

BL820v2M1IR

Full HD IR bullet 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>



SECURITY SOLUTIONS

Unpack



BL820v2M1IR bullet IP camera (all-in-one cable included)

Quick Start Guide



Alarm terminal block (5-pin)



Power terminal block (2-pin)



Screw anchors (5x)



M4 Self-tapping screws (5x)



Screw

Figure 1 BL820v2M1IR package contents

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

Determine installation location

Determine where you are going to install your BL820v2M1IR.

- Make sure that the surface has sufficient strength to support the camera.
- If using Power over Ethernet (PoE), check that there is adequate access to an IEEE 802.3at Power over Ethernet (PoE)-enabled network.

1. Connect the power/Ethernet/alarm/audio wires from ceiling or wall to the corresponding connectors on the all-in-one cable (see below).
2. Fix the camera bracket to the ceiling/wall with the supplied self-tapping screws
3. Use a phillips head screwdriver to loosen the screws on the side of the bracket and the camera housing.
4. Rotate the camera and point it in the desired direction.
5. Tighten the screws to secure the camera.

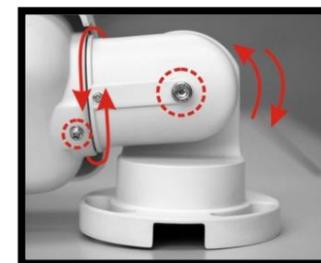
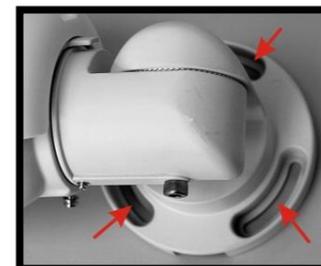


Figure 2 The BL820v2M1IR mounts onto a wall or ceiling

Access microSD card slot and reset button

To access the BL820v2M1IR's microSD card slot and factory default reset button

- Unscrew the screw on the camera housing and then remove the front housing.

To reset the camera to the factory-default settings

- With the camera powered up, push and hold the reset button for at least 20 seconds.

Important! All settings, including the IP address of the camera will be reset to the original factory settings. The factory-set IP address can be found on the label on the bottom of the camera.

microSD card

- The camera supports microSD cards up to 64 GB.

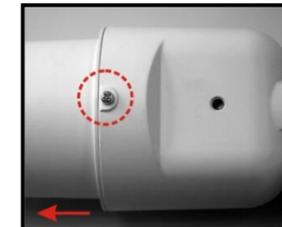


Figure 3a Housing screw

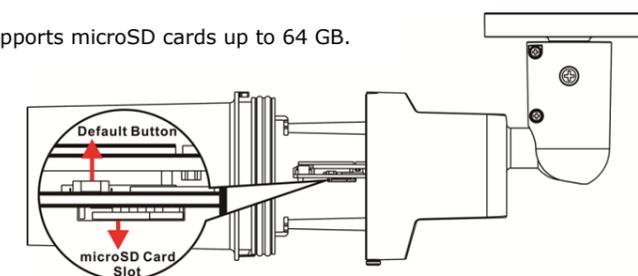


Figure 3b microSD card slot and reset button

Understand all-in-one cable

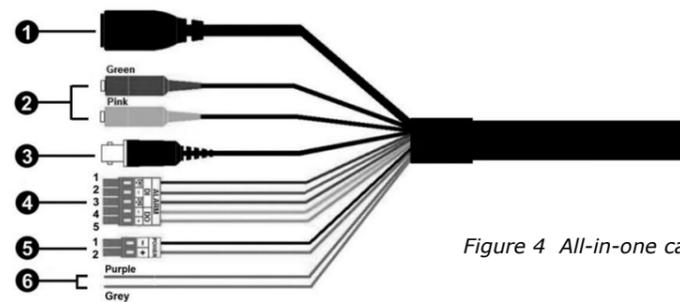


Figure 4 All-in-one cable

No	Cable	Pin	Definition	Remarks
1	RJ-45	-		
2	Audio I/O	Green	Audio Out / Mic Out	Two-way audio transmission
		Pink	Audio In / Mic In	
3	BNC	-		
4	Alarm I/O (5-pin terminal block)	1	Alarm In 2+	Alarm connection
		2	Alarm In -	
		3	Alarm In 1+	
		4	Alarm Out -	
		5	Alarm Out +	
5	Power (DC 12/24V / AC 24V) (2-pin term. block)	1	DC 12/24V - AC 24V 1	Power connection
		2	DC 12/24V + AC 24V 2	
6	RS-485	Purple	D-	RS-485 connection
		Grey	D+	

