

BYOM Feature Usage Guide

What is BYOM?

BYOM, or "Bring Your Own Meeting," allows users to utilize conference room cameras and omnidirectional microphone speakers for remote video conferences via Wi-Fi from their laptops. Simultaneously, the laptop screen can be wirelessly projected onto the conference room's display or projector.

Connection Topologies for BYOM

BYOM supports three connection topologies:

Topology for All-in-One USB Conference Audio and Video Device

1. The USB audio and video device connects to the rear USB port of the base unit.
2. The base unit's HDMI OUT connects to the display screen or projector.



Topology for USB Conference Camera and USB Omnidirectional Microphone

1. The USB conference camera connects to the front USB port of the base unit.
2. The USB omnidirectional microphone speaker connects to the rear USB port.
3. The base unit's HDMI OUT connects to the display screen or projector.



(Note: Audio priority is given to the rear USB port.)

For both configurations, users can set the camera type to either "USB Camera" or "USB Camera Re-encoded" in the web settings. The default is "USB Camera Re-encoded."

- USB Camera:** The base unit retrieves the MJPEG video stream from the USB camera and directly transmits it to the transmitter without processing.
Advantages: Low latency; Disadvantages: High Wi-Fi transmission requirements for high bitrate, potentially causing lag or disconnection.
- USB Camera Re-encoded:** The base unit retrieves the MJPEG video stream, re-encodes it, and transmits it to the transmitter.
Advantages: Stable transmission; Disadvantages: Increased latency (~30ms).



Topology for HDMI Conference Camera and USB Omnidirectional Microphone

1. The HDMI camera connects to the rear HDMI IN port of the base unit.
2. The USB omnidirectional microphone speaker connects to the rear USB port.
3. The base unit's HDMI OUT connects to the display or projector.
4. The web camera setting must be configured as an "HDMI Camera."



HDMI Camera: The base unit retrieves video from the HDMI camera, encodes it in MJPEG, and transmits it to the transmitter.

Average bitrate: 40 Mbps for 1080p at 30 fps, 25 Mbps for 720p at 30 fps.

If HDMI loop-through is enabled, the camera's video feed will be synced to the large display or projector. *(Note: The screen displays the projection when in use and the camera feed when idle.)*

Operational Instructions

- Insert an F21SU or F11SU transmitter into the laptop to enable wireless presentation and camera feedback functions.
- **Wireless presentation:**
 - Plug and play for wireless presentation.
 - The F21SU (TYPE-C DP) and F11SU (HDMI) support 4K resolution, while the F21SU (TYPE-A USB) supports 2K.
 - *Encoding: Hardware encoding for TYPE-C DP or HDMI; Software encoding for USB.*
- **Camera Feedback:**
 - Activates when a video conferencing application accesses the camera feed.
 - *Example (Tencent Meeting):* Select "BYOM UVC Camera" as the camera and "BYOM UAC" as the microphone.

