

Station-IC User Guide



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Document reference

Station-IC[™] User Guide

Part Number: PUB-00051 Rev C

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Introduction to Station-IC

Station-IC[™] is a desktop application available for Microsoft[®] Windows[®] and Apple[®]macOS[®] computers which enables them to operate as a virtual intercom client for Eclipse HX (EHX) matrix systems and LQ Series interfaces.



For information about the Station-IC software version, click 😟 , and then About.

A screen appears with software version information.

About Station-IC

Version: 1.0.0-build.38 Copyright © 2021 Clear-Com. All rights reserved.

ОК

To access the Station-IC User Guide, click (2), and then User Guide.





1

2 Installing Station-IC

To install Station-IC on your PC or Mac, download it from the Clear-Com website and install.

Note: Be sure to enable Station-IC to pass through the system firewall.

Station-IC is in demo mode until you purchase and install a license, available from your Clear-Com partner.

See Installing CodeMeter (License Manager) on page 8

Before you can connect to the host intercom system with your virtual client, you must first setup connection details in the target software user interface. Station-IC connects to the host system using a profile. You will need:

User credentials:

- User ID
- Password

Network:

• IP address for the system you are connecting to.

Station-IC Licenses

Event Licenses - for time limited use

- ST-IC-1W: 1 user, 1 week
- ST-IC-1M : 1 user, 1 month

Subscription Licenses - for ongoing operation

- ST-IC-1Y Subscription Initiation: 1 user, 1 year
- ST-IC-ADD1Y Subscription Extension: 1 user, +1 year

Subscription License Bundles - for use on multiple computers

- ST-IC-8-1Y Subscription Initiation: 8 users, 1 year
- ST-IC-8-ADD1Y Subscription Extension: 8 users, +1 year

The following apply:

- Subscription licenses can be transferred between computers. Event licenses cannot be transferred.
- Event licenses activate and start depleting on first connection to the intercom system. Subscription licenses start depleting following initial activation. The remaining time does not stop while you transfer subscription licenses.
- An extension license will start from the time the subscription license lapsed.
- Multiple extensions can be installed at the same time. For example, for 3 years continuous use, install 1 Subscription Initiation and 2 Subscription Extensions. Subscription Initiation is installed before the extension.
- One event license can be installed on a computer at any one time, additional licenses will overwrite the first. If you wish to extend your event license, wait until it has expired and then install a new one.
- If you wish to use an event license on a computer that has previously hosted an initiation/subscription license, you must remove the subscription license before installing the event license. See Re-Hosting a License on page 10



3.1 **Obtain a license**

To obtain licenses for Station-IC, contact your Clear-Com partner. Once you have purchased your license(s), Clear-Com will send a license Ticket ID containing licenses codes to you.

Licenses are activated by you using a Cloud-based 'WebDepot' which transfers selected licenses from the license ticket to the 'CodeMeter' license manager (a software application) that runs on your computer. This process is described in the following section in this document.



Manages the license tickets (view and transfer)

Contains the license

3.2 Installing CodeMeter (License Manager)

- 1. Download Station-IC from the Clear-Com website. Station-IC will open in demo mode.
- 2. Install the license manager (CodeMeter) by clicking the install icon. CodeMeter runs in the background on your PC, holding your licenses.

Note: After CodeMeter is installed, the install icon is no longer visible.





User Guide | Station-IC Installing and Applying Licenses Online (Recommended)

1. Once CodeMeter is installed on your computer, go to **Settings** in Station-IC and launch **License with Ticket ID**. (Trial Code is for factory service use only).

3				
₿	铰 General 🗹 Profiles			Done
2 AU	Dre			
Ou	tput Devices			
		default		~
		Test	Settings	
Inp	out Devices			
		**default		~
C		Test		
C Fel	ho Cancellation			
(on)			
Far (off	End Silence Suppression			0
No	tifications			
No	tifications			
(on)			_
Lic	ense			
Lic	ense with Ticket Id			Launch
Ad	vanced License Management			Launch
t Tria	al Code		Trial Code	- 1
	h			
	ners			
il.				

2. The online WebDepot opens. Copy and paste your Ticket ID, and click Next.

		English	₩
Home Auto Update			
Welcome to CodeMeter License Central WebDepot			
Welcome to CodeMeter License Central WebDepot. You can transfer your licenses to your C Please enter your ticket and click "Next".	mContainer	using this WebDepo	t.
Ticket:	Ente	er Ticket II	C
Next			
Legal Notice CodeMeter License Central WebDepot v19 07 210 500 ws			

3. You will see the purchased licenses available to you on the license ticket. These licenses are managed by the WebDepot. Press **Activate Licenses**. Select the license(s) you wish to install on your computer, then select **Activate Selected Licenses Now**. Following the license transfer, Station-IC will be licensed and no longer in demo mode.



3.3

3.3.1 Re-Hosting a License

A license can be removed from a computer and returned to the license ticket using the WebDepot where it will be available to install on a different computer using the steps outlined above. The license ticket can then be used for another computer. To re-host a license go to **Settings>Launch with Ticket ID** (step 3). You will need your Ticket ID to do this.

