

Wired
Communications

Analog Partyline Intercom
Digital Network Partyline Intercom
Connectivity Solutions
Intercom Accessories

About Intercom Technology

An intercom (intercommunication system) is a standalone, closed-circuit system for one-way “simplex” and/or two-way “duplex” communication. The general purpose of a professional intercom system is to facilitate simple to complex communication setups for few to thousands of users who need to be continuously on talk and/or listen mode. Two-way communications systems can operate in half-duplex or full-duplex. With half-duplex systems, one party talks while the other party listens. With full-duplex systems, both parties can talk and listen at the same time as if they are in a natural conversation in person.

Users who have different roles in a particular operation can be in a conference or partyline together. Or they can be sub-divided into a matrix of independent groups in any one or many private intercom channels. In addition to establishing communication points, an intercom system can also be interfaced with third-party devices such as 2-way radios, 4-wire audios, telephone, TV cameras, AES3 digital audio, relay control (for signal light activation or door control), etc.

The core technology of an intercom system could be based on one of the following platforms: 2-wire/analog, 4-wire digital, wireless, or IP networks. The decision to deploy one platform over the other will greatly depend on requirements, environment and budget. These intercom platforms operate independently or can be linked to form a larger system in order to meet specific unique communication workflow needs. Moreover, intercom systems can be bridged together with different communications systems as part of a multi-platform solution.

In certain applications, intercom systems need to be geographically distributed to support the various communication positions in a given workflow. Therefore, they can be connected over 2-wire or 4-wire; MAD1 for close-distance connections such as floor-to-floor; optical fiber for short to long distances within a building; and IP networks (LAN, WAN, or Internet) for connections across a wide area, across town, or across the country.

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For decades, Clear-Com has been the leader in wired communications solutions. Clear-Com was the first to market distributed wired beltpacks in the live performance market, and has installed its full-duplex, group communication solutions in tens of thousands of facilities around the world. Today, Clear-Com stands as an unmatched, trusted provider of analog and digital network partyline technologies.

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Analog Partyline Intercom

Analog 2-wire, group communications systems with intuitive plug-and-play design and superior audio clarity.

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Digital Network Partyline Intercom

Flexible, scalable, and intelligent digital network partyline system platform for dynamic group communication.

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Connectivity Solutions

Collection of connectivity products that link local or geographically distributed intercom systems over Ethernet/IP networks and/or optical fiber.

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System Diagram

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Other Clear-Com Offerings

ANALOG PARTYLINE

Analog Partyline Systems offer unsurpassed 2-wire, group communications capabilities. All intercom systems provide full-duplex communications, intuitive plug-and-play design, superior audio clarity with the embedded “Clear-Com Sound,” and reliable communications technology for the most demanding applications.

> Clear-Com Encore®

Clear-Com Encore®

From main stations to remote stations, wired beltpacks to wall-mounted speaker stations, Clear-Com Encore is a 2-wire intercom system family for reliable group communications. This platform is highly compatible with other Clear-Com or third-party products to meet growing communications needs.

Main Stations

Two- or four- channel rackmount or portable main stations for talk, listen and call operations with built-in fail-safe intercom power supply, internal speaker, microphone and headset connections. Up to 40 user beltpacks can be supported.



| Sales Part # | Channels | Internal Power Supply | Internal Speaker | Routing |
|------------------|----------|-----------------------|------------------|---|
| CS-702 | 2 | Yes, 2-amp | Yes | No |
| MS-702/MS-802-IM | 2 | Yes, 2-amp | Yes | No |
| MS-704 | 4 | Yes, 2-amp | Yes | No |
| SB-704 | 5 | Yes, 2-amp | No | Yes, includes 10 source assignment switches |

Source-Assignment Panel

An 8-source by 24-destination assignment panel, ideal for medium to large installations where channel assignments to remote stations change frequently. Expandable up to 15 sources and 72 destinations.



RCS-2700

| Sales Part # | Channels | Routing |
|--------------|-----------------|---------|
| RCS-2700 | 8 x 24-channels | Yes |

Remote Stations

Two- or four-channel rackmount remote stations for talk and/or listen operations on one or both channels. Systems are powered by the intercom line.



RM-702

RM-704

| Sales Part # | Channels | Speaker |
|------------------|----------|---------|
| RM-702/RM-802-IM | 2 | Yes |
| RM-704 | 4 | Yes |

Wired Beltpacks

One- or two- channel analog beltpacks with XLR-3 or XLR-6 line connector and XLR-4M headset connector. Microphone preamp with a dynamic range of 130 db enables intelligible voice communication for every volume level. The beltpacks feature high headroom, low-noise audio and shaped contour crystal clear audio, "The Clear-Com Sound".



RS-702



RS-701



RS-702



RS-703

| Sales Part # | Channels | Cable |
|-------------------------|----------|---|
| RS-701/RS-801-IM | 1 | 3-PIN XLR |
| RS-702/RS-802-IM | 2 | 6-PIN XLR |
| RS-703 | 2 | 3-PIN XLR (TWC-701 or RTS Power Supply equivalent required) |

Speaker Stations

Single- or two-channel flush mount speaker stations provide users with basic talk/listen operations. Integrated speaker, electret microphone connections, push-to-talk capability are built-in features of these stations.



