FD820v2M1IR
High-definition fixed dome IP camera
Quick Start Guide

Find additional manuals, the datasheet, the EU Declaration of Conformity and the latest firmware for this product at:
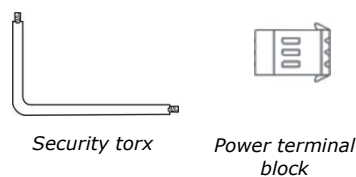
http://www.tkhsecurity.com/support-files

TKH GROUP SECURITY SOLUTIONS

Unpack

FD820v2M1IR camera

Conduit

White rubber ring

Self-tapping screw (x2)

Plastic screw anchor (x2)

Security torx

Power terminal block

Quick Start Guide

Figure 1 Package contents

Note: Subject to modification. Actual product and accessories may differ in appearance.

Install

You can install the FD820v2M1IR directly on a wall or ceiling.

Make sure that the provided surface has sufficient strength to support the camera.

To install the camera

1. Using the supplied security torx, unscrew and open the housing cover.
2. Using a phillips head screwdriver, unscrew the two camera-fastening screws.
3. Remove the camera body from its housing.
4. (Optional) Find the card slot on the side of the camera body (see nect section) and insert a microSD card.

   The camera supports microSD cards up to 64 GB.
5. Thread the power, Ethernet, and possibly audio and alarm device cables through the side or back conduit entry, using the supplied conduit and white rubber ring as needed.
6. Connect the cables to the connectors on the camera (see following sections).
7. Place the camera body back into the housing and tighten the camera-fastening screws.
8. Attach the dome camera to the wall or ceiling with the supplied screws and screw anchors (if necessary, replace the screws with mounting screws that are more appropriate for the mounting surface).
9. Adjust pan, tilt and rotation of the lens for the desired field of view.
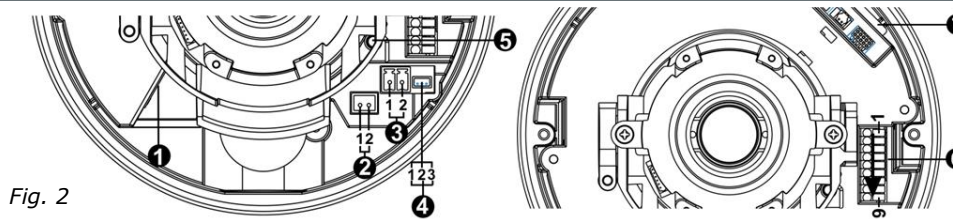10. Reattach the housing cover.

Find connectors

Fig. 2

No	Connector	Pin	Definition		Remarks
1	RJ-45	-	For network and PoE connections		
2	BNC	1	GND		Analogue video output
		2	BNC		
3	Power (DC 12V / AC 24V)	1	DC 12V/24V	AC 24 V 1	Power connection
		2	GND	AC 24 V 2	
4	RS-485	1	D+		RS-485 connection
		2	D-		
		3	GND		
5	Reset button	-	Press for at least 20 seconds to reset all settings, including the IP address, to the original factory settings.		
6	Audio I/O & Alarm I/O	1	Audio In L		Audio In
		2	Audio In R		
		3	GND		
		4	Audio Out L		Audio Out
		5	Audio Out R		
		6	Alarm Out +		Alarm connection
		7	Alarm Out -		
		8	Alarm In +		
		9	Alarm In -		
7	microSD card slot	-	Insert a microSD card to store videos and snapshots. Do not remove the card when the camera is powered on.		

Table 1 Connector definition

Connect to power and network

Connect power and network cables to the camera as indicated in figure 2 and table 1.

To power the FD820v2M1IR with Power over Ethernet (PoE)

- Connect the network RJ-45 connector on the camera body to an appropriate PSE network switch.
- Use Cat 5 Ethernet cable up to 100 m in length.

  Connect to a hub or switch with straight-through cable.

  Use crossover cable to connect directly to a PC.

To power the FD820v2M1IR with DC 12 V / DC 24 V / AC 24 V

1. Insert the leads from your power source into the supplied power terminal block.
2. Connect the power terminal block to the power connector on the camera body.
3. Plug the power supply into a mains outlet.

