LOREX-EDGE™

NETWORK READY H.264 HIGH PERFORMANCE DIGITAL VIDEO SURVEILLANCE RECORDER

INSTRUCTION MANUAL

English Version 4.0

MODEL:

LH310 SERIES

LOREX®

Thank you for purchasing the LH310 Series Lorex-Edge H.264 Digital Video Surveillance Recorder.

This manual refers to the following models:

- *LH314 (4-channel)*
- *LH318 (8-channel)*
- *LH316 (16-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

	CAUTION	
	RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION: TO REDUCE THE RICK 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.

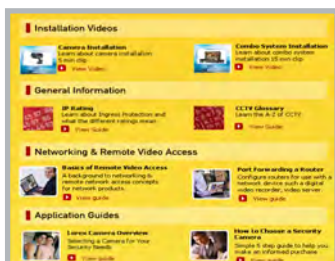**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF THE PLUG TO THE WIDE SLOT AND FULLY INSERT.**

BEFORE YOU START

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**

- If you require further installation assistance, please visit **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.

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www.lorexcctv.com

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

LOREX SE COMPROMETE A SATISFACER SUS NECESIDADES EN SEGURIDAD

• 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**

• Si vous avez besoin de l'aide pour l'installation, veuillez visiter **www.lorexcctv.com/installation** ou contactez un spécialiste en installation

• Veuillez référer à l'insert "Need Help" pour ob¬tenir de l'information sur le service à la cli-entèle et le support technique

• Veuillez constater qu'une fois que les com¬posantes de ce produit ont été retirées de l'emballage, vous ne pourrez plus retourner ce produit directement au magasin.

• 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**

• Si necesita ayuda para la instalación, visite **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 compo-nentes de este producto han sido removidos del embalaje, no podrá devolver este producto di-rectamente a la tienda

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NEED HELP?

CONTACT US FIRST
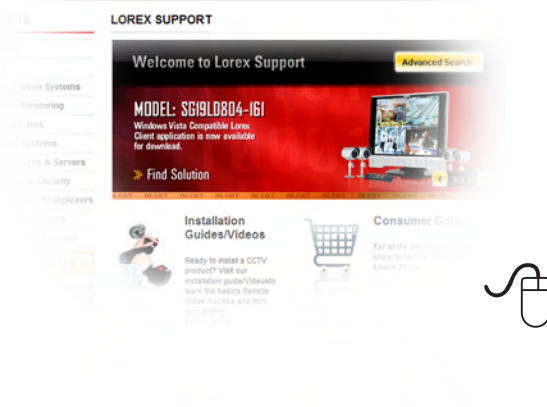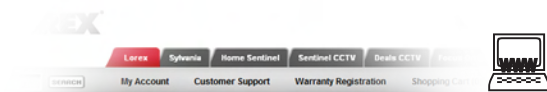
◉ LOREX®

DO NOT RETURN THIS PRODUCT TO THE STORE

Please make sure to register your product at 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**

To order accessories, visit **www.lorexcctv.com**

By Email:

Technical Support (for technical/installation issues) **support@lorexcorp.com**

Customer Care (for warranty and accessory sales) **customerservice@lorexcorp.com**

Customer Feedback **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

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NECESITA AYUDA
COMUNÍQUESE PRIMERO CON NOSOTROS

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

NO DEVUELVA ESTE PRODUCTO A LA TIENDA

Cerciórese de por favor colocar su producto en www.lorexcctv.com/registration para recibir actualizaciones y la información del producto

3 MANERAS SENCILLAS DE COMUNICARSE CON NOSOTROS:

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

Para colocar pedidos de accesorios, visite
www.lorexcctv.com

Por Correo Electrónico:

soporte técnico (para asuntos técnicos/la instalación)
support@lorexcorp.com
O
servicio al cliente (respecto a la garantía y a la venta de accesorios)
customerservice@lorexcorp.com

Comentarios de cliente
info@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
O
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
para colocar pedidos de accesorios, visite
www.lorexcctv.com

NE RETOURNEZ PAS CE PRODUIT AU MAGASIN

Veuillez veiller à enregistrer votre produit à www.lorexcctv.com/registration pour recevoir des mises à jour et l'information de produit

3 FAÇONS FACILES DE NOUS CONTACTER:

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

Pour commander des accessoires, visitez
www.lorexcctv.com

Par Courriel:

support technique (pour les questions techniques et d'installation) **support@lorexcorp.com**
OU
service à la clientèle (pour les questions de garantie et les ventes d'accessoires)
customerservice@lorexcorp.com

Commentaires des clients
info@lorexcorp.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 pour commander des accessoires, visitez
**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.
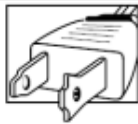
   A grounding type plug has two blades and a third grounding prong.

   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.

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.

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 manuals 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

- Stand-alone network 4/8/16 channel DVR

- Small form factor (11.5" x 1.6"x 7.0")

- *EDGE* design for stand alone or VESA mount (Wall & LCD)

- 3D graphics for sharp, color rich, high contrast video

- DVI/VGA output for display on PC monitor or TV with DVI/VGA input (DVI to VGA adapter included)*

- HDMI compatible†

- H.264 compression for efficient file transfer & storage (up to 50% more than MPEG-4)**

- Simultaneous Pentaplex operation (view, record, playback, and remote view and backup)

- View and record at VGA resolution: up to 640x480 per channel

- Supports up to 1TB "Security Certified" SATA HDD

- "FLEX" IR extender (Remote control does not require line-of-sight)

- USB mouse, Internet browser, QuickTime Player®, USB backup

- 4/1 Alarm input/output

- 2-channel audio

- Record on motion detection, schedule or continuous

- Email notification of events (8/16-channel *only*)

- Internet Remote Functions: View, Search & Playback, Backup and Setup‡

- Windows Vista® compatible

- Free Lorex DDNS (Dynamic Domain Name System) service keeps you connected anywhere, all the time

*DVI output only on 8/16-channel models; VGA output only on 4-channel models.
†DVI to HDMI adapter cable required (not included).
**Recording capacity may vary based on recording resolution & quality, lighting conditions and movement in the scene.
‡Requires a high speed Internet connection and router (not included)

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TABLE OF CONTENTS

GETTING STARTED

The system comes with the following components:

EDGE DVR

POWER SUPPLY

REMOTE CONTROL*

USB MOUSE

DVI / VGA ADAPTER**

FLEX-IR EXTENDER

MOUNTING KIT

ETHERNET CABLE

INSTRUCTION MANUAL
QUICKSTART GUIDE
DOCUMENTATION CD

*Remote control included with the system may vary depending on model.
**Only included with 8 and 16-channel models.

> **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.**

Basic Setup

The system is designed to mount to the back of most LCD monitors with a VESA mount. If desired, you can mount it to a wall or leave the system in a standard horizontal position.

> **ATTENTION**: You can only mount the system to an LCD monitor that has a VESA mount and an independent stand.

1. Mount the System

a. Screw the provided mounting screws into the two top holes in the rear panel of your LCD monitor. Make sure the screws are only 3/4 of the way in; this will allow sufficient clearance to hang the system.

b. Carefully place the system (front panel facing up) over the screws and slide down into place.
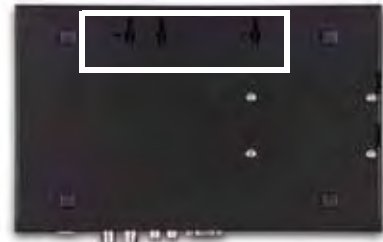
Figure 1.0 Mounting holes on bottom panel

2. Connect the Cameras

a. Connect BNC cameras to the BNC ports on the rear panel.

3. Connect the Monitor

a. Connect the VGA / DVI cable (not included) from your LCD monitor to the VGA port (4 CH) / DVI port (8/16 CH *only*) on the rear panel of the system.

VESA mount

Independent stand

Figure 1.1 Mount the system to the monitor

4. Connect the Ethernet cable

a. Connect the included Ethernet cable to the LAN port on the rear panel of system; connect the other end of the Ethernet cable to an empty LAN port on your router (not included).

5. Connect the Flex-IR Extender

a. Connect the Flex-IR extender to the port on the rear panel of the DVR. Position the Flex-IR extender near the front of your monitor, or where it will receive a clear signal from the remote control. Use a piece of double-sided tape (included) to help secure the Flex-IR Extender.

NOTE: The Flex-IR Extender is not required for normal operation. It may be necessary if there is not a clear line-of-sight between the DVR and the remote control.

Figure 1.2 Connect the Ethernet cable

Optional Mounting

Horizontal (table, desk)   Vertical (wall mount)

Figure 1.3 Connect the Flex IR extender

Front Panel

All models

1. **IR Receiver**: Internal IR receiver for the remote control.
2. **USB port**: Connect a USB flash drive for data backup and firmware updates (download from website).
3. **Power Indicator**: LED indicator for system power. When system is powered on, LED is lit red.
4. **HDD Indicator**: LED indicator for internal hard drive. When in continuous recording mode, LED pulses red.

Rear Panel

4-channel
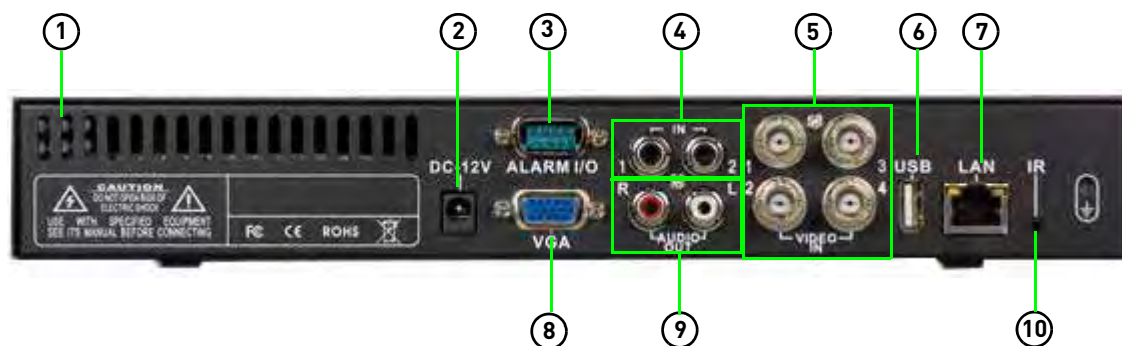
1. **Exhaust slots**: Slots to let heat escape from the internal hard drive. *Do not block*. Allow for proper ventilation.
2. **DC 12V**: Port for 12V DC 2.5 A power adapter (included).
3. **Alarm I/O**: Input/output port for alarm / relay (D-sub 9 connector required—not included).
4. **Audio In**: Input ports for audio enabled cameras.
5. **Video In**: BNC input ports for 4 BNC cameras.
6. **USB Port**: Port for a USB mouse.
7. **LAN**: Networking port for a 10/100 Base-T RJ-45 network cable (included).
8. **VGA**: Port to connect a VGA monitor (not included)
9. **Audio Out**: Output for two audio channels.
10. **IR**: Port for the Flex-IR Extender.

Rear Panel

8-channel
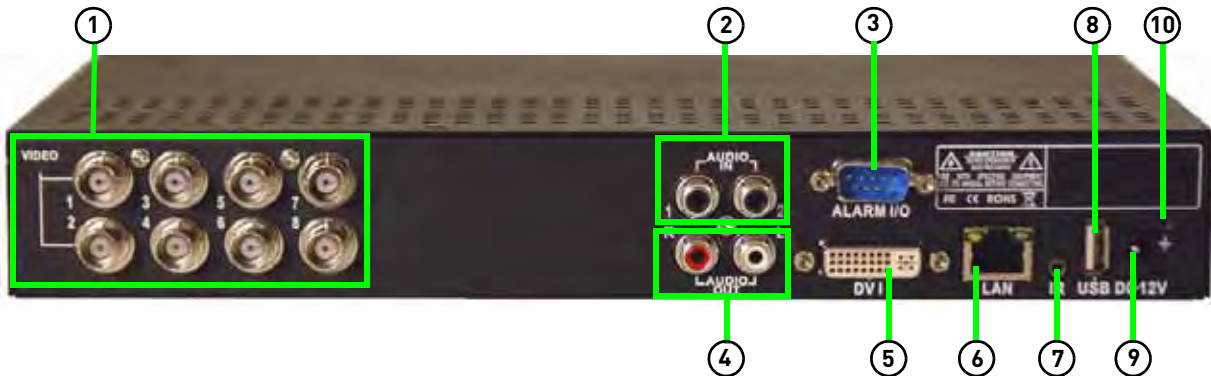
1. **Video In**: BNC input ports for eight BNC cameras.
2. **Audio In**: Input ports for audio enabled cameras.
3. **Alarm I/O**: Input/output port for alarm / relay (D-sub 9 connector required—not included).
4. **Audio Out**: Output for two audio channels.
5. **DVI**: Port to connect a DVI monitor (not included).
6. **LAN**: Networking port for a 10/100 Base-T RJ-45 network cable (included).
7. **IR**: Port for the Flex-IR Extender.
8. **USB Port**: Port for a USB mouse.
9. **DC 12V**: Port for 12V DC 2.5 A power adapter (included).
10. **GND**: Ground hole.

16-channel
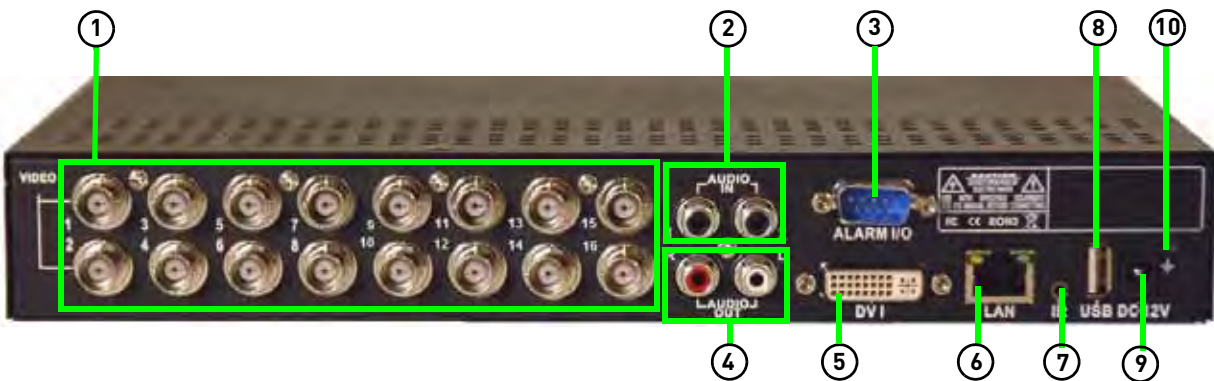
1. **Video In**: BNC input ports for 16 BNC cameras.
2. **Audio In**: Input ports for audio enabled cameras.
3. **Alarm I/O**: Input/output port for alarm / relay (D-sub 9 connector required—not included).
4. **Audio Out**: Output for two audio channels.
5. **DVI**: Port to connect a DVI monitor (not included).
6. **LAN**: Networking port for a 10/100 Base-T RJ-45 network cable (included).
7. **IR**: Port for the Flex-IR Extender.
8. **USB Port**: Port for a USB mouse.
9. **DC 12V**: Port for 12V DC 2.5 A power adapter (included).
10. **GND**: Ground hole.

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 port on rear panel of the system.

   NOTE: Only the 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 USB port on the rear panel.
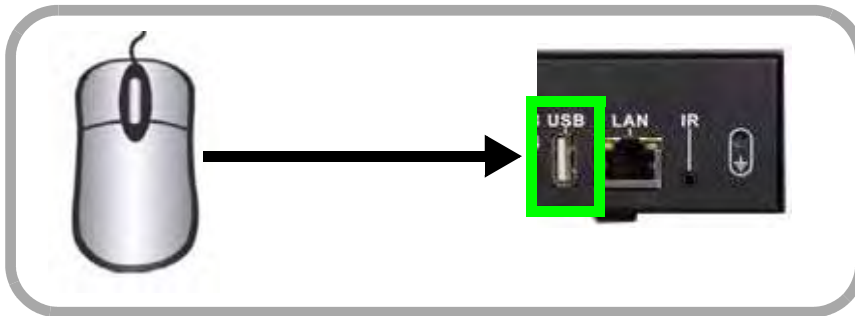

   Figure 2.0 Connect a USB mouse to the USB port on the rear panel

2. Use the mouse buttons to perform the following:

   • **Left-Button**: Click to select a menu option; while in Split-Screen mode (Live View or Playback), click on a channel to view the selected channel in full-screen.

   • **Right-Button**: Click to return to previous menu; exit menus/modes.

3. **Scroll-Wheel**: Scroll up/down to change values in selected menu options; position markers in playback bar.
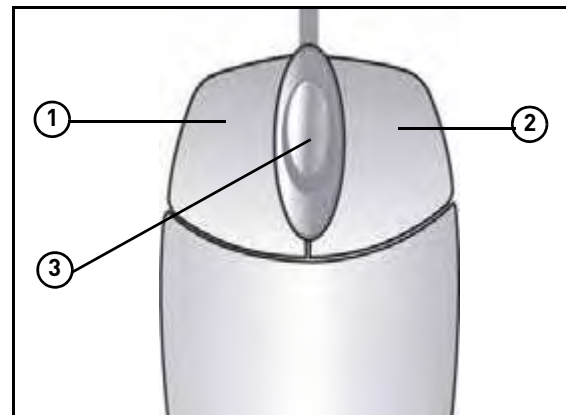
   Figure 2.1 Mouse button operation

Remote Control *

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

> **NOTE:** If the remote control included with your system differs from figure 3.0, please see page 6 for details.

To use the remote control:

1. **LIST**: Open the Event List menu.
2. **OSD**: Show/hide the on-screen display.
3. Primary controls:

    - **MENU**: Opens the system main menu.

    - ⊞ : Press to open the Split-Screen Selection menu (*8 / 16-channel only*).
      From full-screen single channel view, changes display view to Quad split-screen (*4-channel model only*)

    - ▲/**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)

    - ▶ / ‖ : Start/pause forward playback.
    - ▼/**CH-**: Move cursor in menus down; Channel down.
    - **ESC**: Go back / exit menus.

    - ↵ : Confirm menu selections.

4. 🗑 : While in Event List menu, press to delete a selected event (no confirm or undo).

5. 📷 : During Live Mode and Playback, press to switch between cameras (4-channel); Press to take a screenshot of the main display—USB flash drive must be connected (8/16-channel only).

6. Increase/Decrease buttons:

    - ⊕ : Increase the value of selected menu option.

    - ⊖ : Decrease the value of selected menu option.

Figure 3.0 Remote Control

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*Remote control included with the system may vary depending on model.

Remote Control (cont'd.) *

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

To use the remote control:

1. **MENU**: Opens the system main menu.

2. ⊞ : From full-screen single channel view, changes display view to Quad split-screen (*4-channel only*).

3. ▲/**CH+**: Move cursor in menus up; Channel Up.

4. ▶/**FWD**: Move cursor in menus right; during playback, increase forward playback speed (5X, 15X, 60X).

5. ◀/**REW**: Move cursor in menus left; during playback, increase reverse playback speed (5X, 15X, 60X)

6. ▶ / ‖ : Start/pause forward playback.

7. ▼/**CH-**: Move cursor in menus down; Channel down.

8. ↵ : Confirm menu selections.

9. **ESC**: Go back / exit menus.

10. **OSD**: Show/hide the on-screen display.

11. **LIST**: Open the Event List menu.

12. 🗑 : While in Event List menu, press to delete a selected event (no confirm or undo).

