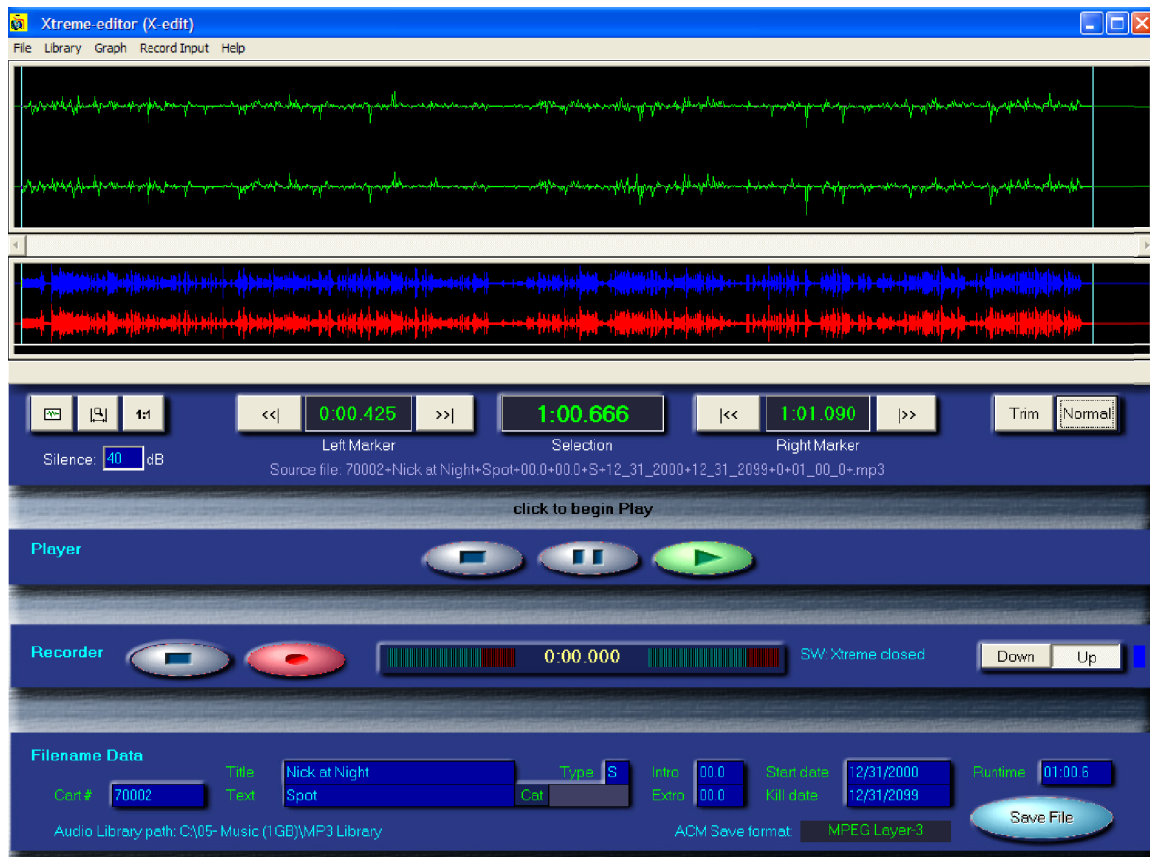


# X-edit



## Installation and Operations manual

Revision: 1.0.0, 8/19/2014



## **Welcome to X-edit**

The Xtreme-Editor (X-edit), is the first in a family of production products designed specifically for use with the Digilink-Xtreme automation system.

X-edit is a versatile and powerful production tool for renaming or editing existing audio files as well as producing new audio files in the Digilink-Xtreme naming format. X-edit can open existing files or produce new ones with the built-in recorder. It is a single block editor that can be used to trim files and has features that will auto-trim silence from the front and back of a file and normalize the audio level of a file. X-edit is optimized for short program audio editing: spots, promos, jingles, songs, news, etc.

## Introducing X-edit

X-edit is a free production tool for use with Digilink-Xtreme automation systems. It is designed for audio library management and basic production of Digilink compatible audio files. X-edit is a software product that is designed to operate on Windows XP computers. It uses the internal sound card on the PC for recording and playback. The software can be mapped to the on air audio library for new production or data management (renaming) of existing library files. Also, X-edit can be used to rename or process audio files that have been produced in 3rd party audio production software.

### 1. Audio Processing

For best on air play in Xtreme, audio files should have a consistent audio level and have no silence on the front or end of the files. Therefore X-edit has a normalize audio level feature, an auto-trim silence feature, and a single block editor for manual trimming silence.

### 2. Radio Data (renaming)

Radio specific data for Xtreme is stored in the filename of the audio file. X-edit therefore has a renaming feature that can name new or existing files into the Digilink naming format.

### 3. Recording New audio files

X-edit features a digital audio recorder. The recorder can up record variable length audio files or down record fixed length audio files. In the down recording mode, a record time (such as 30 seconds) is entered. When the record button is clicked on the recorder will start recording when it first sees audio and record for the length of the down timer (such as 30 seconds).

**Auto-trim silence from the front and back of the file**

**Auto-normalize the audio level to max level**

**Single Block Editor**

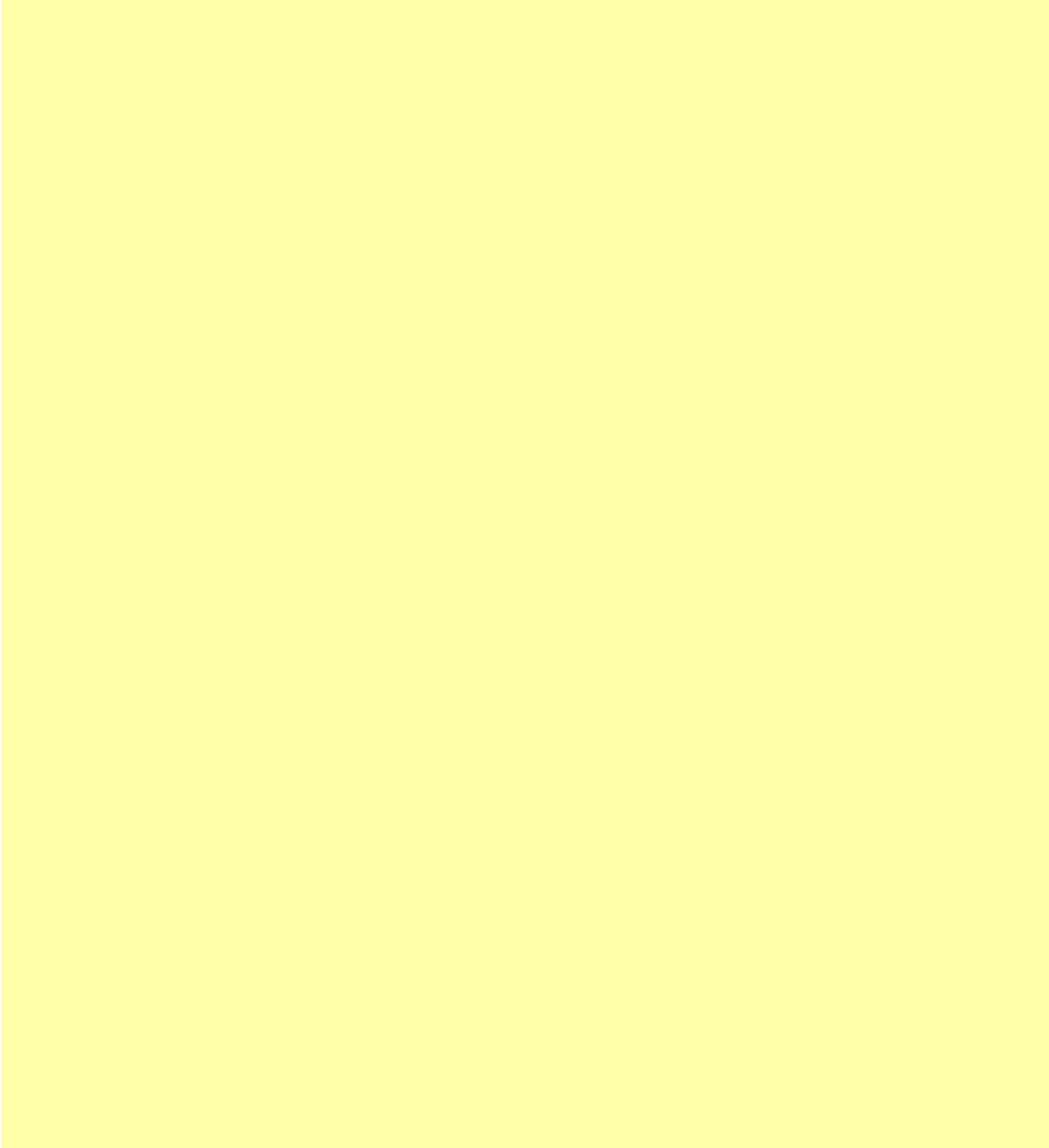
**Player**

**Recorder**

**Renaming Window**

**Save the audio file or block displayed in the Block editor**

**Installing X-edit**



## Installing X-edit

### 1. Required hardware

X-edit uses the soundcard and sound resources built into Windows PCs. It therefore requires a sound card inside the PC or an external USB sound card. The card should have a mic input and stereo line input. A stereo line output allows the audio output to be connected to an external amplifier and speakers. We recommend a >1GHz PC, 512MB RAM, Windows XP. The software will operate on Windows 98SE, ME, 2000, and XP.

