



Instruction Manual

LHWF1006 Series



Instruction Manual

LHWF1006 Series

Thank you for purchasing this product. Lorex Corporation is committed to providing our customers with a high quality, reliable security solution.

This manual refers to the following models:

LHWF1006

For the latest online manual, downloads and product updates, and to learn about our complete line of accessory products, please visit our website at:

lorex.com



WARNING

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER.
NO USER SERVICEABLE 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 product's 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.

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In addition to the careful attention devoted to quality standards in the manufacturing process of your 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 ensure your enjoyment and proper use of the product and accessory equipment. Please read them carefully before operating and using your product.

1.1 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 product in humid or wet places.
4. Keep enough space around the product for ventilation. Slots and openings in the storage cabinet should not be blocked.
5. It is highly recommended to connect the product to a surge protector to protect from damage caused by electrical surges. It is also recommended to connect the product to an uninterruptible power supply (UPS), which has an internal battery that will keep the product running in the event of a power outage.

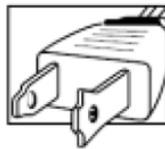


CAUTION

Maintain electrical safety. Power line operated equipment or accessories connected to this product should bear the UL listing mark or 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.

1.2 Installation

1. **Read and Follow Instructions:** All the safety and operating instructions should be read before the 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 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 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 supplied to your location, consult your video dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
 6. **Overloading:** Do not overload wall outlets or 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. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
 8. **Surge Protectors:** It is highly recommended that the product be connected to a surge protector. Doing so will protect the product from damage caused by power surges. Surge protectors should bear the UL listing mark or CSA certification mark.
 9. **Uninterruptible Power Supplies (UPS):** Because this product is designed for continuous, 24/7 operation, it is recommended that you connect the product to an uninterruptible power supply. An uninterruptible power supply has an internal battery that will keep the product running in the event of a power outage. Uninterruptible power supplies should bear the UL listing mark or CSA certification mark.
 10. **Ventilation:** Slots and openings in the case are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided and the product manufacturer's instructions have been followed.
 11. **Attachments:** Do not use attachments unless recommended by the product manufacturer as they may cause a hazard.
 12. **Water and Moisture:** Do not use this 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.
 13. **Heat:** The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.
 14. **Accessories:** Do not place this product on an unstable cart, stand, tripod, or table. The product may fall, causing serious damage to the product. Use this product only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer.



15. **Camera Extension Cables:** Check the rating of your extension cable(s) to verify compliance with your local authority regulations prior to installation.
16. **Mounting:** The cameras provided with this system should be mounted only as instructed in this guide or the instructions that came with your cameras, using the provided mounting brackets.
17. **Camera Installation:** Cameras are not intended for submersion in water. Not all cameras can be installed outdoors. Check your camera environmental rating to confirm if they can be installed outdoors. When installing cameras outdoors, installation in a sheltered area is required.

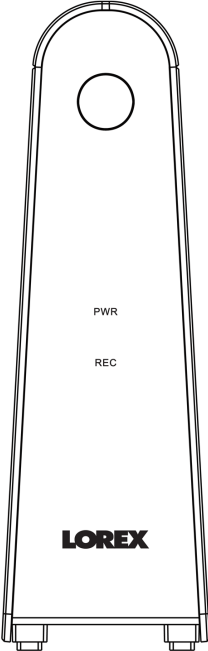
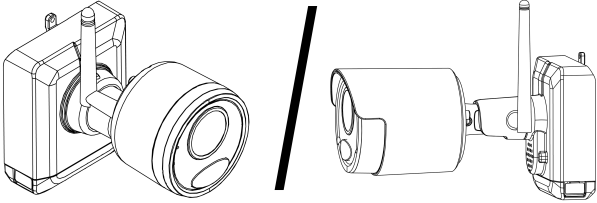
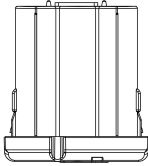
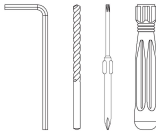
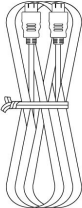
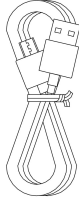
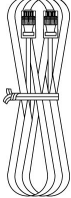
1.3 Service

1. **Servicing:** Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
2. **Conditions Requiring Service:** Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power supply cord or plug is damaged.
 - If liquid has been spilled or objects have fallen into the product.
 - If the product has been exposed to rain or water.
 - If the product has been dropped or the cabinet has been damaged
 - If the 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 product to its normal operation.
 - When the product exhibits a distinct change in performance. This indicates a need for service.
3. **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 product manufacturer can prevent fire, electric shock, or other hazards.
4. **Safety Check:** Upon completion of any service or repairs to this product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the product is in safe operating condition.

1.4 Use

1. **Cleaning:** Unplug the product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
2. **Product and Cart Combination:** When product is installed on a cart, product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
3. **Object and Liquid Entry:** Never push objects of any kind into this 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 product.
4. **Lightning:** For added protection of this 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 product due to lightning and power line surges.

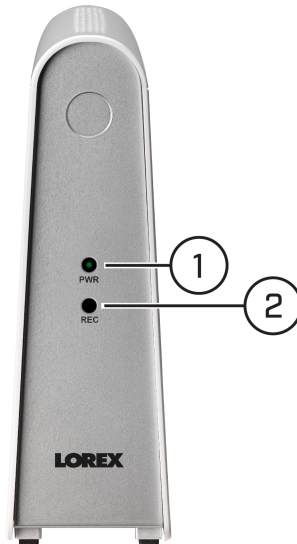
Package Contents

 PWR REC LOREX	 HD Wire-Free Security Cameras	
	 Rechargeable Power Pack*	 Camera Antenna*
	 Toolkit	 Mounting Kit*
 HDMI Cable	 Power Pack Adapter	 Ethernet Cable
 USB Mouse	 Recorder Power Adapter	

* Per camera in multi-camera packs.

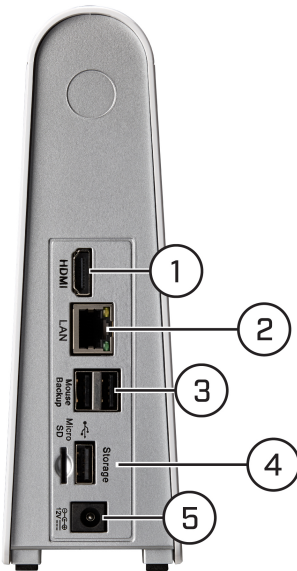
	NOTE
Hard drive size, number of channels, and camera configuration may vary by model. Check your package to confirm that you have received the complete system, including all components shown above.	

3.1 Front Panel



1. **PWR – LED Indicator:** Glows to indicate the system is on.
2. **REC – LED Indicator:** Glows to indicate that the system is recording video.

3.2 Back Panel



1. **HDMI:** Connect the included HDMI cable to view the system interface on an HDMI monitor or TV (1080p output supported).
2. **LAN:** Connect the included Ethernet cable to a router or switch on your network for local and remote connectivity.
3. **USB (Mouse / Backup):** Connect the included mouse or a USB flash drive (not included) for the purposes of backing up recorded video.
4. **microSD / Storage USB:** Connect a microSD card (included with certain configurations) or a USB storage drive (not included) for video storage purposes. For more details on storage options, see 12 *Storage*, page 42.
5. **Power (12V):** Connect the included 12V DC power adapter.

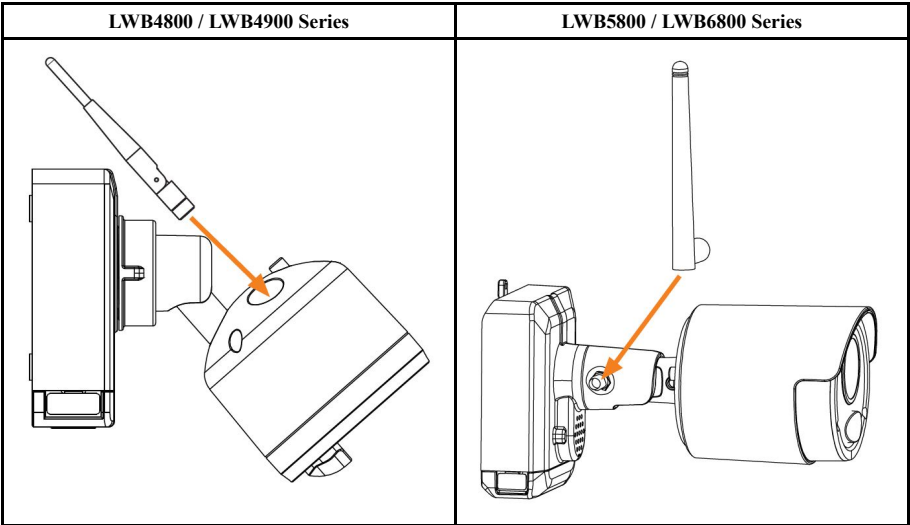
4.1 STEP 1: Initial Setup

Before you begin, you will need to prepare the wire-free cameras and Power Packs.

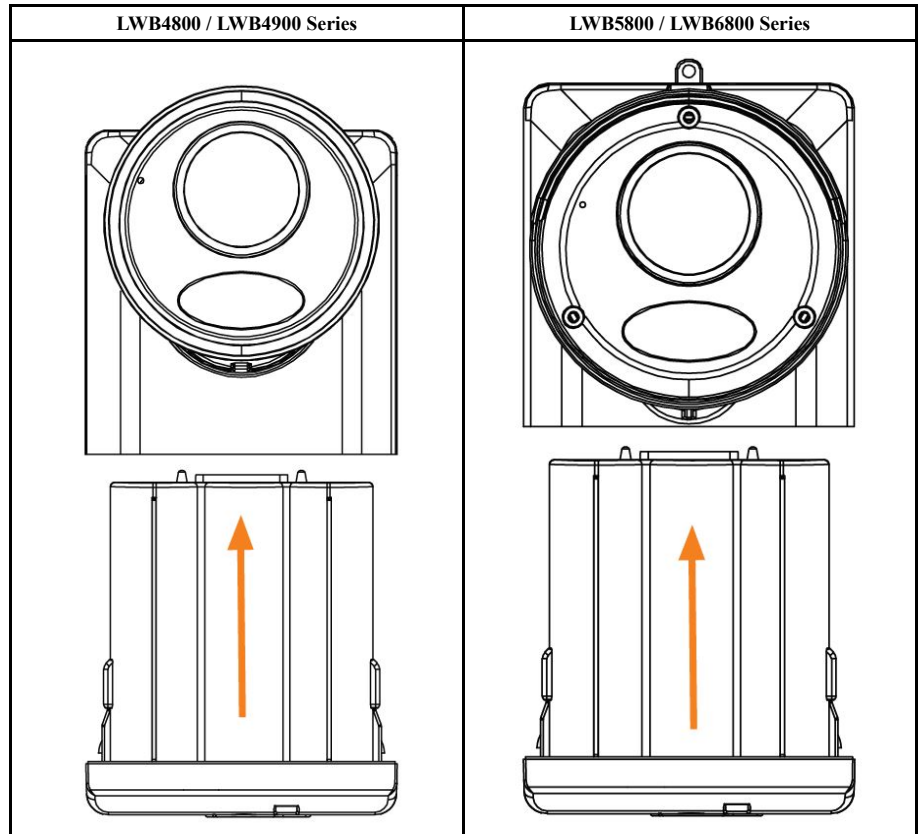
	NOTE
Power packs come fully charged with no need for initial charging.	

To prepare the cameras:

1. Attach an antenna to each camera. For LWB4800 / LWB4900 Series cameras, twist the adjustment ring counterclockwise to reposition each camera as shown below. Twist clockwise to tighten when finished.



2. Peel off the **PLEASE REMOVE** label covering the contacts on each Power Pack. Insert the charged Power Packs into each camera base. Push up until the Power Pack 'clicks' into place.

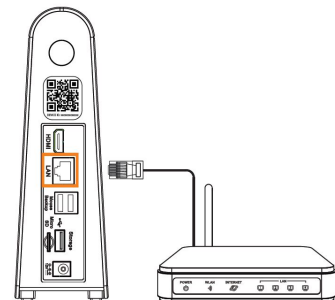


4.2 STEP 2: Setting Up the Recorder

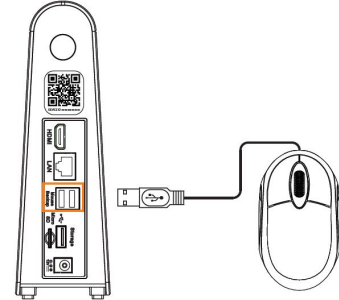
Next, you must set up the recorder.

To set up the recorder:

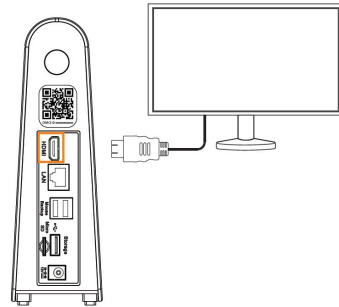
1. Connect the recorder to your router using the included Ethernet cable.



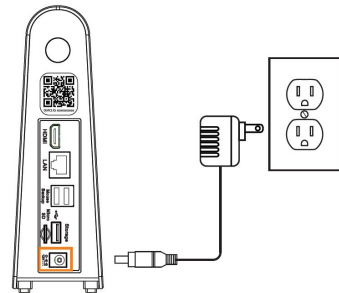
-
2. Connect the included mouse to the **Mouse / Backup** USB port on the recorder.



3. Connect a monitor (not included) to the HDMI port of the recorder using the included HDMI cable.



4. Connect the included power adapter to the recorder. Wait a few minutes for the system to start.



4.3 STEP 3: Connecting with Lorex Cirrus

Connect to your system using the free Lorex Cirrus app for smartphones and tablets (iOS and Android).

To connect with Lorex Cirrus:

1. Download and install the free **Lorex Cirrus** app from the App Store or Google Play Store.
2. Tap the Lorex Cirrus icon () to launch the app.
3. Tap  to open the menu. Tap **Devices**, then tap **Add**.
4. Enter the following:

- A. Ensure **Device ID** is selected.
 - B. Tap to scan the QR code on the back of your recorder using the camera on your mobile device.
 - C. Ensure the **Client Port** reads **35000**.
 - D. Enter the username (default: **admin**).
 - E. Enter the password (default: **00000000**).
 - F. Tap **Save**.
5. Enter a **new, secure 8-15 character password**. This password will be used to connect to your system from now on.
 6. Your cameras will appear on the Live screen of the app. Tap the play button (⏮) to stream live video on channels that are in sleep mode.

**NOTE**

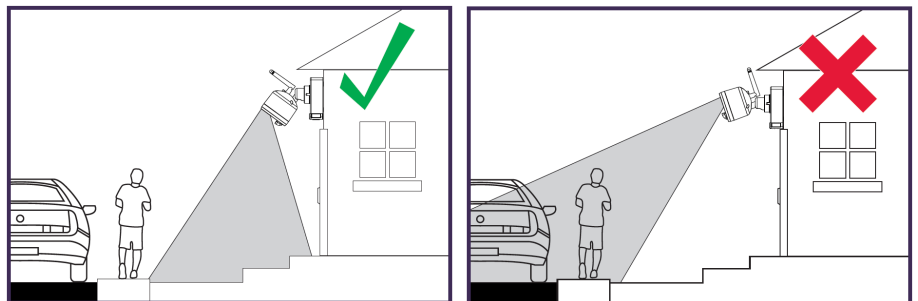
If you do not see video from one or more cameras, ensure you have removed the **PLEASE REMOVE** label from the Power Pack. If the issue persists, see 19 *Troubleshooting*, page 82.

4.4 STEP 4: Installing the Cameras

4.4.1 Installation Tips

Follow the tips below for more accurate motion detection and to optimize battery life:

- **See images below for ideal setup.** It is recommended to place your camera at least 7ft (2.1m) above the ground and angle it slightly downward toward the monitoring area, excluding any busy areas (e.g., sidewalks or roadways).



- Ensure the camera image is free of obstructions (i.e., tree branches).

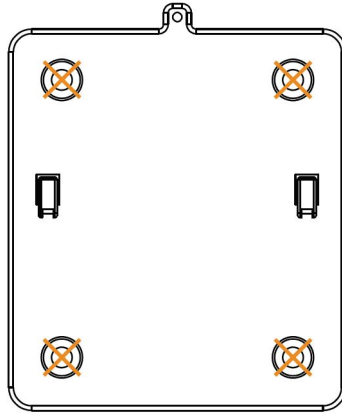
-
- Position the camera no more than 20ft (6.1m) away from the area you wish to monitor.
 - It is recommended that you customize motion settings for each camera on your system. See 4.4.3 *Optimizing Motion Detection*, page 13 for full details.
 - For best performance, position the camera so that objects of interest will move from side-to-side across the camera image, rather than moving towards or away from the camera.
 - Install the camera within range of the wireless receiver (noted in the camera's specifications).
 - This camera is weather resistant for outdoor use (IP66 rated). Installation in a sheltered location is recommended.
 - **Battery life will vary based on temperature, settings and number of events.**

4.4.2 Installing the Cameras

Follow the instructions below to mount the cameras. It is recommended that you refer to the "Installation Tips" section to help you select good mounting locations (see 4.4.1 *Installation Tips*, page 9).

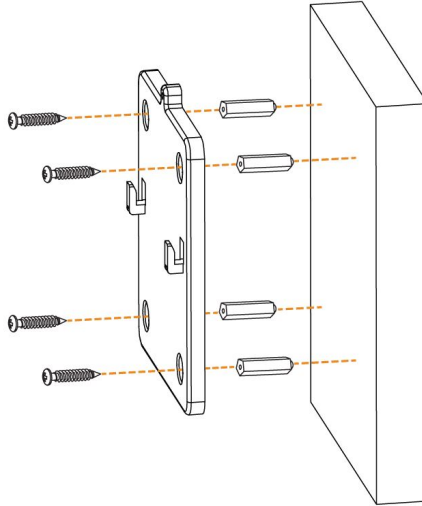
To install your cameras:

1. Set the mounting bracket in the desired mounting position. Mark holes through the mounting bracket (shown as orange X's below).



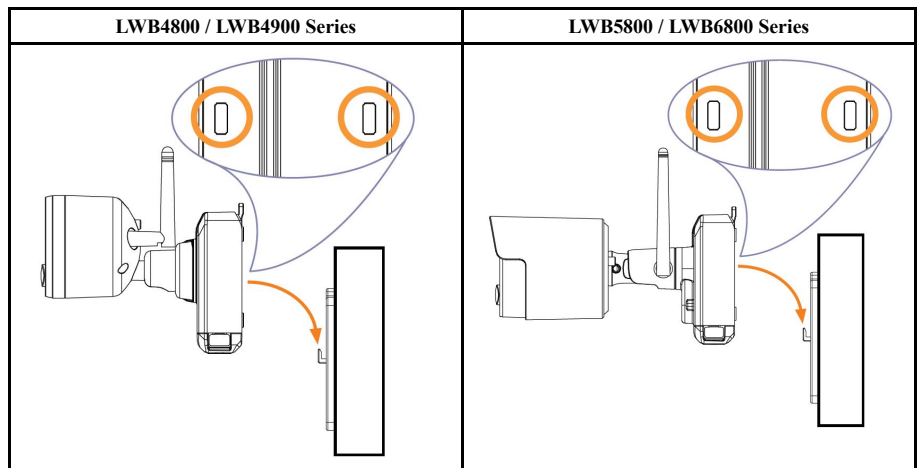
2. Drill holes where marked for the mounting screws using the included drill bit (item C in toolkit).

- Secure the bracket to the mounting surface with the included mounting screws (×4). Make sure all screws are fastened tightly using the included screwdriver (item A+B in toolkit).

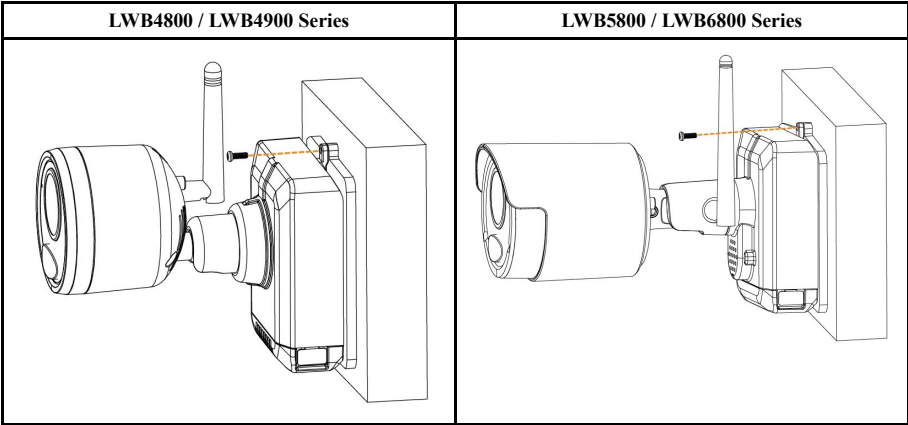
**NOTE**

- Insert the included drywall anchors if you are mounting the camera onto drywall.
- The hole at the top of the mounting bracket will be used in step 5, once the camera is attached to the mounting plate.

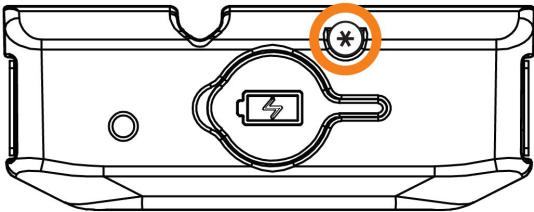
- Lower the camera base onto the mounting bracket so the 2 tabs in the mounting bracket lock into the 2 slots in the camera base.



5. Insert the security screw through the fasteners on the top of the camera base and mounting bracket to secure the camera to the mounting bracket. Tighten using the included screwdriver (item A+B in toolkit).



