Shaw) Business

SmartSurveillance

User Guide



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Ouick Reference

Record your information below.

My username:

My password:

My account number:

Smart Surveillance Customer Support

Phone: 1-877-742-9249

Email: technicalsupport@shawbusiness.ca

Disclaimer:

Any recommendations made in this User Guide are for general applications and may not be the best configuration for particular security or video monitoring set ups. Your use of the SmartSurveillance product may be subject to laws, rules, or regulations, particularly those relating to privacy, protection of personal information, and overt video surveillance. All such laws, rules, or regulations should be adhered to by the user. Shaw does not represent or warrant in any manner that the recommendations made in this User Guide shall meet such requirements.

If you have any questions, a Shaw Business Representative will be happy to help. Please call **1-877-742-9249** or visit us online at **business.shaw.ca/Support**.

SmartSurveillance Overview

SmartSurveillance provides an exceptional cloud-based security camera experience to small businesses that has typically been reserved for large scale enterprise organizations.

Professionally installed cameras with secure encryption help provide peace of mind and allow you to view analytics to make better-informed business decisions.

This User Guide will walk you through how to get started and how to navigate the SmartSurveillance portal, where you can view recorded or live video, or make adjustments to settings from your business, or remotely*.

^{*}Where Internet connectivity is available.

The online portal

Accessing the online portal

a) Creating a new account

To create your account, follow these steps:

- You will receive an email notification informing you that you have been provided an administrator account for your network. Your username will be the email address that you provided the Shaw Business Sales team. You should receive this prior to on-site installation.
- ii. Within the email there will be a link to set your administrator password. Click the link.

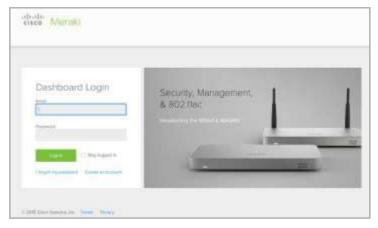


iii. Once you have clicked the link, you will be directed to the SmartSurveillance portal to create your administrator account password.



iv. Once the password is set, you will be able to administer your SmartSurveillance equipment and the configuration settings.

Upon password creation, you will be redirected to the login portal. This portal can be found at http://dashboard.meraki.com. Use your email address and the password that was set previously to log into the SmartSurveillance portal.



Video support within the online portal may vary between browsers. It is recommended to use Google Chrome.

Important note: Windows 7 and IE 11 are not supported.

b) Accessing the portal if you have SmartWiFi and/or SmartSecurity

If you already have SmartWiFi and/or SmartSecurity, you can use the same login credentials (username and password) from your SmartWiFi and/or SmartSecurity online portal to log into the SmartSurveillance portal. Both portals can be found at http://dashboard.meraki.com.

Once you've logged into the portal using your credentials, you can toggle between your SmartWiFi and/or SmartSecurity and SmartSurveillance views by using the drop-down menu located on the left pane of the screen.



Monitor

Once you successfully log into the SmartSurveillance portal, navigate to Cameras -> Monitor. Within this section, you can monitor:

- 1. Cameras
- 2. Video Wall
- Event Log



On this main page, your SmartSurveillance equipment will be displayed. Along with the equipment listing, basic device information is displayed such as name, camera Internet connectivity history, and scheduled recording settings.

Cameras

To view your camera settings, navigate to Cameras -> Monitor -> Cameras.



When you click on a camera, you can access several settings unique to that specific camera.

a) Video

Within this tab, a large video stream will appear of the selected camera's view. On this page, you can also view:

- Video controls This includes controls such as pause, play, skip backward and forward 10 seconds, as well as control to move 1 frame forward or backward.
- ii. Navigation Bar This can be clicked to navigate to the requested position or dragged to move the navigation timeframe. These controls allow for basic video feed browsing. Included in the video navigation bar at is a green line which indicates when motion occurred in the cameras view.
- iii. Zoom To widen the view of the navigation bar timeframe, click the Zoom out button and it will adjust to a 3 times wider view. If a narrower timeframe is required, the Zoom in button allows the navigation bar to be zoomed in to 1/3 the timeframe.