### 2. Software Installation

If the software is provided on a CDROM, it will auto-install if the auto-start feature is enabled on the CDROM. If the software doesn't auto-start after inserting the CDROM, then go to the 'Start' menu, 'My Computer', select the CDROM, and click on the 'Setup.exe' file. The software will self-extract and create shortcuts on the desktop, start menu, and program menu. It will create an 'Arrakis' directory on the root directory of the Windows directory.

### 3. X-edit and Xtreme on a single PC

X-edit is designed to be used on a PC that is networked to a separate Xtreme automation system PC. However, it is possible to use both X-edit and Xtreme simultaneously on a single PC. This can tax the resources of the PC and interfere with on air operation. If unacceptable interactions occur it will be necessary to use two different PCs.

### 4. PC Sound Card setup

X-edit uses the sound resources built into a Windows PC. To set up these resources go to: 'Start, Control Panels, Sound and Audio Devices, Sound Recording, Default device'. The selected 'default' record sound card should be the sound card that you have chosen for X-edit to use. Next, you need to select the sound card inputs that X-edit can record from. Click on the 'Volume' button. This will open the mixer. The mixer has channels for the mic, stereo line input, etc. depending on the specific features of your sound card. Be certain to 'select' all of the channels that you want to mix to the record input of X-edit and to set the volume on the faders to full on. If you have any questions, refer to the help system built into the operating system. Note that a similar mixer is provided for the 'Play' part of the sound card. It also needs to be set up for your PC. If there is no audio out of your PC, the 'Play' mixer is probably muted or the volume is turned down.

### 5. Network System Considerations

X-edit can edit and record audio files directly to the audio library directory of the automation system. It can therefore be used on a PC in a production studio that is networked to the automation system.

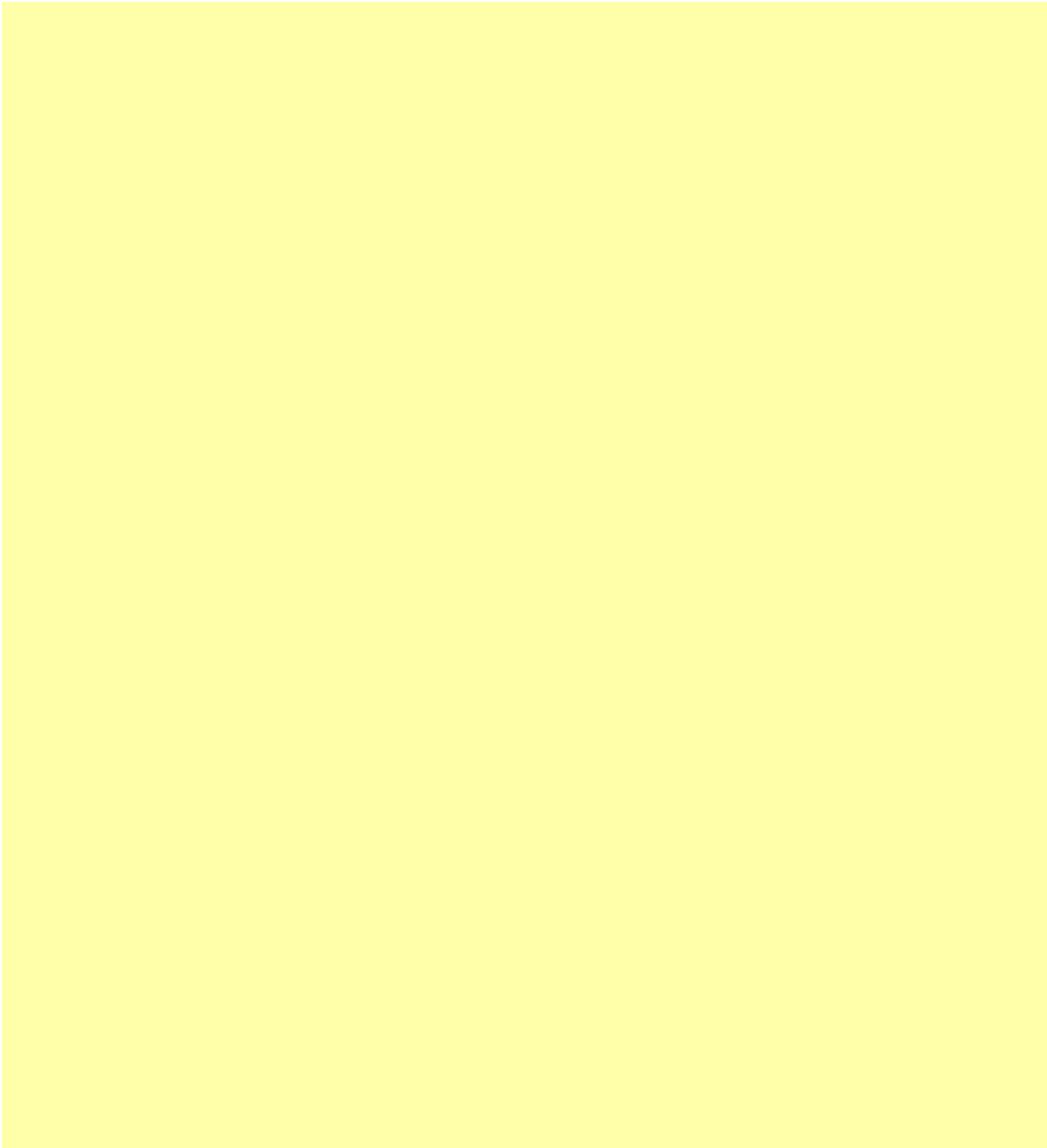
### 6. The Bridge Switcher and X-edit

X-edit has serial control for a Bridge router so as to be able to select among a variety of audio inputs (1-16). It must be connected to the Bridge via an RS232 serial cable for control and an audio cable for audio routing. X-edit and Xtreme can not control the same Bridge at the same time via the RS232 com port.

X-edit controls the 'Cue' switcher built into the Bridge. The Bridge is a stereo 16 input by 3 output audio routing switcher. The outputs are (1) Program, (2) Xtreme Timed Recorder, (3) Cue. X-edit controls the Cue switcher and will not interrupt Program or Timed Record audio.

The Bridge has two cue audio outputs. One is balanced (Molex connector, +4dBu) and the second is unbalanced (1/8" stereo jack, -10dBu). The 1/8" stereo jack cue output on the Bridge can be connected to the 1/8" stereo line input jack on the PC.

**Setting up X-edit**



## Selecting a Library path

### 1. Selecting an Audio Library folder for X-edit

X-edit can find, open, edit, and save individual audio files or it can display and work on all of the audio files in a single library folder. This page describes how to select an audio library folder.

