

Logitech Swytch

Hands-on testing of an innovative meeting room solution that adds BYOD (Bring Your Own Device) support to PC-based video conferencing rooms.



This evaluation sponsored by:



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 and remotes, and more.

In 2011, Logitech formed the "Logitech Video Collaboration" division, which offers a wide range of products and accessories targeting business and enterprise users. Members of our team have used and evaluated numerous offerings from the company's business division, including Logitech BRIO, Logitech GROUP, Logitech MeetUp, Logitech Rally, and Logitech Tap.

In August 2020, Logitech announced Swytch – an auto-switching solution that lets users host video meetings on a laptop using the meeting room AV peripherals (USB mics, speakers, and camera) already connected to systems like Zoom Rooms, Microsoft Teams Rooms, and Google Meet Hardware Kits.

In November 2020, Logitech commissioned the Recon Research (RR) test team to perform an independent, third-party assessment of Logitech Swytch.

This document contains the results of our hands-on testing of Logitech Swytch.

The Evolution of Meeting Room Video

In the last decade, the meeting room video conferencing market has experienced material changes in many areas, including hardware, software, the total cost of ownership (TCO), time to benefit, ease of use, ease of management, and more.

Area	Yesterday	Today
Hardware	Proprietary	PC-based systems Standard operating systems
Software	Proprietary	Apps designed for use on PCs running standard operating systems
Cost of Ownership (TCO)	High up-front cost High ongoing cost	Low up-front cost Low ongoing cost
Time to Benefit	Slow – often months	Fast – often just a few hours
Ease of Use	Weak – proprietary Uls, complex workflows	Strong – familiar UIs, streamlined workflows (e.g., Click to Join)
Ease of Management	Weak – proprietary systems	Strong – simplified using cloud portals
Scale (Deployments)	Typically Low	Significantly Higher

Figure 1: Meeting Room Video Conferencing - Shifts in the Last Decade

The changes above helped transform video conferencing from an intellectual curiosity into a core business tool used by millions of people every day.

However, the tectonic shift shaking the industry (and its stakeholders) to its core is the ongoing migration from standards-based (SIP, H.323) video conferencing systems to service-attached systems that leverage cloud service platforms from providers like Microsoft, Zoom, and Google.



The graphic below highlights several examples of service-attach bundles.



Figure 2: Logitech Room Solutions for Zoom, Teams, and Google

Each of the Logitech Room Solutions depicted above includes the following:

- A mini-PC pre-loaded with the respective service provider's meeting-room software application
 Zoom Rooms, Microsoft Teams Room, or Google Meet
- A Logitech MeetUp system (USB mic, speaker, and camera system)¹
- A Logitech Tap touch controller acting as the user interface for the solution

Such bundles offer a compelling set of features and benefits. For example, these bundles are easy to purchase, cost-effective, and quick to install.

These solutions also offer strong ease of use as they use meeting-room-friendly versions of the personal collaboration apps that users already know and use. People already using Zoom Meetings on their desktop PC, laptop, or mobile device will feel right at home using the Zoom Rooms app in their meeting rooms. The same goes for people using Microsoft Teams and Google Meet.

However, many of these solutions suffer from one fundamental flaw – to simplify and streamline the user experience, they only support one collaboration app.² Microsoft Teams Rooms (MTR) systems support the MTR app only. The same goes for Zoom Rooms (ZR) and Google Meet room systems.

Even if a participant brings a laptop running a different collaboration app to the meeting room, many of these video systems offer no easy way to connect that laptop to the installed AV peripherals and display.

To be fair, this single-app, "kiosk-like" approach offers several advantages such as turnkey functionality and strong reliability. However, these pros come at the cost of flexibility.

So, how can a user run additional collaboration apps in a seemingly locked meeting room environment? That's where Logitech Swytch comes in.

² Technically speaking, admins could load additional collaboration apps onto the installed PCs within these systems. However, these third-party apps would not be easily accessible to standard meeting room users.



¹ Within this study, the term "USB video system" will refer to a system that leverages external USB mics, speakers, and camera.

