

AXIS T61 Audio and I/O Interface Series

AXIS T6101 Audio and I/O Interface

AXIS T6112 Audio and I/O Interface

AXIS T61 Audio and I/O Interface Series

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About this manual

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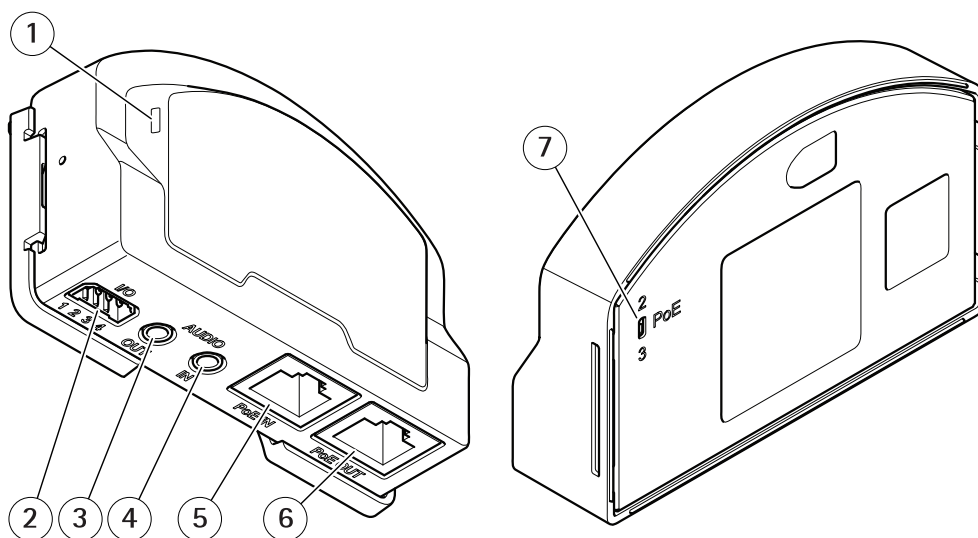
This user manual describes multiple products. Some of the instructions may not be relevant for your product.

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Product overview

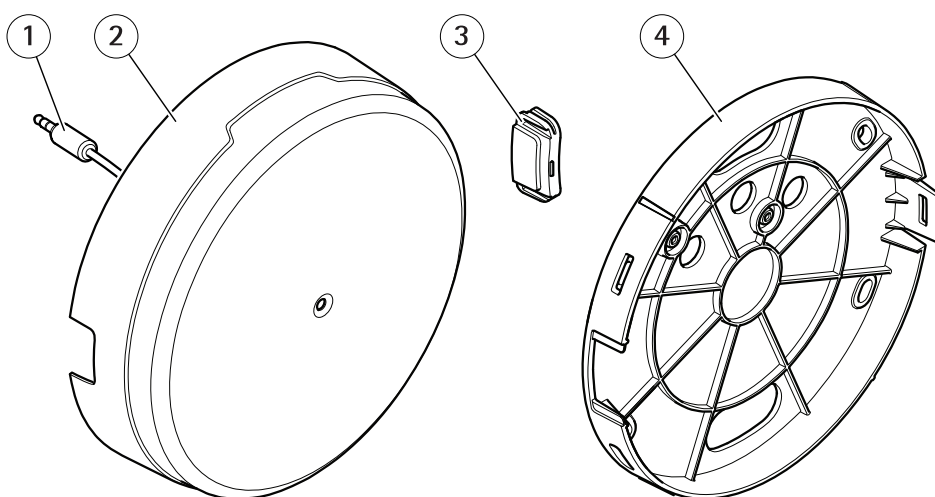
Product overview

AXIS T6101 and AXIS T6112



- 1 LED indicator
- 2 I/O connector
- 3 Audio out
- 4 Audio in
- 5 Network connector (PoE in)
- 6 Network connector (PoE out)
- 7 PoE switch (class 2 or 3)