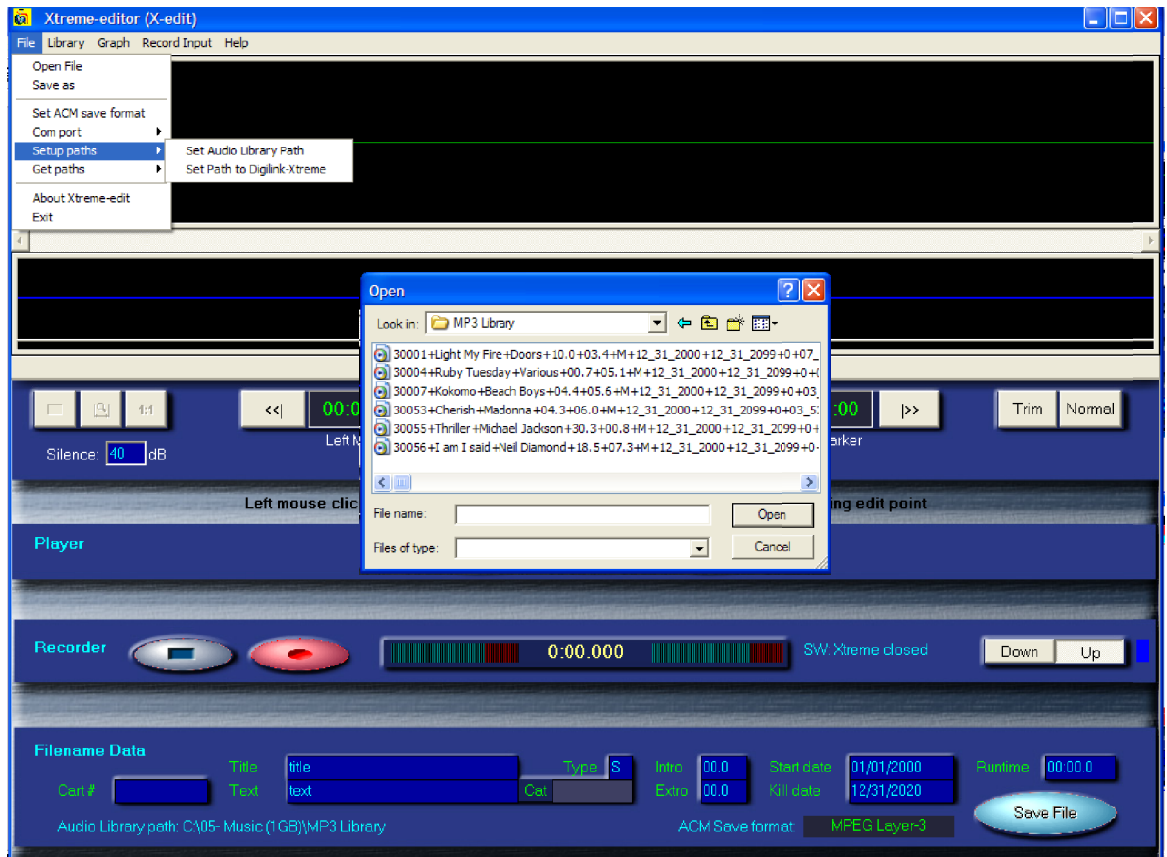
### 2. Working Directly on an Xtreme Audio Library

X-edit can work on local audio files or it can directly work on the audio files in an On Air Xtreme audio library. Xtreme uses a single audio library directory that all audio files must be placed in. X-edit can record, delete audio files, and rename audio files into this library. X-edit must know where this audio library is located. To do this, the path to the Xtreme library must be selected.

*IMPORTANT: if X-edit is to work directly on audio files in the Xtreme library folder, X-edit must also know the path to the actual Digilink-Xtreme.exe application. How to do this is described on the following page.*

### 3. Selecting the Library path

To select the Library Directory, open the software, go to 'File, Setup, Set Audio Library Path'. This will open a Find File dialog box. Browse for the directory that your audio library is located in and double-click on any audio file in the directory. This will select and save this library as the default library. Files saved to disk by clicking on the 'Save File' button will save to this directory. This will also be the default directory that will be displayed under the 'Library' menu item at the top of the screen.



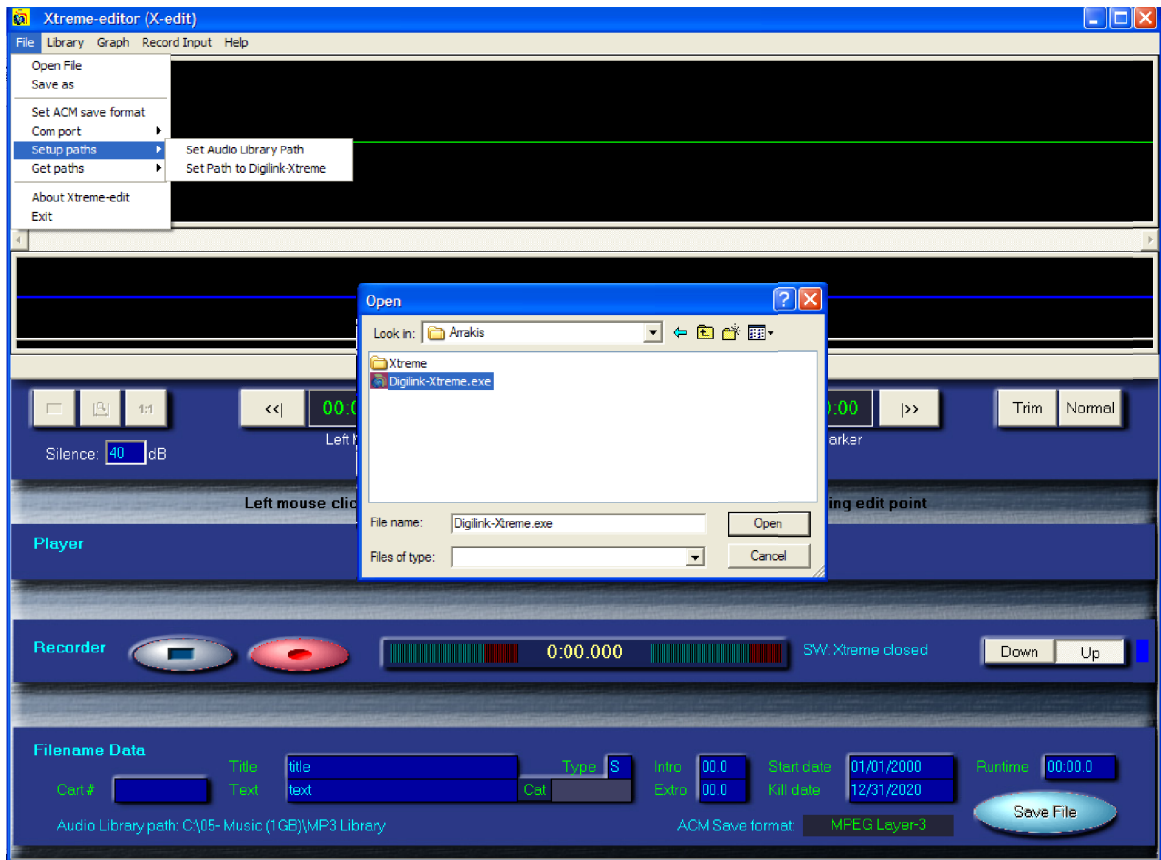
## Selecting an On Air Xtreme for Library updating

### 1. Updating the Xtreme Library

Xtreme uses a single audio library directory that all audio files must be placed in. When Xtreme is first opened, it loads a list of all audio files in this directory. Once opened, Xtreme does not react to changes in the audio files in the library directory. As an example, a new audio file placed directly into the library directory will not be available in the Xtreme directory for playback. To add an audio file to Xtreme, that file must be placed into the 'Arrakis\Xtreme\!!! Import Audio' directory. Xtreme tests this directory every 30 seconds and then moves any new files into the Library directory. X-edit however can talk to Xtreme and therefore can record files directly into the Xtreme library folder.

### 2. Selecting the Path to the Xtreme Library

For X-edit to talk to Xtreme, it must know the path to the Digilink-Xtreme.exe application. To set this path, go to the menu item -- File\Setup path\Set path to Digilink-Xtreme. Browse for and click on the Digilink-Xtreme.exe application that X-edit is to work with. This path will be saved.





## Controlling the Arrakis Bridge Cue switcher from X-edit

### 1. An input Selector for Recording in X-edit

X-edit can control the cue switcher in an Arrakis Bridge as an input selector for the X-edit recorder. This provides up to 16 inputs to be selected for recording in X-edit.

### 2. X-edit can control the Bridge in Two ways

X-edit can control a Bridge directly via RS232 serial cable or by sending control commands over the network to the Digilink-Xtreme.exe application.

### 3. Control by RS232 Com port

Because Xtreme and X-edit can not BOTH control the Bridge via RS232 at the same time, RS232 control of a Bridge by X-edit will typically be done in a production studio that has a second Bridge and is a backup for an On Air Xtreme system. In that case, the Bridge would be controlled by X-edit RS232, and X-edit would be shut down if the Xtreme application was opened to backup On Air.

### 4. Control of Digilink-Xtreme.exe by Network commands

The second way that X-edit can control the Cue switcher portion of an on air Bridge is by sending network commands to the on air Xtreme application. This requires X-edit to have the path to the Xtreme application and for the on air Xtreme system to be on. If the path to Xtreme has been selected in 'File\Setup Paths\Set File to Digilink Xtreme', then X-edit will automatically try to communicate with the remote Bridge.

