Table of Contents

Luma x20 Resources

Click the resource you need, or use the index at left:

Luma View App: The surveillance app for your customers.

Luma x20 Quick-Start Using OvrC: Get your newly installed system up and running in minutes.

Luma x20 OvrC Guide: Details on everything you can do without leaving OvrC, including motion detection, smart events, image adjustment, and more.

- NVR Configure Tab

- IP Camera Details Tab

- IP Camera Configure Tab

Luma x20 NVR Interface: For the specialty settings that OvrC does not handle.

Luma x20 Camera Interface: For the few specialty settings that OvrC does not handle.

Back to the Swipe Install Guides

Tech Support FAQs

These are the most common calls that Tech Support gets from technicians in the field.
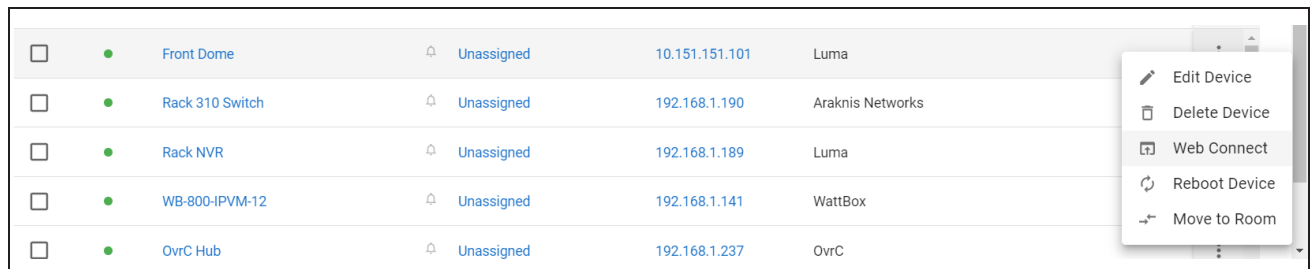
Pro Tip: You must first claim your NVR and cameras in OvrC and update all firmware before setting up the system.

Pro Tip: Most configuration can be handled quickly and easily through OvrC. See the OvrC Quick Start for details.

[Setting up a Luma x10 with a Luma x20 (Tech Community)](#).

Luma x20 Camera Interface

Most common functions can be handled via OvrC. However, if you need to access an x20 camera's web interface, go to its Devices page in OvrC, open the extended menu at right, and select the **Web Connect** option. When the new page opens, click the **Connect** icon. Log in as SupportAdmin using the password provided under Camera Credentials in OvrC's Configure Tab.

☐	●	Front Dome	🔔 Unassigned	10.151.151.101	Luma
☐	●	Rack 310 Switch	🔔 Unassigned	192.168.1.190	Araknis Networks
☐	●	Rack NVR	🔔 Unassigned	192.168.1.189	Luma
☐	●	WB-800-IPVM-12	🔔 Unassigned	192.168.1.141	WattBox
☐	●	OvrC Hub	🔔 Unassigned	192.168.1.237	OvrC

Extended menu:
- Edit Device
- Delete Device
- Web Connect
- Reboot Device
- Move to Room

Main Controls

The interface opens to the Live Page.

Across the top of the windows are several controls that appear on all pages.

OvrC: Connected | admin | Logout — Live | Config | Search | Statistics

At the top right, the camera shows the Ovrc status and the name of the account you are using. Click to the right to log out.

Below that are tabs that navigate to the main pages.

Contents

- Alarm Tile

- Event Tile

- Image Tile

- Maintenance Tile

- Network Tile

- Security Tile

- System Tile

- Search Page

- Statistics Page

Luma x20 IPC UI - Live Page

This shows the camera's current video feed and presents various controls and alerts.

(1) Feed Selection Buttons

At the top left of the image window, click to select which feed you want to view.

(2) Image Sizing Buttons

To the lower left, you can adjust how the feed appears.

- **Original Size:** Displays the feed at its native resolution.

- **Proper Size:** Corrects the aspect ratio of the feed.

- **Adapt:** Fills the image window with the feed (may cause distortion).

- **Full Screen:** Fills your monitor with the feed. Double-click your mouse or press the **Esc** key to exit full-screen mode.

(3) Control Buttons

- **Live View:** This toggle allows you to suspend or resume the live view.

- **Enable Audio:** If your camera has a microphone that has been enabled, this toggle adds live audio to the surveillance feed.

- **Enable Audio:** Adds the camera's audio feed to the live view.

- **Snapshot:** Captures the screen.

- **Local Recording:** This toggle only appears when using IE with the surveillance plugin. It allows you to record the feed to the SD card regardless of schedule.

- **Zoom In:** Digitally zooms in to the feed (click multiple times for greater zoom, though the image pixelates once you surpass its resolution). You can then click and drag the screen to pan around the image.

- **Zoom Out:** Digitally zooms out of the feed. Click multiple times to decrease zoom until the entire feed is visible.

- **Zoom/Focus:** If your camera is equipped with a motorized lens, this opens the Zoom/Focus control panel. This panel appears at the right side of your window. In order, the button are wide-angle, telephoto, focus closer, focus farther, and one-touch focus.
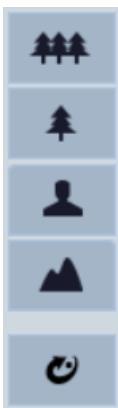
- **Rule Info:** This toggle overlays the active line crossing or intrusion zone rules on the screen.

(4) Alerts

When the camera detects an anomaly, icons appear to the upper right of the video feed.

The camera is recording to its SD card.

A sensor alarm has been triggered.

Motion has been detected.

Abnormal color alert.
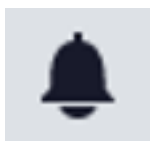
Abnormal clarity alert.

Abrupt scene change alert.

Line crossing alert.
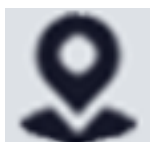
Intrusion alert.

 Target count activated.

Luma x20 IPC UI - Config Page

This holds all the configuration tools for the camera, organized into tiles.

> **Pro Tip:** Most common configuration can be handled more easily through the improved OvrC interface.

The tiles are presented in alphabetical order. The tiles are not clickable, but each tile holds several hotlinks.

When you click a hotlink, the tiles all move to the left side; all the hotlinks remain. At the top of the main section are hotlinks that show you where in the navigation tree you are.

Config > Alarm Tile

This handles basic motion and exception alarms

Contents:

- **Motion Detection** - See if something is moving in the view

- **Exception Alarm** - Protect against internal system errors

- **Alarm In** - Configure how your camera handles incoming alerts

- **Alarm Out** - Configure your camera to send an alert

Motion Detection

Pro Tip: This is easily handled using OvrC. Go to the camera's Device Details tab and use Activity Zones.

This is for basic motion detection. For advanced AI detection such as line crossing and area intrusion, see the Alarm Out.

Detection Config Tab

This configures how your camera reacts to the events.

Enable (if present): This box must be checked to edit anything else on the page.

Alarm Holding Time: This allows the alarm to continue after the event that triggers it ends (for example, if someone opens and quickly shuts a door sensor).

Alarm Out: If your camera is equipped with physical alarm out connections, enabling this has the camera send the alarm.

Trigger SD Card Snapshot (if present): Sends a photo of what triggered the alarm to the SD card.

Trigger SD Recording (if present): Records to the SD card for the duration of the alarm.

