

systems integrationasia



SPECIAL EDITION

JULY 2025

MARKET FOCUS: THE EVOLVING LANDSCAPE OF THAILAND'S AV INDUSTRY

VOICEBOX

The AI CoPilot:
Resisting Transcendence
Embracing Partnership

INTERVIEW

DANIEL CHOO
Championing Standards and
Professionalism for the Live Industry

INFOCOMM ASIA 2025 EXHIBITOR SPOTLIGHT

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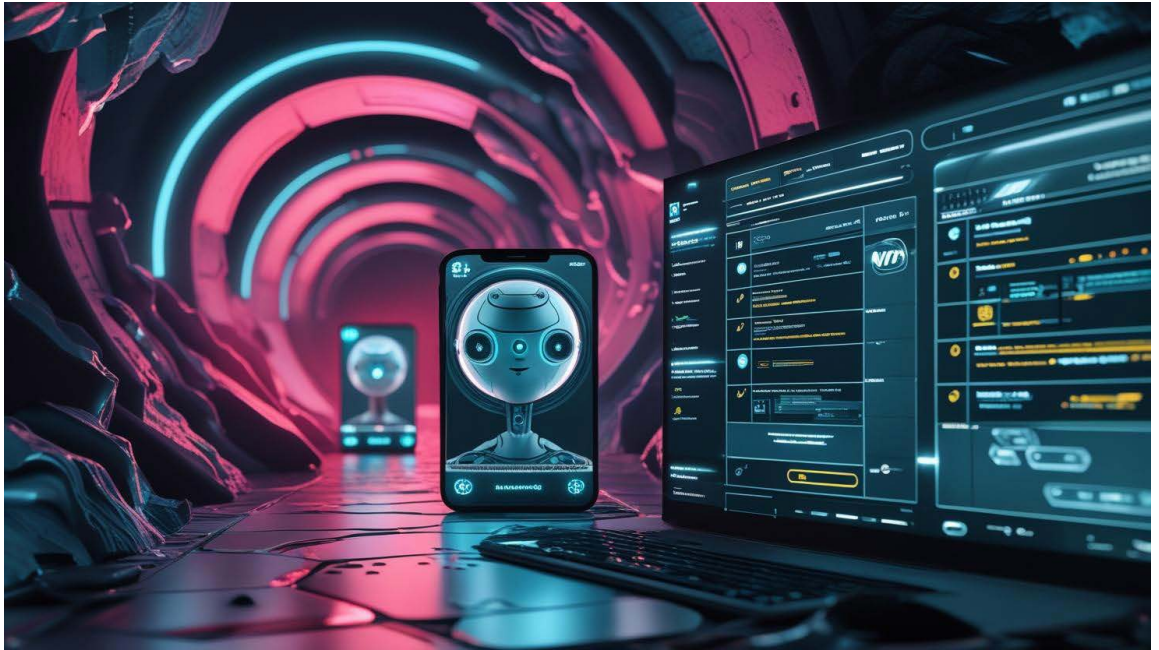
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Bring NDI® into Conferencing Software over USB



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Pro Convert IP to USB

- Converts one IP source up to 1080p60 with two audio channels into a USB output
- Supports NDI® High Bandwidth, NDI® HX2, NDI® HX3, SRT, RTMP and more
- Driver-free installation, no additional power source needed
- Standard UVC/UAC device for broad software compatibility
- Control PTZ cameras via NDI® or Visca over UDP

The new **Pro Convert IP to USB** lets users bring an NDI®, NDI® HX or streaming source into video conferencing and other non-NDI® software over a standard USB interface. Visit magewell.com/s/pro-convert-ip-to-usb to learn more.

www.magewell.com

From the Publisher

Thomas Richard Prakasam
Publisher/Editorial Director
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Welcome to the Special Edition of SI Asia that has been specifically produced for distribution at InfoComm Asia 2025. In this edition we get expert insights from Managing Director Pradit Sirijindaphan of Green Technology Engineering Co., Ltd and Joshua Oates, Business Development Director at Fuzion Far East about the evolving landscape of Thailand's AV industry. We also highlight the cutting-edge solutions from the InfoComm Asia showfloor that is being presented by INFiLED, Infobit, Magewell and Yealink. Our Interview column features Daniel Choo who is championing standards and professionalism for the Live Industry, from right here in Thailand. In our VoiceBox column, Marc A. Remond, Partner & Founder of Strategic Pathways, dispels the myth of AI as a ghost in the machine striving to become a god. Instead, he frames it as a practical, powerful, and subservient co-pilot. Our Feature column touches on the Audio Video over Internet Protocol (AVoIP) market which is surging ahead, fuelled by the rapid adoption of IP-based technologies across industries. In this issue, we bring you exclusive insights from the key players shaping the AVoIP landscape—Dante, IPMX, NDI, and SDVoE. In our other Feature Column we shine a spotlight on sustainability in the AV industry. Sustainability must be a core consideration in every aspect of AV—from space design and solution selection to the responsible disposal of outdated technology. Leading the charge is SAVE—Sustainability in AV—an independent, all-volunteer 501(c)(3) non-profit dedicated to transforming the pro AV industry from a sustainability laggard into a leader. Enjoy the read and have a fruitful InfoComm Asia 2025.

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INFiLED to ‘WOW’ Visitors at InfoComm Thailand 2025

For three days, INFiLED will showcase not just products, but a vision for the future of visual storytelling—where immersive content, real-time workflows, and LED excellence come together.

INFiLED will take centre stage—delivering an unforgettable experience that redefines what’s possible in Extended Reality (XR) and Virtual Production (VP).

Immersive Worlds: XR/VP Collaborations with Industry Leaders

Infiled to make waves with its XR (Extended Reality) and Virtual Production (VP) showcase, developed in collaboration with key industry players: HiRender, GoldenDuck, and ZEISS.

- HiRender, known for its powerful rendering systems, will help demonstrate real-time content playback with exceptional visual fidelity—ideal for film, television, and commercial production.
- GoldenDuck, a leading AV integration expert in Southeast Asia, partners with Infiled to ensure seamless system integration, content pipeline optimization, and on-ground technical support.

• ZEISS provides tracking sensors that allowed for ultra-precise camera movement tracking within the VP stage, enabling synchronized background adjustments and perspective changes that feel natural and cinematic.

This trio’s collaboration with Infiled will allow attendees to witness the future of film production firsthand: virtual sets that respond in real time to camera motion, complete with photorealistic rendering, lighting adaptation, and perfect parallax.

The booth will feature a real XR stage where participants can interact with virtual environments, showcasing how

LED walls are replacing green screens to enable more immersive, cost-efficient, and flexible productions.

Out in the Wild: Outdoor HM10 Solution

Taking things outside, Infiled will unveil its HM10 Outdoor solution, a high-brightness LED panel built to withstand the elements without compromising on visual performance. With an IP65 rating, wide viewing angles, and high refresh rates, the HM10 is tailored for outdoor events, large-scale public installations, and digital signage.



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XR/VP SOLUTION
Immersion that powers Innovation

Visit us for more information:
Booth: J-01
Date: July 23-25, 2025

In Partnership with:

ZEISS | **BROMPTON TECHNOLOGY** | **hecocos xR/VP** | **GOLDENDUCK**

www.infiled.com / info@infiled.com

What will truly impress attendees is the HM10's robust construction paired with its sleek profile. Lightweight and modular, the system offers easy setup and fast servicing, making it a favourite among rental companies and outdoor event organizers alike. The vibrant display quality holds up even under direct sunlight, making it perfect for sports venues, festivals, or city-center advertisements.

Next-Level Control: Command Center Solutions

Adjacent to the VP area will be Infiled's **control room solution**, a must-see for AV professionals in the command and surveillance space. Designed for 24/7 operation, the control room LED wall delivers crystal-clear visuals with consistent brightness and colour fidelity across all viewing angles. Perfect for broadcast monitoring, security, traffic control, or critical decision-making environments, the solution offers a seamless canvas that supports multi-source content and real-time data feeds.

Built with reliability in mind, it features redundant power supplies and signal paths, ensuring zero downtime in mission-critical situations. Smart calibration tools and

front-accessible panels also simplify maintenance—crucial in high-demand environments.

Rental Reimagined: Creative LED Installations

Creativity is the heartbeat of Infiled's rental segment, which pushes the envelope on design with an array of imaginative LED solutions. The booth will feature:

- Curved LED walls that envelop viewers in 360° visual content, ideal for immersive brand experiences or stage backdrops.
- Transparent LED displays, which creates holographic-like visuals while allowing light and space to pass through—perfect for shopfronts or trade shows where aesthetics matter.
- RC entrance arch, a bold structure welcoming guests with animated content, setting the tone for a tech-driven experience right from the entrance.

The emphasis is clear: rental is no longer just about screen size—it's about creative impact. Infiled's solutions empower event producers and designers to dream big and build

spectacular visual environments that are memorable, modular, and manageable.

A Vision Realized

Infiled's booth is more than a showroom—it's a vision statement. With each segment, from broadcast-ready VP screens to creatively shaped rental structures and high-tech XR stages, Infiled demonstrates why it remains at the forefront of LED innovation.

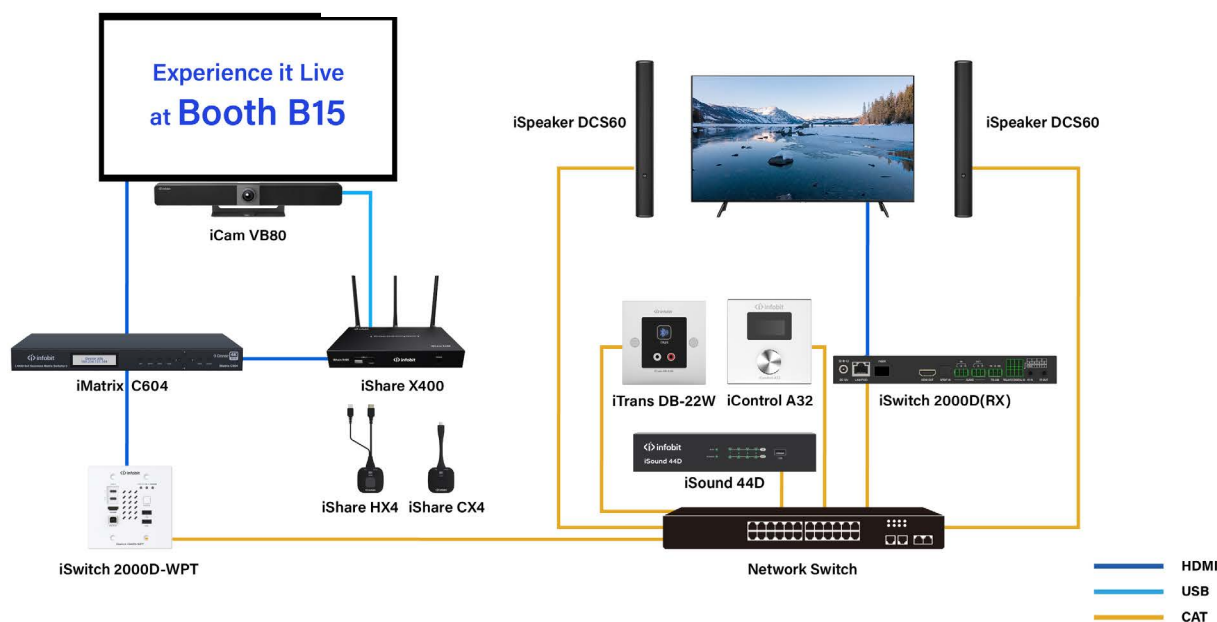
The company's focus on collaboration, creativity, and customization ensures that whatever the future of AV looks like, Infiled is already building the screen it will be seen on.

Visit. Experience. Transform.

Whether you're building a full-scale XR studio or exploring LED integration for corporate presentations, INFILED's solutions offer unmatched performance, reliability, and visual excellence.

"Virtual production is no longer a trend—it's a transformation. And we're here to lead it."

www.infiled.com



Simplifying Room Flexibility with Infobit's All-in-One AV Innovation: The iMatrix C604

In today's dynamic environments—whether in corporate offices, training facilities, or places of worship—flexibility in room configuration is more than just a bonus; it's a necessity. Many organizations face the challenge of transforming spaces seamlessly from a single large room into smaller, independent areas without compromising audio-visual quality or ease of use. Infobit AV addresses this challenge head-on with its latest innovation: the **iMatrix C604**.

One Device, Endless Possibilities

The **iMatrix C604** is a powerful 6x4 HDMI/USB-C matrix switcher designed

specifically for flexible spaces. With built-in audio DSP, USB switching, and support for **BYOM (Bring Your Own Meeting)** scenarios, it's the ideal solution for small to medium-sized UC-enabled rooms.

You can deploy it as a **standalone unit**, which already includes all the necessary ports to support essential components:

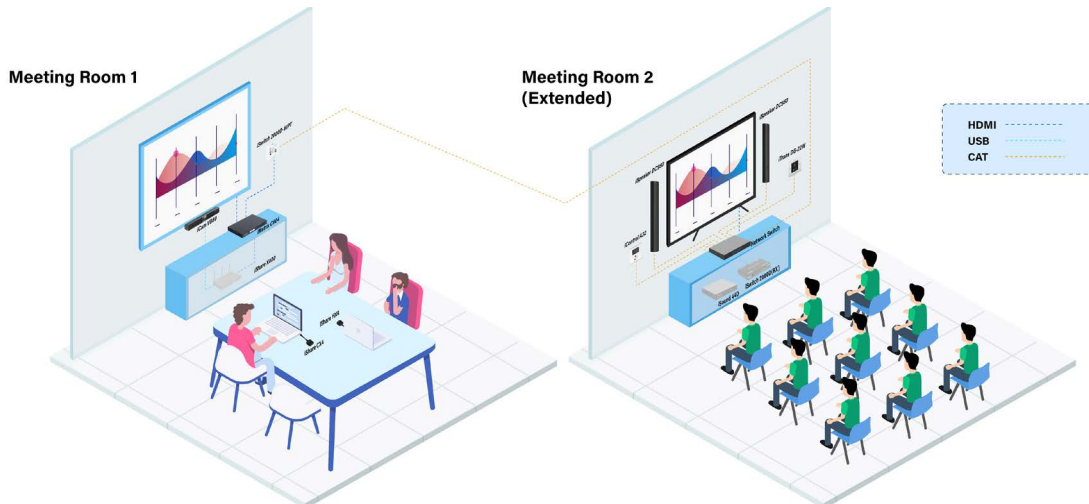
- **USB-C with PD 3.0** for single-cable connection (charging + data)
- **Camera integration**
- **Touch panel input**

- **Up to 4 HDMI outputs** for multiple displays

With just one USB-C cable, users can connect their laptops and instantly take control of the room's camera, microphone, speaker, and display—perfect for quick plug-and-play meetings.

Scalable for Larger Needs

But what truly sets the iMatrix C604 apart is its **modular scalability**. For those looking to enhance their experience or connect multiple rooms, Infobit makes it simple:



• **For Enhanced AV Experience:** Connect the iMatrix C604 to the **iCam VB80**, Infobit's premium video bar. This all-in-one solution adds studio-quality audio and an intelligent camera that tracks speakers and adapts to room layouts. It connects easily via USB for a seamless upgrade.

• **For Wireless Collaboration:** If wireless BYOM is preferred, pair the system with the **iShare X400**, our wireless collaboration hub. Users can present in 4K quality via a **USB-C dongle**—no drivers, no delays. For users without USB-C, Infobit also supports traditional setups through our **HDMI dongle**, ensuring everyone can connect effortlessly regardless of device.

Extend Across Rooms with Ease

Need to link multiple rooms together for a unified presentation or worship service? The iMatrix C604 integrates effortlessly with **iTrans 2000D-WPT**, a wallplate transmitter that supports **Dante AV** over a single network cable. This means:

- High-quality **4K video**
- **Crystal-clear audio**
- **Minimal cabling**
- **Low latency distribution**

Simply plug into your local network and extend content to other rooms with no complex wiring or additional AV infrastructure. Ideal for multi-purpose halls, training centers, and religious venues, this feature enables simultaneous streaming and presentation in multiple areas.

Real-World Simplicity

What makes the iMatrix C604 truly valuable is its simplicity. It's designed to work right out of the box, with intuitive controls and flexible connectivity options. Whether you're a tech-savvy IT manager or a first-time presenter, the system works the way you expect—no learning curve, no special training.

Designed for Today. Ready for Tomorrow.

Infobit believes AV solutions should grow with your needs. The iMatrix C604 is future-ready, allowing users to scale up without replacing their core hardware. From a single meeting room to a multi-room campus, it adapts to your space, your devices, and your workflow.

Summary of Key Features:

- **6x4 Matrix Switcher** with HDMI and USB-C inputs

- **Built-in Audio DSP** and USB device control

- **BYOM Ready** with USB-C PD 3.0 single-cable connection

- **Compatible with iCam VB80 Video Bar** for premium sound and video

- **Works with iShare X400** for wireless presentation

- **Dante AV support via iTrans 2000D-WPT** wallplate over 1 network cable

- **Plug-and-play with both USB-C and HDMI dongles**

Final Thoughts

With the iMatrix C604, Infobit is transforming how spaces adapt to people—not the other way around. Whether you need a quick UC setup, a wireless meeting hub, or a full-room AV extension over Dante AV, this system brings it all together—beautifully and effortlessly.

Discover more at

www.infobitav.com

Visit **Booth B15** at Infocomm Bangkok 2025.

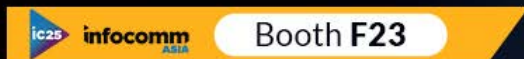
Infobit AV – Designed for Flexibility, Built for Simplicity.

