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A First Look at the Yamaha ADECIA Solution

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15%

of respondents felt their shared spaces were ready for the return to the workplace[1]

85%

of respondents are expecting to see at least small adjustments to conference rooms.[1]

A First Look at the Yamaha ADECIA Solution

In early 2021, Yamaha UC began shipping the ADECIA solution initially announced in September 2020. The initial product launch consists of four components, which together provide professional-grade audio in nearly any situation: a ceiling array microphone (RM-CG) paired with an audio processor (RM-CR), a L2 Network switch equipped with PoE+ (SWR Series), and 2x line array PoE+ powered speakers (VXL-16P). The ADECIA product family addresses pain points of installed audio by streamlining installation and configuration at a time when human capital is in short supply across North America and Europe, reducing both costs and lead times for installation. Additionally, the system can be remotely managed to ensure continuity while reducing maintenance costs when compared to traditionally installed and programmed systems.

The complexity of installed audio in conjunction with the ongoing costs of maintaining a room has driven many organizations down market at the expense of professional-grade audio. Finding the right mix of microphone pick up, audio reinforcement, and rejection while maintaining a budget can be difficult, especially at scale. As an IT decision-maker (ITDM), how do you make

[1]Survey in March 2021 of 342 end users across North America and Europe
[2]Survey Q2/3 of 2020 of IT decision makers

it easy for end users to use, and easy for the IT staff to configure and manage, without interrupting workflow or scheduled meetings? Once scaled to all meeting spaces, how do you tie a solution seamlessly into your other device management tools such that you can deploy, provision, and manage like any other part of your AV/IT infrastructure?

Solution Overview:

ADECIA has been designed from the ground up to solve the nuances of installed audio. The centerpiece of the solution is the RM-CG, or Ceiling Array Microphone, which leverages Yamaha's spiral approach to microphone placement with 64 individual elements able to pass through up to four individual beams of audio at any time. The microphone is connected via a single network cable back to a credenza or closet, where a Dante-equipped SWR Series L2 Network Switch with PoE+ brings together the microphone, the RM-CR audio processor , and PoE+ powered VXL-16P speakers. The RM-CR is a powerful processor capable of auto-recognizing the other components of the system, auto-tuning the system in three steps, in addition to dynamically learning the room if/when the layout changes. Together, the solution provides professional-grade audio to small, medium-sized, and—when paired with a second RM-CG—large meeting spaces.

The ADECIA solution features a single USB connection to the room infrastructure or a personal device. Once plugged in, the system will automatically populate options for ADECIA microphone and speakers under the device settings. Select the Yamaha system and start a call using the conferencing platform of choice. End users can control the mute (w/ green/red visual indicator) and volume directly from their device, or if integrated into a room system, on the touch panel provided.

A: PoE+ powered VXL-16P speakers
B: Ceiling Array Microphone (RM-CG)
C: RM-CR Audio Processor CG)
D: Dante-equipped SWR Series L2 Network Switch with PoE+

Well-designed hardware aside, the core of ADECIA's value is found in the software that configures and manages the system. First, the RM-CR is built to reduce or eliminate the need for specialized labor requirements, meaning it can be installed and configured by a level 1 technician, if not your in-house IT resource. From the unique way the RM-CG microphone array mounts into a ceiling tile, to the single cable connections, the install process is straightforward for anyone with minimal technology experience. Upon initial start-up, tune the system for the room using the auto-configuration process, or as an IT administrator, adjust the calibration as needed within the configuration settings. Using auto-configure, confirm the components, check that the speakers are correctly connected, and let the system
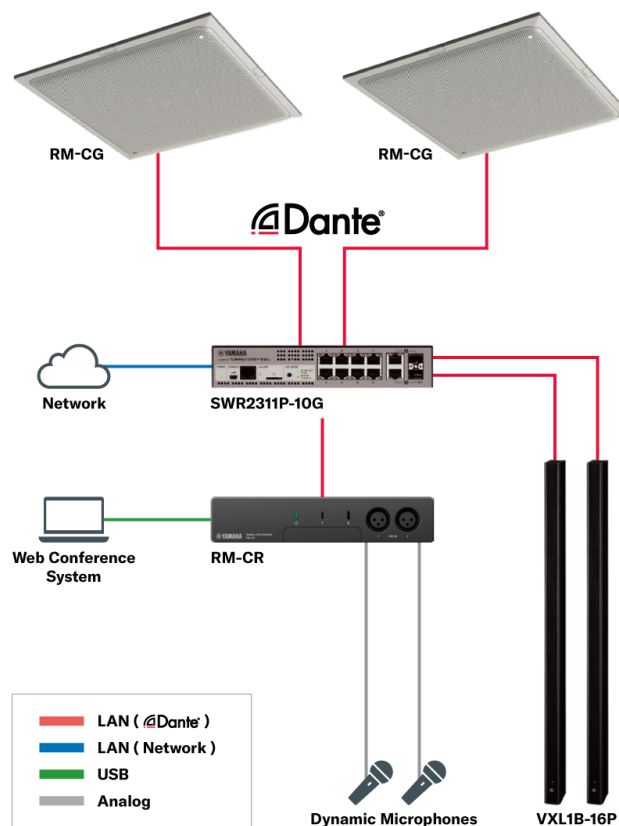
run a script that plays white noise at varying volumes within the space. Once complete, the room is ready to be used.

The tuning experience is an instrumental improvement over previous configuration processes, featuring a user flow typically reserved for premium consumer offerings. After setting up a single room, it becomes clear that this functionality will significantly reduce the resources needed to maintain a meeting room. The resulting audio is clear and intelligible for remote participants, even in the event of multiple speakers within the room talking at the same time.

