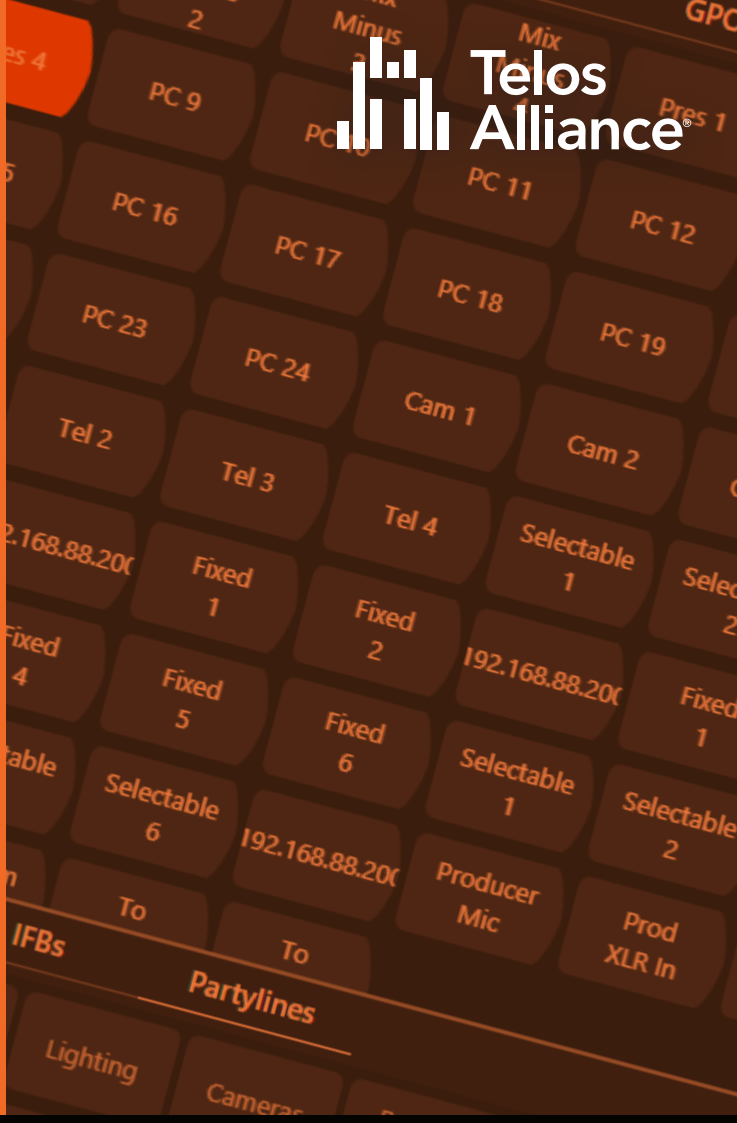
Telos INFINITY®

Telos Alliance®

Telos Infinity® IP Intercom does away with the ‘traditional’ centralized matrix model for more efficient communications, increased flexibility, scalability, and lower cost of ownership.



Telos Infinity®

Break the Matrix

Say Goodbye to Inefficient Centralized Matrix Communications

Telos Infinity® IP Intercom

From the company that invented AoIP for broadcast,

Telos Infinity IP Intercom is the next-generation communication solution that eliminates the matrix, delivering a quantum leap in scalability, ease of integration, and efficiency, while reducing total cost of ownership.

- Seamless interoperability through standards-based Livewire+™ AES67
- Infinite scalability with plug-and-play device integration
- Intuitive UI for simplified operation
- Matrix-free design
- Distributed DSP architecture
- Lower TCO than traditional intercom systems
- Optimization for broadcast communications
- Suitable for use in all Intercom-related applications

Voice and Contribution Audio on a Single IT Backbone

Telos Infinity IP Intercom is a complete reimagining of broadcast communications technology developed by the same Telos Alliance engineering team that invented AoIP for broadcast in 2003. More than just a talkback system, Telos Infinity IP Intercom converges voice communication and contribution audio on a single IT backbone employing the latest standards-based VoIP and AoIP transport to provide dedicated features and functionality without compromise or limitations.

