

# 4-CHANNEL NETWORK TRIPLEX DIGITAL VIDEO RECORDER with VGA Output

## Instruction Manual

English Version1.0



**MODEL:**  
**DXR4300 Series**  
**4 Channel Network DVR**



[www.lorexcctv.com](http://www.lorexcctv.com)

Copyright © 2005 Strategic Vista International Inc.

The DVR converts analog video into digital format and records them on a removable hard disk drive. Digital video allows you to quickly access and search for a specific time segment or event which has been recorded. This system features three different quality settings providing recording capability depending on your hard drive unit.

To learn more about this system or to find out more about our products available, please visit our website at : [www.lorexctv.com](http://www.lorexctv.com)



**CAUTION!** TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

**Explanation of two Symbols**



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



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

THE GRAPHIC SYMBOLS WITH SUPPLEMENTAL MARKING ARE ON THE BOTTOM OF THE SYSTEM.

“WARNING – TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE”

## **NOTE**

This equipment has been certified and found to comply with the limits regulated by FCC, EMC and LVD. Therefore, it is designed to provide reasonable protection against interference and will not cause interference with other appliance usage. However, it is imperative that user follows this manual's guidelines to avoid improper usage which may result in damage to the unit, electrical shock and fire hazard or injury.

In order to improve the feature functions and quality of this product, the specifications are subject to change without notice from time to time

## **FCC CLASS B NOTICE**

### **Note :**

This equipment has been tested and found to comply with the limits For a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, (which can be determined by turning the equipment off and on), the user is encouraged to try to correct the interference by one or more of the following measures:

- Increase the separation between the equipment and the camera and/or monitor.
- Connect the equipment into an outlet on a circuit different from that to which the DVR is connected.
- Consult the dealer or an experienced radio or television technician for help.

# CONTENTS

1	GENERAL PRECAUTIONS .....	1
2	CAUTIONS AND DVR FEATURES .....	3
3	SYSTEM INCLUDES: .....	5
4	GETTING STARTED.....	6
5	DESCRIPTION OF PARTS AND FUNCTIONS .....	8
5.1	FRONT PANEL .....	8
5.2	BACK PANEL.....	15
6	MAIN MENU.....	17
6.1	THE MAIN MENU SETTINGS.....	19
7	PB SET/REC HDD SET .....	26
8	PLAYBACK OPTION .....	27
8.1	FAST REWIND AND FAST FORWARD .....	27
8.2	MULTIPLEXING FUNCTION IN PLAYBACK.....	27
9	THE MASTER & SLAVE HDD .....	27
10	PAN / TILT ZOOM : .....	28
11	REMOTE CONTROL .....	29
12	CAMERA INSTALLATION .....	30
13	PAN/TILT CAMERA INSTALLATION.....	30
14	MONITOR & STANDARD VCR/ INSTALLATION .....	31
15	CONNECT A TYPICAL LOREX MONITOR.....	32
16	NETWORK, ALARM & COMPUTER INSTALLATION .....	33
17	NETWORK IMAGE SIZE & SPEED.....	34
18	RECORDING TIME (IN HOURS).....	35
19	RECORDING TIME (Gigabytes per hour).....	36
20	INSTALLING THE MASTER HDD .....	37
21	THE NETVIEWER SOFTWARE .....	40
21.1	INTRODUCTION.....	40
21.2	INSTALLING THE NETVIEWER IN YOUR PC.....	41
22	SETUP CAMERA FOR REMOTE VIEWING .....	44
22.1	NETWORK CONFIGURATION SETTINGS.....	44
22.2	VIEWING THE CAMERAS.....	45
22.3	NETWORK CONFIGURATION.....	46
23	TECHNICAL SPECIFICATIONS .....	54
24	TROUBLE SHOOTING .....	55
25	CARE AND MAINTENANCE.....	56

# 1 GENERAL PRECAUTIONS

## **Read Instructions**

All of the safety and operating instructions should be read and understood before the product is used.

## **Retain Instructions**

The safety and operating instructions should be retained for future reference.

## **Heed Warnings**

All warnings on the product and the instruction manual should be followed.

## **Follow Instructions**

All operating and usage instructions should be followed for optimal performance

## **Cleaning**

Disconnect this video product from the power supply before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

## **Attachments**

Do not use attachments not recommended by the video product manufacturer as they may cause hazards.

## **Water and Moisture**

Do not use this product near water - for example, near a bathtub, wash bowl, kitchen sink, wet basement, or near a swimming pool.

## **Accessories**

Use this product only with a stand, tripod, bracket or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions.

## **Ventilation**

This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation, such as a book case or rack, unless proper ventilation is provided or the Manufacturer's instructions have been adhered to.

## **Power Source**

This product should be operated from the type of Power source indicated by the marking label. If you are not sure of the type of power supply to your location, consult your product dealer or your local Power Company.

## **Power Cord Protection**

Power supply cords should not be routed so that they are likely to be walked or pinched by items placed on or near them.

## **Lightning**

For added protection, unplug this product from its outlet during a lightning storm. This will prevent damage to the video product due to lightning and power surges.

**Overloading**

To avoid the risk of fire and electric shock, do not plug this product into an over- loaded power supply.

**Object and Liquid Entry**

Never push objects into the openings of this product as they may touch dangerous voltage points that may result in fire or electric shock. Never spill a liquid of any kind on this product.

**Servicing**

Do not attempt to service this product yourself as opening or removing covers may expose you to voltage or other hazards. Refer all servicing to qualified service personnel.

**Damage Requiring Service**

Disconnect this product from the power supply and refer servicing to qualified service personnel under the following conditions:

- a. When the power supply cord or plug is damaged
- b. If objects have fallen into the product
- c. If the product has been exposed to rain or liquids
- d. If the product does not operate normally by following the instruction manual. Adjust only the controls that are covered in the instruction manual as an improper adjustment may result in damage and will often require extensive work by a qualified service technician to restore the product to its normal operation
- e. If the product has been dropped or the cabinet has been damaged
- f. When the product displays a distinct change in performance - this indicates a need for service

**Replacement Parts**

When replacement parts are required, be sure the technician uses replacement parts specified by the manufacturer. Unauthorized substitutions may result in fire, electric shock, or other hazards.

**Safety Check**

Upon completion of any service to this product ask the service technician to perform safety checks to determine that the product is in proper working condition.

**Grounding or Polarization**

This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin and will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

### **Power Lines**

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

### **Wall or Ceiling Mounting**

The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

### **Heat**

The product should be situated away from heat such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

## **2 CAUTIONS AND DVR FEATURES**

1. All the warnings and instructions of this manual should be followed.
2. Remove the plug from the outlet before cleaning. Do not use liquid aerosol detergents. Use water damped cloth for cleaning
3. Do not use this unit in very humid and wet places
4. Keep enough space around the unit for ventilation. Slots and openings of the cabinet should not be blocked.
5. During flashes of lightning or cracks of thunder, or when the system is not used for a long time, unplug the system power supply and disconnect the antenna and cables to protect the unit from lightening or power surges.

### **DVR FEATURES**

- 4 Video inputs: 4 BNC inputs (looping operation).
- Video outputs : - 2 Composite outputs
- VGA option available (PC monitor)
- USB Port for USB Memory Key Interface: USB port for backup.
- Network (TCP/IP) supports.
- RS-232C communication port.
- Internal 2 HDD: 1 internal & 1 removable.
- Optional 3.5" TFT LCD for Front Cover
- Display Resolution : 720 x 480 pixels
- Record Resolution : 720 x 224 pixels
- High Quality Picture with M-JPEG Compression Format (15~50Kbyte/Field)
- 3 Adjustable Video Quality Settings
- 4 Recording modes: Manual / Alarm / Motion / Timer
- Display Frame: 30 frames/sec

- Recording Speed: 60 fields/sec
- Security password protection
- On Screen Display and Real Time Clock Function
- Remote Control as well as Main Panel operation
- Supports 20 ~300 GB HDD
- Quick Multiple Search capability
- Viewing options: Quad, Sequential, PIP, Full Screen
- Supports Pan/Tilt control (Pelco D Protocol): Channel 1 only.
- Alarm terminal block
- Triplex Mode ( Live mode, Playback mode, Recording mode )
- Firmware Update Function (via USB connection)

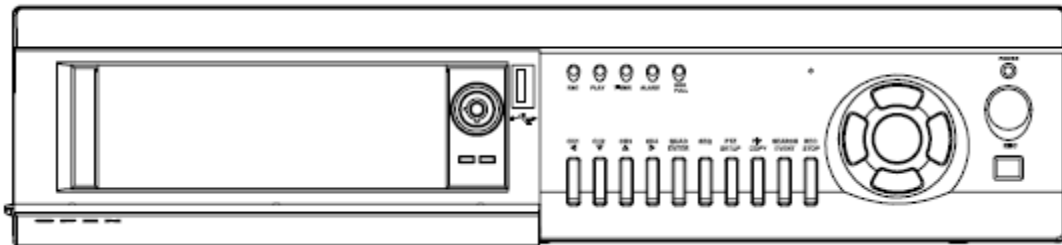
<b>Note: <i>MINIMUM SYSTEM REQUIREMENTS FOR NETWORK USE</i></b>
---

1. **CPU: SPEED SHOULD BE 1.0GHZ or more**
2. **RAM: 256 MB RAM or more**
3. **Operating System: Windows 98/ 2000/ XP**
4. **Videocard (stand alone): 32 MB**
5. **Hard Disk:10 MB (free space for software installation)**
6. **Network card: 10 base T**



### 3 SYSTEM INCLUDES:

- (1) 4 CHANNEL DVR
- Optional (1) HDD, 20~300 GB
- (2) KEYS FOR CARTRIDGE
- (4) CABLES
- (1) POWER ADAPTER AND CORD
- (1) OWNER'S MANUAL
- (1) NETVIEWER SOFTWARE CD



**4 CHANNEL DVR**



Your system may include a HDD with a capacity between 20 ~ 300 GB (HDD) depending on the system you purchased.



**2 KEYS FOR  
CARTRIDGE**



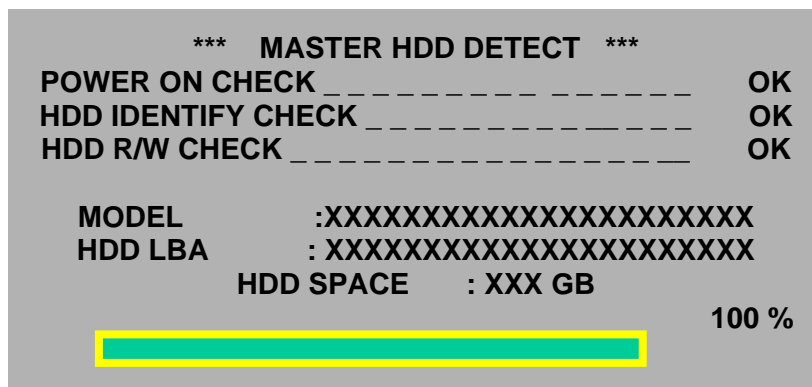
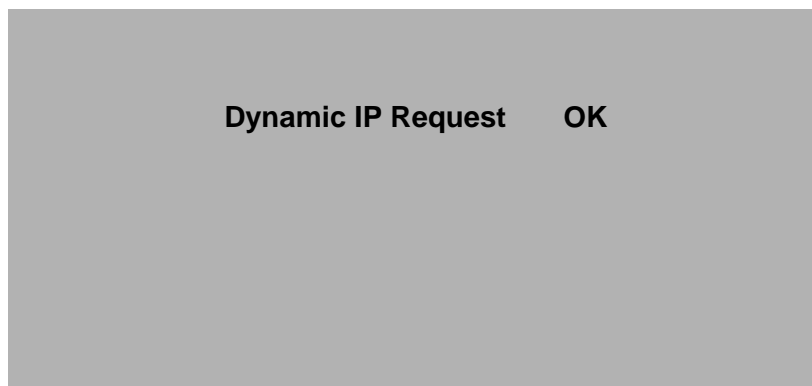
**OWNER'S  
MANUAL**

**SOFTWARE  
CD**

CHECK YOUR PACKAGE TO MAKE SURE THAT YOU RECEIVED THE COMPLETE SYSTEM, INCLUDING THE COMPONENTS SHOWN ABOVE.

## 4 GETTING STARTED

1. Connect the AC Power Cord to the Power Adapter and plug it into an electrical outlet.
2. Connect up to 4 cameras to the BNC video inputs on the back of the DVR.
3. Plug in the power adapter to the back panel. The Red LED indicator will illuminate and the DVR will be in the standby mode
4. The following messages appear when the power is ON successfully.



**Note:** The system is only checking for a MASTER HDD. Install the Slave HDD onto the DVR (if using a Slave HDD), set up the Slave HDD in the MAIN MENU CONTROL settings and restart the DVR.