Clear-Com®			English	** 🗖
Home My Licenses Auto Update				
My Licenses				
Name	Purchased O	n Activated On	CmContainer	Status
Station-IC Virtual Client: Subscription Initial, 1 user, 1 year	2021-03-01 02:42:39			Available: 1 [1)
Station-IC Virtual Client: Subscription Ext., 1 user, +1 year	2021-03-01 02:42:39	Re-host the	license	Available: 1 (1)
Station-IC Virtual Client: Event License, 1 user, 1 month	2021-07 02:42	installed on this	comput	er _{Available: 1}
Station-IC Virtual Client: Event License, 1 user, 1 week	207 -03-01 0 42:39	01:35:30	• 130- 381461340	Available: 0 (1)
Activite Licenses				
Activate Licenses Re-Host Licenses				



3.4 Installing and Applying Licenses (file-based)

If your computer does not have internet access, it is possible to transfer the licenses using a license file exchange. You will obtain a container for the license files from CodeMeter, installed on the computer that needs to be licensed, and load it with a license from the license ticket using the WebDepot.



Obtain a .WibuCmRaC file from the computer to be licensed (CodeMeter). Go to WebDepot and activate the license using **File-based license transfer** option.

2. Install the license on the required computer

Take the file update file (.WibuCmRaC) back to the computer to be licensed. Install the license (CodeMeter).

3. Obtain a receipt and return to the WebDepot

Obtain a receipt from CodeMeter (.WibuCmRac) and return this to the WebDepot.



1. From CodeMeter Control Center, click License Update.



2. Click Next.

×

?

CmFAS Assistant

Welcome to the CmFAS Assistant!

The CodeMeter Field Activation Service (CmFAS) assistant helps you adding, changing and deleting licenses from the license management system CodeMeter.

With the CmFAS assistant you can create license request files, which you can send to the vendor of the software by email. You can also import the received license update files with the CmFAS assistant into the license management and create a receipt of the import for the vendor.





3. Select Create license request, and then click Next.









5. Click Finish.

? ×

CmFAS Assistant
 The license request file has been successfully created.

The license request file has been successfully created. You can send it now to the vendor of the software by email.



6. Enter your Ticket in **WebDepot**, and then click **Activate Licenses**.

Clear-Com			English	80 💌
AN HME COMPANY				
Home My Licenses Auto Update				
My Licenses				
Name	Purchased On	Activated On	CmContainer	Status
Station-IC Virtual Client: Event License, 1 user, 1 week	2021-02-23 05:56:09			Available: 1 (1)
Station-IC Virtual Client: Event License, 1 user, 1 month	2021-02-23 05:56:09			Available: 1 (1)
Station-IC Virtual Client: Subscription Initial, 1 user, 1 year	2021-02-23 05:56:09	2021-02-24 01:50:31	 130- 1055051858 	Available: 0 (1)
Station-IC Virtual Client: Subscription Ext., 1 user, +1 year	2021-02-23 05:56:09	2021-02-25 02-24.49	 130- 1055051858 	Available: 0 (1)
Activate Decessor				
Legal Notice CodeMeter License Central WebDepot v1	19.07.210.500.le			



7. Click File-based license.

🕼 Clear-Co	m.			English	88 💌
Home My Licenses	Auto Update				
Available Licenses					
To activate your licenses 1. Select the locenses you 2. Select the locally come 3. Click *Activate Selected	c want to activate. cted CenContainer to which you w Licenses Now".	vant to transfer the licenses			
 Name 		Purchased On	Activated On	CmContainer	Status
 Station-IC Virtual Client 	Event License, 1 user, 1 week	2021-02-23 05 56 09			Available
 Station-IC Virtual Client: 	Event License, 1 user, 1 month	2021-02-23 05:56:09			Available
Select CmContainer 130-1055051858 (Clearcom- Comment	Universal) 🛩 🚺				
Activate Selected License	is Now		<	File-bested in	onse transfer
Show other licenses in this My Licenses	ticket				
Legal Notice CodeMoter Lice	ense Central WebDepot v19.07.2	10 500 le			
130-1055WibuCm/au ^					

8. Select the license you want to activate, and then click **Choose File**.

Home My Licenses Auto Update		l	English	88 ¥
Available Licenses Upload Request Down	cad Update		Upload Receipt	
To activate your licenses via file transfer - First step "Typica If you have activated licenses from this toket intend, you can be to use another CmContainer, you need a license request like of 1. Select an already used CmContainer or create a license request want to transfer the licenses to. This file can for example be of 2. Select the licenses you want to activate. 3. Select the created license request life. 4. Click "Continue".	d Request": ansfer additional license his new CmContainer, est file with Firm Code (reated with CodeMeter (s into the same C 5001399 for the C Control Center. He	mContainer(s). If y mContainer where w it works	you want e you
Name	Purchased On	Activated On	CmContainer	Status
				Available
Station-IC Virtual Client: Event License, 1 user, 1 week	2021-02-23 05:56:09			
Station-IC Virtual Client: Event License, 1 user, 1 week Station-IC Virtual Client: Event License, 1 user, 1 month	2021-02-23 05:56:09 2021-02-23 05:56:09			Available
Station-IC Virtual Client: Event License, 1 user, 1 week Station-IC Virtual Client: Event License, 1 user, 1 month Station-IC Virtual Client: Subscription Ext., 1 user, +1 yeer	2021-02-23 05:56:09 2021-02-23 05:56:09 2021-02-23 05:56:09			Available Available



