

## Source-Connect® Standard 3.7 User Guide

	··· Sø	STANDARD · · · · · · · ·	•
connected to: elem	ents	audio options:	
time connected: 00:	01:05:74	High quality 🗘 Disconne	ct
🔿 send			
	-50 -40 -34	-25 -20 -18 -14 -12 -9 -6 -4 -3 -2	ò
• receive	n in in i		,
Medium,48.0khz		port: (	oper
CONTACTS			
connected	eleme	unte	
<ul> <li>ONLINE</li> </ul>	echo*		
	echo*	•	
ONLINE	isdn		
ONLINE	suppo	ort	
<ul> <li>ONLINE</li> </ul>		ort_eu	
MESSAGING			
is my mic level ok?			
elements great		13/06/12 01:53PM	-
source this sounds amazing		13/06/12 01:53PM	
		Ser	nd
REMOTE TRANSPORT S	YNC 🕨		
? Manao	ge contact	ts) (Q Manager) (Logou	t

## 1. Introducing Source-Connect

Source-Connect Standard 3.7 is a standalone application for Mac OSX 10.4 – 10.7 that supports high-quality recording and monitoring of audio signals over the internet and allows for input and output directly into the DAW of your choice.

## About Source-Connect

Source-Connect provides professional studio access to the encoding and decoding of high quality, real-time audio streaming from within your editing environment, along with Remote Transport Sync (RTS), for remote synchronization of recording sessions.

To reduce the channel bandwidth requirements while maintaining low delay and high quality communications, Source-Connect uses a state-of-the-art AAC codec developed by Fraunhofer IIS.



In addition to streaming and RTS capabilities, Source-Connect also provides Contacts management and Instant Messaging features. You can add or remove contacts and edit your personal settings and profile by logging in to your account on the Source-Connect website.

## What's new in Source-Connect Standard 3.7?

Source-Connect Standard 3.7 is a fully standalone application and features Source-Connect Link, a set of AAX, RTAS, VST and Audio Units plug-ins that send audio directly to many supported hosts.

For an overview of the new features in Source-Connect 3.7 see:

http://www.source-elements.com/source-connect/3.7

## 2. Installation

### 2.1: System requirements

**Supported Host Versions and Hardware** 

Currently support for Mac OSX 10.4 (Tiger), 10.5 (Leopard), 10.6 (Snow Leopard) and 10.7 (Lion) is available.

Source-Connect Standard supports most core-audio drivers as of the writing of this manual except for those noted here:

http://source-elements.com/support/issues

Minimum recommended configurations: Minimum support is available for:

1ghz G4, 2GB RAM, OSX 10.4 or higher.

We recommend a G5 or higher and 2GB ram or more for best performance.

Source-Connect supported sample-rates: Source-Connect currently only supports 44.1khz and 48khz.

**Source-Connect supported bit-rates:** Source-Connect supports 16bit and 24bit sessions.

#### Compatibility

Source-Connect Standard 3.7 is compatible to connect with all available versions of Source-Connect, including Pro. See Appendix I for connection limitations when working with Source-Connect Pro.

For known hardware issues see http://source-elements.com/support/hardware

## 2.2: Network configuration

To establish an audio session between two studios, direct peer-to-peer communication is required between two hosts each running Source-Connect. Internet communication occurs over the UDP protocol, which is a low level and very fast Internet Protocol. It is therefore required that your firewall and/or router is configured properly to enable such communication.

For most operations you will open UDP 6000-6001 in your firewall and/or port forward these ports to your computer's IP address.

Please review the online Network Guide for specific details on getting your Network configured for Source-Connect:

#### http://source-elements.com/networkguide

#### Bandwidth:

Source-Connect requires an Internet connection with bandwidth of **at least** 300 kbps in both directions and a consistent ping value to ensure quality of service on your network. You may need to configure your firewall and/or router if you are inside a network or have an active firewall. Corporate firewalls and routers may be able to provide QoS services to increase your application bandwidth. Please refer to our detailed network-specific information if you have difficulty connecting successfully.

You can get an idea of your available bandwidth and ping value via Speed Test sites, such as <u>http://www.speakeasy.net/speedtest.</u> However, note that a report from a site in California does not mean that you will be getting the same bandwidth when connecting to a peer in, say, Australia.

#### Additional firewall information:

Source-Connect will make outgoing requests from any available TCP port to ports 80 and 5222 on our server (www.source-elements.com). All TCP ports should be allowed to make outgoing connections to and from the firewall. Most networks allow these connections by default.

#### For additional information on configuring your network, please refer to:

#### http://source-elements.com/networkguide

You will find here an illustrated step-by-step guide on configuring your network, along with Advanced documentation for IT administrators.

## 2.3: Downloading and Installing Source-Connect

All Source Elements software is obtained by download directly from your account on the website.

#### To get access to the Downloads page you will need:

A physical iLok dongle A valid evaluation or purchased license for Source-Connect

For more information on the iLok: <u>http://source-elements.com/iLok</u>

If you requested an evaluation license, or purchased a license you should have also created a new Source Elements account at the same time. Use this account to login to your account and download the software.

If you did not receive an account visit: <u>http://source-elements.com/login/create</u>

**Installing Source-Connect** 

You should now have downloaded the correct software for your iLok license.

Launch the installer and follow the instructions. Newer versions of Source-Connect will install over existing installations.

Installing InterLok Extensions

You must have the InterLok Extensions installed to allow Source-Connect to recognise your iLok. InterLok extensions are installed with the Installer Application. The installer will not overwrite extensions which are more recent, and will only upgrade older versions. You may need to restart the computer if this is the first time you have installed the InterLok Extensions.