**Note:** If the HDD is not properly connected a FAIL message appears. Try reconnecting the HDD and turn on the power.

\*\*\* NETWORK INFORMATION \*\*\*

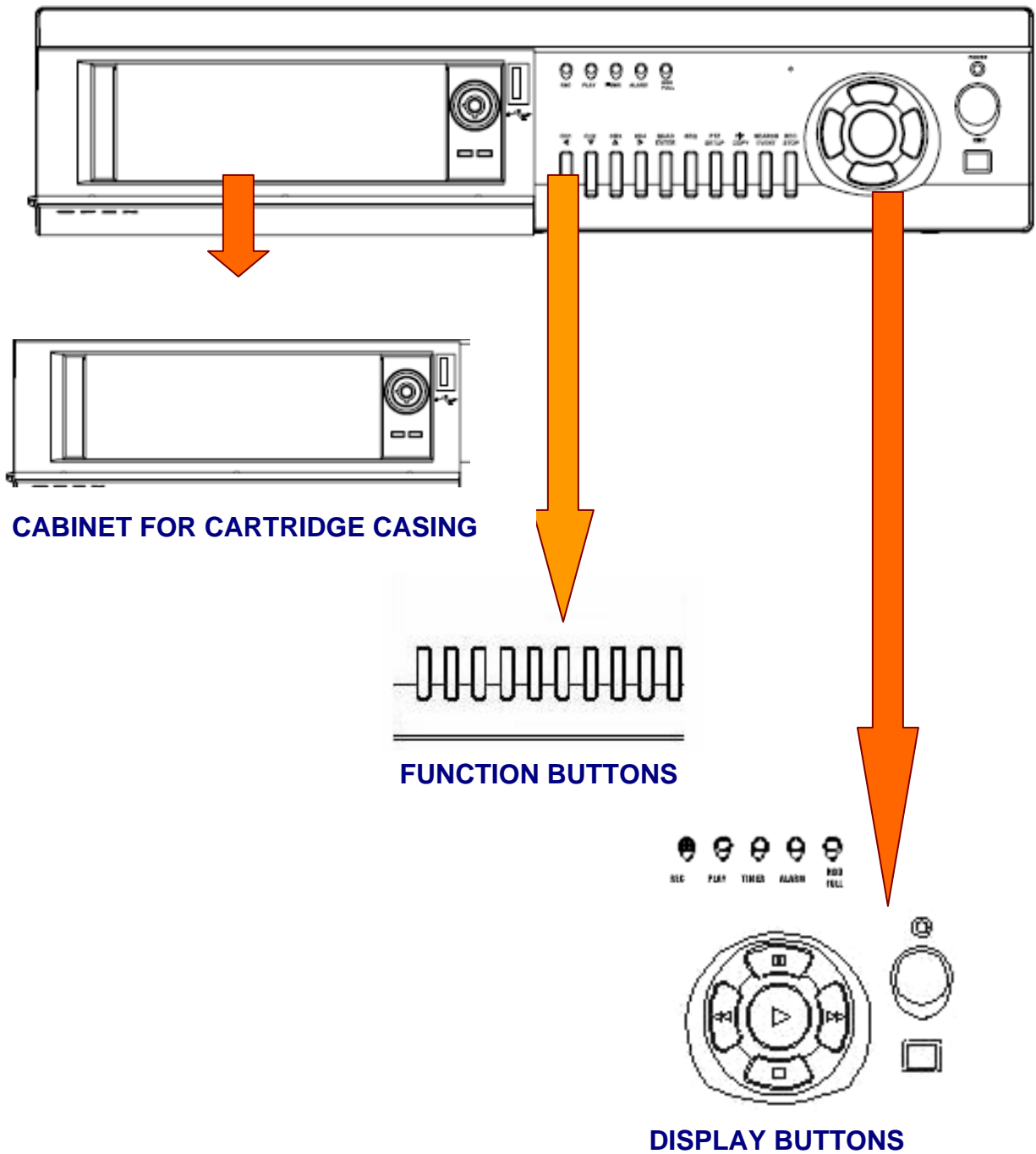
MAC ADDRESS : XX XX XX XX XX XX  
IP ADDRESS : 192 . 168 . 001 . 150  
SUBNET MASK : 255 . 255 . 255 . 000  
GATEWAY : 192 . 168 . 001 . 001  
PORT : 5000

**Note:** The above message indicates the network values set in the DVR.

**Note:** The settings for the network values can be changed in the MAIN MENU SETTINGS.

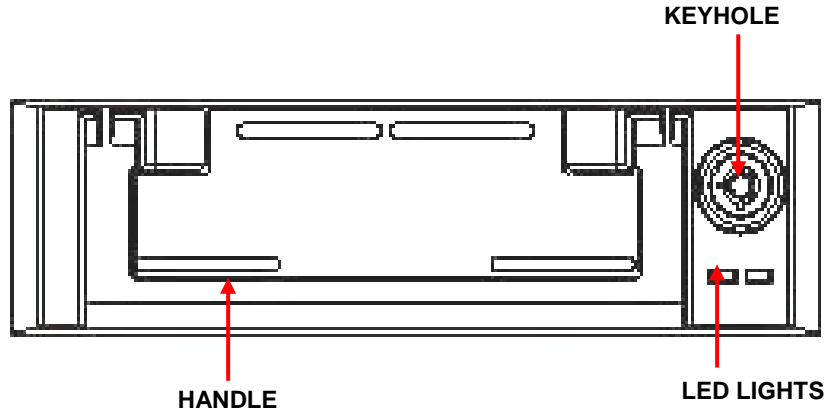
## 5 DESCRIPTION OF PARTS AND FUNCTIONS

### 5.1 FRONT PANEL



### 5.1.1 CABINET FOR CARTRIDGE CASING

The cabinet is located on the front panel behind a panel which flips forward to reveal the removable cartridge casing (contains the HDD).



#### KEYHOLE

Insert the key into the keyhole and turn to lock or unlock the cabinet.

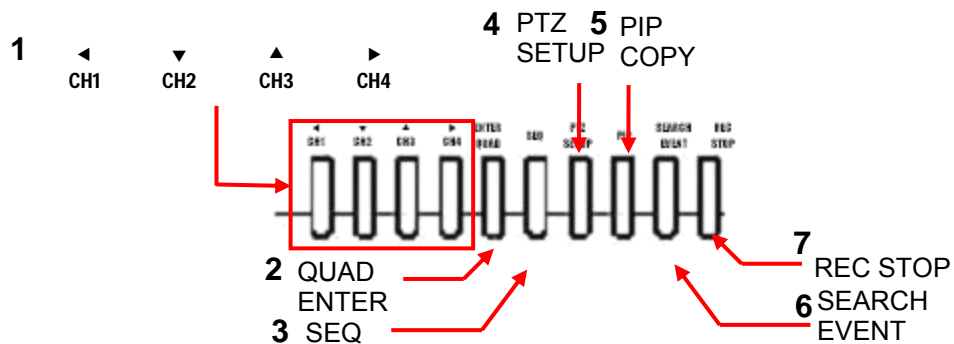
#### LED Indicator Lights

Indicator lights for the power and the HDD access

#### HANDLE

Lift the handle and pull to slide the Cartridge Casing out of the DVR.

### 5.1.2 FRONT PANEL – FUNCTION BUTTONS



## 1. ARROW/CHANNEL BUTTONS (◀CH1, ▼CH2,▲CH3,▶CH4)

These buttons perform the following functions:

a) Displays a picture in Full Screen

In Quad 1 mode: Select the Channel 1 button and hold it for 2-3 seconds to view Camera 1 in Full Screen.

To view the other camera locations, press CH2, CH3, and CH4 buttons.

b) Freezes a specific camera.

You have the option to freeze images in Full or Quad screen mode

In Quad Screen mode: Press a channel button to freeze this channel in the Quad screen; press the button again to unfreeze this channel.

In Full Screen mode: Press the current channel being viewed to freeze it; press the button again to unfreeze this channel.

c) Scrolls LEFT / UP / DOWN / RIGHT in Menu mode.

These buttons are used to navigate through the menu options.

d) MOVE / ZOOM / FOCUS in Pan / Tilt mode.

These buttons are used to pan and tilt the picture.

In Pan / Tilt mode: Choose the MOVE / ZOOM or FOCUS.

- MOVE: Press arrow buttons to move picture (i.e. ◀=left, ▲=up, ▼=down, or ▶=right).
- ZOOM: Press arrow button to zoom in or out.

## 2. ENTER / QUAD BUTTON

a) ENTER: This button is the ENTER key in Menu mode.

b) QUAD: Press this button to change to Quad viewing mode.

## 3. SEQ BUTTON

Press the SEQ button to sequence between all camera locations which are shown in the full screen. The full screen automatically switches between all camera locations in sequential order. Press the SEQ button again to stop sequential viewing. Sequence settings are programmable via the Menu.

REC  
STOP

## 4. PTZ / SETUP BUTTON

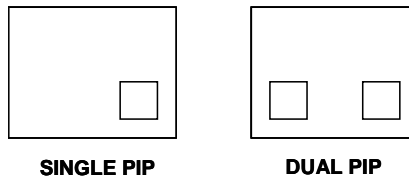
a) PTZ: This button activates the Pan/Tilt feature.

b) SETUP: Press this button to bring up the Main Menu.

## 5. PIP / COPY BUTTON (Picture in Picture)

**NOTE** The PIP function is only accessible by the remote control.

The PIP Button allows you to view two camera locations simultaneously, one being the main channel, the other being viewed as a sub-picture. Dual PIP can also be selected, which displays two sub-pictures as illustrated below. To change between Single PIP and Dual PIP, repeatedly press the PIP button.



The COPY Button allows you to back up stored data in the HDD to the USB memory key.

**NOTE** If the USB Key is connected to the DVR and it is not recognized or the data copy is not correct then use the USB Key after formatting it using a computer.

## 6. SEARCH / EVENT BUTTON

- a) **SEARCH:** Pressing this button brings up the Search menu, which allows you to quickly find recordings.
- b) **EVENT:** Pressing this button brings up a list of up to 3000 Events, including Power, Loss and Alarms. You can scroll through Events using the ▲ and ▼ keys, and navigate between Pages of Events using the ◀ and ▶ keys. Press the QUAD / ENTER Button to exit the Event list.

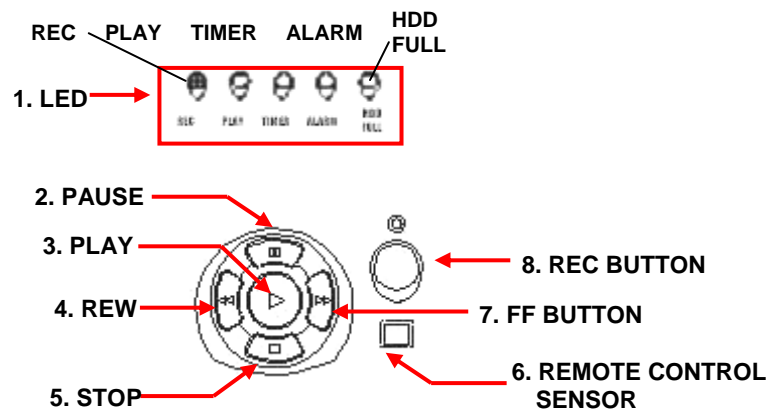
The following letters represent the different types of Events that you may find listed:

- P :** Shows the time when the POWER was turned ON
- A :** Shows the time when a PIR ALARM was triggered
- M :** Shows the time when Pixel-based MOTION detection was triggered
- L :** Shows when a Video LOSS from a Camera occurred
- N :** Shows the starting time when storing data with Manual recording.
- H :** Time of problem occurring in the HDD.

## 7. REC STOP BUTTON

Press this button to stop recording video.

### 5.1.3 FRONT PANEL – DISPLAY BUTTONS



#### 1. LED indicators - Status of operation.

**REC:** LED will be ON when recording data to the HDD.

**PLAY:** LED will be ON when playing data that has been stored in the HDD.



**TIMER:** The LED will be ON when the schedule recording is set (i.e. when you set up the DVR to record automatically in SCHEDULE REC SET, see THE MAIN MENU SETTINGS, page 19).

**ALARM:** LED will be ON when the ALARM or MOTION function is set to ON.

When the ALARM or MOTION function is ON, the LED will blink as an Alarm is being triggered.

**HDD FULL:** If the OVERWRITE menu is set up, the LED will not blink in any case.

The LED blinks if the HDD has less than 1GB of storage space, and remains ON when the HDD is FULL.

## **2. PAUSE BUTTON**

Press this button to pause the video in playback.

## **3. PLAY BUTTON:**

This button serves two functions:

- a) start the video playback
- b) this button serves as the ENTER key in Menu mode

## **4. REW BUTTON**

Press this button to begin high-speed reverse playback during the playback.

## **5. STOP BUTTON**

Press this button to stop the video in playback.

## **6. REMOTE CONTROL SENSOR**

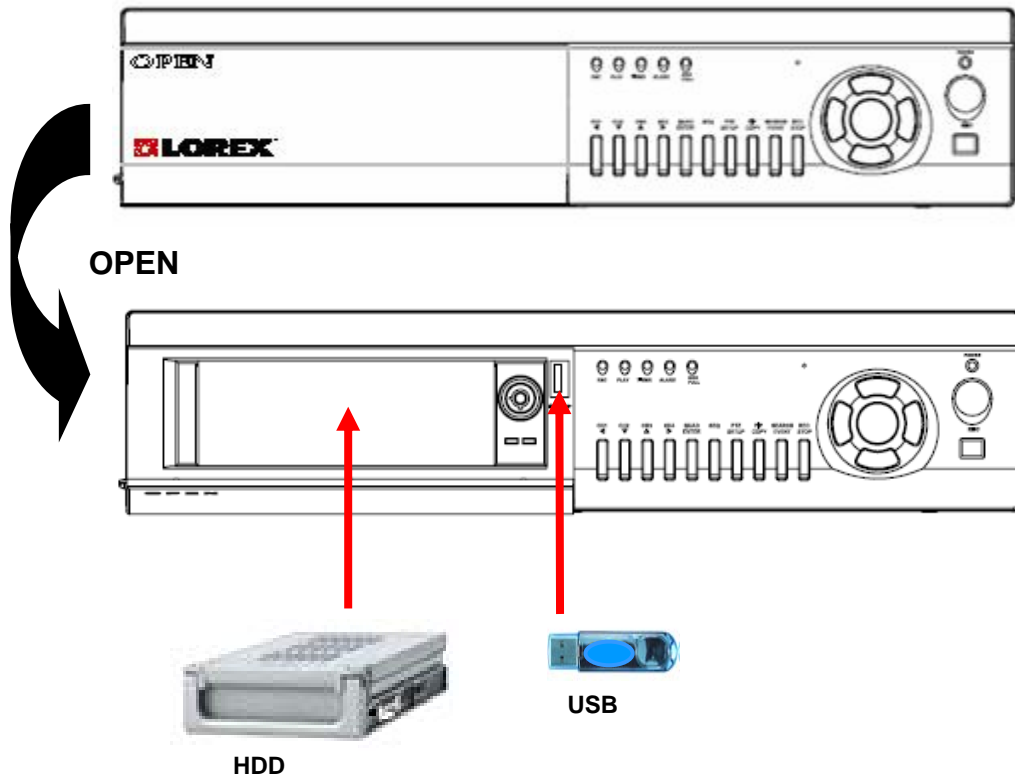
## **7. FF BUTTON**

Press this button to begin high-speed forward playback during the playback.

## **8. REC BUTTON**

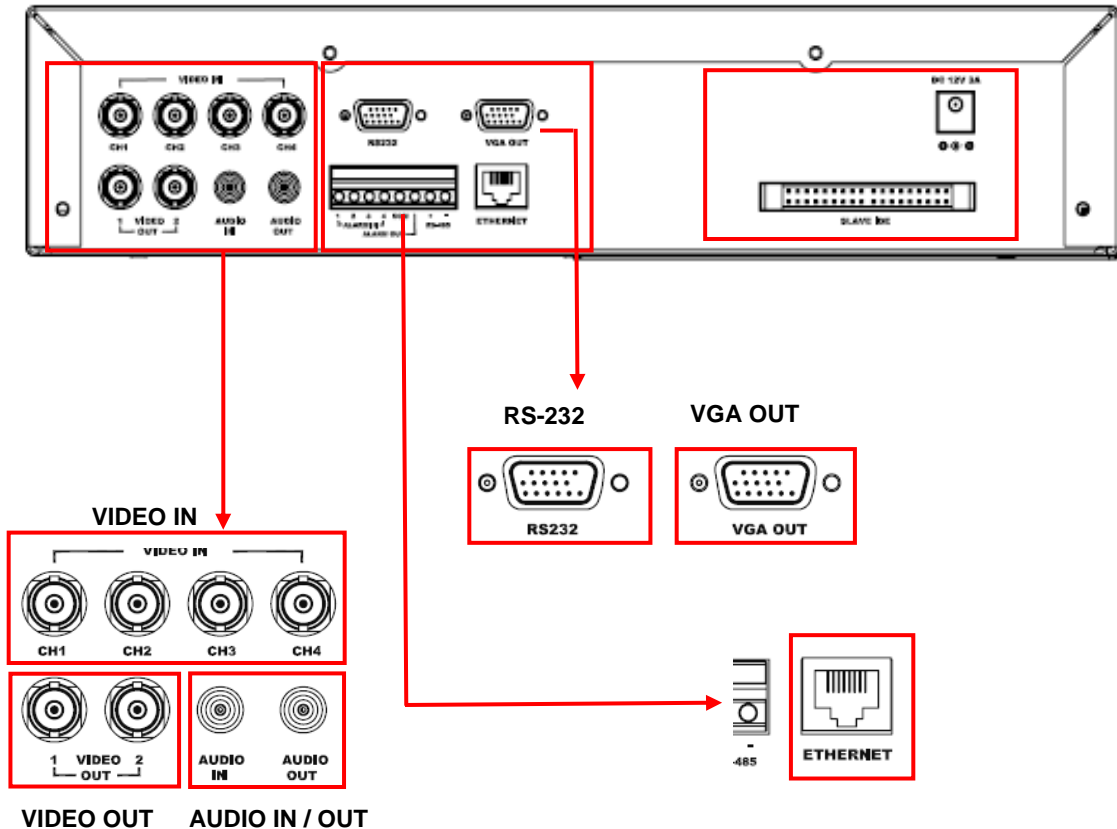
Press this button to start manual recording.

