

QCast Mirror - QP30 HDMI Wireless Dongle User Manual

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Table of Contents

Package Contents	4
Product Overview	4
Operating Instructions	5
Connecting the QCast Mirror to your projector	
Mirroring the content from your device via a direct connection	7
Mirroring the content from your device via a router	9
The Advanced Settings menu	11
Connecting the QCast Mirror to a Wi-Fi router	13
Other Advanced Settings	15
Product Specifications	20
System Requirements	20
FÁQ	

Package Contents



QCast Mirror HDMI Wireless Dongle



USB-C-to-USB-A Cable

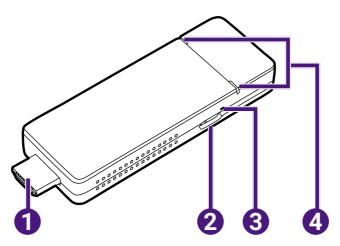


HDMI Adapter Cable



Quick Start Guide

Product Overview



1. HDMI Connector

Connects to the projector.

2. USB-C Port

Connects to the projector's USB port (or a standard adapter head) via the USB-C-to-USB-A cable to supply the dongle with power.

3. Reset Button

Press with a fine tipped instrument and hold for 10 seconds to reset the settings for the dongle.

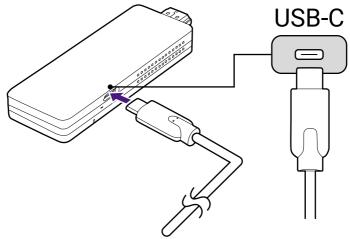
4. LED Indicators

Lights up blue when power is supplied.

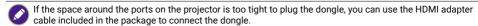
Operating Instructions Connecting the QCast Mirror to your projector

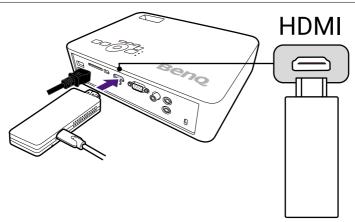
Depending on your device's operating system, different installation procedures and setup are required. Read this document and on-screen instructions (if provided) carefully.

Connect the USB-C-to-USB-A cable to the USB-C port on the dongle.



2. Plug the dongle into the HDMI port on the projector.

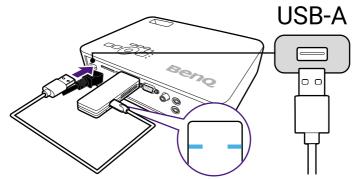




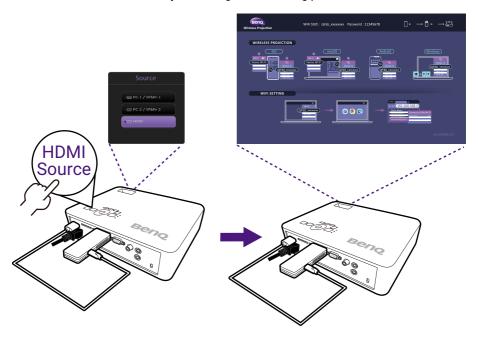
Connect the USB-A connector of the USB-C-to-USB-A cable to the USB port on the projector, the LED indicators on the dongle will light up blue.



- The USB port on the projector that you connect the cable to must provide at least 5V/1A power. If the LED
 indicator on the dongle does not light up blue, the USB port on your projector may not supply enough power
 and you may need to connect the cable to a power socket via a standard USB power adapter (see the notes
 below for restrictions for the adapter).
- You may also use a USB-A plug adapter (e.g., those provided with smartphones) to power the dongle. The plug adapter MUST provide 5V / 1.5A to 2.4A power.
- · The dongle does not support USB-A plug adapters with Power Delivery or Quick Charge capabilities



4. Switch the input source on the projector to HDMI, a standby screen may appear. Once the QCast Mirror screen is shown you can begin the mirroring process.

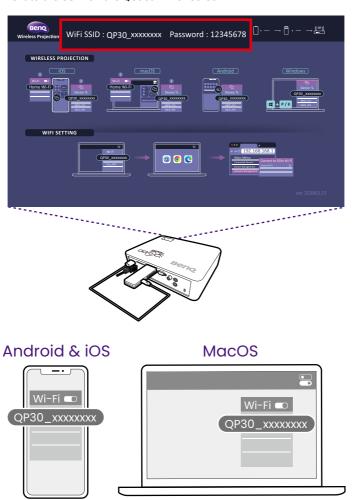


Mirroring the content from your device via a direct connection

The QCast Mirror allows you to mirror the screen of smartphones, tablets, and computers via a Wi-Fi signal. Devices that do not have Wi-Fi capabilities are not able to mirror their screen via QCast Mirror. The steps to begin mirroring are described below.