Trigger Email: This opens a dialog in which you can list email addresses to receive the alert, set that email's subject line and body text, and decide whether to attach a photo of the incident.

Trigger FTP: Add the server address for your FTP site, and the camera uploads any alert recordings to that site for remote viewing.

Click **Save** when finished.

Area and Sensitivity Tab

This section replicates the Activity Zones feature found in OvrC.

The only extra functionality here is the **Invert** button, which switches each grid square between active and inactive.

Schedule Tab

This sets which times the given activity is enabled.

The **Week Schedule** section is where you determine when the camera sends data to be recorded for normal days. Click the **Erase** or **Add** radio buttons, then click and drag your mouse across one of the bands. The exact time spread for that band appears below the band as you click and drag. Alternatively, click **Manual Input** at the right end of each band to enter specific times.

The **Holiday Schedule** section lets you set alternate behavior that overrides the normal daily schedule. In the **Date** text box, enter a month and day in numeric format (i.e., use 02-14 for February 14th). Click **+** to add that date to the list of holidays shown at right. To remove a holiday, click on it in the textbox to the right and click the **-** button. All holidays follow the same schedule.

Exception Alarm

This section sets how your camera reacts to internal events that may interfere with surveillance. For external interference, see Video Exception.

There are tabs for:

- SD Card Full (no space to record)

- SD Card Error (a flaw prevents recording)

- IP Address Collision (a problem at the router or switch)

- Cable Disconnected (a physical disconnect)

They all work the same way, though some tabs do not have all of the controls.

Each tab configures how your camera reacts to that event.

Enable (if present): This box must be checked to edit anything else on the page.

Alarm Type: Choose either normally open or normally closed.

Alarm Holding Time: This allows the alarm to continue after the event that triggers it ends (for example, if someone opens and quickly shuts a door sensor).

Sensor Name: To aid in troubleshooting.

Alarm Out: If your camera is equipped with physical alarm out connections, enabling this has the camera send the alarm.

Trigger SD Card Snapshot (if present): Sends a photo of what triggered the alarm to the SD card.

Trigger SD Recording (if present): Records to the SD card for the duration of the alarm.

Trigger Email: This opens a dialog in which you can list email addresses to receive the alert, set that email's subject line and body text, and decide whether to attach a photo of the incident.

Trigger FTP: Add the server address for your FTP site, and the camera uploads any alert recordings to that site for remote viewing.

Click **Save** when finished.

Alarm In

Certain models have alarm contacts on their pigtail (for door sensors, etc.). This configures what your camera does when an alarm reaches it through the pigtail.

Detection Config Tab

This configures how your camera reacts to an incoming alarm.

Enable (if present): This box must be checked to edit anything else on the page.

Alarm Holding Time: This allows the alarm to continue after the event that triggers it ends (for example, if someone opens and quickly shuts a door sensor).

Alarm Out: If your camera is equipped with physical alarm out connections, enabling this has the camera send the alarm.

Trigger SD Card Snapshot (if present): Sends a photo of what triggered the alarm to the SD card.

Trigger SD Recording (if present): Records to the SD card for the duration of the alarm.

Trigger Email: This opens a dialog in which you can list email addresses to receive the alert, set that email's subject line and body text, and decide whether to attach a photo of the incident.

Trigger FTP: Add the server address for your FTP site, and the camera uploads any alert recordings to that site for remote viewing.

Click **Save** when finished.

Schedule Tab

This sets which times the given activity is enabled.

The **Week Schedule** section is where you determine when the camera sends data to be recorded for normal days. Click the **Erase** or **Add** radio buttons, then click and drag your mouse across one of the bands. The exact time spread for that band appears below the band as you click and drag. Alternatively, click **Manual Input** at the right end of each band to enter specific times.

The **Holiday Schedule** section lets you set alternate behavior that overrides the normal daily schedule. In the **Date** text box, enter a month and day in numeric format (i.e., use 02-14 for February 14th). Click **+** to add that date to the list of holidays shown at right. To remove a holiday, click on it in the textbox to the right and click the **-** button. All holidays follow the same schedule.

Alarm Out

This allows the camera to send out an alarm through its pigtail.

There are four Alarm Out Modes:

- **Alarm Linkage:** The camera is directly linked to the other device via the phoenix connector in the camera's tail. You must also enter the alarm's name in the Alarm Out Name text box.

- **Manual Operation:** This lets the operator manually trigger or cancel an alarm.

- **Day/night switch linkage:** This controls the alarm based on the camera switching between day mode and night mode.

- **Timing:** This controls the alarm based on time of day using the Schedule tool.

Schedule Tool

This sets which times the given activity is enabled.

The **Week Schedule** section is where you determine when the camera sends data to be recorded for normal days. Click the **Erase** or **Add** radio buttons, then click and drag your mouse across one of the bands. The exact time spread for that band appears below the band as you click and drag. Alternatively, click **Manual Input** at the right end of each band to enter specific times.

The **Holiday Schedule** section lets you set alternate behavior that overrides the normal daily schedule. In the **Date** text box, enter a month and day in numeric format (i.e., use 02-14 for February 14th). Click **+** to add that date to the list of holidays shown at right. To remove a holiday, click on it in the textbox to the right and click the **-** button. All holidays follow the same schedule.

Config > Event Tile

This tile organizes how your camera reacts to noteworthy situations.

Contents:

- [Video Exception](#) - Protect against vandalism and malfunction

- [Line Crossing](#) - Watch to see if someone crosses a boundary

- [Target Counting by Line](#) - Tally how many targets cross the line

- [Region Intrusion](#) - Track those who enter a specific area

Video Exception

Exceptions are events that the camera deems abnormal.

Detection Config Tab

In this tab, you decide which exceptions the camera should monitor for:

- **Scene Change Detection:** Sends an alert if the camera's view abruptly changes. This can happen if the camera is knocked or blocked.

- **Video Blur Detection:** Sends an alert if the image loses focus.

- **Video Tampering Detection:** Sends an alert if the camera detects an abnormal feed, or someone trying to interfere with a feed.

Next, configure how your camera reacts to the selected events.

Alarm Holding Time: This allows the alarm to continue after the event that triggers it ends (for example, if someone opens and quickly shuts a door sensor).

Alarm Out: If your camera is equipped with physical alarm out connections, enabling this has the camera send the alarm.

Trigger SD Card Snapshot (if present): Sends a photo of what triggered the alarm to the SD card.

Trigger SD Recording (if present): Records to the SD card for the duration of the alarm.

Trigger Email: This opens a dialog in which you can list email addresses to receive the alert, set that email's subject line and body text, and decide whether to attach a photo of the incident.

Trigger FTP: Add the server address for your FTP site, and the camera uploads any alert recordings to that site for remote viewing.

Click **Save** when finished.

Sensitivity Tab

This determines how easily the camera decides whether or not one of these exceptions has occurred. Higher sensitivity means smaller changes create an alert.

Line Crossing

Pro Tip: Line crossing is easily configured in the OvrC interface. However, OvrC does not configure differing sensitivities based on target type.

The camera can use AI to determine whether something crosses a line. Line crossing cannot be used if area intrusion (above) is being used.

Detection Config Tab

This configures how your camera reacts to the events.

Enable: This box must be checked to use anything else on the page.

Save Original Picture to SD Card: This saves the full video image of the moment the event is triggered.

Save Original Picture to SD Card: This saves the cropped image of the object that triggered the alarm.