13. ↺ : Decrease value of selected menu option.
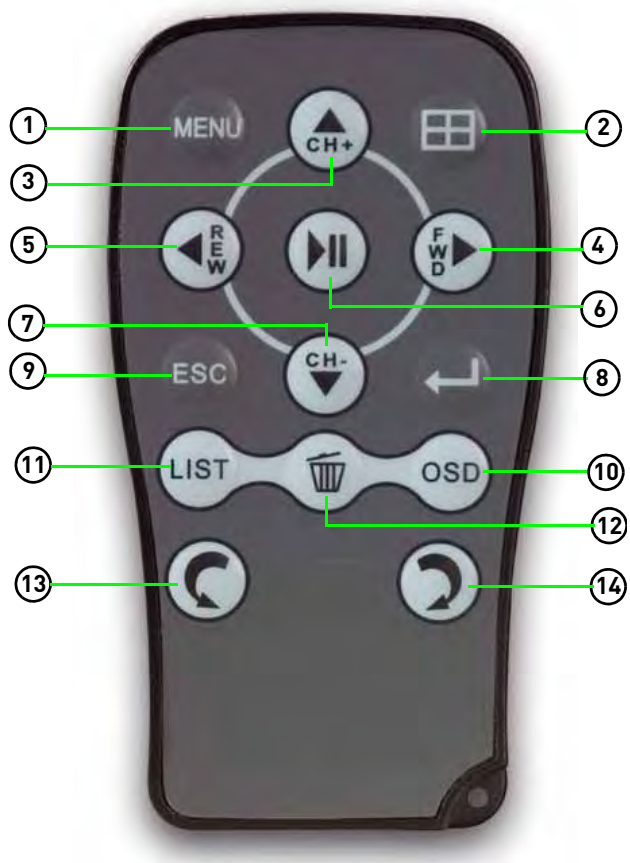
14. ↻ : Increase value of selected menu option.

Figure 3.1 Remote Control

*Remote control included with the system may vary depending on model.

STARTING THE SYSTEM

To power the system ON:

   • Connect the power cable to the DC 12V port on the rear panel of the system

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 (*Live Mode*).

> **NOTE:** Make sure all cameras and cables are properly connected prior to powering on the system.
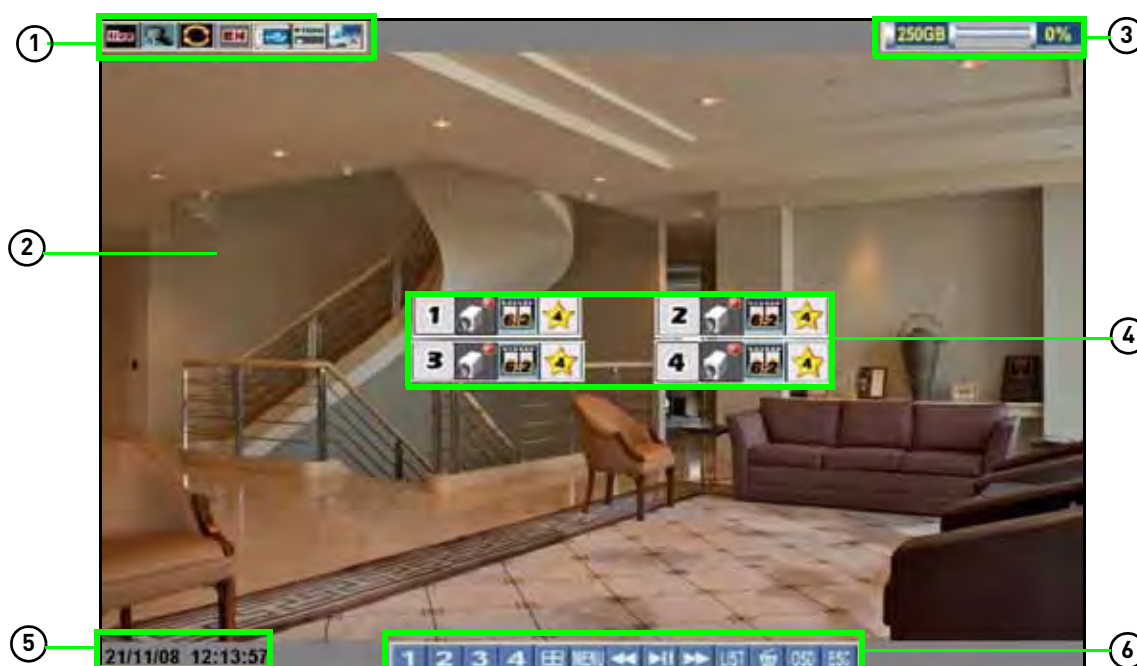
Onscreen Display

4-channel

Figure 4.0 Live viewing with on-screen display (4-channel model)

1. **System Status Bar**: Displays mode, password type, recording mode, language, and status of devices (HDD and USB).


2. **Display**: Full-screen single channel and Quad split-screen available in Live Viewing and Playback modes; if cameras are disconnected, channels display a blue screen with the text, "VLOSS."

3. **HDD Status**: Displays the recording space consumed on the hard disk (%) and the size of the pre-installed hard drive. For example, 250 GB.

4. **Camera Status**: Displays channel number, recording status, frame rate, and video quality.

5. **Date/Time**: Displays the date and time on the system.

6. **Toolbar**: Primary control input for the user interface:
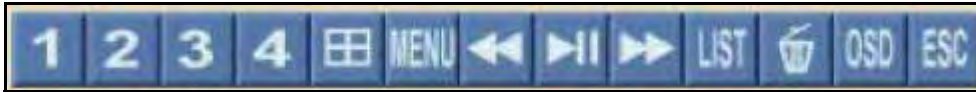
- [1] : Click to view channel 1 in full-screen.

- [2] : Click to view channel 2 in full screen.

- [3] : Click to view channel 3 in full screen.

- [4] : Click to view channel 4 in full screen.

- [⊞] : Click to view Quad split-screen mode (Live View and Playback modes).

- [MENU] : Click to open the system Main Menu. See "Using the Main Menu" on page 23.

- [◀◀] : While in Playback mode, click to increase reverse playback speed (5X, 15X, 60X).

- [▶II] : From Live View, click to open Playback Mode; click to pause/play video.

Figure 4.1 Single channel and Quad (4-channel model)

- [▶▶] : While in Playback mode, click to increase forward playback speed (5X, 15X, 60X).

- [LIST] : Click to open the Event List menu. See "Event List" on page 17.

- [🗑] : From the Event List menu, click to delete a selected video file.

  NOTE: Be careful when clicking the Trash icon—there is no confirmation for deletion and you *cannot* undo the action.

- [OSD] : Click to show/hide the on-screen display (OSD).

- [ESC] : Click to return to the previous menu, and/or quit menus/modes.

8/16-channel

Figure 4.2 Live viewing with onscreen display (16-channel model shown)

1. **Display Screen**: Shows live and recorded video—single, quad, and split-screen (16-split on 16-channel model *only*).

2. **Camera Number/Title**: You can set the display to show the Camera Number, Title, or show no title.

3. **Channels**: Displays channels on the system. If Motion Detection is enabled, active channel will flash red.

4. **Date/Time**: Displays the date and time on the system.

5. **HDD Status**: Displays the recording space consumed on the hard disk (%) and the size of the pre-installed hard drive. For example, 250 GB.

6. **Toolbar**: Primary control input for the user interface (certain buttons will not be available at all times):

- : Click to open the Split-Screen Selector; from full-screen (Live Mode only), click once to view quad, click again to open Split-Screen Selector. See "Using the Split-Screen Selector" on page 12.

- : Click to open the system Main Menu. See "Using the Main Menu" on page 23.

- : Click to select a menu option (left).

- : Playback mode only—click to increase reverse playback speed (5X, 15X, 60X).

- : From Live View, click to open Playback Mode; click to pause/play video.

- : Click to select a menu option (right).

- : While in Playback mode, click to increase forward playback speed (5X, 15X, 60X).

- : Click to open the Event List menu. See "Event List" on page 17.

- : From the Event List menu, click to delete a selected video file.

  NOTE: Be careful when clicking the Trash icon—there is no confirmation for deletion and you *cannot* undo the action.

- : Click to show/hide the on-screen display (OSD).

- : Click to take a snapshot of the active display (live viewing or playback)

  NOTE: USB flash drive must be connected. For more details, see "Appendix I: Taking Screenshots" on page 72.

Figure 4.3 Single channel and Quad (8/16-channel model)

Icons

Depending on your model, the Main Menu and Event List icons may look like one of the following:

Main Menu	*Event List*
• : 4-channel	• : 4-channel
• : 8/16-channel	• : 8/16-channel

The icon will be used throughout this manual.

The icon will be used throughout this manual.

Using the Split-Screen Selector

ATTENTION: Split-Screen Selector is only available on *8/16-channel models only*.

If your system has 8/16-channels, you must choose a split-screen configuration using the Split-Screen Selector built into the system's interface. The Split-Screen Selector allows you to choose the grid configuration for the main display during live viewing and playback: quad, 9-split, or 16-split (16-channel *only*).

Live Viewing

To use the Split-Screen Selector:

1. Click ⊞ to open the Split-Screen Selector. If you are in full-screen, click ⊞ to view quad, then click ⊞ again to open the Split-Screen Selector. Grid configurations appear in circles onscreen.

2. Click a grid configuration for live viewing:
   - *8-channel*: Choose from quad (CH1~4, CH5~9) or 9-split (CH1~8; the bottom-right square will remain blacked out).
   - *16-channel*: Choose from quad (CH1~4, CH5~9, CH9~12, CH13~16), 9-split (CH1~9, CH10~2), or 16-split (CH1~16).
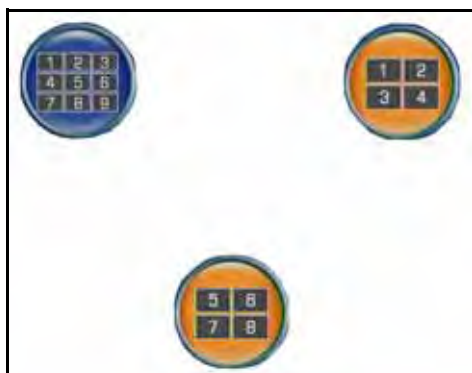
Figure 4.4 Split-Screen Selector (8-channel)
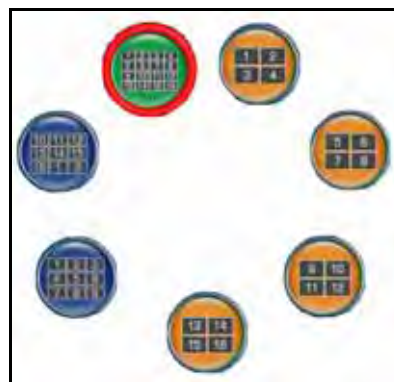
Figure 4.5 Split-Screen Selector (16-channel)

Playback

To use the Split-Screen Selector:

1. During playback, click ⊞ at anytime to open the Split-Screen Selector.
   NOTE: The Split-Screen Selector will open even if you are viewing playback in full-screen.

2. Click a grid configuration for playback.

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. Click ![MENU] to open the Main Menu.
2. Click ![icon] to open the Setup menu.
3. Click **Date/Time Setup** and configure the following options:
   • **Date Mode**: Use the scroll wheel to select **Y/M/D**, **D/M/Y**, or **M/Y/D**.
   • **Date**: Use the scroll wheel to manually enter the date.
   • **Time**: Use the scroll wheel to manually enter the time.
4. Click **Exit/Update**. The new date and time are saved; the system returns to the Setup menu.
5. Right-click to exit until all menus are closed. The date and time will appear on the bottom-left corner of the screen.

Figure 5.0 Clock menu

RECORDING

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

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 "Record" on page 25.

Event Recording

The system includes three modes of event recording:

- **Motion**: The system records when motion is detected by the affected camera.

- **Alarm**: The system records when an alarm or sensor is triggered.

- **Video Loss**: The system records when a camera is disconnected or suffers video loss. The system employs a pre-record function to capture video seconds before the video loss occurred.

Recording Audio

The system can record two audio channels. You must have audio enabled cameras connected to the system in order to use this function.

PLAYBACK

View recorded video on the system through playback mode.

The playback time appears in the bottom-right corner of the screen.

Figure 6.0 Playback display view

To begin playback:

1. From the main screen, click ▶‖ . Playback mode opens.

   NOTE: If toolbar is not visible, first click OSD .

2. Select and change the date, month, year, time, and/or frame for playback and click ▶‖ .
3. During playback, you have access to the following:

   • ▶‖ : Click to pause playback; press again to resume playback.

   • ◀◀ : Click to increase reverse playback speed (5X, 15X, 60X).

   • ▶▶ : Click to increase forward playback speed (5X, 15X, 60X).

   • ⊞ : Click to open the Split-Screen Selector (8/16-channel *only*); Click to view playback in Quad mode (4-channel *only*)

   • LIST : Click to open the Event List menu. See "Playback Mode" on page 20.

4. Click any channel to view the selected channel in full-screen; or click 1 , 2 , 3 , 4 (4-channel model *only*).
5. Click anywhere in the playback bar to set a playback marker. Playback Markers can be used for faster searching in the Event List. See "Playback Markers" on page 16.

6. Right-click anywhere on the screen to exit.

Playback Markers

During playback, click anywhere in the playback bar to set a playback marker. Use this orange-colored marker for reference in future searches.

Additional Search Markers

The Playback bar can also be populated with other multi-colored markers. These markers are part of the *Smart Search* functionality of the system. For more details on Smart Search, see "Event List" on page 17.
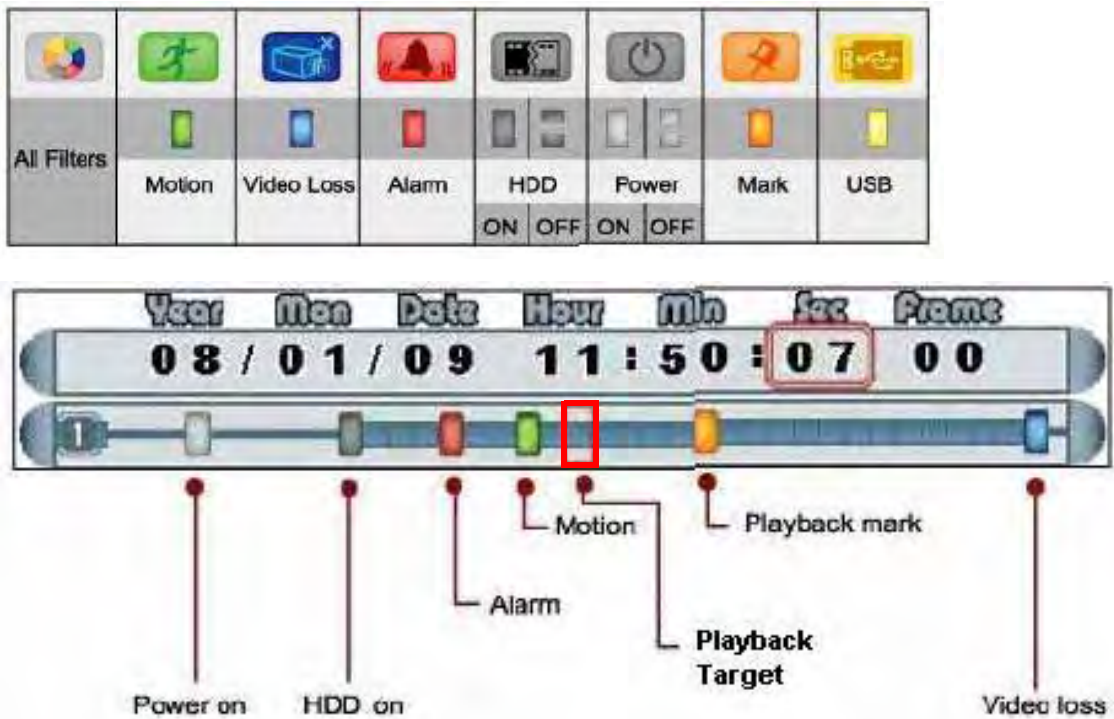
Figure 6.1 Playback display view

To use the search markers:

1. Using the mouse, scroll up/down to position one of the colored markers in the **Playback Target**.

2. Click ▶️❚❚ .

EVENT LIST

The system features an Event List to organize and search for recorded video on the system. The Event List, coupled with the Smart Search icons, allows you to search for recorded data on your system quickly and easily.

> **NOTE:** The system can save a maximum of 4096 events.

Figure 7.0 Event List

1. **Channel Filter**: View data from all, or individual cameras.
2. **Smart Search**: Filter events through Smart Search icons.
3. **Event Details**: View details for the event, including date & time and event source.
4. **Events**: List of recorded events on the system.
5. **Active Toolbar Buttons**: While in Event List, use Play/Pause, Trash (delete), and Escape.

> **NOTE:** Escape button only on 4-channel models. Screenshot button appears on 8/16-channel models.

Channel Filter

Use the Channel Filter to sort the data from individual channels or all channels.

16-channel models

4-channel models
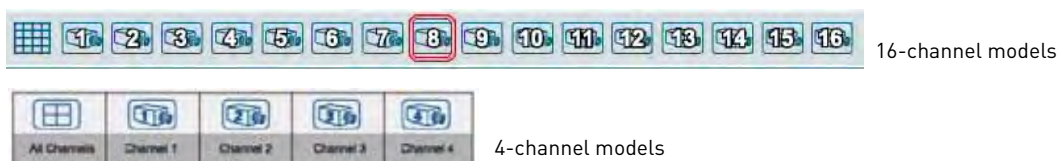
Smart Search

Click the Smart Search icons to filter data according to events. These Smart Search icons are mirrored as event markers in Playback and Backup modes.

Figure 7.1 Smart Search Icons

Event Details

The event details (event number, camera on/off, filter type, date & time, and event source) immediately match the list of events. When you use the Camera filter and Event filter, the Event Details bar can help you view the pertinent information for the data.
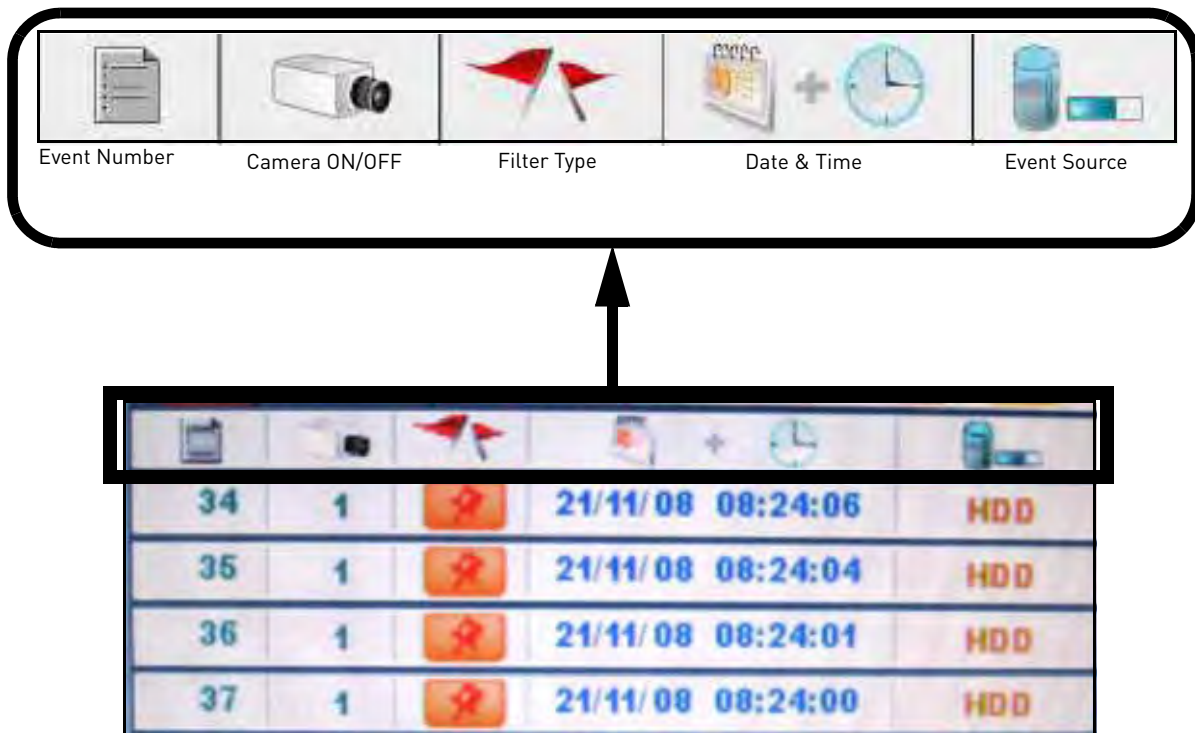
Figure 7.2 Event Details icons

Searching for Recorded Data

You can use the Event List from Live Mode and Playback Mode to search for recorded data on your system.

Live Mode

To search for data:

1. From the main screen, click [icon]. The Event List opens.

2. Under Channel Filter, click [icon] to view events for *ALL* channels, or click the **Channel icons** to view events from *individual* channels.

