



Wired
Communication

Analog Partyline Intercom
Digital Network Partyline Intercom
Connectivity Solutions
Intercom Accessories

is a standalone, closed-circuit system for communication. The general purpose of a simple to complex communication setups be continuously on talk and/or listen operate in half-duplex or full-duplex. With the other party listens. With full-duplex the same time as if they are in a natural

operation, can be in a conference or divided into a matrix of independent groups in addition to establishing communication multi-party devices such as 2-way radios, digital audio, relay control (for signal routing activities via voice or through require low-latency (delays measured

could be based on one of the following wireless, and IP networks. The decision greatly depend on requirements, platforms operate independently or in order to address specific unique requirements, intercom systems can be bridged together as part of a multi-platform solution.

ed to be geographically distributed to users in a given workflow. Therefore, they are used for close-distance connections such as distances within a building; E1/T1 for long distances (WAN, or Internet) for connections across the country.

For decades, Clear-Com has provided communication solutions. Clear-Com has installed its full-duplex, group-to-group of thousands of facilities worldwide the unmatched trusted provider of partyline technologies.

pg 4

Analog Partyline Intercom

Analog 2-wire, group communication systems design and superior audio clarity best for

pg 10

Digital Network Partyline Intercom

Flexible, scalable, and intelligent digital platform for dynamic group communication

pg 14

Connectivity Solutions

Collection of connectivity products that intercom systems over Ethernet/IP networks

pg 16

System Diagram

pg 18

Unsurpassed two-wire, All intercom systems, intuitive plug-and-play the embedded "Clear-Com ion technology for the most

> Clear-Com Encore®

with XLR-3 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 frequency contour (Clear-Com Sound) to deliver crystal-clear audio.



Sales Part #	Channels	Cable
RS-701	1	3-PIN XLR
RS-702	2	6-PIN XLR
RS-703	2	3-PIN XLR

is, wall-mounted speaker stations to wired beltpacks, Clear-Com m family for reliable group communications. This platform -Com or third-party products in order to address growing



CS-702



SB-704



MS-704



MS-702

Internal Power Supply	Internal Speaker	Routing
Yes, 2-amp	Yes	No
Yes, 2-amp	Yes	No
Yes, 2-amp	Yes	No
Yes, 2-amp	No	Yes, includes 10 source assignment switches

Speaker Stations

One- 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

Sales Part #	Channels	Mount Options
KB-701	1	V-Box or HelixNet S-
KB-702	2	V-Box or HelixNet S-
KB-702GM	2, with headset connector, Mic Jack and VOX	V-Box or HelixNet S-
V-Box	Enclosure for KB Speaker Stations	Permits either angled Both male and female

Headset Stations

Two- or four-channel, flush-mount headset stations provide users with internal and external controls allow users to tailor the stations to their needs. Momentary or latching talk switch, remote mic kill, and LED



RCS-2700

Sales Part #	Channels	Routing
CS-2700	8 x 24-channels	No



Sales Part #

Channels



TWC-701



TW-47



EF-701M



IF4W4



TW-12C

face connections

- ects 2-way radio/walkie-talkie
- ects to TV cameras, two-way radios, satellite links, and other communications devices through r headset jacks or four-wire circuits
- ects to four-wire audio, while also converting call signals to RS-422 data (and back)
- ects one intercom system to another (Clear-Com-to-Clear-Com, Clear-Com-to-RTS, RTS-to-RTS system configurations)
- channel cable adapter combines two intercom channels onto a single 3-pin XLR cable



SMQ-1

ontrol and mic on/off switch for each ation with a permanently attached, gged, noise-isolating headset. The <-7 is a suitable power supply option.



PK-7



PS-702



PS-704

Beltpacks	Mount	Power
.600 Series or 16 RS-700 Series	Portable	0.4 Amp

to speak directly to on-air talents and crew members. IFB system sends one of two program audio signals to individual Talent Receivers via standard, two conductor shielded mic cables. Communication is one-directional. Receivers via standard, two conductor shielded mic cables.



