# MAX Connect



# **Installation Considerations**

- The MAX Connect is designed for installation behind or near the in-room display screen. It can be securely fastened to surfaces using the provided mounting plate and fasteners or installed freestanding. The mounting plate includes a built-in cable management retainer.
- The MAX Connect can be powered by a PoE Ethernet connection or with the included power supply.
- Standard WiFi signal positioning considerations apply if the MAX Connect will be used as a WiFi access point.
- Do not exceed the top end of the safe ambient operating temperature range of 32-104° F (0-40° C). When installed in enclosed spaces, be aware of conditions that can cause the temperature to exceed ambient room conditions.
- **Product Specification Sheet**: The specification sheet can be found on the MAX Connect's product page on biamp.com as well as biamp.com's <u>Downloads page</u>.
- The MAX Connect's meeting room display can be controlled by using the included handheld remote, a connected touchscreen display, or the MAX 8 Touch control panel (sold separately).
- The Connect's onboard webpage Administrative Console is accessed by connecting to the MAX via a network or USB connection.





# Included in the Box



Cable management cover

Mounting plate (pre-installed on device)





Bluetooth remote control



#### **Not Shown**

- An included power supply
- QR-code sheet linking to this manual
- Biamp Compliance, Safety, and Warranty Guide

# **Recommended Tools**

- A Phillips-head screwdriver set
- A laptop for configuring the MAX Connect
- Tools appropriate for drilling or inserting fasteners into the selected surface type



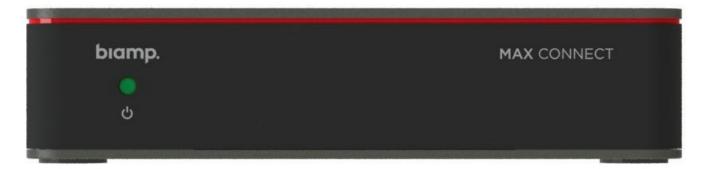
x4 mounting plate screws



x1 Cable management cover screw

These screws come installed on the mounting plate and cable management cover but will be temporarily removed during installation and setup procedures.

## Front Panel



Front panel indicators



# Device Layout continued...

Back Panel

# OUT 12V 500 2.0A POEt IN 6 4 8

#### Power, Network, and Reset

1. Power port 12 V/2A

#### Only use the provided AC adapter

- 2. Pinhole Reset
- 3. Ethernet PoE+

#### **Laptop Connection**

5. HDMI Input

#### **Room AV Peripherals**

- 4. USB 2.0 Type-A
- 6. HDMI Output
- 7. Retention screw retainer
- 8. USB 3.0 Type-C

# Installation

MAX Connect chassis is configured for two installation types:

- Freestanding
- Fixed to a surface using the mounting bracket

# **Freestanding Installation**

The mounting bracket can be quickly removed to install the MAX Connect freestanding on a surface such as a shelf or desktop the MAX Connect does not need to be secured to. However, this does remove the cable management retainer, which is part of the mounting bracket.

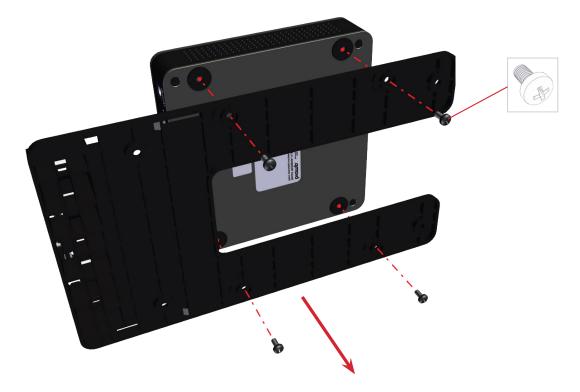
**1.** Remove the retainer screw from the cable management screw from the cover.



**2.** Squeeze the recessed release points on the cable management cover, and tilt the cover toward the MAX Connect to lift it off the bracket.



**3.** Remove the four mounting bracket screws that secure the bracket to the feet on the bottom of the MAX Connect.



**4.** Place the MAX Connect in its freestanding location. The rubber feet on the bottom of the MAX Connect are inteded to help prevent the device from sliding.



- 5. Connect the MAX Connect to the room's display screen and other AV peripherals.
  - See the Connect the Peripherals procedure in the Setup and Operating Info section of this manual.
- 6. Verify the connected cables will not pull the MAX Connect out of position.

