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Evaluation of Logitech MeetUp

Hands-on testing of an all-in-one USB mic, speaker, and camera solution for small to medium spaces

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Background

Founded in 1981, Logitech International S.A. (Logitech) is a leading PC peripheral manufacturer offering webcams, keyboards, standard and “gaming” computer mice, PC speakers, mobile speakers, tablet accessories, home control devices / remotes, and more.

In 2011, Logitech formed the “Logitech for Business” division offering a variety of products and accessories targeting business / enterprise users. Since that time, Logitech has released a number of conferencing-related AV products including Logitech Group, Logitech Connect, and others.

In June 2017, Logitech announced the MeetUp ConferenceCam – an all-in-one USB audio / video solution (a.k.a. group add-on solution) including an integrated microphone, speaker, and camera designed for use in small to medium spaces.

In early 2017, Logitech commissioned the WR test team to perform a third-party assessment of MeetUp ConferenceCam. This document contains the results of our hands-on testing.

What is a Group Conferencing Add-On Solution?

Group conferencing add-on solutions (a.k.a. group add-ons) are designed and intended to enhance the functionality of personal devices (e.g. notebook PCs, tablets, and smartphones) or meeting room PCs to support a group environment.

Group conferencing add-on solutions typically include microphone(s), speaker(s), and audio processing systems (echo cancelling and/or noise reduction algorithms, etc.) and are intended for use in small to medium-sized meeting rooms. In some cases, group add-on solutions also include an integrated video camera or inputs for external cameras (e.g., a USB webcam).

Group conferencing add-on solutions address two specific challenges:

- 1) The fact that meeting room PCs (meaning PCs of various form factors permanently installed in meeting rooms) do not typically include meeting-room-ready microphones, speakers, and cameras.
- 2) The fact that personal devices (e.g., notebook PCs, mobile devices, etc.) were designed to support the audio and video needs of a single person and NOT a group. In this use case, the group add-on solution’s audio (and possibly camera) is used in place of the personal device’s integrated mics, speakers, and webcam.

Understanding Logitech MeetUp

MeetUp is a video-capable group conferencing add-on solution designed for use with USB-capable devices such as notebook and meeting room PCs. A complete MeetUp package includes the following:

- The MeetUp device itself which includes:
 - 4K (ultra-HD) camera with 120-degree field of view, motorized pan/tilt, and 5x digital zoom
 - Three (3) element beamforming mic array with noise and echo cancellation
 - Custom-tuned integrated speaker
- RF remote
- USB 2.0 / 3.0 cable (5 meter length)
- External power supply
- Wall mount bracket ¹

MeetUp sells for US \$899 (MSRP), and is available from Logitech resellers and many retailers / e-tailers (e.g. Amazon, Best Buy, etc.).

Logitech also offers an optional expansion microphone (MSRP of US \$219) to increase the mic coverage range from 8 feet / 2.4 meters (using the integrated mics on the MeetUp device) to 12 feet / 4.2 meters.



Like its cousin Logitech Group ([see WR's April 2016 evaluation](#)), MeetUp is designed to be permanently installed in a meeting room and supports two basic functions / use cases:

- 1) **USB Audio / Video Add-On** – MeetUp connects to the USB port of a notebook PC or a meeting room PC, and acts as the external mic, speaker, and camera for that device. MeetUp is UVC (plug-and-play) compliant which allows it to work with Windows, Mac, and many other systems without the need for proprietary audio and video drivers, plug-ins, or apps.
- 2) **Bluetooth Speakerphone** – MeetUp uses Bluetooth pairing to connect to the user's smartphone, tablet, or notebook PC, and acts as the external mic and speaker for that device.

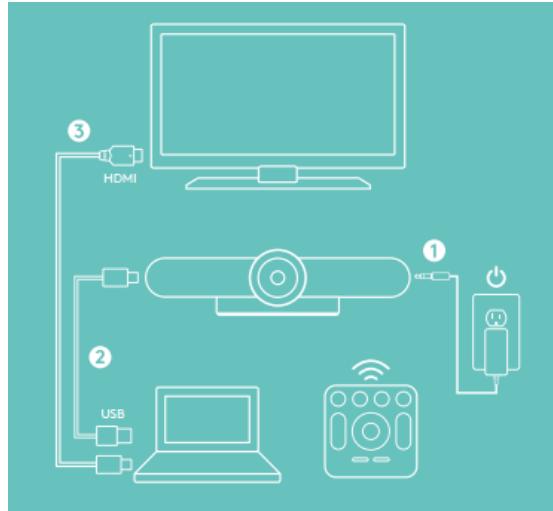
¹ Users can also purchase the optional Logitech TV Mount for MeetUp which holds the MeetUp device either above or below a flat-panel display.