KB-701



KB-702



KB-702GM



V-Box

| Sales Part # | Channels | Mount Options |
|-----------------------------|---|---|
| KB-701 | 1 | V-Box |
| KB-702 | 2 | V-Box |
| KB-702GM/KB-802GM-IM | 2, with headset connector, Mic Jack and VOX | V-Box |
| V-Box | Enclosure for KB Speaker Stations | Permits either angled or vertical portable, desktop or wall mounting. Both male and female 3-pin XLR connectors on side panel |

Headset Stations

Two- or four-channel flush-mountable headset stations with internal and external controls that allow the features of these stations to be tailored to user needs. Standard features include: momentary or latching talk switch, remote mic kill, and LED indicators for visual cueing.



HB-702



HB-704

| Sales Part # | Channels | Mount Options |
|---------------|------------------|-----------------|
| HB-702 | 2 (A or B) | Wall or Console |
| HB-704 | 4 (A, B, C or D) | Wall or Console |

Industrial and Marine Products

Intercom products for use in harsh environments, certified in accordance with DNVGL-CG-0339, asbestos-free, and IEC 60945 Compass Safety distance conformity.



BP-801-IM



BP-802-IM



KB-802GM-IM



MS-802-IM



RM-802-IM

| Sales Part # | Channels | Interface connections |
|--------------------|----------|--|
| BP-801-IM* | 1 | Single-channel beltpack with 3-pin XLR |
| BP-802-IM* | 2 | Two-channel beltpack with 6-pin XLR |
| MS-802-IM | 2 | Two-channel main station with internal speaker and power supply |
| RM-802-IM | 2 | Two-channel remote station with internal speaker |
| KB-802GM-IM | 2 | Two-channel speaker station with headset connector, Mic Jack and VOX |

*IP-53 rated, sealed against water, salt-mist, and humidity

Interfaces

System interfaces enable Encore to connect with external audio sources.



TWC-701



TW-47



EF-701M



IF4W4



TW-12C

| Sales Part # | Channels | Interface connections |
|----------------|----------|---|
| TW-47 | 1 | Connects 2-way radio/walkie-talkie |
| IF4W4 | 4 | Connects to TV cameras, 2-way radios, satellite links, and other communications devices through either headset jacks or 4-wire circuits |
| EF-701M | 1 | Connects to 4-wire audio, while also converting call signals to RS422 data (and back) |
| TW-12C | 1 | Connects one intercom system to another (Clear-Com-to-Clear-Com, Clear-Com-to-RTS, and RTS-to-RTS system configurations) |
| TWC-701 | 1 | Two-channel cable adapter combines two intercom channels onto a single 3-pin XLR cable |

Que-com Partyline System

High-performance, economical partyline system that features a wide frequency response and high audio output. The SMQ-1, the rugged beltpack with a

permanently attached noise-isolating headset, includes an individual volume control and a mic on/off switch. The PK-7 is a suitable power supply option.



SMQ-1

Intercom Power Supplies

Intercom Power Supplies deliver sufficient power to support one to four channels of intercom, up to 40 beltpacks, 10 speaker stations or 12 headset stations.



| Sales Part # | Channels | # of Beltpacks | Mount | Power |
|---------------|----------|--------------------------------------|----------|---------|
| PK-7 | 1 | 8 RS-600 Series or 16 RS-700 Series | Portable | 0.4 Amp |
| PS-702 | 2 | 40 RS-600 Series or 80 RS-700 Series | Rack | 1 Amp |
| PS-704 | 4 | 40 RS-600 Series or 80 RS-700 Series | Rack | 2 Amp |

Wired IFB

IFB systems allow talent coordinators to speak directly to on-air talents and crew members. IFB system transmits one or two program audio signals to individual Talent Receivers via standard, two conductor shielded mic cables. Communication is one-directional.



| Sales Part # | Description |
|----------------------|--|
| PIC-4744 | Program Interrupt Router Handles up to four talent outputs with selectable wet/dry switch. Use with MA-704 and AX-704 IFB Control Panels or intercom stations. Contains the circuitry for selecting one of four program sources, sending the program to the IFB channels, and interrupting it via the talent control station |
| AX-704/MA-704 | IFB Master Control Access & Expansion Access Stations Console-mount or rack-mount units control program interrupt (IFB) to the talent. MA-704 also includes gooseneck mic connector and illuminated All Talent. CEP-RK rack mount fixture is available for both panels |
| TR-50 | Monaural IFB Talent Receiver Single-channel talent beltpack with volume control. Connects to the program interrupt controller with a standard microphone cable. Includes a mini earphone jack output and a talent earset, paired with the CC-010A IFB ear set |
| AB-120 | On-Air Announcer Console Integrates all the inputs, outputs, and controls necessary at the announce position, including intercom Talkback, IFB receiver, and a silent Mute button that provides noise-free cough and mic on/off switching |