The Max Connect is now ready for its initial setup. Please see the Setup and Operating Information section of this manual.

# **Fixed Installation**

The MAX can be installed and secured onto or under a tabletop or on a wall using the mounting bracket and included fasteners.

- **1.** Remove the retainer screw from the cable management screw from the cover.
  - The cable management cover must be removed to grant access to two of the four mount points.

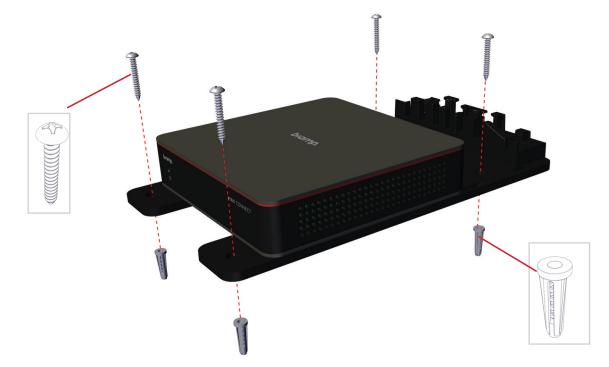


**2.** Squeeze the recessed release points on the cable management cover, and tilt the cover toward the MAX Connect to lift it off the bracket.

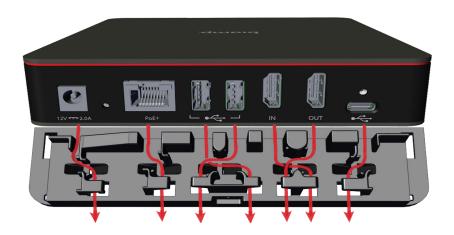


**3.** Use the mounting holes on the mounting bracket to mark the hole location on the surface where the MAX Connect will be mounted.

**4.** Use the included screws and, if applicable, the drywall anchors to secure the unit to the surface.



- 5. Connect the MAX Connect to the room's display screen and other AV peripherals.
  - See the Connect the Peripherals procedure in the Setup section of this guide.
  - Use the cable management retainer plate to secure the cables once connected.



**6.** After connecting a secured-in-place MAX Connect to the room's AV peripherals, remember to:

- Verify the cable connections are secure.
- Reinstall the cable retainer tray cover.



The Max Connect is now ready for its initial setup. Please see the Setup and Operating Information section of this guide.

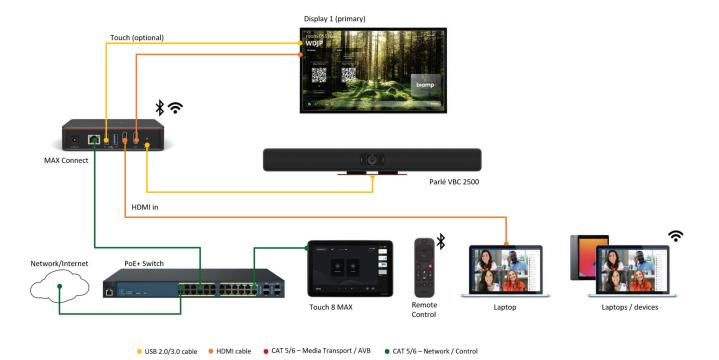
# **Setup and Operating Information**

# **Connect the Peripherals**

Once the MAX Connect has been secured in its installation location, connect the MAX Connect to the room's display screen and other AV peripherals.

The actual connections will depend on the AV equipment installed in the room. This procedure provides example system connect diagrams as well as device and network connection requirements.

