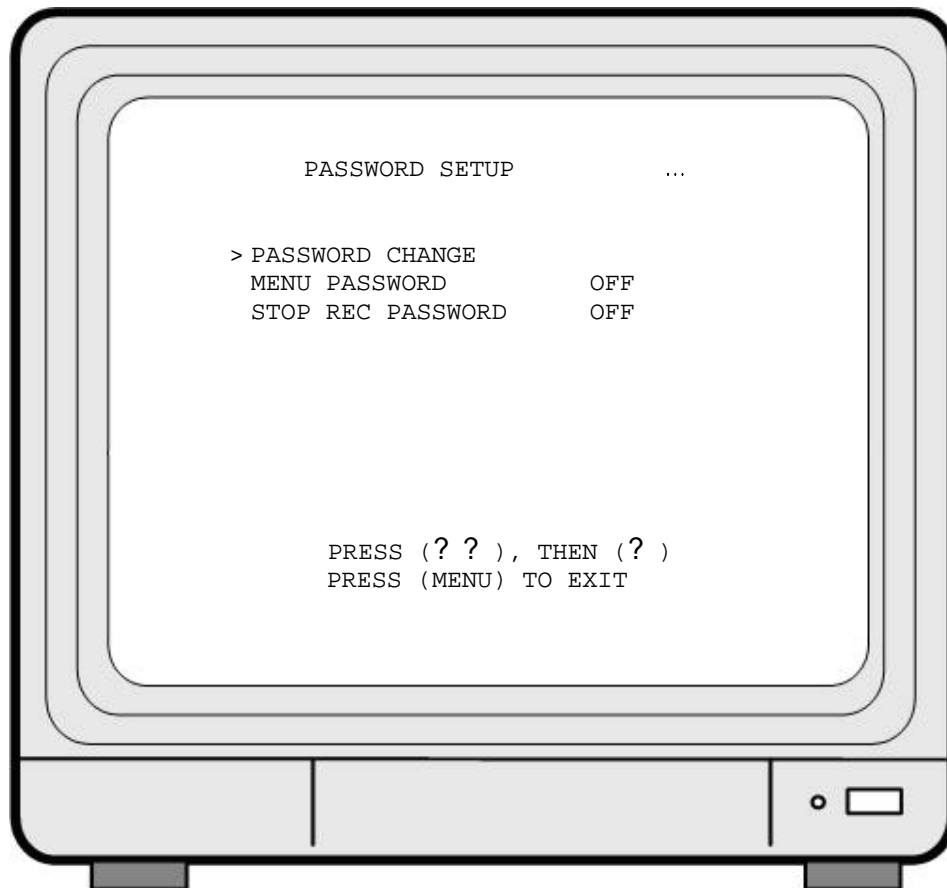


## 8.2.1 Time Setup



1. The cursor (^) position indicates the current time and date selected.
2. Use the« ? » or« ? » button to move the cursor.
3. Use the« ? » button to setup time and date.
4. Use the« MENU» button to exit “Time Setup”.

## 8.2.2 Password Setup

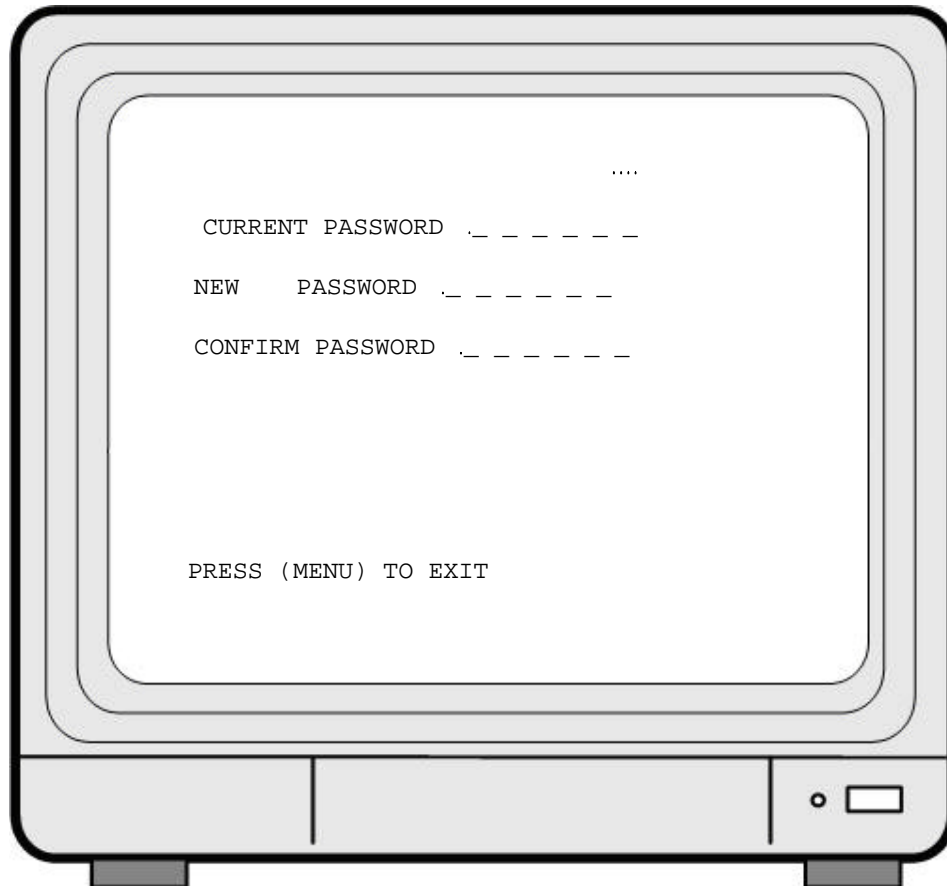


1. Cursor (>) position indicates the current function selected.
2. Use the« ? » and« ? » button to move the cursor to the desired item .
3. Use the« ? » button to make changes.
4. Use the« MENU» button to exit “Password Setup”.
5. When the password is setup to “ON”, user will be requested to enter the 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 the 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 the« ? » 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”.

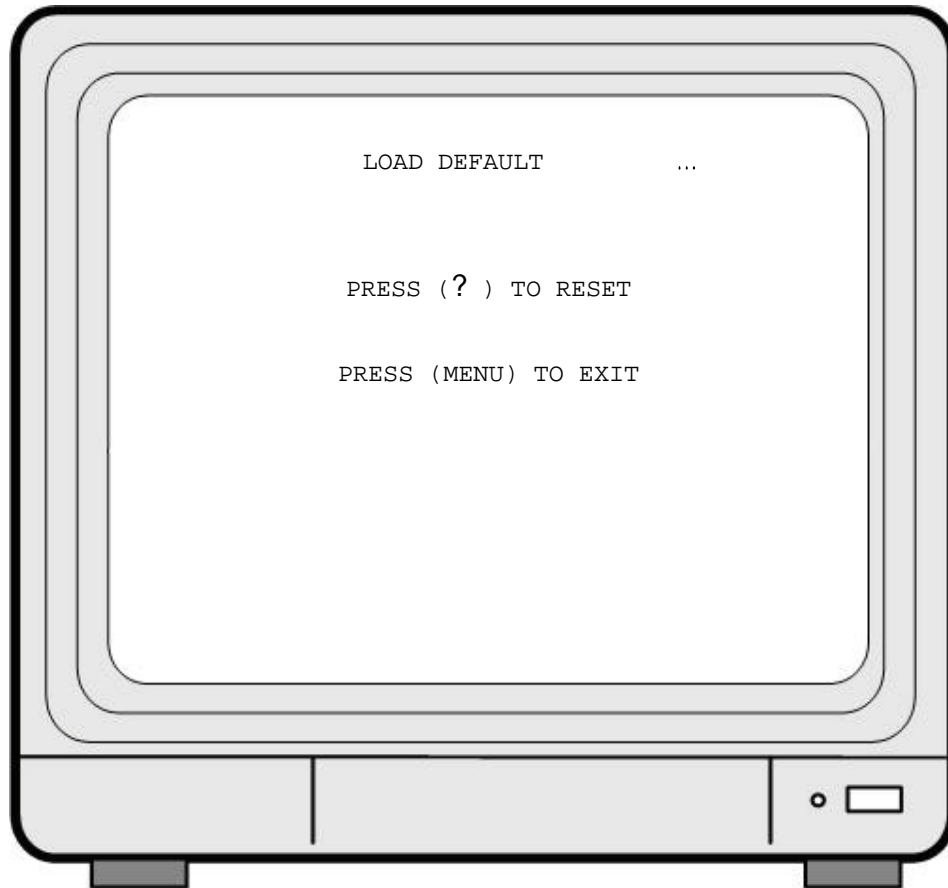
? Default Value: 111111

If password entered is incorrectly, you will receive a message “NO PASSWORD CHANGED” to inform you (message flashes three times) and the

system returns to “Password setup” selection.

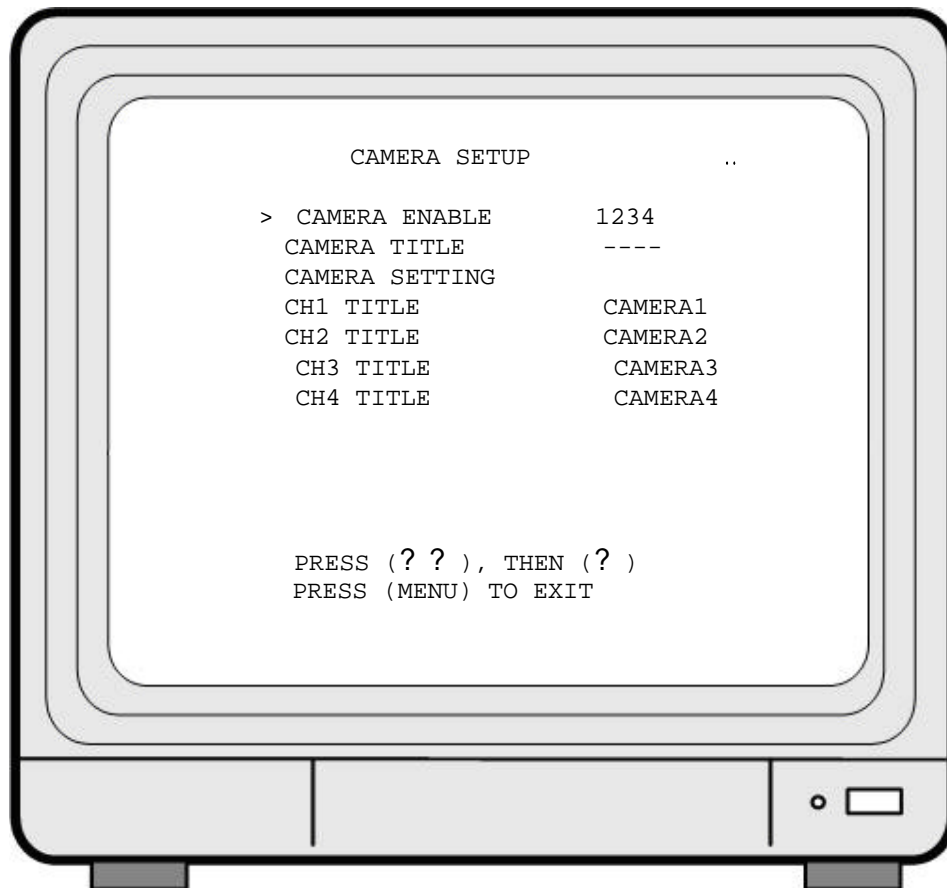
- ? All buttons may be used as a password during password setup, except for the MENU button.