Intercom Accessories

| Sales Part # | Description | Image |
|-----------------|---|---|
| FL-7 | Call Signal Flasher Visual and audible indication of a call signal on the intercom channel |  |
| MT-701 | Isolation Box for Clear-Com Analog Partyline Reduces hum in Clear-Com Encore partyline systems and bridges two Encore partyline systems together |  |
| WP-2 | Two-channel 3-Pin Selectable Intercom Outlet Wall Plate Allows user on the a single-channel beltpack to talk on either of two intercom channels |  |
| WP-6 | Two-channel 6-Pin Intercom Outlet Wall Plate Allows user on the a two-channel beltpack to talk on both intercom channels |  |
| YC-36 | Dual-channel Beltpack Adapter A 3-pin to 6-pin adapter that combines 2 single-channel 3-pin cables into a single two-channel 6-pin connector |  |
| SP-3 | Intercom Line Splitter 3-way intercom line splitter with one 3-pin female and three 3-pin male XLR type connectors |  |
| HS-6 | Telephone-style handset with wall/console mount hanger, push-to-talk switch |  |
| PT-7 | Push-to-talk, hand-held microphone |  |
| BP-MOUNT | Universal beltpack mounting kit for Encore, HelixNet and FreeSpeak II beltpacks |  |

Compatible Intercom Headsets

Clear-Com offers a versatile range of headsets designed to give excellent audio quality, comfort and ease of use to suit every need. Our range of headsets can be used with all Clear-Com Partyline system and beltpacks.



CC-110



CC-220



CC-300



CC-400



CC-40



CC-60



CC-26K



CC-010A

| Sales Part # | Headset | Mic Type | Mic/Headphone Impedance | Mic Boom |
|----------------|-------------------------|----------|-------------------------|---|
| CC-110* | Light-weight single-ear | Dynamic | 200/400 Ohms | 300-degrees rotation for muting mic on/off |
| CC-220* | Light-weight double-ear | Dynamic | 200/400 Ohms | 300-degrees rotation for muting mic on/off |
| CC-300* | Single-ear | Dynamic | 200/400 Ohms | 300-degrees rotation for muting mic on/off |
| CC-400* | Double-ear | Dynamic | 200/400 Ohms | 300-degrees rotation for muting mic on/off |
| CC-40 | Single-ear | Dynamic | 200/400 Ohms | Adjustable |
| CC-60 | Double-ear | Dynamic | 200/400 Ohms | Adjustable |
| CC-26K | Light-weight single-ear | Dynamic | 200/200 Ohms | 360-degrees rotation for left or right side use |
| CC-010A | Single-ear | Dynamic | 200 Ohms | None (Listen only) |

*Different cable options available

Compatible Intercom Microphones

Compatible with Encore Analog Partyline systems, GM microphones have superior audio sensitivity and durable construct. Each type of gooseneck microphones is available in a variety of sizes.



GM-9/GM-18

| Sales Part # | Length | Compatible With |
|-------------------|--------------------|-----------------------|
| GM-9/GM-18 | 9 inches/18 inches | Encore analog systems |

DIGITAL NETWORK PARTYLINE

Digital Network Partyline is a wired intercom platform for full-duplex dynamic group communication, with I.V.Core technology at the core and offers all the benefits of digital audio and network-friendly characteristics.

> HelixNet®

HelixNet

HelixNet Digital Network Partyline System uniquely delivers all features and functions of industry-standard partyline systems with the addition of digital audio and data transport over any IP network or, alternatively, over any standard shielded twisted-pair microphone cable. Up to 24 channels of audio are provided to any endpoint powered either locally, via Powerline, or Power-over-Ethernet (PoE).

HelixNet Main Station

The **HMS-4X** Main Station offers up to 24 channels of full-duplex audio and program audio. It features the legendary “Clear-Com Sound” quality for a highly intelligible audio experience. Configuration and deployment of the HelixNet system is made simple through an intuitive browser-based configuration utility, discovery, and role-based configuration of endpoints.

Multiple systems may also be linked together over a fiber or Ethernet connection to facilitate scaling and distribution of resources.

- High Channel Density. 12 channels of audio and power are standard per Main Station. 24 channels are available via an optional channel expansion license. Up to three Main Stations and three LQ Series devices may be linked to expand the I/O potential of the HelixNet system as well as provide additional powered 2-wire Clear-Com/RTS connectivity.

- Increase the number of channels accessible from any single operator position through expansion using up to 6 Main Station or Remote Station units.
- No Hum. No Buzz. All-digital system offers immunity to electro-magnetic interference and ground loops.
- High User Capacity. A single Main Station can support up to 70 endpoints, including beltpacks, Remote Stations, Speaker Stations, and 2-wire/4-wire analog interfaces.
- Endpoint access to all 24 channels. Whether connected over Powerline or IP, each endpoint has the ability to simultaneously talk and listen to any or all of the 24 channels hosted on the Main Station.
- Seamless integration of local and remote resources through the use of optional analog interface modules on the Main Station or through LQ

linking. This provides additional analog and digital interfacing, including connectivity to Eclipse HX matrix frames, Agent-IC clients, and to PBX or other VoIP-enabled products using the industry-standard SIP protocol. Optional 2- or 4-wire interface modules further extends connectivity to existing analog partyline or matrix intercoms. Link to LQ devices for connection options to Agent-IC mobile clients or SIP/VoIP telephones.

