Online Help Contents

Getting Started

Quickstart
MAGIX music editor 2 Terminology

MAGIX music editor 2 Reference

Menu Reference
Screen Elements
Virtual Project Components
Toolbars
Shortcuts

Working with MAGIX music editor 2

Virtual Editing Concepts
Working with the Mixer
Support

Obtaining help

You can get help on the program on different levels and different methods:

-
- In dialogs: Pressing F1
- or clicking the help button (if provided) will call the appropriate Menu reference page with descriptions on the dialogs elements. In the most cases you'll get also a screenshot of the dialog, where you can click on a specific control element to get help on it.
-
- In the menu and toolbars: Click on a menu item and pressing F1 while
- holding down the mouse button will also call the help page for the command. This works adequately for toolbar icons.
-
- Context help: by selecting Menu Helpà
- Context Help the mouse will change into a question mark. Click on every screen element you wants to obtain help about.

You can also read systematically in the Online help (you can say, it is an online manual, too). There are several sections:

-
- Getting Started
- : That's where you actually reading, here are the quickstart tutorials
-
- What's new ?: This is for owners of older versions of MAGIX music editor 2
-
- Menu Reference:
- All menu items in one view
-
- Working with MAGIX music editor 2 : In the online help section "Working with MAGIX music editor 2
- " there are several chapters on general function of the program (e.g. the VIP working, mixer, effects). To quickly getting started, read the Quickstart chapters in the "Getting started" book.
-
- MAGIX music editor 2 Reference
- : Here you will find reference tables on every keyboard shortcut, mouse mode, toolbar icon and on all graphical elements of the program.

Quickstart - Overview

Recording
Mixing
Real-time effects
Mixing To A Stereo File
Editing
Object editing
Burning an audio CD

Recording made easy

The first track

1. Start MAGIX music editor 2
by double clicking on its icon.
2. Click on the New VIP
icon in the upper toolbar (or Key E).
3. The dialogue Setup for new VIP appears. Key Backspace
to delete the "New" title, then name the project.
4. Click on the folder icon and explore to the audio recording location – this will set where the file is stored. We suggest you create a new folder for the project by typing the name of the folder in the Browse For Folde
r dialog. This will ensure all files are placed in the same folder.
5. Select 4 Tracks, then the appropriate Sample Rate. Click the Advanced
button to display the entire dialog, then uncheck the Auto Crossfade Mode box. Set the Units Of Measurement to SMPTE.
A new VIP
is now ready to use.
Ready to record?
then click the OPT icon in the upper toolbar. A window will open showing various Record Parameters.
Experienced MAGIX music editor 2
users will notice the enhanced dialog and new peak meters based on the Visualization metering system!
7
. Check that all settings are correct as entered.
8. Make sure your soundcard driver is displayed in the Rec. Dev drop-down list and click on (enable) Monitor
. The Visualization and track slot meters will now respond to your input signal.
9. Using the LED meters, adjust the input signal's level so that the loudest peak doesn't quite reach 0db. (The Input signal's level must be adjusted at the source, mixer, or soundcard fader). If a level of 0db or higher is reached, a red marker line will appear in the Visualization meter - you should lower your input gain if this occurs. The red 'over' marker will reset automatically after a few seconds, or you can click the Reset Pk
button to reset the marker.
Note: You can adjust the display of the Record dialog Visualization meter to show input above 0db by clicking on Setup (at the top of the meter) and selecting 6db Max in the Value Range/Display category. This may make it easier to set levels in some cases.
10
. The Record Mode can be set to 16 bit, mono or stereo etc. If your input is mono, set the Mode to mono. If it is stereo, set the mode accordingly.
Note: Don't make the mistake of recording a mono file as a stereo track, as the recorded track will become a stereo file with silence on one side.
11
. When ready, click the Record button to start recording.
An Object representing the recorded Wave file will immediately commence to be drawn in the track slot.
12. To stop recording, click the Stop
button on the Record dialog. A dialog will pop up asking if you want to keep the track.

13. Click Yes to keep the track. The dialog will close and your track will remain as an object in the VIP
.
Note : If you make a mistake and decide not to keep the recording, click Delete. Another dialog will open asking for confirmation of the deletion. This instantly deletes the Object and the actual Wave file, so you can easily redo the recording as many times as you like without cluttering up the VIP or your hard disk!
14. Click OK to close the Record Parameter window. You've just completed recording your first record in MAGIX music editor 2
! Well, almost - you should save it first!
15. Save your VIP project by pressing Ctrl + S - this is a good habit to begin now. Once it is saved, key Home
to return the playback cursor to the start and press the spacebar to play back the track.

Mixing Projects

Controlling Volume and Pan in Real-time

1. Click on the Mixer button in the Workspace section or key M and MAGIX music editor 2 's Mixer window will open.

If you have a dual monitor setup, you can drag the Mixer to the second monitor. The Mixer is also scalable, but for now leave it at the default setting.

For this Quick Start Guide, we will only examine very basic use of this extremely powerful interface. As with all of MAGIX music editor 2 's interfaces, the Mixer includes helpful ToolTips which indicate the function and current numerical parameter settings for all controls. If you aren't sure what a control does, just hover the mouse cursor over the control and the ToolTip will tell you. So let's dive in and start mixing.....

2. Press the Spacebar to listen to your record. Do it sound too loud or too soft?

3. To adjust the volume, click and drag the Faders either up (louder) or down (softer). By all means, make these changes while you listen to the audio.

4. Double click on the Faders

to quickly return it to default (0db) position.
5. When you have finished making volume adjustments, press the Spacebar to stop audio playback.

Tip: To control playback, you can also use the floating Transport control palette (key Shift+T), or the Play arrow button near the top right corner of the Mixer to control playback. Clicking the Opt button next to the Play arrow button will open the Play Parameter dialog, which provides further configuration flexibility. You can also open the Play Parameter dialog by pressing the P key. Various processor dialogs also include playback buttons.

Of course, there are also all the Playback menu items, or you can even program your own hotkey shortcuts - MAGIX music editor 2 always offers you many command choices so you can choose a method which suits the way you like to work!

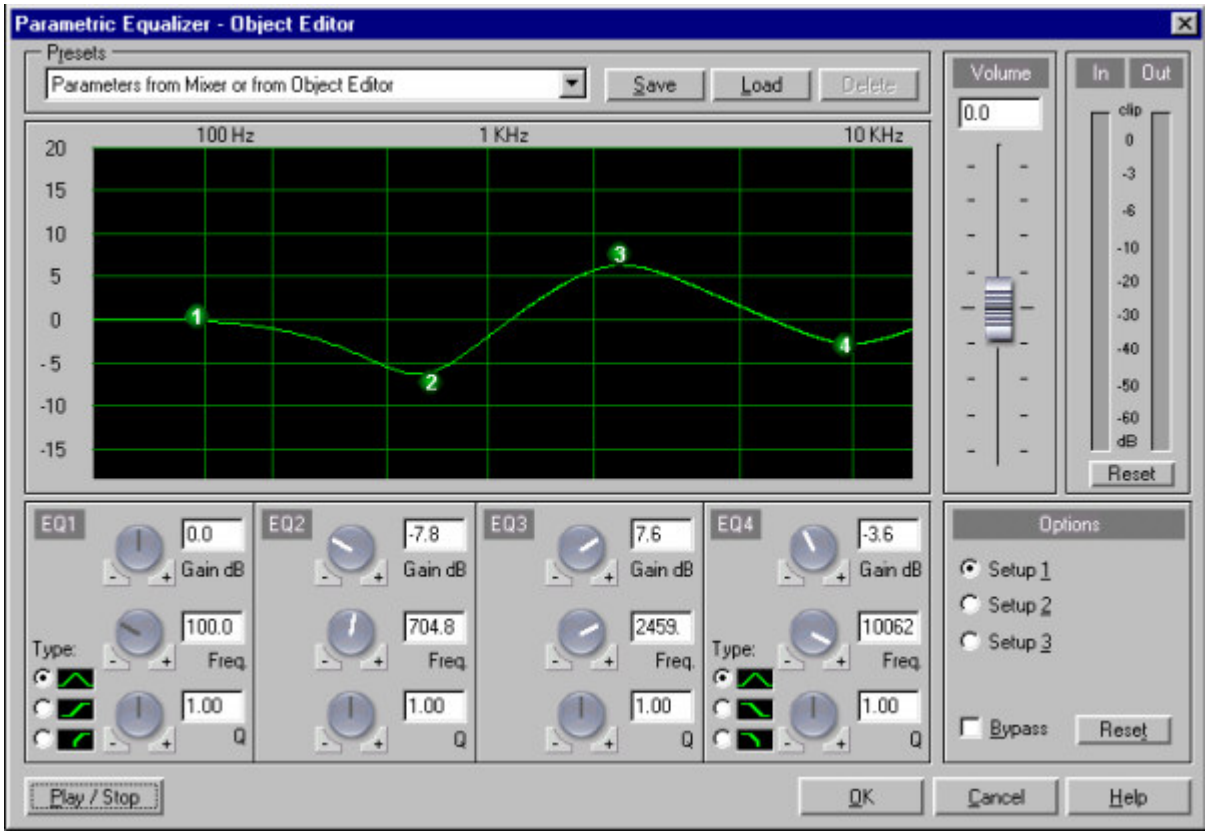
8. To adjust the pan position or your record, click on the Pan fader (the horizontal blue fader directly above the word 'Pan') and drag the mouse left or right. Again, use your ears and make these adjustments while the audio is playing.
9. Double click on a Pan fader to quickly return it to center default position
10. When you have finished making pan adjustments, press the Spacebar to stop audio playback.
11. Save the changes you've made. (Ctrl + S)

Tip: You can use the spacebar to start and stop playback as often as necessary.

Make your record really shine using real-time effects

Equalization

1. With the Mixer window still open, notice the four light blue knobs. These knobs control the 4-band fully parametric EQ. Press the Spacebar
to start audio playback.
2. Listening to your record, do you notice that it's lack low-end? Click on the LF (LOW EQ)
knob and drag the mouse left to cut or right to increase.
3. Using the same methods as in step 2, adjust the MF1(Mid), MF2(Mid) and HF(Hi EQ). Use the Spacebar
to stop and restart playback as often as necessary.
4
. Double click on the center of an EQ knob to quickly return it to center default (off) position.
5
. Now try right clicking on any of the EQ knobs. This will invoke the 4 band parametric equalizer shown below:



6. You can now adjust the EQ in real time using the 12 adjustment knobs, or by entering settings into the settings boxes. The screen shows the EQ curve of your settings. Shelving and Pass Filter settings are also available by selecting the appropriate Type radio button. In the shot above, EQ1 is set as a pass filter, EQ4 is set as a shelving filter.
7
. Once you have selected your settings, you can switch back to the mixer – the settings you have selected

are automatically applied to the mixer knobs and the gain of each band can be subsequently adjusted from the mixer by using the knobs.

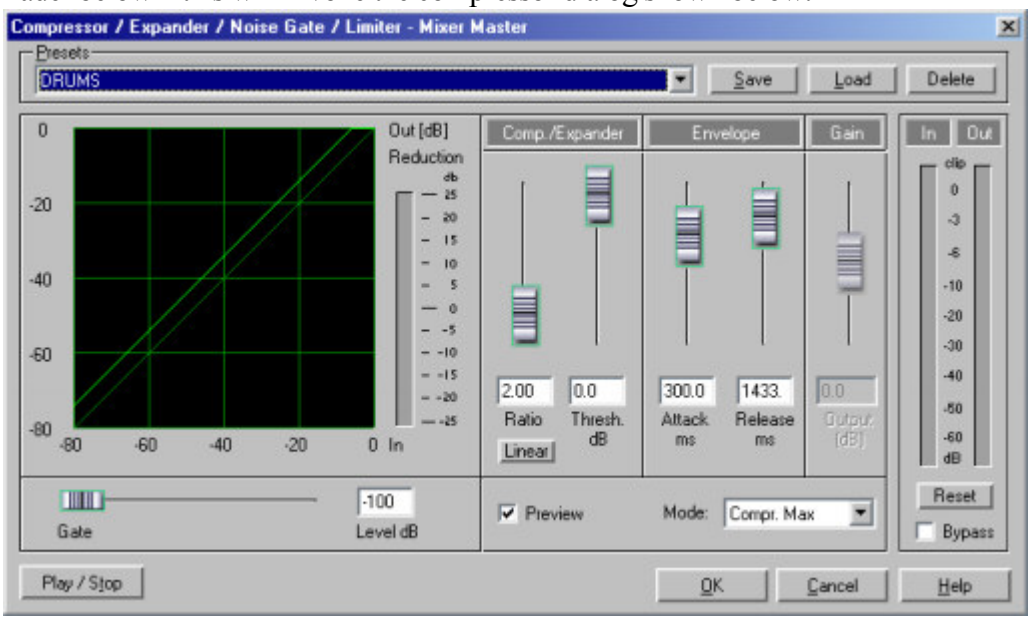
Compression

8. Directly above the four EQ knobs, you'll see a gray multimax fader. This fader is used to apply dynamics processing (compression) to your record. Press the Spacebar to start audio playback.

9. Listen again to your record. Do it sound like it is too loud at times and too soft at others? Click in the multimax fader and drag the mouse right to increase or left to decrease compression.

10. To quickly disable the compressor, double click on the center of the multimax fader.

11. Now right click on the Limiter fader below – this will invoke the compressor dialog shown below:



You can now adjust your compression settings by using the five adjustment Faders in this dialog. The graph shows the gain reduction applied to the audio in real time. The Gain fader controls makeup gain. Note that you can set the compressor into various modes using the mode box. The Gate fader under the graph is used when the compressor is set to Noise Gate mode.

Delay and reverb

12. Directly above the compression section, you'll see the sound FX button. This button is used to apply some effects of to your tracks. Press the Spacebar to start audio playback.

13. Listen again to your record. Might it benefit from a delay (echo) or reverb effect? Click on the sound FX button - the MAGIX FX RACK with some effects from the "Effects"-Menue will open. Use the MAGIX DUAL FX PROCESSOR with REVERB and DELAY effects.

14. To quickly disable sound FX effects, click on the sound FX button and use the Power button of the MAGIX DUAL FX PROCESSOR

.

Mixing To A Stereo File

You will generally want to mix your virtual projects (VIP) incl. all mixer effects to a stereo file. There are a few ways to do this in MAGIX music editor 2 , but in the Quick Start Guide we will cover only two: Output To File and Mixdown by Bouncing.

Output to File

Once you have adjusted your chosen mixer settings for your record, you are ready to mix to stereo. At the bottom of the Fader section in the mixer window, switch on Output To File by clicking the ON button.

2. Select the location of the mixed file by clicking Mix (adjacent to the ON button), browsing to the location and naming the Mixdown.

3. Save your project! Start playback by your preferred method – the project will mix down to the file in real time while you listen to the playback.

4. Close the Mixer by keying M, then save and close your VIP by keying H.

5. Key W to open the Open Audio File dialog and browse to the mixed file. Open the file to playback the mix.

Bouncing Down

Often it is preferable to Bounce Down rather than Mix In File, as more options are available for immediate use of the stereo mix file.

Track bouncing is an industry term for mixing selected tracks to a stereo buss. This can be done to gain additional tracks by freeing up existing tracks, or as a mixdown technique for the entire project.

MAGIX music editor 2 bounces down ‘offline’. In other words, once the bounce down command is issued, MAGIX music editor 2 shuts all interface functionality and concentrates purely on creating the mixed file. This can be very useful if your mix contains intensive processing which overloads your system in real time.

With your record open, open the menue "Tools" and select "Track Bouncing".

1. Note that various options are now available. In this case, select:

– From VIP Start to last Object End

– New VIP

– Save in 16 bit Format, Stereo

. then click OK

.

2. Choose a name and location for the Bounce Down file. Click OK

.

3. The Bounce Down is now performed "offline".

4. A new VIP containing the Bounce Down file is automatically opened.

You are now ready to edit or master the mixed stereo file!