### 8.2.3 Load Default



1. Press the« ? » button to show the display above.
2. Press the« ? » button. The message« ALL SETTING DATA IS INITIALIZED» will be displayed by flashing 3 times, and then returns to default value. When the 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 the« MENU» button to exit “Load Default Setup” selection.

## 8.3 Camera Setup



1. Cursor (>) position indicates the current function selected.
2. Press the« ? » and« ? » button to move the cursor.
3. Press the« ? » button to proceed.
4. Press the« 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 the « ? » or « ? » button to move up and down and « ? » button to change

the camera view combination (select to view the desired channel).

- 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. Titling procedure: “CH1 TITLE”, press « ? » button to show the display

below:

	V
CH1 TITLE	CAMERA1
	12345678

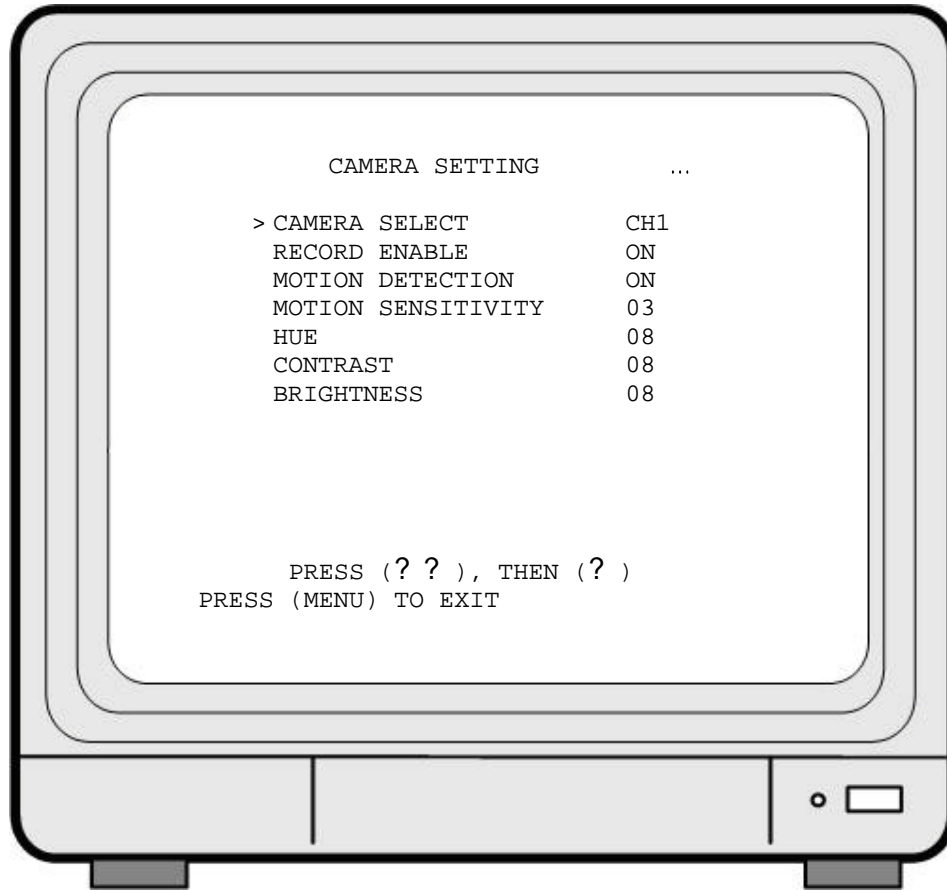
“V” indicates the position of the cursor. Press the « ? » or « ? » button to move the

cursor, and press the « ? » button to change the title (maximum 8 characters).

8. All channel titles are setup using this method.

Once the user formats the hard disk drive, the camera title returns to its default setting (CAMERA1/ CAMERA2/ CAMERA3/ CAMERA4). The camera titling is stored on the hard drive and is erased when the disk is formatted.

### 8.3.1 Camera Setup

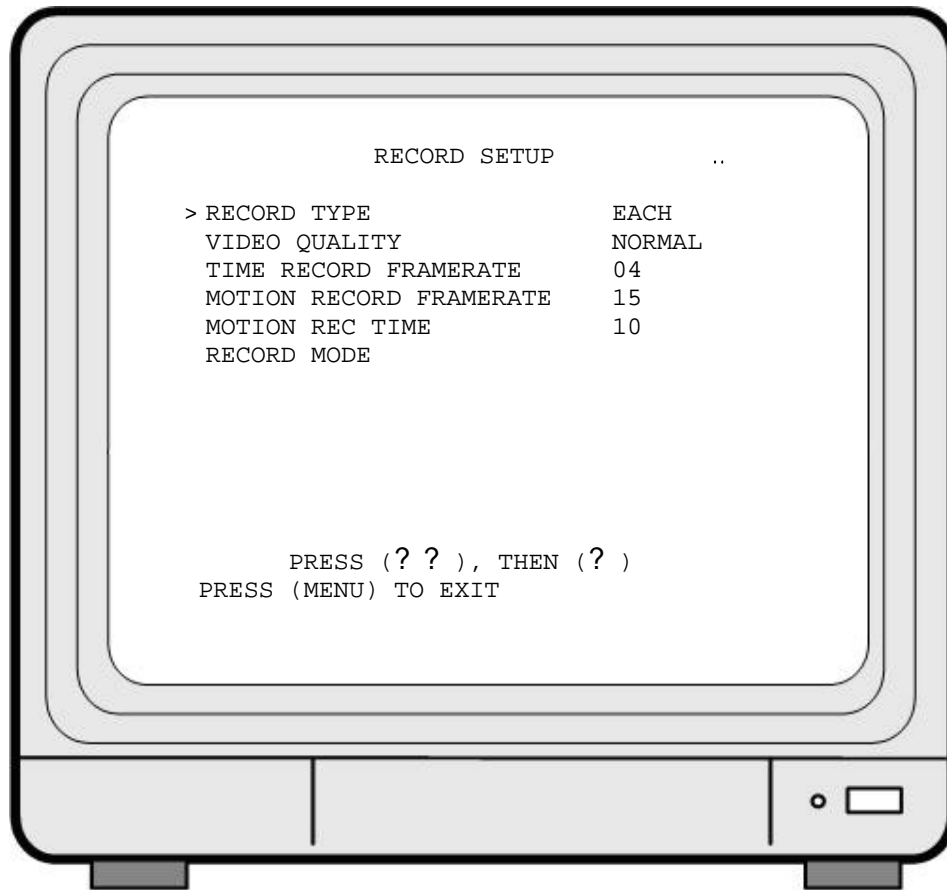


1. Cursor (>) position indicates the current function selected.
2. Press the« ? » and« ? » button to move the cursor to the desired item.
3. Press the« ? » button to make changes.
4. Press the« MENU » button to exit “CAMERA SETUP” selection.
5. CAMERA SELECT: Press the« ? » button to select the desired channel.
6. RECORD ENABLE: Press the« ? » button to switch the channel recording ON/ OFF.
7. MOTION DETECTION: Press the« ? » button to switch the motion detection function ON/ OFF.

8. **MOTION SENSITIVITY:** Press the « ? » button to setup the motion sensitivity rate (5 sensitivity rate values, 01 most sensitive).
9. **HUE:** Press the« ENTER» button to adjust the color of cameras (15 color adjustment values, default value: 08).
10. **CONTRAST:** Press the« ? » button to adjust the camera contrast (15 contrast adjustment values, default value: 08).
11. **BRIGHTNESS:** Press the« ? » 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 the« ? » and« ? » button to move the cursor to the desired item.
3. Use the« ? » button to make changes.
4. Use the« MENU» button to exit “RECORD SETUP” selection.
5. “Record Setup” is located 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 the« ? » button to select between “QUAD” and “EACH” mode.
7. VIDEO QUALITY: Press the« ? » button to select different quality recordings (HIGH/ NORMAL/ LOW).

8. TIME RECORD FRAMERATE: Press the« ? » button to setup the recording speed when “T” mode is setup under schedule record mode.

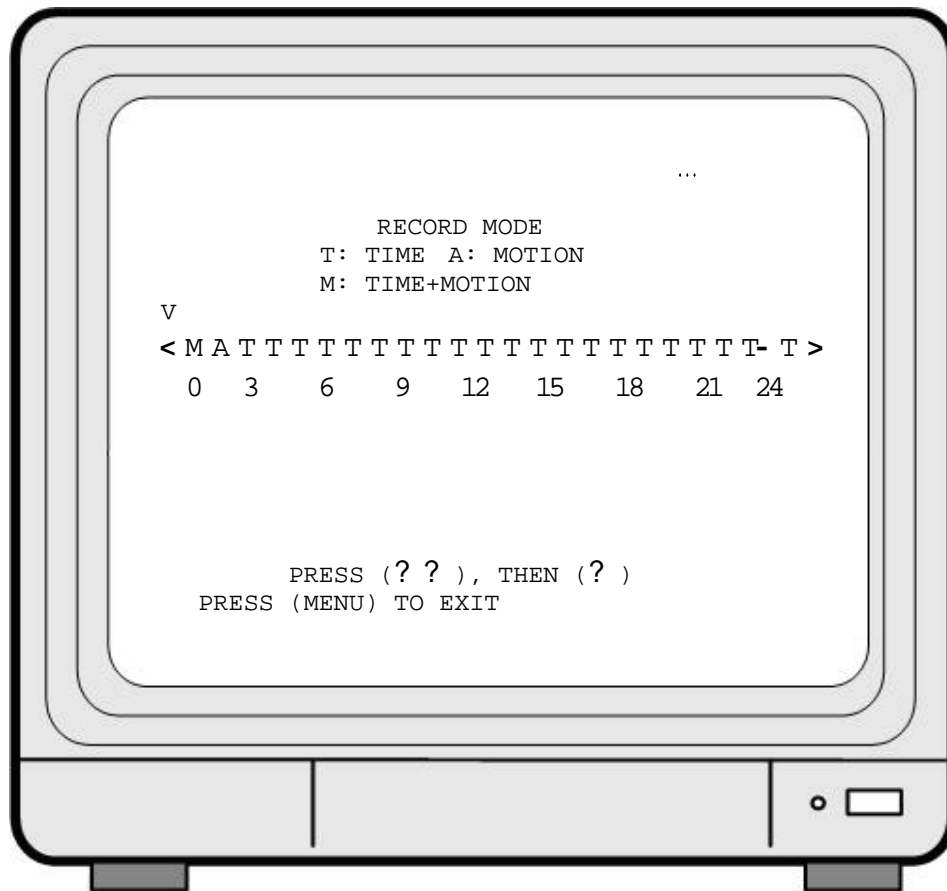
9. MOTION RECORD FRAMERATE: Press the« ? » button to setup different recording speeds per channel, suitable when the recording speed under schedule record mode is setup to “M” (mix) or “A” (motion).