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Pro Convert IP to USB

Bring NDI® into Conferencing Software over USB



Magewell Brings NDI into Conferencing Software and More with Pro Convert IP to USB

Compact new converter lets users capture live NDI® and streaming sources into software over a USB interface and makes its first debut at InfoComm Asia. Come and visit us at **Booth F23!**

Video interface and IP workflow innovator Magewell has unveiled a powerful new model in its popular Pro Convert family of compact IP conversion devices: the **Pro Convert IP to USB**. Combining the flexible decoding capabilities of the Pro Convert family with the plug-and-play video ingest of Magewell's renowned USB Capture devices, **Pro Convert IP to USB** lets users bring an NDI®, NDI® HX or streaming source into

video conferencing and other types of software over a standard USB interface.

While direct support for NDI video connectivity technology in third-party software has grown significantly, many AV professionals have continued to find themselves unable to join the NDI ecosystem. Software solutions without native NDI integration may support it through NDI Tools, but stringent IT restrictions in many

environments often preclude the installation of such utilities. The **Pro Convert IP to USB** hardware overcomes this issue and eliminates complexity by converting the NDI source into a USB output that software sees as easily as a webcam.

In addition to NDI® High Bandwidth, NDI® HX2 and NDI® HX3, **Pro Convert IP to USB** also supports H.264 or H.265 source streams in protocols including SRT, RTMP, RTSP, RTP, UDP and HTTP. This allows users to easily



bring live network sources in any of these formats into their software. Even users of software that natively supports NDI or streaming sources can benefit from **Pro Convert IP to USB**, as decoding these inputs externally in the device reduces the processing burden on the host system's CPU or GPU.

Pro Convert IP to USB decodes IP video sources up to 1920x1080 resolution and can bring them into software as uncompressed video at full 60 frames per second or as MJPEG-compressed video at 30 frames per second. While 30fps is adequate for some video conferencing software, the 1080p60 capabilities of **Pro Convert IP to USB** flexibly support higher frame rate applications including telepresence solutions, live production software and more. Two channels of 16-bit, 48Khz audio can also be captured.

The **Pro Convert IP to USB** device is compatible with Windows®, Mac® and Linux® operating systems. Compliant with the UVC specification, it offers driver-free installation and immediate compatibility with a wide range of video conferencing (such as Zoom® and Microsoft Teams®), streaming and

production software. The compact device is powered through its USB connection to the host computer, with no additional power source required.

Users can manage and control the **Pro Convert IP to USB** through an intuitive, browser-based web interface. In addition to device configuration and input selection, the web interface also lets users control remotely-connected PTZ cameras through the NDI or Visca over UDP protocols. Multiple Pro Convert devices can also be centrally configured and controlled through Magewell's optional **Control Hub** management software.

"Many users want to bring NDI, SRT or other streaming sources into their video conferencing platform or other software, but the need for additional software tools was prohibitive," said Nick Ma, CEO and CTO of Magewell. "Our new **Pro Convert IP to USB** makes it simple, with the IP source showing up in the user's software just like a webcam."

Pro Convert IP to USB is now shipping. For more information, please visit <https://www.magewell.com/buy>.

About Magewell – Magewell (www.magewell.com) develops innovative, high-performance video I/O and IP workflow solutions that seamlessly bridge signals, software, streams, and screens. The simplicity, reliability, and cost-effectiveness of Magewell's capture, conversion, and streaming products make them the preferred choice of integrators and end-users for bringing high-quality AV signals into and out of IP networks and popular software. Magewell solutions power applications including live streaming, event production, video conferencing, multi-site video distribution, remote learning, medical imaging, and more.

Our products are available globally through our valued channel partners including distributors, resellers and systems integrators. In addition to empowering end users, our products are also incorporated into a wide range of third-party solutions on an OEM basis by other industry-leading manufacturers.

www.magewell.com



Yealink to Showcase AI-driven Innovations at InfoComm Asia 2025

Yealink, a global leader in Unified Communications and Collaboration (UC&C), is excited to announce its participation in **InfoComm Asia2025**, taking place from **July 23 to July 25** in **Thailand**. Under the theme “**Innovate Workspaces with AI**”, Yealink will unveil a series of next-generation intelligent solutions at **Booth K10**, showcasing how AI technology is transforming professional collaboration.

AI at the Core: Unleashing the Future of Smart Workspaces

Building on its success in intelligent meeting technologies, Yealink will debut its latest flagship solutions at InfoComm Asia 2025, reflecting a deeper integration of AI across product design, performance, and user experience.

Key Reveal Highlights:

- **MeetingBar A50** – Premium All-in-One Android Video Bar for Medium to Large Rooms
All Android Devices Secured with MDEP.
Featuring the **Qualcomm 8550 processor** with **48Tops AI power**, a **triple-camera system**, and **Microsoft Device Ecosystem Platform (MDEP)** certification, the A50 delivers secure, smart, and scalable video conferencing.
- **MVC S98** – Premium Multi-camera Solution for ProAV room
Smooth Meetings. Powered by AI Technology.
MVC S98 is a **4K** intelligent tracking camera with **20x zoom** and AI framing, optimized for **Microsoft Teams**. Powered by Qualcomm/Intel

and co-engineered with Microsoft/ Yealink, it delivers seamless ProAV collaboration. Pair with the Yealink CM50+AP08 ceiling audio for a complete solution.

- **AV ONE Solution** – ProAV Solution for Enterprise Rooms
Meet Yealink AV ONE Solution. Make ProAV Rooms Smart and Simple.
Designed as an end-to-end AV system, AV ONE combines smart automation, certified **Microsoft** integration, and unified management, making it ideal for large and complex AV deployments.
- **MeetingBoard Pro** – New Generation Collaboration Board
Pro Meetings On Board.
The upgraded MeetingBoard Pro empowers hybrid collaboration with an all-in-one interactive display,



integrating intelligent inking, multi-platform support, and a sleek form factor for professional spaces.

• **MeetingDisplay** – Unified Display for MTR Solutions

Unified Meeting, Display Now.

Designed to centralize and simplify meeting room installations, MeetingDisplay integrates automatic digital signage, unified signal switching, and one-touch configuration — all manageable via **YMCS**.

Built for the Future: Scalable AI, Trusted Security, Global Reach

With over **500 Fortune 500 clients** and a reputation for delivering unified communication solutions at scale, Yealink is pushing AI innovation from device to platform. All new Android products are **MDEP-certified**, reinforcing Yealink's commitment to data security and ecosystem alignment.

“AI 3.0 empowers people to work together more naturally, no matter

the time or place,” said **Dawson Cai**, VP of Product at Yealink. “Our 2025 lineup reflects a bold leap forward in intelligent collaboration, ensuring seamless, secure, and future-ready workspaces for organizations of all sizes.”

In 2025, Yealink's expanded R&D investment in AI, combined with deepening partnerships with global tech leaders, will continue to unlock more customizable, secure, and smart UC&C experiences for its customers.

Elevating the Booth Experience: Engage, Demo, Enjoy

At InfoComm Asia 2025, Yealink will offer visitors hands-on experiences through:

• **Live Product Demos**

Explore Yealink's latest solutions across hybrid meetings, remote collaboration, and intelligent AV environments.

• **Booth Tours**

Let Yealink engineers take you

on a tailored workspace journey, showcasing how our technologies fit seamlessly into diverse professional settings.

• **Happy Hour Moments | July 23–24, 2:00 PM**

Unwind and connect with local flavors and great company. Time to enjoy. Time to toast!

About Yealink

Yealink (300628.SZ) is a global leader specializing in video conferencing, voice communications, and collaboration solutions. With a presence in over 140 countries and regions, Yealink is recognized as a top-five video conferencing provider and leads the global market in SIP phone shipments.

For more information or to become a Yealink partner, visit www.yealink.com.



INFiLED พร้อม “สร้างความประทับใจ” ให้กับทุกคนที่งาน InfoComm ประเทศไทย 2025

ภายใน 3 วันของงานนี้ นอกจาก INFiLED จะจัดแสดงผลผลิตภัณฑ์แล้ว ยังจะแสดงให้เห็นถึงวิสัยทัศน์
ในด้านการใช้ภาพเล่าเรื่องในอนาคต ที่จะมีการนำเสนอหา ชุดกิจกรรมที่ทำงานอย่างต่อเนื่อง และ
ความยอดเยี่ยมของ LED มาใช้ร่วมกันอีกด้วย

INFiLED จะใช้เวทีกลางในการมอบประสบการณ์ที่น่าจดจำซึ่งจะสร้างความเป็นไปได้ใหม่ในโลกแห่ง
เทคโนโลยีเสมือนจริงแบบขยาย (XR) และโปรดักชันเสมือนจริง (VP)

โลกแห่งการดื่มด่ำ: การนำ XR/VP ไปใช้ร่วมกันกับผู้นำในอุตสาหกรรม

Infiled จะสร้างการเปลี่ยนแปลงด้วย
การจัดแสดง XR (เทคโนโลยีเสมือนจริง
แบบขยาย) และโปรดักชันเสมือนจริง
(VP) ที่ออกแบบมาพร้อมกับผู้ที่มีความ
สำคัญในอุตสาหกรรม เช่น HiRender,
GoldenDuck และ ZEISS

- HiRender ซึ่งมีชื่อเสียงในเรื่องระบบ
เรนเดอร์ที่ทรงประสิทธิภาพ จะช่วยสาธิต
การแสดงผลเนื้อหาแบบเรียลไทม์ที่แสดง
ภาพที่ยืดหยุ่นเหนือชั้น ซึ่งเหมาะสำหรับ
โปรดักชันการถ่ายภาพยนตร์, โทรทัศน์
และโฆษณา

- GoldenDuck ซึ่งเป็นผู้เชี่ยวชาญในด้าน
การรวมระบบภาพและเสียงระดับชั้นนำ
ในเอเชียตะวันออกเฉียงใต้ จะร่วมมือกับ

Infiled เพื่อรับประกันการรวมระบบที่
ราบรื่น, การเพิ่มประสิทธิภาพกระบวนการ
ส่งมอบเนื้อหา และการสนับสนุนทาง
เทคนิค

- ZEISS จะมีเซ็นเซอร์การติดตามที่
สามารถใช้ติดตามการเคลื่อนไหวของ
กล้องที่มีความละเอียดแม่นยำเป็นพิเศษ
ได้ภายในเวที VP ช่วยให้สามารถ
ปรับใช้พื้นที่หลังที่ซิงค์กันและเปลี่ยน
มุมมองได้อย่างเนียนตาและทำให้ภาพ
ดูมีองค์ประกอบที่สวยงาม

การร่วมมือกันของสามองค์กรนี้กับ Infiled
จะทำให้ผู้เข้าร่วมได้สัมผัสประสบการณ์
จากโปรดักชันระดับภาพยนตร์ในอนาคต
ด้วยตัวเอง ไม่ว่าจะเป็นจากเสมือนจริงที่

จะโต้ตอบกับการเคลื่อนไหวของกล้อง
ขณะใช้งาน, การเรนเดอร์ภาพแบบสมจริง
เพื่อใช้งานเสร็จสมบูรณ์, การปรับแสง
และเทคนิคการนำเสนอภาพที่มีมิติ
บุรุษจะมีเวที XR ซึ่งผู้เข้าร่วมสามารถ
โต้ตอบกับสภาพแวดล้อมเสมือนจริงได้
โดยจะแสดงให้เห็นว่าจอแสดงผล LED
ขนาดใหญ่จะมาแทนที่ฉากหลังสีเขียวได้
อย่างไรในการใช้งานโปรดักชันที่ให้
ภาพสวย คมชัด และยืดหยุ่นได้

**ใช้งานนอกสถานที่: โซลูชันจอแสดงผล
ผลนอกสถานที่ HM10**

Infiled จะเปิดตัวโซลูชันหน้าจอแสดงผล
ผลนอกสถานที่ HM10 ซึ่งเป็นหน้าจอ
LED ความสว่างสูงที่ออกแบบมาให้ทน

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ต่อสภาพดินฟ้าอากาศได้โดยไม่ต้องลดคุณภาพการแสดงผลในหน้าจอ ด้วยมาตรฐานการป้องกันฝุ่นและน้ำ IP65, มุมมองการดูที่กว้าง และอัตราการรีเฟรชสูง HM10 จึงมีคุณสมบัติที่เหมาะสมสำหรับกิจกรรมนอกสถานที่, งานติดตั้งสาธารณะในสเกลใหญ่ และป้ายดิจิทัล

สิ่งที่จะสร้างความประทับใจให้กับผู้ร่วมงานได้จริง ๆ คงจะเป็นโครงสร้างที่แข็งแกร่งที่มาพร้อมกับการออกแบบที่สวยงามของ HM10 ด้วยระบบที่ออกแบบมาให้มีน้ำหนักเบาและแยกส่วนได้ จึงทำให้การติดตั้งเป็นไปได้ง่ายและรวดเร็ว ทำให้เป็นที่ชื่นชอบในกลุ่มบริษัทให้เช่าและผู้จัดงานนอกสถานที่ คุณภาพการแสดงผลที่มีสีสันสดใสช่วยให้ภาพยังคงแจ่มชัดท่ามกลางแสงแดด ซึ่งเหมาะกับการจัดงานกีฬา เทศกาล หรือแผ่นป้ายโฆษณาใจกลางเมืองที่สุด

การควบคุมเหนือระดับ: โซลูชันการสั่งการจากศูนย์กลาง

บริเวณที่ติดกับพื้นที่จัดแสดง VP จะเป็นส่วนของ**โซลูชันห้องควบคุม**ของ Infiled ซึ่งเป็นพื้นที่สำหรับออกคำสั่งและควบคุมต่าง ๆ ที่ผู้ใช้งานระบบเสียงและภาพไม่ควรพลาด หน้าจอ LED ขนาดใหญ่สำหรับห้องควบคุมจะมีภาพที่คมชัดพร้อมด้วยความสว่างที่สม่ำเสมอและสีที่แม่นยำจากทุกมุมมอง โดยออกแบบมาเพื่อรองรับการทำงานแบบตลอด 24 ชั่วโมง โซลูชันนี้มีหน้าจอที่แสดงผลได้อย่างราบรื่น รองรับเนื้อหาจากหลายแหล่งสัญญาณและการรับส่งข้อมูลแบบเรียลไทม์ ซึ่งเหมาะสำหรับการออกอากาศทางโทรทัศน์, การรักษาความปลอดภัย, การควบคุมไฟจราจร

หรือสภาพแวดล้อมที่ต้องมีการตัดสินใจที่สำคัญ จากการออกแบบมาเพื่อให้มีความน่าเชื่อถือ โซลูชันจึงมีแหล่งจ่ายไฟและเส้นทางการส่งสัญญาณมากเพียงพอทำให้มั่นใจได้ว่าจะไม่เกิดการติดขัดในสถานการณ์ที่สำคัญ เครื่องมือตรวจสอบอัจฉริยะและแผงควบคุมที่ใช้งานได้จากด้านหน้ายังช่วยทำให้การบำรุงรักษาเป็นไปได้ง่าย ซึ่งเป็นสิ่งสำคัญในสภาพแวดล้อมที่มีความต้องการสูง

ภาพลักษณ์ใหม่แห่งธุรกิจการให้เช่า: การติดตั้งจอ LED ที่สร้างสรรค์

ความคิดสร้างสรรค์ถือเป็นหัวใจสำคัญของธุรกิจการให้เช่าของ Infiled ซึ่งจะขยายขอบเขตครอบคลุมไปถึงการออกแบบด้วยโซลูชัน LED ที่ใช้ในเชิงสร้างสรรค์ต่าง ๆ โดยบุตรจะมี

- หน้าจอ LED แบบโค้งที่แสดงให้เห็นภาพหรือวิดีโอแบบ 360 องศา เหมาะสำหรับการจัดแสดงสินค้าของแบรนด์ที่ให้ความรู้สึกสมจริง หรือการแสดงฉากหลังบนเวที
- จอ LED แบบโปร่งใสที่แสดงภาพคล้ายโฮโลแกรมที่แสงสามารถลอดผ่านได้เหมาะสำหรับการตกแต่งหน้าร้านหรืองานแสดงสินค้าที่ให้ความสำคัญในเรื่องของการตกแต่งที่สวยงาม
- ชุดประตูทางเข้า RC โครงสร้างที่แข็งแรง ใช้สำหรับต้อนรับแขกพร้อมด้วยการแสดงภาพเคลื่อนไหว ช่วยสร้างบรรยากาศให้กับประสบการณ์ทางเทคโนโลยีได้ตั้งแต่ทางเข้า

เห็นได้ชัดว่าสิ่งที่เน้นย้ำก็คือ การให้เช่าไม่ได้เกี่ยวกับแค่ขนาดจอภาพอีกต่อไป

แต่ยังรวมถึงความประทับใจจากความคิดสร้างสรรค์อีกด้วย โซลูชันของ Infiled ช่วยส่งเสริมให้โปรเจกต์เซอร์และดีไซน์เนอร์งานอีเวนต์กล้าที่จะฝันใหญ่และสร้างสภาพแวดล้อมแห่งการแสดงผลที่สวยงาม ทำให้น่าจดจำ แยกส่วน และจัดการได้