Editing

In the next section of this document, we will have a look at a new method for stereo editing which includes virtual editing, but does not require a VIP.

1. Open the stereo mix VIP from the previous page.
2. Set the Snap function on by clicking on the Snap toolbar button (top of workspace)
3. Place the cursor at the beginning of the waveform by pressing the Home key.
4. Now we will use an excellent MAGIX music editor 2 feature for zooming. Zoom horizontally into the waveform by click/hold on the Grid And Marker Bar at the location of the play cursor (i.e. the start of the file), then drag the cursor down.

Cutting

5. Our task is to delete the section of empty space (silence) at the beginning of the mix. First we must select the silence as a Range by clicking on the small shaded area (actually a short Range) in the Grid And Marker Bar at the start. Click and then hold/drag the Range to the left as shown below. The range will show as the shaded area in the Grid And Marker Bar. Now playback will focus on the Range. To select the Range section of the Object for editing, extend the Range over the Object by double clicking the shaded area in the Grid And Marker Bar
.
6. Press the Delete key to delete the Range section of the Object. The selected area of the Object is instantly deleted. This edit affects the VIP only – the original wave file is untouched! We have now removed the dead space from the start.
7. You can adjust the position of the remaining Object by clicking and dragging to the start of the track slot (as shown above), or you can press Home to return the playback cursor to the start, click on the Object to select it, then select the Object>Object To Play cursor Position menu item.
8. View the entire waveform by clicking the red All toolbar or the Zoom Out Horizontally button.

Fades and Volume Curves

Fades and Volume changes in the VIP are virtual and can be implemented in various ways - following are two methods :

9. To create a Fade Out at the end of the mix, we will use the Object Handle method. While viewing the entire waveform, click on the Object to select it - note that 4 small squares (Object Handles) appear at either end of the Object.
10. Hover the mouse cursor over the upper handle at the end of the Object. A bi-directional arrow appears, indicating the Handle can be used to create a Fade.
11. Drag the Handle to the left, creating a Fade Out as shown below. The waveform display adjusts automatically to show the Fade.
12. Place the play cursor before the Fade by clicking on the Grid And Marker Bar, then play the Fade. Voila - instant virtual Fade!

13. Let's assume we want to lower the volume of a section of the Object in the middle of the mix. One way to do this (with MAGIX music editor 2 , there is always more than one way!) is by using the Volume Curves. To activate the Volume Curves, click the VOL
button in the Track Properties section at the start of the track. The button will turn yellow and a yellow Volume Curve will appear across the top of the Object.
14.
In the middle of the Object, create 4 Volume Handles by double clicking 4 times on the Volume Curve (each double click slightly to the side of the previous)
15.
Volume Curve Handles are moved by clicking and dragging with the mouse. Select the second handle from the left and drag it down to -15db (watch the ToolTip!), then select the third handle and drag it down to -11db. Note that the waveform adjusts automatically to reflect the new gain changes.
Note : By selecting a Range which includes the Volume handles and starting playback, you can easily adjust the handles in real time while listening to the changes. Selecting Loop Mode playback by clicking the LOOP button on the Transport Control, Play Loop on the Play Parameter dialog or clicking the Play Loop toolbar button will loop the playback.

Object editing

Any waveform shown in a VIP track slot is an Object. Each Object references to the whole or part of a Wave file, but the Object itself does not contain audio. Instead, the Object contains a drawing of the audio and implements real time editing and processing as the audio is read by MAGIX music editor 2 . In other words, the referenced audio remains unchanged. This ‘virtual’ process is sometimes called Non-Destructive Editing or Virtual Editing.

Your project can contain an unlimited number of Objects and each Object can be duplicated multiple times throughout the VIP project.

Objects can be split, cut, copied, pasted, stretched and moved in many ways, all without affecting the original audio files.

Burning an audio CD

Burning Red Book compatible audio CDs is easy with MAGIX music editor 2 . In any multi track project (VIP) you only need to add track markers (with the T
button in the toolbar) and the burning process can be started immediately!

1. Close the Mixer by keying M
and set the Workspace to CD Mastering mode.
2. Under the CD menu, select Set Track Indices On Object Edges. A red Track Index will appear at the beginning of the track.
3. Save your project! (Ctrl + S)
4. Insert a new (blank) CD-R into your CD burner and click on the Make CD icon in the upper toolbar. A dialog will open with several options.
5. For Mode, click on Burn on the fly. This uses MAGIX music editor 2
's built in CD burning routines. All effects (fades, EQs, etc...) are calculated in real-time while burning.
6. In the next dialog CDR Recording Options select the recording speed (e.g. 2 * depending on the capabilities of your CD recorder) and disable the Simulate Recording option to enable the CD writing process.
7. Click OK to start the burning process.

You will also find a step-by-step explanation of the CD-Burning process here
!

Virtual Wave Editing

MAGIX music editor 2
includes a new virtual mode for Wave Editing. In simple terms, edits to Wave projects are compiled in the virtual domain until being saved at the completion of the particular editing session.
The new mode will be instantly familiar to experienced users as it is very similar to working in a VIP. An ‘object’ is transparently created representing the Wave project, allowing cut edits to be instantly implemented and retained as virtual Undo files. This saves considerable time and hard disk space, as each cut edit no longer has to be written to the hard disk. Once you are happy with the cut edits, you simply save the changes (at some point, you have to commit!)
Volume and Pan edits are also virtual in this mode by using the Draw Volume or Pan Mouse Mode toolbar buttons .
Processing edits are implemented by using the Mixer when in this mode. A special ‘Mixer’ is available, providing all real time virtual effects which are normally available in the Mixer.
Processing edits via the Effects menus (such as EQ, compression, time stretching etc.) may still require creation of a temporary Wave file and are therefore ‘destructive edits’ (although there are undo's, of course). For all effects available in real-time we recommend using of the Mixer rather than the Effects menu items.
The original ‘Destructive Editing’ mode is still the default mode when selecting Wave Editing (previously Destructive Editing) from the Object menu. This is due to restrictions which cannot be bypassed when editing files currently open in a VIP.
To use Virtual Wave Editing, open Wave projects directly instead of opening into a VIP.

Menu Reference

Menu File
Menu Edit
Menu View
Menu Object
Menu Effects
Menu Range
Menu CD
Menu Tools
Menu Playback
Menu Options
Menu Window
Menu Help

Menu File

Menu Reference

The project menu contains wide-range functions for generating, managing, loading and saving projects.

New Virtual Project	A new virtual project is opened.
Open Project	A new project is loaded, which was created by MAGIX music editor 2 .
Save Project	The actual project is saved.
Save Project as...	The actual project is saved with a new name.
Save Complete VIP in...	The actual VIP with all needed files is saved to a new directory.
Rename Project	The actual project gets a new name.
Delete Wave project(s) (HDP)	Deletes a HD Wave project from the hard disk
Delete Virtual project	Deletes a VIP and the wave projects used in this VIP
Import Audio	The following file formats can be imported: WAV, AIFF, MPEG Sample-Dump (PCM or RAW Format).
Convert Audio	Converts several audio project formats.
Export Audio	A MAGIX music editor 2 project can exported to the following file formats: WAV, MPEG, Sample-Dump (PCM or RAW Format).
Close Project	This menu item in menu ‘File’ closes the selected project window
Exit	Exits MAGIX music editor 2 .

New Virtual Project

Menu: File

Opens a new virtual project.

Shortcuts:

Toolbar:

Keys: e

Open Project

Menu: File

This command opens various file types in MAGIX music editor 2

.

Here is a short explanation of the file types:

Virtual Project: Project in MAGIX music editor 2

, which makes use of Wave projects.

When loading a virtual project, all associated Wave projects (RAM and HD Wave projects) are opened if they were not open prior to loading the VIP. The windows of the individual Wave projects remain minimized to prevent cluttering of the screen. They are initially only visible as icons.

Once the Wave projects are loaded, the VIP project window is displayed.

Loading audio files

You can listen to every listed file before loading them You can change that in the Options for loading audio files .

You can load several files at once. In the same way as in the Windows Explorer, you can extend your selection by pressing the Ctrl-Key and select a range of files with the Shift-key.

If on the other hand you want to select an area in the explorer (with shift + click), e.g. a whole directory, highlight the last title of the list, then press shift and then highlight the first title on the list. Then click "open", and the tracks appear in the correct order in the VIP.

RAM Wave (RAP): RAM Wave project.

RAM Wave projects contain audio data in MAGIX music editor 2 's proprietary format. These files are loaded into the RAM memory of your computer, including their associated graphic files, marker position information, etc.

HD Wave (HDP): HD Wave project.

HD Wave projects contain audio data, which is directly loaded from the hard disk, together with the graphical information, marker position information, etc. The audio format used for these files is the WAV format.

WAV (*.wave): WAV Files (Windows Standard Audio Format).

When opening a WAV file, MAGIX music editor 2 automatically creates an associated HD Wave project. The HD Wave project file contains additional information about the audio file, such as marker positions. Once the WAV file has been opened once in MAGIX music editor 2

, it can be loaded as a HDP from that point on.

Note: If a VIP is the active window, all loaded WAV projects are immediately turned into objects in the VIP. Any selected range (range beginning) determines the position and track where the object is created. An exception is, when the CD Arrange Mode from the Menu CD is set.

The objects are placed completely independent from any selected range. Instead, the objects are placed in sequence (one after the other) with a pre-determined gap between them. The gap can be set with CD->Set Pause Time. The gap represents the space between individual tracks on a CD.

AVI - Video for Windows video files

You can open a AVI file to edit the audio track of the video directly (without importing the audio data from the video file). After finishing edit, replace the audio in the Video with Export Video Sound

Object:

Contains playback instructions (link to a Wave project, time position, parameters, etc.) for audio data. Objects are used in virtual projects.

Shortcuts:

Toolbar:

Keys: l
for RAM projects
Keys: SHIFT+l
for HD Wave projects
Keys: o
for virtual projects
Keys: w
for WAV files
Toolbar:

Load CD Tracks

Menu: CD

Import entire audio CDs or single CD tracks in a project. However, as opposed to normal data, Audio CDs have to be read first (grabbed or ripped). The data import is 100% digital, so there are no losses in the sound quality.

If you want to import audio CD tracks, just follow these easy steps:

1. Insert an audio CD into your CD-ROM-drive and select "Load CD audio track" from the CD menu. A dialogue with a list of the CD tracks will appear. If you have more than one CD-drive (or for example an additional CD-writer) you will first have to choose the drive from which the CD is loaded. You can do this in the CD-drive options

2. Select the desired title(s) (pressing Shift + mouse button or Alt + arrow keys).

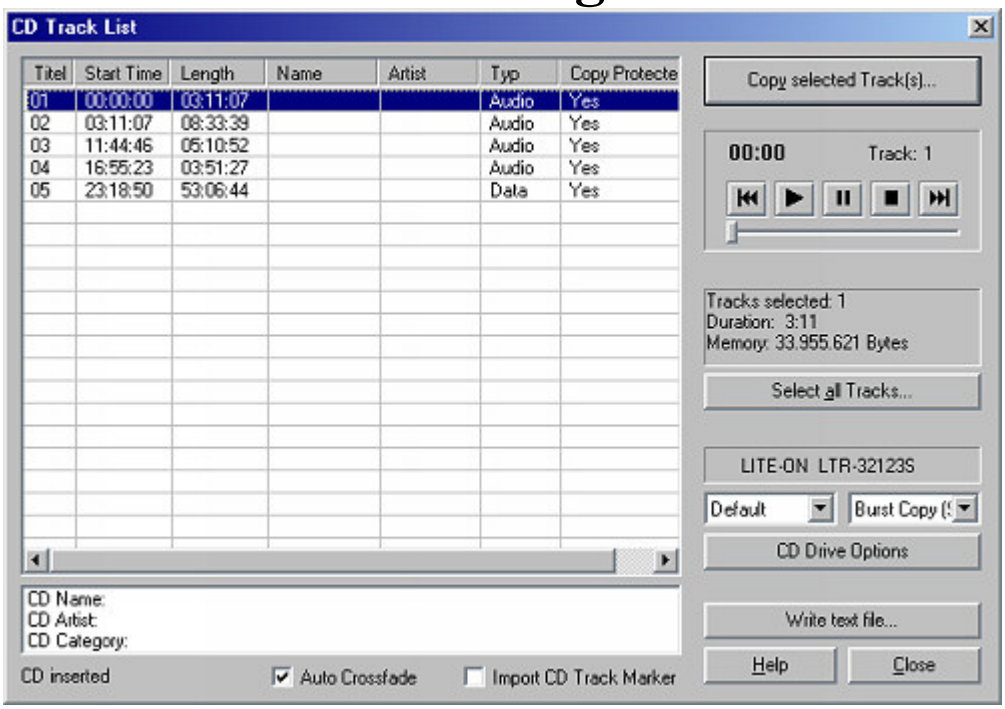
3. Click on "Copy selected track(s)..."

4. The "Project import" dialogue will appear. Here you can choose a file name and the target directory.

5. Now, the audio material will be copied from the CD-drive to the hard disk. A state display informs you of the current transfer state.

6. Once the audio data has been transferred, all dialogues will be closed and the tracks will be added to your master track as single objects.

The Track List Dialogue

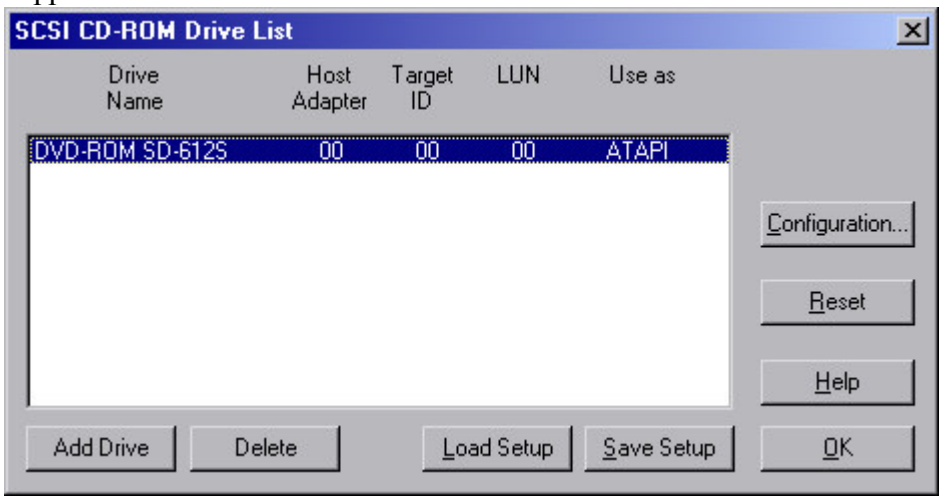


All CD tracks are shown including start time and length. In the name column the track name is shown, this is derived from the CD Text information, if the CD provides this information and the CD drive is able to read it. Select a track by clicking it with the left mouse button, select a range of tracks with SHIFT + mouse click, select several tracks with CTRL + mouse click.

Copy selected track(s):
This button starts the audio copy process. For each track, a new object and the corresponding track marker will be created in the arrangement.
Play:
Starts the audio-playback of the first selected track in the list (for testing).
Stop:
Stops playback.
Pause:
Stops playback that can subsequently be re-started with Play or with a renewed click on Pause
Skip:
Allows you to skip from song to song.
Auto Crossfade:
Turns on the automatic crossfade mode as you import audio tracks and automatically employs crossfades.
Transfer CD Markers:
Markers already set on the CD are transferred to the VIP.
Select all tracks:
All audio tracks are selected (for example, if you want to copy all tracks of a CD). Pressing Ctrl and clicking on the mouse button you can select more than one track.
CD-drive options: Here you can adjust some of the settings of the CD drive settings you are using and choose the drive for "Ripping" CDs if you have more than one CD-drive installed in your system (see The CD-drive dialogue
)

The CD-drive dialogue

Choose and configure your CD-drive. The CD manager permits the import of audio data using most SCSI- and ATAPI-CD-ROM drives and CD writers. In case of doubt, ask our technical support which drives are compatible. If you experience problems while reading audio tracks, you can choose between several reading processes in the Configuration dialogue, which differ in the way the data is read or "ripped".