Fit with the Rest of Yamaha UC: Yamaha UC offers a holistic portfolio of professional-grade audio communication and conferencing devices. Offerings include conferencing solutions that cover the complete expanse of small, medium-sized, and large rooms, and are compatible with all major solution vendors, including Microsoft Teams, Zoom, Google Meet, and bring-your-own-device (BYOD) use cases.

As a room-based peripheral, ADECIA adds value to a meeting space by scaling either the in-room PC or a personal device to professional-grade audio without the need for downloadable software add-ons or proprietary workflows. The solution follows a similar strategy to that of other recent Yamaha UC products by delivering professional-grade audio within a streamlined, user-focused experience.

With remote and hybrid meetings expected to be the norm for the foreseeable future, Yamaha UC is well suited to meet the challenge with a full range of scalable solutions including mobile, table-top, and installed audio for the enterprise.

End User Challenges:

When collaborating in hybrid settings, many employees naturally turn to the technology and workflow they are most comfortable with. This often means a personal device such as a laptop or tablet, which offers audio/video capabilities for an individual. Scaling an individual experience into the meeting room is essential for remote participants, without which the in-room participants are likely to compromise productivity and crowd around one device to be heard. To successfully scale the in-room experience, employees need an audio solution that is simple to operate and does not require a learning curve.

While video conferencing has become far more prevalent over the last year, any meeting without audio is just video surveillance. Consistent, professional-grade

audio is a requirement for productivity, and changing layout or adding physical distance for in-room participants directly impacts performance. Beyond the in-room performance, consistent UX across different spaces is equally important for adoption and management.

89%
of respondents prefer a component driven approach to conference rooms[2]

11%
of respondents prefer all-in-one devices.[2]

The bottom line is ITDMs need to create consistent in-room experiences to reduce the learning curve, and provide simplified management to ensure meeting spaces are operational.

ADECIA Has the Features to Address These Challenges:

This is where ADECIA offers a refreshing answer to these increasingly familiar challenges. From streamlining the installation process, to reducing the skillset needed to deploy, this system was designed to help businesses and integrators deliver a reliable, professional grade audio experience. Combine these innovations with

[2]Source: Wainhouse Research, Survey Insight: Meeting Room and WfH Technology Trends and Drivers – End Users Q4 2020, n= 348

a straightforward user interaction and the result is an audio system that can be scaled to almost any room.

Ease of Install: By reducing the connection points across each of the components, leveraging PoE+, and including corresponding indicator lights, the installation process is streamlined. These improvements significantly reduce the technical knowledge required to install a room system. In addition, the RM-CG ceiling array microphone installation removes the need to alter anything but a single ceiling tile, and is designed to prevent dust from getting into the device for fire safety.

Configuration: Through new software included with the RM-CR, integrators and administrators can now tune and configure a room in a matter of minutes. After auto-configuring the system in testing, it is clear that this approach to enterprise-grade audio should become the norm. Auto-recognition of the components with corresponding indicators on each eliminates confusion and considerable effort. The auto-tune capability borrows a workflow from premium consumer audio systems, leveraging the RM-CG ceiling array microphone to dynamically program the system while the VXL-16P speakers play white noise at various volumes. Once configured, the system is ready for service.

Simple to Use: Similar to other workflows for cameras or in-room content sharing, the ADECIA solution delivers a single USB audio-in which users can connect to. Once connected to a device, use the standard audio settings to route through ADECIA. Alternatively, the system can

be integrated into the room so users can leverage the audio of ADECIA regardless of conferencing infrastructure or other in-room hardware. Through this approach, the system delivers on being both flexible and scalable.

Management, Made Simple: Once configured, the system can be remotely managed to ensure reliability and uptime. In addition to monitoring capabilities, the system can be remotely tuned and configured, removing the need to have a resource come on-site to check settings or reconfigure after a layout change. This approach gives integrators and in-house resources the best chance of recognizing and resolving a problem without interrupting the room's workload and schedule.

Wainhouse's Conclusion on Our First Look at the Yamaha UC ADECIA System:

There is a lot to like with this system. With a focus on solving real-world pain points, ADECIA addresses the age-old challenge of poor in-room audio quality for integrators, administrators, and users alike. The timing of this new product family is exceptional, as ITDMs are currently preparing for the return to the office and the resulting hybrid work use cases.

With a value proposition of easy to install and manage, and simple to use, the Yamaha UC ADECIA system should address the market needs of both ITDMs and end users alike.

ABOUT WAINHOUSE RESEARCH

Wainhouse Research provides strategic guidance and insight on products and services for collaboration and conferencing applications within Unified Communications. Our global client base includes established and new technology suppliers and service providers, and enterprise users of voice, video, streaming, and web collaboration solutions. The company provides market research and consulting, produces conferences on technology trends and customer experiences, publishes a free weekly newsletter, and speaks at client and industry events.

ABOUT THE RESEARCHERS

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ABOUT YAMAHA UC

Audio and video conferencing solutions from Yamaha Unified Communications, Inc. streamline collaboration and boost productivity wherever people work or learn. Yamaha's renowned and rigorous approach to development and manufacturing of enterprise-grade microphone systems, conference phones, and video sound bars ensures superior audio quality, reliability, and flexibility. With both wired and wireless options, Yamaha's unified communications (UC) products enable users to have natural, clear conversations in every meeting space. For more information, please visit https://uc.yamaha.com/ in the United States and Canada or https://www.yamaha.com/2/countries/ in other regions.