

# LOREX ECO™

## H.264 NETWORK READY DIGITAL VIDEO SURVEILLANCE RECORDER

### INSTRUCTION MANUAL

English Version 2.0



MODEL:  
**LH100 SERIES**



*Thank you for purchasing the LH108 Series Digital Video Surveillance Recorder.*

*This manual refers to the following models:*

- LH104 (4-channel)
- LH108 (8-channel)

*To learn more about this product and to learn about our complete range of accessory products, please visit our website at:*

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



## CAUTION

**RISK OF ELECTRIC SHOCK  
DO NOT OPEN**



**CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER. NO USER SERVICABLE PARTS INSIDE.**

**REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the products' enclosure that may be of sufficient magnitude to constitute a risk of electric shock



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.

**WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.**

**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF THE PLUG TO THE WIDE SLOT AND FULLY INSERT.**

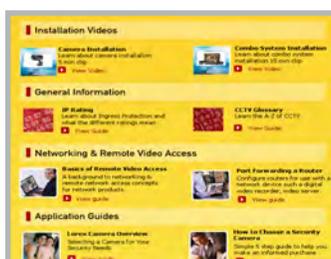
# BEFORE YOU START

THIS PRODUCT MAY REQUIRE PROFESSIONAL INSTALLATION

LOREX IS COMMITTED TO FULFILLING YOUR SECURITY NEEDS



- We have developed user friendly products and documentation. Please read the Quick Start Guide and User Manual before you install this product.



- Consumer Guides and Video Tutorials are available on our web site at [www.lorexcctv.com/support](http://www.lorexcctv.com/support)



- If you require further installation assistance, please visit [www.lorexcctv.com/installation](http://www.lorexcctv.com/installation) or contact a professional installer.



- Please refer to the “Need Help” insert for technical support and customer care information.



- Please note that once the components of this product have been unsealed, you cannot return this product directly to the store without the original packaging.

# AVANT DE COMMENCER

# ANTES DE EMPEZAR

**CE PRODUIT POURRAIT EXIGER UNE INSTALLATION PROFESSIONNELLE**

**ESTE PRODUCTO PUEDE EXIGIR UNA INSTALACIÓN PROFESIONAL**

## LOREX S'ENGAGE À SATISFAIRE VOS BESOINS SÉCURITAIRES

- Veuillez lire le guide de démarrage rapide et le mode d'emploi avant d'installer ce produit.
- Les guides du consommateur et les séances de tutorat vidéo sont disponibles sur l'Internet en visitant [www.lorexcctv.com/support](http://www.lorexcctv.com/support)
- Si vous avez besoin de l'aide pour l'installation, veuillez visiter [www.lorexcctv.com/installation](http://www.lorexcctv.com/installation) ou contactez un spécialiste en installation
- Veuillez référer à l'insert "Need Help" pour obtenir de l'information sur le service à la clientèle et le support technique
- Veuillez constater qu'une fois que les composants de ce produit ont été retirés de l'emballage, vous ne pourrez plus retourner ce produit directement au magasin.

## LOREX SE COMPROMETE A SATISFACER SUS NECESIDADES EN SEGURIDAD

- Favor de leer la guía de instalación rápida y la guía del usuario antes de instalar este producto.
- Puede conseguir las guías del consumidor y los cursos en enseñanza video sobre el Internet visitando [www.lorexcctv.com/support](http://www.lorexcctv.com/support)
- Si necesita ayuda para la instalación, visite [www.lorexcctv.com/installation](http://www.lorexcctv.com/installation) o contacte un especialista en instalaciones
- Favor de referir al documento "Need Help" para obtener información acerca del servicio al cliente y al soporte técnico
- Favor de notar que una vez que los componentes de este producto han sido removidos del embalaje, no podrá devolver este producto directamente a la tienda



 **LOREX**<sup>®</sup>  
[www.lorexcctv.com](http://www.lorexcctv.com)

# NEED HELP?

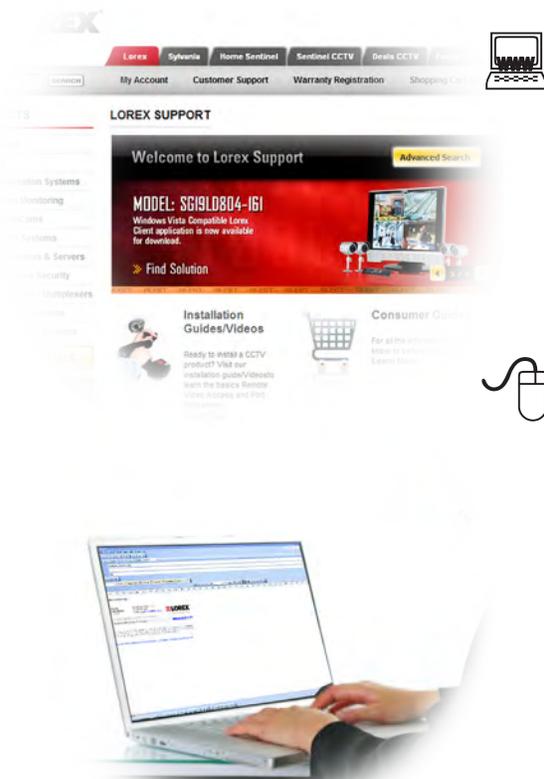


## CONTACT US FIRST

### DO NOT RETURN THIS PRODUCT TO THE STORE

Please make sure to register your product at [www.lorexcctv.com](http://www.lorexcctv.com) to receive product updates and information

## 3 EASY WAYS TO CONTACT US:



### Online:

Product Support is available 24/7 including product information, user manuals, quick start up guides and FAQ's at [www.lorexcctv.com/support](http://www.lorexcctv.com/support)

To order accessories, visit [www.lorexcctv.com](http://www.lorexcctv.com)

### By Email:

Technical Support (for technical/installation issues)  
[support@lorexcorp.com](mailto:support@lorexcorp.com)

Customer Care (for warranty and accessory sales)  
[customerservice@lorexcorp.com](mailto:customerservice@lorexcorp.com)

Customer Feedback  
[info@lorexcorp.com](mailto:info@lorexcorp.com)

### By Phone:

**NORTH AMERICA: 1-888-425-6739 (1-888-42-LOREX)**

**MEXICO: 1-800-514-6739**

**INTERNATIONAL: +800-425-6739-0**

**(Example: From the UK, dial 00 instead of +)**

Technical Support (for technical/installation issues)  
Press option 1 for English, and then press option 1

### OR

Customer Care (for warranty and accessory sales)  
Press option 1 for English, and then press options 2 to 5





# NECESITA AYUDA

## COMUNÍQUESE PRIMERO CON NOSOTROS



# VOUS AVEZ BESOIN D'AIDE? CONTACTEZ-NOUS D'ABORD

**NO DEVUELVA ESTE PRODUCTO A LA TIENDA**

**NE RETOURNEZ PAS CE PRODUIT AU MAGASIN**

**Cerciórese de por favor colocar su producto en [www.lorexcctv.com/registration](http://www.lorexcctv.com/registration) para recibir actualizaciones y la información del producto**

**Veillez veiller à enregistrer votre produit à [www.lorexcctv.com/registration](http://www.lorexcctv.com/registration) pour recevoir des mises à jour et l'information de produit**

### 3 MANERAS SENCILLAS DE COMUNICARSE CON NOSOTROS:

### 3 FAÇONS FACILES DE NOUS CONTACTER:



#### En línea:

apoyo al producto disponible 24/7 incluyendo información del producto, manuales para el usuario, guías de inicio rápido y preguntas más frecuentes en

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

Para colocar pedidos de accesorios, visite

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



#### En ligne:

le support des produits est disponible 24 heures sur 24, 7 jours sur 7, y compris les informations sur les produits, les guides de l'utilisateur, les guides de démarrage rapide et les foires à questions

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

Pour commander des accessoires, visitez

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



#### Por Correo Electrónico:

soporte técnico (para asuntos técnicos/la instalación)

**[support@lorexcorp.com](mailto:support@lorexcorp.com)**

**0**

servicio al cliente (respecto a la garantía y a la venta de accesorios)

**[customerservice@lorexcorp.com](mailto:customerservice@lorexcorp.com)**



#### Par Courriel:

support technique (pour les questions techniques et d'installation) **[support@lorexcorp.com](mailto:support@lorexcorp.com)**

**OU**

service à la clientèle (pour les questions de garantie et les ventes d'accessoires)

**[customerservice@lorexcorp.com](mailto:customerservice@lorexcorp.com)**



#### Por Teléfono:

**L'AMÉRIQUE DU NORD: 1-888-425-6739 (1-888-42-lorex)**

**MEXICO: 1-800-514-6739**

**INTERNACIONAL: +800-425-6739-0**

**(Ejemplo: Desde el Reino Unido, marque el 00 en lugar del +)**

soporte técnico (para asuntos técnicos/la instalación)

oprima la opción 1 para inglés y luego oprima la opción 1

**0**

servicio al cliente (respecto a la garantía y a la venta de accesorios) oprima la opción 1 para inglés y luego oprima las opciones 2 A 5

**sus opiniones son bienvenidas en**

**[info@lorexcorp.com](mailto:info@lorexcorp.com)**

**para colocar pedidos de accesorios, visite**

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



#### Par Téléphone:

**NORTE AMÉRICA: 1-888-425-6739 (1-888-42-lorex)**

**MEXICO: 1-800-514-6739**

**INTERNATIONAL: +800-425-6739-0**

**(Exemple: À partir du Royaume-Uni, composez 00 au lieu de +)**

support technique (pour les questions techniques et d'installation) appuyez sur l'option 1 pour l'anglais, et ensuite sur l'option 1

**OU**

service à la clientèle (pour les questions de garantie et les ventes d'accessoires) appuyez sur l'option 1 pour l'anglais, et ensuite sur les options 2 à 5

**nous serions heureux de recevoir vos**

**commentaires à [info@lorexcorp.com](mailto:info@lorexcorp.com) pour**

**commander des accessoires, visitez**

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

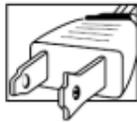
# Important Safeguards

In addition to the careful attention devoted to quality standards in the manufacture process of your video product, safety is a major factor in the design of every instrument. However, safety is your responsibility too. This sheet lists important information that will help to assure your enjoyment and proper use of the video product and accessory equipment. Please read them carefully before operating and using your video product.

## Installation

1. **Read and Follow Instructions** - All the safety and operating instructions should be read before the video product is operated. Follow all operating instructions.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - Comply with all warnings on the video product and in the operating instructions.
4. **Polarization** - Do not defeat the safety purpose of the polarized or grounding-type plug.

A polarized plug has two blades with one wider than the other.



A grounding type plug has two blades and a third grounding prong.



The wide blade or the third prong are provided for your safety.

If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet

5. **Power Sources** - This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your location, consult your video dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.
6. **Overloading** - Do not overload wall outlets of extension cords as this can result in the risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated insulation, have it replaced by your service technician.
7. **Power-Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the video product.

8. **Ventilation** - Slots and openings in the case are provided for ventilation to ensure reliable operation of the video product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video equipment on a bed, sofa, rug, or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the video product manufacturer's instructions have been followed.

9. **Attachments** - Do not use attachments unless recommended by the video product manufacturer as they may cause a hazard.

10. **Camera Extension Cables** - Check the rating of your extension cable(s) to verify compliance with your local authority regulations prior to installation.

11. **Water and Moisture** - Do not use this video product near water. For example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, near a swimming pool and the like.

Caution: Maintain electrical safety. Power line operated equipment or accessories connected to this unit should bear the UL listing mark of CSA certification mark on the accessory itself and should not be modified so as to defeat the safety features. This will help avoid any potential hazard from electrical shock or fire. If in doubt, contact qualified service personnel.

12. **Accessories** - Do not place this video equipment on an unstable cart, stand, tripod, or table. The video equipment may fall, causing serious damage to the video product. Use this video product only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the video product. Any mounting of the product should follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer.



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## Service

13. **Servicing** - Do not attempt to service this video equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
14. **Conditions Requiring Service** - Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions.
  - A. When the power supply cord or plug is damaged.
  - B. If liquid has been spilled or objects have fallen into the video product.
  - C. If the video product has been exposed to rain or water.
  - D. If the video product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
  - E. If the video product has been dropped or the cabinet has been damaged.
  - F. When the video product exhibits a distinct change in performance. This indicates a need for service.
15. **Replacement Parts** - When replacement parts are required, have the service technician verify that the replacements used have the same safety characteristics as the original parts. Use of replacements specified by the video product manufacturer can prevent fire, electric shock or other hazards.
16. **Safety Check** - Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the video product is in safe operating condition.
17. **Wall or Ceiling Mounting** - The cameras provided with this system should be mounted to a wall or ceiling only as instructed in this guide, using the provided mounting brackets.
18. **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

## Use

19. **Cleaning** - Unplug the video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
20. **Product and Cart Combination** - Video and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the video product and car combination to overturn.
21. **Object and Liquid Entry** - Never push objects for any kind into this video product through openings as they may touch dangerous voltage points or "short-out" parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.
22. **Lightning** - For added protection for this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power line surges.

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## General Precautions

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

### 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 in-stalled 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 on and off), the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio or television technician for assistance

This equipment has been certified and found to comply with the limits regulated by FCC, EMC, and LVD. Therefore, it is designated to provide reasonable protection against interference and will not cause interference with other appliance usage.

However, it is imperative that the user follows this manual's guideline to avoid improper usage which may result in damage to the unit, electrical shock and fire hazard 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.



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## Features

- H.264 compression
- Real time recording on 8 channels @ 360 x 240 resolution
- Triplex operation: view, record, playback simultaneously
- Video output : 2 BNC, 1 VGA
- Audio: 8 inputs 1 output (RCA)
- Security Certified Hard Drive pre-installed
- Easy control with USB mouse
- Instant viewing using Windows Mobile™ 6.0 and above touch screen smart phones
- Internet Remote Functions\*: View, Search & Playback, Backup and Setup
- Email alerts with JPEG attachment
- Microsoft Windows XP®, Vista® compatible
- Free Lorex DDNS (Dynamic Domain Name System) service keeps you connected anywhere all the time



\*Requires a high speed Internet connection and router (not included)

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# GETTING STARTED

The system comes with the following components:



**ECO DVR**



**REMOTE CONTROL**



**POWER SUPPLY**



**ETHERNET CABLE**



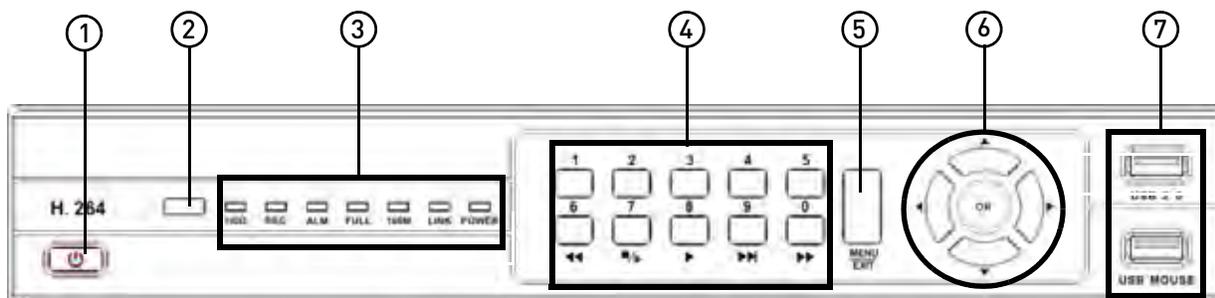
**INSTRUCTION MANUAL  
QUICKSTART GUIDE  
DOCUMENTATION CD**



**USB MOUSE**

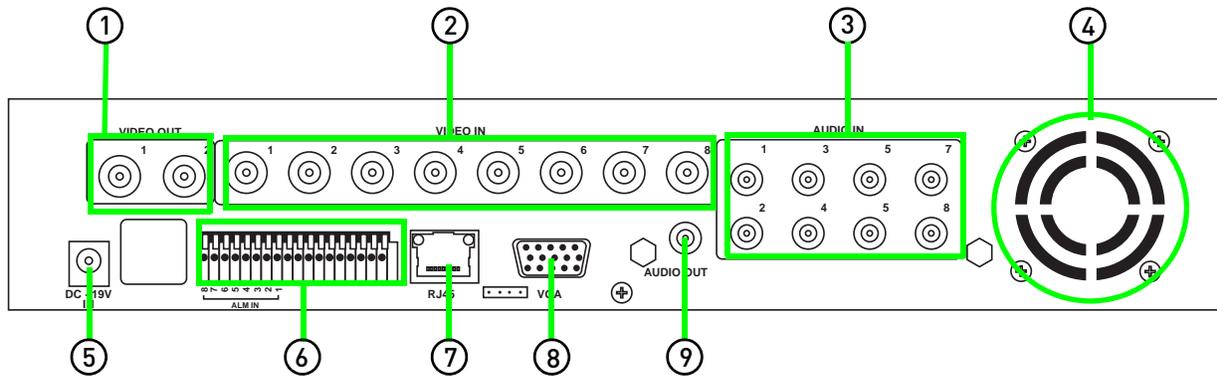
**HARD DRIVE SIZE, NUMBER OF CHANNELS, AND CAMERA CONFIGURATION MAY VARY BY MODEL. PLEASE REFER TO YOUR PACKAGE FOR SPECIFIC DETAILS.  
CHECK YOUR PACKAGE TO CONFIRM THAT YOU HAVE RECEIVED THE COMPLETE SYSTEM, INCLUDING ALL COMPONENTS SHOWN ABOVE.**

# FRONT PANEL



1. **Power:** Press to power the system ON/OFF.
2. **IR Sensor:** IR receiver for the remote control.
3. **LED Indicators:** Shows status of HDD, recording, alarm, network, and power.
4. **Channel/Numbers/Playback:** Press buttons 1~4 (4-channel models) or 1~8 (8-channel models) to view the selected channel in full-screen; press buttons 1~0 to input passwords and user IDs; during playback, press the following:
  - 6/◀◀: Increase reverse playback speed 1X, 2X, 4X
  - 7/■▶: Press to freeze playback to one frame, then press again to advance frame-by-frame
  - 8/▶: Press to start playback
  - 9/▶▶: Press to slow playback speed by 1/2, 1/4, 1/8
  - 0/▶▶: Press to increase forward playback speed 1X, 2X, 4X
5. **MENU/EXIT:** Press to open/close the main menu.
6. **Navigation/OK:** Press the Navigation buttons to perform the following:
  - **OK/PTZ:** In menus, press to confirm selections; in PTZ mode, press to change the navigation buttons to control the connected PTZ camera (not included)
  - ▲: Press to move cursor up; in PTZ mode, press to pan camera up
  - ▼: Press to move cursor down; in PTZ mode, press to pan camera down
  - ◀: Press to move cursor left; in PTZ mode, press to pan camera left
  - ▶: Press to move cursor right; in PTZ mode, press to pan camera right
7. **USB:** Connect a USB flash drive to the top port for data backup and firmware upgrades; connect a USB mouse to the bottom port.

# REAR PANEL



1. **Video Out:** Connect up to two external BNC monitors (not included).
2. **Video In:** Connect up to eight BNC cameras.
3. **Audio In:** RCA input for up to eight audio enabled cameras (not included).
4. **Exhaust fan:** Do not block to allow for proper ventilation.
5. **DC:** Port for 19V DC 3.42 A power adapter (included).
6. **Alarm block:** Connection block for external alarm/motion devices (not included).
7. **LAN/RJ45:** Networking port for a 10/100 Base-T RJ-45 network cable (included).
8. **VGA Output:** Connect an external VGA monitor (not included).
9. **Audio Out:** RCA output for external speakers or other audio devices (not included).

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# MOUSE CONTROL

The mouse is the primary input device for navigating system menus.

**NOTE:** Unless otherwise noted, all system functions described in this manual are achieved through mouse input.

To use a mouse with the system:

1. Connect a USB mouse to the **USB MOUSE** port on front panel of the system.

**NOTE:** Only the *top* USB port on the front panel is designed for data backup to a USB flash drive. Do not connect a USB flash drive to the bottom USB port on the rear panel.

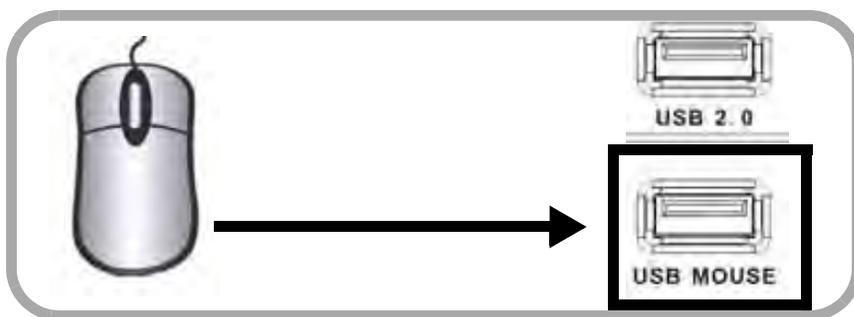


Figure 1.0 Connect a USB mouse to the bottom USB port on the front panel

2. Use the mouse buttons to perform the following:

- **Left-Button:** Click to select a menu option; during live viewing in split-screen, double-click on a channel to view the selected channel in full-screen.; double-click the channel again to return to split-screen view
- **Right-Button:** Click to open the Sub-Menu (see "Using the Sub-Menu" on page 8.)

3. **Scroll-Wheel:** No function.

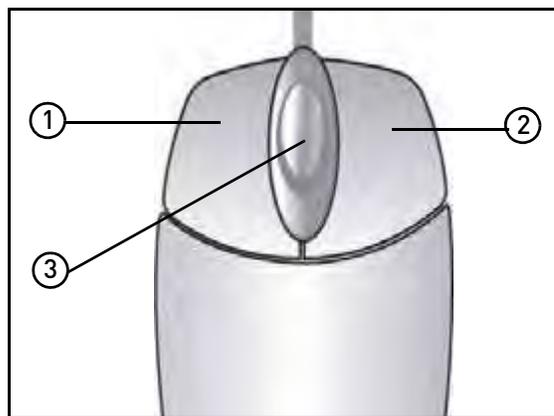


Figure 1.1 Mouse button operation

# REMOTE CONTROL

The remote control is the secondary input device for navigating the system's interface.