Table 1 All-in-one cable definition

Connect and power up

To power the BL820v2M1IR with Power over Ethernet (PoE)

- Connect the RJ-45 network connector on the all-in-one cable of your BL820v2M1IR 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 BL820v2M1IR with DC 12 V / DC 24 V / AC 24 V

1. Insert the leads from your power source into the supplied power connector (fig.1), matching the polarity to the labelling on the all-in-one cable power connector.
2. Connect the power terminal block to the power connector of the all-in-one cable.
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.

Audio I/O and Alarm I/O

- For Audio I/O and Alarm I/O connection and configuration, refer to next page.

Log on

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

- Use Internet Explorer to browse the webpages.
- Find the default IP address of the BL820v2M1IR 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.
- Enable Active X controls.



Figure 5 Camera IP address in address bar of browser

Install Device Manager (optional)

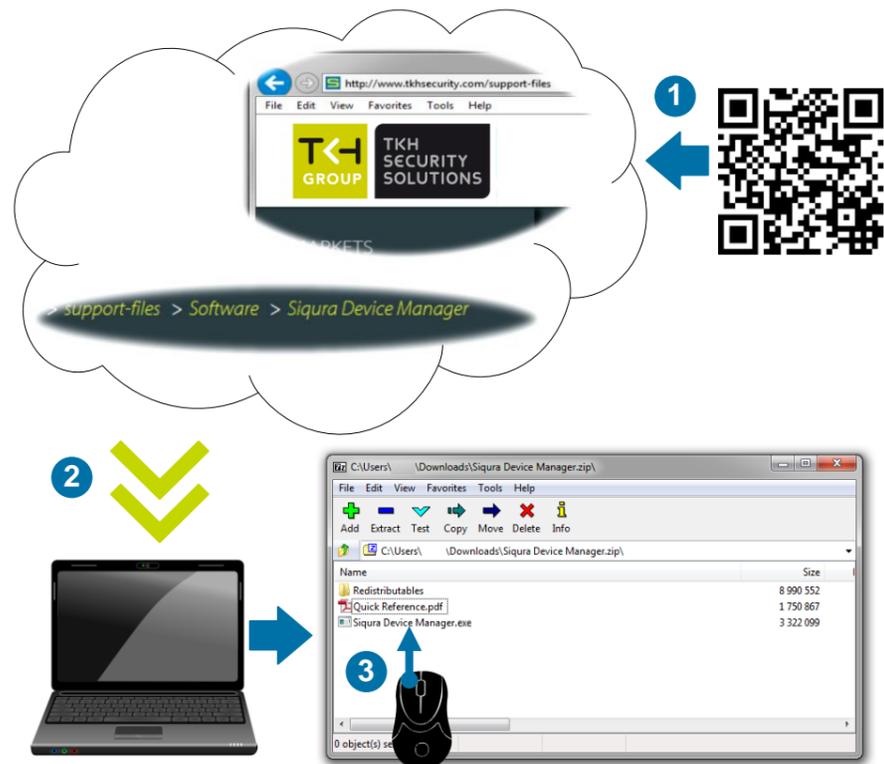


Figure 6

Download Device Manager at <http://www.tkhsecurity.com/support-files>. Install the software on the browsing PC.

Get access via Device Manager

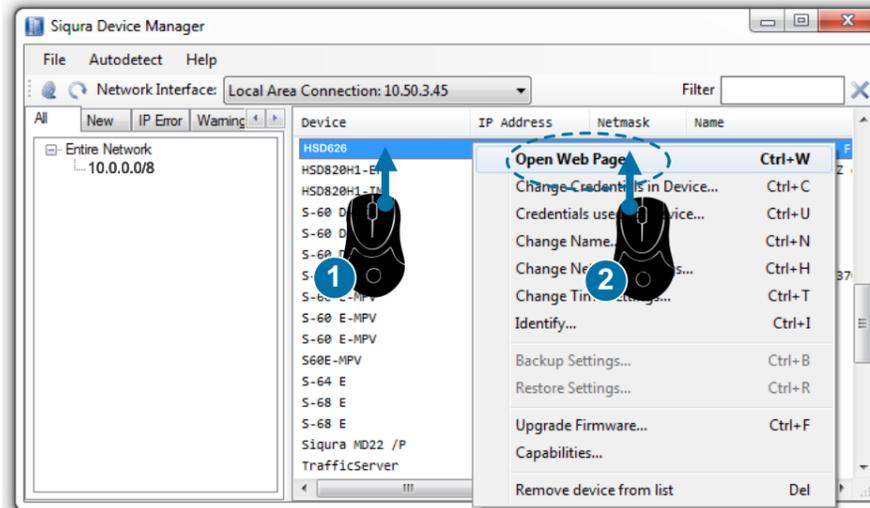


Figure 7 Using Device Manager to open the web interface of a camera detected on the network

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**.