NTSC:30,15,10,7,5,4,3,2,1fps.

PAL :25,12,8,6,4,3,2,1fps.

10. MOTION REC TIME: Press the« ? » button to setup sensor recording time after a sensor device has been triggered (this setup functions is only active when the recording speed under schedule record mode is setup to “A”(Motion)).

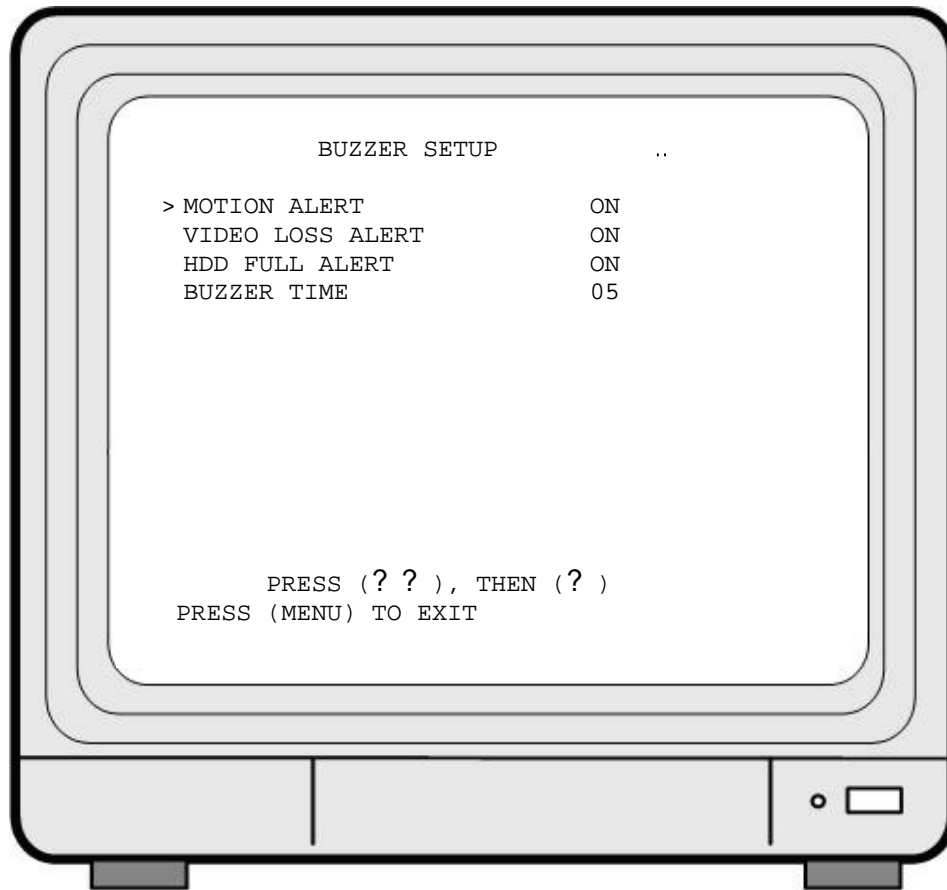
### 8.4.1 RECORD MODE



1. The cursor (V) position indicates the current function selected.
2. Use the« ? » and« ? » button to move the cursor to the desired item (time).
3. Use the« ? » button to make changes.
4. Use the« MENU» button to exit “SECHDULE RECORD MODE” selection.
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”.



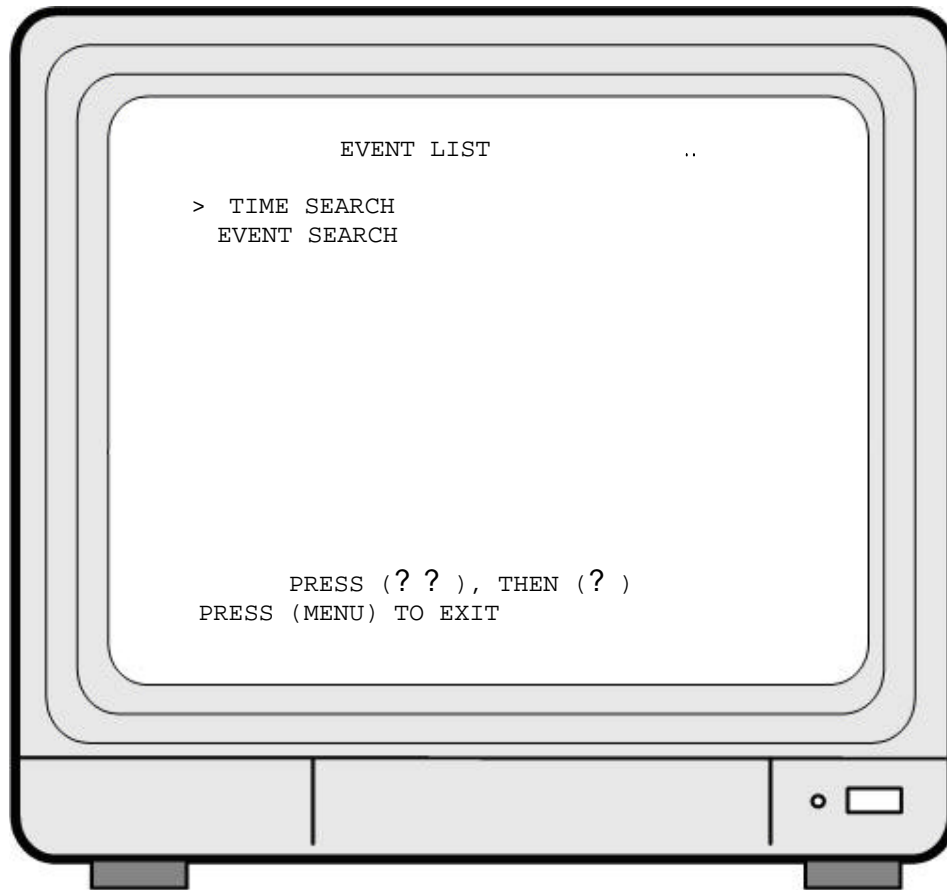
## 8.5 Buzzer Setup



1. Cursor (>) position indicates the current selected position.
2. Press the« ? » and« ? » button to move the cursor to the desired item (time).
3. Press the« ? » button to proceed.
4. Press the« 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 the« ? » 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)).

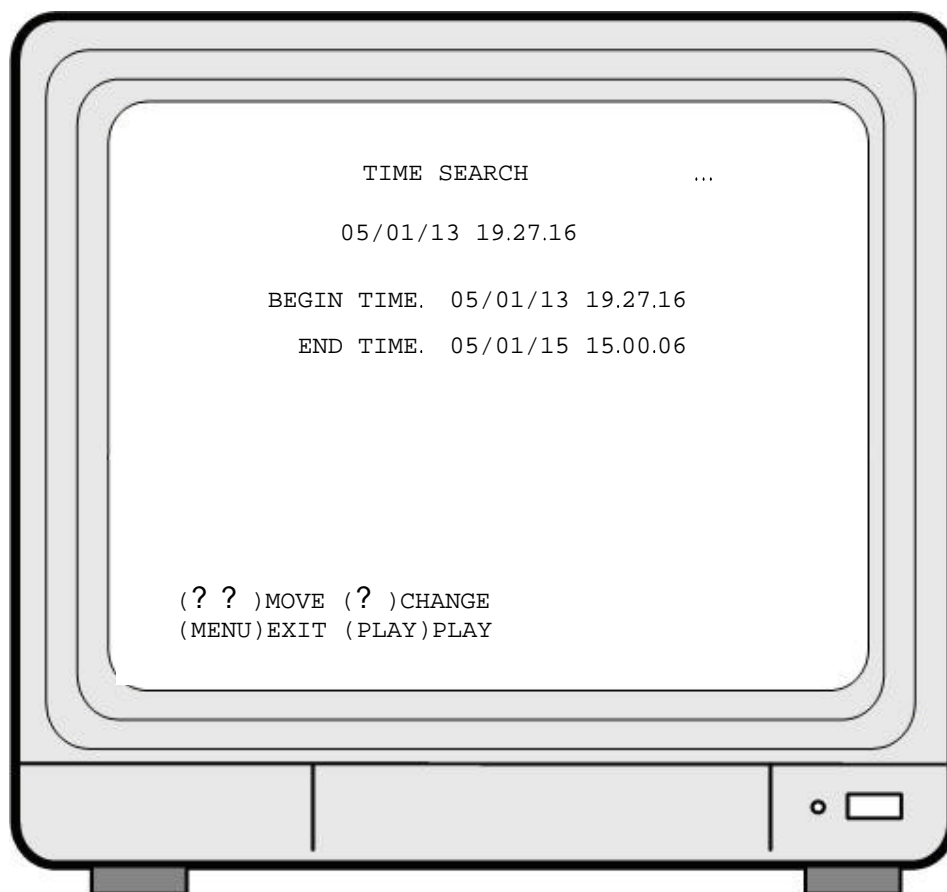
7. VIDEO LOSS ALERT: Press the« ? » button to setup “ON” or “OFF”, whether to trigger the alarm when video loss has been detected (this setup is only active when the system is under record or live status).
8. HDD FULL ALERT: Press the« ? » button to setup “ON” or “OFF”, whether to trigger the alarm when hard disk is full (this setup is only active when the system is in the record mode).
9. BUZZER TIME: Press the« ? » button to setup the buzzer time to continuous (CONT), and press any button to release this function.