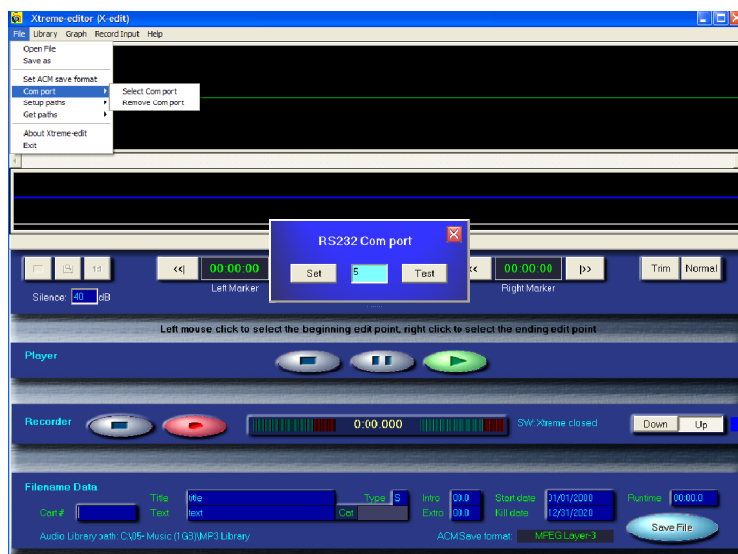
## SELECTING AN RS232 COM PORT

### 1. RS232 com port setup for Bridge

To setup the RS232 serial port, open the software, go to 'File, Setup, Com port, Select Com port'. Enter a com port number (typically 1-10) and click on the 'Set' button. If the number does not correspond to a com port on your PC then an error message will pop up. If an error message does not pop up, then it is a valid com port. However, it may not be the com port that is connected to your Bridge. To determine that, be certain that the Bridge is connected and powered on. Click on the 'Test' button which will query the Bridge for its ID string. If an ID string pops up then you are correctly communicating with the Bridge.

### 2. Removing the Com port

The saved com port can be removed so that X-edit will not query the com port. To do this, simply click on Com port, Remove Com port.



## Choosing a Compression Format

### 1. Audio Formats that X-edit will Open

X-edit will open, display, and edit .mp2, .mp3, and .wav (PCM) files.

### 2. Audio Formats that X-edit will Save

Files can be saved in .mp2, .mp3, and .wav (PCM) file formats. Saving in MP2 or MP3 requires that the ACM encoder codec be present on your PC.

### 3. Wav (PCM) uncompressed Formats

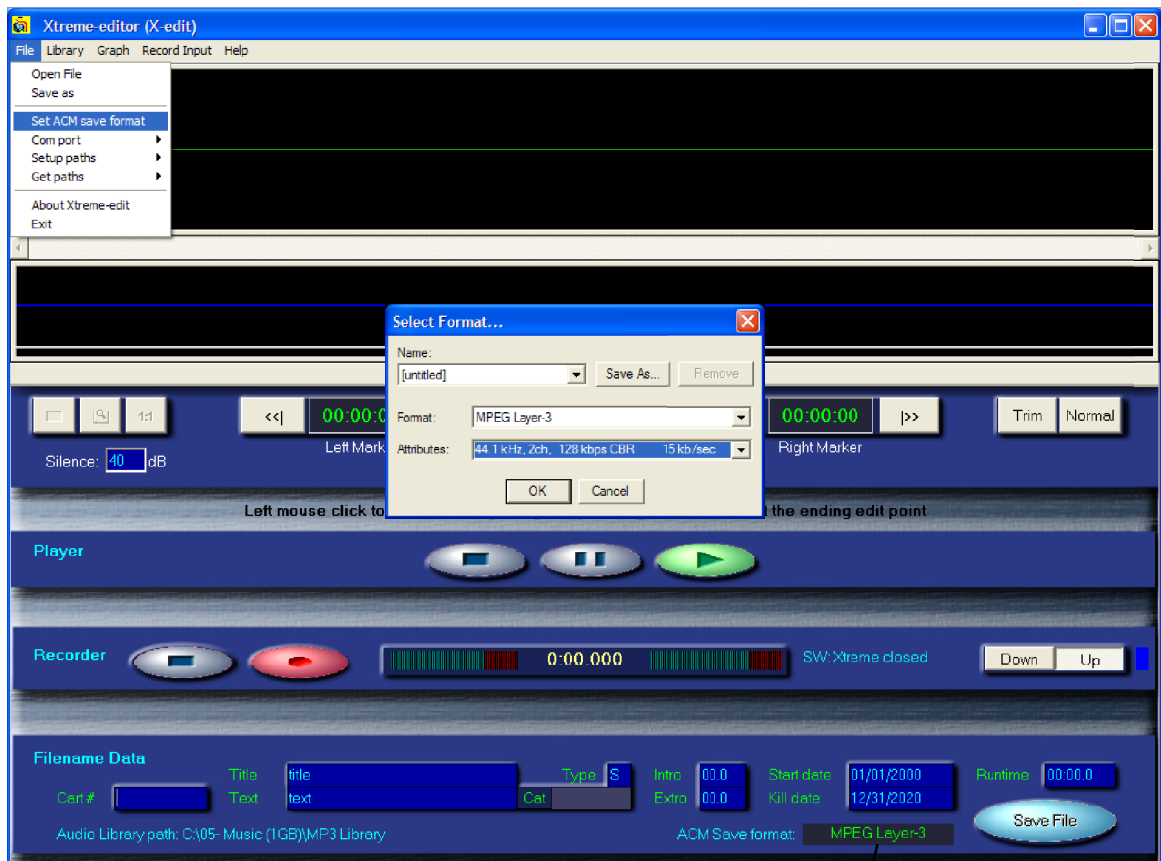
Wav format files do not require an encoder. However, the format of the Wav file must still be selected or Windows will use a default setup that may be unacceptable. CD quality PCM is 44.100kHz, 16 Bit, Stereo, 172 kbit/sec

### 4. MP2 & MP3 Compression Formats

Xtreme uses the Windows Audio Compression Manager (ACM) to save files in .mp2 or .mp3 compression formats. An MP2 or MP3 encoder codec is required on your PC to use these formats.

### 5. Selecting the Compression Format for a Saved File

Go to 'File\ Set ACM Save Format' and follow the selection dialogs. A list of Windows Audio Compression Manager (ACM) encoder codecs on the PC will be displayed. X-edit supports PCM, MP2, and MP3 formats. It may be necessary to purchase a 3rd party MP2 or MP3 encoder if your PC did not come with that encoder. The selected format will be saved and used when the software is opened.