TR-50

Sales Part #	Description
AB-120	On-Air Announcer Console Integrates all of the inputs, outputs, and controls necessary "Talkback," IFB receiver, and a silent "Mute" button that pro
AX-704/ MA-704	IFB Expansion Control Panel Console-mount or rack-mount units control "program inter gooseneck mic connector and illuminated "All Talent." CEP-I
PI-C4744	Program Interrupt Router Handles up to four talent outputs with selectable wet/dry s Panels or intercom stations. Contains the circuitry for selec program to the IFB channels, and interrupting it via the tale
TR-50	Monaural IFB Talent Receiver Single-channel talent beltpack with volume control. Connec a standard microphone cable. Includes a mini earphone jack CC-010A IFB ear set

Wireless IFB

Wireless IFB (interruptible fold back) systems operate between 48.6 and 691.1MHz. Wireless IFBs are used for one-directional communication. Directors and other management can use this to monitor program audio, or for talent cueing and crew communications during a production. The PRC-2 receiver provides simplicity and

flexibility in a package that is intuitive for untrained users to operate. Wireless IFB uses +/-20 kHz FM deviation for efficient use of the bandwidth, wit compandor noise reduction circuitry for an excellent signal to noise ratio.

NOTE: This product is not approved for sale in Europe.

Sales Part #	Description
PRC-2	Wireless IFB Receiver Uses +/-20 kHz FM deviation for efficient use of the bandw an excellent signal to noise ratio. Paired with the CC-010A I
PTX-3	Wireless IFB Transmitter

<p>ner ble indication of a call signal on the intercom channel</p>	
<p>r Clear-Com analog Partyline Clear-Com Encore partyline systems and bridges tyline systems together</p>	
<p>n Selectable Intercom Outlet Wall Plate the a single-channel backpack to talk on either channels</p>	
<p>n Intercom Outlet Wall Plate the a two-channel backpack to talk on both rels</p>	
<p>ltpack adapter i adapter that combines 2 single-channel 3-pin cables :channel 6-pin connector</p>	
<p>plitter i line splitter with one 3-pin female and three 3-pin male :ctors</p>	
<p>and handset with wall/console mount hanger, itch</p>	
<p>and held microphone</p>	

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 backpacks.



Sales Part #	Headset	Mic Type	Mic/Headphone Impedance
CC-110	Light-weight single-ear muff	Dynamic	200/400 Ohms
CC-220	Light-weight double-ear muff	Dynamic	200/400 Ohms
CC-300	Single-ear muff	Dynamic	200/400 Ohms
CC-400	Double-ear muff	Dynamic	200/400 Ohms
CC-40	Single-ear muff	Dynamic	200/400 Ohms
CC-60	Double-ear muff	Dynamic	200/400 Ohms
CC-15-MD4 CC-15-X4	Single-ear muff	Electret	2.2K / 40 Ohms
CC-30-MD4 CC-30-X4	Double-ear muff	Electret	2.2K / 40 Ohms
CC-26K-X4	Light-weight single-ear muff	Dynamic	300-Ohms
CC-010A	Single-ear muff	Dynamic	200/400 Ohms

Compatible Intercom Microphones (for intercom station)

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



Advanced intercom platform for communication, with I.V.Core offers all the benefits of digital characteristics.

> [HelixNet®](#)

The system uniquely delivers all features and functions of industrial audio clarity as well as IP connectivity to any digital network. Any standard shielded twisted-pair cable (microphone or program audio and distributed Power-over-Ethernet (PoE)) can link infrastructure via an Ethernet/LAN connection.

Any combination of Main Stations and Remote Stations (up to a total of 6) may be stacked in order to have one Headset and Mic used to address all channels.

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 20 belt-packs or a combination of HelixNet user devices.

Single Cable Operation. All networked intercom channels and power for belt-packs or a combination of user devices can be transmitted over a single shielded twisted-pair cable (Ex. Microphone cable for powerline, CAT5 or CAT6 cable for PoE).