#### **Installing ReWire**

Some systems will have a previous installation of ReWire, and the permissions will be such that Source-Connect cannot install the required components. If you encounter a failed installation issue, it is likely due to this. To install Source-Connect you can choose to either not include ReWire in the install process via de-selecting it from the 'Custom' panel of the installer, or remove any previous ReWire components from your system. Remove the following folder:

#### /Library/Application Support/Propellerheads Software

Source-Connect will now be able to complete the installation. Note that if you have existing ReWire components for other programs, for example Melodyne or Reason, you should backup, rather than delete, this folder and restore when required.

#### Uninstalling on Mac OSX

To uninstall Source-Connect, open the Installer image and run the Uninstaller package. This will not remove your settings and Q Manager folder. To manually remove all your stored Source-Connect and Q Manager data delete this folder:

/Library/Application Support/SourceElements

## 3. Setup and Settings

## 3.1: Basics

The following is a quick guide, which does not include working with Auto-Restore or Remote Transport Sync. See the section 7 in this guide for information on working with these technologies.

Basic steps in using Source-Connect are as follows:

- 1. Launch the Source-Connect application.
- **2.** Log in with your username and password.
- **3.** Select your send quality and sample-rate.

**4.** Set up your audio I/O in your System Preferences. Source-Connect Standard 3.7 uses your System Preferences audio to determine which audio device to use.

**5.** Select an online contact in your Contacts list and press 'Connect' in the Status (top) panel. This will connect both studios with a real-time streaming-audio session. Instant Messaging will be activated between the connected partners, and if the sample rate and channels are the same (e.g. 48khz mono), RTS (Remote Transport Sync) will also be enabled. During the session, you send compressed audio data to each other over the Internet. Be advised that if either user does not have sufficient bandwidth or has excess packet loss there is a possibility of an audible dropout. To minimize dropouts, see the support documentation online. You can also work with the Q Manager to ensure Auto-Restore provides clean recordings every time. Your connection partner must be using Source-Connect Pro for this.

6. Disconnect. This will end your audio session with the remote studio.

7. Log out.

## 3.2 Audio Input and Output

Source-Connect Standard 3.7 uses your System Preferences audio to determine which audio device to use. Simply open your System Preferences from the Apple menu at the top left of the computer, and choose Sound. Then select your audio I/O device for both input and output.

You can also choose to send audio directly to supported AAX, RTAS, VST and AudioUnit hosts with Source-Connect Link. See Section 7 for more information.



Contact our support team for assistance if required.

## 3.3: About Source-Connect

The About Box provides information on which version of Source-Connect you have installed. To view the About box, go to the Apple menubar, click on Source-Connect and then 'About Source-Connect'

## 3.5: Setting session parameters - Overview

To modify your settings, open the Audio Options menu. 3.7 features a stream-lined menu that shows your settings at a glance.

O O O Source	e-Connect
S	STANDARD
Connections: available time connected:	Low quality Medium quality ✓ High quality onnect
) send	✓ Mono Stereo
d8 -80 -50 -40 -	✓ 48khz 44.1khz
CONTACTS	Input ► System Output ► Link Show system audio

#### **Audio Options**

You will set your Audio I/O settings here, including what bitrate to send, whether to send and receive in Mono or Stereo, whether the sample rate of 44.1khz or 48khz and whether to use System audio and/or Source-Connect Link.

#### **Multi-Channel Devices**

IMPORTANT: Working with multi-channel audio devices means that you must have your input/microphone signal in Channel 1 of your device for Mono, and Channel 1 & 2 in your device for Stereo. Source-Connect only listens to channels 1 and 2.

#### A note on network capacity / bandwidth

Ultimately the actual capability of your network connection will determine the consistency of your sending and receiving reception. However you can optimize the quality of reception with the Audio Options setting you choose to use.

The following parameters can be specified:

- Sample rate (44.1khz or 48khz)
- Send quality (Low, Medium, High)
- Mono or Stereo
- System audio and/or Link for Audio I/O

#### Sample rate

Source-Connect will try to switch the hardware sample rate automatically to the setting you choose. If the audio sounds as if it is pitch-shifted, you should set this to the specific sample rate of your audio device.

#### Send quality

Source-Connect has three available quality settings: Low, Medium and High.

#### Low: 48kbps AAC.

Use when you are monitoring, or if there is insufficint bandwidth for higher quality settings.

#### Medium: 64kbs AAC.

Use when monitoring, or your connection partner does not need high quality audio.

#### High: 96kbps AAC

ISDN-standard compatible. Recommended for most cases.

#### Mono / Stereo

Use mono when recording voice or other single-mic signals. Use Stereo for monitoring/recording music.

#### System audio / Link audio

If you choose an active Link plugin for input only, the output will be your system audio, and conversely for choosing Link for the output only. The following section covers how to configure your System audio settings. **See Section 7** for using the new Link plugins with your DAW.

## 3.6 Setting up your Audio Device in System Preferences

Setting up your audio settings is simple – Source-Connect uses whatever is set in your System Preferences, or you can use the Link plug-in with your DAW.

You can change your audio device on the fly, while connected, as long as the device supports your current sample rate as set in Source-Connect. If you change the number of channels or the sample-rate, you will be asked to logout and login again.

Open your System Preferences and go to the Sound panel.

Choose the audio I/O device you wish to use and make sure you are getting a signal in your System Preferences. Adjust the levels as needed on your device.