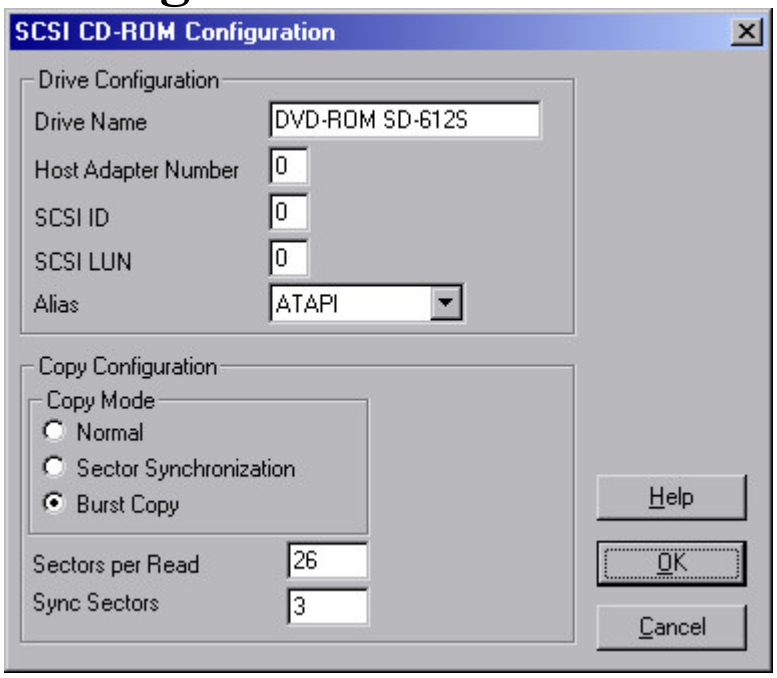
Configuration: This button opens the Config dialogue
, in which you can set different special features, SCSI-IDs etc.
Reset:
Restores the initial drive configuration.
Add Drive:
Adds a new entry to the drive list. However, you will have to adjust the specific settings.

Delete:
Deletes a selected drive from the list.
Save setup:
Saves the current drive list with all configuration-data in a *.cfg file.
Load setup:
Loads the current drive list and all configuration-data from a *.cfg file.

The "Import project" dialogue

The "Import project" dialogue appears after selecting the "Copy selected tracks" option. Type in a name and a target directory for the new audio files. The audio files will receive a number in addition to the name you chose ("name" -> name_1.wav, name_1.wav...).
The preset format for audio tracks (CDA files) is the WAV format. You are however free to convert them into a compressed format, like MP3 while still reading the data. Just choose your audio format in the "Import project" dialogue and click on the "Format settings" button to make your changes (More information concerning the audio formats under Import sample
)

CD-ROM Configuration - Drive Configuration:



Drive Name - Lets you edit the name of the drive in the list. This is useful if you create more than one entry accessing the same physical drive.
Host Adapter Number - Lets you specify the number of your SCSI adapter - normally 0.
SCSI-ID - Lets you set the ID of your CD ROM drive. Be sure to set the correct ID, there is no error checking!
SCSI-LUN - Select the SCSI LUN parameter, normally 0.
Alias - Lets you select a manufacturer type of your CD ROM drive.
CD-ROM Configuration - Copy Configuration:
Copy Mode Normal - Copies the audio data without any software correction.
Copy Mode Sector Synchronization - Copies the audio data using a software correction algorithm. This is useful, because some CD ROM drives cannot seek exactly to the same position between two read

accesses but MAGIX music editor 2 can correct these differences using this algorithm.
Copy Mode Burst - Optimizes the speed of the copy process, no software correction is done.
Sectors per Read - Defines the number of audio sectors per read cycle, the higher the number the faster the copy process will be. Not all SCSI adapters support more than 27 sectors!
Sync Sectors - Defines the number of audio sectors used for the Sector Synchronization. A higher number results in a better synchronization but also in a slower copy process.

Save Projects

Menu: File

The current project is saved with the name displayed in the project window. If you previously have not specified a name for your project, MAGIX music editor 2
will ask you to do so.

Shortcuts:

Toolbar:

Keys: s

Save Project As

Menu: File

You can define the path and name of the new project you want to save your work under. RAM projects and virtual projects will be saved with the new names (the source file remains untouched). HD Wave projects are renamed on the hard disk. MAGIX music editor 2
will not generate a copy of it for reasons of conserving space on your hard drive.

Shortcuts:

Keys: SHIFT + s

Save complete VIP To

Menu: File

This function in menu ‘Project’
allows saving a VIP with all needed Wave projects (*.RAP. *.HDP) into a specified directory. This makes it easy to copy all files of a VIP to a backup disk etc.

Rename Project

Menu: File

The ‘Rename Project’ command will let you rename a project file rather than save it to a different file. For RAM Wave projects, only the internal names are changed (without being saved). But all corresponding files are renamed immediately in the case of HD Wave projects.

RAM Wave projects need to be saved after renaming the project.

Delete HD Wave Project

Menu: File

HD Wave projects are deleted from the hard disk. Use this command with caution
, as all corresponding files are lost.

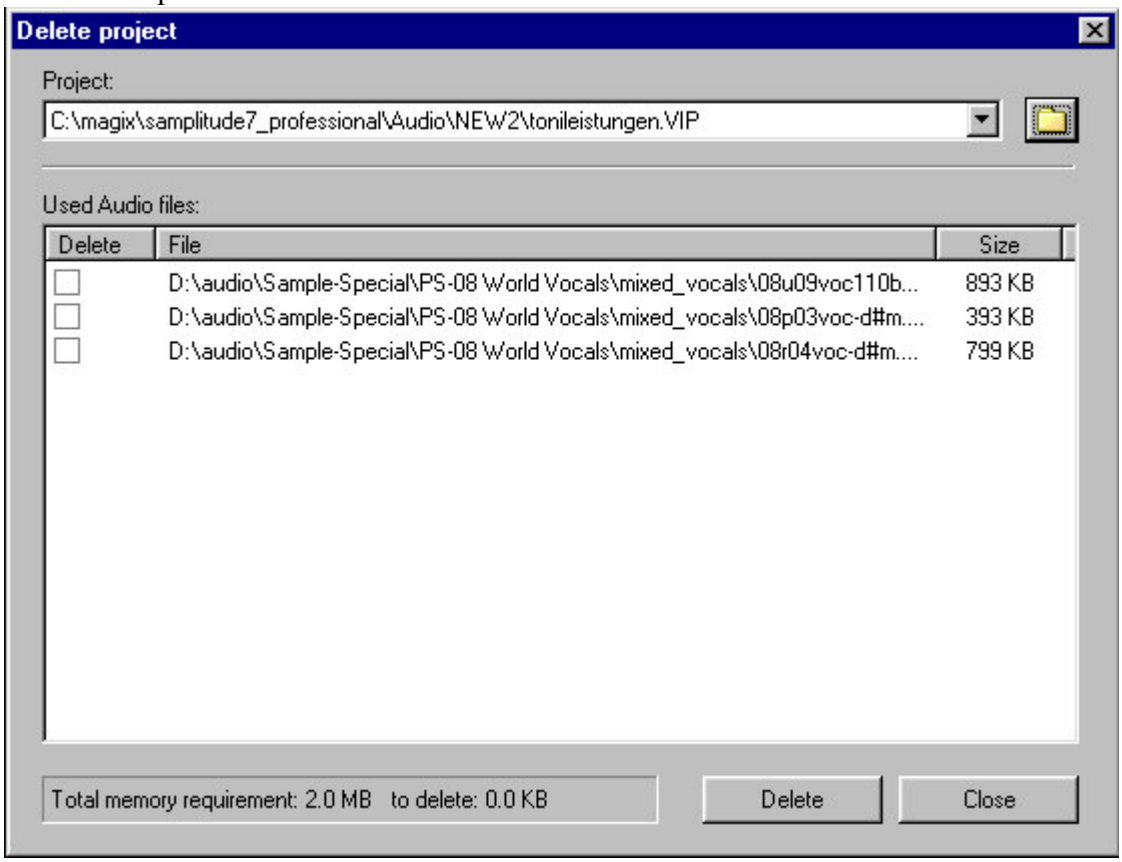
(If you wanted to delete a HD Wave project (HDP) from a file manager such as Windows Explorer, it would also be necessary to delete the graphic files related to the project files.)

Delete Virtual Project

Menu: File

With the command Delete Virtual Projects you can comfortably delete VIPs and all wave projects used in the VIP.

Click on the picture!



To delete a project, it has to be closed first.

Import Audio

Menu: File

MAGIX music editor 2 gives you the option of importing Wave, AIFF, MPEG, MP3 , MS audio (.wma), audio from .avi files or Sample Dump files into a MAGIX music editor 2 project. You will need to specify which type the project is going to be, a RAM Wave Project, or a HD Wave project. MPEG files need to conform to the Layer 2 format. Any bit rate can be imported.

Difference between Open->WAV and Import Sample->WAV:

The command Open->WAV opens an already existing WAV file and edits the file as a HD Wave project. MAGIX music editor 2 automatically creates a HDP file and the corresponding graphic file in the source folder.

When importing a WAV file, the complete file is copied. Additional hard disk space is needed and the process takes much more time, since the audio file has to be copied with Open Project->WAV. Import Sample->WAV has to be used when intending to use the WAV file as a RAM Wave project.

Export Audio

Menu: File

The command ‘Export Sample’ will let you export HD Wave project or RAM Wave project files into Wave, MP3, MP3 with external Encoder, MPEG, Windows Media, Real Audio, AIFF with Quicktime and dump files. You can save it both in Mono or Stereo format.

When choosing compressed audio formats various compression options can be set.

A Note about Export Audio :

The audio data files for HD Wave projects can be directly loaded or imported as WAV files by other audio applications. The command Export Sample is only necessary if you want to copy the audio file. Keep in mind that the hard disk requirement increases and that the copy process takes additional time. This command has to be use to convert RAM Wave projects into WAV files.

Please note that direct editing of WAV files from CD-ROMs is not possible. Please use Import Sample instead.

Export Video Sound

You can load video files like audio files to work on the video soundtrack. This is used, when you dont want to edit the audio, and just want to process the whole audio track with effects, like normalizing or noise reduction. If you prefer a visual feedback, use the "Link Media" function instead.

After editing the video sound track, you can re-write sound track back into the video file. You also have the possibility of replacing either the original video sound track or of producing a new video file. But don't worry, a new time-consuming compression of the video is unnecessary. No matter what, you can change the audio format, for example, into compressed formats such as ADPCM. However, the appropriate compression codecs must be installed.

Create AVI / Audio Copy: This option performs a track bouncing of the current VIP into a WAV file. The AVI file is copied to a new file, which contains the new audio track. This option keeps the original AVI.

Replace Audio in Video: This option performs a track bouncing of the current VIP into a WAV file. This file is merged into the selected AVI file, so the AVI gets a new audio track.

Note: If the length of the video file and the audio are different, a warning is given. After exporting, the longer one is truncated, no automatic synchronization is done. If you obtain such a warning, try to resample your audio soundtrack to the appropriate length.

Batchprocessing

Menu file

Batch processing automatically applies a single WAV project task to any number of other files (the "batch") in exactly the same way – for large volumes, usually overnight.

Possible processings may include:

- normalization
- lineal fading (in and out)
- real-time effects in the mixer master
- Format conversion: Bit resolution(16/24/32), Sample rate, stereo/mono/left/right
- Storage in all available export formats

For example, you can normalize a whole list full of 24bit WAV files to 96%, apply 5 ms fades at the beginning and the end of each file, compress them with the multi-band compressor, change them all to 16bit mono, resample them on 22kHz and then saved them all as mp3s.

Source files

Here you can create a list of the files to be edited by selecting "Add file". Multiple selection is possible. Select "Load directory" to add all of the audio files within a directory (including all sublists). All importable audio formats are loadable in Samplitude. "Save list" creates a Playlist (in the common *.m3u format) for using your selection of files later. "Remove" deletes all selected list entries. " Remove all" deletes the complete list.

Effects

1. Normalization

You can normalize using percentages (%), decibels (dB) or manually by using the levels. For more details, please read the Effects Menu chapter -> Amplitude/Normalize

2. Fades at the start and end of projects

Linear fades of any given length can be added to your files.

2. Master Effects

To avoid repetition in the batch processing dialogue, effects settings have been integrated with the mixer preset files.

In the Samplitude mixer, you can export all mixer settings to the mixer preset (* mix). Simply press the "Save mixer preset" button in the mixer (see illustration).

By loading these *.mix files into the batch processor ("Load preset"), all mixer effect settingsare included (all other mixer preset data e.g. channel properties, groups, etc. are ignored). Mixer presets are stored in the /fxpresets/batch directory and can be selected directly from the Listbox.

Further effects

Besides mixer preset master effects, you can use the non-real-time effects Resampling/Timestretching, DC removal and De-Clipping. Settings opens the applicable effects dialog.

Target format

You may select the bit resolution(16/24/32 bit), the sample rate, stereo/mono/left/right and format with the applicable format option.

For more about the sample rate: Effects menu (modify sample rate .

For more about export formats: Effects menu (export audio.

Target files

There are several ways to save edited files:

"Replace file": Replaces the original file with the edited file. Should the file be used in the VIP, the VIP must first be closed.

"Save and rename file in the source directory"/ "Save file in the following directory". The processed file will be saved into the source directory or into another selectable directory, the file name will be expanded by the given prefix/suffix. Additionally you can check "Delete source file after editing".

"Save with source directory path". The file is saved along with the path to its source, allowing you, for example, to retain the sample CD structure.

Close Projects

Menu: File

This menu item in menu ‘File’ closes all audio devices to give other audio software a chance to use them for playback and recording in multitasking with MAGIX music editor 2

.

Exit

Menu: File

This command will exit MAGIX music editor 2

.

Shortcut: Alt + F4

Convert Audio

Menu: File

This submenu contains items for converting several audio project formats.

Save in Format

Menu: File

With this function, you have the possibility to convert projects between the different MAGIX music editor 2
Wave project formats. This is useful if, for example, a RAM Wave project is to be converted into a HD Wave project or a L&R Wave project (two linked mono files). Another option is the conversion to and from stereo Wave projects to mono Wave projects.

Stereo Wave à 2 Mono

Menu: File

This function can be used to divide a stereo wave project into two independent mono projects. This way you can resolve the rigid combination of the samples and edit them individually. To edit them together simply select the function 2 Mono -> L&R-Wave.

2 Mono à Stereo/LR Wave

Menu: File

Two mono projects are linked to one L&R Wave project. This is a convenient way of editing joined mono samples with the same operations.

Make sure that the windows of the two projects to be linked are open. Select one of the objects as the current object (click on the lower half with the left mouse button) and call up the ‘Link Projects’ menu option. Next, click on the project you want to join. MAGIX music editor 2
will link the two projects.

MAGIX music editor 2
will automatically match the sample length of the two projects but not the bit resolution.

Menu Edit

Menu Reference

This menu contains all functions, which are similar to cutting on a tape machine.
In virtual projects, you can select track sensitive , so only the selected tracks are manipulated.
When working with a virtual project (VIP) a selected range
is always required for the cut functions. The beginning and end of the selected range determine the start and ends of a cut. The vertical position indicates which tracks are affected by the edit.
It is recommended to use the Auto-crossfade function to achieve smooth transitions between the edit points. This will automatically create fades at the object edges.
Please note that these functions are processed for both channels when working with stereo and L&R Wave projects. (If only one channel is to be edited, you will need to convert the Wave project into two mono Wave projects. After editing the two mono Wave projects can be merged again.)