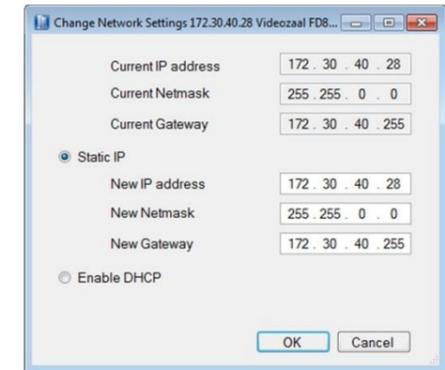


Figure 8 Network settings

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.

Adjust zoom and focus

The BL820v2M1IR 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.

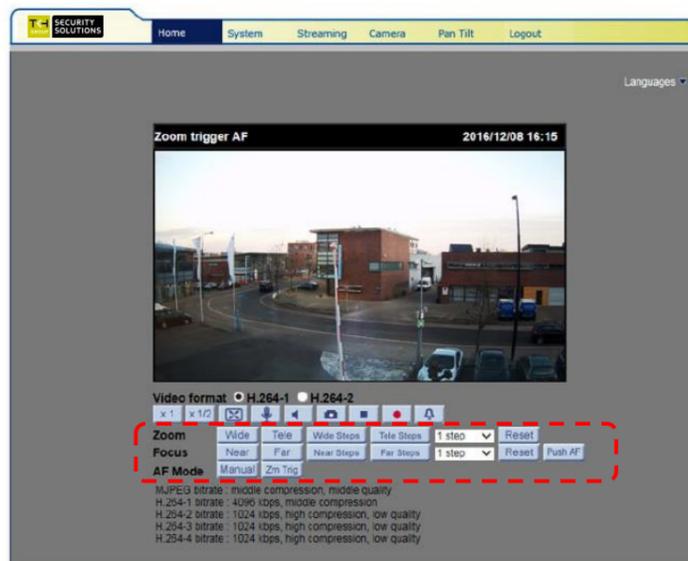


Figure 9 Zoom and focus buttons on the Home page of the BL820v2M1IR

Note: You can set the IR function of BL820v2M1IR via the Camera menu.

Rotate camera image

Depending on how BL820v2M1IR camera is mounted, you may need to rotate the camera image.



Figure 10 Applying 180 degree video rotation

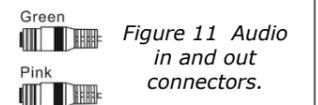
To select a video rotation type

1. On the Streaming tab, click to select **Video Format** from the menu options on the left.
2. Choose one of the following video rotation types:
 - **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** to confirm settings.

Connect audio and alarms

If microphones and speakers are implemented, the BL820v2M1IR camera can be used to provide a two-way audio channel.

Step 1: Connect the audio input and output connectors to the camera's all-in-one connector (figures 4 and 11).



Step 2: In the camera web interface, go to **Streaming > Audio** and select one of the following options:

- **Full-duplex** – Audio can be transmitted and received at the same time. Local and remote sites can communicate with each other simultaneously.
- **Half-duplex** – Audio can be either transmitted or received. One site can talk or listen to the other site in turn.
- **Simplex (Talk only)** – Audio can be transmitted. One site can speak to the other site.
- **Simplex (Listen only)** – Audio can be received. One site can listen to the other site.
- **Disable** – The audio transmission function is turned off.

Connecting an alarm device, such as a sensor, to the BL820v2M1IR camera input can trigger an output action to occur based on contact closure settings. A motion detection or tampering alarm can also trigger an output action.

Step 1: Connect the alarm relay connectors to the I/O terminal block (figure 4 and table 2).

Step 2: In the camera web interface, go to the **System** menu. Using the **Application**, **Motion Detection**, and **Tampering** pages, configure the alarms as desired.