- Easy Configuration. Using either the Main Station front panel menu with cascading menu operation of the freely available browser-based Core Configuration Manager (CCM), setup, deployment, and management of the system is made easy, yet powerful. The CCM supports the latest versions of all major browsers on any browser-enabled platform.



HMS-4X Front



HMS-4X Rear

HelixNet User Devices

HelixNet devices consist of the HMS-4X, HRM-4X Remote Station, HKB-2X Speaker Station and the HXII-BP Beltpack. Digital Beltpacks can be powered either by Powerline using standard mic or via Power-over-Ethernet (PoE). Remote and Speaker Stations are powered either locally using an Universal AC wall adaptor or via PoE.



HKB-2X



HXII-BP



HRM-4X

| Sales Part # | Description | Channel Access | Cable Operation | Power Options |
|----------------|---|---|--|---|
| HMS-4X | Main Station | Up to 4 keys assignable to any of the 24 system channels* | All audio data and control data received via a single shielded twisted-pair cable | Universal power adaptor |
| | Select between 4 of any 24 channels with talk/listen. Easily accessible headset and mic buttons, speaker with rotary volume control. Three rear panel interface module slots for optional Ethernet, Fiber, 4-wire and 2-wire connectivity. | | | |
| HRM-4X | Remote Station | Up to 4 keys assignable to any of the 24 system channels* | All audio data, control data and power received via a single shielded twisted-pair cable | <ul style="list-style-type: none"> • Powerline • Power-over-Ethernet (PoE) • Universal power adapter |
| | Similar capabilities as the HMS-4X Main Station. Rotary channel level controls. Line/LAN status indicators. No option module bays at the rear | | | |
| HKB-2X | Headset and Speaker Station | Up to 4 keys assignable to any of the 24 system channels* | All audio data, control data and power received via a single shielded twisted-pair cable | <ul style="list-style-type: none"> • Powerline • Power-over-Ethernet (PoE) • AC/DC universal power adapter |
| | Large format OLED displays. Up to 10 characters for user-defined labels. Speaker and program level controls. Display tilts up and down for best viewing. Fits 4-Gang standard electrical wall box (US ANSI/NEMA OS-1 standard size) or optional S-Mount enclosure | | | |
| HXII-BP | Digital beltpack | Up to 2 keys assignable to any of the 24 system channels* | All audio data, control data and power received via a single shielded twisted-pair cable | <ul style="list-style-type: none"> • 3-pin XLR MIC cable • Power-over-Ethernet (PoE) |
| | Configurable in daisy-chain or star topology without active split boxes. SP-2 optional line splitter is required to daisy-chain the new beltpack over powerline. System configuration and firmware upgrades are centrally managed from the Main Station. Binaural listening when using the 5-pin X5 beltpack and suitable headset | | | |

*Optional 12-channel expansion license required

S-Mount (Enclosure for HKB-2X)

The S-Mount is a desktop or wall mounting kit for the HelixNet Speaker Station. The S-Mount is easily adjustable to different angles to suit user's requirements.

- AC/DC universal power adapter
- Ethercon Ethernet Connector
- XLR-3M and XLR-3F powerline intercom ports

- Adjustable rake for best viewing options
- Anti-slip feet
- Screw-holes for easy wall mounting



Speaker Station sold separately

HelixNet Option Modules

HelixNet optional modules allow for system expansion over fiber or Ethernet as well as can interface with 2-wire and 4-wire communications systems. Each module fits into one of three built-in expansion bays located at the rear of an HMS-4X Main Station.

Interface Modules

The HLI-2W2 2-wire interface module enables two ports of unbalanced audio (2-wire) interfacing into the HelixNet system. Two 3-pin XLR-F connectors on the module connect intercom lines of Clear-Com or RTS 2-wire systems, and can be assigned via the Main Station front panel menu or CCM.



The HLI-4W2 interface module enables two ports of balanced audio (4-wire) interfacing to devices, such as matrix ports, cameras and telephone circuits. Two RJ45 connectors on the module connect the external 4-wire circuits and can be assigned via the Main Station front panel menu or CCM. Each of the two ports utilizes both transformer and electrical balancing for hum and noise-free audio paths.

| Sales Part # | Port Count | Interface with |
|--------------|------------|--|
| HLI-2W2 | 2 | Analog 2-wire intercoms (Clear-Com and RTS compatible). Does not supply power. |
| HLI-4W2 | 2 | Analog 4-wire intercoms (Matrix ports, cameras, and telephone circuits) |

Connectivity Modules

Ethernet modules facilitate the HelixNet Main Station to be connected to any IP network enabling access of the CCM, IP-connected endpoints, and linking of other Main Stations. Fiber Modules can be mixed with Ethernet Modules in the same network.



| Sales Part # | Port Count | Interface with |
|--------------|------------|---|
| HLI-ET2 | Ethernet | Two daisy-chainable, copper RJ45 LAN connectors |
| HLI-FBS | Fiber | Two daisy-chainable, single-mode or multi-mode compatible fiber transceiver SFP modules |

HelixNet Partyline Station-to-Station Networked Linking

Up to three Main Stations may be linked using any combination of HLI-ET2 Ethernet or HLI-FBS Fiber modules.