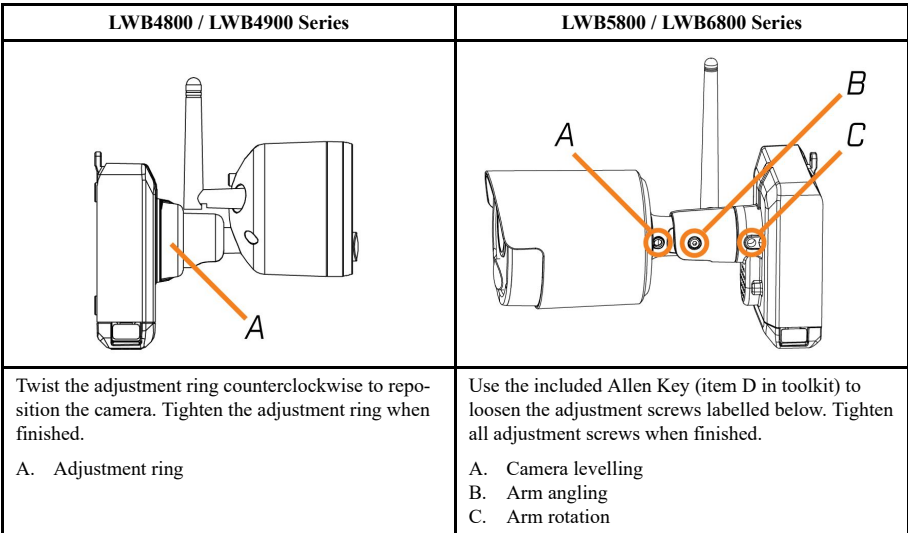
6. **OPTIONAL:** Tighten the pre-installed locking screw on the base of the Power Pack using the included screwdriver (item A+B in toolkit).



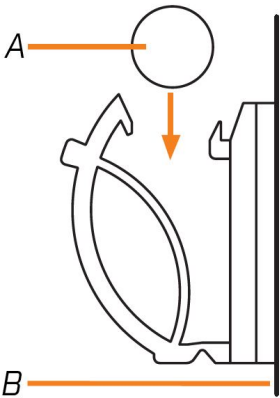
NOTE

You will need to loosen the locking screw to remove the Power Pack in the future.

7. Adjust the angle of the camera:



- 1. Use the included cable clips to complete the installation.



- A. Cable
- B. Mounting surface

4.4.3 Optimizing Motion Detection

Customize motion detection settings to ensure motion events are being recorded and reduce false alarms.

To optimize motion detection:

- 1. Launch the **Lorex Cirrus** app.
- 2. Tap a channel in Live View to select it.
- 3. Tap , then tap **Motion**.
- 4. Configure the following as needed:

	←	Motion	Save
a	Sensitivity	4	
b	Area Selection	>	
c	Distance Setting	>	
d	Buzzer	OFF	

- a. **Sensitivity:** The amount of motion needed to trigger recording (e.g., higher sensitivity requires less motion to trigger recording).
- b. **Area Selection:** Not supported.

-
- c. **Distance Setting:** Configure distance setting for motion detection. While watching the camera’s video on your mobile device, recreate a motion event in front of your camera.
The icon will change from  to  when motion is detected by the camera. Change the distance setting if motion detection is being triggered by unwanted events.

	NOTE
Distance will be affected by temperature.	

- d. **Buzzer:** Set the recorder to sound an alarm when motion is detected.
5. Tap **Save** when finished. Repeat for other cameras on the system.

4.5 Quick Access to System Information

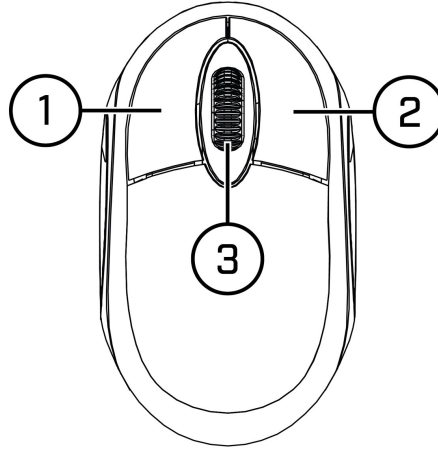
To quickly open a window with system information:

- Click  on the recorder’s Taskbar.

	NOTE
The QR code shown in the System Info screen can be scanned during mobile setup to enter the system’s Device ID.	

The recorder is designed for mouse navigation. Connect the included mouse to one of the **USB** ports on the recorder.

To use the USB mouse:



1. Left Button:

- Click to select menu options.
- During live viewing in split-screen view, double-click on a channel to view it in full-screen. Double-click the channel again to return to split-screen viewing.

2. Right Button:

- During live viewing in split-screen view, click to open the Quick Menu (see 6.2 *Using the Quick Menu*, page 16).
- In menus, click to go back / close menus.

3. Scroll Wheel:

- In menus, scroll to move up / down through the menu content.
- While hovering over the volume control wheel, scroll to turn system volume up / down.



NOTE

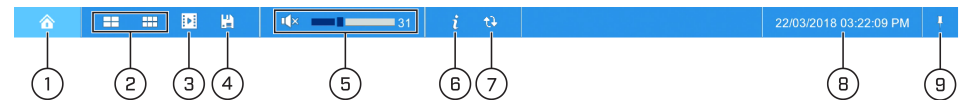
In live view, hover the mouse cursor over the top of the screen to open the Navigation Bar. Move the mouse cursor away from the top of the screen to close the Navigation Bar.

Using the Recorder's On-Screen Display

Use the system's graphical on-screen display to navigate menus and configure options and settings.

6.1 Using the Taskbar

The **Taskbar** along the bottom of the recorder's main display allows you to access the Main Menu and control basic functions of the recorder.



1. **Main Menu:** Opens the Main Menu for browsing. For details on Main Menu functions, see 13 *Using the Main Menu*, page 44.
2. **Viewing Options:** Select how many channels are shown on screen during live viewing.
3. **Playback:** Opens the Playback Menu. This allows you to search for video recordings saved on the recorder's storage. For details on using the Playback menu, see 8 *Playback*, page 25.
4. **Backup:** Opens the Backup Menu. This allows you to back up video recordings saved on the recorder's storage to a USB flash drive (not included). For details on using the Backup menu, see 9 *Search & Backup*, page 28.
5. **Audio Controls:** Use the scroll bar to change system volume. Click  to mute/unmute the system.
6. **System Information:** Displays system information.
7. **Auto Upgrade:** Checks for an available firmware update.
8. **System Date & Time:** Shows the date and time of the system.
9. **Pin / Unpin Taskbar:** Choose to always show the Taskbar on screen () or hide it unless the mouse pointer is near the bottom of the screen ().

6.2 Using the Quick Menu

The **Quick Menu** gives you quick access to functions which can also be accessed using the Taskbar.

To use the Quick Menu:

- Right-click on a camera channel in the live viewing screen.
- The Quick Menu appears:



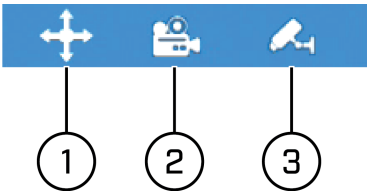
1. **Main Menu:** Open the Main Menu. For details on Main Menu functions, see 13 *Using the Main Menu*, page 44.
2. **Multi View:** Select how many channels appear on the live display at once.
3. **Playback:** Search for and play back recorded video. For details on using Playback, see 8 *Playback*, page 25.
4. **Backup:** Back up recorded video to a USB flash drive (not included). For details on using Backup, see 9 *Search & Backup*, page 28.

6.3 Using the Mini Menu

The **Mini Menu** lets you perform quick functions for a specific channel on the recorder.

To use the Mini Menu:

- Hover the mouse near the top of a channel with a connected camera.
- The Mini Menu opens at the top of the camera’s live display:



1. **Move Mini Menu:** Click-and-drag to move the Mini Menu to a different part of the screen.
2. **Manual Recording:** Click to manually record video from the selected channel. Password entry required.
3. **Pair:** Click to pair a wire-free camera to the selected channel. For more information on pairing, see 11 *Pairing Cameras*, page 39.



NOTE

If a camera is already paired to the selected channel, the new pairing process will override it.

6.4 Using the On-Screen Keypads

The **Full Keypad** is used to input alphanumeric characters, such as in user name or password fields. The **Number Keypad** is used to input numeric characters only, such as in the time or date fields.

To use the Full Keypad:

1. Using the mouse, click on a field where alphanumeric characters are entered, such as the user name and password fields.

- The Full Keypad opens:



- Click  to switch between uppercase and lowercase characters.

**NOTE**

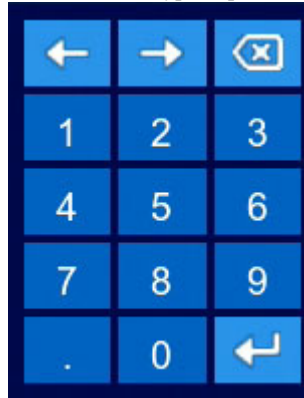
Uppercase entry mode also reveals more special characters on the far-right side of the keyboard.

- Click  /  to move the cursor.
- Click  to backspace / delete characters.
- Click  to confirm what you have entered.
- Right-click to close the Full Keypad.

To use the Number Keypad:

1. Using the mouse, click on a field where numeric characters are entered, such as the date or time fields.

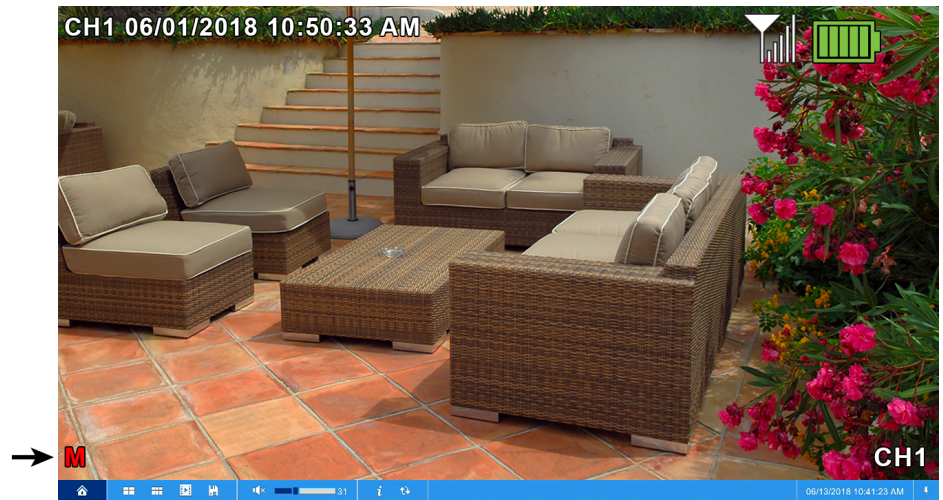
- The Number Keypad opens:



- Click  /  to move the cursor between letters.
- Click  to backspace / delete numbers.
- Click  to confirm what you have entered.
- Right-click to close the Number Keypad.

By default, the system is set to record motion events from all connected cameras. It is recommended that you use the Lorex Cirrus app to optimize camera motion detection regions so that only objects of interest will trigger recording (see 4.4.3 *Optimizing Motion Detection*, page 13 for details). You can also record video from your cameras manually using the recorder interface or the Lorex Cirrus app.

When a camera is recording video, the type of recording is shown with an icon in the bottom-left corner of the camera image.



You may see one of the following icons:

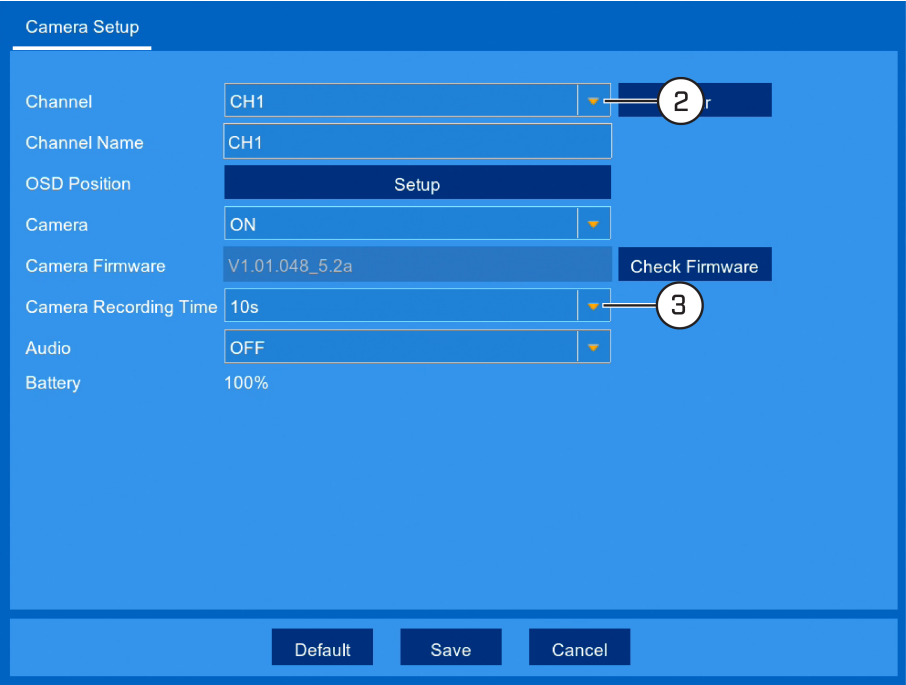
- **M** **Motion Recording:** The system has detected motion and is recording the event.
- **C** **Continuous / Manual Recording:** One of 2 actions may be occurring:
 1. Manual recording has been enabled and the system is currently recording video.
 2. Certain wire-free systems have an option for continuous recording. In order to take advantage of continuous recording:
 - Your recorder must have a hard drive installed – recorders that use microSD card storage do not support continuous recording.
 - Connect any cameras you want to record continuously to a power outlet using a USB power adapter.
 - Change the camera's recording time to **Continuous** (see 7.1 *Recording Time for Motion Detection*, page 20) and set a continuous recording schedule (see 7.4 *Setting a Recording Schedule*, page 23).

7.1 Recording Time for Motion Detection

When a wire-free camera detects motion, the camera will stream live video and record for a set period of time before returning to standby mode. You can choose how long each camera records for when motion is detected.

To configure recording time:

1. From the live viewing screen, click  > **Settings** > **Camera Setup**.



Camera Setup

Channel	CH1	2
Channel Name	CH1	
OSD Position	Setup	
Camera	ON	
Camera Firmware	V1.01.048_5.2a	Check Firmware
Camera Recording Time	10s	3
Audio	OFF	
Battery	100%	

Default Save Cancel

2. Select the channel for the camera you want to configure recording time for.
3. Select a period of time the camera will record video for when motion is detected.



NOTE

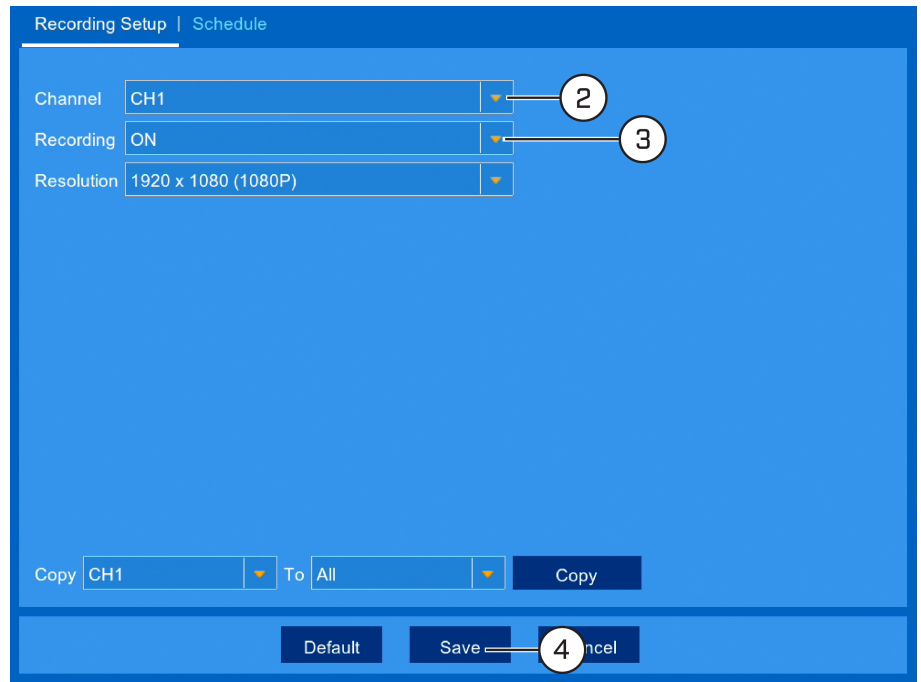
- You should configure motion detection settings to ensure objects of interest are being recorded. For full instructions, see 13.2.10 *Configuring Motion Detection Settings*, page 55.
- Depending on your system, you may have the option to record continuously by setting **Camera Recording Time** to **Continuous**. This option is only available on systems that use a hard drive for storage rather than a microSD card, and only on cameras which have a wired connection to power.

7.2 Configuring Manual Recording

The system will automatically record video when motion is detected by a camera. You can also use **manual recording** to record a video file with a custom start and stop time. By default, manual recording is enabled on all channels.

To enable / disable manual recording:

1. From the live viewing screen, click  > **Settings** > **Recording** > **Recording Setup**.



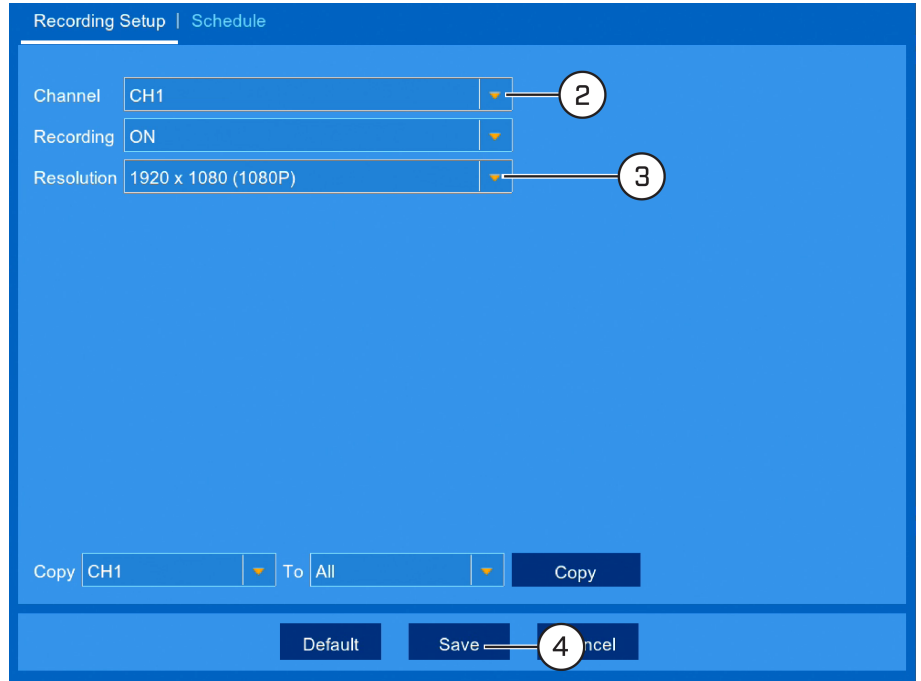
2. Select the channel you want to enable / disable manual recording for.
3. Select **ON** or **OFF** from the dropdown.
4. Click **Save**.
5. **(OPTIONAL)** Use the **Copy** function to copy your settings to another or all connected cameras. See 13.1.1 *Copying Channel Settings to Another Channel*, page 45 for details on using the copy function.

7.3 Changing Recording Resolution

The wire-free cameras are capable of recording at **720p** (1280×720) or **1080p** (1920×1080) video resolution.

To change recording resolution:

1. From the live viewing screen, click  > **Settings** > **Recording** > **Recording Setup**.



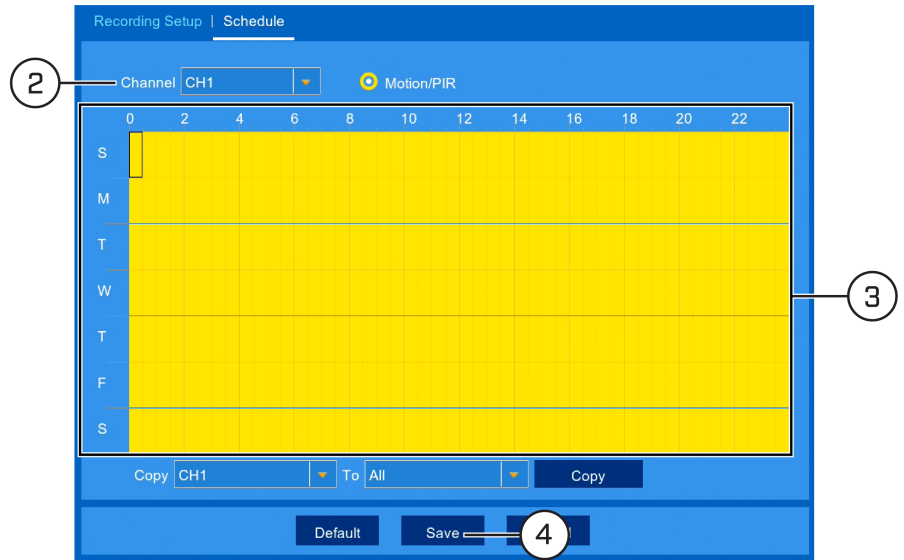
2. Select the channel you would like to edit recording resolution for.
3. Select **1920 × 1080 (1080P)** or **1280 × 720 (720P)**.
4. Click **Save**.

