

# Agent-IC Virtual Mobile Client

For Eclipse HX, Gen-IC & LQ



Agent-IC

## Key Features and Benefits

### Agent-IC Virtual Mobile Client

- For: Eclipse, Gen-IC and LQ
- On: Android and iOS
- Large Talk & Listen buttons
- Swipe to Latch Gestures
- Global Key state and Audio Presence indicators
- Easy download from Apple & Google App Stores

### Virtual Mobile 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 Mobile Client for Gen-IC & 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
- LQ Interface Integration Options

### Network Agnostic

- Supported by hardware or virtual intercom
- Robust intercom over LAN, WAN & internet
- IT friendly networking for internet connectivity
- Encrypted Connection

### Licensing Options

- Perpetual Eclipse & LQ licensing
- Subscription Eclipse, Gen-IC & LQ licenses
- Intercom System Hosted License

Agent-IC® for Eclipse® HX matrix, Gen-IC virtual intercom and LQ® Series interfaces provide local and global intercom access from tablets, smartphones and smartwatches.

## Description

Agent-IC is a virtual mobile client providing an intercom user station on Android and iOS tablets, smartphones and with remote control on smartwatches. Connecting to Eclipse HX IP-capable matrices, Gen-IC virtual intercom or LQ Series IP Interfaces, Agent-IC provides access to the system's available resources including partyline channels with their call signals and logic controls on Gen-IC and LQ as well as one-to-one, one-to-many, ISO and IFB communication on Eclipse systems. Individual keyset listening levels help users focus on specific channels while monitoring others. All this functionality can be tailored to each user to create an efficient intercom user station on their tablets and smartphones.

## Technical Specifications

### Software Application

Audio input and output automatically set by operating system / device  
 Audio level meters  
 Background operation  
 Far-end Silence Suppression  
 Echo cancellation

### Audio Controls & Indicators

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

**Keys:** 23

Number of keys concurrently displayed depends on the window size set by user, screen size, resolution and the applications zoom lever. 4-23 keys can be displayed simultaneously with the option to scrolls for more keys.

**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 - Showings incoming Point-to-Point talk for immediate response. Hidden by default, ops up and provides operating system notification

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

### Gen-IC & LQ

**Host Connection Profiles:** 2

**Keys:** 24

Number of keys concurrently displayed depends on the window size set by user, screen size, resolution and the applications zoom lever. 4-24 keys can be displayed simultaneously with the option to scrolls for more keys.

**Assignable:** Per assigned channel to Talk, Listen, Call, Control Events and Remote Mic Kill in Gen-IC & LQ's CCM

**Talk/Listen:** Swipe to latch, 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:** Arabic, Cyrillic, Hangeul, Hebrew, Hiragana, Kanji, Katakana, Latin

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

Agent-IC LQ functionality is available when LQ is linked in a HelixNet HMS-4X Link Group with Latin character support.

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## Technical Specifications (Continued)

### System Minimum Requirements

#### Host Intercom System

##### Eclipse:

**Perpetual Licenses:** 8.5+ with E-IPA (or IVC-32)

**Client Licenses:** 8.5+ with E-IPA (or IVC-32)

##### LQ:

**Perpetual Licenses:** 4.0+

**Subscription Licenses:** 4.0+

**Note:** Maintaining intercom systems on current or previous major version is highly recommended

### Android

**Version:** 9 (min), 14+ (recommended)

**Note:** Designed to operate on the latest smartphone and tablet devices. Recommended to download the free app from Google Play Store to test specific make and model

### iOS

**Version:** 7.1 (min), 17+ (recommended)

**Note:** Designed for Apple iOS devices and approved peripherals

### Audio

#### Eclipse:

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

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

#### Gen-IC & LQ:

**Audio Encoding:** Opus - configurable 12kHz - 20 kHz within 16-128bit/s

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

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

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

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

Frequency Response is additionally filtered depending on system use

### Latency

Varies depending on device make, model and infrastructure

# Agent-IC Virtual Mobile Client

For Eclipse HX, Gen-IC & LQ

## Network Specifications | Version Android 2.10+ / iOS 2.13+

### 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 Gen-IC & 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 host device)

### Theory of Operation:

Eclipse Intercom System, Gen-IC Virtual Intercom or LQ Interface (the server) provides a network connection and includes user credentials for Agent-IC or Station-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. Gen-IC and 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 Agent-IC  
Port 6001 (configurable) UDP - IVP Audio Streams to/from Agent-IC  
Port 22350 TCP - Online Licensing Activation to/from CodeMeter - LQ only

#### Multicast:

No multicast ports are used for Agent-IC

### Endpoint Resource Usage:

**Eclipse:** 1 port on IPA/IVC card  
**Gen-IC:** 1 Virtual Client User Capacity  
**LQ:** 1-3 See LQ Resource Estimator  
**LQ in HelixNet HMS-4X Link Group:** 1

### Bandwidth:

#### Eclipse:

140 kbps from Eclipse to Agent-IC  
140 kbps from Agent-IC to Eclipse  
With Far-end Silence Suppression & Bidirectional  
Forward Error Correction

