

AXIS Body Worn Live

User manual

AXIS Body Worn Live

This is AXIS Body Worn Live

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With AXIS Body Worn Live, body worn camera users can stream live video over Wi-Fi® or mobile networks. Operators can view the live video, and let the camera users know that they are watching it. In a map view, operators can also view the location of cameras that are currently streaming live video.

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Get started

Get started

To get started with AXIS Body Worn Live:

1. Turn on cloud extensions in your body worn system on page 3
2. Create a My Axis account on page 3
3. Connect your body worn system to AXIS Body Worn Live on page 3
4. Enable end-to-end encryption on page 4
5. Enable live streaming on page 5
6. Enable location on page 5
7. Add Wi-Fi networks on page 5
8. Synchronize time on page 7

Turn on cloud extensions in your body worn system

1. Open AXIS Body Worn Manager.
2. Go to **Cloud** .
3. Select a **Region**.

Note

- The region is the geographical location where your metadata is stored. For more information about metadata, see *Evidence data and metadata on page 9*.
- You can only change the region by resetting the body worn system.

4. Click **Connect**.
5. Click **Connect** to confirm.

For a list of hostnames that the body worn system must have access to, see *Hostnames on page 13*.

Create a My Axis account

A My Axis account gives access to My Systems, where you find our cloud-based systems and services, such as AXIS Body Worn Live. You can skip this step if you already have a My Axis account.

1. Go to *My Axis – Create Account*.
2. Enter your information and click **CREATE ACCOUNT**.



Connect your body worn system to AXIS Body Worn Live

Note

If your body worn system contains AXIS W100 or AXIS W101 Body Worn Cameras and is located outside North America, all wireless network channels in the cameras need to be turned on before you can start live streaming with AXIS Body Worn Live. Contact Axis support at bodywornlive.support@axis.com and provide your system ID and the country the system is located in before you connect to AXIS Body Worn Live. Axis support will enable required wireless channels for the body worn cameras.

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1. In AXIS Body Worn Manager, go to .
2. Click **Start AXIS Body Worn Live setup**.
3. Accept the end user license agreement.
4. Click the link **Start AXIS Body Worn Live setup**.
5. Log in to your My Axis account.
6. Click  to create a new organization, containing one folder. You will become the organization owner for the whole organization. You will also get the admin role. See *Organizations on page 9* and *User roles on page 9*.
7. Go to AXIS Body Worn Manager and copy the authorization code.
8. Go back to the authorization step and paste the code.
9. If you want to specify in which country to store evidence data, click **Advanced settings** and select an option from the list.

If you don't specify a country, all data is stored in the region defined in AXIS Body Worn Manager. For more information about evidence data, see *Evidence data and metadata on page 9*.
10. Click **Finish**.

A 30-day trial license for AXIS Body Worn Live is automatically activated.

Enable end-to-end encryption


End-to-end encryption ensures secure communication between the body worn cameras and AXIS Body Worn Live. To learn more, see *End-to-end encryption on page 9*.

Note

- End-to-end encryption is mandatory, and you must add encryption for each browser that uses AXIS Body Worn Live.
- AXIS Body Worn Manager distributes the public key to the cameras when they're docked.

1. Go to *AXIS Body Worn Live* and sign in using your My Axis account credentials.
2. Go to **Settings**.
3. Click **Generate keys**.
4. If you want to reuse the private key to be able to view the video streams in another browser or on another computer, click **Download**.

It's optional to encrypt the keys.

5. Click **Copy public key**.
6. In AXIS Body Worn Manager, go to  **Settings > AXIS Body Worn Live**.
7. Under **Public key**, click **Add**.
8. Type a name for the public key.

We recommend that you give the key a name that helps you identify the computer and browser that uses the private key, for example "John's Chrome browser".

9. Paste the copied public key.
10. Dock all cameras that belong to the body worn system.

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Reuse private key

Instead of generating one key pair for each browser where you use AXIS Body Worn Live, you can reuse an already downloaded private key. By reusing the key, you only need to store one public key in AXIS Body Worn Manager.


Note

If you already have a key, you have to remove it before you can import a new one.

1. Go to *AXIS Body Worn Live* and sign in using your My Axis account credentials.
2. Go to **Settings**.
3. Click **Import keys**.
4. Browse to the key and select it.

Verify end-to-end encryption


The public key has a public key thumbprint, which you can use to verify the end-to-end-encryption. You can find the public key thumbprint in both AXIS Body Worn Manager and in AXIS Body Worn Live. To verify the end-to-end encryption, compare these two thumbprints and make sure they're the same.