9. Select the .WibuCmRaC file that you saved earlier.



10. Click Start Activation Now.

	Upload Request		Down	vicad Update		Upload Receipt	
To activ If you ha to use an 1. Selec want 2. Selec 3. Selec 4. Click	ate your licenses via nve activated licenses fi nother CmContainer, y f an already used CmC to transfer the licenses it the licenses you wan it the created license re "Continue".	file transfer - rom this ticket cu need a lice Container or cr to. This file ca to activate. quest file.	First step "Uploa aiready, you can t nse request file of eate a license req in for example be	d Request": ransfer additional license this new CmContainer. uest file with Firm Code created with CodeMeter (s into the same C 5001399 for the C Control Center. H	CmContainer(s). If CmContainer when ow it works	you want e you
 Name 	,			Purchased On	Activated On	CmContainer	Status
 Statio 	n-IC Virtual Client: Eve	nt License, 1	user, 1 week	2021-02-23 05:56:09			Available
Statio	n-IC Virtual Client Eve	nt License, 1	user, 1 month	2021-02-23 05:56:09			Available
 Statio 	n-IC Virtual Client: Sub	scription Ext.,	1 user, +1 year	2021-02-23 05:56:09			Available
Select an a No CmCor or	already used CmCont ntainer selected ₩	ainer					
Choose Fi	nse request file (*.Wit ile 130-1055051858.V	vuCmRaC) of VbuCmRaC	another CmCont	ainer			
Comment							
Start A	ctivation Now	>				Direct lice	ense transfer
-	the first of the state						
Show of	ner licenses in this tick						



11. Click Download License Update File Now.

	English 🗱 🖬	
Home Hy Licenses Auto Lipdate		
Download License Update File Upload Request Download Update	Upload Receipt	
To transfer your licenses via file - Second step "Download Update": 1. Click "Download License Update File Now" and save the file on your computer. 2. Import this license update file to the CincContainer with Serial 130-1055051586. This file can for exam CodeMater Control Contex. How it works ID 3. After update file to the CincContainer, click "Next" to com Download License Update File Now Int ID Update File Now Int ID Update File Now Int ID Update File Now Int	ple be imported with irm the license transfer. Direct license transfer	
Legal Notice CodeMinter License Central WebDepot v19 07 210 500 te		

12. Click Next.

		English 🗱 🗷	
	Home Hy Licenses Auto Update		
	Download License Update File Upload Request V Download Update	Upload Receipt	
	To transfer your licenses via file - Second step "Download Update": 1. Cick: "Download License Update File New" and save the file on your computer 2. Import the icense update file to the ConContainer with Serial 130-1065651858. This file can the CodeMeter Control Center. How it works @ 3. After you have successfully transferred the icense update file to the CmContainer, cick: "Next Download License Update File N. Next Mark Second License Update File Next Mark Second License Up	for example be imported with " to confirm the license transfer. Direct license transfer	
	Ny Lonson		
	Legal Notice CodeMeter License Central WebDepot v19 07 210 500 le		
130-1055WibuCmfau			Show all X



User Guide | Station-IC

13. From CodeMeter Control Center, select **Import license update**, and then click **Next**.

	?	\times
← ⓒ CmFAS Assistant		
Please select the desired action		
○ Create license request		
Choose this option if you want to create a license request file in order to send it to	the vendo	r of the
Import license update		
Choose this option, if you received a license update file from the software vendor import this file.	and want t	0
○ Create receipt		
Choose this option if you want to confirm the successful import of a license update software vendor.	file for the	
<u>Next ></u>		lp

14. Select the .*WibuCmRaU* file that you downloaded in step 9, and then click **Commit**.

		?	×
÷	CmFAS Assistant		
	Please select the file name		
<	10: \User: \' \Downloads \130-1055051858. WibuCmRaU		
	Select a file under which the license update hie is stored on your computer. Then click on 'con import the new licenses.	nmit' to	
	Commit	Help	



15. Click OK.



16. Click on the highlighted link.



Einich Hole
rinish neip



17. Save this new . *WibuCmRaC* file, and then click **Commit**.

	?	×
 CmFAS Assistant 		
Please select the file name		
Select a file name for storing the receipt me. Then dick on 'commit' to create the file. Yo this file to the vendor by email.	u can the	 en send
Commit		lelp
Click Finish.		
	?	×
 CmFAS Assistant 		
The license receipt file has been successfully created.		
The license receipt file has been successfully created. You can send it now to the vendor of the software by email.		
	 CmFAS Assistant Please select the file name Ctures - composition of the software by email. Ctures - composition of the software by email. Click Finish. CmFAS Assistant CmFAS Assistant 	 c Contrast Assistant Please select the file name Catternal and the name for summy one receipting with output on "commit to create the file. You can the this file to the vendor by email. Click Finish. c Contrast Assistant A please select file has been successfully created. Cherna receipt file has been successfully created. Cat ensend it now to the vendor of the software by email.