5	iound Effects Output Input
Choose a device for sound in	put
Name	Туре
Internal microphone	Built-in Microphone
Line In	Built-in Input
CEntrance MicPort Pro	USB
Soundflower (2ch)	
Settings for the selected device	e:
The	selected device has no input controls
Input level:	
	(7
Output volume:	(

**Multi-Channel Devices** 

#### **IMPORTANT:**

Working with multi-channel audio devices means that you must have your input/microphone signal in Channel 1 of your device for Mono, and Channel 1 & 2 in your device for Stereo. Source-Connect only listens to channels 1 and 2.

SEE SECTION 7 ON USING SOURCE-CONNECT LINK

## 4. Your Profile and Contacts

## 4.1: Configuring your Profile

Your Contacts list and profile is managed on the Source-Connect website under your Account, which you can access by pressing the 'Go to online account' in the Login panel, or logging in to your account directly online. You can choose what information to display (or not to display). Your basic profile information is available to your Contacts via the Source-Connect software and, depending on the level of privacy you choose, may be viewable to all other users of Source-Connect.

See the Account and Profile pages for available options:

http://source-elements.com/account

http://source-elements.com/profile

### 4.2: Managing your Contacts list online

**To add a new Contact**, click on the 'Manage contacts' button or go to the Source Elements website and browse to My Contacts. You must be logged in to manage contacts.

Simply search or browse for the contact you wish to add and click on the 'Add contact' button:

http://source-elements.com/contacts

**IMPORTANT:** Newly added Contacts may not be immediately visible in your list while you are logged in to the Source-Connect plug-in. If you have added a new Contact, or know that a Contact has added you, please log out, and log back in to refresh the list. The website will let you know if you need to do this once you add a new Contact.

## 5. Using Source-Connect

## 5.1: Logging in

To login, enter your username and password and press the "Log in" button. If your login is successful, the Status panel will change its view: it will now show that you are able to establish an audio session.

Source	username: source
Go to online account	Login

## 5.2 Establishing a session

Upon logging in, the Contacts panel will list all the users you have in your Contacts list. Detailed user information is shown by double clicking on the name. A sliding panel will appear, click again on the name or the panel to close.

ONLINE echo*b     ONLINE isdn	ſ
ONLINE isdn	
ONLINE support_eu	
offline echo48mono	
offline outofhear	

Before connecting to a user and establishing an audio session, it is always recommended that you check your settings by connecting to any 'echo' user. To initiate an audio session, select the user in the Contacts panel with whom the session is to be established. It is only possible to connect to users who have Online status: that is, the users who are online and not already engaged in a session.

Upon selecting a user in the list, double click on the username in your Contacts panel. You will see that their name, email address and any personal details they may have provided appear a new sliding window from the Contacts panel. This can help you to confirm that you are actually connecting to the user you want. Click on the new panel window to close the sliding panel.

#### To connect:

Select the user you wish to connect with in the Contacts list and press the 'Connect' button in the Status panel to request a connection.

000	Source	e-Connect	
	• • • • Sa	STANDARD	
Onnections:	available	audio options:	
time connected:		High quality 🗘	Connect

If the remote user agrees to the dialog that appears immediately on their screen, the session is established.



If both users' port settings are correctly set and the audio settings are appropriate for your respective bandwidths, sending and receiving will begin. Audio activity is displayed in the signal meter. Otherwise (if the remote user disagrees or the request times out), the session is not established and a corresponding alert message is displayed.

#### **Failed connection:**

If you do not see a blinking '**sending**' or '**receiving**' light at the top of the plug-in it means that there is a problem with the network. Please review the Network Guide for information on how to resolve this:

http://source-elements.com/networkguide

## 5.3 Network timeouts

#### Request timeout: 30 seconds

This is the time required to reply to the confirmation dialog when establishing audio session. If you make a request, and see that your user stays listed as 'busy', you know that they are online, but are away from their computer. You can cancel your request at any time by pressing disconnect.

#### Streaming timeout

If the audio session is established but no audio data is received your 'receiving' blinker light will stop blinking to let you know that the network is not sending you any audio. If this happens during your session, try disconnecting and reconnecting with a lower bitrate setting.

#### Source-Connect session timeout

Source-Connect keeps your connection alive indefinitely, until you either log out or disconnect your network. In some cases you may receive a dialogue 'Connection reset by peer': this means you were unexpectedly disconnected – usually because your network was no longer responding. Go ahead and reconnect. If the problem persists it is usually due to insufficient bandwidth resources.

#### Automatic reconnection in case of Network failure

Source-Connect will also recognize if the connection has been lost with the Source-Connect servers. If this is the case, it will not disconnect your session automatically, but continue to assume that your Contact partner is still available. Once the server connection is restored you will see an Instant Message stating this. This is a new feature designed to help in cases where network anomalies stop you from making a server connection, but you may still have peer-to-peer network service and you can continue with your audio session.

## 5.4 Session status

When the session is successfully established, the current session properties are shown in the Status panel. You are informed of the bitrate quality and sample rate that is being sent and received, and whether you are sample-rate converting.

<ul> <li>connected to: source audio options: time connected: 00:02:33:34 High quality + Discon</li> <li>send Q</li> </ul>	nect
• send •	nect
• send •	
Send a	
High,44.1khz dB -80 -50 -40 -34 -25 -20 -18 -14 -12 -9 -6 -4 -3	-2 0
receive	

**Session properties:** 

**Sending light:** If the connection is successful your sending light will blink. If you do not have a sending light blinking but you do have a receive light, it is likely to be an audio application/hardware problem. Try restarting and verify your host settings.

**Receive light:** If the connection is successful your receiving light will blink. If you do not have a receiving light blinking it is likely to be a firewall or other network problem. You should verify that the Port message is successful ('Open' on your Standard status panel). See the online Network Guide for more information.