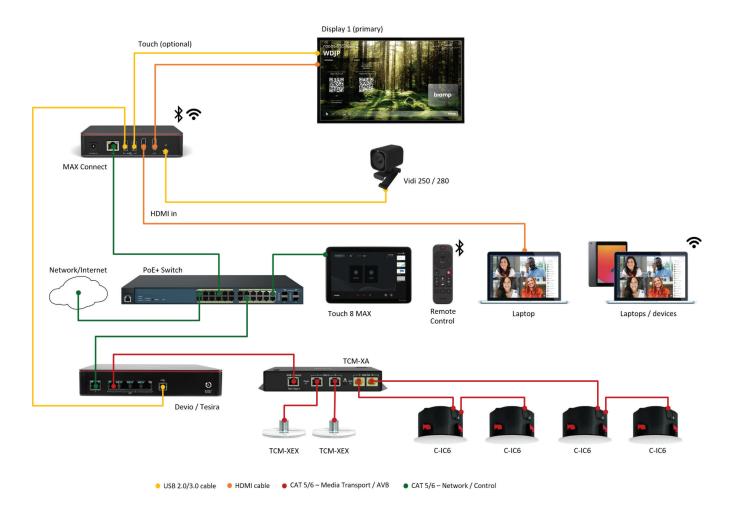
### **Example Systems**



#### MAX Connect - Single display, Conferencing Bar

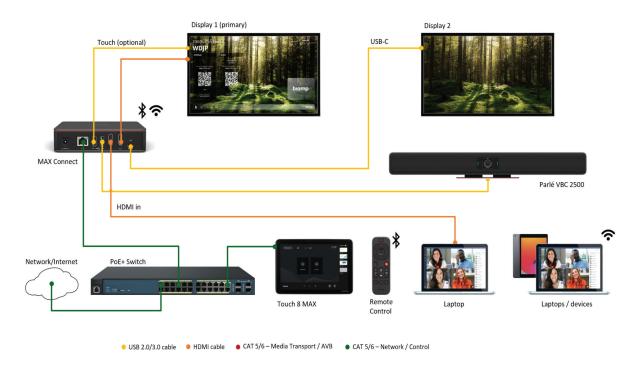
# Connect the Peripherals continued...

#### MAX Connect - Single display, Camera, Audio DSP

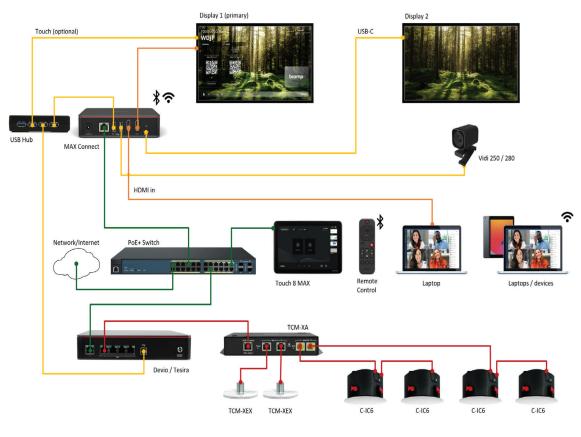


# Connect the Peripherals continued...

#### MAX Connect - Dual display, Conferencing Bar

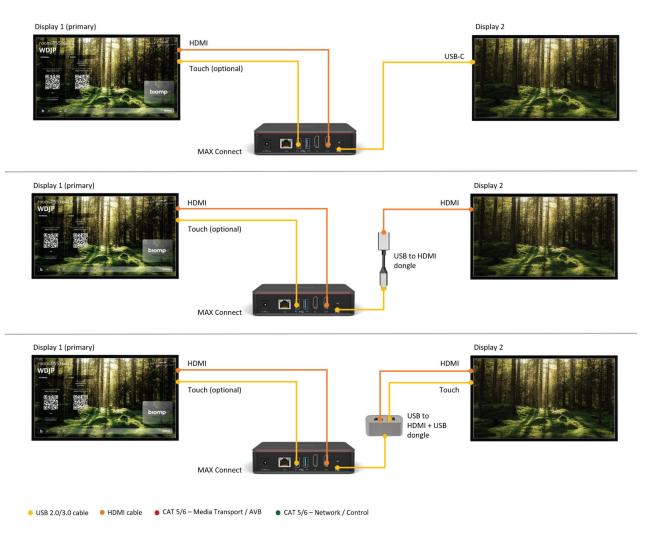


MAX Connect - Dual display, Camera, Audio DSP



USB 2.0/3.0 cable 
HDMI cable 
CAT 5/6 – Media Transport / AVB 
CAT 5/6 – Network / Control

#### MAX Connect - Dual display connectivity options



## AV Peripheral Requirements

Primary display:

- HDMI 1.4/2.0 compliant
- 1080p or 4K resolution
- Optional touch control via USB

Optional second display:

- HDMI 1.4/ 2.0 compliant or USB-C DisplayPort
- 1080p or 4K resolution
- Optional touch control via USB

Audio / Video:

• UVCcompliant USB devices

Launch feature is supported with Biamp ABC/VBC 2500.