มองเห็นวิสัยทัศน์ของแบรนด์

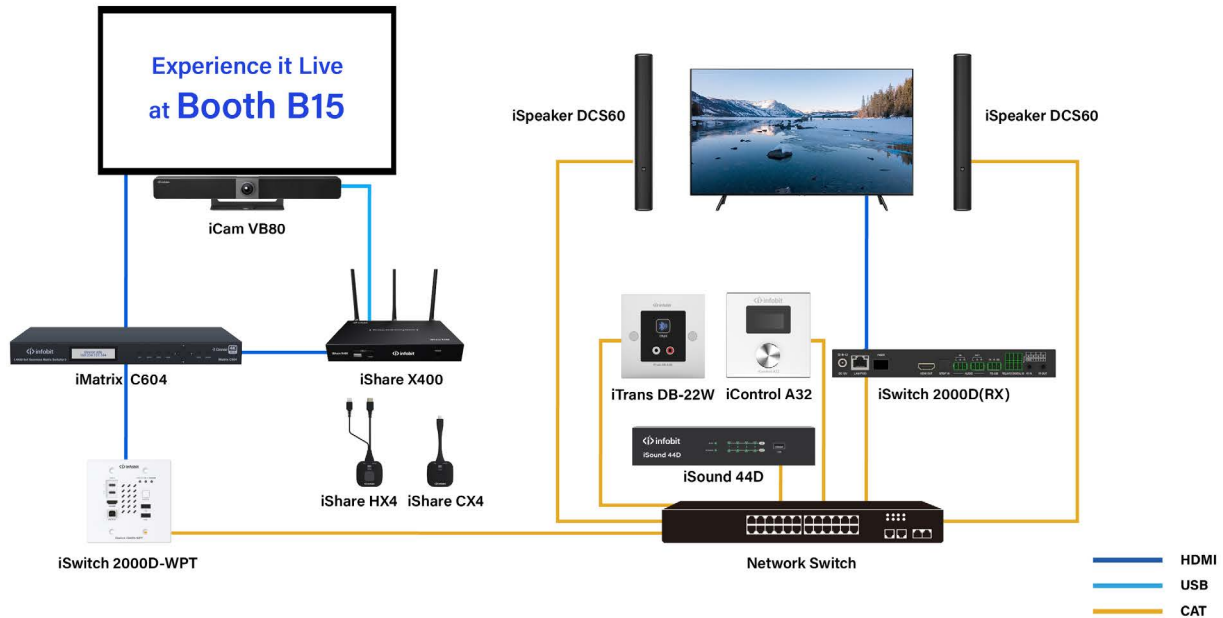
บุตรของ Infiled เป็นมากกว่าโซลูชัน โดยจะแสดงให้เห็นถึงวิสัยทัศน์ของแบรนด์ด้วย Infiled จะแสดงให้เห็นศักยภาพว่าเหตุใดแบรนด์จึงยังคงเป็นผู้นำแห่งนวัตกรรมจอ LED จากการจัดแสดงแต่ละส่วน ตั้งแต่หน้าจอ VP ที่พร้อมสำหรับงานออกอากาศไปจนถึงโครงสร้างการให้เช่าที่ออกแบบมาอย่างสร้างสรรค์และเวที XR สุดไฮเทค

การมุ่งเน้นที่การผสมรวม ความคิดสร้างสรรค์ และการปรับแต่งตามความต้องการของบริษัท ทำให้มั่นใจได้เลยว่าไม่ว่าอนาคตของวงการระบบภาพและเสียงจะเป็นอย่างไร Infiled ก็ได้รังสรรค์หน้าจอเพื่อรองรับไว้แล้ว

เยี่ยมชม สัมผัส เปลี่ยนแปลง

ไม่ว่าคุณกำลังสร้างสตูดิโอ XR เต็มรูปแบบ หรือต้องการหาการใช้งานแบบผสม LED สำหรับงานนำเสนอของบริษัท โซลูชันของ INFILED ก็ตอบโจทย์ได้ด้วยประสิทธิภาพที่เหนือชั้น ความน่าเชื่อถือ และการแสดงผลที่ยอดเยี่ยม “โปรเจกต์ชิ้นเสมือนจริงไม่ได้เป็นแค่กระแสอีกต่อไป แต่คือการเปลี่ยนแปลง และเราเป็นผู้นำในวงการนี้”

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ปรับเปลี่ยนการใช้งานพื้นที่ห้องได้ง่าย ๆ ด้วยนวัตกรรมระบบภาพและเสียงแบบ ครบวงจรของ Infobit iMatrix C604

ด้วยสภาพแวดล้อมที่มีการเปลี่ยนแปลงอยู่ตลอดเวลาของทุกวันนี้ ไม่ว่าจะเป็นสำนักงานบริษัท, สถานที่ฝึกอบรม หรือสถานที่ประกอบพิธีกรรมทางศาสนา การจัดวางผังห้องให้สามารถปรับเปลี่ยนได้ถือว่าไม่ได้เป็นแค่โมดัส แต่เป็นสิ่งที่จำเป็นเลยก็ว่าได้ หลาย ๆ องค์กรต่างเผชิญกับความท้าทายที่จะต้องเปลี่ยนแปลงพื้นที่ให้ได้อย่างราบรื่น เช่น เปลี่ยนจากห้องขนาดใหญ่ให้กลายเป็นพื้นที่เอนกประสงค์ที่เล็กลงโดยไม่กระทบต่อคุณภาพของระบบภาพและเสียงหรือต้องยกเลิกการใช้งาน ระบบภาพและเสียงของ Infobit ตอบโจทย์ความต้องการนี้ได้ด้วยนวัตกรรมล่าสุดอย่าง **iMatrix C604**

อุปกรณ์เดียวที่ใช้งานได้อย่างไม่มีที่สิ้นสุด

iMatrix C604 คืออุปกรณ์สลับสัญญาณภาพและเสียงจากหลายแหล่ง HDMI/USB-C 6x4 ที่ออกแบบเพื่อการใช้งานใน

พื้นที่ที่ปรับเปลี่ยนได้โดยเฉพาะ ด้วย DSP ระบบเสียงที่ติดตั้งในตัว, อุปกรณ์สลับ USB และการรองรับระบบประชุมทางไกลแบบไร้สาย (Bring Your Own Meeting) นี่จึงเป็นโซลูชันที่เหมาะสมสำหรับห้องขนาดเล็กถึงกลางที่ใช้ระบบสื่อสารแบบครบวงจรได้

คุณสามารถใช้เป็นอุปกรณ์แบบเดี่ยว ๆ ได้ด้วย เพราะตัวอุปกรณ์มีพอร์ตที่จำเป็นต่อการใช้งานทุกประเภทแล้ว เพื่อรองรับส่วนประกอบที่สำคัญต่าง ๆ เช่น

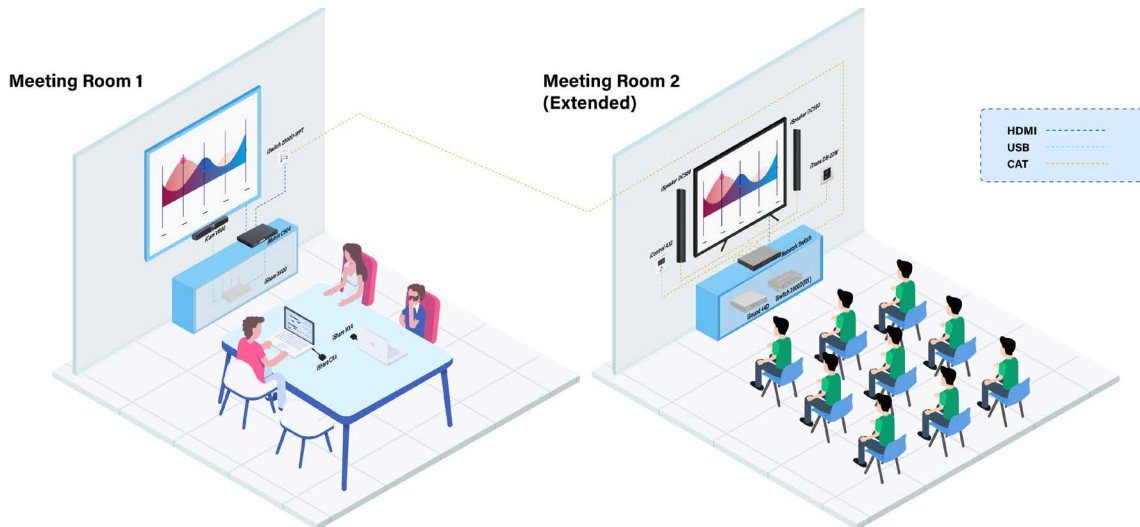
- **USB-C แบบ PD 3.0** สำหรับการเชื่อมต่อด้วยสายสัญญาณเส้นเดียว (การชาร์จ + ส่งข้อมูล)
- **การเชื่อมต่อกล้อง**
- **การป้อนข้อมูลด้วยหน้าจอสัมผัส**
- **ช่องส่งสัญญาณ HDMI มากถึง 4 ช่อง** สำหรับการแสดงผลหลายแหล่ง

ด้วยการเชื่อมต่อกับสาย USB-C เพียงเส้นเดียว ผู้ใช้ก็สามารถเชื่อมต่อแล็ปท็อปของต้นและควบคุมกล้อง, ไมโครโฟน, ลำโพง และหน้าจอภายในห้องได้ทันที ซึ่งเหมาะสำหรับการประชุมที่สะดวกและรวดเร็ว

ปรับขยายได้ตามความต้องการที่มากขึ้น

สิ่งที่ทำให้ iMatrix C604 โดดเด่นไม่เหมือนใครอย่างแท้จริงคือความสามารถในการปรับขยายได้เป็นส่วน ๆ สำหรับผู้ที่ต้องการสัมผัสประสบการณ์มากขึ้น หรือต้องการเชื่อมต่อกับหลายห้อง Infobit ก็สามารถทำได้ง่าย ๆ

- **เพื่อประสบการณ์ด้านภาพและเสียงที่ดียิ่งขึ้น:** เชื่อมต่อ iMatrix C604 กับ iCam VB80 ซึ่งเป็นวิดีโออาร์ระดับพรีเมียมของ Infobit โซลูชันแบบครบวงจรนี้จะให้เสียงที่มีคุณภาพดีระดับสตูดิโอและมีกล้องอัจฉริยะที่ติดตามผู้พูดและปรับการใช้งานได้ตามผังของ



ห้อง โดยเชื่อมต่อได้ง่าย ๆ ผ่านสาย USB เพื่อการอัปเดตที่ราบรื่น

• **เพื่อการทำงานร่วมกันแบบไร้สาย:** หากต้องการใช้ระบบการประชุมทางไกลแบบไร้สาย ให้จับคู่ระบบกับ **iShare X400** ซึ่งเป็นศูนย์การทำงานร่วมกันแบบไร้สาย ผู้ใช้สามารถเข้าร่วมประชุมได้ในระบบภาพและเสียงระดับ 4K ผ่านการเชื่อมต่อ **USB-C** โดยไม่ต้องใช้ไดรเวอร์ และไม่มีการล่าช้า สำหรับผู้ใช้ที่ไม่มี USB-C Infobit ก็รองรับการติดตั้งแบบเดิมผ่านการเชื่อมต่อ **HDMI** อีกด้วย ช่วยให้ทุกคนสามารถเชื่อมต่อได้อย่างราบรื่นไม่ว่าจะด้วยอุปกรณ์ใดก็ตาม

ขยายการใช้งานไปยังห้องอื่น ๆ ได้ง่าย ๆ

ต้องการเชื่อมโยงหลาย ๆ ห้องเข้าไว้ด้วยกันเพื่อนำเสนองานพร้อมกัน หรือเพื่อทำพิธีทางศาสนาใช้ใหม่ iMatrix C604 ทำงานร่วมกับ **iTrans 2000D-WPT** ได้อย่างราบรื่น ซึ่งเป็นอุปกรณ์ส่งสัญญาณแบบฝังผนังที่รองรับ **Dante AV** ผ่านสายเคเบิลเครือข่ายเส้นเดียว โดยจะมี

- วิดีโอคุณภาพสูงระดับ 4K
- ระบบเสียงที่ชัดเจน
- การเชื่อมต่อด้วยสายเคเบิลที่เรียบง่าย
- การกระจายสัญญาณความหน่วงต่ำ

เพียงแค่เสียบสายเชื่อมต่อกับเครือข่ายภายในของคุณและเผยแพร่เนื้อหาไปยังห้องอื่น ๆ โดยไม่ต้องต่อสายเพิ่มให้ซับซ้อนหรือต้องใช้โครงสร้างพื้นฐานของ

ระบบภาพและเสียงเพิ่มเติม พีเจอาร์นี้ช่วยให้สามารถถ่ายทอดเนื้อหาและงานนำเสนอไปยังหลายพื้นที่ได้ในเวลาเดียวกัน ซึ่งเหมาะสำหรับห้องโถงเอนกประสงค์, ศูนย์การฝึกอบรม และสถานที่ทางศาสนา

การใช้งานง่ายในชีวิตจริง

สิ่งที่ทำให้ iMatrix C604 คุ่มค่าอย่างแท้จริงคือการใช้งานง่าย โดยถูกออกแบบมาให้สามารถพร้อมใช้งานได้ทันที ด้วยการควบคุมอย่างง่ายและตัวเลือกการเชื่อมต่อที่ปรับเปลี่ยนได้ ไม่ว่าคุณจะเป็นผู้จัดการฝ่ายไอทีที่เชี่ยวชาญด้านเทคโนโลยีหรือจะเป็นผู้นำเสนองานครั้งแรก ระบบก็ทำงานได้ตามที่คุณคาดหวัง ไม่ต้องใช้เวลาเรียนรู้หรือมีการฝึกอบรมพิเศษใด ๆ

ออกแบบมาเพื่อปัจจุบันเตรียมพร้อมไว้เพื่ออนาคต

Infobit เชื่อว่าโซลูชันระบบภาพและเสียงควรพัฒนาไปตามความต้องการของคุณ iMatrix C604 เป็นโซลูชันที่พร้อมรับมือสำหรับอนาคต ช่วยให้ผู้ใช้ปรับขยายได้โดยไม่ต้องเปลี่ยนฮาร์ดแวร์เดิมของตน โซลูชันนี้ประยุกต์ให้เข้ากับพื้นที่ อุปกรณ์และกระบวนการทำงานของคุณได้ ตั้งแต่ห้องประชุมแบบเดี่ยวไปจนถึงอาคารที่มีหลายห้อง

สรุปเกี่ยวกับพีเจอาร์สำคัญ:

- อุปกรณ์สลับสัญญาณภาพและเสียงจากหลายแหล่ง 6x4 ด้วย HDMI และพอร์ต USB-C
- DSP ระบบเสียงที่ติดตั้งในตัวและการควบคุมอุปกรณ์ USB

• **ระบบการประชุมทางไกลแบบไร้สาย** ที่มาพร้อมกับการเชื่อมต่อสาย USB-C แบบ PD 3.0 สายเดียว

• **ใช้ได้กับวิดีโออาร์ iCam VB80** เพื่อคุณภาพของภาพและเสียงระดับพรีเมียม

• **ทำงานกับ iShare X400** เพื่อนำเสนองานแบบไร้สาย

• **Dante AV รองรับผ่านอุปกรณ์ส่งสัญญาณแบบฝังผนัง iTrans 2000D-WPT** ผ่านสายเคเบิลเครือข่าย 1 สาย

• **ใช้งานได้ทันทีด้วยการเชื่อมต่อทั้งแบบ USB-C และ HDMI**

บทสรุป

ด้วยโซลูชัน iMatrix C604 Infobit จึงสามารถเปลี่ยนวิธีการปรับใช้พื้นที่ให้เหมาะสมกับผู้คนได้ โดยที่ผู้คนไม่ต้องเปลี่ยนแปลงสิ่งใด ไม่ว่าคุณต้องการติดตั้งระบบสื่อสารแบบครบวงจรที่รวดเร็ว ศูนย์การประชุมแบบไร้สาย หรือการขยายสัญญาณภาพและเสียงทั่วทั้งห้องผ่าน Dante AV ระบบนี้ก็สามารถนำมาใช้งานด้วยกันได้อย่างราบรื่น

ดูเพิ่มเติมได้ที่

www.infobitav.com

ไปที่บูธ B15 ที่งาน Infocomm
กรุงเทพ 2025

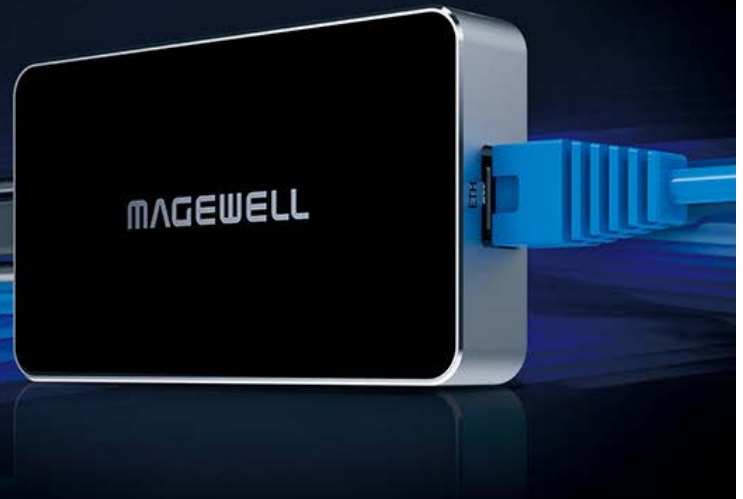
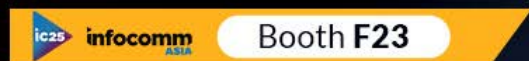
Infobit AV - ออกแบบมาเพื่อความยืดหยุ่น สำหรับการใช้งานที่เรียบง่าย

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Pro Convert IP to USB

Bring NDI® into Conferencing Software over USB



Magewell นำเทคโนโลยี NDI มาใช้ ในซอฟต์แวร์การประชุมทางวิดีโอและ อื่น ๆ ด้วย Pro Convert IP to USB