- Seamless Linking. System resources are shared over a LAN or Fiber link so users can select local or remote partyline channels and program audio feeds. Optional two- or four-wire interface modules further extends connectivity to existing analog partyline or matrix intercoms.
- Easy Configuration. Using Clear-Com's Core Configuration Manager (CCM), HelixNet system configuration and setup is easy through the free, browser-based software. It provides the same menu functionality as HelixNet Main menus. Supported by the latest versions of all major browsers on MAC, PC and tablet platforms.

Remote Station, HKB-2X Speaker Station and the HBP-2X Digital Beltpack. Digital Beltpacks are powered via Powerline over standard mic cable while Remote and Speaker Stations are powered via Power-over-Ethernet (PoE),* or a Universal AC wall adapter. By using a combination of power sources, up to 60 user devices can effectively be on the system simultaneously.



Sales Part #	Description	Channel Access	Cable
HRM-4X	Remote Station	Up to 4 of any 24 system channels*	All au and p single pair c
HKB-2X	Headset and Speaker Station	Up to 4 of any 24 system channels*	All au and p single pair c
HBP-2X	Digital beltpack	Up to 4 of any 24 system channels*	All au and p single pair c
	Similar capabilities as the HMS-4X Main Station. Rotary channel lex No option module bays at the rear Large Format OLED Displays. Up to 10 Characters for User-define Display Tilts Up and Down for Best Viewing. Fits 4-Gang Standard Size) or Optional S-Mount Enclosure Configurable in daisy-chain or star topology without active split box are centrally managed from the Main Station		

*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.

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

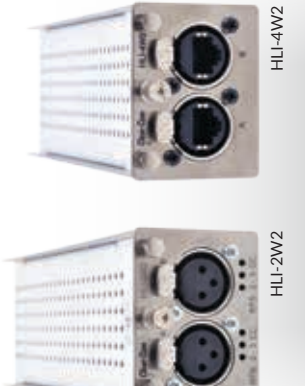
- AC/DC universal power adapter



ication systems. Each module fits into one of three built-in an HMS-4X Main Station.

The HLI-4W2 interface module enables 4-wire audio paths, such as matrix ports, cameras and telephone circuits to interface with HelixNet intercom channels. It connects two 4-wire analog audio circuits to HelixNet intercom channels. Two RJ-45 connectors on the module connect the external 4-wire circuits and can be assigned via the main station menu.

Each of the two ports utilizes both transformer and electrical balancing for hum and noise-free audio paths.



Interface with
Analog 2-wire intercoms (Clear-Com and RTS compatible). Requires external Partyline power
Digital 4-wire intercoms (Matrix ports, cameras, and telephone circuits)



Interface with
Dual LAN interface
Daisy-chain fiber interface

worked Linking



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.



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CC-26K-X4	Light-weight single-ear muff	Dynamic	300-Ohms
CC-010A	Single-ear muff	Dynamic	200/400 Ohms

Compatible Intercom Microphone (for intercom stations)

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 connectors and windscreens.



Solutions designed for linking
 over IP networks, routing
 signals over optical fiber
 solutions with SIP

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

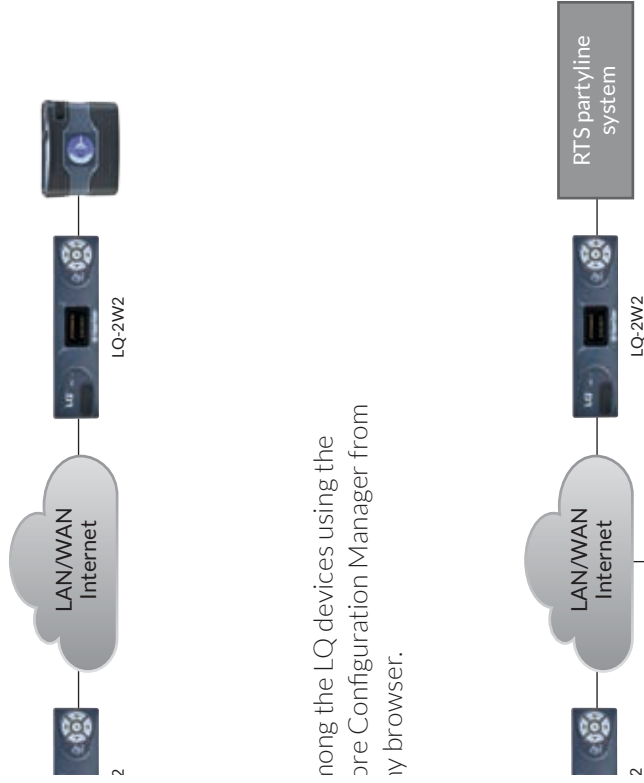
Activity Solution over IP Networks

combination of 2-wire partyline intercom and 4-wire LAN, Corporate WAN or Internet connections).