Installing Logitech MeetUp

Installing MeetUp requires the following:

- Physical mounting of the device (wall-mount, display-mount, or sitting on the table)
- Connection of two cables – power and USB

For this effort, we placed the MeetUp device on the meeting room table at the foot of the display in one of our offices (see image at left below).



We then applied power to the MeetUp unit (cable #1 in the image at right above), and connected the other end of the USB cable (cable #2 in the image at right above) to each of the following host devices (one at a time):

- A Dell Inspiron 15 notebook running Windows 10 Pro (see image above at left)
- An Intel NUC mini-PC running Windows 10 Pro
- A MacBook Air notebook running macOS 10.12.2
- A Microsoft Skype Room System (SRS version 2) which includes a Microsoft Surface Pro 4 tablet installed in a Logitech SmartDock ([see WR's evaluation here](#)) running a version of Skype for Business optimized for use in a meeting room environment. (see image on next page)

As with most group add-on solutions, and thanks to MeetUp's UVC support, no software installation on the host device was required.

All in all, the most time-consuming part of installing MeetUp was unboxing the device.

As is the case with most of the group add-on solutions available today, MeetUp does not connect to the host device's video output. For this reason, we connected the video output of each host device directly to the room display (cable #3 in image at right above).

Hands-On Testing

USB Audio / Video Add-On Mode

To test the USB audio / video add-on capabilities of MeetUp, we leveraged a wide array of collaboration applications / cloud services including (in alphabetical order):

- BlueJeans Network
- Cisco WebEx
- Polycom RealPresence Desktop
- Skype for Business (with Office 365)
- Zoom

In all cases, Logitech MeetUp performed as expected, offering a solid video / audio experience.

Audio Performance / Experience

Overall, we were pleased by MeetUp's audio performance.

Microphone Pick-Up / Performance - MeetUp's integrated 3-microphone array performed well during our testing. At distances from 3 feet to 8 feet from the unit, MeetUp faithfully captured and sent our tester's speech to the far end. In fact, our staff was unable to discern whether the person was close to or relatively far from MeetUp's mics.

Noise Reduction – MeetUp's three-element beamforming mic array was unable to mask or eliminate in-room ceiling HVAC noise or off-axis noise (in our case the sound of people speaking outside the door of our conference room) during our testing. To be fair – this is on-par with most competing low-cost audio systems. However, the outgoing audio remained intelligible throughout our testing.

Incoming Sound Quality / Speaker Performance – MeetUp's speaker provided more than ample volume and solid audio quality during our testing.

Full Duplex Support – MeetUp passed our full duplex audio test (near and far-end participants speaking and hearing each other at the same time) without issue.



*Skype for Business huddle room including Logitech MeetUp connected to Skype Room System
(Surface Pro 4 tablet installed in a Logitech SmartDock)*

Video Performance / Experience

Image Quality - MeetUp's integrated 4K camera provided the far-end participants with a high quality, full-motion video experience during all test calls.

Participant Capture - MeetUp's 120-degree horizontal field-of-view camera successfully captured all local meeting room participants, including those seated only a few feet from the display as would be the case in small / huddle rooms.



Logitech C920 Webcam (78 degree FOV)



Logitech BRIO Webcam (90 degree FOV)



Logitech MeetUp ConferenceCam (120 degree FOV)

In the three images above, the local participants are seated ~ 36 inches away from the camera. The only difference is the camera in use to capture the local participants. While all three cameras are providing a high quality experience, the above highlights the importance of a camera's field-of-view when used in small meeting spaces.

Zoom Performance – MeetUp's 5x digital zoom, combined with its ultra-HD (4K) image sensor, allowed us to zoom-in closely on the person seated at the head of the table – without noticeable quality degradation. And the motorized pan / tilt functions worked as expected.