## 5.1.4 FRONT PANEL – HARD DRIVE AND USB CONNECTIONS

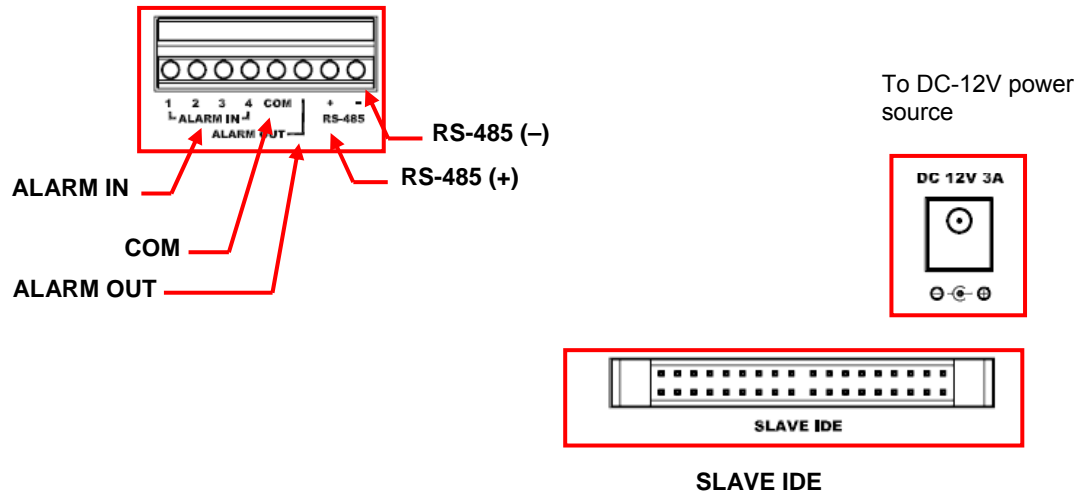


## 5.2 BACK PANEL

(DESCRIPTION OF PARTS AND FUNCTION continued)



1. **VIDEO IN** Channel 1-4 camera video input BNC port.
2. **VIDEO OUT** Composite Output for connecting to another Monitor or VCR.
3. **AUDIO IN / OUT.** Audio input / output through line
4. **ETHERNET.** Available to view live and recorded data on the HDD through the Internet or a LAN
5. **VGA OUT.** Output for connecting to a Computer Monitor
6. **RS-232.** Connects to the RS-232C terminal on your computer



**1. ALARM IN**

These terminals are used to connect external motion sensors, door / window contacts, etc.

**2. COM**

**3. ALARM OUT**

Send a signal to a VCR or other devices in an Alarm or motion situation.

**4. RS - 485 ( +, -)**

Connect the PTZ control wires to these terminals

**5. SLAVE IDE**

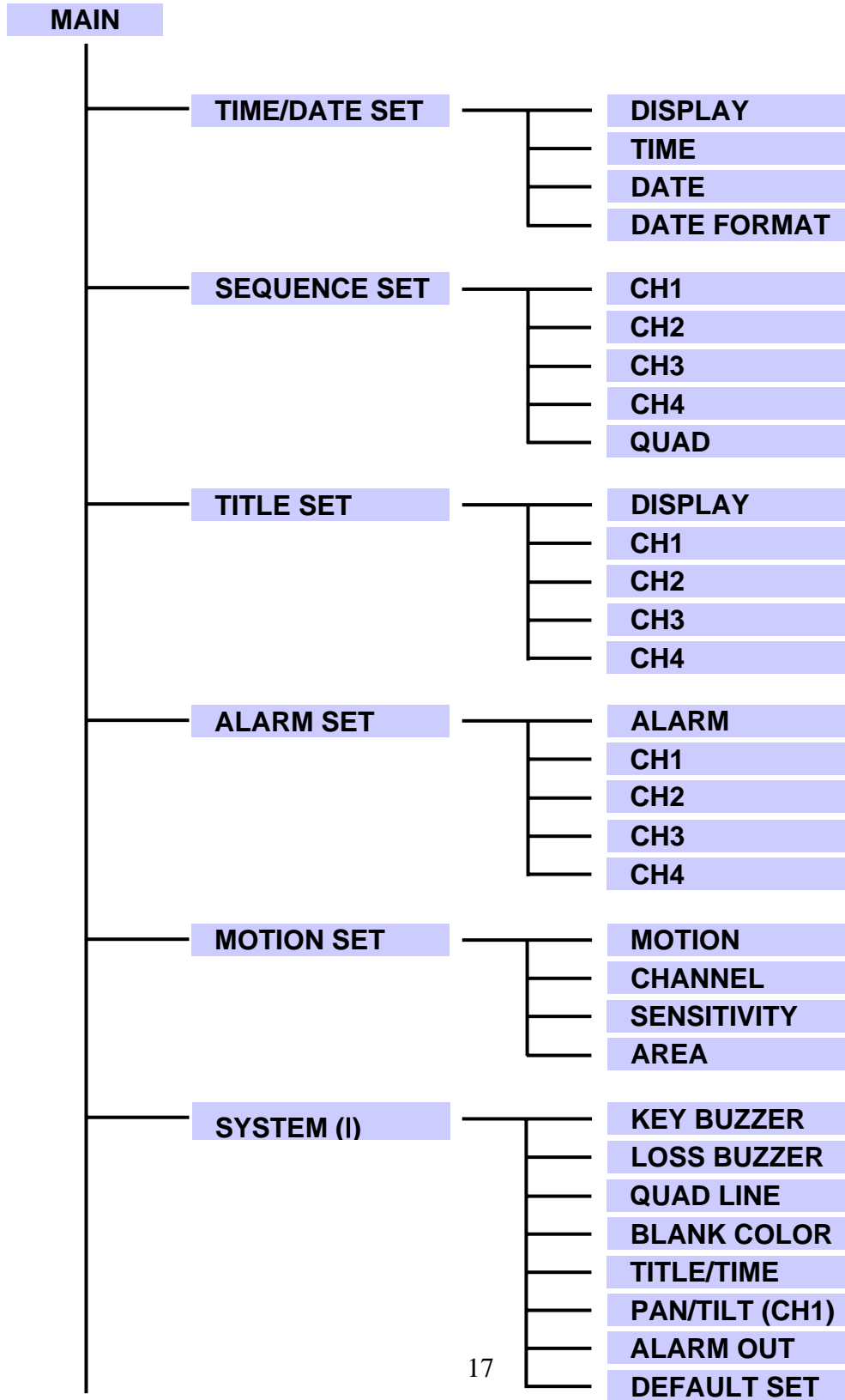
Output for connecting to a Slave Monitor or VCR.

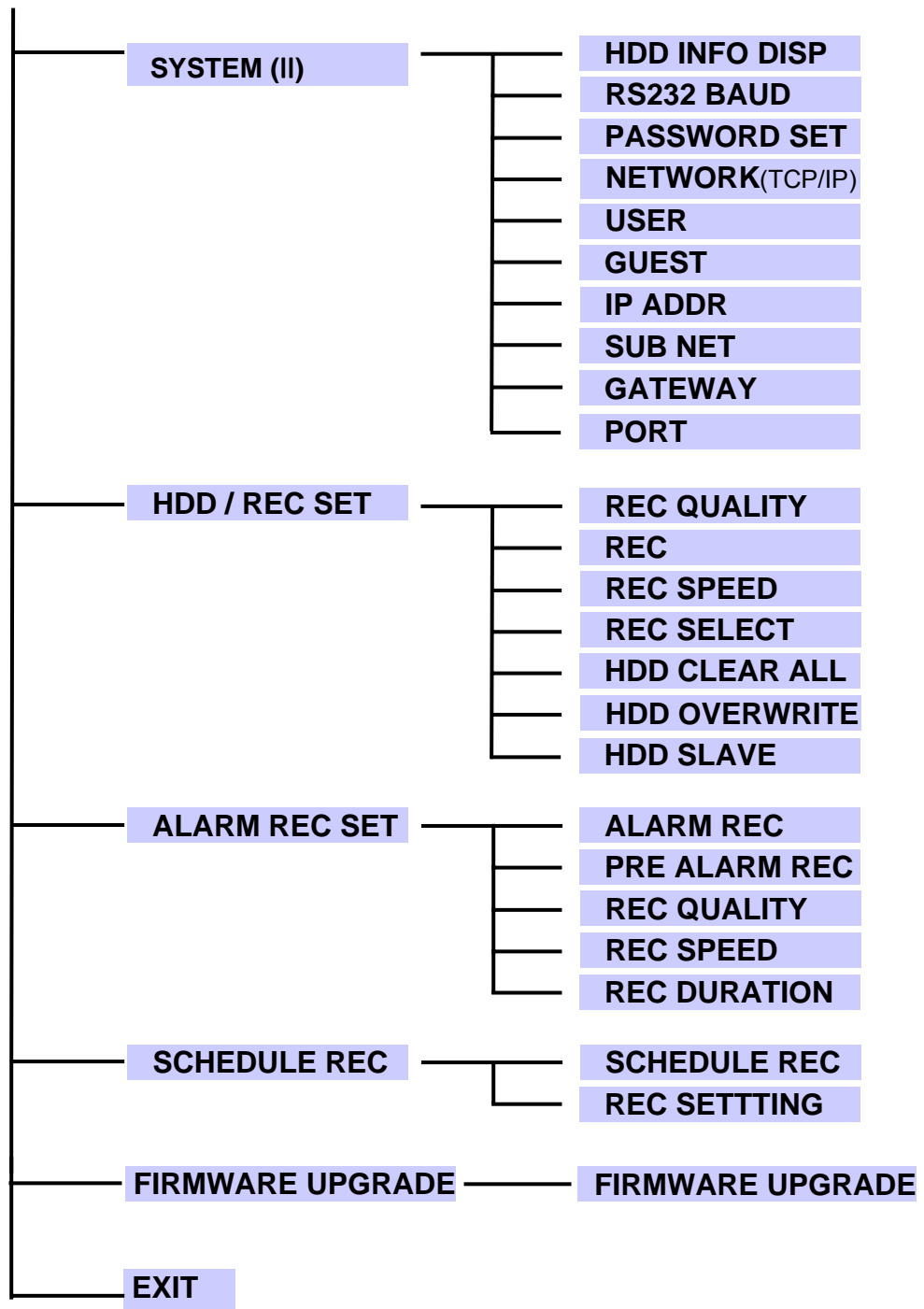
**6. POWER SOURCE**

Connects to a Power Plug (DC -12V)

## 6 MAIN MENU

From the main menu controls, the user accesses each sub-menu to change its properties.





## 6.1 THE MAIN MENU SETTINGS

Enter the MENU screen by pressing the Setup button. Scroll through the 11 options by pressing the UP and DOWN buttons (i.e. ◀=left, ▲=up, ▼=down, or ▶=right). To enter a sub-menu, press the Enter button (i.e. QUAD/ENTER) where the highlighted scroll bar is located. To exit the Main Menu, scroll down to the Exit option and press the Enter button.

**Note:** In sub-menu of the Main Menu, you can exit the Menu mode by selecting **Exit**, or you can return to the Main Menu by selecting **Return**. The Menu is exited automatically after 20 sec of inactivity.

**1. TIME / DATE SET** - This sub-menu allows you to change the Time and Date displayed on the monitor, and also program the information you'd like to appear in the On-Screen Display.

(i) DISPLAY : Selecting [Y] enables on screen display of the date & time.

Selecting [N] hides this information.

(iii) TIME : Change the time (24 hour clock)

(iv) DATE : Change the date.

(v) DATE FORMAT : There are three formats to display the date:

MM / DD / YYYY : for U.S.A.

YYYY / MM / DD : for Asian countries.

DD / MM / YYYY : for European countries.

**2. SEQUENCE SET** - This sub-menu allows you to select how long you'd like each channel to appear on-screen before automatically switching to the next channel in Sequence mode. The Dwell Time is 0-59 seconds selectable for each of the 4 channels and for Quad mode.

**NOTE** Channels without a camera, a Video Loss, or a Dwell Time of zero will be skipped in sequencing.

**3. TITLE SET** - This sub-menu allows you to change the title of each camera location (up to 8 characters), or remove the titles from the on-screen display.

(i) DISPLAY : Selecting [Y] will enable the camera titles to appear in the on-screen display. Selecting [N] will remove all titles from appearing in the on-screen display.

(ii) CH 1 - 4: Change the titles of each individual camera (Maximum 8 digits possible).

**4. ALARM SET** - This sub-menu allows you to enable / disable the camera's PIR Alarm function by channel.

(i) **ALARM:** Selecting [OFF] disables PIR motion detection from triggering any alarm.

Selecting [OSD] will allow alarms to be triggered, and the letters “AL” will appear on the screen of the camera location where the alarm is taking place. A third option, [OSD+BUZZER] will both display “AL” and emit a buzzer sound in the event of an alarm.

(ii) CH 1-4: Set the length of alarm time for each channel between 1~59 seconds. Additionally, you can select the Alarm Input. The default setting is N/O (Normally Open).

**NOTE** Some alternative brand PIR motion sensors have a default setting of N.C. (normally closed). In order to activate the alarm on such a PIR motion sensor, change the setting to N.C.

**5. MOTION SET** - This sub-menu allows you to enable / disable the Pixel-based Motion Detection function by channel and set its Sensitivity level.

(i) **MOTION** : Selecting [OFF] disables the Pixel-based Motion Detection function. Selecting [OSD] will allow motion to trigger alarms, and the letters “MD” will appear on the screen of the camera location where the motion is taking place. A third option, [OSD+BUZZER] will display “MD” and emit a buzzer sound in the event that motion is detected.