To use the remote control:

1. **STANDBY:** Press to turn standby mode ON/OFF.
2. **LOGIN/LOCK:** If "Security" has been enabled in the Setup menu, press to open the user password login screen.
3. **Number/Channel buttons:** While in menus, press buttons 0~9 to enter values; during live viewing, press to view channels in full-screen.
4. : Press to switch between quad and split-screen displays.
5. **MENU:** Opens the main menu.
6. **PTZ:** Press to open the PTZ control window.
7. **EXIT:** Close menu windows.
8. **Navigation/OK:**
  - **▲/CH+:** Move cursor in menus up; Channel Up.
  - **▶/FWD:** Move cursor in menus right; during playback, increase forward playback speed (5X, 15X, 60X).
  - **◀/REW:** Move cursor in menus left; during playback, increase reverse playback speed (5X, 15X, 60X)
  - **▼/CH-:** Move cursor in menus down; Channel down.
  - **OK:** In menus, press to confirm selections; during playback and preview, press to view system information
9. **+/- :** In menus, press to adjust values.
10. **RECORD:** Press to start manual recording.
11. **STOP:** Press to stop manual recording.
12. **EXTRA:** Open the system menu.
13. **Playback controls:**
  - : Increase reverse playback speed 1X, 2X, 4X
  - : Press to start playback
  - : Press to increase forward playback speed 1X, 2X, 4X
  - : Press to slow playback speed by 1/2, 1/4, 1/8
  - : Press to freeze playback to one frame, then press again to advance frame-by-frame
14. **AUDIO:** Press to open the Audio recording menu.\*
15. **MUTE:** Press to mute listen-in audio on the system.\*



Figure 2.0 Remote Control

\*Audio capable cameras (not included) are required for audio recording and listen-in audio functionality.

**TIP:** When using the remote control to enter password and camera titles, select the field using the navigation buttons, press ENTER, and then press the number buttons.

---

# STARTING THE SYSTEM

To power the system ON/OFF:

- Connect the power cable to the DC 19V port on the rear panel.

At startup, the system performs a basic system check and runs an initial loading sequence.\* After a few moments, the system loads a live display view.



Figure 3.0 Initial startup screens

## *Standby Mode*

The system can also be put into Standby Mode. Power will remain to the system but will not be recording.

To start/stop Standby mode:

1. Press and hold the **POWER** button on the front panel or remote control until the prompt closes. The system enters standby mode.
2. Press and hold the **POWER** button on the front panel or remote control until the system beeps. The system will begin powering up.

## *Password*

**ATTENTION:** By default, passwords are **disabled** on the system. You do not need to enter a password when accessing any system menus. However, for security purposes, it is highly recommended to enable passwords on the system using the Password Menu. For details, see "Managing Passwords" on page 13.



Figure 3.1 Password menu

# USING THE ONSCREEN DISPLAY

Use the system's graphical onscreen display to navigate menus and configure options and settings.



Figure 4.0 Live viewing with onscreen display

1. **Date & Time:** Displays the date and time on the system; OW—Overwrite will also appear in this display if the function is enabled.
2. **Channel Title:** Displays the customizable name for the channel.
3. **Record Status:** Displays the current recording status of the system: R=recording, C=continuous (normal recording); M=motion recording; A=alarm recording.
4. **Channel number:** Displays channel number.

## Using the Sub-Menu

### *Mouse Only*

When using the mouse, use the Sub-Menu to access several system options, including the Main Menu and PTZ control.

To open the Sub-Menu:

1. Right-click anywhere onscreen. The Sub-Menu opens.



Figure 4.1 Sub-Menu

2. Select one of the following options:
  - **MAIN MENU:** Opens the main system menu
  - **KEYLOCK:** Locks buttons on the front panel
  - **CHN SWITCH:** Select type of split-screen display
  - **VIDEO SEARCH:** Open the Search Menu to view recorded video
  - **PTZ:** Opens the PTZ control menu\*
  - **MUTE:** Mute listen-in audio on the system\*\*
  - **MANUAL REC:** Start manual recording
  - **STOP REC:** Stop manual recording
3. To close the Sub-Menu, click anywhere onscreen.

\*PTZ cameras are not included with the system.

\*\*Audio capable cameras (not included) are required for audio recording.

## Using the Virtual Keyboard

### *Mouse Only*

When using the mouse, you can input certain values using the onscreen virtual keyboard. You will need to use the Virtual Keyboard when entering your User ID and Password.

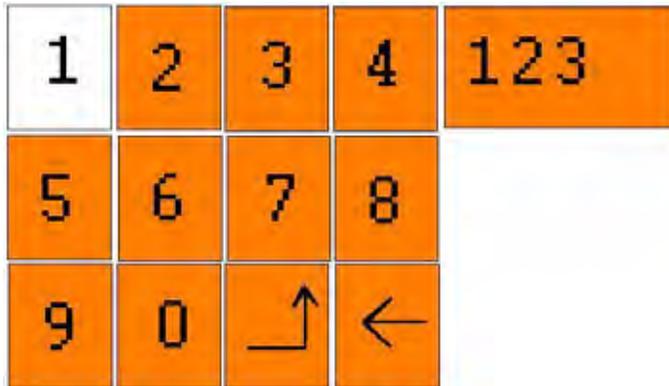


Figure 4.2 Virtual Keyboard—numerals

To use the Virtual Keyboard:

1. Click on an option or field, such as the User ID and Password fields. The Virtual Keyboard opens.
2. Click **0-9** to enter the desired digit.
3. Click **123** to switch between numerals, upper and lowercase letters, and other characters (only for certain options).

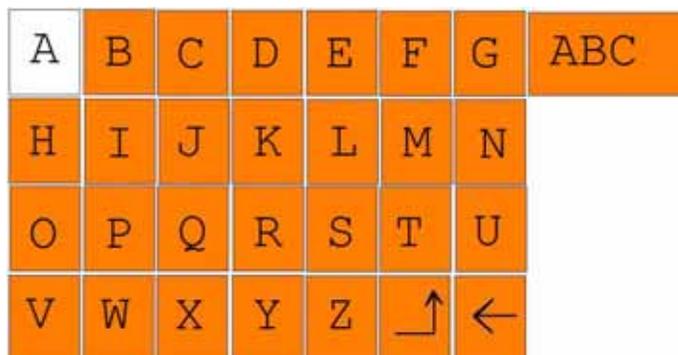


Figure 4.3 Virtual Keyboard—alphabet

4. Click  to Backspace/Delete.
 

**NOTE:** The buttons will turn from orange to white when you select the button with the mouse cursor.
5. Click  to enter/confirm and close the Virtual Keyboard.

# SETTING THE DATE AND TIME

It is highly recommended to immediately set the date and time when first setting up your system.

To set the date and time:

1. Right-click anywhere on the screen to open the Sub-Menu and select **MAIN MENU**. The Main Menu opens.
2. From the Main Menu, click **BASIC**. The Setup menu opens.
3. Click **DATE/TIME** and configure the following options:
  - **DATE**: Enter the day, month, and year
  - **DATE FORMAT**: Select **DD/MM/YYYY**, **MM/DD/YYYY**, or **YYYY/MM/DD**
  - **TIME**: Enter the time
  - **TIME FORMAT**: Use the drop-down menu and select **12HOURS** or **24HOURS**
  - **DST**: Use the drop-down menu to select ON/OFF to enable/disable Daylight Savings Time
4. Click **MODIFY DATE AND TIME**. Click **CLOSE** in the confirmation window.
5. Click **APPLY**. The new date and time are saved.

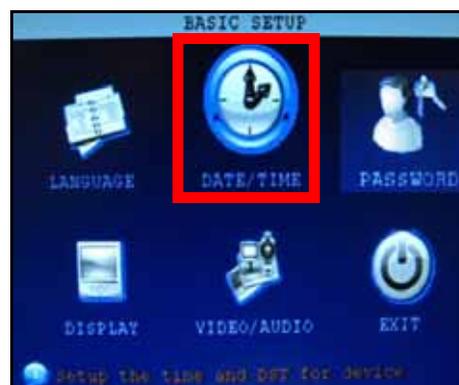


Figure 5.0 Click DATE/TIME from the Setup Menu

## Daylight Savings Time

To set daylight savings time:

1. Under DST, select **ON**. DST options appear.
2. Under DST MODE select one of the following:
  - **CUSTOM**: Set customized start and end times for DST (go to step 4)
  - **DEFAULT**: The Default setting will apply DST from the second Sunday of March to the second Sunday in November (go to step 3)
3. If using the DEFAULT, click **APPLY**.
4. If setting a CUSTOM DST, use the drop-down menus to select a week and month for the start and end times.
5. Click **APPLY**. Click **CLOSE** in the confirmation window.
6. Click **EXIT** in each menu until all windows are closed.

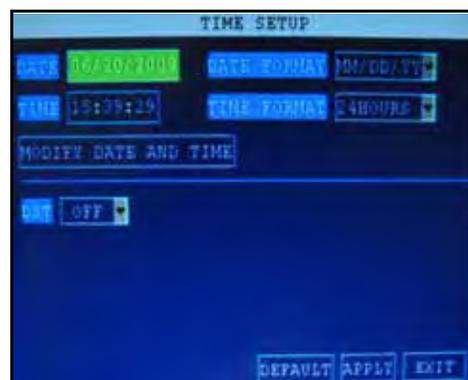


Figure 5.1 Configure date & time options



Figure 5.2 Configure DST settings

# RECORDING

By default, the system is set to immediately record video from connected cameras in Continuous Recording Mode.

- **R.C** **Recording—Continuous:** Normal, continuous recording

You can set the system to stop recording once the hard drive is full, or to continually record by overwriting previously recorded data. For more details, see “HDD” on page 18.

## Event Recording

The system also includes two modes of event recording:

- **R.M** **Recording—Motion:** The system records when motion is detected by the camera
- **R.A** **Recording—Alarm:** The system records when an alarm or sensor is triggered

For details on Motion Detection see “MOTION DETECTION” on page 23. For details on Alarm recording, see “ALARM” on page 21.

## Recording Audio

The system can also record audio for each channel (4 or 8 audio channels depending on your respective model).

**ATTENTION:** Audio capable cameras (not included) or self-powered microphones are required in order to record audio on the system. The SG7550A (not included) is an audio-capable BNC camera. Visit [www.lorexctv.com](http://www.lorexctv.com) for more details.

To enable audio recording:

1. Connect the BNC video cable from the camera to one of the BNC ports on the rear panel of the system. For example, connect the camera to BNC port 1.
2. Connect the RCA audio cable from the camera to the corresponding audio channel. Following the example in step 1, you would connect the cable to audio port 1.
3. Open the Main Menu and click **RECORD**.
4. Under AUDIO, select **ENABLE**.
5. Click **APPLY**.
6. Click **EXIT** in all menus until all windows are closed.

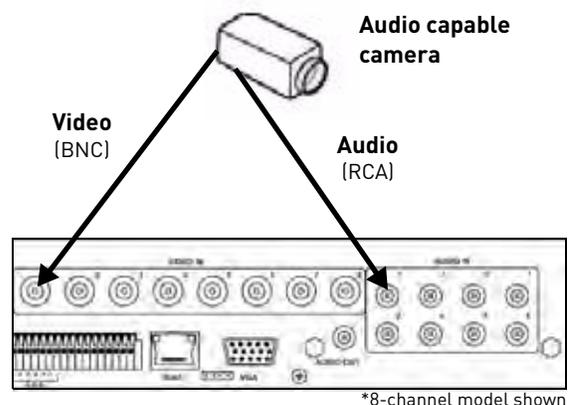


Figure 6.0 Connecting an audio capable camera

# PLAYBACK

View recorded video on the system through the Search Menu.

To begin playback:

1. Right-click anywhere onscreen and select **VIDEO SEARCH**. The Search Menu opens.  
**NOTE:** When you first open the Search Menu, it displays the current month and date.
2. Click **PLAY** to playback the last minute of recorded video (Quick Search).  
**or**
3. Under CHN select a **specific channel** or select **ALL**.
4. Under DATE, enter a **date** using the Virtual Keyboard (mouse only).
5. Click **SEARCH**. Recorded events on the system appear in red (alarm events—including both alarm and motion events) and green (normal recording).
6. Click a **date** in the Month Grid to search for video files.
7. Click a **time block** in the Hour Grid to view the video. Playback begins.

**ATTENTION:** Only single channel full-screen playback is available on 8-channel models; 4-channel models have full-screen and quad-screen playback.

8. Move the mouse slightly to display the onscreen playback controls. You can also use the playback control buttons on the remote control or front panel of the system.

For more information on using the Search Menu, see “SEARCH” on page 15.

## Onscreen Playback Controls

To use the onscreen playback controls:

1. Click the VCR-like controls to play, pause, fast forward, rewind, and slow down playback.
2. Drag the slider to adjust the volume (audio capable camera required, not included). Select the box to mute the audio.
3. Click **X** to quit playback and return to the Search menu.



Figure 7.0 Select VIDEO SEARCH



Figure 7.1 Search menu

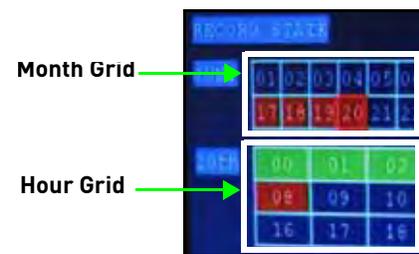


Figure 7.2 Setup menu

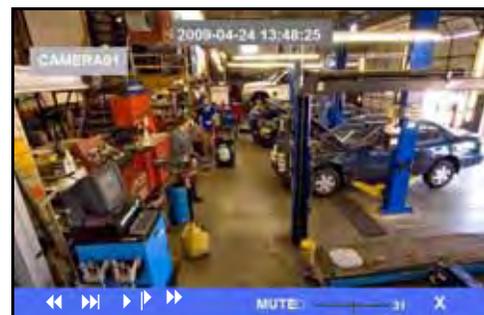


Figure 7.3 Playback with onscreen controls (mouse)

# MANAGING PASSWORDS

**ATTENTION:** By default, passwords are disabled on the system. You will not need a password to log in or access menus. You will not need a password to access your system using the browser-based remote software.

When you first startup your system, you are technically logged in as the ADMIN under Device ID 000000. The system employs two user authorities connected to a *Device ID*. The authorities are as follows:

- **ADMIN**—administrator: Has full control of the system, and can change both administrator and user passwords and enable/disable password checking
- **USER**—normal user: only has access to live viewing, search, playback, and other limited authorities

For security reasons, it is highly recommended to enable passwords on your system. If you enable passwords, you must select a 6-digit USER password *and* a 6-digit ADMIN password.

## Changing Your Device ID and Password

You can change the Device ID and password of the ADMIN and the USER from the Password/Security menu.

To open the Password/security menu:

1. Right-click anywhere onscreen to open the Sub-Menu and select **MAIN MENU**.
2. Click **BASIC**. The Basic Setup Menu opens.
3. Click **PASSWORD**. The Password/Security menu opens.

To change your Device ID and Password:

1. Click the field beside **DEVICE ID** and enter a **6-digit numerical** Device ID using the Virtual Keyboard (mouse only). For example, change the ID to *000010*.
2. Under **PASSWORD**, select **ENABLE**.
3. Click the field beside **USER PASSWORD** to enter a **6-digit numerical password** using the Virtual Keyboard (mouse only). Re-enter the password in the corresponding field.
4. Click the field beside **ADMIN PASSWORD** to enter a **6-digit numerical password** using the Virtual Keyboard (mouse only). Re-enter the password in the corresponding field.

**NOTE:** The USER and ADMIN passwords must not be the same.

5. Click **APPLY** to save your changes. Click **CLOSE** in the confirmation window.
6. Click **EXIT** in each menu until all windows are closed.

Use your new password to log in to the system and access system menus. You can also use the USER and ADMIN passwords to access your system using the browser-based remote software.

If desired, you can create a *Network password* from the Settings menu in the Remote Software. For more details, see “Setting a Network Password” on page 37.



Figure 8.0 Password menu

## USING THE MAIN MENU

To open the Main Menu:

- Right-click anywhere onscreen to open the Sub-Menu and select **MAIN MENU** (mouse only), or press the **MENU/EXIT** button on the remote control or front panel of the system.

**NOTE:** If passwords are enabled on the system, you need to select your Device ID and enter the 6-digit numerical password to open the Main Menu.



Figure 9.0 Main Menu

1. **SEARCH:** Search for recorded video and log files on the system.
2. **RECORD:** Configure recording parameters (quality, resolution), set record modes, and enable/disable audio recording.\*
3. **HDD:** Display hard drive status and format the internal hard drive of the system.
4. **BASIC:** Open the Basic Setup Menu, which lets you set the system language, date and time, Device IDs and passwords, and configure audio and video settings.
5. **ADVANCE:** Opens the Advanced Setup Menu, which lets you view system info, configure alarm, PTZ, mobile, and network settings.
6. **EXIT:** Closes the Main Menu.
7. Displays information about the contents of the selected Main Menu icon.

\*Audio capable cameras (not included) are required for audio recording on the system.



# SEARCH

Search and playback recorded video on your system.



Figure 10.0 Search menu

**NOTE:** When you first open the Search menu, it will display the current month and date.

To perform a Quick Search:

1. Open the Search menu and click **PLAY**. The last minute of recorded playback begins.

To perform a Date & Time search:

1. Under CHN, select **individual channels** or select **ALL**.
2. Under DATE, click the field and enter the desired date using the Virtual Keyboard and then click **SEARCH**. The system searches for data.
3. Under RECORD STATE, the system shows recorded events in a Month Grid and a Time Grid. The selected day of the month will be outlined in red. **Green**=normal recording; **Red**=alarm recording (includes both alarm and motion events).
4. Click a date in the month grid to view recorded video files for that selected date in the hour grid.



Figure 10.1 Month and Hour grids

5. During playback, use the onscreen controls or the playback buttons on the

remote control or front panel to control playback.

**NOTE:** For details on Playback, see "Playback" on page 12.

## File List

Use the File List sub-menu to see a detailed list of all the recorded video on your system.

To open the File List:

1. From the Search Menu, click **SEARCH** to search the system for recorded video.
2. Click **FILE LIST** at the bottom of the menu. The File List menu opens.

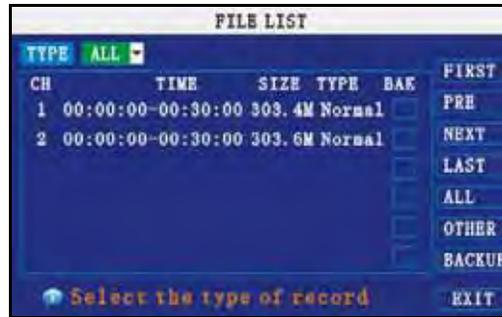


Figure 10.2 File list menu

To use the File List:

1. Under TYPE, select **NORMAL** to view only normal recordings, **ALARM**, to view alarm recordings (includes alarm and motion detection), or **ALL** to view all video on the your system.
2. Use the buttons on the side panel to navigate the file list:
  - **FIRST:** Jump to the first page of the list
  - **PRE:** Turn to the previous page
  - **NEXT:** Turn to the next page
  - **LAST:** Jump to the last page of the list
  - **ALL:** Select all files
  - **OTHER:** Clear all files
  - **BACKUP:** After selecting a file(s), click to begin copying the data to a USB flash drive (not included); For details, see "Backup" on page 16.
3. Click any file to begin playback.

## Backup

Use the File List sub-menu to find recorded video on your system and copy it to a USB flash drive (not included).

**NOTE:** The system is compatible with most major brands of USB flash drives, with capacities from 256 MB to 4 GB.

To backup recorded data:

1. Connect a blank USB flash drive to the top USB port on the front panel of the system.
2. Open the Search menu and search for recorded data on the system.
3. Click **FILE LIST**.
4. Select the files you want to backup and click the "BAK" box next to the file name (see figure 0.0). Select multiple files if desired. Click **ALL** to select all files; click **OTHER** to deselect all files.

**NOTE:** The size of each file is shown in the File List menu. Use this to help you find a USB flash drive large enough to hold all the files you wish to backup.

5. Click **BACKUP** from the side-panel to immediately begin copying the files to the USB flash drive.

**NOTE:** Backup progress appears in the status window. *DO NOT* remove the USB flash drive during backup.

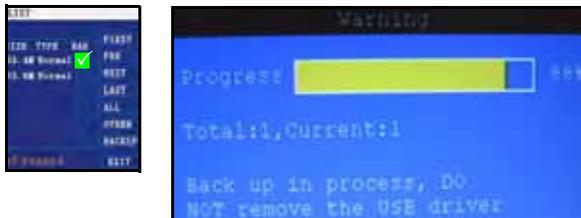


Figure 10.3 Select files and click BACKUP

6. If backup is successful, click **CLOSE** in the confirmation window and then remove the USB flash drive.

**NOTE:** If there is not enough space on the USB flash drive, the system will display the following: "Space is not enough."

## Backup File Data

The system will create a folder on the USB flash drive named *RecordFile*. The files are saved as .264 files.



## RECORD

Configure record parameters, enable/disable audio.

**NOTE:** Audio capable cameras (not included) are required for audio recording.



Figure 11.0 Record menu

To configure recording options:

1. Under CHANNEL, use the drop-down menus and select **ON/OFF** to enable/disable recording from the selected channel.
2. Under QUALITY, select **HIGHEST**, **HIGH**, or **NORMAL**.
3. Under AUDIO, select **ENABLE** or **DISABLE**. If audio recording is enabled, the system will record audio from connected audio capable cameras (not included).
4. Under REC. MODE, select **POWER UP** or **TIMER RECORD**. If you select **POWER UP**, the system will record continuously (Normal Recording) when the system is powered on. If you select **TIMER RECORD**, you have to set a recording schedule on the system. See "Setting a Recording Schedule" on page 17.