7.4 Setting a Recording Schedule

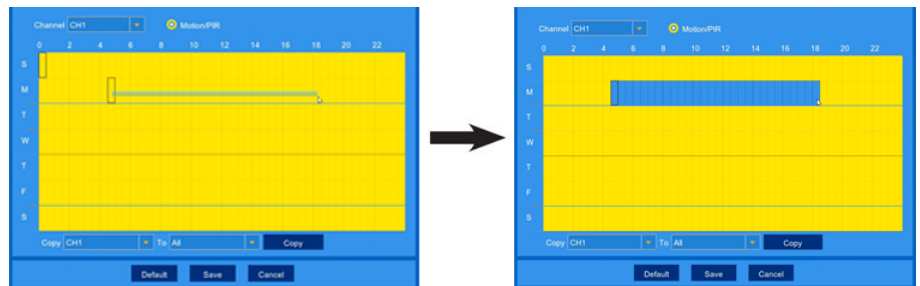
By default, the system is set to record whenever a camera detects motion. You have the option to set a recording schedule so that a particular camera only records at certain times. The recording schedule repeats weekly, and can be configured differently per camera.

To set a recording schedule:

1. From the live viewing screen, click  > **Settings** > **Recording** > **Schedule**.



2. Use the dropdown next to **Channel** to select a channel to set the recording schedule for.
3. Click or click-and-drag over existing bars to remove sections from the recording schedule. For blank areas of the schedule, click or click-and-drag to add sections to the recording schedule.



NOTE

If your system and the selected channel support continuous recording, you will have the option to choose between **Motion** and **Continuous** schedules for each day of the week. Continuous recording will only occur if you set a recording schedule.

4. Click **Save**.
5. **(OPTIONAL)** Use the **Copy** function to copy your settings to another or all connected cameras. See 13.1.1 *Copying Channel Settings to Another Channel*, page 45 for details on using the copy function.

You can view and back up recorded video on the recorder.

To access playback:

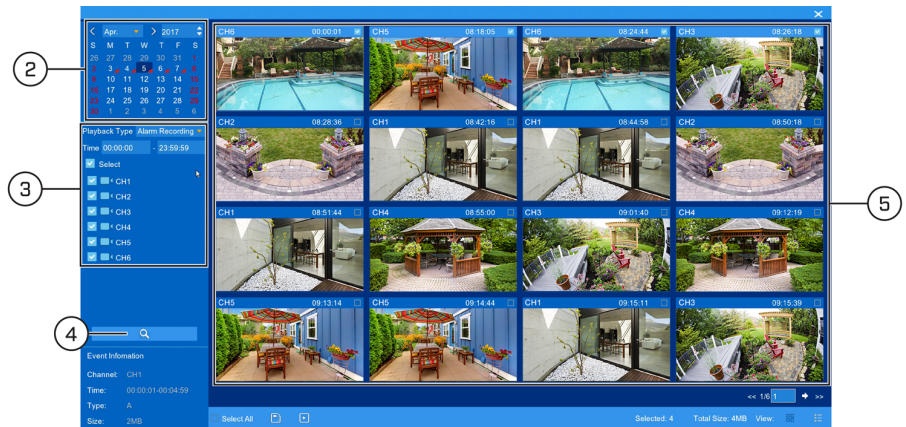
- Click  on the Taskbar.
- OR
- Right-click during live view to open the Quick Menu, then click **Playback**.

8.1 Using Playback

Play back video recordings from a specific date and time.

To search for and play back videos:

- Open the Playback menu:
 - Click  on the Taskbar.
 - OR
 - Right-click during live viewing to open the Quick Menu, then click **Playback**.



- Use the calendar on the left-side of the screen to select the date to search for video recordings from.
- Check off the channels you would like to search for recordings from on the left-side of the screen.
- Click  to search for recordings.
- Recordings that fit your search criteria appear. Double-click an event to begin playback.

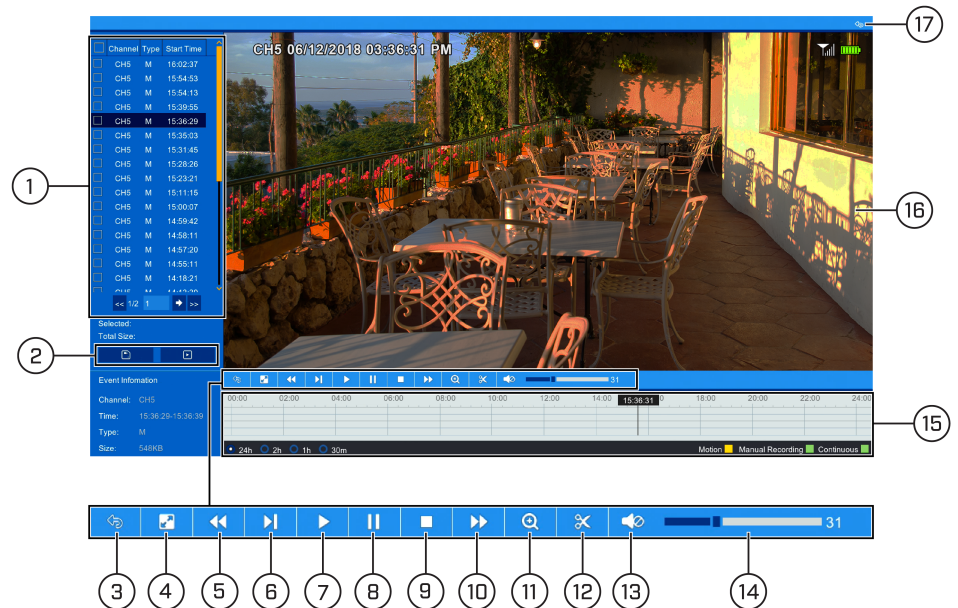


NOTE

Recordings appear as thumbnails by default. Use the viewing buttons in the bottom-right corner to toggle between thumbnail () and list view ()

8.2 Playback Controls

Once you have started playing a video clip, the playback controls appear as shown below.



1. **Event List:** Shows all video clips that fit your original search criteria. Double-click any event to begin playback, or check multiple events to perform a backup.

2. **Backup and Playback Buttons:**

- Click  to play the currently selected video clip.
- Click  to backup one or more clips to a USB flash drive (not included).



NOTE

You must check off video clips in the event list to backup multiple files at once. For more details on performing a backup, see 9 *Search & Backup*, page 28.

3. **Return:** Return to previous screen to perform a new search.

4. **Full Screen**

5. **Rewind**

6. **Slow Play:** Click to slow playback by half-speed. Click repeatedly to play as slow as 1/16 of normal speed.

7. **Play**

8. **Pause**

9. **Stop**

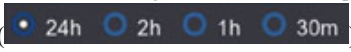
10. **Fast-Forward**

11. **Digital Zoom:** Click , then click-and-drag on a camera image during playback to zoom in on the selected area. Right-click to return to regular playback.

12. **Video Clip:** Quickly save a section of video to a USB flash drive (not included). For full instructions on using the Video Clip, see 9.2.2 *Video Clip Backup*, page 31.

13. **Mute / Unmute**

14. **Volume Bar**

15. **Timeline:** Continuous recordings are shown with colored bars to represent different types of recording (legend shown in the bottom-right corner of the display). Use the timeframe options in the bottom-left corner () to view a smaller or larger time period.
16. **Video Playback Area:** Double-click any channel to view in full screen.
17. **Exit Playback:** Return to live viewing mode.

You can back up video recordings and snapshots to a USB flash drive (not included) connected to the recorder.

The system allows for a few ways to perform a back up. You can use Backup mode, which is helpful for backing up all events during a certain time period. You can also back up video directly from Playback mode, which is helpful if you do not know the time frame you want to back up.

- For instructions on using Backup mode, see 9.1 *Using Backup Mode*, page 28.
- For instructions on backing up video using Playback mode, see 9.2 *Backing Up Videos using Playback Mode*, page 29.

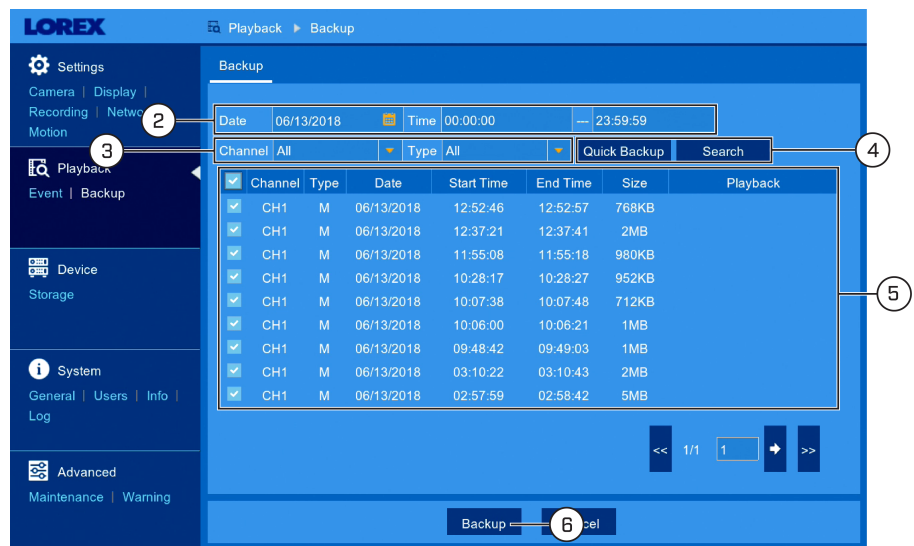
9.1 Using Backup Mode

Use Backup mode to search for available recordings by time period, recording type, and channel. You can then select which files you want to back up to a USB flash drive (not included.)

- To use back up, you must connect a USB flash drive to one of the recorder's USB ports labelled **Mouse / Backup**.

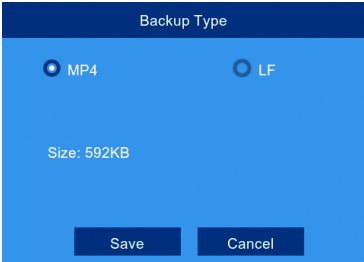
To use Backup mode:

1. Click  on the Taskbar.

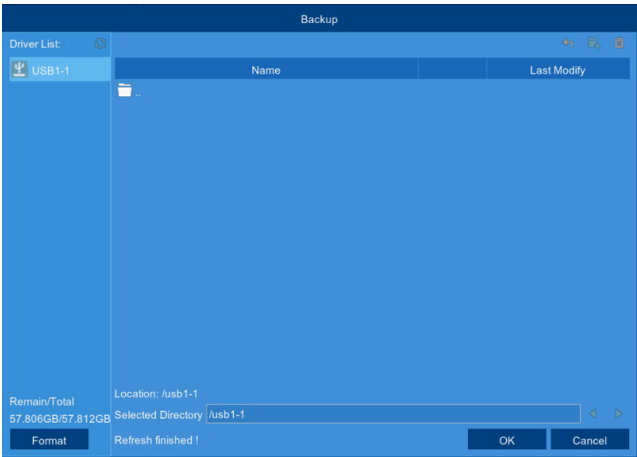


2. Select a date to search for recording on from the on-screen calendar. Enter a start and end time for the search.
3. If needed, select a specific channel and/or type of event to help narrow your search results. If you want to include all channels and event types, select **All**.
4. Click **Search** to display all recordings that match your search criteria, or click **Quick Backup** to back up all recordings that fit your search.
5. If you clicked **Search** in the previous step, check off recordings you want to back up.
6. Click **Backup**.

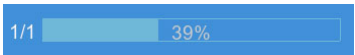
7. Select a file type for your backup files.



8. Click **Save**.
9. The backup drive menu appears (see 9.3 *Drive Menu Controls*, page 33 for an overview of drive menu controls).



- Navigate to the folder you want the backup files to be saved in.
- Click **OK** to begin.
- The progress bar at the bottom of the window shows you the progress of the backup.



NOTE

- For details on viewing your backup files on a PC or Mac computer, see 16 *Viewing Backed Up Video on PC/Mac*, page 72 .

9.2 Backing Up Videos using Playback Mode

You can search for and back up single or multiple video recordings from Playback mode.

- To use back up, you must connect a USB flash drive to one of the recorder’s USB ports labelled **Mouse / Backup**.

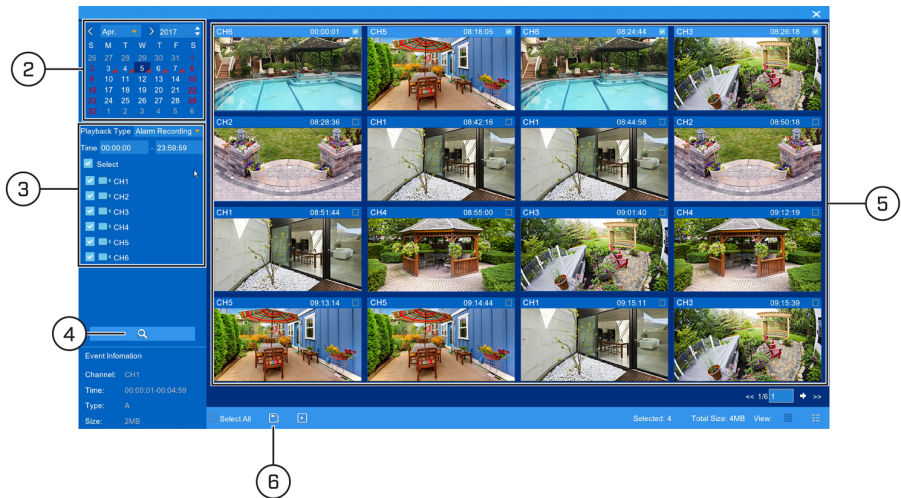
9.2.1 Back Up Entire Recordings

Choose from recordings that appear in your search to back up to the USB flash drive.

To search for and back up videos:

1. Open the Playback menu:

- Click  on the Taskbar.
- OR
- Right-click during live viewing to open the Quick Menu, then click **Playback**.

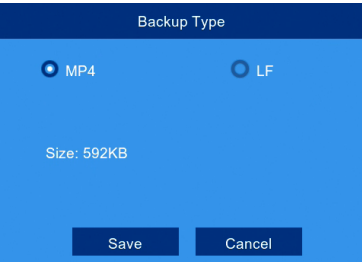


- 2. Use the calendar on the left-side of the screen to select the date to search for video recordings from.
- 3. Check off the channels you would like to search for recordings from on the left-side of the screen.
- 4. Click  to search for recordings.
- 5. Recordings that fit your search criteria appear. Check off any recordings you would like to back up.

 **NOTE**

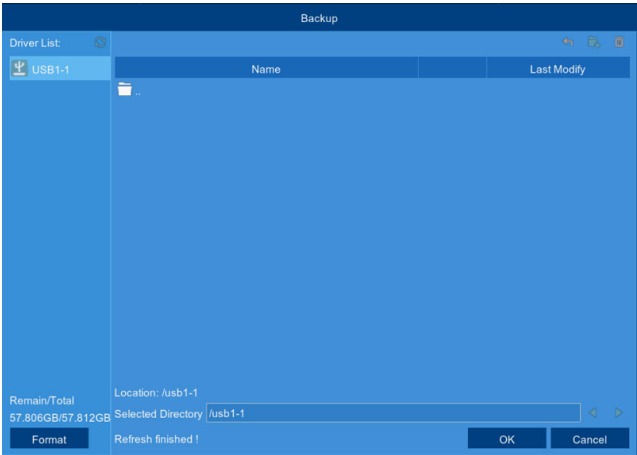
Recordings appear as thumbnails by default. Use the viewing buttons in the bottom-right corner to toggle between thumbnail () and list view ()

- 6. Click  to confirm your backup selection.
- 7. Select a file type for your backup files.

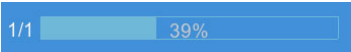


8. Click **Save**.

9. The backup drive menu appears (see 9.3 *Drive Menu Controls*, page 33 for an overview of drive menu controls).



- Navigate to the folder you want the backup files to be saved in.
- Click **OK** to begin.
- The progress bar at the bottom of the window shows you the progress of the backup.



 **NOTE**

- For details on viewing your backup files on a PC or Mac computer, see 16 *Viewing Backed Up Video on PC/Mac*, page 72 .

9.2.2 *Video Clip Backup*

Choose the exact section of video recording you want to back up from Playback mode.

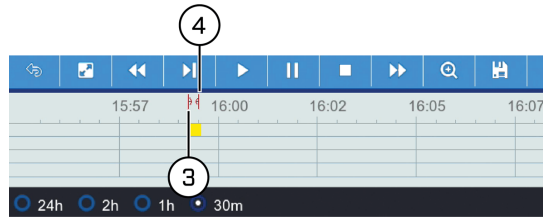
Prerequisites:

- To use back up, you must connect a USB flash drive to one of the recorder’s USB ports labelled **Mouse / Backup**.

To use video clip back up:

1. Open the Playback menu:
 - Click  on the Taskbar.
 - OR**
 - Right-click during live viewing to open the Quick Menu, then click **Playback**.

2. Select a channel you would like to backup a video clip from, and begin playback at the desired start time for the backup file.

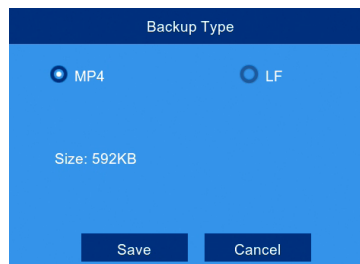


3. Click  to begin the video clip at the current playback time. A red arrow on the timeline indicates your start time.
4. Select an ending time for the backup file:

- Let the video play until the desired end time, then click .
- OR**
- Click the desired end time on the video timeline, then click .

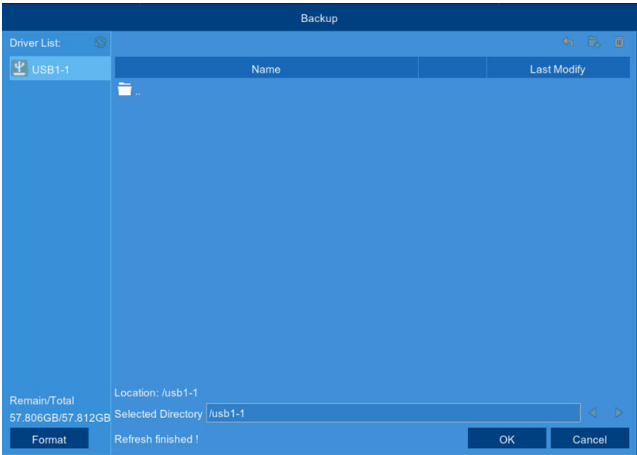
A second red arrow appears on the timeline to show you the full duration of your backup file.

5. Select a file type for your backup files.

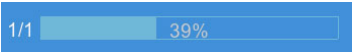


6. Click **Save**.

7. The backup drive menu appears (see 9.3 *Drive Menu Controls*, page 33 for an overview of drive menu controls).



- Navigate to the folder you want the backup files to be saved in.
- Click **OK** to begin.
- The progress bar at the bottom of the window shows you the progress of the backup.

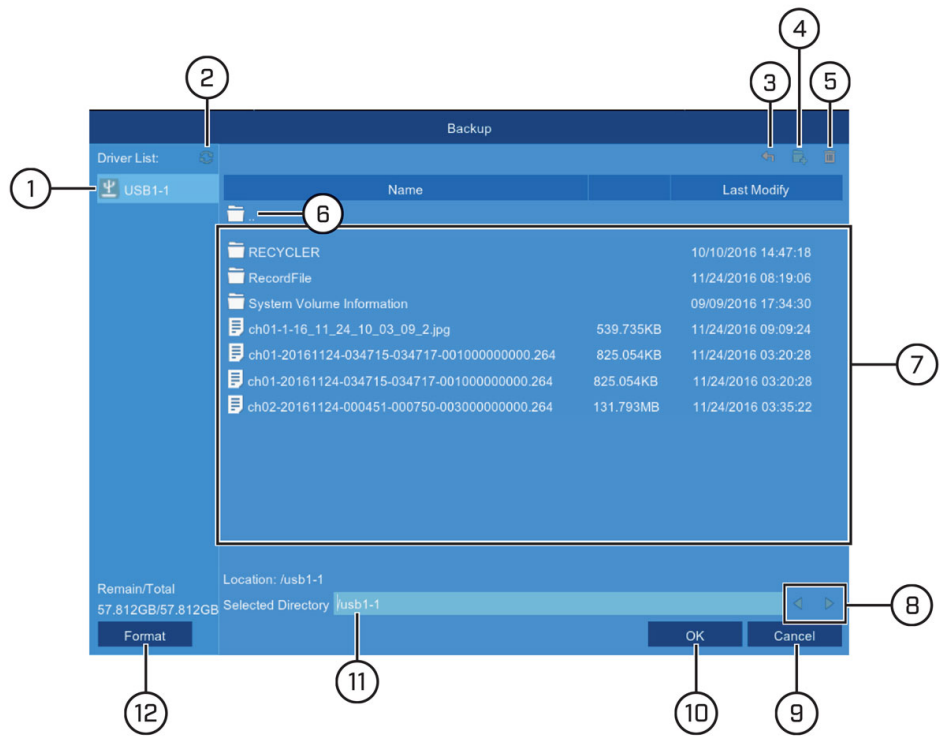


NOTE

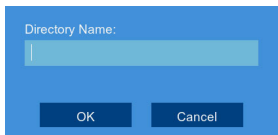
- For details on viewing your backup files on a PC or Mac computer, see 16 *Viewing Backed Up Video on PC/Mac*, page 72 .

9.3 Drive Menu Controls

When you perform a backup, the folder structure of the connected USB flash drive (not included) is shown on screen. Use the on-screen controls to browse through and edit the contents of the drive.



1. **Connected Drives:** USB flash drives (not included) connected to the system are shown here. Click to open.
2. **Refresh Contents**
3. **Up One Level:** Click to navigate to the containing folder for your current location. Clicking in the root folder has no effect.
4. **New Directory:** Click to create a new folder at your current location. Enter the name for the new folder under **Directory Name**, then click **OK**.



5. **Delete:** Delete the selected file or folder.
6. **Up One Level:** Click to navigate to the containing folder for your current location. Clicking in the root folder has no effect.
7. **Browsing Area:** Shows files and folders contained in the selected USB flash drive (not included).
8. **Move Cursor:** Click the arrow keys to move the cursor in the **Selected Directory** field.
9. **Cancel:** Cancel the backup.
10. **OK:** Save backup files to the folder path shown in the **Selected Directory** field.
11. **Selected Directory:** Shows the folder path for the location currently shown in the Browsing Area.