Indicator LEDs

- RJ-45 connector LEDs:

  Green indicates a good network connection; orange verifies network activity.

Connect audio and alarms

If microphones and speakers are installed, you can use the camera to provide a two-way audio channel.

Connecting an alarm device to the camera input can trigger an output action to occur based on digital I/O settings.

To connect audio

1. Connect the audio input and output cables to the Audio I/O & Alarm I/O terminal block on the camera body (figure 2 and table 1).
2. On the Audio page of the camera web interface, the following options are available for audio streaming:
   - *Full duplex*: Talk and listen simultaneously
   - *Half duplex*: Talk or listen (not at the same time)
   - *Simplex*: Talk only
   - Simplex: Listen only
   - *Disable*

To connect an alarm device

- Connect the alarm relay cables to the Audio I/O & Alarm I/O terminal block on the camera body (figure 2 and table 1).

  Use the Application, Motion Detection, and Tampering webpages of the camera web interface to configure the alarms as desired.

Log on

You can get access to the settings of the camera via its web interface.

- Use Internet Explorer to browse the webpages.
- Find the default IP address of the FD820v2M1IR on the bottom of the camera.
- The default logon user name and password (both case sensitive) are:

Admin / 1234

⚠️ **CAUTION:** MAKE SURE THAT YOU CHANGE THE DEFAULT ADMIN PASSWORD AT THE FIRST LOGIN. TO KEEP THE ACCOUNT SAFE, CREATE A STRONG, COMPLEX PASSWORD. THIS HELPS TO PREVENT UNAUTHORISED ACCESS FROM PEOPLE WHO TRY TO USE THE DEFAULT ACCOUNT.

To open communication with the camera

1. Make an IP connection between the camera and the PC.

   To achieve initial access, the network adapter of the PC must be set to the same subnet as the camera.
2. Type the IP address of the camera in the address bar of your browser.
3. Enter the default user name and password (see above).

To view the webpages of the camera properly

- When prompted by the camera, install the Viewer add-on.

Figure 3 Camera IP address in address bar of browser

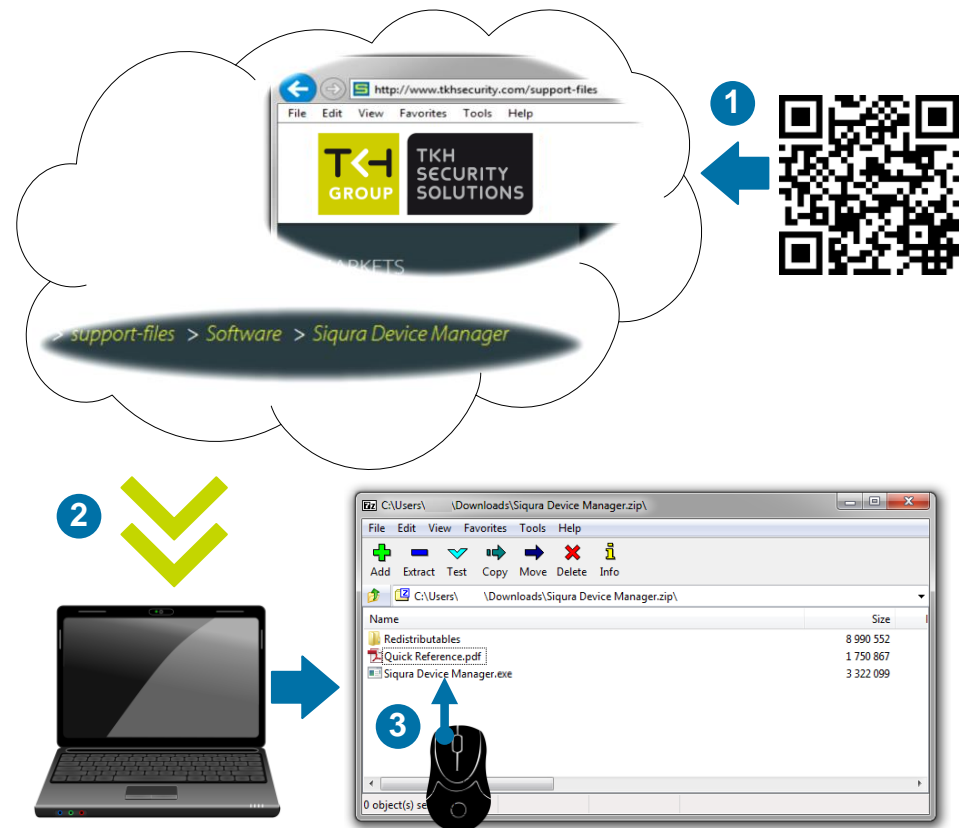
Install Device Manager (optional)