- Under **REC. SIZE**, select **15MIN**, **30MIN**, **45MIN**, or **60MIN**.  
**NOTE:** Record Size sets the file size for recorded video files on the system. Instead of recording data as one large file, the system will divide the data into blocks of 15, 30, 45, or 60 minutes. This makes the recorded data easier to search.
- Click **APPLY**. Click **CLOSE** in the confirmation window.
- Click **EXIT** in every menu until all windows are closed.

## Setting a Recording Schedule

By default, the system is set to record continuously. You can program the system to record according to a customized recording schedule.

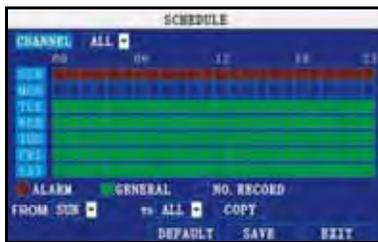


Figure 11.1 Recording Schedule

The Schedule Grid shows the days of the week and hours 0~23. You can set Alarm Recording (Red), General (Normal) Recording (Green), or No Recording (Blue) to each time block of each day.

To set a recording schedule:

- Open the Main Menu and click **RECORD**.
- Under **REC. MODE**, select **TIMER RECORD**.
- Click **SCHEDULE**. The Schedule menu opens.
- Under **CHANNEL**, select **specific channels** or select **ALL**.
- Below the grid, click either **ALARM** (red), **GENERAL** (Green), or **NO RECORD** (Blue) and then click a time block on the desired day.
- Use the **FROM/TO** drop-down menus to copy the schedule of one day to another. For example, if you want your schedule for Monday to be the same on Wednesday: under **FROM** select **MON**, under **TO** select **WED**, and then click **COPY**.

- Click **SAVE**.
- Click **EXIT** in each menu until all windows are closed.

## Example

You want your system to record continuously on all channels from 9 AM to 5 PM Monday to Friday. You also want Alarm/Motion recording from 5 PM to 9 AM. You do not want the system to record Saturday or Sunday.

**NOTE:** By default, the system is set to record continuously 24 hours a day, 7 days a week.

To set the recording schedule:

- Open the Schedule menu.
- Under **CHANNEL**, select **ALL**.
- Click the **blue NO RECORD block** below the grid. A checkmark will appear in the block.
- Under **SUN**, click blocks **00~23**. The blocks will turn blue.
- Under **FROM**, select **SUN**. Under **TO** select **SAT**, and then click **COPY**.
- Click the **red ALARM block** below the grid.
- Under **MON**, click blocks **00~8** and blocks **18~23**. The blocks will turn red.
- Under **FROM**, select **MON**. Under **TO** select **TUE**, and then click **COPY**. Repeat for Wednesday, Thursday, and Friday. Your completed schedule should be the same as the schedule in figure 11.2.



Figure 11.2 Customized recording schedule

- Click **SAVE**. Click **CLOSE** in the confirmation window.
- Click **EXIT** in all menus until all windows are closed.

## Mask Field Setup

The Mask Field lets you block a specific portion of a channel you do not want recorded or shown on the display screen. This can be useful if you need to conceal a sensitive area being captured by the installed camera.

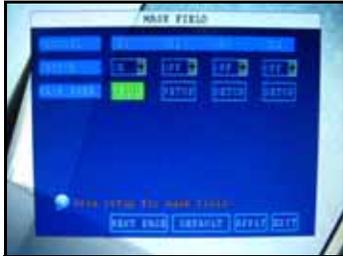


Figure 11.3 Mask Field menu

To use the mask field:

1. From the Record menu, click **MASK FIELD SETUP**. The Mask Field menu opens.
2. Choose a channel you wish to apply the Mask Field. Click **NEXT PAGE** if necessary (8-channel models only). Select **ON** from the SWITCH drop-down menu.
3. Click **SETUP**. The Mask Menu disappears and the select channel is shown in full-screen.
4. Using the mouse, click and drag the cursor over the area you want to conceal. A single click will produce a small black square.

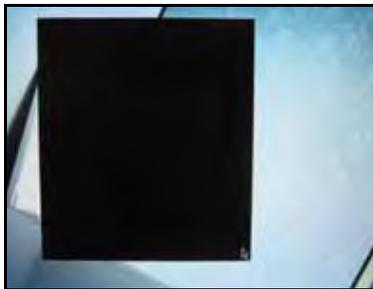
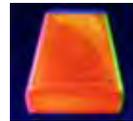


Figure 11.4 Mask Field menu

5. Right-click anywhere on the screen to return to the Mask Field menu.
6. Click **APPLY**. Click **CLOSE** in the confirmation window.
7. Click **EXIT** in all menus until all windows are closed.



## HDD

Displays essential information about the system's internal hard drive, and lets you format the internal HDD and external USB flash drive (not included).



Figure 12.0 HDD menu

The HDD menu displays the following:

- **HDD STATUS:** The system will display "OK" for normal operation
- **SIZE:** The size (in gigabytes) of the internal hard disk drive
  - The size of your system's internal hard drive will vary by model
- **FREE SPACE:** The space (in gigabytes) remaining on the system's internal HDD
- **AVAILABLE TIME:** The recording time (in hours) remaining on the HDD based on your current record settings
- **OVERWRITE:** Select **ENABLE** or **DISABLE**. If Overwrite is *enabled*, the system will record over the oldest video data once the HDD is full. If Overwrite is *disabled*, the system will stop recording once the HDD is full and the "FULL" LED on the front panel of the system will light up

## Formatting the Hard Drive

**ATTENTION:** Formatting the HDD will erase *all* video data. This step *cannot* be undone.

To format the internal HDD:

1. Open the Main Menu and click **HDD**.
2. From the HDD menu, click **HDD FORMAT**.



Figure 12.1 Formatting warning

3. From the Warning prompt, click **SURE**. The system will begin formatting the hard drive. This may take several moments depending on the size of the HDD.
4. Once formatting is complete, click **CLOSE** in the confirmation window. The system will automatically restart and load to the default live viewing display.
5. Open the Main Menu and click **HDD** to check the status of the hard drive.

**NOTE:** You will notice that the size of the HDD and the free space are not the same. The system uses a portion of the disk space for the operating system and initialization. This is common in all security DVRs as well as common PC hard drives.

## Formatting the USB Flash Drive

Use a USB flash drive to backup recorded video and upgrade the system's firmware. You should always format the USB flash drive you intend to use with the system.

**NOTE:** Not formatting the USB flash drive may result in improper functionality.

To format the USB flash drive:

1. Connect a USB flash drive to the top USB port on the front panel of the system.
2. Open the Main Menu and click **HDD**.
3. Click **USB FORMAT**.
4. From the Warning prompt, click **SURE**. The system will begin formatting the USB flash drive. This may take several moments depending on the size of the USB flash drive. *DO NOT* remove the USB flash drive while formatting is taking place.

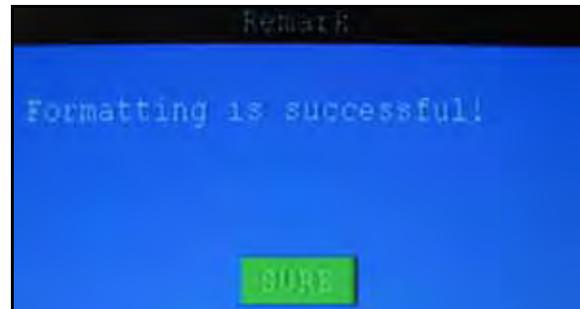


Figure 12.2 Formatting warning

5. When formatting is complete, click **CLOSE** in the confirmation window. It is now safe to remove the USB flash drive from the system.



## BASIC

Set the system language, date and time, passwords, and configure audio and display options.

The Basic Setup menu contains the following sub-menus: **Language**, **Date/Time**, **Password**, **Display**, and **Video/Audio**.



Figure 13.0 Basic Setup menu

## LANGUAGE



Figure 13.1 Language menu

To change the system language:

1. From the drop-down menu select **ENGLISH**, or **Chinese**.
2. Click **APPLY**. Click **CLOSE** in the confirmation window.
3. Click **EXIT** to close the menu.

## DATE/TIME

For details on setting the date and time, see “Setting the Date and Time” on page 10.

## PASSWORD

For details on setting Device IDs and passwords, see “Managing Passwords” on page 13.

## DISPLAY

Use the Display Setup menu to customize channel titles, show/hide the date and time in live viewing and playback, and enable/disable covert channels.

To customize Display settings:

1. Configure the following options:
  - **NAME**: Click any of the fields and enter a new title for the selected channel using the Virtual Keyboard (mouse only)
  - **POSITION**: Reposition the channel title; select **TOPLEFT**, **BOTTOMLEFT**, **TOPRIGHT**, **BOTTOMRIGHT**, or **OFF**. If **OFF**, the title will not be displayed for the selected channel
  - **COLOR**: Adjust **CHROMTICITY**, **LUMINOSITY**, **CONTRAST**, and **SATURATION** for the selected channel
  - **PREVIEW TIME**: Select **ON/OFF** to show/hide the date and time during live viewing
  - **RECORD TIME**: Select **ON/OFF** to show/hide the date and time during playback
2. Click **NEXT PAGE** to change the settings for the remaining channels (8-channel models only).
3. Click **APPLY** to save your settings. Click **CLOSE** in the confirmation window.

## Covert Channels

Covert channels can be very useful if your display monitor is in public view. A covert channel will appear black on the display to give the impression that no cameras are connected and the system is not recording.

To enable/disable covert channels:

1. Choose a channel you wish to conceal. For example, channel 3. Under **COVERT**, select **OFF**.
2. Click **APPLY**. Channel 3 will turn black. Click **CLOSE** in the confirmation window.
3. Click **EXIT** in all menus until all windows are closed.

## VIDEO/AUDIO

Use the Video/Audio menu to set the resolution and camera system on the system.



Figure 13.2 Video/Audio menu

To configure video options:

1. Under VGA RESOLUTION, select **800x600** or **1024x768**.
2. Under CAMERA SYSTEM, select **NTSC** or **PAL**.
3. Click **APPLY**. Click **CLOSE** in the confirmation window.
4. Click **EXIT** in all menus until all windows are closed.

To configure audio options:

1. From the Video/Audio menu, click **VOLUME SETUP**. A split-screen display view appears.
2. Click any channel and adjust the slider to increase/decrease the volume for listen-in audio.
3. Click **X** to return to the Video/Audio menu.
4. Click **APPLY**. Click **CLOSE** in the confirmation window.
5. Click **EXIT** in all menus until all windows are closed.



## ADVANCE

Use the Advanced Setup menu to configure alarm settings, motion detection, mobile surveillance, PTZ settings and network settings.

The Advanced Setup menu contains the following sub-menus: **Alarm**, **Info**, **MD**, **Mobile**, **System**, **PTZ**, and **Network**.



Figure 14.0 Video/Audio menu

## ALARM

Use the Alarm menu to configure alarm and email settings.

**NOTE:** External alarm devices must be connected to the alarm block on the rear panel of the system in order to use the I/O (input/output) alarms of the system.

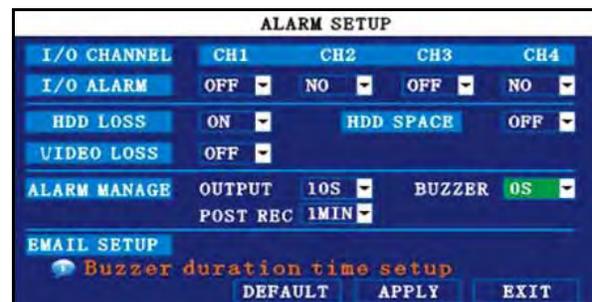


Figure 15.0 Video/Audio menu

To configure alarm settings:

1. Under I/O CHANNEL, select **NO** (Normal Open), **NC** (Normal Closed), or **OFF**. Click **NEXT PAGE** to view additional channels (8-channel models only).
2. Apply loss alarms to the following:

- **HDD LOSS:** the alarm will sound if the internal HDD is damaged
  - **HDD SPACE:** the alarm will sound when the HDD is full (overwrite must be disabled)
  - **VIDEO LOSS:** the alarm will sound when a camera is disconnected
3. Under ALARM MANAGE, configure the following:
    - **OUTPUT:** Set the output time (in seconds) on the spot monitor from **0s, 10s, 20s, 40s,** or **60s**
    - **BUZZER:** Set the time (in seconds) for the buzzer when an alarm is triggered—**0s, 10s, 20s, 40s,** or **60s**

**NOTE:** Set the buzzer to **0s** if you want to disable the alarm during motion detection

    - **POST REC:** Set the time (in seconds) for the system to record after a triggered alarm—**0s, 10s, 20s, 40s,** or **60s**
  4. Click **APPLY**. Click **CLOSE** in the confirmation window.

## ALARM SETUP

Click **ALARM SETUP** and select **ON/OFF** to apply an external alarm trigger to a channel.

## EMAIL SETUP

The system can send an email notification with a JPEG snapshot for triggered events on the system.

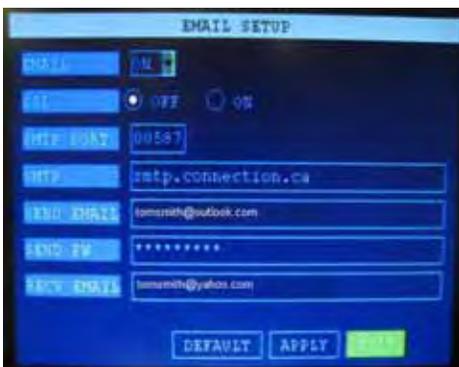


Figure 15.1 Email Setup menu

To setup email notification:

1. Under EMAIL, select **ON**.
2. Under SSL, select **OFF**.
 

**NOTE:** SSL deals with encryption. Only advanced users should enable this option.

3. Under SMTP PORT, enter the **SMTP port** of your email server.
4. Under SMTP, enter the **SMTP** address of your email server. For example, **smtp.connection.ca**
5. Under SEND EMAIL, enter the sender email address.
6. Under SEND PW, enter the **password** of your email server.
7. Under RECV EMAIL, enter the email address that will receive the email notification.
8. Click **APPLY**. Click **CLOSE** in the confirmation window.
9. Click **EXIT** in all menus until all windows are closed.

## INFO

View system information, including the IP address, MAC address, and HDD capacity of the system.

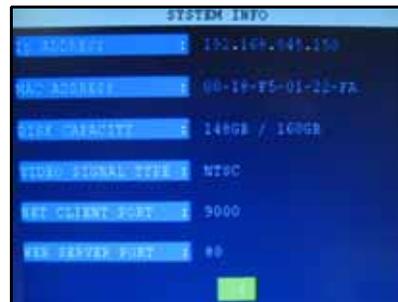


Figure 16.0 System Information

To view system information:

1. From the Advanced Setup menu, click **INFO**.
 

**or**
1. From Live viewing, press the **OK** button on the front panel of the system.
2. View the system's IP address, MAC address, Disk Capacity, Video Signal Type, Net Client Port, and Web Server Port. Click **OK** to close the menu.

## MOTION DETECTION

Configure motion detection for each channel.



Figure 17.0 System Information

To configure motion detection:

1. Under STATUS, select **ON** to enable motion detection for the desired channel. Click **NEXT PAGE** for additional channels [8-channel models only].
2. Under SENSITIVITY, select **1, 2, 3, or 4**. The higher the number, the more sensitive the motion detection.
3. Under MD SETUP, click **SETUP**. The red motion grid appears over the selected channel in full screen.
4. Click the blocks in the grid to enable/disable motion detection. Red=motion detection *enabled*; Clear=motion detection *disabled*.

**NOTE:** You can click and drag the mouse cursor when selecting/deselecting the blocks.

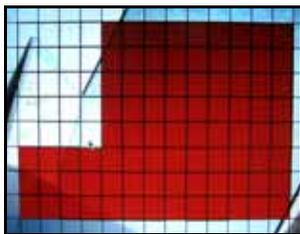


Figure 17.1 Motion Grid

5. Right-click anywhere on the screen to return to the Motion Detection menu.
  6. Click **APPLY**. Click **CLOSE** in the confirmation window.
  7. Click **EXIT** in all menus until all windows are closed.
- NOTE:** You can disable the buzzer in the Alarm menu. See "ALARM" on page 21.

## MOBILE

Send alerts to your Windows Mobile enabled touch-screen smart phone (Windows Mobile 6.0 or greater is required).

**NOTE:** Currently, mobile viewing is supported by Windows Mobile *only*.



Figure 18.0 Mobile menu

To configure mobile notification settings:

1. Under MOBILE NETWORK, select **3G, 2.75G, or 2.5G**.  
**NOTE:** Contact your cellular provider if you are unsure about the network of your cellular phone.
2. Under MOBILE PORT, enter your mobile port number (by default, 100).
3. Click **APPLY**. Click **CLOSE** in the confirmation window.
4. Click **EXIT** in all menus until all windows are closed.

For complete details on setting up mobile viewing on your Windows Mobile phone, please see "Appendix L: Mobile Phone Instant Viewing" on page 64.

## SYSTEM

Use the System menu to update system firmware and set an automatic system reset schedule.

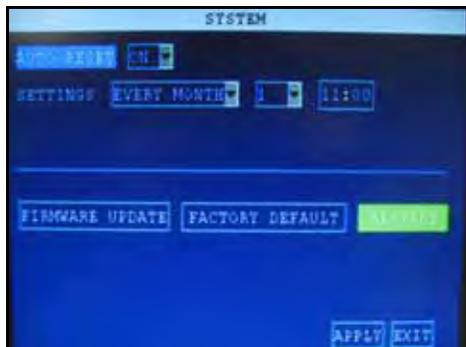


Figure 19.0 System menu

To enable auto-reset:

1. Under **AUTO RESET**, select **ON**. The Settings option appears.
2. Under **SETTINGS**, select **EVERY DAY**, **EVERY WEEK**, or **EVERY MONTH**. The date drop-down menu appears.
3. Select the date for auto-reset from the drop-down menu.
4. Enter the time for auto-reset using the Virtual Keyboard (mouse only).
5. Click **APPLY**. Click **CLOSE** in the confirmation window

To restore factory settings:

1. Click **FACTORY DEFAULT**. This will restore the system to the original factory settings.
2. Click **SURE** in the prompt.  
**NOTE:** Recorded video on the HDD will not be erased.

To restart the machine (soft-reset):

1. Click **RESTART**.
2. Click **SURE** in the prompt. The system will perform a soft-reset and load to a live split-screen view.

## Upgrading Firmware

Your system will periodically need firmware updates to ensure optimal performance. Visit [www.lorexcctv.com](http://www.lorexcctv.com) to check if upgrades are available for your system.

To upgrade firmware:

1. Download the latest firmware update for your system from [www.lorexcctv.com](http://www.lorexcctv.com)
2. Copy the firmware file to an empty USB flash drive. The firmware file should not be in a folder.
3. Connect the USB flash drive to the top USB port on the front panel of your system.
4. Open the System Menu (Main Menu>Advance>**System**).
5. Click **FIRMWARE UPDATE**. The system will scan the USB flash drive and begin updating the firmware. Do not remove the USB flash drive while the upgrade is taking place.

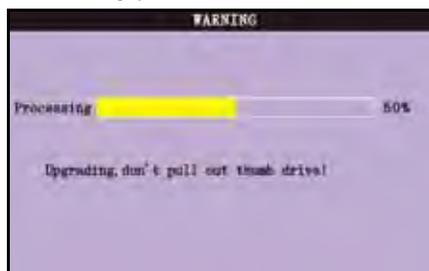


Figure 19.1 Firmware upgrade progress

6. Click **CLOSE** in the confirmation window. In the system prompt, click **SURE**. The system will restart.

## PTZ

Use the PTZ Setup menu to configure settings for a connected PTZ camera (not included).

**NOTE:** Consult the instruction manual of your PTZ camera for complete information about your camera, including protocol and baud rate.



Figure 20.0 PTZ Setup menu

To configure a PTZ camera:

1. Connect a PTZ camera to the BNC and 485A (TX, +) and 485B (RX, -) ports and power outlet. For more details on connecting a PTZ camera, see “Appendix D: Connecting a PTZ CAMERA” on page 53.
2. Under PROTOCOL, select **PELCO-D** or **PELCO-P** for the selected channel. Click **NEXT PAGE** for additional channels (8-channel models only).
3. Under BAUD RATE, select **1200**, **2400**, **4800**, or **9600**.
4. Under DATA BIT select **5**, **6**, **7**, or **8**.
5. Under STOP BIT, select **1** or **2**.
6. Under VERIFY, select **ODD**, **EVEN**, **MARK**, **SPACE**, or **NONE**.
7. Under ADDRESS, enter an address from **001~255** using the Virtual Keyboard. Refer to your PTZ camera’s instruction manual for further details.
8. Click **APPLY**. Click **CLOSE** in the confirmation window.
9. Click **EXIT** in all menus until all windows are closed.

## NETWORK

Use the Network Setup menu to configure your network and DNS settings.



Figure 21.0 Network menu (DHCP default)

To configure network settings:

1. Under TYPE, select **DHCP** (default), **PPPoE**, or **STATIC**. If DHCP, go to *step 5*. If PPPoE, go to *step 2*. If STATIC, go to *step 3*.  
**NOTE:** DHCP allows you to quickly connect to your network by obtaining an IP address from the router. After the initial setup, we recommend that you disable DHCP and set the IP address between 1~100. For example, if your IP address is 192.168.0.107, change the last digits to 90 (i.e. 192.163.0.90). This ensures that port forwarding will not change in the event of power failure or resetting of your network.
2. If you select *PPPoE* in step 1, enter your **PPPoE user name** and **password** in the respective fields using the Virtual Keyboard.