Below that, you can select whether the camera will look for people, motor vehicles (like cars), and/or non-motor vehicles (like bicycles). Each option has its own sensitivity setting.

Alarm Holding Time: This allows the alarm to continue after the event that triggers it ends (for example, if someone opens and quickly shuts a door sensor).

Alarm Out: If your camera is equipped with physical alarm out connections, enabling this has the camera send the alarm.

Trigger SD Card Snapshot (if present): Sends a photo of what triggered the alarm to the SD card.

Trigger SD Recording (if present): Records to the SD card for the duration of the alarm.

Trigger Email: This opens a dialog in which you can list email addresses to receive the alert, set that email's subject line and body text, and decide whether to attach a photo of the incident.

Trigger FTP: Add the server address for your FTP site, and the camera uploads any alert recordings to that site for remote viewing.

Click **Save** when finished.

Area Tab

Pro Tip: Line crossing is more easily configured in the OvrC interface.

Detection Config   Area   Schedule

Alarm Line	1
Direction	A->B

Draw Area   Clear   Save
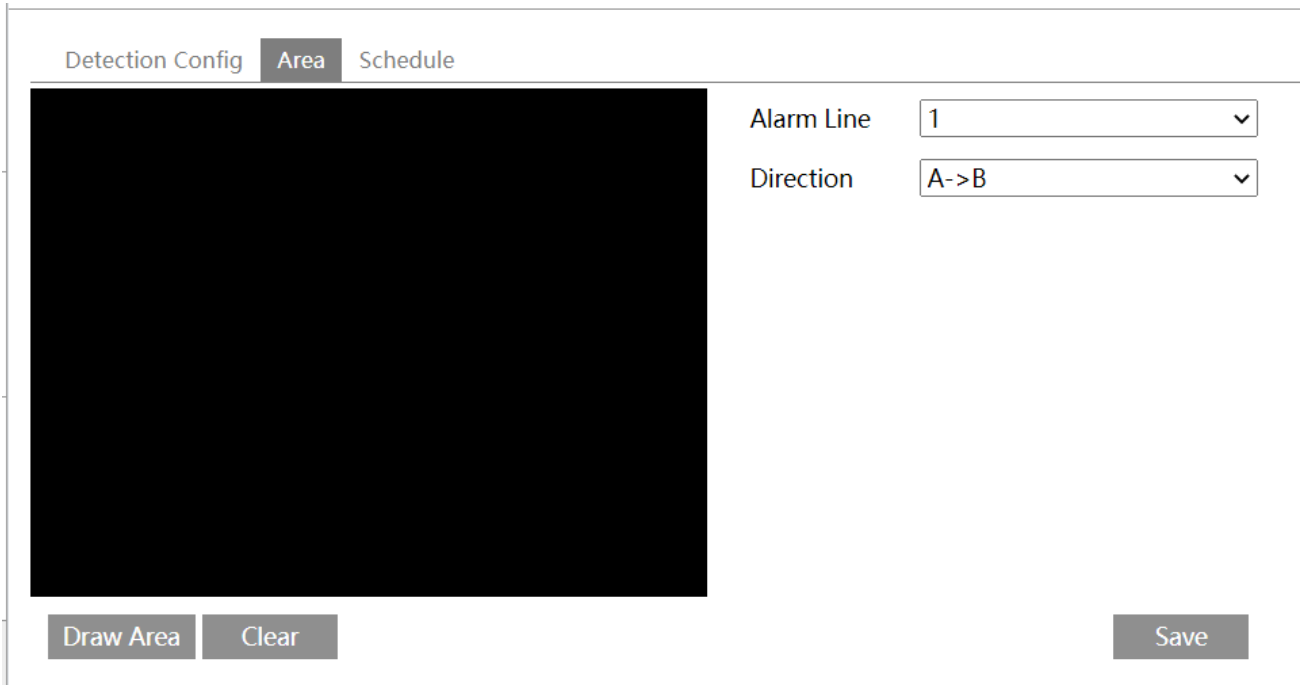
Under **Alarm Line**, select which of the 4 lines you want to modify. Click **Draw Area.** Click and drag in the camera view image to create the line. Click and drag one end of a line to edit it.

Note the arrow in the camera image, and the selection in the **Direction** dropdown. The camera counts line crossings in that direction only. You can change the dropdown selection to reverse the direction.

Click **Clear** to delete the selected line.

Click **Save** before exiting.

Schedule Tab

This sets which times the given activity is enabled.

The **Week Schedule** section is where you determine when the camera sends data to be recorded for normal days. Click the **Erase** or **Add** radio buttons, then click and drag your mouse across one of the bands. The exact time spread for that band appears below the band as you click and drag. Alternatively, click **Manual Input** at the right end of each band to enter specific times.

The **Holiday Schedule** section lets you set alternate behavior that overrides the normal daily schedule. In the **Date** text box, enter a month and day in numeric format (i.e., use 02-14 for February 14th). Click **+** to add that date to the list of holidays shown at right. To remove a holiday, click on it in the textbox to the right and click the **-** button. All holidays follow the same schedule.

Target Counting by Line

Here you can track how many people, cars, etc., cross your line. **This line is different from the lines used in the Line Crossing alarm.** Unlike line crossing, you can only have one counting line.

Detection Config Tab

This configures how your camera reacts to the events.

Enable: This box must be checked to use anything else on the page.

Save Original Picture to SD Card: This saves the full video image of the moment the event is triggered.

Save Original Picture to SD Card: This saves the cropped image of the object that triggered the alarm.

Below that, you can select whether the camera will look for people, motor vehicles (like cars), and/or non-motor vehicles (like bicycles). Each option has its own sensitivity setting.

Staying Threshold: Each type of target also has a threshold that needs to be met before triggering an alarm. When this si set to zero, every crossing sets off the alarm. When set to higher numbers, the camera only triggers the alarm if it sees excess traffic.

Counting Reset: In the middle of the alarm section, the Counting Reset section tells the camera when to start its count over. You can choose daily, weekly, monthly, or not at all. Click the **Reset** button to restart the count manually.

Alarm Holding Time: This allows the alarm to continue after the event that triggers it ends (for example, if someone opens and quickly shuts a door sensor).

Alarm Out: If your camera is equipped with physical alarm out connections, enabling this has the camera send the alarm.

Trigger SD Card Snapshot (if present): Sends a photo of what triggered the alarm to the SD card.

Trigger SD Recording (if present): Records to the SD card for the duration of the alarm.

Trigger Email: This opens a dialog in which you can list email addresses to receive the alert, set that email's subject line and body text, and decide whether to attach a photo of the incident.

Trigger FTP: Add the server address for your FTP site, and the camera uploads any alert recordings to that site for remote viewing.

Click **Save** when finished.

Area Tab

Click **Draw Area.** Click and drag in the camera view image to create the line. Click and drag one end of a line to edit it.

Note the arrow in the camera image, and the selection in the **Direction** dropdown. The camera counts line crossings in that direction only. You can change the dropdown selection to reverse the direction.

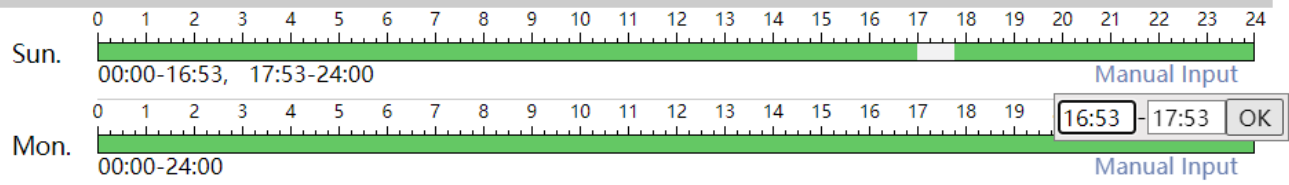Click **Clear** to delete the selected line.