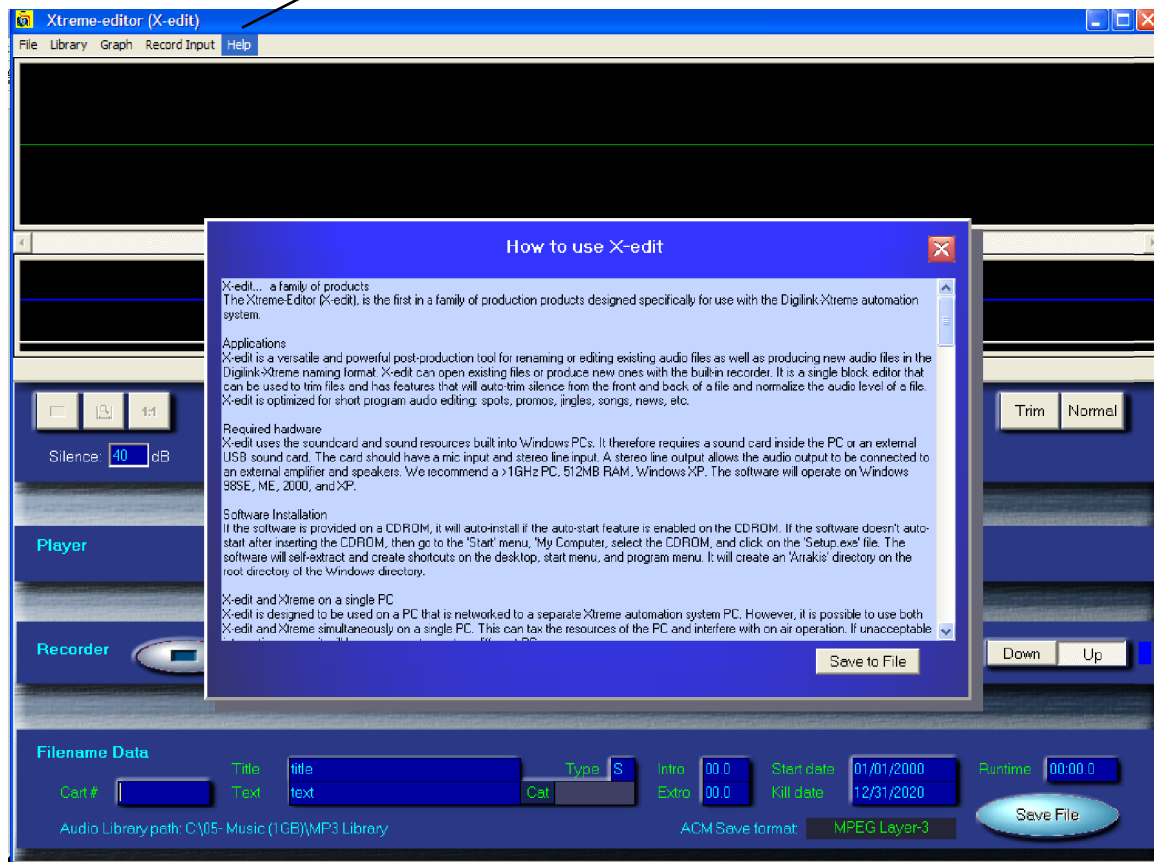


Displays the selected Save format

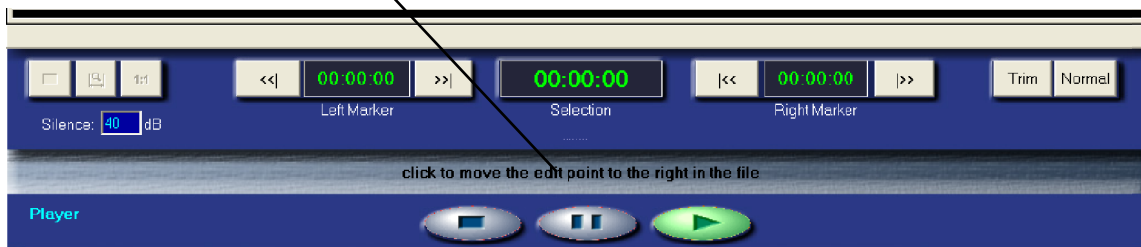
### On screen Help system

X-edit comes with this manual in electronic form, a topic based on screen help manual, and comment line help associated with the placement of the mouse cursor.

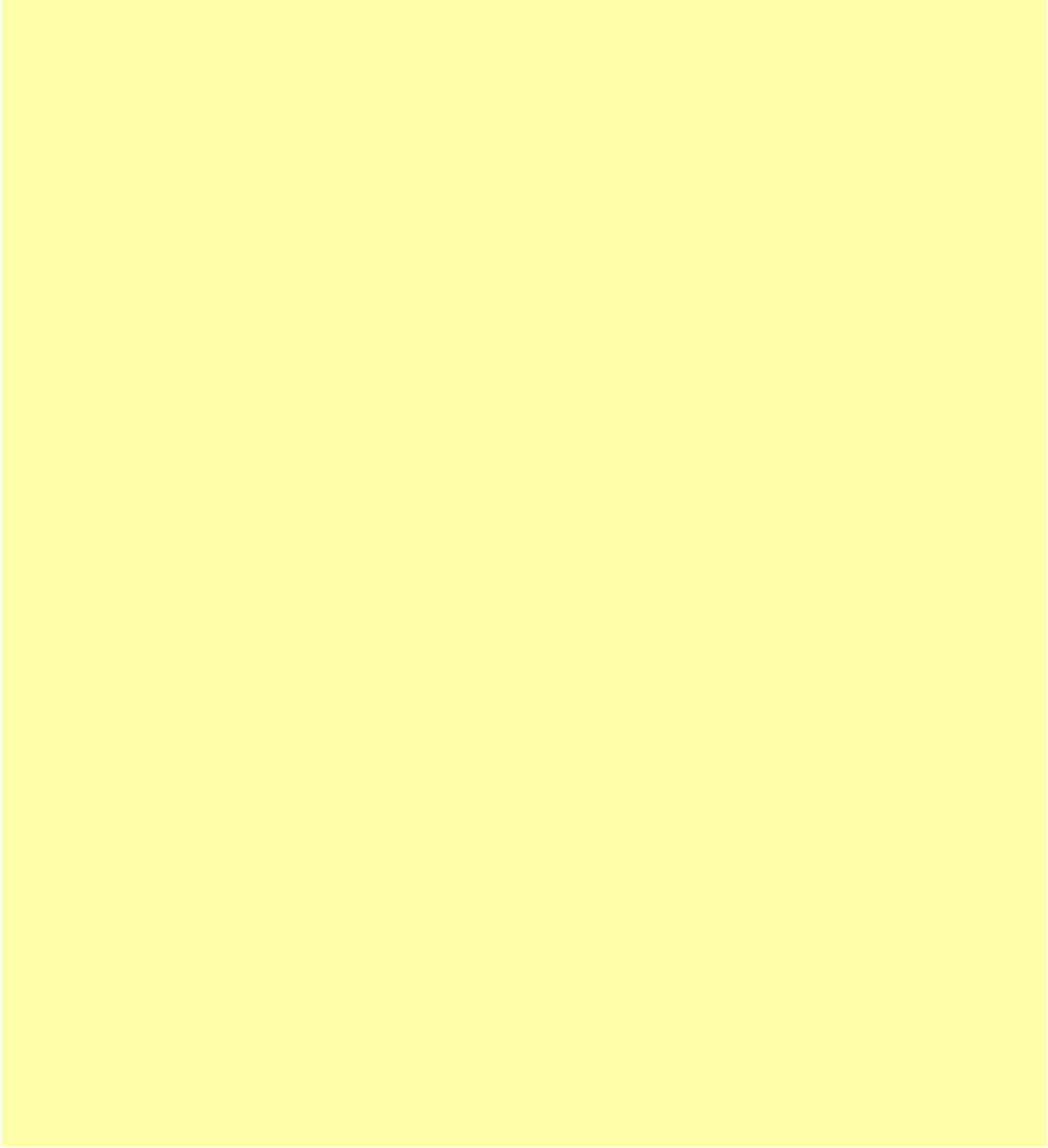
**Help menu item**  
click on the menu item to open the on line text manual



**Comment Line Help**  
put the mouse cursor over a control and see a one line help message



**Using X-edit**



# The Basics of Using X-edit

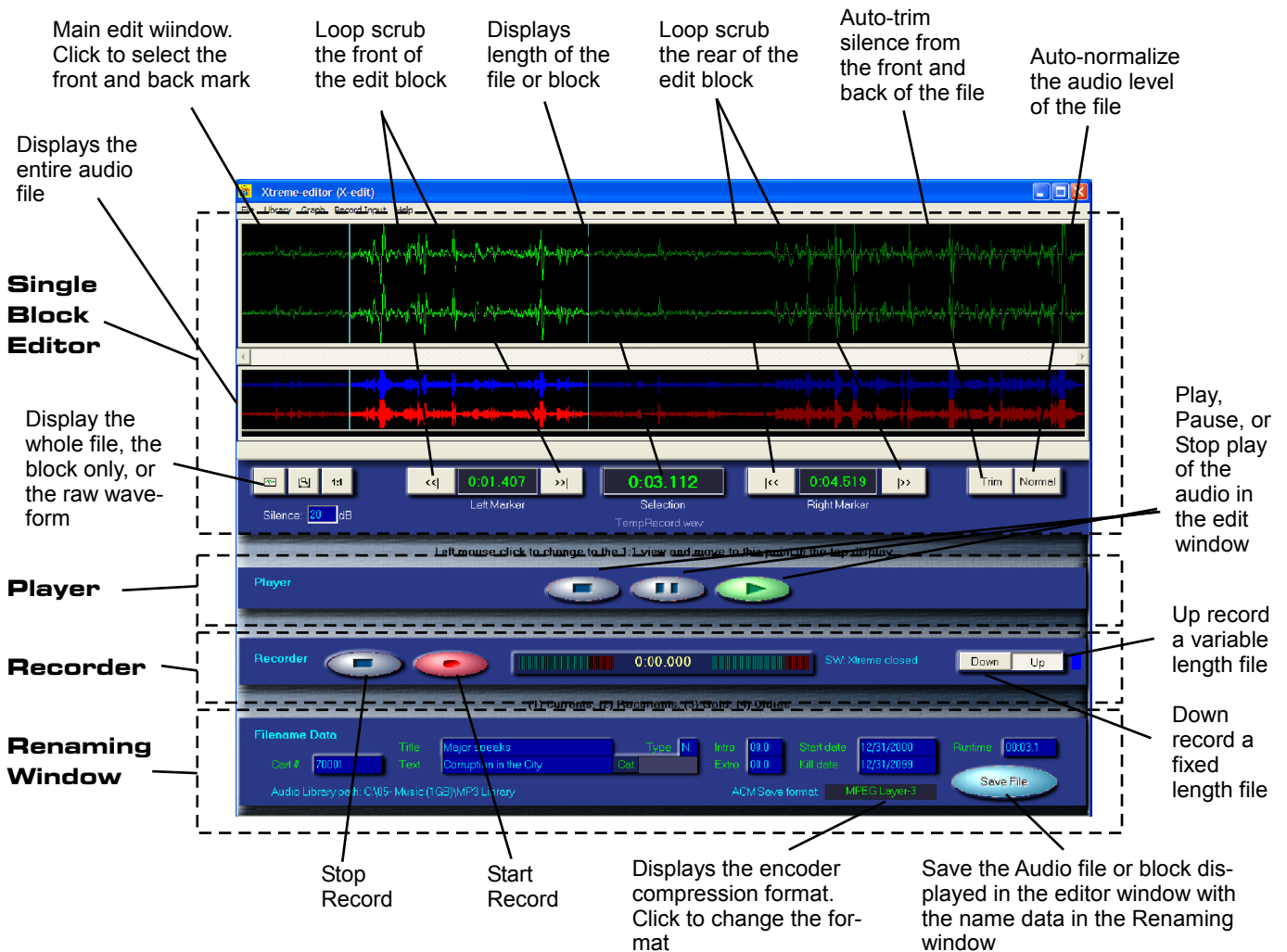
X-edit is designed for audio library management and basic production of Digilink compatible audio files. The screen is simple and easy to use.

