

An abstract graphic of many thin, green, wavy lines flows from the top left, curving downwards and to the right. These lines are punctuated with small white dots, creating a sense of motion and connectivity. The background is a dark, blurred image of a modern office interior with tables and chairs.

OMNI

The Unified Audio, Video & Control Platform



THE EVOLUTION OF BSS

BSS has delivered professional audio processing excellence for decades, providing the reliability and performance trusted in the world's most demanding environments.

OMNI represents the next evolution of that legacy – a unified Audio, Video, and Control platform built from the ground up to meet the needs of modern integrators and end users alike.

OMNI combines purpose-built hardware, a tightly integrated set of software tools, and standards-based interoperability to create a platform that is powerful, scalable, and simple to deploy across any environment.

OMNI

ONE PLATFORM. SIX INTEGRATED CATEGORIES.



AUDIO

Deliver clear, consistent sound that scales effortlessly across any environment



VIDEO

Share high-quality video seamlessly across spaces with flexible, reliable distribution



USB

Enable simple, networked USB connectivity for effortless collaboration anywhere



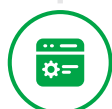
CONTROL

Automate and unify system behavior for smarter, more consistent performance



USER INTERFACE

Simplify interaction with intuitive, customizable control across every space



SOFTWARE

Design, deploy, and manage everything through one integrated platform

A COMPLETE AUDIO, VIDEO & CONTROL PLATFORM

AUDIO, VIDEO, AND CONTROL – NOW WORKING AS ONE

OMNI brings audio, video, and control together into a single, cohesive platform, enabling systems to be designed, configured, and managed as one unified experience. The result is greater consistency, improved performance, and a more intuitive interaction with technology.

A CONNECTED ECOSYSTEM OF PRODUCTS

OMNI combines purpose-built hardware, an integrated set of software tools, and standards-based interoperability to create a fully connected ecosystem of products. Every component is designed to work seamlessly together as one system, reducing integration friction and ensuring reliable, end-to-end performance.

INTUITIVE SOFTWARE

At the core of OMNI is AVX Suite, a powerful set of integrated software tools that simplifies the design, configuration, and management of an OMNI solution. With intuitive usability and infinite scalability, AVX Suite allows you to execute a unified audio, video, and control solution with excellence.

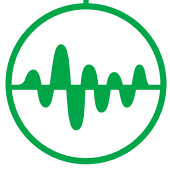
SCALABLE ACROSS ANY ENVIRONMENT

Designed for flexibility, OMNI solutions scale effortlessly from small business deployments to enterprise environments and large venues. AVX Architect supports both centralized and distributed architectures, and provides a limitless single-canvas interface to manage your entire design.

SIMPLE TO DEPLOY, BACKED BY TRUSTED EXPERTISE

OMNI is engineered for intuitive setup, installation, and configuration – reducing time to deploy and simplifying system management. Backed by the proven legacy of BSS and industry-leading support, it delivers the confidence and reliability professionals depend on.





AUDIO

High-Performance Audio, Powered by BSS

Audio is the foundation of effective communication. OMNI builds on decades of BSS expertise to deliver the premium performance, reliability, and precision trusted by professionals worldwide.

Designed for modern environments, OMNI Open Architecture Audio Processors manage, route and optimize sound across complex systems. OMNI supports centralized and distributed topologies, scales seamlessly, and simplifies system designs, from single spaces to enterprise and venue deployments – all with consistent workflows and management through AVX Suite.

○ AUDIO PROCESSORS

OMNI AUDIO PROCESSORS

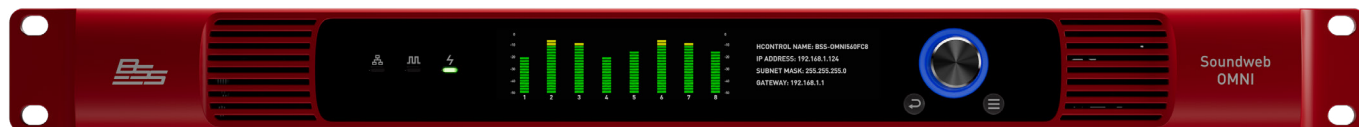
BSS Soundweb OMNI Audio Processors combine enterprise-grade hardware with Dante/AES67 networked audio, a vast library of processing objects including media playback, AEC, and VoIP, an onboard MUSE scripting engine, and more. They offer the flexibility of centralized or distributed DSP, allowing system designers to choose the appropriate topology for any installation. Soundweb OMNI Audio Processors support both 48kHz and 96kHz processing, exemplifying BSS's commitment to audio fidelity, and are available with channel counts of up to 512x512.



FEATURES

- Scalable open-architecture DSP
- Up to 512x512 Dante/AES67 channels
- Integrated AEC, VoIP, and advanced processing
- Support for centralized or distributed topologies
- Proven BSS performance and reliability

AUDIO EXPANDERS



OMNI Audio Expanders broaden the reach of an OMNI solution and create a bridge between the IP network and physical devices. With support for both Dante and AES67, OMNI Expanders can be leveraged to transmit audio from analog or AES3 devices across the network to OMNI Audio Processors, to other Dante devices, or even directly to other OMNI Audio Expanders, creating a “digital snake”. Providing unparalleled I/O flexibility, these devices enable system designers to create customized I/O configurations that precisely meet the requirements of the application.