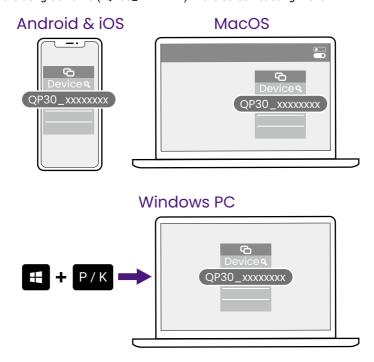


- Mirroring via a direct connection will prevent your device from having Internet access. For your device to have Internet access while mirroring, the device must be connected to the dongle via router. For instructions on connecting via a router, see "Mirroring the content from your device via a router" on page 9.
- [For iOS/macOS/Android devices only]: Open your device's Wi-Fi menu and connect to the SSID displayed on the top side of the QCast Mirror screen and enter the security password displayed next to the SSID on the QCast Mirror screen.



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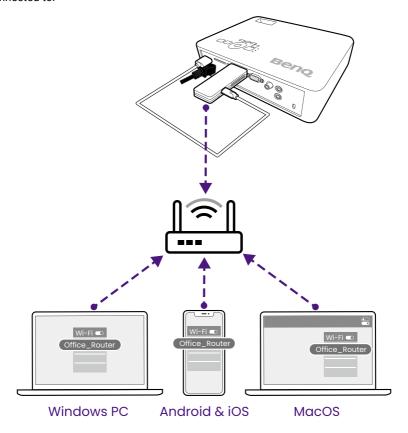
- [For Windows PCs only]: Press the Windows (■) key and the P or K key simultaneously to open your PC's screen casting menu.
 [For iOS/macOS/Android devices only]: Open your device's screen casting menu.
- 3. Select the dongle's name ("QP30_XXXXXX") in the screen casting menu.



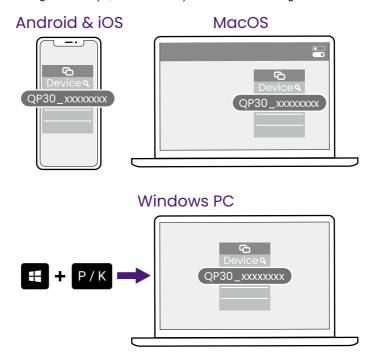
Mirroring the content from your device via a router

When the devices that want to mirror their screens require Internet access (to play videos from the Web for example), they will need to connect to the dongle via a Wi-Fi router with Internet access. The steps to begin mirroring in this manner are described below.

- Follow the instructions in "Connecting the QCast Mirror to a Wi-Fi router" on page 13 to connect the dongle to a Wi-Fi router.
- Open your device's Wi-Fi menu and connect to the SSID of the router that the dongle is connected to.



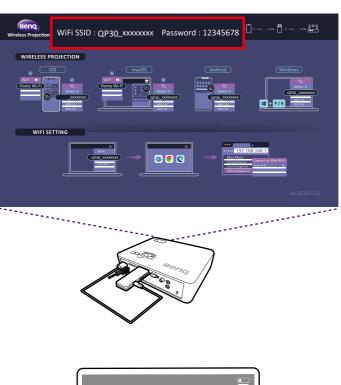
- [For Windows PCs only]: Press the Windows (■) key and the P or K key simultaneously to open your PC's screen casting menu.
 [For iOS/macOS/Android devices only]: Open your device's screen casting menu.
- 4. Select the dongle's name ("QP30_XXXXXX") in the screen casting menu.



The Advanced Settings menu

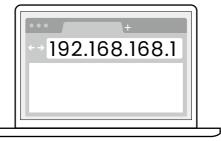
The **Advanced Settings** menu for the QCast Mirror allows you to connect the QCast Mirror to a Wi-Fi router as well as configure various settings for the dongle. The steps to accessing the **Advanced Settings** menu are described below:

- Follow the instructions in "Connecting the QCast Mirror to your projector" on page 5 to power on the QCast Mirror.
- Enter your device's Wi-Fi menu and connect to the SSID displayed at the top of the QCast Mirror screen and enter the security password displayed next to the SSID on the QCast Mirror screen.





