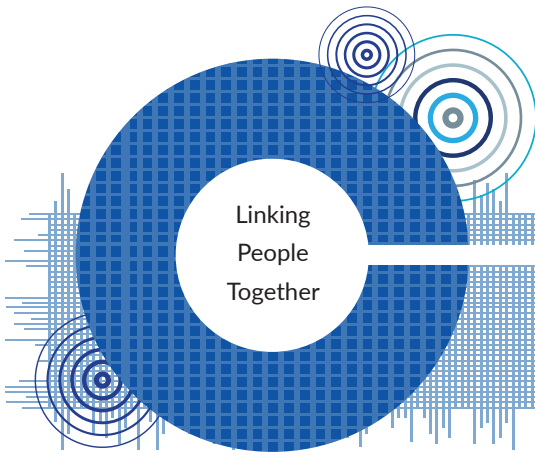


# Station-IC Virtual Desktop Client

For Eclipse HX and LQ Series



Station-IC

## Key Features and Benefits

### Station-IC Virtual Desktop Client

- For: Eclipse and LQ
- On: Windows and MacOS
- Scalable UI for multitasking desktops
- Compact UI mode configured by the user
- Global Key state and Audio Presence indicators
- Audio routing to computers I/O
- Easy download from Clear-Com Website

### Virtual Desktop Client for Eclipse-HX

- (23) Keysets assignable to: Partylines, Groups, IFB, Point-to-Point, Directs & Controls
- Individual Keyset Listen Level Controls
- Reply for Incoming Point-to-Points
- OS Notifications for incoming Calls

### Virtual Desktop Client for LQ

- (24) Keysets assignable to Channels: Listen, Talk, Call, Control Events, Remote Mic Kill
- Individual Keyset Listen Level Controls
- Reply for incoming Call Signals
- OS Notifications for incoming Call Signals
- HelixNet HMS-4X & Encore Integration Options

### Network Agnostic

- Supported by mission-built hardware
- Robust intercom over LAN, WAN & Internet
- IT friendly networking for Internet connectivity
- Encrypted Connection

### Flexible Licensing Options

- Perpetual Eclipse licensing\*
- Subscription Client licenses for continuous use
- Event Client Licenses for time limited use

Station-IC™ Virtual Desktop Client for Eclipse® HX matrix and LQ® Series interfaces provides local and remote intercom access from PC and Mac computers.

### Station-IC Virtual Desktop Client

Station-IC is a virtual desktop client that provides a scalable intercom user station on Windows and MacOS computers. Connecting to Eclipse HX IP-capable matrices or LQ Series IP Interfaces, Station-IC provides access to the system's resources which can include one-to-one, one-to-many, partyline, ISO and IFB communication in addition to call signals and logic controls. Individual keyset listening levels help users focus on specific channels while monitoring others. All of this functionality can be tailored to each user to create an efficient intercom user station on their computer.

### Efficient Operation for Multi-tasking Desktop User

Station-IC's ergonomic, easy-to-use interface is designed for familiarity and consistency with other user stations, including Agent-IC® and V-Series Iris™ panels. Station-IC's large Talk and Listen buttons with individual level control and clear indication of current state allow operation with mouse and touchscreens. The window can be shaped and scaled to fit the screen and shows latched keys as well as input and output audio meters. Station-IC's always-on-top compact mode allows users to keep their favorite intercom keys visible in the smallest window, even while working on other applications. Favorite keys can be dynamically designated by the user, without any administrator involvement, ensuring that notifications of incoming calls and Eclipse reply / LQ call keys are always visible.

### Integrates into any Intercom System

Station-IC fully integrates into Eclipse systems with available IP port capacity while LQ offers Channel based routing with a wide variety of LQ interfaces allowing Station-IC to connect to Clear-Com's Encore Partyline systems, TW Partyline, HelixNet HMS-4X systems, Two-Way radios, SIP telephone lines and to any other intercom system via four-wire.

\*Perpetual Station-IC License is not available for LQ.