Understanding Logitech Swytch

Logitech Swytch is an auto-switching solution that adds BYOD capabilities to meeting rooms with video systems that use external USB AV peripherals (mics, speakers, camera) and HDMI displays.³

BYOD (Bring Your Own Device) conferencing refers to the use of a participant's laptop to host a collaboration session within a meeting room.

BYOD allows the USB AV peripherals installed in a meeting room to be used with any collaboration app running on a user's laptop (e.g., Amazon Chime, BlueJeans Meetings, Cisco Webex, Facebook Workplace, Fuze Meetings, Google Meet, GoToMeeting, Microsoft Skype, Microsoft Teams, Zoom Meetings, etc.).

Practically speaking, Swytch allows customers to deploy video meeting rooms that, by default, use their preferred collaboration app (e.g., Zoom Rooms, Microsoft Teams Rooms, or Google Meet), but also allows the use of any collaboration app running on a user's laptop.

Logitech Swytch works with Windows, Mac, and Chromebook laptops with USB 3.0 connections.



Figure 3: Logitech Swytch – Connector Cable (Left), Extender Unit with Connector Cable (Top Right), Hub (Bottom Right)

A Logitech Swytch package includes the following:

- The Swytch Connector (Y) Cable that offers USB-C and USB-A connections for the user's laptop
- The Swytch Extender that is installed under the meeting room table and transmits the laptop's USB and video signals to the Hub.
- The Swytch Hub that is installed at the front of the room and acts as the system's traffic cop by automatically switching signals:
 - Between the host PC, the installed AV peripherals, and the meeting room display when no laptop is connected to the Swytch Connector Cable, and
 - Between the laptop, the installed AV peripherals, and the meeting room display when a user's laptop is connected to the Swytch Connector Cable
- Various USB cables, HDMI cables, and power supplies

³ BYOD conferencing is also referred to as BYOC (Bring Your Own Codec) or BYOM (Bring Your Own Meeting).



Logitech Swytch sells for a manufacturer's suggested retail price (MSRP) of US \$999 and is available on the Logitech website, through Logitech channel partners, and from other retailers/e-tailers.

The standard Swytch package includes a 5m (16 ft) USB cable that connects the Extender to the Hub. For larger rooms or to run the USB cable in a conduit, the distance between the Extender and the Hub can be extended using optional Logitech 10m or 25m Strong USB cables.

System Installation and Configuration

For this assessment, Logitech provided Recon Research with the following equipment:

- 1 x Logitech Swytch package
- 1 x Logitech Small Rooms Solution for Microsoft Teams Rooms (MTR)
- 1 x Logitech Small Rooms Solution for Zoom Rooms (ZR)
- 1 x Logitech Small Rooms Solution for Google Meet

Physical Installation

We installed the above Logitech equipment in a small meeting room equipped with a 55" 4K touch display in our South Florida office.

First, we installed the Logitech Small Rooms Solution for Microsoft Teams Rooms (see the drawing below). As shown, this included connecting the Logitech Tap touch controller to the mini-PC pre-loaded with the MTR software using the Logitech Strong USB cable.



Figure 4: Logitech Small Rooms Solution – Installation Diagram – Includes Logitech Tap and MeetUp

We then conducted a few test calls to verify that the system was operating correctly.

Next, we added the Logitech Swytch solution to the installation per the diagram below.



Figure 5: Logitech Small Rooms Solution Installation Diagram - Includes Logitech Tap, MeetUp, and Swytch



As shown, the Swytch Hub connects to the following:

- the host PC using USB and HDMI connections
- the Swytch Extender using a USB connection
- the Logitech MeetUp using a USB connection
- the room display using an HDMI connection

These connections allow the Swytch Hub to detect when a laptop is connected to the Swytch Extender, and route the audio, video, and USB (control) signals appropriately.

While installing the Logitech Small Rooms Solution and Logitech Swytch, we were struck by the installation-friendly design of these devices.