Remote Control Functions

The Logitech MeetUp RF remote offers the following functions:

- Microphone mute (red LED on device shows mute status)
- Volume up / down
- Camera pan / tilt
- Zoom in / out
- 2 camera presets (plus home)
- Answer and Hang-Up call (for Skype for Business only)
- Bluetooth on / off (for pairing with other devices)

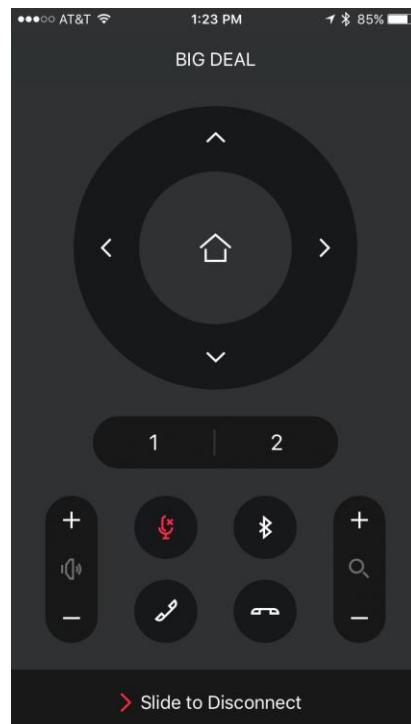
We tested each of the remote functions with each of the software clients listed above, and all features worked as expected – including the ability to answer and hang-up Skype for Business calls. In addition, MeetUp's mute status was displayed within the Skype for Business client on the host PC.

Additional Testing – Logitech ConferenceCam Soft Remote App

We also tested the recently released Logitech ConferenceCam Soft Remote app for iOS and Android (a.k.a. "soft remote.")

The soft remote (see screenshot at right) uses Bluetooth Low Energy to discover and pair with nearby MeetUp devices so that participants can control the device from their personal device.

We tested the discovery / pair functionality and confirmed that the soft remote worked just as well as the RF remote (all commands worked as expected with very low delay).



Soft Remote User Interface

Bluetooth Speakerphone Mode

To test using MeetUp as a Bluetooth speakerphone, we first placed MeetUp in Bluetooth pairing mode by pressing and holding the Bluetooth button on the RF remote. MeetUp then acknowledged it was in Bluetooth pairing mode with a noise and a blinking blue LED.

We then paired each of the following smartphones with MeetUp:

- A Samsung Galaxy S6 Active
- An Apple iPhone 7

MeetUp worked extremely well as a Bluetooth speakerphone, offering outgoing and incoming audio quality that we deemed more than adequate for use in a small to medium meeting room.

We also appreciated the ability to use the MeetUp RF remote to mute outgoing audio, increase / decrease volume on the host device (the phone hosting the audio call), and hang-up the call.

Analysis and Opinion

Logitech MeetUp is a well-performing USB group conferencing add-on solution from a company that has quietly become the leading player in the meeting room camera space.

MeetUp uses the same basic design language as the rest of Logitech's extremely successful ConferenceCam product line. In short – MeetUp combines a solid build, with strong video and audio performance, excellent compatibility (as a peripheral and with applications), no-brainer installation and operation, and an exceptional price point.

As a part of our testing, we used MeetUp as the audio and video (camera) system for notebook and meeting room PCs, running Windows and Mac operating systems, and using a number of leading collaboration applications. We even tested a not-yet-released remote control application, which also worked as expected. And finally we tested MeetUp as a Bluetooth speakerphone.

In all cases, in all areas (audio quality, video quality, ease of use, etc.), and with all of our test devices and applications, MeetUp met or exceeded our expectations for a USB video and audio device intended for use in small to medium conference rooms.²

Perhaps our only critical comment would be about MeetUp's limited noise reduction capabilities, which could be an issue in extremely noisy environments.

MeetUp's all-in-one form factor and 120-degree horizontal field of view, combined with its sub US \$900 price, makes it an exceptional group add-on device for huddle rooms (and even slightly larger spaces).

² WR did not receive an extension mic for our testing / use. For this reason, we are unable to opine on the use of MeetUp in larger meeting spaces.

Contributing Authors / Research Team



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About Wainhouse Research



Wainhouse Research, www.wainhouse.com, is an independent analyst firm that focuses on critical issues in the Unified Communications and Collaboration (UC&C). The

company conducts multi-client and custom research studies, consults with end users on key implementation issues, publishes white papers and market statistics, and delivers public and private seminars as well as speaker presentations at industry group meetings.

About Logitech

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Logitech designs products that have an everyday place in people's lives, connecting them to the digital experiences they care about. More than 35 years ago, Logitech started connecting people through computers, and now it's a multi-brand company designing products that bring people together through music, gaming, video and computing. Brands of Logitech include [Jaybird](#), [Logitech G](#) and [Ultimate Ears](#). Founded in 1981, and headquartered in Lausanne, Switzerland, Logitech International is a Swiss public company listed on the SIX Swiss Exchange (LOGN) and on the Nasdaq Global Select Market (LOGI). Find Logitech at www.logitech.com, the [company blog](#) or [@Logitech](#).