Figure 4
Download Device Manager at http://www.tkhsecurity.com/support-files.
Install the software on the browsing PC.
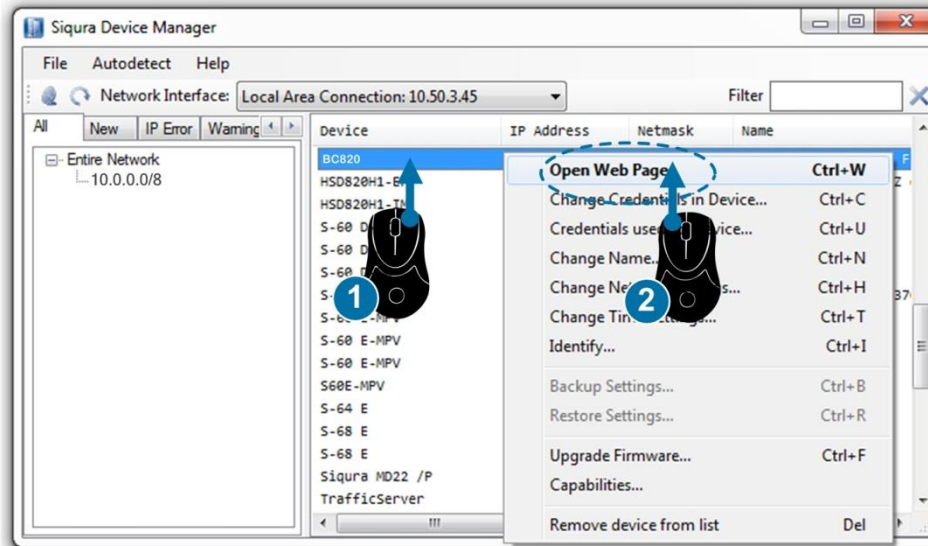
Get access with Device Manager

Figure 5 Using Device Manager to open the web interface of a camera found on the network

Change network settings

With Device Manager you can directly change the network settings of the camera.

To change the network settings
1.   Right-click the camera in Device Manager.
2.   Click **Change Network Settings**.
3.   Click **Enable DHCP**.
       - or -
       Click **Static IP**, and then enter the new IP address, subnet mask, and gateway address.
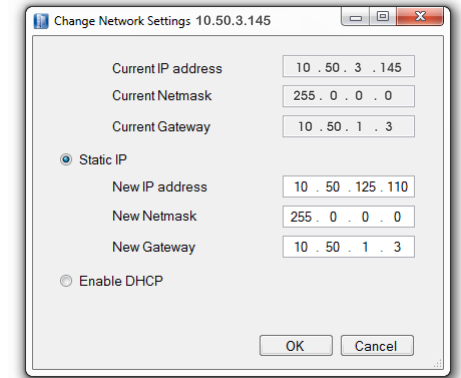4.   Click **OK**.

Figure 6 Network settings

Note: A DHCP server must be installed on the network in order to apply DHCP network support.

You can also change these settings on the Network page of the camera. For more information, see the User Manual.