(ii) **CHANNEL** : Select which channels will have the Pixel Motion Sensing feature activated. The Sensitivity level can be set to zero for a channel, which will disable the Motion Sensing ability for that channel.

(iii) **SENSITIVITY** : Select the sensitivity level of the Motion Sensing by channel.

Level 05 is the highest sensitivity, Level 01 is the least sensitive.

Level 00 deactivates Motion Sensing.

(iv) **AREA** : Select the area of the screen where the Pixel Motion Sensing feature will be active. The digits below represent the area on the screen where motion is detected.

[ 00 ] - Whole screen.

[ 02 ] - Top right side of screen.

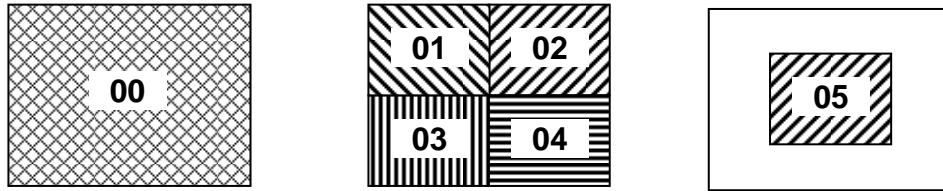
[ 04 ] - Bottom right side of screen.

[ 01 ] - Top left side of screen.

[ 03 ] - Bottom left side of screen.

[ 05 ] - Center of the screen.





**6. SYSTEM SET ( I )** -This sub-menu allows you to configure various preferences on the system, related to Monitor settings.

- (i) **KEY BUZZER** : When set to [Y], the system will make a sound when a key is pressed on the remote control or on the main panel of the monitor.
- (ii) **LOSS BUZZER** : When set to [Y], the system will make a sound when a camera becomes disconnected.
- (iii) **QUAD LINE** : Activates and deactivates the border line in Quad mode.
- (iv) **BLANK COLOR** : Choose between blue, gray or black as the background screen color in Menu Mode.
- (v) **TITLE/TIME** : Change the location of on-screen display for Time/Date and camera titles. T/R/B/L represent Top / Right / Bottom / Left respectively. Therefore, for example, the setting “TR/BL” would display the Title in the Top-Right corner of the screen, and the Time in the Bottom Left corner.
- (vi) **PAN/TILT(CH1)** : Activates Pan/Tilt mode to become accessible.
- (vii) **ALARM OUT** : Select the Alarm Out setting, which is defaulted to NO (Normally Open) for triggering external devices.
- (viii) **DEFAULT SET** : Selecting [Y] resets all programmed settings back to the default factory settings (except for the time & date).

**7. SYSTEM SET (II)** - This sub-menu allows you to configure various preferences on the system, related to DVR settings.

- (i) **HDD INFO DISP** : Sets the display settings for information on the HDD status. This can be displayed as a percentage of HDD space used, or amount of Bytes available, or the HDD information display can be set to OFF.
- (ii) **RS232 BAUD RATE** : Sets the speed at which the RS 232 input and the computer communicate. Baud Rate, which is the rate of

data transmission, can be set to OFF, 2400, 4800, 9600, or 19200.

**(iii) PASSWORD SET :** If you select [Y], you will need to input a password when you enter the Main Menu. Use to change your password for accessing the Menu. The password must be 4 digits. The default Password is "0000".

Selecting [N] will allow you into the menu without a password.

<b>NOTE</b> NETWORK CONFIGURATION (Part of SYSTEM SET (II))
---

**(iv) NETWORK (TCP/IP):** The User can set the network for OFF, DYNAMIC IP or STATIC IP. The default value is "**DYNAMIC IP**".

**(v) USER ID/PASSWORD:** The User can set a password for the Master ID and account. The Master ID should be 5 digits in English, and the Password should be a 5 digit alphanumeric combination.

Default value - **ADMIN / ADMIN.**

**(vi) GUEST PASSWORD:** The User can set a password for the GUEST account. Maximum 5 digits.

Default value - GUEST.

**NOTE** The Master User has full access to all the functions on the Network but the Guest User has limited access to the functions. The GUEST can see only cameras.

**(vii) IP ADDR :** Enter the DVR IP address.

Default value – 192. 168. 001. 150

**(viii) SUBNET :** Enter the Subnet Mask.

Default value - 255.255. 255. 000

**(ix) GATEWAY :** Enter the Default Gateway.

Default value – 192. 168. 001. 001

**(x) PORT :** Enter the Default port.

Default value – 5000

**8. HDD / REC SET** - This sub-menu allows you to set the Record parameters for your Hard Disk Drive.

**(i) REC QUALITY :** Sets the quality level of recording. Available settings are: Low, Basic, Normal, High and Best.

**Note:** Higher quality recording consumes more memory on your HDD.

**(ii) REC RESOLUTION**

**(iii) REC SPEED:** Allows you to set the Images Per Second for recording. Available IPS settings are: 1, 2, 3, 5, 10, 15, 30 & 60. The speed of 60 IPS is also known as “Real Time”.

The slowest Time Lapse speed is 1 IPS; it will allow for the longest recording durations but it records less information.

**(iv) REC SELECT :** Selects which channels will be recorded to the HDD.

Select [0] to enable recording on a camera channel

Select [x] to disable recording on a camera channel

**(v) USB REC LIMIT :** Select the storage capacity to be saved via USB.

**NOTE** Even if the storage capacity is already set, you can stop the saving process immediately by pressing the “STOP” button during the process.

**(vi) HDD CLEAR ALL:** Select [MASTER] to delete all the contents in your Master HDD, then press the right arrow button ([CH4] – on front panel of DVR, or the remote) and you will be asked “REALLY?” Select [Y] to confirm the HDD Clear.

**NOTE** If you have a SLAVE HDD connected as well and the HDD Slave option is set to [Y], then you may also choose to Clear the contents of your Slave HDD.

**(vii) HDD OVERWRITE:** Select [Y] to have the DVR automatically overwrite previously recorded video in the event of the HDD becoming FULL. If you select “Y” it will display OVWR (Overwrite) in the on-screen display. If you select “N”, the DVR will terminate recording once it reaches its capacity.

**NOTE** HDD Overwrite replaces the earliest recorded video with additional video being recorded. When the HDD is Full and Overwrite is active, the first piece of video that you had recorded will be lost.

**(viii) HDD SLAVE :** Select [Y] to enable the system to check for a Slave HDD upon startup. Enabling HDD SLAVE allows you to record to and playback from the Slave HDD.

**NOTE** After activating the Slave HDD, you need to restart your system by turning the Main Power Switch (located on the back of the monitor) OFF and then ON again in order for the system to recognize the Slave HDD.

**9. ALARM REC SET** - This sub-menu allows you to configure the Recording parameters under the Alarm condition.

(i) **ALARM REC:** This setting selects whether or not the DVR will record automatically when a Motion Detection or a PIR alarm is triggered.

(ii) **PRE ALARM REC:** Selects the enable or disable of "PRE ALARM".

**NOTE** PRE ALARM saves 6 secs of image at 5 IPS before ALARM or MOTION goes off under alarm or motion situation. (When ALARM REC mode is on, images are being stored in HDD.)

(iii) **REC QUALITY:** Selects the Recording Quality level for Alarm Recording (from Low, Basic, Normal, High, or Best).

(iv) **REC SPEED:** Sets the speed of Alarm Recording from 60 / 30 / 15 / 10 / 05 / 03 / 02 IPS.

(v) **REC DURATION :** Selects how long the DVR will automatically record after an alarm is triggered. Available duration times are: [ 20SEC / 30SEC / 1MIN / 2MIN / 5 MIN and CONTIN] CONTIN refers to Continuous recording.

**10. SCHEDULE REC SET** - This sub-menu allows you to program the DVR to schedule the times when you want the DVR to record automatically.

(i) **SCHEDULE REC :** Select from the following types of Scheduled recordings:

[DAILY] - Recording will be carried out according to a specified time on a daily schedule.

[OFF] - No schedule.

[ONCE] - Recording will be carried out one time, according to the schedule.

(ii) **REC SETTING (N0-N7) :** Total 8 REC can be set up from N0 to N7.

Each Schedule Rec can control Start TIME/DATE, End TIME/DATE and Rec Quality as well as Rec Speed can be set up in this mode.

**NOTE** When SCHEDULE REC is set up, the recording time should not be overlapped from one scheduled recording to another. If it is overlapping

this will result in a loss in recorded activity and the schedule may be ignored.

To delete a scheduled recording, place the cursor on the selected time and press the ◀, ▶ key. “**CURRENT LINE DELETE?** [Y] / [N]” is then displayed. If [Y] is selected, the selected schedule is deleted.

**11. FIRMWARE UPGRADE** : Used to upgrade most recent Firmware.

Once you choose this menu, the system will ask you once again whether you will be proceeding with the Upgrade process. Connect the USB Memory with the FIRMWARE to be upgraded and click “YES”.

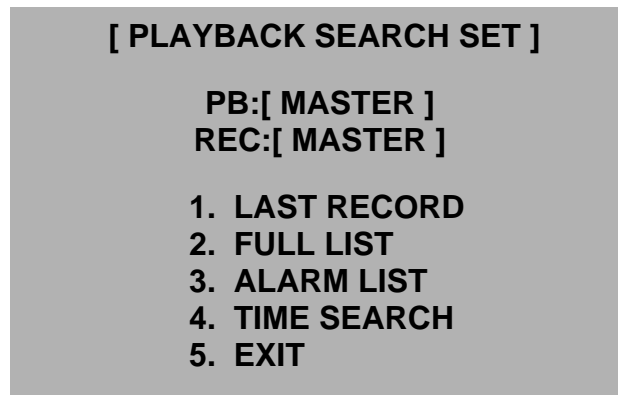
**NOTE** *The name of the Firmware Upgrade File is “dht\_dvr4.bin”. NEVER Power off or disconnect during this process. If the power goes off during the firmware upgrading process, the product may become damaged and may not work.*

**NOTE** If the USB Memory is not recognized or not working properly, please try again after formatting the USB Memory.

**12. EXIT** - Exits the MENU mode.

## 7 PB SET/REC HDD SET

The DVR allows you to easily find sections of recorded video using the Search feature. Press the SEARCH button to access the “PLAYBACK SEARCH SET” menu.



- (1) **LAST RECORD** : Plays the most recent recording.
- (2) **FULL LIST** : Shows a listing of all recorded video on the HDD, sorted by time.
- (3) **ALARM LIST** : Shows a listing of all recorded video triggered by an Alarm.
- (4) **TIME SEARCH** : Finds video recorded on a specific date and time that is entered.
- (5) **EXIT** : Exits Search mode.

A listing of up to 1000 recordings can be stored in both the ALARM LIST and the FULL LIST. You can scroll through Recordings using the ▲ and ▼ keys, and navigate between Pages of Recordings using the ◀ and ▶ keys.

To view a selected piece of video on the list, press the QUAD/ENTER button on the highlighted recording. The DVR will play that video. You can stop the video at any time by pressing the STOP button.

**NOTE** *If you set the HDD SLAVE to “Y” then you can set the Playback HDD or the Recording HDD as Master or Slave.*

If you change the Recording HDD then select “REC : [ MASTER ]” and press the “Enter” Key, “◀” or the “▶” key.

If want to change the Playback HDD select “PB : [ MASTER ]” and press the “Enter” Key, “◀” or “▶” key. You can also select other menus by pressing “◀”, or “▶”.

Note, you can also change the “Playback HDD”, or “Recording HDD” with the Netviewer software.

## 8 PLAYBACK OPTION

When the PLAY button is pressed, one of the Playback Search menus will appear.

The Playback menu that appears upon pressing PLAY depends on the Search option that was last used.

For example, if the last Search option used was a Time Search, then pressing PLAY will bring up the Playback Time Search. If the last Search option utilized was a Last Record, then pressing play will simply play the most recent recording.

### 8.1 FAST REWIND AND FAST FORWARD

You can increase the speeds of Fast Forward and Fast Rewind on the DVR. The FF/REW speed is controlled (from the front panel or remote control) by pushing the >> (FF) or the << (REW) button during playback of data.

**Example** Pressing the PLAY button then pressing the FF/REW button also shows the speed of FF/REW (from 1x to max. 16x) on the monitor screen. Continuously press the FF/REW button to change the speed.

### 8.2 MULTIPLEXING FUNCTION IN PLAYBACK

The multiplexing function of the DVR allows you to switch between individual channels during playback and watch each one in Full-Screen. Press the Channel buttons to view the Full Screen.

## 9 THE MASTER & SLAVE HDD

The Master HDD is a hard disk drive. The Master HDD is located inside the DVR cabinet and is accessible from the front of the DVR. The Slave HDD backs up the Master HDD by providing extra storage space.

**NOTE** Once you have connected a Slave HDD, it needs to be activated in the HDD SLAVE option of the HDD / REC SET sub-menu.

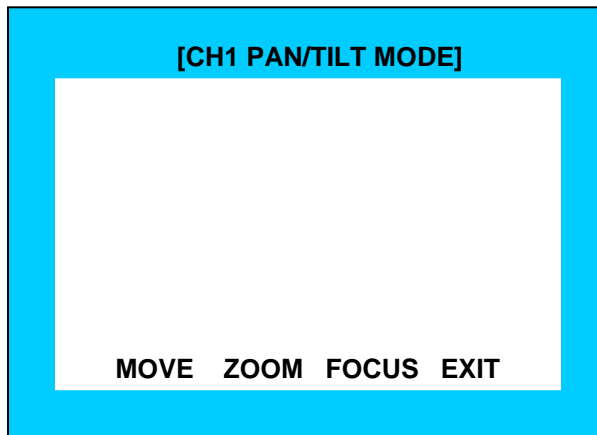
**NOTE** HDD that you connect to the system must be cleared. When the Master HDD becomes full during recording, the earliest recorded data from the Master HDD is sent to the Slave HDD. Data is not lost because it gets transferred to the Slave HDD. The most recent recordings are found on the Master HDD.

## 10 PAN / TILT ZOOM :

The DVR is equipped with a built-in Pan/Tilt Zoom feature, which is only available when used in conjunction with a compatible Pan/Tilt Dome camera. The Pan/Tilt Zoom feature supports “Pelco D” protocol, and RS-485 Port. To access and operate the PTZ feature, follow these instructions:

1. Connect a compatible Pan/Tilt Zoom Dome camera to RS-485 Port;
2. Go to the SYSTEM sub-menu and set the PAN/TILT(CH1) option to “Y”;
3. Enter the Pan/Tilt Zoom mode by holding the PAN/TILT key on the DVR for 3 seconds, or press the Pan/Tilt button on the remote control ;
4. You will see a contracted screen with a blue border.
5. Use the Arrow keys to move sideways and the QUAD/ENTER Button to select whether to MOVE, ZOOM, or FOCUS the camera.
6. If you have selected MOVE, you can use all four arrow keys to Pan and Tilt in all directions. If you selected ZOOM or FOCUS, use the arrow keys to Zoom / Focus IN / OUT.
7. Select and press ENTER on the EXIT option to escape the Pan/Tilt mode.


