

QUICKSTART GUIDE

HARRIER 52x AF-ZOOM IP CAMERA

Introduction

This guide is designed to get you quickly up and running with the **Harrier 52x AF-Zoom IP Camera** (AS-CAM-52IPHD-A). This document should be read in conjunction with the datasheet and technical reference manual for the Harrier 52x AF-Zoom IP Camera. The camera is shipped with a fixed IP address of 192.168.1.108; this can be changed once you have connected to the camera.



Figure 1. Harrier 52x AF-Zoom IP Camera



Figure 2. Harrier 23x/52x IP Camera Evaluation Board

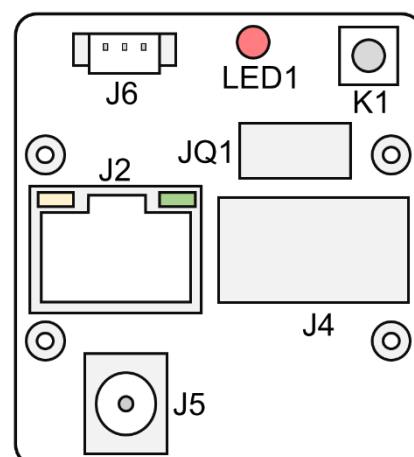


Figure 3. Harrier 23x/52x IP Camera Evaluation Board



Evaluation Kit Contents

The Evaluation Kit for the Harrier 23x/52x IP Camera (AS-CAM-23IP4K-EVAL-A) contains all the parts needed to evaluate the Harrier 52x AF-Zoom IP Camera. Note that the evaluation kit does not include a camera, this needs to be ordered separately.

Please check that you have all the parts listed below:

- Harrier 23x/52x IP Camera Evaluation Board (see Figures 2 and 3).
- Fixing posts and screws to mount evaluation board on to the camera.
- 36-way 0.5mm pitch FFC cable
- 12V multi-standard power supply and mains socket adapters.

Mounting the Evaluation Board on the Camera (optional)

1. Connect the Harrier 23x/52x IP Camera Evaluation Board (J1) to the camera (J17) using the 36-way 0.5mm pitch FFC cable. Ensure that the cable is connected the right way round. The metal contacts should face towards the PCB.
2. Screw the mounting posts into the back of the camera.
3. Using the screws, carefully mount the Harrier 23x/52x IP Camera Evaluation Board to the camera. Without creasing the FFC cable, gently fold the FFC cable between the evaluation board and the camera so it does not protrude excessively.



Quick Start

1. Download and install the [ONVIF Device Manager](https://sourceforge.net/projects/onvifdm/) from <https://sourceforge.net/projects/onvifdm/>
2. Configure the network adapter on a PC to have an address of 192.168.1.1 (or similar).
3. Using a Cat5/6 RJ45 cable, connect the RJ45/Ethernet port of the Harrier 23x/52x IP Camera Evaluation Board to the network adapter of the PC.
4. Connect the 12V power supply to the barrel connector of the evaluation board.
5. When you are ready, the power supply can be plugged in and switched on; the camera will start up. After a while the camera will have initialized and a blinking LED on the PC Ethernet port and on the Harrier 23x/52x IP Camera Evaluation Board will indicate network activity.
6. On the PC, open the Microsoft Edge or Chrome browser and browse to 192.168.1.108.
7. The camera configuration website will open, and you will see a login prompt (Figure 4).
8. Before logging in, click on the Plug-in download and install the plug-in. This will enable the video preview to work on the web page. You may need to close the browser to install the plug-in.
9. Login using user: admin, password:123456
10. Open the configuration website at 192.168.1.108 with Microsoft Edge or Chrome to work properly.
11. You should see a video preview from the camera.
12. Go to the settings tab and select System Settings->Encode settings (Figure 5).
13. Set all streams to H.264 and save the settings. Note: The ONVIF Device Manager cannot display H.265 encoded streams.
14. On the PC, open the ONVIF Device Manager and use it to locate the camera. Click the Refresh button and the camera will appear on the Device List with the IP address 192.168.1.108.
15. Open the connection to the camera by clicking on the box in the left-hand pane that shows the camera and its IP address. The panes on the right will populate and show a video preview image and camera stream settings.
16. By clicking on the **Live video** menu option, you can view the streaming video from the camera (see Figure 6).
If you select the **Profiles** option on the menu you will also be able to select different video streams served by the camera (as set up in the demo web page encoder settings).
17. If the PTZ control menu option is selected, the camera can be zoomed using the Zoom +/- buttons on the screen.
18. The video stream can also be opened using a media player application (e.g. VLC media player or GStreamer). Use **rtsp://192.168.1.108:554/type=0&id=1** to connect to the camera.