In AXIS Body Worn Manager, you find the public key thumbprint in the list of public keys in  **Settings > AXIS Body Worn Live**.

In AXIS Body Worn Live, you find the public key thumbprint in **Settings > End-to-end encryption**.

Enable live streaming

We recommend dedicating a camera profile for live streaming to minimize the number of licenses used. See *Licenses on page 9*


1. Open AXIS Body Worn Manager.
2. Go to  .
3. Under **AXIS Body Worn Live**, turn on **Streaming**.

Enable location

It's possible to view the geographical position of cameras that are currently streaming live video. To be able to view their position, you must enable location.

Note

Location isn't available for all camera models.

1. Open AXIS Body Worn Manager.
2. Go to  .
3. Select the camera profile that you enabled live streaming for.
4. For each camera model, turn on **Location**.

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Add Wi-Fi networks

Note

If the camera has a SIM card and uses only mobile networks, you don't have to add and assign Wi-Fi networks.

The body worn camera must be connected to a Wi-Fi or mobile network to stream video. For Wi-Fi networks, the body worn camera uses networks assigned to the camera user. You can assign a Wi-Fi network to the camera user either through camera profiles or directly to the camera user.



Option 1: Assign Wi-Fi network through camera profile – You can add one or more Wi-Fi networks in AXIS Body Worn Manager and assign them to different camera profiles. For instructions, see *Assign Wi-Fi network through camera profile in AXIS Body Worn Manager on page 6*.

Option 2: Assign Wi-Fi network directly to the camera user – You can assign a Wi-Fi network directly to a camera user, either in AXIS Body Worn Manager or in AXIS Body Worn Assistant. In AXIS Body Worn Assistant, the camera users can add Wi-Fi networks on their own. This is especially useful if you have many camera users, and want to use many individual Wi-Fi networks. When you assign a Wi-Fi network directly to the user in AXIS Body Worn Manager, it overrides any network assigned through the camera profile. When you assign a Wi-Fi network directly to the user in AXIS Body Worn Assistant, it overrides any other assigned network. For instructions, see *Assign Wi-Fi network directly to the camera user in AXIS Body Worn Manager on page 6* or *Assign Wi-Fi network directly to the camera user in AXIS Body Worn Assistant on page 7*.

Note

AXIS W100 Body Worn Camera and AXIS W101 Body Worn Camera support the 2.4 GHz frequency band only.


Assign Wi-Fi network through camera profile in AXIS Body Worn Manager

1. Open AXIS Body Worn Manager.
2. Go to  Settings > Camera.
3. Under Wi-Fi networks, click Add.
4. Enter the Name (SSID) and Password for the Wi-Fi network.
5. Click Add.
6. Go to .
7. Select the camera profile you want to assign the Wi-Fi network to.
8. Expand the **AXIS Body Worn Live** panel.
9. Select a Wi-Fi network to assign it to the camera profile.
10. Go to Users and select the camera user you want to assign the Wi-Fi network to.
11. Select the camera profile that has the appropriate Wi-Fi network.

Assign Wi-Fi network directly to the camera user in AXIS Body Worn Manager


Note

Before you can assign a Wi-Fi network directly to the camera user, you must enable streaming, see *Enable live streaming on page 5*.


1. Open AXIS Body Worn Manager.
2. Go to  and select the user you want to add a Wi-Fi network to.

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3. Click  .
4. Enter the **Name (SSID)** and **Password** for the Wi-Fi network.
5. Click **Add**.

Assign Wi-Fi network directly to the camera user in AXIS Body Worn Assistant

1. Open AXIS Body Worn Assistant.
2. Go to **Camera**.
3. Tap the pen icon  .
4. Enter the Wi-Fi network name and password, and tap **OK**.

Note

When you add a Wi-Fi network this way it overrides any networks added in the camera profile, or directly to the user in AXIS Body Worn Manager.

Synchronize time

Important

- Browsers used for viewing AXIS Body Worn Live streams must have the same time, give or take a few seconds, as the body worn system.
- AXIS Body Worn Live prevents video streaming if the time between the system and the client isn't synchronized.
- We recommend using the same NTP server and time settings on the computers used for viewing AXIS Body Worn Live streams, as in the body worn system.

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Configure your system

Configure your system

Add users

Admins can add users to AXIS Body Worn Live.