For example, the Logitech Tap touch controller includes a recessed cable area hidden behind a removable cover on the device's back. As shown below (see the top red circle in the right photo), the power, HDMI, and USB cables tuck neatly into cable guides that provide proper strain relief.



Figure 6: Logitech Tap – Recessed Cable Well on the Back of the Device

Logitech even included 180° cable guides (see the bottom red circle) to ensure that cables are not damaged or accidentally dislodged.

The Swytch components are also installer-friendly. For example, the Swytch Hub, the Swytch Extender, and their respective power supplies are all clearly labeled with a familiar Logitech blue sticker.



Figure 7: Logitech Swytch Extender - Recessed Cable Well with Integrated Cable Strain Relief

The Swytch Extender uses a similar cable strain relief system as Logitech Tap. All connections are made within a recessed cable hatch, and the cables are mechanically held in place by the cable hatch lid. Once the cable hatch lid is secured using the black hand-screw, it is almost impossible to dislodge the cables.



Also, the Swytch Extender can be mounted under the table using either the under-table mount or grommet mount, both included within the Swytch package.

As shown below, the grommet mount fits through the hole in the table and the hole in the center of the Extender. Finally, the Swytch Connector cable runs through the inside of the grommet mount. The result is a clean and clutter-free installation that requires no special expertise or tools (assuming the table already has a grommeted hole).



Figure 8: Logitech Swytch Extender – Grommet Mounting Under the Table

We are absolute sticklers for secure device mounting and proper cable management in all meeting rooms. In these areas, Logitech Swytch certainly did not disappoint.

It took our team less than 15 minutes to make the above connections and add Swytch to our Logitech Small Rooms deployment in our test environment. In a real-world installation, additional time may be required to tidy-up cables and run the USB cable between the Extender and the Hub.

The sketch at right is an accurate representation of our test environment.

The red letter A is the Swytch Hub, B is the Swytch Connector, C is the Logitech Tap touch controller, and D is the Logitech MeetUp.



Figure 9: Logitech Swytch – Typical Small Room Installation

One additional comment – once installed, Logitech Swytch is immediately ready for use. There is no software to update or configure.



Hands-On Testing

In total, we tested Logitech Swytch in 12 different hardware combinations (3 room solutions x 2 laptops x 2 USB AV devices).

Room Solutions

Microsoft Teams Rooms (MTR) Zoom Rooms (ZR) Google Meet BYOD Laptops

Windows (Lenovo ThinkPad) macOS (MacBook Pro)

USB AV Devices

Logitech MeetUp (Small Room) Logitech Rally (Medium Room)

Figure 10: Logitech Swytch – Hardware Combinations Tested

We started our testing with the Logitech Small Rooms Solution for Microsoft Teams Rooms.

Step 1 - We placed a few calls using the default collaboration app on the installed mini-PC, in this case, Microsoft Teams Rooms.

Step 2 - We connected the Swytch Connector to a USB port on our Windows laptop (see image at right).⁴

A few seconds later, Swytch detected our laptop and established connections between our laptop, the Logitech MeetUp, and the meeting room display.



Figure 11: Logitech Swytch Connector – Connected to Windows Laptop

Step 3 - We placed a handful of BYOD calls using our Windows laptop, MeetUp's mics, speakers, and camera, the meeting room display, and collaboration apps from numerous providers (e.g., BlueJeans Meetings, Cisco Webex, Google Meet, Microsoft Teams, Zoom Meetings, and others).

Step 4 - We disconnected the Swytch Connector from our Windows laptop. A few seconds later, Swytch re-routed the USB and AV connections from our laptop to the installed mini-PC.

Step 5 - We placed another test call using the default collaboration app on the mini-PC.

Step 6 - We connected the Swytch Connector to the USB port on our MacBook Pro laptop. Sure enough, a few seconds later, Swytch established connections between the MacBook, the Logitech MeetUp, and the meeting room display.

Step 7 - We placed a handful of BYOD calls using our macOS laptop, MeetUp's mics, speakers, and camera, the meeting room display, and collaboration apps from numerous providers.