Break the Matrix

Telos Infinity IP Intercom replaces outmoded matrix technology with an advanced, distributed IP network solution that provides superior functionality in a simplified, more elegant form. Because it is matrix-free, you can add plug-and-play networked hardware and software devices to the system as part of a planned or ad-hoc change, without ever worrying that you might exceed the number of available ports on a matrix.

As Part of an Integrated System...

Telos Infinity IP Intercom unleashes the full potential of a distributed IP audio infrastructure, allowing access to any networked audio endpoint through the intuitive Telos Infinity Dashboard application. Mix-minuses, program busses, mixer auxes, monitor feeds, remote contribution audio, and presenter mics are all available anywhere you need them—for communication or on-air use. And since Telos Infinity IP Intercom natively supports Livewire+ AES67, you can use it with Telos Alliance AoIP products or those from other manufacturers that support AES67 or SMPTE ST 2110-30.

... Or as Part of a Legacy Installation

Harnessing the benefits of Telos Infinity IP Intercom doesn't mean you have to abandon existing audio infrastructure. Instead, Telos Infinity seamlessly integrates into analog, AES, SDI, and MADI systems using Telos Alliance xNode baseband-to-IP interfaces and other AES67 partner devices. A transition to AoIP reduces the amount of cabling and its associated costs, system design time and installation expense—all while establishing a pathway to a complete AoIP solution in the future.

The New Benchmark in Broadcast Talkback Technology

Infinite Possibilities

Telos Infinity IP Intercom marks the next generation of Audio over IP solutions destined to revolutionize broadcast communication through the creation of disruptive and innovative technologies—and it's just the start.

Award-Winning

We're honored that Telos Infinity IP Intercom has been the recipient of several awards since its introduction, including TVB Europe Best of Show (IBC 2017), Radio World Best of Show (NAB 2018), TV Technology Best of Show (NAB 2018), and AV Technology Best of Show (InfoComm 2018).

Telos Infinity IP Intercom Panels

By combining familiar hardware Intercom facilities with the flexibility and workflow advantages of matrix-free IP communications, the INF-MP-16, INF-MP-16B, and INF-MPX-20 set a new benchmark in talkback technology.

The INF-MP-16 1RU Intercom Master Panel features 16 multicolor talk/listen lever display keys that can show up to four lines of text plus bitmap images and icons (future feature). Complemented by optimized voice channels and loudspeaker reproduction, the INF-MP-16 features the excellent speech intelligibility required for mission-critical broadcast operations. Each INF-MXP-20 Expansion Panel provides 20 additional display keys.

Optimized for Broadcast, Live Event, and Pro AV Communications

Auxiliary, rear panel stereo analog I/O including a studio-quality mic preamplifier means that the INF-MP-16 can be used as a contribution or monitoring endpoint. The addition of GPIO as standard enables remote control of signalization or complex logic interfacing across the network infrastructure. Features of the INF-MP-16 Intercom Master Panel include:

- 16 multicolor display lever keys with additional shift levels at the touch of a button
- Multichannel duplex voice and contribution audio endpoint
- 24 bit/48 kHz IP audio
- Natively Livewire+ AES67 compliant
- Optional Infinity Link VoIP codec capability
  - ‘Free’ Standalone ‘Link Lite’ Mode
- Network connection via standard Gigabit Ethernet
- PoE+ or external DC power (or both for redundancy)
- Aux rear panel I/O including studio-grade mic input for on-air contribution
- GPIO via rear panel D-Sub as standard
- Headset connector supporting industry-standard XLR-4M
- Configurable dynamics processing for improved speech intelligibility
- Full configuration via Telos Infinity Dashboard
- Device management via built-in Web UI

The INF-MP-16B 1RU Intercom Master Panel Base Version offers all of the same features as the INF-MP-16 but without the rear panel audio inputs and outputs, making it a more cost-effective option in applications where local I/O is not required.