Undo	Undo last operation(s) (VIP).
Redo	Undo last Undo-operation(s) (VIP).
Undo History	Displays a list of recent editing steps for easy undo.
Cut	Cuts the selected range into the Clip (VIP, WAVE PROJECTS). Works dependent from chosen Object mode
Delete	Deletes the selected range. (VIP, WAVE PROJECTS) Works dependent from chosen Object mode
Copy	Copies the selected range into the Clip. (VIP, WAVE PROJECTS)
Paste/Insert	Inserts sample data from the Clip at the play cursor position. (VIP, WAVE PROJECTS) Works dependent from chosen Object mode
Extract	Deletes sample data before and after the selected range. (VIP, WAVE PROJECTS)
Insert Silence	Inserts memory in the length of the range. (WAVE PROJECTS)
More....	All edit Commands here are working independent from the chosen Object Mode
Clear	Replaces the selected range with silence. (VIP)
Copy and Clear	Copies the selected range into the Clip and clears it in the project. (VIP)
Copy As	Copies the selected range into a new file. (WAVE PROJECTS)
Overwrite with Clip	Overwrites sample data with the Clip.. (VIP, WAVE PROJECTS)
Mix with Clip	Mix sample data with the Clip. (WAVE PROJECTS)
Crossfade Editor	Opens the Crossfade Editor
Auto Crossfade active	Activates the Auto Crossfade, which is applied after each edit process to make smooth cuts.
Delete Undo Levels	Clears the Undo History to free Wave projects for destructive Editing or Delete.

Undo

Menu: Edit

MAGIX music editor 2
offers you a comfortable way of tracking your changes in virtual and wave projects. Up to 100 changes can be kept in memory and traced backwards
That means, virtual processes and physical processes (such as normalize, reverb, filter with activated Create Copy option etc.) can be reversed (undone).
Range and marker manipulations can also be undone using the ‘Undo’ feature.
Thanks to this extremely efficient feature, critical operations can simply be tried and then reversed to return to the original status if the results are not satisfactory.
MAGIX music editor 2
offers a convenient undo option for VIP objects. A maximum of 100 undo steps can be retraced. This number can be configured in File/Preferences/Undo Definition.
When adding effects to audio material (menu option Effects), the undo option only works when the selection 'Create Copy' has been chosen in the effect dialog.
Shortcuts:
Keys: CTRL+Z or Alt + Back

Redo

Menu: Edit

Redo revokes the latest undo command.

Shortcuts:

Keys: CTRL+A

Undo History

Menu: Edit

Displays the Undo History dialog. This dialog can be used to undo specific editing steps. By clicking on an entry in the dialog, MAGIX music editor 2
returns the project to the state just prior to the editing step listed. To return to another state, simply click on a different entry. This can be repeated unlimited times.

Cut

Menu: Edit

Wave Projects:

The audio data in the selected range are copied from the current Wave project into the Clip. The material behind the removed range is merged with the material in front of the removed range to close the gap. The complete Wave project becomes shorter.

Please keep in mind that the Clip always contains the same attributes as the Wave project the material was copied or removed from.

If you cut material from a mono Wave project, the Clip becomes a mono Wave project. If material from a stereo Wave project is cut or copied to the Clip, the Clip becomes a stereo Wave project. Another attribute adopted is the bit resolution and the sample rate of the originating Wave project. The previous contents of the Clip are deleted.

After a successful removal of the selected material, MAGIX music editor 2 drops a marker at the position the removed range previously started. This allows you to insert the contents of the Clip into the Wave project at the exact same spot if you accidentally removed the material. Use the function Edit >Paste/Insert Clip

to insert the Clip contents.

Virtual Projects (VIP):

In virtual projects the selected range is copied to the VirtClip and is removed from the current VIP project. The VirtClip does not contain actual audio information, only the links to the audio files. The VirtClip also contains as many tracks as the removed range.

The material behind the removed range is appended to the material in front of the removed range. The VIP project becomes shorter if the selected range did cover all tracks. This way you can shorten Vips which contain empty space behind the last object.

As with the Wave projects, a successful removal of the selected range drops a marker at the position the removed range previously started. This allows you to insert the removed material with Edit >Paste/Insert Clip

.

Shortcuts:

Toolbar:

Keys: Shift + Delete or X

Delete

Menu: Edit

The data of the current range is deleted. The sample data after the deleted range is added at the position the deleted range started. The sample length becomes shorter.

Please note that this command will not save the deleted data to the Clip. If you want to preserve the deleted sample data, use the ‘Cut’ command. Using this the ‘Delete’ command will delete the data from the current sample and preserve the contents of the Clip.

Shortcuts:

Keys: Delete

Copy

Menu: Edit

The current range is copied into the Clip
but not deleted in the project. The sample length is not varied. Please note that the former Clip contents are deleted. The Clip again has the same attributes as the project.

Shortcuts:

Toolbar:

Keys: CTRL + C or C or Ctrl + Insert

Insert/Paste

Menu: Edit

The contents of the Clip are inserted into the current project behind the position of the play cursor or the beginning of the currently selected range. The data or objects that are located behind the insert position are moved out of the way to make room for the Clip contents. The samples or audio tracks become longer. The Clip remains unchanged during the procedure. If the Clip was empty, an error message is displayed.

After inserting the contents, the program selects a range over the inserted area. If you select Edit >Delete , the inserted contents are removed and the project is returned to the original state.

In virtual projects using selected ranges, the program utilizes the beginning position and relative track position as the insert point for the VirtClip or Clip contents.

The following table shows how MAGIX music editor 2 responds in the case the clip and the project have different channel numbers:

Clip Project	Clip Channel	Project Channel
Mono	Mono Channel 1	Channel 1
Stereo	Stereo Channel 1	Channel 1
	Channel 2	Channel 2
Mono	Stereo Channel 1	Channel 1
	Channel 1	Channel 2
Stereo	Mono Channel 1	Channel 1

Shortcuts:

Toolbar:

Keys: Shift + Insert or V

Extract

Menu: Edit

This function is the counter part of the ‘Cut’ function.

Wave Projects:

The current range remains unchanged only the sections before and after the selected range are permanently deleted. The audio file becomes shorter. The contents of the Clip are unchanged.

Virtual Projects (VIP):

The objects before and after the selected range are deleted from the project. The contents of the VirtClip remain unchanged.

Insert Silence

Menu: Edit

The ‘Insert Silence’ option will insert ‘blank’ data at the current play cursor position or the starting position of the currently selected range

.

If a range is selected, the length of this range is predefined in the dialog to insert.

The blank space will actually contain data with zero value. The data following the insertion point will be added to the end of the blank space. The defined range is maintained, the length of the inserted space extends the overall sample.

If you do not have sufficient memory to insert the workspace (i.e. with RAM projects), MAGIX music editor 2

will display an error message.

Delete Undo Levels

Menu: Edit

This feature will delete the Undo levels of a virtual project. This is useful, if for example certain Wave projects are left in the Undo chain, but do not exist in the VIP anymore. You won't be able to process or delete the Wave project if the Undo chain still contains a reference. After deleting the Undo levels, these projects are available again.

Append Projects

Menu: Edit

With this function a project can be appended with another project, i.e. the material of one project is copied directly behind the material of the first.
You need to first select the object you want to append. Then you activate the menu and click on the project you want to add to the first.
A particular use of this option is the 'cleaning up' of VIP's that contain numerous physical samples.
You can:

-
- append a VIP with a VIP
- This is good for bigger projects, you can edit parts of it in different files and finally put them together
-
- append a wave project with a wave project
- A particular use of this option is the"cleaning up' of VIP's that contain numerous physical samples.
-
- append a wave project with a VIP
- This is a smart method to transfer markers from a wave project to the VIP. Normally, when a hdp is loaded into a VIP, the markers stay inside the audio file as "audio markers". Often it is necessary to have these markers in the VIP. When you append a wave project with the VIP, the wave data will be inserted as an object at the end of the VIP at the active track and the markers from the hdp will be inserted in the VIP.

The Crossfade Editor

Menu: Edit

To apply a crossfade between two overlapping objects on a track, you have two methods:

With the normal fade in/out handles:

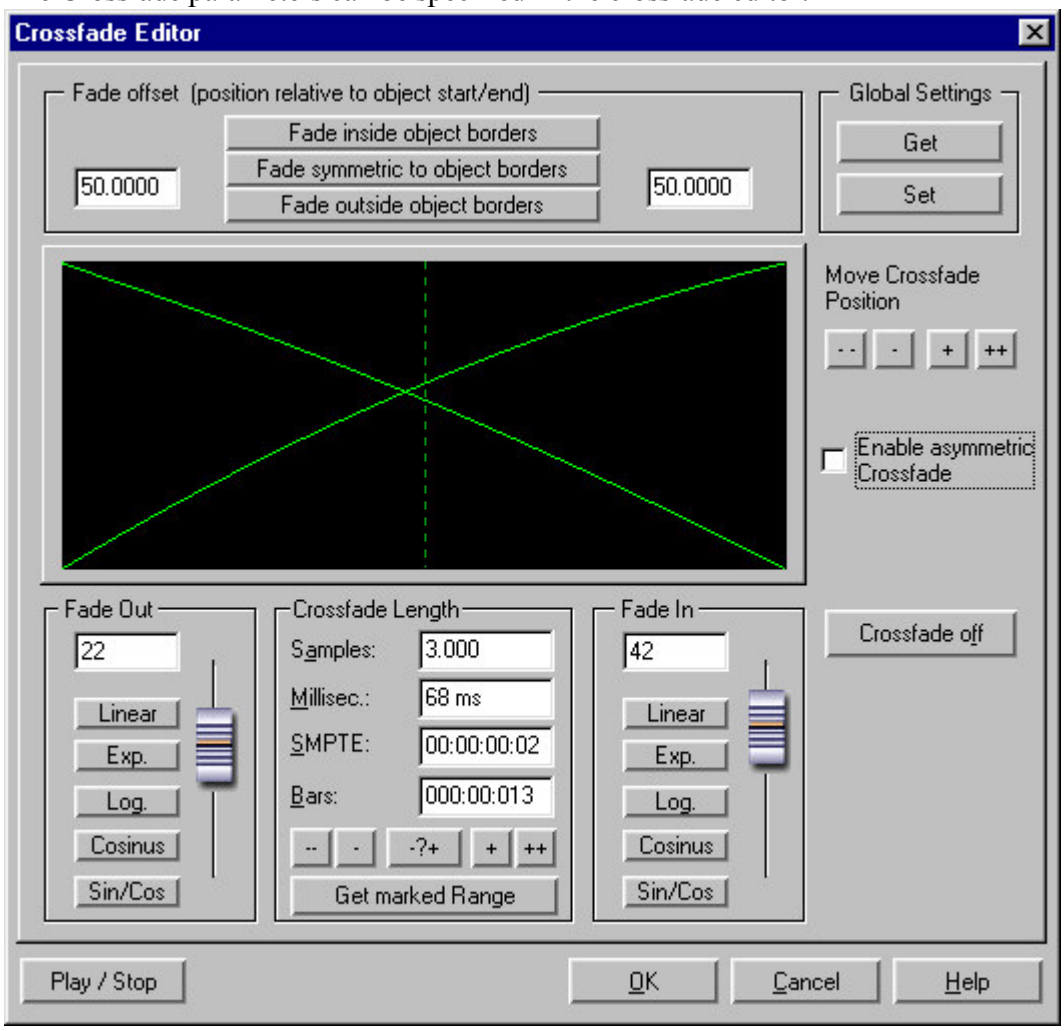
Activate the Auto crossfade mode

and fade in the second object. The first object will be faded out and mixed with the second, a crossfade will be applied. The object remembers, if a crossfade was once applied. If you use this object (or a copy of it) at another place in the VIP, you don't have to activate Auto crossfade again to have this behavior. Fade in the overlapping object will cause a crossfade again. You can reset this object quality by selecting "Crossfade off" in the Crossfade editor.

With the Crossfade Editor

Select the second object and call the Crossfade editor.

The Crossfade parameters can be specified in the crossfade editor.



Crossfade Length

The length of the crossfade can be specified in different length units. Clicking "+ / -" expands / shortens the crossfade by a minor step width, "++ / --" by a major step width. With "-?+" you can define these step widths. The Crossfade length can also be transferred from the selected range (if there is one) with

the "Get marked range
" button

Curve types

Available fade-in and fade-out curve types are Linear (0), Logarithmic/Exponential(-100..100), and Sine/Cosine (-100..100). With the fader you can adjust the curve form continuously between these extremes. Linear crossfades do not take as much processing power as non-linear crossfade curves.

Global Set

The currently selected settings for the crossfade can be used as default setting for newly created crossfades. This mainly concerns the crossfades created after applying a "Split Object" command (Keyboard: "t"), which are small symmetric, linear crossfades of 35 ms, fade offset 0%. So use it wisely, if you set any other value here for new default, it has to be a reasonable one.

Global Get

Restores the global crossfade settings as parameters for the Editor configuration.

Get Range

The length of the currently selected range is used for the length of the crossfade.

Crossfade off

The button "Crossfade Off" deactivates the crossfade for the selected Object. The first object's fade out time is set to zero, the second preceding objects independent from its fade in / out settings

Play/Stop button

If a range is selected over the crossfade section, the crossfade can be pre-viewed with the Play/Stop button. This also works while making adjustments in the editor dialog and allows you to audition the crossfade parameters in real-time.

Move Crossfade

The object borders of both object will be moved simultaneously, this results in moving the whole crossfade. Use the +/-/++/-- buttons like above.

Shortcut:

Key: Ctrl + F

Auto Crossfade Active

Menu: Edit

If this option is turned on, all newly recorded or cut material in a VIP or material that is dragged from a Wave project into a VIP track has an automatic fade in /out applied to it. If you perform a "split object " command, the resulting two objects are crossfaded too. This is to avoid clicks at the beginning and end of the object.

Global settings for Fade In and Fade Out parameters are assigned to the object. These settings can be changed in the Edit->Crossfade Editor . This can be necessary, when the audio material is already clean cut and the fade is impairing the attack of the sample.

If two objects are overlapped that had an automatic crossfade applied to them a real-time crossfade is the result. If an Object with a fade in is moved over a preceding object, a crossfade will be applied over the two object, when auto crossfade is active.

The auto crossfade mode is an excellent tool to easily perform a linear cut of a spoken voice track, jingle track etc., which requires a soft passage without the unwanted 'pops'. If needed, each crossfade can be edited in the editor or by manually manipulating the handles.

Toolbar

Set Silence

Menu: Edit

The data of the current range is replaced with silence.

Please note that this command will not save the deleted data to the Clip. If you want to preserve the deleted data, use the Cut or Copy command. Using the Delete command will delete the data from the current project and preserve the contents of the Clip.

Shortcuts:

Keys: Alt + Delete

Copy + Silence

Menu: Edit

The current range is copied into the Clip
and cleared in the project. The project length is not changed. Please note that the previous Clip contents are deleted.

Shortcuts:

Keys: Alt + C

Copy As

Menu: Edit

The current range of a Wave project (HDP or RAP) is copied into a new file. A file requester appears to select the name of the new project.

Shortcuts:

Keys: Shift + C

Overwrite with Clip

Menu: Edit

The current range is replaced with the Clip contents. The overall sample length remains unchanged. The data that occupied this position before cannot be recalled. The Clip contents are not changed. The assignment of the Clip channels follows the table mentioned above

.

In virtual projects

using selected ranges, the program utilizes the beginning position and relative track position as the insert point for the Clip contents.

Shortcut:

Keys: Alt +V or Insert

Mix with Clip

Menu: Edit

The range contents and the Clip contents are mixed. Channel assignment between project and Clip follows the table above (See ‘Insert’
function). The contents of the Clip are not altered.

Since either component is combined with their full sample values, make sure that no over-modulation takes place. This function is performed by way of addition. This assures on one hand, that the project sample remains free of a sudden volume decrease. On the other hand, modification of the amplitude might need to be performed before the mix to keep the resulting sample from clipping and distorting. For information on amplitude modification, see ‘Editing Menu.’