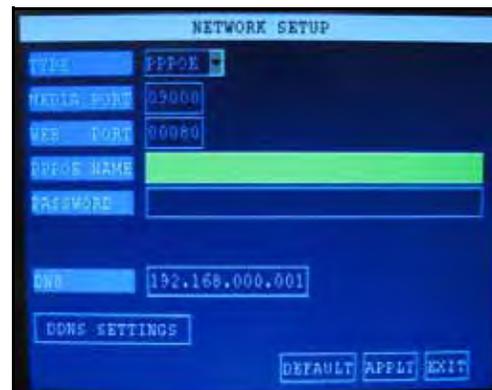


Figure 21.1 PPPoE setup

- If you selected *STATIC* in step 1, enter your **IP Address**, **Netmask**, and **Gateway** in the respective fields using the Virtual Keyboard.

**NOTE:** The default IP address of the system is 192.168.3.97

- If necessary, change the Media and Web Ports.

**NOTE:** For added security, we strongly recommend changing Web port 80 on the system to any desired port not blocked by your Internet service provider (ISP). Please note however, that you will also need to update the Web port in your browser and open this new port in your router. For details on changing ports on your system, see “Appendix C: Changing Ports On Your System” on page 49.

- Click **APPLY**. Click **CLOSE** in the confirmation window.
- Click **EXIT** in all menus until all windows are closed. The system restarts automatically.

## Manual DNS

Enter the **Primary or Secondary DNS** from your router. This is required for DDNS to function properly.

To obtain your Primary or Secondary DNS:

- In your web browser, log in to your router using its Default Gateway address.  
**NOTE:** Refer to your router’s manual or software for login information. You can also get the Default Gateway on your PC by selecting Start>Run. Type **cmd** and press **Enter**. In the Command Prompt window type **ipconfig** and press Enter.
- View its **WAN settings**. Enter the **Primary or Secondary DNS** address in the **MANUAL DNS** field on your system.

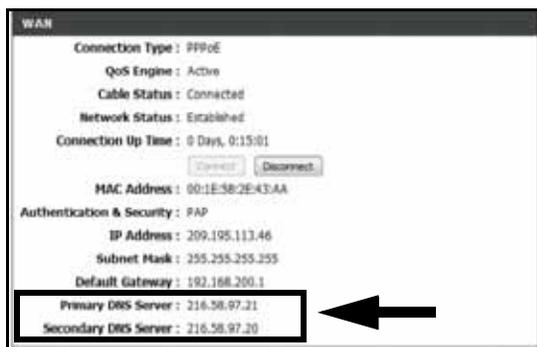


Figure 21.2 Primary DNS from router’s WAN settings

## DDNS SETTINGS

Lorex provides a free DDNS service for use with your DVR. A DDNS account allows you to set up a web site address that points back to your Local Network.

**NOTE:** You must register for Lorex’s free DDNS service prior to configuring DDNS settings. Visit <http://lorexddns.net> to register.

**ATTENTION:** You **MUST** enter your DDNS information **LOCALLY** before attempting remote access.

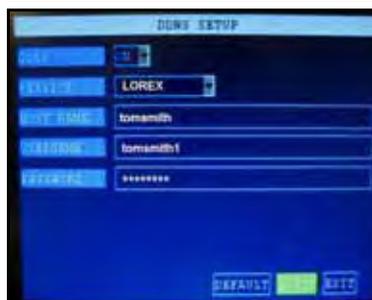


Figure 21.3 DDNS setup

To configure DDNS settings:

- From the Network Setup menu, enter **Primary or Secondary DNS** from the WAN settings of your router in the **MANUAL DNS** field. See “Manual DNS” on page 26.
- Click **DDNS SETTINGS**.
- Under DDNS, select **ON**.
- Under SERVICE, select **LOREX**.
- Under DOMAIN NAME, enter only the **first portion of your DDNS domain** from the confirmation email. For example, if your domain name is *tomsmith@lorexddns.net*, you only need to enter *tomsmith* in the text field.
- Enter your Lorex DDNS **user name** and **password** in the respective fields.  
**NOTE:** Obtain this information from the confirmation email after registering for the free Lorex DDNS service.
- Click **APPLY**. Click **CLOSE** in the confirmation window.
- Click **EXIT**. The system will prompt you that it must restart. Click **CLOSE**.  
**NOTE:** Please allow 10~15 minutes for the DDNS servers to update with your new DDNS address. This is normal for the DDNS system.

# REMOTE SURVEILLANCE SOFTWARE

The system features a built-in browser-based software that allows you to access your system remotely over your local area network (LAN) or over the Internet using Internet Explorer®.



Figure 22.0 Remote Surveillance main screen

## System Requirements

Prior to using DVR Netviewer, make sure your PC meets or exceeds the following system requirements:

Description	Requirement
<b>CPU</b>	Pentium® 4 or above
<b>Operating System</b>	Windows XP/Vista
<b>Memory</b>	256 MB RAM or greater
<b>Video</b>	16 MB of video memory
<b>Network (LAN)</b>	10/100 BaseT Network
<b>Network (WAN)</b>	384 Kbps upstream* *High-speed Internet service is recommended when using DVR Netviewer.
<b>Browser</b>	Internet Explorer 6 (or later)
<b>Media Player</b>	Windows Media Player® 10 or above

---

# USING REMOTE SURVEILLANCE

With your system connected to your local area network, you can now log in to your system using Internet Explorer.

**NOTE:** Your system must be connected to your local or wide area network before attempting remote access.

## Logging In to Your System

With your IP address, you can now log in to your system over your local or wide area network.

**NOTE:** You must configure DDNS settings locally. For details on setting up DDNS, see “DDNS SETTINGS” on page 26.

To access your system:

1. Open Internet Explorer. In the address bar, enter the IP address of your system (i.e. 192.168.3.97). For details on how to find your IP address, see “How do I find my IP and MAC addresses?” on page 42.
2. You must install the ActiveX<sup>®</sup> in order to access your system. Click the attention bar at the top of the main page and select **Install ActiveX Control**. DVR Netviewer will reset.

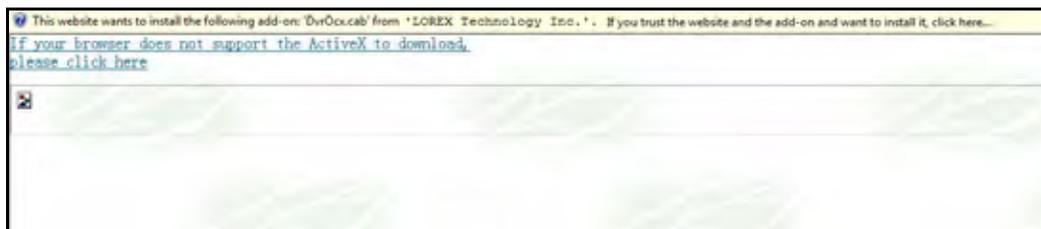


Figure 23.0 Click the ActiveX attention bar

3. In the warning box click **Install**. The login page appears.
4. Leave the password field **blank** (default).  
**NOTE:** If you have enabled passwords on your system, enter your USER or ADMIN password. However, only the ADMIN can change settings and options on the system.
5. Select **LAN** or **INTERNET** from the drop-down menu and click **LOGIN**.

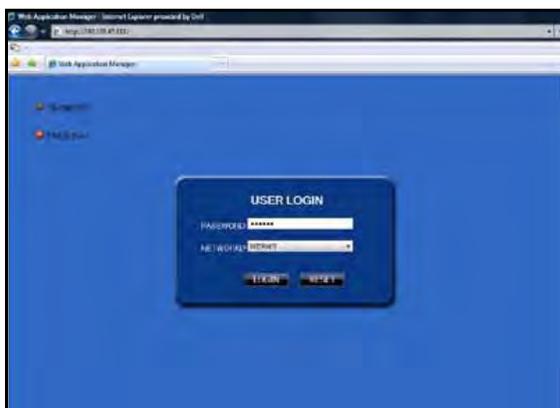


Figure 23.1 Remote access login screen

## Remote Surveillance Main Screen

Upon login, the Remote Surveillance main screen appears in your browser.



Figure 23.2 DVR Netviewer main screen

1. **Modes:** Click LIVE, REPLAY (playback), and SETUP.
2. **Main Screen:** Main display screen for live viewing and playback.
3. **Time Stamp:** Time stamp appears on each channel.
4. **Channel:** Channel number appears in the top left corner.
5. **PTZ Control:** PTZ control for any connected PTZ cameras (not included).
6. **Functions:** Click the icons to show/hide channels, take screen captures, and record.
7. **Display Modes:** Click the icons to view channels in single-channel full-screen, quad, and split-screen configurations.
8. **Volume/Mute:** Select a channel (outlined in red) and then click the bars to increase/decrease volume; click the icon to mute/unmute volume.\*

\*Audio capable cameras (not included) required for audio listening and recording.

## Live Viewing

By default, remote surveillance opens in Live Viewing mode (split-screen).

To use Live Viewing:

1. Click **LIVE** at the top of the main screen.
2. Click the display mode icons to view the main screen in **single-channel, quad, or split-screen** configurations. You can also double-click a channel at any time to view it in single-channel.
3. Click  to show or hide all the channel windows.
4. Click  to start/stop manual recording to your PC on ALL channels. For more details see RECORDING.
5. Select a channel (outlined in red) and then click the audio bars to increase or decrease listen-in volume. Click the icon to mute/unmute.\*

**NOTE:** The Talk function is not supported.

## RECORDING

You can record video directly to your PC using the remote surveillance software.

To record video to your PC:

- From Live Viewing, click  to start/stop manual recording to your PC on ALL channels

**NOTE:** You will record video to your PC regardless of the recording mode on the system itself. By default, recorded files are saved in  
C:\DVR\[ip\_address]\Record



Figure 24.0 Live Viewing controls

## Sub-Menu

Right-click any channel to open the sub-menu.

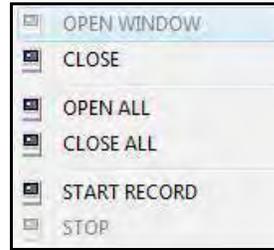


Figure 24.1 Sub-menu

The sub-menu contains the following options:

- **Open Window**
- **Close**
- **Open All**
- **Close All**
- **Start Record**
- **Stop**

## PTZ Control

You must have a PTZ camera (not included) connected to the system in order to use the PTZ controls.

To control a PTZ camera:

1. Select the channel of the connected PTZ camera(s).
2. Click the **navigation arrows** to pan and tilt the camera.
3. Click **+/-** to control zoom, focus, and iris.
4. Enter presets.
5. Click **SETTING, HAND,** and **CLEAR** to further control presets.

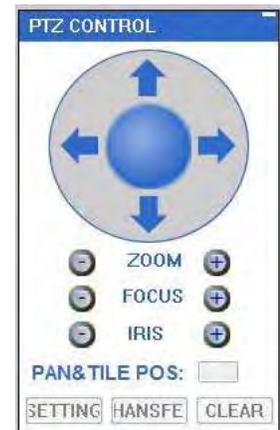


Figure 24.2 PTZ control

\*Audio capable camera (not included) required for listen-in audio.

\*\*2-way audio not supported.

## Taking Screen Captures

Use the remote surveillance software to take a snapshot of the channels on the main display screen. Screen Captures can be useful for your own records, or may be needed by authorities in case of a security incident.

To take a screen capture:

1. From Live Viewing, select the channel you want to capture. The selected channel will be highlighted in a red frame.
2. Click .
3. Click **OK** in the confirmation window.



Figure 24.3 Screen capture save path

Screen captures are saved as BMP files to the default save location (C:\DVR\...).

## Playback

Use the Replay menu to search and playback recorded video on your system and convert saved video files to AVIs.

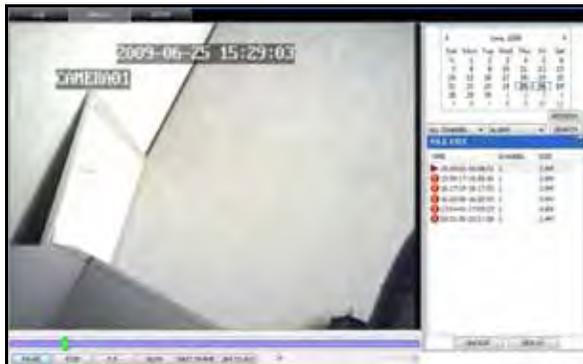


Figure 25.0 Playback screen

To use the replay menu:

1. Click **REPLAY** at the top of the main screen. The main screen will be grey.
2. Click **REFRESH** below the calendar to view the recorded files for the current month.
 

**NOTE:** Normal recording is indicated by a clock icon; alarm recording (alarm, loss, and motion events) are indicated by an exclamation mark icon.

3. Double-click a file from the File List to playback the file in the main screen. The icon in the file list changes to "▶". Control playback using the buttons at the bottom of the main screen.



Figure 25.1 Progress bar

The *purple bar* indicates the download progress. The *green marker* indicates playback progress. You can click and drag the playback marker (will turn from green to orange) to advance or rewind playback as needed.

- **Pause** : Play/Pause playback
- **STOP** : Stop playback
- **F.F.** : Fast Forward (click repeatedly for 1X, 2X, 4X, 8X)
- **SLOW** : Slow motion (click repeatedly for 1X, -2X, -4X, -8X)
- **NEXTFRAME** : Pause playback—click repeatedly to advance frame-by-frame
- **264 TO AVI** : 264 TO AVI Click to convert the recorded video file to AVI format. For more details see "Appendix J: Converting Files to AVI" on page 61.

## Search

Use the calendar and drop-down menus to search for recorded video on your system.

1. Click  $\leftrightarrow$  to change the month on the calendar. Dates with recorded video data will appear in **bold**.
2. Click the date. Recorded video files will populate the File List.
3. From the *Channel* drop-down menu, select a **specific channel** or select **ALL CHANNEL** and then click **SEARCH**.
4. From the *Type* drop-down menu, select **COMMON** (normal recording), **ALARM**, or **ALL TYPE** and then click **SEARCH**.
5. Double-click the file from the File List to playback the file in the main screen.

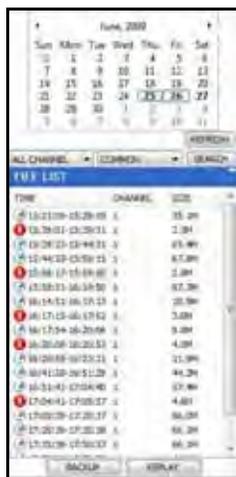


Figure 25.2 File List

## Remote Backup

You can backup recorded video files from your system to your PC using the Replay menu in the remote surveillance software.

To backup files remotely:

1. Click **REPLAY** at the top of the main screen.
2. Select a date(s) on the calendar and click **REFRESH**.
3. Double-click a file from the File List to begin playback.
4. Click **BACKUP**. Backup begins to `C:\DVR/[ip_address]/Backup`

**NOTE:** If you playback a file, you must wait for the file to load before backing it up, otherwise you may receive an error message (see figure 0.0).



Figure 26.0 If viewing a file, wait for it to load before backing it up

5. When file backup is complete, click **OK** in the confirmation window. The confirmation window show the save path of the backup file.

**NOTE:** Backup files are saved as .264 files.

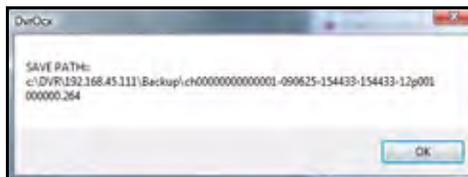


Figure 26.1 Backup confirmation

**NOTE:** Use the Player Software included on the software CD to playback backed up video. For more details, See "Appendix K: Playback Software" on page 62.

## Remote Setup

Use the Setup tab to configure the settings of your system from a remote location.

**NOTE:** If the Main Menu is open on the system, you will not be able to make changes to the system from the remote location.

To open remote setup:

- Click **SETUP** at the top of the main screen.

The Remote Setup menu features the following tabbed options:

- **RECORD**
- **ALARM**
- **PTZ**
- **NETWORK**
- **SETTING**
- **HOST INFO**

### RECORD

The Record tab allows you set recording parameters on the system as well as program a recording schedule.



Figure 27.0 Record menu

- **CHANNEL:** Click the drop-down menus for the respective channels and select ON/OFF to enable/disable recording. If OFF, the channel will not record

**NOTE:** Click NEXT and PREVIOUS to view additional channels (8-channel models only)

- **RESOLUTION:** Check (non-selectable)
- **QUALITY:** Select **BEST**, **FINE**, or **NORMAL**
- **AUDIO:** Select **ON/OFF**

**NOTE:** Audio capable cameras (not included) are required for audio recording.

- **REC. MODE:** Select **POWER UP** or **TIMER RECORD**; if you select POWER UP, the system will automatically begin recording

continuously whenever the system is restarted; if you select **TIMER RECORD**, you can click **SCHEDULE** to program a recording schedule

- **SCHEDULE** (TIMER RECORD must be selected):

Click **DEFAULT** to restore factory settings.

Click **APPLY** to save your changes and then click **OK** in the confirmation window.

### SCHEDULE

To enter a recording schedule remotely:

1. Click **SETUP** at the top of the main screen. The Record menu opens by default.
2. Under **REC. MODE**, select **TIMER RECORD** and then click **SCHEDULE**. The Schedule window opens.
3. From the drop-down menu at the top of the window, **select the desired channel** or select **ALL**.
4. At the bottom of the window, select either **ALARM**, **NORMAL**, or **NO** (no recording).
5. Click the time blocks from 0~23 for the desired day of the week.
  - ■ : (blue) selected block
  - ■ : (red) alarm
  - ■ : (green) normal
  - : (clear) no recording
6. From the **COPY/SET TO** drop-down menus to copy the schedule of one day to another. For example, if you want your schedule for Monday to be the same on Wednesday: under COPY select **MON**, under SET TO select **WED**, and then click **COPY**.
7. Click **APPLY** and then click **OK** in the confirmation window.
8. Click **EXIT** to close the Schedule window.

## ALARM

The Alarm tab allows you to configure alarm settings as well as set motion detection.

To open Alarm setup:

- Click **SETUP** at the top of the main screen and then click **ALARM**.



Figure 28.0 Record menu

Configure the following alarm and motion detection settings for each respective channel:

**NOTE:** Click **NEXT/PREVIOUS** for additional channels (8-channel models only)

- **I/O ALARM:** Select **NO** (normal open), **NC** (normal close) or **OFF**
- **MOTION DETECT:** Configure the following:
  - **STATUS:** Select **ON/OFF** to enable/disable motion detection
  - **SENSITIVITY:** Select **HIGHEST**, **HIGH**, **NORMAL**, or **LOW**
  - **MD (motion detection) AREA:** Click **SETUP** to open the Motion Grid (see Motion Grid on page 36)
- **VIDEO LOSS:** Select **ON/OFF** to enable/disable the alarm when a camera is disconnected
- **HDD SPACE:** Select **ON/OFF** to enable/disable the alarm when the hard drive is full (Overwrite must be turned off)
- **HDD LOSS:** Select **ON/OFF** to enable/disable the alarm is the internal hard drive is damaged or incurs failure
- **ALARM MANAGE:** Configure the following:
  - **OUTPUT:** Set the time (in seconds) for the buzzer to sound when an alarm is triggered—**0s**, **10s**, **20s**, **40s**, or **60s**

- **POST REC:** Set the time for the system to record after an alarm is triggered—**30s**, **1min**, **2min**, or **5min**

Click **APPLY** to save your settings and then click **OK** in the confirmation window.

## MOTION GRID

To set the motion grid:

1. Click **SETUP** at the top of the main screen and then click **ALARM**.
2. Under **MOTION AREA**, click **SETUP** for each respective channel you wish to apply motion detection. The Motion Grid opens.
 

**NOTE:** Click **NEXT/PREVIOUS** for additional channels (8-channel models only).

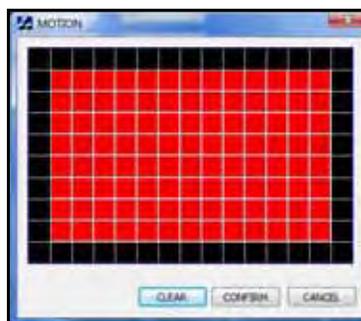


Figure 28.1 Motion Grid

3. Click the blocks to enable/disable motion detection. **RED**=motion detection *enabled*; **BLACK**=motion detection *disabled*. You can click and drag to select multiple blocks; click **CLEAR** to disable all the blocks.
4. Click **CONFIRM** and then click **OK** in the confirmation window.

## PTZ

The PTZ tab allows you to configure the settings for connected PTZ cameras (not included).

**NOTE:** Please refer to the instruction manual of your PTZ camera for complete details on configuring your camera settings.

To open PTZ setup:

- Click **SETUP** at the top of the main screen and then click **PTZ**



Figure 29.0 PTZ menu

Configure PTZ settings for each channel with a connected PTZ camera (not included):

**NOTE:** Click **NEXT/PREVIOUS** for additional channels (8-channel models only).

- **PROTOCOL:** Select **PELCO-D** or **PELCO-P**
- **ADDRESS:** Select from **1~255**
- **BAUD RATE:** Select **1200, 2400, 4800,** or **9600**
- **DATA BIT:** Select **5, 6, 7,** or **8**
- **STOP BIT:** Select **1** or **2**
- **VERIFY:** Select **ODD, EVEN, MARK, SPACE,** or **NONE**

Click **APPLY** to save your settings and then click **OK** in the confirmation window.

## NETWORK

The Network tab allows you to configure your IP and DDNS settings.

To open Network setup:

- Click **SETUP** at the top of the main screen and then click **NETWORK**

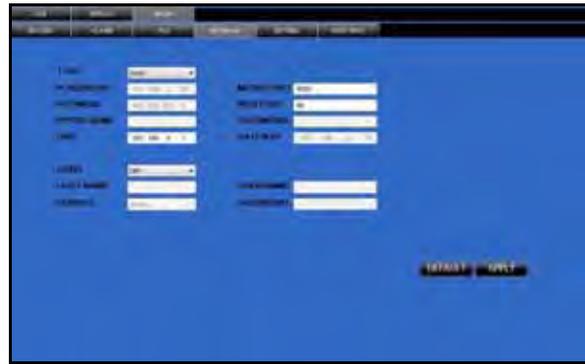


Figure 30.0 Network menu

To configure IP settings:

1. Under TYPE, select **DHCP** (default), **PPPoE**, or **STATIC**. If DHCP, go to *step 5*. If PPPoE, go to *step 2*. If STATIC, go to *step 3*.