#### Gen-IC & LQ:

##### Low:

40 kbps from LQ to Agent-IC  
160 (max) kbps from Agent-IC to LQ

##### Balanced:

70 kbps from LQ to Agent-IC  
280 (max) kbps from Agent-IC to LQ

##### High:

100 kbps from LQ to Agent-IC  
400 (max) kbps from Agent-IC to LQ

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

300 (max) kbps from each Agent-IC to LQ  
1200 (max) kbps from LQ to Agent-IC

### Network Jitter Tolerance:

#### Eclipse:

Agent-IC Rx: LAN: <=160ms, WAN: <=400ms, Internet: <=600ms  
E-IPA RX: (Configurable) LAN: <=12ms, WAN: <=120ms, Internet: <=200ms

#### Gen-IC & LQ:

Agent-IC Rx: High: <=400ms, Balanced: <=500ms, Low: <=600ms  
Gen-IC & LQ Rx: V. High, High & Balanced: <=60ms, Low: <=100ms, V. Low: <=200ms

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

Agent-IC Rx: High: <=400ms, Balanced: <=500ms, Low: <=600ms  
LQ Rx: <=128ms automatically adjusted to network performance

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## Technical Specifications (continued)

### Licensing

#### Perpetual Eclipse License

**Part Numbers:** AGENT-IC-HX, AGENT-IC8-HX

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

**Duration:** For major feature release (e.g. v2.x); license does not expire

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

**License Host:** Eclipse Frame running EHX 8.5+

**Transferable:** No - works only on specified Eclipse system

**Recovery:** Contact Clear-Com

#### Subscription Eclipse Licenses

**Part Numbers:** A-IC-HX-1Y, A-IC-HX-ADD1Y, A-IC-HX8-1Y, A-IC-HX8-ADD1Y

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

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

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

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

**License Host:** Eclipse frame running EHX 8.5+

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

**Recovery:** Contact Clear-Com

#### Subscription Gen-IC Licenses

Active Gen-IC Virtual Client capacity can be used by the latest version of Agent-IC. Separate Agent-IC-IC license is not required for use with Gen-IC. See Gen-IC product information for details.

#### Perpetual LQ License

**Part Numbers:** AGENT-IC-LQ, AGENT-IC8-LQ

**Validity:** Permanent for major version of Agent-IC connecting to LQ

**Duration:** For major feature release (e.g. v2.x). License does not expire

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

**License Host:** LQ

**Transferable:** No; works only on the LQ the license has been applied to

**Recovery:** Contact Clear-Com

#### Subscription LQ Licenses

**Part Numbers:** A-IC-HX-1Y, A-IC-HX-ADD1Y, A-IC-HX8-1Y, A-IC-HX8-ADD1Y

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

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

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

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

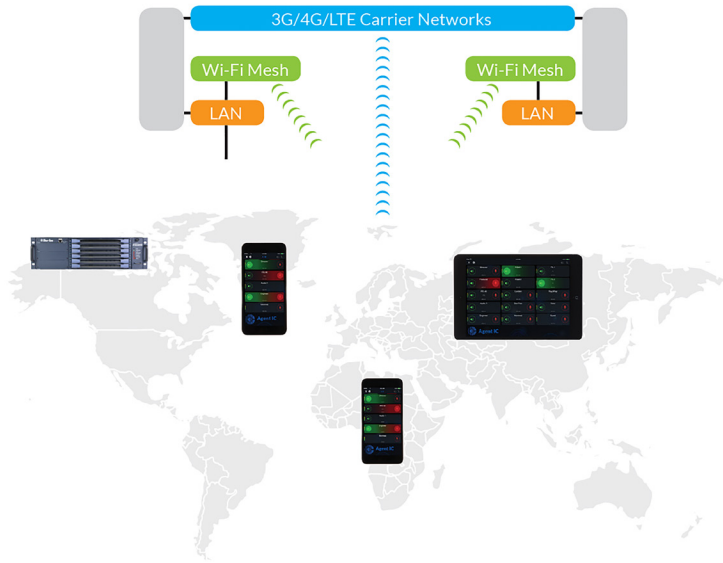
**License Host:** LQ

**Transferable:** No. Works only on the LQ the license has been applied to

**Recovery:** Contact Clear-Com

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## Order Codes

### **Perpetual Eclipse Hosted Licenses**

Permanent for major version

**AGENT-IC-HX:** 1 user

**AGENT-IC8-HX:** 8 users

Permanent license for major version of Agent-IC hosted on Eclipse. Eclipse Dongle ID required with order

### **Subscription Eclipse Hosted Licenses**

For ongoing continuous use

**A-IC-HX-1Y:** 1 user for 1 year

**A-IC-HX8-1Y:** 8 users for 1 year

**Subscription Extension**

**A-IC-HX-ADD1Y:** 1 user for +1 year

**A-IC-HX8-ADD1Y:** 8 users for +1 year

### **Subscription Gen-IC Hosted Licenses**

Active Gen-IC Virtual Client capacity can be used by the latest version of Agent-IC. Separate Agent-IC license is not required for use with Gen-IC. See Gen-IC product information for details.

### **Perpetual LQ Hosted Licenses**

Permanent for major version

**AGENT-IC-LQ:** 1 user

**AGENT-IC8-LQ:** 8 users

Permanent license for major version of Agent-IC hosted on LQ.

### **Subscription LQ Hosted Licenses**

For ongoing continuous use

**Subscription Initiation**

**A-IC-LQ-1Y:** 1 user for 1 year

**A-IC-LQ8-1Y:** 8 users for 1 year

**Subscription Extension**

**A-IC-LQ-ADD1Y:** 1 user for +1 year

**A-IC-LQ8-ADD1Y:** 8 users for +1 year