## 8.6 Event List



1. The cursor (>) position indicates the current function selected.
2. Press the« ? » and« ? » button to move the cursor to the desired item.
3. Press the« ? » button to proceed.
4. Press the« 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 SEARCH” or “EVENT SEARCH”.

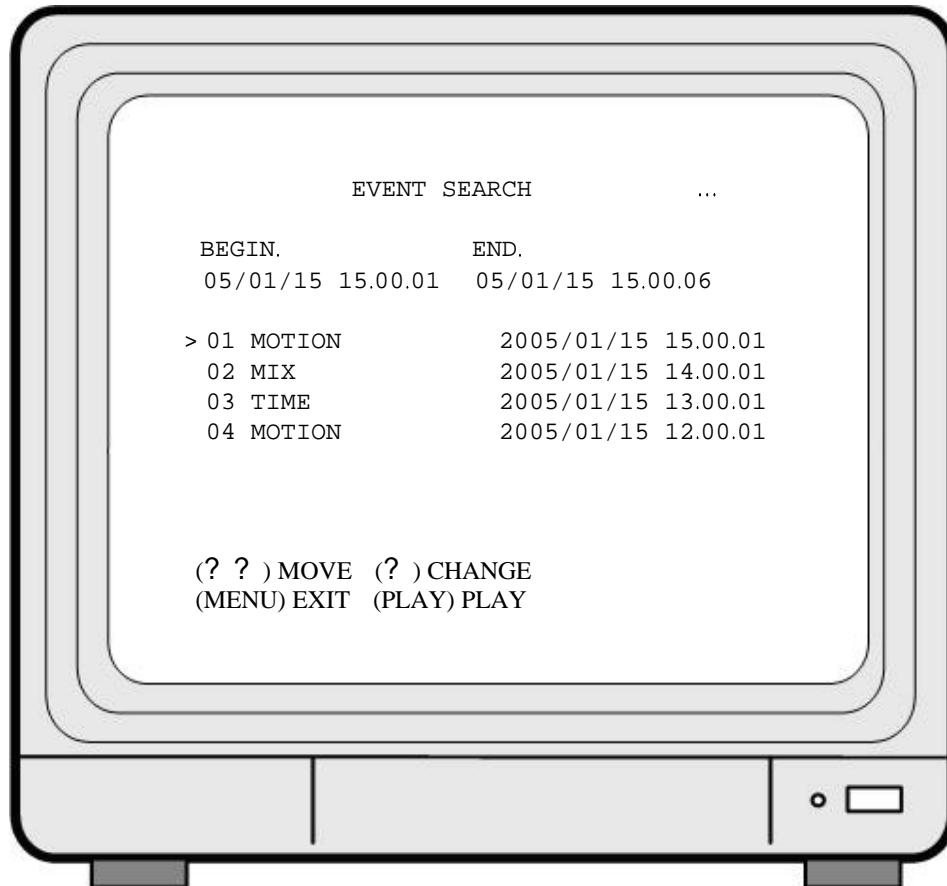
## 8.6.1 TIME SEARCH



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



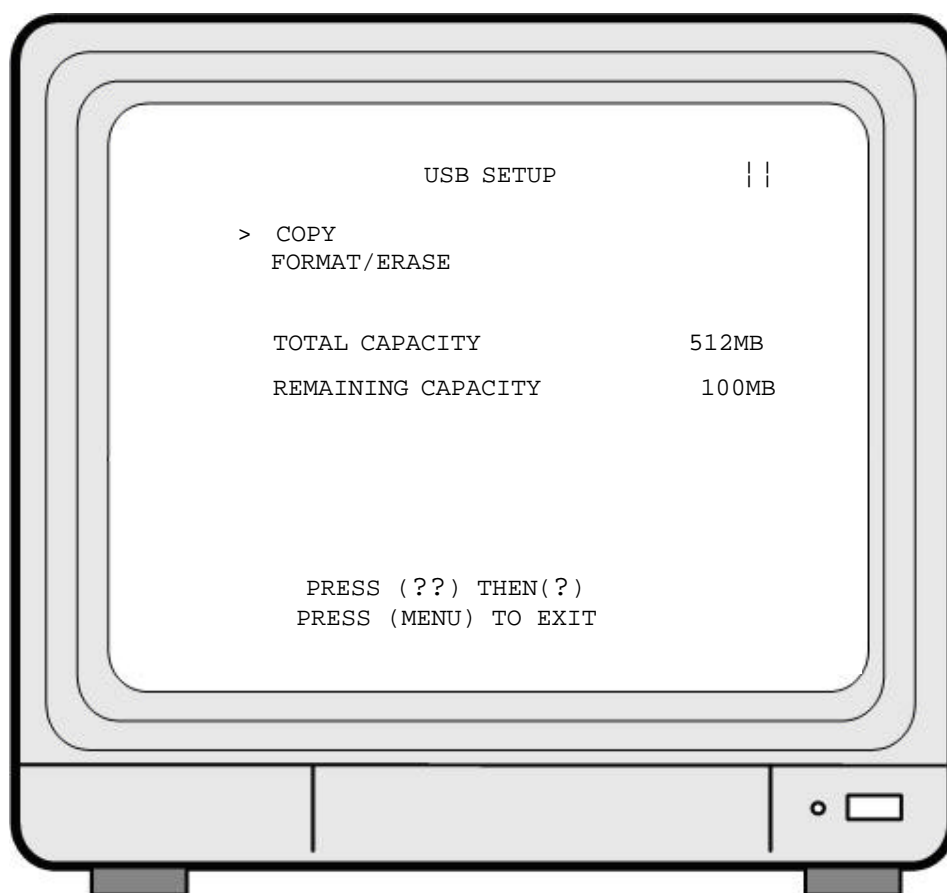
## 8.6.2 EVENT SEARCH



1. EVENT SEARCH: Displays all recording events, every page consists of 7 events, and maximum 63 stored events.
2. Press the« ? » and« ? » button to select the desired event to playback.
3. Press the« MENU» button to exit “EVENT SEARCH” selection.
4. Press the« PLAY» button to play.

? BEGIN: END:  
05/01/15 15: 00: 01 05/01/15 15: 00: 06  
Displays the beginning and end time of each event.

## 8.7 USB SETUP



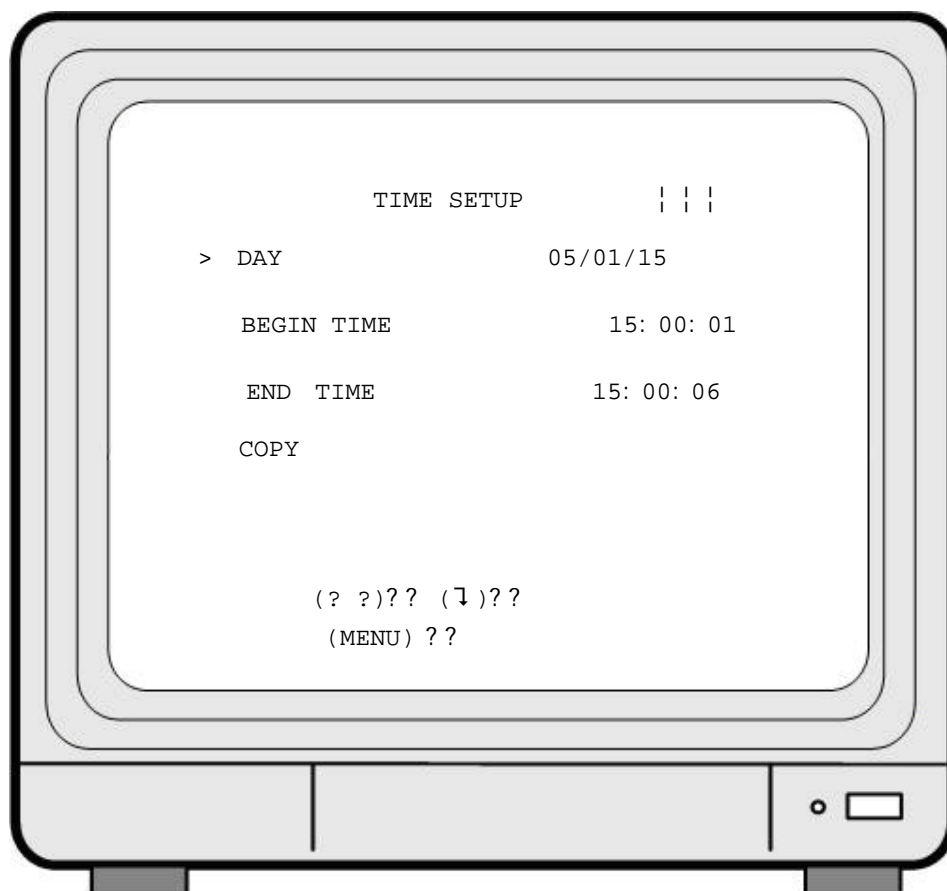
1. The cursor (>) position indicates the current function selected.
2. Press the« ? » and« ? » button to select the desired event to playback.
3. Press the« ? » button to proceed.
4. Press the« MENU» button to exit “CF CARD SETUP” selection.
5. “USB SETUP” is located on the second menu layer. This selection enables user to setup COPY or FORMAT/ERASE functions.
6. TOTAL CAPACITY: Total USB storage capacity.
7. REMAINING CAPACITY: Remaining USB storage capacity.
8. When remaining capacity equals zero: indicates that there is no more space left for storage. Please precede with the FORMAT/ ERASE function. Or put in another USB drive with adequate space.

? When the message “NO USB DEVICE” appears indicates that the USB has not

been detected.