**NOTE:** DHCP allows you to quickly connect to your network by obtaining an IP address from the router. After the initial setup, we recommend that you disable DHCP and set the IP address between 1~100. For example, if your IP address is 192.168.0.107, change the last digits to 90 (i.e. 192.168.0.90). This ensures that port forwarding will not change in the event of power failure or resetting of your network.

2. If you select *PPPoE* in step 1, enter your **PPPoE user name** and **password** in the respective fields.

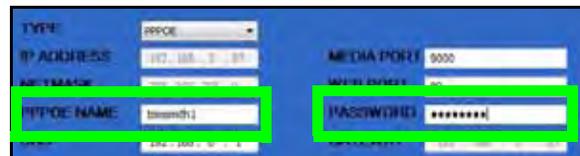


Figure 30.1 PPPoE setup

- If you selected *STATIC* in step 1, enter your **IP Address**, **Netmask**, and **Gateway** in the respective fields.

TYPE	STATIC	MEDIA PORT	8000
IP ADDRESS	192.168.45.99	WEB PORT	80
NETMASK	255.255.255.0	PASSWORD	*****
IPNS	192.168.0.1	GATEWAY	192.168.0.99

Figure 30.2 Static IP setup

**NOTE:** The default IP address of the system is 192.168.3.97

- If necessary, change the Media and Web Ports.
 

**NOTE:** For added security, we strongly recommend changing HTTP port 80 on the system to any desired port not blocked by your Internet service provider (ISP). Please note however, that you will also need to update the Web port in your browser and open this new port in your router. For details on changing ports on your system, see “Appendix C: Changing Ports On Your System” on page 49.
- Click **APPLY** to save your settings and then click **OK** in the confirmation window.

## DDNS

Lorex provides a free DDNS service for use with your DVR. A DDNS account allows you to set up a web site address that points back to your Local Network. You must register for Lorex’s free DDNS service prior to configuring DDNS settings.

**ATTENTION:** You *MUST* enter your DDNS information *LOCALLY* before attempting remote access.

Visit <http://lorexddns.net> to register for Lorex’s free DDNS service. For more details on setting up a free Lorex DDNS account, see “Setting Up DDNS Service” on page 44.

To change DDNS settings:

- Under DDNS, select **ON**.
- Under SERVICE, select **LOREX**.

- In the HOST NAME field, enter only the **first portion of your DDNS domain** from the confirmation email. For example, if your domain name is `tomsmith@lorexddns.net`, you only need to enter `tomsmith` in the text field.

DDNS	ON	USER NAME	tomsmith1
HOST NAME	tomsmith	PASSWORD	*****
SERVICE	LOREX DDNS		

Figure 30.3 DDNS setup

**NOTE:** Obtain this information from the confirmation email after registering for the free Lorex DDNS service.

- Enter your Lorex DDNS **user name** and **password** in their respective fields.
- Click **APPLY** to save your settings and then click **OK** in the confirmation window.
- To ensure your DDNS settings are saved on your system, disconnect the power cable from the rear panel of your system. Allow the system to power down for 15~20 seconds. Reconnect the power cable.

**NOTE:** Please allow 10~15 minutes for the DDNS servers to update with your new DDNS address. This is normal for the DDNS system.

## SETTINGS

Use the Settings menu to enable/disable network passwords, set the save location for backup files, and configure Daylight Savings Time settings.

To open Settings:

- Click **SETUP** and the top of the main screen and then click **SETTINGS**



Figure 31.0 Settings menu

Configure the following:

- **INTERNET BANDWIDTH:** Select **128K**, **192K**, **256K**, **384K**, **512K**, or **1024K**
  - NOTE:** Adjust the bandwidth setting based on the bandwidth capacity of your local or wide area network. Consult your Internet Service Provider (ISP) for more information.
- **FILE SAVEPATH:** By default, the system is set to save all data to `C:\DVR\`. Click  to browse for a new save location
- **DST:** Select **ON** or **OFF** to enable/disable Daylight Savings Time.
  - **DST MODE:** Select **DEFAULT** or select **CUSTOM**.
  - **START:** If you select **CUSTOM**, you can set the Start and Stop times for DST. From the drop-down menu, select **1ST WEEK ~ 4TH WEEK**. From the Sunday drop-down menu, select **JANUARY~DECEMBER**.
  - **END:** From the drop-down menu select **1ST WEEK ~ 4TH WEEK**; from the Sunday drop-down menu select **JANUARY~DECEMBER**
- Click **APPLY** to save your settings and then click **OK** in the confirmation window.

## Setting a Network Password

By default, the system is designed to allow you to use your system password (if enabled) as your network password for remote surveillance. If desired, you can set a Network Password only for use with the Remote Surveillance Software.

To set a Network Password:

1. Under **IE PASSWORD ENABLE**, select **ON**.
2. Enter **6-digit alpha/numeric USER and ADMIN passwords** in their respective fields. Re-enter the passwords to confirm.
3. Click **APPLY**.

If you forget the network passwords, you can clear the network password on your system to allow you to login with your standard system password.

**NOTE:** The network password can only be cleared on the system itself—not through remote surveillance using Internet Explorer.

To clear the network password:

1. On the system, open the **MAIN MENU** and then click **BASIC**.
2. From the Basic Setup menu click **PASSWORD**.
3. Select the box beside **NETWORK PW CLEAN**.

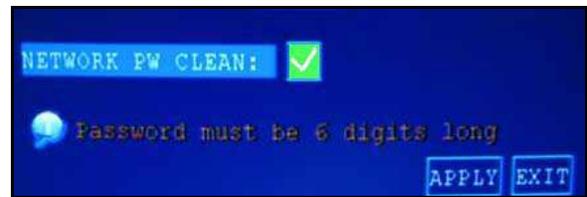


Figure 31.1 Network password clear in the system menu

4. Click **APPLY**. Click **CLOSE** in the confirmation window.

Your network password has been cleared. You can now access your system remotely using the system passwords.

## HOST INFO

Use the Host Info menu to view important information about the status of your system.

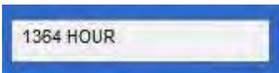


Figure 32.0 Host Info menu

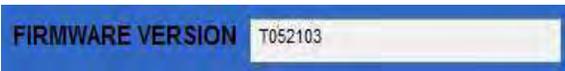
**HDD Status:** The bar will fill from left to right to indicate the storage space used on the HDD.



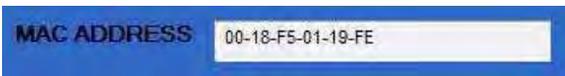
**Recording hours available** (based on current settings):



**Firmware version:**



**MAC address** (the physical address of your system on your network):



# APPENDIX A: SYSTEM SPECIFICATIONS

## Specifications:

### DVR

Image size	384-768 Kbyte (CIF)
Video inputs	8 x 1.0Vp-p, CVBS, 75ohms, BNC
Video outputs	VGA, BNC x 2
Audio inputs	8 x line-in, RCA
Audio output	1 x line-out, RCA
Supply voltage	100VAC-240VAC, 19VDC@ 3.42A, 50/60Hz
Power consumption	Approx. 25 watts (with HDD)
Operating Temp. Range	0° ~ 50° C
Hard disk capacity	1 HDD (Max 1TB)
Operating System	Linux (embedded)
Backup	USB Default (USB memory flash drive)
Back-up file formats	H.264 (special formats)
Compression	H.264
Recording resolutions	360x240
Recording speed	360x240 : 240fps (NTSC), 360x288 : 200fps (PAL)
Record Scheduling	Daily, Weekly adjust specific Hr per channel
Pre/Post alarm recording	MAX 1 minutes (Post)
Playback	Single channel
Alarm inputs	8 x voltage inputs, programmable as NC/NO
Alarm outputs	1 x voltage outputs; 12VDC/0.2A,
Activity detection	13x8 grid @ NTSC, Sensitivity levels: 4
PTZ Control	RS-485 interface
Unit Weight	2.5 kg
Unit Dimensions	300mm X 250mm X 60mm (W X D X H)

### Networking

Remote Functions	Live View, Live Recording, Search, Set-up, Back-up
Network Speed Control	6 levels (128-1024kb)/sec.
Network Protocol	TCP/IP, DDNS and Web
Network Interface	10/100-Base-TX, RJ-45

As our products are subject to continuous improvement, Lorex Technology Inc. and its subsidiaries reserve the right to modify product design, specifications, and prices without notice and without incurring any obligation. *E&OE*

# APPENDIX B: SETTING UP LOCAL AND REMOTE VIEWING

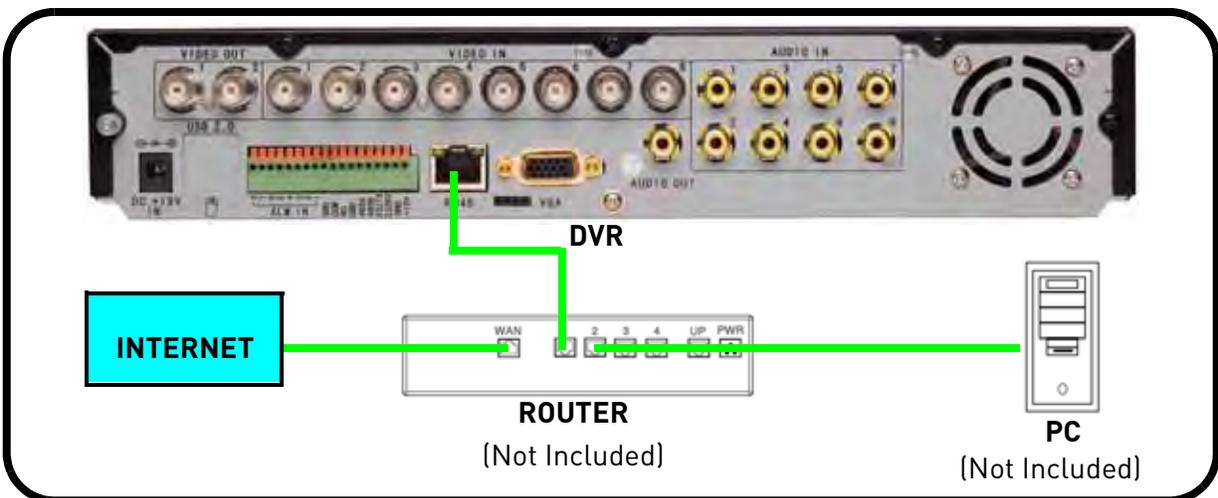
You can connect the system to a network for local or remote viewing. Once connected, you can access your system locally or remotely using the DVR Netviewer client with Internet Explorer. The default IP address of the system is **192.168.3.97**

**NOTE:** Experience with routers and networking are recommended if configuring the network functions of the system.

## *What do I need?*

- DVR System
- PC with Internet Explorer 6 or later

**NOTE:** A router (not provided with the system) and a High Speed Cable or DSL Internet connection (for remote viewing outside your network)



## Network Setup / Remote Access Overview

1. With the system powered off, connect your system to a router using the included Ethernet cable. Power on the system.
2. Find the IP and MAC addresses of your system.
3. Enable Port Forwarding on your router (remote viewing only). see “How do I enable port forwarding?” on page 43.

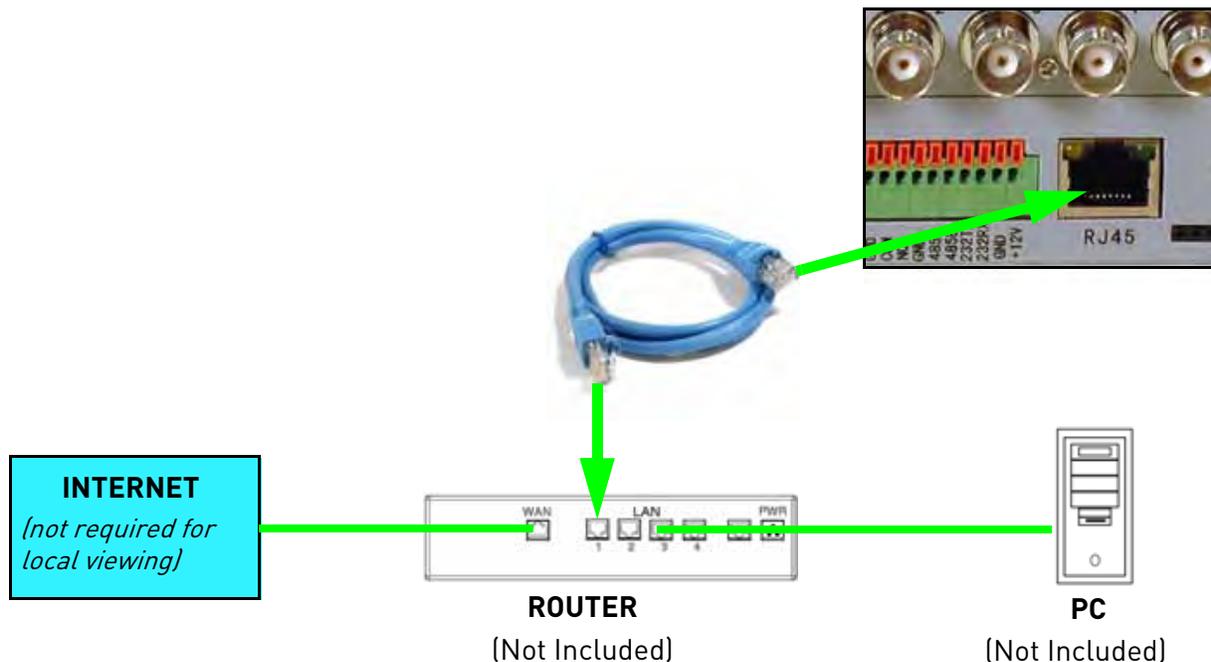
**NOTE:** All routers are different: please refer to your router’s manual for complete details on port affording your router.

4. Setup an account at <http://lorexddns.net>
  5. Enable DDNS on your system (log in *locally* and then power off and power on your system).
- Use the Networking Checklist on page 47 to confirm you have completed all the necessary steps of the networking process.

## Connecting to a Network

To connect to a network:

1. Power off your system by disconnecting the power cable from the rear panel.
2. Connect an Ethernet cable (included) to the LAN port on the rear panel of the system. Connect the other end of the Ethernet cable to an empty LAN port (usually numbered 1~4) on your router.



3. Reconnect the power cable to power the system back on.

## How do I find my IP and MAC addresses?

The IP and MAC address of your system are necessary for DDNS setup. DDNS allows you to view and control your system from a remote location.

**NOTE:** Make sure you have connected the DVR to your local or wide area network via the LAN port on the rear panel of the system.

To find your IP address: and MAC address:

1. Press the **OK** button on the front panel. The System Information menu opens. Here you will find your IP address and MAC address.

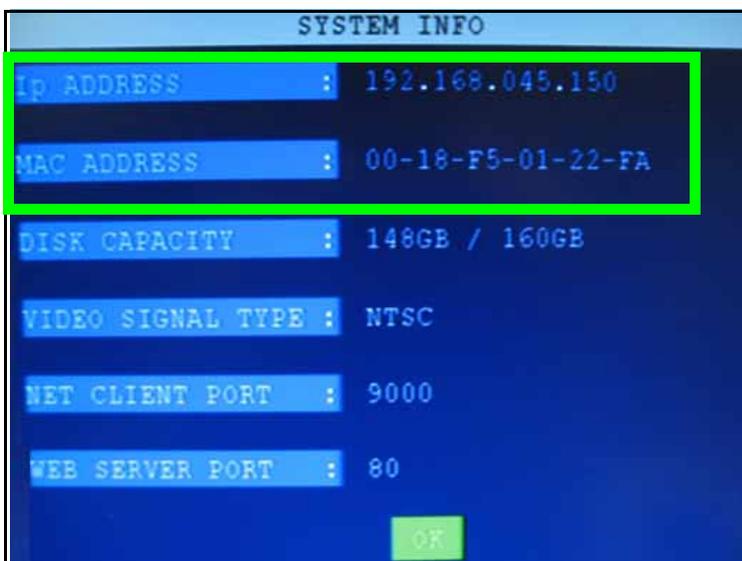


Figure 33.0 IP address and MAC address

2. Press the **OK** button to close the menu.

### *Finding Your External IP Address*

If you wish to find your external IP address, you can use a third-party website such as [www.showmyip.com](http://www.showmyip.com). Your external IP address can also be found within your Router settings. Refer to your router user guide for further details.

## How do I enable port forwarding?

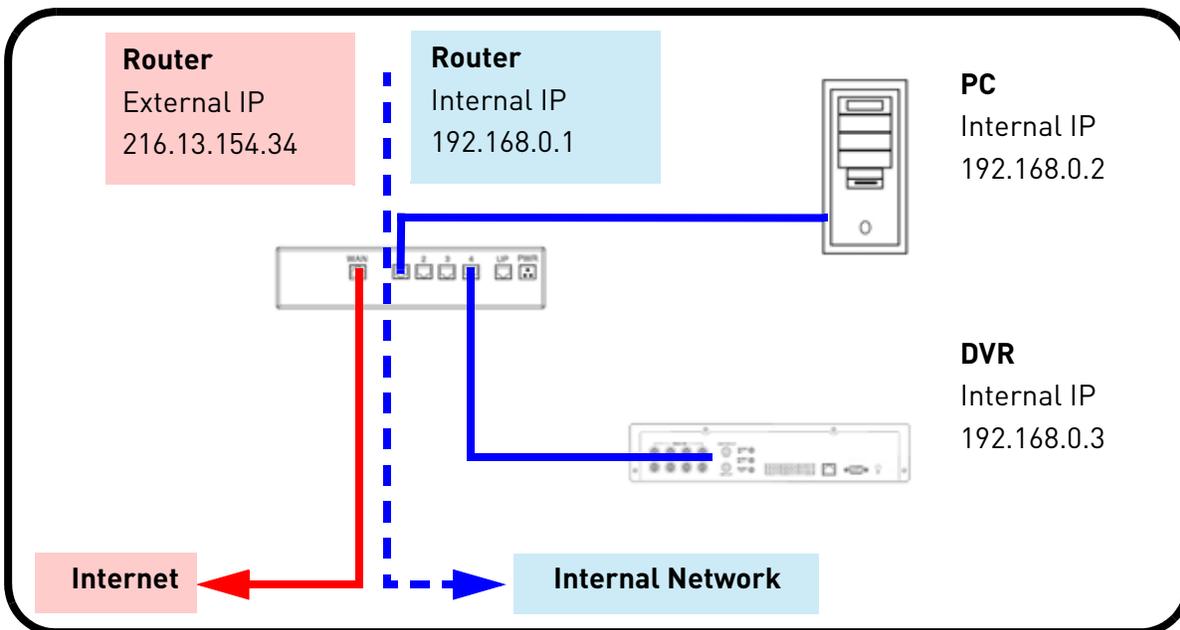
You need to enable port forwarding on your router to allow for external communications with your system for the following port:

- **80** (HTTP port)
- **9000** (Media Port)

**NOTE:** For added security, we strongly recommend changing HTTP port 80 on the system to *any desired port*—the port must not be blocked by your Internet service provider (ISP).

Computers, DVRs, and other devices inside your network can only communicate directly with each other within the internal network. Computers and systems outside your network cannot directly communicate with these devices. When a system on the internal network needs to send or receive information from a system outside the network (i.e. from the Internet), the information is sent to the router.

### NETWORK EXAMPLE



When a computer on the Internet needs to send data to your internal network, it sends this data to the external IP address of the router. The router then needs to decide where this data is to be sent to. This is where setting up Port Forwarding becomes important.

Port Forwarding tells the router which device on the internal network to send the data to. When you set up port forwarding on your router, it takes the data from the "**external IP address:port number**" and sends that data to an "**internal IP address:port number**" (i.e Router External IP 216.13.154.34 to DVR Internal IP **192.168.0.3:80**).

The instructions found online in the Router Configuration Guides will assist you in the port forwarding configurations for a selection of different router models. Visit our **Consumer Guides Support** website at <http://www.lorexctv.com> for more details.

## Setting Up DDNS Service

Lorex offers a free DDNS service for use with your system. A DDNS account allows you to set up a web site address that points back to your Local Network. The following outlines how to set up your free Lorex DDNS account.

To setup your free Lorex DDNS account:

1. In your browser, go to <http://lorexddns.net> and click **Create Account**.
2. Complete the **Account Information** fields with your personal information. Complete the **Warranty Information** with your purchase details (optional).
3. Complete the System Information fields:
  - **Product License:** Select your product model from the Product License drop down menu (e.g. LH108)
  - **<Product Code> - <MAC Address>:** The physical address of your product on your network. Do not include hyphens/dashes.
  - **URL Request:** Choose a URL for your DDNS connection (i.e. your name, your company or business name, or anything of your choice.)
4. Once the information has been entered, click **Create New Account**.
5. Your Account information will be sent to you at the email Address you used in Step 2.



Figure 34.0 Create a DDNS account

 A screenshot of the "Account Information" form. The form is titled "Account Information" and contains several input fields: "Email" (with the value "sm@method.com"), "Password" (masked with asterisks), "Password confirm" (masked with asterisks), "First name" (with the value "Tom"), "Last name" (with the value "Smith"), "Region" (with a dropdown menu showing "Ontario"), "Country" (with a dropdown menu showing "Canada"), and "Timezone" (with a dropdown menu showing "Eastern Standard Time (EST)"). At the bottom, there is a small text link: "By clicking on 'Create New Account' you accept the Terms of Service".

Figure 34.1 Enter personal information

 A screenshot of the "System Information" form. The form is titled "System Information" and contains three main input areas: "Product License" (a dropdown menu with "LH108" selected), "Product Code" (a text box with "1234567890AB" and a label "<Product Code> - <MAC Address>"), and "URL Request" (a text box with "tomsmith" and a label ".lorexddns.net"). There is also a "What is this?" link next to the URL request. At the bottom, there is a "Create New Account" button with a mouse cursor icon.