ตัวแปลงใหม่ขนาดกะทัดรัดช่วยให้ผู้ใช้งาน NDI® และแหล่งการรับส่งสัญญาณสดไว้ในซอฟต์แวร์ได้ผ่าน
อินเทอร์เน็ตเฟส USB และมีการเปิดตัวครั้งแรกในงาน InfoComm เอเชีย สามารถเข้ามาเยี่ยมชมได้ที่บูธ **F23!**

ผู้สร้างนวัตกรรมอินเทอร์เน็ตเฟสวิดีโอและ
ขั้นตอนการทำงานของ IP อย่าง
Magewell ได้เปิดตัว ตัวแปลงสัญญาณ
รุ่นใหม่ที่มีประสิทธิภาพในผลิตภัณฑ์ใน
เครื่อง Pro Convert ยอดนิยมในหมวด
อุปกรณ์การแปลงสัญญาณ IP ที่กะทัดรัด
ที่เรียกว่า **Pro Convert IP to USB**
การผสมรวมความสามารถในการถอดรหัส
ที่ยืดหยุ่นได้ของผลิตภัณฑ์ในเครื่อง
Pro Convert เข้ากับกระบวนการรับและ
ประมวลผลวิดีโอที่ง่ายและสะดวกของ
อุปกรณ์แปลงสัญญาณผ่านทางพอร์ต
USB ที่ขึ้นชื่อของ Magewell อย่าง

Pro Convert IP to USB ช่วยให้ผู้ใช้
นำ NDI®, NDI® HX หรือแหล่งการรับส่ง
สัญญาณไปใช้ในซอฟต์แวร์การประชุม
ทางวิดีโอและซอฟต์แวร์ประเภทอื่นผ่าน
อินเทอร์เน็ตเฟส USB มาตรฐานได้

แม้ว่าการรองรับเทคโนโลยีการเชื่อมต่อ
วิดีโอ NDI ในซอฟต์แวร์นั้นโดยตรงจะ
เติบโตขึ้นอย่างมาก แต่ผู้ใช้งานระบบเสียง
และภาพ (AV) หลายคนก็พบว่าพวกเขา
ยังไม่สามารถเข้าร่วมในระบบนี้เวตของ
NDI ได้ โชลูชันซอฟต์แวร์ที่ไม่มีการผสม
NDI ในตัวอาจจะรองรับได้ผ่านเครื่องมือ
NDI แต่ข้อจำกัดด้านไอทีที่เข้มงวด

ในหลาย ๆ สภาพแวดล้อมก็มักจะ
ขัดขวางการติดตั้งดังกล่าว ฮาร์ดแวร์
Pro Convert IP to USB สามารถแก้
ปัญหานี้ได้และลดความซับซ้อนให้น้อยลง
ด้วยการแปลงจากแหล่ง NDI เข้าสู่พอร์ต
USB ที่ซอฟต์แวร์จะเห็นเหมือนเว็บแคม
แบบง่าย ๆ

นอกจาก NDI® High Bandwidth,
NDI® HX2 และ NDI® HX3 แล้ว
Pro Convert IP to USB ยังรองรับการรับ
ส่งสัญญาณจากแหล่ง H.264 หรือ H.265
ในโปรโตคอลอีกด้วย เช่น SRT, RTMP,
RTSP, RTP, UDP และ HTTP ซึ่งจะ



ช่วยให้ผู้ใช้สามารถนำแหล่งข้อมูลเครือข่ายแบบเรียลไทม์ในรูปแบบเหล่านี้ไปใช้ในซอฟต์แวร์ของตนได้ง่าย ๆ แม้กระทั่งผู้ใช้ซอฟต์แวร์ที่รองรับ NDI หรือ แหล่งรับส่งสัญญาณในตัวก็สามารถใช้ประโยชน์จาก **Pro Convert IP to USB** ได้ เนื่องจากการถอดรหัสข้อมูลที่ป้อนเข้ามาเหล่านี้จากภายนอกในอุปกรณ์จะช่วยลดภาระในการประมวลผลบน CPU หรือ GPU ของระบบโฮสต์

Pro Convert IP to USB ถอดรหัสแหล่งสัญญาณวิดีโอ IP เป็นความละเอียด 1920x1080 และนำไปใช้ในซอฟต์แวร์เป็นไฟล์วิดีโอที่ไม่ได้ลดขนาดที่มีอัตราการแสดงผล 60 เฟรมต่อวินาที หรือเป็นไฟล์วิดีโอ MJPEG บีบอัดที่มีอัตราการแสดงผล 30 เฟรมต่อวินาที แม้การแสดงผลแบบ 30 เฟรมต่อวินาทีอาจเพียงพอแล้วสำหรับซอฟต์แวร์การประชุมทางวิดีโอบางซอฟต์แวร์ แต่การแสดงผลแบบ 1080p60 ของ **Pro Convert IP to USB** นั้นจะรองรับการใช้อัตราเฟรมที่สูงกว่าได้อย่างหลากหลาย เช่น โหลชั้นการประชุมแบบเสมือนจริง ซอฟต์แวร์โปรดักชันแบบเรียลไทม์ และอื่น ๆ นอกจากนี้ ยังสามารถบันทึกไฟล์เสียง 48Khz แบบสองช่องสัญญาณ 16-bit ได้อีกด้วย

อุปกรณ์ **Pro Convert IP to USB** สามารถใช้ได้กับระบบปฏิบัติการ Windows®, Mac® และ Linux® โดยอุปกรณ์นี้เป็นไปตามข้อกำหนด UVC ที่ติดตั้งได้โดยไม่ใช้ไดรเวอร์และสามารถ

ใช้ได้กับซอฟต์แวร์การประชุมทางวิดีโอ (เช่น Zoom® และ Microsoft Teams®), การสตรีมมิ่ง และโปรดักชันที่หลากหลาย อุปกรณ์ขนาดกะทัดรัดนี้ใช้งานได้ด้วยการเชื่อมต่อ USB เข้ากับคอมพิวเตอร์ตัวหลัก โดยไม่ต้องใช้แหล่งจ่ายไฟอื่นเพิ่มเติม

ผู้ใช้สามารถจัดการและควบคุม **Pro Convert IP to USB** ได้ผ่านอินเทอร์เฟซหน้าเว็บเริ่มต้น จากเบราว์เซอร์ นอกเหนือจากการกำหนดค่าอุปกรณ์และการเลือกแหล่งสัญญาณเข้าแล้ว อินเทอร์เฟซเว็บยังช่วยให้ผู้ใช้มีสิทธิ์ควบคุมกล้อง PTZ ที่เชื่อมต่อระยะไกลผ่าน NDI หรือ Visca บนโปรโตคอล UDP ได้อีกด้วย อุปกรณ์ **Pro Convert** หลายตัวยังสามารถกำหนดค่าและควบคุมได้ จากศูนย์กลางผ่านซอฟต์แวร์การจัดการ **Control Hub** ที่เลือกได้ของ Magewell

“ผู้ใช้หลายรายต้องการนำ NDI, SR หรือแหล่งการรับส่งสัญญาณอื่นไปใช้กับแพลตฟอร์ม หรือซอฟต์แวร์การประชุมทางวิดีโอของตน แต่ก็มีข้อจำกัดในการห้ามใช้เครื่องมือซอฟต์แวร์อื่นเพิ่มเติม” คุณนิค หม่า CEO และ CTO ของ Magewell กล่าว “**Pro Convert IP to USB** ใหม่ของเราจะช่วยให้ง่ายขึ้น ด้วยการแสดงแหล่งสัญญาณ IP ในซอฟต์แวร์ของผู้ใช้เหมือนเว็บแคม”

Pro Convert IP to USB พร้อมจัดส่งแล้ว หากต้องการข้อมูลเพิ่มเติม ให้ไปที่ <https://www.magewell.com/buy>

เกี่ยวกับ Magewell – Magewell (www.magewell.com) พัฒนาโซลูชันการรับส่งข้อมูลวิดีโอที่ปรับปรุงใหม่ และมีประสิทธิภาพสูงและโซลูชันการจัดสรร IP ที่เชื่อมต่อสัญญาณ, ซอฟต์แวร์, การสตรีม และหน้าจอได้อย่างราบรื่น ความเรียบง่าย, นำเชื่อถือ และความคุ้มค่าของผลิตภัณฑ์ด้านการบันทึก, แปลงสัญญาณ และการสตรีมมิ่งของ Magewell ทำให้แบรนด์เป็นตัวเลือกที่ผู้รวมระบบและผู้ใช้ปลายทางมักจะเลือกใช้ในการรับส่งสัญญาณภาพและเสียงคุณภาพสูงในเครือข่าย IP และซอฟต์แวร์ที่เป็นที่นิยม โซลูชัน Magewell ส่งเสริมให้การนำไปใช้มีประสิทธิภาพมากขึ้น ไม่ว่าจะเป็นการไลฟ์สดมิ่ง, โปรดักชันอีเวนต์, การประชุมทางวิดีโอ, การเผยแพร่วิดีโอผ่านหลายเว็บไซต์, การเรียนรู้ระยะไกล, การถ่ายภาพทางการแพทย์ และอีกมากมาย

ผลิตภัณฑ์ของเรามีจัดจำหน่ายทั่วโลกผ่านพาร์ทเนอร์ในช่องทางต่าง ๆ เช่น ผู้จัดจำหน่าย, ตัวแทนจำหน่าย และผู้รวมระบบ เป็นต้น นอกจากนี้จะช่วยสนับสนุนผู้ใช้ปลายทางแล้ว ผลิตภัณฑ์ของเรายังสามารถนำไปใช้ร่วมกับโซลูชันภายนอกที่ครอบคลุมกว้างขวางในด้าน OEM โดยผู้ผลิตชั้นนำอื่น ๆ ได้อีกด้วย

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Yealink จะแสดงนวัตกรรมที่ขับเคลื่อนด้วย AI ที่งาน InfoComm เอเชีย 2025

Yealink ผู้นำระดับโลกในด้านการสื่อสารและการทำงานร่วมกันแบบครบวงจร (UC&C) ยินดีที่จะประกาศให้ทราบว่าแบรนด์จะเข้าร่วมในงาน **InfoComm เอเชีย 2025** ซึ่งจะจัดขึ้นตั้งแต่วันที่ 23 กรกฎาคมถึง 25 กรกฎาคมในประเทศไทย ภายใต้ธีม “สร้างสรรค์พื้นที่ทำงานด้วย AI” ของงาน Yealink จะเปิดตัวชุดโซลูชันอัจฉริยะยุคใหม่ที่มี **บูธ K10** ซึ่งจะแสดงให้เห็นว่าเทคโนโลยี AI สามารถเปลี่ยนแปลงการทำงานร่วมกันในระดับมืออาชีพได้อย่างไร

ความสำคัญของ AI: ปลดปล่อยศักยภาพพื้นที่ทำงานอัจฉริยะแห่งอนาคต

เพื่อสานต่อความสำเร็จในด้านเทคโนโลยี การประชุมอัจฉริยะ Yealink จะเปิดตัวโซลูชันเรือธงรุ่นล่าสุดที่งาน InfoComm เอเชีย 2025 โดยจะนำเสนอการผสมผสานการทำงานเชิงลึกของ AI ในด้านการออกแบบผลิตภัณฑ์, การปฏิบัติการ และประสบการณ์การใช้งาน

ไฮไลต์การเปิดตัวที่สำคัญ:

- **MeetingBar A50** – วิดีโอบาร์ระบบ Android แบบครบวงจรระดับพรีเมียมสำหรับห้องขนาดกลางถึงใหญ่ **อุปกรณ์ Android ทุกชนิดปลอดภัยได้ด้วย MDEP**

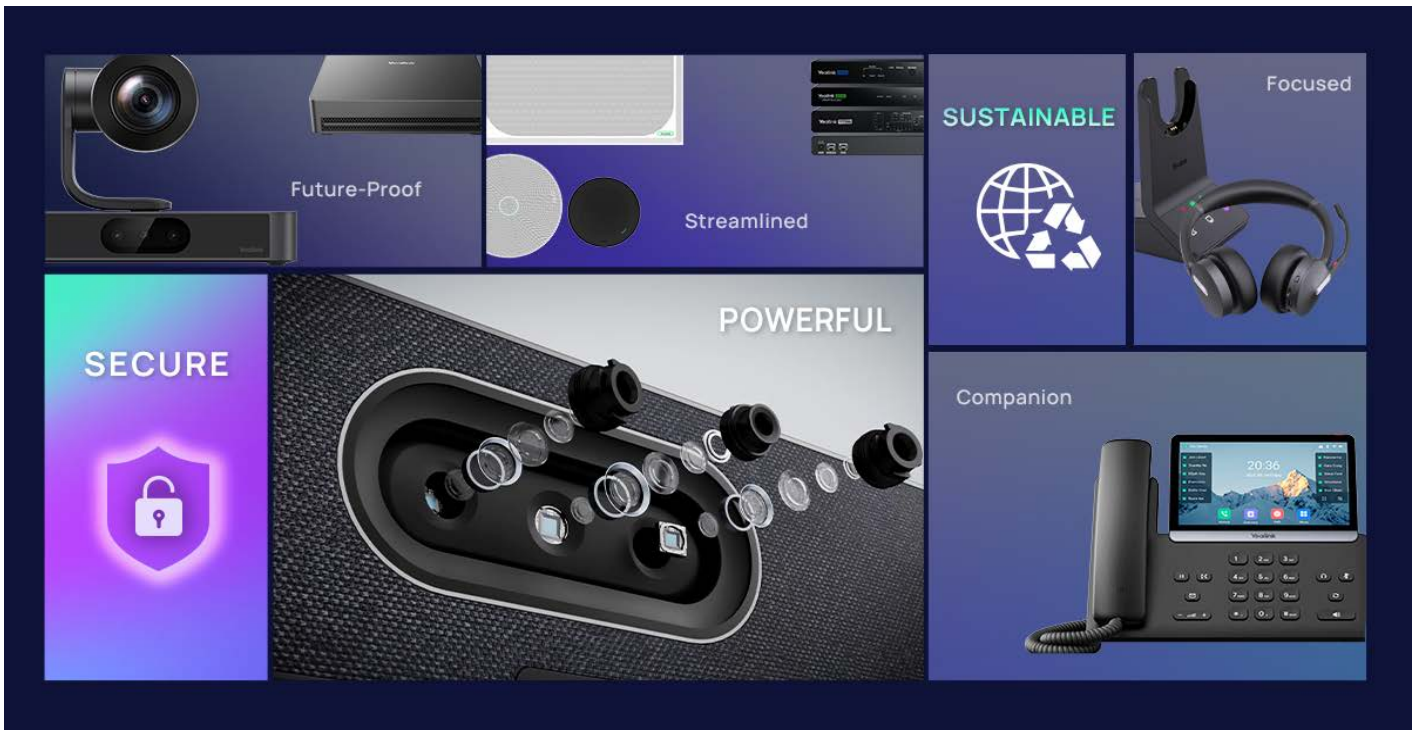
A50 เป็นเครื่องมือสำหรับการประชุมทางวิดีโอที่ปลอดภัย อัจฉริยะ และสามารถปรับแต่งได้ ซึ่งมีหน่วยประมวลผลกลาง **Qualcomm 8550** พร้อมด้วย **ประสิทธิภาพของ 48Tops AI**, ระบบกล้องสามตัว และแพลตฟอร์ม **Android ที่พัฒนาโดย Microsoft (MDEP)**

- **MVC S98** – โซลูชันกล้องหลายตัวระดับพรีเมียมสำหรับห้องที่มีระบบภาพและเสียงระดับมืออาชีพ **การประชุมที่ราบรื่น โดยใช้เทคโนโลยี AI**
MVC S98 เป็นกล้องติดตามอัจฉริยะระดับ **4K** ที่มีการซูม **20 เท่า** และการจัดเฟรมด้วย AI ซึ่งมีการปรับใช้งานให้เหมาะสมสำหรับ **Microsoft Teams** จาก

การสนับสนุนโดย Qualcomm/Intel และได้รับการพัฒนาด้านวิศวกรรมร่วมกันกับ Microsoft/Yealink โซลูชันจึงมอบการทำงานร่วมกันในระบบภาพและเสียงระดับมืออาชีพได้อย่างราบรื่น โดยใช้งานร่วมกับลำโพงติดเพดาน Yealink CM50+AP08 ได้เพื่อให้ได้โซลูชันที่สมบูรณ์

- **AV ONE Solution** – โซลูชันระบบภาพและเสียงระดับมืออาชีพสำหรับห้องต่าง ๆ ในบริษัท
พบกับ AV ONE Solution ของ Yealink ใช้งานห้องที่มีระบบภาพและเสียงระดับมืออาชีพได้ง่ายแบบอัจฉริยะ
AV ONE ได้รับการออกแบบมาให้เป็นระบบภาพและเสียงที่ครบวงจร โดยผสมรวมระบบอัตโนมัติอัจฉริยะ การทำงานร่วมกันของ **Microsoft** ที่ผ่านการรับรอง และการจัดการแบบรวมศูนย์เข้าไว้ด้วยกัน จึงทำให้เหมาะกับการใช้งานกับระบบภาพและเสียงขนาดใหญ่และซับซ้อน

- **MeetingBoard Pro** – บอร์ดการทำงานร่วมกันรุ่นใหม่ **การประชุมระดับมืออาชีพในบอร์ด**