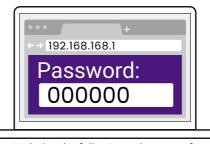
3. Open a web browser on your device and enter the URL http://192.168.168.1, the Advanced Settings menu will open in the browser.



4. Enter the **Advanced Settings** menu password to log in.



- When opening the Advanced Settings menu for the first time, enter the default password "000000" to log
 in. Once logged in you will be asked if you want to change the password, select Skip if you want to keep the
 default password.
- If at any time you forget the login password, use the reset button on the dongle to restore the dongle to its default settings and then log into the **Advanced Settings** menu using the default password again.



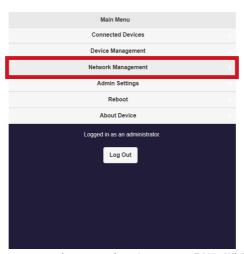
The **Advanced Settings** menu includes the following sub-menus, for more information on each sub-menu, see <u>"Other Advanced Settings" on page 15</u>:

- · Connected Devices
- Device Management
- · Network Management
- · Admin Settings
- · Reboot
- · About Device

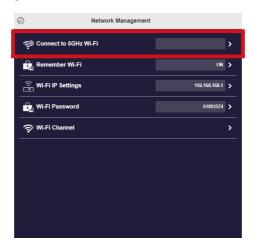
Connecting the QCast Mirror to a Wi-Fi router

To provide devices connected to QCast Mirror with Internet access you must first connect QCast Mirror to a Wi-Fi router via the **Advanced Settings** menu. The steps to connecting QCast Mirror to a Wi-Fi router are described below.

- 1. Ensure QCast Mirror is within range of a Wi-Fi router with Internet access.
- Follow the instructions in "The Advanced Settings menu" on page 11 to access the Advanced Settings menu.
- 3. In the Advanced Settings menu select the Network Management sub-menu.



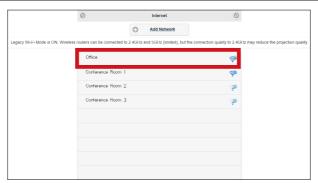
4. In the Network Management sub-menu select Connect to 5GHz Wi-Fi.



Select the SSID of the router in the **Internet** menu and enter a password for the Wi-Fi router if needed.



- If you do not see the SSID of the router in the Internet menu, select the refresh button at the top-right corner
 of the screen.
- If you still do not see the SSID of the router in the **Internet** menu, go to the **Device Management** sub-menu of the **Advanced Settings** menu, enable **Legacy Wi-Fi mode**, and then reboot the QCast Mirror. Once the dongle has been rebooted, repeat the steps in this section to connect to the Wi-Fi router.



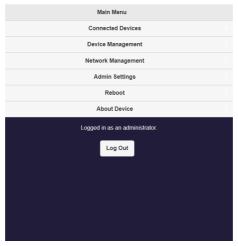
Once you have successfully connected to the Wi-Fi router, the connection between the dongle and router at the top-right corner of the QCast Mirror screen will feature a blue Wi-Fi icon.



Other Advanced Settings

The **Advanced Settings** menu includes the following sub-menus that allow you to make various configurations to QCast Mirror:

- · Connected Devices
- · Device Management
- · Network Management
- · Admin Settings
- · Reboot
- · About Device



Connected Devices

The **Connected Devices** sub-menu lists the various devices currently connected to QCast Mirror including the device(s) name and their IP address:

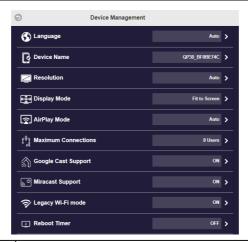


Device Management

The **Device Management** sub-menu includes the following items:



This sub-menu is only available when you log into the **Advanced Settings** menu using its password.