ere backpacks or KB units are necessary. Then, establish links between devices using the Core Configuration Manager from any browser.

Features:

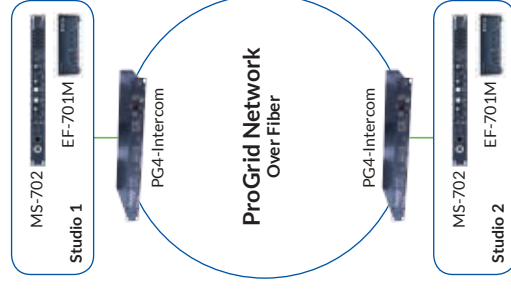
- Brand agnostic—connect any brand intercom system to LQ
- Up to 5 RS Series backpacks can be powered by a 12V DC-powered LQ unit; only 1 RS backpack can be powered by PoE-powered LQ unit
- Auto-null circuit
- Low latency - no audible delays



Among the LQ devices using the Core Configuration Manager from any browser.

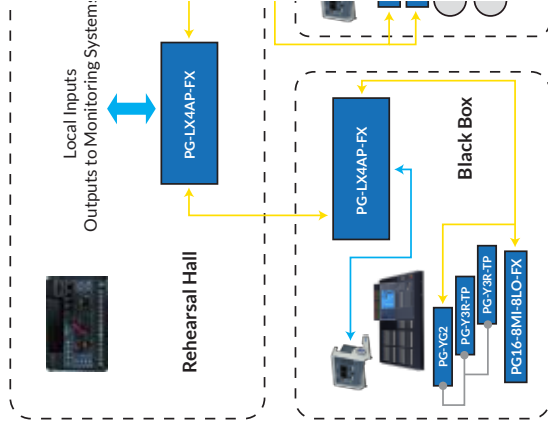
signal transport solution, for ultra-fast transport, distribution, and routing of audio, intercom, video signals* and control data. Based on the open AES3

Multiple Encore analog systems connected over ProGrid



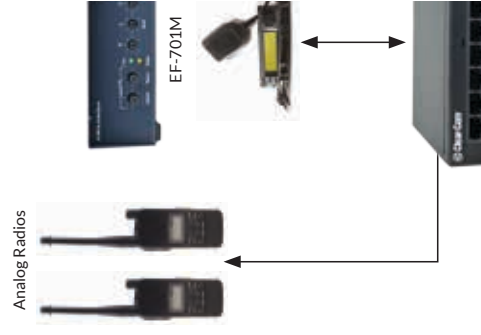
the ProGrid devices runs on the OPTOCORE® (Optical Fiber) and SANE (Synchronous Audio Network +Ethernet) platforms. All serial data,