#### Sample-rate: The sample-rate that Source-Connect is sending and receiving

The sample-rate listed below the sending and receiving status indicate the sample-rate that the codec within Source-Connect is working at and not necessarily the same sample-rate that your connection partner is receiving. If they are different Source-Connect will indicate that it is sample-rate converting and certain functions are unavailable.

**'Q' icon on sending meter:** The other side has 'Restore' or 'Replace' checked in their Settings panel and is capable of requesting Restore and Replace processes. To use Auto-Restore you must be at 44.1khz, or use Medium or High quality at 48khz, as the Low setting at 44.8khz is down-sampled to 44.1khz due to codec compatibilities. When you are sending Q processes Source-Connect will cache the entire session to your hard-drive. You can delete this cache via the Q Manager. See the Q Manager section for more details and troubleshooting tips.

## 5.5 Instant Messaging

During an audio session it is often useful to exchange instant messages with remote user, for example if you are not able to send or receive a signal for any reason, or you do not wish to interrupt the audio signal with a message to the other side.

To send a message, type in the lower textbox at the bottom of Instant Messaging panel and enter your message. Press either enter or return key or click the Send button. Sent and received messages appear in the text display panel above.

echo*b	11/01/11 10:20AM
Hi, getting my signal ok?	
source	11/01/11 10:20AM
all great thanks!	

## 5.6 Remote Transport Sync (RTS)

send		(SMPTE Time *) (23.976 FPS *)
receive		00:00:00:00
?	(Manage contacts)	Q Manager Logout

Access the RTS panel by clicking on the RTS bar.

RTS is an integrated method of synchronizing remotely connected Pro Tools transports. Purpose-built for ADR, overdubbing and remote monitoring RTS makes distance collaboration easier and more efficient than it's ever been. Source-Connect 3.7 implements several new features and now includes support for Tempo maps.

The following is a very brief overview. For specific instructions and screenshots, please see the comprehensive Remote Transport Sync FAQ:

http://source-elements.com/support/rts

How to enable RTS:

Create a new mono Audio track. From the Inserts->RTAS-> Instruments menu, instantiate 'Se ReWire'. (Note: you do not have to select an output in this plugin). When you establish a session over Source-Connect the SEND and RECEIVE buttons will now be enabled in the RTS panel.

#### Using RTS

To use RTS, one user must be in SEND mode and the other in RECEIVE. The RECEIVE user has no transport controls - effectively they are now slaved to the SEND user who has 2 possible types of operation: ADR mode or Mix/review mode.

#### Source-Connect Standard can only send ADR mode, but can receive both ADR and Mix/Review modes. Source-Connect Pro can send both ADR or Mix/review modes.

This means that to use RTS with Source-Connect Standard when sending, you must press Play on the RTS panel in Source-Connect. You cannot press play in your host / DAW application.

Please review the Remote Transport Sync FAQ for details on ADR or Mix/review modes and running an RTS session:

http://source-elements.com/support/rts

## 5.7 Closing a Source-Connect session

A Source-Connect session can be disconnected by pressing the Disconnect button in Status panel, by logging out, or quitting Source-Connect.

## **5.8 Logging out of Source-Connect**

Logging out can be performed manually by pressing the Log out button at the very bottom of the Source-Connect window. Once you are logged out, you can log in again at any time and with any valid Source-Connect account.

### 5.9 Privacy

Once you have established a connection and you are sending and receiving audio, you are sending data directly to and only from your remote user. Instant Messages are not captured or stored on our servers.

For a comprehensive outline of our Privacy policy, please read: <u>http://source-elements.com/privacy</u>

## 6. The Q Manager: Auto-Restore

This section provides a complete overview on using Source-Connect 3.7 with Auto-Restore. With Source-Connect 3.2 and up, a new version of the Q Manager provides easier and faster Restore and Replace operations, plus additional back-up options.

This section is divided into 10 parts:

6.1 Ultra-QuickStart Guide
6.2Lifecycle of a recording
6.3 Launching the Q Manager
6.4 What is Auto-Restore?
6.5 Comprehensive Q Manager interface overview
6.6 Activity: Cancel all
6.7 Q Menubar options
6.8 Invalid Q Manager settings and warnings
6.9 Troubleshooting
6.10 Common Q Manager issues

The online Q Manager Help guide is also available directly as a link from the Q Manager setup panel and will take you to the comprehensive Q Manager guide online. You can refer to this guide whenever needed for quick help, or feel free to contact support for an overview and demo session.

If you have any questions on working with the Q Manager and Auto-Restore and Auto-Replace please contact Support.

## 6.1 Ultra-QuickStart Guide

This section is provided for the most common case uses when your connection partner is using Source-Connect Pro. The Q Manager will not be functional if both sides are using Source-Connect Standard.

- 1. Launch Source-Connect Standard
- 2. The Q manager will login automatically.

**2.** Connect to a Source-Connect Pro user. Check that you have a Q icon on the Send status, next to the blinking Send light.

**5.** Have your connection partner record a test file – it should show up immediately in their Q Requests. In most cases the file will return on the status of your connection partner's Activity panel" 'Restore not required', meaning that your connection is stable.

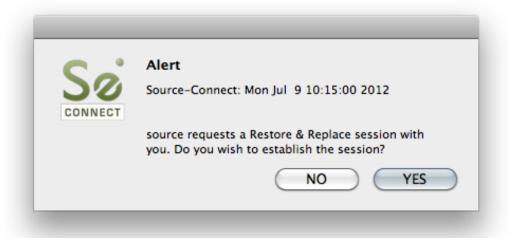
In cases where your connection is not the most stable, or you are recording very long files where the chance of a drop-out is more possible, your connection partner's status should come back saying Restored, and you're good to go!

