

BG-Connexio

Direktronik art 20124317

4K BYOD Collaboration Solution with AirPlay, Miracast, and Chromecast Support

User Manual







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Statement

Please read these instructions carefully before connecting, operating, or configuring this product. Please save this manual for future reference.

Safety Precaution

- To prevent damaging this product, avoid heavy pressure, strong vibration, or immersion during transportation, storage, and installation.
- The housing of this product is made of organic materials. Do not expose to any liquid, gas, or solids which may corrode the shell.
- Do not expose the product to rain or moisture.
- To prevent the risk of electric shock, do not open the case. Installation and maintenance should only be carried out by qualified technicians.
- Do not use the product beyond the specified temperature, humidity, or power supply specifications.
- This product does not contain parts that can be maintained or repaired by users.
 Damage caused by dismantling the product without authorization from BZBGEAR is not covered under the warranty policy.
- Installation and use of this product must strictly comply with local electrical safety standards.



Introduction

BG-Connexio is a revolutionary wireless conference product that was specifically designed to meet the needs of today's hybrid workforce. It allows for seamless local presentations as well as collaborations with remote participants by connecting the room camera, microphone, speakers, and display with the attendees' own laptops wirelessly. This eliminates the need for cumbersome cables, setup, and makes it easy for people to take advantage of the room's audio/video (A/V) system to collaborate with both in-room and remote meeting participants.

Features

- Bring your own device wireless presentation experience, no cables required for participants.
- Wireless connection between your laptop and room USB peripherals like a camera,
 mic, and speakers for easy video conferencing.
- Fully compatible with mainstream platforms such as Teams, Zoom, Webex, etc.
- Wireless content input up to 1080P, HDMI 2.0 output.
- Native wireless mirroring protocols like AirPlay, Miracast, and Chromecast are supported.
- Windows and Mac applications available for wireless connection.
- Available 2x2 split screen view.
- Supports wireless touch back on interactive whiteboard/touch screens.
- Best-in-class data security with dual network and high standard encryption.
- PoE supported.
- OSD control with preview function.
- Supports whiteboard and annotation.
- Customizable home screen page.
- Central management platform available.



Packing List

- 1x BG-Connexio
- 1x 12V/3A Power Supply
- 3x External Antennas

- 1x Dual USB Wireless Dongle (optional)
- 1x User Manual

Specifications

Specifications		
HDMI output	1x HDMI 19-pin female connector	
Video Output Resolution	3840x2160@60Hz, 3840x2160@30Hz, 1920x1080@60Hz, 1280x720@60Hz	
Format Compliance	HDMI 1.4/HDMI 2.0	
Video Capacity:	1080P @ <60Hz AirPlay for IOS devices 1080P @ <60Hz "WirelessMedia" Connexio application 1080P @ <60Hz for BG-C-USB dongle	
HDCP	HDCP 1.4/HDCP2.2	
Analog Audio Output	1x 3.5mm PC audio female connectors	
LAN port	RJ45 x2:1000Mbps x1, 100Mbps x1	
USB interface	USB 3.0 x3: USB 2.0 x1, Type-C x2	
Audio Input	AirPlay, Miracast, DLNA, Windows/MAC, WMH, USB/BT Speaker Phone	
Control connectors	3.5mm Phoenix terminal/ RS232 interface	
Number of window simultaneous on screen	≥4+14(4 main windows+14 thumbnail windows)	
Number of simultaneous connections	≥16	
Data rate in wireless	Up to 1200Mbps	
Video Playback Frame Rate	20-60 FPS	
Latency	<100ms, Min 20ms	
Wireless transmission protocol	Wi-Fi IEEE 802.11 a/g/n/ac	
Frequency band	2.4 GHz & 5 GHz	
Dimension (W x D x H)	220mm x 120mm x 41mm (including antenna: 220mm x 120mm x 145mm)	
Weight	2.2 lbs [1.0kg]	
Temperature	-4° ~ +140° F / -20° ~ +60° C	
Humidity (Storage / Operating)	20%-90% (non-condensing)	
DC Power	12V / PoE	
PoE standard	IEEE 802.3af	
Power Consumption	10W (MAX)	



Operation Controls and Functions

Front Panel



No.	Name	Function Description
1	Type-A USB connector (Front)	For mouse control, USB touch screen etc.
2	Type-C USB connector (Front)	For dongle pairing (optional dongles not included)
3	Power Button	Turn on or off the device.
4		During boot it will flash RED, powered on and waiting is indicated by flashing GREEN, "Ready to share" is indicated by solid GREEN, "Sharing" is indicated by solid CYAN.

Note: The USB Type-A and Type-C ports on the front cannot be used at the same time. The Type-C USB port is secondary to the USB Type-A port.



Rear Panel



No.	Name	Function Description
1	Line audio output	2 channel analog audio output, Connect a 3.5mm mini-jack to the line in jack of an audio system.
2	RS-232	Connect an RS-232 cable from this port to an RS-232 device.
3	Kensington Lock	One end is wrapped around a fixed object and one end is inserted into this port for physical security.
4	Type-C connector (Rear)	For Type-C dongle pairing.
5	USB 3.0 connector (Rear)	For mouse control, USB touch screen, and USB peripheral devices such as a USB camera or speaker.
6	Reset	
7	HDMI output	Connect an HDMI cable from this port to an HD or 4K/HDMI 2.0 display.
8	LAN Ethernet port 1	100Mbps, Connect an Ethernet cable between this jack and a LAN.
9	LAN Ethernet port 2	1000Mbps, Connect an Ethernet cable between this jack and a LAN. Supports POE.
10	DC Power socket	Connect the included power adapter to this socket and connect the plug to an available electrical outlet.
11	Antenna Fixture Points	Screw in the three included antennas to these three ports.



Factory Reset

- 1. Power on the Connexio.
- 2. When the *Home Screen* is shown, press and hold the reset button on the rear panel with a pointed object, e.g. an unbent paper clip until the "*Factory Reset*" page is shown for at least 2 seconds.



- a.
- 2. The Connexio will reboot after 3 seconds to the default configuration.
- 3. If you do not have a picture, press and hold the reset button until the red LED in the top panel is illuminated to perform the reset.

NOTE: All previous settings will be lost and you will need to perform the initial set-up once more.

Default Configuration

Ethernet:

Proxy: None DHCP: Enable Wireless network: Frequency: 5GHZ

Auto change Wi-Fi hotspot password: 5minute

Display & Audio

Channel: Auto

HDMI resolution: Auto

HDMI CEC:

Device auto power off: ON Connexio auto power on: OFF Audio output: 3.5mm Jack & HDMI

AirPlay screen quality: High

show device name and password when mirroring: OFF

show PCs user name when mirroring: ON

Moderator Control

Add a sub-window bar to enable previewing the connected devices: ON

Real time preview: ON



System settings

Date & time: Automatic date & time: use network-provided time

Auto Standby: Never Language: English **Security Settings**

Security Level: Security level 1

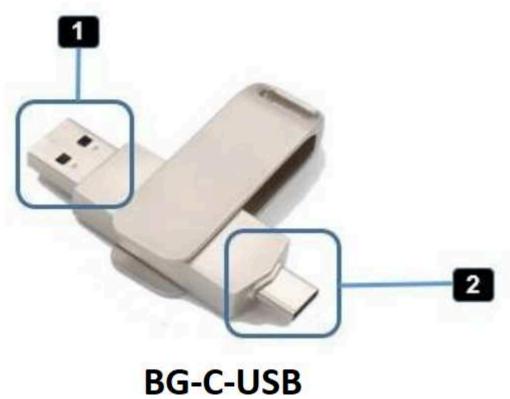
Connection Password: 4-digits password beginning with 0000

Change admin password: admin(default)

Other settings

Auto create launcher: Disabled Clear history after meeting: Always

USB Dongle (Optional)

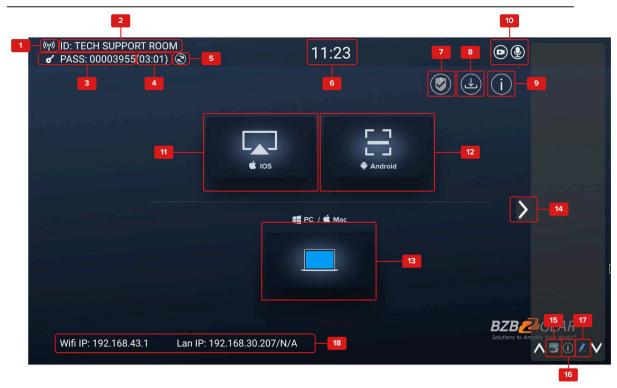


ID	Name	Description
1	USB connector	Use the USB connector of the dongle to plug into a PC/Laptop to share your screen.
2	Type C connector	Using the Type-C connector of the dongle to plug into a PC/Laptop to share your screen.



Software Interface

Home Screen



ID	Name	Description
1	Wi-Fi Indicator	Wi-Fi Infrastructure mode: "Client-Mode" Wi-Fi connection to router is established and the icon displays the current signal strength. A secure Wi-Fi connection is not established, or connection to a router failed: Wi-Fi is not available: LAN Infrastructure mode: access point is disabled.
2	ID	Wi-Fi name or device name of the base-unit access point.
3	PASS	Wi-Fi password of Connexio.
4	Password-Timer The time until the password is changed automatically. Only displayed w timer is active.	
5	Refresh Wi-Fi Password Generate a new password manually for securing your Wi-Fi network.	
6	Time If LAN has access to a time server; even after disconnecting the LAN contributed the time is displayed until the device has been disconnected from power.	
7	Security Level Security Level Security Level Security Level Security level 1-3, display ONLY. The security features of the displayed level shown in detail by clicking on the icon. The settings can only be changed by an administrator in the web server co settings menu.	
8	Download Button	Creates, upgrades, and exports the launcher "WirelessMedia.exe" for Windows and Mac computers to a USB stick.