Use the web interface

Use the menus across the top of the web interface to navigate the webpages
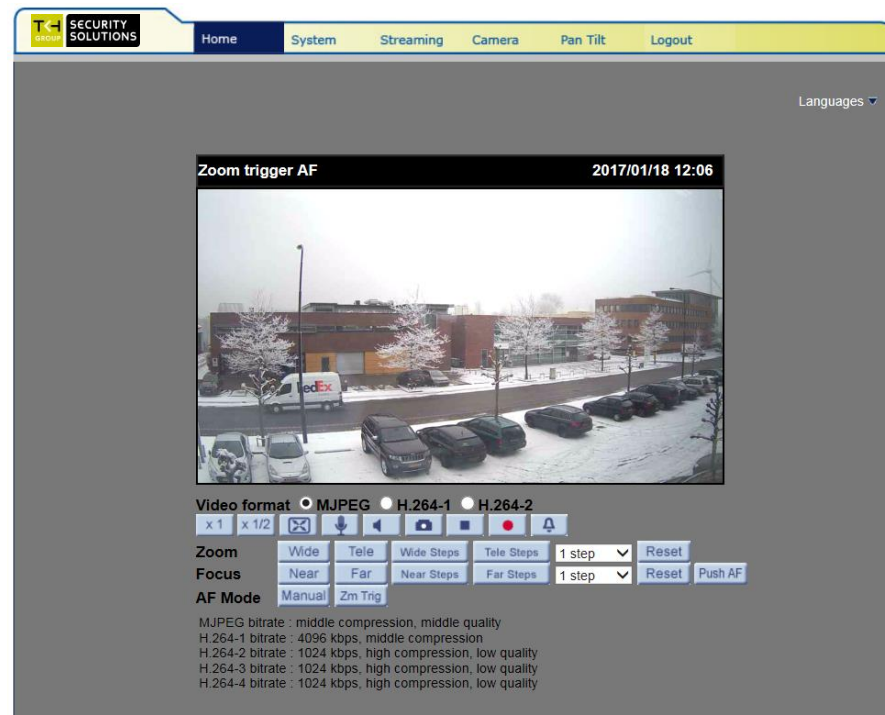

Figure 7 FD820v2M1IR web interface

Zoom and focus

The FD820v2M1IR has a motorised lens.
Use the Zoom and Focus buttons on the Home page to achieve the desired field of view and focus the lens properly. Changes you make are instantly reflected in the camera view.
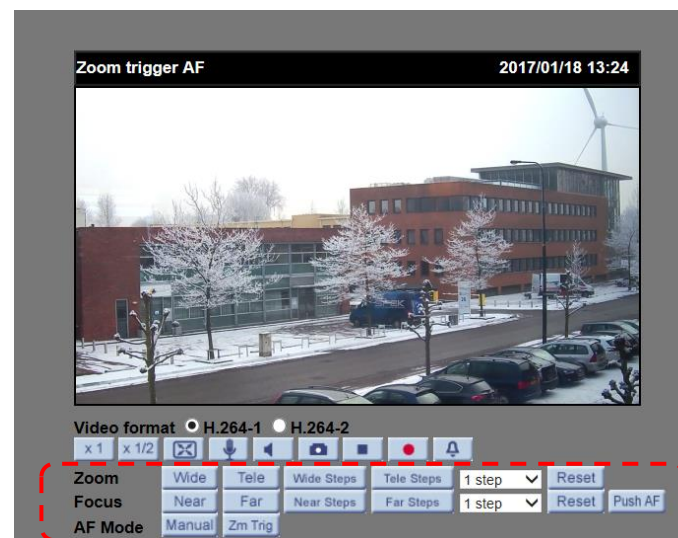

Figure 8 Zoom and focus buttons on the Home page of the FD820v2M1IR

Note: You can set the IR function of FD820v2M1IR via the Camera menu.

Change video rotation

Depending on how the FD820v2M1IR is mounted, you may need to rotate the camera image.

Figure 13 Applying 180 degree video rotation

To select a video rotation type
1.   On the **Streaming** tab menu, click **Video Format**.
2.   Choose the required rotation type:
       - **Normal video.** The camera's orientation is not modified.
       - **Flip video.** The image rotates across the horizontal axis.
       - **Mirror video.** The image rotates across the vertical axis.
       - **90 degree clockwise.** The image rotates 90° clockwise.
       - **180 degree rotate.** The image rotates 180°.
       - **90 degree counterclockwise.** The image rotates 90° counterclockwise.
3.   Click **Save**.