Language	Selects the language for QCast Mirror.		
Device Name	Changes the name of the QCast Mirror's SSID.		
	Hide SSID: Makes the QCast Mirror's SSID invisible in the Wi-Fi		
	menu of nearby devices.		
Resolution	Selects the output resolution for QCast Mirror.		
Display Mode	Configures the video output by QCast Mirror.		
	• Fit to Screen: Keeps the original aspect ratio of the video.		
	• Stretch to Full Screen: Stretches the video to fit the whole screen.		
AirPlay Mode	Configures the AirPlay settings for QCast Mirror.		
	AirPlay Mirroring: Enables/Disables AirPlay.		
	• AirPlay PIN code: Enables/Disables a PIN code for iOS/macOS		
	devices to mirror their screen via AirPlay.		
Maximum Connections	Sets the maximum number of users (up to 32) that can connect to		
	QCast Mirror at one time.		
Google Cast Support	Enables/disables support for screen mirroring via Google Cast.		
Miracast Support	Configures the Miracast settings for QCast Mirror.		
	Miracast Support: Enables/Disables Miracast		
	• PIN: Enables/Disables a PIN code for devices to mirror their screen		
	via Miracast.		
	• Full screen only (Negotiated Group Owner): Only allows the screen		
	of one user to be mirrored on QCast Mirror at one time.		
	• Split display supported (Autonomous Group Owner): Allows up to		
	four screens to be mirrored in a split screen format on QCast Mirror at one time		
Lagary Wi Fi made	3.7 5.7 5		
Legacy Wi-Fi mode	Enables/disables users from connecting QCast Mirror to legacy (2.4G) wireless Wi-Fi routers.		
Reboot Timer	Sets the amount of idle time before QCast Mirror automatically		
	reboots itself.		

If you make any changes to the settings in the sub-menu, you will need to reboot QCast Mirror in order for the changes to take effect.

Network Management

The **Network Management** sub-menu includes the following items:



This sub-menu is only available when you log into the Advanced Settings menu using its password.



Connect to 5GHz Wi-Fi	Connects QCast Mirror to a Wi-Fi router. For more details, see	
	"Connecting the QCast Mirror to a Wi-Fi router" on page 13.	
Remember Wi-Fi	Allows QCast Mirror to remember any previous Wi-Fi routers	
	QCast Mirror has previously connected to so that the dongle will	
	automatically reconnect after any reboot.	
Wi-Fi IP Settings	Configures the IP address and related information for QCast Mirror.	
Wi-Fi Password	Sets the Wi-Fi connection password for QCast Mirror.	
Wi-Fi Channel	Sets the Wi-Fi channel and bandwidth for QCast Mirror's Wi-Fi signal.	

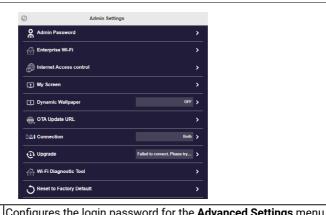
If you make any changes to the settings in the sub-menu, you will need to reboot QCast Mirror in order for the changes to take effect.

Admin Settings

The Admin Settings sub-menu includes the following items:



This sub-menu is only available when you log into the **Advanced Settings** menu using its password.



Admin Password	Configures the login password for the Advanced Settings menu.		
Enterprise Wi-Fi	Allows you to upload digital certificates for higher level of access authorization.		
Internet Access control	Sets which type of user connected to QCast Mirror has access to the Internet. The available options include: All Allowed, Only Casting Users, and All Denied.		
My Screen	Changes the image shown as the QCast Mirror screen.		
Dynamic Wallpaper	Enables/Disables a dynamic wallpaper (video and images) to be shown as the QCast Mirror screen when QCast Mirror is idle.		
	• Silent Mode: Enables/Disables sound for the custom QCast Mirror screen.		
	URL: Sets the URL at which the JavaScript file for the dynamic wallpaper is located.		
	• Starts After X Minutes of Idle: Sets the amount of idle time before the dynamic wallpaper begins playing		
	• Stops when any transmitter is connected: Stops playback of the dynamic wall paper anytime a device connects to QCast Mirror.		
	• Stops when any transmitter starts to mirror: Stops playback of the dynamic wall paper anytime a connected device begins mirroring its screen.		
OTA Update URL	Sets the URL which QCast Mirror uses to detect and download an OTA upgrade.		
Connection	Sets the type of connections devices can use to connect to QCast Mirror.		
	• Both: Allows devices to connect directly to QCast Mirror or via a Wi- Fi router.		
	• Direct Link Only: Allows only direct connections to QCast Mirror.		
	Via Router Only: Allows only connections via a Wi-Fi router.		
Upgrade	Allows you to update QCast Mirror's firmware when an update is available. QCast Mirror must be connected to a Wi-Fi router with Internet access to be able to detect and install a firmware update.		

Wi-Fi Diagnostic Tool	Allows you to test the performance of QCast Mirror's Wi-Fi signal.	
Reset to Factory Default	Resets QCast Mirror's to its factory default settings.	

If you make any changes to the settings in the sub-menu, you will need to reboot QCast Mirror in order for the changes to take effect.

Reboot

Select Reboot in the Advanced Settings menu to manually reboot QCast Mirror.



Reboot is only available when you log into the Advanced Settings menu using its password.