19. From the WebDepot Control Center, click **Choose File** and pick the last *.WibuCmRaC* file. Click **Upload Receipt Now**.

Clear-Com	English 🗱 💌	
An Intel Contract Home My Licenses Auto Update		
Confirm License Transfer Upload Request ✓ Download Update To transfer your licenses via file - Third step "Upload Receipt": 1. Create a license recept file from the CmContainer with Serial 130-1055051588 and Firm Code 6001 example be created with CodeMeter Control Center. How it works []	Uptrad Receipt	
2. Sinc't The Created Accept New 3. Cick "Upbace Recept New". If you haven't imported the leanse update file yet, you can download it again. Cick "Back" to get to the d Pick license receipt file (".WibuCmRaC) Upbace Noceet New 34	download page.	
My Licenses		
Legal Notice CodeMeter License Central WebDepot v19.07 210 500 le		
🕅 130-1355WibuCm/ku 🔺		Show all X

20. A final confirmation screen appears.

	Clear-Com	English	00 M
	Home My Licenses Auto Update		
	License Transfer Successfully Completed		
	The license transfer has been completed successfully.		
	OK		
	Legal Netice CodeMeter License Central WebDepot v19 07 210 500 le		
130-1055wibuCmRaU ^			Show all X



The Startup Screen

When you open Station-IC, the Startup screen appears:



4.1 To begin using Station-IC:

Select **Start**. You will connect to the device specified by the selected profile. On first connection this will be the Clear-Com demo system or, in normal usage, the system last connected to.



4.2 Changing profiles

Click the profile selection drawer to see other profiles. Available profiles: 2 x Eclipse, 2 x LQ.

		~			\$
ЕНХ	Profile EHX Demo doc2 206.47.10.200				Start D
EHX	Profile EHX Demo doc2 206.47.10.200	2	ЕНХ	Profile EHX Demo doc2 206.47.10.200	
• •	Profile LQ Demo CC-Demo agent-ic-lq.clearcom.com	•	- = 0 LQ	Profile LQ Demo CC-Demo agent-ic-lq.clearcom.com	•

Note:

You may wish to edit the selected profile. See Configuring Station-IC on page 24.



Configuring Station-IC

5

You can configure Station-IC as follows:

- General Settings. This includes audio input and output devices such as microphones and loudspeakers. It also includes audio quality settings, notifications, links to licensing tools and data usage diagnostics.
- Profiles. A profile is a collection of settings including user credentials, network address and port number, that enable you to connect with the required intercom host system.
 Profile settings must match corresponding settings in the host intercom system. Profiles are available for EHX and LQ.

5.1 Configuring General Settings

To configure Station-IC general settings:

1. Click on the Settings icon, 🔯 The Settings dialog screen appears

රිූි General	Profiles	Done
Audio		
Output Devices		
	Default	\checkmark
	Test	
Input Devices		
	Default	~
	Test	
Echo Cancellation (on)		
Far End Silence Sup (off)	opression	Q
Notifications		
Notifications (off)		0

2. Ensure that the **General** tab is selected. Edit the settings as required, and then select **Done**.



- Note:
 Click the dropdown arrow to select Input and Output audio devices from those available on your

 PC. Click Test to make sure that the audio devices are functioning.
- Note:Echo Cancellation can reduce echo and thus improve audio quality.Far End Silence suppression, by stopping transmission when there is no audio on the line, can
reduce your bandwidth consumption to the host intercom system.

5.2 Configuring an EHX Profile

r

٢

To configure an EHX profile:

1. Click on the Settings icon, The Settings dialog screen appears:

လ်ို့ General	Profiles	•	Select profile here	Done	Details match
Edit profile		Ρ	rofile EHX Demo (Active)		those set in the target
Name			Profile EHX Demo		intercom software
User			CC-Demo		
Password			****		
Server			hx-demo.clearcom.com		
Port			6001		
Profile type				EHX	
Network Type		E	HX Managed	\sim	

- 2. Ensure that the **Profiles** tab is selected.
- 3. Edit the settings as required by the host intercom system, and then select **Done**.



5.2.1 Network Type

Network type	Description/comments
LAN	LANs (Local Area Networks) usually cover a small area, such as an office, single building or business.
WAN	WANs (Wide Area Networks) cover a broad area and may include any number of local area networks (LANs).
Internet	Global network that may be used to connect local networks in various locations around the world.
EHX managed	Station-IC follows the port settings set in the EHX configuration software.



5.2.2 Example EHX configuration:

Configuration is required in the host intercom software. This section contains a brief overview of required configuration. In the EHX configuration software you will set:

IP port options (User ID and Password)

 IP Port Options 	
User ID	E92692DA7E
Network Connection	WAN ~
Audio Codec	G722 Y
Password	

Note:

The port type must be Virtual Client in the host EHX software.

