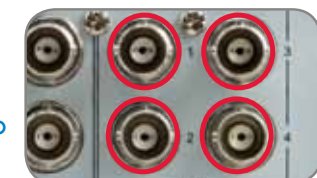




Connecting Cameras (not included)

- 1 Connect BNC cameras to the BNC ports (**VIDEO INPUT**) on the rear panel.

NOTE: Test the cameras prior to selecting a permanent mounting location by temporarily connecting the cameras and cables to your DVR.



NOTE: the four channel model is shown

Connecting the USB Mouse

- 2 Connect the USB mouse to one of the USB ports on the back panel of the DVR.



Connecting a Monitor

The ECO2 features multiple options for connecting to a monitor. For the absolute best picture quality, it is recommended that you connect to a monitor with an HDMI input.

- 3a Connect an HDMI cable from your TV or monitor to the HDMI port on the rear panel of the DVR.



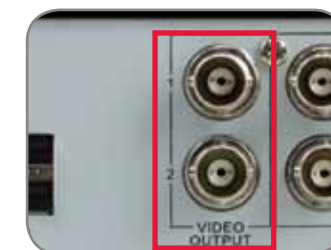
OR

- 3b Connect a VGA cable (not included) from your monitor or TV to the VGA port on the rear panel of the DVR.



OR

- 3c From one of the **VIDEO OUTPUT** ports connect a BNC terminated cable (not included) to a TV or CCTV monitor.



Connecting the Ethernet Cable

- 4 Connect one end of the Ethernet cable to an available LAN port of your router (not included) and the other end to the DVR's LAN port.



Powering ON the DVR

- 5 Connect the power cable to the DC 12V port on the rear panel and the power cord into an electrical outlet. To power on the DVR, turn the ON/OFF switch to the ON position. 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.

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



Setting the Date & Time

- 6 1. Move the mouse cursor to the bottom of the screen to open the menu bar and select **MAIN MENU**.
2. Click **SYSTEM**.
3. Configure the date and press **APPLY** to save your settings. Click **APPLY**. To finish, press **OK**.



NOTE: A pop-up key pad will open. When you have selected the desired date, press the button to confirm.

It is important to set the correct time to assure accurate time stamps on video recordings.

Managing Passwords

- 7 By default, passwords are disabled on the system. You do not need to enter a password when accessing the Menu Bar or Main Menu. However, you may be asked for a password to access certain functions.



NOTE: By default, the username is **admin** and password is **000000**.

NOTE: For security purposes, it is highly recommended to enable passwords on the system using the Password Menu. Please refer to the instruction manual for more information.



Using the Main Menu

- 1 Right-click anywhere on-screen to open the Sub-Menu and select **MAIN MENU** (mouse only), or press the **SEL** button on the remote control or the PTZ button on the system front panel of the DVR.



1. Display
2. Search
3. Alarm
4. System
5. Record
6. Network
7. Device
8. Advanced

Using a Mouse (Recommended)

- 2 1: Left-button: Click to select a menu option; during live viewing in split-screen, double-click on a channel to view the selected channel in full-screen.; double-click the channel again to return to split-screen view.
2: Right-button: Click to open the Menu Bar or to exit from a menu.
3: Scroll-wheel: No function.



Other Control Options

- 3 The DVR can also be controlled using the front panel buttons and the included remote control. Please refer to the instruction manual for more information on these methods.



Front Panel Buttons



Remote Control

*remote control may not be exactly as shown

You have completed STEPS 1 & 2 successfully. Your DVR is now ready to use. Refer to the owner's manual to learn how to record, playback, search and for all other features available with this DVR.



Retrieve the DVR Information

- 1 This step will teach you how to locally view your system over the LAN (local area network) using your PC.

NOTE: This method only works if your computer is on the same network as the DVR.

To record your IP Address and Mac Address, simply press the button on the front of the DVR.