ID	Name	Description
9	Info	Show status-bar (1) – (7) on Home screen.
10	Camera and microphone icon indicator	Once connected with a USB camera or microphone, the icon will show up accordingly.
11	IOS Quick Start	IOS devices use AirPlay for mirroring.
12	Android Quick Start	Download the android app "WMedia2" to mirror from smart devices to the display.
13	Windows / MacOS Quick Start	Steps instruct how to transmit PC/Laptop onto the main screen. First-time users must install the starter program from the web page or from the USB stick.
14	Preview function of the screen contents of the participants with transmitter and mobile devices; White Board & Annotation function icon	Preview function of the screen contents of all connected transmitters and mobile devices; White Board and Annotation function.
15	Whiteboard icon	Whiteboard function
16	Info	Click to show ID and password when mirroring.
17	Annotation	Annotation function.
18	Wi-Fi IP LAN IP	Wi-Fi IP: address of Connexio in wireless LAN Assigned IP: address of Connexio in LAN; "N/A" = no connection to network

Installation

Introduction to the installation methods:

The Connexio can be installed in different ways in a meeting room.

- Table mount
- Wall mount

The articulated antennas are removable. They can rotate for better wireless connection.

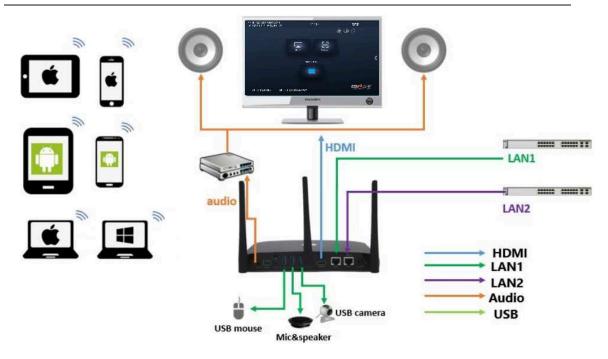
Note: For optimal performance, install the Connexio close to the display and avoid obstacles between the Connexio and transmitting devices.

Antenna Placement Rules

- The antennas should be oriented vertically, so perpendicular to the ceiling and parallel to the walls.
- The antennas should be installed far enough (at least 50 cm/1.6ft) from metallic surfaces to avoid unwanted reflections and far enough (at least 1m/3.3ft) from other radio equipment that operates in the same frequency range, e.g. other Wi-Fi access points, cordless telephone, microwave ovens,.... It is also best to install antennas at least 15 cm (6 inches) from concrete walls.
- The most favorable situation is a direct line of sight between antennas and Buttons. Any obstruction will cause the signal to follow a longer propagation path, which can result in performance degradation.
- Due to the particular radio pattern of the dipole antennas, the antennas should not be placed just above potential positions of WirelessMedia users. As a result, the advised position for the antennas is at the side of the meeting room



Wiring Diagram



Power Connection

The Connexio can be powered by the external universal power adapter or via Power over Ethernet (PoE).

How to connect the external power adapter

- 1. Choose the appropriate power plug (US, UK, EU or AU) to be installed on the power adapter.
- 2. Plug in the power adapter to the power input connector on the Connexio.
- 3. Connect the power cable plug into the wall outlet.

Note: Once the Connexio is powered, it will start up automatically. Afterwards, use the POWER button with Status LED on the front of the Connexio to switch it ON or OFF.



Power over Ethernet (PoE)

The Connexio can be powered via an ethernet cable if the unit is connected to a PoE network switch instead of using the external power adapter.

Video Connection

- 1. Connect the HDMI Output of the Connexio to a 4K or Full-HD display with an HDMI cable.
- 2. After the unit is started the system will show the home page, as shown below.



Audio Connection

The Connexio can transmit the audio output of the PC/Laptop to the Connexio together with the video signal. The audio will be output at line levels from the 3.5mm mini jack connector and via the HDMI output connectors simultaneously.

How to connect to an external audio system

- 1. Connect a 3.5mm mini audio cable to the audio port of the Connexio.
- 2. Connect the other side of the cable to the meeting room's sound system.





If sound is not transmitted

The Connexio will continuously capture and transmit audio from the connected PC/Laptop.

- 1. Ensure the LED on top is solid green and the PC/Laptop is sharing on the screen
- 2. Check that the Connexio is selected as the output device in sound settings and that the volume is set to an acceptable level.

PC/Laptop Sound

As default the Connexio will mute the internal speaker of PC/Laptop and route the audio to the Connexio in order to avoid an audio echo.

When clicking the button to stop sharing, the local speaker will return to its previous state.

Note: If you want to keep the internal speaker of PC/Laptop active and still route the audio to the Connexio, click the audio mute icon in the status bar to turn the internal speaker on.

LAN Connection

The Connexio can be connected to a local network or directly to a PC/laptop. For normal operation, a LAN connection is not necessary but it is recommended to connect the Connexio to the Internet.

- 1. Connect a network cable with an RJ-45 connector into the LAN port of the Connexio.
- 2. Connect the other side to the network.
- 3. If the connected network switch supports power over ethernet (PoE), it can also power the Connexio instead of using the external power supply.





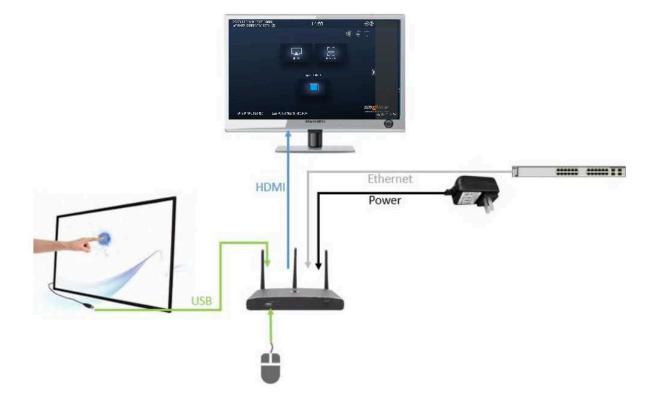
The LAN connection can be used for:

- Network integration of Connexio to the guest or company networks.
- Telnet control of the Connexio.
- Maintenance purposes.

Over-The-Air Updates (OTA) of firmware for the Connexio.

Connecting a USB device

Connect a USB mouse or to a touchscreen to control the Connexio.





Please be aware of the following limitations:

The Connexio supports most generic USB devices for the camera and speakerphone peripherals, meaning most brands will work just fine. Note that the peripherals attached must have the following characteristics to work with a Connexio setup:

- A connection via the Connexio app is required to access the connected peripherals.
- For cameras that only have a built-in microphone and are not equipped with a speaker or speakerphone (e.g.Logitech webcams or Huddle cameras), only the camera functionality will be used by the Connexio.
- Separate mics and speakers are not supported. The Connexio only supports speakerphone devices, which contain both microphones and speakers in one peripheral. Separate microphones (e.g. speakerphones in combination with an all-in-one camera) or USB speakers are not supported.



Configure the Security level through the check button following actions:

to perform the

- 1. To control the sharing PC/Laptop.
- 2. To activate system upgrading
- 3. For white board or annotation during a presentation the Connexio transmits video, audio, and the USB-HID function for mouse control and click functions of a touchscreen. Connect the touch interface of your screen to the USB-port on your laptop or PC.

USB Mouse

For menu configuration:

Single click to select.

Right-click to navigate back to the Home Page.

Touch Screen

Click to select.

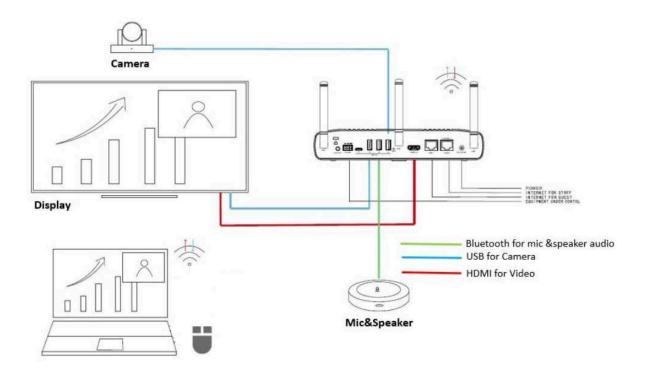
Long press to open the contextual menus or emulate double-click/right click of a USB mouse.

External USB Devices over Wi-Fi Sharing

Connexio supports USB Cameras and USB speakerphones over Wi-Fi sharing.

Use the 3 USB ports and 1 Type-C port in the rear panel to connect external USB devices such as microphones and cameras to use with video conferencing software such as Skype, Zoom, Teams, and more.





Mobile Device: Wireless Connection

 Android Devices: Download a sharing application such as "WirelessMedia2" from the Google Play store.



- 2. WirelessMedia provides two ways to discover Connexio for mobile devices.
 - a) Portable Hotspot: Connect the hotspot to the Connexio.
 - b) LAN Connection: Connect the Connexio and mobile device to the same LAN network to discover and connect to the Connexio.
- 3. iOS Devices: Use AirPlay to mirror the desktop.

Enable portable hotspot:

Check that the ID and PASS (Password) are shown on the Homepage, as shown



below.





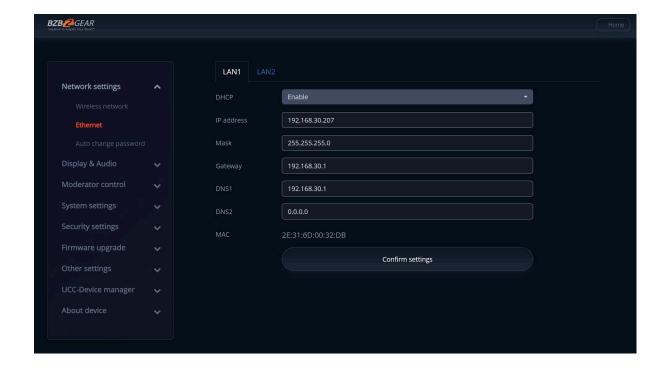
Enable LAN connection:

Be sure the Connexio is connected to the Network. The Connexio has successfully connected to the LAN When the *Local IP* shows an active IP address in the bottom left.