## Network Connection Requirements

- All LAN connections must use Cat5e/Cat6 Ethernet cables and Gigabit switches
- MAX Connect can be powered through PoE+ (30W) or the included power supply unit.
- Touch 8 MAX can only be powered through a PoE+ switch or a PoE+ injector
- The MAX Connect relies on stable and efficient Wi-Fi connections and should be deployed on a professional, enterprise-grade wireless network to ensure optimal reliability during a meeting.
- Per each connected client:
  - 4 Mbps average / 15 Mbps peak
  - Upstream when presenting; downstream when receiving
  - Additional 4 Mbps average / 15 Mbps peak for the videoconference host when using BYOM

# **Network Port Configuration**

Local firewalls must be configured to allow the required MAX Connect traffic, as some communication ports might be locked by default, typically for security reasons. This list describes which ports are used by the system.

#### **MAX Connect LAN Traffic**

Ports	Туре	Usage	Direction	Required	Notes	
53	UDP	DNS	Outbound	Optional		
67	UDP	DHCP	Outbound	Optional		
80	ТСР	HTTP	Inbound/Out- bound	Yes	Inbound: Access to web client pair- ing screen, access to settings GUI login, TTC pairing, Mobile landing page	
123	UDP	NTP	Outbound	Optional	Outbound: Weather	
443	ТСР	HTTPS	Inbound/Out- bound	Yes		
1900	UDP		Inbound/Out- bound	Optional	Inbound: Web client after pairing, Settings GUI after login, TTC com- munication after pairing, Desktop client, Mobile client, MAX Connect Discovery	
3478	UDP	STUN-			Outbound: Agenda, Automatic firmware updates, MAX Connect Discovery	
5353	UDP	TURN	Inbound/Out- bound	Optional	Casting communication, legacy but maintained for compatibility	
5895	ТСР	MDNS	Inbound/Out- bound	Optional		
7000	ТСР		Inbound/Out- bound	Optional	MAX Connect Discovery, Casting Discovery	
7100	ТСР		Inbound/Out- bound	Optional	Casting communication	
8009	ТСР		Inbound/Out- bound	Optional	Casting communication	

#### MAX Connect LAN Traffic continued

Ports	Туре	Usage	Direction	Required	Notes	
7236	ТСР		Inbound/Out- bound	Optional	Casting communication	
7250	ТСР		Inbound/Out- bound	Optional	Casting communication	
20000- 36000	UDP		Inbound/Out- bound	Yes	Media streaming between MAX Connect and clients	
47000	ТСР		Inbound/Out- bound	Optional	Casting communication, legacy but maintained for compatibility	

#### **MAX Connect Wi-Fi Traffic**

Ports	Туре	Usage	Direction	Required	Notes	
Same as LAN ports, plus:						
53	UDP	DNS	Inbound	Optional		
67	UDP	DHCP	Inbound	Optional		
68	UDP	DHCP	Outbound	Optional		

#### Touch 8 MAX Traffic

Ports	Туре	Usage	Direction	Required	Notes	
53	UDP	DNS	Outbound	Optional		
67	UDP	DHCP	Outbound	Optional		
80	ТСР	HTTP	Outbound	Yes	Touch 8 MAX Pairing	
443	ТСР	HTTPS	Outbound	Yes	Touch 8 MAX communication after pairing	
5353	UDP	MDNS	Inbound	Optional	MAX Connect discovery	
20000- 36000	UDP		Inbound/Out- bound	Yes	Media streaming between MAX Connect and Touch 8	

# MAX Connect Help System

See the online MAX Connect Help System for information on how to configure and operate the MAX Connect and the room conferencing system it controls, including the hand-held Bluetooth remote control that ships with the MAX Connect.

• <u>https://maxconnect-help.biamp.com</u>

The Help System covers:

biamp.	MAX CONNECT		
	Model	Serial Number	Firmware version
DEVICE	MAX Connect	88000028	0.1.6.13
ROOM	Device Operations		
PERIPHERALS	REBOOT FA	CTORY RESET DOWNLOAD LOGS	
NETWORK			
ABOUT	Update		
	Automatically install new updates orr on Firmware File Scheduled installation of updates orr on Daily 01:00	CHECK FOR UPDATES	

## The Onboard Administration Console

The MAX Connect's Administration Console is an onboard embedded webpage system that allows an administrative-level user to:

- Set the MAX Connect device settings, including paring a new handheld remote control or re-pairing an old one
- Configure visual elements displayed on the conference room's display screen as well as the settings for meeting sessions
- Discover and manage peripheral devices connected to the MAX Connect
- Configure LAN network, and wireless connection options for the MAX Connect system
- View and download information about the end-user licensing agreement as well as web and firmware components