-
12. **Format:** Click to format the currently selected USB drive. When first connecting a USB flash drive (not included) to the system, it is recommended to format the drive so it is ready for use with the recorder.

**CAUTION**

Formatting will erase all data saved to the drive. **This cannot be undone.**

Managing Users, Passwords and Permissions

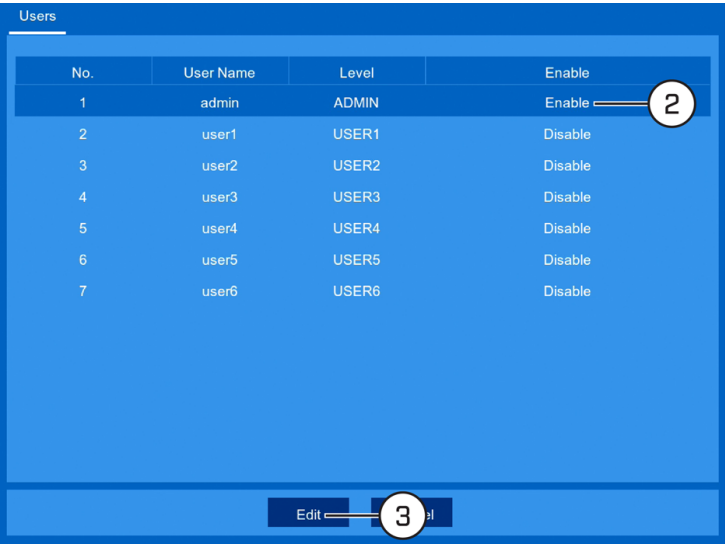
The system supports the following account types:

- **ADMIN — System Administrator:** The administrator has full control of the system, and can change both administrator and user passwords and enable/disable password protection.
- **USER — Normal User:** Users only have access to live viewing, search, playback, and other functions. You may set up multiple user accounts with varying levels of access to the system.

10.1 Changing Passwords

To change the password for the administrator or user accounts:

1. From the live viewing screen, click  > **System** > **Users**.

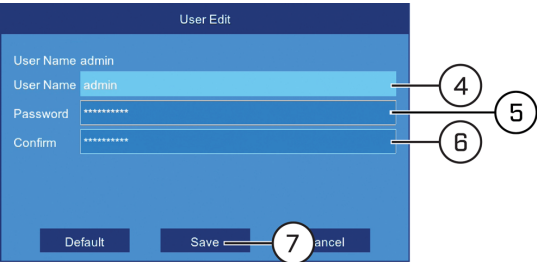


2. Click the account you want to change the password for.

 **NOTE**

For instructions on enabling user accounts, see 10.2 *Adding a New User*, page 37.

3. Click **Edit**.



4. Click the field next to **User Name** to change the user name for the selected account.
5. Click the field next to **Password** to enter a new password.
6. Click the field next to **Confirm** to reenter the password.
7. Click **Save**.

10.2 Adding a New User

To enable a new user account:

- 1. From the live viewing screen, click  > **System > Users**.

Users

No.	User Name	Level	Enable
1	admin	ADMIN	Enable
2	user1	USER1	Disable 
3	user2	USER2	Disable
4	user3	USER3	Disable
5	user4	USER4	Disable
6	user5	USER5	Disable
7	user6	USER6	Disable

 Edit 

- 2. Click one of the user accounts that is currently disabled.
- 3. Click **Edit**.

User Edit

User Name

user1

User Enable

Enable 

User Name

Employee

Password

Confirm

Default

Save 

 Cancel

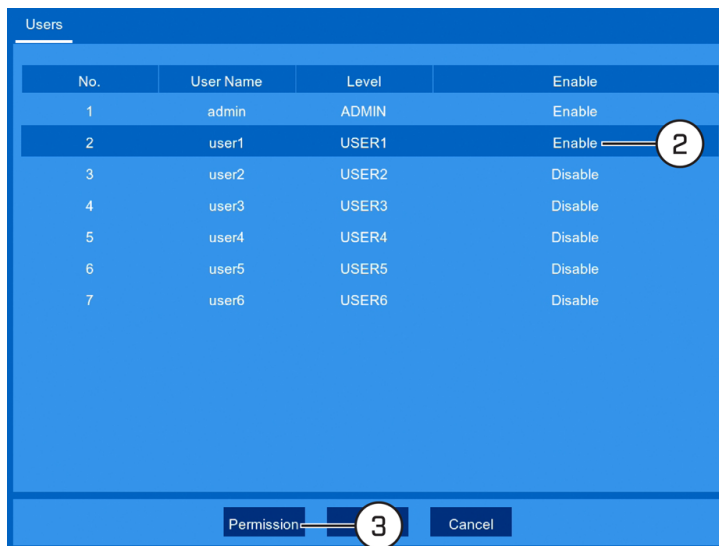
- 4. Select **Enable** from the dropdown next to **User Enable**.
- 5. Click the field next to **User Name** to change the user name for the account.
- 6. Click the field next to **Password** to enter the desired password.
- 7. Click the field next to **Confirm** to reenter the password.
- 8. Click **Save**.

10.3 Setting User Permissions

The administrator account is the only account that has full control of all system functions. You can enable or disable access to certain menus and functions of each user account.

To edit user permissions:

- From the live viewing screen, click  > **System** > **Users**.



No.	User Name	Level	Enable
1	admin	ADMIN	Enable
2	user1	USER1	Enable
3	user2	USER2	Disable
4	user3	USER3	Disable
5	user4	USER4	Disable
6	user5	USER5	Disable
7	user6	USER6	Disable

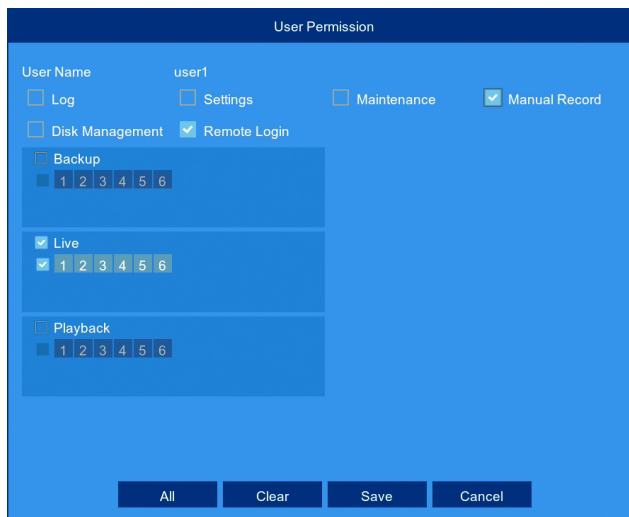
- Click one of the user accounts.



NOTE

For instructions on enabling user accounts, see 10.2 *Adding a New User*.

- Click **Permission**.



User Permission

User Name: user1

☐ Log
 ☐ Settings
 ☐ Maintenance
 ☒ Manual Record

☐ Disk Management
 ☒ Remote Login

Backup

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

Live

☒ 1 ☒ 2 ☒ 3 ☒ 4 ☒ 5 ☒ 6

Playback

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

All Clear Save Cancel

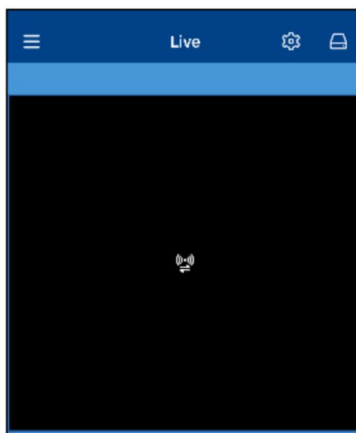
- Edit the user permissions to your preference:
 - Check the boxes next to any system menus or capabilities you would like the user to access.
 - Click **All** to check all boxes.
 - Click **Clear** to check none of the boxes.
- Click **Save**.

Your cameras should be paired to the recorder and ready to use out of the package. If a camera becomes unpaired, or if you have purchased a wire-free add-on camera (max. 6 cameras per system), follow the instructions below.

- To pair cameras to your system using the Lorex Cirrus, see 11.1 *Pairing Cameras with Lorex Cirrus*, page 39.
- To pair cameras to your system using the recorder interface, see 11.2 *Pairing Cameras using the Recorder Interface*, page 40.

11.1 Pairing Cameras with Lorex Cirrus

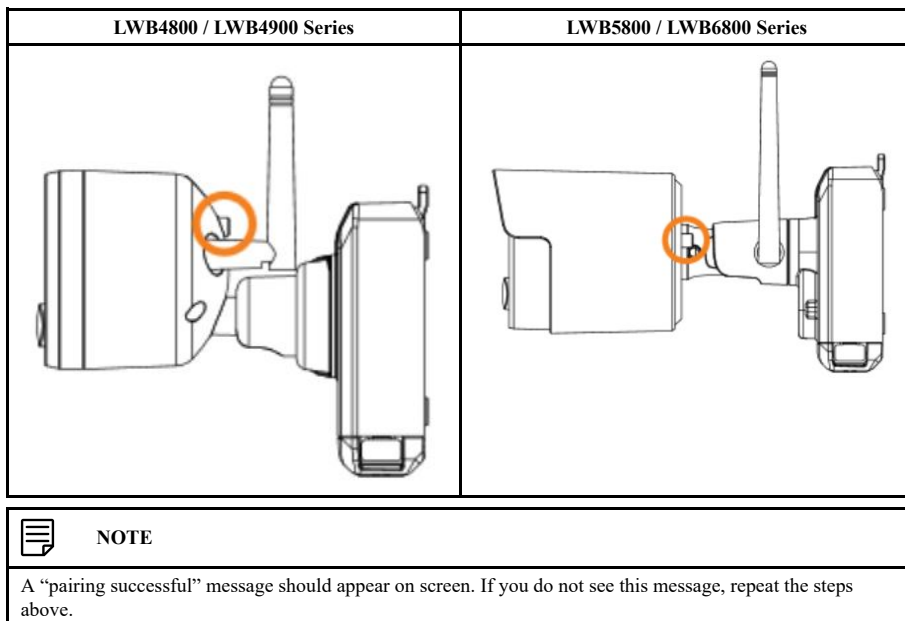
1. From Live view, tap any free channel you would like to pair a camera to (marked with a  icon).



2. Tap **PAIR**. A timer for 30 seconds appears.

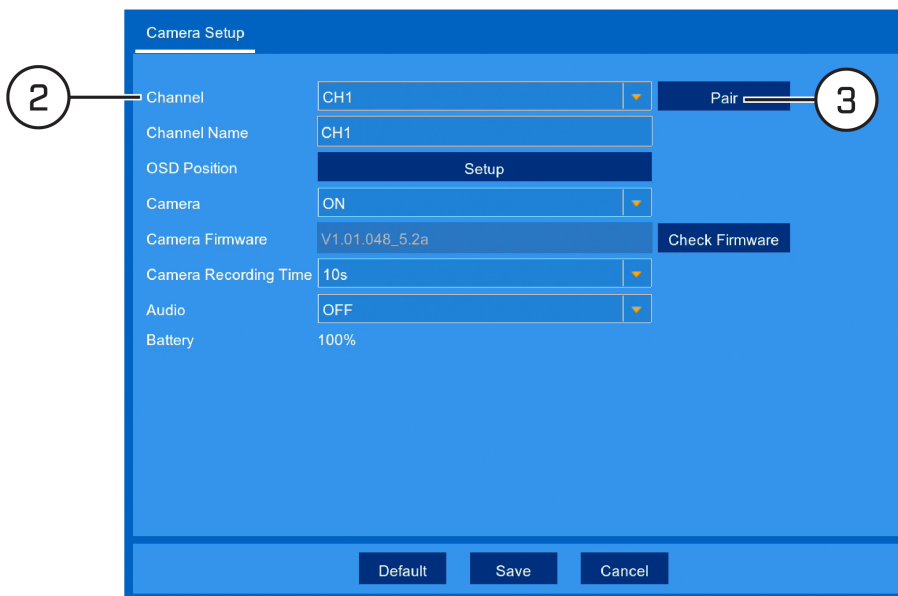


- Press and hold the pair button on the back of the camera for 3 seconds.



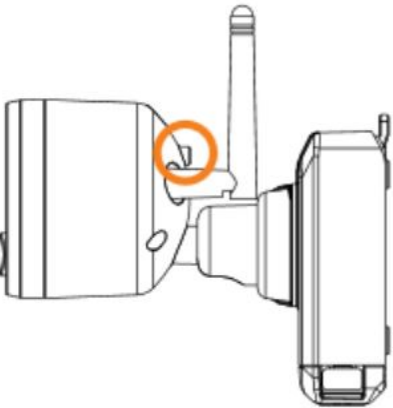
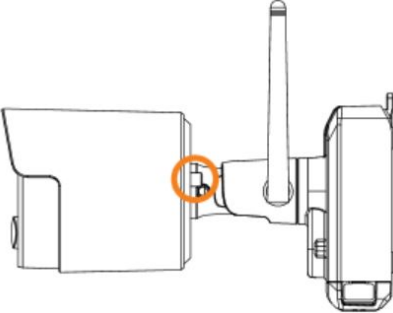
11.2 Pairing Cameras using the Recorder Interface

- From the live viewing screen, click  > **Settings** > **Camera Settings**.



- Select an unoccupied channel to pair the camera to.
- Click **Pair**. A timer for 30 seconds appears.

4. Press and hold the pair button on the back of the camera for 3 seconds.

LWB4800 / LWB4900 Series	LWB5800 / LWB6800 Series
	
 NOTE A “pairing successful” message should appear on screen. If you do not see this message, repeat the steps above.	

Your recorder has multiple storage options for video files. Depending on your system configuration, your recorder may have come with a pre-installed 2.5” hard drive or a pre-inserted microSD card.

You may also connect a USB storage device to the USB port labelled **Storage** on your recorder for redundant storage. This means the system will automatically create a backup of the most recent recordings on the USB drive as well as recording to the primary storage.

 **NOTE**

Units with a pre-inserted microSD card can be upgraded with a new card up to 128GB. Units with a pre-installed hard drive are not user upgradable.

12.1 Configuring Storage Overwrite

By default, your storage device is set to overwrite automatically, meaning that the system deletes the oldest footage when storage is full to make way for new recordings. You can also select a number of days or hours the system should retain data for. For example, if you select 30 days, only recordings more than 30 days old will be overwritten.

To configure overwrite:

1. From the live viewing screen, click  > **Device** > **Storage**.



2. Click to select the storage device you want to configure overwrite settings for.

3. Select an overwrite mode from the dropdown next to **Overwrite**:

- **Auto:** Deletes the oldest saved footage when the hard drive is full (recommended).
- **1–90 Days:** Keeps footage for as long as specified before overwriting. Ensure your hard drive is large enough to retain recordings for as long as you have specified.
- **Off:** No footage will be overwritten.

**CAUTION**

If you turn off overwrite and your hard drive fills up with footage, the system will stop recording.

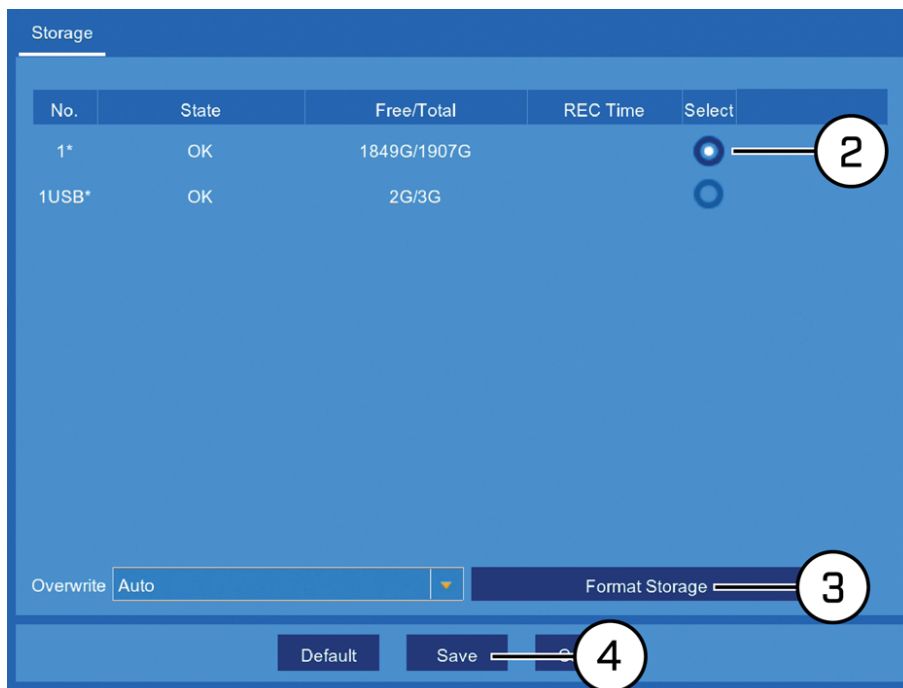
4. Click **Save**.

12.2 Formatting Storage Devices

Formatting deletes all saved files from the selected storage device. It is recommended to format any newly-installed storage device before recording.

To format storage:

1. From the live viewing screen, click  > **Device** > **Storage**.



2. Click to select the storage device you want to format.
3. Click **Format Storage**.
4. Enter your recorder's user name (default: **admin**) and secure password to begin formatting the drive.

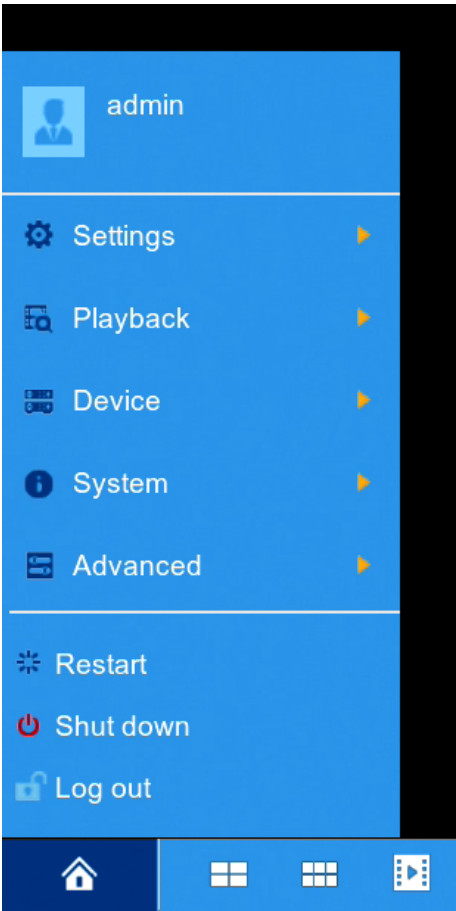
**CAUTION**

Formatting a storage device deletes all saved files. **This step cannot be undone.**

Use the Main Menu to access the full feature set of the recorder.

To open the Main Menu:

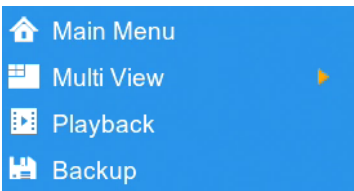
- 1. Click on the Main Menu button () on the Taskbar from the live viewing screen.



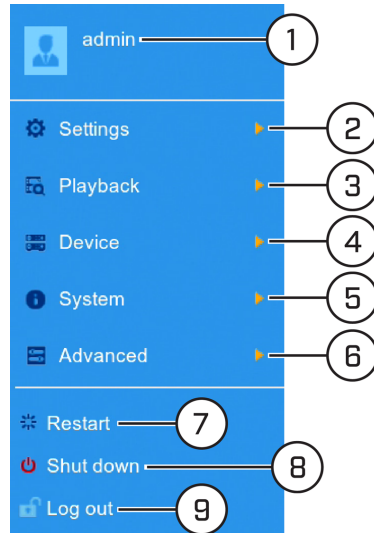
- 2. Hover over one of the options in the menu to browse options in full view. Click to make a selection. If prompted, enter the user name (default: **admin**) and your secure password.

 **NOTE**

You can also access the Main Menu by right-clicking on the live view of any camera to open the Quick Menu, then select **Main Menu**:



13.1 Main Menu Overview



1. **Username:** Displays the name of the user account that you are currently logged into the system with.
2. **Settings:** Configure options for display, recording parameters, network settings and more. See 13.2 *Settings Menu*, page 46 for full instructions on using the Settings menu.
3. **Playback:** Search for and view video recordings and snapshots. See 8 *Playback*, page 25 for full instructions on using the Playback menu.
4. **Device:** Configure HDD recording mode or format HDD. See 12 *Storage*, page 42 for full instructions on using the Device menu.
5. **System:** Configure system date and time, user profiles, and system information including logs. See 13.3 *System Menu*, page 57 for full instructions on using the System menu.
6. **Advanced:** Perform firmware upgrades, restore unit to default settings, configure system warnings and more. See 13.4 *Advanced Menu*, page 65 for full instructions on using the Advanced menu.
7. **Restart:** Restarts the recorder. You must enter the user name (default: **admin**) and your secure password before the unit restarts.
8. **Shut down:** Shuts down the recorder. You must enter the user name (default: **admin**) and your secure password before the unit shuts down.
9. **Log in / Log out:** Log in or log out of the unit. This is useful for switching between users.

13.1.1 Copying Channel Settings to Another Channel

Many parts of the recorder menu allow you to customize settings for only one channel at a time. In these cases, you can use the **Copy** function to copy your settings for one channel to others or all channels of the recorder.

To copy channel settings to another channel:

1. Set your preferences for one channel and click **Save**.
2. Use the dropdown next to **Copy** to select the channel you wish to copy settings from. Use the dropdown next to **To** to select another channel or select **All** to copy to all connected channels, then click **Copy**.