Note: When it shows "N/A" this means the Connexio is not connected to the LAN (Local Area Network) by CAT cable or it failed to get an available IP address from the router.

Logging into the Connexio via the LAN IP allows users to modify network settings as shown below:





Pairing transmitter with Connexio

1. To pair the optional dongle to the Connexio connect one of the USB connections (Type-C or Type-A) to the ports on the front of the Connexio.



1. A pop-up window will display "Pairing, please wait..." as shown below:



2. After pairing is complete, the message "Succeeded to pair!" will be displayed. At this point it is safe to unplug the USB dongle and connect to a computer to install the software or for quick pairing after initial first use.



If the error-message "Configuration fail" is shown, please check the connection of the USB dongle and try again.

Note: After changing the SSID/Wi-Fi name in the menu all transmitters must be paired again.

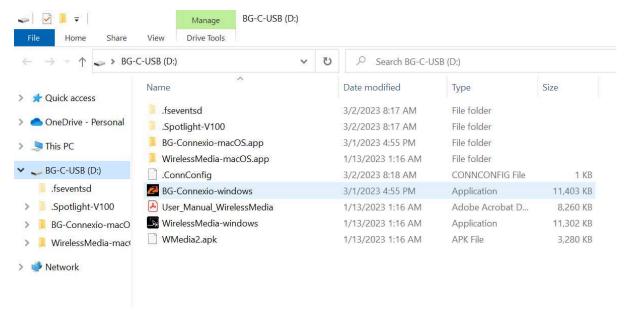


Software or Optional Dongle Connection

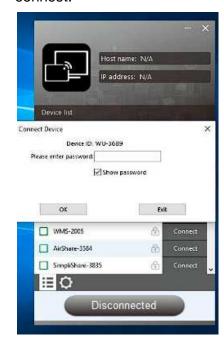
The Connexio can be operated with either the optional dongle or PC application. If there are several participants in a meeting, mixed operation is also possible.

BG-C-USBi:

- 1. Pair the optional USB dongle with the Connexio as shown above.
- 2. The necessary software will be automatically installed on the dongle as shown below:



- 3. Plug the dongle into a PC/Macbook and click the "Launcher" to install. The dongle will auto change the PC's Wi-Fi to the target Connexio's Wi-Fi.
- 4. The software will have a pop-up message appear to enter the password to connect.

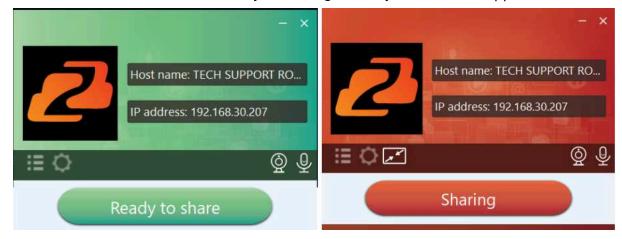




5. Enter the password shown in the top right of the splash screen as shown below:



6. Once connected successfully, a message "Ready to share", will appear:



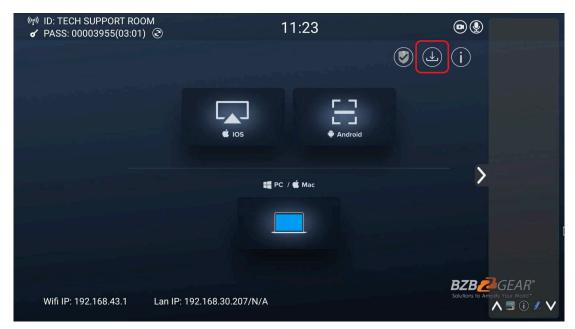
7. Clicking the "Ready to share" button will change the window from green to red and the button to "Sharing" when your screen is being actively shared.

Note: After initial install, users can either use the application on their computer or activate the software by using the dongle which will automatically run the application if installed. Users will need to close the file explorer window that pops up automatically. To exit, even if the dongle is removed, users will need to exit the software by clicking the 'x' in the top right of the window.

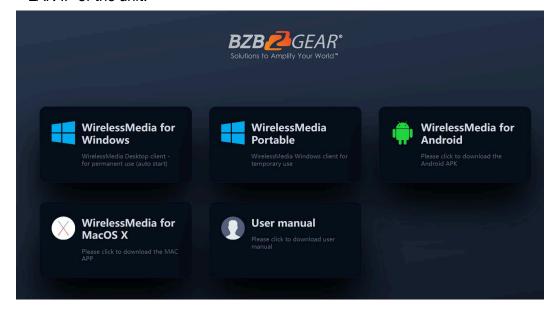
Manually Downloading the Application

If needed, it is possible to use a universal USB stick to create a launcher.
 Connect the USB stick to the Connexio and click the DOWNLOAD icon on the homepage which will download applications for Windows, Android, Mac OS, as well as the user manual.





Users can also download the application from the web page by connecting a computer or device to the same network as the Connexio and navigating to the LAN IP of the unit.



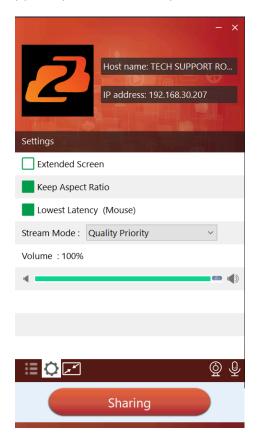


Options for Microsoft Windows PC / Laptop - Extended Screen

Click the icon



in the App to open/close the "options" menu.



Options:

- 1. Extended Screen:
 - a. Transfers extended desktop functionality of the active source.
 Depending on your operating system, the installation of a virtual driver for "ExtendedDisplay" may be necessary (see 3. below).
 - b. The primary screen (1) will be displayed on the laptop and the virtually extended screen (2) will be displayed on the main screen. If the PC is already connected to an extended screen (3), the extended screen (2) will always be displayed on the main screen.
 - c. For the first time use of "Extended Screen" click the "Extended Screen" box. A pop up message will indicate the installation of the "ExtendedDisplay" driver. Click "yes" to continue, once installed, the "Extended screen" function will be ready to use.





Note: If you select the "Extended Screen" feature, Windows automatically switches to "Extended Mode". If you stop the transfer with "WirelessMedia" (Pause), Windows remains in " Extended Mode" until you press "Windows key + P" on the laptop to select the "PC screen only" mode.





2. Keep Aspect Ratio:

Keep the original aspect ratio to display on the connected screen.

3. Low Latency Mouse:

The setting is applied individually for each connected device. The shape of the mouse-pointer will equal the shape in the application. There may be a small delay in movement of the cursor.

4. Stream Mode:

Fluency Priority: Image transmission delay is small, image resolution will be lower, suitable for PPT presentation modes.

Quality Priority: The image resolution is high, but if the image content is complex the transmission delay may be larger, suitable for watching a video.

5. Volume Slider:

Adjust the playback volume of the main screen when a presentation laptop is active.

Quad View Mirroring

The Connexio can mirror 4 sources onto the main display simultaneously (supports PC/Laptop and mobile devices).



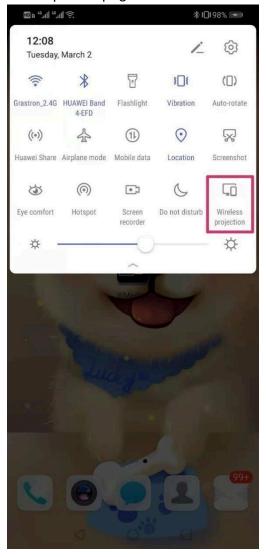
Note: By clicking full screen icon in the bottom left of the PC UI interface the content will be displayed as full screen. Click again and the screen will revert back to quad view mode.



Android Devices

Steps as below:

- 1. Make sure the Wi-Fi or WLAN is enabled.
- 2. Swipe down from the top of the phone's screen and click the wireless projection icon in the dropdown page.



- 3. It will open the wireless projection window, find the Connexio in the available list to connect with.
 - Note: under Security Level 1 mode, there is no need to enter a password to connect. Under Security level 2 and Security level 3 mode, users will need to enter the password shown on the home screen.
- 4. After entering the password, it will show your mobile content on the display.
- 5. Click the "wireless projection" icon again to disconnect and stop mirroring.

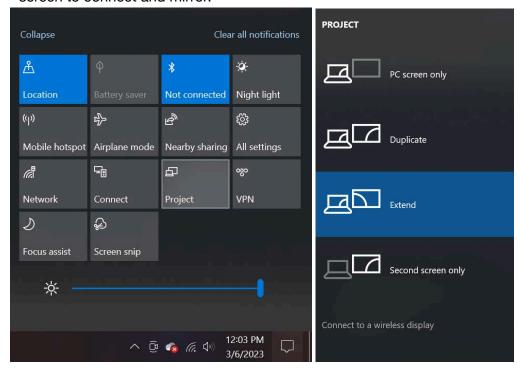


WIN10 PC Miracast

- 1. Make sure the Wi-Fi or WLAN is enabled.
- 2. Click the Notifications button in the bottom right operation zone icon as seen below.



3. Click the "Project" icon, select "Connect to a wireless display," and select the Connexio from the list. Enter the password if prompted from the home screen to connect and mirror.



Note: under Security Level 1 mode, there is no need to enter a password to connect. Under Security level 2 and Security level 3 mode, users will need to enter the password shown on the Connexio home screen to connect and mirror.

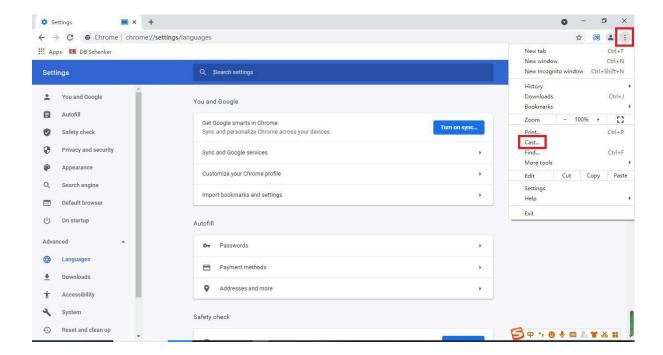
4. Click the "Project" icon again to disconnect to stop mirroring.