The INF-MPX-20 1RU Expansion Panel adds 20 additional display keys when paired with the INF-MP-16 or IN-MP-16B Intercom Master Panels.

Excellent Speech Intelligibility for Mission-Critical Operations

Telos Infinity IP Intercom Desktop Station

The Telos Infinity INF-DS-16 and INF-DS-16B 16 Key Intercom Master Desktop Station are ideal for locations where a rackmount panel isn't practical but where the same functionality and features from the INF-MP-16 are required in a compact and attractive format. By combining familiar hardware Intercom facilities with the flexibility and workflow advantages of matrix-free IP communications, the INF-MP-16 sets a new benchmark in broadcast talkback technology. The INF-MP-16 1RU Intercom Master Panel features 16 multicolor talk/listen lever display keys that can show up to four lines of text plus bitmap images and icons (future feature). Complemented by optimized voice channels and loudspeaker reproduction, the INF-MP-16 features the excellent speech intelligibility required for mission-critical broadcast operations.

Optimized Voice Channels and Loudspeaker Reproduction

Auxiliary, rear-panel stereo analog I/O, including a studio-quality mic pre-amplifier, means that the INF-MP-16 can be used as a contribution or monitoring endpoint. The addition of GPIO as standard enables remote control of signalization or complex logic interfacing across the network infrastructure.

- 16 multicolor display lever keys with additional shift levels at the touch of a button
- Multichannel duplex voice and contribution audio endpoint
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- Device management via built-in Web UI

The Telos Infinity INF-DS-16B 16 Key Intercom Master Desktop Station Base Version offers all of the same features as the INF-DS-16 but without audio inputs and outputs, making it a more cost-effective option in applications where local I/O is not required.

Communicate Across the Network with Incredibly Low Latency

Telos Infinity IP Intercom Beltpacks

The Telos Infinity INF-BP-2 and INF-BP-4 are next-generation wired Dual and Quad Channel Digital Beltpacks that are powered by PoE (Power over Ethernet) and natively AES67 compliant. Whether via Partyline, Group, IFB, Peer to Peer, or connection to any other IP audio networked element within the wider Telos Infinity IP Intercom, Beltpacks communicate across the network seamlessly while maintaining incredibly low latency.

The BP-2 is a Dual Channel Beltpack. The BP-4 is a Quad Channel version that can either be used in standard 4-channel mode or in 3-channel mode with a dedicated “reply to last caller” button.

Multiple BP-2 and BP-4 units can be daisy-chained together, powered from the same physical PoE port, providing a functionally superior alternative to traditional 2-wire or digital-audio-based partyline systems.

An available neoprene BP Boot provides additional protection for both models in harsh environments or where additional protection is required.

- Two- and four-channel duplex communication plus auxiliary program source
- 24 bit/48 kHz IP audio
- Natively Livewire+ AES67 compliant
- Optional Infinity Link VoIP codec capability
- Standalone ‘Link Lite’ VoIP Mode
- Rugged, lightweight design with interchangeable belt clip/mounting accessory
- Network connection via standard 100mbit Ethernet
- PoE or PoE+ with managed daisy-chain connectivity

Designed for Comfort, Flexibility, and Durability

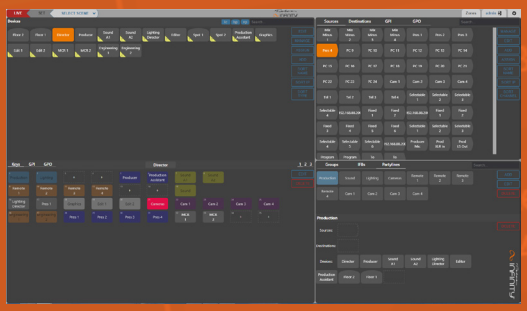
- Headset connector supporting industry-standard XLR-4M
- Internal mic/speaker for hands-free walkie-talkie, desktop or wall-mount use
- Configurable dynamics processing for improved speech intelligibility
- Full configuration via Telos Infinity Dashboard
- Device management via built-in Web UI

Telos Infinity IP Intercom Lite Single Ear Wired Headset

Professional single-ear lightweight headset specifically designed for exceptional comfort, flexibility, and durability as needed in the most demanding environments.