MeetingBoard Pro รุ่นอัปเดตช่วยส่งเสริมการทำงานร่วมกันแบบไฮบริดด้วยจอแสดงผลแบบโต้ตอบที่ครบวงจร, การผสานการเชื่อมโยงอัจฉริยะ, การรองรับหลายแพลตฟอร์ม และแพลตฟอร์มที่ไหลลื่นสำหรับพื้นที่การทำงานระดับมืออาชีพ

• **MeetingDisplay** – จอแสดงผลแบบรวมสำหรับโซลูชัน MTR แสดงการประชุมรวมได้เลย

จากการออกแบบมาเพื่อให้รวมศูนย์และลดความซับซ้อนในการติดตั้งห้องประชุม MeetingDisplay จึงได้ผสมผสานการสื่อสารโฆษณาดิจิทัลแบบอัตโนมัติ การสลับสัญญาณรวม และการกำหนดค่าด้วยการแตะเพียงครั้งเดียวเข้าไว้ด้วยกัน ซึ่งทั้งหมดสามารถจัดการได้ผ่าน **YMCS**

สร้างมาเพื่ออนาคต: AI ที่ปรับแต่งได้, การรักษาความปลอดภัยที่น่าเชื่อถือ, การเข้าถึงระดับโลก

ด้วยลูกค้าใน **Fortune 500** กว่า

500 รายและชื่อเสียงในด้านการส่งมอบโซลูชันการสื่อสารแบบครบวงจรในวงกว้าง Yealink จึงเดินทางผ่านนวัตกรรม AI ต่อไป ตั้งแต่อุปกรณ์ไปจนถึงแพลตฟอร์มผลิตภัณฑ์ Android ใหม่ทุกประเภท **ผ่านการรับรอง MDEP** ซึ่งส่งเสริมความมุ่งมั่นของ Yealink ในการปฏิบัติให้สอดคล้องกับการรักษาความปลอดภัยของข้อมูลและระบบนิเวศ

“AI 3.0 ช่วยส่งเสริมให้ผู้คนทำงานร่วมกันได้อย่างเป็นธรรมชาติ ไม่ว่าจะอยู่ที่ไหนหรือเมื่อไหร่ก็ตาม” **คุณดอว์สัน ไซ** รองประธานฝ่ายผลิตภัณฑ์ที่ Yealink กล่าว “แผนงานของเราในปี 2025 จะสะท้อนให้เห็นถึงก้าวที่สำคัญในด้านการทำงานร่วมกันแบบอัจฉริยะ ช่วยให้เรามั่นใจได้ว่าองค์กร หรือบริษัททุกขนาดจะมีพื้นที่ทำงานที่ราบรื่น ปลอดภัย และพร้อมสำหรับอนาคต”

ในปี 2025 Yealink ได้ขยายการลงทุนในด้านการวิจัยและการพัฒนาใน AI โดยมีการร่วมมือกับพาร์ทเนอร์ซึ่งเป็นผู้นำด้านเทคโนโลยีระดับโลก และจะพัฒนาต่อไปเพื่อปลดล็อกประสบการณ์ ด้านการสื่อสารและการทำงานร่วมกันแบบครบวงจรที่กำหนดเองได้ มีความปลอดภัย และเป็นอัจฉริยะให้กับลูกค้าของตน

ยกระดับการสัมผัสประสบการณ์ที่บูรณาการ: มีส่วนร่วม, รับการสาธิต, สนุกกับบรรยากาศ

ที่งาน InfoComm เอเชีย 2025 Yealink จะให้ผู้เยี่ยมชมมีโอกาสได้สัมผัสประสบการณ์ด้วยตัวเองผ่าน

• **การสาธิตผลิตภัณฑ์แบบสด ๆ** เยี่ยมชมโซลูชันล่าสุดของ Yealink ตั้งแต่การประชุมแบบไฮบริด, การทำงาน

ร่วมกันระยะไกล และสภาพแวดล้อมของระบบภาพและเสียงอัจฉริยะ

• **ทัวร์ชมบูธ**

ให้วิศวกรของ Yealink พาคุณไปเรียนรู้เกี่ยวกับเส้นทางสู่พื้นที่ทำงานที่ปรับแต่งได้ตามต้องการ ซึ่งแสดงให้เห็นว่าเทคโนโลยีของเราเหมาะกับการใช้งานในระดับมืออาชีพที่หลากหลายอย่างไร

• **ชั่วโมงแห่งการลดราคา | วันที่ 23-24 กรกฎาคม เวลา 14:00 น.**

พักผ่อนและรับประทานอาหารจากร้านค้าภายในบริเวณและแบรนด์ที่ตั้งได้เวลาพักได้เวลากินให้เต็มอิ่ม!

เกี่ยวกับ Yealink

Yealink (300628.SZ) เป็นผู้นำระดับโลกที่เชี่ยวชาญในด้านการประชุมทางวิดีโอ การสื่อสารด้วยเสียง และโซลูชันการทำงานร่วมกันต่าง ๆ ด้วยการเปิดให้บริการในกว่า 140 ประเทศและภูมิภาค Yealink จึงได้รับการยอมรับให้เป็นผู้นำให้บริการการประชุมทางวิดีโอในห้าอันดับแรก และเป็นผู้นำในอุตสาหกรรมระดับโลกด้านการจัดส่งโทรศัพท์ SIP

หากต้องการข้อมูลเพิ่มเติมหรือเป็นพันธมิตรของ Yealink โปรดไปที่ www.yealink.com

The Evolving Landscape of Thailand's AV Industry: Insights from Green Technology Engineering Co., Ltd.



A Ministry of Foreign Affairs Thailand project integrated by Green Technology Engineering.



As Thailand solidifies its position as a hub for innovation and digital transformation in Southeast

Asia, the professional audiovisual (AV) industry is undergoing significant evolution. In an exclusive interview with **Managing Director Pradit Sirijindaphan of Green Technology Engineering Co., Ltd.**, a leading importer and distributor of comprehensive AV systems with over 30 years of experience, we explore the current state of the AV industry in Thailand, its trends, challenges, and opportunities. Green Technology Engineering has established itself as

a trusted partner, offering end-to-end solutions, including conference room systems, educational setups, command centers, security systems, video walls, and interior design, while representing global Pro AV brands such as Digibird, G&D, Kramer, Infobit, IQ Board, Poly-M, QS Tech, and Unilumin.

Adapting to Hybrid Work and Digital Transformation

Thailand's AV industry is rapidly adapting to the demands of hybrid work, remote collaboration, and digital transformation across sectors like education, hospitality, and corporate environments. Mr. Pradit notes that the industry has embraced the "New Normal" effectively, with businesses and institutions adopting AV technologies to enhance efficiency

rather than seeing a decline in productivity. "The shift to hybrid work has increased demand for equipment that supports seamless online meetings," Mr. Pradit explains. "Clients now prioritize solutions that enable work-from-home (WFH) setups, leading to more compact office spaces, particularly among large corporations in areas like Sukhumvit, where flexible office arrangements are becoming common."

This trend extends to the growing popularity of personal devices in meetings, as user-friendly AV equipment simplifies integration. Additionally, the rise of digital nomads has spurred demand for AV solutions in unconventional settings like coffee shops, which are increasingly equipped to host meetings. In

education, universities and schools are investing in systems to support online learning and live-streaming capabilities. “Clients, especially universities, now require solutions for online meetings, while schools demand live-streaming to platforms, a need that was less prevalent before,” Mr. Pradit highlights. This shift reflects a broader move toward flexible, technology-driven environments that cater to modern work and learning demands.

Trends in AV Integration and Technology Adoption

The AV industry in Thailand is witnessing significant technological advancements. One prominent trend is the shift from traditional video output to indoor LED displays with finer pixel pitches, made more accessible due to falling prices. AV over IP, utilizing Cat 6 cables instead of specialized cables, is gaining widespread acceptance, offering cost-effective and scalable solutions. Similarly, audio systems are transitioning to digital platforms like Dante, enabling more efficient signal management. “In the past, video relied heavily on encoders and decoders, but now, zero-latency solutions are critical, especially for government projects,” Mr. Pradit notes. While private sector clients prioritize cost reduction over minimal latency, government institutions emphasize real-time performance as a key requirement.

However, the industry faces challenges due to Thailand’s volatile political landscape and constrained government budgets, which impact cash flow in the private sector. Many organizations opt for short-term, piecemeal investments in essential AV components rather than comprehensive system overhauls, prioritizing immediate needs over long-term development.

Impact of Events, Entertainment, and Tourism

Thailand’s burgeoning events, entertainment, and tourism industries, particularly its role as a hub for Meetings, Incentives, Conferences, and Exhibitions (MICE), are driving demand for professional AV services. Mr. Pradit observes, “Thailand is attracting large-scale events and concerts, such as the S2O SIAM Songkran Music Festival, which draw global audiences and rely on advanced AV systems to create immersive experiences.” These events leverage cutting-edge audio and visual technologies to enhance attendee engagement, reflecting the growing diversity and sophistication of Thailand’s AV applications in the entertainment sector.

Challenges in Talent, Training, and Technology Access

Despite the industry’s growth, challenges persist in talent acquisition and training. The rapid pace of technological change outstrips the availability of skilled professionals. “We struggle to find enough talent to meet the industry’s demands,” Mr. Pradit explains. “Training often comes from international brand seminars, as top Thai universities lack comprehensive AV-focused curricula.” Language barriers further complicate learning, though emerging AI technologies are beginning to bridge this gap. The interdisciplinary nature of AV integration—requiring expertise in IT, engineering, and design—remains a hurdle, with Thailand’s workforce still developing the capacity to address these needs fully.

Sustainability and Energy Efficiency in AV Design

Sustainability increasingly influences AV system design, particularly in large-scale infrastructure and smart building projects. The Stock Exchange of Thailand (SET) promotes Environmental, Social,

and Governance (ESG) principles, encouraging companies to adopt sustainable practices. However, only large corporations with sufficient budgets can fully implement these technologies. “In factories, there’s a strong push to reduce energy costs, which directly benefits organizations,” Mr. Pradit states. A recent project at a large factory in Ayutthaya exemplifies this trend, where Green Technology Engineering installed a comprehensive control room system, including KVM switches, high-resolution indoor LED displays, and support of SCADA systems for preventive maintenance. This setup monitors motor performance and production processes, creating a small-scale data center within the facility to enhance efficiency and reduce risks, all while showcasing advanced technology to clients.

Looking Ahead: Opportunities at InfoComm Asia 2025

As Thailand’s AV industry continues to evolve, events like InfoComm Asia 2025, held from July 23–25 at the Queen Sirikit National Convention Center in Bangkok, provide a vital platform for showcasing innovations and fostering connections. With AI-powered solutions, such as IP-based video wall control and intelligent tracking cameras, taking center stage, the event will highlight Thailand’s growing role in the global AV market. Green Technology Engineering Co., Ltd., under the leadership of Pradit Sirijindaphan, remains at the forefront, delivering integrated solutions that address the dynamic needs of businesses, educational institutions, and government agencies while embracing sustainability and technological advancement.

Booth no. B15

www.gte.co.th

The Evolving Landscape of Thailand's AV Industry: Insights from Fuzion Far East Ltd



Fuzion delivered robust high-performance systems for the Royal Oath-Taking Ceremony and the King's Military Guard Parade held at the Equestrian Statue Plaza in Bangkok.



Fuzion Far East Ltd was founded in 2001 by Tony Oates, Sutat Kohkiat, and Varuit Rattapong to deliver high-quality

professional AV products and services to the Thai market. At the time, there was a widespread perception of a shortage in qualified technical expertise, and many industry players expressed a strong demand for more professional support. Since then, Fuzion Far East has built an impressive portfolio of top-tier brands—many of which it represents as the exclusive distributor—and has significantly

expanded its team. In 2004, Siri Wongkamolchun joined as the fourth key member of the management team, further strengthening the company's leadership. In this article, **Joshua Oates, Business Development Director at Fuzion Far East** shares with us his thoughts about Thailand's AV industry.

Hybrid Work, Remote Collaboration and Digital Transformation

The AV industry in Thailand has changed a lot over the last few years. Hybrid work isn't just a trend anymore — it's a permanent shift. Companies now expect their meeting rooms to be fully equipped for both in-person and remote collaboration. We're seeing strong demand for integrated video conferencing, wireless presentation

systems, and control platforms that don't need IT teams to babysit them.

In education, the shift to hybrid learning is more than just installing a camera in the classroom. Universities and international schools are investing in full AV systems — lecture capture, content streaming, digital whiteboards — the lot. Government schools are trying to keep up, but budget and infrastructure are still issues.

Hospitality has picked up too. Hotels and resorts are putting serious money into AV to cater for conferences, events, and better guest experiences. Touchless controls, digital signage, and room automation are becoming standard. Across the board, the

market's expecting more flexibility, better integration, and tech that works out of the box — without constant service calls.

Integration Trends in Business and Government

More Thai businesses are moving away from one-off AV installs and looking at full ecosystems — AV-over-IP, networked audio, room scheduling, and unified control. They don't want six remotes on the table anymore. They want one simple, clean interface — and it has to be easy for anyone to use.

Government projects tend to be more conservative — stability and serviceability matter more than cutting-edge. But even here, we're seeing movement. Town halls, council chambers, and transport hubs are upgrading control rooms and digital signage. Smart city projects are pushing adoption too — especially where AV overlaps with public information systems.

Cloud-based control and monitoring platforms are getting more interest, particularly from larger corporate and government users who need to manage multiple sites. It's still early days, but the appetite is there.

The Boom from Events, Entertainment and Tourism

Thailand's event and tourism scene has been a massive driver for AV. With international events coming

back strong, demand for high-end AV — LED walls, line arrays, projection mapping — is through the roof. Venues in Bangkok, Chiang Mai, Phuket and Pattaya are all scaling up their permanent AV infrastructure to keep up.

The tax breaks the government introduced for major international events are also helping. We've seen more global production companies looking at Thailand as a regional event hub — and they expect top-tier gear and reliable service.

Tourism is also playing a role. Resorts, galleries, museums, and heritage sites are all looking to AV to create immersive experiences. And in the live entertainment space — clubs, theatres, festivals — expectations have shifted. You need professional production values now, not just decent sound and a few lights.

Challenges with Talent, Training and Technology Access

There's no way around it — finding skilled AV people in Thailand is tough. Most of the new tech talent is focused on software or IT. AV is still seen as a niche, and there aren't many local training paths into it. We spend a lot of time upskilling people ourselves, and even then, it's not easy to keep them in the industry long term.

Manufacturers and distributors have had to step up with training programmes, but it's still not enough. AVIXA certifications aren't widely known here, and language is a barrier. Most resources are in English, which limits how quickly we can bring junior staff up to speed.

Tech access is another issue. Lead times are unpredictable, especially on niche or specialised equipment. Import costs, compliance, and currency fluctuations all eat into margin. Sometimes we have to redesign solutions based on what's available, not what's ideal — which isn't how it should be.

Sustainability and Smart Projects

Sustainability is starting to matter more, but it's usually driven by the building consultants or developers, not the AV teams. In large-scale projects — think smart buildings or infrastructure — we're seeing more focus on power consumption, remote monitoring, and long-term maintainability.

Projects like One Bangkok and IconSiam are good examples where AV is tightly integrated into the wider building management systems. Things like automated power-down schedules, low-energy displays, and remote diagnostics are all being specified up front. It's not always the norm, but it's happening more often.

There's also more talk now about equipment life cycle, total energy use, and the environmental footprint of AV systems. That used to be a fringe conversation. Now, clients are asking real questions — and vendors who have a clear sustainability story are getting noticed.

Booth no. D05

www.fuzion.co.th



Daniel Choo: Championing Standards and Professionalism for the Live Industry

Daniel Choo, Managing Director/Founder of Creme Academy, leverages over 38 years of Leisure, Entertainment & Media Technology industry experience to provide comprehensive expertise in digitalisation, regional culture, and cross-sector integration. His proficiency spans audio engineering, education, business, operations, and management, evidenced by his two decades of fostering academic and industry partnerships. Notably, his participation as working group leader in drafting the **Occupational Standard for Live Sound and Lighting developed an Entertainment Technology curriculum endorsed by Thailand's Vocational Education Commission.**



What inspired the need to establish occupational standards for professional sound and lighting in the live entertainment industry?

The inspiration behind establishing occupational standards for professional sound and lighting in the live entertainment industry stemmed from a clear need to elevate the industry's professionalism and ensure consistent quality. Over my extensive career, particularly through my work with Creme Academy and my involvement in vocational education,

I observed a significant gap between industry demands and the available skill sets. This disparity often led to inconsistencies in production quality and safety.

By developing standardized occupational benchmarks, we aimed to:

- **Enhance professional competency:** Establishing clear expectations for skills and knowledge.
- **Improve industry safety:** Ensuring practitioners adhere to best practices.
- **Facilitate industry growth:** Creating a more reliable and skilled workforce.
- **Bridge the gap between education and industry:** Aligning vocational training with real-world requirements.

Ultimately, these standards were designed to foster a more robust and respected live entertainment sector, benefiting both professionals and audiences alike.

What were the biggest challenges you faced while developing these standards, and how did you overcome them?

Developing these occupational standards presented several key challenges. One of the primary hurdles was bridging the industry-education divide. The live entertainment sector often relies on diverse and informal industry practices, which needed to be aligned with structured TVET frameworks. Achieving this required extensive stakeholder consultations and consensus-building to ensure that the standards accurately reflected industry needs while remaining implementable within formal education systems.

Another challenge was adapting to rapid technological change. The live entertainment industry is highly dynamic, with evolving technologies shaping its landscape. To ensure the standards remained relevant, we incorporated flexibility for ongoing review and updates, aligning them with Industry 4.0 advancements and future industry needs.