- ? When the 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 use the 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



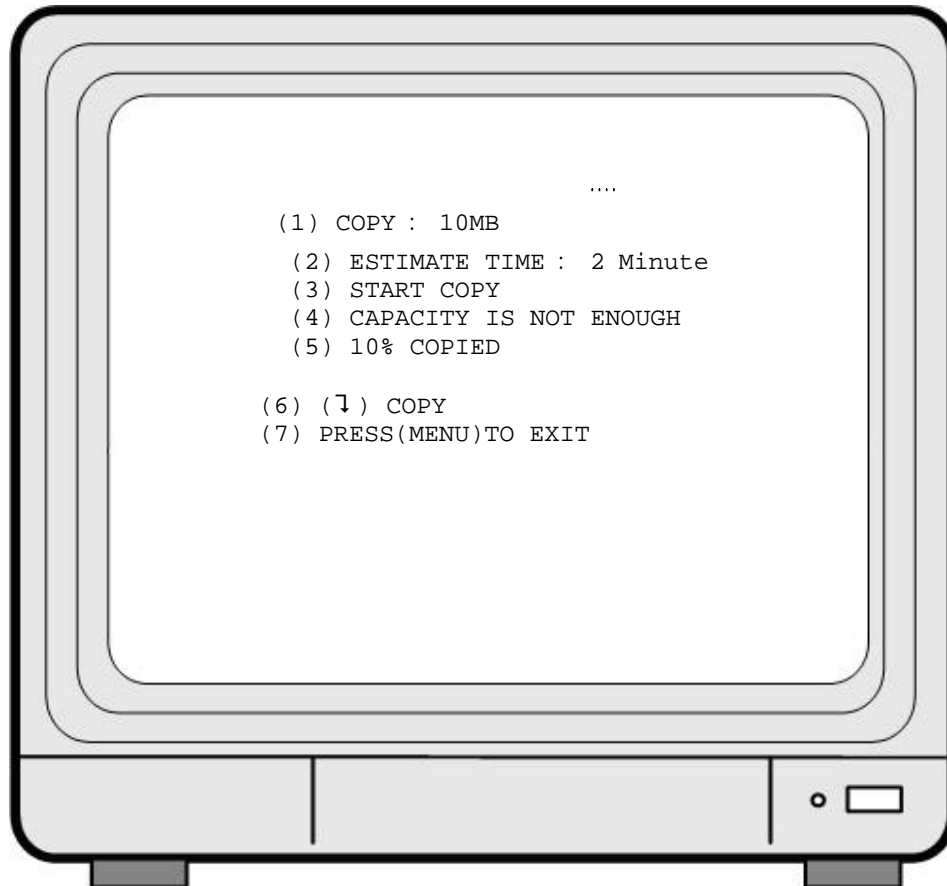
1. Cursor (>) position indicates the current function selected.
2. Press the « ? » and « ? » button to select the desired item.
3. Press the « ↓ » button to setup data copy date and time, or to enable COPY.
4. Press the « MENU » button to exit “COPY” selection.

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

function.

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

### 8.7.1.1 COPY

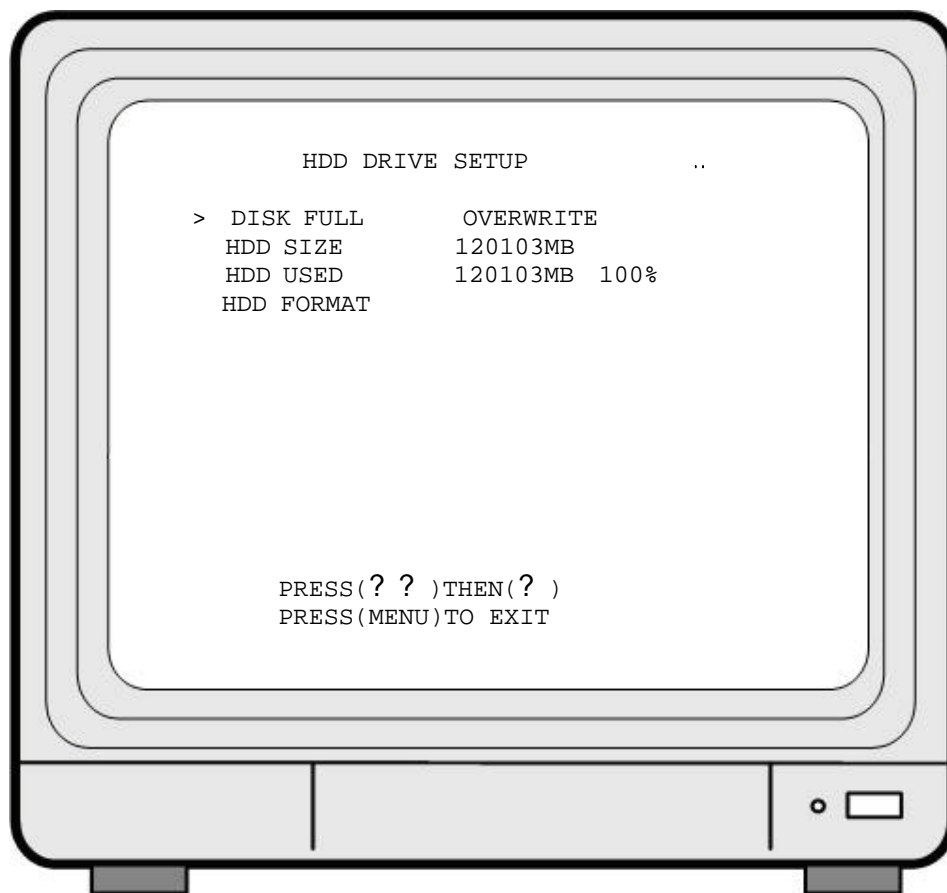


- ( 1) Capacity of the copied data.
- ( 2) Time required to make a data copy.
- ( 3) Request to start data copy.
- ( 4) Message “CAPACITY IS NOT ENOUGH” indicates that the data to be copied exceeds the USB storage capacity available.
- ( 5) Status / percentage complete of COPY process

( 6) Press the« ↵ » button to copy.

( 7) Press the« MENU» button to exit COPY selection.

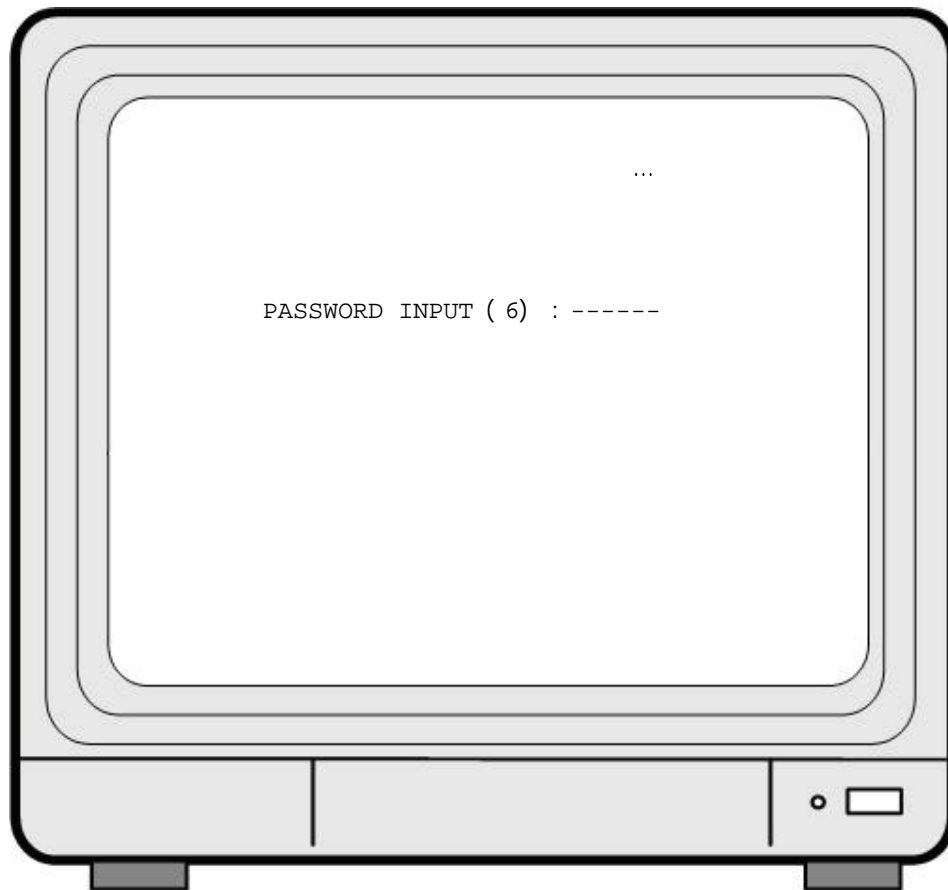
## 8.8 Hard Drive Setup



1. Cursor (>) position indicates the current function selected.
2. Press the« ? » and« ? » button to select the desired item.
3. Press the« ? » button to proceed.

4. Press the« MENU» button to exit “HARD DRIVE SETUP” selection.
  5. “HDD DRIVE SETUP”is located on the second menu layer. Under this menu layer, the user may setup to “OVERWRITE” or “STOP”.
  6. When the item “OVERWRITE” has been selected, press the« ? » 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 with the “FORMAT/ ERASE” function, the above display will be shown.
2. When the password entered is correct, the screen will display the message “PASSWORD CORRECT”, “HDD FORMATED” (flashes 3 times). This indicates hard disk format is successful.
3. When the 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 your local area network (router), and use IPedit.exe to identify and 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

Your system router will serve as a DHCP. This means your router automatically assigns a local IP address to your computer and any network peripherals, such as your DVR.

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

IPEditV3

Camera lists:

LenCamera .....	192 168 10 25
-----------------	---------------

Name	LenCamera
Gateway	192 168 10 254
IP	192 168 10 25
Netmask	255 255 255 0
HTTP Port1	80
HTTP Port2	8888
MAC	00:00:00:00:00:22

Update Submit Exit

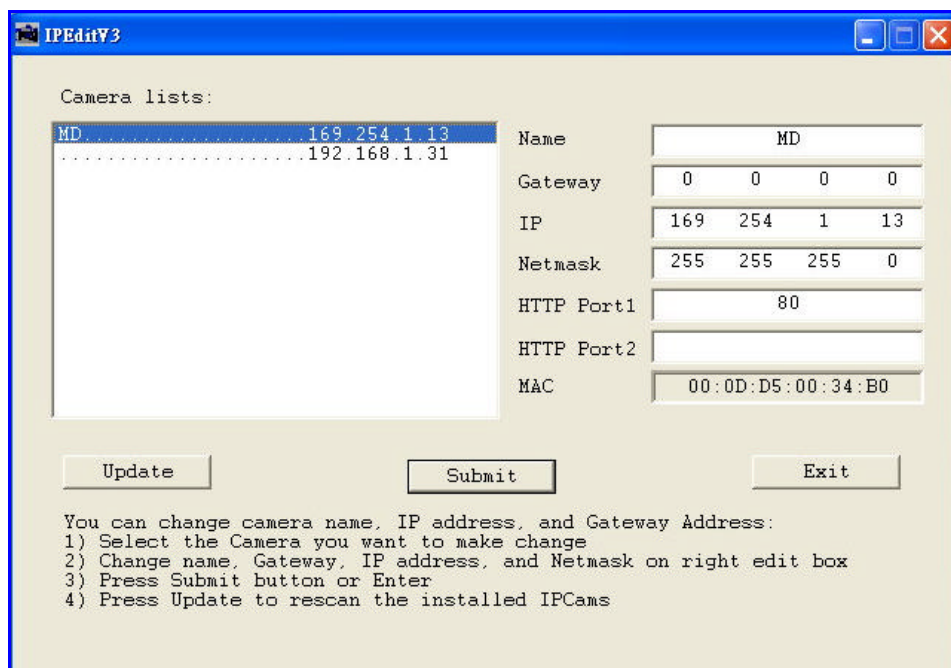
You can change camera name, IP address, and Gateway Address:  
 1) Select the Camera you want to make change  
 2) Change name, Gateway, IP address, and Netmask on right edit box  
 3) Press Submit button or Enter  
 4) Press Update to rescan the installed IPCams

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 the 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. On your PC using windows XP, open the COMMAND PROMPT. It is normally found under PROGRAMS/ACCESSORIES. At the DOS prompt, type ipconfig. to view Gateway, IP, and Netmask setting values. Enter those values. Do not copy the IP address of your computer. Each peripheral on your system must have a unique IP address.