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## Robust Technological Foundation

Station-IC uses multiple mission specific audio codecs for audio alongside a proprietary control transport protocol designed to operate over LAN, WAN and Internet network connections of various quality. Clear-Com's legendary IP connectivity, requiring only a single network port on the Eclipse/LQ host end, drastically minimizes efforts required for network management and routing to public internet connectivity. Station-IC connects to the host Eclipse HX matrix via the E-IPA/IVC-32 card or to any LQ series Interface device with available capacity.

## Versatile License Options Tailored to Business Requirements

Station-IC includes variety of licensing options from Perpetual Licenses centrally hosted on Eclipse frames to time based Event and Subscription Client Licenses hosted on the users computers with ability to connect to either Eclipse or LQ systems capable of supporting Station-IC. All licensing methods can be used on the same system, giving the option of a core pool of perpetual licenses and event licenses for one-off short term requirements.

**Perpetual Eclipse Licenses\*** allow multiple Station-IC licenses to be installed on an Eclipse frame for a major feature version of Station-IC (e.g. version 1.x). Eclipse hosted licenses are used by concurrently connected Station-IC users on a first-come first-serve basis.

**Subscription Client Licenses** are for ongoing requirements at the lowest daily cost of Station-IC for Eclipse and LQ and are installed on the users computer. Subscription licenses include all major feature updates, allow multiple extensions to be loaded for extended duration and transfer back to their license ticket while clearly displaying their expiration to users in the last month of subscription.

**Event Client Licenses** enable effortless licensing of Station-IC for Eclipse and LQ on the users computer for one week or one month duration from the first connection and are ideal for short-term surge capacity and rental applications.

Station-IC can be downloaded from the [Clear-Com website](#) and run in demo mode. Demo mode is provided with the ability to connect to a Clear-Com (or customer) provided system to test on a user's computer.

See also Clear-Com's [Agent-IC](#) mobile app which provides fully integrated intercom capabilities on Android and iOS devices.

\*Perpetual Station-IC License is not available for LQ.

# Station-IC Virtual Desktop Client

For Eclipse HX and LQ Series

## Technical Specifications

### Software Application

#### Audio Settings

Assignment to any operating system audio input and output  
Audio test capability for computer audio  
Audio level meters  
Far-end Silence Suppression  
Echo Cancellation

#### Audio Controls & Indication

Talk/Listen indication and level meter  
Talk/Listen master mute  
Listen level per key/keyset  
Master level & balance by operating systems

#### Eclipse

**Host Connection Profiles:** 2

**Keysets:** 23

**Assignable:** Talk, Listen and Controls in EHX

**Talk/Listen:** Tap to latch (if allowed), push for momentary

**Call signal:** Initiation and indication

**Tally Indication:** Audio Presence, In-Use, Panel/Client Connected

**Reply key:** 1 - Shows incoming Point-to-Point talk for immediate response.

Hidden by default, pops up and provides operating system notification

**Character Support:** Arabic, Cyrillic, Hangeul, Hebrew, Hiragana, Kanji, Katakana, Latin

#### LQ

**Host Connection Profiles:** 2

**Keysets:** 24

**Assignable:** per assigned channel to Talk, Listen, Call, Control Events and Remote Mic Kill in LQ's CCM

**Talk/Listen:** Tap to latch (if allowed), push for momentary

**Call signal:** Initiation and Indication

**Tally Indication:** Audio Presence, Call, Control Events 1 & 2

**Reply Call key:** 1 - Shows incoming Call signal on a Channel for immediate response. Hidden by default, pops up and provides operating system notification

**Character Support:** Latin

#### LQ in HelixNet HMS-4X Link Group

Station-IC LQ functionality is available when LQ is linked in a HelixNet HMS-4X Link Group.