1. You invite the users to your organization in *My Systems*. For instructions, see *My Systems user manual*.
2. The users accept the invitation. All users must have My Axis accounts.
3. You assign a user role to each user. For instructions, see *My Systems user manual*. For information about what each role can do in AXIS Body Worn Live, see *User roles on page 9*.

Set up automatic notifications to SOC

To make sure the operators in the security operating center (SOC) get notified when a new live stream starts, you can set up the system to send notifications automatically. You set up a connection between your organization and the security operating center.

1. Go to **Settings**.
2. Click **+ New SOC integration**.
3. Enter the URL for the security operating center.
4. Optionally, click **Sign messages** and enter a payload signature. This is used on the receiving end to verify that the notification comes from the correct source.
5. Click **Add**.

For instructions on how to set up the integration on the receiving end, download the *SOC integration* document.

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Learn more

Learn more

Organizations

The organization is a virtual representation of your Axis system installations, and it's at the center of your body worn cloud services.

- The organization connects your body worn system to your AXIS Body Worn Live licenses.
- The organization connects your body worn system to the AXIS Body Worn Live users.

You can learn more about organizations in *My Systems user manual*.

User roles

Note

- AXIS Body Worn Live users are separate from the camera users in AXIS Body Worn Manager
- AXIS Body Worn Live users need a My Axis account to sign in.

In AXIS Body Worn Live, there are two user roles:

Operator – Views and acknowledges incoming live streams.

Admin – Manages the AXIS Body Worn Live settings. The administrator connects the body worn system to AXIS Body Worn Live, invites users, and assigns user roles. Administrators can also view and acknowledge incoming live streams.

Licenses

The number of cameras assigned to users with a live streaming-enabled camera profile during a 24-hour period, averaged over the last week, determines how many AXIS Body Worn Live licenses you need.

The license model is the same whether you use fixed or self-assign camera assignment.

We recommend that you dedicate a camera profile for live streaming to minimize the number of licenses used.

To learn more about licenses for Axis products and services, see *My Systems user manual*.

End-to-end encryption

End-to-end encryption ensures that only the intended recipients can access the streamed video. A public key in each body worn camera and a private key in each browser using AXIS Body Worn Live enable this secure communication.

Important

- The browser removes the private key if you remove cookies and other site data. This can happen when you clear your browsing history. One way to avoid this is make an exception for AXIS Body Worn Live in the browser.
- If you remove the private key, for example when you clear the browsing history, you must repeat the instructions in *Enable end-to-end encryption on page 4*.

Evidence data and metadata

When a body worn camera streams live video, both evidence data and metadata is produced. In AXIS Body Worn Live you can choose between several countries for storing evidence data. Metadata must be stored in one of the main cloud regions (EU or US), which you select in AXIS Body Worn Manager when you turn on cloud extensions.

Evidence data:

- Encrypted video and audio streams

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Learn more

- Encrypted incident positioning data

Metadata:

- User-related, such as user ID, username, stream ID, and organization ID.
- Stream-related, such as start time, end time, and duration.

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Daily use

Daily use

Important

For security reasons, AXIS Body Worn Live requires that the camera is docked at least once every six days. Live streaming only works if you dock the camera within the six-day interval.

Open AXIS Body Worn Live



1. Go to *AXIS Body Worn Live*.
2. Sign in using your My Axis account credentials.

Note

- You'll stay logged in as long as you keep your web browser open, even if you close the AXIS Body Worn Live tab.
- You'll be logged out if you close the web browser and don't open it again within seven days.

Start a live stream

To start a live stream:

1. Double-press the function button on the body worn camera. The recording LED turns red, and depending on your camera model:
 - The Wi-Fi® connectivity LED starts pulsing amber.
 -  turns white.
2. When the camera has established a connection and started streaming to AXIS Body Worn Live, depending on your camera model:
 - The Wi-Fi connectivity LED turns green.
 -  turns green.
3. The camera provides feedback when the SOC (security operating center) operator acknowledges the stream, see *View and acknowledge a live stream on page 11*.

Note


You can start a live stream while recording, or you can start recording and streaming at the same time.

Stop a live stream

To stop the live stream and the recording, press and hold the recording button. Check the camera's user manual for information about how long you need to keep the button pressed.




View and acknowledge a live stream

When a camera user starts a live stream, their body worn user name appears under **Active streams**. To view a live stream:

1. Go to streams  .
2. Click the camera user whose video stream you want to view.




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3. To switch between map view and live stream view, click  and .
4. To let the camera user know that you have opened the live stream, click . The camera vibrates to notify the camera user.