Delete Volume Handle

Menu: Edit

This function deletes volume curve events, which have been previously selected. Individual volume events can be deleted by selecting the Object and Curve Mode mouse mode and double clicking the left mouse button on a volume curve event. However, when deleting several curve events, the 'Delete Volume Handle' function is the best tool. Use the Curve Mode and Grab Tool to select multiple curve events.

Delete Panorama Handle

Menu: Edit

This function deletes panorama curve events, which have been previously selected. Individual events can be deleted by selecting the Object and Curve Mode mouse mode and double clicking the left mouse button on a volume curve event. However, when deleting several curve events, the 'Delete Panorama Handle' function is the best tool. Use the Curve Mode and Grab Tool to select multiple curve events.

View Menu

Menu Reference

This menu contains tools for manipulating the display of MAGIX music editor 2

.

Rebuild Graphic Data	Calculates new graphic data of a project.
Sections	Select number of views.
Fix vertically	Selects ranges always with full height.
Show Grid	Switch grid on or off.
Grid Lines	Select kind of grid.
Units of Measurement	Selects several units of measurement for the time display.
Snap to Grid	Switches the snapping functions on and off.
Snap and Grid Setup	Chooses the kind of the snapping and gridding.
VIP Display Mode	Select and toggle Display Preferences in VIPs.
Horizontally	This sub menu contains all functions for horizontal zooming and scrolling.
Vertically	This sub menu contains all functions for vertical zooming and scrolling.

Rebuild Graphic Data

Menu: View

Display inaccuracies after complicated sample processing can be fixed by using this menu option. The screen (window) will be cleared and redrawn to display the project properly.

Sections

Menu: View

MAGIX music editor 2
allows the optional display of one, two or three of the samples belonging to one Wave project or the VIP itself. Other audio editing applications usually show only one window of a sample.
If you select ‘2’, MAGIX music editor 2 will display the same sample in two window . Each section can be handled separately. It is possible, for example, to represent the complete sample in one section and a zoomed in version of a certain range
in the other.
The mode ‘3 sections’
is especially useful for searching for loop points in Wave projects.
The whole sample can be shown in the upper section, while the section on the lower left displays the beginning of the loop range and the section on the lower right the end of the range. Use the split range function for this purpose (key b).
Go back to 1 view with Shift b!
This is only an example of the mode ‘3’
view. All sections can be handled independently.
You can also drag ranges over the section bounds. Establish the starting point of a range by clicking, then keep the mouse button pressed, and change over to another section. MAGIX music editor 2
will show you the size of the range and at the desired location release the left mouse button to determine the end of this range.

Fix Vertically

Menu: View

Ranges can be dragged (pulled) in MAGIX music editor 2 horizontally and vertically as well. If this option seems too strange to you, you can fix the upper edge of a range(s) to the maximum value and the lower end to the minimum value. Thus, you get the usual representation in range dragging. However, a trade-off is, that you will not be able to define the vertical extension of a section by choosing the vertical range button.

Show Grid

Menu: View

This menu function will display the grid on the project window. The units of measurement defined in ‘Units of Measurement’
will appear in the upper sections of the grid.

Shortcuts:
Keys: #

Grid Lines

Menu: Options

With this option, you can define the type of grid that is used for the Show Grid option. Select between several line styles.

Units of Measurement

Menu: Options

'Units of Measurement'

is used to specify the grid dimensions. Several display options are available which will appear at the upper section of the grid.

The units supplied with MAGIX music editor 2 are 'Samples', 'Milliseconds', three SMPTE Frame options, the MSF format for red book CDs (SMPTE with 75 frames), SMPTE + Milliseconds (instead frames), 'Bars'

for BPM display and feets and frames for 16/36 mm film..

Snap to Grid

Menu: View

This function switches the Grid on and off.

When working with virtual objects the Virtual Grid becomes available. Objects can only be shifted to the beginning, the end, or the hot spot of another object. The reference point is usually the beginning of the object to be shifted to. A hot spot when defined will be used as a reference point as well.

If several objects have been selected, the move is performed in lining up the beginning of the last selected object in the sequence with the reference object or Grid point. All selected objects remain their position to each other.

This option can be used to easily rearrange objects with their audio patterns and gain sample-exact connections.

Shortcuts:

Toolbar:

Keys: Ctrl + r

Store Position and Zoom Level

Menu: View

Stores positions and zoom factors. They can be called up using the 8 buttons below the Section track, the "Get position and zoom factor" menu item and the NUM pad (to the right of the cursor keys). To delete them again click the right mouse on the buttons.

Store Zoom Level

Menu: View

Stores the current zoom factor only. Please also refer to: Store Position and Zoom Factor

.

Get Position and Zoom Level

Menu: View

Loads one of the 4 possible setups for position and zoom factor, which have been stored before using "Store Position and Zoom Factor". After they have been stored they can be called up by clicking the mouse on the buttons below the track boxes or by using the Num pad (to the right of the keyboard).

Get Zoom Level

Menu: View

Loads one of the 4 possible zoom factors which have been stored before. Please also refer to: Get Position and Zoom Factor

.

Horizontally

Menu: View

This menu contains all the functions of the horizontal (red) position bar.

Section to Beginning

Menu: View

Section Left

Menu: View

Half Section Left

Menu: View

Half Section Right

Menu: View

Section Right

Menu: View

Section to End

Menu: View

Section to Play Cursor/Stop Position

Menu: View

Object border Left

Menu: View

Object border Right

Menu: View

Marker Left

Menu: View

Marker Right

Menu: View

Zoom In

Menu: View

Zoom Out

Menu: View

Show All

Menu: View

Range to Section

Menu: View

1 Pixel - 1 Sample

Menu: View

Zoom Level from 1s to 10 min

Menu: View

Vertically

Menu: View

This menu contains all the functions of the vertical (blue) position bar.

Section to Upper End

Menu: View

Section Up

Menu: View

Half Section Up

Menu: View

Half Section Down

Menu: View

Section Down

Menu: View

Section to Lower End

Menu: View

Zoom in Track

Menu: View

Zoom Out Track

Menu: View

Show All

Menu: View

Range to Section

Menu: View

1 Pixel - 1 Bit

Menu: View

Zoom out Wave

Menu: View

Vertical zoom out the Waveform in VIP, the normal vertical zoom buttons will zoom the tracks

Zoom in Wave

Menu: View

Vertical zoom in of the Waveform in VIP, the normal vertical zoom buttons will zoom the tracks

Object Menu

Menu Reference

Contrary to the menu Edit all functions in this menu exclusively manipulate selected objects in virtual projects. Selected have no effect with these functions. Ranges are used to determine insertion points or cut positions of objects. When inserting material into a virtual project, the range beginning has the same function as the play cursor –
the material is inserted at the range beginning.

New Object	A new object is generated, using the audio data from the last activated Wave project. several object related copy/paste operations

Cutting Objects

Cut Objects	All selected objects are cut from the VIP and transferred to the VirtClip.
Copy Objects	All selected object are copied from the VIP and transferred to the VirtClip
Insert Objects	The objects in the VirtClip will be inserted at the play cursor position.
Delete Objects	All selected objects will be deleted.
Extract Objects	All NOT selected objects will be deleted.
Duplicate Objects	All selected objects will be duplicated.
Duplicate Objects multiple	Multiple copies of all selected objects are copied. A dialog with additional selections is displayed.
Split Objects on Marker Position	The object will be split into parts at VIP marker positions.
Split Objects	Objects are separated at the selected range borders or the play cursor position.
Trim Objects	The object borders are trimmed to the selected range borders.
Mute Objects	The selected Object will be muted
Lock Objects	All selected objects will be protected from moving, fading and/or size changes.
Unlock Objects	All selected objects will be unlocked.
Lock Definitions	Selects options for object locking.
Object to Playcursor Position	Moves Object to actual play cursor position
Build Loop Object	Generate an object with a loop range.
Hotspot	The current play cursor position is made a reference point.
Select Objects	All objects in selected range are selected.
Switch Selection	Invert the selection.
Group	All selected objects build a group.
Ungroup	All selected objects will be ungrouped.
Object Background Color	Sets a background color for objects.
Object Foreground Color	Sets a foreground color for objects.
Object Name	Changes the name of objects.
Wave Editing	Opens the associated Wave project for destructive editing.

New Object

Menu: Object

Use this function to create a new object. The current range in the last activated Wave project will be inserted into the virtual project at the play cursor position into the currently selected track. It will also be the currently selected object. The object is inserted at the actual range position in the VIP.

Split Objects

Menu: Object

This function splits or separates selected objects so that individual object sections can be further manipulated. All selected objects are separated at the current play cursor position, which results in two independent objects.

If a range is selected, the cut occurs on both range borders. It is not necessary to select objects prior to choosing the range and calling the Split Objects function. If an underlying object is separated, the newly created object covers the original underlying object.

The two new objects have the same object properties (FX, Object volume, color...).

Shortcut:

Keys: t

Trim Objects

Menu: Object

This function trims the object borders to the currently selected range borders. The selected range needs to be located within the confinements of the object you want to trim.

Shortcut:

Keys: Ctrl+t

Heal/Unsplit objects

With this command you can join objects which were split into pieces (e.g. by accident). The objects have to border each other in the VIP as well as its referred audio data has to fit. That means, the have to refer to distinct, but bordering wave data of the same wave project. If this conditions are not fullfilled, the command is greyed out. All object settings (fades, effects etc.) of the second object are removed, the resulting object carries the settings from the first one.

Mute Objects

Menu: Object

The selected Objects will be muted

Object to Play cursor Position

Menu: Object

Moves the selected object to the actual play cursor position. If multiple objects are selected, the selected object with the smallest track number is moved to the playcursor, all other selected objects are moved relative to it (in consideration of the object modes).

Build Loop-Object

Menu: Object

With this function, a loop can be defined within an object. An area, which indicates the loop length, must be selected in the object first.
The object then becomes the loop object. That means that the number of loops can simply be 'raised' with the 'length handlers' at the bottom of the object.
Such generated loop objects are ideal for generating long drum sequences from only one drum loop! Loop objects also help to save memory, since in the VIP only one object is handled rather than multiple objects or copies of the same material or very long samples!

Set Hotspot

Menu: Object

The current play cursor position is turned into a reference point for the snap function. Instead of the object'
s beginning, the hot spot is now used when the object is snapped to the grid.
Stroked vertical lines illustrate hot spots. Hot spots may stand outside an object (in front of or behind the object).
This function is very useful for a case where the portion of an object to be synchronized does not line up with it'
s beginning.

Selecting Multiple Objects with the Mouse

If the Shift or Ctrl key is pressed in addition to a mouse click, additional objects are selected without undoing any previous object selection.
Prerequisite for this is the selection of the correct Mouse Mode: Object Mode, Object & Curve Mode, and Universal Tool Mode all offer this functionality. In the Universal Tool Mode, the object is selected by clicking on the lower half of the object.
Another method of selecting multiple objects is the use of the Object Lasso. Simply click the left mouse button at an empty VIP track pane location to the left of the desired objects and drag a marquee (Object Lasso) around the object you would like to select. Once the mouse button is released, the object covered by the Object Lasso will be selected.
Also, see the information in Mouse Functions of the Individual Mouse Modes .

Switch Selection

Menu: Object

All selected Objects become unselected, all unselected become selected.

Group Objects

Menu: Object

All selected objects are grouped together. All operations are applied to the whole group.

Shortcuts:

Toolbar:

Ungroup Objects

Menu: Object

Selected objects are ungrouped. Individual objects are available for processing after that.

Shortcuts:

Toolbar:

Object Background Color

Menu: Object

Sometimes it is necessary to distinguish certain objects from others. MAGIX music editor 2 will let you specify different colors for selected objects. Once you have selected one or more objects, choose ‘Object Background Color’ from the ‘Object’
menu and specify a different background color for the objects. After clicking on OK, all selected objects will have the specified background color.

Object Foreground Color

Menu: Object

The foreground color (such as sample data displayed) can be changed as well. After selecting the desired color, all selected objects in the project will have the same foreground color.

Object Name

Menu: Object

Another way to distinguish certain objects is to give them a different name. MAGIX music editor 2 will let you specify a name (such as ‘Verse’) with this option. Please note that the name only shows up if you enabled this option in the ‘Object Draw mode’ definition window (available from the ‘Setup’ menu or by pressing Shift+Tab when the object is selected).

Wave Editing / Destructive Editing

Introduction

MAGIX music editor 2 is primarily a non-linear, non-destructive audio editor. This means that most of your work is usually completed in the virtual domain (VIP), without making changes to the original audio. However, there are some situations which are best completed by working directly on a Wave Project, as if you were using a conventional audio editor. MAGIX music editor 2 can also function as a conventional audio editor, but now offers two alternatives - Destructive Editing or the new virtual Wave Editing. When working directly on Wave Projects, the powerful options offered by the Wave Editing system place MAGIX music editor 2
a "cut" above other conventional audio editors!

Wave Editing / Destructive Or Virtual?

Using Wave Editing or Destructive Editing may not necessarily be the best method of completing your editing task. For example, if you have duplicated an Object several times, all of the Objects would contain the same edits after changes are applied and saved directly to the Wave Project window. But this can also be an advantage at the other hand.
Please keep in mind that editing functions such as cut, copy, fades, crossfades, and so on can also all be applied to the audio material in a non-destructive way in the VIP. Almost all effects can be used from within the Virtual Project and applied to the Objects in the VIP Tracks.
With regard to the Effect Menu functions, the editing can also be performed "offline", in a destructive or semi-destructive fashion which has similarities to Wave Editing. For example, the Effect Menu Room Simulator function is always performed "offline". However, the option Create Copy (checked by default) makes sure that a copy of the original material is processed with the effect and not the original audio segment. The copy of the audio segment allows the use of Undo in the Virtual Project to return the Object to its original state. Of course, this process utilizes additional hard disc space.
Also, remember that even if you work extensively with WAV files, you can complete all editing tasks within a VIP. By importing the Wave Project into a VIP, you can complete editing steps faster and more conveniently than in any destructive Wave editing application! For example, any type of cutting and rearranging of audio segments can be performed in a non-linear, non-destructive, and extremely fast way in the VIP. The Track Bouncing option in the Tools Menu allows you to take any material in a VIP and turn it into a new WAV file which can then be imported into a VIP Project.
Note : As we shall see in this chapter, the new non-destructive Wave Editing mode is very similar to working within a VIP , but the editing is carried out directly on the Wave Project
. This saves a lot of time in some cases (such as when working with sound or loop libraries).
Editing on Wave projects can be performed in two different modes, in the old "Destructive Editing" mode or in (virtual) "Wave editing" mode.

Destructive Editing

This is the term used to describe the method for working directly on Wave projects in earlier versions of MAGIX music editor 2
.

When editing in Destructive Editing mode, the physical audio files are edited on a ‘destructive’ basis. This means that the audio file is reconstructed with whatever effect or editing process you choose. There will be Undo backups (assuming Undo is enabled), but these only exist while the file is open. Once the Project is closed, the changes to the file are permanent. Of course, the Undo files consume large quantities of hard disk space and can also take a long time to write to the hard disk!
When using Destructive Editing on a Wave Project, the changes are in general written back to the audio file without having to use the Save Project command, as the changes are directly applied to the audio material contained in the file. Once editing is finished, you simply close the Project. However, the Save Project command needs to be used for saving marker information and other workspace specific items.
A RAP project needs to be saved to the hard disk to make the changes available the next time the project is loaded. Since any editing is applied to the computers volatile RAM memory, the changes would be lost as soon as the computer is turned off. The contents of the RAP project are loaded into the RAM memory of the computer and are played back and edited in RAM. The Save Project command will save any changes to the hard disk for storage and retrieval.
The Save Project As dialog lets you make a duplicate copy of the Wave Project window.
The original audio files are kept intact when using this command. Instead, a copy with the exact same content is created. This can be a useful option for Destructive Editing.
MAGIX music editor 2 ’s development team designed a way to circumvent the disk space and time inefficiencies associated with Destructive Editing. MAGIX music editor 2
introduces this new method, called Wave Editing :

Virtual Wave Editing

This is the new virtual wave editing mode introduced with MAGIX music editor 2
.
Read the new features quickstart "Virtual Wave Editing"
for an introduction to this mode.
There are some differences between the "destructive" and the "Wave editing" mode when working on wave projects:

Rendering edit operations on saving

All edits: cut, paste, delete and insert are virtual. The positions, where the edit took place, are marked by dotted lines. There will be no time consuming undo file creation any more. All the edit operations are applied on the wave project, when you save it.