Figure 34.2 System information

You will need this information for remote access to your system. Record your information below:

**Username:** \_ \_ \_ \_ \_

**Domain name\*:** \_ \_ \_ \_ \_

**Password:** \_ \_ \_ \_ \_

\* Only the first part of the Domain Name is required for setup on the system. For example, if the full domain sent is *tomsmith.lorexdds.net*, you only need to enter **tomsmith** on the system.

## How do I enable DDNS on my system?

Once you have registered for free DDNS service, use the information in the confirmation email to configure DDNS settings on your system

You can enter your DDNS information directly on your system (recommended) or using the built-in remote surveillance software. If using the remote surveillance software, however, you must enter your DDNS on your local network (i.e. not over the Internet).



Figure 35.0 DDNS setup on the system

**ATTENTION:** You *MUST* enter your DDNS information *LOCALLY* before attempting remote access.

To enable DDNS on your system:

1. Open the MAIN MENU and click *ADVANCE*.
2. From the Advanced Setup menu, click **NETWORK**.
3. From the Network Setup menu, enter the **Primary** or **Secondary DNS** from the WAN settings of your router in the **MANUAL DNS** field. See “Manual DNS” on page 26.
4. Click **DDNS SETTINGS**.
5. Under DDNS, select **ON**.
6. Under SERVICE, select **LOREX**.
7. Under DOMAIN NAME, enter only the **first portion of your DDNS domain** from the confirmation email. For example, if your domain name is tomsmith@lorexddns.net, you only need to enter *tomsmith* in the text field.
8. Enter your Lorex DDNS **user name** and **password** in the respective fields.

**NOTE:** Obtain this information from the confirmation email after registering for the free Lorex DDNS service.

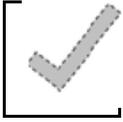
9. Click **APPLY**. Click **CLOSE** in the confirmation window.
10. Click **EXIT** in all menus until all windows are closed.
11. To ensure your DDNS settings are saved on your system, disconnect the power cable from the rear panel of your system. Allow the system to power down for 15~20 seconds. Reconnect the power cable.

**NOTE:** Please allow 10~15 minutes for the DDNS servers to update with your new DDNS address. This is normal for the DDNS system.

For details on how to enable DDNS on your local network using the built-in remote surveillance software, see “DDNS” on page 36.

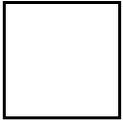
## Networking Checklist

Use this checklist to confirm you have completed all the steps of the Network Setup.



### *I have the following:*

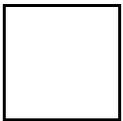
- High-Speed Internet
- Router
- Ethernet cable (included with the system)
- Computer with Internet Explorer 6 or later



### *I have turned off the system and performed the following:*

- Connected the Ethernet cable to the LAN (RJ45) port on the rear panel of the system
- Connected the other end of the Ethernet cable to my router

**NOTE:** Network Setup will not work if you do not have a router.

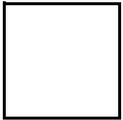


### *I have found my System Information:*

- Open the Main Menu and then click **ADVANCE**. Click NETWORK. Your IP address appears below the Media and Web port
- Open the Main Menu and then click **ADVANCE**. Click INFO. Your MAC address appears above the serial number

My IP Address is: \_\_\_\_\_

My MAC Address is: \_\_\_\_\_



### *I have enabled Port Forwarding on my router:*

- **Port 80**
- **Port 9000**

**NOTE:** For added security, we strongly recommend changing HTTP port 80 on the system to *any desired port*—the port must not be blocked by your Internet service provider (ISP). For details on changing your ports, see “Appendix C: Changing Ports On Your System” on page 49.

**NOTE:** Each router is different, so port forwarding settings vary by model. Please visit us on the web at [www.lorecctv.com](http://www.lorecctv.com) for assistance with the latest types of routers. If your router is not listed, please refer to your router’s manual or contact your router’s manufacturer for assistance.

*I have configured DDNS for remote access to my system:*

Go to [www.lorexddns.net](http://www.lorexddns.net) and create a new account

Domain: \_\_\_\_\_

User ID: \_\_\_\_\_

Password: \_\_\_\_\_

*I have configured my system to connect to the DDNS server:*

**ATTENTION:** You *MUST* enter your DDNS information *LOCALLY* before attempting remote access.

To enable DDNS on your system:

1. Open the MAIN MENU and click *ADVANCE*.
  2. From the Advanced Setup menu, click **NETWORK**.
  3. From the Network Setup menu, enter the **Primary** or **Secondary DNS** from the WAN settings of your router in the **MANUAL DNS** field. See "Manual DNS" on page 26.
  4. Click **DDNS SETTINGS**.
  5. Under DDNS, select **ON**.
  6. Under SERVICE, select **LOREX DDNS**.
  7. Under DOMAIN NAME, enter only the **first portion of your DDNS domain** from the confirmation email. For example, if your domain name is `tomsmith@lorexddns.net`, you only need to enter `tomsmith` in the text field.
  8. Enter your Lorex DDNS **user name** and **password** in the respective fields.
- NOTE:** Obtain this information from the confirmation email after registering for the free Lorex DDNS service.
9. Click **APPLY**. Click **CLOSE** in the confirmation window.
  10. Click **EXIT** in all menus until all windows are closed.
  11. To ensure your DDNS settings are saved on your system, disconnect the power cable from the rear panel of your system. Allow the system to power down for 15~20 seconds. Reconnect the power cable.

**NOTE:** Please allow 10~15 minutes for the DDNS servers to update with your new DDNS address. This is normal for the DDNS system.

*I can access my system from a remote PC:*

To access your system remotely:

1. Open Internet Explorer and enter your **DDNS address** from the confirmation email. For example, `tomsmith.lorexddns.net`
2. Log in using your ADMIN **password**. If you have not enabled passwords on the system, leave the password field **blank**.

---

## APPENDIX C: CHANGING PORTS ON YOUR SYSTEM

For added security, we strongly recommend changing Web port 80 on the system to *any desired port*—the port must not be blocked by your Internet service provider (ISP).

**NOTE:** Please contact your ISP for complete information on available ports in your area.

Prior to changing ports on your system, you must connect your system to your network using the included Ethernet cable.

### Example

Let's say you want to change the Web port on your system from 80 to **85**.

To change the port number:

1. Open the Main Menu and click **ADVANCE**. The Advanced Setup menu opens.
2. Click **NETWORK**.
3. Under WEB PORT, enter **00085** using the Virtual Keyboard.



Figure 36.0 Change the Web port

4. Click **APPLY** and then click **CLOSE** in the confirmation window.
5. Click **EXIT**. The system will prompt you that it must restart. Click **SURE**.
6. To confirm that the new port number is saved on your system, repeat steps 1~2. The new Web port should appear on the Network Setup menu.

You must now include the new Web port number in the URL when logging in to your system with Internet Explorer.

**NOTE:** Requires Internet Explorer 6 or later.

## *Local Viewing:*

To log in using the new port number:

1. Open Internet Explorer.
2. In the address bar, enter the IP address of your system immediately followed by **:85** (no spaces). For example, `http://192.168.3.97:85`

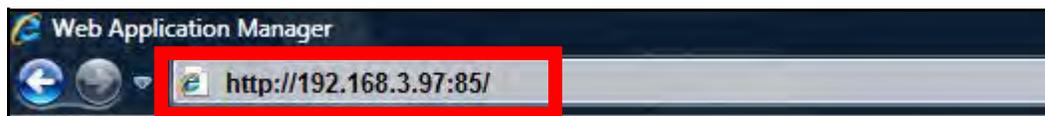


Figure 36.1 Enter :85 at the end of the IP address

3. Enter your system **ADMIN password** and select **LAN**.  
**NOTE:** If you have not enabled passwords on the system, leave the password field blank.
4. Click **LOGIN**.



Figure 36.2 Login with your LAN ID and password

## Remote Viewing

You should now be able to access your system from your local network. Prior to using remote viewing, you must log in to your system locally and enter the DDNS information from your Lorex DDNS confirmation email.

**NOTE:** We strongly recommend registering for Lorex’s free DDNS service prior to using remote viewing. For details, see “Setting Up DDNS Service” on page 44.

**ATTENTION:** For remote viewing, the Web port and Media port of your system *MUST be port forwarded on your router*—in this example, port **85** and Media Port **9000**. Each router is different, so port forwarding settings vary by model. Please refer to the Lorex Port Forwarding Guide ([www.lorexctv.com/support](http://www.lorexctv.com/support) and then click Consumer Guides) for help on port forwarding your router. If your router is not listed, please refer to your router’s manual or contact your router’s manufacturer for assistance.

To edit DDNS settings:

1. From a PC on your **local network**, open Internet Explorer.
2. In the address bar, enter the IP address of your system immediately followed by **:85** (no spaces). For example, **http://192.168.3.97:85**
3. Enter your system ADMIN password and select **LAN**.  
**NOTE:** If you have not enabled passwords on the system, leave the password field blank.
4. Click **LOGIN**.
5. Click **SETUP** at the top of the main screen and then click **NETWORK**.
6. Under DDNS, select **ON**. Enter your DDNS information from the confirmation email and click **APPLY**. For complete details on entering your DDNS information, see “How do I enable DDNS on my system?” on page 46.
7. Reset your system by disconnecting the power cable from the rear panel of the system. Let the system power down for 15~20 seconds and then reconnect the power cable.
8. To confirm the DDNS settings have been saved to your system, open the Main Menu and click **ADVANCE**. The Advanced Setup menu opens.
9. Click **NETWORK** and then click **DDNS SETTINGS**.



Figure 36.3 DDNS

If you have not already done so, port forward ports 85 and 9000 on your router. Each router is different, so port forwarding settings vary by model. Please refer to the Lorex Port Forwarding Guide ([www.lorexctv.com/support](http://www.lorexctv.com/support) and then click Consumer Guides) for help on port forwarding your router. If your router is not listed, please refer to your router’s manual or contact your router’s manufacturer for assistance.

## *Remote Viewing (cont'd.)*

Now that you have configured your DDNS settings, you should be able to log in to your system from a remote PC (i.e. a PC not on your local network).

To log in using DDNS:

1. Using a remote PC, open Internet Explorer.
2. In the address bar, enter your **DDNS address** immediately followed by **:85** (no spaces).

**NOTE:** Obtain your DDNS address from your confirmation email.

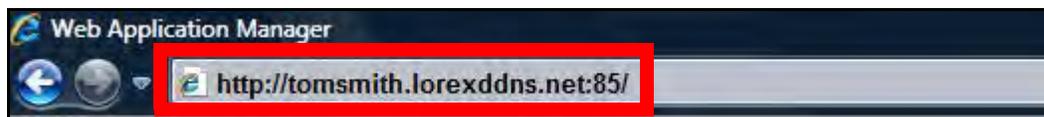


Figure 36.4 Enter :85 at the end of the DDNS URL

3. Enter your system **ADMIN password** and select **INTERNET**.  
**NOTE:** If you have not enabled passwords on the system, leave the password field blank.
4. Click **LOGIN**.



Figure 36.5 Login with your LAN ID and password

**NOTE:** If you are having problems connecting using DDNS, check that you have port forwarded ports 85 and 9000 on your router. If you change Media Port 9000 on your system, you *MUST port forward the corresponding port on your router.*

## APPENDIX D: CONNECTING A PTZ CAMERA

You can connect RS-485 PTZ cameras (not included) to the PTZ Control Block on the rear panel of the system. Additional PTZ cameras are available at [www.lorexcctv.com](http://www.lorexcctv.com)

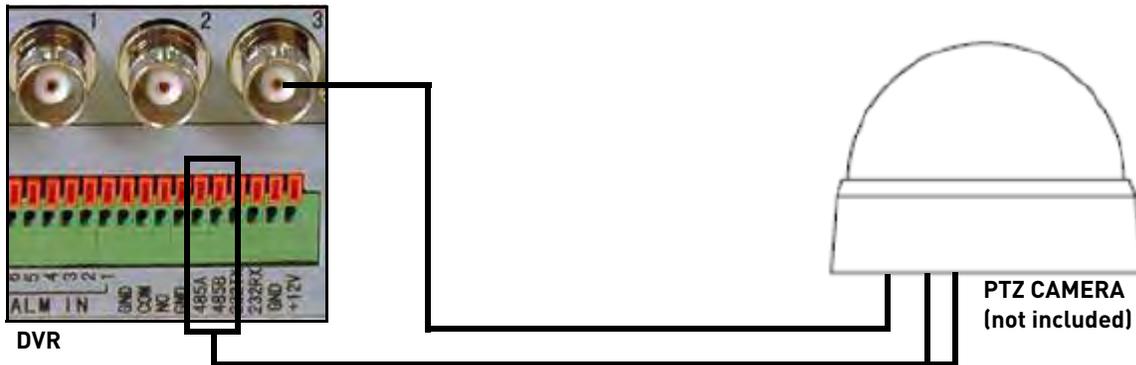


Figure 37.0 Connecting a PTZ camera (not included)

To install a PTZ Camera:

1. Connect the Transmit Cable to the **485A TX (+)** port of the PTZ block on the rear panel.
2. Connect the Receive Cable to the **485B RX (-)** port of the PTZ block on the rear panel.
3. Connect the video cable to a BNC port.
4. Open the MAIN MENU and then click **ADVANCE**. The Advanced Setup menu opens.
5. Click **PTZ**.
6. Configure the settings based on the instructions of your PTZ camera and click **APPLY**.

**NOTE:** The PTZ camera settings depend on the type of PTZ camera. Please refer to the specific camera manual for your brand and model of PTZ camera.

To use a PTZ camera:

1. Make sure the camera is properly connected and configured prior to using the PTZ camera.
2. From live viewing, right-click anywhere on the screen to open the sub-menu and select **PTZ**. The PTZ control panel opens.
3. Click the navigation keys to move the lens.
4. Click and drag the slider to adjust panning speed.
5. Click **+ / -** to control Zoom, Focus and Iris.
6. Click **SETUP** to open Senior Control.

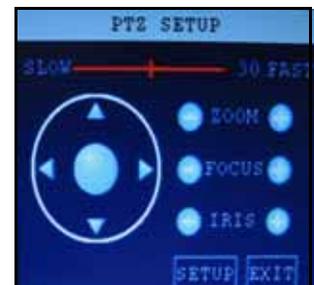


Figure 37.1 PTZ control

To use Senior Control:

1. Under Preset, enter a number using the Virtual Keyboard (mouse only). Click Set Preset to save the preset.
2. Click **Clean Preset** to erase a preset.
3. Click **Call Preset** to set a preset.
4. Click **Auto Scan** to scan for presets. Click **Stop Scan** to stop the scan.
5. Click **EXIT** to close the Senior Control menu.



Figure 37.2 PTZ Senior control

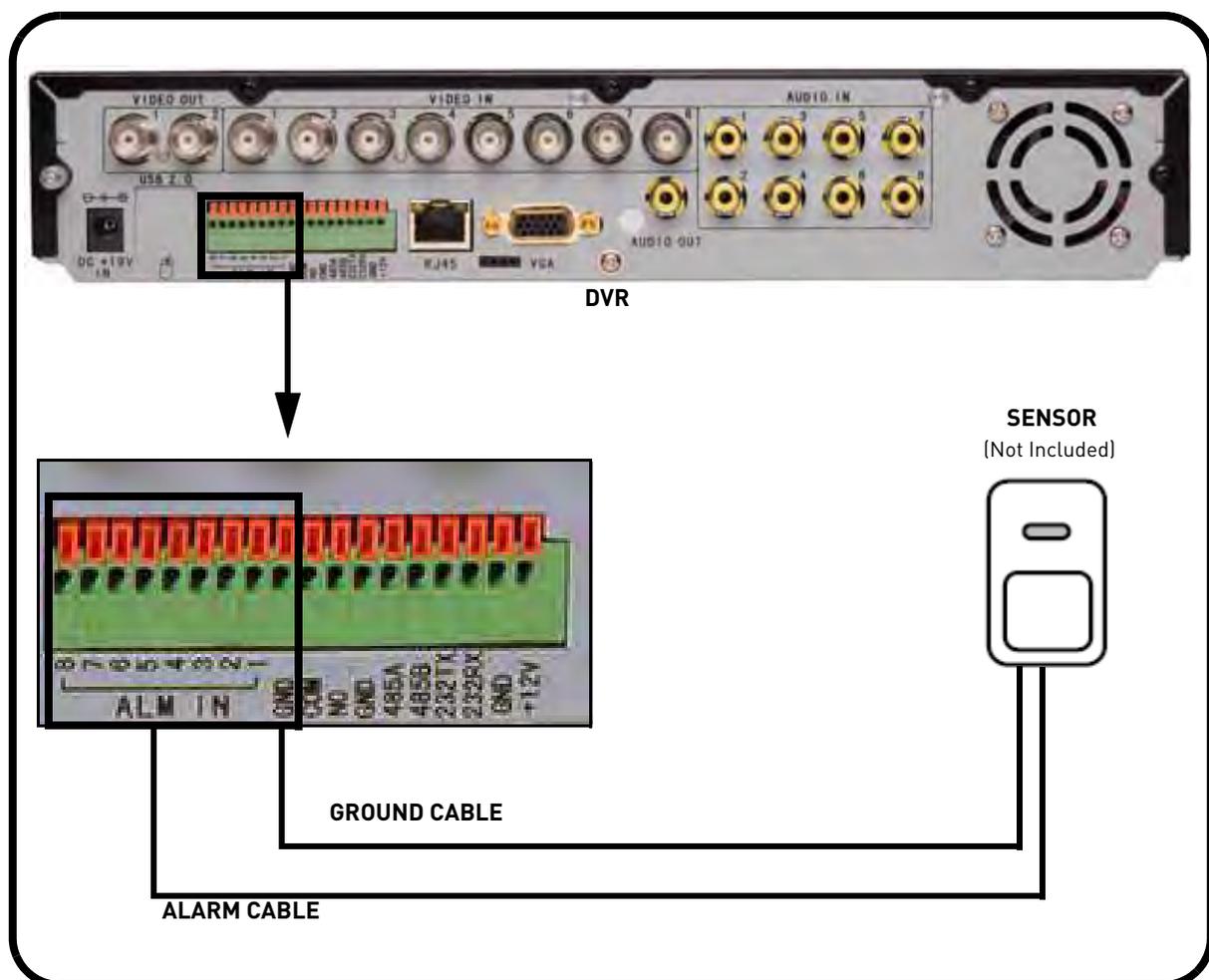
# APPENDIX E: CONNECTING MOTION/ALARM DEVICES

You can enable Motion Detection and Alarm control from the Main Menu. Use a motion detector or sensor to send a signal to the system to trigger alarm recording on the corresponding camera channel (when enabled in the Menu).

## *Installing a Sensor*

To connect an external alarm sensor to the system:

1. Connect the Signal Cable to the desired **Channel number port** on the rear panel.
2. Connect the Ground Cable to a **Ground port** on the rear panel.



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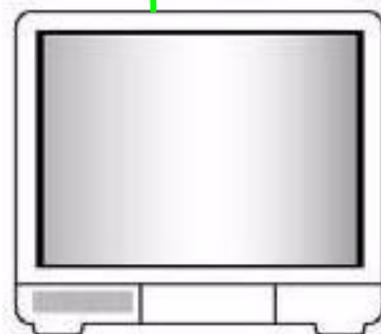
## APPENDIX F: CONNECTING ADDITIONAL EXTERNAL MONITORS

Use the VIDEO OUTports (BNC) on the rear panel of the system to connect an external monitor(s). Monitor-out mirrors the entire screen image of your system. This is useful if you need to monitor the system from a second location (e.g. a back office).

### EXTERNAL MONITORS (BNC) (Not Included)



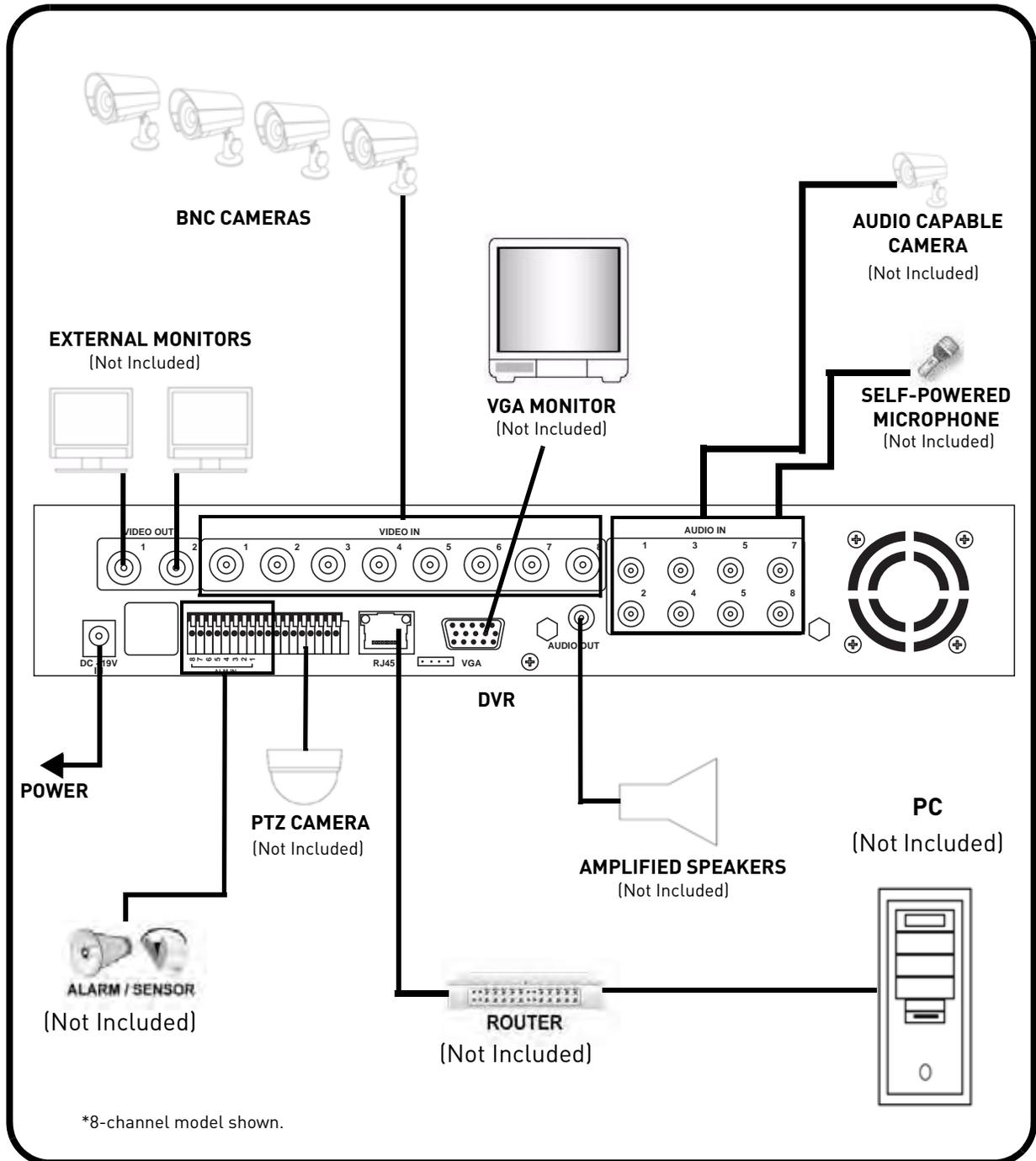
DVR



### PRIMARY MONITOR (VGA) (Not Included)

# APPENDIX G: FULL CONNECTIVITY DIAGRAM

The following diagram outlines a general set of connections available with the system\*.