Chromecast on PC

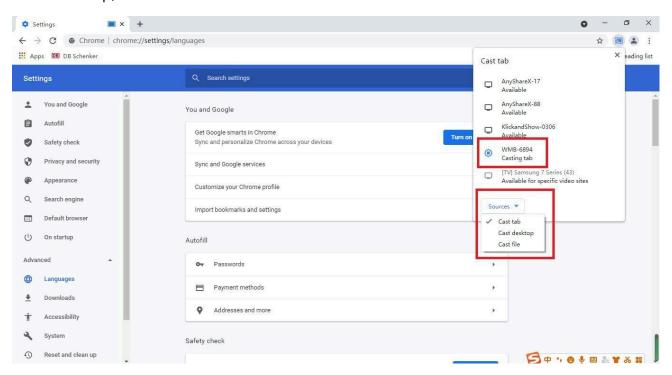
The Connexio supports Chromecast functionality on Windows 7/10/11 devices. The PC and Connexio need to be in the same LAN network to start sharing via Chromecast.

- 1. Open a Chrome based browser (Chrome/Edge) and connect your PC to the same network as the Connexio.
- 2. Click the menu (3 dots) in the top right and select "Cast..." and select the Connexio SSID from the Cast tab to start the Chromecast function.





3. The "Sources" dropdown has three options to choose to cast. Cast tab, Cast desktop, and Cast file.



Preview Window

Using a touch-screen or with a mouse connected to the Connexio, you can click on the LEFT/RIGHT arrows (2), to show small preview-windows on the right edge of the screen or to hide them. Once the preview windows are activated, users see live-pictures (1) of all connected host devices. Scroll UP or DOWN (3) to see more connected devices.



As soon as a presenter is selected the screen will be activated. A red frame is shown around the active picture.



The button indicates play and will show a screen when clicked. Clicking

the button will stop mirroring the current signal. The button will make

the connected device display as full screen. The indicates volume, click to adjust the volume of the connected device.



Whiteboard & Annotation

Whiteboard and Annotation requires an HID compatible device such as an interactive white board or interactive touch screen. It is easy to use, makes collaboration in your business more productive and effective: documents can be easily written, edited, captured, and shared.

Whiteboard: write all your ideas and share the digital notes with anybody. Different color pens and backgrounds can be selected.

Annotation: draw or write annotations in an overlay of your documents or presentations. Save and share everything that was discussed. Different colors of pen can be selected.

How to start Whiteboard or Annotation mode

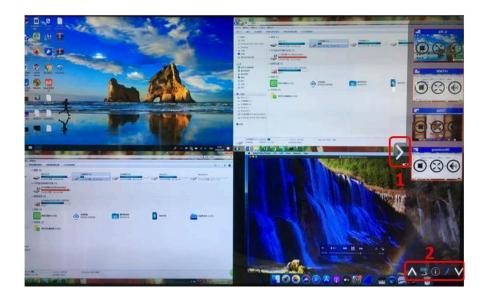
The "Preview window" on the Home Screen.

Tap (click) the LEFT-arrow (1), located on the right side of the screen, and select

Whiteboard or Annotation (2).

The icon in (2) indicates "information." Click to check the Connexio SSID, password, Wi-Fi and Lan IP addresses when a device is sharing on the main screen. This info will show on the main screen for at least 20s then will disappear automatically. In order to let other attendees join into the meeting as well.





The toolbar for Whiteboard or Annotation will appear in the bottom of your screen. If another user is mirroring, the Whiteboard & Annotation function will be closed.

Whiteboard

Click on the icon to enter the white Whiteboard page. You can create free drawings with your finger when using a touch screen or mouse (multitouch capability).



Use the toolbar to select one of the following functions.



ID	Icons	Function
		1 - Add an empty page
Toolbar 1	2	2 - Delete the page
	1/1 3	3 - Display previous or next page
	1	1 - Undo: one step backward in changes
	2	2 - Redo: one step forward in changes
	4	3 - Erase part of drawings or annotation, change diameter by a longer tap
	4	4 - Clear the entire drawing/writing on the screen
Toolbar 2	5	5 - Pen allows writing/drawing in different colors
	5	6 - Draw basic geometric shapes
		7 - Select color of board, the drawing will be kept
	7	
Toolbar 3		Pops up when "Pen," "Draw shape," or "Select color of board" is selected, for individual change of size of Pen, Shape, or color.
Toolbar 4		
File options		1 - Save the current screenshot on local storage (PNG+WMN)
Open		2 - Close Whiteboard to go back to Home screen, actual project can be saved on local storage (WMN)
New project	2	3 - File options:
Save as		Open WMN-file from local storage and continue/edit an older project
Import from U disk		New project Save as WMN on local storage in unit, it will be erased after
Save as pdf		POWER-OFF
Clear hietory	3	 Import from U disk stored project (WMN) All pages are saved as PDF on local storage Clear history – delete all whiteboard & annotation files on local storage



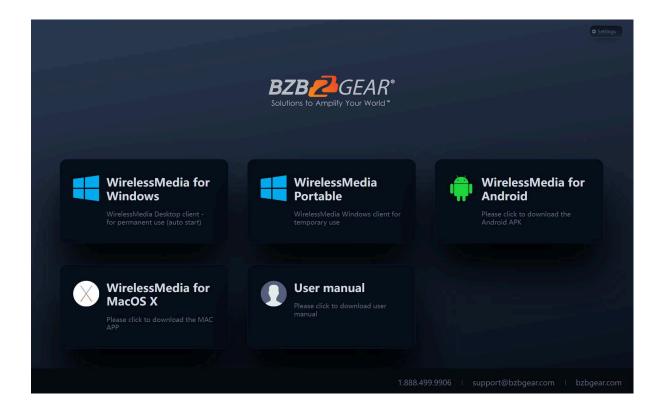
Annotation

Click on the icon \int to enter the Annotation function. Use the toolbar to select one of the following functions.

ID	Icons	Function
Toolbar 1	2 2 3 4 6 7 8	 Undo: one step backward in changes Redo: one step forward in changes Frase part of drawings or annotation, change diameter by a longer tap Clear the entire drawing/writing on the screen Pen allows writing/drawing in different colors Draw basic geometric shapes Close Whiteboard to go back to Home screen, actual project can be saved on local storage (WMN) Close Whiteboard to go back to Home screen Save the current screenshot on local storage (PNG)

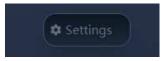


Web Setting Management Configuration



To access the web settings of the Connexio, the unit must be connected to the same network as the device trying to connect. Type in the IP address of the Connexio displayed at the bottom of the splash screen into your preferred browser. Once the page loads users can download the Connexio applications or user manual if needed.

To access the device settings click "Settings" in top right of the window.

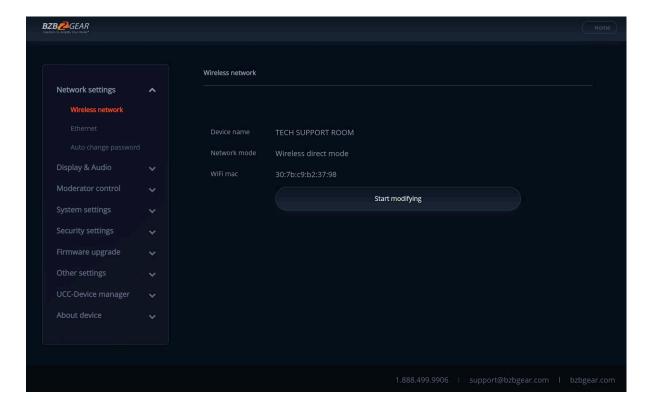


On initial sign in type in the default password "admin" into the password field and click "Login."





Upon successfully logging in, the main interface will be shown. From here users can access settings from the left hand menu including Network settings, Display & Audio, Moderator Control, System Settings, Security Settings, Firmware Upgrade, Other Settings, and About Device.





Network Settings

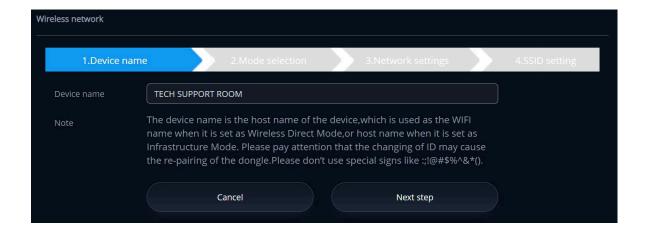
Wireless Network

To take the full benefits of the WirelessMedia possibilities, the Connexio should be properly integrated in the organization's network. The wizard allows users to create a custom configuration for integration of WirelessMedia into the existing wireless infrastructure in larger organizations.

Segmented Dual Network provides two separate ways to connect to the Connexio simultaneously, including a Wi-Fi network (normally connected to Guest/untrusted network) and wired LAN network (normally connected to the corporate/trusted network).

Wireless Network Configuration Wizard

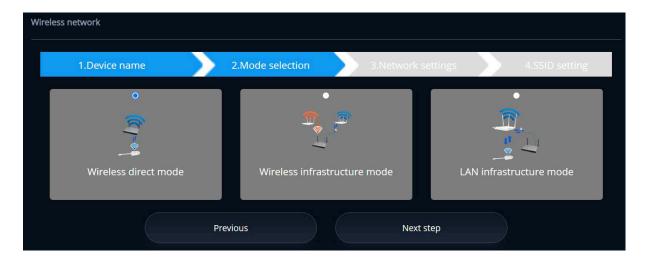
Enter a device name for the Connexio. We recommend a descriptive name in case you have more than one Connexio or other WirelessMedia installed. The default name is "WMB-XXXX".