3. Click **Save** to save your settings.

13.2 Settings Menu

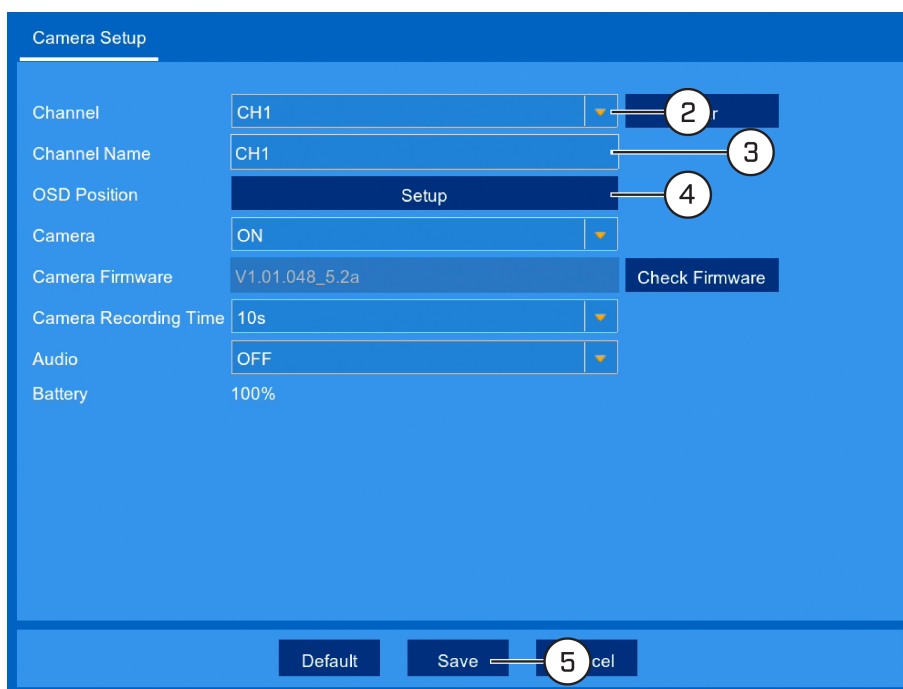
Configure options for display, recording parameters, network settings, and preferences for snapshots and motion detection.

13.2.1 Changing a Camera's On-Screen Display (OSD)

By default, the channel name, date and time are shown overtop of your video recordings.

To change a camera's OSD:

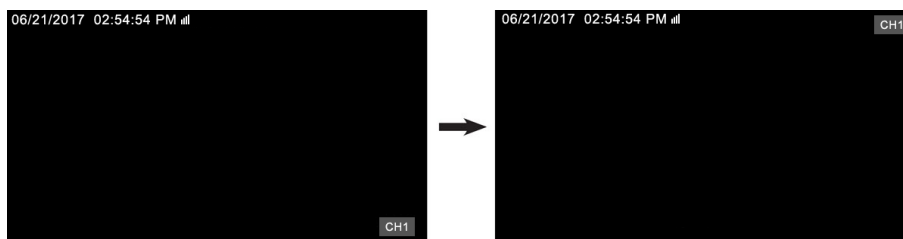
1. From the live viewing screen, click  > **Settings** > **Camera Setup**.



The screenshot shows the 'Camera Setup' menu with the following fields and callouts:

- Channel:** CH1 (Callout 2 points to the dropdown arrow)
- Channel Name:** CH1 (Callout 3 points to the text field)
- OSD Position:** Setup (Callout 4 points to the 'Setup' button)
- Camera:** ON (Callout 2 points to the dropdown arrow)
- Camera Firmware:** V1.01.048_5.2a (Callout 3 points to the 'Check Firmware' button)
- Camera Recording Time:** 10s (Callout 2 points to the dropdown arrow)
- Audio:** OFF (Callout 2 points to the dropdown arrow)
- Battery:** 100%
- Buttons:** Default, Save (Callout 5 points to the 'Save' button), and a 'cel' button.

2. Select the channel for the camera you want to modify.
3. Enter a channel name of your choice (e.g., *Back Yard Camera*). This name will appear on the camera image in live viewing and in recordings.
4. Click **Setup** next to **OSD Position**. Click-and-drag the channel name to reposition it.



5. Click **Save**.

13.2.2 Enabling / Disabling Cameras

Enable or disable wire-free cameras.

**NOTE**

Disabled cameras will not show video during live viewing or record video to the hard drive.

To enable / disable cameras:

1. From the live viewing screen, click > **Settings** > **Camera Setup**.

The screenshot shows the 'Camera Setup' menu with the following fields and options:

- Channel:** CH1 (Callout 2 points to the dropdown arrow)
- Channel Name:** CH1
- OSD Position:** Setup
- Camera:** ON (Callout 3 points to the dropdown arrow)
- Camera Firmware:** V1.01.048_5.2a (Callout 4 points to the 'Save' button at the bottom right)
- Camera Recording Time:** 10s
- Audio:** OFF
- Battery:** 100%

Buttons at the bottom: Default, Save, and a 'cel' button.

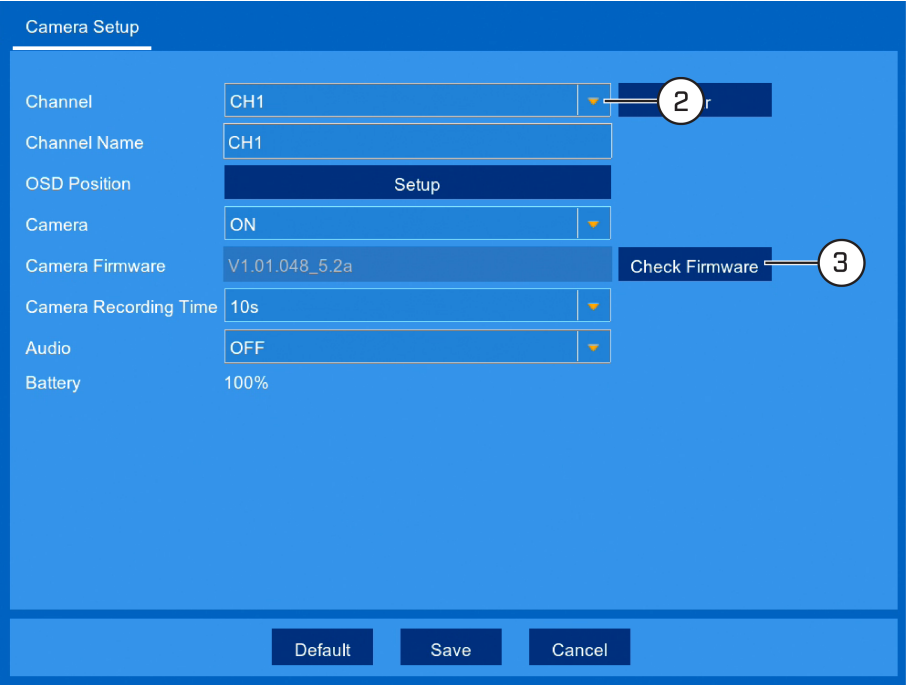
2. Select the channel for the camera you want to enable / disable.
3. Select **ON** or **OFF**.
4. Click **Save**.

13.2.3 Camera Firmware

In order to troubleshoot certain issues, technical support may ask you for the firmware version of your wire-free cameras. Use the procedure below to determine the current version.

To check camera firmware:

1. From the live viewing screen, click  > **Settings** > **Camera Setup**.



Camera Setup

Channel	CH1	
Channel Name	CH1	
OSD Position	Setup	
Camera	ON	
Camera Firmware	V1.01.048_5.2a	
Camera Recording Time	10s	
Audio	OFF	
Battery	100%	

Default Save Cancel

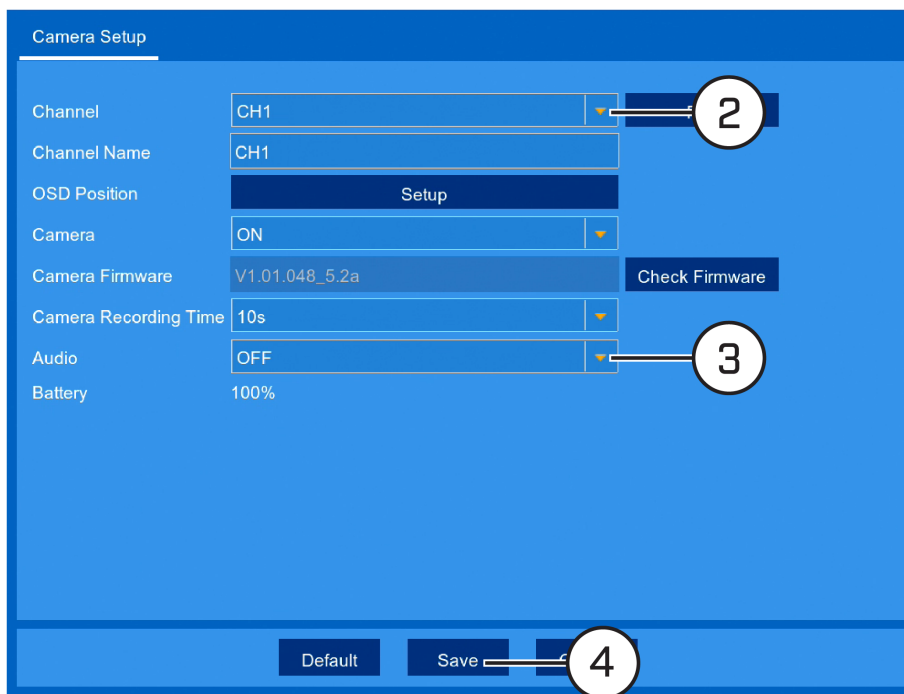
2. Select the channel for the camera you want to check firmware for.
3. Click **Check Firmware**. The current firmware version number will appear in the text box to the left.

13.2.4 Enabling Audio

The included cameras support audio recording, but must be enabled through the recorder interface. This is due to the fact that audio recording is unlawful in certain jurisdictions. Please ensure your installation complies with local laws before enabling audio recording.

To enable audio:

1. From the live viewing screen, click  > **Settings** > **Camera Setup**.



The screenshot shows the 'Camera Setup' menu with the following settings and callouts:

- Channel:** CH1 (Callout 2 points to the dropdown arrow)
- Channel Name:** CH1
- OSD Position:** Setup
- Camera:** ON
- Camera Firmware:** V1.01.048_5.2a (with a 'Check Firmware' button)
- Camera Recording Time:** 10s
- Audio:** OFF (Callout 3 points to the dropdown arrow)
- Battery:** 100%
- Buttons:** Default, Save (Callout 4 points to the Save button)

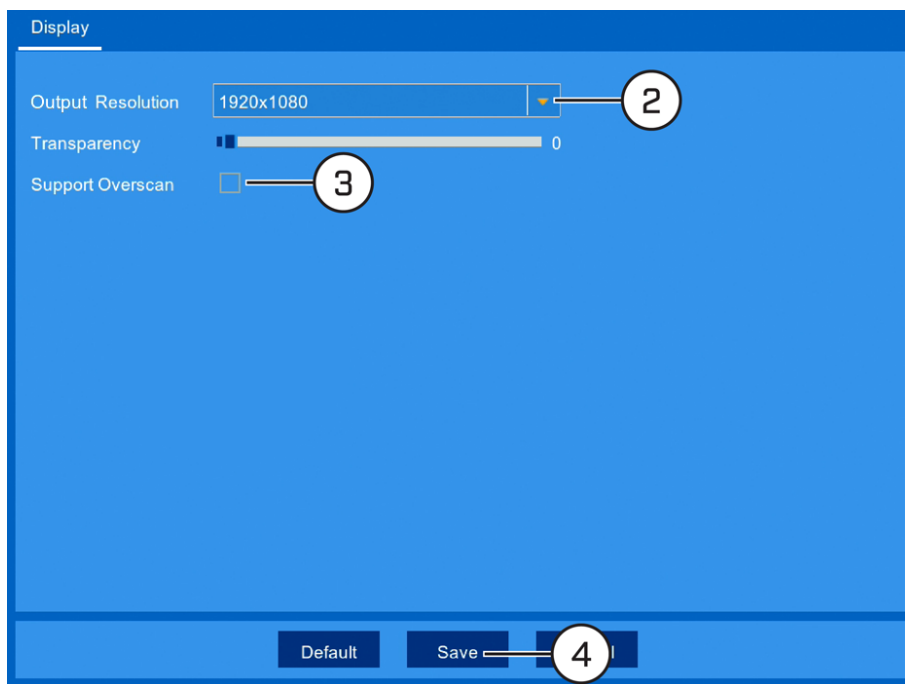
2. Select the channel for the camera you want to enable audio for.
3. Select **ON** from the **Audio** dropdown.

13.2.5 Changing the Display Resolution

To optimize display, you can change the output resolution of your recorder to match the maximum supported resolution of your monitor.

To change the recorder's output resolution:

1. From the live viewing screen, click  > **Settings** > **Display**.



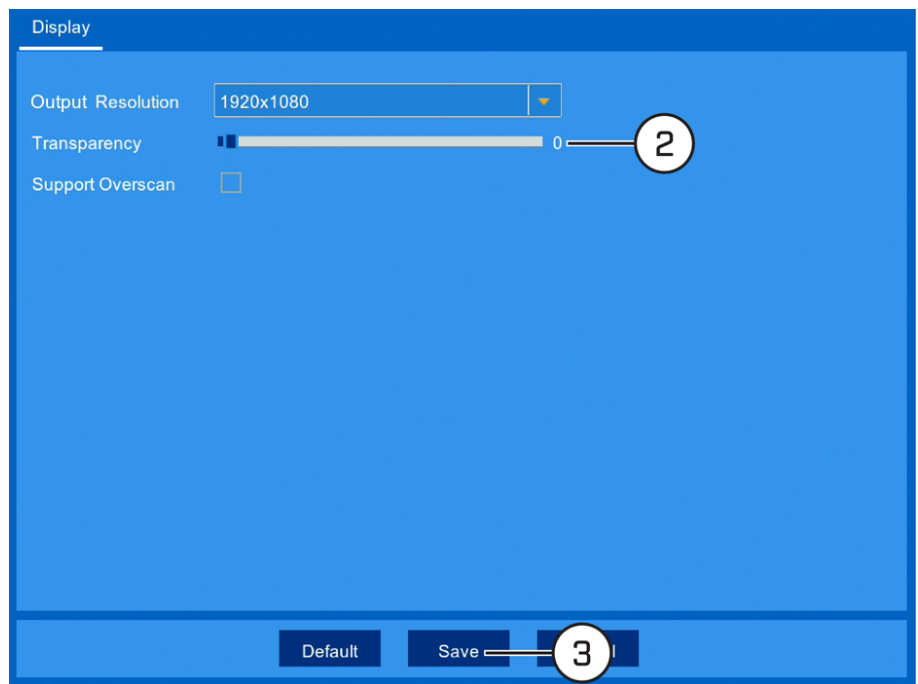
2. Use the dropdown next to **Output Resolution** to select the resolution of your monitor or TV.
3. **(OPTIONAL)** If you are experiencing cropping of the recorder's display, it is recommended that you check the **Support Overscan** box to optimize your display. This is typically only an issue for those using older Cathode Ray Tube (CRT) monitors.
4. Click **Save**.

13.2.6 Menu Transparency

You can set a custom transparency level for the on-screen menus and the Taskbar.

To adjust menu transparency:

-
1. From the live viewing screen, click  > **Settings** > **Display**.



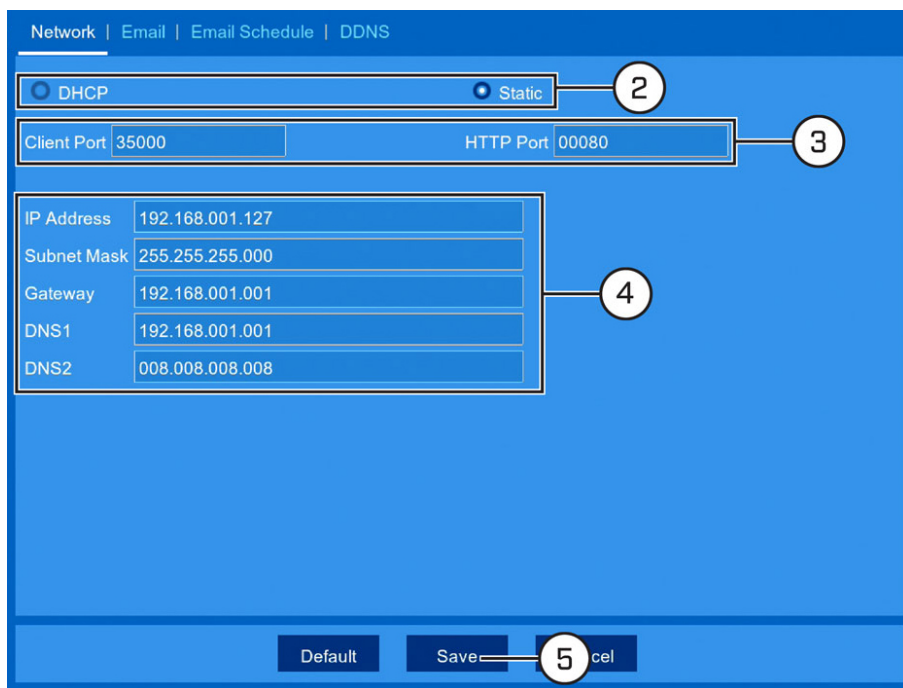
2. Click-and-drag the slider next to **Transparency** to adjust the transparency of the taskbar and menu screens.
3. Click **Save**.

13.2.7 Configuring Basic Network Settings

The basic network menu allows you to change port numbers if needed and configure the network protocol type (**DHCP** or **static**).

To configure basic network settings:

1. From the live viewing screen, click  > **Settings** > **Network** > **Network**.



2. Select **DHCP** (default — recommended) or **Static**.

**NOTE**

Selecting **Static** requires you to edit the IP Address, Subnet Mask, Gateway and DNS settings. This option is for advanced users only.

3. Click the fields next to **Client Port** and **HTTP Port** to change port numbers if required.
4. **(FOR STATIC IP ONLY)** Click the fields next to **IP Address**, **Subnet Mask**, **Gateway** and **DNS** to edit as required.
5. Click **Save**.

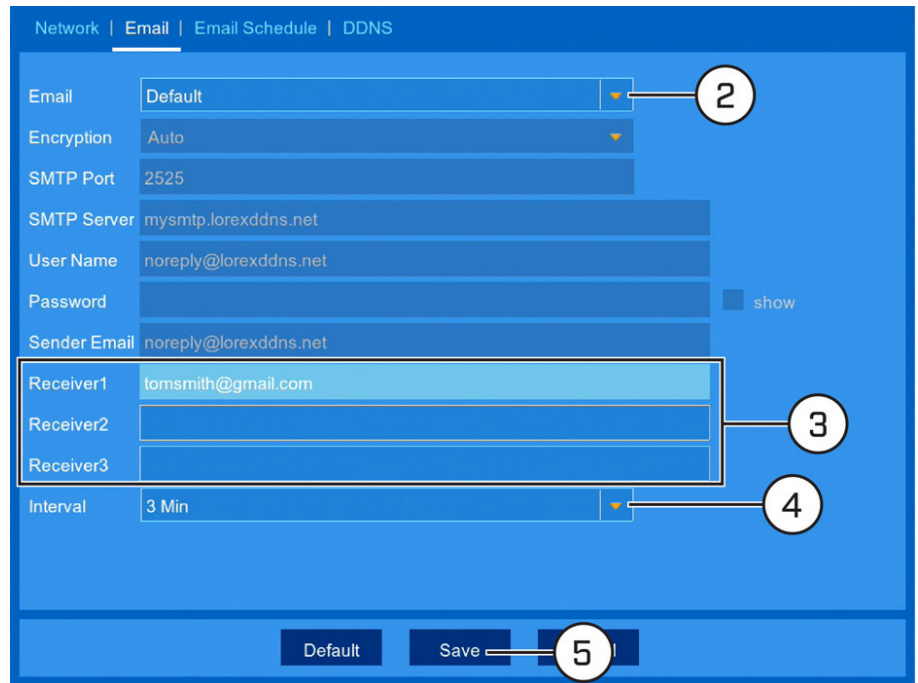
13.2.8 Setting up Email Notifications

You can configure the system to send email notifications about important activity from your security system. To have the option of using Lorex's free email server (recommended) or using a different one.

- For instructions on enabling email notifications using the Lorex server, see 13.2.8.1 *Email Notifications — Using the Lorex server (recommended)*, page 53.
- For instructions on enabling email notifications using a different mailing server, see 13.2.8.2 *Email Notifications — Using your own server information*, page 54.

13.2.8.1 Email Notifications — Using the Lorex server (recommended)

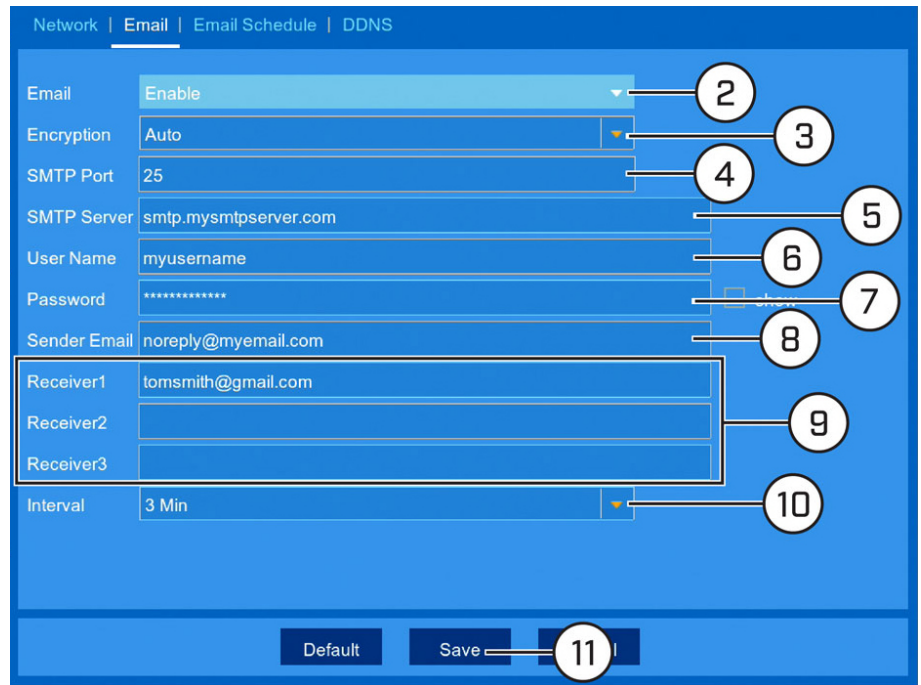
1. From the live viewing screen, click  > **Settings** > **Network** > **Email**.