### System Minimum Requirements

#### Host Intercom System

##### Eclipse:

Perpetual Licenses\*: 13.0+ with E-IPA (or IVC-32)

Client Licenses: 12.1+\*\* with E-IPA (or IVC-32)

##### LQ:

Perpetual Licenses: N/A\*

Client Licenses: 4.2+

#### Windows

**Version:** 8 (min), 10+

**Computer and processor:** 1.6GHz, 2 core (min)

**Memory:** 4.0GB RAM (min)

**Hard disk:** 3.0GB (available)

**Display:** 1024 x 768 (min)

#### MacOS

**Version:** 10.14 (min), 10.16+ (recommended)

**Computer and processor:** Intel Duo Core Processor (min), Apple M1

**Memory:** 4.0GB RAM (min)

**Hard disk:** 1.5GB (available)

**Display:** 1280 x 800 (min)

#### Audio

##### Eclipse:

**Audio Encoding:** G.722 - Fixed Wideband 7kHz within 64kbit/s

**Frequency Response:** 50Hz-7kHz

##### LQ:

**Audio Encoding:** Opus - Configurable 12kHz-20kHz within 16-128kbit/s

**Frequency Response:** 100Hz-12kHz, 100Hz-20kHz

##### LQ in HelixNet HMS-4X Link Group:

**Audio Encoding:** WavPack - Fixed Wideband 10kHz within 320kbit/s

**Frequency Response:** 20Hz-10kHz

Frequency Response is additionally filtered depending on use

\*Perpetual Station-IC License is not available for LQ.

\*\*Please contact your Clear-Com representative for use with older Eclipse versions.

# Station-IC Virtual Desktop Client

For Eclipse HX and LQ Series

## Technical Specifications

### Latency

#### Eclipse

##### Windows

**Station-IC to 4-wire:** LAN 85ms, WAN 92ms, Internet 117ms

**4-wire to Station-IC:** LAN 135ms, WAN 158ms, Internet 216ms

**Station-IC to Station-IC:** LAN 220ms, WAN 245ms, Internet 333ms

##### MacOS

**Station-IC to 4-wire:** LAN 109ms, WAN 115ms, Internet 145ms

**4-wire to Station-IC:** LAN 85ms, WAN 107ms, Internet 177ms

**Station-IC to Station-IC:** LAN 185ms, WAN 205ms, Internet 305ms

### LQ

#### Windows

**Station-IC to 4-wire:** High 60ms, Balanced 90ms, Low 110ms

**4-wire to Station-IC:** High 115ms, Balanced 115ms, Low 115ms

**Station-IC to Station-IC:** High 197ms, Balanced 202ms, Low 246ms

#### MacOS

**Station-IC to 4-wire:** High 66ms, Balanced 88ms, Low 109ms

**4-wire to Station-IC:** High 76ms, Balanced 76ms, Low 76ms

**Station-IC to Station-IC:** High 94ms, Balanced 140ms, Low 152ms

LQ is measured with LQ Local Mix Network Quality receiver set to High

#### LQ in HelixNet HMS-4X Link Group:

##### Windows

**Station-IC to 4-wire:** High 106ms, Balanced 106ms, Low 106ms

**4-wire to Station-IC:** High 119ms, Balanced 132ms, Low 172ms

**Station-IC to Station-IC:** High 177ms, Balanced 187ms, Low 223ms

##### MacOS

**Station-IC to 4-wire:** High 109ms, Balanced 109ms, Low 109ms

**4-wire to Station-IC:** High 77ms, Balanced 96ms, Low 137ms

**Station-IC to Station-IC:** High 171ms, Balanced 177ms, Low 183ms

Latency is measured on local network with user selected network presets which adds latency with processing and Forward Error Correction for network resilience. Measurements are averages due to inline adaptive Echo Cancellation and Silence Suppression. Final latency performance is heavily dependent on configuration, computer, audio peripherals and network.

