# City Harvest Church CASE STUDY

CWW









### Background

Singapore's City Harvest Church (CHC) today calls the Suntec Convention Centre in the heart of the capital city its permanent home, having previously held its twice-weekly worship services at opposite ends of the country — the Jurong West church building in the west and the Singapore Expo convention center in the east. CHC has co-owned the 4,000-square-meter building as a stakeholder since 2011. The venue at the convention center is a 3,500-seater, and CHC holds multiple services here every weekend. The hall is fitted in a manner that suits the church's particular worship style, incorporating high-quality sound and lighting.



## Challenge

Because the control room and worship hall at CHC's conference center are located far apart, communications over an existing intercom system often were compromised, making it difficult for production teams to work collaboratively during worship services and other events. In addition to struggling with audio distortion over its wired system (AOIP), CHC dealt with limited wireless coverage and constant drop-off of beltpack signals.

The church needed a new intercom system that would provide stable network connections and wireless comms, allowing the director to communicate with the crew and other departments effectively across a large space during live productions. In addition to being free from disturbances such as low humming sounds or interference, the system needed to be flexible, enabling administrators to configure comms on the fly. Along with redundancy and ease of use, scalability was a final requirement, as CHC needed the option of expanding the infrastructure at any time without significant costs or major changes to deployed equipment.







### Solution

**Riedel Communications' Artist-1024 node, Bolero** wireless intercom, and SmartPanel support communications for live production of primary services at CHC.

Fully compliant with SMPTE 2110-30/31 (AES67), Artist-1024 enables CHC to take in MADI and AES67 audio. The node's 10 bays allow the crew to expand the number of ports without having to change the frame. When the card is configured using Riedel's intuitive Director software, each bay can scale from eight to 128 ports, with seamless access between ports. Because the Artist-1024 system is fully redundant, the CHC team can quickly shift ports in the event of a faulty card, with no interruption of the live production.

Camera operators throughout the venue rely on Bolero beltpacks to communicate with the rest of the team. The Riedel SmartPanels serve as main stations for directors around the hall. During special events, such as CHC's annual Easter and Christmas services, both wired and wireless Riedel intercom systems integrate smoothly with other systems to facilitate more extensive communications across the audio, lighting, stage, and backstage teams.