After completing the Microsoft Teams Rooms testing above, we reconfigured our environment to use Zoom Rooms and repeated all of the steps above.

We then reconfigured our environment to use a Google Meet hardware kit and repeated the steps.

⁴ On our Windows laptop, we tested both the USB-A and USB-C connections on the Logitech Swytch Connector.



Next, we reconfigured our environment to use the Logitech Medium Rooms Solution by replacing the Logitech MeetUp with a Logitech Rally system.

We then repeated the above testing with each of the three Room Solutions.

In all cases, using all three Room Solutions and both Logitech MeetUp and Logitech Rally USB AV devices, Logitech Swytch worked perfectly by successfully enabling BYOD video calling using both our Windows and Mac laptops.

Throughout our testing, Logitech Swytch worked perfectly by successfully enabling high-quality BYOD video calling using both Windows and Mac laptops.

Best of all, Swytch adds the ability to conduct video meetings from a laptop (BYOD support) <u>without</u> adding undue burden on the user. To conduct a BYOD meeting, the user makes a single USB connection to his laptop. It's just that simple.

Our testing revealed a few other Swytch features and benefits, including:

- **4K Support** built-in 4K support means Swytch does not reduce video quality and is compatible with both consumer and professional AV devices and systems.
- **Dual USB Connector** the Swytch Connector offers both USB-A and USB-C connections, making it compatible with virtually all laptops without the need for adapters or interfaces.
- **Laptop Charging** the Swytch Connector charges the connected laptop (max 60w via USB-C), so the user doesn't need a power supply, and knows his laptop won't give out during a call.
- **DisplayLink Integration** Swytch's integration of DisplayLink technology means that users need to connect only one cable to their laptop. This USB connection carries all of the required audio, video, and control signals.⁵
- Logitech Strong USB Cables in some situations, the 5m USB cable included in the Swytch package may not be long enough. Fortunately, Logitech offers compatible Strong USB cables at 10- and 25-meter lengths. The Strong cables are plenum-rated and Eca certified for installation in walls, above ceilings, and through raceways and conduits.
- **USB Device Agnostic** as a part of our testing, we connected a USB hub to the "USB-A AV" port on the Swytch Hub. We then connected USB webcams and mic/speaker devices from Logitech and others to the USB hub. Swytch worked equally well with all of these USB AV peripherals.
- **Collaboration App Agnostic** during our BYOD testing, we used a wide range of personal collaboration apps on our laptops. Swytch worked properly with each of these applications.

⁵ The first time a laptop is used with Swytch, several drivers (e.g., the DisplayLink driver) must be installed. On Windows laptops, this happens automatically. On Mac laptops, the DisplayLink driver must be downloaded manually. Alternatively, organizations can pre-install the required drivers as a part of their global build.



Our testing also revealed a few minor items that were not caused by Swytch, but may impact the user experience nevertheless, including:

- Connecting the Swytch Connector to a laptop does not automatically disconnect a call in progress on the installed mini-PC.
- While using Swytch in BYOD mode, the Logitech Tap touch controller shows the user interface from the primary collaboration app on the installed mini-PC, which may confuse some users.
- In some cases, our laptops did not automatically select the proper mic, speaker, and camera sources. This issue is easily fixed by choosing the proper sources within the collaboration app.
- Switching between the installed mini-PC and the laptop too quickly can cause issues.

Fortunately, these operating-system-related issues can be mitigated or avoided entirely by using the system correctly and applying common sense.⁶

Overall, our team was very pleased by the design, build, usability, and performance of Logitech Swytch.

Remote Monitoring / Management

Logitech Swytch also works with Logitech's cloud monitoring platform, Logitech Sync.

In this case, we had previously configured our Logitech Small Rooms Solution for Microsoft Teams Rooms to work with our Logitech Sync account. As a result, once installed, Swytch was automatically added to our Sync account.⁷

The screenshot of Logitech Sync below shows that Sync is actively monitoring the various devices within our Logitech Small Rooms solution, including the installed mini-PC ("Room"), the MeetUp device, the Tap controller, and the Swytch. The green circles indicate that each device is working properly.