3. Click the **Smart Search icons** to sort the data according to the following:

   - [icon] **ALL**: View all events chronologically.
     NOTE: USB backups appear at the top of the list if the USB flash drive with saved backup data is connected.

   - [icon] **Motion**: Motion events from the connected cameras.

   - [icon] **Video Loss**: Cameras are disconnected or suffer video loss. The system employs a pre-record function to capture video seconds before the loss of video occurred.

   - [icon] **Alarm**: Alarm or sensor events on the system.

   - [icon] **HDD ON/OFF**: Disconnection, power loss, or disk failures on the hard drive.

   - [icon] **Power ON/OFF**: System ON/OFF.

   - [icon] **Mark**: A personal marker set by the user during Playback Mode.

   - [icon] **USB**: USB backup performed by the user

4. Scroll up/down to view the events on the list.

5. Click an event and then click [icon]. System switches to Playback Mode.

   NOTE: You cannot begin playback after clicking [icon] or [icon]

6. To exit, right-click until you return to the main screen.

Playback Mode

To search for data:

1. From the main screen, click ▶❙❙ . Playback mode opens.

    NOTE: If toolbar is not visible, first click OSD .

2. Click LIST . The Event List opens.

    NOTE: Click ▤ for 8/16-channel models.

3. Under Channel Filter, click ⊞ to view events for *ALL* channels, or click the Channel icons to view events from *individual* channels.
4. Click any of the **Smart Search icons** to filter your search.
5. Scroll up/down to view the events on the list.

6. Click an event from the Event List and then click ▶❙❙ . Playback begins for the selected file.

    NOTE: You cannot begin playback after clicking ▦ or ⏻ .

You can click LIST while a file is playing. Playback will pause. Select a new file from the Event List

and then click ▶❙❙ to play the file.

MANAGING PASSWORDS

The system has the following user authorities:

> • **ID 1**—normal user: Has full control of the system, but cannot change passwords or enable/disable password checking. **Default password: 1111**

> • **ID 2**—administrator: Has full control of the system, and can change both administrator and user passwords and enable/disable password checking. **Default password: 2222**

By default, when you first startup your system, you will be logged in as **ID 2**.

Using the Password Wheel

The system uses a graphical Password Wheel for inputting and changing user IDs and 4-digit, numeric passwords.
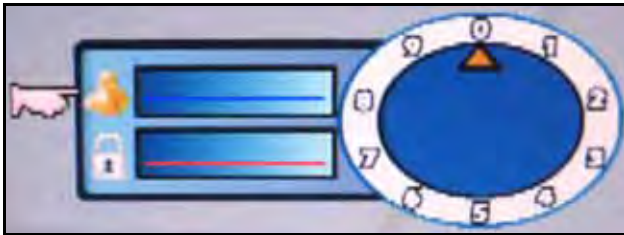
Figure 8.0 Login with your user ID and password using the Password Wheel

To use the Password Wheel:

> • Using the mouse, move the cursor and click from **0~9**.

You cannot select the options to the left of the Password Wheel (user ID, password)—you can *only* select the digits. If you make a mistake, simply right-click to exit and re-select the option to try again.

Enabling and Disabling Passwords

By default, passwords are enabled when you first startup the system. With passwords enabled, you need to enter your user ID and password whenever you access the system Main Menu, Event List, or Playback mode.

To enable/disable passwords:

1. Click ![MENU] to open the Main Menu. If necessary, login using **ID: 2**; **password: 2222**.

2. Click ![icon]. The Setup menu opens.
3. Click **Password Enable** and scroll up/down to select **O** to enable passwords, or **X** to disable.
4. To exit, right-click until you return to the main screen.

Changing Passwords

You need to be logged in as the administrator (**ID 2**; **password 2222**) in order to change passwords on the system.

To change passwords:

1. Click ![MENU] to open the Main Menu.

   NOTE: Click ![icon] in 8/16-channel models.

2. Click ![icon]. The Setup menu opens.
3. Click **DVR Password**. The Password Wheel opens.
4. Log in as the administrator (by default, **ID 2**, **password 2222**).
5. Click either **User Password** or **Admin Password**.
6. Use the Password Wheel to input a 4-digit password. Input it again to confirm.

Figure 8.1 Password change

Figure 8.2 Password confirmation

7. To exit, right-click until you return to the main screen.

USING THE MAIN MENU

- Click to open the Main Menu (4-channel)

- Click to open the Main Menu (8/16-channel)

NOTE: If passwords are enabled on the system, you need to select your user ID and enter the four-digit numerical password to open the Main Menu. See "Managing Passwords" on page 21.
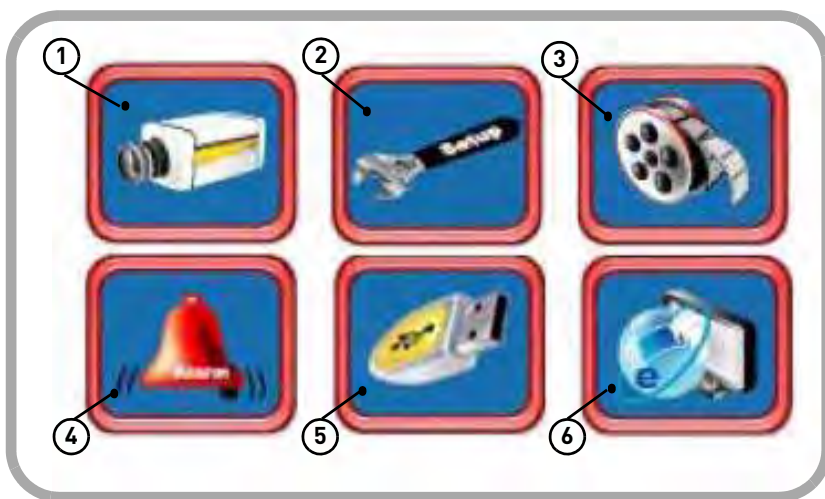
Figure 9.0 System Main Menu

1. **Camera**: Adjust Brightness, Contrast, Hue, and Saturation for each camera.
2. **Setup**: Configure Date/Time, Language, video system, passwords, and view system information.
3. **Record**: Configure recording parameters for Alarm/Motion recording, and working/non-recording; adjust video quality, resolution, set record mode, schedule, and format the hard drive
4. **Alarm**: Configure alarm, motion, and video loss settings.
5. **Backup**: Set backup parameters; format connected USB flash drive.
6. **LAN**: View/configure networking settings.

TIP!

When navigating menus:

Left mouse button: Click to select menu options

Scroll-Wheel: Scroll up/down to change values for selected options

Camera

Configure display settings for each camera.
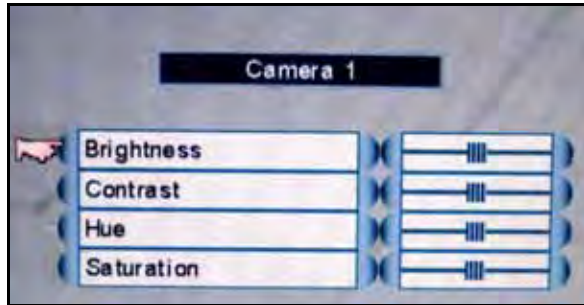
Figure 10.0 Camera menu

To configure camera settings:

1. From the Main Menu, click [icon]. The Camera menu opens.
2. Click camera **1**, **2**, **3**, or **4**. The video settings menu opens.
3. Configure the following:
   - **Brightness**
   - **Contrast**
   - **Hue**
   - **Saturation**
4. Scroll up/down to increase/decrease the value for the selected option.
5. To save your settings, right-click until you return to the main screen.

Setup

Set date/time, system language, passwords, and view system information.
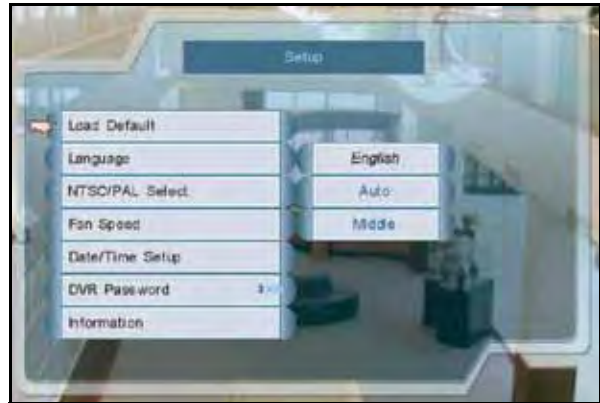
Figure 11.0 System Setup

To configure Setup settings:

1. From the Main Menu, click [icon]. The Setup menu opens.
2. Configure the following:
   - **Load Default**: Click to load default factory settings.
   - **Language**: Select **English**, **Traditional Chinese**, **Spanish**, **Russian**, **Italian**, **Simplified Chinese**, **Japanese**, **German**, **French**, **Dutch**, **Czech**, **Polish**, **Hebrew**, **Thai**, **Danish**, **Finnish**, **Swedish**, and **Vietnamese**.

     NOTE: The new language is reflected in the status bar in the top-left corner (4-channel *only*).

Figure 11.1 System Languages

   - **NTSC/PAL Select**: Scroll up/down to select NTSC (I.e. North America), PAL (i.e. Europe), or AUTO. If AUTO, the system will automatically detect the format of the connected cameras.

• **Fan Speed**: Click to set the fan speed to Low, Middle, or High. The higher the fan speed the cooler the HDD temperature (8/16-channel *only*).

• **Date/Time Setup**: Click to open Date/Time Setup. See "Setting the Date and Time" on page 13.

• **DVR Password**: Click to open the password menu. See "Managing Passwords" on page 21.

• **Information**: Click to view system information: software, hardware, disk, and LAN.

3. To save your settings, right-click until you return to the main screen.

Figure 11.2 System information

Record

Set recording parameters, image quality, resolution, set the recording schedule, and format the hard drive.

4-channel

Figure 12.0 Record menu

NOTE: As you make changes to the recording parameters, the storage calculator at the bottom of the menu displays the time remaining on the hard drive.

To configure record settings:

1. From the Main Menu, click ⬛. The Record menu opens.

2. Configure the following:

• **Alarm/Motion Rate**: Click under each camera and select **X**, **2**, **3**, **5**, **7.5**, **10**, or **15** (fps).

• **Working Hour Rate**: Click under each camera and select **0**, **2**, **3**, **5**, **7.5**, **10**, or **15** (fps).

• **Non-working Hour Rate**: Click under each camera and select **0**, **2**, **3**, **5**, **7.5**, **10**, or **15** (fps).

Figure 12.1 Frame rates for NTSC and PAL

• **Quality**: Click under each camera and select **1**, **2**, **3**, **4**, or **5**.
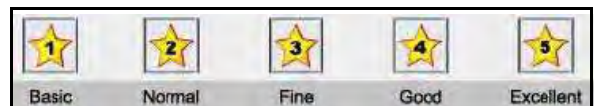
Figure 12.2 Set image quality: 1 basic ~ 5 excellent

• **Audio**: Click under each camera and select either **O** to enable audio or **X** to disable audio.

NOTE: Audio is only available on channels 1 and 2.

• **Resolution**: Click to set the resolution for all cameras—**640x240** or **640x480**.

• **Record Mode**: Select one of the following:

- ➡ **Single-Way**: The system stops recording when the internal hard drive is full.

- 🔄 **Overwrite**: The system continues recording when the internal hard drive is full by overwriting the oldest recorded data.

- 🔒 **No Record**: The system *does not* record.

3. To exit, right-click until you return to the main screen.

8/16-channel

Figure 12.3 Record menu (8/16-channel)

NOTE: As you make changes to the recording parameters, the storage calculator at the bottom of the menu displays the time remaining on the hard drive.

To configure record settings:

1. From the Main Menu, click [icon]. The Record menu opens.
2. Configure the following:

• **Record Mode**: Click to select one of the following:

- ➡ **Single-Way**: The system stops recording when the internal hard drive is full.

- 🔄 **Overwrite**: The system continues recording when the internal hard drive is full by overwriting the oldest recorded data.

- 🔒 **No Record**: The system *does not* record.

• **Frame Rate**: Set the frame rates for alarm/motion, working hour, and non-working hour:

Figure 12.4 Frame Rate menu (8/16-channel only)

- **Alarm/Motion Rate**: Click under each camera and select **X**, **2**, **3**, **5**, **7.5**, **10**, or **15** (fps).

- **Working Hour Rate**: Click under each camera and select **0**, **2**, **3**, **5**, **7.5**, **10**, or **15** (fps).

- **Non-working Hour Rate**: Click under each camera and select **0**, **2**, **3**, **5**, **7.5**, **10**, or **15** (fps).

Figure 12.5 Frame rates for NTSC and PAL

- **Real Rate**: The system will automatically calculate and allocate a *Real Rate* when you change the Working Rate.

- **Quality**: Click under each camera and select **1**, **2**, **3**, **4**, or **5**.
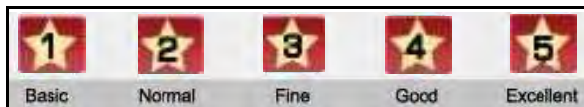
Figure 12.6 Set image quality: 1 basic ~ 5 excellent

- **Audio**: Click under each camera and select either **O** to enable audio or **X** to disable audio.

  NOTE: Audio is only available on channels 1 and 2.

- **Resolution**: Click to set the resolution for all cameras— **640x240** or **640x480**.

To exit, right-click until you return to the main screen.

Schedule

4/8/16-channel

Set an hourly, daily, and/or weekly recording schedule.

Figure 12.7 Recording Schedule

The Recording Schedule is a grid featuring the days of the week and hours **0~23**.

 • **Working Hour**

 • **Non-working Hour**

Active recording is known as *Working Hour (yellow)* and non-recording is known as *Non-working Hour (green)*.

> **NOTE:** As you make changes to the recording parameters, the storage calculator at the bottom of the menu displays the time remaining on the hard drive.

To set a recording schedule:

1. From the Record menu, click **Schedule**. The Recording Schedule grid opens.
2. Click an hour square (0~24) in each weekly row (Sun~Sat): active squares turn yellow, inactive turn green.
3. To save your settings, right-click or until you return to the main screen.

   NOTE: Alarm or Motion Recording recording will not be affected by the recording schedule.

Format HDD

If you replace the pre-installed hard drive, the new drive *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. From the Main Menu, click [icon]. The Record menu opens.
2. Click **Format HDD**.
3. Click **Yes** to format the hard disk or click **No** to cancel.

Figure 12.8 Storage calculator

Please allow a few moments for formatting to take place and the system to reset.

Storage Calculator

A storage calculator shows the approximate maximum continuous recording time available on the hard drive based on your settings. Use the storage calculator to help maximize your hard drive space.

Figure 12.9 Storage calculator

> **NOTE:** The estimation from the Storage Calculator is based *only* on Continuous Recording, not motion or alarm recording.

Alarm

4-channel

Configure alarm and motion detection settings.
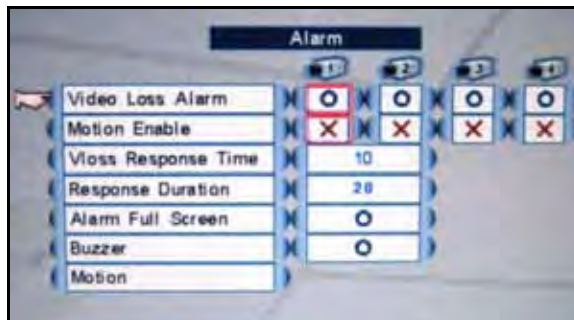
Figure 13.0 Alarm menu (4-channel)

To configure the alarm settings:

1. From the Main Menu, click [icon]. The Alarm menu opens.
2. Click and edit the following:

   - **Video Loss Alarm**: Click under each camera and select either **O** to enable the VLoss alarm, or **X** to disable it. If enabled, the system will sound an alarm whenever one of the connected channels incurs a loss of video.

   - **Motion Enable**: Click under each camera and select O to enable motion detection or select **X** to disable it. If enabled, the camera can record in specific recording parameters when it detects motion.

   NOTE: With Motion Detection enabled, the text, "Motion" appears on-screen (full-screen and quad split-screen) whenever a motion event is triggered.

   - **VLoss Response Time**: Select the time (in seconds) for the system to record prior to a triggered event: 0, 3, 5, 10, 30, 60, 120, 180, or Infinite.

   - **Response Duration**: Select the time (in seconds) for the system to record after a triggered alarm or motion event: 1~255.

   NOTE: The Response Duration also applies to the accompanying message and/or buzzer.

- **Alarm Full Screen**: Select **O** to enable a full-screen display of the active alarm/motion channel; select **X** to disable it.

- **Buzzer**: Select **O** to enable the system to beep when an alarm is triggered or motion is detected; select **X** to disable it.

3. To save your settings, right-click until you return to the main screen.

8/16-channel

Figure 13.1 Alarm menu (8/16-channel)

To configure the alarm settings:

1. From the Main Menu, click . The Alarm menu opens.
2. Click and edit the following:

- **Video Loss Alarm**: Click under each camera and select either **O** to enable the VLoss alarm, or **X** to disable it. If enabled, the system will sound an alarm whenever one of the connected channels incurs a loss of video.

- **Motion Enable**: Click under each camera and select **O** to enable motion detection or select **X** to disable it. If enabled, the camera can record in specific recording parameters when it detects motion.

  NOTE: With Motion Detection enabled, the text, "Motion" appears on-screen (full-screen and quad split-screen) whenever a motion event is triggered.

- **Buzzer**: Select **O** to enable the system to beep when an alarm is triggered or motion is detected; select **X** to disable it.

- **Alarm Input & Output**: Click to open the Alarm Input & Output menu.

Figure 13.2 Alarm Input & Output menu

- **Alarm-In Setup**: Click to open the Alarm-In Setup menu. Click to assign channels to up to four alarms.
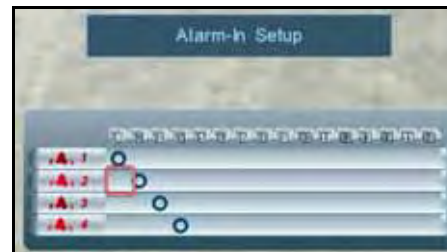
Figure 13.3 Alarm-In Setup menu (8/16-channel *only*)

- **Alarm-Out Setup**: Click to open the Alarm-Out Setup menu. Click to assign an Event notification (Motion, VLoss, Alarm) to an Alarm-Out notification (Buzzer, Full-Screen, Label, Alarm Out 1).

Figure 13.4 Alarm-Out Setup menu

- **VLoss Response Time**: Select the time (in seconds) for the system to record prior to a triggered event: **0**, **3**, **5**, **10**, **30**, **60**, **120**, **180**, or **Infinite**

• **Response Duration**: Select the time (in seconds) for the system to record after a triggered alarm or motion event: **1~255**.

   NOTE: The Response Duration also applies to the accompanying message and/or buzzer.

• **Alarm/Motion Schedule**: Click to enable/disable the Alarm/Motion Schedule for each day of the week/ hours 0-23.

Figure 13.5 Alarm/Motion Schedule (8/16-channel *only*)

 • **Enabled** (yellow)   • **Disabled** (green)

• Click to enable/disable the entire grid.
• Scroll up/down to increase/decrease the size of the cursor.
• To save your settings, right-click until you return to the main screen.

Motion

4/8/16-channel

Set the motion detection cells and sensitivity for each camera.

To configure motion detection:

1. From the Alarm menu, click **Motion Enable**. The text, "Motion" will appear on-screen when motion is detected on the respective camera.

2. Choose a camera for motion detection and select **0**.

3. Click **Motion**. Select the camera you want to configure motion detection. The motion grid appears for the selected camera.

Figure 13.6 Select the camera for motion detection (4-channel)

4. Click within the grid to enable/disable individual motion cells. Enabled cells are light green; disabled cells are clear.

• **Motion Detection Enabled**

• **Motion Detection Disabled**

Figure 13.7 Select cells and adjust sensitivity

5. Click the **Sensitivity bar** at the bottom of the screen. Scroll up/down to increase/ decrease the sensitivity for the motion cells from **0~100**. The higher the number, the greater the sensitivity.

   NOTE: Sensitivity applies to all cells. If the Sensitivity bar is not visible, click .

6. Click to enable/disable the entire grid (8/16-channel *only*).

7. To save your settings, right-click until you return to the main screen.

Backup

Set start and stop times for recorded video data you wish to copy to a connected USB flash drive (not included).