## 1. Working with an Existing File

To find a file to edit, simply click on the 'File\Open' menu item or the 'Library' menu item. A file will be displayed as shown below. Create an edit block (if desired) by clicking with the left and right mouse button to set the end points. Click on the 'Play' button to listen to it. Enter the cart number and other data in the Renaming Window. Click on the 'Trim' button to auto-trim the front and back of the file and the 'Normal' button to automatically adjust the audio level. Click on the Save button at the bottom of the screen and the file will be saved with the filename data or click on the 'File\Save as' menu item and save the file with another name.

## 2. Recording New audio files

X-edit features a digital audio recorder for real time Radio production direct to audio. The recorder can up record variable length audio files or down record fixed length audio files. In the down recording mode, a record time (such as 30 seconds) is entered. When the record button is clicked on the recorder will start recording when it first sees audio and record for the length of the down timer (such as 30 seconds). When the recording is complete, the waveform will be displayed in the edit window. Click on the play button to play the file and then adjust and save it as described in 'Working with an Existing File' in point (1) above.



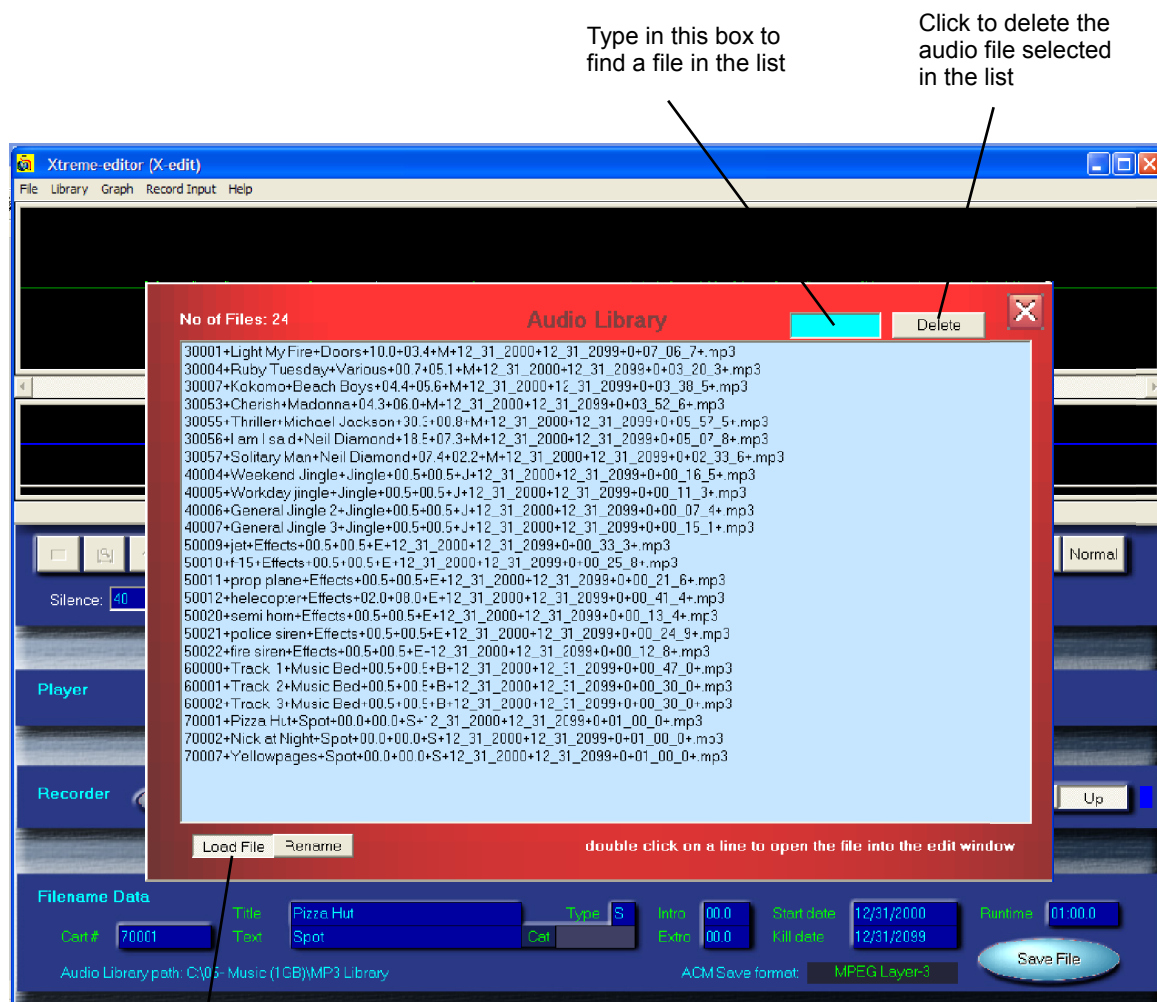
## Loading Audio files for Editing

### 1. Opening an Existing Audio File

Click on 'File, Open File' on the menu. This will open a 'Find File' dialog box. Browse for an audio file and select it. The audio file will load up and be displayed as a waveform in the edit window.

### 2. Opening the Library Folder for audio file selection

Click on the 'Library' main menu item. A window will open. Double-click on a file in the list box. The audio file will load up and be displayed as a waveform in the edit window.



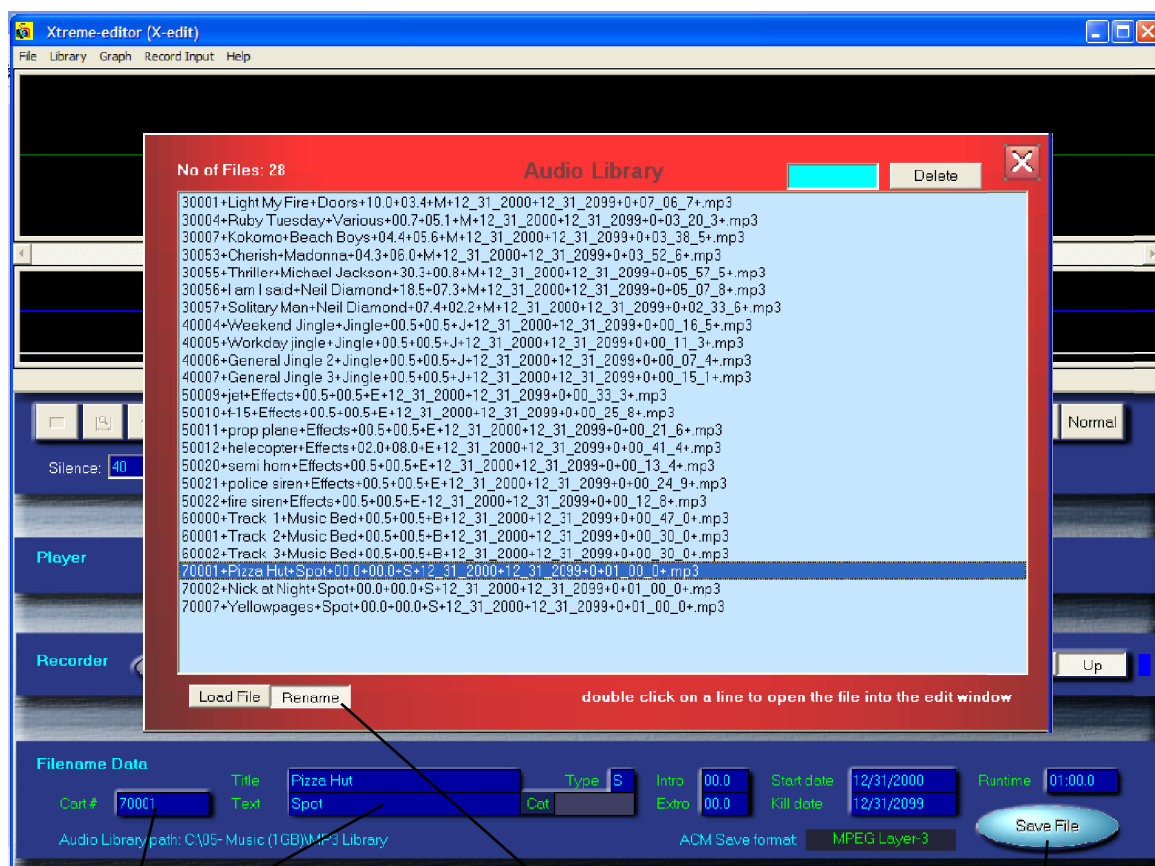
If the 'Load File' button is down, double clicking on a line in the list will load that file into the edit window