Record the information in the section below:

IP ADDRESS: _____
MAC ADDRESS: _____
(Required for DDNS registration)

Logging into Lorex Web Client (LOCALLY)

- 2 1. Launch **Internet Explorer**.
NOTE: If using Internet Explorer 9, be sure you do not select 64 bit.
2. In the address bar, enter the **IP address of your DVR** (recorded in the previous step)
NOTE: Enter **http://** followed by the IP address of your DVR (recorded in step 3-1), then a colon followed by the Web Port number i.e. **http://192.168.X.XXX:80**
3. Enter your **user name** and **password**, then click **LOGIN**.
Your default login:
Username is "admin"
Password is left blank
4. You must install the ActiveX® plug-in for DVR Netviewer to function. Click the attention bar and select **Install ActiveX Control**. Lorex Web Client will reset.
5. Log in with your **LAN** user name and password. From the security window, click **Install**.



Live Viewing Using the Web Client (LOCALLY)

- 3 Upon login, the Web Client main screen appears in your browser.



Congratulations! You can now view & playback video on your via your LAN.

ECO2 LH130 Series Digital Video Surveillance Recorder



ECO2



PACKAGE CONTENTS:

- 1 x Digital Video Recorder with pre-installed HDD*
- 1 x USB mouse
- 1 x Power adapter
- 1 x Remote control
- 1 x Ethernet cable
- 1 x HDMI cable (in 8 and 16 channel models only)*
- 1 x Audio harness cable (in 16 channel models only)*
- 1 x Instruction manual
- 1 x Quick start guide
- 1 x CD

* Content may vary by model, including number of channels/port configuration and HDD (hard disk drive) capacity. Check your package for specific content information.

CHECK OUR WEBSITE FOR LATEST DVR SOFTWARE
FIRMWARE UPGRADES, VIDEOS & DOCUMENTATION.
www.lorextechnology.com

ATTENTION:

- This guide refers only to the DVR set-up.
- Monitor and cameras are not included.
- Broadband router and computer are required for local and remote monitoring (not included).

It's all on the Web



* For setup of Instant Mobile Viewing refer to your Instruction Manual.

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STEP 4

REMOTE INSTALLATION GUIDE
Time: 30 Minutes Hardware: PC Skills: Intermediate

STEP 4

Continued

STEP 4

Continued

STEP 4

Continued

STEP 4

Continued

1 Auto Port Forward Wizard

NOTE: You must be on the same network as the DVR when setting up the DDNS.

The Lorex Auto Port Forwarding Wizard is a software that automates router port forwarding. You must have the following before you configure the software:

1. Your router's **model** and **version** numbers
2. Your router's **user name** and **password**
3. Your Lorex device's **IP** address (**recorded in Step 3-1**)
4. Your Lorex device's **port** numbers that require port forwarding (80, 9000, 1025)

2 Installation

1. Insert the system's software CD, and follow the instructions to launch the **Lorex Auto Port Forwarding Wizard** software.

NOTE: The Wizard is PC compatible only. Mac users, please go to Step 4-4.

3 1: Populate the Router Database

The Auto Port Forwarding Wizard automatically populates a list of current routers, and detects the number of connected routers.

1. Click the **Next** button after the software detects your router configuration.



2: Enter your Router Settings

1. Under the Router drop-down list, select the model of your router **OR** click the **Search** button to enter the name of your router model.

NOTE: Ensure you select the proper model and firmware number of the router (as it appears on the back of the router) **IMPORTANT:** Default ports that must be port forwarded for remote access:

- Port **80** (Web Port)
- Port **9000** (Media RTSP Streaming Port)
- Port **1025** (Mobile Connectivity Port)

NOTE: Click the **Auto Detect** button if you have a Linksys or Netgear router (this works with most models).

2. Under **Router IP**, click the **Detect Router IP** button. The router's IP populates in the blank field.
3. Under **Username** and **Password**, enter the router's username and password.
4. Under **IP**, enter the IP address of your Lorex device as recorded in Step 3-1.
5. Under **Port**, enter the port number(s) that require forwarding (80, 9000, 1025).
6. Click **Next** to continue.



3: Update the Router Settings

1. Click the **Update Router** button. The program begins updating the router settings. This may take 20 - 30 seconds.
2. Close the **update** window when the update finishes.