**NOTE** *The system automatically exits Pan/Tilt mode after 20 seconds of inactivity.* Refer to the diagram below for an illustration of Pan/Tilt Zoom mode.

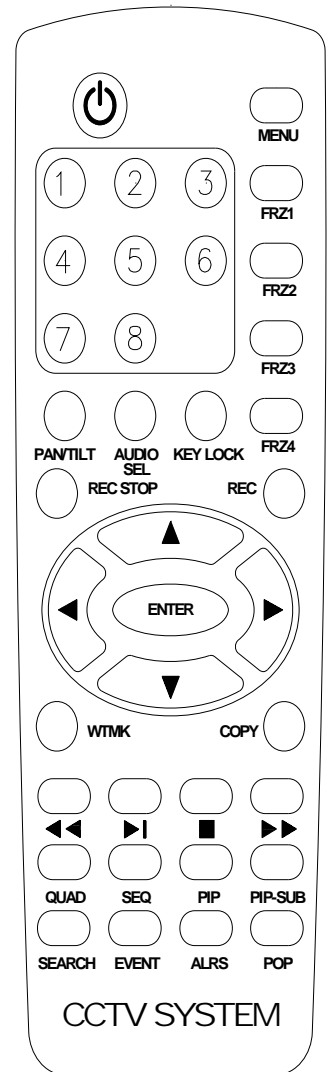




## 11 REMOTE CONTROL

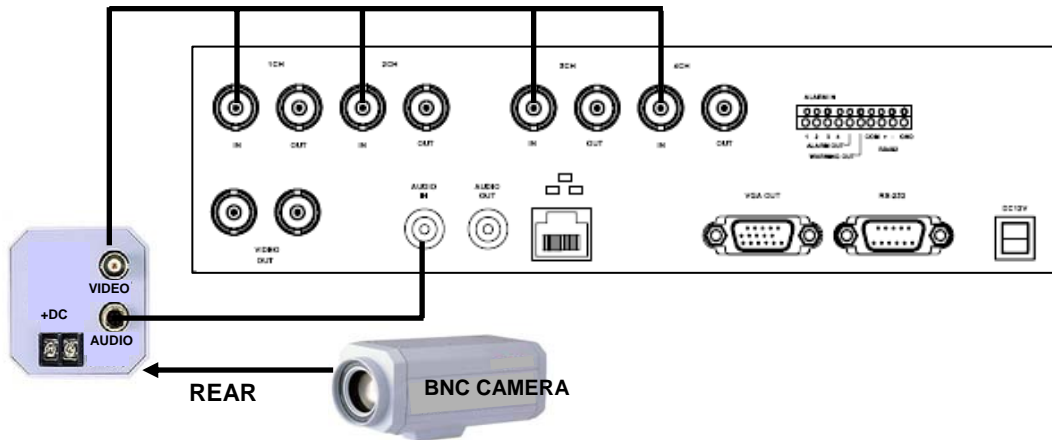
Features of the Remote Control. For more details on specific remote control features, refer to the Front Panel features.

KEY	FUNCTION DESCRIPTION
	SLEEP Mode On/Off.
<b>MENU</b>	Brings up the Main Menu.
<b>1 - 4</b>	Allows user to select individual cameras.
<b>FRZ 1</b>	Freezes the Channel 1 screen.
<b>FRZ 2</b>	Freezes the Channel 2 screen.
<b>FRZ 3</b>	Freezes the Channel 3 screen.
<b>FRZ 4</b>	Freezes the Channel 4 screen.
<b>PAN / TILT</b>	Enters Pan/Tilt Zoom mode.
<b>AUDIO SEL</b>	N/A
<b>KEY LOCK</b>	Locks the buttons on the keypad from functioning.
<b>REC STOP</b>	Stop in video recording.
<b>REC</b>	Initiates Recording.
<b>▲ , ▼</b>	UP / DOWN arrow keys, used in Menu mode.
<b>◀ , ▶</b>	LEFT / RIGHT arrow keys used in Menu mode.
<b>ENTER</b>	Confirms selections in Menu mode.
<b>WTMK</b>	Select the Enable or Disable of “WTMK” while display.
<b>COPY</b>	Back up stored data in HDD to USB memory key.
<b>◀◀</b>	Rewinds video in Playback mode.
<b>▶  </b>	Initiates video Playback mode and Pauses video.
<b>■</b>	Stops video Playback.
<b>▶▶</b>	Fast Forwards video in Playback mode.
<b>QUAD</b>	Displays Quad screen.
<b>SEQ</b>	Initiates automatic channel scan.
<b>PIP</b>	Displays PIP Mode and Main Screen change.
<b>PIP-SUB</b>	Changes the Sub-screen in PIP mode.
<b>SEARCH</b>	Brings up the Playback Search mode.
<b>EVENT</b>	Brings up a listing of Events
<b>ALRS</b>	Turns the Alarm sound OFF.
<b>POP</b>	Displays POP Mode and Main Screen change.

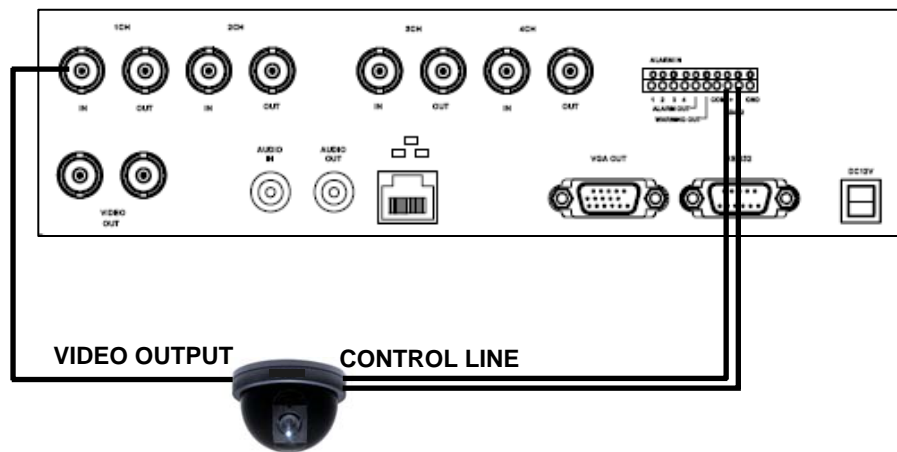


## 12 CAMERA INSTALLATION

Connect the camera to the CAMERA INPUT on the rear panel of the system.

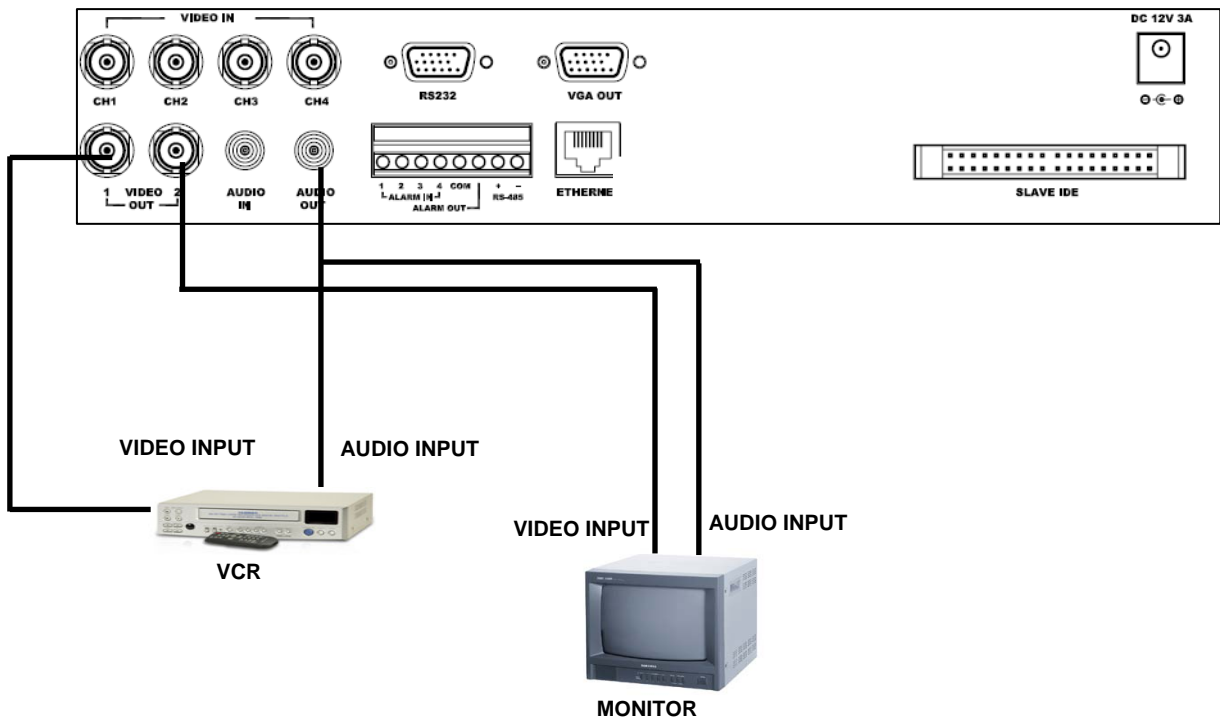


## 13 PAN/TILT CAMERA INSTALLATION



## 14 MONITOR & STANDARD VCR/ INSTALLATION

Connect the a VCR and a monitor to the inputs on the rear panel of the system.



### **CONNECTION TO A MONITOR FOR VIEWING**

You can connect your DVR to a monitor for viewing purposes and for On Screen display set-up. Connect a BNC video cable, RCA audio cable from your DVR marked "VIDEO OUT / AUDIO OUT" to the audio/video input on the monitor.

### **CONNECTION TO A STANDARD VCR**

You may wish to record from the DVR to a VHS cassette in order to back up video and make it viewable for other parties.

To record the video signals from your DVR connect a BNC video cable, RCA audio cable from the VIDEO OUT/ AUDIO OUT to the Audio/Video inputs on your VCR.

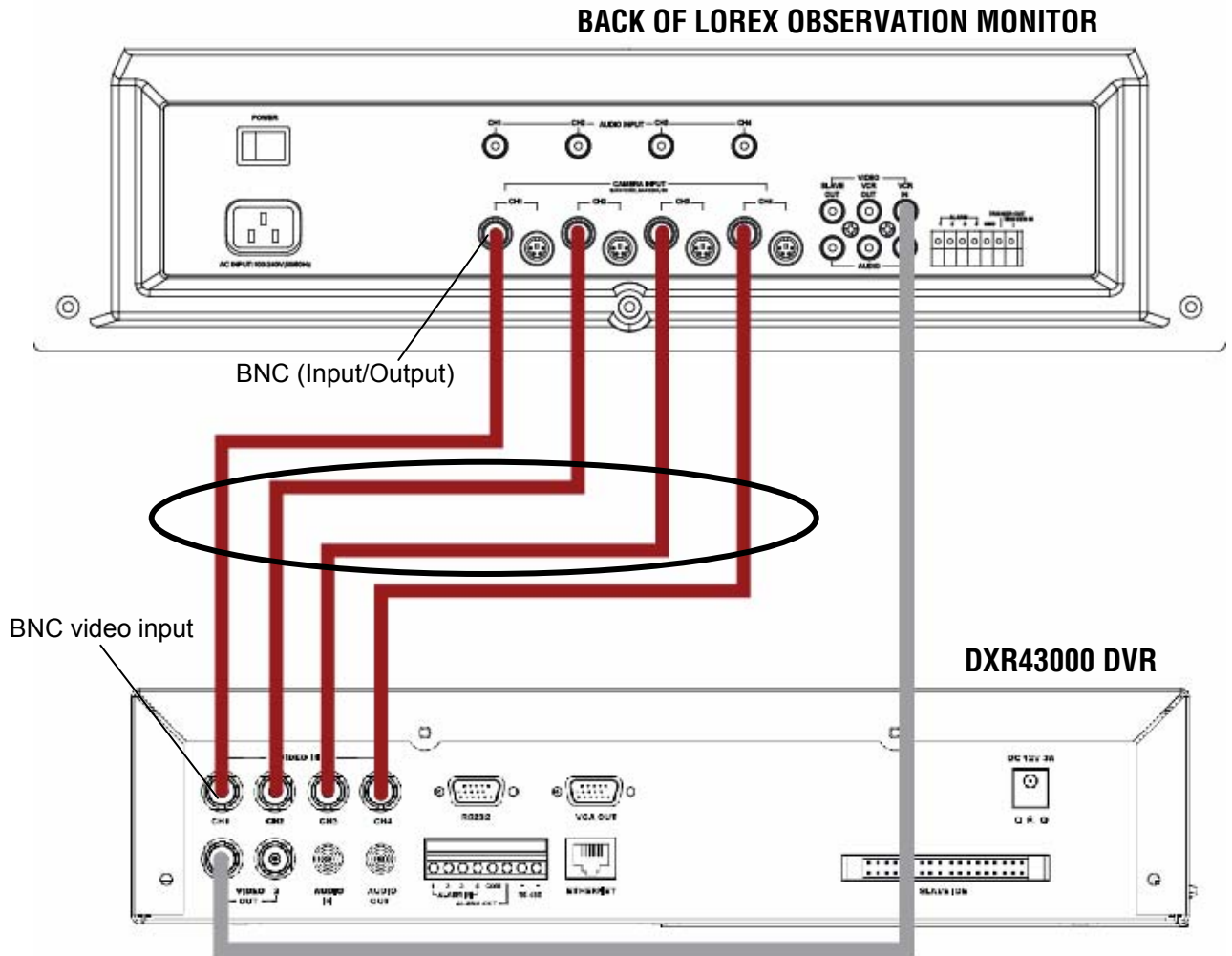
### **CONNECTION TO A SLAVE MONITOR**

To record the video signals from your DVR connect a BNC video cable, RCA audio cable from the VIDEO OUT / AUDIO OUT to the Audio/Video inputs on your VCR.