Figure 12: Logitech Sync – Monitoring MeetUp, Tap, and Swytch Devices

When we utilized Swytch with our laptop, Sync indicated that our MeetUp device was disconnected from our room system (see the red circle in the screenshot below). Technically speaking, at least from the installed mini-PC's vantage point, this is correct. However, this is not the complete story.

⁷ The Logitech Sync agent running on the mini-PC acts as the conduit between the Logitech Sync cloud and the installed devices (Logitech and supported third-party devices) in the meeting room.



⁶ Our understanding is that Logitech is working with its room system partners to address these gaps.

			FL - TAP - TEAMS · 2 SEATS 🖄
Room	•	FL - TAP - TEAMS	
Insights			
-		Category 🗸 Trigger 🗸 Date 🗸	
MeetUp	0		
Video		Oct 29, 2020	
Ταρ		• MeetUp was disconnected	1:43 PM
, ,		MeetUp was reconnected	1:42 PM
Swytch		MeetUp was disconnected	1:42 PM

Figure 13: Logitech Sync – Displaying Notification that MeetUp is Offline

In this case, Swytch has re-routed MeetUp's connections from the mini-PC to the laptop. So the MeetUp device is actually online and working ... it's just in use by the laptop for a BYOD session.

We were pleased to see that the Swytch device was automatically detected and added to our Sync account. But ideally, Sync would let admins know when Swytch is in BYOD mode.



Analysis and Opinion

Logitech Swytch is a 4K-capable, USB 3.0 / HDMI auto-switching solution that adds single-cable, BYOD (Bring Your Own Device) capabilities to PC-based meeting room video conferencing systems such as Microsoft Teams Rooms, Zoom Rooms, and Google Meet Hardware Kits.

Stated differently, Swytch lets users conduct video meetings using collaboration apps on their laptops in video conferencing rooms that do not support third-party collaboration apps. This adds significant flexibility to seemingly closed video environments.

Swytch brings many noteworthy features to the table, including 4K support, support for both USB-A and USB-C laptop connections, single-cable operation, laptop charging, and native DisplayLink support. Swytch can also be remotely monitored and managed using the Logitech Sync management platform.

Also, Logitech designed Swytch for quick and easy installation, by non-AV professionals, without the need for specialized tools.

To facilitate this evaluation effort, Logitech provided the Recon Research team with a Logitech Swytch system and various other Logitech devices.

As a part of this effort, our test team conducted hundreds of video calls across numerous calling platforms and twelve different hardware configurations.

In all cases, Logitech Swytch performed as expected. There were no exceptions.

Throughout our testing and across numerous calling platforms and hardware configurations, Logitech Swytch performed flawlessly.

In the past, organizations that deployed the current generation of PC-based meeting room solutions enjoyed strong ease of use and performance, but often paid the price in application flexibility.

After taking Logitech Swytch through its paces in our lab, our team can definitively answer the question we asked earlier in this study:

How can a user run other collaboration apps in a seemingly locked meeting room environment?

That's easy. Deploy Logitech Swytch, and for less than US \$1000, add multi-platform support to your meeting spaces.



About Logitech

logitech

(Information below provided by Logitech)

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 video, music, gaming, and computing.

Logitech's Video Collaboration goal is to make video meetings accessible and affordable to every business and every individual, without sacrificing quality. We want to video-enable every meeting room, every workspace, and every home. Find Logitech and more on its video collaboration products at www.logitech.com/vc, the company blog or @LogitechVC.

About Recon Research



Recon Research (RR) is an analyst/market research firm focused on the enterprise communications space. Our company's coverage areas include unified communications, video conferencing, collaboration and ideation, audiovisual AV solutions, wireless presentation, and more.

RR provides enterprise customers, vendors, channel partners, and investment professionals with the information and insight needed to make fact-based decisions.

What makes RR different is the depth of knowledge and experience from 15+ years of company briefings, market analysis, and hands-on testing of products and services in the space.

For more information, visit us at <u>www.reconres.com</u>.

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