Section:

You can call the mixer, while working in the wave project. There you can apply every fx manipulation as in the normal VIP section in real-time. These effects will be applied on the wave project, when you save it. For more information on the Mixer section, read here
!

Menu fileàSave in format:

This will call the track bouncing Track bouncing dialog (format conversions are possible). (Toolsà Trackbouncing)

Auto Crossfade

The Auto crossfade option (Menu Edit) works in wave projects too, on every cut or insert operation the default crossfades are applied, when auto crossfade is active. You can use the Crossfade Editor to edit that crossfade, when you select the crossfade by selecting a range over the crossfade.

New File with Drag and Drop

You can mark a range in the wave project and drag this range to an empty space somewhere t the program desktop. A new wave project (untitled.wav) will appear. So you can easily make copies of the whole or parts of the wave project.

Lock Objects

Menu: Object

To protect objects from unintended shifting use this option. First, select the objects you want to ‘lock’ in place and activate the lock function. A diagonal line is placed across the locked object.

Unlock Objects

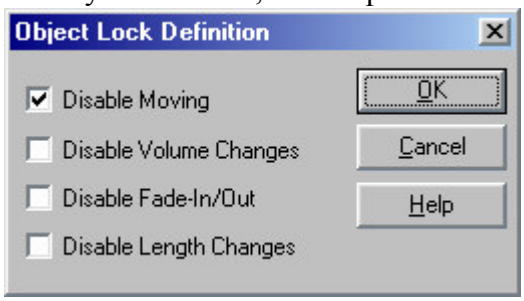
Menu: Object

Locked objects are unlocked and made available for shifting. Make sure you have selected the object(s) you want to unlock prior to activating the unlock function.

Lock Definitions

Menu: Object

Here you can select, which options should be disabled:



Disable Moving

Disables moving of objects (default). This is useful in multi-track projects to avoid delays between several tracks.

Disable Volume Changes

The volume handles are disabled.

Disable Fade In/Fade Out

The fade handles are disabled.

Disable Length Changes

The length handles are disabled.

Cut Objects

Menu: Object

The currently selected object is replaced with empty space and copied to the VirtClip. The length of the current project remains and all other non-selected objects remain in their positions. The previous contents of the VirtClip are replaced with the cut object.

If a range is selected, all active objects are separated on the range edges.

Copy Objects

Menu: Object

To place a copy of the currently selected object into the VirtClip select this option. The contents of the VirtClip can then be inserted into the project using the 'Insert Objects' option (see below). The previous contents of the VirtClip are replaced.

Insert Objects

Menu: Object

Objects in the VirtClip can be inserted in the project at the current play cursor position. The other objects in the project maintain their positions. Please note that the newly inserted object might cover portions of the already existing objects. Simply drag the new object to a different set of tracks or reposition the object on the same tracks.

Delete Objects

Menu: Object

The selected objects are deleted from the current project. The length of the current project however remains the same. Previously unselected objects keep their positions. The contents of the VirtClip remain unchanged.

Shortcuts:

Keys: CTRL + Del

Extract Objects

Menu: Object

All objects not currently selected are deleted. Please note that the function Edit->Extract works similar. However, the Edit menu function requires a previously selected range

!

Duplicate Objects

Menu: Object

All selected objects are duplicated and pasted to the same position as the original objects. The original object is overlaid with the copied object. The duplicate object can easily be shifted to a desired position by using the mouse. If several objects have been selected before the duplication, press the shift key before shifting to ensure that all objects remain in selected status and are shifted together.

This option does not make use of the VirtClip

, so all contents of the VirtClip remain unchanged.

This function is also available using your mouse. Press and hold the Ctrl-key, click on the object you want to duplicate and drag the copy to a new position in the project.

Another option is to use the Drag & Drop functionality for the Object or Universal Mouse Mode:

If multiple objects are selected, press the Ctrl key and drag the selected objects to the new position. This allows you to duplicate the selected objects easily and without using the VirtClip.

Duplicate Objects Multiple

Menu: Object

This function duplicates multiple objects and places them in sequence. Another dialog is displayed, which allows you to determine how many copies of the selected objects are to be duplicated, the separating distance and the overall length of the duplication.

Duplicate Objects - Number of Objects

Determines the number of objects that are created.

Duplicate Objects - Group created Objects

When checked, all created objects are grouped together.

Duplicate Objects - Delta Time

This determines the relative position of each created object to the next (from the beginning of one object to the beginning of the next). The default setting is the length of the selected object. At the default setting the duplicated objects line up without a gap between them, this creates a seamless loop.

Duplicate Objects – Duration

As an alternative, the duration can be specified, which are the combination of time difference and the number of duplicated objects.

Split Objects on Marker Position

Menu: Object

The object is separated into to object at the marker positions which lie within the object borders. The new objects have the same object properties (FX, Object volume, color...).

Menu Effects

Menu Reference

This menu will let you add high-grade effects to Wave projects and VIP Objects in destructive way. The audio material will be physically altered. Read more on effects in general in the Using Effects in MAGIX music editor 2 . More about destructive Effects read here

Normalize...	Sample data values in a selected range are normalized.
Amplitude / 2	The amplitude of the samples is halved. (WAVE PROJECTS)
Amplitude * 2	The amplitude of the samples is doubled. (WAVE PROJECTS)
Fade In/out...	Sample data values in a selected range are faded in or out.
Set Zero	Sample data values in a selected range are set to zero .
DirectX Plug-Ins	Uses DirectX Plug-Ins for destructive editing
Graphic EQ	A graphic 10-band equalizer is opened.
Dynamics	Dynamic-Functions (Compressor, Limiter, Expander, Gate)
Room Simulator	Simulates Reverb and other room effects.
Reverb/Echo...	An reverb/echo effect effect is calculated.
Declipping	Eliminates Clipping.
Remove DC-Offset	Removes a DC offset from the selected range.
Get Noise Sample	Copy the selected range to the noise sample project for the noise reduction. This is a sample of the noise print.
Noise Reduction	Removes Noise from the sample using the Noise Sample
Dehisse	Removes low noise from the selected Wave project. No noise print sample is needed.
Timestretching/ Pitchshifting/ Resample	Resampling, Timestretching and Pitch Shifting.
Change Samplerate...	Creates a new project with another sample rate.
Build Loop	A smooth loop is calculated.
Switch Channels	Switches left and right stereo channel.
Stereo Enhancer	Stereo bandwidth changes and panorama control.
Invert Phase	Sample data values in a selected range are inverted.

DirectX Plug-Ins

This function allows you to use Microsoft DirectX compatible plug-ins with MAGIX music editor 2
. This complements the already existing superb effects with an unlimited number of 3rd-party effects.
The Mixer in MAGIX music editor 2
is also compatible with plug-ins, which can be used as real-time effects. However, the plug-ins have to be able to process the audio data blocks immediately and completely, without changing the length of the material. This is the case for most plug-ins (i.e. Wave Native Powerpack, Power Technology DSP FX, Arboretum Hyperprism, TC Native Reverb and others). Other algorithms will fail, such as time stretching plug-ins, since they are based on changing the length of the material.
The menu Effects
does not pose these limitations. All available plug-ins should work, even if they change the length of the audio material or temporarily off-load the data blocks (i.e. Sonic Foundry Acoustic Modeler).

Working with the Plug-Ins

After opening the plug-in dialog, a list of installed DirectX Plug-Ins is visible. Double clicking on a specific plug-in moves the plug-in to the left side of the dialog. The left side shows the active plug-ins. At the same time the plug-in is moved into the active plug-in list, the dialog for the chosen plug-in is displayed. The DirectX plug-in dialog allows you to make further settings for the effect. Additional double clicks on entries in the right-side list add other plug-ins to the active plug-in list on the left side.
Dialog Elements
Play/Stop –
This button activates the real-time preview of the active plug-in listed on the left side of the display. This function is ideal for testing of the chosen plug-in settings if the real-time calculation operates sufficiently.
Preview (only in Effects menu)– This function calculates a short segment of the audio material with the active plug-in settings and plays back the audio segment. . Use this option if your system does not seem to be able to sustain the real-time preview (button 'Play/Stop'). The length of the off-line preview can be determined with the setting System
(shortcut: y) – Test buffers.
Create Copy (only in Effects menu)– This decides whether MAGIX music editor 2
creates a copy of the original material. If the option is checked, the copy is appended to the end of the audio file and the effect is processed over the copy instead of the original. This function allows the Undo option to return the VIP object to the original state. It is therefore recommended to always use this option!
Solo -
Only the selected Plug-In will be used.
Mute -
The selected Plug-In will be muted (bypass function). You can also bypass a plugin by unchecking the preceding checkbox.
Remove –
the selected plugin will be removed from the effects chain.
Saving and Loading –
These two buttons in the upper left-hand section of the dialog allow you to save and load Plug-In presets. A previously saved preset, which is saved in the standard fx-preset folder will be listed in the selection box. A Plug-In Setup contains the information of utilized Plug-Ins, all the parameters, and the order in which the Plug-Ins are set.
This allows you to easily transfer custom settings between several instances and projects in MAGIX music editor 2

(Mixer, Offline wave editing in the Effects menu).

With the copy/paste button
in the top right corner you can even quicker transfer plugin settings between different instances of a plugin chain.

Graphic Equalizer

The 10-band-Equalizer splits the frequency spectrum into 10 areas ("bands") and provides them with separate volume faders. This offers a whole spectrum of impressive effects, from a simple bass boost to complete alienation of your sound. However, raising the levels too much, especially in the case of the lower frequencies, will also increase the general sound level, and distortions may appear. In this case you should lower the main sound level using the "Volume"-controllers in the main menu.

Slider:

Each of the 10 frequency areas can be raised or lowered separately using the corresponding 10 volume sliders.

Link Bands:

This switch links the different frequency areas in a flexible way, avoiding override of isolated frequency areas that would result in artificial sound.

A/B:

If you chose a preset value for an effect and want to change that value manually, you can compare the original preset sound with the new settings by pressing the A/B button.

Reset:

Resets the equalizer to it's original (neutral) settings where no system resources will be used and no effect will be added to the sound.

Touchscreen (right EQ section):

This is the "sensor field" of the EQ: draw a frequency curve using your mouse, and it will be immediately translated into the corresponding slider positions on the left side of the EQ.

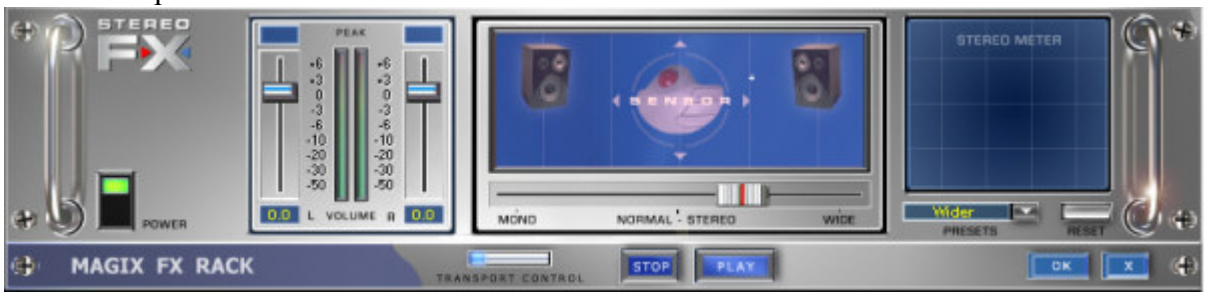
Dynamics

The Compressor is basically an automatic, dynamic volume controller. The dynamics of a track will be limited, loud passages will stay loud whereas the volume of silent passages will be raised. The compression is normally useful, if you want to make your material sound more powerful and smashing. The grade of compression can be adjusted using the Ratio-controller. The threshold is controlled by the Threshold button and attack and release can also be controlled by the corresponding buttons.
The processing of the track is as "prospective" as with high-end professional studio equipment. This means that there are no peak overrides (blasting, clipping) or other disturbances, as the algorithm can not be "surprised" by sudden peaks.

Sensor field:
The sensor field of the compressors can be manipulated intuitively, just by a movement of the mouse, which will change the colour of the graphic and the effect settings.
Ratio:
This parameter controls the compression ratio.
Threshold:
Adjusts the threshold above or below the active compression.
Attack:
Adjusts the delay, in which the algorithm responds to increasing levels. Short attack times can result in a "pumping" sound, as the volume will be raised or lowered very quickly.
Release:
This value controls the delay in which the algorithm reacts to falling levels.
A/B:
If you chose a preset value for the effect and then changed it manually, you can compare the original sound settings with the new ones pressing the A/B buttons.
Reset:
Resets the Compressor to the original values. In this state no system resources are used and no effects are added to the original sound.
Load/Save:
This option allows you to save the actual settings as an effects file, so that you can use them for other projects.

Stereo Enhancer

The Stereo-FX-Enhancer allows you to reposition your audio material in the stereo panorama. Whenever a stereo recording sounds undifferentiated, the extension of the basic stereo-width can provide a more transparent sound.



Basic stereo width controller:

Here you can adjust the width of the basic stereo panorama from mono (leftmost side), over unchanged (in the centre) to maximum width ("Wide", rightmost side).

When setting the stereo panorama to smaller values, the sound level may rise. In an extreme case – it means that if the left and right channels contain identical audio material and the Basic stereo width controller is set to "mono" – the sound level increase can be as much as 3 dB.

While increasing the basic stereo width (values exceeding 100) the mono sound compatibility gets worse. This means, that recordings that have been manipulated in such a manner will sound hollow during mono playback.

Volume fader:

Adjust the volume for each channel and the stereo panorama. The damping for the left and the right channel will be indicated in dB values under the controllers. This allows you to reposition an originally centred recording to the right or to the left inside the stereo panorama.

Stereo-meter (correlation indicator):

This is a graphic display of the phase position of the audio signal. Here you can check the orientation of your signal inside the stereo panorama and the effects caused by the Stereo-Enhancer.

In order to achieve the best possible mono-compatibility, the graphic should resemble a diagonal line. If not, some frequency areas may eliminate each other when the stereo signal is played back on a mono player.

Room Simulator Dialog

Menu: Effects

Room Type

You can chose between several room types When choosing a room type, the Room Simulator loads several parameters (non-editable) and a so-called "impulse response" associated with the settings. The impulse response is a sample of reverb from real rooms, produced by a very short impulse. They are used to "convolute" the audio data with it to produce a mega-realistic reverb. If the file was moved or deleted, the Room Simulator displays an error message.

The files loaded with the standard presets (factory presets) are located in the same folder as the presets (Folder ‘fx-preset’ in the MAGIX music editor 2
folder).

Preview

This option allows you to preview the current dialog settings.

Mix

Original %

This setting allows you to determine the amount of original signal that is to be mixed with the reverb signal. A setting of 0% will only contain the reverb signal. At 50% both signals are present with the same volume and amplitude amount.

Reverb dB

The setting determines the overall amplitude of the reverb effect in dB.

Create Copy

When checking this box MAGIX music editor 2 will create a copy of the selected range
into the same audio file as the original material. This can be done to compare the results with the original material. Please consider the length of the selected range and the available hard disk space or RAM memory! It must be activated for working with the Undo-Function in virtual projects.