Only "a-z", "A-Z", "0-9", "-_" and space characters are allowed.



Click the "Next step" button to proceed. The following three connection methods are available:



Wireless Direct Mode

After Factory Reset, the Connexio starts up in the default Stand-Alone "Wireless direct mode" configuration, where the base unit creates its own wireless access point, which devices use to connect with the software.

This is typical for a quick setup or small group meetings. The Wi-Fi icon "Wireless direct mode" will be displayed in the top status-bar of the display splash screen. Guests connect to the access-point of Connexio, while Staff can also connect to Base-unit via Wi-Fi or via LAN connection from their corporate network.

Stand-Alone Connection

If the internal Wi-Fi access point of the Connexio is active and the dongle is paired, then guests and staff can use the internal Wi-Fi access point of Connexio to present with all their units. No Internet access is required.

Recommended Environment

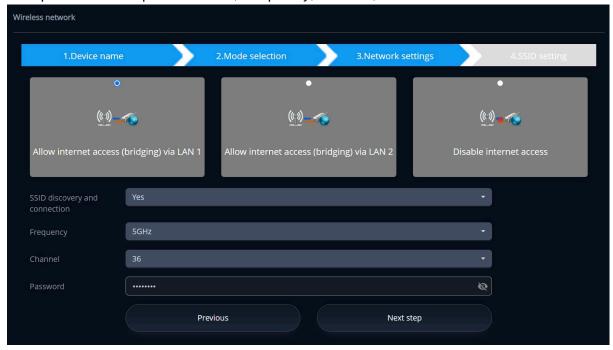
This option is best for temporary operations, small installations, and rooms without network access or networks that do not allow network access for guests due to strict security concerns, or there is a need to be completely isolated from the corporate network.

You can start using Connexio in this mode without any other wireless network configuration.

Click "Next step" to Set up Wi-Fi access point



Set-up Wi-Fi access point includes, Frequency, Channel, and Password.



Frequency: Click to select the 2.4 GHz or 5 GHz Wi-Fi frequency. Default is 5 GHz.

Channel: Click to select the Wi-Fi channel. Default is 5 GHz, Auto.

Note: If the Wi-Fi channel is changed, no new pairing of the dongle is necessary.

2.4 GHz frequency band: channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11,

5 GHz frequency band: no need to choose 5G channel, system will choose proper channel automatically. Default is 5 GHz, channel: Auto.

Default channel (USA): 36, 40, 44, 48 or 149, 153, 157, 161. Four channels will be opened at the same time and the system will automatically choose the proper channel.

Default channel (Europe): 36,40,44,48.

Default channel (China): 149, 153, 157, 161.

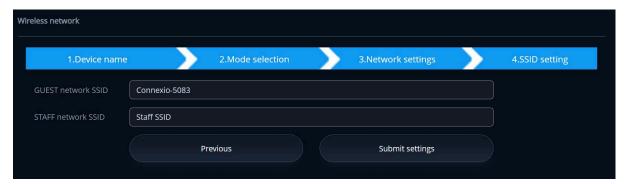
Password: Click in the input field to enter a static password or leave alone to randomly generate a password with a maximum length of 8 characters.

There are 3 ways to connect the Connexio to the Internet in "Wireless Direct Mode."

- 1) Allow internet access (bridging) via LAN 1: able to connect to the Internet if the LAN1 port is available.
- 2) Allow internet access (bridging) via LAN 2: able to connect to the Internet if the LAN2 port is available.
- 3) Disable internet access: cannot connect to the internet in this mode.

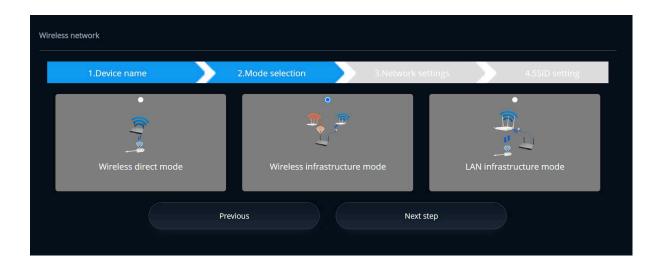


Click the "Next step" button to edit or change the Guest network SSID and STAFF network SSID. This information will be shown on the splash screen display.



Click "Submit settings" to finish configuration. Afterwards please re-sync the dongle to the Connexio.

Wireless Infrastructure Mode



Connexio can connect to a wired and a wireless network simultaneously. The Connexio is connected to the company network via a hardwire LAN connection. Guest users connect to Wi-Fi "Guest" access. The employees ("Staff") connect to their usual access point of the corporate network, without having to change the Wi-Fi. This is useful for organizations, which have a wireless "Guest" network for external visitors and a wired "Staff" network for their employees. The segmented Dual Network of Connexio provides two separate ways to connect to the Connexio at the same time. Guest users will not be able to access any resource on the main network of the company.

Connexio utilizes the existing wireless network infrastructure so both Guest and Staff meeting participants have internet access.



Dual Network Configuration

The internal Wi-Fi network of the Connexio is connected to the Guest Wi-Fi network of the organization.

Client Mode: the indicator-icon shows the actual signal strength. The Connexio is still wired with a LAN-cable to the internal company network.

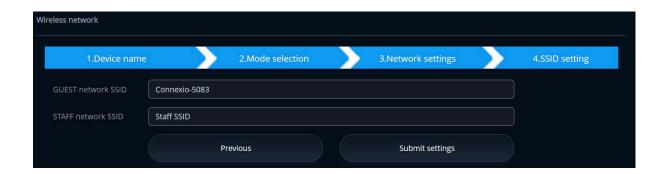
Click "Next step" to configure which network the dongle needs to be paired to.

"Dongle connects to the Connexio via wireless network."

Choose a wireless network which is separate from the company LAN network for guest users.

Select SSID: Choose a wireless network to connect to the Connexio for guests. Password: enter password to connect the Connexio to the guest network.

Click "Next step" to edit or change Guest network SSID and Staff network SSID.



The Wi-Fi name of the guest network and staff will be shown on the home screen after clicking "Submit settings."

After submitting, resync the dongle with the Connexio.

"Dongle connects to the Connexio via LAN."

Choose a LAN network which is used for the company staff users.

Note: usually in this mode, dongle paired for internal staff usage.

<u>Select SSID:</u> Choose a wireless network to connect to the Connexio for guest.

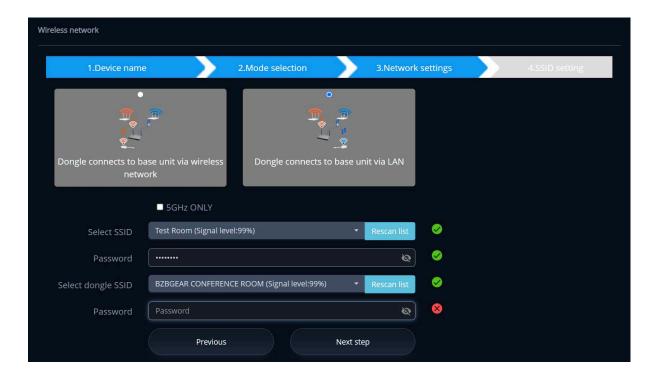
<u>Password:</u> enter password to connect the Connexio to the guest network.

<u>Select dongle SSID:</u> choose the same <u>LAN</u> network which the Connexio connects, to pair the dongle.

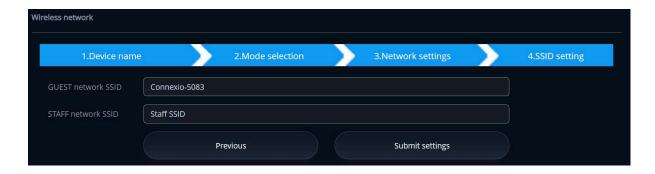
Password: enter password of the LAN network.



See picture below:



Click "Next step" to edit or change Guest network SSID and Staff network SSID.



The Wi-Fi name of the guest and staff networks will be shown on the splash screen after clicking "Submit settings."

After submitting, resync the dongle with the Connexio.



LAN Infrastructure Mode



In this configuration the built-in Wi-Fi access point of the Connexio is disabled:

The dongle and/or mobile devices can connect to the secured wireless access point of the company network. The Connexio Connexio needs to be connected via ethernet to the company network.

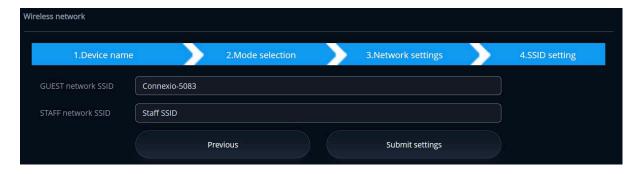
Staff-users connect to their usual access point of the company network, without the need to change their Wi-Fi. Follow the instructions of the configuration wizard for "LAN infrastructure mode".

Click "Next step" to choose a LAN network which is used for the company staff users and pair the dongle into this network.



Click "Next step" to edit or change the Guest network SSID and Staff network SSID.



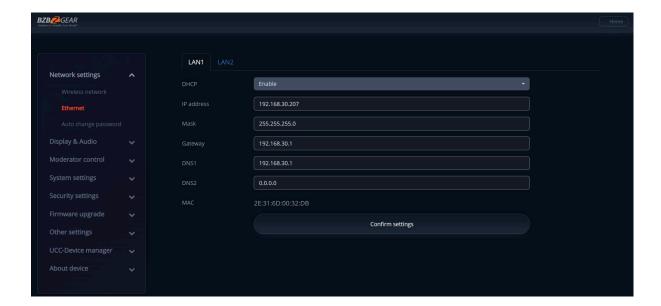


The Wi-Fi name of the guest and staff networks will be shown on the splash screen after clicking "Submit settings."

After submitting, resync the dongle with the Connexio.