Up to three Main Stations and three LQ or LQ-R Series devices can be linked over LAN or WAN.



Compatible Intercom Headsets

Clear-Com offers a versatile range of headsets designed to give excellent audio quality, comfort and ease of use to suit every need. Our range of headsets can be used with all Clear-Com Partyline system and belt packs.



| Sales Part # | Headset | Mic Type | Mic/Headphone Impedance | Mic Boom |
|----------------|-------------------------|----------|-------------------------|---|
| CC-110* | Light-weight single-ear | Dynamic | 200/400 Ohms | 300-degrees rotation for muting mic on/off |
| CC-220* | Light-weight double-ear | Dynamic | 200/400 Ohms | 300-degrees rotation for muting mic on/off |
| CC-300* | Single-ear | Dynamic | 200/400 Ohms | 300-degrees rotation for muting mic on/off |
| CC-400* | Double-ear | Dynamic | 200/400 Ohms | 300-degrees rotation for muting mic on/off |
| CC-40 | Single-ear | Dynamic | 200/400 Ohms | Adjustable |
| CC-60 | Double-ear | Dynamic | 200/400 Ohms | Adjustable |
| CC-15 | Single-ear | Electret | 2.2K/40 Ohms | 360-degrees rotation for left or right side use |
| CC-30 | Double-ear | Electret | 2.2K/40 Ohms | 360-degrees rotation for left or right side use |
| CC-26K | Light-weight single-ear | Dynamic | 200/200 Ohms | 360-degrees rotation for left or right side use |

*Different cable options available

Compatible Intercom Microphone

Compatible with HelixNet Partyline Systems, the 110 Series gooseneck condenser microphones offer excellent frequency response and audio sensitivity. This range of microphones comes supplied with a threaded 3-pin male DIN connector and windscreens.



| Sales Part # | Length | Compatibility with |
|--|--|--------------------|
| 110/100 110/340 110/490 | 10 cm (3.9") 34 cm (13.4") 49 cm (19.3") | HelixNet |

CONNECTIVITY SOLUTIONS

Clear-Com offers connectivity solutions designed for linking multiple intercom systems together over IP networks, routing and distributing audio and video signals over optical fiber networks, and interfacing communications solutions with SIP protocols and 2-way radios.

- > LQ Series
- > ProGrid™
- > Clear-Com Gateway

LQ™ Series: Intercom Connectivity Solution over IP Networks

LQ devices extend and connect any combination of 2-wire partyline intercom, 4-wire intercom/audio, 4-wire with GPIO, SIP connectivity or Agent-IC mobile clients over IP circuits (House LAN, Corporate WAN, Internet or Wi-Fi connections).

For extending intercom systems to remote locations:

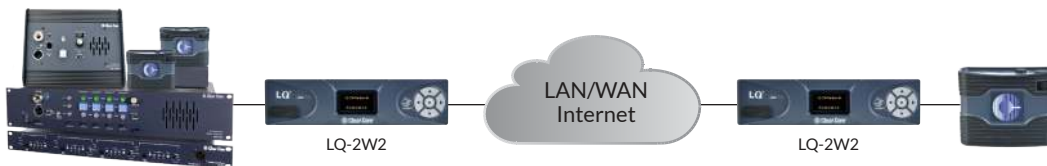
Simply connect an LQ device to the house intercom system and place other LQ devices at remote locations where beltacks or KB units are necessary.

Then, establish links between LQ devices using the Core Configuration Manager from any browser.

Features:

- Brand agnostic—connect any brand intercom system to LQ

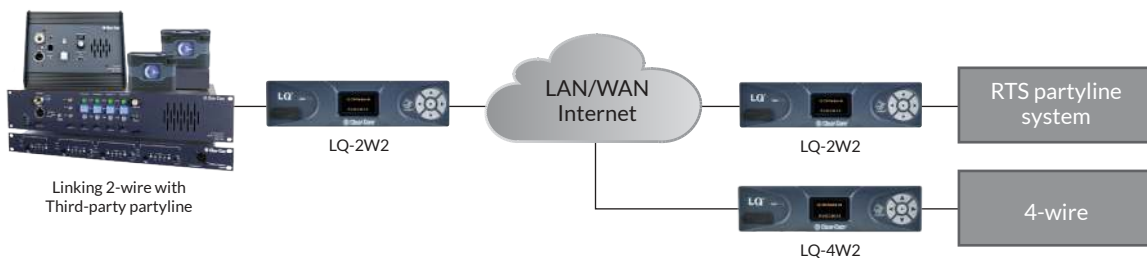
- Up to five RS Series beltacks can be powered by a 12V DC-powered LQ unit; only 1 RS beltpack can be power by PoE-powered LQ unit
- Auto-null circuit
- Low native latency



For linking multiple systems from different locations:

Place an LQ device at each end of the intercom system, then establish links among the LQ devices using the

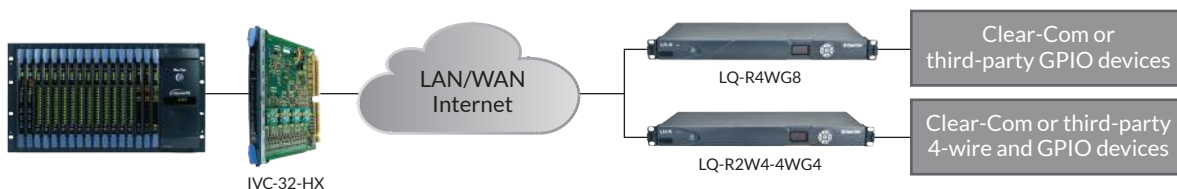
Core Configuration Manager from any browser.