## 6.2. 'Lifecycle' of a recording

This section is a step-by-step guide to why you would want to use Source-Connect with Auto-Restore. It shows how the Q Manager works by describing the 'lifecycle' of a file recorded in Pro Tools and the subsequent restore and final replace process.

#### 1. Request a Source-Connect session

When you request a Source-Connect session with a Source-Connect Pro user, you will be shown a dialog indicating that you are requested to send Restore data.



#### 2. Ready to record

Once you accept you have now established a Source-Connect session with Restore enabled. You should now see a Q icon to the left of the Send meter, indicating that you can send Restore data.

000	S
connected to: echo	o*b
time connected: 00:0	0:5
$\frown$	
Send Q	
Send Q High,48.0khz	-50
	-50

#### 3. Recording an audio file

In this example we are sending a sine-tone signal via the Signal Generator plug-in to be recorded, and for the purposes of demonstration we are causing a significant number of dropped packets. You can see on the waveform in the timeline when the recording is significantly degraded: this is the audio received by your connection partner that they are recording from you, and the drop-outs are caused by an unstable internet connection.

What your connection partner sees when recording a drop-out:



**IMPORTANT:** If your connection partner is not sure on how to record with Restore enabled, please refer them to the Source-Connect Pro documentation or contact Support for a demonstration. It is recommended that all Source-Connect Pro user enable Auto-Restore to ensure perfect recordings, every time.

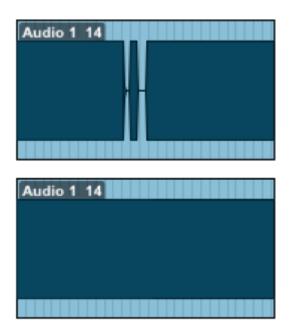
#### 4. Restoring the audio file in the background

Once you stop recording the Q Manager on the other side will start the restore process if required. Your connection partner can continue recording multiple files as the restore process does not interrupt your session in any way.

#### 5. Taking a look at the restored file

Since we have recorded a sine-tone signal, it is simple to see visually how the restore process works. If your connection partner selects the filename in the Pro Tools bin and chooses 'Recalculate waveform overviews' they can now compare the files before and after the restore process visually:

Before and after the restore process:



They can now see (and hear on playback) that they have a completely restored audio file with perfect playback.

## 6.3 Launching the Q Manager

Launching Source-Connect and the Q Manager

When you launch Source-Connect and login, open the Q Manager via the 'Q Manager' button at the very bottom. The Q Manager will open, and automatically login to your Source Elements account. You can then establish a connection with your Source-Connect partner.



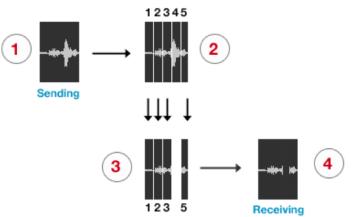
## 6.4. What is Auto-Restore?

With traditional long-distance recording, whether with Source-Connect, ISDN or any network-based transmission, the send signal is subject to various issues which may cause dropped packets and therefore 'glitches' in your recorded audio. Previously the only method to ensure a fully complete recording was to ensure your connection partner was also recording locally, so you could transfer this audio after your session and manually replace it in your edit.

Source-Connect with Q is the only available automated method to ensure that your recordings are perfect every time, with our Auto-Restore functionality.

#### How does it work?

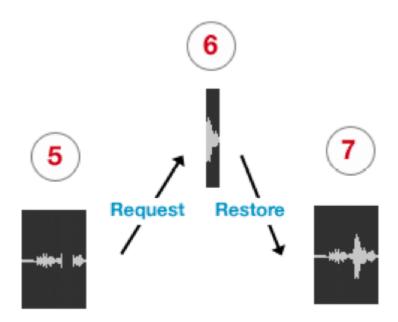
First, an overview of how audio is transferred and recorded over packet-based transmission lines.



- **1.** The audio signal is sent through Source-Connect, and is split into packets.
- 2. These packets are sent sequentially to your connected partner over the internet.
- 3. If a network error occurs, a packet may not arrive in time.
- 4. If this occurs you will hear a minor glitch in the received audio signal.

Source-Connect has built-in error correction modes to try and resolve these dropped packet issues in realtime, however under certain circumstances a packet may not be retrieved in time to recover the signal before it is recorded.

Auto-Restore resolves this problem by working in the background in non-realtime and restoring your recorded audio files.



**5.** The audio file is scanned when recording completes.

**6.** If any missing packets are detected they are requested from your connected partner, who has stored them during the connection.

7. Your file is restored and is now available for flawless playback.

### 6.5. Comprehensive Q Manager interface overview

This section is a complete overview of all available options and their functions.

Settings panel

© Stat	us:	ONLINE	1	
Log	ged in as:	source		$\sim$
		Auto		
Log	in mode:	Auto	•	
		(3)	Options •	Cancel all
	2011/01/1			n l
	io 1_10.wav			
	io 1_11.wav		Dono	(4)
	store 12f4fe io 1_12.wav		Done	
	store 846e7		Done	U
	io 1_14.wav		Done	
	io 1_15.wav			Ă
	io 1_16.wav			•
► Aud	io 1 17 way			
Name:	Session 201	1/01/11 13:38	:57	
Date:	2011/01/1	1		
Time:	13:38:57			(5)
Session II	D: 30edc163-	f857-40b9-98a	1-fa8474a54af4	$\smile$
Dele	te all sessio	n data	Using 739	9KB. 7GB available. 97%
Q: 2.0.0.8.1011	03.2049M		Manager help	) (Shut down Q

#### 1. Login status

Verify that your account is logged in. If you have a login error, check your internet settings or contact support.