About Device

Lists the following information for QCast Mirror:

- · SSID
- · Firmware Version
- · IP
- · Internet IP
- · MAC
- · 2.4G Wi-Fi Channel



Product Specifications

Model Name	QP30 - QCast Mirror HDMI Wireless Dongle		
Dimensions	97.2 x 12 x 32 mm (W x H x D)		
Input Terminals	USB-C		
Output Terminals	HDMI 1.4b		
Weight	32g approx.		
Wireless Standard	IEEE 802.11a/b/g/n/ac		
Security	WPA/WPA2		
LED	Blue LED indication for Power		
Output Resolution	1280x720 @60hz	1920x1080 @60hz	4096x2160 @30Hz
	1280x720 @50hz	1920x1080 @50hz	3840x2160 @30Hz
Frequency Band	2.4G/5G (default setting	g)	
Color	White		
CPU	AM8270		
DRAM	DDR3 512MB		
NAND	256MB		
Power	DC 5V/1.5A, through USB-C port		
Video support	Max. 4K@30p video decode		

System Requirements

PC	Windows OS	Windows 7 and above with Miracast support
		Mirror Screen support depends on Wi-Fi module and graphics
		chipset.
	Mac OS	Mac OS X 10.12 and above with Mirror Screen support
		Recommended Models: Mac Book series and iMac series after
		E/2015.
	Chrome OS	for Cast/Mirroring support
Tablet/Smartphone	iOS	iOS 12 and later with Mirror Screen support
	Android	Android 9 above with Mirror Screen support



- Make sure your device has been upgraded to a proper OS version that supports screen mirroring.
- 5G Wi-Fi only supports Band 1 (5.150 5.250 GHz).
- 2.4G Wi-Fi only supports CH. 1 CH. 11 (2.401 2.473 GHz).
- Transmission quality depends on the Wi-Fi environment and the screen mirroring compatibility of mobile
 devices from different brands. To ensure the best transmission quality, visit http://www.benq.com/ for the
 list of compatible devices.

· For further information, please visit: http://www.benq.com/

FAQ

- (?) Is my device able to use QCast Mirror?
- Any device with screen mirroring capabilities is able to use QCast Mirror.
- (2) How can I tell if my device has screen mirroring capabilities?
- For smartphones/tablets:

Check to see if the operating system for your device matches the system requirements for QCast Mirror, see <u>"System Requirements" on page 20</u> for more details.

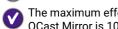
For PCs:

Use the following methods to check to see if your PC is capable of screen mirroring:

- Check to see if the version of your PC's operating system matches the versions listed in <u>"System Requirements" on page 20</u>. If you are using a PC with Windows 8.1 or above continue with the steps below:
- Swipe-in from the right edge of the screen or press Windows+P, and then tap Devices.
 Tap or click Project. If you see Add a wireless display, your PC supports screen mirroring.
- 3. Get the current drivers for your PC.
 - Make sure Windows Update has installed all of the important and optional updates for your PC.
 - Check the Support page on your PC manufacturer's website and install the drivers for your PC located on the page.
- 4. If your PC matches all the software requirements for QCast Mirror and you are still unable to mirror your PC's screen, you can check the hardware specifications from the manufacturer for your PC to see if the following specification categories matches the hardware requirements for screen mirroring:
 - Graphics
 - Chipset
 - Wi-Fi adapter
 - Graphics Driver
- (?) Am I able to connect to the internet when I am screen mirroring.
- Yes, your device is able to connect to the internet while screen mirroring via an already established (Wi-Fi router or mobile broadband 3G/4G) internet connection. Devices running the Android platform supports Wi-Fi router or mobile broadband 3G/4G internet connections when screen mirroring; devices running the iOS platform only supports mobile broadband 3G/4G internet connection when screen mirroring.
- How many devices can connect to QCast Mirror simultaneously? Can more than one device mirror their screen at the same time?