> **NOTE:** The system supports most brands of USB flash drives from 128 MB ~ 8 GB.

Figure 14.0 Backup menu

Formatting the USB Drive

Prior to backing up data, you must first format the USB flash drive so it will function properly with the system.

> **ATTENTION**: Formatting erases *all data* on the USB flash drive. This step *cannot* be undone.

To format the USB drive:

1. Connect a USB flash drive to the USB port on the front panel on the system.

   NOTE: Do not connect a USB flash drive to the USB port on the rear panel. Only the port on the front panel has been designed for backup data transfer.

2. From the Main Menu, click [icon]. The Backup menu opens.

3. Click **Format**.

4. Click **Yes** to format the hard disk or click **No** to cancel.

Figure 14.1 Confirm formatting

Please allow a few moments for formatting to take place and the system to reset.

To backup data:

1. Connect a formatted USB flash drive to the USB port on the front panel.

   NOTE: Do not connect a USB flash drive to the USB port on the rear panel. Only the port on the front panel has been designed for backup data transfer.

2. From the Main Menu, click [icon]. The Backup menu opens.

3. Click **Start Time**, and select the date, month, year, and time to begin the backup. Event Markers will appear in the Time Bar as you scroll through the date and time.

4. Click **Stop Time**, and select the date, month, year, and time to begin the backup.

   NOTE: Event Markers will appear in the Time Bar as you set through the Start and Stop times.

5. Click **Select Channel**, and select a channel for backup.

6. Click **Save**. Backup begins—the on-screen counter displays the progress of the transfer based on the selected start and stop times.

7. To cancel Backup, right-click until you return to the main screen. Please allow a few moments for the system to exit.

   NOTE: Backup may take several moments depending on the size of data being transferred.

Confirming Backup

To verify that the file has been properly backed up:

1. Click ⬛ to open Event List.

2. Click 🟨 from the Smart Search event filter.

3. Select the file and click ▶❚ . The backup file should begin playing.

4. To exit, right-click until you return to the main screen.

Backup File Information

Backup files are saved as MOV files. These files can be played on the system using Event List or on your PC using QuickTime Player. See "Event List" on page 17.

Backup files are labeled according to the following naming convention:

`ch_##YYYYMMDDhhmmss.mov`:

Filename	Definition
ch_##	Channel number (1~4)
YYYY	Year
MM	Month
DD	Day
hh	Hour
mm	Minute
ss	Second

For more details on viewing backup files, see "Appendix H: Playing Saved Video" on page 71.

LAN

Configure network settings.

From the Main Menu, click 🔵 . The LAN menu opens.

> **NOTE:** Some networking knowledge is required when adjusting options in the LAN menu.
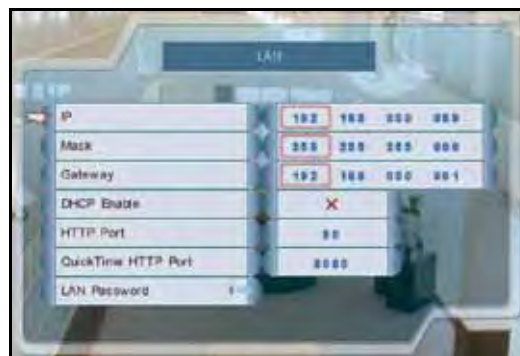
Figure 15.0 LAN menu

To configure network settings:

1. Select the following, and use the scroll-wheel to change values:
   - **IP**
   - **Mask**
   - **Gateway**
   - **DHCP** (8/16-channel *only*)
   - **HTTP Port**
   - **QuickTime HTTP Port** (4-channel *only*)

2. To save your settings, right-click until you return to the main screen.

> **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.

> **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). For details on changing ports on your system, see "Appendix C: Changing Ports On Your System" on page 61.

LAN Password

Use the LAN Password to control Remote Viewing access for Guest, User, and Administrator profiles. The LAN password is required if using the built-in browser-based remote client software.

Figure 15.1 LAN Passwords

To change LAN passwords:

1. Select **LAN Password** and use the Password Wheel to login as the administrator (by default, **ID 2**; **pass: 2222**).
2. Only the administrator (ID 2) can edit and manage LAN passwords.
3. Select the following, and use the Password Wheel to change the LAN user ID and password:

    • **Guest Password**: Lowest level network user, with access to remote live viewing only. By default, **ID 7**; **pass: 1111**.

    • **User Password**: Normal level network user, with access to remote live viewing and playback only. By default, **ID 8**; **pass: 2222**.

    • **Administrator Password**: Highest level user, with access to remote live viewing, playback, and permissions to change network configurations. By default, **ID 9**; **pass: 3333**.

4. To save your settings, right-click until you return to the main screen.

Upgrading Firmware

Firmware upgrades can provide improved functionality to your system. You can download these free upgrades from your DVR manufacturer's website.

Prior to upgrading your system's firmware, you must first format the USB flash drive so it will function properly with the system.

ATTENTION: Formatting erases *all data* on the USB flash drive. This step *cannot* be undone.

To upgrade firmware:

1. Connect a USB flash drive to the USB port on the front panel of the DVR and format (see "Formatting the USB Drive" on page 31.) Once formatting is complete, remove the USB flash drive and connect it to a USB port on your computer.

    NOTE: The system creates two folders on your USB drive: *Picture* and *Movie*.

2. In your web browser, visit your DVR manufacturer's website and download the free firmware upgrade.
3. Copy the firmware file to the connected USB flash drive—*do not* place the file in either the Picture or Movie folder. Once the file transfer is complete, remove the USB flash drive from your computer.
4. Disconnect the power cable to power off your DVR and connect the USB flash drive. Reconnect the power cable.
5. The system will detect the USB drive and new firmware and begin the upgrade process. The system will prompt you when the upgrade is complete.
6. Remove the USB flash drive from your DVR and power off your system.
7. Power on the system. The system is now upgraded with the new firmware.

REMOTE ACCESS: DVR NETVIEWER

DVR Netviewer is the built-in browser-based remote surveillance software that allows you to access your system from any PC with an Internet connection.

Figure 16.0 DVR Netviewer Main Screen (8/16-channel)
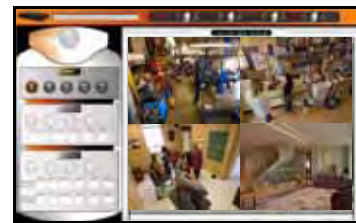
Figure 16.1 Main screen (4-channel)

System Requirements

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

Description	Requirement
CPU	Pentium® 4 or above
Operating System	Windows XP®/Vista®
Memory	128 MB RAM
Video	16 MB of video memory
Network (LAN)	10/100 BaseT Network
Network (WAN)	384 Kbps upstream* *High-speed Internet service is recommended when using DVR Netviewer.
Browser	Internet Explorer® 6 (or later); Mozilla Firefox is also supported but you need to install the IE Tab plug-in (http://addons.mozilla.org)
Media Player	Windows Media Player®10 or later (8/16-channel only); QuickTime Player 7 or later (4-channel *only*)—visit www.apple.com to download the latest version

Configuring QuickTime

ATTENTION: 4-channel models *only*.

You must configure QuickTime prior to using DVR Netviewer for the first time. QuickTime is required for DVR Netviewer to function properly (4-channel *only*). If not already installed on your system, download QuickTime from www.apple.com/quicktime

> **NOTE:** Make sure you have connected your DVR to your network prior to using DVR Netviewer.

To configure QuickTime:

1. With QuickTime installed on your system, open QuickTime by double-clicking the QuickTime icon on your desktop or selecting Start>Programs>QuickTime>**QuickTime Player**.

2. From the QuickTime Player main window, select Edit>Preferences>**QuickTime Preferences**.

3. From the QuickTime Preferences window, click the **Advanced tab**.
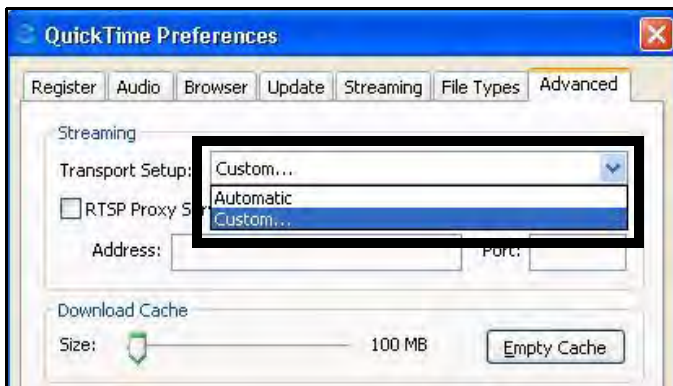
Figure 17.0 QuickTime Preferences

4. Under Transport Setup, select **Custom**. The Streaming Transport window opens.

5. Under Transport Protocol, select **HTTP**.

Figure 17.1 Streaming Transport

NOTE: For security purposes, we strongly recommend changing HTTP port 80 on the system to *any desired port* not blocked by your Internet service provider (ISP). For details on changing ports on your system, see "Appendix C: Changing Ports On Your System" on page 61.

6. Under Port ID, select **80** and click **OK**. The Streaming Transport window closes.

7. From the Preferences window, click **Apply**, and then click **OK**.

USING DVR NETVIEWER

With your system connected to your local area network, and settings configured in QuickTime (4-channel *only*), you can now log in to your system via DVR Netviewer and Internet Explorer.

Network User Profiles

In order to login to DVR Netviewer, you need a network user ID and password. These user IDs and passwords are different from those that control access to your DVR.

Use the following default network user IDs and profiles to login to DVR Netviewer:

- **Administrator Password**: Highest level user, with access to remote live viewing, playback, and permissions to change network configurations. By default, **ID 9**; **pass: 3333**.
- **User Password**: Normal level network user, with access to remote live viewing and playback only. By default, **ID 8**; **pass: 2222**.
- **Guest Password**: Lowest level network user, with access to remote live viewing only. By default, **ID 7**; **pass: 1111**. For details on changing your network ID and pass word, see "LAN Password" on page 33.

Logging In to Your System

To log in to your system via DVR Netviewer:

1. Open Internet Explorer.
2. In the address bar, enter the IP address of your system. For details on how to find your IP address, see "How do I find my IP and MAC addresses?" on page 54.
3. In the ID and password fields, enter your **LAN user ID** and **password** and click **LOGIN**. If your system has *4 channels*, go to **step 4**; if your system has *8/16 channels*, go to **step 5**.

    NOTE: If you enter an incorrect user ID or password the login page will refresh and the text fields will clear.

Figure 18.0 Login screen

4. *4-channel only*: If necessary, select your MIME type* configuration. DVR Netviewer uses Quicktime for live video streaming. Select **No** to maintain your MIME type association with your default media player. If you select Yes, the MIME types will be associated with QuickTime. Check the box to avoid seeing the MIME type prompt in the future.
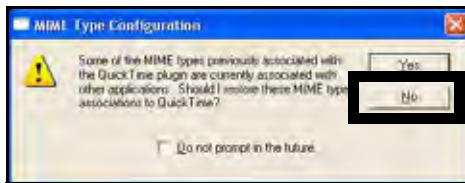
Figure 18.1 MIME Type

5. *8/16-channel only*: You must install the ActiveX® plug-in for DVR Netviewer to function. Click the attention bar at the top of the main page and select **Install ActiveX Control**. DVR Netviewer will reset.

Figure 18.2 Click the ActiveX attention bar

6. Log in with your **LAN user name** and **password**.
7. From the security window, click **Install**. DVR Netviewer launches.
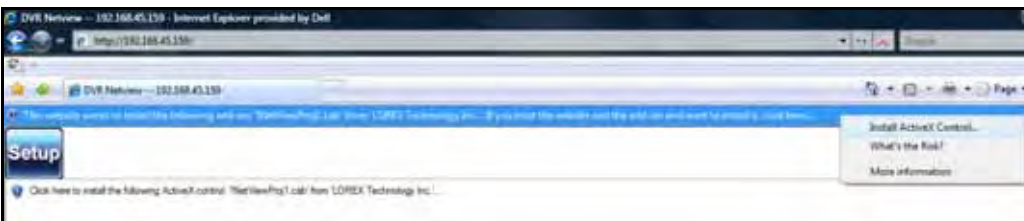
Figure 18.3 Select Install ActiveX Control

NOTE: ActiveX must also be installed on 4-channel systems when using remote backup. For more details, see "Backup" on page 42.

*Multimedia Internet Mail extension—an essential component of Internet communication (HTTP protocol).

DVR Netviewer Main Screen

4-channel

Upon login, the DVR Netviewer main screen appears in your browser. By default, DVR Netviewer opens in Live Viewing mode.
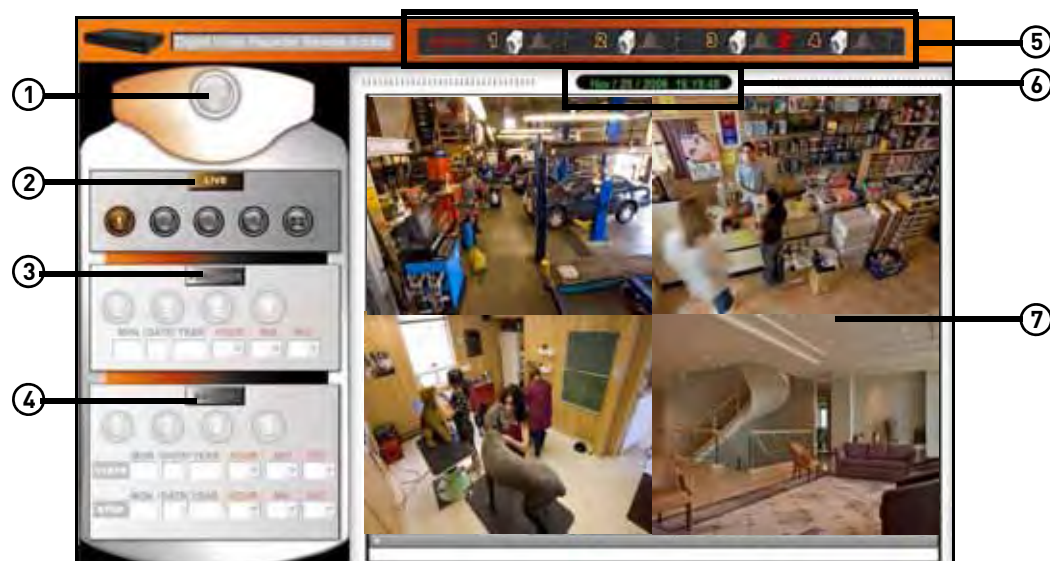
Figure 19.0 DVR Netviewer main screen

1. **SETUP**: Click to open the Setup menu.

2. **LIVE**: Click to view live, streaming video; view single channels in full-screen, or view all channels in quad split-screen.

3. **PLAYBACK**: Click to view recorded video from the DVR. Select channel and enter date and time; playback controls appear when Playback mode selected.

4. **BACKUP**: Click to save recorded video data to your PC.

5. **Message bar**: Indicates the status of the connected cameras; icons will change to display motion, alarm, or camera loss

6. **Date/Time**: Present date and time on the networked system.

7. **Display screen**: Live, playback, and backup modes. Displays channels in single channel full-screen, or all channels in quad split-screen; click the Pause button to pause the live video stream.

8/16-channel
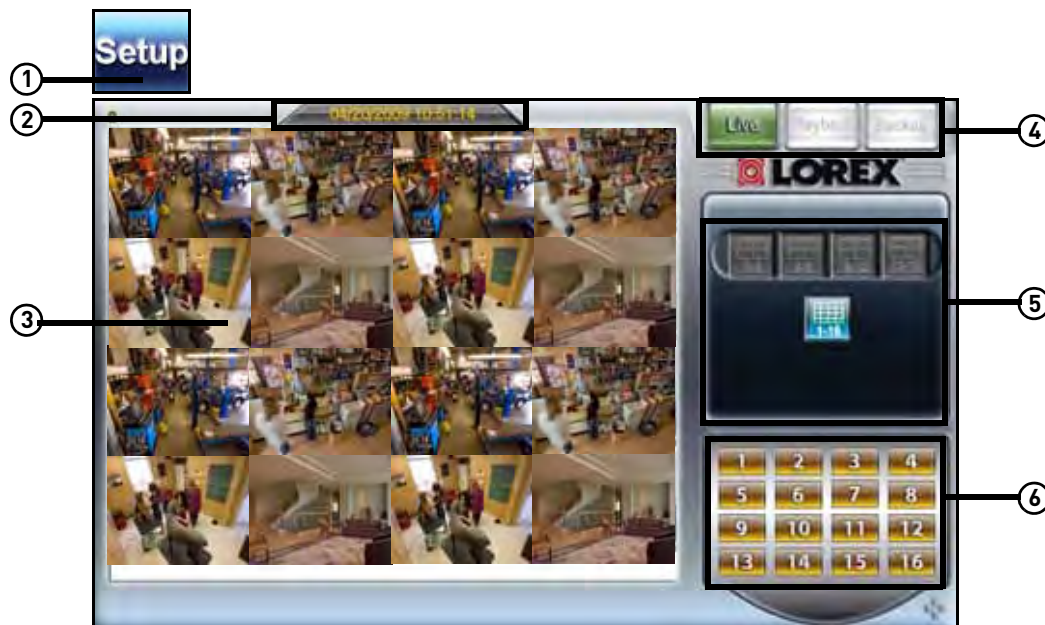
Figure 19.1 DVR Netviewer main screen (16-channel shown)

1. **Setup**: Click to open the Setup menu.
2. **Date/Time**: Present date and time on the networked system.
3. **Display screen**: Live, playback, and backup modes. Displays channels in single channel full-screen, or all channels in quad split-screen; click the Pause button to pause the live video stream.
4. **Modes**:
   - *LIVE*: Click to view live, streaming video; view single channels in full-screen, or view all channels in quad split-screen.
   - *PLAYBACK*: Click to view recorded video from the system. Select channel and enter date and time; playback controls appear when Playback mode selected.
   - *BACKUP*: Click to save recorded video data to your PC.
5. **Views**: Click to view in Quad (1-4, 5-8, 9-12, 13-16) and 16-split.
6. **Channels**: Click to view channels in full-screen.

Live Viewing

4-channel

By default, DVR Netviewer launches in Live Viewing mode.
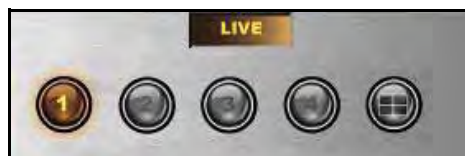
Figure 20.0 Live Viewing controls

To use Live Viewing:

1. Click .

2. Click , , , , to view individual selected channels in

   full-screen, or click to view channels in quad split-screen mode.

3. To pause the live image, click in the bottom-left corner of the QT window. Click

   to resume live streaming.

Message Bar

The Message Bar (4-channel *only*) on top of the main display screen indicates active channels, video loss, alarm/sensor, or motion detection.

Figure 20.1 Message Bar icons

8/16-channel

To use Live Viewing:

1. Click .

2. Click , , , , to view in Quad or 16-split.

3. Click the Channel buttons to view channels in full-screen.

Playback

4-channel

Figure 21.0 Playback controls (4-channel)

To use remote playback:

1. Click .

   NOTE: Depending on your network connection, please allow a few moments for the system to switch to playback mode.

2. Click , , , , to select the channel you want to view.

3. Click the date fields to open a pop-up calendar to change the date.

4. Click the drop-down menu to select the hour, minute, and second.

5. Click , , , to control playback.

8/16-channel

Figure 21.1 Playback controls (8/16-channel)

NOTE: Depending on your network connection, please allow a few moments for the system to switch to playback mode.