- iv. Calendar Clicking on this allows for quick navigation to a specific date, or you can navigate to a date and time by using the search field. For example, selecting "Yesterday at noon" will show the camera feed for that specified timeframe.
- v. Motion search This is an analytical tool that provides motion based searching for a specified area of interest within the displayed timescale selected. To access this feature:
 - a. Select motion search, at the top of the screen. A grid will appear

on top of the video feed where a region of interest can be selected.

- b. Select a region or object to determine when that region has last seen activity.
- c. A timestamp, ordered by the most recent, will be displayed.

 Clicking the zoom out button will allow for older video footage to be included in the analysis.
- d. The duration of the motion, percentage of the entire frame that had motion detected, and the percentage of the region of internet that had motion detected will be displayed.
- e. A screenshot of the current image can be downloaded by clicking on the screenshot button.
- f. Clicking the export button allows the user to export a video clip of an event of interest. If large timeframes are selected, it may take a long time for retrieval of the video. Also uplink bandwidth may determine the time for an upload to be made available.

Once a search box is selected, the online portal will return how many events occurred in that search area over the time period displayed on the timescale.

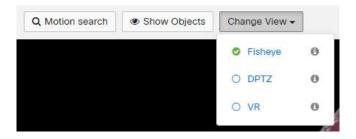
Best practice is to select the smallest area possible so that the search results returned are most meaningful. Selecting a large search box will return more results and you will have to scroll through many more events.

b) MV32 Video

The MV32 camera offers a 'digital' pan, tilt, zoom experience. By default, when first looking at an MV32, the image is in fisheye 360-degree view.



At the top of the image, you can change the view to DPTZ, which is 'Digital Pan Tilt Zoom'. If using a mouse, you can also simply scroll forward with your mouse wheel and you will enter DPTZ view mode automatically.



Once in DPTZ mode you will notice the image is now 'dewarped' and you can 'click and drag' around in the 360 space that the camera captured.



Note: The MV32 supports the use of VR headsets. Shaw will not support helping customers use this feature as it is only officially supported with Oculus Go and the use cases are limited. If you would like to try this on your own, please see information on the Meraki website.

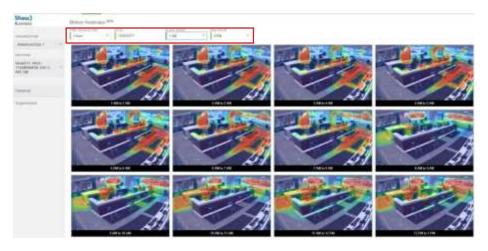
c) Analytics

In the Analytics tab, you can access the Motion heatmaps feature. This allows for a quick overview of where, when, and how much motion has occurred in a specific camera's field of view.



The color indicates the quantity of motion in an area. Colour ranges from red for a large amount of motion, to blue for a small amount of motion.

You can select the time range to view the motion density and view footage up to 24 hours at one hour intervals or up to 15 days with one day intervals. You can also specify the start and end hours you would like to view.

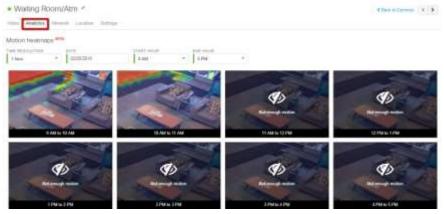


 How to read SmartSuveillance Heat Maps - Heat Maps allow for a quick overview of where, when, and how much motion has occurred in a specific camera's field of view.

Get started by logging into the online portal at dashboard.meraki.com with your credentials.

Where do I find the heat map for my cameras?