Reverb/Echo Processor

Reverb

Reverb supplies a high-quality reverberation which can be defined more closely with ‘room size’, ‘time’ and ‘colour’ and mixed into the original sound with ‘mix’.

Room size:

This control button controls a room simulator which calculates the reverb effect in dependency on the room size. If the control is turned completely to the left, it sounds as if the audio object has been recorded in a tiny room, turned completely to the right, one can listen to the object as if it had been recorded in a cathedral.

Time:

Here the length of the ‘reverb trail’ is determined, i.e. the fading phase of the sound.

Colour:

Here it is possible to control the type of reverb – rather dull than high-pitched or vice versa.

Mix:

This control determines the mixing ratio between the unedited original sound (‘dry’ signal) and the reverb portion (‘wet’ signal).

Echo

The echo effect is defined more closely with ‘delay’ and ‘feedback’ and calculated into the original sound by means of ‘mix’.

Delay:

Here the period of time between the individual echos can be determined; the more you turn the control to the left, the faster will the echos follow each other.

Feedback:

Here the number of echos can be adjusted. Turned completely to the left, there is no echo at all, turned completely to the right there are virtually endless repetitions.

MultiMAX

The MultiMax is a compressor with three independent frequency bands. The dynamic processing takes place separately for each band.
The main advantage of a multi-band compressor over a "normal" compressor is that warping and other bothersome side-effects are reduced drastically by the dynamic processing. This means, for example, that a single peak level in the bass section will not drag the level of the whole signal down.
Otherwise, the multi-band technology enables precise treatment of individual frequency bands.

Limiter
: The MultiMax contains a limiter that harmonizes levels so that, for example, too high a level is automatically reduced, and quiet passages remain unaffected.

Tip: The limiter can also be used independently of the MultiMax!

Get Noise Sample

Use this to get a sample of the noise used in the Noise Reduction function.
For general information on Noise Reduction read here
Here is an outline of using this function:
1. Select a range
in the audio material or select in a VIP object that contains only the noise print.
2. Copy the range to a special clipboard with Effects->Get Noise Sample. Especially for noisy material such as tape hiss the rule of thumb works best: The longer the Noise Sample material the better the algorithm will work!
3. Next, select the section in the Wave project or select the VIP object that needs the noise signal removed.
4. Open the dialog Noise Reduction in the Effect menu.
5. In the Noise Sample box select the Noise Sample setting, since this project contains the noise print.
6. Make all desired changes in the dialog or load a preset and click on OK to process the sample.
7. You also may wish to preview the changes before committing them to the audio material by clicking on the Preview button.
If you are satisfied with the changes you may click on OK to commit them to the audio material. You may also refer to the section on Noise Reduction: Tips and Trick for information on finding the best settings in this dialog.

Denoiser

The Denoiser is especially useful for the elimination of continuous background noise, such as electric buzzing, band noise, noise produced by the sound card, your HiFi equipment (for example, the turntable) and LPs.
All the Denoiser needs is a sample of the disturbing noise. Some of the most common disturbing noises are provided. It is however preferable to make your own noise sample. All you need is a short section of audio material with the isolated disturbing noise.

Noise Level: This is the threshold at which the Denoiser starts to work. This value needs to be as exact as possible. Low values will result in deficient damping of the disturbing noise and in formation of artefacts such as disturbing sounds or "tweeting"(see artefacts
). Excessive values will produce a dull sound, as all higher frequencies of the music signal will be filtered away. So it is recommendable to spend some time on the correct adjustment of this value!
Noise reduction:
To adjust the balance between the original signal and the processed signal. In many occasions it is better not to eliminate the whole disturbing signal but to dampen it only 3-6 dB. This will help maintain the natural sound of your sound material.
In case of buzzing sounds however, we recommend that you eliminate them completely.
Removed Noise
: To listen to the part of the sound material that the Denoiser is going to eliminate.
Noise Sample Section
Pick!
Generates a NoisePrint. A small noise sample will be taken from the actual position onwards. It is important, that the noise sample includes no music or voices, but only the pure disturbing noise signal. The actual position can be changed using the transport bar even if the module is already opened in order to search for an ideal sample.
The noise print cannot be generated if the replay position is located between two objects. An error message will appear to remind you.
Play:
To listen to the noise sample.
Auto:
If this switch is activated, the length of the noise sample will be chosen automatically.
Length:
Choose the length of the noise sample in ms, if the "Auto" switch is turned off.
Save:
The generated Noise Sample can be saved in the "Noise Print Sample" directory. It can then be selected from the "Noise Sample Presets" selection whenever you need it.
Noise Sample Presets:
Choose one of the noise samples. The noise samples are located in the "Noise Print Samples" directory. If you generated the noise sample using the "Pick!" function, then it will appear in the list titled "NoisePrint".

Play:

To listen to the noise sample. However, this is not possible if the noise sample has been generated using the Pick! function.

Dehisser

The Dehisser was especially designed to eliminate the band noise, which is all so typical for analogue tape recordings, micro-preamps or AD-transducers.

Noise Level: Here you will have to determine as exactly as possible the noise level at which the Dehisser starts to work. If you choose a level that is not high enough, the band noise will not be completely eliminated. In such a case you will notice tweeting sounds (the so called "melodic band noise"). An excessive value will result in a dull sound as part of the band noise and part of the original audio signal recording will be eliminated by the Dehisser as well (for example: air intake sounds of brass instruments) (see Artifacts
)

If the noise level on your recording is low, you should experience no problems while adjusting it.

Noise Reduction:

this option allows you to adjust the damping of the band noise in decibel units. In many occasions it is the best solution, not to eliminate the noise completely, but to damp it only -3 - -6 dB, hence maintaining the natural sound of the original material.

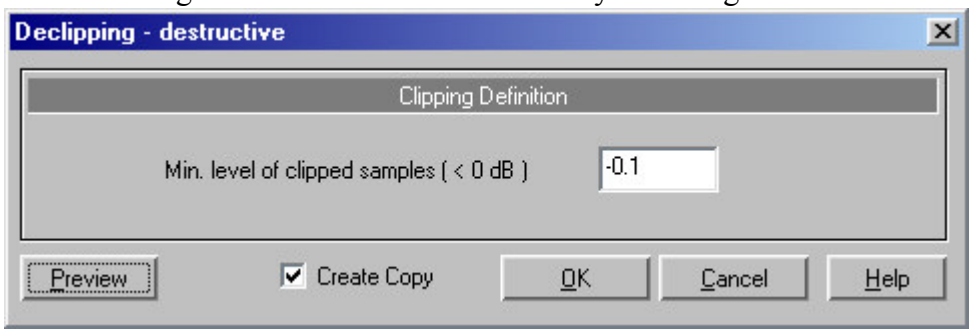
Removed Hiss:

This option allows you to listen to the music that would be filtered away by the Dehisser.

Declipping

Menu: Effects

MAGIX music editor 2
contains a one of a kind function to remove digital or analog clipping. Anybody who records audio has encountered this one before. The perfect live recording contains clipping at the most important moment. This alone may render the recording unusable!
MAGIX music editor 2
uses high-grade algorithms to interpolate the passages containing the clipping. The algorithm uses the material before and behind the clipping as a reference point. Once processed, the total volume level for the material can be reduced to prevent further clipping.
The declipping algorithm is especially useful for material that contains obvious clipping, such as a piano or voice recording. Distorted drumbeats are normally not salvageable.



Minimal Level of Clipped Samples

This setting determines the volume level the algorithm considers offending material. There are sound cards that exhibit different clipping behavior and this setting becomes an important issue. Some DAT recorders have an analog protection mechanism so that the level never reaches the digital maximum signal. In these cases a setting of –0.5 dB or lower make most sense.
By entering a value of –6 dB all samples above half of the digital maximum are considered ‘distorted’ and are recalibrated. Even analog distorted material can be improved with the algorithm.

Remove DC Offset

Menu: Effects

This function in menu ‘Effects’ removes a DC offset in the selected range of a Wave project (RAP or HDP). Some sound cards produce such a DC offset while recording, so it is useful, if you can remove it!

Resampling/ Timestreching/ Pitchshifting

Note: If you only want to change the sample rate of an audio file, use the Adjust sample rate option from the Effects Menu.

All algorithms in this dialog use the time factor parameter and pitch as input parameter.
The time factor calculation (from the original length/original speed and the length required / speed required) can be comfortably activated on the right side of the dialog.

Resampling

Samplers and PCM Synthesizers transpose samples during this procedure. Time factor and pitch are dependent upon each other: the shorter the audio material, the more higher the pitch. The effect is comparable with changing the playing speed of record players or tape recorders.
The effect is relatively loss-free, the sound loss is smaller than with all Timestretching/Pitchshifting procedures. If pitch change is justified by changing the speed (and vice versa), use this algorithm.

When lengthening the audio material by resampling, very small aliasing effects may occur. the anti-aliasing filter helps in this regard. Alternatively, since this filter requires additional CPU load, it can be activated for the computation and the real-time preview. The filter is also available for the other algorithms that use resampling internally when pitchshifting.

Pitch-Shifting/Timestretching

With all other algorithms, pitch and length variation are independently adjustable. These algorithms produce artefacts, and depending upon the audio material, other algorithms may produce better results. The algorithm used for Timestretching/Pitchshifting as a default object effect can be stored in the wave project with the Timestretch-Patcher.

Algorithms for Pitchshifting / Timestretching

Standard

Smoothed

Beat Marker-based Slicing

Beat Marker-based Stretching

Monophone Voice

Standard

An algorithm is used that usually produces very good results. It uses factors (from 0.9 to 1.1) and fixed

phases, which maintains the impression of space for stereo signals. For drum loops or other "beaty" material, this algorithm is only occasionally suitable because it can change the groove and - in rare cases - doubles or erases beats. The cross-fade length parameter determines sample length to be added to this algorithm. The optimal size depends on the basic frequency and/or the deepest frequency in the material. If the duration of one period is larger than the length of the cross-fade, the wave shape can be distorted and may develop greater artefacts.
For 44.1 kHz samples, approx. 900 samples works satisfactorily. This corresponds to a frequency of approx. 50 cycles per second.
With heavily periodic material (e.g. instrument samples) it is recommended that you mark the duration from in front of a sample and then use this area as your desired length.
Time Compression (shorter sample length) usually works better with this as timestretching. When combining two samples, reduce the longer sample rather than the other way around.
Use recommended when:

- working with complex material (Mix)
- the other algorithms fail

Load on the CPU: light

Smoothed

This is a substantially more complex algorithm which demands more computing time. The material can now be processed even with very large factors (0.2... 50) without creating large artefacts. That's because the material is "smoothed", which creates a softer sound and changes phase position. This smoothing is hardly audible in recordings of speech, singing or solo instruments. With more complex spectra – mixed sounds from different instruments or fixed mixes – problems may arise. This algorithm is not suitable for drum loops and other material with pronounced transience. The groove remains, but the phase shift alters the 'attacks'. In such cases, a small correction (factor approx. 0.9 - 1.1) often does the trick.
Use recommended for:

- orchestral instruments
- speech recordings with background noise (e.g. video recordings)
- Synth surfaces, guitars…

Use not suitable for:

- Stereomix
- Drum loops, percussion

Load on the CPU: very heavy

Beat marker-based slicing

This mode was primarily conceived for adjusting drum loops, but can also be used for other material such as monophone bass lines or sequencer lines. The algorithm divides the material into individual components – individual notes or beats marked by beat markers.
This "snippet". is then constructed in the new timeline: Individual beats are overlaid when the tempo is increased. Small pauses appear between beats when the tempo is decreased.

If you are able to use this algorithm, do so. It allows you to change the tempo without loss of quality and with minimum CPU load.
Use recommended for:

-
- Samples to be cut into individual notes or measures (beats)
-
- Drum loops, but only when beats don’t overlap and there is little reverb

Use certainly not suitable for:

-
- Anything else

Load on the CPU: very light

Beat marker-based stretching

This algorithm works like the standard algorithm, but synchronizes the stretched material with the beat markers. The groove is consequently altered somewhat, and beats may be duplicated or deleted. In contrast to the beat marker-based slicing algorithm (which may produce missing or incorrectly positioned markers), this algorithm’s disadvantage lies in decreased synchronization performance. In practice, the automatic generation of markers almost always produces good results. One should avoid placing beat markers too close to each (< 1000 samples.)
Use recommended for:

-
- All types of rhythmic samples that can’t be cut into individual notes or measures (beats)
-
- Complex overlapping drum loops
-
- For when beat marker-based slicing can’t be employed or when it’s too much bother to find the perfect beat marker position.

Load on the CPU: light

Beat marker-based slicing and beat marker stretching – Setting and evaluating beat markers

Setting markers

The Beat markers can be set manually or automatically. Using the Timestretching Patcher, you can set the markers and save them in the Wave file (patched). Use the Resampling/Timestretching dialog (Effects menu) to set the destructive calculation of the (temporary) beat marker.

Evaluating patched markers

In the object editor, use the "Patched" flag to determine whether the beat markers should be calculated automatically in real-time, or whether patched beat markers should be used (if available). In the Resampling/Timestretching dialog (Effects menu) patched markers are used if the find beat marker option is not employed.

Setting beat markers in the Timestretching Patcher or in the

Resampling/ Timestretching Dialog (Effects menu)

Generating beat markers -- Options:

Find beat marker: The algorithm searches for and marks out beats in the audio material.

Beat recognition threshold: Sets the threshold for beat recognition. When the wave project is being displayed, you can follow the placement of beats. This also works with VIP objects if the wave project is kep open simultaneously.

Beat markers can be re-positioned, copied, deleted etc. by activating the applicable marker commands.

When new markers are created, the marker name must be assigned "Beat Marker". Before editing, we advise that you set the beat recognition threshold to a high value and then delete the redundant markers. It is quicker than adding markers manually.

You can only edit markers while the dialog is open by using the Timestretching-Patcher . This allows you to check the results without having to close the dialog.

Monophone Voice

This is Timestretching and Pitchshifting for solo vocals, speech or solo instruments. The material must not contain background noises and should be free of reverb. With suitable source material, the audio quality is very high. The "Use formant correction" option secures the formants when pitchshifting so that the "Mickey Mouse effect" doesn't occur. You can therefore "compose" a background chorus from just one solo voice. Formants can also be shifted across + - 12 half-tones to create voice distortion.

Typical uses are:

-
- Intonation correction (imprecisely pitched notes should be removed as objects and worked on separately)
-
- Harmonizer effects: an object with singing can be copied and shifted downwards. If the pitch is then changed, a second voice is generated, etc.
-
- Creating background vocals from existing vocal samples
-
- Timestretching
-
- Speech sample distortion

Use recommended for:

solo vocals, speech or solo instruments without overlapping, little or no reverb or background noises.

Use certainly not suitable for:

Anything else

Load on the CPU: heavy

Change Sample Rate

Menu: Effects

Use this function to change the sample rate of a whole audio file. This may be needed to convert a DAT recording at 48 kHz to 44.1 kHz for use on an audio CD.

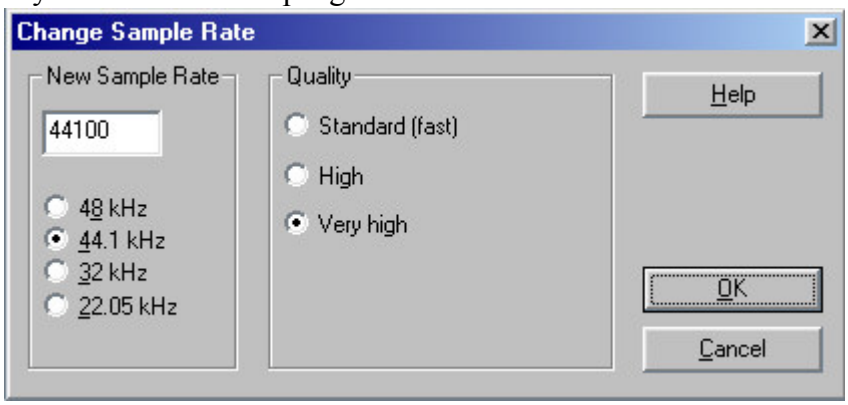
After choosing the new sample rate you can select a filename for the new project.

