



How to demo **Dinion HD 720p** and **FlexiDome HD 720p** cameras



BOSCH

Purpose

This document describes how to set up and demonstrate Bosch Dinion HD 720p and FlexiDome HD 720p cameras. It includes:

- Demonstration scenarios
- Equipment requirements
- Configuration instructions
- Recommendations on how to best demonstrate the cameras' strengths

Perfect picture quality

Our Dinion HD and FlexiDome HD Day/Night cameras with 15-bit image processing give you a powerful solution capable of handling most lighting conditions, day or night. Strong backlighting or high contrast scenes are no problem. Low light situations are handled easily by a highly sensitive progressive scan CCD sensor, ensuring high quality image capture day or night.

Smart Backlight Compensation (BLC) automatically compensates the image by optimizing light levels for objects of interest without compromising the Dynamic Range. Additionally, AutoBlack applies detail enhancement to the whole scene, while sharpness automatically enhances every pixel.

Reduced storage, automatic scene analysis and alarm functionality

H.264 video compression ensures the best image quality, while minimizing storage and bandwidth requirements. Bosch IVA can analyze a scene and alert your security personnel to any suspicious activity. Alarm functionality enables you to trigger alarm systems or start the camera recording when an event is detected. And, audio lets you hear as well as see what is going on. The camera sends an alarm for sudden or loud noises, alerting your security team to a potential problem.

Local Storage & Automatic Network Replenishment (ANR)

Dinion HD & FlexiDome HD cameras support local storage with a microSD card. The cameras support SDHC microSD cards and can use microSD cards with up to 32 GB. Local storage can be used for alarm recording or for ANR.

Easy installation

Bosch IP cameras are easy to set up. Just mount, plug in, and they operate immediately on the IP network. Software detects and configures the cameras automatically while allowing quick changes to be made to the settings.

To make installation and configuration easy, the Dinion HD and FlexiDome HD are shipped with Bosch Video Client (BVC) and configuration client. The cameras comply with PoE (Power over Ethernet) and are ONVIF conformant.

Dinion HD allows for customization with specific lenses and housings while the FlexiDome HD comes with lens, housed in a convenient, rugged dome.

Equipment

Here is the equipment you need for the demos.

FlexiDome HD 720p system

- ▶ Camera
- ▶ PSU (Optional)
- ▶ PoE compliant Ethernet Switch
- ▶ BVC & Configuration Manager
- ▶ PC with Internet Explorer 6 or later¹
- ▶ Monitor²

Fixed body Dinion HD 720p system

- ▶ Camera
- ▶ PSU (Optional)
- ▶ PoE compliant Ethernet Switch
- ▶ BVC & Configuration Manager
- ▶ HD Lens
- ▶ Desk tripod
- ▶ IR Illuminator
- ▶ PC with Internet Explorer 6 or later¹
- ▶ Monitor²

Demonstration materials (from Dinion 2X demo kit)

- ▶ Auto Black chart
- ▶ Colorful toy (little demo duck)
- ▶ VRM with iSCSI (only for ANR demo)

Audio demonstration material

- ▶ Mobile audio device (or Mp3 Player)
- ▶ Connecting cable with 3.5 mm jack

Notes

- ¹ See user manual for current system requirements.
- ² We recommend you use a Bosch HD Monitor 16:9 format.

Demo 1: Installation and configuration

Key message: ease of installation / set-up

Ease of installation is shown more clearly by demonstrating the fixed-body IP camera, so we recommend you use the Dinion HD unless your customer expressly asks for the FlexiDome IP. In both cases the features demonstrated are the same.

The steps below guide you through the installation demo for both Dinion IP and FlexiDome IP cameras.

The configuration manager and all other software are on the disk and should be installed prior to giving the demo.