- a. Navigate to Cameras > Monitor > Cameras.
- b. Select one of the cameras to monitor.
- c. Click on the Analytics tab.
- d. View Heat Map Summary



- ii. How do I read the heat maps?
 - The image will display a range of colours to indicate motion. Range is from red for a large amount of motion to blue for a small amount of motion.
 - b. Click the magnifying glass on any of the images for a zoomed in view.

c. The Icon Indicates not enough motion was detected during a specified timeframe.

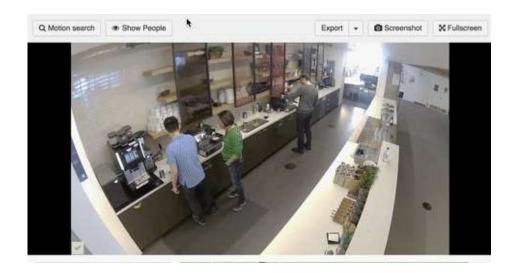
Heat map overview

Time frame can be adjusted

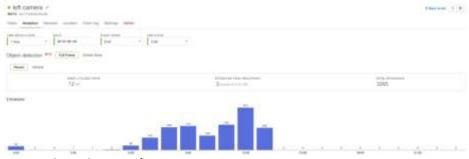
- i. Time Resolution.
 - Adjust by hour or day.
- ii. Date.
 - Select a date.
- Object detection this feature allows you to narrow down your search to detect people and vehicles (bikes, cars and trucks) in the camera's field of view. (Vehicle detection is only available on the second generation outdoor camera MV72s)



The first place you can see MV object detection is when viewing historical video and clicking on "Show Objects" on a single camera's video page. Objects detected as people will be enclosed by yellow boxes whereas vehicles will be detected in purple boxes as shown.



iv. MV Analytics Tab - Both object detection and motion metadata are aggregated for you to analyze in the Meraki Dashboard, under the Analytics tab for each camera. Here, Meraki uses object detection analytics to help create histograms of objects detected by object type - person or vehicle. For example, in object detection, you will be able to choose person or vehicle and analyze data to provide information about how many people/vehicles entered or were present at a specific time. The dashboard can show you this data at a minute, hourly, or daily scale, which allows you to identify time-based trends and anomalies in the usage of your space. This tab's information also serves as a tool to quickly find relevant video clips with histograms and time links. Motion heatmaps are also provided at the bottom of the Analytics page to correlate the people detection data with motion data.



v. Object detection features

Time Resolution, Date, Start Hour and End Hour

 Configure the scale for the slices of your histogram and the time range for your analytics.

Object Detection by Zones

• If you have configured zones on your camera, you can also view the

object detection analytics by zone. The zones feature is explained in more detail in the Zones section of this article.

Most Utilized Hour

• This value represents the hour that had the highest average occupancy. **Estimated Peak Occupancy**

- This value takes the maximum of the estimated occupancy of the scene across the selected time range. The estimated occupancy of a scene is calculated every minute and is an average of the number of objects detected for every second of the minute.
 - <u>Example 1</u>: 10 people are in a camera's field of view (FoV) for 5 seconds, followed by 0 people for the remaining 55 seconds of that minute
 - The estimated occupancy for that minute would be rounded to 1 person.
 - <u>Example 2</u>: 10 people are in a camera's FoV for 55 seconds, followed by 0 people for the remaining 5 seconds of that minute
 - ②The estimated occupancy for that minute would be rounded to 9 people

Entrances (bar chart/histogram)