## Renaming Audio files in the Library

The library list (under Library in the menu) displays a list of all of the audio files in the library directory. There is a two position switch at the bottom of the list labeled, 'Load File' and 'Rename'. If in the 'Load File' position, double click on a line in the list to load that audio file into the edit window for trimming. If placed in the 'Rename' position, then clicking on the file only loads the filename (does not load the audio). If you change the fields in the filename and click on the 'Save File' button then you can quickly change filenames without playing or editing the audio.

### Naming a File in the Xtreme naming Convention

Xtreme stores radio specific data (such as kill date) in the Windows filename. The 'File Data' section of the X-edit screen is used for naming audio files. Enter cart number, title, etc into the filename boxes.



Change data in the naming fields

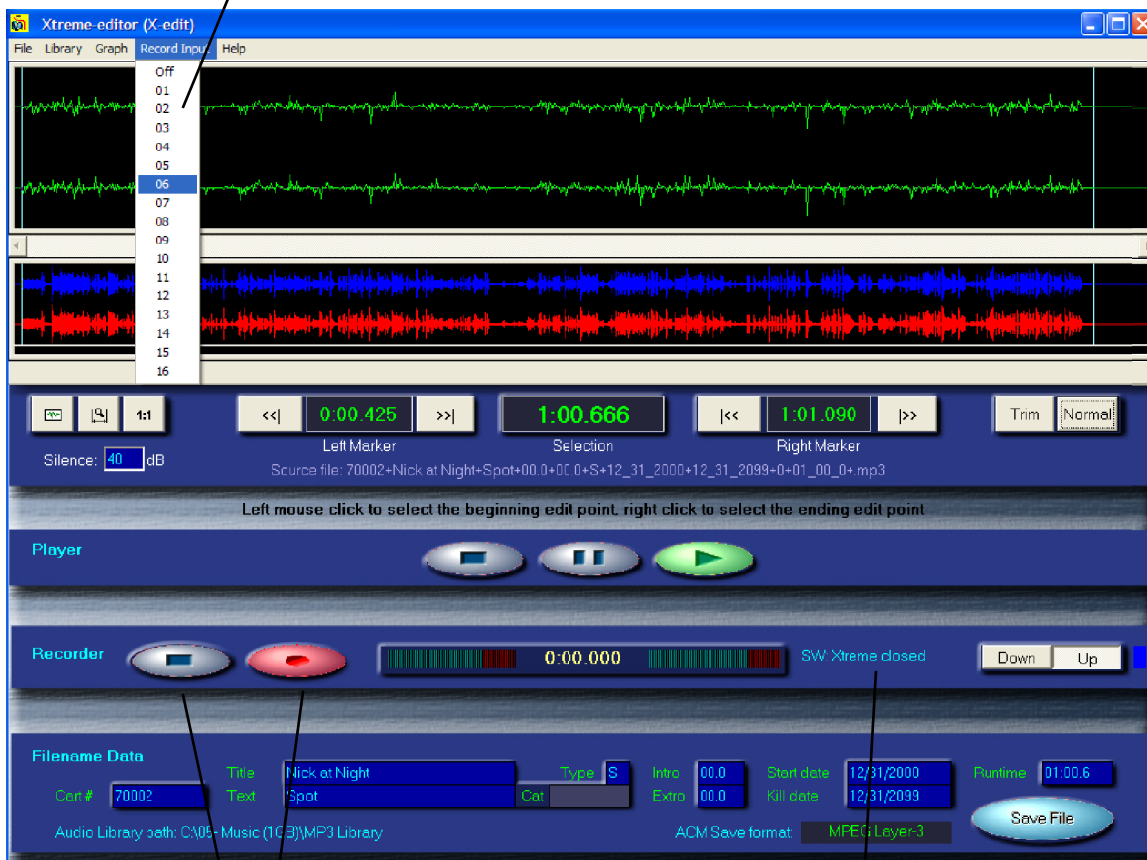
Click on the 'Rename' button to rename audio files. Click on a line in the list and the selected file will load to the Rename Window.

Click to Save name changes

## Using the Bridge switcher

If X-edit is connected via an RS232 serial control cable (or set up for network Bridge control) and an audio cable to an Arrakis Bridge, then X-edit can select the record audio input. The Bridge features 16 selectable inputs that X-edit can then record from. To select an input, click on the 'Record Input' menu item and then select the record channel from the drop down list.

Select a Record input from the pull down menu



Record normally

Displays the selected Record input



## Audio Recording

The recorder has two buttons at the right side (Up, Down). For normal manual recording, select the Up button. For recording to begin with audio and count down to a stop time, select the Down button. The trigger level to start recording is set by the Silence edit window in dB (default = 40dB).

If Up is selected, the timer will operate as an up timer. Recording will start when you click on the start record button (red) and stop when you click on the stop record button (light blue).

If the 'Down' button is selected, an edit box will appear allowing you to select a record time in Minutes (00) and Seconds (00). The default is 30 seconds. Set a desired time and then the timer will be a count down timer and the recorder will automatically stop when it reaches zero (00:00). To start recording, click on the record button (red). Recording (and the timer) will not start until audio is present. To stop recording, either click on the stop record button (light blue) or wait until the timer times out to 00:00.

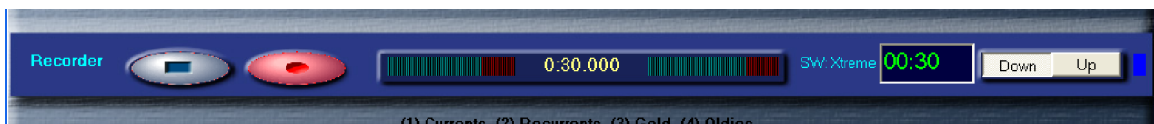
The VU meters are active while recording is on while the edit window remains static. Once recording is complete, the file will be displayed in the edit window.

Once a file has been recorded, you can trim silence with the 'Trim Silence' button, mark a block, or Normalize the audio levels.

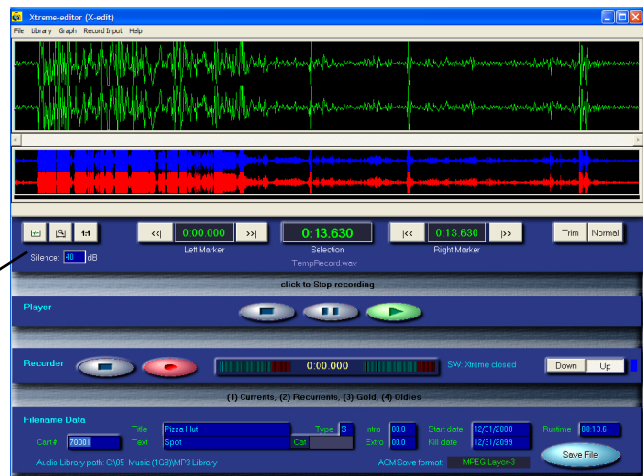
### Up recording



### Down recording (fixed length record starting with audio)



Set the silence threshold in dB below peak level. Default is 40dB.