E-IPA Card Properties (IP address)

E-IF	PA-HX Card Properties
	Use IVC settings for Admin connection 🦲
E-IPA-HX Port License:	E-IPA-48-HX ^v
View card license:	Dpen in browser
Admin and	IVC AoIP Protocol Settings Co
Rear Connection:	LAN 1
IP Address:	10.50.14.147
Subnet mask:	255.255.252.0
TCP/UDP Port:	6001
Default gateway:	10.50.12.1
External IP Address:	255.255.255.255
External TCP/UDP Port:	6001
	Close

For more information please refer to the latest Eclipse EHX Configuration Software User Guide



5.3 Configuring an LQ Profile

To Configure an LQ Profile:

- 1. Click on the Settings icon, it The Settings dialog screen appears.
- 2. Ensure that the **Profiles** tab is selected:

ôf General 🗹 Pro	ofiles		Done	
Edit profile				Name can be
Name		Michelle LQ		Profiles Drawer
User		Michelle		
Password		Password		Details match those set in the
Server		ccrdemo.dnsalias.net		target intercom
Port		6002		software
Profile type			LQ	Select role
Network Quality	Ba	alanced	~	
Select Preferred Role	LC	Q Managed	V	
Some changes require to rec	connect with the server to ta	ake effect.		

- 3. Edit the settings as required by the host intercom system.
- 4. Select a role, and then select **Done**.

Note:

The role can be fixed by the LQ CCM interface. In this case, you will not be able to select a role as it will be allocated automatically by the host intercom system.

Once you have accessed the system, a user selectable role is indicated by a star in the Station-IC keysets screen:





Note: If the role for your intercom client has been configured as fixed in the LQ CCM, you cannot select a different role. If you try to select a different role, you will see an exclamation mark in a triangle next to the role selection drop-down. This indicates that the role you have tried to select will not be applied to Station-IC.

Network type	Description/comments
High	LAN only
Balanced	LAN or WAN
Low	Internet

5.3.1 Example LQ CCM Configuration

Configuration is required in the host intercom software. This section gives a brief overview of configuration details.

User credentials are configured in the **Accounts** page of the LQ CCM:

Soverview	Device	🔐 Roles	ゔゔ Assignments	Accounts		litte Cle	ar-Com 0
Clients	The Agent-IC Agent-IC clie Virtual Clie	C service is no ents will be for ent Users	ot licensed. rced to connect in [Demo mode only	:		
SIP	Virtual Clien	t Users List					
IVC	#	Label	User ID	Password	Default Role	LQ Assignment	Status
ŧŧŧ	- C1	Michelle LQ	Michelle		None 🗸	Any 🗸	🖌 🗙
	- C2	2	<u>CC-Demo</u>	<u>Not Set</u>	<u>CC-Demo</u>	LQ-R 4W#1	•

For more information on setting up the host system for Station-IC see:

- The Station-IC Knowledge Center (https://www.clearcom.com/station-ic-knowledgecenter)
- The LQ Series User Guide available from the Clear-Com website.





Station-IC operates as a virtual intercom client to two Clear-Com systems.

- Eclipse HX (EHX) matrix systems
- LQ Series interfaces

The key display and operation is slightly different on the two systems.

Using Station-IC with EHX on page 31

Using Station-IC with LQ on page 39



6

6.1 Using Station-IC with EHX

6.1.1 The Keysets Screen

When you connect to the device specified in your selected profile, the **Keysets** screen appears. You can have up to 23 keysets.





6.1.2 Select Operation Mode

You can use Station-IC in two modes:

Normal Mode - you can resize the screen to any required size. The keysets will responsively adjust to fit the screen size.

Compact Mode - a small screen containing up to six keysets floats on top of the programs on the user's desktop. You can position the compact screen as required. This enables you to use Station-IC while you use your main screen for other applications. This screen appears on top of any other applications that are open.

🚯 Statio	on-IC		_	\times
	Director1	Profile EHX Demo	۷ 💽	0
	_			
(e) ↓			REPLY	$) \otimes$

To select Compact Mode, click the icon.

To return to Normal mode, click the 🚺 icon.

6.1.3 Using Keysets

A keyset is a set of controls associated with an audio assignment that enables you to communicate with an endpoint user or a conference/partyline. For example, you can talk or listen to an intercom panel, or take part in a conference (partyline) group. Keysets can also be used to talk to interruptible foldbacks (IFBs), controls such as call signals, GPIO and logic functions, and direct interface ports.

Each keyset can have:

- A green Listen key
- A red Talk key
- A volume indicator
- A label that identifies the keyset



Front View of Keyset



Back View of Keyset





Using Talk and Listen Keys

Select the Red Talk

When a Talk or Listen key is active, it is highlighted as follows,

or Green Listen key 🔍 to talk or listen respectively.

and

If you select Talk or Listen with a brief mouse click the key will latch. This means that the Talk or Note: Listen function remains active until you click the button again to deselect it.

If you click and hold the Talk or Listen key, the key remains active until you release it. You will Note: see Talk/Listen latch indicators at the top of the screen.



