



# ARTIST THE INTERCOM

# ARTIST

## THE ADVANCED COMMUNICATIONS PLATFORM

A bustling control room during a live broadcast, where split-second decisions shape the narrative... A sprawling event venue with multiple teams coordinating thousands of tasks to ensure a flawless production... In these high-stakes environments, communication isn't just a necessity; it's the lifeline that ensures coordination, precision, and ultimately, success. Whether you're a director running a live show, a producer orchestrating backstage operations, or a stage manager coordinating intricate cues – your communication makes or breaks the project. You are an Artist.

Since its inception in 2000 as the world's first distributed intercom system, the Artist ecosystem has seen constant evolution, growing with, reacting to – and often anticipating – radical changes in the field. As the pace of innovation and disruption in the broadcast, AV and live event sectors steadily increases, so do the requirements for flexibility of a professional intercom system. From speaking new standards over novel IP-powered workflows to increasingly complex production processes: a truly futureproof intercom ecosystem must be flexible enough to deal with whatever life throws at you.

To provide users with unprecedented flexibility, the latest generation of Artist intercom products introduced a range of technical innovations centered around our unique software-definable Universal Interface Card (UIC). This entirely new type of interface card combines networking, mixing, and management and can be configured to act as a SMPTE 2110-30 (AES67), MADI or Dante subscriber card, or as an Artist fiber/router/processor card. That way, Artist is set to evolve with your – and the industry's – demands.

An Artist system can be anything from a single Artist frame to a vast, fiber-based and remotely connected network of nodes and easily scales to fit any application – from small theatres over OB vans to multi-national broadcast centers and global events. The non-blocking system can be expanded from 16x16 to 1024x1024 ports per 2RU node and can connect several thousand subscribers via trunking. Its decentralized network structure allows for a flexible placement of nodes, considerably reducing the wiring and setup costs for any installation – and also enhances the system's reliability, as its dual ring fiber optic network topology provides full redundancy.

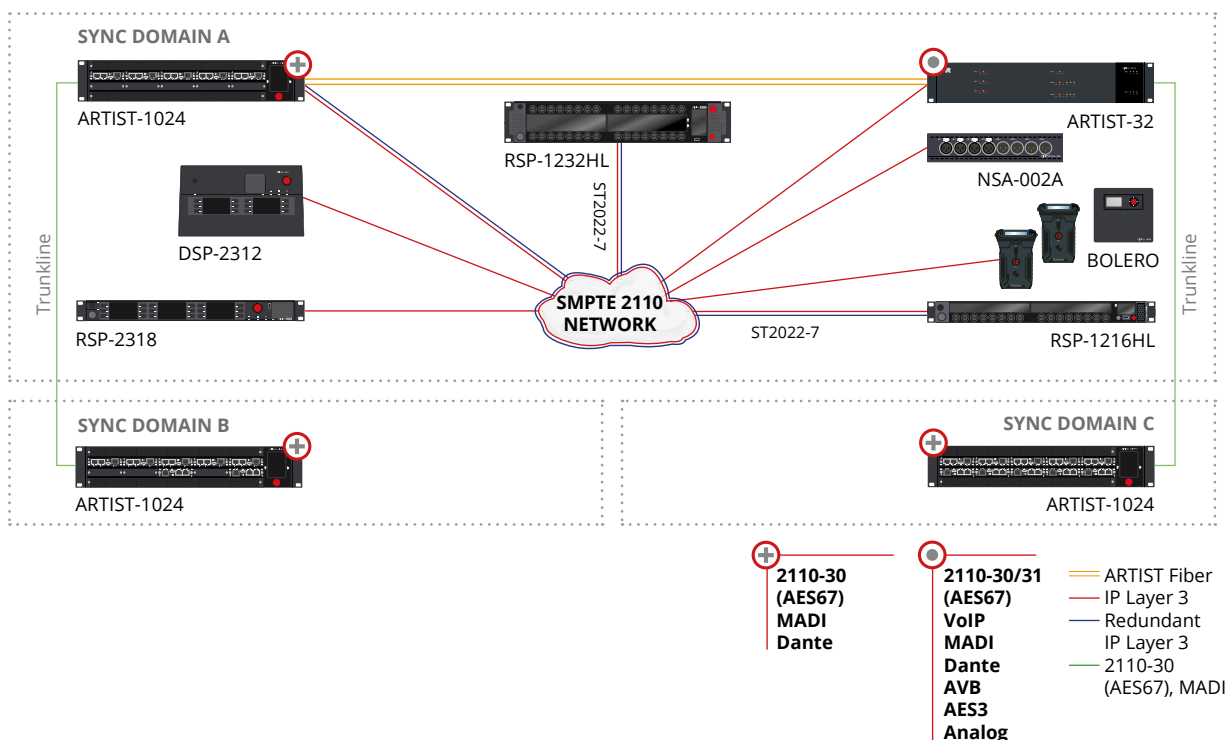
Artist-1024 has been architected with redundancy at its core, providing an unprecedented degree of robustness and reliability. In addition to control data and SMPTE 2022-7-compliant audio stream redundancy, there are countless

redundancy mechanisms in place to avoid single points of failure: The N+1 subscriber redundancy scheme includes hot spare cards that can take over the configuration of other subscriber cards, while the NIC scenario allows a seamless handover between the primary and secondary NIC cards. And it doesn't stop there: the node itself boasts redundant control logic, backplane and data links, two load-sharing PSUs and a fan module with redundant fans. The sum of these measures equals the most comprehensive comms safety net available on the market.