#### 2. Login mode

In most cases you will leave Login mode on Auto. If your system is used by other users, you may wish to set a Manual login mode so that a single Source Elements account is used for all Q processes. This means that if another Source-Connect user was using your system for a session, previous session data will still be able to be accessed by their connection partners after you have logged in to Source-Connect.

#### 3. Options

Status: 0	NLINE	
Logged in as: so	ource	
Login mode:	Auto 🗘 Edit	
	Options  Cancel all	
	Rename Session	
Session 2011/01/11 1	Delete selected session	
Audio 1_10.wav	Delete all session data from dis	sk
Audio 1_11.wav		
▶ Audio 1_12.wav		
Audio 1_14.wav		
Audio 1_15.wav	U	
Restore 39b83cc8	Done	
Audio 1 16 way	4	

The options menu applies to the Session and Files that have accumulated as your connection partner on Source-Connect Pro is recording you.

#### **Rename Session**

The default session name is the date and time it was created. Rename it here.

		Q manager (Standard)	_
© Stat	Sø	Type new session name: Session 2011/01/11 13:38:5	
Log		Apply Cancel	

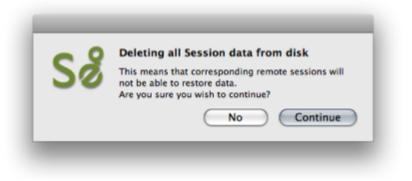
#### **Delete selected session**

This removes the session from the disk – once it has been removed your connection partner can no longer request Restore data for this session. Useful for freeing up disk space if required, without deleting newer sessions.



#### Delete all session data from disk

Same as the Delete all Session Data button on the lower section of the panel. This option is not available when you are currently connected with Source-Connect.



#### 4. Session and file history

Each time you establish a connection with Source-Connect a new session is created in the Q manager. If Restore data is requested, that session becomes visible so you can verify the status of the request. If any network issues are encountered you will be given an error. For support with any errors encountered please contact support.

Each upload process will show a progress bar and the current status. The currently active session will be displayed in blue lettering, for easy viewing. When the upload is completed successfully the status will be 'Done'.

The current disk usage is displayed to help you know when you may need to allocate additional resources, or delete the session data from disk (see further in this section).

#### 5. File and session info

Detailed information about the session, who it was with, time information and length of session. Useful if you are looking for a particular session to get it's status.

#### 6. Delete all upload session data

Each time that you establish a session where your connection partner has selected Restore and/or Replace, Source-Connect will immediately begin storing all session data in compressed form. This can quickly fill a harddrive: at the rate of 56MB per hour.

The Q Manager helps you keep track of your hard drive availability by letting you know when you have less than 20% available.

You can choose to delete this stored upload data at any time, and once you have deleted this data your connection partner will not be able to request any Restore or Replace processes. Please ensure that your connection partner has received everything they need before you delete this data.

If you choose to delete your session data while connected, your current session will not be deleted. This can be useful if you find you are running out of drive space and cannot reestablish the session.

#### 7. Q Manager version and Help

This shows your installed version of the Q Manager. Source Elements periodically releases updates, so if you are having any issues please contact Support with this information.

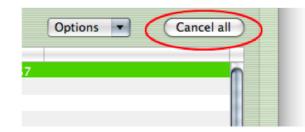
To get more online help about the Q Manager, click on the Help button to open the specific support site for Source-Connect Standard and the Q Manager.

#### 8. Shut down Q

Press this to shut down the Q Manager. You can also Quit via the icon on the Dock, or use the File menu.

Once the Q Manager is shut down, any requests made to you from your connection partner will not be communicated and they will receive a process error.

### 6.6 Activity: Cancel all



If a transfer is in process and you need to conserve bandwidth or no longer wish for the process to continue, the Cancel All button will pause all transfers currently in process.

Your connection partner can request to resume any transfers again at any time, however transfers will be reset so any data that has been uploaded or downloaded will begin again.

## 6.7. Q Menubar options

The Q Manager has several functions available to you via the Menubar and also provides a quick glance at what processes are active.

	Sé			
		loads: 9 requests, 100% complete	ed .	
Status:	Show Q Manager			
Logged	l in as:	source		
Login i	node:	Auto 🗘 🤇	Edit	

**Q Uploads processes / status** Request statistics

#### Show Q Manager

Open the Q Manager window.

## 6.8 Invalid Q Manager settings and warnings

If your Q Manager settings are invalid for some reason, you'll be given a dialog warning. Possible warnings are:

- Invalid username or password
- Duplicate login, possibly on different machines
- Q Manager is unable to connect to the internet

#### Invalid username or password



This means that your username and password are incorrectly entered, or your username has not be validated to work with Source-Connect 3.0 and up. If you are sure that your username and password are correct, you can validate your details simply by visiting the Download page on the Source Elements website:

http://source-elements.com/downloads

Then click on the Download page for your Source-Connect version. The username and password that you are logging into Support with will now be validated to work with the Q Manager.

#### **Duplicate login on different machines**

If you see this error, it means that another computer is currently logged in with your username and password. If you choose to continue the other machine will be logged out. It will get this same message, so be aware that if someone else is seeing this you may have an issue of both of you not being able to login. It can also mean that your computer restarted unexpectedly, and the Q Manager did not manually log out, in which case ignore this message and continue with your login.