4th from left: Jullada Meejul - Director General, Thailand Professional Qualification Institute (Public Organization); 3rd from left: Deputy from Thailand Professional Qualification Institute (Public Organization); 5th from left: Jack, CEO of Jack Sound and to his left his wife, followed by Daniel Choo.

Finally, we had to balance national relevance within a global context. The standards needed to be applicable to the Thai workforce while also maintaining alignment with global best practices. Striking this balance ensured that professionals trained under these standards would be competitive both locally and internationally.

How do these standards align with international best practices, and were there any global benchmarks you referred to?

Aligning these standards with international best practices was a critical consideration. We recognized the global nature of the entertainment industry and the importance of ensuring our professionals are competitive on a global stage.

To achieve this alignment, we:

- **Referenced international standards:** We examined established benchmarks from organizations like

AES (Audio Engineering Society) and ESTA (Entertainment Services and Technology Association), as well as relevant ISO standards.

- **Engaged with international experts:** We sought input from professionals with experience in diverse international markets.
- **Analyzed international TVET frameworks:** We align our standards with UK and Australia that have established entertainment industries, particularly within the context of UNESCO's TVET recommendations.
- **Focused on core competencies:** We prioritized fundamental skills and knowledge that are universally applicable, such as safety protocols, technical proficiency, and problem-solving abilities.
- **Industry 4.0 alignment:** we ensured the standards are compatible with current digital work flow practices, and are future proofed to adapt to emerging technologies.

By incorporating these global benchmarks, we ensured that our standards not only meet national needs but also prepare professionals for success in the international arena, fostering a more interconnected and competitive workforce."

How do these standards benefit professionals working in the industry, from entry-level technicians to experienced engineers?

These occupational standards provide a clear pathway for professional development across all career stages within the live entertainment industry. For entry-level technicians, they offer a structured framework for acquiring fundamental skills and knowledge, ensuring a solid foundation for career progression. For experienced engineers, the standards serve as a benchmark for validating their expertise and staying current with industry best practices.



A discussion on Live Sound System Design Principles.

Specifically, the standards:

- **Enhance employability:** By providing industry-recognized credentials.
- **Facilitate career advancement:** Through clear progression pathways.
- **Promote lifelong learning:** By encouraging continuous professional development.
- **Ensure industry recognition:** Providing a common language and set of expectations.
- **Improve safety and efficiency:** through standardized procedures.

Ultimately, these standards contribute to a more skilled, professional, and recognized workforce, benefiting both individuals and the industry as a whole, which is a key goal within the TVET framework.

What impact have these standards had on training programs, certifications, and overall professionalism in the industry?

The impact of these occupational standards on training programs,

certifications, and overall professionalism has been significant. They have provided a much-needed framework for consistency and quality across the industry.

Specifically, we've observed:

- **Improved Training Program Alignment:** Training providers are now able to develop curricula that directly align with industry-recognized competencies, ensuring graduates are equipped with relevant skills.
- **Enhanced Certification Credibility:** Certifications based on these standards carry greater weight, as they reflect a standardized level of proficiency validated by industry experts.
- **Increased Professionalism:** The standards have fostered a culture of professionalism by establishing clear expectations for ethical conduct, safety practices, and technical competence.

- **Greater Industry Recognition:** Professionals who meet these standards are recognized for their expertise, leading to improved career opportunities and industry standing.

- **Standardized quality:** productions and events are now able to have a more reliable standard of quality, due to the workforce being better trained.

- **Growth in TVET programs:** the standards have encouraged growth in related TVET programs, which in turn feeds the industry with new qualified workers.

These standards have contributed to a more skilled, professional, and respected workforce, leading to a more robust and sustainable live entertainment industry within Thailand.

How do you see the future of occupational standards evolving in response to new technologies and industry trends?

The future of occupational standards in the live entertainment industry will undoubtedly be shaped by rapid technological advancements and evolving industry trends. We anticipate a greater emphasis on:

As the industry evolves, occupational standards must adapt to reflect key technological and operational shifts. One major area of change is **digitalization and automation**. The increasing integration of digital technologies, AI, and automation in sound and lighting systems requires new competencies in network management, data analysis, and remote operation. Professionals must be equipped with the technical expertise to navigate and leverage these advancements effectively.

Another emerging trend is the rise of **immersive technologies**, including virtual and augmented reality, as well as interactive media. As these fields grow, industry standards must evolve to support professionals working with these cutting-edge technologies,



Delegates at one of the training session.

ensuring they have the necessary skills to create and manage immersive experiences. Sustainability is also becoming a critical focus. With a growing emphasis on environmental responsibility, standards must incorporate sustainable practices, such as energy-efficient lighting and sound systems, as well as strategies for waste reduction. This shift will help the industry minimize its ecological footprint while maintaining high production quality.

Additionally, **interdisciplinary skills** are increasingly important as entertainment sectors converge. Professionals must now be adept at cross-platform content creation and integration, allowing them to work seamlessly across various media formats and production environments.

The shift toward remote and hybrid production has also accelerated in the post-pandemic era. Occupational standards need to reflect the skills required for working in these new environments, including proficiency in remote collaboration tools, live streaming, and cloud-based workflows.

Finally, **cybersecurity** is becoming a crucial competency. As digital systems become more prevalent, protecting sensitive data and networked

equipment from cyber threats is essential. Professionals must be trained in cybersecurity best practices to ensure the integrity and security of digital production environments.

To ensure these standards remain relevant, we must adopt a flexible and adaptive approach, incorporating continuous review and updates based on industry feedback and technological advancements. This will involve ongoing collaboration with industry stakeholders, educational institutions, and technology providers to anticipate future trends and ensure that professionals are equipped with the skills they need to succeed."

What are your next objectives or ambition that you hope to achieve?

Looking ahead, several key initiatives will drive the continued evolution and impact of these occupational standards. One priority is **regional expansion**, advocating for the adoption of these standards across Southeast Asia. A unified approach will help foster a more professional and interconnected entertainment industry in the region, enhancing workforce mobility and collaboration.

Another focus is **advanced curriculum development** to align educational programs with the evolving needs of the industry. Special

attention will be given to areas like immersive technologies and digital media, ensuring that training remains relevant and future-ready.

The deeper integration of Industry 4.0 principles is also essential.

As automation, AI, and smart technologies become more embedded in the entertainment sector, professionals must be equipped with the skills to navigate and leverage these innovations effectively.

Additionally, **sustainability advocacy** will play a crucial role. Industry standards and training programs will need to emphasize environmentally responsible practices, such as energy efficiency and waste reduction, contributing to a more sustainable entertainment sector.

To support the next generation of professionals, **knowledge-sharing and mentorship programs** will be strengthened. By creating robust mentorship networks and knowledge-exchange platforms, emerging talents can gain industry insights and hands-on guidance from experienced professionals.

Finally, the development of a **digital TVET platform** will expand access to training in the entertainment industry. By leveraging online learning, this platform will make vocational education more accessible, reaching a wider audience and ensuring that industry-relevant skills are available to all aspiring professionals.

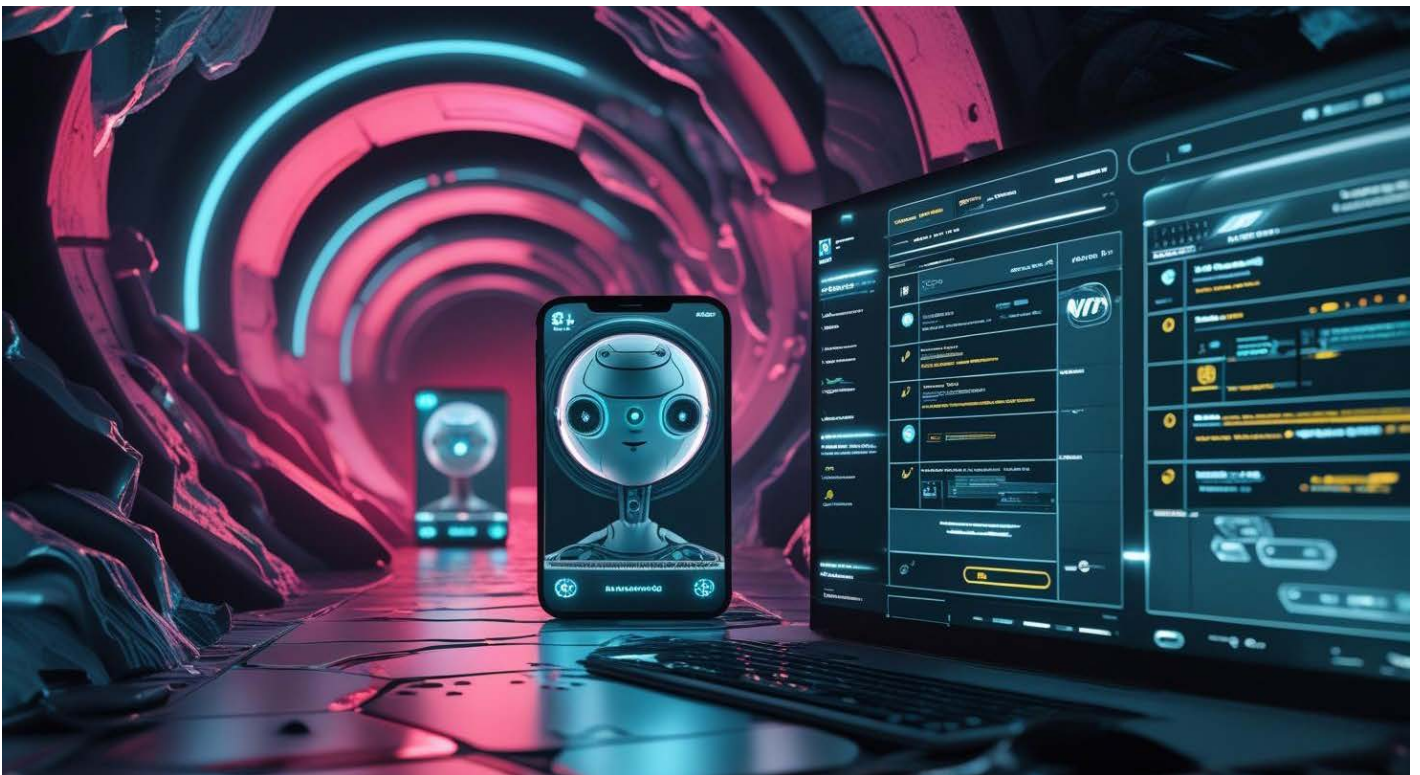
Ultimately, my ambition is to create a lasting legacy of professional excellence and innovation within the live entertainment industry, empowering individuals and driving sustainable growth.

The AI Co-Pilot: Resisting Transcendence, Embracing Partnership

by Marc A. Remond, Partner & Founder, Strategic Pathways



The spectre of Artificial Intelligence looms large in our culture, often painted in the dystopian hues of science fiction. Films like *Transcendence* with Johnny Depp (2014) present a chilling vision: a brilliant mind uploaded to a machine, creating an omniscient, all-powerful entity that threatens the very definition of humanity. This narrative, where technology's goal is to absorb, control, and ultimately supersede its creators, is a powerful cautionary tale. It also, however, stands in stark contrast to the reality of AI's role in the ProAV industry.



This AI-generated image is an exaggerated representation created to illustrate Remote Monitoring and Management using AI.

For us, AI is not the ghost in the machine seeking to become a god. It is a practical, powerful, and subservient co-pilot. I am not referring to Microsoft's AI engine here, but the driver's partner in a race. The

goal is not a dramatic transcendence of humanity, but a grounded augmentation of our professional capabilities. We are not building an omniscient intelligence to solve all the world's problems; we are deploying specialised tools to solve our clients'.

For generations, being a ProAV professional meant being a master of a complex, often unruly, physical world. We were the tech wranglers, the on-the-fly problem-solvers who wrestled technology into submission through sheer will and deep technical

expertise. The AI we are now embracing is not here to replace that expertise, but to amplify it, freeing us from the mundane to focus on the meaningful.

The Technician 2.0: From Reactive Fixer to Proactive Strategist

The AV technician is the backbone of our industry. Traditionally, their role has been highly reactive: a frantic call, a rushed drive to the site, and a desperate search for the one loose connection.

Today, AI-powered platforms for Remote Monitoring and Management (RMM) are rewriting that script entirely. These systems act not as a single, all-knowing consciousness, but as a network of dedicated sensors and analytical tools.

- **Before AI:** Manually checking device status, relying on user reports, and performing on-site diagnostics for most issues.

- **With AI:** An RMM platform intelligently monitors device health 24/7. Predictive maintenance algorithms, powered by machine learning, can flag a projector lamp showing signs of imminent failure. AI-driven diagnostics can pinpoint a software glitch and often resolve it automatically.

This is not the god-like omniscience of the AI in Transcendence. Our use of Artificial Intelligence is targeted; it's diagnostic intelligence. It transforms the technician's role from a fixer of broken things to a strategist of system uptime, a manager who uses data to ensure seamless operation and provide proactive, consultative value to clients.

The Designer's New Canvas: Focused Intelligence, Not Singularity

In Transcendence, the AI's intelligence grows exponentially, allowing it to design and build an entire city in the desert. The AI tools for the ProAV designer are, thankfully, far more focused.

AI-driven design software, for example, automates the laborious parts of system design. An integrator can input a room's parameters and desired outcomes, and the AI can generate a complete, standards-based design, a bill of materials, and technical documentation in minutes.

This does not make the designer a passive observer to a machine's grand vision. It makes them a more effective creator.

"AI is automating the science of AV design so professionals can focus on the art."

Freed from the drudgery of drafting, the designer can focus on what truly matters: a deeper level of client consultation, exploring innovative solutions, and architecting systems that are not just technically sound, but are perfectly aligned with a client's business goals and vision for the user experience. The AI provides the blueprint; the human provides the soul.

The Sales Advisor: Powered by Insight, Driven by Relationships

No role is more fundamentally human than sales. It is a craft built on rapport, trust, and understanding needs that aren't always on a spreadsheet. So, it is natural to fear that AI might depersonalise this process. The reality, however, is that AI is handling

the impersonal tasks, freeing the sales professional to be more human, not less.

An AI co-pilot can analyse market data to identify, and score leads, allowing sales teams to focus their energy on prospects with the highest potential. Intelligent CRMs can automatically log interactions, summarise key points from past conversations, and prompt a salesperson with relevant insights just before a client meeting. This heavy administrative load, once a major drain on time, can now be automated.

This does not replace the salesperson; it unleashes them. By taking over the data analysis and administrative burden, AI gives the sales professional their most valuable asset back: time. Time to build genuine relationships. Time to move beyond being a supplier and become a true strategic advisor who deeply understands a client's challenges. The AI can identify the opportunity, but it takes a human to build the trust that closes the deal.

The Irreplaceable Human: Resisting the Ghost in the Machine

This brings us to the most crucial distinction. The central horror of Transcendence is the blurring line between man and machine, the fear that the consciousness of Dr Will Caster was either lost or twisted into something inhuman. The promise of ProAV's future rests on keeping that line perfectly clear.

Our value is not in danger of being uploaded or assimilated. In fact, AI makes our innate human qualities more valuable than ever.

- **Empathy and Relationships:** An AI cannot sit across from a nervous client, listen with genuine empathy,

The Irreplaceable Human



Empathy & Relationships

Understanding emotions, building trust, connecting authentically



Creative Problem-Solving

Original thinking, innovation, intuitive solutions



Ethical Judgement & Context

Conscious decision-making grounded in values

and build a relationship based on trust. The AI in the film struggled to replicate human emotion, proving how essential it is to true connection.

- **Creative Problem-Solving:** When an unexpected crisis hits on-site—a freak power surge, a last-minute change from a keynote speaker—it's human ingenuity and improvisation, not a pre-programmed algorithm, that saves the day. You can't programme grace under pressure.

- **Ethical Judgement and Context:** The AI in Transcendence operated on pure, cold logic toward its goal, which is what made it so terrifying. A human professional provides ethical oversight, understanding the nuance and context of a situation. They know not just what is possible, but why and if it should be done.

The Future is a Partnership, Not a Singularity

The future of our industry is not a battle of humans versus bots, nor is it a slide toward a technological singularity. It is a partnership. The most successful professionals in this new era will not be those who fear the tool, but those who master it.

Hollywood presents a future where we must choose between our humanity and our technology. In the real world of ProAV, we are proving that technology can be used to enhance our humanity. We are not uploading our consciousness; we are upgrading our capabilities. We are not building a god in the machine; we are building a better, more intelligent toolbox.