2. Select **Default** from the dropdown next to **Email** to enable the default Lorex mail server.
3. Click to enter up to 3 email addresses that will receive email notifications from the system.
4. Use the dropdown next to **Interval** to set the minimum amount of time between email notifications. This can be used to limit the number of notifications you receive throughout the day.
5. Click **Save**.
Email notifications are now enabled. The default schedule is set to send email notification whenever motion is detected or a system warning occurs. To configure the schedule for email notifications, see 13.2.9 *Setting an Email Schedule*, page 54.

13.2.8.2 Email Notifications — Using your own server information

1. From the live viewing screen, click  > **Settings** > **Network** > **Email**.



2. Select **Enable** from the dropdown next to **Email** to enable email notifications using a custom mail server.
3. Use the dropdown next to **Encryption** to select an encryption type.
4. Click the field next to **SMTP Port** to enter the SMTP port.
5. Click the field next to **SMTP Server** to enter the URL used by your mail server.
6. Click the field next to **User Name** to enter your user name for the mail server.
7. Click the field next to **Password** to enter your password for the mail server.
8. Click the field next to **Sender Email** to enter the sending email address. This can be any email of your choice.
9. Click to enter up to 3 email addresses that will receive email notifications from the system.
10. Use the dropdown next to **Interval** to set the minimum amount of time between email notifications. This can be used to limit the number of notifications you receive throughout the day.
11. Click **Save**.

Email notifications are now enabled. The default schedule is set to send email notification whenever motion is detected or a system warning occurs. To configure the schedule for email notifications, see 13.2.9 *Setting an Email Schedule*, page 54.

13.2.9 Setting an Email Schedule

The email schedule determines the time periods that the system will send out email notifications. You can set separate schedules for motion events and system warnings per channel.

Prerequisites:

- You must enable email notifications for the email schedule to take effect.
- To enable email notifications using the default Lorex email server, see 13.2.8.1 *Email Notifications — Using the Lorex server (recommended)*, page 53.

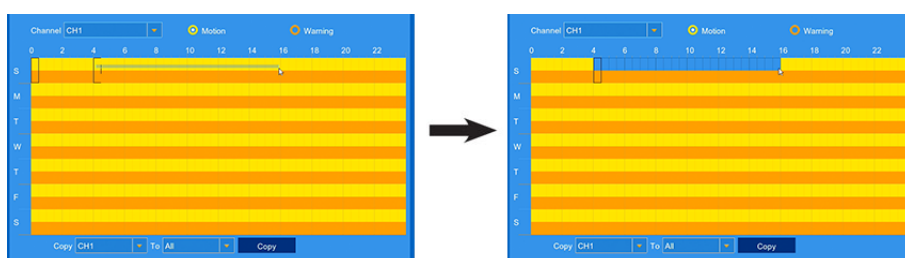
- To enable email notifications using custom mail server information, see 13.2.8.2 *Email Notifications — Using your own server information*, page 54.

To set an email schedule:

1. From the live viewing screen, click  > **Settings** > **Network** > **Email Schedule**.



2. Use the dropdown next to **Channel** to select a channel to set the email schedule for.
3. Select **Motion** to edit the motion notification schedule (represented by **yellow** bars), or **Warning** to edit the system warning notification schedule (**orange** bars).
4. Click or click-and-drag over existing bars to remove sections from the recording schedule. For blank areas of the schedule, click or click-and-drag to add sections to the recording schedule.



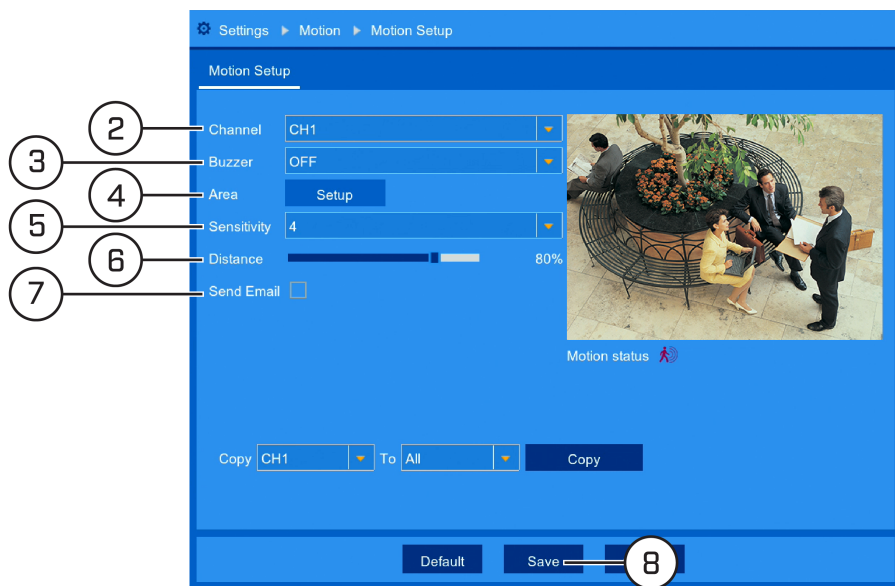
5. Click **Save**.
6. (OPTIONAL) Use the **Copy** function to copy your settings to another or all connected cameras. See 13.1.1 *Copying Channel Settings to Another Channel*, page 45 for details on using the copy function.

13.2.10 Configuring Motion Detection Settings

Configure settings for motion detection, such as sensitivity and detection distance. You also have the option of having an alarm sound, or receiving notification via email.

To configure motion detection:

- From the live viewing screen, click  > **Settings** > **Motion** > **Motion Settings**.



- Select the channel you want to configure motion detection options for.
- Use the dropdown next to **Buzzer** to choose whether the recorder should sound an alarm when motion is detected by the selected channel.
- Click **Setup** next to **Area** to configure the active area for motion detection. The live view appears with a red grid overlay covering the whole image, meaning the whole image is active. Click or click-and-drag to enable / disable parts of the image. In the example image below, only motion occurring in the yard will trigger recording, but motion in the flower beds will not.



- Set the **Sensitivity** level to determine how much of the image needs to register motion at once to trigger an event. For example, a higher sensitivity level will trigger recording even when smaller objects move across the camera image.
- Set the **Distance** to configure the PIR sensor. This will help to make motion detection more accurate. Recreate a motion event in front of the camera, and set the distance so that wanted events turn the icon below the camera image from  to .

- Check the box next to **Send Email** to receive an email when motion is detected by the selected channel.

**NOTE**

Email notifications require additional configuration. Please see 13.2.8 *Setting up Email Notifications*, page 52 for full setup details.

- Click **Save**.

13.3 System Menu

Change general system information such as date, time and region, edit passwords and permissions, and more.

13.3.1 Changing the Date and Time

If you need to change the date and time after completing the setup wizard, follow the steps below.

To change the recorder's date and time:

- From the live viewing screen, click > **System** > **General** > **General**.

The screenshot shows the 'System > General > General' configuration page. The 'General' tab is selected. The settings are as follows:

Date	04/24/2017	Time	04:42:34	PM
Date Format	MM/DD/YY			
Time Format	12Hour			
Language	ENGLISH			
Video Format	NTSC (60Hz)			
Menu Timeouts	3Min			

At the bottom, there are 'Default' and 'Save' buttons.

- Select the correct date from the calendar.
- Enter the correct time. Use the dropdown to select **AM** or **PM** if using 12-hour time format.
- Select a date format for date stamps on recordings.
- Select a time format for time stamps on recordings.
- Click **Save**.

13.3.2 Changing On-Screen Language

Change the language of on-screen text for the recorder.

To change language:

1. From the live viewing screen, click  > **System** > **General** > **General**.



2. Use the dropdown next to **Language** to set the desired language for the recorder's on-screen display.
3. Click **Save**. The system language will update only once you exit the main menu.

13.3.3 Changing Video Output — NTSC and PAL

Manually switch between NTSC and PAL video output.



NOTE

The video output is determined intelligently based on the region you set during the setup wizard. Ensure your region has been set correctly before manually changing the video output (see 13.3.6 *Configuring NTP*, page 61 for more details on changing the region).

To change the video output:

1. From the live viewing screen, click  > **System** > **General** > **General**.



General | DST | NTP

Date: 04/24/2017 Time: 04:42:34 PM

Date Format: MM/DD/YY

Time Format: 12Hour

Language: ENGLISH

Video Format: NTSC (60Hz)

Menu Timeouts: 3Min

Default Save

2. Use the dropdown next to **Video Format** to select either **NTSC** or **PAL**.
3. Click **Save**. The system will reboot to properly set the new video output mode.

13.3.4 Configuring Menu Time-out Option

By default, system menus are set to time-out after a set time period, taking you back to the main menu if there is no activity.

To configure or disable menu time-out:

1. From the live viewing screen, click  > **System** > **General** > **General**.



General | DST | NTP

Date: 04/24/2017 Time: 04:42:34 PM

Date Format: MM/DD/YY

Time Format: 12Hour

Language: ENGLISH

Video Format: NTSC (60Hz)

Menu Timeouts: 3Min

Default Save

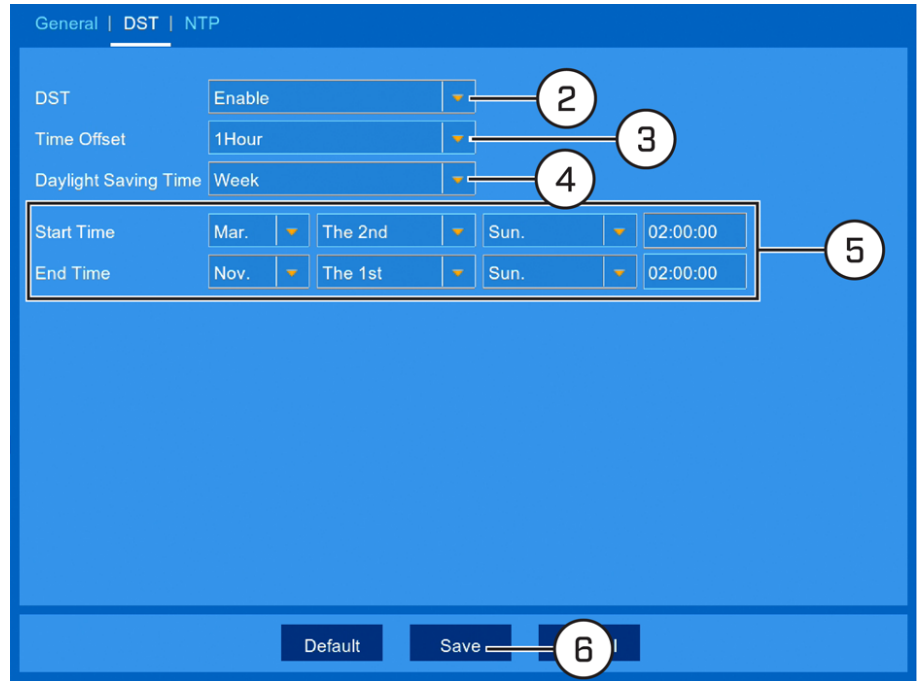
2. Select a time period from the dropdown next to **Menu Timeouts**.
 - **30s–10min**: Menus will disappear after the set time period if there is no activity on the system.
 - **OFF**: Menus will never time-out due to inactivity.
3. Click **Save**.

13.3.5 Configuring Daylight Savings Time (DST)

Customize settings for Daylight Savings Time (DST) based on your region or preference.

To configure Daylight Savings Time:

1. From the live viewing screen, click  > **System** > **General** > **DST**.



The screenshot shows the 'DST' configuration page. At the top, there are tabs for 'General', 'DST', and 'NTP'. The 'DST' tab is selected. The page contains several configuration fields:

- DST:** A dropdown menu currently set to 'Enable' (callout 2).
- Time Offset:** A dropdown menu currently set to '1Hour' (callout 3).
- Daylight Saving Time:** A dropdown menu currently set to 'Week' (callout 4).
- Start Time:** A section with four dropdowns: 'Mar.' (callout 5), 'The 2nd', 'Sun.', and '02:00:00'.
- End Time:** A section with four dropdowns: 'Nov.', 'The 1st', 'Sun.', and '02:00:00'.
- Buttons:** At the bottom, there are 'Default' and 'Save' buttons (callout 6).

2. Select **Enable** from the dropdown next to **DST**.
3. Select the time difference to use for DST from the dropdown next to **Time Offset**.
4. Use the dropdown next to **Daylight Saving Time** to select a mode of entry for effective dates:
 - Select **Week** to choose DST time changes that are relative to the day of the week (for example, on the second Sunday of March).
 - Select **Date** to choose a specific date and time for each DST time change (for example, on March 13th at 2:00AM).
5. Enter the desired **Start Time** and **End Time** for Daylight Savings Time. System time will move forward an hour at the start time, and back an hour at the end time.
6. Click **Save**.

13.3.6 Configuring NTP

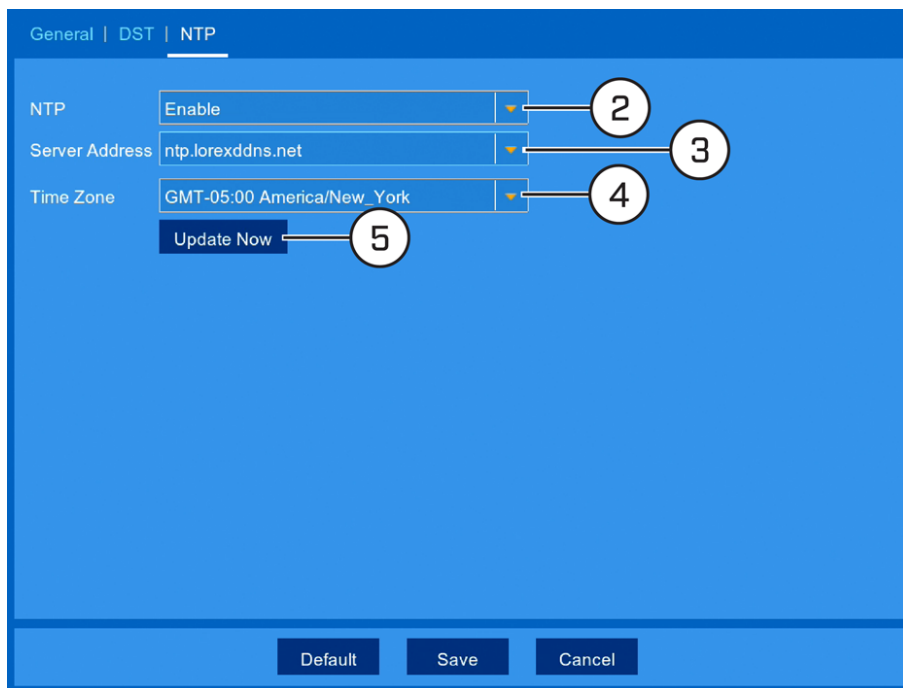
Network Time Protocol (NTP) allows the recorder to sync with an NTP time server to ensure that system time is always accurate.

Prerequisites:

- The recorder must be connected to a router or switch on your network using the included Ethernet cable. A constant connection to the Internet is required to use NTP.

To configure NTP:

1. From the live viewing screen, click  > **System** > **General** > **NTP**.



2. Select **Enable** from the dropdown next to **NTP**.
3. Select the desired NTP server from the dropdown next to **Server Address** (we recommend using the default ntp.lorexddns.net).
4. If needed, use the dropdown next to **Time Zone** to set the correct region.

**NOTE**

In most cases, the region should already be correct as it was configured during the recorder setup wizard. In addition to determining the time zone, the selected region is also used by the system to intelligently determine the correct video format (NTSC or PAL) for that region, which may change automatically when changing the region. For example, changing the region from New York to London will also switch the video format of the system from NTSC to PAL.

5. Click **Update Now** to sync with the NTP.

**NOTE**

If the video format changes between NTSC and PAL based on your new choice of region, the recorder will reboot automatically.

13.3.7 View System Information

View system information such as device ID, IP address, MAC address, model number, firmware version and more.



To view system information:

- 1. From the live viewing screen, click  > **System** > **General** > **NTP**.
OR

From live view, click  on the Taskbar along the bottom of the screen.

13.3.8 Logs — Searching and Backing Up

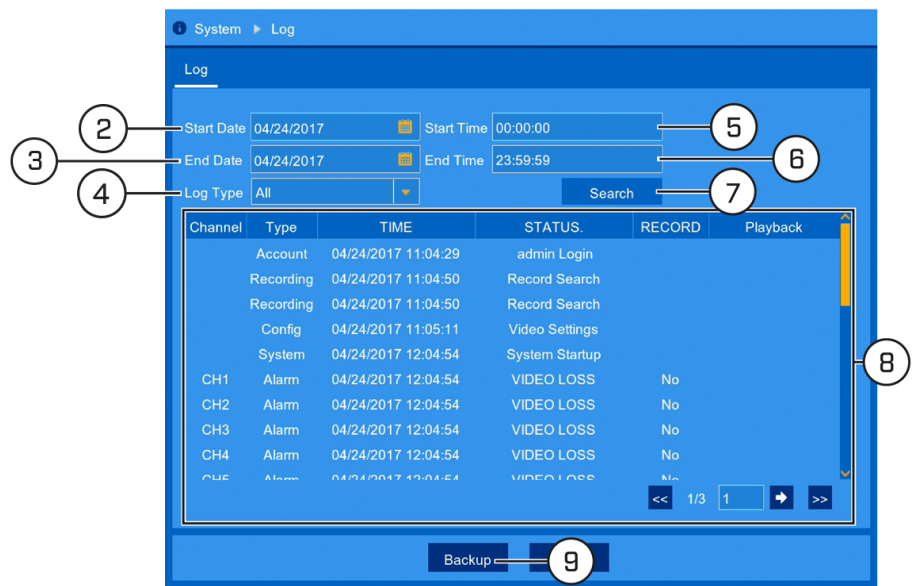
The system log shows you important system events, such as motion alarms and system warnings. You can easily create a backup file of the system log for a set time period to a USB flash drive (not included).

Prerequisites:

- To back up system log events, you must connect a USB flash drive to one of the recorder’s USB ports.

To search and back up the system log:

1. From the live viewing screen, click  > **System** > **Log**.



2. Click the field next to **Start Date** to choose the starting date for your search from the on-screen calendar.
3. Click the field next to **End Date** to choose the end date for your search from the on-screen calendar.
4. Select the type of events you would like to search for from the dropdown next to **Log Type**, or select **All** to see the entire system log for the selected time period.
5. Click the field next to **Start Time** to enter the starting time for your search (24-hour format). The search will begin at this time on the start date.
6. Click the field next to **End Time** to enter the starting time for your search (24-hour format). The search will end at this time on the end date.
7. Click **Search**.
8. Browse system log events from your search period:
- Video events can be played back instantly by clicking  in the **Playback** column. Right-click to return to your search results.
 - Use the  /  buttons in the bottom-right corner of the menu to move between pages of system log events.
9. Click **Backup** to create a backup of the system log for your search period.
10. The backup drive menu appears. Navigate to the folder you want the backup file to be saved in, then click **OK** to begin. The progress bar at the bottom of the window shows you the progress of the backup.



 **NOTE**

For more details on using the backup drive menu, including a full overview of buttons and their functions, see *9.3 Drive Menu Controls*, page 33.

13.4 Advanced Menu

Perform firmware upgrades, manage system events and warnings, load default settings, and save/load current system settings.

13.4.1 Manual Firmware Upgrade

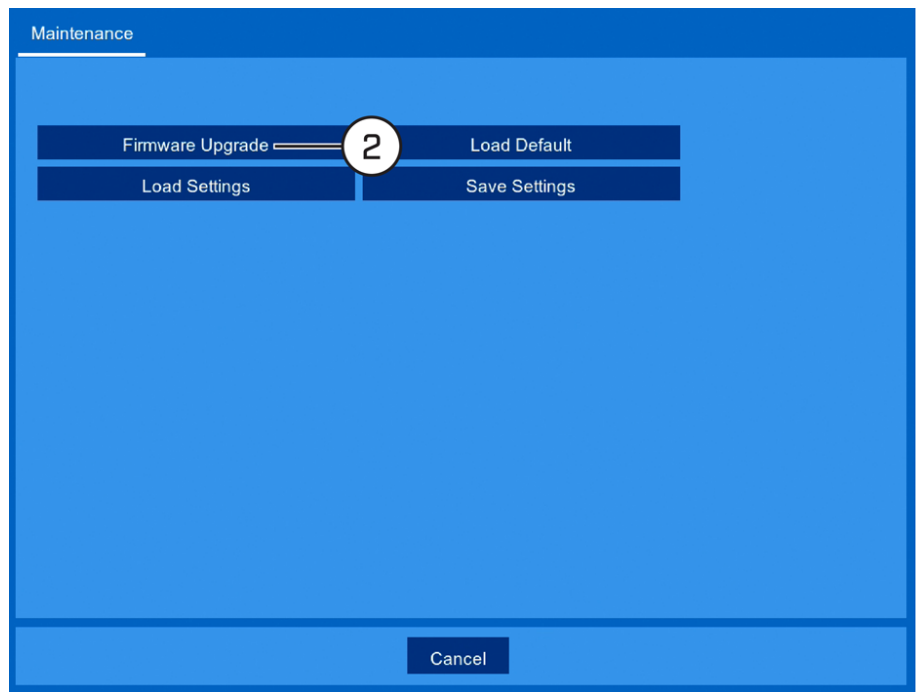
The system supports automatic firmware upgrades over the network to ensure your unit is always up-to-date. It is recommended to always use automatic upgrade unless directed to perform a manual upgrade by technical support.