To use remote playback:

1. Click ![Playback] .

2. Click the **Channel buttons** to select the channel you want to view.

3. Click ![calendar icon] to open a pop-up calendar to select the date and time.

4. Click ![rewind], ![pause], ![play], ![fast-forward] to control playback.

Using the Pop-Up Calendar

4-channel

When using Playback and Backup, you will use a pop-up calendar to enter the date.
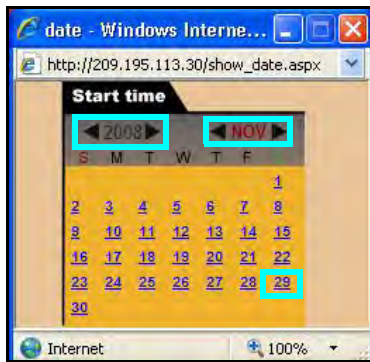
Figure 21.2 Pop-Up Calendar (4-channel)

To use the pop-up calendar:

1. Click ◀ ▶ to change the year and the month.

2. Click a date. The pop-up calendar closes; the selected month, date, and year appear in the text fields.

8/16-channel
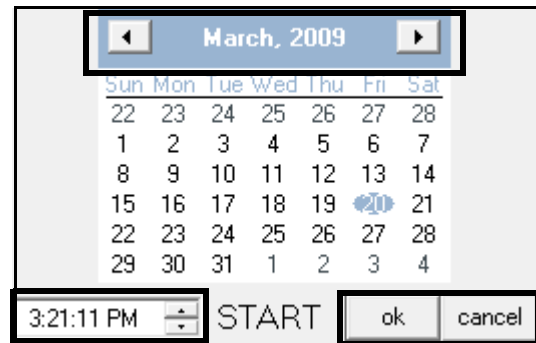
Figure 21.3 Pop-Up Calendar (8/16-channel)

To use the pop-up calendar:

1. Click ◀ ▶ to change the month.

2. Click a date.

3. Click ![up/down icon] to set the time.

4. Click OK. The pop-up calendar closes.

5. Click ![rewind], ![pause], ![play], ![fast-forward] to control playback.

Backup

Use Backup to copy recorded video data from your DVR to your PC.

NOTE: Only the system administrator (by default, *ID 9*) may use the Backup function of DVR Netviewer.

NOTE: If your system has 4 channels, you must install the ActiveX plug-in for Backup to function properly.

Figure 22.0 Backup controls (4-channel)
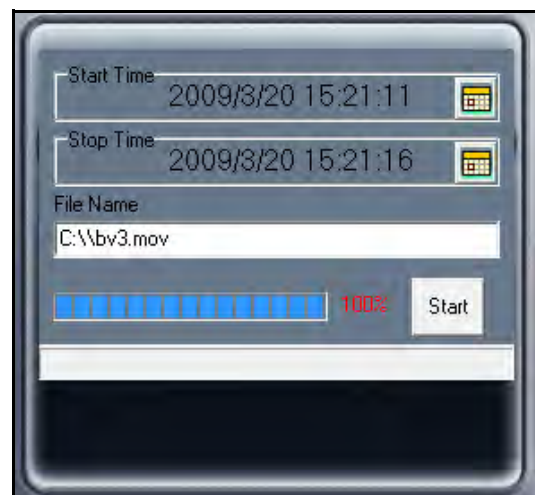
Figure 22.1 Backup controls (8/16-channel)

To install ActiveX (4-channel *only*):

1. Click .

Figure 22.2 Active X prompt

2. When prompted, click the bar to install ACTIVE X to your browser. DVR Netviewer will reset. You need to log in again with your user ID and password.

3. From the main screen, click . Windows will prompt you to install the CAB file. Click Install to begin the installation.
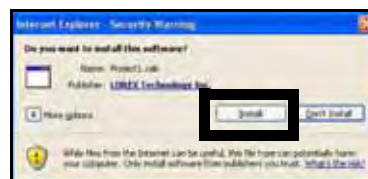
Figure 22.3 Install the `Project1.cab` file

To use Backup:

4-channel

1. Click the **Channel buttons** to select the channel you want to view.

2. Under START (start time), click the date fields to open the pop-up calendar to enter the date. Click the drop-down menus to select the hour, minute, and second.

3. Repeat step 2 for STOP (stop time).

4. Click **Start** to begin backup. File is saved to `C:\` with the default file name, `bv3.mov`

   NOTE: Backup files carry the file extension `.mov`; QuickTime Player is required to view MOV files.

   OR

5. Under File, click the text field to select the save location and file name for the backup file.

6. Click **Start**. File backup begins. Depending on your connection and size of the file, this could take several moments.

Figure 22.4 Backup progress (4-channel)

> **NOTE:** You may need to log back in to your system via DVR Netviewer after the Backup process.

To use Backup:

8/16-channel

1. Click the **Channel buttons** to select the channel you want to view.

2. Under Start Time, click to open the pop-up calendar and enter a date and time.

3. Under Stop Time, click to open the pop-up calendar and enter a date and time.

4. Click **Start** to begin backup. File is saved to `C:\` with the default file name, `bv3.mov`

   NOTE: Backup files carry the file extension `.mov`; QuickTime Player is required to view MOV files.

   OR

5. Under File, click the text field to select the save location and file name for the backup file.

6. Click **Start**. File backup begins. Depending on your connection and size of the file, this could take several moments.
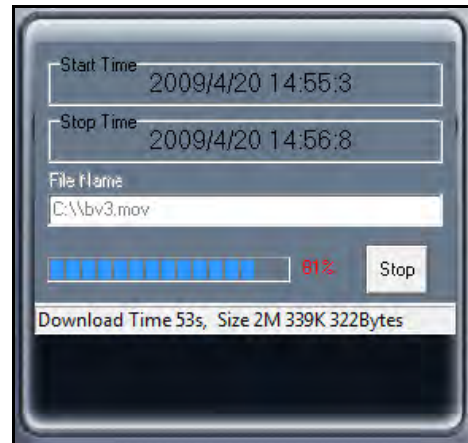
Figure 22.5 Backup progress (8/16-channel)

> **NOTE:** You may need to log back in to your system via DVR Netviewer after the Backup process.

Setup

Use Setup to configure your network settings and video streaming options.

> **NOTE:** All users (by default, *IDs 7*, *8*, and *9*) have access to the Setup menu; only the system administrator (by default, *ID 9*) may configure PPPoE and DDNS settings.

To open the Setup menu:

- From the main screen, click the **Setup button**. By default, the System Status screen opens.
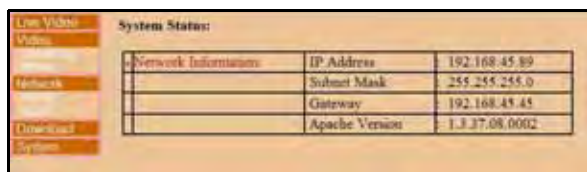
Figure 23.0 System Status in Setup menu (4-channel)
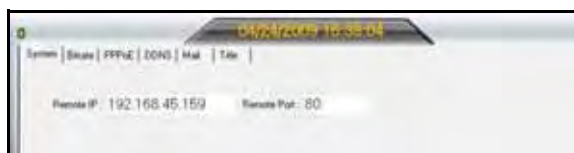
Figure 23.1 System Status in Setup menu (8/16-channel)

The Setup menu lets you configure the following:

- **Video**: Streaming and Bitrate
- **Network**: PPPoE and DDNS

Streaming

4-channel only

Figure 23.2 System Status in Setup menu (4-channel)

To configure video options:

1. Under Video, click **Streaming**.
2. Under HTTP port, enter **80**.
3. Under QT (QuickTime) port, enter **8090** (4-channel *only*).

4. Click **Submit** to save your settings or click Cancel to exit without saving.

> **NOTE:** For security purposes, we strongly recommend changing HTTP port 80 on the system to any desired port not blocked by your Internet service provider (ISP). For details on changing ports on your system, see "Appendix C: Changing Ports On Your System" on page 61.

Bitrate

4-channel
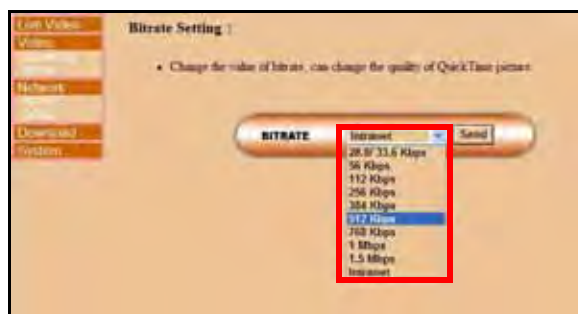
Figure 23.3 System Status in Setup menu

To change Bitrate speed:

1. Under Video, click **Bitrate**.
2. Click the drop-down menu to select a bitrate speed. The higher the bitrate, the better the quality of the QuickTime video stream. Adjust the bitrate speed to best suit your connection.
3. Click **SEND** to save your settings to the system.

8/16-channel
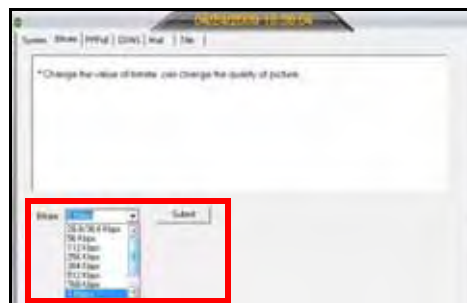
Figure 23.4 System Status in Setup menu (8/16-channel)

To change Bitrate speed:

1. Click the **Bitrate tab**.

2. Under Bitrate, select a **bitrate speed**. The higher the bitrate, the better the quality of the video stream. Adjust the bitrate speed to best suit your connection.

3. Click **Submit** to save your settings to the system.

PPPoE

4-channel

Figure 23.5 PPPoE menu (4-channel)

To change PPPoE settings:

1. Under Network, click **PPPoE**.

2. Under PPPoE status, select **ON**.

3. In the corresponding text fields, enter your **PPPoE Username** and **password**.

4. Click **Submit** to save your settings or click Cancel to exit without saving.

8/16-channel

Figure 23.6 PPPoE menu (8/16-channel)

To change PPPoE settings:

1. Click the **PPPoE tab**.

2. Under the PPPoE Status, select **ON**.

3. In the corresponding text fields, enter your **PPPoE Username** and **password**.

4. Click **Apply** to save your settings.

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.

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

4-channel

Figure 23.7 DDNS setup (4-channel)

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 56.

> **NOTE:** You must register for Lorex's free DDNS service prior to configuring DDNS settings.

To change DDNS settings:

1. Under Network, click **DDNS**.

2. Under DDNS Select, select **http://lorexddns.net**

3. In the corresponding text fields, enter your **DDNS username** and **password**.

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

Figure 23.8 Enter only the first portion of your domain name

4. Under DDNS 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.

5. Click **Submit** to save your settings or click Cancel to exit without saving.

6. 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.

8/16-channel
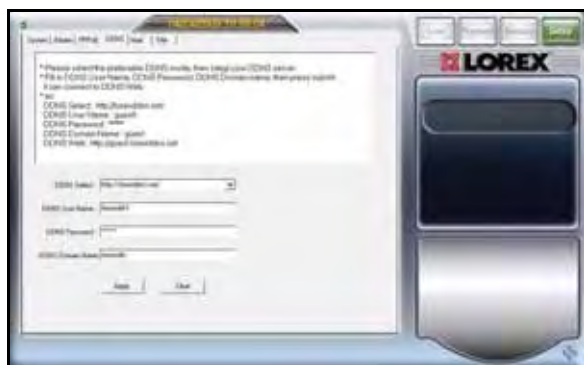
Figure 23.9 DDNS menu (8/16-channel)

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 56.

> **NOTE:** You must register for Lorex's free DDNS service prior to configuring DDNS settings.

Figure 23.10 Enter only the first portion of your domain name (8/16-channel)

To change DDNS settings:

1. Click the **DDNS tab**.

2. Under DDNS Select, click the drop-down menu and select **http://lorexddns.net**

3. In the corresponding text fields, enter your **DDNS username** and **password**.

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

4. Under DDNS 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.

5. Click **Apply** to save your settings or click **Clear** to exit without saving.

6. 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.

Download

4-channel only

If you are experiencing poor video quality when using DVR Netviewer, you can download an additional component that should improve the quality of the video stream—Windows XP *only*.

> **NOTE:** *DO NOT* download this component if using Windows Vista.

To download the additional component:

1. From the Setup menu, click **Download**.
2. In the new download window, click **Run** to run the file, `tcp_timestamp.reg`.
3. In the subsequent security and/or firewall windows, click **Allow/Yes** to allow the component access to your network.
4. Once installed, reset your computer.

System Status

By default, the Setup menu opens to the System Status screen. However, you view this screen at any time when navigating the Setup menu.
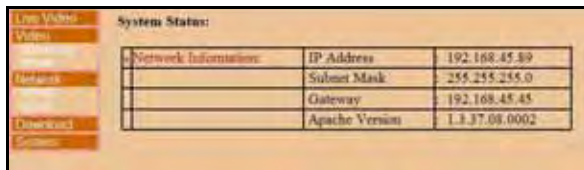
Figure 23.11 System Status (4-channel)
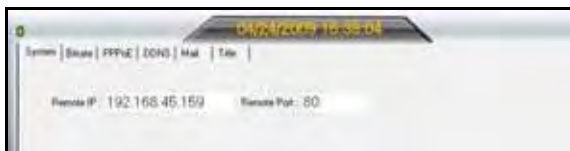
Figure 23.12 System Status (8/16-channel)

To view system status:

- *4-channel*: Click **System**. The System Status screen appears.
- *8/16-channel*: Click the **System tab**. The System Status screen appears.

> **NOTE:** You cannot edit the IP address or port number.

Resuming Live Viewing

To return to DVR Netviewer main screen:

- *4-channel*: From the Setup menu, click **Live Video**.
- *8/16-channel*: From the Setup menu, click
   .

NOTE: *4-channel only*: If you have not closed the QuickTime prompts, you will be asked to confirm your MIME type associations prior to returning to the DVR Netviewer main screen.

Mail

ATTENTION: Email notification is applicable to *8/16-channel models only*.

Configure email notification for triggered events on your system.

Figure 23.12 Default email notification setup (8/16-channel only)

> NOTE: By default, Mail Notification is designed to work with Lorex DDNS. You must first register with Lorex DDNS for email notification to work. However, you can also use your own SMTP server.

To configure email notification:

1. Under Send Mail Status, select **Default**.
2. In the From Your Email field, enter the **sender's email address**.
3. In the Send To Email fields, enter the **recipient's email address**.

    NOTE: You *must* enter a sender and recipient email address for mail notification to work.

4. *Optional*: Enter a subject for the notification and a location (of the DVR) in the respective fields.
5. Click **Apply** to save your settings or click **Clear** to exit without saving.
6. Click **Test Email** to send a test notification. Click **OK** to close the confirmation window.

    NOTE: If you have made a mistake with either email addresses, you will not receive the test notification.

    NOTE: If you want to use your own SMTP server, select **ON** from the Send Mail Status drop-down menu. Enter the address of your SMTP Server, port, user name, and password. Select the box to log on using secure authentication. Enter the sender's email address and recipient's email address. Click **Apply** to save your settings and Test Mail to test the notification.

Title

ATTENTION: Camera Title is applicable to *8/16-channel models only*.

Edit the camera names/titles on your system.

Figure 23.13 Camera title setup (8/16-channel only— 16-channel shown)

To edit camera names/titles:

1. Click the **Title tab**.
2. In the Channel fields, enter the **new name/title** for the camera. For example, *Parking Lot 1*, *Front Door*, etc.
3. *Optional*: Click **Font Option** to select the font and font style.

    NOTE: You cannot change color, underline, or strike through options.

4. *Optional*: Under Font Size, click the drop-down menu and select **X-Large**, **Large**, **Medium**, **Small**, or **X-Small**. You can also drag the slider to adjust the font size.
5. *Optional*: Click the drop-down menu below the font options to select the language for the camera titles. You can select **English**, **Taiwanese**, **Spanish**, **Russian**, **Italian**, **Chinese**, **Japanese**, **German**, **French**, **Dutch**, **Czech**, **Polish**, **Hebrew**, **Thai**, **Danish**, **Finnish**, **Swedish**, or **Vietnamese**.
6. Click **Save File** to save your camera title configuration to your PC. Files are saved as MOV files.

    NOTE: Click **Load file** to open the saved configuration file on your PC.

7. Click **Apply** to save the new title to your system.
8. Refresh your screen by changing the display mode (single, quad, split-screen) to see the titles.

APPENDIX A: SYSTEM SPECIFICATIONS

Specifications are shared among 4/8/16-channel models unless specifically noted.

DVR

Description	Specification		
	4CH	8CH	16CH
Hard disk capacity	Maximum 1 HDD up to 1TB, 100% duty cycle		
Operating system	Linux (embedded)		
Backup	USB flash drive (front panel port *only*)		
Backup file format	MOV		
Compression	H.264		
Recording resolution	NTSC: 640x240, 640x480; PAL: 640x256, 640x512		
Recording speed	60 fps (NTSC)/50 fps (PAL) @ 640x240/640x256 NTSC/PAL	120 fps (NTSC) / 100 fps (PAL)	
Recording schedule	Daily, Weekly—adjust specific hour per channel		
Pre/Post alarm recording	3~10 sec. (pre); 1~255 sec. (post)—programmable per camera		
Event/Log search	Up to 4096 for alarm, motion, video loss, power loss		
Playback	Single, Quad	Single, Quad, 8-channel simultaneous	Single, Quad, 8, 16-channel simultaneous
Video inputs	4 x 1Vp-p, 0.75 ohms, BNC	8 x 1Vp-p, 0.75 ohms, BNC	16 x 1Vp-p, 0.75 ohms, BNC
Video outputs	1 x VGA	1 x DVI	
Audio inputs	2 x line-in, RCA		
Audio outputs	2 x line-out, RCA		
Supply voltage	120 VAC-240 VAC, 12V DC, 2.5 A, 50/60 Hz	120 VAC-240 VAC, 12V DC, 3 A, 50/60 Hz	
Power consumption	Approximately. 30 watts		
Operating Temp Range	41⁰~104⁰ F / 5⁰~40⁰ C		

Appendix A: System Specifications (cont'd.)

DVR
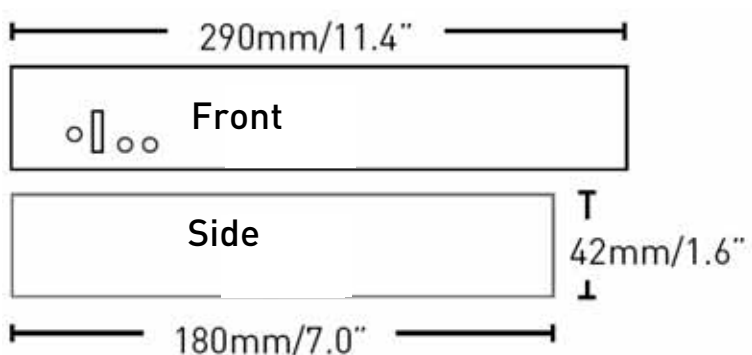
Description	Specification		
	4CH	8CH	16CH
Alarm inputs	4 x TTL	4 x TTL, programmable as NC/NO	
Alarm outputs	1 x relay with NO/NC contact		
Activity detection	4 x 3 grid, sensitivity levels: 100	8 x 6 grid, sensitivity levels: 100	
Remote functions	Live view, live recording, search, setup, backup		
Network speed control	10 levels (28.8Kb~8MB) / sec.		
Network protocol	TCP/IP, DDNS, Web		
Network interface	10 / 100Mbps Base-TX, RJ-45		

Product Information

4/8/16-channel

Description	Specification
Unit Weight	3.19 lbs / 1.45 kg
Unit Dimensions (WxHxD)	11.4" x 1.6" x 7.0" 290 mm x 42 mm x 180 mm

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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 **192.168.1.89**

> **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**
- **QuickTime** (4-channel *only*)

NOTE: A router (not provided with the system) and a High Speed Cable or DSL Internet connection (for remote viewing outside your network)
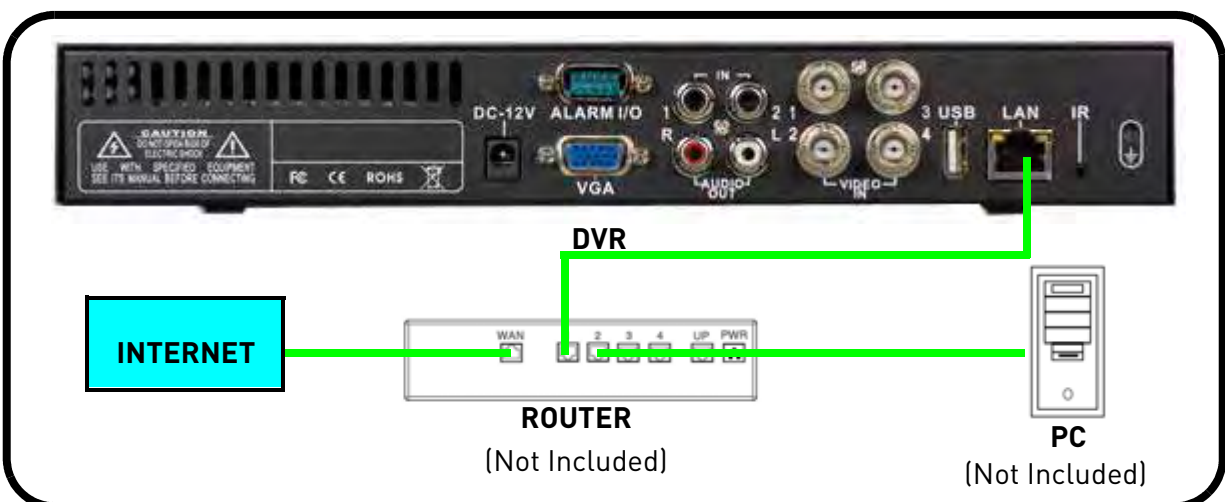
Network Setup / Remote Access Overview

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 55.