E.g. for VLC media player (supports H.265): Select the Media menu, select Open Network Stream. In the Open Media dialog, enter **rtsp://192.168.1.108:554/type=0&id=1**. Click the Play button.



Web Server

User Name:

Password:

Language:

☒ Remember ☐ Extranet

Figure 4. Camera demo web page login dialog

Channel	01	Second Stream	1
Type	H265	Type	H265
Level	Main Profile	Level	Main Profile
Enable	<input checked="" type="checkbox"/> Video <input type="checkbox"/> Audio	Enable	<input checked="" type="checkbox"/> Video <input type="checkbox"/> Audio
Resolution	1920*1080	Resolution	720*576
Frame Rate(FPS)	20	Frame Rate(FPS)	20
Bitrate	512	Bitrate	512
Bitrate Control	VBR	Bitrate Control	VBR
Picture	Good	Picture	Good
GOP(100ms)	20	GOP(100ms)	20
Bitstream Smoothing	<input type="text" value="50"/>	Bitstream Smoothing	<input type="text" value="50"/>
Input Volume	<input type="text" value="50"/>		
Output Volume	<input type="text" value="50"/>		
H264+/H265+	<input type="checkbox"/>		
<input type="button" value="Save"/> <input type="button" value="Refresh"/>			

Figure 5. Camera demo web page encoding setting view

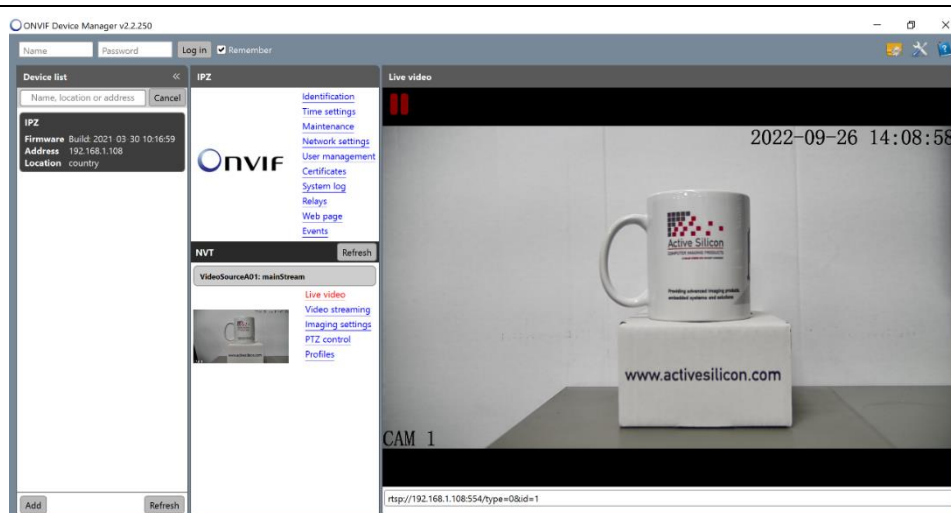


Figure 6. ONVIF Device Manager video streaming screen



Opening the Camera Configuration Website

Open your Microsoft Edge or Chrome browser and browse to the IP address of the camera. A login page will open.

To display video the website requires an ActiveX plug-in that is downloaded from the camera. This plug-in works with Microsoft Edge or Chrome but may not work with other web browsers.

On the login dialog you will see 'Plug-in Download' (Figure 4). If you have not done this before, click on the option to download and install the file: Setup.msi.

Once the plug-in is installed you can log in:

User: **admin**

Password: **123456** or **password123**

This will open the configuration website where you can control the camera and change the camera settings.