Click **Save** before exiting.

In addition, you can enable Statistics to add information text to the screen, detailing your preferences in the OSD area. Be sure to click **Save** once you've customized your data.

Schedule Tab

This sets which times the given activity is enabled.

The **Week Schedule** section is where you determine when the camera sends data to be recorded for normal days. Click the **Erase** or **Add** radio buttons, then click and drag your mouse across one of the bands. The exact time spread for that band appears below the band as you click and drag. Alternatively, click **Manual Input** at the right end of each band to enter specific times.

The **Holiday Schedule** section lets you set alternate behavior that overrides the normal daily schedule. In the **Date** text box, enter a month and day in numeric format (i.e., use 02-14 for February 14th). Click **+** to add that date to the list of holidays shown at right. To remove a holiday, click on it in the textbox to the right and click the **-** button. All holidays follow the same schedule.

Region Intrusion

This lets you define an area. The camera watches for anything entering that area.

Detection Config Tab

This configures how your camera reacts to the events.

Enable: This box must be checked to use anything else on the page.

Save Original Picture to SD Card: This saves the full video image of the moment the event is triggered.

Save Original Picture to SD Card: This saves the cropped image of the object that triggered the alarm.

Below that, you can select whether the camera will look for people, motor vehicles (like cars), and/or non-motor vehicles (like bicycles). Each option has its own sensitivity setting.

Alarm Holding Time: This allows the alarm to continue after the event that triggers it ends (for example, if someone opens and quickly shuts a door sensor).

Alarm Out: If your camera is equipped with physical alarm out connections, enabling this has the camera send the alarm.

Trigger SD Card Snapshot (if present): Sends a photo of what triggered the alarm to the SD card.

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Trigger Email: This opens a dialog in which you can list email addresses to receive the alert, set that email's subject line and body text, and decide whether to attach a photo of the incident.

Trigger FTP: Add the server address for your FTP site, and the camera uploads any alert recordings to that site for remote viewing.

Click **Save** when finished.

Area Tab

The camera can use AI to determine whether someone enters the marked area. Intrusion cannot be used if line crossing (below) is being used.

Under **Alarm Area**, select which of the 4 zones you want to modify. Each zone has six corners; click in the camera view image to add each corner one at a time. If you want fewer than six corners, make the corners you want, then click **Stop Draw.** The camera will complete your shape when you click **Save.**

You cannot edit a zone; you must instead click **Clear** and start a new one.

Click **Save** before exiting.

Schedule Tab

This sets which times the given activity is enabled.

The **Week Schedule** section is where you determine when the camera sends data to be recorded for normal days. Click the **Erase** or **Add** radio buttons, then click and drag your mouse across one of the bands. The exact time spread for that band appears below the band as you click and drag. Alternatively, click **Manual Input** at the right end of each band to enter specific times.

Holiday Schedule

The **Holiday Schedule** section lets you set alternate behavior that overrides the normal daily schedule. In the **Date** text box, enter a month and day in numeric format (i.e., use 02-14 for February 14th). Click **+** to add that date to the list of holidays shown at right. To remove a holiday, click on it in the textbox to the right and click the **-** button. All holidays follow the same schedule.

Config > Image Tile

Here you control how the surveillance feed appears.

Contents:

- [Display Settings](#) - Adjust how the image appears

- [Video/Audio](#) - Manage your streams

- [OSD](#) - On-screen Display: add information to the feed

- [Video Mask](#) - Block out sensitive areas

- [ROI Config](#) - Region of interest: keep your best images where it counts

- [Zoom/Focus](#) - Adjust your motorized camera

Display Settings

> **Pro Tip:**   Many of these controls can be found in the OvrC interface.

Camera Parameters Tab

The Camera Parameters tab lets you adjust the image. There is no save button; settings are applied dynamically as you work and saved when you exit the tab.

The camera has three separate configuration profiles, one for daytime, one for nighttime, and one generic-use one. Select which one you want to edit at the top right. Whenever you select a profile, the interface automatically adjusts the screen image to show you what it looks like.

Video Adjustment

Lens Distortion Correction	☐ ━━━━━●━━━━━	80
HFR	On ⌄	
Frequency	60HZ ⌄	
Infrared Mode	Auto ⌄	
Corridor Pattern	180 ⌄	
Image Mirror	○ Open	⦿ Close
Image Flip	○ Open	⦿ Close

In the Video Adjustment section below the screen image,

- **Lens Distortion Correction:** This setting has the camera try to smooth out the edges of the view.

- **HFR:** If you enable High Frame Rate, the camera reboots. After it finishes, you can set the main stream to either 50 or 60 frames per second. This is useful for high-speed environments like cashiers and casinos. Disable this, and the camera reboots, setting the frame rate back to 30.

- **Frequency:** If you have lights that flicker in your image, try changing this setting.

- **Infrared Mode:** Choose how the camera decides to engage its infrared lighting.

- **Corridor Pattern:** Enable this for situations like long hallways. Set the video resolution to 1080P or below, and choose the rotation of the camera image (in 90° increments).

- **Image Mirror:** Reverse the image horizontally.

- **Image Flip:** Reverse the image vertically.

The right-hand column holds several settings.

Let's start with the sliders, which cover basic image settings.

- **Brightness:** Set the brightness level of the camera's image.

- **Contrast:** Set the color difference between the brightest and darkest parts.

- **Hue:** Adjust the total color of the image.

- **Saturation:** Set the degree of color purity. High saturation makes for vivid color; low makes the image more grayscale.

- **Sharpness:** Set the resolution level of the image plane and the sharpness level of the image edge.

- **Noise Reduction:** Decrease the visual noise (snow, random pixel errors, etc.). Increasing the value improves the noise reduction effect but reduces image resolution.

- **Defog:** Enable this and test the settings to improve visibility in foggy, dusty, smoggy, or rainy environments.

Auto Iris: If your camera is motorized, enable this; otherwise disable it.

BLC	HWDR ⌄
Level	Low ⌄
Smart IR	Off ⌄
White Balance	Auto ⌄
Day/Night Mode	Auto ⌄
Sensitivity	Mid ⌄
Delay Time(Second)	●————————— 2
Exposure Mode	Auto ⌄
Gain Mode	Auto ⌄
Gain Limit	————●———— 50

Below, you set how the camera handles difficult lighting situations. These settings vary slightly depending on the BLC option chosen:

- **BLC:** Select which backlight compensation option to use:

    - **Off:** Disables the backlight compensation function. It is the default mode.

    - **HWDR:** Hardware Wide Dynamic Range adjusts the image when there are both very bright and very dark areas in the field of view. It dims the bright areas and boosts the dark areas. Recording stops for a few seconds when the camera switches into or out of WDR mode.

    - **HLC:** Highlight Compensation suppresses the brightness of the image's bright areas and reducing the size of any halo.

    - **BLC:** Enabling backlight compensation makes dark areas (especially backlit areas) clearly visible.

- **Start Time / End Time** (HLC selected): These settings tell the camera when to use highlight compensation.

- **Location** (BLC selected): This tells the camera which part of the field of view suffers from backlighting.