   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 59 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.

INTERNET
(not required for local viewing)

ROUTER
(Not Included)

PC
(Not Included)
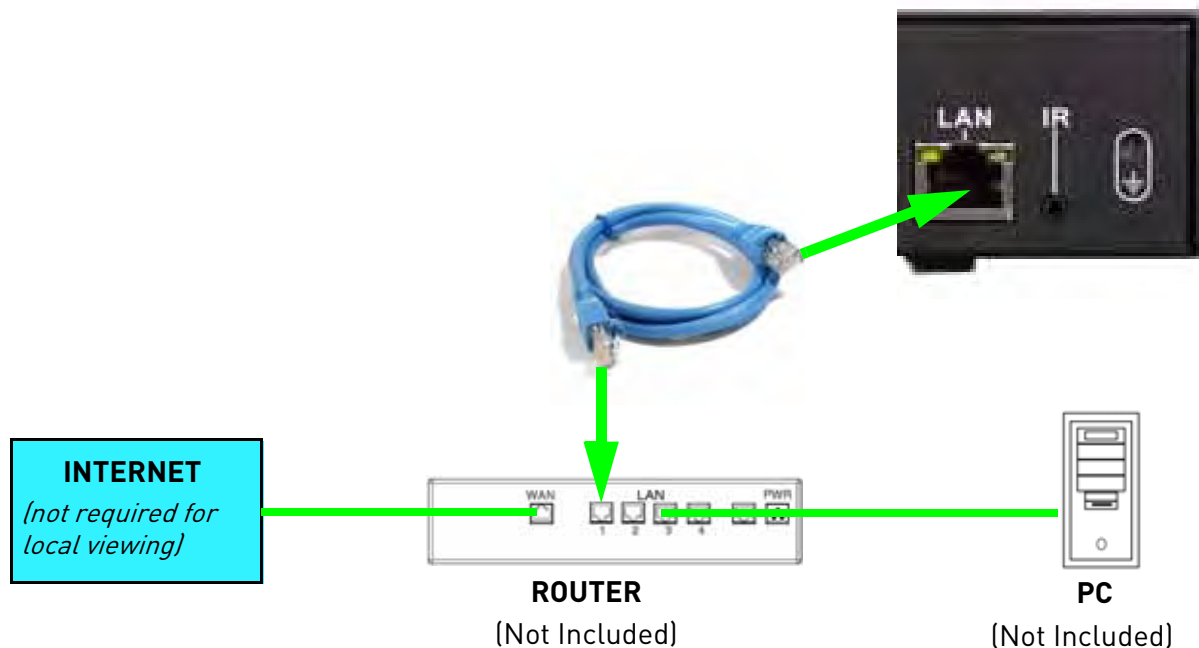
3. Reconnect the power cable to power the system back on.

    NOTE: If your system has *4 channels*, go to **step 4**; If your system has *8 or 16 channels*, continue to **page 54** to find your IP address for DDNS setup.

4. On your PC, click **Start** and select **Run**. In the Run window, enter **cmd** and click **OK**. The Command Prompt window opens.
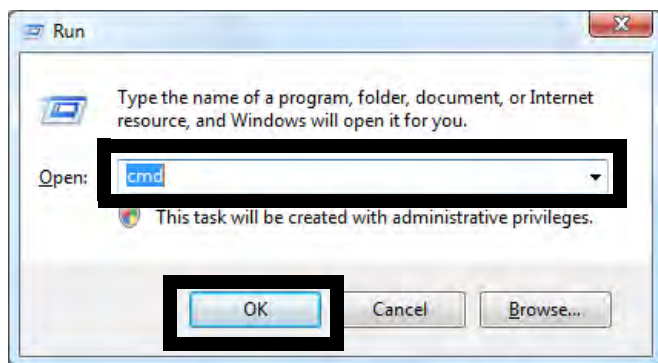
Figure 24.0 Run window

5. Type **ipconfig** and press **Enter**. Your network information appears (see figure 24.1). You may need to enter some of this information in your system's LAN settings.


```
192.168.11.100
255.255.255.0
192.168.11.1
```
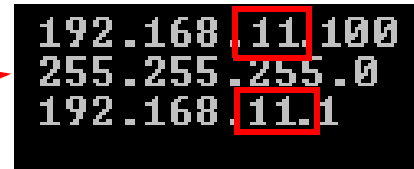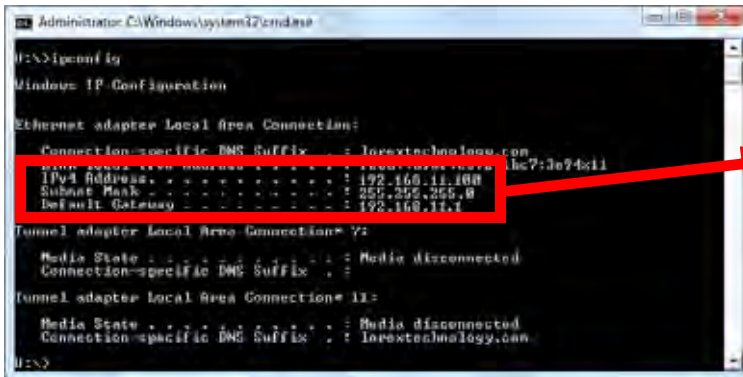
Enter the third set of numbers from the IP address and Gateway in the LAN settings of your system.
In this example, the number is *11*.

Figure 24.1 IP configuration information

6. On the system, click [MENU] to open the Main Menu. Click **LAN**.

    • If the IP address and Gateway are the **SAME** as those in ipconfig on your PC, your system is connected to your local network.

    • If the IP address and Gateway are **DIFFERENT** than those in ipconfig on your PC, **go to step 5**.

7. Under IP, select the third field (001) and enter the **third set of numbers** from the **IP address** in the Command Prompt window. Under Gateway, select the third field (001) and enter the **third set of numbers** from the **Default Gateway** in the Command Prompt window Right-click to exit all menus to save your settings (or press the **ESC button** on the remote control).
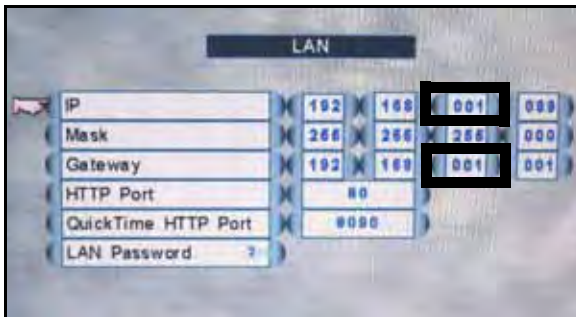
Figure 24.2 Default IP address and Gateway

NOTE: The **third set of numbers** in IP and Gateway in your LAN settings **MUST MATCH** the third set of numbers in IP address and Default Gateway from the IP Config results in the Command Prompt window. You do not need to change any of the other sets of numbers.

NOTE: In this example, we changed the default digit from *001 to 011* in order to match the IP address and Default Gateway in ipconfig.
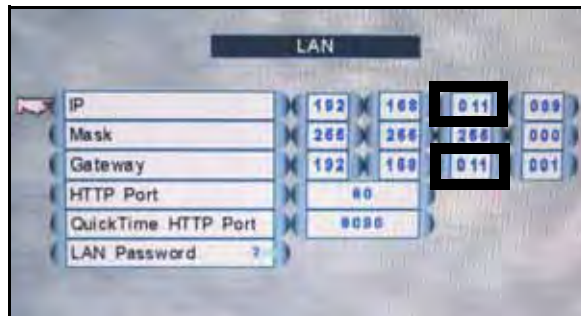
Figure 24.3 New IP address and Gateway

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.
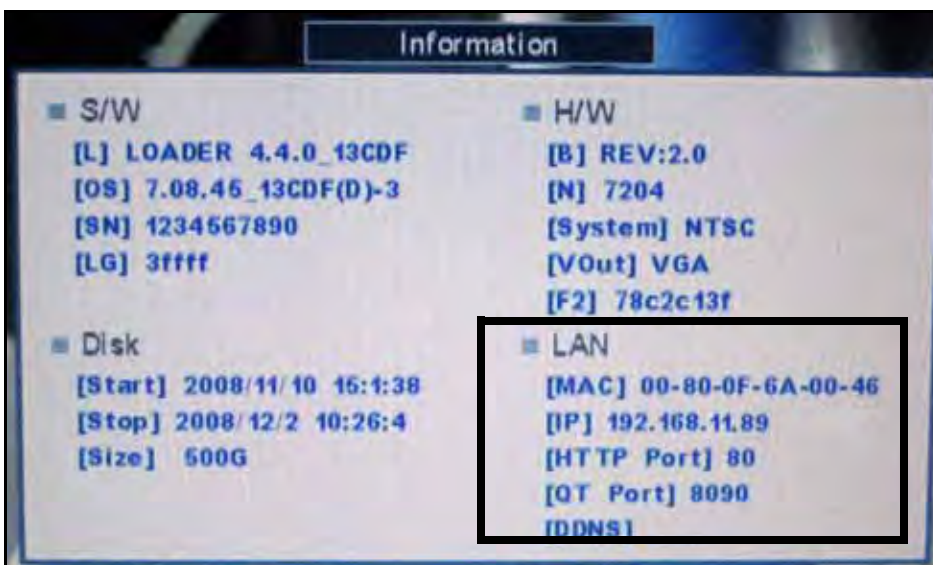
Figure 24.4 System information

To find your IP and MAC addresses:

1. Press the ⏎ button twice on the remote control.
   OR

2. From the Main Menu, click 🖊, and then click **Information**. Your IP address and MAC address are under LAN.

3. To exit, right-click or click ESC until you return to the main screen.

If you do not see your IP address:

1. Power off the system.

2. Connect a network cable (included) to the LAN port on the rear panel of the system.

3. Power on the system.

4. Repeat steps 2~6 under "Connect to a Network" on page page 52.

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. 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)
- **8090** (QuickTime Port—4-channel *only*)

NOTE: For added security, we strongly recommend changing HTTP port 80 on the system to *any desired port*—the port must not 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
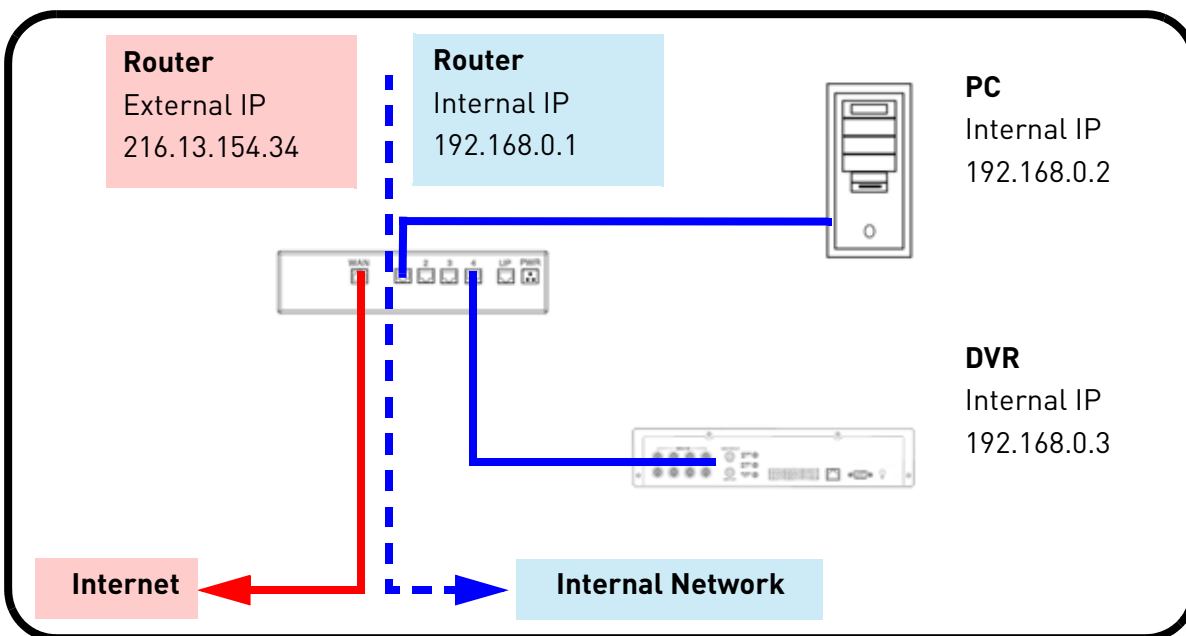
When a computer on the Internet needs to send data to your internal network, it sends this data to the external IP address of the router. The router then needs to decide where this data is to be sent to. This is where setting up Port Forwarding becomes important.

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 **192.168.0.3:8090**).

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.lorexcctv.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. LH318)

    • **<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 25.0 Create a DDNS account

Figure 25.1 Enter personal information

Figure 25.2 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.lorexddns.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.

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

Figure 25.3 DDNS setup in DVR Netviewer

To enable DDNS on your system:

1. Open Internet Explorer (version 6 or above) and enter the **IP address** of your DVR in the address bar (i.e. 192.168.xxx.89). DVR Netviewer opens.
2. Login using your **LAN user ID** and **password** (by default, **ID 9**; **password 3333**).
3. Click the **Setup button**. The Setup menu opens.
4. Under Network, click **DDNS**.
5. Under DDNS Select, click the drop-down menu and select **http://lorexddns.net**
6. In the corresponding text fields, enter your **DDNS username** and **password**.

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

7. Under DDNS 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. Click **Submit** to save your settings or click **Cancel** to exit without saving.

    NOTE: Once you have saved your DDNS settings, your must reset your system in order for the changes to take effect. Disconnect and reconnect the power cable from the rear panel to reset. Please allow 10~15 minutes for the DDNS servers to update with your new DDNS address.

Networking Checklist

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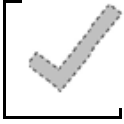
I have the following:

- High-Speed Internet
- Router
- Ethernet cable (included with the system)
- Computer with Internet Explorer 6 or later
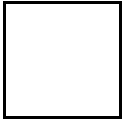
I have turned off the system and performed the following:

- Connected the Ethernet cable to the back of the system
- Connected the other end of the Ethernet cable to my router
- Entered the IP address and Default Gateway from ipconfig in my system's LAN settings (*4-channel model only*)

    NOTE: Network Setup will not work if you do not have a router.
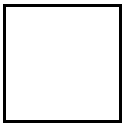
I have found my System Information:

- Press the ⏎ button **twice** on the remote control.

OR

- From the Main Menu, click 🖊, and then click **Information**. Your IP address and MAC address are under LAN.
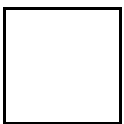
My IP Address is: _____

My MAC Address is: _____

I have configured QuickTime (4-channel only)*:*

You must enable **HTTP** as the transfer protocol and select port **80**.

    NOTE: You must configure QuickTime in this manner for *EVERY PC* that will have access to your system.
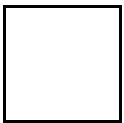
I have enabled Port Forwarding on my router:

- **Port 80**
- **Port 8090** (4-channel *only*)

NOTE: For added security, we strongly recommend changing HTTP port 80 on the system to *any desired port*—the port must not blocked by your Internet service provider (ISP). For details on changing your ports, see "Appendix C: Changing Ports On Your System" on page 61.

NOTE: Each router is different, so port forwarding settings vary by model. Please visit us on the web at www.lorexcctv.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.
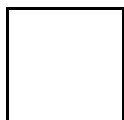
I have configured DDNS for remote access to my system:

Go to www.lorexddns.net and create a new account

Domain: _____

User ID: _____

Password: _____
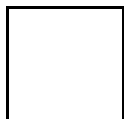
I have configured my system to connect to the DDNS server:

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

To enable DDNS on your system:

1. Open Internet Explorer (version 6 or above) and enter the **IP address** of your DVR in the address bar (i.e. 192.168.xxx.89). DVR Netviewer opens.
2. Log in using your **LAN user ID** and **password** (by default, **ID 9**; **password 3333**).
3. Click the **Setup button**. The Setup menu opens.
4. Under Network, click **DDNS**.
5. Under DDNS Select, click the drop-down menu and select **http://lorexddns.net**
6. In the corresponding text fields, enter your **DDNS username** and **password**.

    NOTE: Obtain this information from the confirmation email after registering for the free Lorex DDNS service.
7. Under DDNS 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. Click **Submit** to save your settings or click **Cancel** to exit without saving.

    NOTE: Once you have saved your DDNS settings, your must reset your DVR in order for the changes to take effect. Disconnect and reconnect the power cable from the rear panel to reset.
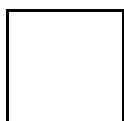
I can access my system from a remote PC:

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 **LAN user ID** and **password** (by default, **ID 9**; **password 3333**).

APPENDIX C: CHANGING PORTS ON YOUR SYSTEM

For added security, we strongly recommend changing HTTP port 80 on the system to *any desired port*—the port must not 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 and must configure QuickTime to the necessary settings. For details, see "Configuring QuickTime" on page 35.

Example

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

> **NOTE:** QuickTime Port 8090 is on 4-channel models *only*.

To change the port number:

1. Click [MENU] to open the Main Menu and then click [icon]. The LAN menu opens.
2. From the LAN menu, select **HTTP**.

3. Use the scroll-wheel (or press [+] on the remote control) to change the port number to **85**.
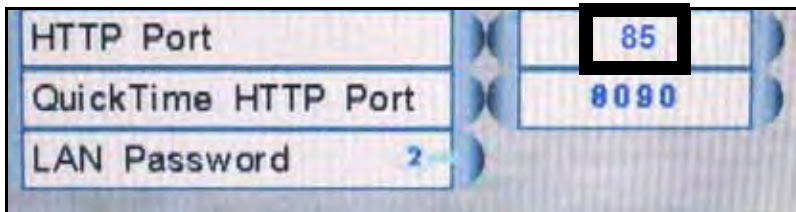
Figure 26.0 Change the HTTP port

4. Right-click to exit and save your settings (or press the **ESC button** on the remote control.
5. Disconnect 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.

6. To confirm that the new port number is saved on your system, the [↵] button twice on the remote control to view the System Information.
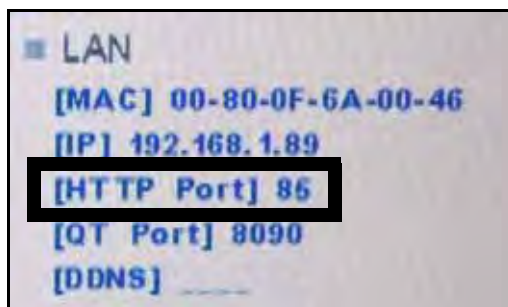
Figure 26.1 Confirm the new HTTP port

You must now include the new HTTP 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://192.168.1.89:85
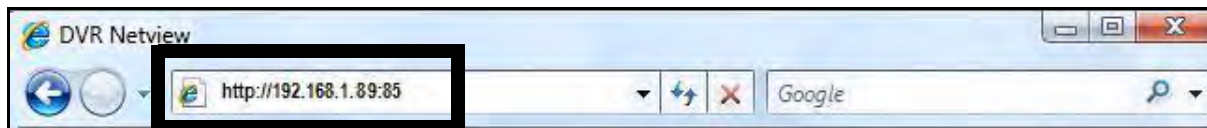
Figure 26.2 Enter :85 at the end of the IP address

3. Enter your *LAN ID* and *password* to log in to your system using DVR Netviewer (by default, admin **ID: 9**; **password 3333**).