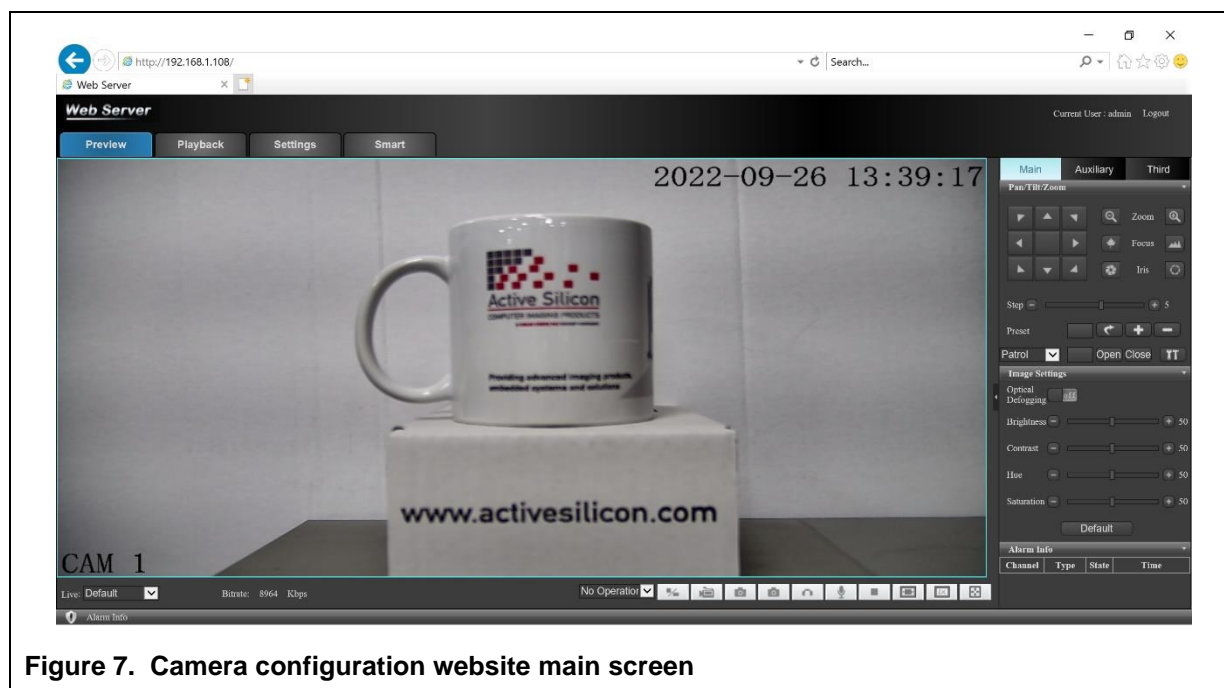


Figure 7. Camera configuration website main screen

Changing the Network Address

The network address can be changed using ONVIF Device Manager or the camera configuration website. Care must be taken when changing the address to ensure that you are always able to find the camera.

To change the network address using ONVIF Device Manager (see Figure 8):

- Open/connect to the camera by clicking on the box in the left hand panel.
- Select 'Network settings' in the centre panel and edit the settings.
- Select 'Apply' and the settings on the camera will change – note you will need to refresh the view as the camera will now be at a different IP address.



To change the network address using the camera configuration website (see Figure 9):

- Log in to the camera configuration website
- Select the 'Settings' tab
- Select the 'Network Settings' option from the menu on the left and edit the settings.
- Select 'Apply' and the settings on the camera will change – note you will need to reconnect to the camera as it will now be at a different IP address.

For more information, please refer to the camera's Technical Reference Manual.