- **Antiflicker** (HWDR not selected): If lights pulsate or flicker in your video feed, test the settings here to try to eliminate it.

- **Level** (HWDR selected): Sets the amount of WDR to use. The higher the level, the less contrast there is between the lightest and darkest areas.

- **Smart IR:** This function avoids overexposure and underexposure by controlling the brightness of the IR lights according to the ambient light.

- **White Balance** Adjust the color temperature according to the environment automatically.

- **Day/Night Mode:** This tells the camera when to switch to night mode. Auto lets the camera decide, Day and Night leaves the camera in that mode constantly, and Timing switches according to a set schedule.

- **Daytime / Nighttime** (Timing mode selected): Makes the switch according to a set schedule.

- **Sensitivity** (Auto mode selected): This sets how readily the camera switches. Higher sensitivity requires less change to make the switch.

- **Delay Time (Seconds)** (Auto mode selected): How long a change in light must remain at that light level before the camera switches modes.

- **Exposure Mode** (HWDR not selected): If you select Manual, another dropdown appears where you select a fixed value for the digital shutter speed.

- **Gain Mode** (HWDR not selected): If you select Manual, this activates the Gain Limit slider below. The higher the value is, the brighter the image is.

The **Default** button performs a factory reset of just these settings.

The **Reset Display Settings** button returns all of the above to where they were when you opened this tab. Remember, canges are saved dynamically when you exit this page.

Profile Management Tab

This sets the basis for switching between day and night mode.

- With **Schedule** at Full time and **Config** at Common, then the camera stays in Common mode at all times.

- With **Schedule** at Full time and **Config** at Auto, then the camera switches between day and night mode whenever it senses the need.

- With **Schedule** at Timing, you can use the slider to tell the camera when to switch between night mode and day mode.

Click **Save** before leaving this page.

Video/Audio

This tab manages your streams.

Video Tab

In the table, you set the parameters for each video stream as follows:

- **Resolution:** The dimensions of the feed.

- **Frame Rate:** Measured in frames per second.

- **Bitrate Type:** Choose either CBR (constant bitrate) or VBR (variable bitrate). CBR keeps the volume of the feed constant, no matter how much change occurs in the video. VBR adjusts the bitrate according to scene changes: scenes with little to no movement have a low bitrate, while scenes with a lot of motion have a higher bitrate. WHich option you choose depends on your plan to optimize the network bandwidth load.

- **Bitrate (Kbps):** Higher bitrate provides better images at the expense of heavier network traffic.

- **Video Quality:** This adjusts the maximum bitrate your camera uses.

- **I Frame Interval:** An Iframe is a frame in a video feed that has full resolution for every pixel. Frames after the iframe reduce their bandwidth by just noting changes from the most recent iframe. This setting determines how often the camera uses an iframe. Higher numbers save on bandwidth, but can reduce image quality, especially when there is a lot of motion.

- **Video Compression:** We recommend you use H265 as it uses less disk space.
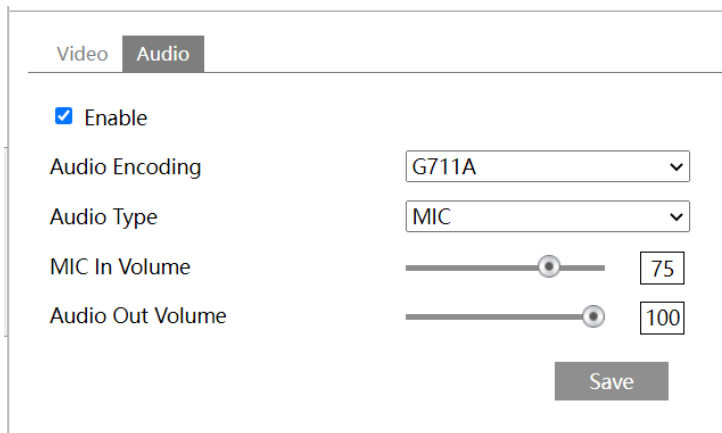
Below the table are several additional options:

- **Send Snapshot:** This determines which stream handles the snapshot, and therefore what resolution the snapshot is.

- **Video encode slice split:** This feature helps provide a smooth video on low-performance computers..

- **Watermark:** If you are using H264 or H265, you can have watermark text appear when playing local recorded video in the search interface. Check the Watermark box to enable it, and enter the desired message in the text box.

Audio Tab

If you Enable audio, the following options appear:

- **Audio Encoding:** We recommend G711U

- **Audio Type:** Choose whether the input is from a built-in microphone or an external line. Use the built-in microphone whenever possible.

- **MIC/LIN In Volume:** Sets the volume of the incoming audio.

- **Audio Out Volume:** Controls the volume of an attached speaker.

OSD

Pro Tip: You can perform basic OSD functions in OvrC.

This supplies additional OSD options beyond those enabled in OvrC.
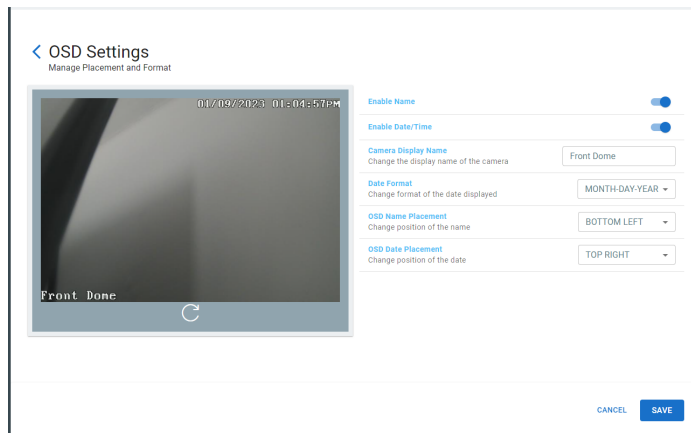
To the left is the camera's video feed showing how all of your OSD options will look.

At the top, select the visibility and format of the date, and the content and visibility of the camera name.

You can also add up to four additional pieces of information, each with one or two lines of text. Click the checkbox to the left to activate the OSD option and enter up to 15 characters in the text box. If desired, you can add a second line of text with 15 more characters.

OSD option 1 can support a graphic instead of text. This graphic must be a JPG that is no more than 200×200.

These OSD options initially appear down the left side of the screen, however you can drag them to any location on the screen.

Video Mask

Your Luma camera supports up to four video masks to preserve privacy, whether it's a secure item of yours, or a window into a neighbor's house. Areas covered by a mask are excluded from all recordings.

Click **Enable** to use a video mask.

Click **Draw Area** to begin drawing your mask(s). Click and drag across the screen to set the areas to block. **Clear** erases all masks. Click **Stop Draw** when you are finished, then **Save**.