Eavesdropping

When another user has a key latched to listen to you, you will see an eavesdropping icon in the top bar. This shows you that someone is listening.



Adjusting Volume

To adjust the volume, click 😟 , and then use the green slider control to adjust the audio volume.



Muting microphones and loudspeakers

()

To mute all microphone and loudspeakers across all the keysets:



respectively. When all the microphones or all the loudspeakers are

muted the icons display with line across them, 🕺 🛞

Call Signal

To send a call signal, click \bigcirc and then click \bigcirc .

Tally Icons

Tally Icon	Indication
Quaver	
Radio J = D D	Audio presence tally
Microphone	
ECH0010 ↓ ↓ ↓ ⊕	In-use tally
Checkmark	
ECH0003 ⊕	Panel connected tally

Using the Reply Key

The **Reply** Key is located in the footer area of the **Keysets** screen. To view this area, click as shown below.



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The footer area expands to show the **Reply** key.

Note: If you receive a call, the footer area will automatically expand and the **Reply** key will flash and display the name of the caller. When the call ends, the footer area will collapse.

Use the arrows (<>) to navigate through stacked calls on the Reply key. X clears the top element in the call stack.



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Control Key

Keysets can be configured in the host intercom system to send a control (General Purpose Output) to an external system. This allows you to control an external appliance such as an on-air light, or transmission to two-way radios.

Alternative Key Configuration

Keysets do not have to be configured in the host intercom software to have two keys. They can have listen, talk, both or none.

Using Compact Mode

To make any keyset appear in Compact Mode, click the **Favorite** icon at the top-right hand side of the keyset. Click the icon again to remove it from Compact Mode.

Favorite keysets have a Star icon at the top-right hand side of the keyset.

When in compact mode, the name of the key is shortened to two characters.

Talk (red indication) and listen (green indication) latched keys are indicated by a triangle, as well as the talk-latch indicators (the red/green bars).

6.2 Using Station-IC with LQ

When you connect to the device specified in your selected profile, the Keysets screen appears. The maximum is 24 Keysets.

6.2.1 The Keysets Screen

6.2.2 Select Operation Mode

You can use Station-IC in two modes:

Normal Mode - you can resize the screen to any required size. The keysets will responsively adjust to fit the screen size.

Compact Mode - a small screen containing up to six keysets floats on top of the programs on the user's desktop. You can position the compact screen as required. This enables you to use Station-IC while you use your main screen for other applications. This screen appears on top of any other applications that are open.

To select Compact Mode, click the icon.

To return to Normal mode, click the 🚺 icon.

6.2.3 Using Keysets

A keyset is a set of controls associated with an audio assignment that enables you to communicate with a channel (conference line).

Each Keyset can be rotated to reveal more keys and controls. Click for the keyset. Each keyset has four keys that can be configured as:

- Call signal
- Event signal (1 or 2)
- Talk key (red)
- Listen key (green)
- Remote mic kill (RMK)

Each key also has:

- A volume indicator
- A label that identifies the keyset

The positioning of controls on Keysets is controlled by the LQ software and can be changed as required.

Front View of Keyset (default configuration)

Back View of Keyset

When the Listen key is not activated it has a black background:

Note:

When **both** Talk and Listen keys are not activated, Call Signal, Events and RMK are not available.

Note:

These graphics show the default configuration for Keysets. The system administrator may set up an alternative Keyset layout.

Using Talk and Listen Keys

When a Talk key is active, it is highlighted as follows,

Every time you log into Station-IC for LQ, all the Listen keys are activated. If you don't want to hear a particular key, you must turn it off.

When you log out and back in to Station-IC, all Keysets will return to default configuration (all Listen keys ON).

In the default configuration, the Listen key is latched activated.

Note: If you select Talk or Listen with a brief mouse click the key will latch. This means that the Talk or Listen function remains active until you click the button again to deselect it.

Adjusting Volume

To adjust the volume, click , and then use the green slider control to adjust the audio volume.

Muting microphones and loudspeakers

To mute all microphone and loudspeakers across all the keysets:

respectively. When all the microphones or all the loudspeakers are

muted the icons display with line across them,

× ×

Call Signal

Click on

🞐 or

To send a call signal, click the call signal button on the front of the Keyset:

Note: The call signal is not latchable. When you press it, you will see it light briefly. Once pressed, the call signal will remain active in the target channel for 10 seconds.

Tally Icons

Tally Icon	Indication
Quaver	Audio presence tally
Call signal	
Channel 1	Call signal active
Event 1	
Channel 1	Event 1 is currently active
Event 2	
Channel 1 D Channel 1 Channel 1 Channel 1	Event 2 is currently active

Using the Reply key

The **Reply** Key is located in the footer area of the **Keysets** screen. To view this area, click as shown below.

The footer area expands to show the **Reply** key.

If you receive a call, the footer area will automatically expand and the **Reply** key will flash and display the name of the caller. When the call ends, the footer area will collapse.

Use the arrows (<>) to navigate through stacked calls on the Reply key. X clears the top element in the call stack.