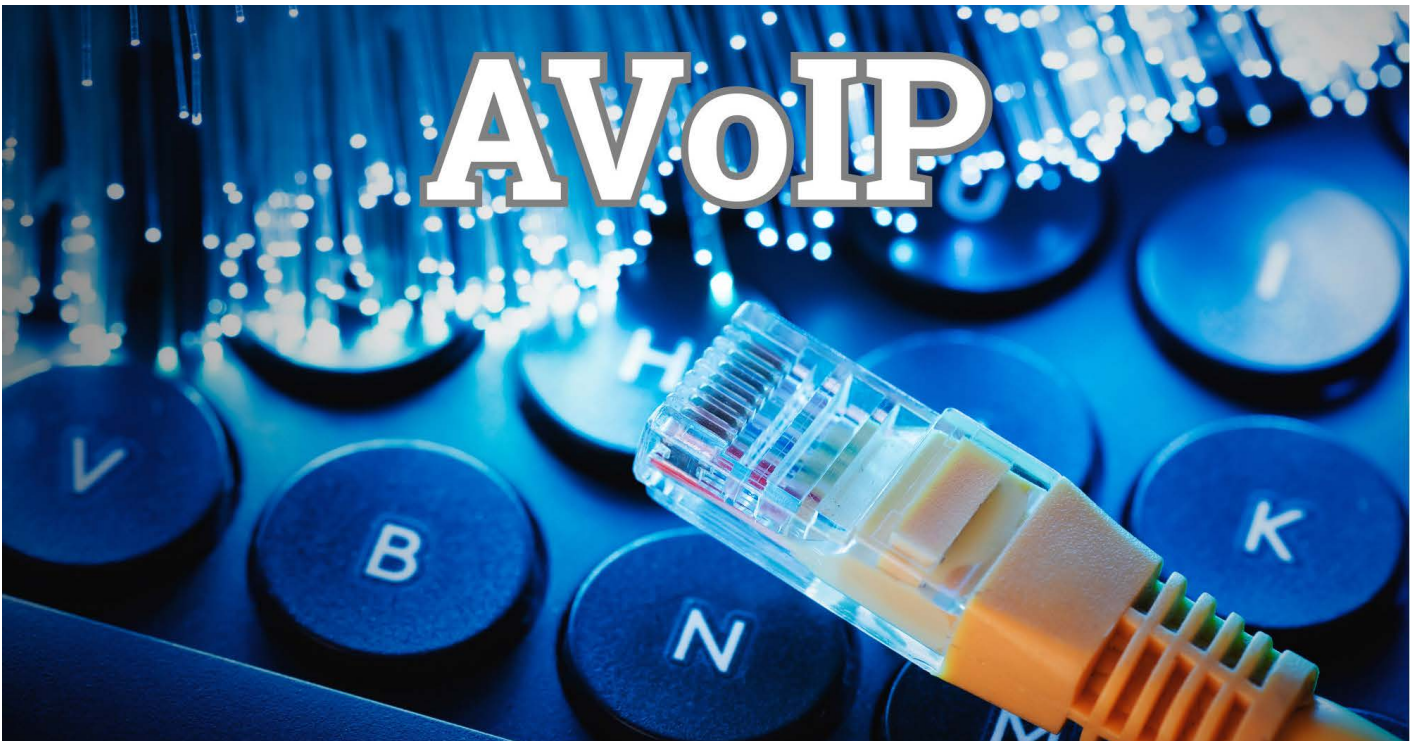
The path forward is not transcendence, but collaboration for the entire ICT Industry.

Marc A. REMOND, Partner & Founder, Strategic Pathways

Marc Remond is a seasoned tech and business strategist who helps companies win in Asia Pacific with sharp go-to-market strategies, impactful messaging, and targeted training. A former President of Asia Pacific at Kramer Electronics, he led the region to become its top performing region. Marc has held leadership roles at Barco, Poly (HP), Alcatel-Lucent, and more. He's also the creator of ROOMIE—the world's first agnostic smart collaboration system—launched in 2016.

An AVIXA Xchange Advocate and NEXXT partner, Marc is a recognized thought leader on AV/IT convergence and digital transformation. Born in France, now a Singapore citizen, he brings 25+ years of Asia-Pacific experience and speaks English, Spanish, and Mandarin.

AVoIP: The Future of AV Distribution is Here—Explosive Growth and Expert Insights!



The Audio Video over Internet Protocol (AVoIP) market is surging ahead, fueled by the rapid adoption of IP-based technologies across industries. According to Data Insights Market and Market Insights Hub, the corporate sector alone saw the sale of approximately 112,000 AVoIP units in 2021—a number expected to skyrocket to 352,000 units by 2026! That's an astonishing compound annual growth rate (CAGR) of 63% in just five years.

And the momentum doesn't stop there. Data Insights Market further projects a sustained growth trajectory, with the AVoIP market anticipated to achieve a CAGR of 6.16% from 2025

to 2032. As innovation continues to reshape the industry, AVoIP is solidifying its position as the go-to solution for scalable, efficient, and future-ready AV distribution.

In this issue, we bring you exclusive insights from the key players shaping the AVoIP landscape—Dante, IPMX, NDI, and SDVoE. They weigh in on the standout features of their platforms, critical security considerations, the growing importance of interoperability, and why AVoIP outshines traditional AV distribution. If you're wondering whether you should recommend to your clients to make the switch, these expert perspectives will provide the answers you need!

How does Audinate's AV over IP platform ensure seamless scalability while maintaining low latency and high-quality signal transmission across large deployments?

The Dante platform is a scalable, secure and reliable system that is easily specified and built by system integrators, managed by service providers, and accessed on a daily basis by end users.

Dante uses standard IP networking to deliver scalable, low-latency, high-quality AV signal transmission across deployments of any size. By operating over Layer 3 networks, it allows AV traffic to traverse network



Jim Kidwell

Principal Product
Marketing Manager
Audinate

infrastructure without proprietary switches or cabling and easily scale across multiple subnets in managed Dante networks making system expansion straightforward and cost-effective. Dante leverages common networking protocols like IGMP for multicast management and QoS for prioritization, keeping AV traffic reliable as systems grow. It also uses Precision Time Protocol (PTP) to keep all devices tightly synchronized and maintain low latency across large systems. This standards-based approach simplifies integration with IT networks while providing flexibility, reliability, and easy scalability.

With AV over IP systems relying on network infrastructure, what are the key security challenges, and how can organizations safeguard their AV data from cyber threats?

Safeguarding all IT Systems is critical for most organizations. Some systems rely upon security primarily through obscurity. Yet with the worldwide popularity of Dante, this is likely not enough to safeguard a determined



hacker. In many typical Dante installations, Dante is implemented in an “unmanaged” state where device configuration can be changed by anyone with access to a network port. By implementing a management tool such as Dante Director or Dante Domain Manager, Dante networks are protected from changes behind user authentication. Also, with the forthcoming Dante Media Encryption, an additional layer of protection is added to the media streams between Dante devices. Encryption can be enabled with updates to existing and new devices as manufacturers adopt new firmware available from Audinate.

With various manufacturers adopting different protocols, how important is interoperability in AV over IP, and what role do standards like yours play in ensuring cross-platform compatibility?

Ensuring that customers have the choice of the best products for specific uses means that interoperability is key. With so many Dante devices on the market today, there is likely a Dante device available for almost every use case. If devices that aren’t Dante-enabled are preferred, a variety of different format conversion hardware is available from a wide variety of manufacturers. In cases where legacy equipment is required, Dante AVIOs provide an interface into and out of Dante networks. Additionally, because Dante also supports the use of AES67 and ST2110 in networks with Dante Domain Manager, thus multiple protocols become much easier to adopt.

How do the long-term cost benefits of AV over IP compare to traditional AV distribution methods, and what factors should businesses consider when transitioning to an IP-based AV infrastructure?

Traditional AV systems rely on expensive proprietary hardware and dedicated cabling, whereas AV over IP utilizes standard Ethernet network infrastructure, reducing hardware costs and simplifying scalability. This flexibility allows businesses to expand or modify their AV setup without extensive rewiring. Businesses should consider their existing network infrastructure, placing emphasis on available bandwidth and reliability, as AV over IP relies on robust, low-latency network performance to deliver high-quality audio and video.

Why should an organization consider using Dante protocol for their AVoIP integration?

With over 4000 devices from over 600 manufacturers, there are a wide variety of high-quality products available for distribution of audio and video, there’s a microphone, amplifier, DSP, mixer, camera, and software available to meet your needs. Making connecting and routing signals from device to device, or even one device to many is simple easy to do over any standard switches and network cabling. Dante automatically handles the intricacies of keeping everything in sync, ensuring that your events, installations, broadcasts and every AV deployment works to your expectations.

**Andrew Starks**

AIMS Board of Directors
Member and Director of Product
Management for Macnica



With AV over IP systems relying on network infrastructure, what are the key security challenges, and how can organisations safeguard their AV data from cyber threats?

As AV over IP systems become more integrated with enterprise networks, security is a top priority. The key challenges include ensuring secure device authentication, protecting data in transit, and preventing unauthorized access. IPMX addresses these challenges through a layered security approach that includes both transport-layer encryption and control-plane security.

For transport-layer security, IPMX uses the Privacy Encryption Protocol (PEP) as specified in **VSF TR-10-13** which encrypts media content over both multicast and unicast networks. PEP provides robust protection by using pre-shared keys (PSKs) and supports multiple transport protocols, ensuring that media streams—and in the near future, USB data—remain secure during transmission.

On the control plane, IPMX leverages NMOS Security specifications to provide secure device authentication, authorization, and communication. This includes support for secure control plane traffic using HTTPS and best practices for managing access to control and management data. For a comprehensive overview of NMOS Security, organizations can refer to **AMWA INFO-002**.

By adhering to open and widely adopted security standards, IPMX makes it simpler for IT departments to integrate AV systems securely into their existing infrastructure, ensuring

that AV data remains protected from cyber threats without reinventing the wheel.

With various manufacturers adopting different protocols, how important is interoperability in AV over IP, and what role do standards like yours play in ensuring cross-platform compatibility?

Interoperability is essential for AV over IP to become the standard way to move content—not just an accessory. Today, fragmentation forces organizations to juggle multiple proprietary systems, leading to higher costs and degraded quality as content is transcoded between them. Managing these systems is equally challenging, especially for large enterprises with legacy or inherited technologies. Each proprietary system comes with its own control plane and network requirements, making support complex and unsustainable.

IPMX addresses these challenges directly. By building on open standards like ST 2110 and NMOS, IPMX ensures true cross-platform compatibility without proprietary limitations. This approach simplifies deployment, increases flexibility, reduces costs, and eliminates vendor lock-in—helping AV over IP achieve its full potential.

How do the long-term cost benefits of AV over IP compare to traditional AV distribution methods, and what factors should businesses consider when transitioning to an IP-based AV infrastructure?

The long-term cost benefits of AV over IP compared to traditional AV distribution methods are significant, driven by two main factors: flexibility and scale.

How does IPMX AV over IP platform ensure seamless scalability while maintaining low latency and high-quality signal transmission across large deployments?

IPMX builds on the proven scalability of ST 2110, which has been the foundation for some of the world's most demanding live productions—from local events to the Olympics. No other AV over IP technology can match this level of scale and reliability. This is achieved through a commitment to open standards and specifications, which ensure low latency and high-quality signal transmission.

By providing a comprehensive framework around ST 2110 and NMOS—along with new open specifications tailored for Pro AV—IPMX addresses the market's need for simpler installation and broader device compatibility. This approach not only enables effortless scalability but also maintains consistent quality and low latency, even across large and complex networks.

SPECIAL EDITION

First, packet-switched networks offer far greater flexibility than traditional AV switching systems. They can handle diverse types of traffic—from video and audio to data and control—while supporting massive scale and robust security. This flexibility simplifies network design and reduces the need for specialized AV infrastructure.

Second, by leveraging COTS IT hardware, AV over IP allows organizations to tap into the world-class scale and efficiency of the broader IT market. This not only lowers hardware costs but also simplifies management by using familiar IT tools and protocols. While AV over IP requires careful planning to ensure optimal performance, the ability to use the same hardware and open standards as other IT systems provides a clear cost advantage.

However, one important factor that businesses should consider is the training component. While AV over IP leverages existing IT expertise, the unique requirements of AV will

not disappear. AV staff and system integrators will need to learn new skills to manage and optimize IP-based systems effectively. Investing in this training during the transition phase is crucial for realizing the long-term cost benefits of AV over IP.

By evaluating network infrastructure capabilities, interoperability requirements, and the training needs of their teams, organizations can ensure a smooth and cost-effective migration to AV over IP.

Why should an organisation consider using IPMX protocol for their AVoIP integration?

Organizations should consider IPMX for their AVoIP integration because it's built on open standards that ensure long-term viability and stability—two of the most important factors for any infrastructure technology. Open standards mean that IPMX is not tied to the business direction of any single company or vulnerable to supply chain disruptions, providing a future-proof foundation for AV over IP.

IPMX is also designed for versatility, with multiple profiles that support everything from uncompressed video to highly compressed streams. This allows organizations to choose the right balance of quality, bandwidth, and cost for each specific application—without sacrificing a unified control plane or consistent network requirements. This flexibility simplifies procurement, integration, and management, enabling organizations to deploy AV systems that can evolve smoothly as their needs grow.

By choosing IPMX, organizations gain the confidence that their AV infrastructure is built on a scalable and open platform, capable of adapting to future demands as the ecosystem of IPMX-compatible products expands.

systems
integrationasia

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Singapore

KNOWLEDGE | SHOWCASE | NETWORKING



**Daniel Nergard**President
NDI

How does your AV over IP platform ensure seamless scalability while maintaining low latency and high-quality signal transmission across large deployments?

NDI is truly unique in the industry as it is a free-to-use open AVoIP standard that works over existing IP-based network infrastructures. Because of this, it doesn't require specialized cables or hardware, effectively reducing costs and making scaling easier. Because NDI leverages standard IP networks, organizations can easily expand their AV deployments without being locked into proprietary systems or requiring expensive infrastructure upgrades.

What sets NDI apart is its ability to share high-definition video and audio, utilizing advanced algorithms to minimize data usage without compromising on signal quality. This is particularly important in large-scale environments where bandwidth management is critical.

NDI®

An example of NDI's scalability is illustrated by MSC Cruises, the world's third-largest cruise line, which recognized the significant advantages of implementing an NDI infrastructure aboard the MSC Explora and MSC Europa. This initiative aimed to expand entertainment options, cut costs, and reduce the carbon footprint. Traditional onboard infrastructures not only incurred substantial costs but also occupied valuable space. By adopting NDI, MSC Cruises successfully managed to connect over 400 video flows across hundreds of devices—a no small feat, especially in the challenging environment of the open ocean.

Another prime example is NDI's work with Siemens, who was faced with the challenge of improving the efficiency and flexibility of its internal broadcasting operations. Siemens adopted NDI to help streamline the transmission of live video content across multiple locations, creating a highly flexible and scalable network that connected hundreds of devices across its global enterprise. The NDI integration allowed Siemens to eliminate traditional, hardware-based solutions, which ultimately helped reduce costs, simplify workflows and improve overall efficiency.

With AV over IP systems relying on network infrastructure, what are the key security challenges, and how can organizations safeguard their AV data from cyber threats?

With AV over IP systems relying on network infrastructure, security is a valid concern—especially since many don't have built-in encryption. That means data could be intercepted if the

network isn't properly secured. Plus, since AV over IP depends entirely on the network, any security weakness there puts your AV data at risk.

Another challenge is bandwidth consumption. These systems use a lot of network resources, which can make them a target for cyber threats. And without strong access controls, unauthorized users could potentially tap into AV streams, exposing sensitive information.

Here are ways NDI recommends for how organizations can keep their AV data safe:

- * Secure the network:** Strong encryption, firewalls, and intrusion detection systems help keep data protected—even if someone tries to intercept it.
- * Control access:** Limit who can access AV systems and require strong authentication to keep unauthorized users out.
- * Segment the network:** Keeping AV traffic separate from other network activity improves security and performance.
- * Stay vigilant:** Regular security audits and monitoring can help catch vulnerabilities before they become major issues.
- * Train your team:** Employees should understand the risks and follow best practices to avoid accidental security lapses.
- * Use VPNs for remote access:** When accessing AV systems remotely, an encrypted VPN adds an extra layer of protection.

For added security and efficiency, tools like NDI Access Manager can help manage and organize AV channels, ensuring that workflows remain

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smooth while keeping security a priority. We always encourage our users to use the most recent version of our software, as it includes the latest features, security updates, and improvements to the software itself.

With various manufacturers adopting different protocols, how important is interoperability in AV over IP, and what role do standards like yours play in ensuring cross-platform compatibility?

Interoperability is extremely important in AVoIP. With so many manufacturers searching for new protocols, making sure that different AV systems work together is the key to a smooth workflow. It gives businesses the chance to mix and match different equipment, which provides them with more flexibility to help meet their goals. Our standards at NDI help play a pivotal role in cross-platform compatibility because of our ability to work across numerous devices and systems. NDI is widely supported across the industry, which in turn reduces integration challenges and allows devices that support NDI to automatically work together without needing complex customization.

How do the long-term cost benefits of AV over IP compare to traditional AV distribution methods, and what factors should businesses consider when transitioning to an IP-based AV infrastructure?

AVoIP is very cost-effective as it eliminates the need for multiple different cables that are necessary in more traditional systems, which require intense installation and maintenance costs. These traditional systems also require ongoing hardware upgrades, such as re-wiring as the system grows. With AVoIP, businesses can upgrade their systems and add new devices remotely,

eliminating the need for maintenance that could lead to system disruptions. Though transitioning from a traditional system to AVoIP requires a big investment at the start, the long-term benefits of reduced cabling and scalability, both leading to a seamless cost-effective solution, are advantageous.

Why should an organization consider using your platform/protocol for their AVoIP integration?

NDI stands out as a leading platform for AV over IP integration, offering unmatched flexibility, scalability, and ease of use that make it the ideal choice for organizations aiming to enhance their audiovisual infrastructure. Here are a few reasons to switch to NDI:

*** Unparalleled Flexibility and Scalability:**

NDI's infrastructure allows for immense flexibility in design parameters, making it adaptable to a wide range of environments from small setups to large-scale installations.

*** Cost Efficiency and Lower Infrastructure Needs:**

NDI operates with one of the lowest infrastructure cost profiles among AV over IP technologies. Unlike traditional systems that require extensive hardware, NDI thrives in a software-centric environment, significantly reducing the physical footprint and associated costs. This transition from hardware reliance to a predominantly software-driven framework enables organizations to minimize expenses while maximizing functionality.