Features:

- Single-ear lightweight design with enhanced acoustic isolation
- Closed back supra-aural (on ear) design
- Flexible, ambidextrous swiveling mic boom
- Flip-up microphone mute
- Dynamic noise-cancelling cardioid microphone optimized for voice communications
- Comfort fit adjustable headband
- Replaceable ear cushion pads
- Non-reflective rubberized matte black finish



The Entire Intercom System on a Single View

Includes:

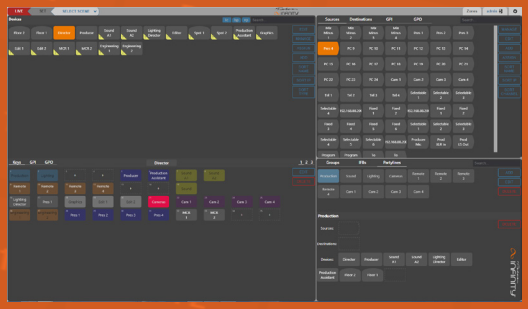
- Fixed 5 ft. (1.52 m) cable with 4-pin XLR Female connector termination
- Ear Sock
- Magnetic Cable Clip

Telos Infinity IP Intercom Dashboard Software

Telos Infinity Dashboard is unlike other Intercom system-management tools. By displaying the entire Intercom system as a single page view without the clutter of multiple tabs and embedded menus, the operator can navigate quickly, and within minutes take control to create or manage a working IP Intercom. Much more than a simple configuration tool, Dashboard also manages all hardware and software elements within the system, including software and firmware updates, and monitors network performance and fault logging.

Telos Infinity Dashboard is available in two forms, Dashboard Application and Dashboard Server, each providing the same advanced functionality, but in versions that suit either single or multiple user workflows.

Take Control Instantly with Infinity's Intuitive UI



Infinity Dashboard Server

For medium to large sized fixed installations, the optional Telos Infinity Dashboard Server software represents an optimized configuration and system management tool with an extended feature set to unlock the full potential of the multi-award-winning Telos Infinity matrix-free IP Intercom System.

Dashboard Serveris installed on either single or dual servers (coming soon) and constantly monitors the Telos Infinity Intercom network as well as any other connected AES67 devices, stream sources and destinations. User Clients connect to the Server Host via any HTML5 compatible web browser using a suitable connected device including PCs, tablets and mobile devices.

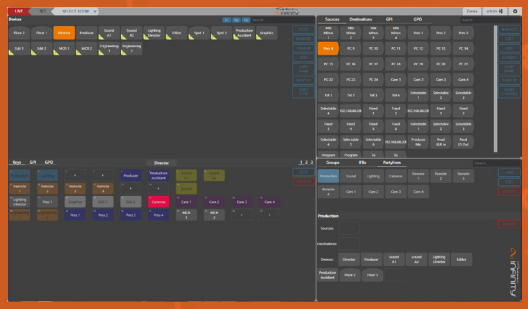
Dashboard Server can be used for all system configuration, from initial set up to 'on the fly' changes during live operation. However, Dashboard Server does not need to run constantly for Infinity to function normally (although it is highly recommended).

Additional features like System Zone and Scene support enable the user to define dedicated system views of specific components and quickly create snapshots (Scenes) for different productions and applications. Tailored access to specific Zones and Scenes as well as offline configuration modes are all protected by centrally managed user rights administration, ensuring that operators at all levels have restricted access to the resources that they need. Zones and Scenes can be edited, cloned and recalled both in Live and Offline modes.