FEATURES

- Flexible analog, AES3, and networked audio connectivity
- Format-configurable audio and fully configurable GPIO ports
- Seamless integration with OMNI ecosystem
- Reduced cabling and simplified installation
- Designed for scalable, distributed systems

Together, OMNI Audio Processors and Expanders deliver the trusted performance of BSS in a modern, connected platform, enabling flexible design, seamless scalability, and consistent audio performance across any environment.





VIDEO

Video & USB Distribution

Modern AV applications call for flexible and scalable distribution of video, audio, USB, and control signals over network infrastructure. BSS OMNI AV-over-IP products offer a comprehensive range of solutions for integrating AV systems that combine performance, application versatility, expandability, interoperability, ease of use, and centralized management.

OMNI AV-OVER-IP SOLUTIONS

OMNI AVoIP options include three product ranges — the OMNI 600, 300, and 200 Series — each engineered to address specific AV application requirements. Together, they form a powerful AV-over-IP ecosystem capable of supporting everything from high-performance, ultra-low latency video, to bandwidth-efficient streaming and long-distance USB device connectivity.

DESIGNED FOR PROFESSIONAL INTEGRATION

Across the entire OMNI AVoIP product family, integrators benefit from powerful system features including Dante audio networking, enterprise-grade network security, a standby mode for energy savings, system deployment and management through AVX Suite, and open APIs for third-party control. OMNI AV-over-IP offers a comprehensive portfolio for designing and integrating AV distribution systems in modern professional installations such as classrooms, meeting spaces, campuses, and enterprise environments.

VIDEO PLATFORMS & BENEFITS



OMNI 600 SERIES

HIGH-PERFORMANCE 1G AVoIP WITH DANTE AV-A

A family of high-performance AV-over-IP encoders and decoders for distributing ultra-low latency 4K60 4:4:4 video, audio, control, and USB 2.0 signals over Gigabit Ethernet.



- Features high-performance MWC codec for pristine-quality video with ultra-low latency
- USB routing over IP with Virtual Network USB 2.0 Hub technology
- Dante audio and Dante AV-A interoperability
- Designed for applications requiring the utmost in video performance and image quality

OMNI 300 SERIES

BANDWIDTH-EFFICIENT AVoIP WITH DANTE AV-H

Optimized for scalable video distribution across shared networks and WAN environments, enabling efficient, high-quality video delivery at scale.



- 4K60 4:4:4 video streaming with H.264 or H.265 compression
- Dual-streaming support for hybrid classrooms and meeting spaces
- USB audio and video (UAC and UVC) plus AV recording capability
- Dante audio and Dante AV-H interoperability
- Delivers bandwidth-efficient streaming with excellent image quality

USB



USB Without Boundaries

USB connectivity is essential for modern collaboration and education environments. OMNI 200 allows USB hosts to communicate with cameras, conferencing bars, touch displays, and other USB devices across rooms or facilities over the network.

OMNI 200 SERIES

ROUTABLE FULL-BANDWIDTH USB 2.0 OVER IP

Professional-grade, networked extension and distribution of USB 2.0 signals over standard Gigabit Ethernet.



- USB routing over IP with Virtual Network USB 2.0 Hub technology
- Supports USB 2.0 data rates up to 480 Mbps
- Compatible with OMNI 600 Series
- Dante audio and USB audio (UAC) integration
- Allows USB devices at remote locations with robust USB 2.0 connectivity over Gigabit Ethernet
- Simplifies room design and reduces dedicated cabling





CONTROL & UI

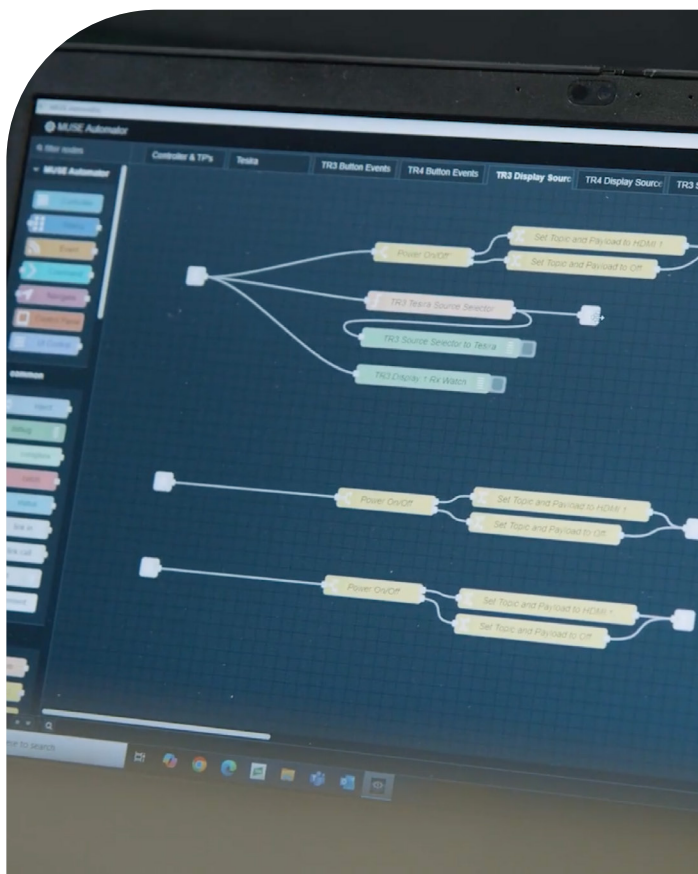
Intuitive Control & User Experience, Powered by OMNI