AXIS T6112

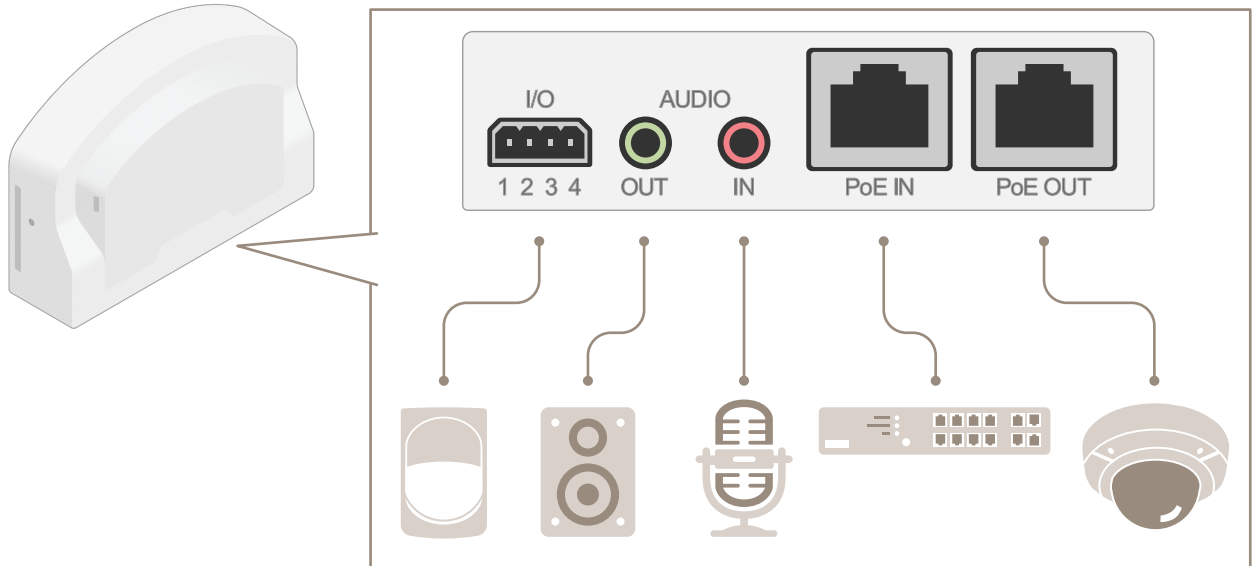


- 1 Microphone
- 2 Cover
- 3 Side lid
- 4 Bracket mount

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Solution overview

Solution overview



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Setup

Setup

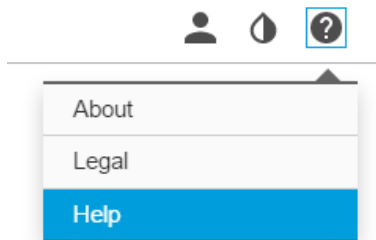
About the product

When you connect your product to a supported Axis network camera with the latest firmware version, settings for audio and I/O will appear in the camera's webpage.

You can do all the settings described in this manual through the camera's webpage.

About the camera's built-in help

You can access the built-in help from the camera's webpage. The help provides more detailed information on the product's features and their settings.



Audio

How to add audio to your recording

Edit the stream profile which is used for the recording:

1. Go to **Settings > System > Stream profiles**.
2. Select the stream profile and click **Modify**.
3. In the **Audio** tab, select the **Audio stream** checkbox and select **On** from the drop-down list.
4. Click **Ok**.

How to allow two-way audio communication

Note

When you have set up two-way audio communication in the camera's user interface, use a video management system to make use of the functionality.

This use case explains how to make it possible to communicate with audio through the product.