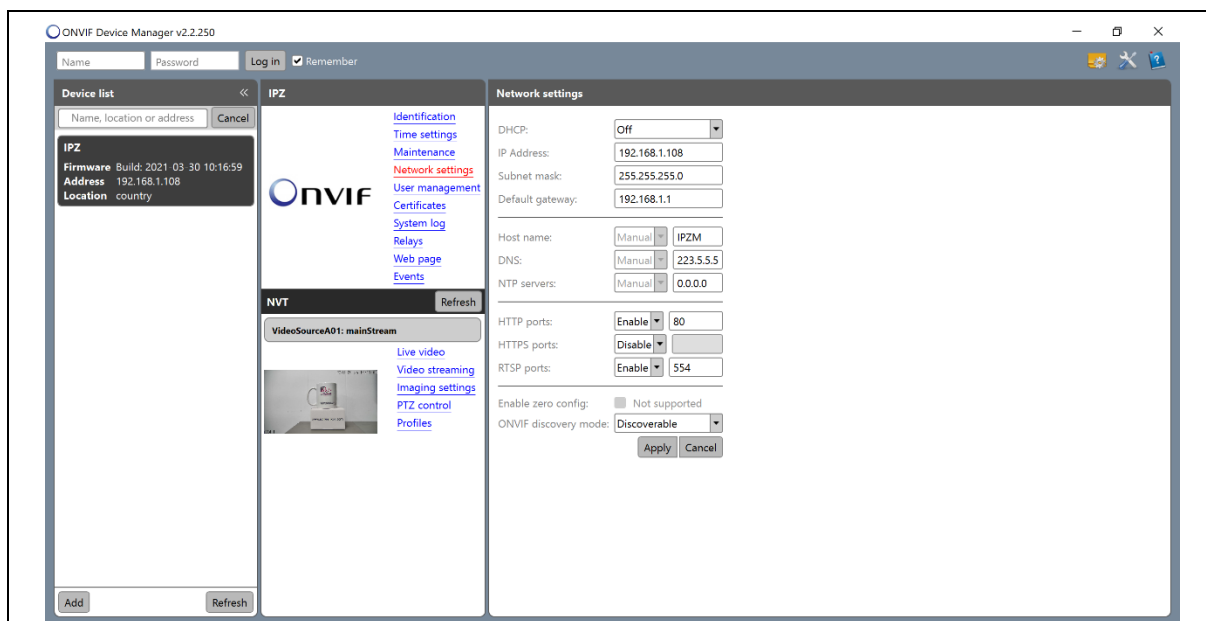


Figure 8. ONVIF Device Manager network settings

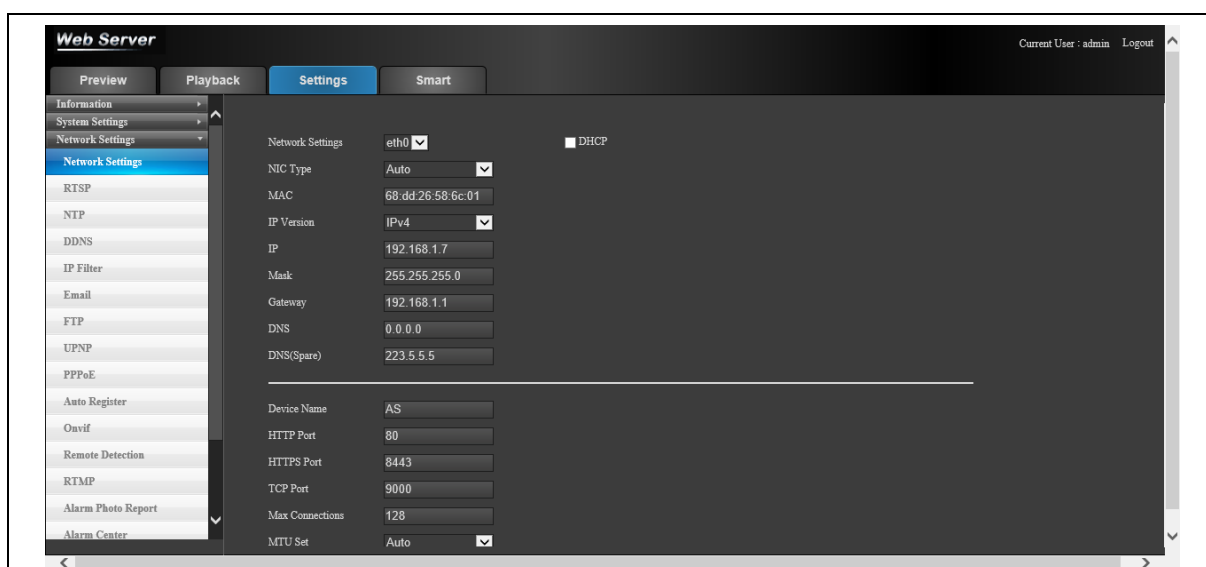


Figure 9. Camera demo web page Network Settings tab



SD Card Recording

Applications should use the ONVIF service to control the recording, but the camera configuration website can also be used to set up recording on the SD card.