NOTE: You may have to manually save your router settings after the software makes the required changes to your router.



4: Test your Connection

1. Click the **Test Your Connection** button. Your system's default browser opens and connects to your Lorex device. **NOTE:** Ensure that Internet Explorer is your system's default internet browser.

4 Optional: Manual Port Forward

If you were unable to port-forward your router automatically using the wizard, you will need to do so manually.

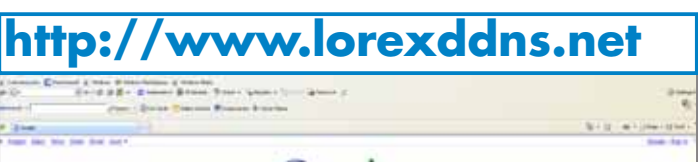
All routers are different. To port forward your router, please refer to your router's user manual.

An example of a port forwarding screen is shown for illustration purposes.

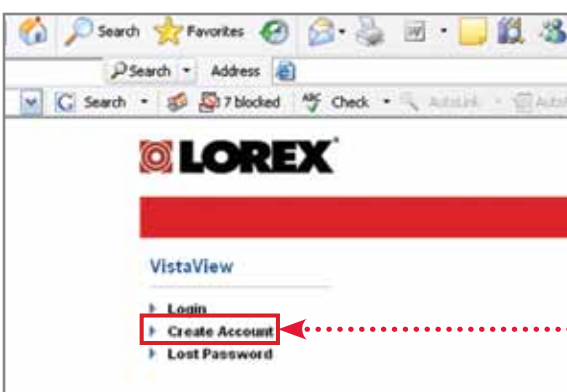
EXAMPLE						
Port Range						
Application	Start	End	Protocol	IP Address		Enable
Web	80	to 80	Both	192.168.1.12		<input checked="" type="checkbox"/>
Media	9000	to 9000	Both	192.168.1.12		<input checked="" type="checkbox"/>
Mobile	1025	to 1025	Both	192.168.1.12		<input checked="" type="checkbox"/>

5 DDNS (Dynamic Domain Name System) Set-up

Open your web browser (Internet Explorer by default) and enter <http://www.lorexddns.net> in the address bar.



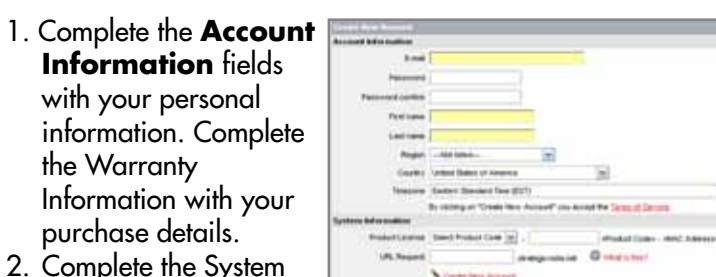
6 Create Account



Create Account

Click the "Create Account" button.

7 Complete New Account Information



1. Complete the **Account Information** fields with your personal information. Complete the Warranty Information with your purchase details.
2. Complete the System Information fields.
3. **Product License (Code):** Select your product model (LH100) from the Product License drop down menu.
4. **MAC Address:** The physical address of your system on your network (as recorded in Step 3-1).
5. **URL Request:** Enter a unique URL name (e.g. **tomsmith**). **NOTE:** URL name should not be more than 15 characters.
6. Click **Create New Account** to create a new account and save your settings.
7. **Your Account** information will be sent to you at the email address you provided earlier.

8 Registration E-mail

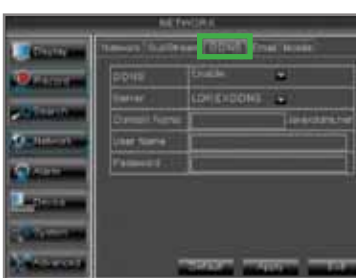
An automated **REGISTRATION CONFIRMATION E-MAIL** will be sent to your email. Print and Save this confirmation. You will need this information to access your System remotely.