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## APPENDIX H: REPLACING THE HARD DRIVE

The system comes with a pre-installed 3.5" SATA hard drive. You can expand the system with a replacement single hard drive up to 1 terabyte (TB).

**NOTE:** Make sure that the system is OFF and the power cable has been disconnected before changing the hard drive.

### Removing the Hard Drive

To remove the hard drive:

1. Remove the screws from the side panel (x2) and rear panel (x5) of the cover.
2. Gently slide the cover away from the rear panel and lift off.

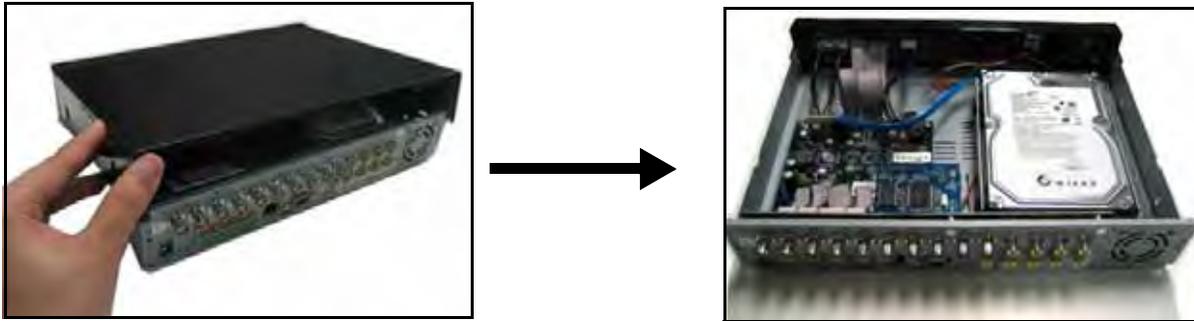


Figure 38.0 Remove cover

3. Disconnect the power and data cables.
4. Remove the screws from the mounting brackets (see figure 38.1).

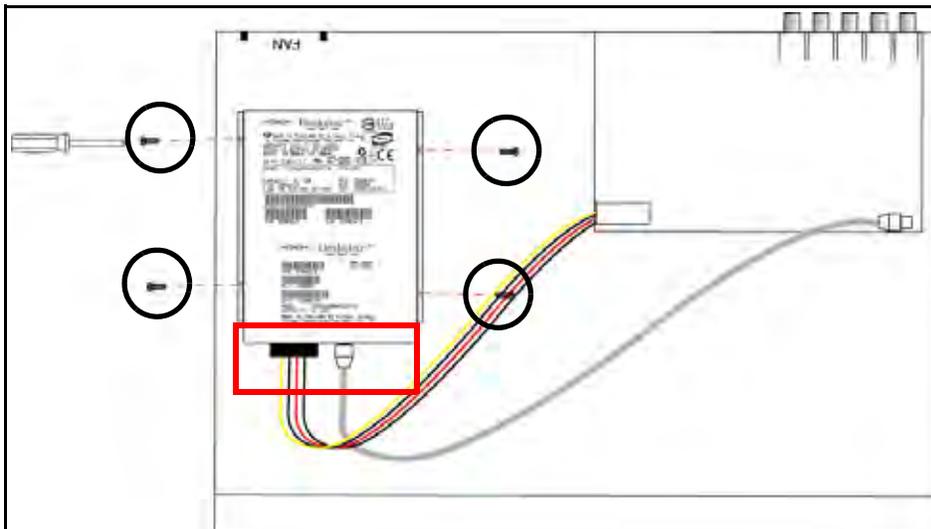


Figure 38.1 Disconnect the power and data cables, then remove the screws from the mounting brackets

5. Gently remove the hard drive from the housing.

## Replacing the Hard Drive

To replace the hard drive:

1. Place the new drive in the housing. The connections end of the drive should face toward the front panel (see figure 38.2). Replace the screws (x4) to secure the drive to the mounting brackets.

**NOTE:** The cable from the exhaust fan will be underneath the drive.

2. Reconnect the power and data cables. Each cable can only be connected one way.

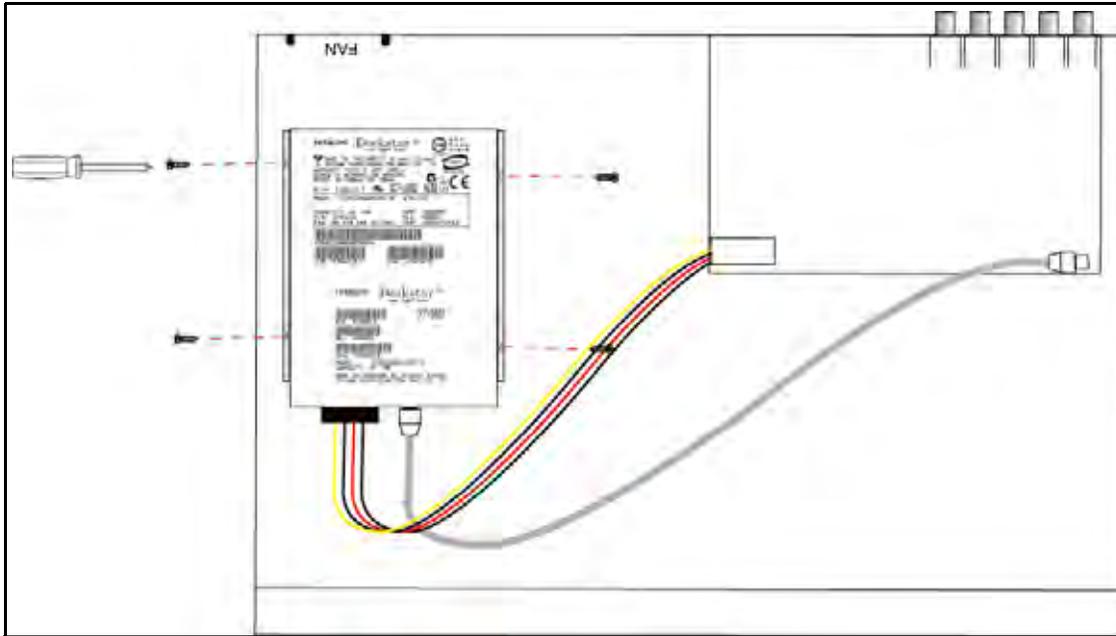


Figure 38.2 Secure the HDD to the mounting brackets and reconnect the power and data cables

3. Replace the cover, tucking the lip of the cover at the front panel.
4. Replace the screws on the side and rear panels of the cover.

## Formatting the Hard Drive

If you replace the pre-installed hard drive, it *must* be formatted in order to function properly with the system.

**ATTENTION:** Formatting the HDD erases *all data* on the hard disk. *This step cannot be undone.*

To format the hard disk:

1. Right-click anywhere on the screen and select **MAIN MENU**.
2. Click **HDD**.
3. From the HDD Management menu click HDD FORMAT.
4. From the Warning prompt, click **SURE**. The system will begin formatting the hard drive. This may take several moments depending on the size of the HDD.

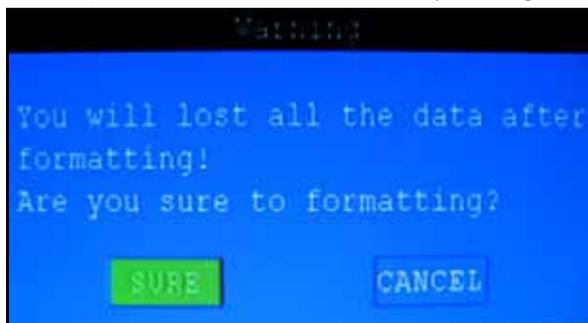
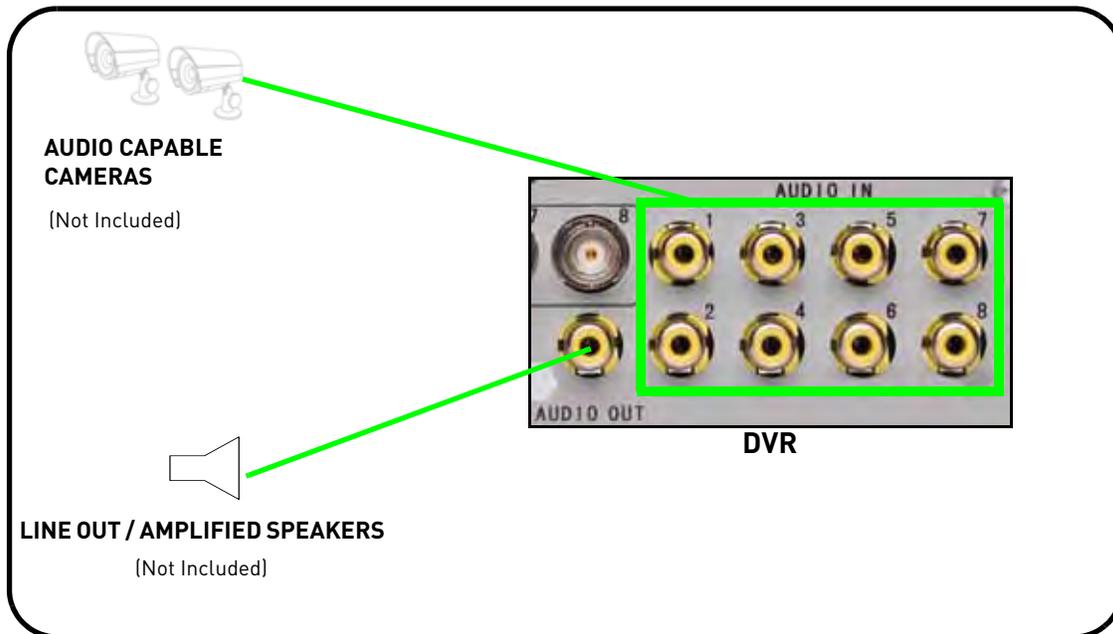


Figure 38.8 Formatting warning

5. Once formatting is complete, click **CLOSE** in the confirmation window. The system will automatically restart and load to the default live viewing display.
6. Open the Main Menu and click **HDD** to check the status of the hard drive.  
**NOTE:** You will notice that the size of the HDD and the free space are not the same. The system uses a portion of the disk space for the operating system and initialization. This is common in all security DVRs as well as common PC hard drives.

# APPENDIX I: CONNECTING AUDIO

Use audio capable cameras (not included) to listen to, and record audio on the system\*.



To connect audio:

1. Connect RCA audio cables from an audio capable camera(s) to the **AUDIO IN** ports on the rear panel of the system. The audio port should correspond to the matching VIDEO IN port (i.e. *Audio camera 1* should be connected to *Video In port 1* and *Audio In port 1*).
2. Connect an RCA audio out cable to the **AUDIO OUT** port on the rear panel of the system.
3. Right-click anywhere on screen and select **MAIN MENU**.
4. Click **RECORD**.
5. Under AUDIO, select **ENABLE**.
6. Click **APPLY** and then click **CLOSE** in the confirmation window.

To adjust volume:

1. From the MAIN MENU click **BASIC**.
2. Click **VIDEO/AUDIO**.
3. Click **VOLUME SETUP**.
4. Click each channel and **click and drag the volume slider** to increase/decrease the volume.
5. Click **X** to exit.
6. Click **APPLY** and then click **CLOSE** in the confirmation window.

---

## APPENDIX J: CONVERTING FILES TO AVI

Use the built-in, browser-based remote surveillance software to convert saved video files to AVI. The AVI format allows you to playback the video files in many multimedia players. AVI conversion involves two parts: selecting a file, then converting the file.

To select a file:

1. Open Internet Explorer. In the address bar, enter the IP address of your system.
2. Log in using your **ADMIN password**. If passwords are not enabled on your system, leave the password field **blank**.
3. Click **REPLAY** at the top of the main screen.
4. Use the calendar to select a date and click **REFRESH**.
5. Find a desired file from the File List and double-click to playback the file in the main screen.

To convert the file:

1. With a file selected and played back in the main screen, click **264 TO AVI**. The AVI Convert window opens.

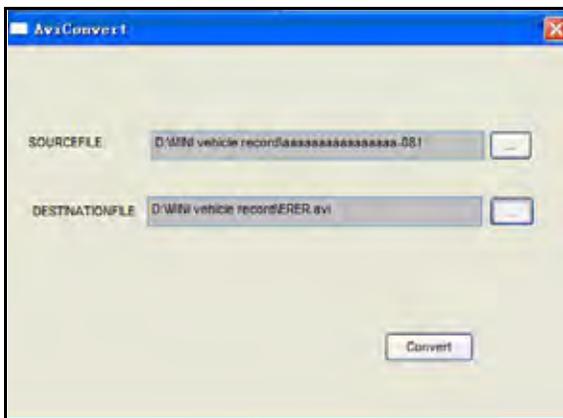


Figure 39.0 AVI Convert window

2. Under SOURCE FILE, click  to select the .264 file you wish to convert. By default, the file you have already viewed in playback should be selected.
3. Under DESTINATION FILE, click  to select the save directory for the converted file. Enter a name for the file. By default, converted files are saved to C:\DVR\.
4. Click **CONVERT**. File conversion begins. The progress bar indicates the status of the conversion.

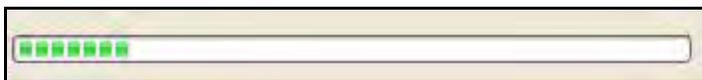


Figure 39.1 AVI Conversion progress

Click **OK** in the confirmation window.

**NOTE:** You can view the AVI file in media players such as VLC and DivX Player. The DivX, XviD, or FFDSHOW codec (not included) is required if viewing AVIs in Windows Media Player.

---

# APPENDIX K: PLAYBACK SOFTWARE

View backup video files using Backup Player Software. Visit [www.lorexcctv.com](http://www.lorexcctv.com) to download the Player Software for free.

## Installing the Player

To install the Player Software:

1. Download the free software from [www.lorexcctv.com](http://www.lorexcctv.com)—the software is found on the product page of your system.
2. Double-click **PlaybackSetup.exe**



Figure 40.0 Player Software Installation

3. Click **Next**.
4. Click **Next** to install the player to the default folder, or click **Browse** to select a new location.
5. Click **Next** to install the Player's shortcuts to the default location, or click **Browse** to select a new location.
6. To add a desktop icon, select the box and click **Next**.
7. Click **Install** to continue the installation.

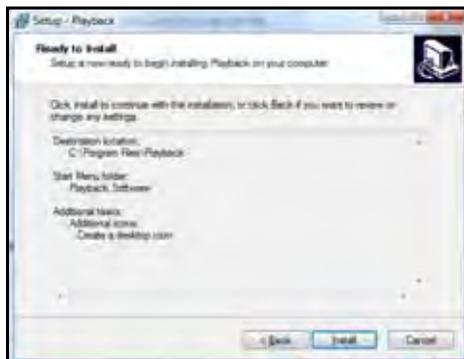


Figure 40.1 Click Install

8. Click **Finish**.

## Using the Player Software

To use the Player Software:

1. Launch the Player Software from the desktop icon or from Start>Programs>**Playback Software**.
2. Select File>**Open local file**.
3. Find the directory of your saved or backed up files. For example, c:/DVR/ . . .
4. In the Open window, set the file type to "**All Files.**"
5. Select your file and click **Open**.
6. Click  to open the playback controls and then click . Playback begins.



Figure 40.2 Player Software desktop icon

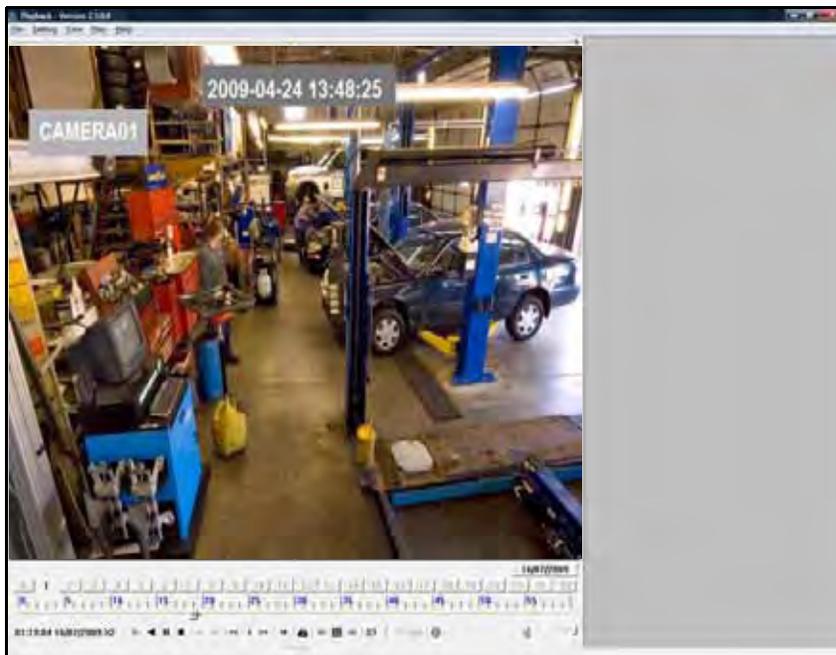


Figure 40.3 Player Software main window (image simulated)



### TIP!

For instant playback, drag and drop the backup file onto the Player Software desktop icon.

---

# APPENDIX L: MOBILE PHONE INSTANT VIEWING

You can access your system while on the go using your Windows Mobile enabled touch-screen smart phone (Windows Mobile 6.0 or greater is required).

**NOTE:** Currently, mobile viewing is supported by Windows Mobile *only*.

Mobile Phone Instant Viewing features the following:

- 352x240 resolution
- Selectable one channel display
- Supports IP address only
- Requires a touch screen smart phone



## Enable Mobile Viewing on the System

You must first enable mobile viewing on the system.

To enable mobile viewing:

1. Under MOBILE NETWORK, select **3G**, **2.75G**, or **2.5G**.  
**NOTE:** Contact your cellular provider if you are unsure about the network of your cellular phone.
2. Under MOBILE PORT, enter your mobile port number (by default, **100**).
3. Click **APPLY**. Click **CLOSE** in the confirmation window.
4. Click **EXIT** in all menus until all windows are closed.



Figure 41.0 Mobile menu

## Installing the Mobile Viewing Application

Once you have enabled mobile viewing on your system, visit [www.lorexcctv.com](http://www.lorexcctv.com) to download the free mobile viewing application.

**NOTE:** This section deals with a an installation using Windows Vista. File management and operations may differ using Windows XP.

To install the Mobile Viewing Application:

1. Download the Mobile Viewing Application for free from [www.lorexcctv.com](http://www.lorexcctv.com)—the application can be found on the product page of your system. The file name is `amplayersetup.cab`.
2. Connect and synchronize your Windows Mobile touch-screen smart phone to your PC.
3. View the files and folders on your phone using Windows Explorer. Copy the file, `amplayersetup.cab`, to the **My Documents** folder on your phone.
4. On your phone, select Start>**File Explorer**.
5. Double-click **amplayersetup**. The application begins to install on your phone.
6. When the installation has finished click **OK**.

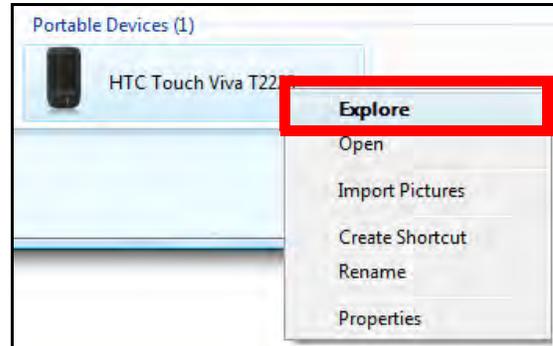


Figure 41.1 View files and folders on your phone

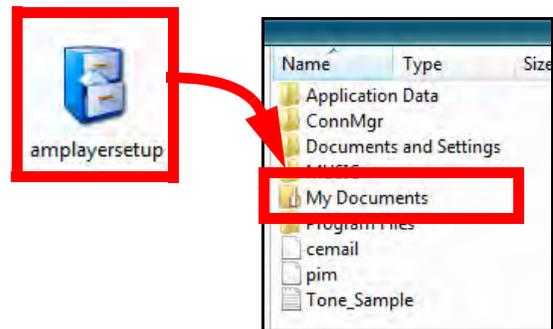


Figure 41.2 Copy the CAB file to My Documents

## Connecting To Your Cameras

Once the application is installed on your phone, you can log in and access your system.

To use mobile viewing:

1. From your phone, select Start>Programs>**QQeye**. You can also click Start then double-click the QQeye icon.
2. Click **Setting**. In the Username field enter **admin**; in the Password field enter **admin**.
3. Under Server, enter the **IP address** of your system.
4. Under Port, enter the port number of your system (by default, **100**).
5. Under Channel, select a camera from the drop-down menu.