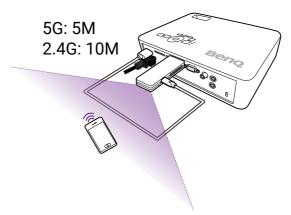
- Up to 32 devices can be connected to QCast Mirror simultaneously, but only up to 4 devices can mirror their screen at a time. Once that number is reached, one of the devices mirroring its screen must disconnect before another device can mirror its screen.
- (2) How do I switch between 2.4G and 5G Wi-Fi frequency?
- You can switch Wi-Fi frequency in two ways:
 - Enter the **Advanced Settings** menu of the dongle and enable **Legacy Wi-Fi mode**. See <u>"The Advanced Settings menu" on page 11</u> for details on the **Advanced Settings** menu.
- How do I restore QCast Mirror to its original factory settings?
- You can restore QCast Mirror to its original factory settings in two ways:
 - Press and hold the reset button located on the dongle for 10 seconds then release the button. QCast Mirror will restart with all the user-defined settings deleted.
 - Enter the **Advanced Settings** menu of the dongle and select **Reset to Factory Default**, and then reset the device. See <u>"The Advanced Settings menu" on page 11</u> for details on the **Advanced Settings** menu.
- (?) How do I reboot QCast Mirror?
- If your QCast Mirror has frozen or you have changed the configurations in the Advanced Settings menu you will need to reboot your dongle using any one of the following methods:
 - · Re-connect QCast Mirror's USB-C cable to the power source.
 - · Select the **Reboot** in the **Advanced Settings** menu.
 - With BenQ Wireless Projectors (M6 series), press the Menu key and enter the advanced OSD and set the USB power switch to Off and then On. Visit www.BenQ.com for compatible projector models.
- What do I do if videos shown via QCast Mirror lag or are choppy?
- When videos shown via QCast Mirror lag or are choppy, the most likely factors are Wi-Fi signal strength or the video bitrate:
 - For videos located locally on the mirrored device: The most likely factor is the video's bitrate.
 - For online videos: The most likely factor is QCast Mirror's Wi-Fi signal is not strong enough, it is suggested that the dongle be placed in an ideal location in terms of Wi-Fi signal strength.
- Transmission quality depends on the Wi-Fi environment and the screen mirroring compatibility of mobile devices from different brands.

What is the ideal location for Wi-Fi signal strength?



The maximum effective range of connection between the mirrored mobile device and QCast Mirror is 10 meters (for 2.4G Wi-Fi signal) or 5 meters (for 5G Wi-Fi signal) without any obstacles or radio interference.

It is suggested that the mobile device be located behind the dongle within the effective range. And make sure there is no wall or objects obstructing the signal between the connected devices.



- How do I update the QCast Mirror to the latest firmware OTA (Over-The-Air)?
- Connect to the QCast Mirror's SSID/Password from your mobile device.
 - Open the mobile device's web browser and open the URL http://192.168.168.1 to view the Advanced Settings menu.
 - Connect the QCast Mirror to a router with Internet access. See "Connecting the QCast Mirror to a Wi-Fi router" on page 13 for instructions.
 - 4. Enter the Admin Settings sub-menu of the Advanced Settings menu.
 - 5. If the **Upgrade** field shows "New Version!", select **Upgrade**.
 - Wait for the confirmation of the upgrade process.
- There is no audio when I am using 2-way or 4-way spilt screen mirroring. How can I fix it?
- Audio is not available with 2-way or 4-way spilt screen mirroring, but it is supported with single screen mirroring. Please switch to single screen mirroring if audio is required.
- Can I mirror streaming video like Netflix, Prime Video, or Disney Plus, etc. through BenQ OP30?
- Streaming media is not supported on BenQ QP30 due to Digital rights management (DRM).

- BenQ QP30 does not power on when I connect a USB-C to a USB-C cable to BenQ QP30. How can I fix it?
- USB-C chargers provide the Power Delivery protocol but QP30's USB-C does not support Power Delivery protocol. Please use a USB-A charger and connect it to QP30 via the USB-A-to-USB-C cable.
- The screen begins flickering when I mirror my device to the projector through BenQ QP30? How can I fix it?
- It's possibly due to the Internet speed or Wi-Fi channel. Flickering could be improved if you connect the QP30 to faster Internet and to a Wi-Fi channel which is less crowded, or stop other applications which consume more bandwidth of your Internet.
- Screen mirroring is not working with my office PC/laptop. How can I fix it?
- It's possibly due to the Firewall setting on your office PC/laptop. Please add a firewall rule with a source and destination port of port 7236, 53, 67, and 68 with IP address 192.168.168.1 to allow screen mirroring.
- QP30 is unable to connect with the network, how can I fix it?
- Please switch the router to Band 1 then QP30 can connect with it.
- The projection has a lot of lag and is choppy, how can I fix it?
- Please follow below troubleshooting steps to fix the problem.
 - 1. Please disable Legacy Wi-Fi mode in the advanced settings menu for QP30.
 - If the problem persists after step 1, please scan the network status with a Wi-Fi channel analyzer and make sure that not too many devices are allocated to the same channel.

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