For linking remote systems to an Eclipse HX matrix:

Remotely connect intercom or audio sources via LQ Series devices to

an Eclipse HX matrix using an IVC-32-HX card.



Linking matrix to GPIO, 2-wire or 4-wire intercom system

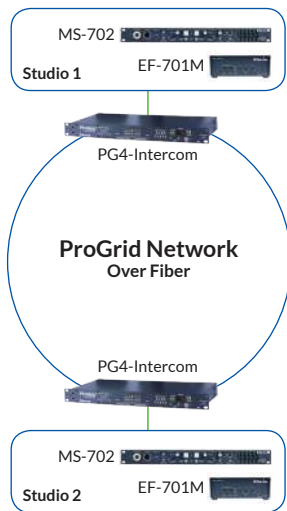
ProGrid

ProGrid is a world-class audio and signal transport solution, for ultra-fast transport, distribution, and routing of audio, intercom, video signals* and control data. Based on the open AES3

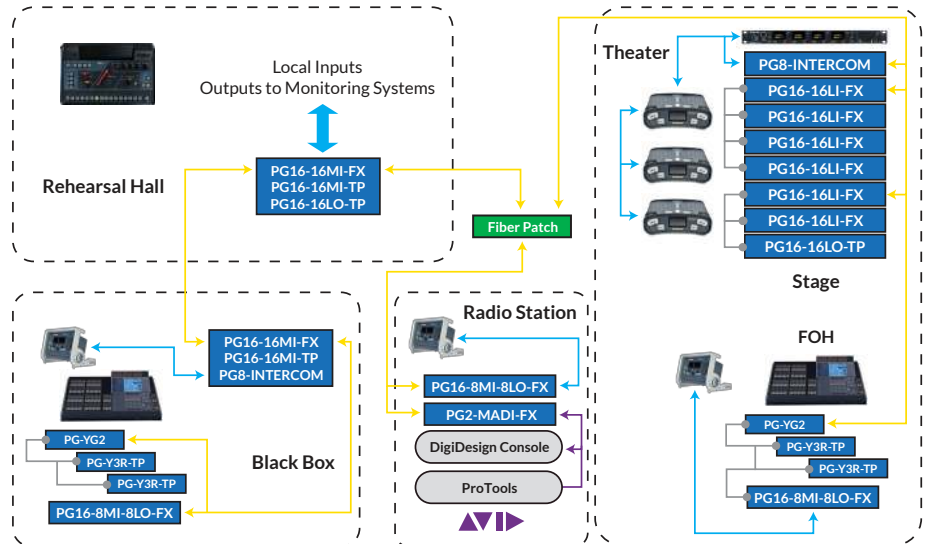
and AES10 (MADI) standards, the ProGrid devices runs on the OPTOCORE® (Optical Fiber) and SANE (Synchronous Audio Network + Ethernet) platforms. All serial data,

word clock sync, analog, AES, MADI audio with timecode, and all major brand intercom signals are transmitted synchronously at extremely low latency and across long distances over ProGrid.

Multiple Encore analog systems connected over ProGrid

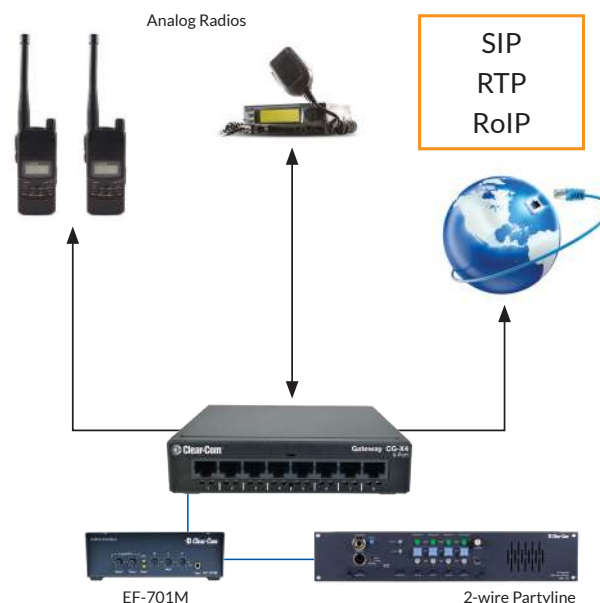


Multiple venues connected to a Studio/Radio Station with HelixNet Intercom over ProGrid



Clear-Com Gateway

Clear-Com Gateway is an interoperability solution for linking and bridging disparate communications systems from different platforms such as radios, intercoms, telephones, and IP networks.