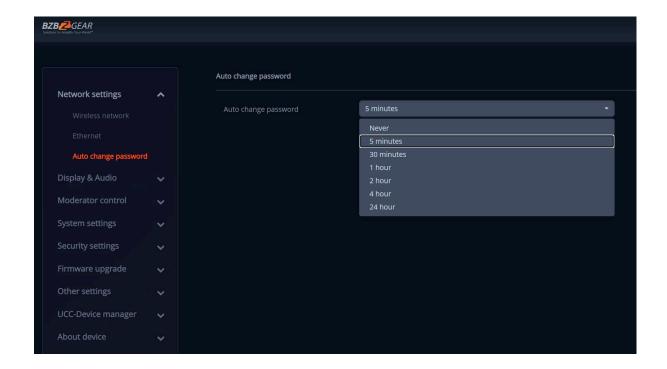
Ethernet

Configure the Ethernet settings of the Connexios 2 LAN ports. If the Connexio is connected with 2 LAN cables, they can be configured in the tab shown below.





Auto Change Password



The password remains unchanged for all participants of the meeting while at least one device is connected with the Connexio. After the last user is disconnected, a configurable countdown begins.

The Connexio will automatically change the Wi-Fi password to a random number every selected period of time unless the "Never" option is selected.

Display & Audio

HDMI

HDMI Resolution

Select the HDMI output of the Connexio.

Resolution Options:

Auto

3840x2160 @30Hz

3840x2160 @60Hz

3840x2160 @50Hz

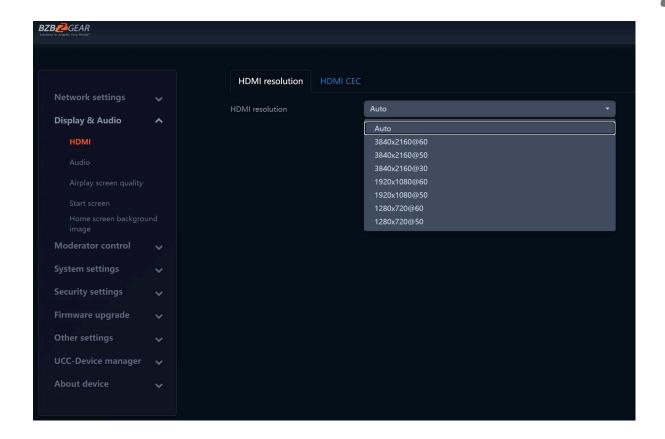
1920x1080 @60Hz

1920x1080 @50Hz

1280x720 @60Hz

1280x720 @50Hz





Note: If the connected display only supports FULL HD (1920x1080 @60), the 4K resolution options will not be shown on the list of available resolutions.

HDMI CEC

The Connexio supports CEC functions if the connected display also supports CEC functions.

Note: If an HDMI CEC command does not work check whether the display supports the desired CEC control feature or not. Some brands do not support every feature/function via CEC control.

Control Connexio via the Display

ON: Turning the TV on/off will also send the command to the Connexio to wake up or put the Connexio to sleep.

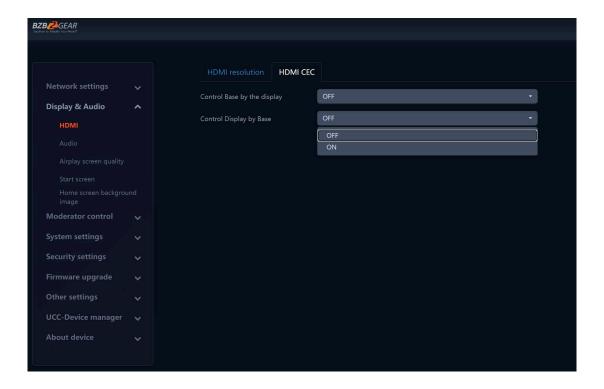
OFF: TV controls do not affect the Connexio.

Control Display via the Connexio

ON: Waking the Connexio will send the CEC command to turn on/wake the connected display device.

OFF: The Connexio will not affect the connected display.





Audio

Audio output

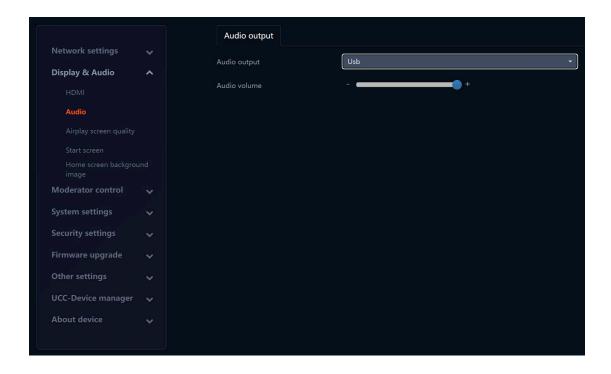
Choose audio output method:

Jack: output only through the 3.5mm mini-jack.

HDMI: output only through HDMI audio.

Jack & HDMI (Default): output 3.5mm jack & HDMI audio simultaneously.

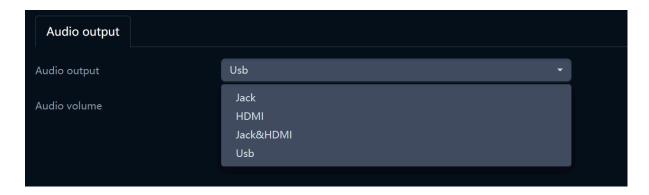
USB: Output audio to a connected USB device.





Volume

Users can select the volume to be output to the connected display/device from 0 to 100.



AirPlay Screen Quality

Click to select the one of three image quality options when transmitting from an Apple device via AirPlay.

HIGH (1920x1080) MEDIUM (1600x900) LOW (1280x720)





Start Screen

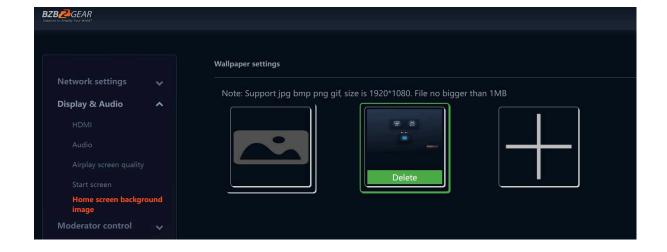
Show the Connexio device name and password when mirroring: Name (ID) and Wi-Fi password can be shown or hidden in the top status-line of the main splash screen.



Show connected PCs user name when mirroring: If this option is enabled, the Connexio will show a bubble on the display for a brief time with the connected/presenting PC username when sharing is initially started.

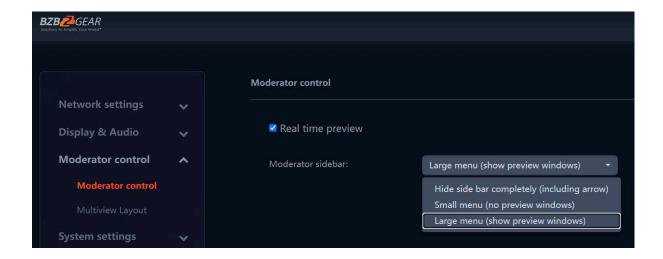
Home Screen Background Image

Users can change the background image of the splash screen. Select the desired image using the connected device which can be a jpg, bmp, png, gif with a resolution of 1920x1080p. Users can return to the standard splash screen any time.

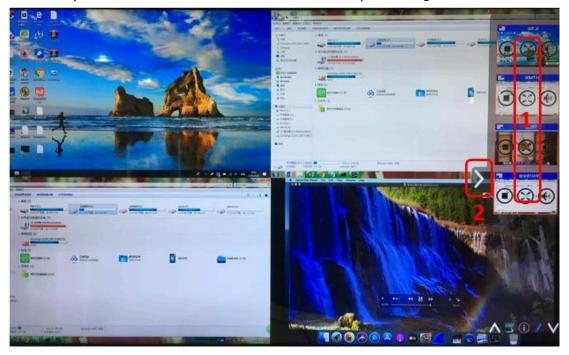




Moderator Control



Real time preview: Adds the window bar that enables previewing connected devices.

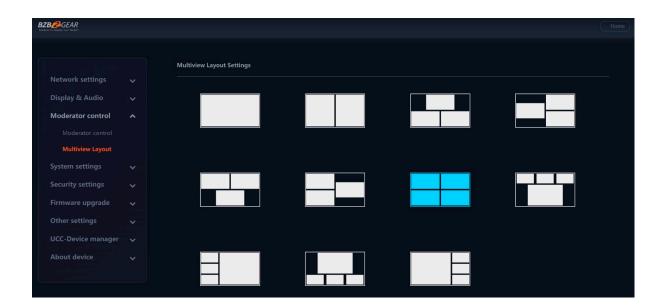


Real Time Preview

If the option is disabled then the preview window will only show a static picture for connected devices.



Multiview Layout



Users can select the multiview layout for connected devices. By default the Connexio is set to a 2x2 configuration.



System settings

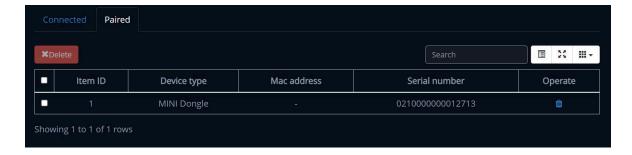
Buttons:

Connected: Shows the current status off all currently paired devices (Note: if the connected computer software is launched using the Mini dongle it will appear as so even after the dongle is disconnected)





Paired: Shows the properties of connected dongles and can be managed from this page.

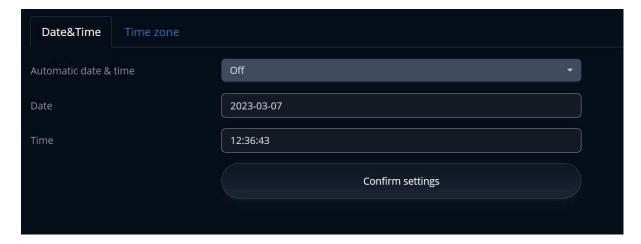


Date & Time

Includes Automatic date & time, Set date, Set time, Select time zone.