Service Provider: dns1.lorexddns.net
Domain Name: tomsmith.lorexddns.net
User ID: tomsmith
Password: (your password)

EXAMPLE

9 Enable DDNS on the DVR

1. Click on **Main Menu** from the menu bar, then click **Network**.
2. Click the **DDNS** tab.
3. Select **Enable** in the **DDNS** drop-down menu.



10 Enter the DDNS Information into the DVR

Enter the following into the **DDNS Setup** menu:

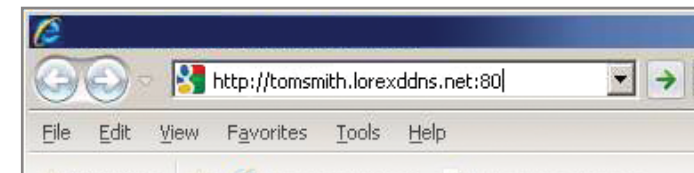
- **Domain Name:** Enter the first portion of your DDNS name. For example, if your DDNS address is tomsmith.lorexddns.net, enter **tomsmith**.
- **User Name:** Enter your DDNS user name that was e-mailed to you after DDNS registration.
- **Password:** Enter your DDNS account password that was e-mailed to you after DDNS registration.



Click the **Apply** button to save your settings.

11 Logging into DVR Web Client (REMOTELY)

To access your DVR remotely, enter the DDNS address that you created earlier into Internet Explorer. The DDNS URL must include **http://**, the name of your DDNS URL, **followed by a colon**, then the **web port number of your DVR**.



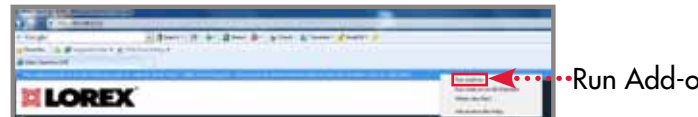
Example of a DDNS address:
<http://tomsmith.lorexddns.net:80>
DDNS name you created Colon Web Port Number

Installing ActiveX Plug-ins

When connecting to your system the first time, you will have to install an ActiveX plug-in for Internet Explorer.

To install ActiveX® plug-ins on Internet Explorer:

1. Log in to your system using Internet Explorer.
2. Click the ActiveX banner and then click **Run Add-on**.



Logging into the System

1. In the User Name field, enter the system's user name (the default name is "admin").
2. In the Password field, enter the system's password (by default, the password is left blank).
3. Select the Open All Channels Preview check box.
4. Click Login to connect to the system.

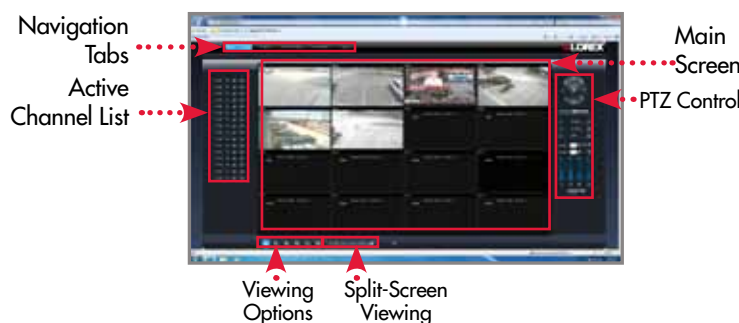


NOTE: For this step, you must enter the SYSTEM's user name and password, NOT the DDNS information from earlier in Step 4.

NOTE: Certain ISP (Internet Service Providers) block port 80. If you are unable to connect, check with your ISP and consult with the user manual for instructions on changing the web port. Make sure to port forward your revised web port.

Lorex Web Client Screen

Upon login, the Web Client main screen appears in your browser.



For a full explanation of all the Web Client buttons and features, please refer to the instruction manual.

Congratulations! You have completed Step 4 successfully. You can now connect over the internet to view and playback video.



For remote connectivity using compatible smartphones and tablets refer to the instruction manual. Make sure to complete Step 4 entirely. To connect remotely using Mac, refer to the instruction manual. Should you require further assistance, LOREX Tech Support is available to assist you. Make sure to register your product prior to contacting support at : www.lorextechnology.com/support