## Network Specifications (Version 1.1+)

### Network Protocols

Ethernet IPv4 – Unicast Audio and Control

Layer 3 – IP Routable

DNS – Domain Name Server

HTTP – License Transfer

HTTPS – Optional Usage Data / Diagnostic Service

IVP – Proprietary Intercom Audio and Control

G722 – Audio Codec for Eclipse IPA/IVC

Opus – Audio Codec for LQ

WavPack – Audio Codec for LQ in HelixNet HMS-4X Link Group

AES-128 – Audio and Control Encryption

**Network Connectivity:** Ethernet, Wi-Fi, 3G, 4G, LTE (as available on device)

### Theory of Operation:

Eclipse Intercom System or LQ Interface (the server) provides a network connection and includes user credentials for Agent-IC (the clients) in its database. Server allows use of DNS and declaration of external IP address of an optional third-party network router which may be used to cross firewalls or NAT. Client receive connection information from the server via TCP, used to log onto the server with its credentials and establish encrypted audio and control stream(s) via UDP. Single UDP and TCP port is required in each direction. Eclipse systems route and mix all audio for the client centrally and stream a complete mix to the clients running on a Windows or MacOS computer. LQ systems intelligently route audio ethernet packages dependent on loudest talkers and listen levels to be mixed on the client.

### Network Ports

#### Unicast:

Port 443 TCP – Optional Usage Data to Diagnostic Service

Port 6001(configurable) TCP – System Management to/from Station-IC

Port 6001(configurable) UDP – IVP Audio Streams to/from Station-IC

Port 22350 TCP – Online Licensing Activation to/from CodeMeter

#### Multicast:

No multicast ports are used for Station-IC

### Endpoint Resource Use:

**Eclipse:** 1 port on IPA/IVC card

**LQ:** 1-3 See LQ Resource Estimator

**LQ in HelixNet HMS-4X Link Group:** 1

### Bandwidth:

#### Eclipse:

140 kbps from Eclipse to Station-IC

140 kbps from Station-IC to Eclipse

With Far-end Silence Suppression & bidirectional Forward Error Correction

#### LQ:

##### Low:

40 kbps from LQ to Station-IC

160 (max) kbps from Station-IC to LQ

##### Balanced:

70 kbps from LQ to Station-IC

280 (max) kbps from Station-IC to LQ

##### High:

100 kbps from LQ to Station-IC

400 (max) kbps from Station-IC to LQ

#### LQ in HelixNet HMS-4X Link Group:

300 (max) kbps from each Station-IC to LQ

1200 (max) kbps from LQ to Station-IC

### Network Jitter Tolerance

#### Eclipse:

**Station-IC Rx:** LAN: <=160ms, WAN: <= 400ms, Internet: <= 600ms

**E-IPA Rx:** (Configurable) LAN: <=12ms, WAN: <= 120ms, Internet: <= 200ms

#### LQ:

**Station-IC Rx:** High: <=400ms, Balanced: <= 500ms, Low: <= 600ms

**LQ Rx:** V. High, High & Balanced: <=60ms, Low: <= 100ms, V. Low: <= 200ms

#### LQ in HelixNet HMS-4X Link Group:

**Station-IC Rx:** High: <=400ms, Balanced: <= 500ms, Low: <= 600ms

**LQ Rx:** <=128ms automatically adjusted to network performance

\*Perpetual Station-IC License is not available for LQ.