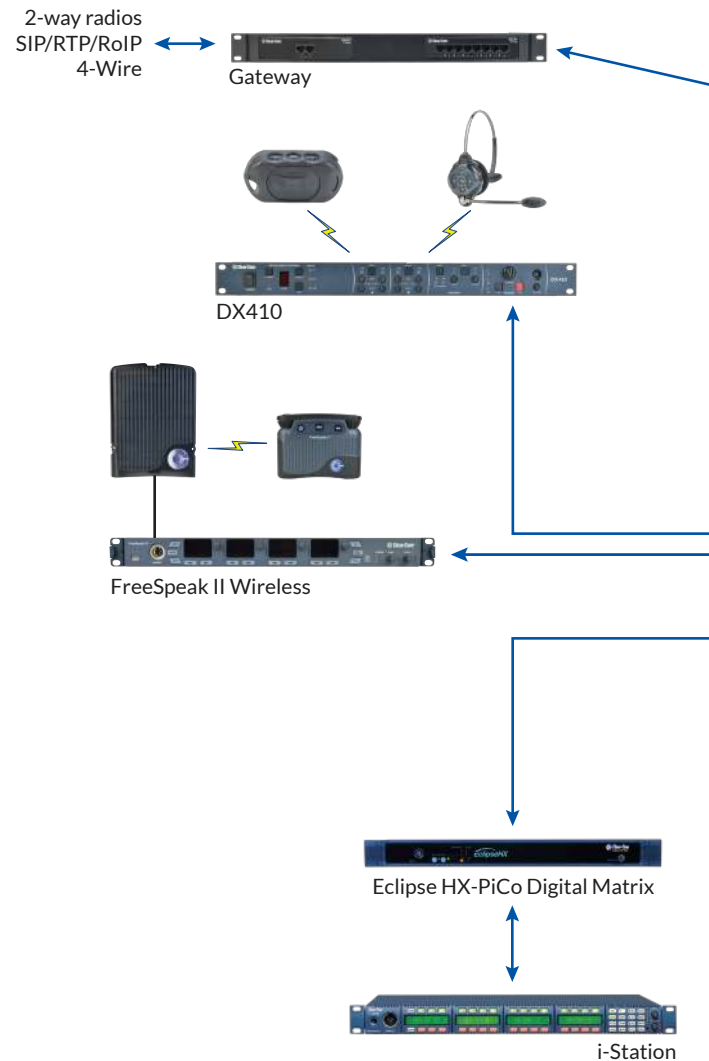
* Composite video is available over the Optocore network using the PG2-MADI-FX and PG32-AES-FX units. HD SDI video is available through the use of the BroaMan MUX-22-CC.

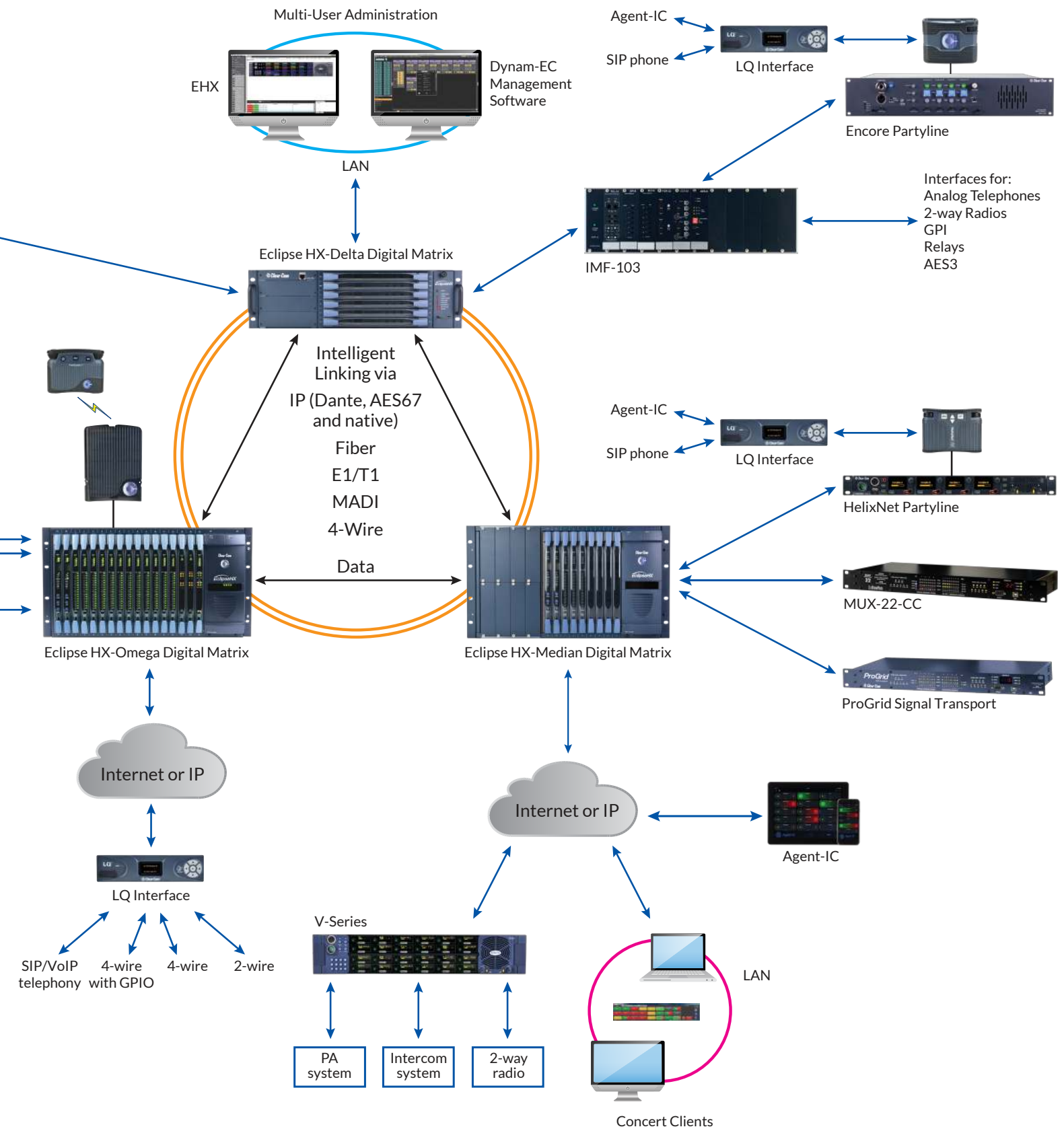
Clear-Com Intercom and Connectivity Solution Diagram