Control is what brings AV systems to life. OMNI unifies control, automation, and user interaction into a unified, intelligent platform.

OMNI User Interfaces bring spaces to life with intuitive, beautifully designed control experiences. From sleek, app-driven touch panels to elegant, easy-to-use keypads, the portfolio empowers users to interact with technology effortlessly and confidently. Designed to adapt to any environment, these interfaces deliver a consistent, engaging experience that scales with your needs, combining simplicity at the surface with powerful capability behind the scenes.

OMNI Processors enable No-Code, Low-Code, and High-Code control programming, opening the possibilities for technicians and IT managers of all skillsets to deliver advanced automation in a modern market.

○ CONTROL & INTERFACE PLATFORMS



OMNI CONTROL

AUTOMATION & SYSTEM ORCHESTRATION

OMNI Processors enable No-Code, Low-Code, and High-Code control programming.

- AVX Architect provides control programming through BSS Logic, enabling user control of DSP objects with zero programming
- MUSE Automator enables low-code development with Node-RED
- The onboard MUSE scripting engine can simultaneously process a virtually unlimited number of scripts written in JavaScript, Python, or Groovy
- Open APIs and HControl support third-party interoperability



OMNI TOUCH PANELS

ADVANCED, APP-DEFINED EXPERIENCES

Deliver fully customizable user experiences that adapt to any environment or workflow.

- App Persona-based interfaces for tailored user experiences
- Pre-installed support for AV control, room scheduling, web apps, digital signage, and Zoom Rooms
- Integrated camera, microphones, speakers, and NFC
- Secure 'No-Comm' models for high-security environments
- Quick Launch Sidebar for fast access and app switching
- Flexible mounting with ultra-slim in-wall options



OMNI DYNAMIC KEYPADS

SIMPLE, FLEXIBLE, ELEGANT CONTROL

Designed for intuitive operation, OMNI Keypads combine tactile simplicity with software-defined flexibility.

- Dynamic LCD buttons for adaptable controls
- Rotary and touch inputs for precise interaction
- Native integration with OMNI and MUSE workflows
- Multiple form factors for flexible deployment



SOFTWARE

OMNI, Powered by AVX Suite

Software brings the OMNI platform together. AVX Suite delivers a unified environment for design, deployment, and management.

By connecting all OMNI devices within one platform, AVX Suite eliminates fragmented workflows and creates a consistent, streamlined experience across the system lifecycle – improving efficiency, reducing complexity, and enhancing visibility.

FEATURES

- Unified design and configuration
- Centralized monitoring and management
- Integrated control and automation
- Consistent experience across all OMNI devices
- Simplified updates and system maintenance





AVX ARCHITECT

AVX Architect™ provides a single-canvas interface to empower designers with the capability to diagram complete solutions without limitation, configure internal device processing for optimal performance, and create custom user interfaces for intuitive control.



AVX MANAGER

AVX Manager™ brings incredibly powerful management to HARMAN Professional devices with HControl. Instead of configuring devices one-by-one, AVX Manager allows large numbers of devices to be configured simultaneously, either locally or remotely.



AVX CONTROL

AVX Control™ enables nearly any tablet, phone, or computer to be used as a control interface for your HARMAN Professional AVC solution.

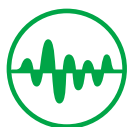


AVX NAV ROUTER

AVX NAV Router™ is a powerful utility for the configuration, control, and troubleshooting of OMNI networked AV systems.

WHY OMNI?

OMNI sets a new standard for AV by unifying audio, video, USB, control, and user interfaces into a single, intelligent platform. Built on the trusted performance of BSS Audio and powered by AVX Suite, it combines high-quality audio, flexible video distribution, and network-based USB with integrated control and automation, ensuring every component works together as one seamless and scalable system.



AUDIO



VIDEO



USB



CONTROL



UI



SOFTWARE

A series of thin, flowing green lines originate from the top left and curve downwards and to the right, creating a dynamic, wave-like pattern that frames the central text.

OMNI

The Unified Audio, Video & Control Platform



Scan the QR code
or visit BSSAudio.com