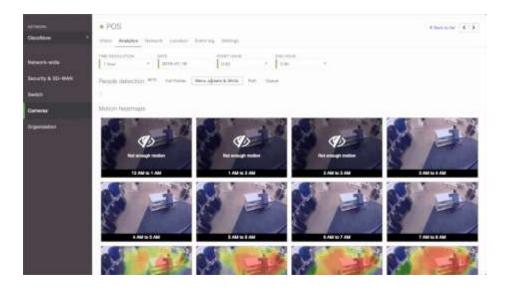
- Presents the total number of entrances per hour/day for the hour/date range specified. This can be up to 24 hrs, 7 days or 1 hour - depending on the selected time resolution.
 - <u>Example:</u> A single person may be detected as multiple entrances within the period that they are within the frame.
 - If a person walks into a camera's FoV, walks across the frame, and then walks out unobstructed by other people or objects, the person will likely be counted as one entrance.
 - ②If a person walks into a camera's FoV with a column in the middle, stands behind a column for a short while, and then reappears from behind the column before exiting the frame, this person will likely be counted as two entrances to this total.
 - ②If a person bends down and is for a moment not detected as a person due to his/her crouched shape, and then stands up again, this person will likely be counted as two entrances as well.

Total Entrances

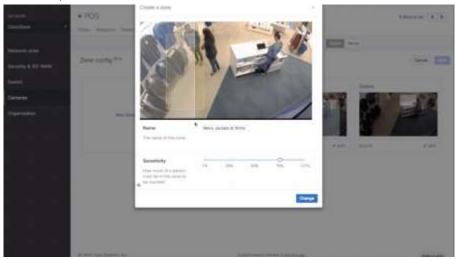
 This value represents the number of entrances of objects detected within the scene. vi. Zones - set zones on your camera on the Zones page under your camera's Settings tab. Use this to separate your object detection data according to areas within the camera's field of view (FoV).



Example: You can navigate to the Analytics tab of a camera, select which zone you want to analyze and view the people detection data only within that zone.

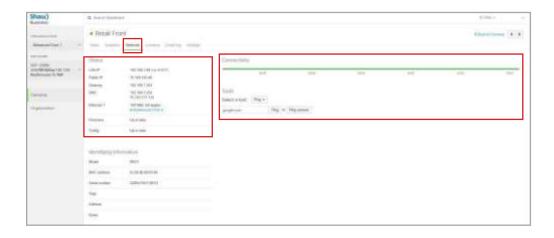


You can also click on the Edit option under each zone and change the sensitivity of how much a person must be in the zone to be counted.



d) Network

The Network tab shows network information such as IP and Gateway info, DNS info, firmware and configuration versions, model and serial number as well as connectivity status and ping test tools.



e) Location

The location tab shows network information such as IP and Gateway info, DNS info, firmware and configuration versions, model and serial number as well as connectivity status and ping test tools.



f) Event Log

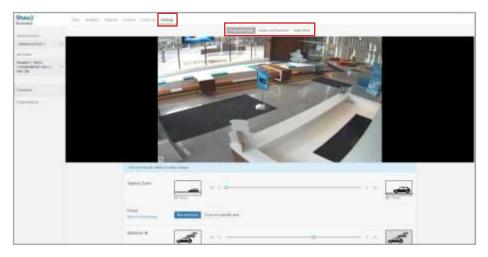
On the Event log tab, you can see event records of the camera such as transitioning to night mode. You can view older records or the full event log as well.



g) Settings

On the Settings tab, you can set individual settings for the camera you have chosen. There are three settings categories, Zoom and Focus, Quality and Retention, and Night Mode.

It is recommended to use the default settings or recommended settings set by Shaw Business at time of installation. Adjusting or reconfiguring these settings after Shaw Business has completed your installation and you have completed the customer sign off may not provide you with the intended result. If you have questions, please contact your Shaw Business Technical Support Representative for assistance at 1-877-742-9249.



Zoom and Focus - this includes optical zoom, focus and aperture settings.





- A. **Optical Zoom** You can set the zoom of the camera to either 82deg (wide) to 28deg (narrow)
 - To capture a wide angle, it is recommended to use the 82deg wide setting.
 - To capture a specific area and a high level of video detail, it is recommended to use a 28deg narrow (zoomed in) setting.



B. **Focus** - This allows you to set the point of attention that the camera should focus on to provide the best clarity for that point.

There are two options you can select:

Run auto focus - this allows the camera to automatically adjust the
focus to capture objects at different depths with maximum clarity. It
is recommended to use this setting, as it captures the most
possibilities that may occur within a camera's field of view.