**NOTE** The maximum distance using cable should not exceed 20 meters

# 15 CONNECT A TYPICAL LOREX MONITOR

CONNECTION OF A TYPICAL LOREX OBSERVATION MONITOR TO A DXR43000

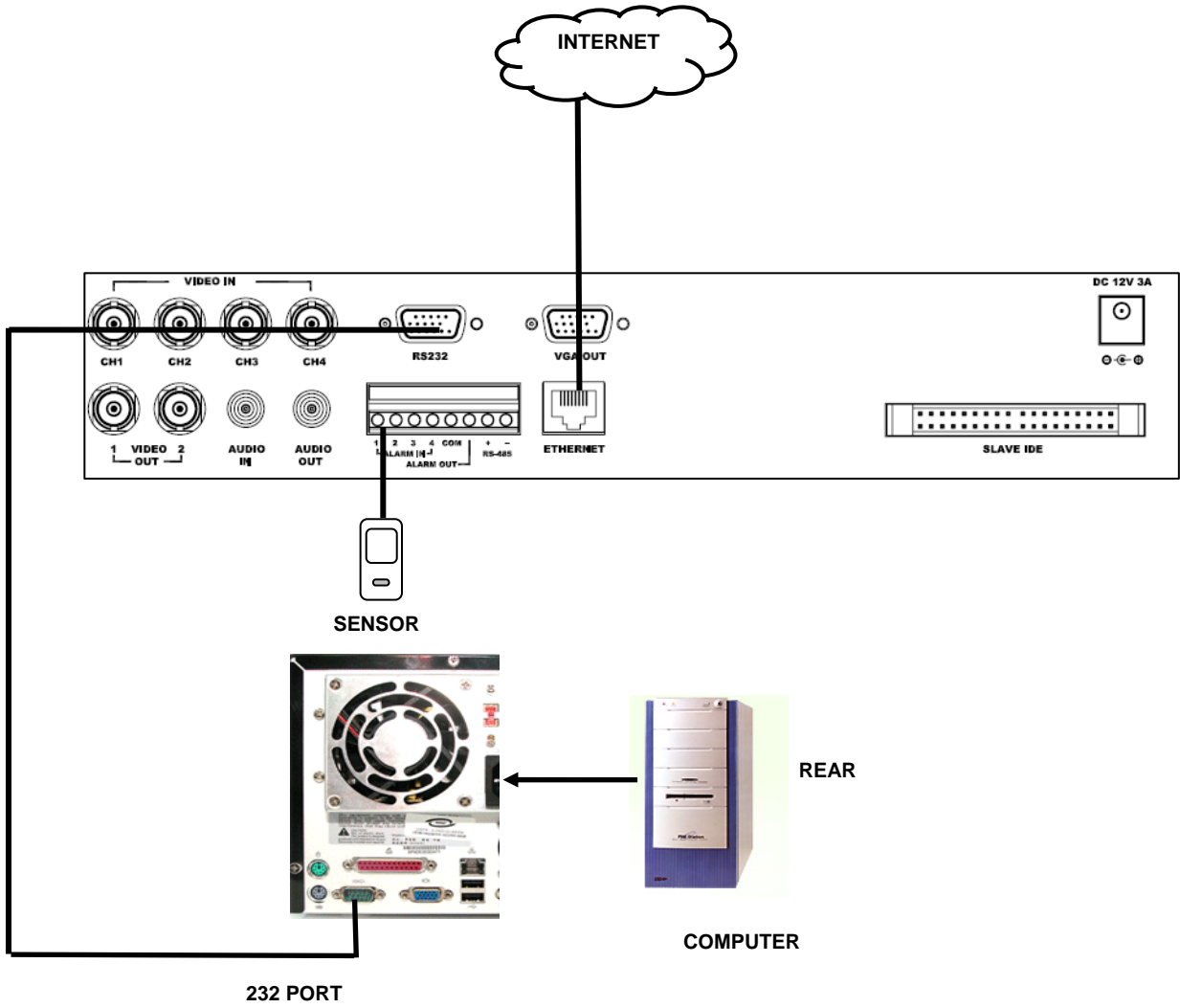


## NOTE:

On Lorex quad monitors the BNC video input channel connectors also support video output. The BNC video input/output on a Lorex quad monitor can be connected to BNC video input of the DVR.

To view the menu or playback of the DVR, press the monitor's VCR button located on the front of the monitor. Please refer to the monitor manual for more information.

# 16 NETWORK, ALARM & COMPUTER INSTALLATION



## 17 NETWORK IMAGE SIZE & SPEED

	720 X 240		360 X 240	
	IMAGE SIZE	IPS	IMAGE SIZE	IPS
LOW	14K ~ 15K	13 ~ 18	08K ~ 09K	25 ~ 30
BASIC	16K ~ 17K	10 ~ 15	10K ~ 11K	23 ~ 28
NORMAL	19K ~ 20K	09 ~ 14	11K ~ 12K	23 ~ 28
HIGH	23K ~ 24K	09 ~ 14	14K ~ 15K	15 ~ 20
BEST	32K ~ 33K	09 ~ 14	19K ~ 20K	10 ~ 15



The demand on the volume of the HDD can be different depending on the displayed picture.

## 18 RECORDING TIME (IN HOURS)

	720 X 240				
	LOW	BASIC	NORMAL	HIGH	BEST
<b>01 IPS</b>	1569Hours	1429Hours	1250Hours	1026Hours	755Hours
<b>02 IPS</b>	777Hours	714Hours	625Hours	513Hours	379Hours
<b>03 IPS</b>	519Hours	473Hours	417Hours	343Hours	252Hours
<b>05 IPS</b>	311Hours	286Hours	249Hours	206Hours	152Hours
<b>10 IPS</b>	156Hours	142Hours	125Hours	103Hours	76Hours
<b>15 IPS</b>	104Hours	95Hours	83Hours	68Hours	50Hours
<b>30 IPS</b>	52Hours	47Hours	42Hours	34Hours	25Hours
<b>60 IPS</b>	26Hours	24Hours	21Hours	17Hours	13Hours

	360 X 240				
	LOW	BASIC	NORMAL	HIGH	BEST
<b>01 IPS</b>	2581Hours	2222Hours	1951Hours	1600Hours	1194Hours
<b>02 IPS</b>	1290Hours	1127Hours	976Hours	808Hours	597Hours
<b>03 IPS</b>	860Hours	748Hours	650Hours	537Hours	400Hours
<b>05 IPS</b>	516Hours	449Hours	390Hours	323Hours	240Hours
<b>10 IPS</b>	259Hours	225Hours	195Hours	161Hours	120Hours
<b>15 IPS</b>	172Hours	150Hours	130Hours	107Hours	80Hours
<b>30 IPS</b>	86Hours	75Hours	65Hours	54Hours	40Hours
<b>60 IPS</b>	43Hours	37Hours	33Hours	27Hours	20Hours



60 IPS is equal to 30 frames per second. 1 IPS is equal to 0.5 frames per second. The demand on the volume of HDD can be different depending on the displayed picture.

## 19 RECORDING TIME (Gigabytes per hour)

	720 X 240				
	LOW	BASIC	NORMAL	HIGH	BEST
01 IPS	0.051GB/H	0.056GB/H	0.064GB/H	0.078GB/H	0.106GB/H
02 IPS	0.103GB/H	0.112GB/H	0.128GB/H	0.156GB/H	0.211GB/H
03 IPS	0.154GB/H	0.169GB/H	0.192GB/H	0.233GB/H	0.317GB/H
05 IPS	0.257GB/H	0.28GB/H	0.321GB/H	0.389GB/H	0.528GB/H
10 IPS	0.514GB/H	0.562GB/H	0.642GB/H	0.778GB/H	1.06GB/H
15 IPS	0.77GB/H	0.843GB/H	0.962GB/H	1.17GB/H	1.59GB/H
30 IPS	1.54GB/H	1.69GB/H	1.92GB/H	2.33GB/H	3.17GB/H
60 IPS	3.08GB/H	3.37GB/H	3.85GB/H	4.67GB/H	6.34GB/H

	360 X 240				
	LOW	BASIC	NORMAL	HIGH	BEST
01 IPS	0.031GB/H	0.036GB/H	0.041GB/H	0.05GB/H	0.067GB/H
02 IPS	0.062GB/H	0.071GB/H	0.082GB/H	0.0999GB/H	0.134GB/H
03 IPS	0.093GB/H	0.107GB/H	0.123GB/H	0.149GB/H	0.2GB/H
05 IPS	0.155GB/H	0.178GB/H	0.205GB/H	0.248GB/H	0.334GB/H
10 IPS	0.309GB/H	0.356GB/H	0.41GB/H	0.497GB/H	0.668GB/H
15 IPS	0.464GB/H	0.535GB/H	0.615GB/H	0.745GB/H	1.00GB/H
30 IPS	0.928GB/H	1.07GB/H	1.23GB/H	1.49GB/H	2.00GB/H
60 IPS	1.86GB/H	2.14GB/H	2.46GB/H	2.98GB/H	4.00GB/H



60 IPS is equal to 30 frames per second. 1 IPS is equal to 0.5 frames per second. The demand on the volume of HDD can be different depending on the displayed picture.



## 20 INSTALLING THE MASTER HDD



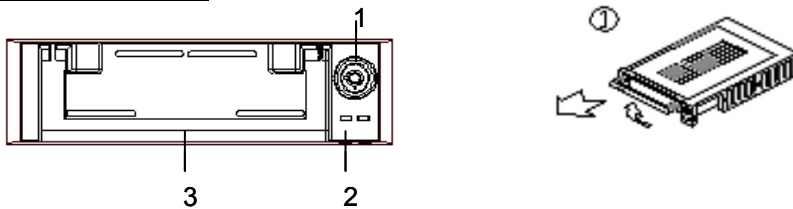
The HDD serves the same purpose in a DVR as a video cassette does in a VCR. However, installing the HDD is a bit more complicated. Please follow the next steps carefully in order to ensure proper installation.

The compartment located on the front panel of the DVR is the removable Cartridge Casing in which you insert the HDD. The various parts of the Cartridge Casing are labeled for your reference.

### 1. Remove the Cartridge Casing from the DVR

Lift the Handle and pull towards you. The Cartridge Casing will slide out of the DVR.

#### Cartridge Casing



1. Keyhole
2. LED indicator lights (Power indicator & HDD Access indicator)
3. Handle



YOU MAY FIND THAT THE CARTRIDGE CASING IS LOCKED. IN THIS CASE, SKIP AHEAD TO STEP 8 TO FIND INSTRUCTIONS ON UNLOCKING THE CABINET, THEN RETURN TO STEP 2.

### 2. Remove the Cover from the Cartridge Casing

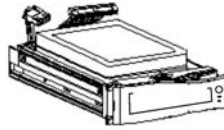
- a) Unclip the release latch with the word "OPEN" printed beside it by gently pushing on the latch.
- b) Slide the cover off the Cartridge Casing.



### 3. Connect the HDD into the

Take the Hard Disk Drive and connect it to the Cartridge Casing to the HDD. The cables should be inserted into the back of the Cartridge Casing, but not forcibly.

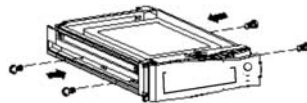
Take the Hard Disk Drive and connect it to the Cartridge Casing to the HDD. The cables should be inserted into the back of the Cartridge Casing, but not forcibly.



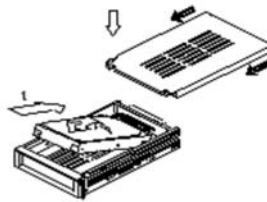
The 4 Pin connection is the DC Power cable, and the wider cable is the standard Hard Drive IDE type connection.

#### **4. Secure the HDD in the Casing**

Use screws and tighten them, positioning the HDD into place.



#### **5. Slide the top Cover over the Cartridge Casing**



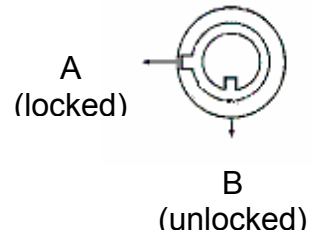
Slide the Cover forward over the Cartridge Case. Ensure it is secured in place over the release latch.

#### **6. Reinsert the Cartridge Casing into the DVR**

Fully insert the Cartridge Case into the DVR.

## 7. Lock the Cabinet

Lock the cabinet by turning the key clockwise.



If you need to unlock the cabinet, turn the key counter-clockwise from the position shown above.



**IF YOU DO NOT LOCK THE CABINET, THE DVR SYSTEM WILL NOT FUNCTION PROPERLY.**

## 21 THE NETVIEWER SOFTWARE

This section provides instructions for installing and using the NetViewer, which is included with the DXR 43000 series DVR. The minimum requirements for this installation are as follows:

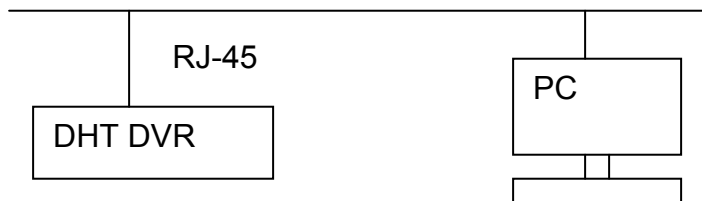
- CPU: SPEED SHOULD BE 1.0GHZ or more
- RAM: 256 MB RAM or more
- Operating System: Windows 98/ 2000/ XP
- Video card (stand alone): 32 MB
- Hard Disk:10 MB (free space for software installation)
- Network card: 10 base T

### 21.1 INTRODUCTION

The Network Viewer allows you to access the DVR from a remote desktop or laptop in a TCP/IP networking environment. It can perform the following functions:

- View live images from the 4CH.
- Store, search, and review recorded video from the DVR HDD.
- Change the record settings and date/time properties.

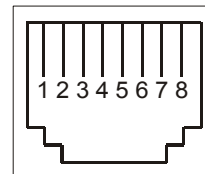
**Note:** Before you are ready to view images from a desktop, you need to have your DVR CONNECTED TO THE LAN by obtaining a 10- base T Ethernet data cable (Standard RJ-45)



#### 21.1.1 RJ-45 PIN CONFIGURATION FOR ETHERNET

PIN NO.	PIN Assignment
1.	TX +
2.	TX -
3.	RX +
4.	Not Connected
5.	Not Connected
6.	RX -
7.	Not Connected
8.	Not Connected

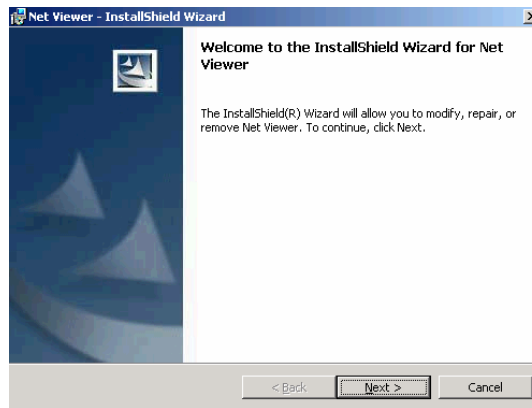
RJ-45 socket



## 21.2 INSTALLING THE NETVIEWER IN YOUR PC

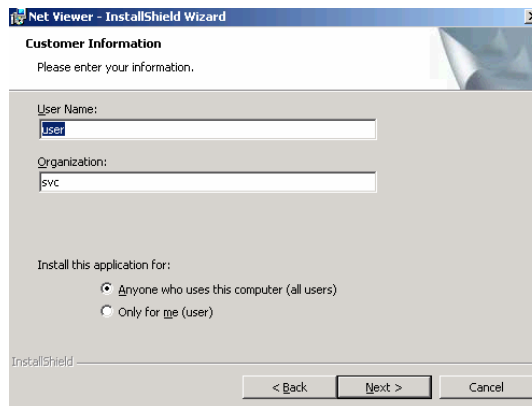
Follow these steps to install the NetViewer from the supported CD-R.