There are many applications that need to support considerable size communication teams. Their workflows often span within a building, across a wide campus area, and across geography, as well as involve many different types of communications systems. These applications require a flexible, reliable and extensible communications and connectivity solution for linking people or systems together.

Clear-Com's Integrated Wired, Wireless and IP solutions can be connected with Eclipse HX matrix systems. Multi-system connections are possible over intelligent linking via IP networks (Dante, AES67 and native), fiber, E1/T1, MADI, SIP, and 4-wire.

In addition, intercom and data signals flowing through the Eclipse HX system can be distributed, routed, transported across long distances over an Optical Fiber platform along with signals from audio and video.





Matrix and IP Communications Solutions

Eclipse HX

Eclipse HX Digital Matrix Systems enables critical intercommunications among teams who need direct (point-to-point) and one-to-many (group and partyline or conference) connections. Eclipse HX is a large-scale matrix communications solution that has extensively integrated IP connectivity and IP communications into its platform, making it the leader in matrix and integrated IP intercom solutions in the industry.



IP-based Communication Points

Clear-Com Concert

Clear-Com Concert is an IP-based software client that integrates directly with Eclipse HX Systems, enabling remote users to connect back to the central intercom system. Concert

users on PCs simply connect to the internet, LAN or WAN, and immediately communicate with other members on the Clear-Com partyline and/or matrix intercom circuit who are using hard-wired panels and wireless beltpacks.



Agent-IC®

The Agent-IC mobile app enables remote users of Clear-Com intercom systems to access intercom audio from mobile devices such as iOS and Android smartphones, tablets and select wearable devices over 3G, 4G or Wi-Fi/IP

networks. Fully featured app with point-to-point calling, point-to-multi-point group calling, partyline, PTT, local cross-point audio level control and notification functions. Access to the host Eclipse HX matrix or LQ Series devices are secure, using User ID/ password and audio encryption.



Wireless Intercom Systems

FreeSpeak II—1.9GHz & 2.4GHz

FreeSpeak II® is the most powerful and sophisticated distributed wireless solution. Its ability to maintain a strong and continuous wireless connection

across an expansive coverage area while providing crystal-clear digital audio makes FreeSpeak II the ideal wireless roaming solution.



DX Series—2.4GHz

All DX Series wireless intercom systems feature Spectrum-Friendly™ technology for interference-free operation. The DX Series enable full-duplex communications in a range of system offerings, from a portable base station

for few wireless users to co-located rack-mount base stations for up to 16 full-duplex users on two channels. DX Series intercoms are cost-effective, easy to set up, and deliver exceptional sound clarity.



WBS—470-488MHz and 590-608MHz

The WBS system operates in select frequency UHF bands. Whether WBS is used as a standalone wireless

communications system or combined with wired intercoms, its frequency agility, rich feature set, audio clarity and performance reliability make every WBS system an excellent choice.

NOTE: Not all frequency bands are available in all countries.





Clear-Com, an HME company, is a trusted global provider of professional real-time communications solutions and services since 1968. We innovate market proven technologies that link people together through wired and wireless systems.

Clear-Com was first to market portable wired and wireless intercom systems for live performances. Since then, our history of technological advancements and innovations has delivered significant improvements to the way people collaborate in professional settings where real-time communication matters.

For the markets we serve – broadcast, live performance, live events, sports, military, aerospace and government – our communications products have consistently met the demands for high quality audio, reliability, scalability and low latency, while addressing communication requirements of varying size and complexity.

Our reputation in the industry is not only based on our product achievements, but also on our consistent level of customer engagement and dedication to delivering the right solutions for specialized applications, with the expertise to make it work. Around the globe and across markets, Clear-Com's innovations and solutions have received numerous awards and recognitions for ingenuity and impact to customers.

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