

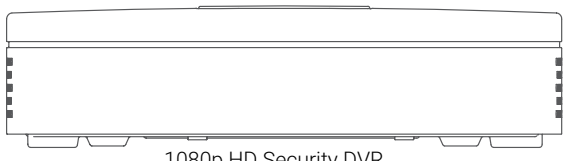
Quick Setup Guide

Physical setup of the recorder and essential system settings

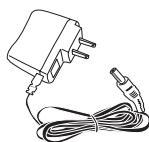


D231 Series

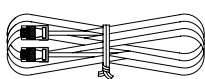
Package Contents



1080p HD Security DVR



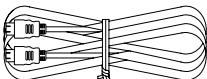
Power Adapter



Ethernet Cable

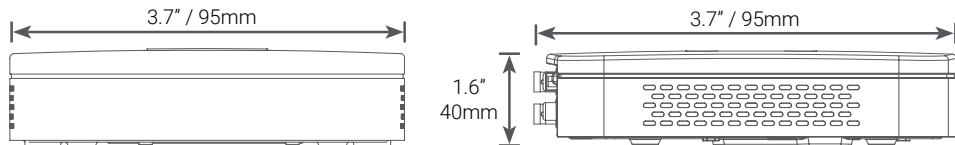


USB Mouse



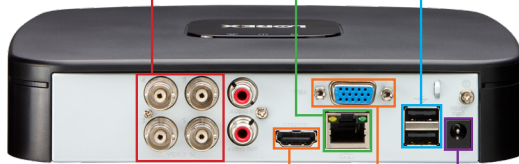
HDMI Cable

Dimensions



Setting Up Your Recorder

See the steps below (expanded instructions to the right) to complete initial setup of the recorder:



For camera compatibility information, visit lorex.com/compatibility.

* Not included / sold separately.

Overview of extra ports:



Audio In/Out

Connect microphone / speaker*

USB

Backup to USB flash drive*

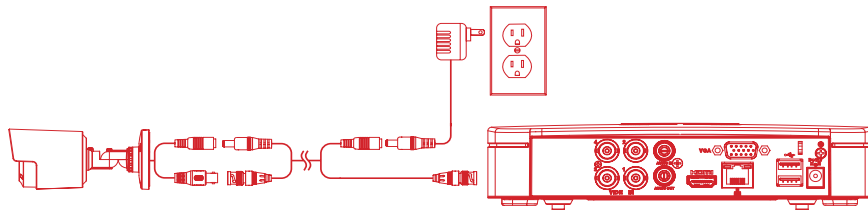
NOTE: For full instructions on using the extra ports, please refer to your security recorder's instruction manual at lorex.com.

Back panels shown below are for illustration only. Your recorder's back panel may appear different, with all the same ports in different locations.



STEP 1: Connect cameras*

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



NOTES:

- The extension cable must be a single stretch of cable between the recorder and camera. You cannot connect multiple extension cables to each other.
- This guide covers connecting cameras to your security recorder only. For full instructions on installing your cameras, please refer to your camera's documentation at lorex.com.
- Before selecting a permanent mounting location for your cameras, see **Ensuring Accurate Person / Vehicle Detection** below for important camera installation notes.



STEP 2: Connect router*

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

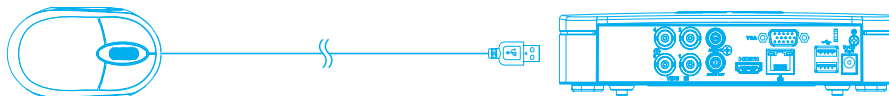


NOTE: To receive automatic firmware updates and enable remote viewing with mobile apps, a high speed Internet connection is required (minimum upload speed of 3.5Mbps required for remote viewing). All other system features can be used without an Internet connection.



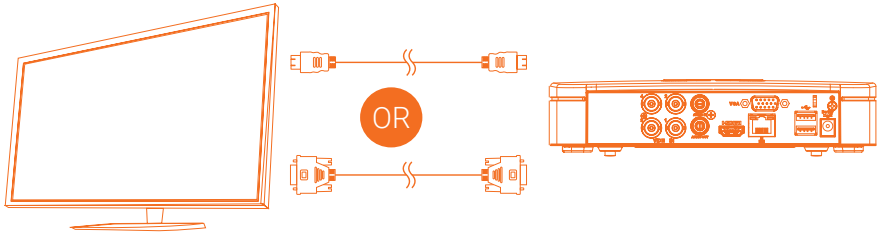
STEP 3: Connect mouse

Connect the included mouse to one of the two USB ports on the recorder.