ROI Config

Region of interest (ROI) lets you outline one area in your video that received special attention. The camera uses a higher bitrate for the ROI at the expense of other areas. Thus ROI places the best image quality in the area that you mark as most important.
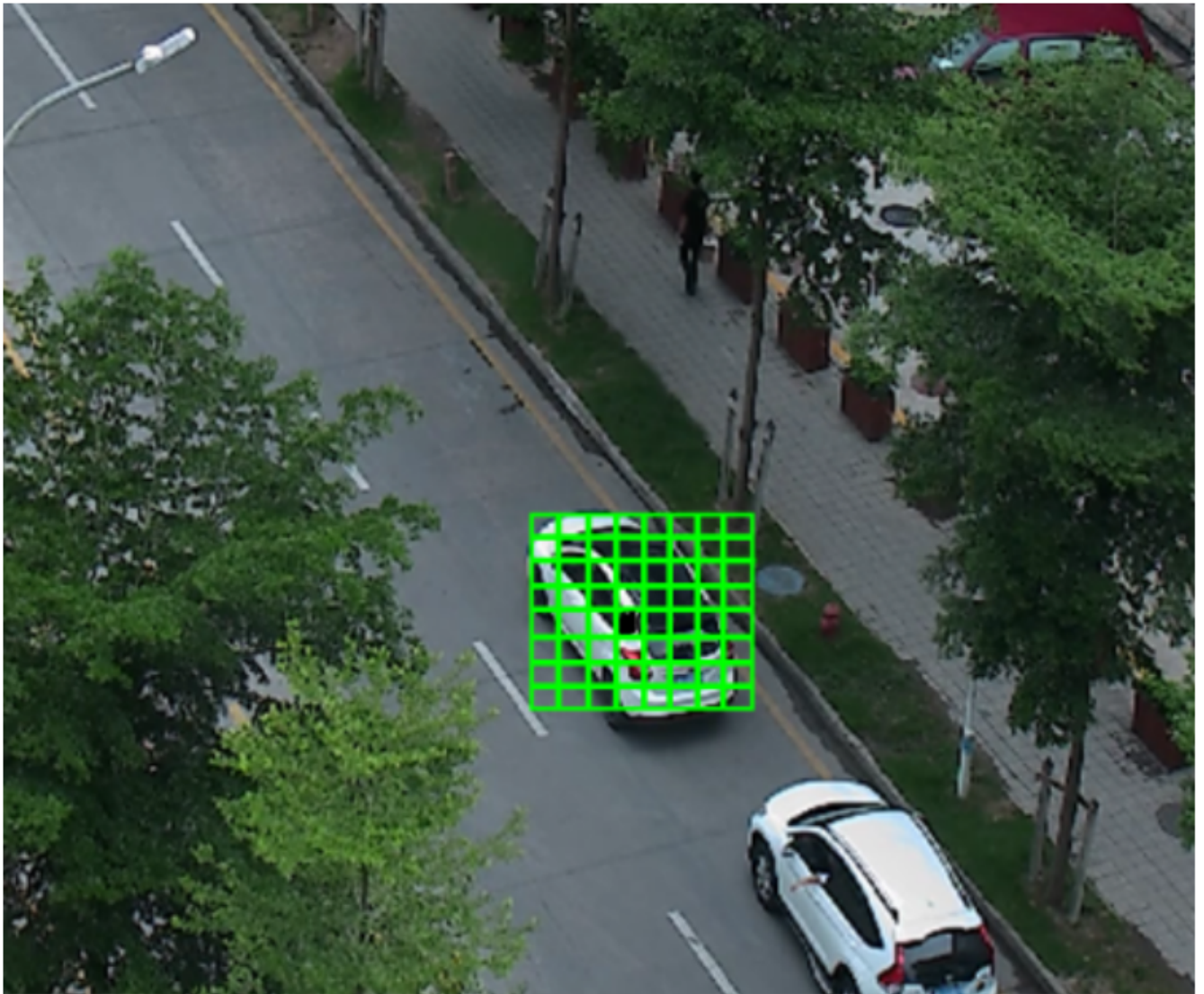
Click **Enable** to activate ROI. Then click **Draw Area** and click and drag across the image. Clear erases that area.

Level determines how much the camera shifts image quality toward the ROI; higher levels mean more detail in the ROI and less in other areas.

Zoom/Focus

If you have a motorized camera, you can adjust its zoom and focus here.

One-Key Focus lets the camera use its AI to determine the best focus value. It can be adjusted from there.

Config > Maintenance Tile

This tile helps you keep your system in top shape.

Contents:

- [Backup and Restore](#) - Save important configurations for later use

- [Reboot](#) - Schedule regular maintenance reboots

- [Upgrade](#) - Check your status after an update

- [Operation Log](#) - See what's been happening in the system

Backup and Restore
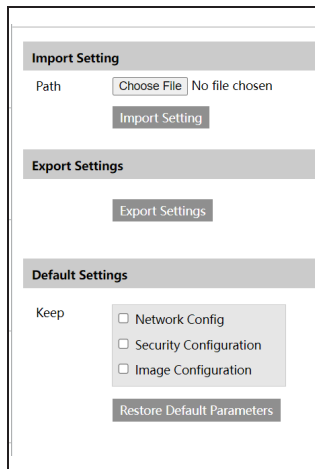
Import Setting: Click **Choose File** to open a standard file explorer. Locate the config file you want to use for your camera and click **Import Setting**. Your camera loads the new config and reboots.

Export Settings: Click this button, and the camera downloads a copy of its current config file to your Downloads folder.
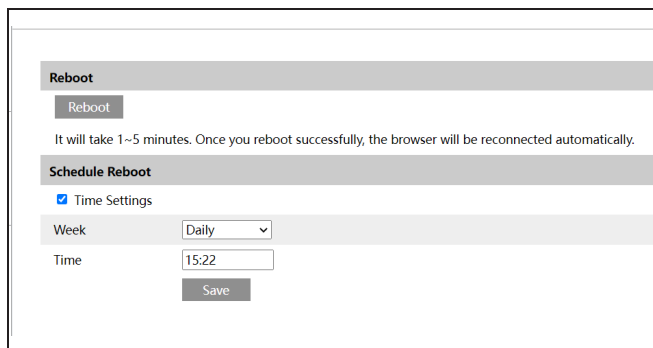
Default Settings: When installing a new config file, this lets you preserve some portion of your camera's current settings. Select any or all of:

- **Network Configuration** (your camera's IP settings, etc.)

- **Security Configuration** (password and accounts)

- **Image Configuration** (all image adjustments and day/night settings)

Restore Default Parameters: Click this button to restore all system settings to the default factory settings (except those you selected to preserve, above).

Reboot

The **Reboot** button forces an immediate reboot of the camera.

Below, the **Time Settings** checkbox enables a regular reboot of the camera.

In the **Week** dropdown, select which day (or all) to perform the reboot.

In the **Time** box, you can enter the time manually (place your cursor immediately before the digit you want to replace), or you can click in the hours or minutes section and use the up and down arrows to adjust the time.

Rebooting takes 1-5 minutes. After a reboot, the browser reconnects automatically.

Upgrade

This provides a quick view of your firmware update's success.

Luma x20 devices run in a dual-firmware mode to protect the hardware (and your installs) from unforeseen glitches.

Once the firmware has been applied to the first (operational) partition, the device goes into an observation mode to ensure the new firmware operates properly. Observation mode lasts for about ten minutes once the firmware update is completed.

Once proper function has been verified, the device applies the firmware to the second (backup) partition and logs the new firmware version with OvrC. If the new firmware fails, the device restores the backup firmware to the first (operational) partition.

As of this writing, OvrC does not track whether a Luma x20 device is in observation mode. This means that, for about ten minutes in OvrC, it looks like the firmware update didn't take, and that an update is available. If you try to update the firmware again while your Luma is in observation mode, the update will fail in OvrC but this will not impact the performance of the device.

Operation Log

> **Pro Tip:** The OvrC interface provides a quick summary of activities under the camera's Activities tab.

Here you can download complete records of everything that your camera has been up to.