Step	Camera	Actions	Key points
1a	Both	Take camera out of its box. Dinion: ▶ Connect varifocal lens. ▶ Put camera on tripod. FlexiDome: ▶ Put on table. ▶ Remove cover and inner liner.	
2	Both	Connect power supply – low voltage DC/AC or PoE, or both.	Both power sources can be attached simultaneously for extra power.
3	Both	Connect the camera and PC with BVC & Config manager to the network switch	It's important that you preset the PC IP address to known value, and you should have the IP address that you need to set for the camera ready with you. Also can be highlighted that camera supports Auto MDIX and can be connected either with cross over or straight LAN cable.
4	Both	Start the Config manager in advance mode and run the network scan Right click on the newly found device and change the IP address to the same network segment as the PC and rescan the network to ensure that the camera has changed the IP address.	You will now see the camera in the list. Right click on the camera and set the pre known IP address in the camera. At the time of the network scan, keep the IP address of the PC in different range then of the camera (e.g., if default IP address of camera is 192.168.0.1, keep the PC IP address in 10.10.183.1.) Highlight to the customer that it's easy to find the camera, even if the IP addresses are in a different range.
5	Both	Right click on the camera in the scanned camera list and open the camera in a Web browser	Show the customer that he can access all the camera features either in Config manager or in a Web browser
6	Dinion	Select the installer menu in the Web browser and launch the new Lens Wizard. Set the FOV & Focus. Select the Enable Zoom. Resize the Zoom window with the mouse to zoom into the region of interest.	Highlight to the customer that launching the Lens Wizard opens the Iris automatically and then he can select the FOV and set the Focus. Also, check the Enable zoom button and highlight to customer that he can ensure proper focus in the region of interest.
7	Both	Configure the IP camera.	Can be done via Internet Explorer, the camera menu or the configuration tool. Choose your favorite!

Demo 2: HD image processing

Key message: see more clearly in harsh lighting conditions and reveal more detail

The superior performance of Bosch cameras due to advanced image processing is shown in the Competition benchmarking slides of the introduction presentation.

What to demo	How to demo	Key points
XF Dynamic Engine	Place the camera in an indoor scene looking at a well illuminated part and relatively dark part in the scene.	15 bit image processing allows the camera to see more details. Try to find a relatively dark area in the scene for highlighting the details.
Wider Field of View	Place the Dinion HD camera with HD Lens next to Dinion IP (NBC 455) and use the same lens on both cameras.	Show the customer that the HD camera has much wider FOV when compared to SD cameras
More details with same FOV (HD vs. SD)	Place the Dinion HD camera with HD Lens next to Dinion IP (NBC 455) and use the same lens on both cameras. Ensure both cameras have similar FOV. Use the Digital zoom feature of BVC to zoom into the text on box.	Use some box or object with visible text on it (e.g., packaging box of FlexiDome). Place the objects within 2m to 3m from the cameras. Key message: HD camera has more pixel density (approx 3 times) for same FOV.

Demonstrate easy selection of different predefined modes from Config manager or Web browser. Also, highlight the similar menu structure as BOSCH IP cameras.

Preset mode	Description
1. 24-hour	Default installation mode provides stable pictures over a 24-hour period. Settings optimized for out-of-the-box installation.
2. Traffic	Capture high-speed objects using default shutter in variable lighting conditions.
3. Low light	Provides extra enhancement, such as AGC and SensUp, to make usable pictures in low light conditions.
4. Smart BLC	Settings optimized to capture details in high contrast and extremely bright-dark conditions.
5. Low noise	Enhancements set to reduce picture noise – useful for conditional refresh IP storage systems because less noise means less storage required.
6. Infrared	Use if camera viewing scene is lit by infrared illumination.

Also, demonstrate in BVC that the customer can see HD & SD camera simultaneously, so we have one solution for the entire family.

Demo 3: IP functionality

Key message: delivering high quality, real-time H.264 video over IP

Follow the instructions below to demonstrate IP functionality of both Dinion HD and FlexiDome HD cameras.

What to demo	How to demo	Key points
Efficient use of bandwidth and Quad-streaming capability	<p>Show the video over IP on the PC's browser.</p> <p>Go to the 'Settings' page and show the various fields.</p> <p>From Camera > Encoder Profile, show the flexibility of predefining the encoding quality for different profiles</p> <p>From the Camera > Encoder Streams menu, select 'Property.' Set 'Stream 1' to "H.264 MP 720p 25/30 fixed," and select Non-Recording Profile as one of the available profiles.</p> <p>Set Stream 2 to</p> <ol style="list-style-type: none"> Copy of stream 1 H.264 BP+ H.264 MP SD <p>Explain to customer the benefits of the different property of stream 2</p> <p>Click on the Preview Tab and show the image quality of stream 1 & stream 2.</p> <p>Also, adjust the JPEG stream to different FPS and quality setting for demo.</p> <p>The fourth stream (e.g., I Frame only stream can be demonstrated using the RTSP mode in VLC player and using the URL <code>rtsp://<ipaddr>/?inst=3</code></p>	<p>Dual H.264 streams for high/low quality, an MJPEG stream for very low frame rates and compatibility with third-party video management systems. (ONVIF conformance also aids feature compatibility between different devices.)</p> <p>The IP camera is 'Quad-streaming' – four different IP streams at different image sizes, compressions and frame rates.</p> <p>This allows streaming of (i) high quality images for live viewing, while (ii) recording at a lower frame rate and (iii) simultaneously sending JPEG images/I-frames to third-party video management systems or a remote PDA device.</p>

Demo 4 (optional): Autoblack

Key message: Reveal extra details

The Auto Black test chart is specially designed to help you illustrate the benefits of our Dinion Autoblack feature.