Figure 26.3 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 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 56.

ATTENTION: For remote viewing, the HTTP port and QuickTime port of your system *MUST be port forwarded on your router*—in this example, port 85 and QuickTime Port 8090 (4-channel *only*). Each router is different, so port forwarding settings vary by model. Please refer to the Lorex Port Forwarding Guide (www.lorexcctv.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://192.168.1.89:85
3. Enter your **LAN ID** and **password** to log in to your system (by default, admin ID: **9**; password **3333**).
4. Click the **Setup button** and then click **Network**.
5. Click **DDNS**. Enter your DDNS information from the confirmation email and click **Submit**. For complete details on entering your DDNS information, see "How do I enable DDNS on my system?" on page 58.
6. 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.
7. To confirm that the DDNS information is saved on your system, press the ⬅ button twice on the remote control to view the System Information.
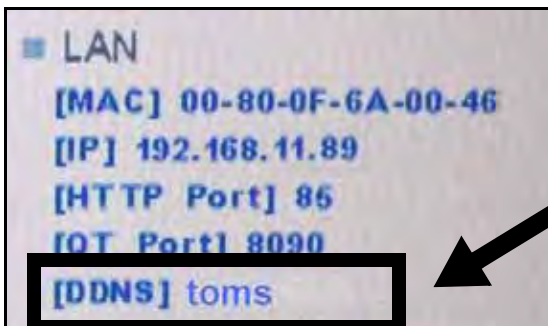
NOTE: The system has a 4-character *display limit* for the DDNS subdomain. Please note however, that *the complete subdomain* (i.e. tomsmith) *is saved by the system.*

Figure 26.4 Your DDNS sub-domain should appear in System Information

8. If you have not already done so, port forward ports 85 and 8090 (4-channel *only*) on your router. Each router is different, so port forwarding settings vary by model. Please refer to the Lorex Port Forwarding Guide (www.lorexcctv.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.

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).

> **NOTE:** *4/8/16-channel*: The PC used for remote viewing requires Internet Explorer 6 or later. *4-channel only*: The PC requires QuickTime. QuickTime must be configured to the necessary settings. For details, see "Configuring QuickTime" on page 35.

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 26.5 Enter :85 at the end of the DDNS URL

3. Enter your **LAN ID** and **password** to log in to your system (by default, admin **ID: 9**; **password 3333**).

Figure 26.6 Login with your LAN ID and password

> **NOTE:** If you are having problems connecting using DDNS, check that you have port forwarded ports 80 and 8090 (4-channel *only*) on your router. If you change QuickTime Port 8090 (4-channel *only*) on your system, you *MUST port forward the corresponding port on your router.*

APPENDIX D: CONNECTING MOTION / ALARM DEVICES

You can enable Motion Detection and Alarm control from the Main Menu. You can also connect additional motion sensor devices to the system (i.e. motion sensors, door/window sensors) with a D-sub 9 connector (not included). Use a motion detector or sensor to send a signal to the system to begin camera viewing and recording on the matching camera channel (when enabled in the Menu).

NOTE: Some soldering is required when using a D-sub 9 connector.

Installing a Sensor

To connect an external alarm sensor to the system:

1. Connect a **D-SUB 9 connector** (not included) to the **ALARM I/O** port on the rear panel.
2. Connect Alarm-In wires to pins 1~4; connect NC wire to pin 6 connect NO open to pin 7.
3. Connect the ground wire to pin 9.

D-SUB 9 CONNECTOR
(Not Included)

SENSOR
(Not Included)

D-SUB 9 CONNECTOR
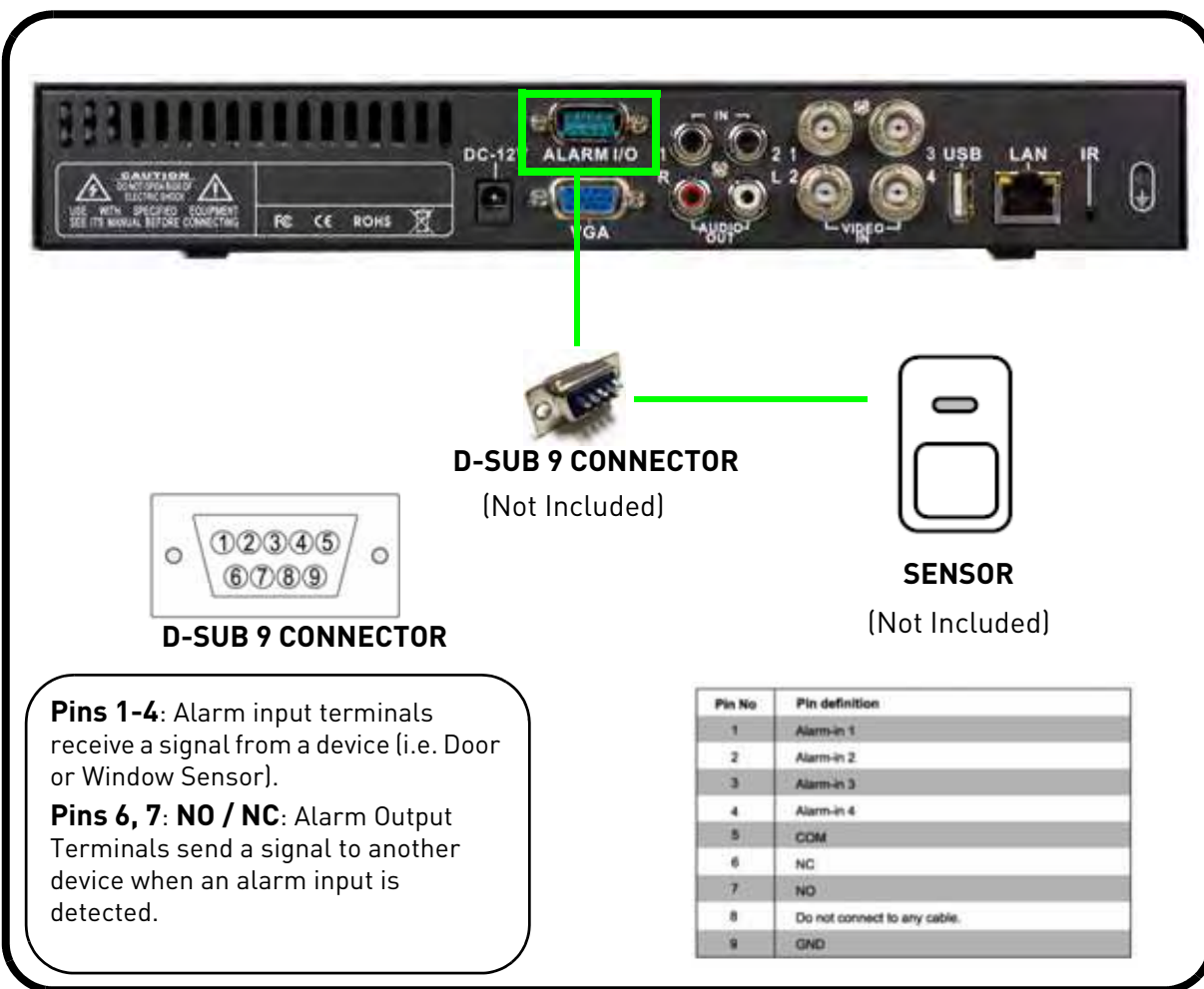
Pins 1-4: Alarm input terminals receive a signal from a device (i.e. Door or Window Sensor).

Pins 6, 7: **NO / NC**: Alarm Output Terminals send a signal to another device when an alarm input is detected.

Pin No	Pin definition
1	Alarm-in 1
2	Alarm-in 2
3	Alarm-in 3
4	Alarm-in 4
5	COM
6	NC
7	NO
8	Do not connect to any cable.
9	GND

APPENDIX E: FULL CONNECTIVITY DIAGRAM

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

PC
(Not Included)

ROUTER
(Not Included)

ALARM / SENSOR
(Not Included)

Flex IR Extender

DVR

USB Port*

VGA MONITOR
(not included)

**LINE IN AUDIO /
AMPLIFIED
SPEAKERS**
(not included)

BNC CAMERAS

*Connect a USB mouse; Do not connect a USB flash drive or hard drive.
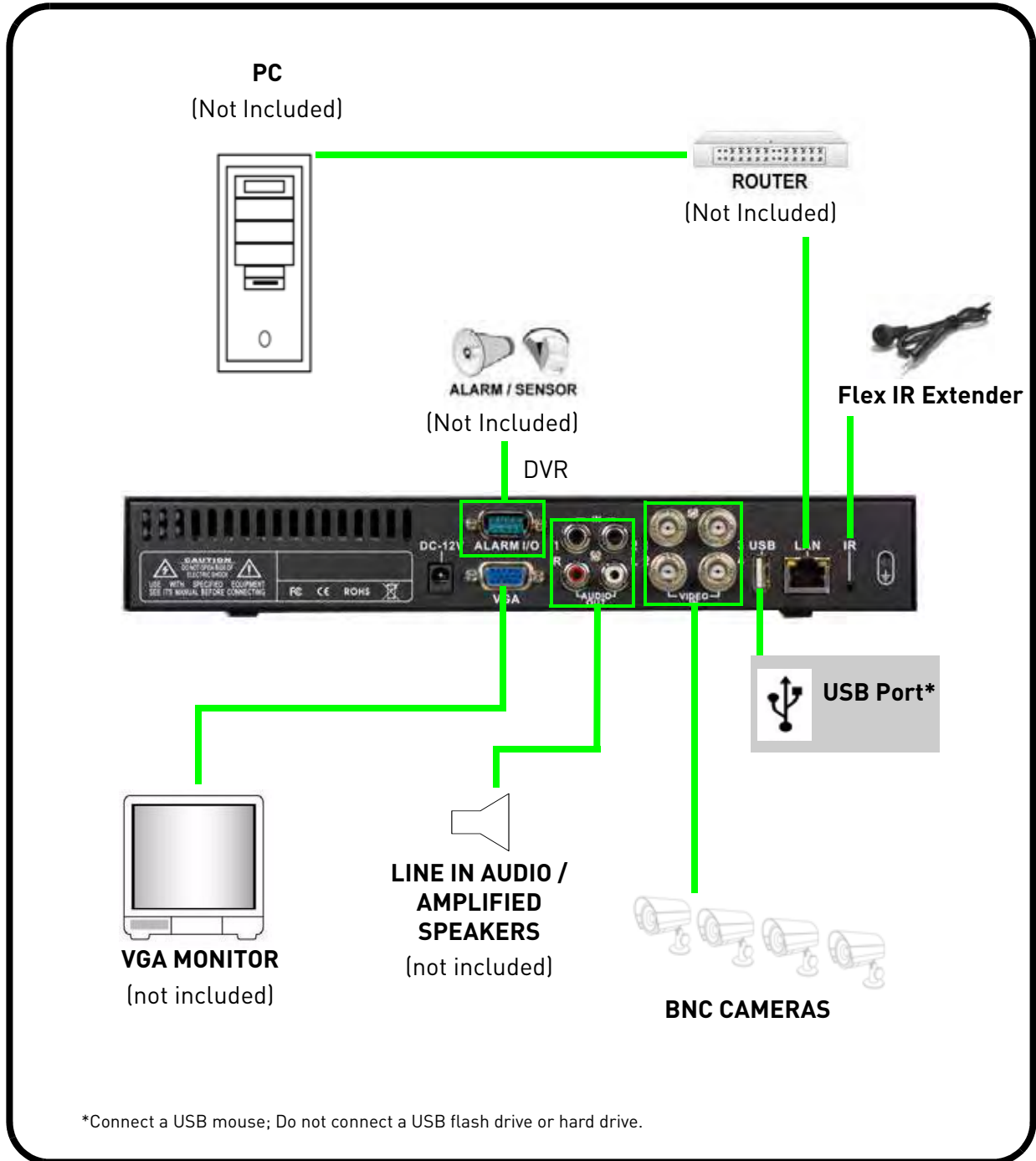
APPENDIX F: REPLACING THE HARD DRIVE

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 top panel and side panels of the housing.

2. Gently slide the cover away from the front panel and lift off.

3. With your hand supporting the hard drive, turn the unit upside down. Remove the four mounting screws from the bottom of the unit. Turn the unit right side up.

4. Gently slide the hard drive toward the front panel and lift out.

5. Disconnect the power and data cables.

> **NOTE:** Make sure to keep the two sets of screws (cover, mounting) in a safe place.

Figure 27.1 Remove cover.

Figure 27.2 Support the HDD with your hand and remove mounting screws.
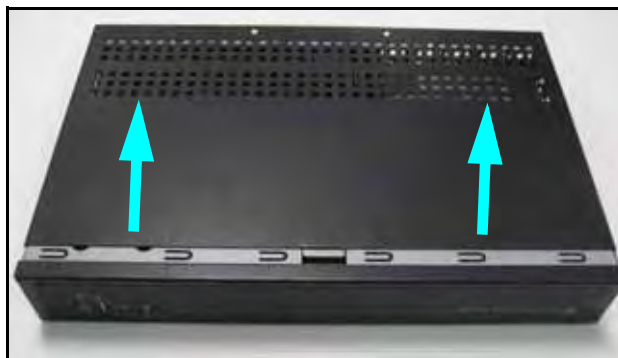
Figure 27.0 Slide cover away from front panel.

Figure 27.3 Carefully remove the HDD from housing.

Replacing the Hard Drive

To replace the hard drive:

1. Firmly connect the power and data cables to the replacement SATA hard drive—each cable can only connect in one way.

2. Carefully place the hard drive in the housing: insert towards the front panel, lower the drive, then slide toward the rear panel.

   NOTE: Make sure not to damage any of the cables when placing the hard drive in the housing.

   NOTE: Make sure no cables are caught beneath the drive.

3. With your hand supporting the hard drive, turn the housing upside down: replace the four mounting screws on the bottom of the housing.

4. Turn the housing right side up. Replace the cover, making sure to slide the cover toward the front panel until flush.

5. Replace the screws on the top panel (x2) and side panels (x2).

6. Reconnect all cameras and cables. Re-mount the unit the back of your monitor if desired.

7. Power on the system. If you have installed a new hard drive, you must format the drive before using the system.

   NOTE: The system will detect the hard drive a few seconds after powering on the system. The system will prompt you if the hard drive is not detected.

Figure 27.4 Connect the power and data cables.

Figure 27.5 Insert the drive carefully

Figure 27.6 Replace the mounting screws

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. From the Main Menu, click . The Record menu opens.
2. Click **Format HDD**.
3. Click **Yes** to format the hard disk or click **No** to cancel.

Figure 27.7 Confirm formatting

Please allow a few moments for formatting to take place and the system to reset.

APPENDIX G: CONNECTING AUDIO

You can listen to, and record live audio on the system one channel at a time.
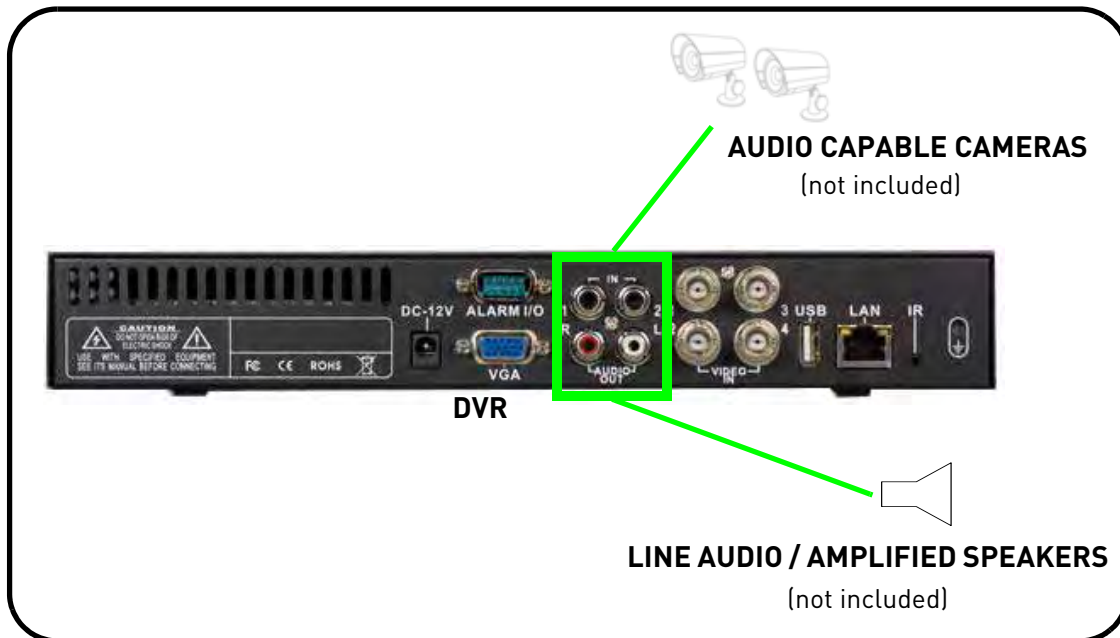
To connect audio:

1. Connect RCA audio cables from an audio capable camera(s) to the **AUDIO IN 1 / 2** ports on the rear panel.
2. Connect RCA audio out cables to the AUDIO OUT ports on the rear panel.

    NOTE: The audio-out ports are two separate *mono* channels, *not* stereo left and right.

3. From the system Main Menu, click .
4. Click **Audio**, and then click under each camera and select either **O** to enable audio or **X** to disable audio.

    NOTE: Audio is only available on channels 1 and 2.

APPENDIX H: PLAYING SAVED VIDEO

View your saved backup video files using QuickTime Player.

To playback MOV files:

1. On your PC, open the folder where you saved the MOV file (by default, C:\). By default, converted files use the following naming convention: `bv3.mov`

Figure 28.0 QuickTime Player main window

2. Double-click the file to open it in QuickTime Player.

For more details on backup files, see "Backup" on page 31.

APPENDIX I: TAKING SCREENSHOTS

ATTENTION: *8/16-channel models only.*

If your system has 8 or 16 channels, you can take screenshots (screen captures) of the main display of your system. You can take a screenshot at any time: during live viewing, search, and playback, or in any system menu. Screenshots are useful if you need to provide a still image of your security footage to the authorities.

> **NOTE:** A USB flash drive must be connected and formatted to the system in order to take screenshots.

To take a screenshot:

1. Connect a USB flash drive (not included) to the USB port on the front panel of the system. Format the USB flash drive if you have not already done so. For more details, see "Formatting the USB Drive" on page 31.

2. If you want to capture a point in live viewing or playback, select the display view for the screenshot: single, quad, or split-screen.

3. Click . The screenshot will appear in the centre of the main display, followed by the file name. Screenshots are saved to the *Picture folder* on the USB flash drive.
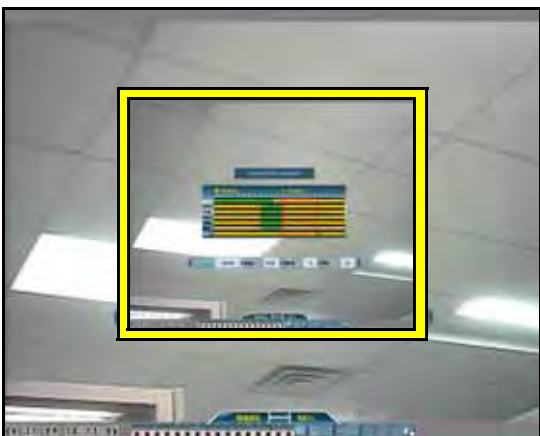
Figure 29.0 Screenshot being taken on the system

> **NOTE:** Screenshots are saved as JPEG files with the following naming convention: `KMMDD00x.jpg`

Filename	Definition
K	System file marker (all screen caps begin with *K*)
MM	Month
DD	Day
x	Numeral (i.e. 001, 002, 003, etc.)

Using Screenshots

Once you have taken screenshots, you need to connect the USB flash drive to a PC to view, print, or archive the images.