In the **Main Type** dropdown you can choose to view all events or select a major filter, as well as a Sub Type that varies based on the Main Type chosen.

Below these dropdowns, you set the time frame that you are interested in.

Click **Search** to execute the filters you have chosen, and **Export** to save the results as a text file to your computer.

	Main Type	All logs ▼	Sub Type	All logs ▼				
	Start Time	All logs	End Time	01-19-2023 11:59:59 PM	Search	Export		
		Alarm						
		Exception						
		Operation						
		Information						

Index		Main Type	Sub Type	User Name	Login IP	Details
1	01-19-2023 07:42:17 PM	Operation	Video config modify	admin	192.168.1.165	video config change
2	01-19-2023 07:41:54 PM	Operation	Log in	admin	192.168.1.165	login
3	01-19-2023 07:40:50 PM	Operation	Log out	admin	192.168.1.165	logout
4	01-19-2023 07:35:44 PM	Operation	Log in	admin	192.168.1.165	login
5	01-19-2023 12:47:30 PM	Alarm	Perimeter Alarm			start
6	01-19-2023 10:21:28 AM	Operation	Video config modify	admin		video config change
7	01-19-2023 10:21:21 AM	Operation	Video config modify	admin		video config change
8	01-19-2023 10:18:01 AM	Operation	Video config modify	admin		video config change
9	01-19-2023 10:17:43 AM	Operation	Video config modify	admin		video config change
10	01-19-2023 10:05:16 AM	Operation	Log out	admin	192.168.1.165	logout
11	01-19-2023 09:59:25 AM	Operation	Log in	admin	192.168.1.165	login

⊮ ◁ 1 / 1 ▷ ⊯ 20 ▼ View 1 - 11 of 11

48

Config > Network Tile

Explaining networking details is beyond the scope of this document. If you are a network professional, you know what you're doing. If not, we suggest enrolling in the Professional Certified Network Administrator (PCNA) course at https://www.snapav.com/shop/en/snapav/pcna .

Contents:

- [TCP/IP](#)

- [Port](#)

- [Server](#)

- [ONVIF](#)

- [DDNS](#)

- [SNMP](#)

- [802.1x](#)

- [RTSP](#)

- [RTMP](#)

- [UPnP](#)

- [Email](#)

- [FTP](#)

- [HTTP POST](#)

- [HTTPS](#)

- [P2P](#)

- [QoS](#)

TCP/IP

Set network configurations.

IPv4 Tab

Choose DHCP or static. We recommend DHCP with a reservation at the router.

IPv6 Tab

Choose DHCP or static. We recommend DHCP with a reservation at the router.

PPPoE Config Tab

Set the user name and password for Point-to-Point Protocol over Ethernet communication.

IP Change Notification Config Tab

Set the camera to send an email or upload files if its IP address changes.

Port

Here you configure the port settings for HTTP, HTTPS, etc. Be sure to click **Save**.

Server

Authentication server configuration and settings.

ONVIF

Here you set your ONVIF user accounts, which can log in to RTSP and ONVIF protocol(and use addition, modification, deletion, and query).

Click on the list to select a specific user. The buttons across the top let you add a user, edit the selected user, or delete the selected user.

DDNS

If you want to set up your camera on a DDNS server, click **Enable** and fill in the appropriate information in the text boxes.

SNMP

Monitor your network for any concerns.

802.1x

Manually select the camera's authentication mode.

RTSP

RTSP configuration for remote video streaming.

RTMP

RTMP configuration for remote video streaming.

UPnP

Enable or disable Universal Plug-and-Play, and name the camera.

Email

Here you configure the emails that the camera sends with alerts.

Sender Address: This is who the email appears to be from.

User Name and **Password:** Enter the credentials for the email server, or click **Anonymous Login**.

Next, fill in the **Server Address** and select the **Secure Connection** setting and **SMTP Port** number.

To limit the frequency of emails, enable **Send Interval** and enter a number between 10 seconds and an hour. Emails will send no more frequently than the interval you set.

The Recipients text box shows who gets the alert emails. Enter an address in the text box and click **Add**, or select an address in the display and click **Delete**.

FTP

Here you configure the settings for your FTP server.

The table shows the FTP servers you have set up. Click **Add** to create a new server to use, or select a server in the display and click **Test**, **Modify**, or **Delete**.

HTTP POST

Set up an HTTP POST server that can be used to receive notifications, alarms from devices, etc.

HTTPS

If you want to create a self-signed certificate, you can do so here.

P2P

Enable the peer-to-peer function.

QoS

Rank the importance of different data packets by adding DSCP to network packet data.

Config > Security Tile

This tile manages access to your camera.

Contents:

- [User](#) - Edit account

- [Online User](#) - Edit online accounts

- [Block and Allow Lists](#) - System access IP address

- [Security Management](#) - Various other settings and alerts

User

Here you create and edit all users for the camera.

Index	User Name	User Type
1	admin	Administrator
2	SupportAdmin	Advanced User
3	SystemConnect	Advanced User

Buttons: Add, Modify, Delete, Security Question

The page opens to a list of the available accounts, listing their user name and their type. Use the buttons to add or delete a customer, modify their permissions, and change their security questions.

When you click **Add**, the camera opens the Add User dialog.

At the top, click **Enable** to activate (or suspend) the user, and **Web Login** to allow the user remote access.

Set the user's name and password, and select a user type. The user type is an informal classification; it just changes which permissions a user has selected by default.

Finally, in the box at the bottom, select which permissions that user has. Each user can have differing permissions.

When you click **Modify**, the camera opens the Edit User dialog, which is almost identical.

Finally, when you click Security Question, the camera opens a dialog in which the user can select three security questions to verify their identity.

Online User

This shows which users are currently accessing the camera. You can press **Kick Out** to eject them from the system.

Index	Client Address	Port	User Name	User Type	
1	10.151.151.1	16619	POE	Anonymous User	Kick Out

Block and Allow Lists

This page lets you block IP addresses, keeping out scammers, ex-spouses, etc.

When enabled, use the radio buttons to select whether you want to block addresses (allow every IP unless specified) or allow addresses (block every IP unless specified).

To add an address, enter it in the box at the bottom, and click **Add**. Click an address in the lists and click **Delete** to remove it.

Click **Save** when finished.

Security Management

Security Service Tab

Enable "Illegal Login Lockout" Function limits the number of times a single IP can attempt to log in to the system. After that limit is reached, that IP cannot log in again for several minutes.

P-

Enabling **Trigger Email** opens a dialog where you can list recipients to be alerted when an illegal login is detected.

Logout Time sets a time limit after which any user is logged out and must renew their access.

a-

ssword Security Tab

Here you set expiration times for passwords based on how strong they are. These settings apply to all passwords on the camera.

Select the level in the top dropdown, and the expiration time in the second.

Click **Save** when finished.

Authentication Tab

This determines which method the camera uses to authenticate remote logins.

Click **Save** when done.

Config > System Tile

This tile covers informational and administrative tasks.

Contents:

- [Basic Information](#) - Useful for troubleshooting

- [Date and Time](#) - Set it here

- [Local Config](#) - Add bitrate to your OSD

- [Storage](#) - Manage your recordings

Basic Information

This gives you information about the camera and its firmware. You may be asked for this information when receiving technical support.

This is all self-explanatory, with the possible exception of **Device ID,** which is used for P2P communications.

Date and Time

Time settings are typically pushed by your camera's NVR. If you have an NVR. we recommend you do not edit these here.