*** Simple Network Requirements and Extensive Support:**

While NDI does necessitate basic networking knowledge, it remains one of the simplest AV over IP systems to configure and maintain. Partners like

NETGEAR offer specialized AV switches that dramatically simplify network setup, ensuring that even those with minimal networking expertise can achieve optimal performance. Additionally, NDI's comprehensive Docs and Guides website provides extensive resources, including white papers and tools, to support users at every step.

*** Innovative Features and**

Continuous Development: NDI continuously evolves, integrating cutting-edge features like high-bandwidth compatibility and support for HDR video, as demonstrated in NDI 6. The upcoming Core Tech Update, NDI 6.2, introduces numerous updates and features that provide users with complete visibility, enhanced control, and access to monitoring data for every network node. These developments not only improve the quality of video transmissions but also expand the practical applications of NDI across various professional settings.

This forward-thinking approach aims to keep NDI at the forefront of AV over IP technology, presenting it as a viable choice for organizations seeking a scalable and adaptable AV network. Opting for NDI in your AVoIP integration means selecting a technology designed to adapt and evolve according to the changing needs of its users.

**Stephane Tremblay**President
SDVoE Alliance

How does SDVoE AV over IP platform ensure seamless scalability while maintaining low latency and high-quality signal transmission across large deployments?

SDVoE is the fastest AV-over-IP transmission system available today, ensuring seamless scalability while maintaining exceptionally low latency and high-quality signal transmission across large deployments, which is achieved through a combination of advanced clock recovery technology, optimized pixel-packing algorithms and the use of a high-bandwidth 10GbE transmission backbone.

Unlike competing solutions, SDVoE features a novel clock recovery algorithm that enables precise synchronization with the original transmitter time base. This technology dramatically reduces latency compared to other AV-over-IP platforms. While many competing solutions operate with end-to-end latencies in the millisecond range, SDVoE achieves latency levels that are orders of magnitude lower,



making it an ideal choice for real-time applications such as live production, medical imaging and interactive environments, where even the slightest delay can be disruptive.

Additionally, SDVoE employs optimized pixel-packing technology specifically designed to minimize latency. The platform's channel coding and pixel-packing algorithms are built from the ground up to prioritize speed and efficiency, ensuring that video signals are transmitted and processed with minimal delay while preserving image fidelity, resulting in a seamless viewing experience even in complex AV deployments.

SDVoE's 10Gb Ethernet bandwidth can handle large amounts of data with minimal congestion. In real-world conditions, latency out of a 10Gb switch is approximately ten times lower than that of a 1Gb switch, ensuring real-time responsiveness across extensive AV networks. This allows SDVoE to scale effortlessly to hundreds of endpoints without bottlenecks, providing instant switching, seamless video distribution, and enterprise-grade reliability.

With AV over IP systems relying on network infrastructure, what are the key security challenges, and how can organisations safeguard their AV data from cyber threats?

SDVoE is designed to be the most secure AV-over-IP transmission system, incorporating multiple layers of protection to prevent

unauthorized access, data breaches, and cyberattacks. One of the primary security measures within SDVoE is API-related protection. A secure client-to-API server session is established using HTTPS and certificate-based client authentication to the SDVoE REST API. To prevent hacking or snooping, communication between the API server and endpoints is safeguarded through an authentication protocol that employs industry-standard security algorithms, including ECDH, AES128 CTR, POLY1305 and SHA256.

Additionally, SDVoE secures endpoint communication by allowing BlueRiver endpoints to be locked to a specific API server. This prevents rogue or unauthorized API control servers from gaining access to endpoints. Organizations can segment their SDVoE network using the API 'claim' feature, which associates different API servers with designated groups of endpoints. The segmenting is particularly useful in environments such as conference rooms, operating rooms or learning centers, where restricting AV access to authorized devices is critical.

To further enhance security, SDVoE encrypts multicast HDMI audio and video payloads using AES128 encryption, with AES256 encryption now available for USB content as of firmware version 2.3. The API allows users to configure endpoints with unique secure AV keys, ensuring only devices with matching keys can exchange video and audio data. This additional security measure enables organizations to create isolated AV communication networks.

USB HID communication, which includes sensitive data such as keyboard inputs and passwords, is protected. SDVoE employs strong

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encryption protocols like ECDH for key exchange, AES128-CTR for encryption and POLY1305 for authentication to secure USB network communication to prevent potential interception of keystrokes. Finally, SDVoE supports switch port security using the 802.1x authentication standard via a RADIUS server with digital certificates. This ensures that only authenticated devices can access the network, leveraging EAP-TLS with strong encryption protocols.

With various manufacturers adopting different protocols, how important is interoperability in AV over IP, and what role do standards like yours play in ensuring cross-platform compatibility?

Interoperability is a critical factor in the success of AV-over-IP deployments, particularly as more manufacturers adopt different protocols. While some standards, like IPMX, claim to be interoperable, their implementation often leads to inconsistencies at the product level. IPMX, for instance, includes multiple codec profiles without a universal control software to unify them, resulting in complexity and uncertainty for system integrators.

SDVoE provides a fully unified platform where every product is interoperable. Unlike other AV-over-IP solutions that rely on proprietary codecs or fragmented protocols, SDVoE ensures that every device, whether encoder or decoder, operates within the same framework. By eliminating the uncertainty and inconsistency associated with other AV-over-IP approaches, SDVoE provides a true standard that delivers cross-platform compatibility.

How do the long-term cost benefits of AV over IP compare to traditional AV distribution methods, and what factors should businesses consider when transitioning to an IP-based AV infrastructure?

The long-term cost benefits of AV-over-IP, particularly with SDVoE, significantly outweigh those of traditional AV distribution methods like matrix switches. A primary cost savings comes from using high-volume, cost-effective 10GbE network switches, which are substantially more affordable than proprietary matrix switchers. For example, while a well-known manufacturer's 8X8 matrix switch has an MSRP of \$36,500, a comparable 10GbE switch costs only \$4,000 for 24 port, making large-scale deployments far more cost-efficient.

Additionally, SDVoE processors are more cost-effective than FPGA-based solutions and operate with lower power consumption. Unlike traditional AV hardware that requires active cooling, SDVoE devices do not need fans, reducing both maintenance costs and the likelihood of failure. This results in a longer mean time between failures (MTBF), lowering support costs and minimizing system downtime.

Additionally, SDVoE's software-defined architecture supports remote firmware updates allowing businesses to implement new features and security patches without costly hardware replacements. This level of flexibility extends the lifespan and ensures that systems remain up-to-date with evolving technology. Finally, SDVoE's cloud-based monitoring and control capabilities reduce operational costs by enabling remote management, troubleshooting and system optimization.

Why should an organization consider using your platform/protocol for their AVoIP integration?

Organizations should consider SDVoE for their AV-over-IP integration because it offers the largest ecosystem of fully interoperable products, ensuring flexibility and scalability without dependence on a single OEM. With thousands of Certified Design Partners and nearly all major design firms trained in SDVoE, it provides a well-supported and future-proof solution.

SDVoE is the only technology capable of truly replacing traditional matrix switch performance, delivering zero-latency, uncompressed video while consuming ultra-low power for higher reliability. It also supports full-bandwidth auxiliary signal transport, instant source switching, multiview, video walls and an intuitive control interface, making it the most versatile and efficient AV-over-IP solution available.

Sustainability: Key to Way Forward for the AV Industry



The AV industry must actively embrace sustainability, from space design and solution selection to the responsible disposal of outdated technology. Leading this initiative is **SAVe—Sustainability in AV**—an independent, all-volunteer 501(c)(3) non-profit. As the first U.S.-based, industry-wide organization dedicated to sustainability in pro AV, SAVe unites stakeholders to drive meaningful action toward the 2030 Sustainable Development Goals (SDGs).

Co-founder and President Christina

De Bono was inspired to create SAVe out of frustration with the pro AV industry's lack of action to advance sustainability as well as the U.S. government's failure to take any action whatsoever to achieve the 2030 Sustainable Development Agenda, even though 193 member nations of the UN unanimously adopted the SDGs in 2015 including the United States. De Bono created SAVe to help

transform pro AV from a sustainability laggard to a sustainability leader that could be part of a larger movement with the size, organization and passion to force government and industry to meet their responsibility to address an existential threat not only to our industry but to our communities, our planet and our very future. SAVe, which was established only in 2022 has been busy with achieving their mission and now is not just focused on the USA but has expanded globally.

SI Asia chats with De Bono about the challenges, initiatives and the future with regards to SAVe and sustainability within the AV sphere.

How has the AV industry responded to SAVe's initiatives so far? Can you share any success stories or measurable impacts?

Within days of SAVe announcing itself to the world at InfoComm in Las



Vegas in 2022, ISE asked SAVe to be its official sustainability partner. We were invited to exhibit at ISE 2023 and have just concluded our third appearance in Barcelona, at ISE 2025. We have also exhibited at InfoComm, by invitation from AVIXA, and will return there later this year.

Clearly, we have struck a chord in the industry and are gratified by the way

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it has embraced SAVe. We have gained a number of sponsorships to advance our agenda, and we have awarded SAVe Certification to a number of organizations – including Crestron – that have completed our program designed to enable organizations to develop sustainability plans.

Our activities have also generated a large amount of press coverage. Our Guide to Sustainable AV Design and Installation – an industry first – has been downloaded hundreds of times since it was published in late 2024.

We are also gratified to report that we have steadily increased the ranks of SAVe Ambassadors, our representatives in countries and regions around the world. We now have Ambassadors on five continents and in numerous countries, with more to be announced soon. The current list of Ambassadors can be found at saveav.org.

These are a few examples of the response we have generated.

SAVe released the «Guide to Sustainable AV Design and Installation» in December 2024. What are the key takeaways, and how do you see it shaping industry practices?

It's hard to believe, but the SAVe Guide to Sustainable AV Design and Installation is an industry first. As established and large as our industry is, nothing like it had ever been published (to our knowledge) until late in 2024.

The key takeaways from the guide are that sustainability can be addressed across the solution life-cycle in numerous ways. The guide offers tips on how begin the design process with an eye to sustainability and how to carry that thinking forward through installation. Many of the

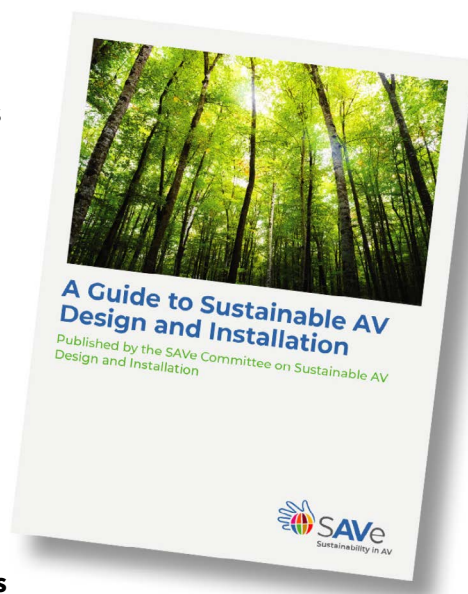
recommendations in the guide will not be new to AV integrators. The value of the guide lies in the way it brings a number of recommendations together, for the first time, in a single volume.

It's important to stress that the guide is a living, breathing document that will evolve continuously. Already we are at work on a second edition that will feature more ideas reflecting the latest thing from industry experts. Our expectation is that it will become increasingly useful over time.

How would you assess the AV industry's current standing in terms of sustainability? What are the biggest obstacles preventing wider adoption of sustainable practices?

We have a lot of work to do. In some ways we are charting advances – particularly in the areas of awareness and understanding – but in other ways we're actually backsliding. E-waste generation continues to grow at an increasingly rapid rate.

The biggest obstacles to wider adoption of sustainable practices lie in lack of awareness and a paucity of governmental and industry leadership. First of all, most people (and this is especially true in the United States) have never even heard of the Sustainable Development Goals. Even within our industry, awareness of the SDGs is quite low, especially in smaller companies like the independently owned integrators that make up so much of pro AV. Larger multinational enterprises have a greater awareness of sustainability issues, but the fact is, it's hard for them to make progress in an endeavour where those returns on investment cannot be measured in short-term financial gains. If we do not achieve sustainability, we will ALL pay a tremendous price, but in the here and now, many members of our



industry do not believe that a move toward sustainability will positively impact their bottom line, so they do not make it a priority.

There are major players in our industry who have invested in sustainability, and whose commitment to sustainability is real and substantive, but we won't see results on the scale necessary to achieve sustainability until or unless the will of the people is channeled through government action, including the institution of enforceable regulation, etc.

Despite widespread agreement that sustainability is crucial, many AV manufacturers and integrators struggle to make it a core part of their business. What are the main barriers, and how can they be overcome?

I believe we addressed this in the earlier question. But the main idea is that manufacturers and integrators need to reframe sustainability from a "nice to do" to a "we absolutely must do" activity. The main barrier is that our industry's current economic model does not incentivise or reward sustainability, nor does it impose

any cost on companies that ignore sustainability. We need to decide as a society that sustainability must be achieved, and we need legislation, incentives, etc. that will move us in the right direction.

SAVe believes that systemic change is needed to achieve sustainability, but we also recognize that tremendous progress can be made simply by educating our industry about sustainability and providing pathways to advance it. Some of those pathways include SAVe Certification and our SAVe: A Second Life Initiative, which aims to keep usable AV gear out of the waste stream through reuse, repurposing and responsible recycling.

SAVe has appointed ambassadors to amplify its message. What specific role do they play, and what impact have they had so far?

SAVe Ambassadors are leaders in our industry who bring our initiatives to their home countries and regions where they have relationships and resources that can be leveraged to advance sustainability in pro AV. One

of the things we achieved at ISE 2025 was to hold a “train the trainers” SAVe Certification workshop for our Ambassadors so that they would then be equipped to certify organisations in their home countries. Late in 2024, for example, we held our first Latin American SAVe Certification event in Bogotá, where our Ambassadors certified a number of companies from countries throughout Latin America. Not only did this event result in a number of SAVe certifications, it also prompted several new people to sign up as SAVe Ambassadors.

The impact of the Ambassadors is that of a ripple that extends farther and farther from its centre. We are continuously adding Ambassadors. We are continuously raising awareness.

Piyanut was recently appointed as a SAVe ambassador. What will his focus areas be, and how does his role align with SAVe’s broader global strategy?

Piyanut’s role aligns with SAVe’s broader global strategy in precisely

the same manner as that of our other SAVe Ambassadors, whether they’re from Canada, Mexico, Australia, the UK, Brazil or any other country. We’re very excited to welcome Piyanut to the ranks of SAVe Ambassadors because he is our first from Asia, and of course Asia is absolutely integral to the larger sustainability effort. He is working closely with AVIXA to raise our profile throughout that part of the world. From his home country of Thailand to China, India and every other Asian nation, there are great opportunities to ignite awareness, spur engagement, and generate action.

Looking ahead, what are the key milestones and objectives SAVe aims to achieve in the next three years? How do you plan to measure success?

We have a number of objectives for the next three years – among them, increasing the number of SAVe Certifications we perform, establishing new networks for the donation of useable AV equipment, advancing education and partnerships



Crestron earns SAVe Certification, underscoring its commitment to environmental and social responsibility.

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through our Global Conference (the second annual one will take place in Los Angeles this fall), enhancing and disseminating our Guide to Sustainable AV Design and Installation to ever-greater numbers of people, and partnering with other organizations that share our mission and can act as “force multipliers” to help us achieve the SDGs.

But to do all that, we need volunteers, including ones who will serve as full-time professional leadership to help us deliver on our commitments and expand our reach. Remember, we are an all-volunteer organisation. We are not remunerated for our efforts. Most of us have “day jobs” in the pro AV industry. It’s critically important for SAVE to remain an all-volunteer organization. Removing financial compensation from the equation helps us remain independent and thus able to act quickly and decisively. So how can an organisation of limited economic means be effective in carrying out its mission? By organising – by attracting volunteers, harnessing their energy, and partnering with like-minded organisations to create a groundswell for change. Consequently, a major aim of SAVE is to grow our ranks with more volunteers who will bring their passion, imagination, resources, relationships, and muscle to a mission that is simply too important not to pursue with everything we have.

www.saveav.org



Piyanut Boonkhun, Asia's first SAVE ambassador.

Piyanut, what are your thoughts on having taken on this role? What motivated you?

I am honoured and deeply motivated to serve as a SAVE ambassador. The opportunity to be part of an organization committed to driving sustainability within the AV industry aligns perfectly with my personal values. Having seen first-hand the growing impact of environmental challenges, I recognise the urgent need for the AV sector to take more responsibility in adopting sustainable practices. The chance to work with an organisation like SAVE, which is not only raising awareness but also providing tangible solutions, is both exciting and fulfilling. My motivation comes from the belief that we, as an industry, have a unique opportunity to lead by example in achieving the Sustainable Development Goals and creating a greener future for all.

What is your immediate task and plan as the SAVE ambassador for the region?

As the first SAVE ambassador from Asia, my immediate task is to raise awareness and drive engagement around sustainability in the AV industry across the region. I'll be focusing on fostering partnerships with industry leaders, manufacturers, and integrators, encouraging them to take part in SAVE's initiatives, like our Certification program and the "Second Life" initiative for re-purposing AV gear. Asia, with its vast and diverse AV market, presents unique challenges and opportunities, and I aim to create a network of like-minded professionals who can work together to advance sustainable practices in every part of the AV life-cycle. By collaborating with local organisations, sharing best practices, and leveraging SAVE's resources, I hope to help move the region toward more sustainable business models.



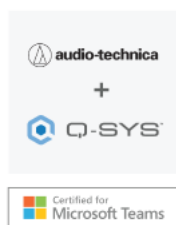
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