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”.

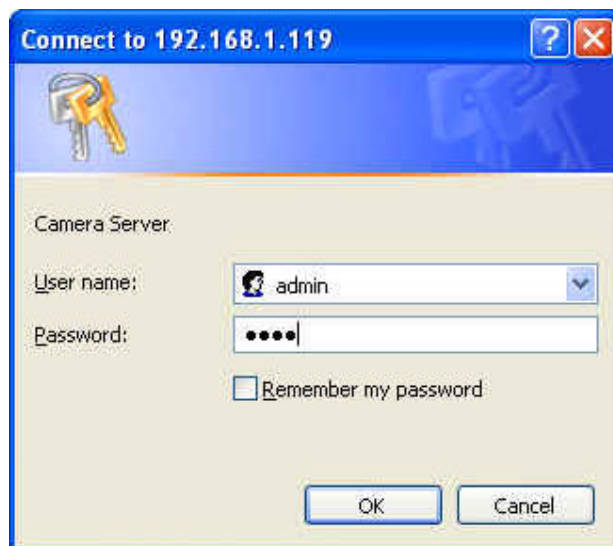
### 9.2.4 Online Connection

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**

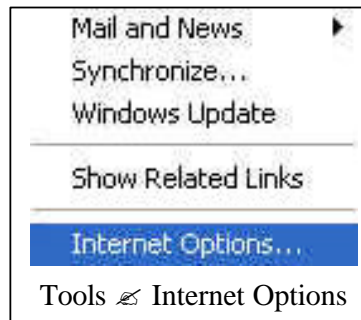
Default Password: **1234**



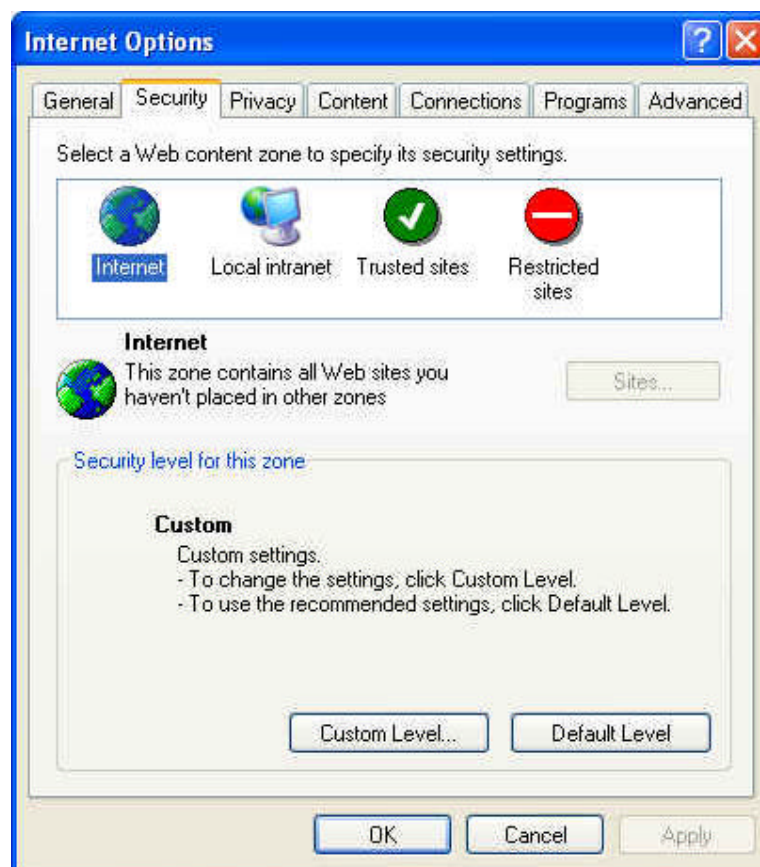
### 9.2.4.1 Install ActiveX

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

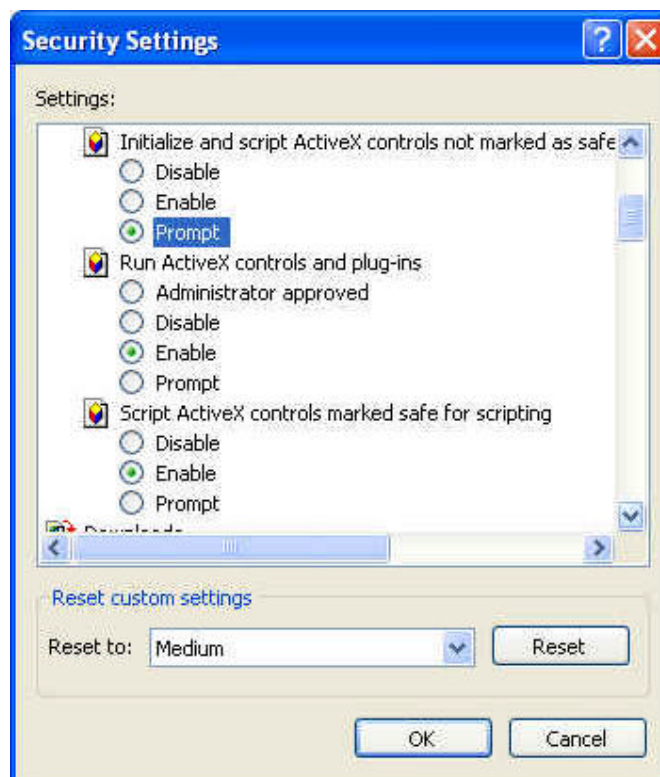
- a. Open Internet Explorer under “Tools”, select “Internet Options”.



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

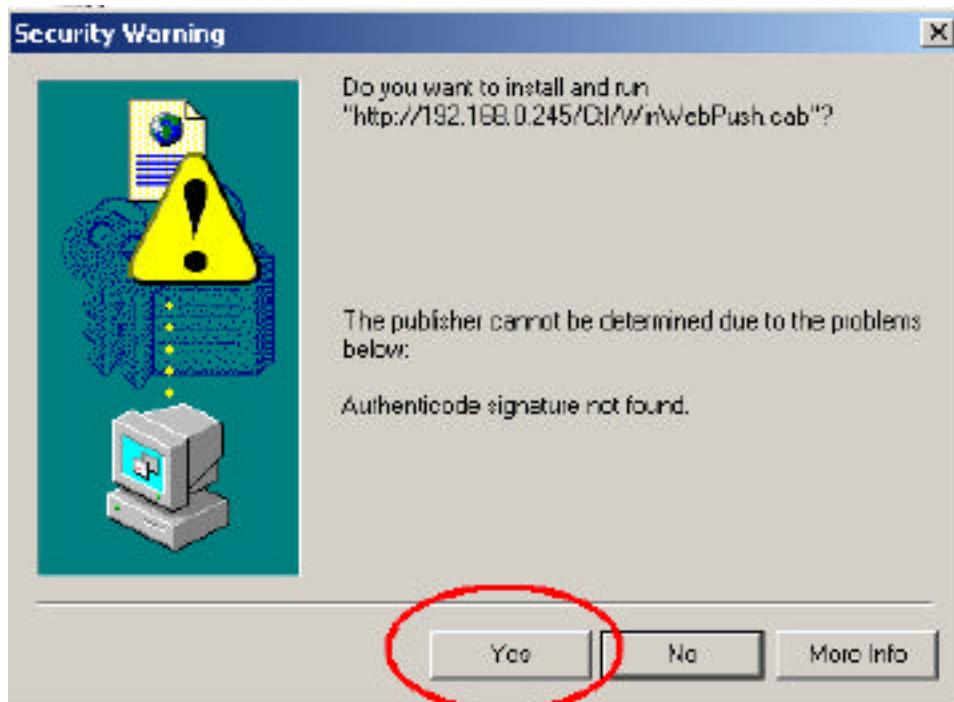


Security -> Custom Level



Start-up ActiveX Control

The message 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

? Live Display

? DVR Control Button

? Video Setup

? 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

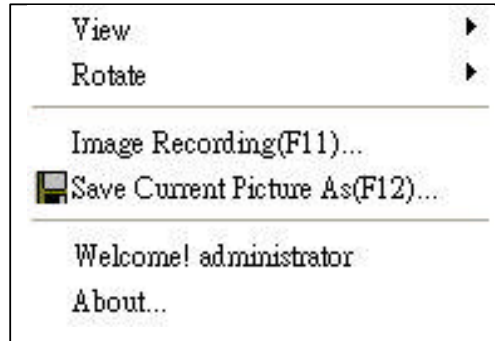
Save Current Picture/ Save the current image

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”.

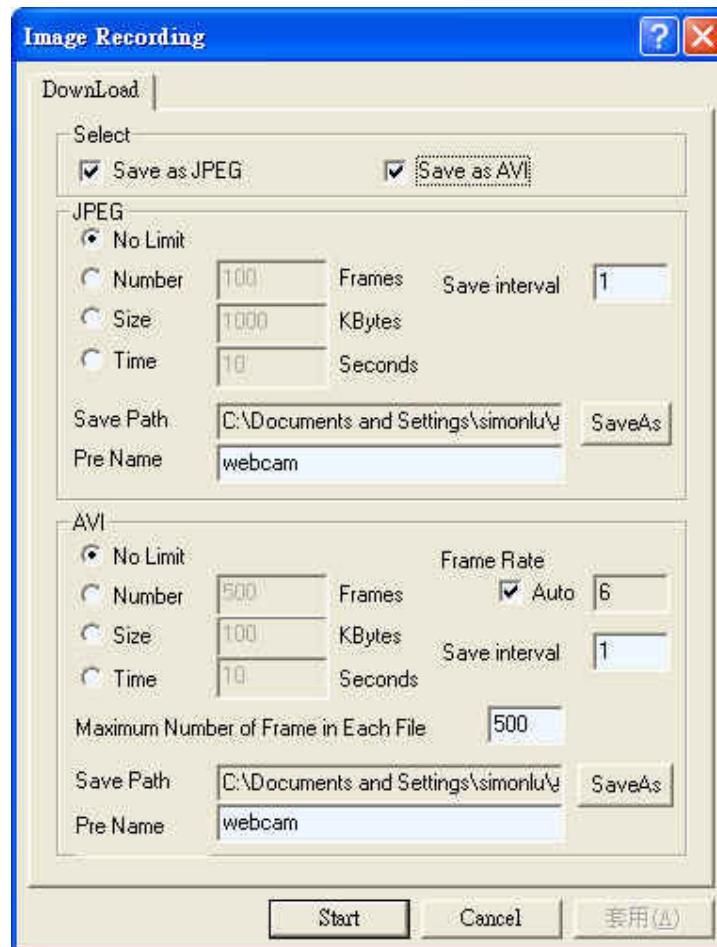
Time: Image storage according to “time”.