View several live streams at the same time

You can view live streams from up to four camera users next to each other. To create a group of camera users and view their live streams simultaneously:

1. Go to streams .
2. Click .
3. Type a name for the group.
4. Click  and select up to four camera users.
5. Click **Create**.
6. To view the live streams, click the group name.

View recent streams

AXIS Body Worn Live saves all streams for 24 hours. To view recent streams:



1. Go to recordings .
2. Click the camera user whose video stream you want to view.
3. Click the stream you want to view.

View location

If you want to find out where a camera user who is currently streaming live video is located and how they are moving, you can view the camera's geographical position on a map.

Note

- You need to enable location in AXIS Body Worn Manager before you can view the location. See *Enable location on page 5*.
- You can't view the movements of a camera that can't receive GPS signals.

1. Open AXIS Body Worn Live.
2. Go to streams .
3. Click a camera user who is currently streaming live video.
4. Click .

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Troubleshooting

Troubleshooting

Problem or symptom	Cause	Solution
The body worn camera doesn't react when you try to start a live stream.	Streaming isn't turned on in the user's camera profile.	See <i>Enable live streaming on page 5</i> .
	Your AXIS Body Worn Live license has expired.	Check the license information in AXIS Body Worn Live > Settings .
The body worn camera won't connect to the wireless network. The Wi-Fi® connectivity LED/AXIS Body Worn Live connection icon doesn't turn green.	A wireless network hasn't been assigned to the user using the camera.	See <i>Add Wi-Fi networks on page 5</i>
	The camera hasn't been docked for over six days. For security reasons, AXIS Body Worn Live requires docking the camera at least every six days, and live streaming only works if you dock the camera within the six-day interval.	Dock the camera to renew the certificate.
	The network name or password is wrong.	Make sure the network name and password are correct.
	AXIS W100 and AXIS W101 Body Worn Cameras only support 2.4 GHz wireless networks.	Make sure the wireless network uses the 2.4 GHz frequency band. Many phones use the 5 GHz frequency band by default. So if you're connecting to a mobile hotspot you need to go into your phone's settings and enable the 2.4 GHz frequency band.
There's no image in the live stream player.	The time in the body worn system is different from the time on the computer using AXIS Body Worn Live.	Make sure you're using automatic time in the body worn system.
In Genetec™ Security Center, there are issues with the live stream in the embedded browser.	Genetec™ Security Center uses the Google Chrome™ browser by default.	Change the default browser to Microsoft Edge® by editing a config file. For example, go to Program Files (x86) > Genetec Security Center 5.11 > ConfigurationFiles > App.SecurityDesk.config . In Presentation , add or change WebBrowserType to Edge.
In AXIS Camera Station, there are issues with the live stream in the embedded browser.	The AXIS Camera Station version is too old.	Upgrade to version 5.50 or later.
	The Microsoft® Windows version is too old.	Upgrade to the latest version.

Hostnames

These are the hostnames that the body worn system must have access to when you set up and use AXIS Body Worn Live Cloud. The port is always 443.

Global

Domain	Information	Device type
*.mysystems.axis.com	Web applications.	Clients (web browser)

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*.bodyworn.axis.com	Bodyworn specific APIs.	Clients (web browser), body worn cameras, system controllers
*.bodyworn.axis.cloud	Bodyworn specific APIs.	System controllers
*.axis.com	Common Axis APIs.	Clients (web browser), system controllers
axisbwsprod.webpubsub.azure.com	Websocket for application data.	Clients (web browser)
axisbws-prod.azure-devices.net	Application communication between devices and cloud.	Body worn cameras, system controllers

Regional streaming storage

Domain	Region	Device type
axislive31517ebf9edd88f9.blob.core.windows.net	East US	Clients (web browser), body worn cameras
axislive1c7751f2e2c4df77.blob.core.windows.net	West US	
axislivee6dc2820e149af9f.blob.core.windows.net	EU	
axislive980d6ba8adbbf223.blob.core.windows.net	Australia	
axis-live9280c1821b19cd35.blob.core.windows.net	Canada	
axis-live5894d7bc3cd547d1.blob.core.windows.net	India	
axislive09082556af5ba7de.blob.core.windows.net	France	
axislive8adf5397b85a521e.blob.core.windows.net	Germany	
axis-live7411d120eb3dc484.blob.core.windows.net	Switzerland	
axislive39b4a3a4e44aa1f5.blob.core.windows.net	UK	
axislivef1c7db59e587d874.blob.core.windows.net	Japan	