But a comms platform is not just about the nodes. The user experience of any intercom system is defined by its user interface – and Artist is the only system to employ the SmartPanel concept of app-driven user interfaces. Riedel's software-based SmartPanels provide multiple connectivity options and combine intercom, audio monitoring and 3rd party control panel functionalities in a single user interface. In a similar vein, only Artist seamlessly integrates with the award-winning Bolero wireless intercom system to complement the wired intercom panels. Operating in the license-free 1.9GHz and 2.4GHz bands, Bolero has a global reputation as a top performer even in difficult RF environments – and it continues to amaze with its outstanding audio quality.

And while we're talking about integration: Artist easily integrates with all relevant 3rd party broadcast controllers via the RRCs interface, enabling external control over nearly every system and configuration detail. And of course, Artist-1024 integrates seamless with any existing Artist (32/64/128/1024) system, allowing to flexibly upgrade or expand your Artist installation.

Artist intercom is a future-proof invest – with Riedel's ongoing support and innovation, your intercom system will continually redefine the standards of reliability, efficiency, flexibility, scalability, and interoperability.



# I'M AN ARTIST

## CHRIS ROSTALSKI

LIGHTING DESIGNER  
[www.cr-lichtdesign.de](http://www.cr-lichtdesign.de)

Managing teams at a major music festival is like conducting a symphony of chaos.

With its unparalleled connectivity and clarity, Riedel's intercom solution is our lifeline in an environment pulsating with noise."

## ARTIST INTERCOM

Professional live communications made reliable. Seamlessly integrating Riedel's **SmartPanel** and **Bolero** wireless intercom. Easily scaling from **16 to 1024** ports with flexible licensing.



Become an ARTIST

[www.riedel.net](http://www.riedel.net)

#iamanartist

# ARTIST

THE INTERCOM

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**RELIABILITY** Where intercom is required, there is no room for failure. Artist has the most comprehensive comms safety net available.

- 1
  - Redundant CPUs (NICs)
  - Redundant audio and control data transmission (SMPTE 2022-7), backplane data path and license storage
  - Redundant fans and dual-redundant, load-sharing power supplies

**EFFICIENCY** Increase your productivity! Artist dramatically reduces rack space and power consumption.

- 2
  - Unrivalled port density with 1024 ports in 2RU
  - Less weight for larger systems - Low weight enables lower freight cost
  - One card (UIC) for all standards, reduced cost of ownership

**FLEXIBILITY** Artist supports all important IP standards, and software-defined hardware concepts allows to tailor the system to your needs.

- 3
  - App-based SmartPanel concept
  - Software-defined Universal Interface Card as format-agnostic I/O subscriber card (ST2110-30 (AES67), MADI or Dante), or NIC
  - F-VAE licenses can be moved between nodes in a granularity of 16 ports

**SCALABILITY** While Artist has the power to handle the world's largest broadcasts and events, it is also a great fit for smaller projects.

- 4
  - Ports can scale from 16 -1024
  - Distributed architecture allows for flexible deployment
  - Seamlessly integrates with Artist-32/64/128

**INTEROPERABILITY** Artist seamlessly integrates with your existing and future infrastructure, ensuring compatibility across the board through open standard protocols.

- 5
  - 3rd Party API (RRCS)
  - NMOS support
  - The only JTNM-tested intercom (compliant to SMPTE standards and AMWA NMOS specifications)



ARTIST front

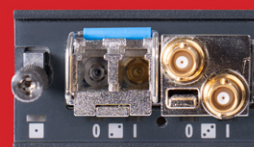


ARTIST back

UNIVERSAL INTERFACE CARD (UIC)



ARTIST FIBER



MADI



SMPTE 2110 // (AES67)



Dante

One card, countless possibilities

The software-definable Universal Interface Card (UIC) with flexible licensing

Change the card's connectivity type with a simple SFP swap and a click of a button in Director!



5

4

1

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# DIRECTOR INTUITIVE CONFIGURATION SOFTWARE

Any comms solution is only as good as its configuration software – and Director is just one more differentiator that sets Artist apart from the rest. This user-friendly and intuitive configuration software lets you effortlessly access, set up, and control every facet of an Artist system, even those comprising hundreds of intercom ports across multiple nodes.