Automatic date & time: Check to use a NTP time server to provide time as system time.

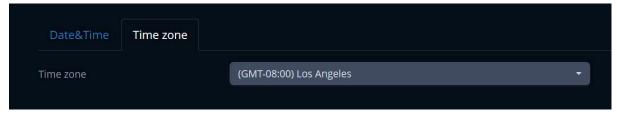




Set date: Click in the input field to fill out the appropriate date.

Set time: Click in the input field to fill out the appropriate time manually. The setting is not saved, when the system is powered off.

Time zone: Click in the input field to fill out the appropriate time zone.



Auto Standby

If the Auto Standby mode is activated, Connexio will automatically switch to power saving mode after a selectable time after the last dongle is unplugged, desktop application closed, or Wi-Fi of a mobile device is disconnected. In Standby, the green LED on top of the Connexio will be flashing and the HDMI-output is switched off.

When a dongle is plugged in or another device is connected then the Standby mode will be deactivated. Movement of a connected USB mouse will also cause the Connexio to wake.





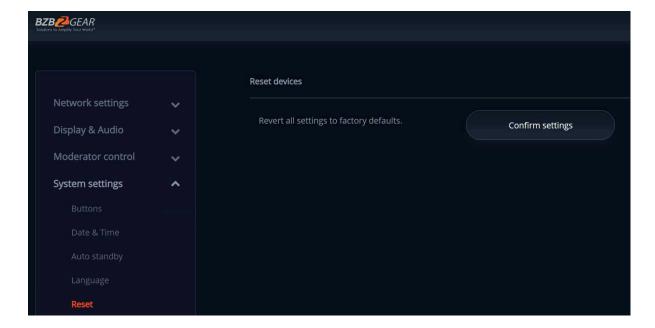
Language

Select an installed display language.



Reset

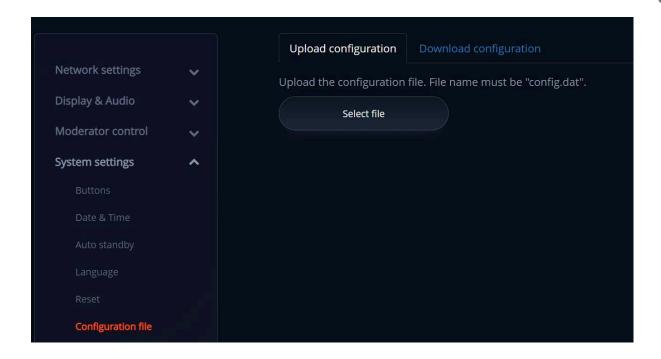
Restore the unit to factory settings.



Configuration File

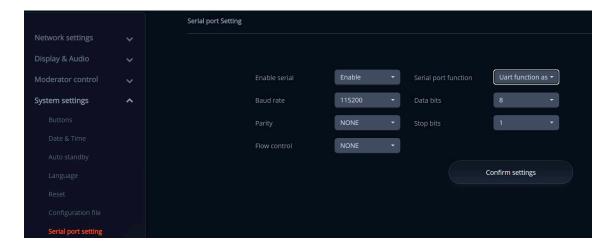
The Configuration File is a packaged file which contains all the configuration parameters of the Connexio, which could be downloaded and copied to multiple devices which need to use the same configuration.





Series Port Setting

To configure telnet command and RS-232 command.



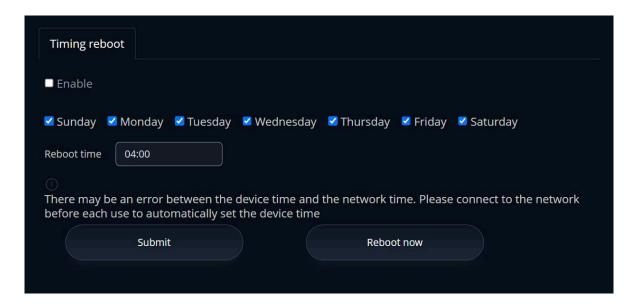
Telnet Switch

Switch on or off the telnet functions





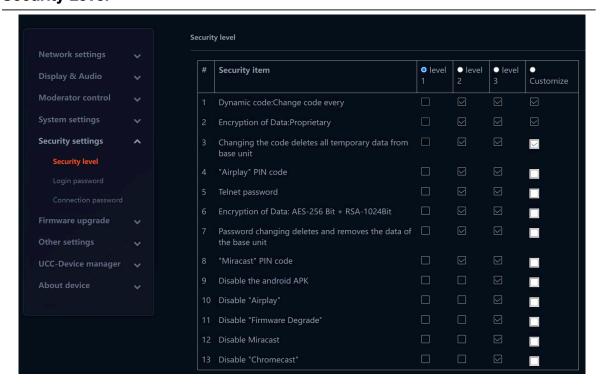
Reboot



Enable the system to automatically reboot on certain days at a specified time. This feature is best used in conjunction with the automatic date and time with an NPT server.

Security Settings

Security Level





Based on user requirements, three different security levels can be set in the menu of the Connexio for different security sensitive environments or security policies. A security level is a predefined set of settings. Click on the corresponding entry in the menu if you want to adjust the respective security features. The default setting is level 1.

Level 1: normal; security for daily usage for any organization such as a classroom, regular meeting room, etc.

Level 2: medium security; provides increased security for companies, organizations, government agencies, etc. through powerful encryption of audio and video data. Includes security features such as limiting the transmission of "AirPlay" by introducing a password.

Level 3: high security; used for strict security requirements for companies, organizations, authorities, banks etc.

This level contains all "Level 2" security measures; in addition, all mobile applications, such as the Android application as well as AirPlay are blocked. The web browser (WebUI) of the Base-unit is blocked. In addition, downgrading of the firmware is not possible.

The setting of the security level is displayed on the display splash screen by the shield icon

and clicking the icon



will show more information.

Login Password

Users can change admin password for entering the web interface. The default password, or after a factory reset, is "admin". Users can also deactivate the password if desired.





Connection Password

Two types of password formats can be chosen to show on the home screen.

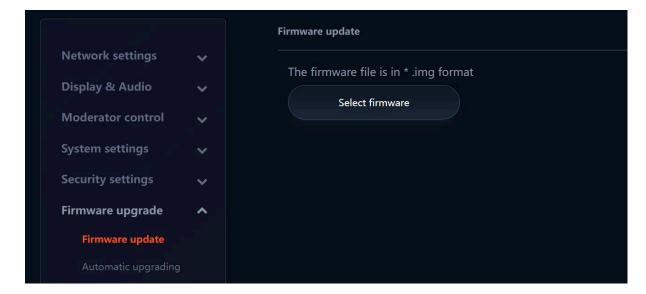
- 4-digits password, beginning with 0000
- 8-digits password



Firmware Upgrade

Firmware Update

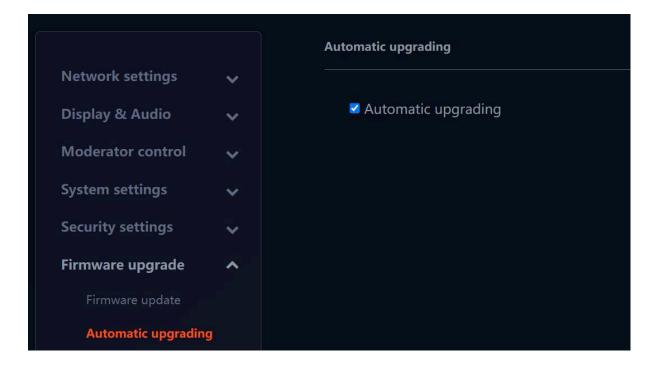
Upload firmware files to upgrade the Connexio.





Automatic Upgrading

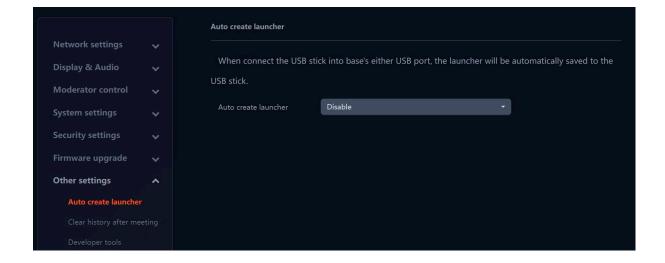
Tick the box to enable upgrading OTA via internet or local files.



Other Settings

Auto Create Launcher

When a USB flash drive is connected to the Connexio, the Connexio will automatically save the various launcher software files and device user manual to the flash drive.





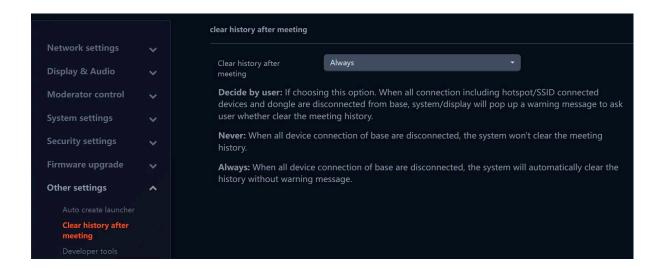
Clear History After Meeting

Pictures, videos, and music can be stored in memory of Connexio. This memory can be erased at the end of a meeting automatically when the software is closed.

Settings options:

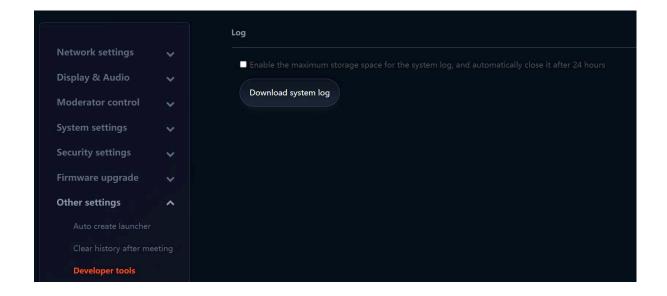
Decide by User – a dialog appears when the software is closed prompting the user to decide.