STEP 4: Connect monitor*

Connect the recorder to a monitor using the included HDMI cable or a VGA cable (not included). Both HDMI and VGA ports support up to 1080p output resolution.



IMPORTANT: The system will automatically match the resolution of the connected monitor the first time you use the recorder. If you need to switch monitors, make sure you set the recorder to an output resolution supported by the new monitor before switching. See **Changing the Recorder's Output Resolution** on the rear for details.



STEP 5: Connect power

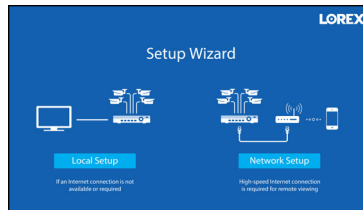
Use the included power adapter to connect the recorder to a nearby outlet to turn on.



STEP 6: Lorex Setup Wizard

When you first power up your recorder, the **Lorex Setup Wizard** will begin. The Wizard will help you configure core system settings.

You will also create a secure password. For future reference, it is recommended that you record your password here:



Record your password below and store in a secure place:

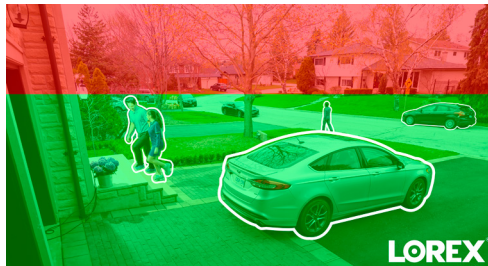


Ensuring Accurate Person/Vehicle Detection



The following are important camera installation notes to ensure accurate person/vehicle detection. For full camera mounting instructions, see your camera's documentation at lorex.com.

- Angle the camera so that objects of interest appear in the bottom ⅓ of the camera image.
- Choose a location where objects of interest will be no further than 50ft (~15m) from the camera.



Lower accuracy for objects further away than 50ft (~15m) and/or in the top ⅓ of the image.

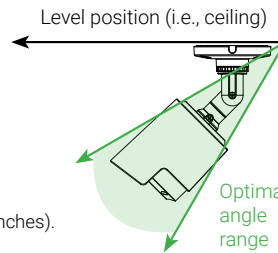
Optimal accuracy for objects within 50ft (~15m) and in the bottom ⅓ of the image.

- Angle the camera between 30~60° down from the level position.
- Install the camera between 8-16ft (2.5-5m) off of the ground.

NOTE: Accuracy of person/vehicle detection will be influenced by multiple factors, such as the object's distance from the camera, the size of the object, and the height and angle of the camera. Night vision will also impact the accuracy of detection.

Additional Installation Tips:

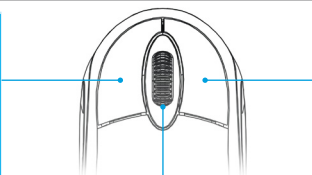
- Point the camera where there is the least amount of obstructions (e.g., tree branches).
- Install the camera where vandals cannot easily reach.
- Secure cabling so that it is not exposed or easily cut.
- This camera is rated for outdoor use. Installation in a sheltered location is recommended.



Once you have completed all steps for initial setup on the front of this guide, please refer to the following sections to learn more about using your system.

Using the Mouse

- **During split-screen display mode:** Click an individual channel to view it in full-screen. Click again to return to the split-screen display mode.
- **While navigating menus:** Click to open a menu option.



- **During live view:** Click anywhere on the screen to open the Quick Menu.
- **While navigating menus:** Click to exit menus.

During live view: Use the scroll wheel to zoom in / out.

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.

Quick Access to System Information

To quickly open a window that displays vital system information such as device ID, model number, firmware version, and IP address:

- Tap the button on the front panel of the recorder.

OR

- Right-click to open the Quick Menu and click **Info**.

Using the Quick Menu

Right-click anywhere on the live viewing screen to open the Quick Menu.



- Open Main Menu.
- Search and playback recordings.
- Control PTZ cameras (not included).
- Select camera / live display view.
- View previous / next channel(s).
- View system information.
- Start/stop sequence mode.
- Temporarily disable all current audible warnings.
- Open manual recording controls.
- Adjust camera color and image settings.