With a simple drag-and drop interface, the software is designed for swift comprehension and unparalleled convenience. Programmable logic functions empower users to manage complex production requirements effortlessly. The Audio Patch function streamlines the configuration and remote storage of internal routing and DSP aspects for any intercom panel within the Artist system, significantly reducing setup and service time. The system boasts advanced monitoring, Live View, Remote Control and diagnostic features, enabling maintenance personnel to swiftly resolve issues or assist users, even in

complex IP installations. The real-time Crosspoint View function, coupled with comprehensive remote control capabilities, ensures efficient problem-solving. Control panel and matrix activities are logged for future reference, and multiple PCs can simultaneously control and monitor the system through the Ethernet connection on the UICs. Each PC can display the real-time configuration status, granting access to configuration changes based on user rights. Configuration changes are executed within in seconds and with the Configuration merge option, partial changes do not affect the entire system.

## ADD-ON-FEATURES

Partial Files	Save parts of the configuration and reload as "partial files"
Riedel Router Control Software (RRCS)	Provides a universal XML interface to enable control of Riedel Artist systems via third-party router control systems (e.g. DataMiner by Skyline , ...)
Trunk Navigator	Easy networking of up to 50 Artist systems at geographically separate locations via WAN link to a central trunk master



## LICENSING SCHEME FLEXIBLE FOR EASY SCALING

Every Artist-1024 node comes equipped with 16 pre-licensed ports. To accommodate additional ports, customers can effortlessly add Virtual Artist Expansion (VAE) licenses in increments of 16 ports, only paying for those capacities they really need.

In addition to these node-locked licenses, Flexible Virtual Artist Expansion (F-VAE) licenses allow for fast (re-) configuration of the system by simply moving capacities between nodes.

With both VAEs and F-VAEs, all licensed ports can be freely distributed across the UICs with a granularity of 8 ports. Since the licensing model does not involve connectivity, the system's UICs can be freely altered to meet any connectivity requirement.

### VAE = Virtual Artist Expansion License

- Adds ports in 16 port blocks
- Node-locked to a 1024 node
- Multiple VAEs per node

### F-VAE = Flexible Virtual Artist Expansion License

- Adds ports in 16 port blocks
- Can be moved between 1024 node
- Multiple F-VAEs per node

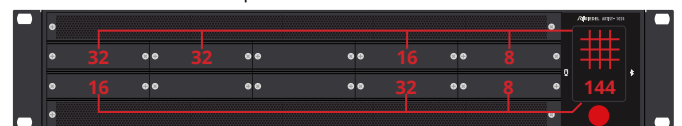
Node A - Wuppertal // 256 ports

16 integrated ports  
+ 15 x VAE-16



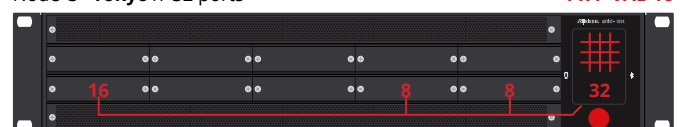
Node B - New York // 144 ports

16 integrated ports  
+ 4 x VAE-16  
+ 4 x F-VAE-16



Node C - Tokyo // 32 ports

16 integrated ports  
+ 1 x F-VAE-16



## INTERCOM SYSTEM

Product name	Artist Intercom
Non-blocking subscriber ports per ring	1024
Artist nodes per ring	50+
Trunked Artist rings	25+
Subscriber ports in trunked systems	6000+
Redundant fiber switchover	Fully automatic & seamless

## INTERCOM NODES

Product name	ARTIST-1024
Subscriber ports per node (min - max)	16-1024
Subscriber ports per card (min - max)	8-128
CPU / (NIC) card bays	2
Universal interface card bays	8
Display	E-ink
Mounting options	19" Rack Ears (offset 0,2,4,5,7.5cm), 180° rotatable
Width	19" / 483mm
Height	2RU / 88mm
Depth	404mm
Weight (inc. PSUs and fan units)	6,3kg
Airflow direction	front-to-rear (reversible)
Redundant PSUs	✓
Hot swappable PSUs	✓
Load-sharing PSUs	✓
Input voltage	85-264 VAC, 50/60 Hz
Power consumption	max. 225W


## UNIVERSAL INTERFACE CARD (UIC)

Artist Fiber	1024 channels in Artist-1024 node
SMPTE 2110-30 (AES67) 	128/128 channels per UIC-128 / UIC-128-II
MADI	128 / 64 channels per UIC-128 / UIC-128-II
Dante	128/128 channels per UIC-128-II
Power consumption	13 W / 44 BTU/h (typ.) // 20 W / 68 BTU/h (max.)
Dimensions (w×h×d)	75 × 22 × 210 mm
Weight	410 g

## REDUNDANCY

CPU (NIC)	✓
Dual Fiber Ring	✓
N+1 Redundancy	✓
SMPTE 2022-7	✓

## IP NETWORKING & CONNECTIVITY

SMPTE 2110-10 / -30	✓ / ✓
SMPTE 2110-30	Level A & B & C
PTP	IEEE 1588:2008
ST-2059-2 / Media Profile / AES R16	✓ / ✓ / ✓
IP Layer3 WAN	SMPTE 2110-30
IGMPv3 / SSM 	✓ / ✓
JT-NM TR-1001:1	✓
DHCP	-
DNS	-
NMOS IS-04 / -05	✓ / ✓
SDP import / export	✓ / ✓
In-band / out-band control	✓ / ✓



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