Never – storage space is automatically erased, when memory is filled for 90% Always – memory is automatically deleted.



Developer Tools

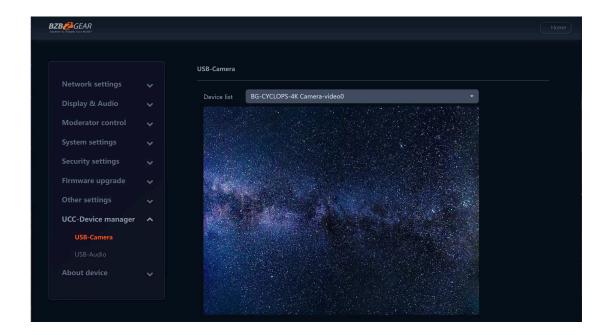
Check the box to enable Connexio to generate a system log file for diagnostics.





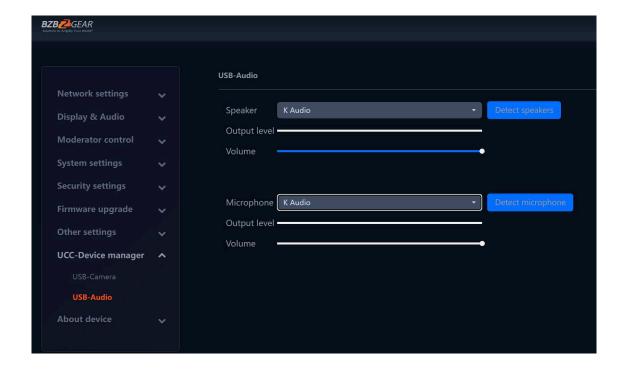
UCC-Device Manager

USB-Camera



Use the drop down device list to select and preview the image of a connected USB camera.

USB Audio

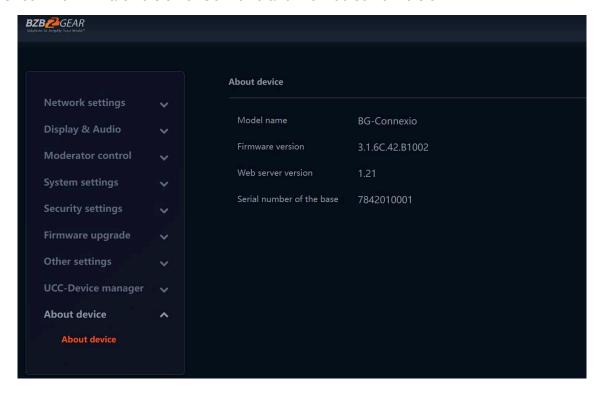


Use the drop downs and volume sliders to select and adjust connected USB speakers and microphones.



About Device

Check the firmware version of Connexio and the web server version.





Troubleshooting

Problem	Cause	Solution	
The WirelessMedia for Android application or AirPlay on IOS devices can't find the Connexio.	The Wi-Fi password of the Connexio changed while the android or IOS device was connected to the Wi-Fi of the Connexio.	Reconnect the mobile device by entering the password shown on the home screen.	
The image quality on the main display screen is not good.	The quality or length of the cable between the Connexio and the display or the connection between these two. Improper resolution for the main screen. Connexio Resolutions: 3840x2160_60Hz, 3840x2160_50Hz 3840x2160_30Hz, 1920x1080_60Hz, 1920x1080_50Hz, 1920x1080_30Hz	Replace the cable Check if the cable is connected properly. Change the resolution on the Setting configuration page and match it to the native resolution of the main screen.	
Bad wireless connection. The connection between the transmitter and the Connexio is not stable.	Wi-Fi problems. Interference in the radio channel. Overload in the radio channel. "WirelessMedia" does not automatically jump to other channels when there are changes in the RF environment. Low signal strength: Metal cabinets, walls, and other construction elements can cause reflections deteriorating the wireless signal. Obstacles between transmitting device/dongle and Connexio cause lowering of the wireless strength and quality.	Use a Wi-FI scanner to find a free wireless frequency and channel and select it via the setting configuration page. Check the RF environment regularly if there are frequent changes in Wi-Fi networks in your environment. Put the Connexio closer to the main screen. Change the orientation of the antennas at the rear panel of the Connexio to point in the transmitter's direction. Remove or limit as much as possible all obstructions between the transmitters and Connexio. Avoid placing the base-unit in cabinets, suspended ceilings, under tables, or in adjoining rooms.	



Problem	Cause	Solution
Cannot get the application to run when plugging the dongle into a laptop.	 When you are using "WirelessMedia" for the first time on your laptop or for guests, you have to copy the Launcher program "BG-Connexio windows.exe" or "WirelessMedia macOS.app" for first install on your Laptop /PC. Run this Starter- program. You can run the Starter App without Admin rights. Bad connection at USB port on the laptop Some types of USB devices might be blocked as per the company policy. 	There are 2 methods to load the Launcher program. Download the App via LAN or Wi-Fi from the Connexio or copy the application from the dongle. Reconnect to the USB port Try another USB port Reboot the laptop If possible, change the USB port policy on the laptop.
Low video performance (sharpness, audio and video dropouts, video stream is jerking,)	 The video quality depends on the computing power of the PC / laptop and chosen playback application. A laptop in battery mode can be switched to reduce computing power or to save energy. The transmission of HD video requires a certain amount of CPU power to guarantee the optimum quality of the transmission. 	 Use another media-player (VLC player) or another browser. Update the software of your video player to the latest version. Reduce the CPU usage of other software applications. Lower the screen resolution of the Laptop. Update driver of your graphics card. Turn off low power mode.
Video is not shown on screen	 The content uses HDCP The display cable is not connected correctly The Connexio is in standby mode or off. 	 WirelessMedia input does not support showing HDCP source. If possible, connect the source device directly to the display. Check if the cable is connected correctly. Power cycle the Connexio.



Problem	Cause	Solution
Your content is removed from the display and the LEDs on the base are blinking.	Connection to the Connexio is lost.	WirelessMedia tries to restore the connection automatically. If it fails, the LEDs on the Connexio start blinking. Try to reestablish the connection through the software/dongle.
No LAN connection with the Connexio.	Wrong IP address	IP address is not within LAN range DHCP is not enabled.
No Wi-Fi connection between mobile device and Connexio	Wrong Wi-Fi frequencyWrong SSID or password	Check the mobile device is on the correct frequency. Enter the correct SSID
No audio when transmitting a local file to Connexio	Unsupported audio format such as Dolby MS11, DDCO DTSLBR, DTSE, DTSNeoUltra, SRS-THEATERSOUND, DTS_StudioSound3D, DTS_HD	If possible, reformat the file to another audio format, like DD, DD+, HE- AAC, DTS DMP, WMA, DRA, COOK
There is no sound from the display.	 No connected audio device. Volume is set to OFF. The volume level is set too low in the options of the "WirelessMedia" Launcher program on PC. Audio signals may be muted. The Volume is set to low Audio is muted in the sound mixer in the taskbar. The media player software is out of date 	 Ensure the audio is turned on. Adjust level in menu configuration Adjust the volume in the "WirelessMedia" Launcher program on PC. Check the speaker icon in the taskbar and ensure it is not muted Adjust the volume options in the WirelessMedia application Right-mouse click the speaker icon in taskbar, open mixer and unmute "WirelessMedia" or "Video Playback" Update the media players software



Problem	Cause	Solution	
There is no sound when using a MacBook.	There is a problem with the sound-flower App which is integrated in the driver WirelessMedia.app.	You need Admin privileges Go to the macOS System Preferences and select the "Security & Privacy" tab. Find the "allow to run/install the sound-flower" and click on "Allow" next to "Matt Ingels," in order to allow Sound-Flower to install on the MacBook. Run the WirelessMedia.app again and it will auto-install Sound-Flower.	
There is no sound via AirPlay.	The volume is set too low, on the mobile device.	Increase the volume on the mobile device.	
There is no sound at main-screen, when mirroring a video from the "WirelessMedia for Android" application.	Due to an Android system limitation, Android doesn't provide an interface to capture audio. In this case, there is no sound when mirroring the video.	Use a dongle or Apple AirPlay to do the mirroring instead.	
Cannot update the firmware of the Connexio.	Flash disk format is not correct.	Please reformat the flash disk to be FAT format to update.	
Poor video quality/lag when using AirPlay.	The chosen application is throttling transmission.	Reduce the output quality in the chosen application to decrease buffering time needed.	



Tech Support

Have technical questions? We may have answered them already!

Please visit BZBGEAR's support page (<u>bzbgear.com/support</u>) for helpful information and tips regarding our products. Here you will find our Knowledge Base (<u>bzbgear.com/knowledge-base</u>) with detailed tutorials, quick start guides, and step-by-step troubleshooting instructions. Or explore our YouTube channel, BZB TV (<u>youtube.com/c/BZBTVchannel</u>), for help setting up, configuring, and other helpful how-to videos about our gear.

Need more in-depth support? Connect with one of our technical specialists directly:

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1.888.499.9906	support@bzbgear.com	bzbgear.com



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Limited Product Warranty Terms

Pro Line: 5-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Essential Line: 3-year warranty from the date of purchase for AV/Broadcasting products bought on or after August 1, 2024.

Cables: Lifetime Limited Product Warranty.

For complete warranty information, please visit bzbgear.com/warranty.

For questions, please call 1.888.499.9906 or email support@bzbgear.com.

Mission Statement

BZBGEAR is a breakthrough manufacturer of high-quality, innovative audiovisual equipment ranging from AVoIP, professional broadcasting, conferencing, home theater, to live streaming solutions. We pride ourselves on unparalleled customer support and services. Our team offers system design consultation, and highly reviewed technical support for all the products in our catalog. BZBGEAR delivers quality products designed with users in mind.

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