**NOTE:** You can only view one channel at a time.

6. Click **OK**. The Mobile Viewer will connect automatically.
7. Use the Channel drop-down menu to switch between camera.

If you are having trouble connecting, please check the wireless network configuration on your phone.

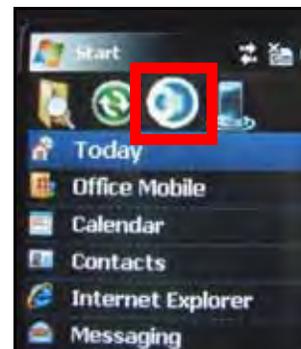


Figure 41.3 The QQeye mobile viewer icon

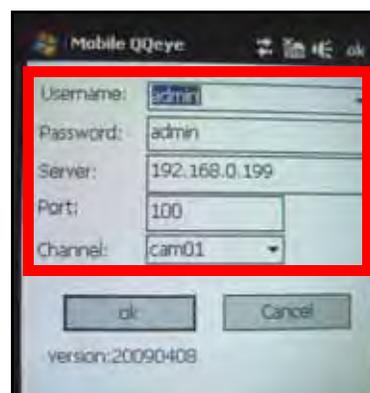


Figure 41.4 Enter your login information

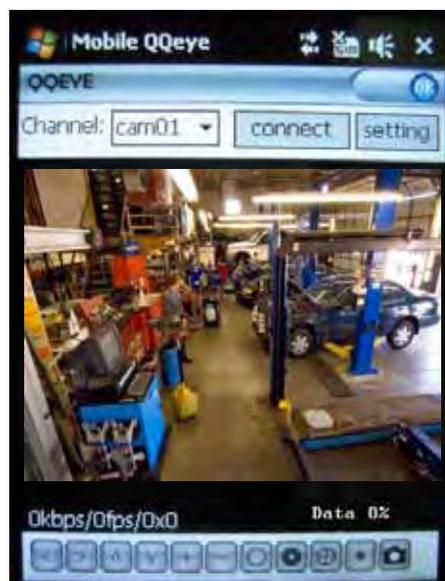


Figure 41.5 Live viewing on your mobile phone  
\*Image simulated

## APPENDIX M: MOBILE VIEWING ON YOUR IPHONE

Mobile viewing allows you to view video streams from your DVR (Digital Video Recorder) on your mobile device, such as an iPhone. It is an easy and convenient way to view events on your DVR.

### Enabling Mobile Viewing On Your iPhone

To enable mobile viewing of your DVR, you will need an iPhone application called **Meye Sun**. This application can be downloaded through the Apple App Store™ on your iPhone. You need to create an iTunes™ account to access the App Store.

System Requirements	
Supported Devices	iPhone, iPod Touch with OS 2.2 or later
Storage Space	>800KB
Optional Software	iTunes

To download the Meye Sun application using your iPhone:

1. Touch the  (App Store) icon to open the App store.
2. Touch the **Search** icon on the bottom of the screen. Search for **Meye Sun** and then touch the **Search** button.
3. Touch the **FREE** button, then touch **Install** to download and install the program.

### The Meye Interface



Figure 1.0 The main interface window.

Icon	Function	Description
	Play	Connect to your cameras.
	Full Screen	Enable/disables full screen mode.
	Snap Shot	Takes a picture of the current channel.
	Settings	Set up your DVR's: IP address, port number, and account information.
	Next Group	View the next batch of cameras on your system (ranges from cameras 1~16).

## Connecting To Your DVR

Once the application is installed on your phone, you can log in and access your system remotely.

### Before You Start

- If you are connected to your service provider on your iPhone (ie. 3G network), you must enter in the WAN IP address of your DVR in the Settings window.
- To find the IP address of your DVR, press the ENTER button on the front panel.
- You must enable port forwarding on your DVR (Port 100).
- It is recommended to use a **static IP address**. If using a dynamic IP, your WAN IP may change frequently

NOTE: You must have access to the internet on your iPhone before you can connect to your cameras.

To connect to your cameras:

1. From your iPhone, touch the  (Meye) icon to start the program.
2. Touch the  (Settings) button. The setting window opens (Figure 1.2).
3. Under Server Info, in the Address field, enter your **DVR's WAN IP address** or a **DDNS\*** address. In the Port field, enter your DVR's port number (default is port 100).
4. Under Account Info, in the User ID field, enter **admin**. In the Password field, enter **admin**.

NOTE: You can only view a single channel at a time.

5. Touch the **Back** button to return to the main screen.
6. Touch the  (play) icon to begin viewing. Touch the channel numbers on the bottom of the screen to switch channels.



Figure 1.2 Settings window.

## Uninstalling Meye From Your iPhone

To uninstall the Meye application from your iPhone:

1. From the iPhone's main menu, touch and hold the  (Meye) icon for several seconds. Touch the **X** on the top left corner of the icon. A window opens that says, "Deleting "MEye" will also delete all of its data."
2. Touch the **Delete** button to uninstall the program.

# TROUBLESHOOTING

When a malfunction occurs, it may not be serious and can be corrected easily. The following describes the most common problems and solutions. Please refer to the following before calling Lorex Technical Support:

Error	Possible Causes	Solutions
<ul style="list-style-type: none"> <li>System is not receiving power, or is not powering up</li> </ul>	<ul style="list-style-type: none"> <li>Cable from power adapter is loose or is unplugged</li> </ul>	<ul style="list-style-type: none"> <li>Confirm that all cables are connected correctly</li> <li>Confirm that the power adapter is securely connected to the back of the unit</li> </ul>
	<ul style="list-style-type: none"> <li>Cables are connected, but system is not receiving sufficient power</li> </ul>	<ul style="list-style-type: none"> <li>Confirm that the system is powered on (LED indicators on the front should be ON)</li> <li>If the unit is connected through a power bar or surge protector, try bypassing the bar and connecting the power directly to the wall outlet</li> <li>Confirm that there is power at the outlet:                             <ul style="list-style-type: none"> <li>Connecting the power cable to another outlet</li> <li>Test the outlet with another plugged device (such as an electric calculator or phone charger)</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>Remote control is not detected by the system</li> </ul>	<ul style="list-style-type: none"> <li>Battery in the remote control is drained</li> </ul>	<ul style="list-style-type: none"> <li>Install two fresh AAA alkaline batteries in the remote control</li> </ul>
	<ul style="list-style-type: none"> <li>There are no batteries in the remote control</li> </ul>	
<ul style="list-style-type: none"> <li>Hard drive is not detected by the system</li> </ul>	<ul style="list-style-type: none"> <li>Hard drive cables are loose or not properly connected</li> </ul>	<ul style="list-style-type: none"> <li>Remove the housing and check that hard drive cables are firmly connected</li> </ul>
	<ul style="list-style-type: none"> <li>There is no hard drive in the system</li> </ul>	<ul style="list-style-type: none"> <li>Open the housing and install a 3.5" SATA hard drive</li> </ul>
<ul style="list-style-type: none"> <li>Hard drive is full (0%) and the unit is no longer recording</li> </ul>	<ul style="list-style-type: none"> <li>Overwrite is not enabled</li> </ul>	<ul style="list-style-type: none"> <li>From the Main Menu, select HDD&gt;Overwrite&gt;Enable and click Apply</li> </ul>

## Troubleshooting (cont'd.)

Error	Possible Causes	Solutions
<ul style="list-style-type: none"> <li>• Mouse not detected by system</li> </ul>	<ul style="list-style-type: none"> <li>• Mouse cable is not firmly connected to the system</li> </ul>	<ul style="list-style-type: none"> <li>• Firmly connect the mouse cable to the USB Mouse port on the front panel</li> </ul>
	<ul style="list-style-type: none"> <li>• Mouse is not connected to the system</li> </ul>	
	<ul style="list-style-type: none"> <li>• System needs to be reset</li> </ul>	<ul style="list-style-type: none"> <li>• Power off the system (disconnect power cable). Firmly connect a USB mouse to the USB Mouse port on the front panel of the system. Reconnect the power cable to the DC 19V port on the rear panel.</li> </ul>
<ul style="list-style-type: none"> <li>• There is no picture on selected channels / camera picture is not being displayed</li> </ul>	<ul style="list-style-type: none"> <li>• Camera cables are loose or have become disconnected</li> </ul>	<ul style="list-style-type: none"> <li>• Check the camera video cable and connections</li> <li>• Disconnect and reconnect the cable at the system and at the camera</li> <li>• Try moving the camera to another channel or use another cable</li> </ul>
<ul style="list-style-type: none"> <li>• The image on the DVR appears, but does not have sound</li> </ul>	<ul style="list-style-type: none"> <li>• Audio cables are loose or have been disconnected</li> </ul>	<ul style="list-style-type: none"> <li>• Check the AUDIO connections to the DVR</li> </ul>
	<ul style="list-style-type: none"> <li>• Audio channels are disabled in the system menu</li> </ul>	<ul style="list-style-type: none"> <li>• Check the Configurations: Main Menu&gt;Record&gt;Audio</li> </ul>
	<ul style="list-style-type: none"> <li>• Volume on external speakers (not included) is low or off</li> </ul>	<ul style="list-style-type: none"> <li>• Increase volume on external speakers (not included)</li> </ul>
<ul style="list-style-type: none"> <li>• A "whirring" noise is coming from the system</li> </ul>	<ul style="list-style-type: none"> <li>• Fan is active</li> </ul>	<ul style="list-style-type: none"> <li>• The noise means the exhaust fan is working normally.</li> </ul>
<ul style="list-style-type: none"> <li>• The system beeps at startup</li> </ul>		<ul style="list-style-type: none"> <li>• The beep at startup is normal</li> </ul>
<ul style="list-style-type: none"> <li>• The system beeps during motion detection</li> </ul>	<ul style="list-style-type: none"> <li>• Motion detection is enabled, but the alarm buzzer is activated</li> </ul>	<ul style="list-style-type: none"> <li>• Open the Main Menu and click ADVANCE</li> <li>• Click ALARM; set the Buzzer to 0s and click APPLY</li> </ul>
<ul style="list-style-type: none"> <li>• I am not receiving email notifications</li> </ul>	<ul style="list-style-type: none"> <li>• Email notification is disabled</li> </ul>	<ul style="list-style-type: none"> <li>• Open Main Menu&gt;Advance&gt;Alarm; click EMAIL SETUP; under EMAIL select ON</li> </ul>
	<ul style="list-style-type: none"> <li>• Default setting is disabled, but you have not entered your own SMTP information</li> </ul>	<ul style="list-style-type: none"> <li>• If you want to use your own SMTP server, deselect the Default box, and enter your SMTP Server address, Port, User name, and Password in the respective fields</li> </ul>





Revision 1.0

**LOREX PRODUCT LIMITED WARRANTY**

Lorex warrants, to the original retail purchaser only, (the "Purchaser"), that this item (the "Product") if properly used and installed, and where applicable, the CD-ROM on which the accompanying software is provided, is free from manufacturing defects in material and workmanship, provided the Product is used in normal conditions and is installed and used in strict accordance with the instructions contained herein. This warranty shall be for the following warranty periods (the "Warranty Period") commencing on the date the Purchaser buys the Product at retail in an unused condition.

**Parts and Labor: 1 year (Warranted parts do not include Bulbs, LED's and Batteries)**

- Lorex's obligations under this warranty shall be limited to
- The repair and/or replacement of the product by means of hardware and/or software (at option of Lorex);
- The replacement of any warranted parts found by Lorex to be defective.
- If Lorex is unable to repair or replace the Product or CD-ROM, refund the then-current value of the Product. Any replacement parts furnished by Lorex in connection with this warranty shall be warranted to the Purchaser for a period equal to the unexpired portion of Warranty Period for the Product.

**Warranty Exclusions**

This warranty does not apply to Bulbs, LED's and Batteries supplied with or forming part of the product. This warranty is invalidated if other than Lorex accessories are or have been used in or in connection with the Product or in any modification or repairs made to the Product by other than a service depot authorized by Lorex. This warranty does not apply to damages or damages arising by use of the Product in other than normal (including normal start-up, use, and normal operation) conditions or installation or use of the Product other than in strict accordance with the instructions contained in the Product's User's Manual.

This warranty does not apply to defects in or damages to the Product caused by (i) negligent use of the Product (ii) misuse, abuse, neglect, alteration, repair or improper installation of the Product, (iii) electrical short circuits or transients, (iv) Purchaser misuse not in accordance with product installation, (v) use of replacement parts not supplied by Lorex (vi) improper Product maintenance, or (vii) accident, fire, flood or other Acts of God.

This warranty does not cover the performance or functionality of any computer software included in the package with the Product. This warranty only covers defects in the CD-ROM media such as a broken or a defect in the CD-ROM that would prevent the CD-ROM from being read by your personal computer's CD-ROM drive. Lorex makes no warranty that the software provided with the Product will function without interruption or otherwise be free of anomalies, errors or Bugs. Lorex makes no warranty with regard to any software provided with the Product unless specifically set forth otherwise in a license agreement accompanying such software. This warranty does not cover any costs relating to removal or replacement of any Product, CD-ROM, or software installed on your computer.

Lorex reserves the right to make changes in design or to make additions to or improvements in its products without incurring any obligation to modify any product which has already been manufactured. Lorex will make every effort to provide updates and fixes to its software via its website. This warranty does not cover any alteration or damage to any other software that may, be or may become resident on the users system as a result of installing the software provided. This warranty is in lieu of other warranties, express or implied, and Lorex neither assures nor authorizes any person to assume for it any other obligation or liability in connection with the sale or service of the Product. In no event shall Lorex be liable for any special or consequential damages arising from the use of the Product or arising from the malfunctioning or non-functioning of the Product, or for any delay in the performance of this warranty due to any cause beyond its control.

This warranty shall not apply to the appearance or accessory items including, but not limited to cabinets, cabinet parts, knobs etc., and the uncrating, setup, installation or the removal and reinstallation of products after repair. Lorex does not make any claims or warranties of any kind whatsoever regarding the Product's potential, ability or effectiveness to prevent minimize, or in any way affect personal or property damage or injury. Lorex is not responsible for any personal damage, loss or theft related to the Product or to its use for any harm, whether physical or mental related thereto. Any and all claims or statements, whether written or verbal, by salespeople, retailers, dealers or distributors to the contrary are not authorized by Lorex, and do not affect this provision of this warranty.

Lorex's responsibility under this, or any other warranty, implied or expressed, is limited to repair, replacement or refund, as set forth above. These remedies are the sole and exclusive remedies for any breach of warranty. Lorex is not responsible for direct, special, incidental, or consequential damages resulting from any breach of warranty or under any other legal theory including but not limited to, loss profits, downtime, goodwill, damage to or replacement of equipment and property and any costs of recovering, reprogramming or reproducing any program or data stored in or used with a system containing the Product CD-ROM or accompanying software.

Lorex does not warrant that the software will operate with any other software except that which is indicated. Lorex cannot be responsible for characteristics of third party hardware or software which may affect the operation of the software included.

The purchaser may have other rights under state, provincial or federal laws and where the whole or part of any item of this warranty is prohibited by such laws, it shall be deemed null and void, but the remainder of the warranty shall remain in effect.

All expressed and implied warranties are limited in duration to the limited warranty period. No warranties apply after that period. Some states do not allow limitation on how long an implied warranty lasts, so this limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above warranty may not apply to you. This limited warranty gives you specific legal rights and you may also have other rights that vary from state to state.

**Obtaining Service**

In order to obtain service, please make sure that you have registered your product online ([www.lorexctv.com](http://www.lorexctv.com)) in the warranty registration section. Should the Product require service under this warranty, the Purchaser must provide Lorex with a copy of his/her original, dated bill of sale, receipt or invoice, failing which Lorex will not perform any of its obligations under this warranty. If you return the Product and/or CD-ROM to Lorex, you must assume the risk of damage or loss during shipment. You must use the original packaging or the equivalent, and you must pay postage.

To claim on this warranty, proceed with the following steps:

- 1 Pack the Product in a well-padded sturdy carton.
  - a. Please contact our customer service department to obtain a return authorization number.
  - b. Return the unit to:
 

Lorex Service Center  
2375 Hadley Rd., Plainfield, IN 46168
  - ii.) If the unit was purchased in Canada proceed as follows:
 

Please contact our customer service department to obtain a return authorization number.
  - b. Return the unit to:
 

Lorex Service Center,  
300 Alden Road, Markham, Ont. L3R 4C1
  - iii) If the unit was purchased in Europe please visit:
 

[www.lorexinternational.com](http://www.lorexinternational.com) for return instructions.

**TOLL FREE CUSTOMER SUPPORT**  
 North America: 1-888-42-LOREX (1-888-425-6739)  
 Toll Free: 1-800-368-5338  
 International: 800-42-LOREX / 600-425-6739  
[www.lorexctv.com](http://www.lorexctv.com)

Always use discretion when installing video and/or audio surveillance equipment especially when there is perceived privacy, including regarding federal, state and/or local regulations applicable to the lawful installation of video and/or audio recording or surveillance. Party consent may be required.

**GARANTEE LIMITÉE DES PRODUITS LOREX**

Lorex garantit à l'acheteur original (si-après désigné comme étant "l'acheteur") dans un magasin au détail seulement, et que ce produit (ci-après désigné comme étant le "produit"), s'il est installé conformément et -s'il y a lieu- utilisé conformément aux instructions ci-inclues, et le disque CD-ROM qui comporte le logiciel, seront libres de tout défaut de fabrication, tant dans les pièces que la main-d'œuvre, pourvu que le produit soit utilisé dans des conditions normales et installé et utilisé strictement selon les instructions incluses dans le guide qui l'accompagne.

Cette garantie couvrira la période mentionnée ci-dessous (ci-après désignée comme étant la période de garantie), commençant le jour où l'acheteur se procure le produit à l'état neuf dans un magasin au détail.

**Pièces et main-d'œuvre :**

*1 année (les pièces couvertes différencient des les ampoules, voyants à DEL, ni les piles).*

- Les obligations de Lorex selon les termes de cette garantie se limitent exclusivement aux points suivants :
- Lorex se réserve le droit de réparer ou de remplacer, sa seule discrétion, le logiciel et/ou le matériel.
- Le remplacement des pièces sous garantie que Lorex estime être défectueuses dans le produit ou le disque CD-ROM ou, à sa seule discrétion, le remplacement du produit jugé défectueux.
- Si Lorex ne peut réparer ni remplacer le produit ou le disque CD-ROM, rembourser la valeur monétaire du produit ou du disque CD-ROM en cours au moment de l'achat.
- Toutes les pièces remplacées par Lorex seront couvertes pendant la période résiduelle de la garantie dudit produit.

**Exclusions de la garantie**

Pour obtenir du service, veuillez vous assurer que vous avez inscrit votre produit en ligne ([www.lorexctv.com](http://www.lorexctv.com)) dans la section d'abonnement à la garantie. Cette garantie ne couvre pas les ampoules, voyants à DEL, ni les piles incluses avec le produit ou faisant partie de celui-ci. Cette garantie deviendra nulle si des accessoires autres que ceux vendus ou distribués par Lorex sont utilisés ou ont été utilisés conjointement avec le produit ou si des modifications ou des réparations ont été effectuées au produit par une entité autre qu'un centre de service autorisé par Lorex.

Cette garantie ne s'applique pas aux défauts ni aux dommages survenus suite à une utilisation anormale du produit (incluant des conditions atmosphériques et des faux chuintement anormaux) ou suite à une installation ou une utilisation du produit autre que celle décrite dans le guide accompagnant le produit.

Cette garantie ne s'applique pas aux défauts ni aux dommages causés au produit suite à (i) une utilisation insoignée du produit, (ii) mauvaise utilisation, abus, négligence, modification ou mauvaise installation du produit, (iii) court-circuits ou transitoires électriques, (iv) tout usage de l'acheteur qui ne correspond pas à l'installation prescrite du produit, (v) l'utilisation de pièces non fournies par Lorex, (vi) un entretien inadéquat du produit, ou (vii) tout accident, incendie, inondation ou autres désastres naturels.

Cette garantie ne couvre pas la performance ni la fonctionnalité de tout logiciel informatique inclus avec le produit. Cette garantie ne couvre pas les défauts que pourrait contenir le support optique (disque CD-ROM) ou magnétique (disquette), tel qu'un CD-ROM bisé ou comportant un défaut qui empêcherait d'être lu adéquatement par le lecteur de disque de votre ordinateur. Lorex ne garantit pas que le logiciel fourni avec le produit fonctionnera sans interruption ni qu'il sera libre de tout défaut, d'erreurs ou de bogues. Lorex ne garantit pas le logiciel inclus à moins que cela ne le soit mentionné spécifiquement dans l'enveloppe de la licence incluse avec le produit. Cette garantie ne couvre pas les frais se rapportant à l'abandonnement ni à la réinsertion de tout produit, logiciel, périphérique ou disque CD-ROM installé sur votre ordinateur.

Lorex se réserve le droit de modifier la conception ou d'équiper des ajouts ou des améliorations à ses produits, sans obligation de sa part de modifier les produits déjà fabriqués. Lorex fera tout en son pouvoir pour fournir des améliorations et des réparations à son logiciel via son site web. Cette garantie ne couvre pas les altérations ni les dommages effectués tout autre logiciel, ni les bogues pouvant résider de ta ou permanentement sur le système de l'utilisateur suite à l'installation du logiciel ci-inclus.

# SEE > HEAR > PROTECT



Enhance your security with genuine Lorex Cameras, Digital Video Recorders, Integrated Systems and Accessories. Order whatever you need at [www.lorexctv.com](http://www.lorexctv.com) or call 1-888-42-LOREX (1-888-425-6739)

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Office



CVC6993R

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VQ1536HR

Convenience Store



CNC1020

Day Care



LW2602

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Add wired or wireless cameras to expand the "Envelope of Protection" for your business, your home and your family

Home Office



LW2002B

Drive Way



SG7555

Front Door



LW1010

Nursery



LW2002W

Backyard



LW2201