#### **Q** Manager cannot connect to the Internet

If the Q Manager cannot connect to the internet, perhaps due to a firewall settings or other network configuration issues, the status will be Offline. Check that your internet connection is working, and if you have a built-in firewall you will need to allow access to the Q Manager and Q Daemon.



## 6.9 Troubleshooting

For each file and process there is a status. For successful files the status will be 'Done'. If you see that the status for a file, or files, is 'Failed' it means that either you or your connection partner has invalid settings or a component is not properly installed or configured. There are various reasons as to why a file may fail to replace or restore. Usually the issue is due to incorrect Network settings on your connection partner's end – have them verify their FTP settings or contact Support.

Q Manager errors are rare, and generally mean that the other side is offline, or has moved or deleted the Q data. Contact support with any specific questions, we will be able to provide detailed information on a case-by-case basis.

### 6.10 Common Q Manager issues

A comprehensive guide is available online: <u>http://source-elements.com/support/q</u> The following are common reasons why Auto-Restore may fail.

1. **Check that Q is enabled**. You should have a Q icon to the left of your Source-Connect receiving meter if you are the recording end, and on the Sending meter if you are the sending end. Verify that the Restore and/or Replace checkboxes are checked in the Source-Connect Pro Settings panel before establishing a connection.

## 2. It is important that your connection partner using Source-Connect properly understands how to use the Auto-Restore feature with their recording host.

3. **Q Manager should be launched:** make sure you can view the Q Manager via the MenuBar icon and see the Q Manager window when the Q Manager is the front-most facing application.

### 6. Files should be recorded while Source-Connect session was established.

Files recorded when Source-Connect is not established will not appear for processing in your connection partner's Q Manager.

#### 7. Sample-rate converting is not supported.

Verify your connection is not sample-rate converting.

#### 8. Post-processed audio files will not be restore or replace compatible.

It is strongly recommended that you avoid post-processing any files recorded by Source-Connect until you have fully restored or replaced the files you need.

## 7. Source-Connect Link

## 7.1 What's Source-Connect Link?

New since 3.6, Link provides a direct, internal connection via RTAS, Audio Units and VST plugins to and from the Source-Connect application directly to your supported DAW of choice , such as Pro Tools, Logic or Nuendo.

Source-Link is a quick, easy way to use Source-Connect, Remote Transport Sync, and the Q Manager with your DAW when you don't have the external equipment and/or a big enough audio interface to use Source-Connect with its own audio device.

This affords you to use the full features and stability of the Standalone application while taking advantage of the flexibility and recording/mixing features of your DAW with out needing additional cables or audio interfaces..

## 7.2 Quick-Start: Using Link

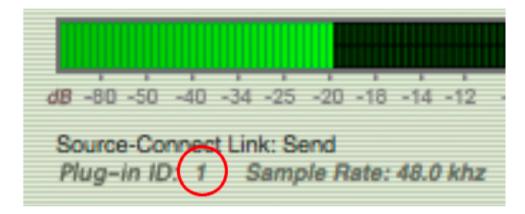
A quick-start guide follows:

1. Insert "Source-Connect Link" into your DAW on an Aux track



In Pro Tools, for example, this plugin is under the 'Other' menu, or 'Source Elements' for HD.

2. Note the plugin ID that shows up in the plugin window



**3.** Select this ID in your Audio Options->Link menu.

O O O Source	e-Connect
S	STANDARD
Connections: available time connected:	Low quality Medium quality ✓ High quality onnect
• send	✓ Mono Stereo
dB -80 -50 -40 -	48khz ✓ 44.1khz
	Input 🕨 🗸 System
CONTACTS	Output Link Show system audio

To determine where in your Audio I/O you choose to use the Link plug-in see the next section below (7.3).

## 7.3 Example uses

#### There are four common use cases for using the Link plugin:

#### 1. Record

You want to record your connection partner from Source-Connect into your DAW: Place the link plug-in in your DAW so it is the last item in the path prior to your record track. Then select Link as your output in the Audio I/O Settings in Source-Connect. For talk back use any direct audio input of your choice for the into Source-Connect

#### 2. Send a mix

You want to send a live audio mix from your DAW to your Source-Connect partner: In your DAW create a duplicate channel that has your main mix for as its input, Route your talk back through your DAW and into this channel. Then place the link plug-in on this channel. Select Link as your input in the Audio I/O Settings in Source-Connect. Select a direct audio output of your choice so you can hear your connection partner.

#### 3. Send a processed microphone signal

You want to use plugins or processing built-in to your DAW before sending your microphone signal to Source-Connect: Place the link plug-in in your DAW so it is the last item in the path, after any plugins or processing you need to do. Then select Link as your input in the Audio I/O Settings in Source-Connect. To hear your connection partner, in Source-Connect use any direct audio output of your choice in Source-Connect

#### 4. Send and receive through your DAW

In certain cases you may wish to use Link for both sending and receiving to your DAW. This may be the case where record and monitoring is being switched several times during the session, or in a large session where the engineer may want all their I/O integrated in one mixer. To set up link in this way there are two basic options.

**a-** One link plugin for Input and Output. In this mode Select the same link ID in Source-Connect for input and output. In your DAW place Source-Connect in the same routing configuration as you would have with Source-Connect 3.0 RTAS/VST/AU.

**b-** One link plugin for Input and one link for Output. Some DAWS do not allow the routing flexibility for the convenience of an integrated send/receive plug-in. In the case where separate link plug-ins are required the user should combine the routing for methods 1 and 2.

**Please note**: when using Link for both send and receive additional latency can cause an extra delay of up to 150ms depending on your DAW settings. Use digital audio I/O where possible.