 Focus on the entire frame - this allows you to select a point of attention you want to focus on by click and dragging on a focus area



C. **Aperture** - this provides the ability to adjust the sharpness of the image to either provide reduced noise in the image or a sharper but noisier image.

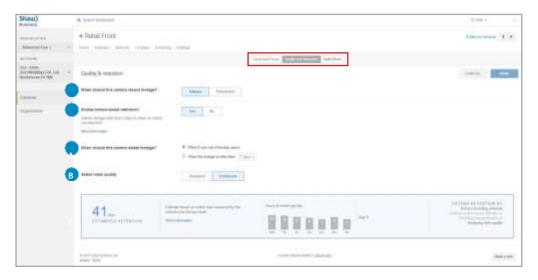
To change the depth of field, moving the aperture slider to right will result in a wider depth of field (more in focus) at the penalty of more noise. Adjusting aperture inherently changes the shutter speed of the camera lens (frame rate is unchanged). In some cases, your LED lighting systems may impact the video capture and result in flickering video. Adjusting the aperture setting changes the shutter speed such that any flickering effects can be eliminated.

In most cases, the default aperture setting is fine, and an aperture adjustment is not required.



Quality and Retention

There are several settings on the Quality and Retention tab you can configure. Any changes made in this section require clicking Save to commit them.



A When should this camera record footage? — With this setting, you can choose whether to always record or to schedule the time(s) you would like to record. To set a recording schedule, select Scheduled. The recommended setting is Always. In some cases, some specific customer requirements may require this to be set to Scheduled but this would be determined according to the requirements of your business.



B. **Enable motion-based retention** – This option will keep any footage with motion detected in the camera's Motion based retention by default will save the last three full days of video. After three days video clips that do not contain any motion are automatically deleted allowing the camera to store only footage of interest and dramatically increases video retention. It is recommended that motion-based retention is enabled at all times, as this increases the potential days of storage for camera footage exponentially.



C. When should this camera delete footage? – this gives the option to delete footage either after a set number of days or when the camera's onboard storage runs out of space. The recommended setting is to be set to "When it runs out of storage space."



D. Select video quality – this allows you to choose standard video quality or enhanced quality. It is recommended to use Enhanced video quality. To extend your video storage and ensure great video quality, it is recommended to use this enhanced setting along with the enable Motion-based retention seen above.

When enhanced video setting enabled, a higher frame rate (15fps vs 8fps) is used. This means more information is stored every second, but the actual resolution and still frame video quality is the same.

Night Mode

There are several settings on the Quality and Retention tab you can configure. Any changes made in this section require clicking Save to commit them.

A. Night Mode - this enables a higher sensitivity to infrared light enabling video capturing in dark environments. The auto selection is recommended as the camera will enable 'night mode' if the area it is viewing has a decrease in room illumination.



B. Infrared Illuminators - this allows the control of the camera's built-in infrared LEDs which can light up dark scenes. It is recommended that On during night mode is selected as it will enable infrared LEDs when the camera requires the lighting.
If the camera is looking through glass, or other transparent material, glare may make seeing through the glass less likely. If this is the case, it is recommended to disable the infrared LEDs by selecting Always Off.



C. Transition Thresholds - this setting pertains to the camera's ambient light sensor, which is used to detect room lighting. It can be used to automatically transition in and out of night mode. It is recommended to use the default settings of 0.5lux and 3.0lux



Video Wall

To view your Video Wall settings, navigate to Cameras -> Monitor -> Video Wall.



SmartSurveillance provides the ability to view up to 12 cameras live and historical content on one webpage within a web browser. Each camera is accessible by clicking on its image, which will display the individual cameras settings page as described in sections of this guide above.



Event Log

If you navigate to **Cameras -> Monitor -> Event Log**, you will be routed back to the camera display page. This page cannot be accessed.

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