Using Compact Mode

To make any keyset appear in Compact Mode, click the **Favorite** icon at the top-right hand side of the keyset. Click the icon again to remove it from Compact Mode.

Note:

Favorite keysets have a Star icon at the top-right hand side of the keyset.

When in compact mode, the name of the key is shortened to two characters.

Talk (red indication) and listen (green indication) latched keys are indicated by a triangle, as well as the talk-latch indicators (the red/green bars).

6.2.4 Alternative Key Configuration

Station-IC keysets are configurable in the host intercom software (the LQ CCM).

Each keyset has 4 keys. Each key is assigned to a channel and different functions can be assigned to the channel:

- Talk
- Listen only
- Call
- Events (1 and 2)
- Remote mic kill (RMK)

Example configuration:

🚯 Statio	on-IC								-	×
8	←] Test1	(AIC 3)				Maison				55
\$ \$		*	Channel 1		*	Channel 2	*	Channel 3	•	
<u>.</u>		*	Channel 4 		*	Channel 5 Channel 5 	4	Channel 7	* : • RMK	
		d D	Channel 8	* :		Channel 9 4	РЫК	Channel 10		
		*	Channel 11	РМК	*	Channel 12			*	
))										
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tation-I(
SI SI										

Note:

Call Signal and Event keys are not latchable. You will see them light briefly in Station-IC. Call signals and events will persist for 10 seconds in the target endpoint. If you want the signal or event to last longer than 10 seconds, you must press the key again.

When in compact mode, the keys are determined according to the first key found on the keyset in the following order: Talk, Listen, Call, Event 1, Event 2, RMK.

In the above example,

- C2 is a talk key
- C3 is a listen only key
- C4 is a call key
- DB and eg are Event and RMK keys respectively.

7 Troubleshooting

Ways to resolve any problems that may arise with Station-IC.

7.1 Connecting to the Matrix

In Settings/Connections , check:

- Username
- Password (passwords are case sensitive)
- DNS Name or IP Address of the host intercom system
- Host intercom system network TCP/UDP port (default 6001)

7.2 Network Issues

If your network connection to the host intercom system fails:

- Check if you can ping the host intercom system
- If you can ping the host intercom system but cannot connect, the problem may be that the port that Station-IC uses on your local network is blocked. Check with your network administrator.
- If the problem is not with the network, it may be that your network connection is not providing enough bandwidth to support Station-IC.

7.3 Configuration Issues

Are you connecting to your own host intercom system? If you are connecting to your own Eclipse matrix or LQ unit, and the issue is not with your local firewall (the port is closed) then check the following details with your system administrator:

- Hardware: is an IVC-32-HX or an E-IPA-HX card installed and configured on the matrix?
- Software: is the matrix running on Eclipse EHX 12.1 or above? Is the LQ unit (all the units if you are connecting to a Link-Group) running LQ 4.2 or above?
- Eclipse configuration: is the Station-IC client correctly configured in this system?
- Check that the firewalls are configured to allow Station-IC to access. This includes the firewalls set on your PC and those set on the host intercom system.

• LQ only: Role allocation; is another Role user still logged in to your Station-IC client? LQ (not EHX) is Role based. A Role may have many users, but only one user can log in to the Station-IC client at one time.

7.4 Poor Audio

This is caused by unreliable IP infrastructure. Query your IP provider and make sure that your network resources are suitably configured.

7.4.1 Audio Delay

This fault is due to the inherent delay between the matrix and Station-IC. But certain devices may make this worse if they do not support low latency. Check your device capabilities under Settings.

7.4.2 Unwanted Echo

Some devices do not support acoustic echo cancellation (AEC) when in speaker mode. If one party has a device that does not support AEC, make sure that he uses a headset. Ask the other party to check his device capabilities under Settings.

7.5 Installation Issues

Windows installation error:

If you see this popup, follow the instructions and click 'Open Setup Log' for more information.

Clear-Com strongly recommends re-installing Station-IC if you are prompted with a message of failed installation.

7.6 Any Other Issues

Please consult the Clear-Com solution finder: Clear-Com Solution Finder.

8 Technical Specifications

8.1 Software Applications

	Software Applications
	Host Connection Profiles: 2
	Keysets: 23
	Assignable: Talk, Listen and Controls in EHX
Eclipse	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
	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
LQ	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 Link- Group	Station-IC LQ functionality is available when LQ is linked in a HelixNet Link Group.