## 7.4 Pro Tools HD

Pro Tools HD does not support the use of the Source-Connect Link plug-in for reliable performance. Pro Tools HD users should use the proper external digital I/O setup with Source-Connect Pro. While the Source-Connect Link plug-in will work in Pro Tools HD, because of various issues with the RTAS engine in Pro Tools HD, certain intermittent performance situations can arise. More information: <u>http://source-elements.com/source-connect/standalone</u>

### 7.5 Remote Transport Sync

Sync to Picture, ADR and for overdubbing

You can use Link in any of the three scenarios above. Then initiate the SeRewire device in your DAW's rewire feature set. Please refer to your DAWs Rewire instructions as well as the specific RTS section of this manual for further information.

## 7.6 Supported DAWS / Audio Hosts

This is not a comprehensive list, please contact us if your DAW is not listed here.

Pro Tools	Digital Performer
Logic	GarageBand
Nuendo	Ableton Live
Cubase	Adobe Audition
Reaper	

Sample sessions to help you get started with Link here:

http://source-elements.com/support/link

#### **Unsupported hosts**

These hosts have been found to not work with Source-Connect due to the way that they are configured to use plugins or due to incompatibilities.

Twisted Wave	Tracktion
Bias Peak	Audacity

## 7.7 Trouble shooting

The main issue with Source-Connect Link may be additional latency. To mitigate latency between Source-Connect and your DAW try setting your plugin buffers and DAW host processing buffers to the lowest possible setting.

For example in Pro Tools open Playback Engine settings and lower the Host Processing buffer to 256 or lower. Source-Connect Link is a slim-line plugin and should not incur much additional CPU usage.

## 9.3 Integrated debugging with Support

Source-Connect 3.7 comes with a new integrated debugging method to send connection information to Support when requested. To send a debug session, click on the Help menu and choose 'Start debug session'. Once the issue has been reproduced, click on 'Stop debug session'.

# 8. Troubleshooting Source-Connect and Known Issues

## 8.1 Known Issues

#### CPU speed / RAM configurations:

Source-Connect performs best on a minimum of a 1ghz G4 with at least 1GB RAM. If your computer is configured lower than this, you may experience difficulty while reading and writing to disk, and your Pro Tools or VST host may tell you that you have insufficient resources. Because USB devices (for example, if you are using an Mbox for your audio I/O) also require additional resources we recommend running Source-Connect on newer machines.

It is not recommended that you connect your audio devices via a USB hub unless the hub is self-powered.

#### Network bandwidth:

The most common cause of difficulty is insufficient network resources. Assuming your network has sufficient bandwidth the issue may be due to internal congestion, for example an FTP server is running or other people are heavily using the network. A common fix for this is to install a dedicated DSL line, or apply QoS ('Quality of Service') settings on the router.

For further details and tools see the Support section online or contact Support.

## 8.2 Integrated debugging with Support

Source-Connect 3.7 comes with a new integrated debugging method to send connection and audio device information to our support team. To send a debug session, click on the Help menu and choose 'Start debug sesson'. Once the issue has been reproduced, click on 'Stop debug sesson' and your support advisor will work with you to resolve issues with more detailed information.

📹 Source-Connec	ct Standard	Edit	Window	Help	
	000		Source		Search
	C	0			Source-Connect Standard Online Help Start debug session
	20	0	use	ername:	username
	SOUR • I • m •		pas	ssword:	
	Go to onlin	ie accour	nt		Login

## 8.3 Reporting Issues

To report an issue, please provide the following information:

- Source-Connect build number (available from the About box)
- System configuration (Operating system, computer hardware)
- DAW version and hardware e.g. Pro Tools HD 8.0.1, Digi192
- Network configuration i.e. LAN, DSL, wireless etc
- Source-Connect settings: username, settings.
- Bandwidth report, for example from <u>http://speedtest.net</u>
- Description of what action(s) you were taking when the issue occurred, for example who you were connected to and what the settings were.
- Where possible, send a Debug request to Source Elements support.

Technical Support is available via email, telephone and directly over Source-Connect.

## 9. Contact Support

**Contact Source Elements for technical and general support:** 

Comprehensive documentation is available on our website. If your question is not answered please contact us via telephone, email or we can arrange communication over other methods such as Skype on request.

Online support:

http://www.source-elements.com/support

**Online forum:** 

http://source-elements.com/community

**Telephone:** 

Chicago: +1 312 706 5555 London: +44 (0)20 7193 8755 Sydney: +61 (02) 8005 5903

Telephone hours: 6am - 6pm Central Time US (Chicago time).

After hours:

Please leave a message with your name and phone number and we will return your call as soon as possible. If we can't take your call immediately we call back at least the same day, if not earlier. We can also schedule an appointment for a convenient time for you.

Email:

Technical support:	support@source-elements.com
Sales:	sales@source- elements.com
General:	info@source-elements.com

When emailing Support, please provide us with the information required to resolve the issue: for example, your Source-Connect login, computer type, host version, and as much detail about the problem you are having as possible. This will assist us in responding to you with relevant assistance more rapidly.

Mailing address:

Source Elements LLC 515 N. State St 25th Floor Chicago, Illinois 60654 United States

## **APPENDIX I**

### **Connection limitations with Standard to Pro**

Source-Connect Standard does not support the following features available in Pro:

**Bitrate/quality:** Higher than 96kbps mono / 192kbps stereo

VPN mode: Not available in Source-Connect Standard

**Remote Transport Sync** Review mode is not available (play direct from DAW)

Multi-Connect Source-Connect Standard can only run once per public IP

#### Sample-rates:

Source-Connect Pro may connect at 88.2 or 96khz. Source-Connect Standard will downsample this to 44.1 and 48khz respectively.