Connect a microphone and a speaker to the product:

1. Connect a microphone to the **Audio in** connector.
2. Connect a speaker to the **Audio out** connector.

Allow two-way audio in the camera's web page:

1. Go to **Settings > Stream** and include audio.

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Setup

2. Go to **Settings > Audio** and make sure audio is allowed.
3. Make sure **Mode** is set to **Full duplex**.

Events

How to trigger an action

1. Go to **Settings > System > Events** to set up an action rule. The action rule defines when the camera will perform certain actions. Action rules can be setup as scheduled, recurring, or for example, triggered by motion detection.
2. Select what **Trigger** must be met to trigger the action. If you specify more than one trigger for the action rule, all of them must be met to trigger the action.
3. Select which **Action** the camera should perform when the conditions are met.

Note

If you make changes to an active action rule, the action rule needs to be restarted for the changes to take effect.

How to record video when a PIR detector senses motion

This example explains how to connect an Axis PIR detector to the product, and set up the camera to start recording when the detector senses motion.

Required hardware

- 3-wire cable (ground, power, I/O)
- Axis PIR detector

NOTICE

Disconnect the product from power before connecting the wires. Reconnect to power after all connections are done.

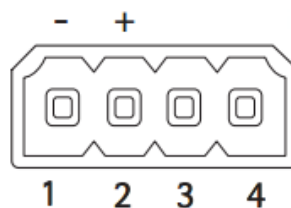
Connect the wires to the product's I/O connector

Note

For information on the I/O connector, see *Connectors on page 10*

1. Connect the ground wire to pin 1 (GND/-).
2. Connect the power wire to pin 2 (12V DC output).
3. Connect the I/O wire to pin 3 (I/O input).

Connect the wires to the PIR detector's I/O connector



1. Connect the other end of the ground wire to pin 1 (GND/-).
2. Connect the other end of the power wire to pin 2 (DC input/+).
3. Connect the other end of the I/O wire to pin 3 (I/O output).

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Configure the I/O port in the camera's web page

1. Go to **Settings > System > I/O ports**.
2. Select **Input** in the **Port 1** drop-down list.
3. Give the input module a descriptive name.
4. To make the PIR detector send a signal to the camera when it senses motion, select **Closed circuit** in the drop-down list.

To trigger the camera to start recording when it receives a signal from the PIR detector, you need to create an action rule in the camera's web page.

How to detect tampering with input signal

This example explains how to trigger an alarm when the input signal has been cut or short-circuited. For more information about the I/O connector, see *page 10*.

1. Go to **Settings > System > I/O Ports** and enable **Supervised I/O** for one of the ports.

Create an action rule:

1. Go to **Settings > System > Events** and create an action rule.
2. Type a name for the action rule.
3. From the list of triggers, select **Input Signal** and then **Digital input port**. Select the port with **Supervised I/O** and set **Tampered** to **Yes**.
4. From the list of schedules, select **Always**.
5. From the list of actions, select **Send Notification** and then select a recipient or create a new recipient.
6. Click **OK**.

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Troubleshooting

Troubleshooting

Technical issues, clues and solutions

If you can't find what you're looking for here, try the troubleshooting section at axis.com/support

The Audio tab and I/O icon are not visible in the camera's webpage

The webpage is not updated. Refresh the browser window. If that does not help, clear the browser cache.

Wrong camera firmware version.	Verify that the camera's firmware version supports the product. For information about how to check the camera's firmware version, see the camera's user manual.
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The network connection is unavailable.	Check the LED indicators on the product and compare with the LED indicators table on <i>page 10</i> .
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The input and output network cables are connected to the wrong connectors.	Interchange the input and output network cables.
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The Audio tab is visible but audio is not working

The camera has been disconnected from the Audio and I/O Interface.	Reconnect the camera to the Audio and I/O Interface and refresh the camera's webpage.
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The camera doesn't start up after connecting it to the product

Hardware issue	Contact Axis support.
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Specifications

Specifications

To find the latest version of the product's datasheet, go to the product page on axis.com and locate **Support & Documentation**.

LED indicators

Status LED	Indication
Green	Steady green for normal operation.
Amber	Steady during startup. Flashes during firmware upgrade.
Amber/Red	Flashes amber/red if network connection is unavailable or lost.
Red	Flashes red for firmware upgrade failure.