- Insert an SD card into the camera.
- Open the camera configuration website and log in.
- Open the 'Settings' tab and select 'Storage Settings' -> 'Disk Manager'.
- Click on 'Refresh' and select the SD card (it will be listed as a hard drive).
- Select 'Format' and accept the prompts.
- The camera will re-boot, log in again and re-select the 'Disk Manager' to check that the card is formatted correctly.
- Select 'Record Settings'.
- The demo page has been designed to emulate a security system and can be set to operate at set periods of time or with alarms.
- Set the 'General' tick box on Period 1, a green line will appear in the display for Sunday.
- Set the 'Copy To All' tick box, the green line will now appear on all days. Click on the 'Save' button. This has now enabled 24 hour/7 days a week recording.
- Go to the 'Disk Manager' or 'Information' -> 'Disk Information' and you will see that the free space is slowly going down as the camera records the video to the SD card.
- To stop the recording return to 'Storage Settings' -> 'Record Settings' and use the 'Reset All' button to clear the recording schedule then click on 'Save'.

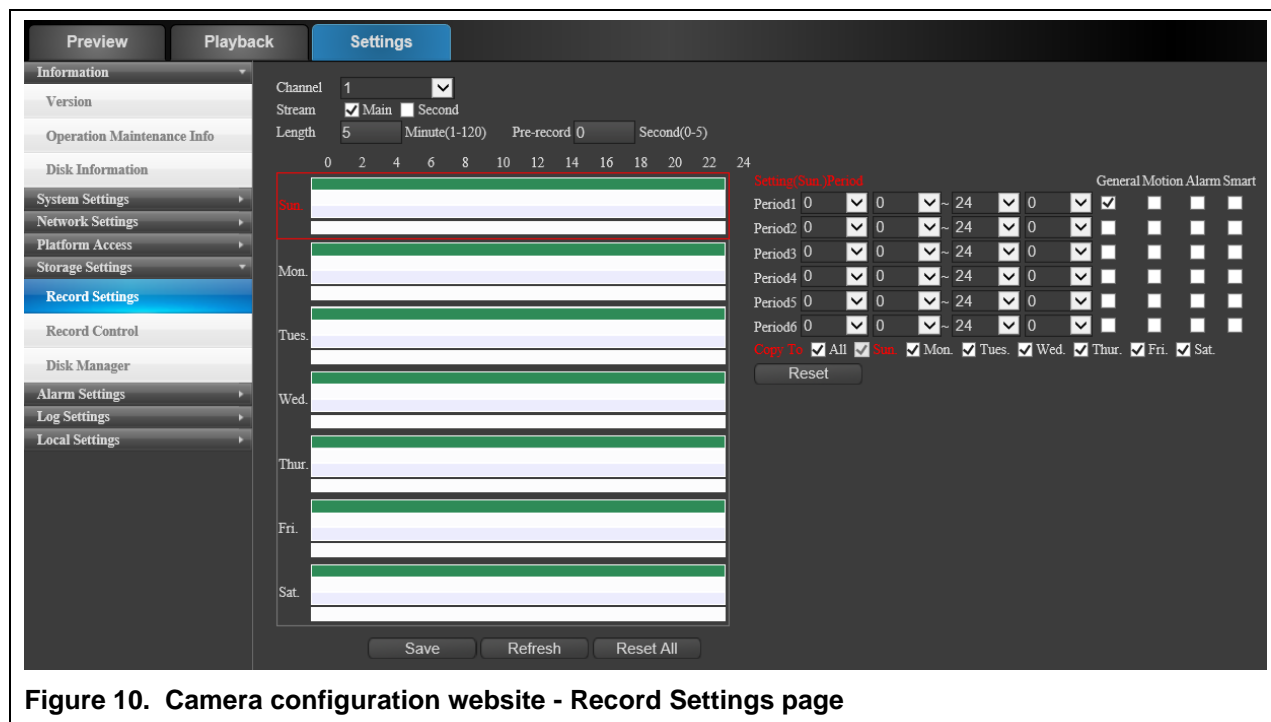


Figure 10. Camera configuration website - Record Settings page



To view the recordings:

- Select the Playback tab.
- Click on the 'Query Terms'-'>'Query' button.
- The timetable row/bar at the bottom of the frame will update to show the times where recordings have been made (shown in green).
- Click on and slide the timetable row/bar until the recoding region you want to view is under the green maker line shown at the centre of the timetable row/bar.
- Click on the play button and the recording will be played back to the display.

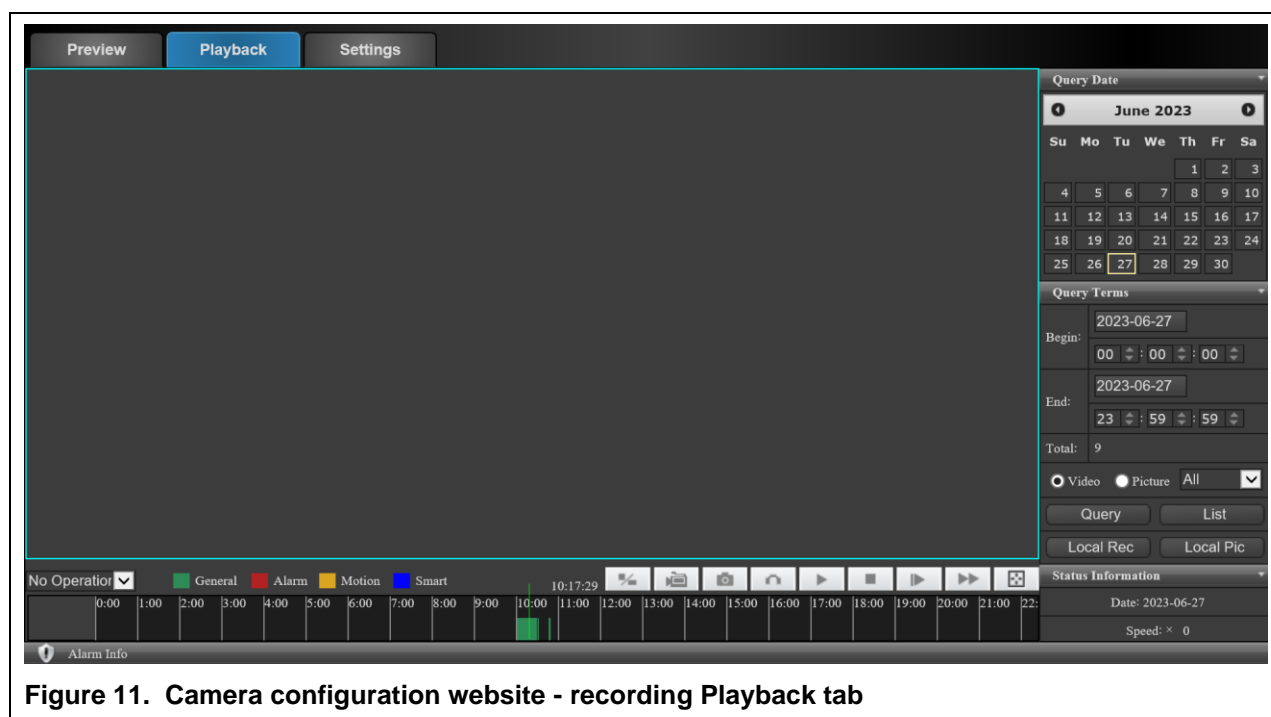


Figure 11. Camera configuration website - recording Playback tab

Downloads

ONVIF reference documentation: <https://www.onvif.org/resources/>

ONVIF Device Manager: <https://sourceforge.net/projects/onvifdm/>

VLC: <https://www.videolan.org/vlc/index.en-GB.html>

GStreamer: <https://gstreamer.freedesktop.org/download/>

Technical Support

In case of any issues, please contact Active Silicon Technical Support by email on techsupport@activesilicon.com.



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