Prerequisites:

- Save the **.bin** firmware upgrade file in the root folder of a USB flash drive (not included), and connect the drive to one of the USB ports on your recorder.

To manually upgrade the recorder's firmware:

1. From the live viewing screen, click  > **Advanced** > **Maintenance**.



2. Click **Firmware Upgrade**.
3. The drive menu appears. Navigate to and select the **.bin** firmware file, then click **OK**.
4. A confirmation window appears. Click **OK** to confirm.
5. Allow 5-10 minutes for the system to upgrade and reboot.



CAUTION

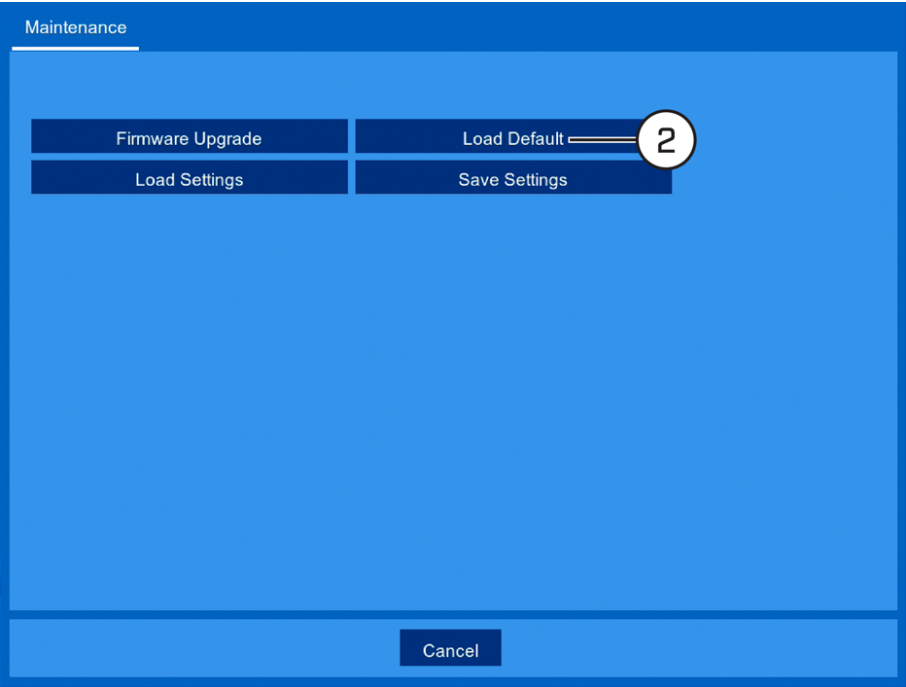
Do not power off the recorder during firmware upgrade.

13.4.2 Restoring Default Settings

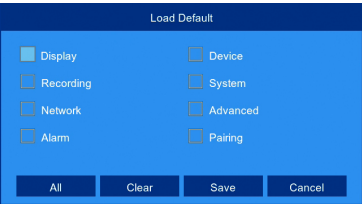
Reset the recorder settings to their out-of-box state. You can choose to reset all settings at once, or just settings on specific menus. Restoring default settings will not delete recordings and snapshots saved to the hard drive.

To restore default settings:

1. From the live viewing screen, click  > **Advanced** > **Maintenance**.



2. Click **Load Default**.
3. Select the menus you would like to restore to default settings:



- Click **All** to select all menus.
 - Click **Clear** to deselect all menus.
4. Click **Save** to confirm. The recorder will reboot automatically.

13.4.3 Exporting System Settings

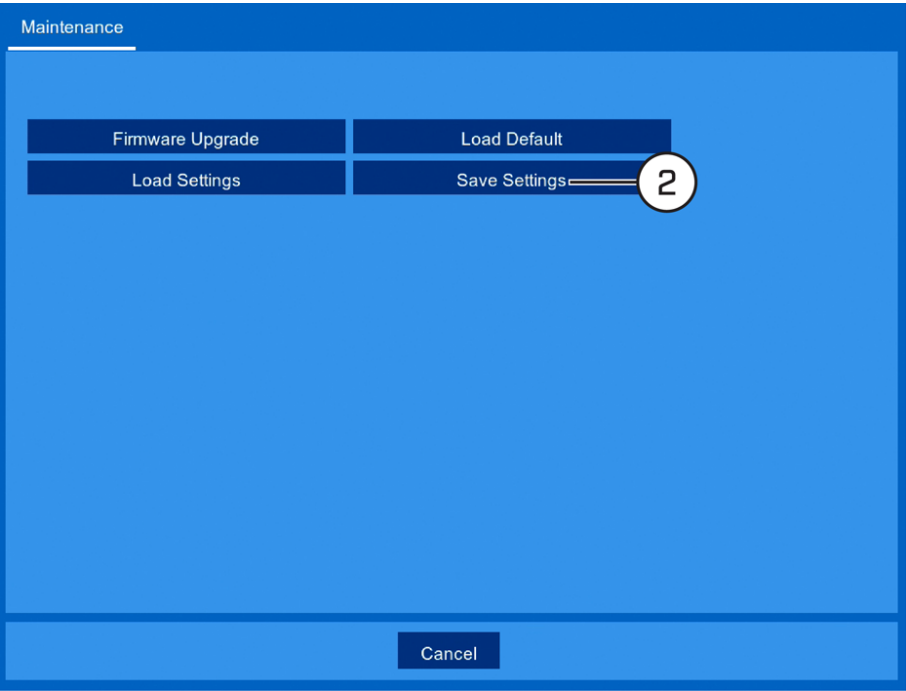
You can export the main menu settings you have configured to a USB flash drive (not included). Exporting system settings lets you to quickly apply your settings to another recorder.

Prerequisites:

- You must connect a USB flash drive to one of the recorder’s USB ports.

To export system settings:

1. From the live viewing screen, click  > **Advanced** > **Maintenance**.



2. Click **Save Settings**.
3. The drive menu appears and displays the contents of the USB flash drive. Navigate to the folder you want the system settings file to be saved in, then click **OK** to begin. The progress bar at the bottom of the window shows you the progress of the backup.



 **NOTE**

- For more details on using the drive menu, including a full overview of buttons and their functions, see 9.3 *Drive Menu Controls*, page 33.
- See 13.4.4 *Importing System Settings*, page 67 for instructions on importing saved system settings.

13.4.4 Importing System Settings

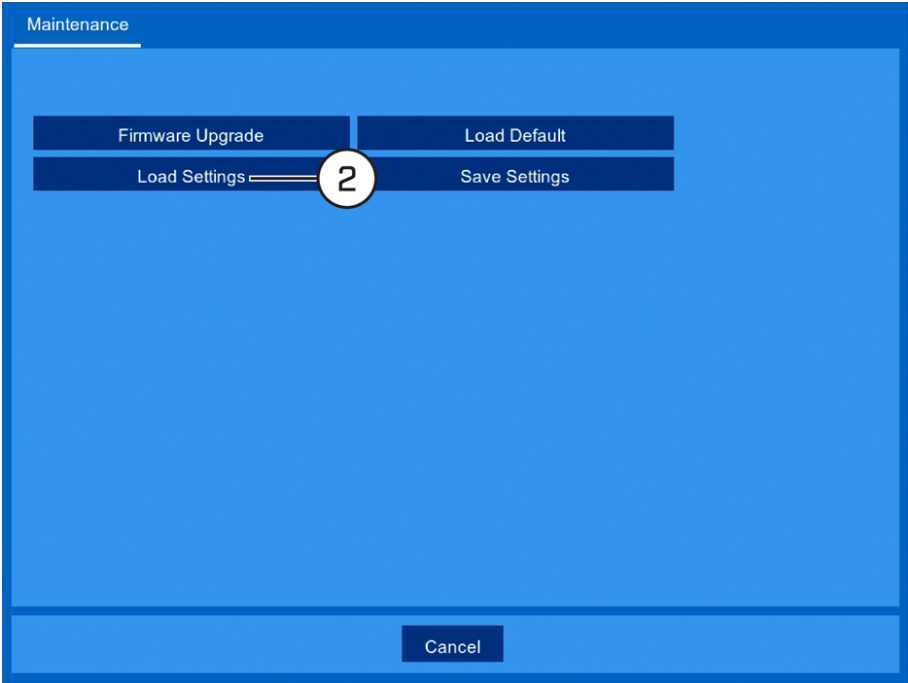
Once you have created a system settings export (see 13.4.3 *Exporting System Settings*, page 66for details), you can import the settings on another recorder.

Prerequisites:

- You must connect a USB flash drive to one of the recorder’s USB ports.
- The connected USB flash drive must have a system settings file saved on it. See 13.4.3 *Exporting System Settings*, page 66 for full instructions on saving settings to a USB flash drive.

To import system settings:

1. From the live viewing screen, click  > **Advanced** > **Maintenance**.



2. Click **Load Settings**.
3. The drive menu appears and displays the contents of the USB flash drive.
- Navigate to the system settings file you want to import, then click **OK** to begin.
 - A warning message appears to inform you the system will reboot in order to properly import your saved settings. Click **OK** to proceed.



NOTE

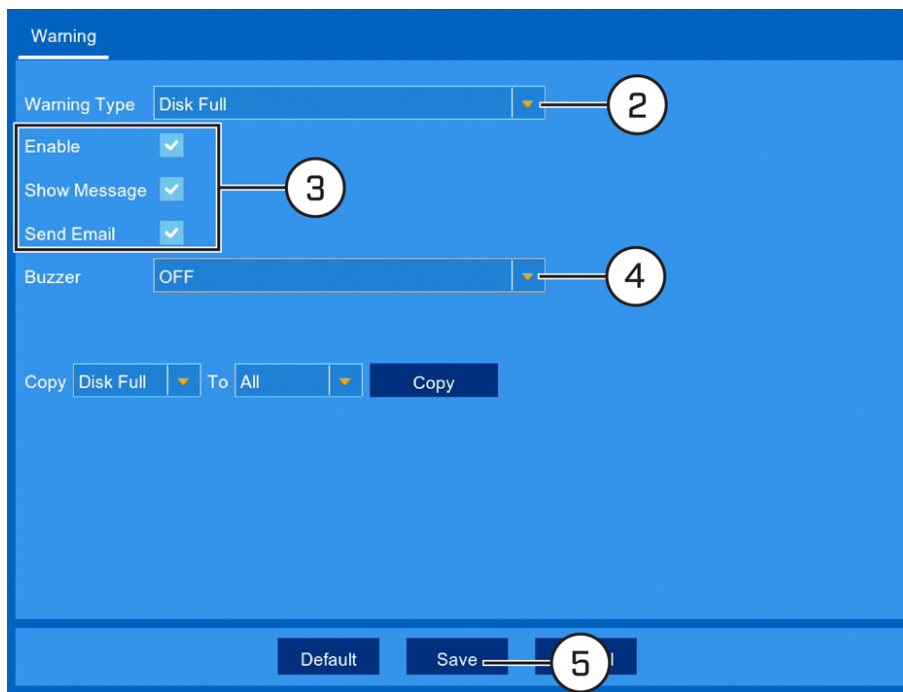
For more details on using the drive menu, including a full overview of buttons and their functions, see 9.3 *Drive Menu Controls*, page 33.

13.4.5 Configuring System Warning Settings

Set preferences for system warnings including video loss, hard drive errors, and warnings when the hard drive is full.

To configure system warning settings:

1. From the live viewing screen, click  > **Advanced** > **Warning**.



2. Use the dropdown next to **Warning Type** to select the system warning you would like to configure.
3. Check boxes next to features you would like to activate when the selected event occurs.

**NOTE**

Enabling **Send Email** requires you to set up email notifications. See 13.2.8 *Setting up Email Notifications*, page 52 for full instructions.

4. Use the dropdown next to **Buzzer** to have the recorder make an alarm sound when the selected system warning occurs, or select **OFF** to have the recorder remain silent.
5. Click **Save**.
6. **(OPTIONAL)** Use the **Copy** function to copy your settings to another or all system warning types.

Connecting to Your System Using PC or Mac

You can connect to your security system over the Internet using our free Lorex Client 13 for PC and Mac computers. Securely connect to your system from anywhere with no recurring fees for live viewing.



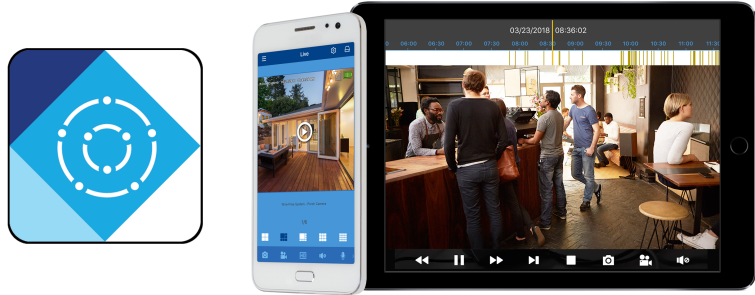
The Lorex Client 13 software allows you to:

- View live video from cameras over the Internet
- Play back recorded video from the hard drive
- Manually record video clips or save snapshots to your computer's hard drive
- Access your recorder's complete set of menu options for remote configuration

For full setup instructions and advanced support, [click here](#) to open the Lorex Client 13 instruction manual.

Connecting to Your System Using Smartphone or Tablet Apps

You can connect to your security system over the Internet using our free Lorex Cirrus app for iPhone®, iPad®, and Android™ smartphones / tablets. Securely connect to your system from anywhere with no recurring fees for live viewing.



The Lorex Cirrus app allows you to:

- View live video from cameras
- Play back recorded video from the hard drive
- Manually record video clips or take a snapshot of live video
- Set preferences for push notifications informing you of motion and sound detection* events

For full setup instructions and advanced support for the app, [click here](#) to open the Lorex Cirrus instruction manual.

* On supporting devices.

When you perform a video backup, the system allows you to select the file type of the backup file. For Mac users who wish to view backed up video on their computer, it is recommended to select **MP4** file type, which can be played by most video player software.

PC Users have the option of using the Lorex Player 11 software, which is automatically saved to your backup USB flash drive when you perform a video backup. Lorex Player 11 is capable of playing **LF** files.

Minimum System Requirements

- Intel Pentium 4 or above
- Microsoft Windows XP / Vista / 7 / 8 / 10
- 256MB RAM
- 16MB video memory

Prerequisites

- Connect the USB flash drive (not included) used for recorder backup to your computer. Ensure at least one backed up video file is on the USB drive.
- Back up video files from the recorder to your local hard drive.

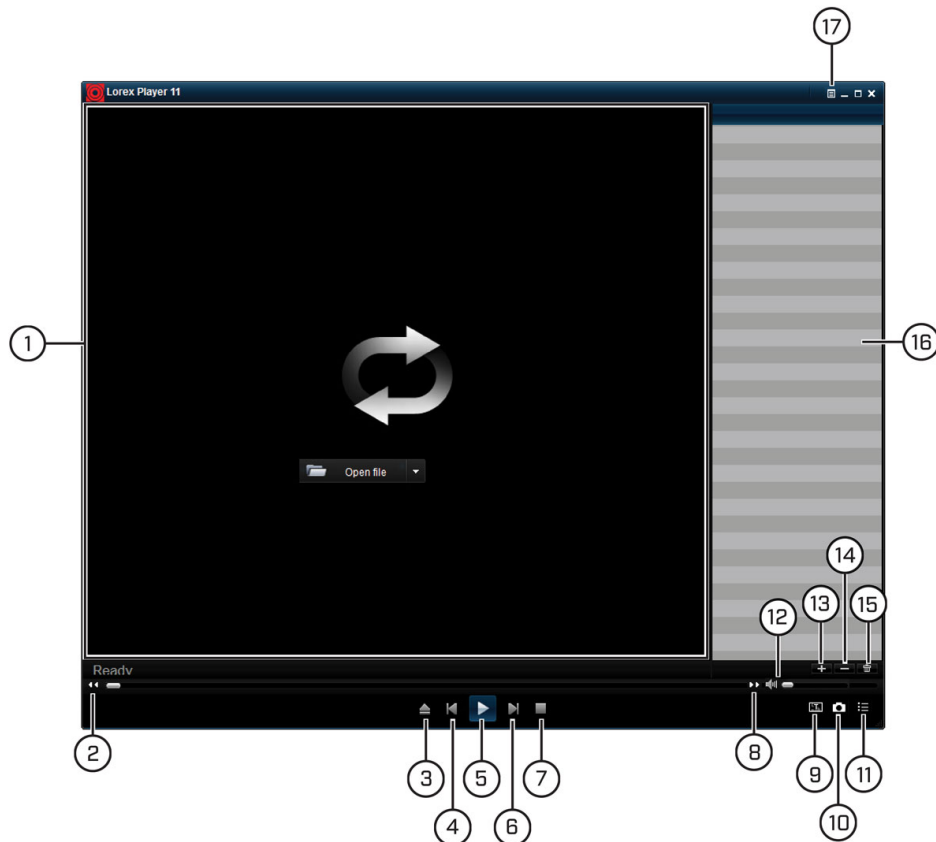
16.1 Running Lorex Player 11

1. Open your USB flash drive in Windows Explorer to view its contents.
2. Double-click the **RecordFile** folder to open it, then double-click **Lorex Player 11**.
3. Double-click **LorexPlayer11.exe** to run the player.
4. Click the **Open File** to load a single video file. Click the  button next to it to load a folder with backed-up videos.



5. Select the file and click **Open**.
 - If you are opening a folder, click **Add**.
6. Double-click the file in the list on the right to begin playback.

16.2 Lorex Player 11 Interface Overview



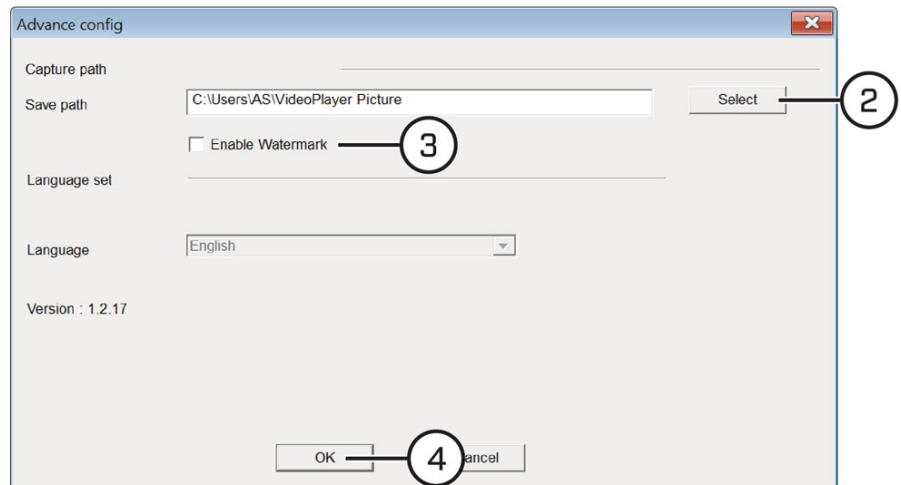
1. **Video Window**
2. **Rewind**
3. **Open File**
4. **Previous File**
5. **Play**
6. **Next File**
7. **Stop**
8. **Fast Forward**
9. **Enable/Disable Watermark**
10. **Take Snapshot**
11. **Hide/Show Playlist**
12. **Mute/Unmute and Volume Bar**
13. **Add File**
14. **Remove File**
15. **Delete File**
16. **Playlist**
17. **Advanced Menu**

16.2.1 About the Advanced Menu

The Advanced Menu allows you to select where the screen captures are stored.

To use the Advanced Menu:

1. Click the  button.



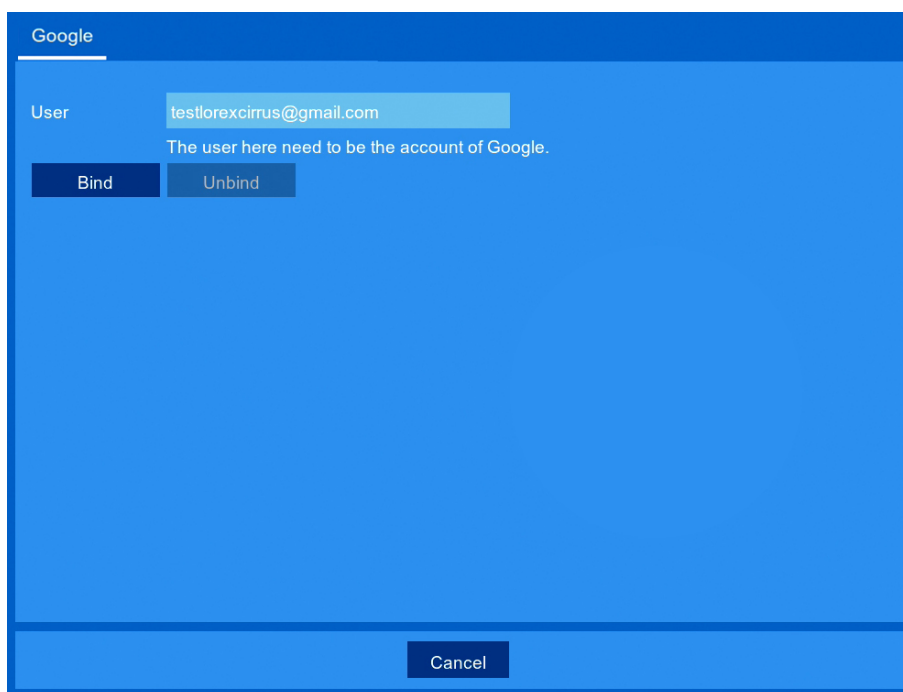
2. Click **Select** to change the snapshot save folder. Then select the folder and click **OK**.
3. Check to enable the watermark.
4. Click **OK** to save changes.