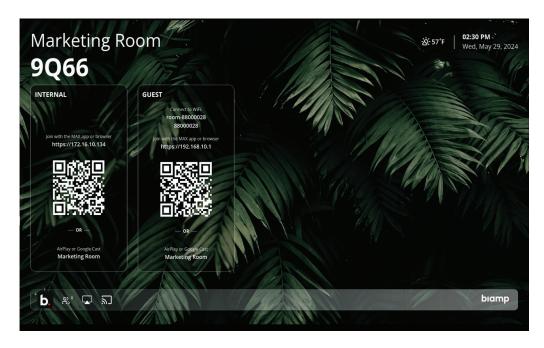
# MAX Connect Help System continued...

### Access the Console

The Console is accessed as a webpage from a connected computer using a browser. Enter the device's IP address or the device name in the browser URL field to bring up the sign-in page.

- https://<IP-Address>/settings
- https://MAXConnect -<serialNumber>.local/settings/

The default password the 8-digit serial number found on the MAX Connect.



# The Room Display and Controls

This section of the Help System covers:

• The login information displayed on the Welcome Screen for joining a meeting session

Settings for

- Turning attached microphones or cameras on and off
- Setting static camera preset views or enable dynamic video tracking of meeting participants
- Generating a new session

How to interact with the display using:

- The included handheld remote control
- A touch-enabled room display screen (purchased separately)
- The optional Touch 8 MAX control panel (purchased separately)

# MAX Connect Help System continued...

#### **User Apps**

This section of the help system covers the end-user apps available for users to join meeting sessions in the room, share content, and use the meeting room whiteboard.



#### **Download Options**

The macOS and Windows desktop client apps are available on the <u>downloads page of biamp.com</u>.

The iOS mobile app is available on the <u>Apple App Store</u>.

#### **User Device Requirements**

Windows

- Intel<sup>®</sup> Core i7 9th gen or higher
- Windows 10 / 11
- Admin privileges are required for the installation of the MAX software

#### Mac

- Intel<sup>®</sup> Core i7 9th gen or higher, Apple Silicon M1 or higher
- Mac OS 12 or higher
- On MacOS, screen recording and the MAX system extension must be allowed after installation

#### Web browser

Google Chrome, Microsoft Edge

#### iOS

• iOS / iPadOS 14 or higher

# **Cornerstone Support**

FAQs, system integration articles, troubleshooting, as well as firmware and software release notes can be found on Biamp's Cornerstone technical support site.

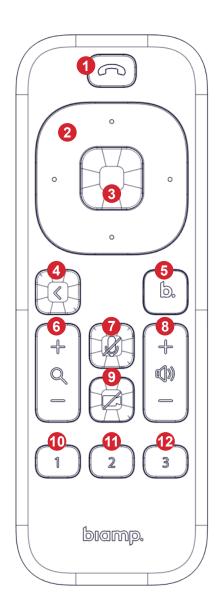
<u>https://support.biamp.com/Modena</u>

# Remote Control

The Bluetooth-enabled hand-held remote control comes paired with the MAX Connect that it ships with an with batteries installed.

Activating the remote control

- 1. Open the battery compartment by sliding the back cover down in the direction indicated by the embossed arrow, and remove the protective plastic tabs.
- 2. Press the "b." button on the remote to activate the popup Setting's menu on the display.
- 3. If the remote does not bring up the Settings menu, it can be paired from the Max Connect's Administration Console.



- 1. Red Phone button: No function
- 2. Directional Pad
- Used to navigate through menu options, shared content options, and controls in the Settings Menu.
- Manually tilts and pans the current camera view in the Camera Settings menu.
- 3. Center Button: Selects the highlighted menu option.
- 4. Back: Moves back to the previous menu or option.
- 5. Settings Menu button:
- Access the Settings menu from the Welcome Screen.
- Returns to the Welcome Screen when in Settings menus.
- **6. Zoom in and out rocker:** Zooms the camera Preset views in and out in the Camera Settings menu.
- **7. Microphone Mute and Un-Mute button**: Mutes and unmutes the room microphone.
- 8. Volume rocker: Increases and decreases the room's speaker volume.
- 9. Video Off and On: Turns the room camera on and off.
- **10.11. 12.:** Camera Preset Views 1, 2, 3.
- Used to select a static preset camera view in the Camera Settings menu.
- Press and hold to save the current camera view as a static Preset view.

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