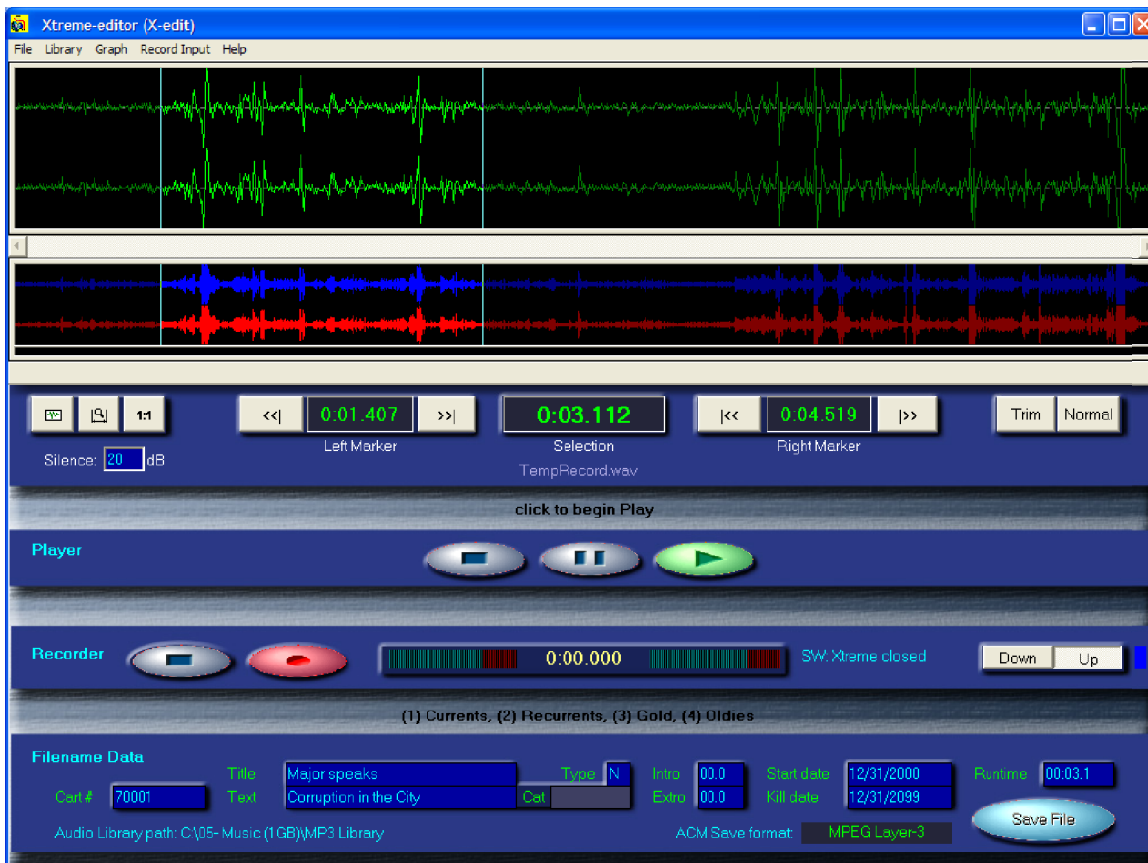
## Editing a File

### 1. Creating an Edit block

To create a left marker, LEFT mouse click on the waveform while the file is not playing. A line will be displayed. To create a right marker, RIGHT mouse click on the waveform in the edit window.

### 2. Scrubbing a Left or Right marker

Once a marker has been selected, click on the << or >> buttons to play a short segment of audio at the marked point. The point will move left or right by about 20milliseconds each time the button is clicked. In this way you can quickly scrub to an exact trim point on your block.



## Processing a File

### 1. Trimming Silence from a File

X-edit has two ways to trim silence from an audio file. The first is to load the file into the edit window and then to create an edit block with the silence removed. The second is to load up the audio file into the edit window and then to click on the 'Trim' button. It will trim silence below a preset level (set in the Silence edit box in dB) from the front and back of the file. If there is noise however, it can not automatically trim the file. Manual editing will be required.

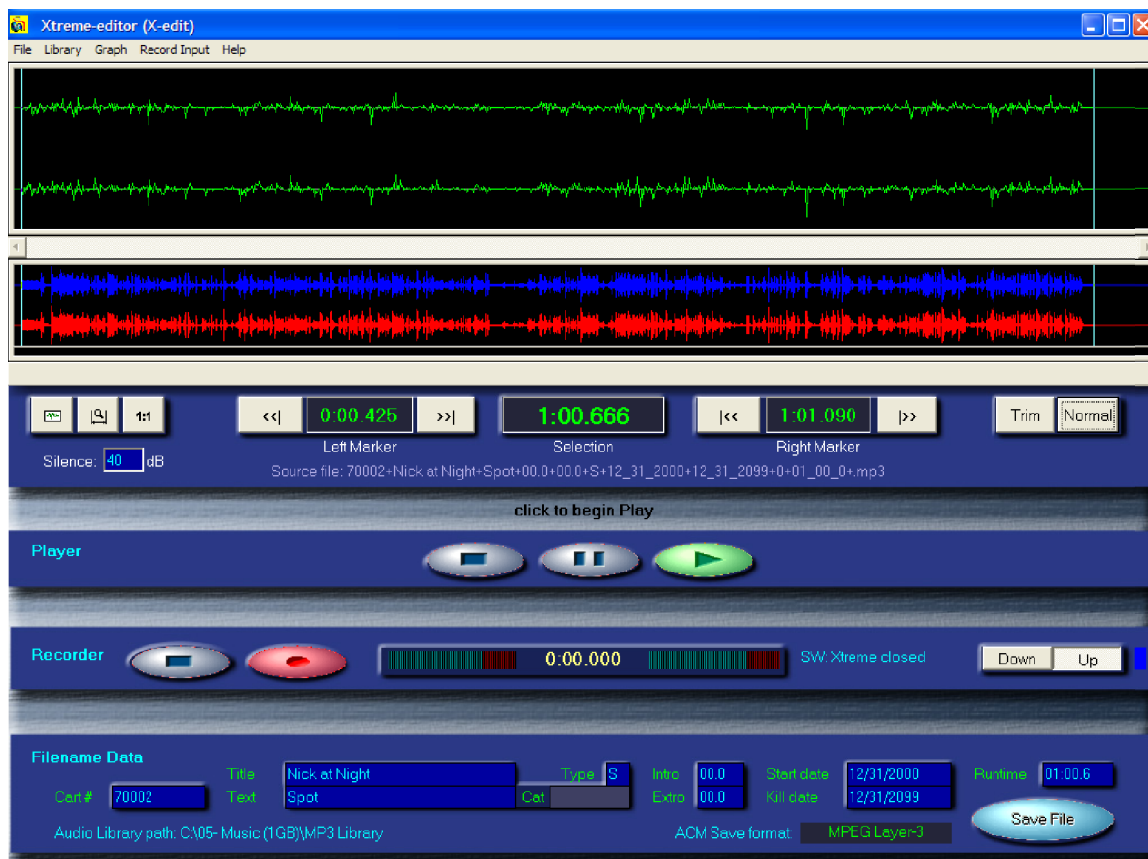
### 2. Silence Level Selection

The audio level threshold to trigger audio recording and to trim silence is set in the Silence edit box in dB. The default level is 40dB below max output. If the system is noisier then a level such as 30dB may be required. To change the level, simply enter a new number into the on-screen box. The number will automatically be saved.

**IMPORTANT:** if a file is manually edited so that the back of the file is removed, any data saved in a footer at the back of the file will be lost. An example would be an ID3 footer tag from a CD ripper.

### 3. Normalizing Audio Levels

If the peak audio level of the file is lower than the maximum digital level of the system, the level of the audio file can be automatically 'normalized' to the max level by clicking on the 'Normal' button. This function will increase the audio level of the file by the 'max level / current peak level.' If there is a pop in the file that reaches max level, then it may appear that the normalize feature is not operating because the file is already at max level.



## Two ways to Save the File

### 1. Saving an Audio File to the Library Directory

Once the filename and audio file itself are correct, click on the 'Save File' button in the bottom right of the screen to save the file as it is named to the default library path. It will be automatically saved in the audio format selected for the Windows Audio Compression manager (ACM). To view the newly saved file, go to 'Library, View' in the top menu and double click on the file in the list. It will then be loaded and display again in the edit window.

### 2. Saving an Audio File with any Filename and in any Directory

To save the edited file to disk, go to 'File, Save as' in the top menu. A 'Save File' dialog box will open allowing you to name the file and save it to any directory. The default directory will be the 'Arrakis\Xtreme\!!! Update Audio' directory.

Click to open the Save file dialog to save the file with any name and path



Click to Save the file with the name data in the edit boxes

## **Customer service for X-edit**

If you have an installation, operational, or other question and your station is enrolled in the Xtreme Solutions program, call

Arrakis customer support at:  
970-461-0730.

Also, go to the Arrakis website at:

[www.arrakis-systems.com](http://www.arrakis-systems.com)

for support updates, application notes, and other valuable information.