Changing the Recorder's Output Resolution

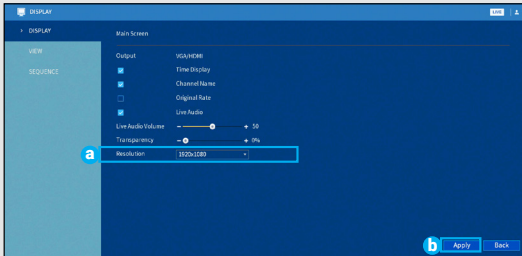
The system will automatically match the resolution of the connected monitor the first time you use the recorder.

IMPORTANT: If you need to switch the monitor, make sure you set the recorder to an output resolution supported by the new monitor before switching.

To change the recorder's output resolution:

- From live view, right-click and then click **Main Menu**. If prompted, log in using the system user name (default: **admin**) and your new, secure password.
- Click **DISPLAY**, then configure the following:

- Set **Resolution** to match the highest resolution supported by your monitor. For example, select **1920×1080** for 1080p monitors, or **1280×720** for 720p.
- Click **Apply**. The recorder will restart before changes take effect.



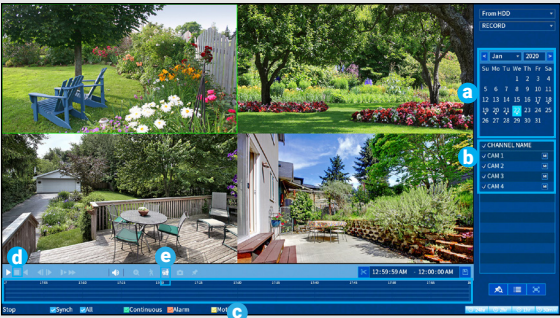
Playback

Search through and play video recordings from the hard drive.

To search for and play recordings:

- From live view, right-click and then click **Playback**. If prompted, log in using the system user name (default: **admin**) and your new, secure password.
- Configure the following:

- Use the calendar on the right to select the date to playback.
- Check channels you want to play back. Click the icon beside each selected channel to select **Mainstream (M)** or **Substream (S)** video quality.
- Click inside the video bar to select the playback time. Playback starts immediately at the selected time.



To filter for person/vehicle recordings:

PREREQUISITE: You must enable **Smart Motion Detection** on any and all channels you would like to filter for person / vehicle detection. See the section **Motion & Advanced Person/Vehicle Detection** for details.

- Click to stop current playback.
- Hover over the icon. Check **Person/Vehicle** to filter available playback events. Wait a few seconds for the video bar to show detection events.

Backup

Back up recordings from the hard drive to a USB flash drive (not included).

To back up recordings:

- Insert a formatted USB flash drive (not included) into a free USB port on the recorder.
- From live view, right-click and then click **Main Menu**. If prompted, log in using the system user name (default: **admin**) and your new, secure password.
- Click **BACKUP**.
- Configure the following:

- Select your USB drive and the folder for the backup.
- Select the channel(s) and recording types to search by.
- Select a start and end time.
- Choose a file format.
- Click **Add** to see recordings that match your search.
- Check boxes next to recordings you want to back up.
- Click **Backup**.

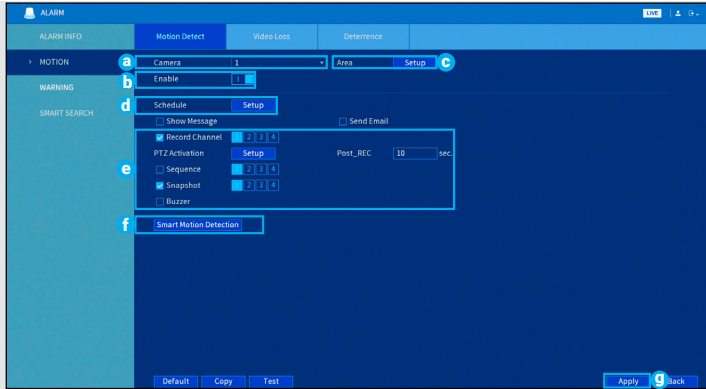


Motion & Advanced Person/Vehicle Detection

Set preferences for motion detection. This section includes setup of person/vehicle detection. By default, person/vehicle detection is enabled on channel 1.