To use screenshots:

1. Connect the USB flash drive to a USB port on your PC. In the AutoPlay window, select **Open folder to view files**.

    NOTE: If AutoPlay does not start, search your computer for a *Removable Disk*.
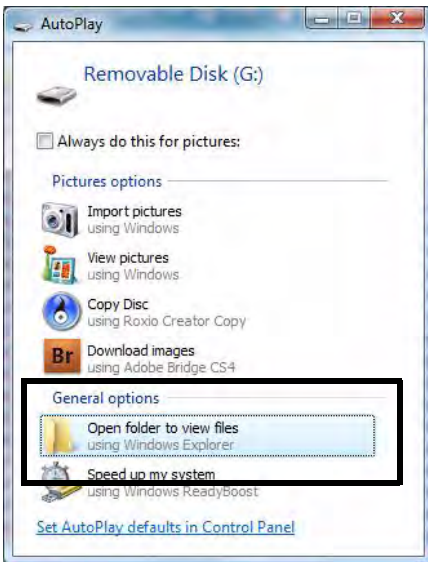
Figure 29.1 AutoPlay screen

2. Double-click the **Picture folder**.
3. Perform one of the following:
    * *View*: Double-click the screenshot to view it in an imaging program, such as Windows Picture Viewer or Adobe$^{®}$ Photoshop$^{™}$
    * *Archive*: Copy the images to a folder on your computer
    * *Print*: Select the image and print it directly from Windows Explorer, or print the screenshot from an imaging 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
• System is not receiving power, or is not powering up	• Cable from power adapter is loose or is unplugged	• Confirm that all cables are connected correctly • Confirm that the power adapter is securely connected to the back of the unit

	• Cables are connected, but system is not receiving sufficient power	• Confirm that the system is powered on (LED indicators on the front should be ON)
		• 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
		• Confirm that there is power at the outlet:
		    • Connecting the power cable to another outlet
		    • Test the outlet with another plugged device (such as an electric calculator or phone charger)

• Remote control is not detected by the system	• Battery in the remote control is drained	• Install a fresh CR2025 battery in the remote control
	• There are no batteries in the remote control	
• Hard drive is not detected by the system	• Hard drive cables are loose or not properly connected	• Remove the housing and check that hard drive cables are firmly connected
	• There is no hard drive in the system	• Open the housing and install a 3.5" SATA hard drive
Hard drive is full (0%) and the unit is no longer recording	• Overwrite is not enabled	• From the Main Menu, select Record>Record Mode and select ⟳ .This enables the system to continuously record by overwriting data once the hard drive is full

Troubleshooting (cont'd.)

Error	Possible Causes	Solutions
Mouse not detected by system	• Mouse cable is not firmly connected to the system	• Firmly connect the mouse cable to the USB port on the rear panel.
	• Mouse is not connected to the system	
	• System needs to be reset	• Power off the system (disconnect power cable). Firmly connect a USB mouse to the USB port on the rear panel of the system. Reconnect the power cable to the DC 12V port on the rear panel.
• There is no picture on selected channels / camera picture is not being displayed	• Camera cables are loose or have become disconnected	• Check the camera video cable and connections • Disconnect and reconnect the cable at the system and at the camera • Try moving the camera to another channel or use another cable
• The image on the DVR appears, but does not have sound	• Audio cables are loose or have been disconnected	• Check the AUDIO connections to the DVR
	• Audio channels are disabled in the system menu	• Check the Configurations: Main Menu>Record>Audio
	• Volume on external speakers (not included) is low or off	• Increase volume on external speakers (not included)
New camera titles do not appear on the system (8/16-channel *only*)	• New camera titles have not been correctly saved on the system	• Log in to DVR Netviewer in Internet Explorer • Click Setup and then click the Title tab • If you saved your old settings, click Load File; for new settings, enter the new camera titles and click Save file to save the settings to your PC • Disconnect and then reconnect the power cable from the rear panel of the system to reset and implement the new camera title settings
	• Camera display on the system is set to numerals	• Check the Configurations: Main Menu>Camera>Camera Title Type
I am not receiving email notifications	• Email notification is disabled	• Log in to DVR Netviewer in Internet Explorer and click Setup; click the Mail tab; under SMTP Status, select On
	• If using the default setting, you have not entered your Lorex DDNS user name and password	• In the SMTP User field, enter your Lorex DDNS user name; in the SMTP Password field, enter your Lorex DDNS password (you must first register for Lorex DDNS to use email notification at the default setting)
	• Default setting is disabled, but you have not entered your own SMTP information	• 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

Cette garantie a préséance sur toutes les autres garanties, incluant la garantie en qualité loyale et marchande et les aptitudes visant toute autre obligation ou responsabilité de la part de Lorex, et par les présentes, Lorex n'autorise aucune personne ni entité à assumer pour elle nulle autre responsabilité en rapport avec la vente de ce produit. Lorex ne sera pas tenue responsable, en aucune circonstance, des dommages-intérêts directs ou indirects survenant de l'utilisation du produit ou suite au mauvais fonctionnement ou à l'absence de fonctionnement dudit produit, ainsi que pour tout délai dans l'exécution de cette garantie suite à des circonstances hors du contrôle de Lorex.

Lorex ne garantit d'aucune manière l'apparence extérieure du produit, ni les pièces ou accessoires incluant, mais ne s'y limitant pas, le boîtier, les pièces du boîtier, les boutons, etc., ainsi que le déballage, l'installation, l'enlèvement et la réinstallation du produit après une réparation.

Lorex ne garantit pas et ne fait aucune revendication en ce qui a trait au potentiel, à la capacité ou l'efficacité de prévenir, réduire ou d'une façon quelconque, d'influer sur les dommages à la propriété ou sur les blessures corporelles. Lorex ne sera pas tenue responsable des blessures corporelles, dommages à la propriété personnelle, perte ni au vol se rapportant de près ou de loin au produit ou son usage dans un cadre malveillant, qu'il soit physique ou mental. Lorex n'autorise aucunement les représentants, détaillants ou grossistes, à faire des revendications ou des énoncés de la part de Lorex, tant par voie verbale et ces énoncés n'influent d'aucune manière sur les clauses de cette garantie.

La seule responsabilité de Lorex, selon les termes de cette garantie, qu'ils soient tacites ou explicites, se limite à une réparation, un remplacement ou un remboursement, selon les clauses décrites dans les présentes. Ces recours constituent les seuls auxquels a droit l'acheteur pour les bris des clauses de la garantie. Lorex ne sera pas responsable des dommages-intérêts spéciaux, directs ou indirects, qui résulteraient d'un bris des clauses de cette garantie ou de toute autre convention législative, incluant mais ne s'y limitant pas, les pertes de profits, pannes de courant immobilisant des équipements, la valeur ajoutée des biens incorporés, les dommages effectués au produit ou à la propriété ou les coûts reliés à leur recouvrement, remplacement, reproduction d'un programme ou des données stockées dans un système contenant le disque CD-ROM du produit ou le logiciel qui accompagne celui-ci.

L'acheteur peut bénéficier de certains droits provinciaux ou fédéraux additionnels et toute clause de cette garantie qui soit prohibée par de telles lois sera jugée nulle et sans effet mais les autres clauses demeureront en vigueur.

Lorex ne garantit pas que ce logiciel fonctionnera conjointement avec tout autre logiciel ou suite logicielle, moins que cela ne soit indiqué. Lorex ne sera pas tenue responsable des caractéristiques ni des fonctions du matériel ou des logiciels d'un tiers pouvant entrer en conflit avec le fonctionnement du logiciel ci-inclus.

Toutes les garanties tacites ou explicites se limitent à la durée de la garantie limitée. Aucune garantie ne sera applicable après cette période de temps. Certains états ou provinces ne permettent pas de restrictions en ce qui a trait aux termes d'une garantie tacite, ni d'exclusions aux dommages-intérêts directs ou indirects et il se peut que ces restrictions ne s'appliquent pas à vous. Cette garantie donne à l'acheteur original des droits spécifiques et il se peut que d'autres droits, variant d'un état ou d'une province à l'autre, puissent lui être conférés.

Obtention du service

Si l'acheteur a besoin de service pour son produit, selon les termes de cette garantie limitée, il doit fournir à Lorex une copie de la facture d'achat affichant clairement la date et l'endroit où le produit a été acheté. Sans cette preuve d'achat, Lorex ne sera pas dans l'obligation de remplir ses obligations envers l'acheteur. Si vous retournez le produit et/ou le disque CD-ROM à Lorex, vous devez assumer le risque que ceux-ci soient endommagés ou perdus au cours de l'expédition. Vous devez emballer le produit dans sa boîte originale ou un emballage adéquat et vous devez défrayer les coûts d'expédition à l'une des adresses mentionnées ci-dessous.

Pour bénéficier du service sous garantie, vous devez suivre les étapes ci-dessous :

1. Emballez le produit dans une boîte solide et remplie de matériau d'expédition.
   i) Si l'appareil a été acheté aux États-Unis, suivez ces étapes-ci :
   a. Veuillez contacter notre département de service à la clientèle pour obtenir un numéro d'autorisation pour le retour.
   b. Retournez le produit à : Lorex Customer Service
      2375 Hadley Rd, Plainfield, IN 46168
   ii) Si l'appareil a été acheté au Canada, suivez ces étapes-ci :
   a. Veuillez contacter notre département de service à la clientèle pour obtenir un numéro d'autorisation pour le retour.
   b. Retournez le produit à : Lorex Customer Service
      300 Alden Road, Markham, ON L3R 4C1
   iii) Si l'unité a été achetée dans l'Europe veuillez visiter : www.lorexinternational.com pour les instructions de retour.

COMPOSEZ LA LIGNE D'ASSISTANCE SANS FRAIS AUS CONOMMATEURS:
L'Amérique du nord: 1-888-42-LOREX (1-888-425-6739)
Local : 905-940-5355
International : 800-42-LOREX 0 (800-425-67390)
www.lorexcctv.com

GARANTÍA LIMITADA DEL PRODUCTO LOREX

Lorex garantiza, sólo al comprador original al por menor (el "Comprador") que este artículo (el "Producto"), si se usa e instala debidamente, y — si hay lugar - el CD-ROM en el que se proporciona el software asociado, está libre de defectos de fabricación en materiales y mano de obra, sujeto a que el Producto sea usado en condiciones normales y que sea instalado y usado estrictamente de acuerdo con las instrucciones contenidas.

Esta garantía será para los siguientes periodos de garantía (el "Período de Garantía"), a partir de la fecha en que el Comprador adquiera el Producto al por menor en la condición de no haber sido usado previamente.

Repuestos y Mano de Obra: 1 año *(Las piezas garantizadas no incluyen bombillas, LEDs y baterías)*

Las obligaciones de Lorex bajo esta garantía estarán limitadas a:

• la reparación o el reemplazo del producto por medio de hardware y/o software (a opción de Lorex).
• el reemplazo de cualquier parte garantizada que Lorex determine que está defectuosa en el Producto o CD-ROM o, por decisión única de Lorex, al reemplazo del Producto que Lorex encuentre defectuoso.
• Si a Lorex no le es posible reparar o reemplazar el Producto o CD-ROM, se devolverá el valor vigente en ese momento del Producto o CD-ROM.

Se garantizará al Comprador cualquier pieza de repuesto provista por Lorex en conexión con esta garantía por un periodo igual a la parte no vencida del Período de Garantía del Producto.

Exclusiones de la garantía

Esta garantía no se aplica a las bombillas, LEDs y baterías suministradas con el producto o que formen parte del mismo.

Esta garantía quedará nula si se han usado accesorios que no son Lorex en el Producto o en relación con el mismo o si se hace alguna modificación o reparación al Producto en algún taller que no sea un local de servicio autorizado por Lorex.

Esta garantía no se aplica a defectos o daños resultantes del uso del producto en condiciones diferentes a las normales (incluyendo condiciones atmosféricas o de humedad normales) o por la instalación o uso del Producto en forma distinta a seguir estrictamente las instrucciones contenidas en el Manual del Propietario del Producto.

Exclusiones de la garantía

Esta garantía no se aplica a las bombillas, LEDs y baterías suministradas con el producto o que formen parte del mismo.

Esta garantía quedará nula si se han usado accesorios que no son Lorex en el Producto o en relación con el mismo o si se hace alguna modificación o reparación al Producto en algún taller que no sea un local de servicio autorizado por Lorex.

Esta garantía no se aplica a defectos o daños resultantes del uso del producto en condiciones diferentes a las normales (incluyendo condiciones atmosféricas o de humedad normales) o por la instalación o uso del Producto en forma distinta a seguir estrictamente las instrucciones contenidas en el Manual del Propietario del Producto.

Esta garantía no se aplica a defectos o daños al Producto causados por (i) uso negligente del Producto, (ii) mal uso, abuso, negligencia, alteración, reparación o instalación incorrecta del Producto, (iii) cortocircuitos o corrientes eléctricas transitorias, (iv) uso por el Comprador que no esté de acuerdo con la instalación del producto, (v) uso de piezas de repuesto no suplidas por Lorex (vi) inadecuado mantenimiento del Producto, o (vii) accidente, incendio, inundación u otros accidentes naturales.

Esta garantía no cubre el rendimiento o funcionalidad de ningún software de computadora incluido en el paquete con el Producto. Esta garantía sólo cubre defectos en el material de CD-ROM, tal como roturas o defectos en el CD-ROM que sea leído por la unidad de CD-ROM de su computadora personal. Lorex no garantiza que el software provisto con el Producto funcione sin interrupción o que de otra forma esté libre de anomalías, errores o "bugs". Lorex no ofrece ninguna garantía con respecto a algún software provisto con el equipo a menos que específicamente se establezca de otra forma en un acuerdo de licencia que acompañe a dicho software.

Esta garantía no cubre ningún costo relativo a la remoción o reemplazo de algún Producto, CD-ROM, o software instalado en su computadora.

Esta garantía no cubre ninguna alteración ni daño a algún otro software que pueda ser instalado o pueda quedar instalado en el sistema del usuario como resultado de la instalación del software provisto.

Lorex se reserva el derecho de hacer cambios en el diseño o hacer adiciones o mejoras a sus productos sin incurrir en ninguna obligación de modificar algún producto que ya haya sido fabricado.

Lorex tratará en lo posible de proporcionar actualizaciones y arreglos a su software por medio de su página en la red.

Esta garantía es el reemplazo de otras garantías, expresas o implícitas, y Lorex no asume ni autoriza a ninguna persona a asumir por ella ninguna obligación en relación con la venta o servicio del producto. En ningún caso Lorex será responsable por ningún daño o perjuicio especial o consecuente resultante del uso del Producto o de su mal funcionamiento o incapacidad de funcionar, o por cualquier demora en la atención de esta garantía debida a causas fuera de su control.

Esta garantía no se aplicará a la apariencia o artículos accesorios incluyendo, sin estar limitado a ellos, gabinetes, piezas de gabinetes, perillas, etc., y el desembalaje, instalación, configuración, o remoción y reinstalación del producto después de ser reparado.

Lorex no hace ninguna de cada declaración ni garantía de ninguna clase con respecto al potencial, capacidad o eficacia del Producto para evitar, minimizar o en alguna forma afectar a los daños o lesiones personales o a la propiedad. Lorex no es responsable por ningún daño personal, siniestro o robo relacionado con el Producto o a su uso para cualquier daño, sea físico o mental relacionado con el mismo. Cualquier afirmación o declaración, sea escrita o verbal, hecha por vendedores, minoristas o distribuidores en sentido contrario no es autorizada por Lorex y no afecta esta disposición de esta garantía.

La responsabilidad de Lorex según ésta o cualquier otra garantía, implícita o explícita, está limitada a la reparación, reemplazo o reembolso, como se establece anteriormente. Estas compensaciones son el único y exclusivo remedio por cualquier incumplimiento de garantía. Lorex no es responsable por daños y perjuicios directos, especiales, incidentes, o consecuentes resultantes de algún incumplimiento de garantía o bajo cualquier otra teoría legal, incluyendo pero sin estar limitada a pérdida de utilidades, plusvalía, daños o reemplazo de equipos y propiedad y cualquier costo de recuperar, reprogramar o reproducir cualquier programa o datos almacenados o usados con un sistema que contenga el CD-ROM del Producto o el software que lo acompaña.

Lorex no garantiza que el software operará con ningún otro software excepto con el que se indica. Lorex no puede ser responsable de las características de hardware o software de terceras personas que puedan afectar la operación del software incluido.

El comprador puede tener otros derechos de acuerdo con las leyes federales, provinciales o estatales y cuando toda esta garantía o parte de la misma sea prohibida por dichas leyes, será considerada nula, pero el resto de la garantía permanecerá vigente.

Todas las garantías expresadas e implícitas están limitadas en duración al período de garantía limitada. Ninguna garantía se aplicará después de dicho período. Algunos estados no permiten limitación a la duración de una garantía implícita, de modo que esta limitación puede no serle de aplicación. Algunos estados no permiten la exclusión o limitación de daños y perjuicios incidentes o consecuentes, por lo que la garantía anterior puede no serle de aplicación. Esta garantía limitada le otorga derechos legales específicos y usted puede también tener otros derechos que varía de un estado a otro.

Como obtener servicio

Con el fin de obtener servicio, por favor asegúrese de registrar haber registrado su producto en nuestra página web www.lorexcctv.com en la sección de registro de garantía. Si el Producto necesitase servicio bajo esta garantía, el Comprador debe hacer llegar a Lorex una copia del recibo o factura de compra, con su fecha respectiva, sin lo cual Lorex no estará obligada a cumplir con ninguna de sus obligaciones bajo esta garantía. Si devuelve el Producto y/o el CD-ROM a Lorex, debe usted asumir el riesgo de daño o pérdida durante el envío. Debe usar el envase original o equivalente y debe pagar el flete.

Para hacer un reclamo bajo esta garantía, proceda con los siguientes pasos.

1. Empaque el Producto en una caja robusta bien acolchada.
   i). Si la unidad fue comprada en Estados Unidos proceda en la siguiente forma:
   a. Para devoluciones por favor contacte nuestro departamento de servicio para obtener un número de autorización.
   b. Devuelva la unidad a: Lorex Customer Service
      2375 Hadley Rd, Plainfield, IN 46168
   ii). Si la unidad fue comprada en Canadá proceda en la siguiente forma:
   a. Para devoluciones por favor contacte nuestro departamento de servicio para obtener un número de autorización.
   b. Devuelva la unidad a: Lorex Customer Service
      300 Alden Road, Markham, Ont. L3R 4C1
   iii) Si la unidad fue adquirida en Europa y desea devolver el producto por favor visite:
      www.lorexinternational.com para obtener instrucciones.

NÚMERO GRATUITO DE SERVICIO A CLIENTES:
Norteamérica: 1-888-42-LOREX (1-888-425-6739)
Internacional: 800-42-LOREX 0 (800-425-67390)
Local : 905-940-5355

WWW.lorexcctv.com

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. 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 in the Product or, in Lorex's sole discretion, the replacement of the Product found be 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 un expired 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 does not apply to defects or damages arising by use of the Product in other than normal (including normal atmospheric, moisture and humidity) conditions or by installation or use of the Product other than in strict accordance with the instructions contained in the Product's Owner'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 usage 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 assumes 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 effect 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 on-line (www.lorexcctv.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.
2.
a.   i).   If the unit was purchased in the United States proceed as follows:
       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

a.   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 for return instructions.

              TOLL FREE CUSTOMER SUPPORT
              North America: 1-888-42-LOREX (1-888-425-6739)
              Local: 905-940-5355
              International: 800-42-LOREX 0 (800-425-67390)
              www.lorexcctv.com

Always use discretion when installing video and/or audio surveillance equipment especially when there is perceived privacy. Inquire 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.

GARANTIE LIMITÉE DES PRODUITS LOREX

Lorex garantit à l'acheteur original (ci-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 correctement et - s'il y a lieu - utilisé conformément aux instructions ci-incluses, et le disque CD-ROM qui comporte le logiciel, seront libres de tout défaut de fabrication, tant dans les pièces que la main-d'oeuvre, 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'oeuvre :   *1 année (les pièces couvertes n'incluent pas 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.lorexcctv.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 taux d'humidité 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 insouciante 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 brisé ou comportant un défaut qui l'empêcherait d'être lu adéquatement par le lecteur de disque 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'entente de la licence incluse avec le produit. Cette garantie ne couvre pas les frais se rapportant à l'enlèvement 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'apporter 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 la on permanente sur le système de l'utilisateur suite 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.lorexcctv.com or call 1-888-42-LOREX (1-888-425-6739)

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