1. Exit all applications currently running in the selected PC.
2. Insert the supplied software CD in the CD-ROM drive.
3. Locate the Setup icon on your CD and double click on setup icon



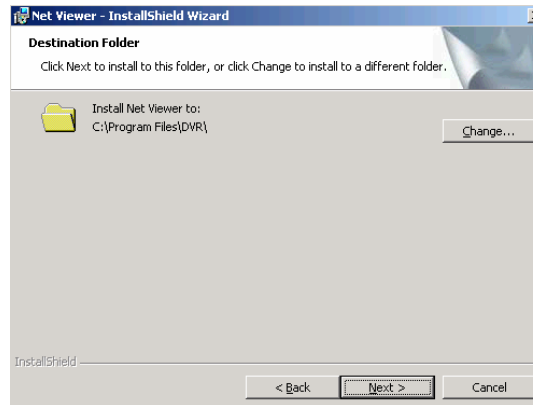
**Figure 1: Startup Screen**

4. Press Next



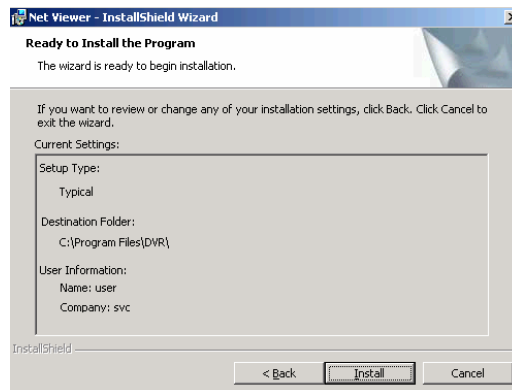
**Figure 2: Customer Information**

5. Enter your name and organization and press Next.



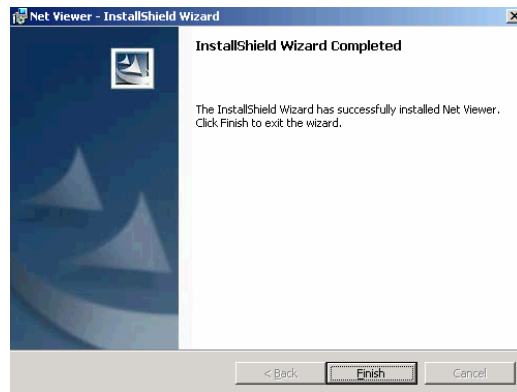
**Figure 3: Destination Folder**

6. Enter the desired folder for the installation or press Next.



**Figure 4: Installation**

7. Press Install to start installing the program.



**Figure 5: Installation Complete**

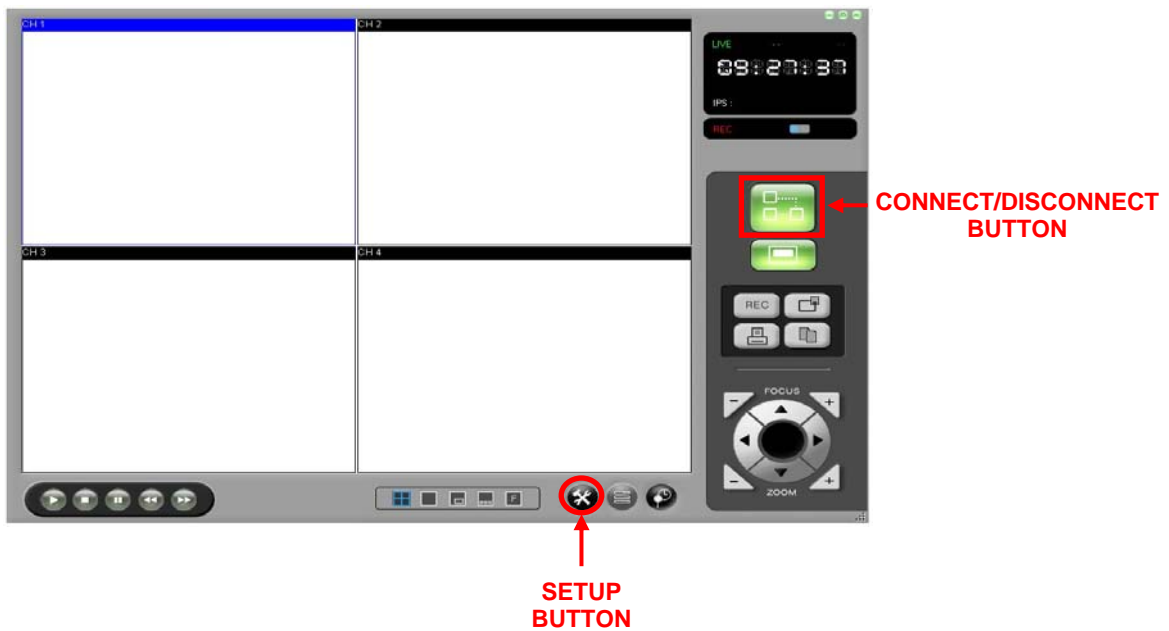
8. Press the Finish button to end the installation process.



9. Open the **NetViewer** icon located on your desktop and click on it.

10. The **Netviewer** main window will appear on the screen as shown below.

### 21.2.1 NETVIEWER MAIN SCREEN




## 22 SETUP CAMERA FOR REMOTE VIEWING

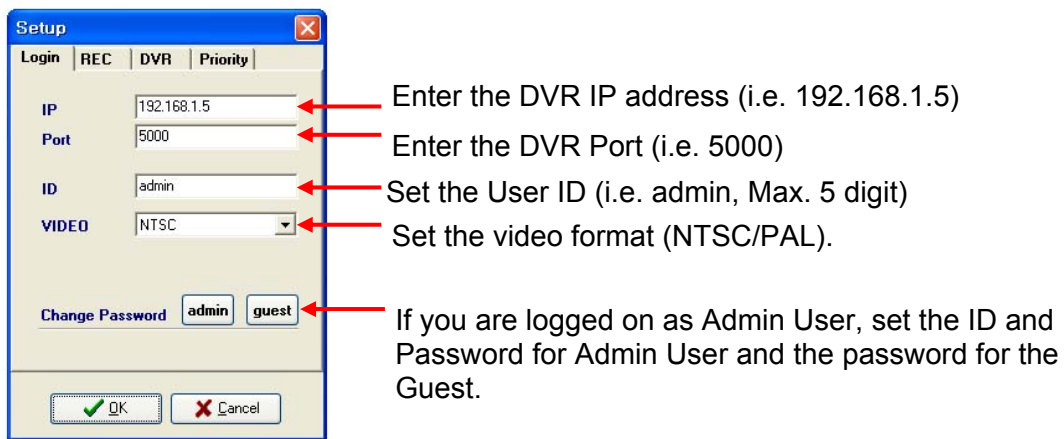
See the following instructions to setup the camera for remote viewing over the internet:

1. NETWORK CONFIGURATION SETTINGS (Page 44)
2. VIEWING THE CAMERAS (Page 45)

### 22.1 NETWORK CONFIGURATION SETTINGS

#### PROCEDURE

Click on the Setup icon , a small setup window will appear.



The screenshot shows a 'Setup' window with four tabs: 'Login', 'REC', 'DVR', and 'Priority'. The 'Login' tab is active. It contains the following fields and controls:

- IP:** A text box containing '192.168.1.5'. A red arrow points to it with the text: 'Enter the DVR IP address (i.e. 192.168.1.5)'. Below this is a red arrow pointing to the 'Port' field with the text: 'Enter the DVR Port (i.e. 5000)'.
- Port:** A text box containing '5000'.
- ID:** A text box containing 'admin'. A red arrow points to it with the text: 'Set the User ID (i.e. admin, Max. 5 digit)'.
- VIDEO:** A dropdown menu showing 'NTSC'. A red arrow points to it with the text: 'Set the video format (NTSC/PAL)'.
- Change Password:** A button with two sub-buttons: 'admin' and 'guest'. A red arrow points to the 'admin' button with the text: 'If you are logged on as Admin User, set the ID and Password for Admin User and the password for the Guest.'
- Buttons:** At the bottom, there are 'OK' and 'Cancel' buttons.

Press OK to continue.

**NOTE** If you are using the Port Forwarding, you should forward 4 serial ports from the set port number.

#### Example:

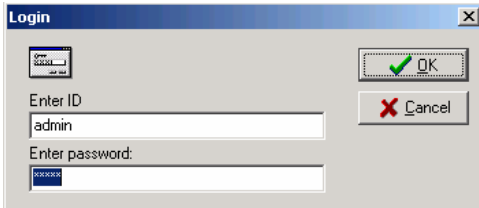
Set Port Number: 5000, Ports to be Forwarded: 5000, 5001, 5002, 5003.



## 22.2 VIEWING THE CAMERAS

### PROCEDURE

Press the connect icon  to start viewing the cameras.



If the setup is properly done, the cameras will appear on the screen (see *Figure 6, page 45*).



**Figure 6: Remote Camera Views**

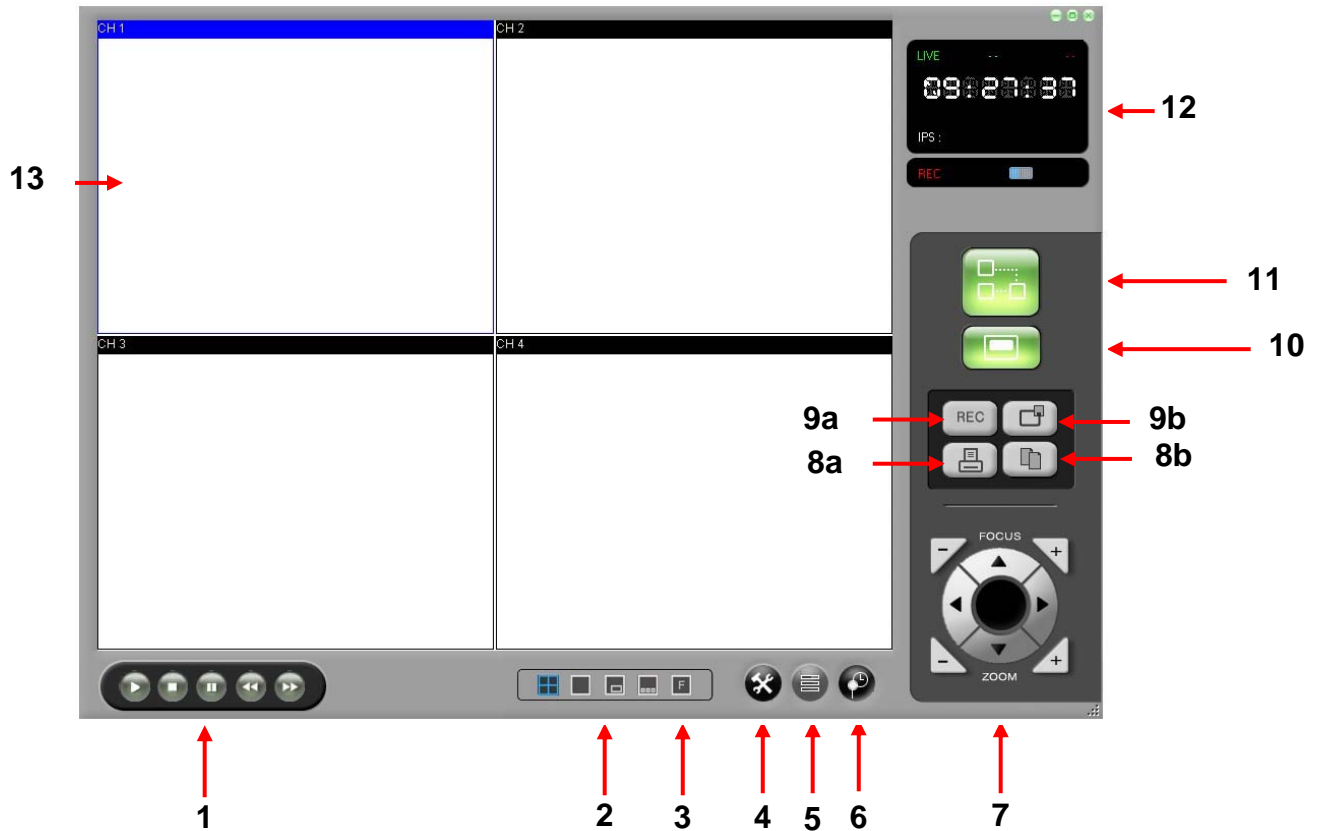
**NOTE** If you are behind a router you need to open 4 ports related to the main port.

**Example:**

If you set up port 5000 you need to open ports 5000, 5001, 5002 and 5003 in order to get connected remotely.

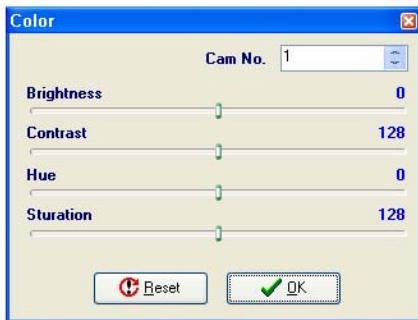
## 22.3 NETWORK CONFIGURATION

### 22.3.1 NETVIEWER PANEL DESCRIPTION



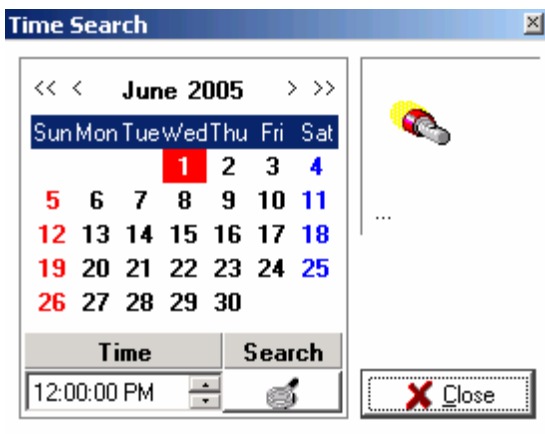
1. Used to "PLAY, STOP, PAUSE, REW and FF" the recordings saved on the HDD of the DVR.  
When the PLAY button is pressed the most recent recorded data will be played regardless of search data set on the DVR.
2. Select the display mode.  
Available modes are QUAD, FULL, PIP, POP.  
You could change the channel right button of the mouse on each mode.
3. Change the NETVIEWER image screen to Full Screen Mode.
4. Used to set the appropriate value for NETVIEWER.

5. Set the Contrast/Bright/Sharpness/Color of each channel.



- ← Choose the channel.
- ← Set the Brightness Value.
- ← Set the Contrast Value.
- ← Set the Hue Value.
- ← Set the Saturation Value.

6. TIME SEARCH. This feature allows you to Search events on your DVR.



Press the Search button. Select the desire date and time and press the Search button.