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

Users

Network

DDns

System Setting

HTTP Port

Port 180

Port 20

OK

Reboot DVR browser

Firmware update

Restore factory default configuration

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

System	Users	Network	DDns
--------	-------	---------	------

Users Setting  
 Authorization  
  
 New user / Change Password  
  
 Delete User  
  
 Current Users

☒ Needed   ☐ No Need

Username:

Password:

Confirm:

Username: jann

0:jann  
 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' window. On the left is a sidebar with 'Lan Setting' and 'DNS'. The main area has two radio buttons: 'Manually' (selected) and 'Automatically by DHCP'. Under 'Manually', there are three input fields: 'IP Address' with '192.168.1.31', 'Subnet Mask' with '255.255.255.0', and 'Default Gateway' with '192.168.1.254'. Under 'Automatically by DHCP', there are three 'DNS' fields, each with '0.0.0.0'. An 'OK' button is located at the bottom right of the main area.

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.

1

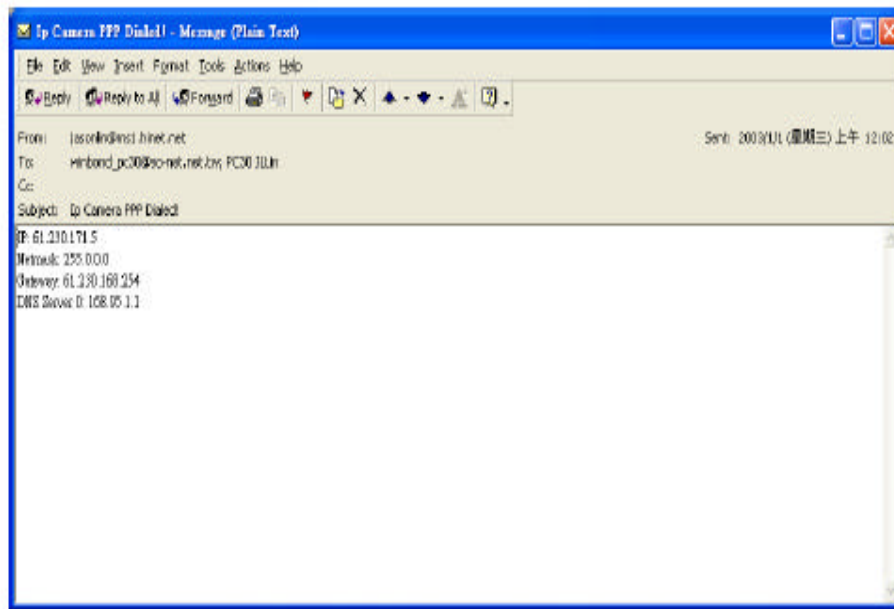
2

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

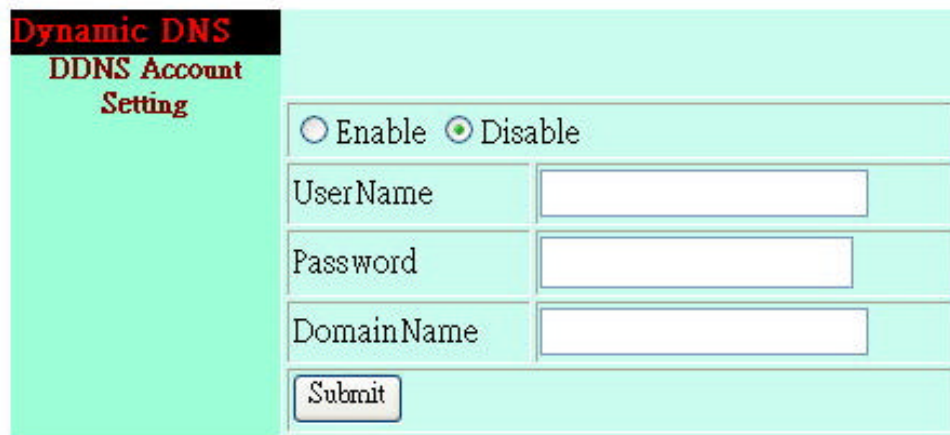
#### 9.4.4 DDNS Setting

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 a DDNS Server: <http://www.dyndns.org>.

DDNS = **D**ynamic **D**omain **N**ame **S**erver

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”.



Dynamic DNS DDNS Account Setting	
<input type="radio"/> Enable <input checked="" type="radio"/> Disable	
UserName	<input type="text"/>
Password	<input type="text"/>
DomainName	<input type="text"/>
<input type="button" value="Submit"/>	

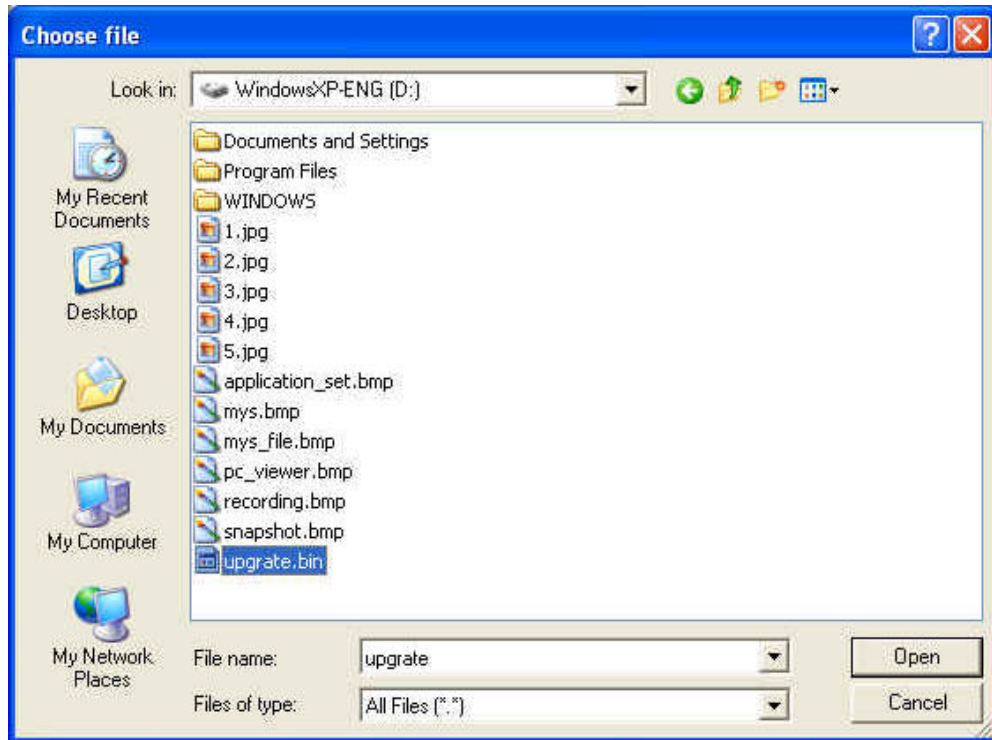
DDNS Setting

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 the user uses PC Player Software, it will auto create a directory “\_config”, the purpose is to store all the parameters setup is 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 than PC Player software.

### 3. Software Playback Interface Description

#### A. User Interface

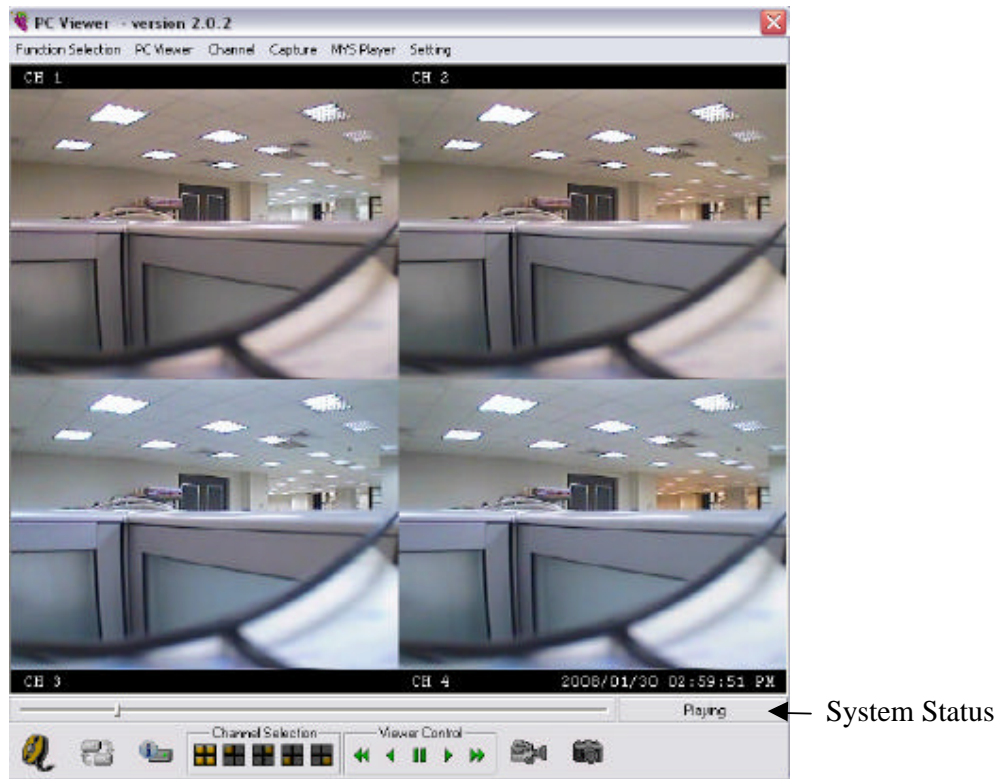

















Figure 1

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

-  : Fast Rewind
-  : Rewind
-  : Pause Playback
-  : Forward
-  : Fast Forward
-  : Quad split screen display
-  : CH1 Full Screen Display
-  : CH2 Full Screen Display
-  : CH3 Full Screen Display
-  : CH4 Full Screen Display
-  : Click “Pause” button first before clicking “” button to capture images as BMP file, graphic (shown on “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 on “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.