Connectors

Network connector

Input: RJ45 Ethernet connector with Power over Ethernet (PoE).

Output: RJ45 Ethernet connector with Power over Ethernet (PoE).

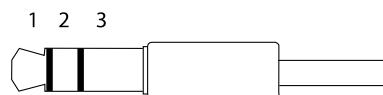
Audio connector

The Axis product has the following audio connectors:

- **Audio in (pink)** – 3.5 mm input for a mono microphone, or a line-in mono signal.
- **Audio out (green)** – 3.5 mm output for audio (line level) that can be connected to a public address (PA) system or an active speaker with a built-in amplifier. It is recommended to use a stereo connector for audio out.

For audio in, the left channel is used from a stereo signal.

3.5 mm audio connectors



	1 Tip	2 Ring	3 Sleeve
Audio Input	Microphone/Line in, Microphone bias voltage		Ground
Audio Output	Line out, mono	Line out, mono	Ground

I/O connector

Use the I/O connector with external devices in combination with, for example, motion detection, event triggering, and alarm notifications. In addition to the 0 V DC reference point and power (DC output), the I/O connector provides the interface to:

Digital input – For connecting devices that can toggle between an open and closed circuit, for example PIR sensors, door/window contacts, and glass break detectors.

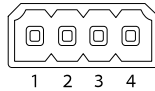
Supervised input – Enables possibility to detect tampering on a digital input.

Digital output – For connecting external devices such as relays and LEDs. Connected devices can be activated by the VAPIX® Application Programming Interface or from the product's webpage.

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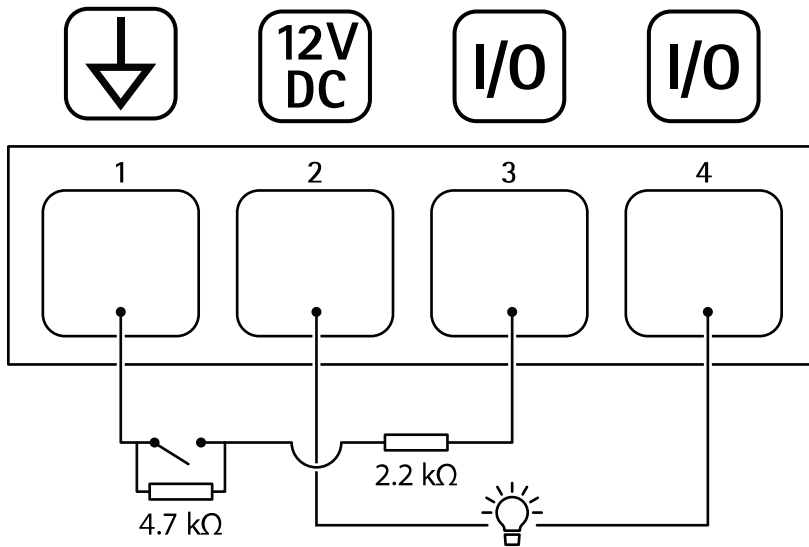
Specifications

4-pin terminal block



Function	Pin	Notes	Specifications
DC ground	1		0 V DC
DC output	2	Can be used to power auxiliary equipment. Note: This pin can only be used as power out.	12 V DC Max load = 50 mA
Configurable (Input or Output)	3-4	Digital input or Supervised input – Connect to pin 1 to activate, or leave floating (unconnected) to deactivate. To use supervised input, install end-of-line resistors. See connection diagram for information about how to connect the resistors.	0 to max 30 V DC
		Digital output – Connect to pin 1 to activate, or leave floating (unconnected) to deactivate. If used with an inductive load, e.g., a relay, connect a diode in parallel with the load, to protect against voltage transients.	0 to max 30 V DC, open drain, 100 mA

Example



- 1 DC ground
- 2 DC output 12 V, max 50 mA
- 3 I/O configured as supervised input
- 4 I/O configured as output