What to demo	How to demo	Key points
Autoblack	<ul style="list-style-type: none"> ▶ Use test chart of crowd. ▶ In the Main menu, choose 'Enhance'. ▶ Switch off and on 'Autoblack' feature. 	<ul style="list-style-type: none"> ▶ Picks out details that cannot normally be seen. ▶ Even helps to penetrate mist and fog.

Demo 5 (optional): Smart BLC

Key message: Automatic image compensation in backlit scenes

Use the demo duck toy to demonstrate the benefits of Smart BLC. You can also find video snapshots illustrating this feature on the introduction presentation.

What to demo	How to demo	Key points
Smart BLC	Hold the demo duck in front of a bright light (e.g. overhead light). Move the duck to different areas in the camera view.	Don't have to set BLC area, camera adjusts automatically.

Demo 6 (optional): Privacy zones

Key message: Up to four easily configurable privacy zones

This demo is easy to show the customer with the camera on a table. Follow the steps below to guide you through the Privacy zones demo.

What to demo	How to demo	Key points
Privacy zones	In the Install menu, choose 'Privacy masking', then 'Pattern'. Activate one of the four masks and adjust it onscreen.	<ul style="list-style-type: none"> ▶ Can set up to four mask areas. ▶ Easy to adjust size and position.

Demo 7: Intelligent Video Analysis (IVA)

Key message: Intelligence at the edge – processing done in the camera, not in a central video management or PC station

What to demo	How to demo	Key points
IVA	Using the browser settings, show Motion+	Intelligence at the edge – IVA performed by the IP camera itself.
IVA	To show more about IVA, use existing IVA demo tools.	

Demo 8: Local Storage

Key message: Dinion HD & FlexiDome HD can store video locally on a microSD card

Demonstrate local recording in microSD card and optionally demonstrate Dual recording and ANR if VRM is also available.

What to demo	How to demo	Key points
Local Storage Capabilities	Insert a microSD SD card (preferably 32 GB) into the camera.	Show to customer the accessibility of microSD slot and the physical protection of the SD card with the SD card CAP in the Dinion as well as how the SD card is protected in the vandal proof housing of the FlexiDome.
Start the recording	For the ease of starting the recording, use the Basic Mode option from the Web browser setting page.	Ease of starting the recording
	Select the recording menu > Select SD card as Storage Medium and click > Start	Highlight to customer the feedback “recording Started Successfully”
Playback	Wait for a few seconds and then select the recording link in the top menu (Next to Live Page hyperlink)	Demonstrate the playback from the Web browser.
Local Storage Advanced options	From the advanced mode, select recording and demonstrate various recording options for local storage.	Demonstrate to customer that scheduled recording or event-based recording with profile switching is possible on the cameras.
Automatic Network Replenishment (Optional)	Start the local recording in the camera as explained above.	Ensure that VRM, BVC and camera have the same time. For ANR demo, ensure that the camera is powered with a local PSU. If the camera is powered on POE, and you remove the network cable, it will stop the local recording.
	Select ANR option from the VRM configuration.	
	Disconnect the camera from the network. The customer will not see the live video on the screen any more. During the period that the camera is disconnected from the network, make some motion in front of the camera, which the customer cannot see on the live viewing page.	
	Wait for few seconds and reconnect the camera back to the network.	
	From the BVC, replay the recording on VRM and point <i>out</i> the location where the video is recovered and show the customer the motion <i>that</i> he <i>did not</i> see on <i>the</i> live page, as <i>the</i> camera was disconnected from the network.	Highlight to the customer the advantage of local storage and the added reliability that is possible with ANR.

Demo 9: Audio

Key message: HD camera capability includes two-way audio

Simulate sound source by playing back music over the PC's speakers from a mobile audio device connected to the camera.

What to demo	How to demo	Key points
Audio capability	Connect a mobile audio device to the camera's audio input (black) using 3.5 mm jack.	Make sure PC has speakers for sound playback.
	From the browser's Encoder menu, select 'Audio.' Make sure audio is on.	
	Play audio device and increase the volume in the browser window until sound is heard from PC's speakers.	Play back music or vocals from audio device.

Bosch Security Systems

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