Features in the latest version of Dashboard Server include ISO key support, advanced VOX Detection with noise gating, redundant Ethernet support per SMPTE ST 2022-7 and Bonded Failover modes, and alerts when device firmware is out of date.

Critical for use within the wider Audio over IP ecosystem, Dashboard Server supports SAP for AES67 discovery and advertisement enabling a direct connection of third-party AES67 streams including SAP for Dante and future NMOS modes.

Telos Infinity users have the option to purchase either single or dual server versions of Dashboard Server, each including Systems Administrator login licenses. Further logins for additional clients can be purchased. There is no limit to the number of simultaneous users who can be connected to Dashboard Server.



Define Dedicated System Views or Quickly Create Scenes

Infinity Dashboard Application

The single-user application of the Dashboard license is designed for use with smaller systems of up to 24 devices where multiple simultaneous users and dedicated server management is not required. It is equipped with the same comprehensive feature set as Dashboard Server, but runs on a dedicated PC as an application.

Dashboard Application allows users to create unlimited Groups, Partylines, and IFBs, drag-and-drop functions directly onto Panel and Beltpack keys in real-time, and manage AoIP sources and destinations as though they are physical ports on a virtualized Intercom matrix. Remote control of Panels, Desktop Stations, and Beltpacks is now possible via the web interface for all Infinity systems.

Common Infinity Dashboard Server and Application Features:

- Optimized user experience
- Infinity Dashboard Application for smaller systems (single user)
- Infinity Dashboard Server total system control and management (multi-user server application)
- Online and offline configuration
- Create unlimited Groups, Partylines and IFBs
- Drag-and-drop system configuration
- Remote control of Panels, Desktop Stations, and Beltpacks
- Manages all Telos Infinity and Telos Alliance AoIP devices
- Livewire+ AES67 source and destination management (virtual matrix ports)
- GPIO / Logic configuration and management
- Constantly updating system database backup
- Native AES67 input/output support for all Livewire+ and non-Livewire+ streams (including SAP discovery and advertisement)
- Drag-and-drop Intercom Device copy and cloning of Panel and Beltpack configurations
- System Zones enable user-restricted or bespoke system viewports
- System Scenes enable multiple ‘snapshots’ for offline creation, save and live recall of show specific configurations
- ISO Keys
- Zone by Zone System Update Tool (allows user to choose when and what hardware devices to update)
- Optional Dongle Licensing

Enable Infinity Systems in Remote Locations with Infinity Link

Telos Infinity Link

Telos Infinity Link enables Infinity systems in remote locations to connect to one another using an embedded, versatile, speech-optimized OPUS codec, over the public internet or private infrastructure

Telos Infinity Link is available in the form of software licenses that can be added to any host Infinity Panel or Beltpack hardware, or by way of a dedicated higher-density 1RU hardware gateway.

Infinity Link for Panels is available for Infinity Intercom Master Panel, Infinity Expansion Panel, and Infinity Desktop Panel by way of either the Link 4 or Link 8 options, offering four or eight bi-directional codecs respectively.

Infinity Link for Beltpack adds two bi-directional codecs via the Link 2 option...

Link Lite (VoIP Only) Mode 'Link Lite' VoIP mode for Beltpacks and Panels enables instant connectivity for at-home/remote workflows with minimal config and adaptive bandwidth. This is a free feature released with all devices running V1.7 firmware and above, but with a limited feature set that is optimized for remote users running in standalone applications.

Infinity Link Gateway supports either eight or sixteen bi-directional codecs running on a dedicated 1RU hardware platform, making it ideal for higher-density applications. Infinity Link Gateway features dual redundant internal power supplies and dual Gigabit Ethernet ports.

Once connected, the resulting Livewire+ AES67 streams from the remote locations appear as sources and destinations within the Telos Infinity Dashboard software and behave just like local networked audio sources, providing the ultimate flexibility.

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