The DVR will start searching the data. If the data were found, it will be played automatically. If there is no data available on specified date and time, "DATA NOT FOUND" message will be displayed.

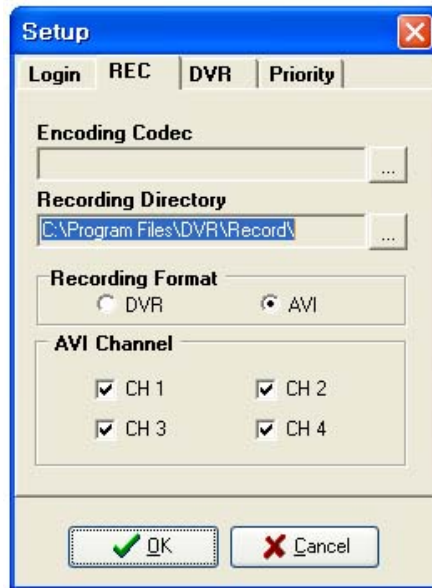
7. Used to adjust the PAN/TILT camera.
8.
  - a. Used to print the displayed image.
  - b. Used to capture the displayed image of the NetViewer in a JPEG file format
9.
  - a. Used to Start or Stop the recording on the DVR.
  - b. Used to activate REC function of the DVR
10. Local Player: Used to save the video on AVI or DVR format of the displaying image of NetViewer or to stop it.
11. Connect/ Disconnect button
12. Information Display Screen
  - The status of NORMAL/ALARM/MOTION/SCHEDULE REC is displayed.
  - Marking whether currently displaying image is LIVE or PLAYBACK.
13. Video image is displayed.

**Note: The Admin User has full access. The Guest User can ONLY use the No. 4 and No. 10 buttons.**

## 22.3.2 AVI SAVING METHOD PROCEDURE



Start the NETVIEWER application and press the SETUP BUTTON . The SETUP window will come out (see Figure 7).



**Figure 7: Netviewer Setup Window**

From the SETUP menu, select the REC menu and the window will appear. The REC menu is used to set the values to save the images displayed on the Viewer.

**Note: If you choose the Encoding Codec, you can select the relevant Codec you want to use. You could use any Codec out of the preinstalled Codec on your computer. For an example of the selection window see Figure 8, page 49 (the actual display could be different depending on your computer system)**

### 22.3.3 CODEC SETTING PROCEDURE

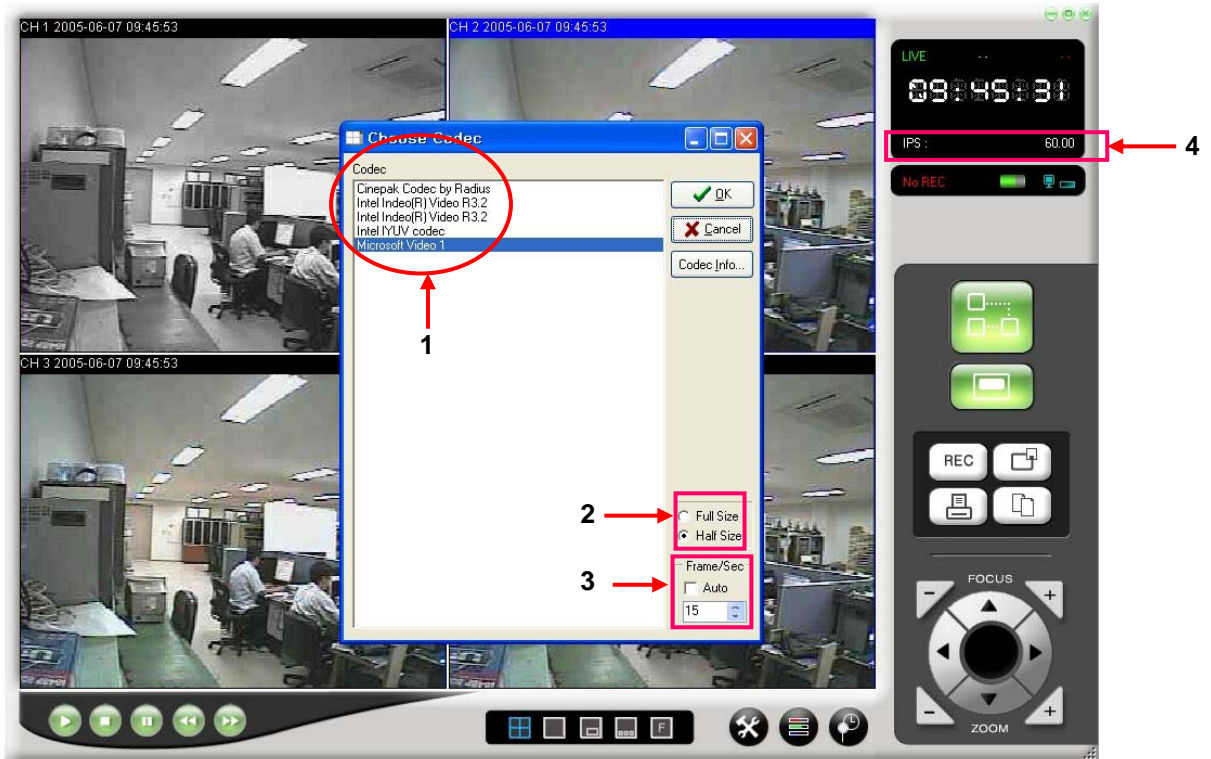


Figure 8: Codec Setting

1. Choosing a Codec window displays the currently available Codec on your computer. Choose the Codec you want to use.

2. Select the image size to be saved.

3. Set the IPS value to be saved.

For example: You could set a new IPS value to be  $\frac{1}{4}$  the IPS value displayed on #4. If #4 displays the IPS = 16, you could set the new value at #3 IPS = 4 (i.e.  $\frac{1}{4} \times 16 \text{ IPS} = 4 \text{ IPS}$ ).

### 22.3.4 RECORDING DIRECTORY SETTING

1. Choose the Folder to be saved.

### 22.3.5 RECORDING FORMAT SETTING

1. Select the Format of the image to be saved.

**Note:** With the available DVR format, you can only playback with the Local Viewer. AVI format can be played with the Windows Media player or other player.

## 22.3.6 RECORDING CHANNEL SETTING

1. Select the Channels to be saved.



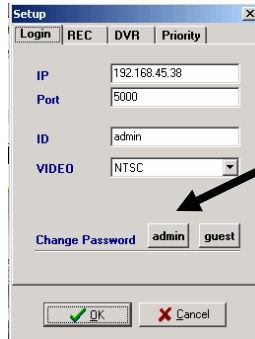
**LOCAL REC BUTTON**  
(records to the hard drive  
of your local computer)

2. Press the LOCAL REC BUTTON to start recording. Press the LOCAL REC BUTTON again to stop recording.

## 22.3.7 ADMIN USER ID (OR GUEST) PASSWORD CHANGE PROCEDURE

Click on the Setup icon to open the setup window.

**Note: you must be connected to the DVR to change the password**



Click on the **admin** icon



- Enter the current password
- Enter the ID of the admin user (Max. 5digits)
- Enter new the password for the admin user
- Verify the new password of the admin user.
- Click OK to finish



The change password message window will appear

To change the **guest** password, repeat the procedure above by pressing the guest icon.



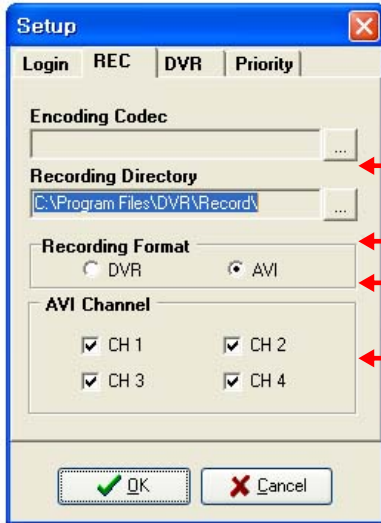
- Enter the password for the guest user
- Verify the password of the guest user.
- Press OK to finish.



- A change password message window will appear

### 22.3.8 REMOTE CAPTURE VIDEO SETTINGS

This menu allows you to configure the video capture settings to save and capture the video of the DVR on your PC. Click on the Setup icon and select the REC tab.

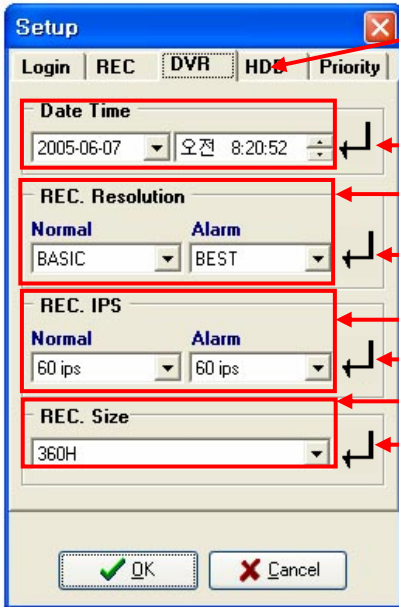


- Set the video compress Codec.
- Set the folder to save the video.
- Set the video format to be saved
- Select the channel to be saved.

Press OK to finish.

### 22.3.9 REMOTE DVR SETTINGS

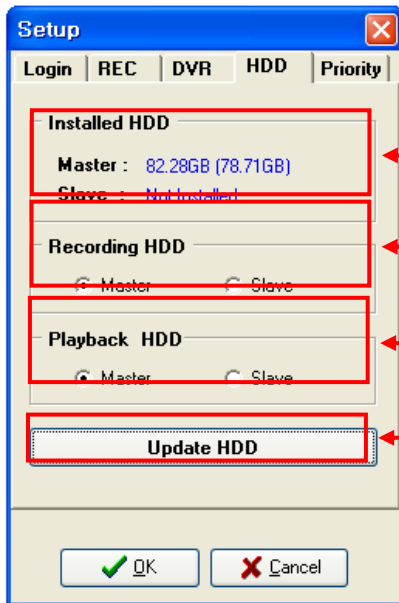
This menu allows you to configure some DVR settings from a remote location. Click on the Setup icon and select the DVR tab.



- Used to Change the DVR Setting over the Network.
- Set the data and time.
- Press the button to apply the changes.
- Set the resolution for the Normal Rec and the Alarm Rec
- Press the button to apply the changes.
- Set the IPS for the Normal Rec and the Alarm Rec
- Press the button to apply the changes.
- Set the Recording Resolution.
- Press the button to apply the changes.

Press OK to finish.



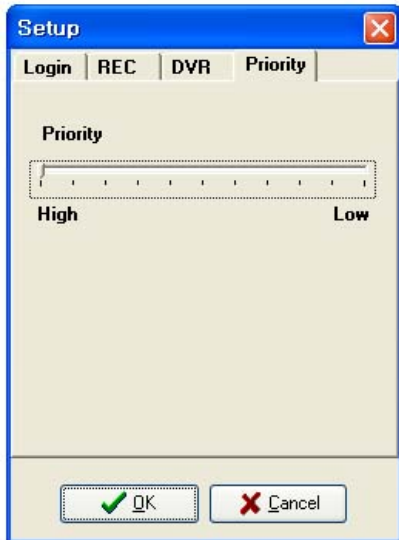


Show the HDD information installed on the DVR. The value is the physical capacity of each HDD, and the value in the parenthesis is the available capacity for saving.

Select the HDD for Recording

Select the HDD for Playback

Press button to apply the changes.



60 IPS is equal to 30 frames per second. 1 IPS is equal to 0.5 frames per second. The demand on the volume of HDD can be different depending on the displayed picture. Set the priority level to High for the best possible program performance. (The NetViewer will run smoothly with multiple programs open)

**NOTE: If you are not logged on as an Admin User you can NOT use the DVR Setting men.**

## 23 TECHNICAL SPECIFICATIONS

<b>DVR</b>	
<b>Recording Speed :</b>	60 Fields / Sec.
<b>HDD Capacity :</b>	300GB(Max.)/ Drive
<b>Recording Video Quality :</b>	Low, Basic, Normal, High, Best
<b>Recording Mode :</b>	Normal recording, Alarm (Alarm, Motion) recording, Schedule recording
<b>Playback Mode :</b>	Normal play mode, FF/REW
<b>Video Display Mode :</b>	Full mode, Quad mode, Sequential mode, PIP mode, POP mode (only accessible from remote control)
<b>Video Input :</b>	4 BNC Input port - note that each of these inputs has a corresponding Video Out BNC connector, if looping operation is desired. (1 CH PORT - PAN/TILT video input available )
<b>Audio Input :</b>	1 RCA Input port
<b>Video Output :</b>	1 VGA Output port / 2 Composite Output ports
<b>Audio Output :</b>	1 RCA Output port
<b>Alarm In/Out :</b>	PIR sensor Input, Alarm Output, HDD Warning Output
<b>Compression Rate :</b>	15~50K Byte / Frame
<b>View Resolution :</b>	720 (H) X 480 (V)
<b>Record Resolution :</b>	720 (H) X 224 (V)
<b>Display Frame :</b>	30 Frames/sec
<b>Recording Frame :</b>	Max.60 IPS
<b>OS :</b>	Embedded RTOS
<b>Power Consumption :</b>	25W
<b>Power Input :</b>	AC 90V ~ 240V 50/60Hz and 12V DC out
<b>Operating Temperature :</b>	0°C ~ 50°C (32°F ~ 122°F)
<b>Storage Temperature :</b>	-20°C ~ 70°C (-4°F ~ 158°F)
<b>Weight :</b>	4.5 kg (9.9 lbs)
<b>Dimensions :</b>	360(W) x 90(H) x 280(D) mm / [14.2"(W) x 3.5"(H) x 11"(D)]

Because our products are subject to continuous improvement, SVII and its subsidiaries reserve the right to modify product design and specifications without notice and without incurring any obligation. E&OE

## 24 TROUBLE SHOOTING

If the system does not function properly, please check the following points.

	PROBLEM	SOLUTION
DVR	Slave HDD not readable	Check the jumper PIN connection. Activate the Slave HDD in the Menu option HDD SLAVE.
	Keypad doesn't work	Remove the Key Lock
	Recording stopped	The HDD is full, and overwrite is not enabled

## 25 CARE AND MAINTENANCE

Please follow these instructions to ensure proper care and maintenance of this system

Keep your monitor and camera dry. If it gets wet, wipe it dry immediately.

Use and store your unit in normal temperature environment. Extreme temperatures can shorten the life of the electronic devices.

Handle the monitor carefully. Dropping it can cause serious damage to the unit.

Occasionally clean the unit with a damp cloth to keep it looking new.

Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the unit.

Keep the unit away from excessive dirt and dust. It can cause premature wear of parts.



# It's all on the web



**Product Information**



**Specification Sheets**



**User Manuals**



**Software Upgrades**



**Quick Start Guides**



**Firmware Upgrades**



**VISIT**  
**www.lorexcctv.com**

[www.lorexcctv.com](http://www.lorexcctv.com)

Strategic Vista International Inc.