> **Pro Tip:** The OvrC interface is a much easier way to set date and time.

Zone Tab

Set the customer's Time Zone, choose whether or not to use Daylight Saving Time, and, if used, whether to let the system calculate it, or enter the data yourself.

Date and Time Tab

Here you can set these for your camera, as well as format the time display. We recommend that you synchronize time settings with the NTP server.

Local Config

Activate the **Show Bitrate** option to show the bitrate of the camera on its OSD.

Storage

Here you manage your recordings.

Management Tab

In the Management tab, you can review the capacity of your SD card. The only item here that is editable is the ratio of space reserved for video and snapshots.

If you change the ratio, click **Format** to save those changes.

When swapping out your SD card, click **Eject** so the camera safely forgets the item.

Record Tab

In the Record tab, you select which data gets sent to the SD card for preservation.

In the **Record Stream** dropdown, select which stream you want sent.

Pre-Record Time lets you add extra video (taken before an event occurs) to the recording of that event. Your camera always has several seconds of video stored in its memory as it analyzes the feed for motion, etc. When an event occurs, it can add some of this video to the front of the event to add context to the recording.

Cycle Write determines whether new recordings can overwrite old recordings.

Enable Schedule Record has the camera use the schedule you detail in the calendar below; the default schedule is to record events 24/7. Instructions for the schedule tool are at the bottom of the page.

Click **Save** before leaving this page.

Snapshot Tab

In the Snapshot tab, you select which data gets sent to the SD card for recording.

Under Snapshot Parameters, in the **Image Format** dropdown, select which stream you want sent.

Resolution is where you choose the image size.

Image Quality sets the level of compression. Low quality means high compression (and therefore small file size), and vice versa.

Under Event Trigger, **Snapshot Interval** tells the camera how frequently to take a photo once an event is triggered. **Snapshot Quantity** tells the camera how many photos to take once an event is triggered.
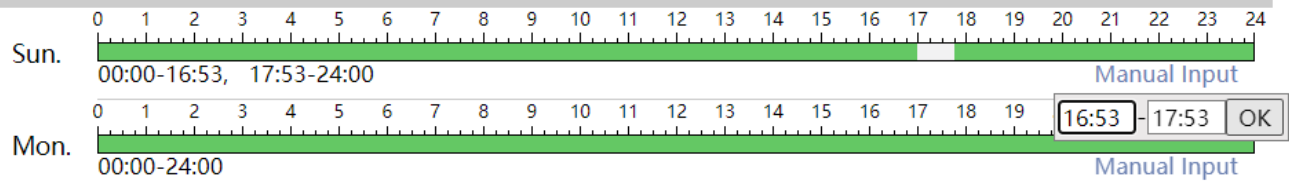
Under Timing, **Enable Timing Snapshot** tells the camera to take snapshots on a regular basis based on the schedule outlined below. **Snapshot Interval** tells the camera how frequently to take a photo during its normal recording schedule.

The Schedule Tool

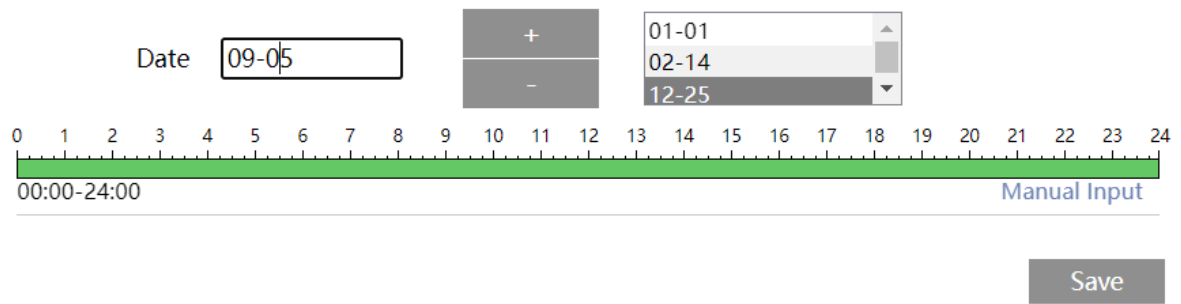This sets which times the given activity is enabled.

The **Week Schedule** section is where you determine when the camera sends data to be recorded for normal days. Click the **Erase** or **Add** radio buttons, then click and drag your mouse across one of the bands. The exact time spread for that band appears below the band as you click and drag. Alternatively, click **Manual Input** at the right end of each band to enter specific times.


The **Holiday Schedule** section lets you set alternate behavior that overrides the normal daily schedule. In the **Date** text box, enter a month and day in numeric format (i.e., use 02-14 for February 14th). Click **+** to add that date to the list of holidays shown at right. To remove a holiday, click on it in the textbox to the right and click the **-** button. All holidays follow the same schedule.

Click **Save** before leaving this page.

Search Page

Here you can search through your surveillance recordings.
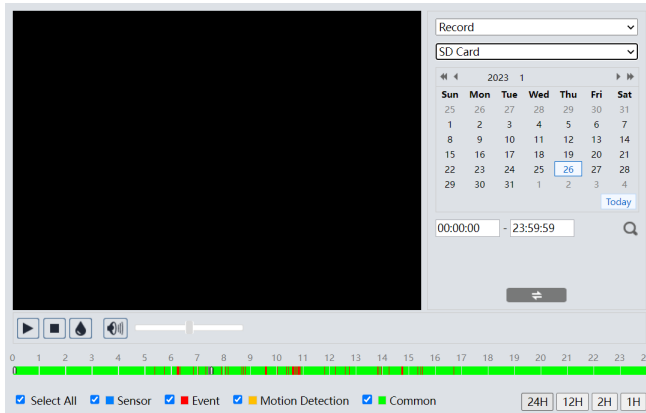
Playback

The top left of the screen holds the video playback display. Immediately below the video are buttons to:

- Start and stop playback

- Add a watermark to the video

- Enable/disable audio and set the volume

Search Detail

The search area at the top right lets you search for:

- Photographs or video files

- Stored on the SD card or NVR

- Specific date and time

Click the search icon to execute the search.

The Timeline

The bottom of the screen shows a record of all surveillance activity. This can help you narrow your search.

To the left, select which surveillance events you want displayed. To the right, select how much time to show.

Statistics Page

If you have set up Target Counting by Line in the Event tile, you can track the results here.

Target Counting by Line			

Report Type Daily Report ⌄   Count Type Enter ⌄   Count Time 2023 ⌄ Year 1 ⌄ Month 23 ⌄ Day   Count

Table   Chart

Index	Count Time	Human	Motor Vehicle	Non-motor Vehicle
1	01-23-2023 12:00:00 AM ~ 01-23-2023 1...	0	0	0
2	01-23-2023 01:00:00 AM ~ 01-23-2023 0...	0	0	0
3	01-23-2023 02:00:00 AM ~ 01-23-2023 0...	0	0	0

This gives you target count tallies for humans, motor vehicles, and non-motor vehicles that crossed the camera's lines.

Report Type: Here you choose to view

- **Report Type:** Daily, weekly, monthly, or annual.

- **Count Type:** Select either entering or leaving.

- **Count Time:** This lets you set the year, month, week, and/or day ranges for the data (selections adapt to the report type).

Click **Count** to generate a new set of data based on the new selections you've made.

Click **Table** to see the data as a table (as shown above). Click **Chart** to view the data as a graph.

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