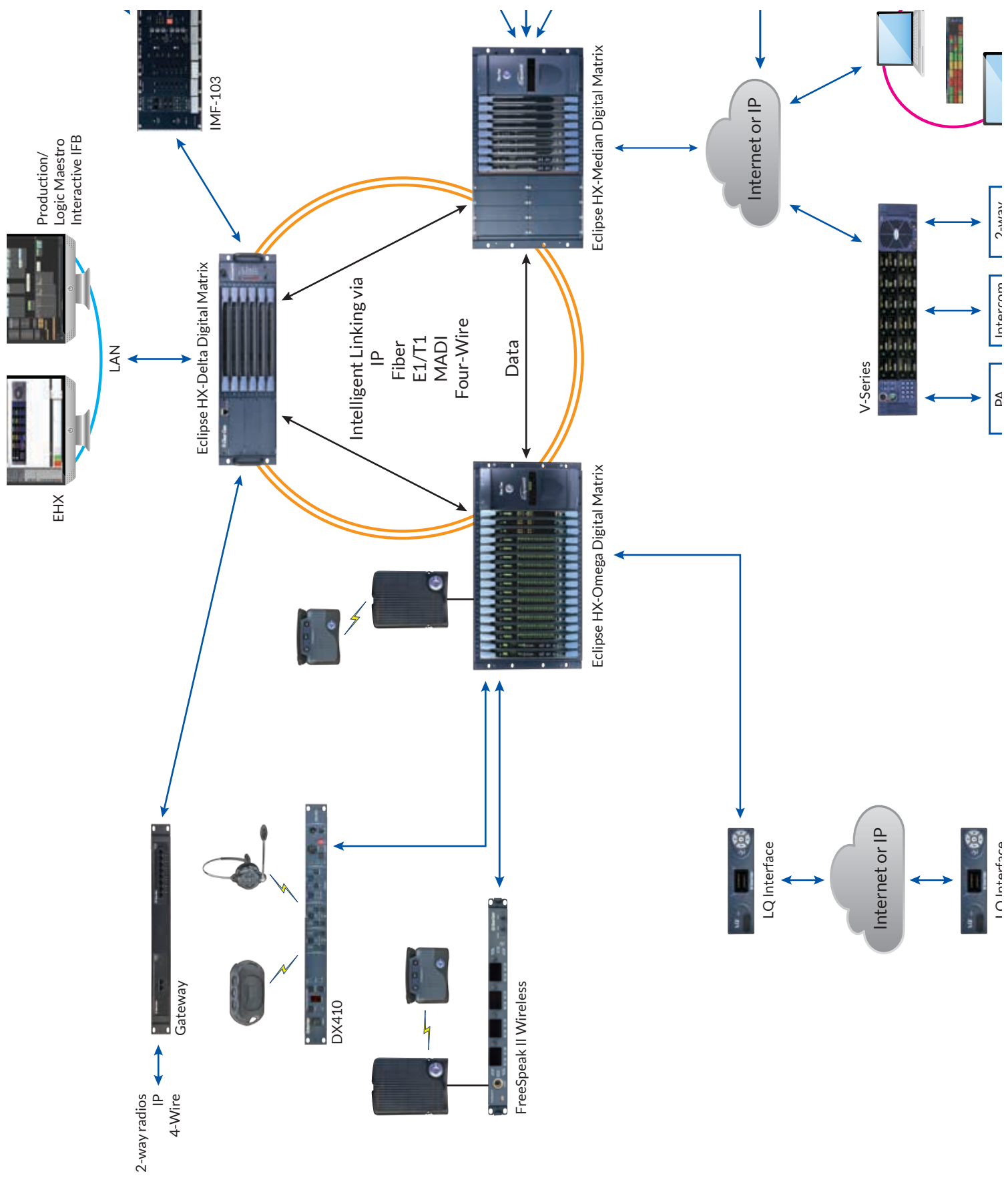
Multiple venues controlled with HelixNe



Clear-Com Gateway

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





2-way radios
IP
4-Wire

Gateway

DX410

FreeSpeak II Wireless

Eclipse HX-Delta Digital Matrix

Eclipse HX-Omega Digital Matrix

Eclipse HX-Median Digital Matrix

Intelligent Linking via
IP
Fiber
E1/T1
MADI
Four-Wire

Data

LAN

LQ Interface

Internet or IP

I/O Interface

V-Series

Internet or IP

IMF-103

Production/
Logic Maestro
Interactive IFB

EHX

PA

Intercom

2-WAY



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

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.

Points

- 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.



WBS—518-608MHz and 614-686MHz

WBS Systems operate in select frequency UHF bands. Whether WBS is used as a standalone wireless

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

- Point-to-point calling, point-to-multi-point group calling, partyline, T, local cross-point audio level control and notification functions.
- Access to the host Eclipse-HX matrix secure, using User ID/password and audio encryption.





Corporate Description

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 communication 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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