# Station-IC Virtual Desktop Client

For Eclipse HX and LQ Series

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## Licensing

### Perpetual Eclipse License\*

**Part numbers:** STATION-IC-HX, STATION-IC8-HX

**Validity:** Permanent for major version of Station-IC connecting to Eclipse

**Duration:** For major feature release (e.g. v1.x). License does not expire

**Delivery:** EHX Passcode. Requires Frame Dongle ID to generate

**License Host:** Eclipse frame running EHX 13+

**Transferable:** No. Works only on specified Eclipse system

**Recovery:** Contact Clear-Com

### Subscription Client Licenses for Eclipse or LQ

**Part numbers:** ST-IC-1Y, ST-IC-ADD1Y, ST-IC-8-1Y, ST-IC-8-ADD1Y

**Validity:** Duration of a Committed Subscription. Starts with Activation

**Duration:** 1 Year with Initiation, +1 Additional Year Extensions

Multiple extension licenses can be Activated for extended duration

**Support:** Duration of use or 7 years following purchase, whichever first

**Delivery:** License Ticket, may include multiple licenses, can be re-loaded

**License Host:** Local - CodeMeter License Manager software on user's computer

**Virtual Machine Support:** Not Available

**Activation:** Via WebDepot, Online (recommended) or Offline

**Transferable:** Yes, Re-Hostable from computer to original ticket

**Recovery:** Yes, using valid context files. Contact Clear-Com

### Event Client Licenses for Eclipse or LQ

**Part numbers:** ST-IC- 1W, ST-IC-1M

**Validity:** Time-Limited. Starts upon first connection, to host system

**Duration:** 1 Week, 1 Month. One license can be installed at a time

**Delivery:** License Ticket, may include multiple licenses, can be re-loaded

**License Host:** Local - CodeMeter License Manager software on user's computer

**Virtual Machine Support:** Not Available

**Activation:** Via WebDepot, Online (recommended) or Offline

**Transferable:** No

**Recovery:** Contact Clear-Com

\*Perpetual Station-IC License is not available for LQ.

# Station-IC Virtual Desktop Client

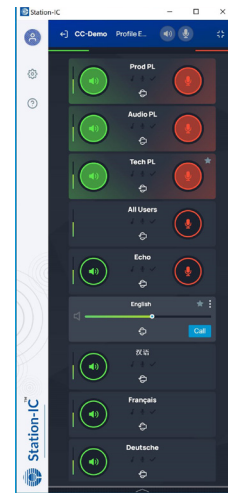
For Eclipse HX and LQ Series



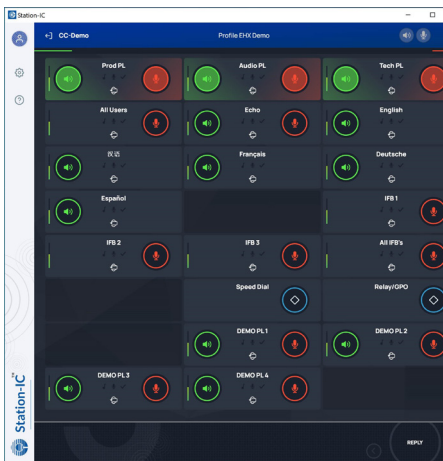
Connection Screen



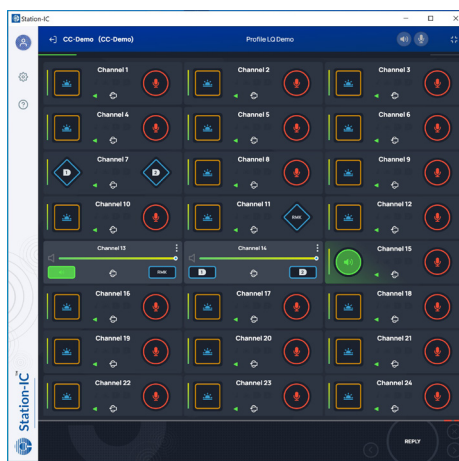
Connection Screen - Profile Selection



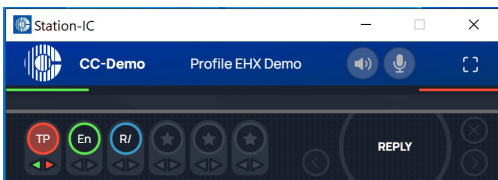
Normal Mode - One Column



Large Screen Mode - Eclipse HX



Large Screen Mode - LQ



Compact Mode - Loaded with user's favorite keys

## Order Code

### PERPETUAL ECLIPSE HOSTED LICENSES:

*Permanent for major version*

**STATION-IC-HX:** 1 user

**STATION-IC8-HX:** 8 users

Permanent license for major version of

Station-IC installed on Eclipse

Eclipse Dongle ID required with order

### SUBSCRIPTION CLIENT HOSTED LICENSES:

*For ongoing continuous use*

**ST-IC-1Y:** 1 user, 1 year

**ST-IC-ADD1Y:** 1 user, +1 year

**ST-IC-8-1Y:** 8 users, 1 year

**ST-IC-8-ADD1Y:** 8 users, +1 year

Installed on the Virtual Client Computer

### EVENT CLIENT HOSTED LICENSES:

*For time-limited use*

**ST-IC-1W:** 1 user, 1 week

**ST-IC-1M:** 1 user, 1 month

Installed on the Virtual Client Computer