This recorder is compatible with a third-party smart home solution, Google Assistant®. You can use this service to take your security experience to the next level, with smart home options that make accessing your system even easier.

For compatibility information, as well as full instructions on setup and use, visit lorex.com/SmartHome.

To enable Smart Home services on the recorder:

1. From the live viewing screen, click  > **Settings** > **Voice Assistance**, then select **Google**.
2. Enter the email address you use to log into your Google Home account, then click **Bind**.



Google

User testlorexcircus@gmail.com

The user here need to be the account of Google.

Bind Unbind

Cancel

Setting up DDNS connectivity allows you to view your recorder from any computer or compatible mobile device with Internet access.

NOTE

The primary connectivity option for the recorder uses Lorex Cloud Services to connect to your system over the Internet without the need for port forwarding or DDNS registration.

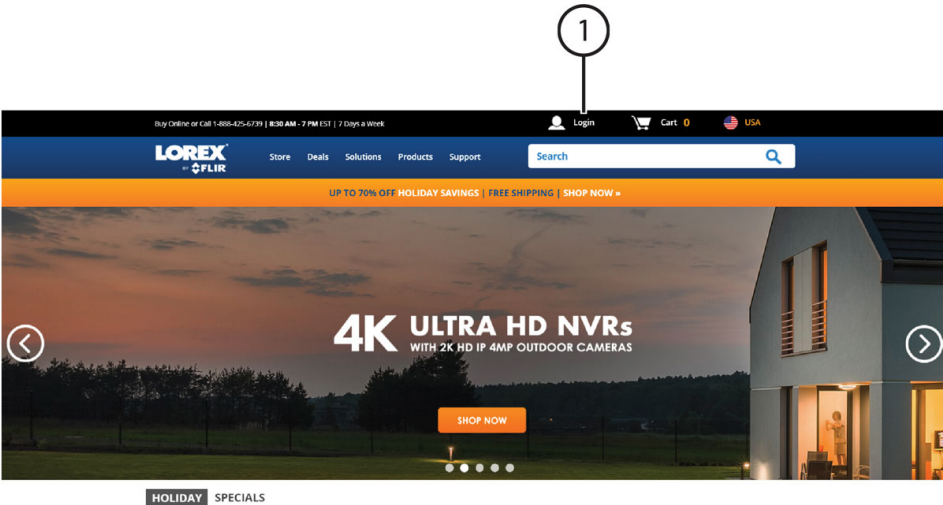
- For instructions on using the Lorex Cirrus app for smartphones and tablets, see 15 *Connecting to Your System Using Smartphone or Tablet Apps*, page 71.
- For instructions on using the Lorex Client 13 software for PC and Mac computers, see 14 *Connecting to Your System Using PC or Mac*, page 70.

18.1 STEP 1: Port Forwarding

You **must** port forward the HTTP and Client ports (default: **80** and **9000**) on your router to your recorder’s IP address before you can remotely connect to your system using DDNS. There are several methods to port forward your router:

- Use the **Easy Connect Auto Port Forwarding Wizard** (PC only) to port forward the required ports (see www.lorextechnology.com for details). For instructions on how to use the Easy Connect Wizard, see the Easy Connect manual on www.lorextechnology.com.
- Manually port forward the required ports on your router to your recorder’s IP address by following your router manufacturer’s instructions. For more information on port forwarding, see the reference guides on www.lorextechnology.com.

18.2 STEP 2: Create a LOREX Account



1. Visit lorex.com and click **Login** at the top of the page.

The screenshot shows the LOREX website's login page. At the top, there is a navigation bar with the LOREX logo, links for Store, Deals, Solutions, Products, and Support, a search bar, and a user account section with 'Login', 'Cart 0', and 'USA' flags. Below the navigation bar, a banner reads 'SAVE 15% OFF | USE CODE SAVE15 | FREE SHIPPING ON ORDERS'. The main content area is titled 'Login' and includes the text: 'Please select one of the options listed below, as a guest user you will have an opportunity to create an account at the end if one does not exist for you.' There are two radio button options: 'I Have a LOREX Account' and 'Create an Account'. A callout '2' points to the 'Create an Account' option. To the right, there is a form with five input fields: 'First Name' (containing 'Tom'), 'Last Name' (containing 'Smith'), 'Email' (containing 'tomsmith@gmail.com'), 'Password', and 'Confirm Password'. A callout '3' points to the email field. At the bottom of the form is a checkbox labeled 'Email me about product updates, sales, special pricing and more. My email address will only be used as described in the privacy policy.' Below the form is an orange 'Create an Account' button, with a callout '4' pointing to it.

2. Select **Create an Account**.



NOTE

If you have already set up an account, select **I Have a LOREX Account** and log in. Proceed directly to 18.3 *STEP 3: Add Your Address*, page 77.

3. Enter basic information for account setup.
4. Click **Create an Account**.

18.3 STEP 3: Add Your Address

Once you have a LOREX account, you must add your address to the account.

Adding an address is required for warranty activation, which is needed before you can sign up for a DDNS account.

To add your address to your LOREX account:

The screenshot shows the LOREX account interface. On the left is a sidebar menu with options: OVERVIEW, ORDERS, TICKETS, REVIEWS, WARRANTIES, RETURNS, ADDRESSES (highlighted with a location pin icon and circled with a '1'), PAYMENTS, and DDNS. The main content area is titled 'Address Book' and contains an orange 'Add an Address' button (circled with a '2'). Below this is a 'Create a New Address' form (circled with a '3') with fields for: Country (dropdown menu showing 'United States'), Name (first name 'Tom' and last name 'Smith'), Address (240 D St), Address (line 2), Redwood City, California (dropdown menu), 94063, and (555) 555-5555. There is a 'Make Default' checkbox. At the bottom of the form are 'Submit' and 'Cancel' buttons. The 'Submit' button is circled with a '4'.

1. From your LOREX account, click the **ADDRESSES** tab.
2. Click **Add an Address**.
3. Enter your address information.
4. Click **Submit**.

Once submitted, your address information will be summarized under **My Saved Addresses**.

My Saved Addresses

Operation is successfully done

 Tom Smith 240 D St Redwood City, CA 94063 United States (804) 300-1655	Default: Shipping Edit Delete
---	---

18.4 STEP 4: Activate Your Warranty

Activate the manufacturer's warranty on your recorder.

To activate your product warranty:

The screenshot shows the Lorex account interface. On the left is a sidebar menu with options: REVIEWS, **WARRANTIES** (highlighted with a blue checkmark icon and circled 1), RETURNS, ADDRESSES, PAYMENTS, DDNS, CLOUD, DEVICES, and WEB PLAYER. The main content area is titled 'Activate a New Warranty' and features an orange 'Activate Warranty' button (circled 2). Below this is a form titled 'Your Address' with a dropdown menu showing '1470 2nd Ave'. Below the dropdown is a link 'Add a new address'. The form contains four input fields: 'LHA4108', 'DK01107800021' (circled 3), '12/31/2016', and 'Lorextechnology.com | Website'. There is an 'Attach your bill of sale' button and a 'Choose file' button with the text 'No file chosen'. At the bottom of the form are two buttons: 'Save Warranty' (circled 4) and 'Cancel'.

1. From your LOREX account, click the **WARRANTIES** tab.
 2. Click **Activate Warranty**.
 3. Select your address from the dropdown under **Your Address**. Enter the rest of your product information (attaching bill of sale optional).
 4. Click **Save Warranty**.
- Once submitted, your warranty information will be summarized under **My Warranties**.

My Warranties

The 'My Warranties' section displays a summary of warranty information. It includes a Lorex logo, a product image of a black recorder, and the following details:

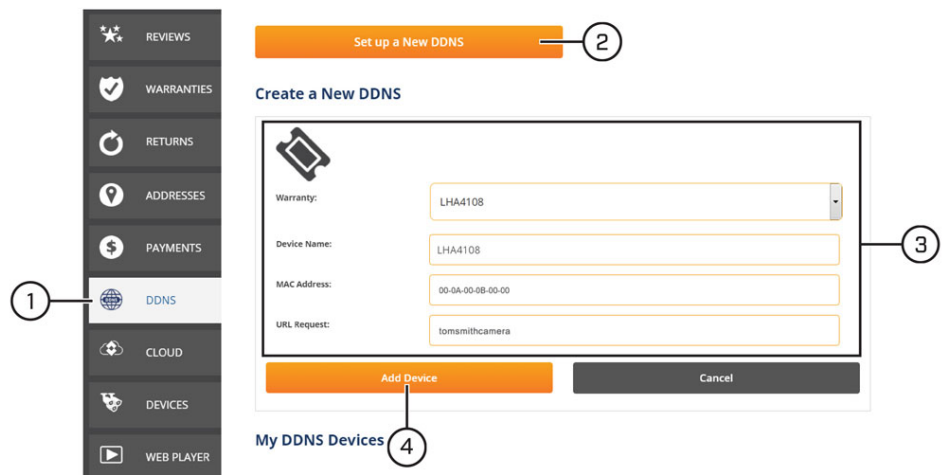
- Warranty No:** LWB-11122016-00092
- Serial Number:** DK01107800021
- Model No:** LHA4108
- Place of Purchase:** Lorextechnology.com | Website
- Purchase Date:** Dec 1, 2016

 At the bottom, there is an 'Upload Bill of Sale' section with a 'Choose file' button and the text 'No file chosen', and a 'Save Bill' button.

18.5 STEP 5: Sign Up for a DDNS Account

Activate the manufacturer's warranty on your recorder.

To sign up for a DDNS account:



1. From your LOREX account, click the **DDNS** tab.
2. Click **Set up a New DDNS**.
3. Select your recorder warranty from the dropdown next to **Warranty**. Enter the rest of your product information.

NOTE

- The **Device Name** can be any name of your choice (for example, “Store Security System”).
- You can find your recorder’s **MAC Address** in the system information window on the recorder. Click  on the Taskbar to open the system information window.

4. Click **Add Device**.
Once submitted, your DDNS account information will be summarized under **My DDNS Devices**. Make a note of your **DDNS URL**, **Username** and **Password**, as they will be needed to complete DDNS setup.

My DDNS Devices



Device Name
LHA4108
Dec 12 2016, 14:54:39

MAC Address:
00-0A-07-0B-00-00

Model No:

URL: tomsmithcamera.lorexddns.net

IP Address: 0.0.0.0

Username: tomsmith

Password: ULCDHUZH

Edit

18.6 STEP 6: Enable DDNS on the recorder

The primary connectivity option for this recorder uses Lorex Cloud Services to connect to your system over the Internet without requiring port forwarding or DDNS registration.

Lorex DDNS is available as an **optional** connectivity option. See 18 *DDNS Setup (Advanced)*, page 76 for details.

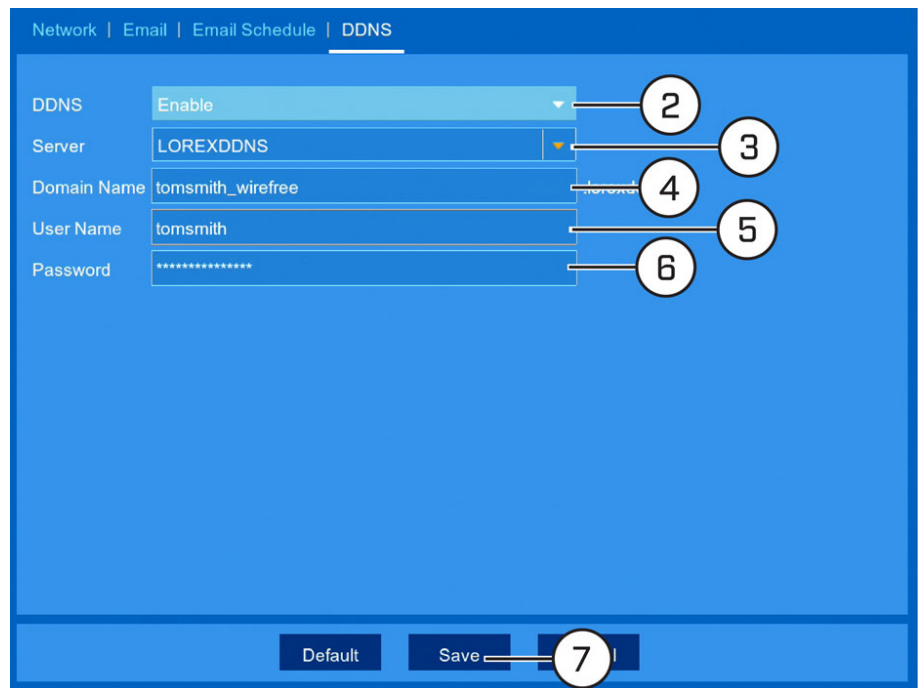
- For details on connecting to your system over the Internet using a smartphone or tablet (**no DDNS setup required**), see 15 *Connecting to Your System Using Smartphone or Tablet Apps*, page 71.

Prerequisites:

- You must create a free Lorex DDNS account. See 18 *DDNS Setup (Advanced)*, page 76 for full setup instructions.

To configure DDNS settings:

- From the live viewing screen, click  > **Settings** > **Network** > **DDNS**.



Network | Email | Email Schedule | DDNS

DDNS: Enable

Server: LOREXDDNS

Domain Name: tomsmith_wirefree

User Name: tomsmith

Password: *****

Default Save

- Select **Enable** from the dropdown next to **DDNS**.
- Select **LOREXDDNS** from the dropdown next to **Server**.
- Click the field next to **Domain Name** to enter the **URL** shown under **My DDNS Devices** in your Lorex account (for example, www.tomsmith.lorexddns.net).
- Click the field next to **User Name** to enter the **Username** shown under **My DDNS Devices** in your Lorex account
- Click the field next to **Password** to enter the **Password** shown under **My DDNS Devices** in your Lorex account
- Click **Save**.

When a malfunction occurs, it may not be serious or difficult to correct. The following chart contains solutions to most common problems. Please refer to the topics below before calling Lorex Technical Support.

Error	Solutions
No picture from cameras showing on the recorder.	• Ensure the Power Pack is properly inserted into the camera base. • Ensure you have removed the PLEASE REMOVE label from the Power Pack. • Connect the power adapter to your Power Pack to ensure it is charged. The LED indicator on the Power Pack glows green for full charge, red for less than full. • Remove obstructions between the recorder and camera. Materials such as brick, concrete and wood can significantly impact the wireless signal strength. • Try repositioning the camera, recorder, or both to improve the reception.
Battery life of cameras is too short.	• Ensure the camera is not pointing at a high-traffic area. Position the camera so it only captures areas of interest with no high-traffic areas (e.g., a busy sidewalk or roadway) visible in the image. • Live video is being viewed too frequently. Viewing live video often will impact battery performance. • Ensure you have configured the distance setting for motion detection to reduce false alarms. For details, see 4.4.3 <i>Optimizing Motion Detection</i>, page 13. • Battery life will vary based on temperature, settings and number of events.
Picture from cameras is dropping.	• Move the camera closer to the recorder. • Try repositioning the camera, recorder, or both to improve the reception.
Picture is or has become choppy.	• Ensure the camera resolution is set to 720p. See 7.3 <i>Changing Recording Resolution</i>, page 22 for details. • Move the camera closer to the recorder. • Remove obstructions between the recorder and camera. Materials such as brick, concrete and wood can significantly impact the wireless signal strength.
Camera is not detecting motion.	• Your camera may be too far away from the area of interest. Try to keep the camera within 20ft (6.1m) of the area you want to monitor. • Review the wire-free installation tips section to ensure your camera is installed in an optimal location and motion detection is properly configured. See 4.4.1 <i>Installation Tips</i>, page 9 and 4.4.3 <i>Optimizing Motion Detection</i>, page 13 for details.
Picture is too bright.	• Ensure your camera isn't pointed directly at a source of light (e.g., sun or spot light). • Move your camera to a different location.
Night vision is not working.	• The night vision activates when light levels drop. The area may have too much light.
Picture is not clear.	• Check the camera lens for dirt, dust, spiderwebs. Clean the lens with a soft, clean cloth. • Too much environmental interference will affect picture clarity. Move your camera to a different location.
Bright spot in video when viewing at night.	• Night vision reflects when pointing a camera through a window. Move the camera to a different location.

Error	Solutions
System is not receiving power, or is not powering up.	• Confirm that all cables are firmly connected to the recorder. • Confirm that the power adapter is securely connected to the back of the unit. • 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: ◦ Connect the power cable to another outlet. ◦ Test the outlet with another device (such as a lamp or phone charger).
There is no picture on monitor/TV after connecting it to the recorder.	• Power off the monitor/TV and the recorder. Power on the monitor/TV, and then power on the recorder. • Ensure that the monitor/TV is set to the input channel that the recorder is connected to. • Check the video cable connection to the recorder and the monitor/TV.
Mouse not detected by system.	• Remove then firmly reconnect the mouse cable to one of the USB ports marked Mouse / Backup. • Power off the system (disconnect power cable). Firmly connect a USB mouse to one of the USB ports. Reconnect the power cable to the 12V DC port on the rear panel.
The edges of the recorder's on-screen display are cut off.	• If you are using an older Cathode Ray Tube (CRT) monitor, you may need to enable overscan. See 13.2.5 <i>Changing the Display Resolution</i>, page 49 for full instructions on enabling overscan support.
The image on one or more of my cameras is distorted or discolored.	• The system uses the region entered in the setup wizard to intelligently determine the video format for your region. • To change the region, enter the main menu. Under System, click General, then click the NTP tab. Use the dropdown next to Time Zone to select the correct region, then click Save. The system takes some time to refresh and reboot.
The system beeps during motion detection.	• Enter the main menu. Under Settings, click Motion to open the Motion Settings tab. Use the dropdown next to Buzzer to select Disable for any channels you want to disable the buzzer for, then click Save. For more details on motion detection configuration, see 13.2.10 <i>Configuring Motion Detection Settings</i>, page 55.
I am not receiving email notifications.	• Ensure you have configured email notification. For full instructions, see 13.2.8 <i>Setting up Email Notifications</i>, page 52. • If you want to use your own SMTP server, you must enter your SMTP server address, SMTP port, username, and password in the appropriate fields. For full instructions, see 13.2.8.2 <i>Email Notifications — Using your own server information</i>, page 54.

20.1 Wire-Free DVR (LHWF1000 Series)

20.1.1 System

Pentaplex	Simultaneous View, Record, Playback, Backup & Remote Monitoring
Number of Channels	6 Channels

20.1.2 Inputs/Outputs

VGA OUT	No
HDMI	Yes
USB Port	3 in rear (Mouse, Backup, USB Storage)
Video Output Resolution	1920×1080, 1440×900, 1280×1024, 1280×720

20.1.3 Display

Display Split	1/6
Live Display Speed	72fps @ 1080p 90fps @ 720p
OSD	ON
System Navigation	USB mouse
Firmware Upgrade	Network / USB device
User Authority	By user group
Time Synchronization	Auto time sync by NTP server

20.1.4 Recording

Video Compression	H.264
Recording Resolution	1080p / 720p
Recording Frame Rate	1080p: 12fps per channel 720p: 15fps per channel
Recording Resolution Setting	Per camera for different resolutions
Recording Schedule	By motion or manual recording
Reliability	Watch-Dog, auto-recovery after power failure

20.1.5 Playback

Playback Channel	1/4/6
Playback Speed	Variable Max 2×
Playback Players	Backup Player
Search	By time, date & event
Log Search	Up to 4,000 lines for system configuration changes, motion detected, account, recording & storage.

20.1.6 Storage & Archive

Storage	1× security-grade HDD (2.5" SATA, non-upgradable) or 1× microSD card
Maximum Capacity	1× 1TB SATA HDD (2.5" SATA, non-upgradable) or 1× microSD card (up to 128 microSD Class 10 supported)
Storage Priority	HDD (1× 1TB); microSD / USB flash drive: 1× 128MB
Backup Media	USB flash drive, HDD & network
Backup File Format	LF / MP4

20.1.7 Connectivity

Cloud Connection	P2P connectivity
Supported Operating Systems	Windows™ Mac OSX
Remote Software	Lorex Cirrus mobile app
Email Notification	Text with snapshot
Instant Smartphone & Tablet Support	iPad®, iPhone®, Android™
System Configuration	Full setup configuration over network
Ports	Programmable by user
Network Protocol	HTTP, IPv4, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Interface	10/100 Base-TX, RJ-45
Network Bit Rate	Max. 32Mbps total

20.1.8 General

Power Consumption	3W (no HDD installed)
Supply Voltage	100VAC-240VAC, 12VDC, 2A, 50/60Hz
Unit Weight (lbs / kg)	2.6lbs / 1.2kg (without hard drive)
Unit Dimensions	2.4 × 7.1 × 7.4" / 60 × 180 × 187mm
Operating Temperature	14° ~ 131°F / -10° ~ 55°C
Humidity	10 ~ 90% RH

20.1.9 Recording Resolution (Pixels) & Maximum Speed (FPS — Frames per second)

		1080p	720p
6ch	Total	72fps	90fps
	Per channel	12fps	15fps

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

This product 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 the guidelines in this manual to avoid improper usage, which may result in damage to the product, electrical shock and fire hazard injury.

21.1 FCC/IC

This equipment has been tested and found to comply with the limits for a digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential or commercial installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

21.2 CE

This product and the supplied accessories are marked with “CE” and comply with the applicable harmonized European standards listed under Low Voltage Directive 2006/95/EC and the EMC Directive 2004/108/EC.

21.3 Modification

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

Toute modification non approuvée explicitement par le fournisseur de licence de l'appareil peut entraîner l'annulation du droit de l'utilisateur à utiliser l'appareil.

21.4 RoHS

This product is fully compliant with the European Union Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment ("RoHS") Directive (2002/95/EC). The RoHS directive prohibits the sale of electronic equipment containing certain hazardous substances such as lead, cadmium, mercury, and hexavalent chromium, PBB, and PBDE in the European Union.

21.5 ICES-003

This device meets the CAN ICES-3 (A) / NMB-3 (A) standards requirements.

**Website**

www.lorextechnology.com

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Legal disclaimer

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