To configure motion & advanced person/vehicle detection:

- From live view, right-click and then click **Main Menu**. If prompted, log in using the system user name (default: **admin**) and your new, secure password.
- Click **ALARM**. Click **MOTION** on the far-left, then click the **Motion Detect** tab.
- Configure the following:



- Select the channel you would like to configure.
- Click **Enable**.
- Click **Setup** next to **Area** to set an active area for motion detection. See **Figure 1** below for details.
- Click **Setup** next to **Schedule** to set the weekly schedule for motion detection. See **Figure 2** below for details.
- Set preferences for how the system reacts to motion detection events.
- Click **Smart Motion Detection** to enable person / vehicle detection. See **Figure 3** below for details.
- Click **Apply** to save changes.

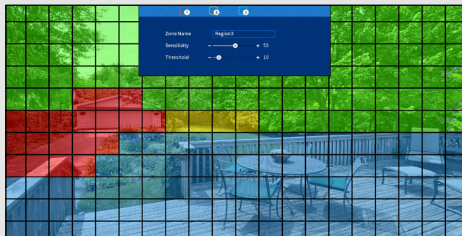


Figure 1: Motion Detection Area

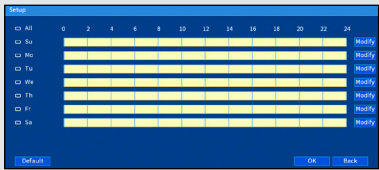


Figure 2: Motion Schedule

- The default schedule, shown in **Figure 2**, is active at all times.
- Click **Modify** to change the schedule for the corresponding day of the week.
- Click **OK** when finished.

- The camera image appears with a red grid overlay. This means the entire image is enabled for motion detection.
- Click or click-and-drag to add / remove boxes from the active area. Cells that have been removed from the active area appear green.
- Hover near the top of the image to reveal zone selection. You can set up to 3 different zones with different sensitivity and threshold values.
- Right-click when finished.

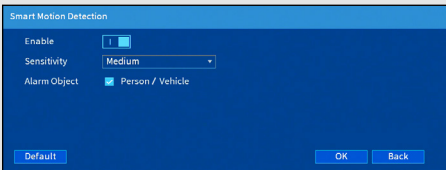


Figure 3: Smart Motion Detection

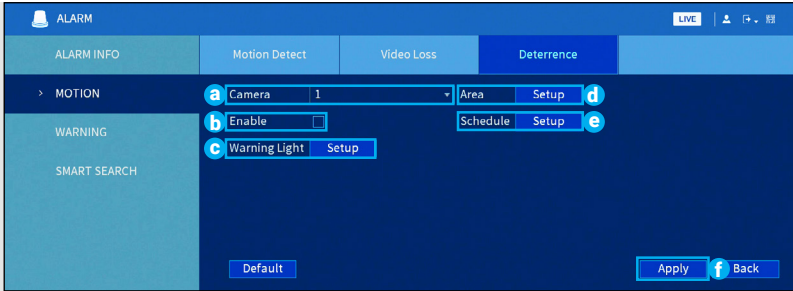
- Click **Enable** to allow detection of people and vehicles on the selected channel.
- IMPORTANT:** A maximum of 1 channel will support person/vehicle detection at once. By default, channel 1 has person/vehicle detection enabled.
- Select a **Sensitivity** level (a high sensitivity value will detect smaller objects than a low value).
- Check **Person / Vehicle**.
- Click **OK** when finished.

Configuring Deterrence Settings

Set preferences for automatic warning light triggering on compatible Lorex deterrence cameras. For a complete list of compatible deterrence cameras, navigate to your recorder series at lorex.com/compatibility.

To configure deterrence settings:

- In live view, right-click and click **Main Menu**. If prompted, log in using the system user name (default: **admin**) and your new, secure password.
- Click **ALARM**. Click **MOTION** on the far-left, then click the **Deterrence** tab.
- Configure the following:



- Select the channel of a connected deterrence camera.
- Check **Enable**.
- Click **Setup** next to **Warning Light** to configure preferences.
- Click **Setup** next to **Area** to set an active area for automatic deterrence. See **Figure 4** below for details.
- Click **Setup** next to **Schedule** to set the weekly schedule for automatic deterrence. See **Figure 5** below for details.
- Click **Apply**.



Figure 4: Deterrence Area

- The camera image appears with a grid overlay. The green area is the active area for deterrence.
- Click or click-and-drag to add / remove boxes from the active area.
- In **Figure 4**, only motion around the doorway will trigger warning light.
- Right-click when finished.



Figure 5: Deterrence Schedule

- The default schedule, shown in **Figure 5**, is active during the night, between 5pm and 7am.
- Click **Modify** to change the schedule for the corresponding day of the week.
- Click **OK** when finished.