Audio Settings 8.2

Audio Settings

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

8.3 **Audio Controls and Indications**

Audio Controls and Indications

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

8.4 Minimum System Requirements

Minimum System	m Requirements
Host Intercom System	 Eclipse 12.1 or above with E-IPA (or IVC-32)
	• LQ 4.2 or above
Windows	Version 8 (minimum), Version 10 or above (recommended) Computer and Processor: 1.6 GHz, 2 core (min) Memory: 4.0 GB RAM (min) Hard Disk: 3.0 GB (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: 4.0 GB RAM (min) Hard disk: 1.5 GB (available) Display: 1280 x 800 (min)

Note:

8.5

Audio

Audio		
Ecl	ipse	
Audio Encoding	G.722 – Wideband - 7 kHz audio-coding within 64 kbit/s	
Frequency Response	50Hz-7kHz	
LQ		
Audio Encoding	Opus – Configurable 12kHz-20kHz within 16- 128kbit/s	
Frequency Response	100Hz-12kHz, 100Hz-20kHz	

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

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Au	idio	
LQ in HelixNet Link-Group		
Audio Encoding	WavPack – Fixed Wideband 10kHz within 320kbit/s	
Frequency Response	20Hz-10kHz	

Note: Frequency Response is additionally filtered depending on use

8.6 Latency

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

	Eclipse/Station-IC Latency			
Windows	Station-IC to 4-wire: LAN 85 ms, WAN 92 ms, Internet 117 ms 4-wire to Station-IC: LAN 135 ms, WAN 158 ms, Internet 216 ms Station-IC to Station-IC: LAN 220 ms, WAN 245 ms, Internet 333 ms			
MacOS	Station-IC to 4-wire: LAN 109 ms, WAN 115 ms, Internet 145 ms 4-wire to Station-IC: LAN 85 ms, WAN 107 ms, Internet 177 ms Station-IC to Station-IC: LAN 185 ms, WAN 205 ms, Internet 305 ms			

	LQ Series to Station-IC Latency			
	Opus Latency (With LQ Local mix at default High Quality)			
	Station-IC to 4-wire: High 60ms, Balanced 90ms, Low 110ms			
Windows	4-wire to Station-IC: High 115ms, Balanced 115ms, Low 115ms			
	Station-IC to Station-IC: High 197ms, Balanced 202ms, Low 246ms			
	Station-IC to 4-wire: High 67ms, Balanced 88ms, Low 109ms			
MacOS	4-wire to Station-IC: High 76ms, Balanced 76ms, Low 76ms			
	Station-IC to Station-IC: High 94ms, Balanced 140ms, Low 152ms			
WavPack Latency - (when LQ Series are linked to HelixNet Stations)				
	Station-IC to LQ 4-wire: High 106ms, Balanced 106ms, Low 106ms			
Windows	4-wire to Station-IC: High 115ms, Balanced 115ms, Low 115ms			
	Station-IC to Station-IC: High 177ms, Balanced 187ms, Low 223ms			
	Station-IC to 4-wire: High 109ms, Balanced 109ms, Low 109ms			
MacOS	4-wire to Station-IC: High 76ms, Balanced 76ms, Low 76ms			
	Station-IC to Station-IC: High 171ms, Balanced 183ms, Low 176ms			

8.7 Bandwidth

Bandwidth, Opus and WavPack (LQ only). For EHX see Network Ports in this chapter.		
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 quality:	
	• 40 kbps from LQ to Station-IC	
	• 160 (max) kbps from Station-IC to LQ	
	Balanced quality:	
	• 70 kbps from LQ to Station-IC	
	• 280 (max) kbps from Station-IC to LQ	
	High quality	
	100 kbps from LQ to Station-IC	
	• 400 (max) kbps from Station-IC to LQ	
LQ in HelixNet Link- Group	• 300 kbps (max), Station-IC to LQ	
	 1200 kbps (max), LQ to Station-IC 	

8.8 Network Specifications (Version 1.0)

Network Specifications			
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 RTP – Audio Transport G722 – Audio Codec Opus - Audio Codec for LQ WavPac - Audio Codec for LQ in HelixNet Link-Group AES-128 – Audio and Control Encryption		
Network Connectivity	Ethernet, Wi-Fi, 3G, 4G, LTE (as available on device)		

8.9 Network Ports

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 – Audio Streams to/from Station-IC Port 8080 TCP – Online Licensing Activation to/from CodeMeter	
QoS Tags	DSCP=41, Assured Forwarding (AF)	

8.10 Network Jitter Tolerance

Software Type	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: (Configurable) High : <=60ms, Balanced : <= 60ms, Low : <= 100ms, Very Low : <= 200ms
LQ in HelixNet Link-Group	Station-IC Rx: High: <=400ms, Balanced: <= 500ms, Low: <= 600ms LQ Rx: <=128ms automatically adjusted to network performance

8.11 Endpoint Resource Use

Software Type	Resource Use
Eclipse	1 port on IPA/IVC card
LQ	1-3 See LQ Resource Estimator
LQ in HelixNet Link-Group	1

8.12 Theory of Operation

Eclipse or LQ Host Intercom System (the server) provides a network connection and includes user credentials for 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. Client logs onto the server with its credentials and establishes an encrypted RTP audio stream(s) via UDP and control via TCP. 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.

8.13 Privacy

Station-IC optionally collects usage data to troubleshoot and continuously improve the application. The data collected is limited to Station-IC and the use of connected equipment and is transferred to Clear-Com managed diagnostics cloud servers. The data collected does not include any content or personal data. The data collected is stored and managed according to the Clear-Com Privacy Policy. Data-Usage and related communication to Clear-Com diagnostic cloud services can be disabled by the customer.