How to add a camera

Overview

Setting up Paxton10 as a video management system is simple and allows Paxton10 to intelligently manage your video and access control events in a single unified system, enhancing security and providing powerful additional features.

Using cameras with Paxton10 allows you to:

• View live video – as well as viewing the live video of your cameras, Paxton10 can overlay important events relative to what your cameras are currently viewing.

• View archived video – all recorded video footage is available for instant viewing in easy-to-use video reports. Simply navigate to the time and date you wish to view and the video footage from the selected cameras will be displayed.

• Associate devices with the cameras that can see them – if something happens at a device, Paxton10 will automatically provide you with the video footage of the event.

• In addition to the basics, Paxton10 also offers a number of useful video management and playback features, including Smart Search, Video Bookmarks, Snapshot and Export, Video Scrubbing and more.

Supported cameras

Paxton10 cameras

Paxton10 Cameras can be used to provide a plug and play solution, without the need for any configuration or additional hardware. All Paxton10 cameras are 4K and are available in a number of variants and housings.

Third-party cameras

Most third-party IP cameras can be added to a Paxton10 system using ONVIF discovery, or for those that are not ONVIF compliant, manual addressing via RTSP can be used.

Third party cameras must provide 2 video streams: A high resolution main-stream (up to 4096 x 2160 @ 25 FPS), and a low resolution sub-stream (up to 640 x 480 @ 15 FPS). For ONVIF cameras, the video streams can be configured automatically by Paxton10. For RTSP cameras, configure the streams in your camera’s configuration software prior to adding them to Paxton10.

One Paxton10 Video Controller is required for every 4 third-party cameras.
Adding a camera to a Paxton10 system

Paxton10 cameras

1. Plug the Paxton10 camera into a network port

A Paxton10 controller must be bound to the server prior to binding the camera, if multi-subnet is in use this controller must be located on the same subnet as the camera.

2. In the Paxton10 software, navigate to 'Devices', then in the Device Panel on the right side of the screen, select 'Cameras'

The Paxton10 camera will automatically be detected and will be listed in the Device Panel.

3. Locate your camera in the Device Panel, then click and drag the 'Camera' component, dragging it onto an empty space on the left side of the screen

4. Give the camera a name, and select where recorded video should be stored, then click 'Create'

The Paxton10 camera will now be bound to the system and recording video. Click on the camera device in 'Devices' to configure the recording or video settings.

Third-party cameras

Third-party cameras must be associated with a Video recorder (a Paxton10 Video Controller) for their video to be processed and recorded in Paxton10.

First, create a Video recorder device:

1. In the Paxton10 software, navigate to 'Devices', then in the Device Panel on the right-hand side locate your Paxton10 Video Controller

2. Click and drag the 'Video recorder' component, dragging it onto an empty space on the left side of the screen

3. Give the recorder a name, and select whether to save video to the controller’s SATA drives or to a network location, then click 'Create'

Then, add the cameras to your system and associate them to the video recorder:

4. Plug the camera into a network port

A Paxton10 controller or Video controller must be located on the same subnet as the camera.

5. In the Paxton10 software, navigate to 'Devices', then in the Device Panel on the right side of the screen, select 'Cameras'

ONVIF cameras will automatically be detected and will be listed in the Device Panel. Any cameras not listed will need to be added manually – Scroll to the bottom of the list of cameras, and select 'Manual add'; enter the camera’s RTSP address for both the main and sub stream of the camera, give it a description (name), then click 'Add'.

6. Locate your camera in the Device Panel, then click and drag the 'Camera' component, dragging it onto an empty space on the left side of the screen

5. Give the camera a name, and select the video recorder to associate it with, then click 'Create'

The camera will now be bound to the system and recording video. Click on the camera device in 'Devices' to configure video settings, or click on the video recorder to configure the video recording and save location.
Camera and video configuration

Once the camera has been added to Paxton10, double click on it in the ‘Devices’ section to see further configuration. The options available may vary depending on the camera.

Recording

In this section you can select when to record video and where the video footage is stored.

For Paxton10 cameras, manage the video storage settings here. Either save footage directly onto the camera’s inbuilt memory, or save it to a network location.

For third party cameras, select the video recorder that will manage the recording and storage configuration. View the video recorder device to manage further settings and view the Paxton10 Video Controller in Hardware Management to manage any connected SATA drives.

Video settings

In this section you can view the camera’s current video settings, such as its video quality and focal length.

**Video resolution**: This defines how much detail each video frame contains. A higher resolution results in a clearer image, however also increases storage costs and bandwidth requirements.

**Frame rate**: This defines how many pictures (frames) are taken every second. For an average office, a frame rate of 15 FPS will appear visually smooth to most people. For a busy road, a frame rate of 30 FPS may be required to ensure every car is captured with minimal blur. The higher the frame rate, the more storage and bandwidth required.

**Max bitrate**: Bitrate is the amount of data (bits) that is sent from the camera to the recorder or client. The higher the bitrate, the higher the network bandwidth requirements. A maximum bitrate ensures that the video is compressed sufficiently to meet the available bandwidth.

**Video rotation**: Rotate the video footage depending on how the camera is mounted.

**Focal length**: The focal length of a camera refers to the distance that the camera lens is located away from the sensor. By changing the distance between the lens and the sensor, the focal point of the image changes, changing the camera’s field of view and having the effect of zooming in or out on the image.

**Standard**: PAL (50Hz) is the standard format for Europe, Australia, and parts of Asia, while NTSC (60Hz) is used in the United States.

Motion detection

Paxton10 is efficient and only ever records when there is motion, this means more of what you need is recorded and can be stored for longer.

The Motion detection section allows you to exclude areas from Paxton10 motion detection, preventing false recording from traffic, or a tree blowing in the wind.

1. Define any areas to exclude from the motion detection by clicking and dragging areas onto the video that are not relevant to when you wish to record

2. Drag the slider to adjust motion sensitivity – this defines how much movement is required for it to start recording

Devices

These are the devices that the camera has view of. Associate devices with the camera to provide events with video footage.

For example, if the camera is overlooking the front door; associate the front door with the camera. All access and alarm events at the front door will be supplemented with the relevant video footage.
More information

See the links below for more information.

AN0048 – Cameras and Video, a beginner’s guide < www.paxton.info/4981 >
AN0019 – Paxton10 Video Management < www.paxton.info/4978 >