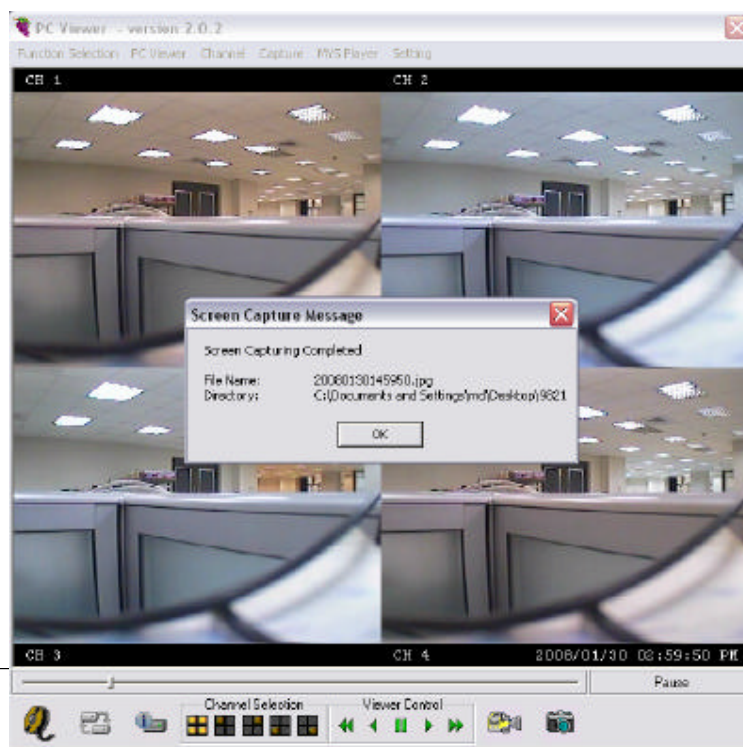


Figure 2

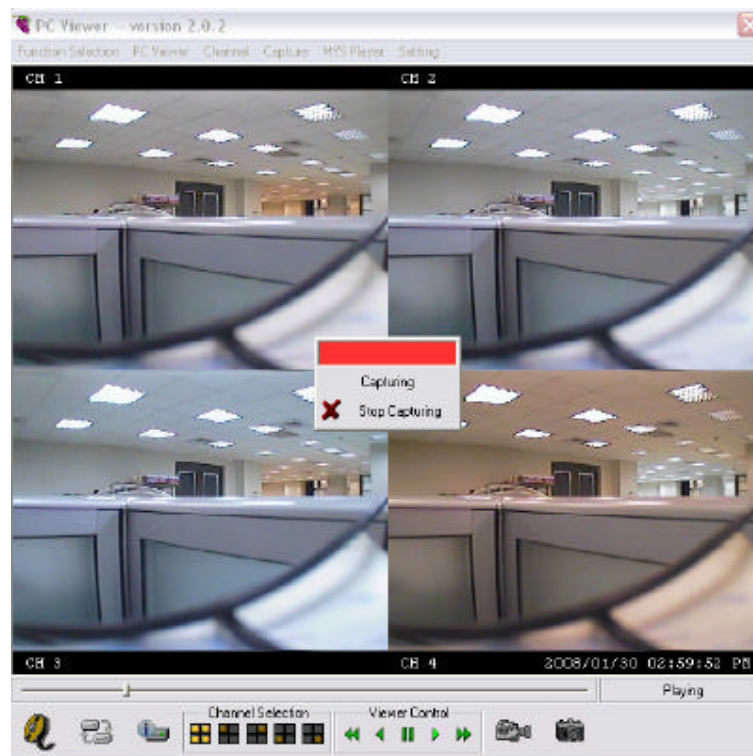


Figure 3

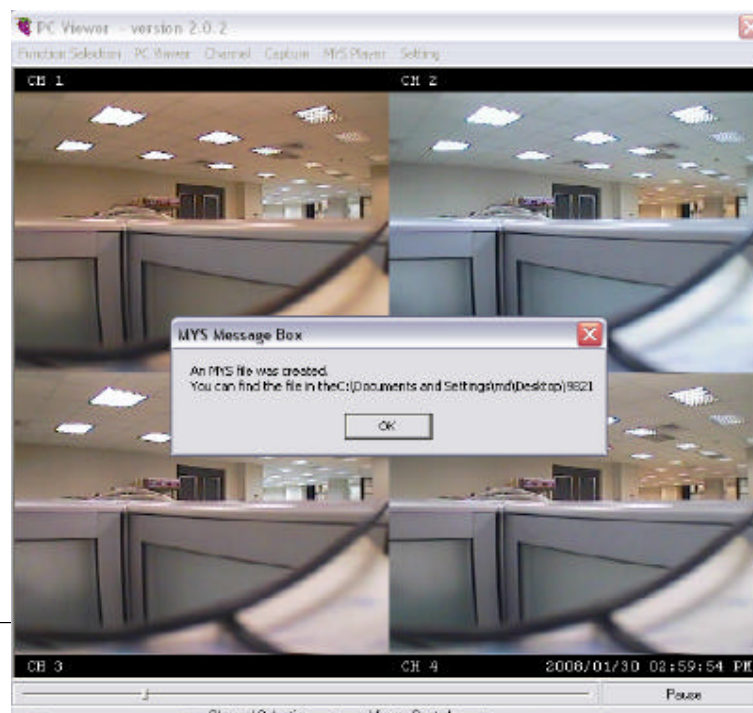


Figure 4

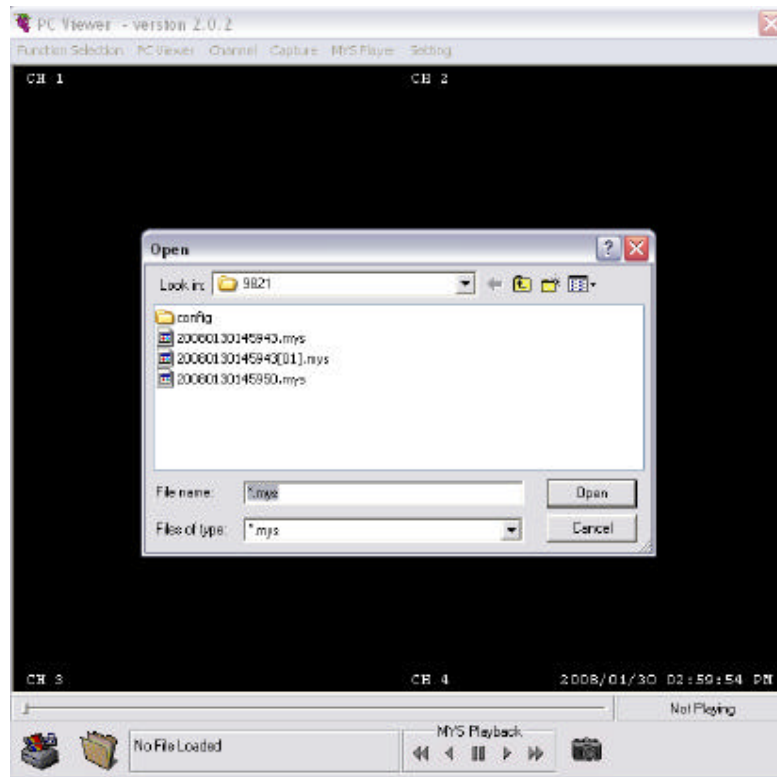


Figure 5



## 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:

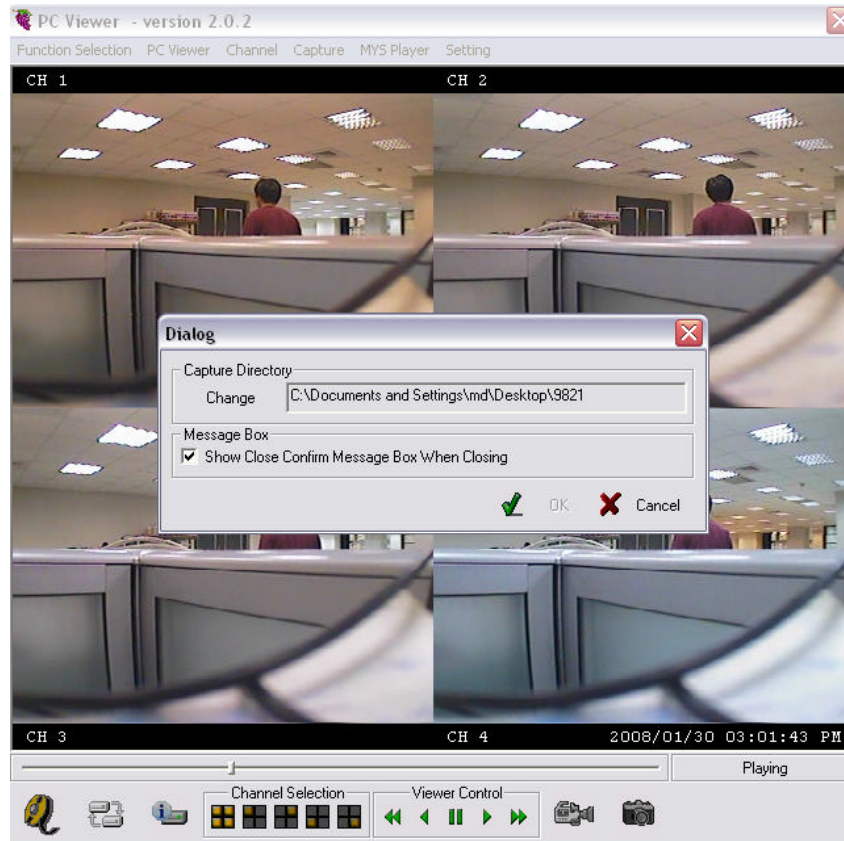


Figure 6

## 12. SPECIFICATIONS

Video	Format	NTSC/EIA or PAL/CCIR
	Compression	M-JPEG
	Input	4CH, BNC
	Output	1 x BNC
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		1~60sec
Search Method		By Date, Time, Event
Network (optional)		10/100BaseT Ethernet(RJ45)
Backup Device		HDD, USB
Power Supply		DC 12V 2.5A
Weight		2.59 kg (without HDD)
Dimension (W*H*D)		195mm x45mm x 226mm
Operating Environment		30 ~ 80% RH, 5? C ~ 40? C (40? F ~ 104? F)



# MEMO

**Customer Support 1-800-774-0284**