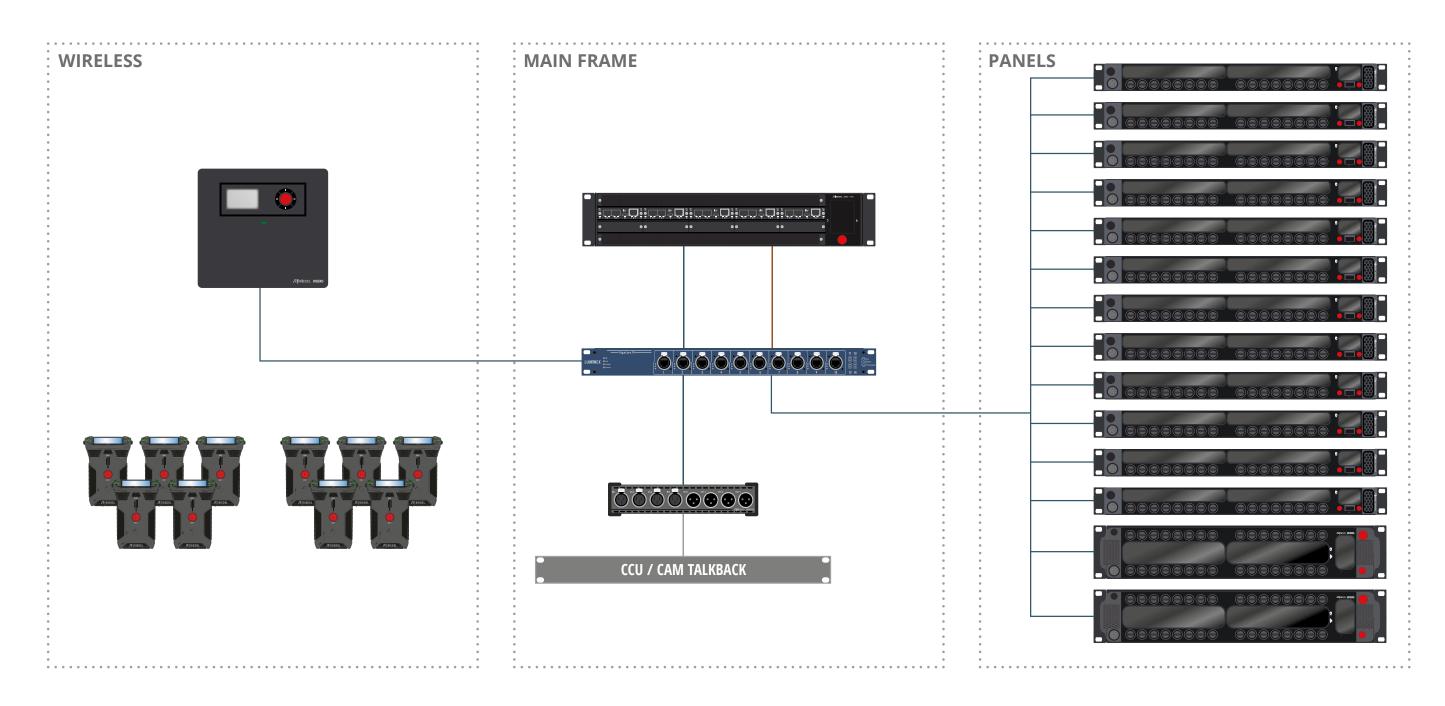
### Result

Providing stable network connections, reliable and robust wireless coverage, the flexibility needed to adapt during live production, and the scalability to support future expansion, Riedel intercom systems ensure clear, uninterrupted communication for key production staff during CHC worship services.

"Riedel has definitely brought our intercom experience to the next level," said Mr Seth Gan, Technical Director, CHC. "The audio quality is impressive, and the reach of the wireless antenna more than covers our needs. To top it off, the after-sales service from the account manager and the engineering support were excellent. We hope to continue having a close working relationship with Riedel, and we would be happy to explore new solutions that will enhance our future productions."







### Product Spotlight



### ARTIST-1024

Artist-1024 is the next evolutionary step in the continuous development of the Artist intercom ecosystem, bringing added reliability, flexibity and port density to the Artist ecosystem.

	Reliability	Multiple redundancy schemes, including 2022-7 audio and control of
		N+1 & NIC redundancy, as well as dual redundant processors & PSUs, r
		sophisticated intercom safety net on the market
	Flexibility	Artist's software-defined UIC is the only card that speaks MADI, DANTE a
	Scalability	Flexible licensing model allows to easily scale up and to move licenses b
<b>Efficiency</b> U		Unmatched configuration change speed; enormous density in 2RU
	Interoperability	Powerful RRCS 3rd party API; JT-NM tested

# Product Lines

data redundancy, , make up the most

& AES67 between frames

### ARTIST

#### The Digital Matrix Intercom

- Distributed masterless system architecture for reduced wiring and installation costs
- Up to 1,024 x 1,024 non-blocking ports per system
- Seamless integration of VoIP SIP PABX and mobile HF radio (conventional and TETRA)
- Easy and intuitive programming for reduced training and service
- Future-proof scalable and expandable

### BOLERO

#### The Wireless Intercom

- Up to 10 beltpacks per antenna; 100 antenna, 250 beltpack system capacity
- High-clarity voice codec, ADR technology for multipath mitigation
- 6-channel beltpack plus dedicated REPLY button
- Decentralized AES67 IP networked antennas
- Seamless integration into Riedel's Artist intercom matrix
- Two standalone network modes: Standalone Link & Standalone 2110 (AES67)

### SMARTPANEL

The Multifunctional User Interface

- Multiple full-color multitouch displays,
- 32 innovative hybrid-lever keys
- Stereo, phase-accurate speakers
- Easy adaptability to various workflows
- Ability to leverage apps for multifunctionality:
- Intercom App, Control Panel App, Audio Monitoring App







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