If the resolution is increased, the sample rate change will take place without almost any quality loss - the sample material will not experience fidelity reductions. (The needed hard disk space will increase though.)

If the resolution is reduced, the overtones or high frequencies may be lost during the sample rate change. For example, if the resolution of a 44.1 kHz sample is reduced to 22.05 kHz, the frequency response of the resulting sample is reduced to 11.025 kHz. The frequency response is always half of the resolution specified.

Please note that resampling to 44.1 kHz can also be done while recording in real-time.

The Playback Parameter window (Shortcut: p) contains a Varispeed option for real-time resampling during playback. The Record window (Shortcut: r) will let you resample to 44.1 kHz in real-time from any of the selected sampling rates.



New Sample Rate

Enter the new sample rate or select from one of the presets.

Quality

This setting determines the anti-aliasing quality during the reduction of the sampling rate and whether the reconstruction filtering (Interpolation) is to be applied when increasing the sampling rate.

An interpolation algorithm is used, which is also applied during the real time resampling.

High

This adds a filter to dampen the aliasing frequencies or to improve the reconstruction (Interpolation). Especially when using extreme conversion ratios, such as converting from a 48 kHz signal to a 22 kHz signal, this setting may improve the results.

Very High

This setting uses a new algorithm, which internally utilizes a higher sample rate. The input and output sample rates are divisible by this internal sample rate. (For example, the conversion from 48 to 44.1 kHz uses an internal sample rate off 7.056 MHz). This ensures the highest possible quality.

This method is also used during CD-Bouncing if the sample rate of the project isn’
t equal to 44.1 kHz.

Reverse

Menu: Effects

The sample data in the selected range is reversed along the time axis. The playback of the sample data happens from the end to the beginning. This allows for very interesting effects, not to mention the ‘hidden messages’
frequently referred to in various songs.
This function is reversible: if you do not select a new range, calling this function once more leads to the original material.

Build Physical Loop

Menu: Effects

This function utilizes a complex algorithm for optimizing loops in Wave projects. It is useful when samples are to be used for instrumental sounds as well as wave table synthesizer.

Before you can process a sample you need to select a range in your sample that already defines the rough edges of the sample loop. Remember that you can shift and vary a range during playback to find the best loop position. A comfortable way to look at the loop positions is by activating the split range mode by pressing ‘b’

. The sample will be displayed in 3 sections.

To gain an interruption-free loop the outer limits of the range will be set to zero. By applying a crossfade to the material at the loop end containing the sample data in front of the loop beginning, MAGIX music editor 2 will create a ‘smooth’

transition between loop end and loop beginning.

When a marker

is set in front of the selected range, the range between the marker and the beginning of the loop will be used for the crossfade. This offers you a feature found in professional hardware samplers. To achieve a short crossfade set the marker close to the loop beginning. To receive a long crossfade position the marker further away from the loop beginning.

Notice that the distance between marker and beginning of the loop range needs to be smaller than the loop range itself to make a crossfade possible.

Switch Channels

Menu: Effects

With this function you can switch left and right stereo channel. This is useful to correct recordings with switched channels.

Invert Phase

Menu: Effects

The sample data within the selected range is inverted along the amplitude axis. This phase inversion means that negative values become positive and vice versa. This function, too, is reversible.

The 'Invert' function permits samples with different phases to be matched.

Along with the available mixing functions (which are, from a mathematical viewpoint, adding functions) you can actually subtract samples by applying this function to the selected sample.

Process only left/righ channel

Menu: Effects

Only the right / left channel of a stereo Wave project will be affected by effects when activating "Left/Right processing only". This options is only available when in Wave editing /destructive Editing mode.

The same effect have the L/R buttons in the lower left corner of the WAV project window.

Normalize

Menu: Effects

Normalize File

This function modifies the sample's overall amplitude.

The data is altered so that the maximum amplitude occurring in a specified range is set to 100% (or any other value between 1-400%). MAGIX music editor 2
will first attempt to detect the maximum and relate it to the percentage chosen. Then all other values are weighted with the new factor.

The Normalize function is designed to fully modulate or over-modulate samples. A particular application is processing that is done before a conversion from a higher sample resolution to a lower resolution takes place. Since the dynamic range of the low resolution is smaller, it still can be fully utilized by applying the Normalize function.

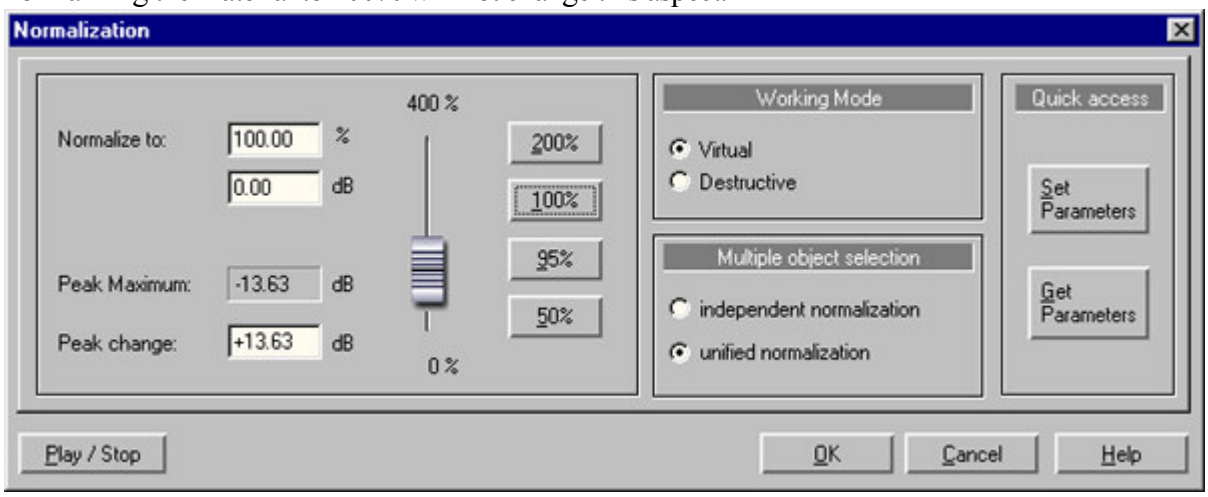
If working with sounds from one single instrument, you should set the factor to 100%.

If, however, your audio material has background percussion for example, you will be able to over-modulate the sample to 120% to 200%. This will only cut off the new percussion peaks. The same method allows you to alter the sound of natural instruments by over-modulating them.

As preparation for further physical processing, such as filters, reverb, dynamic compression etc., a level reduction of 50-70% is suggested. This should avoid clipping during post processing.

An important reselect:

If the volume level during the recording is relatively low and the material is later normalized, the result will not be of the same quality if the recording level is maximized to its fullest range. If for example the volume level was only set to 50% of the possible range, the audio material will be in 15-bit quality. Even normalizing the material to 100% will not change this aspect.



Normalize to: Here you can set the level to normalize the audio data to, by typing in the data fields, adjusting the fader or pressing the preset buttons for 50, 95, 100 or 200% . The value is displayed in % and dB. 0db=100% (full range). Normalizing over 0dB results to digital distortion.

Peak maximum: displays the highest detected peak in the selected range/object.

Peak change: displays the level change in dB according to the chosen normalize level and the detected peak maximum

Working Mode

Virtual: This function will perform real-time normalizing on the selected objects. This is different than the destructive normalizing, which will restructure the audio file.

The real-time normalizing will look for the peaks in the object and adjust the object volume so that the highest peaks represent exactly the choosen normalize level.

This option is not available when working on wave projects (Wave editing)

Destructive: The audio material in the wave project is physically altered. Undo is only available, when Undo is enabled and the "create copy" flag is set.

Multiple selection

When multiple objects are selected, there are two different techniques to normalize the objects:
Independent normalization: Each object is normalized according to its own maximum
Unified normalization: The maximum is detected from all objects and each object is normalized according to that value. This is the default behavior.

Quick Access

Set parameters: With this buttons you can set a normalize value (e.g. 99%) and the normalize method for multiple selected objects, which is used when you call the Normalize function via the "Quick access command".
Get parameters: to reload this parameters in the dialog.

Normalize (quick access)

Quick normalize a selected range (wave projects) or selected objects (VIP) to a fix value. This value you can define in the "Normalize
" dialog.

The working modes are always applied according to the project type, i. e. Wave projects in destructive editing mode are normalized destructive, wave projects in virtual wave editing mode and VIP objects are normalized virtual.

Key: n

Fade In/Out

Menu: Effects

This function allows sample ranges to be faded in or out.
The amplitude is varied in its time characteristic from the start value of the beginning to the final value at the end of the range
. When the function has been called, a window appears in which you can specific parameters for this operation.
A simple Fade In operation would be performed with the parameters from 0% to 100%, whereas normal Fade Out requires the specification from 100% to 0%.
The fade curve can be adjusted from linear to exponential or logarithmic.
Notice that real time fading is applied to virtual projects only (with handles
). For all other projects (RAM and HD), the sample data is physically altered.
Shortcuts:
Keys: f

Set Zero

Menu: Effects

Sample data values in a selected range
are set to zero (no data). Noise and imperfections in a sample can thus be eliminated.

Menu Range

Menu Reference

MAGIX music editor 2 offers a convenient way of working with ranges. The ‘Range’ menu will let you use these options.

Range all	The range will cover the complete sample.
Move Play Cursor to beginning	Sets the play cursor to the beginning of the project.
Move Play Cursor to end	Sets the play cursor to the end of the project.
Move Play Cursor to Range Start	Sets the play cursor to the beginning of the selected range.
Move Play Cursor to end of range	Sets the play cursor to the end of the selected range.
Left Move in Page Mode	Moves play cursor left
Left Move in Scroll Mode	Moves play cursor left and scrolls
Right Move in Page Mode	Moves play cursor right
Right Move in Scroll Mode	Moves play cursor right and scrolls
Range to beginning	The beginning of the range will be extended toward to the beginning of the project.
Range to end	The end of the range will be extended toward the end of the project.
Flip Range left	The current range is shifted left.
Flip Range right	The current range is shifted right.
Beginning of Range -> 0	Shifts the beginning of a range right to next zero position.
End of Range -> 0	Shifts the end of a range right to next zero position.
Beginning of Range <- 0	Shifts the beginning of a range left to next zero position.
End of Range <- 0	Shifts the end of a range left to next zero position.
Range Length to	Sets the range length to 1...16 beats.
Split Range	Splits current range in 3 views for better loop search.
Split Range for Video	Splits current range in 3 views, zoomed down to 1 frame.
Store Range	Stores current on a function key.
Get Range	Recall range from function key.
Get Range Length	Recall the length of a range from function key.
Store marker	Stores current marker to a number key.
Get marker	Recall marker from a number key.
Set Markers on Range Borders	Sets 2 markers to start and end of the range.
Set Markers on Silence	Sets marker to silent positions in the sample.
Delete Marker	Deletes selected marker
Delete all Markers	Deletes all markers
Zoom Level and Store Position	Stores VIP zoom level and scroll position
Store Zoom Levels	Stores VIP zoom level

Get Position and zoom Levels	Recalls VIP zoom level and scroll position
Get zoom Levels	Recalls VIP zoom level
Recall last Range	Recalls the last range.
Range Editor	Edit range borders numerically.
Object Lasso	Marks several objects using a lasso mouse mode

Range All

Menu: Range

The range will cover the complete sample. This command comes in handy if you want to apply changes to the entire sample with functions that normally only address certain ranges.

Shortcuts:

Keys: a

Range Length to Beat 1...16

Menu: Range

This command lets you set the range length to 1, 2, 4, 8, and 16 bars.
You can set the tempo in BPM with menu View->Snap Setup.

Split Range

Menu: Range

This function is in particular useful for working with loops. If not already displaying in Split Range Mode the project is first switched to this mode displaying three sections on the screen.
The upper section displays the whole sample. The section located at the bottom left displays the data near the beginning of the range. The section at the bottom right displays the data near the end of the range.
The boundaries of the range can be exactly positioned in the lower sections, while the upper section will display the location of the entire range. You can also define ranges across several sections.
Shortcuts:

Keys: b
off Shift + b

Split Range for Video

Menu: Range

This function is in particular useful for working with AVI Videos.

The upper section displays the whole sample. The section located at the bottom left displays the data near the beginning of the range. The section at the bottom right displays the data near the end of the range.

Both lower sections are zoomed down to single frame accuracy.

The boundaries of the range can be exactly positioned in the lower sections, while the upper section will display the location of the entire range. You can also define ranges across several sections.

To undo the split, the display has to be returned to a 1 section display with Shift + b
or View->Sections->1.

Store Range

Menu: Range

Another powerful feature of MAGIX music editor 2
is the option of defining and saving different ranges for future retrieval. An unlimited number of ranges can be defined. You can for example specify different loops and compare them while you recall their ranges. All ranges of a project can be seen in menu Tools->Range Manager. There all ranges can be renamed or played.
When selecting this menu option, the selected range needs to be stored by entering a numerical value the range is associated with.

Shortcuts:

Keys: ALT + F2 ... F10

You can define more ranges by using the submenu ‘Other’
. You will need to specify a name for the range selected.

Shortcuts:

Keys: ALT + F11

Get Range

Menu: Range

By selecting this option, you can choose one of the defined ranges as the current range.
MAGIX music editor 2
even lets you choose a range while playing. The specified range becomes the current one and is audible.
Using this method, you can change between two ranges comparing them with each other.
Ranges can also be named and recalled with the Range Manager (Tools menu).

Shortcuts:
Keys: ctrl+F2 ... F10

Get Range Length

Menu: Range

By selecting this option you can choose the length of one of the defined ranges as the current range. MAGIX music editor 2
even lets you choose a range length while playing. The specified range becomes the current one and is audible. Using this method you can change between two range length comparing them with each other.

Shortcuts:

Keys: Shift + Ctrl + F2 ... F10

Store Marker

Menu: Range

You can store an unlimited number of markers wherever the play cursor is placed at.

Shortcuts:

Keys: SHIFT + 1 ... 0

Using the submenu ‘Other’

, you can define more markers with a desired name.

Shortcuts:

Keys: ?

The with the submenu item Auto number set markers will be in an arising numerical order

Shortcuts:

Keys: ‘

Defined markers can be seen above the sample data section of the project window in the marker bar and can be moved with the mouse. Right-click on a marker to open a context menu with the most important menu entries concerning markers. Double click between two markers on the marker bar marks a range between the markers. Read more about markers here

Get Marker

Menu: Range

By selecting this menu option, you can easily locate marker points. Simply specify the desired marker location and MAGIX music editor 2
will position the play cursor at that location.
You can even select a new play cursor location during playback of the project.

Shortcuts:

Keys: 1 ... 0

Set Markers on Range Borders

Menu: Range

This function sets two markers to the beginning (S) and the end (E) of a selected range.

Set Markers automatically

Menu: Range

MAGIX music editor 2 automatically detects Silence and places a Marker each time Silence is encountered. When working in a VIP, you can set MAGIX music editor 2 to split Objects wherever the Silence is encountered.

Important Tip: Only audio to the right of the Locator (Cursor), or audio within a marked Range will be searched! If you wish to search the entire audio flippers the HOME key to place the Locator (Cursor)at the beginning of the file.

Delete Marker

Menu: Range

This function deletes the currently selected Marker.To select a Marker,either use one of the Get Marker commands or hover the mouse Cursor over the Marker until the bi-directional arrow Cursor appears,then click on the Marker.

Note:When using the mouse to select the Marker,the quickest method to then delete it is to select the Marker as shown above,then press Delete on the keyboard.You can also right click on the selected Marker and use the Delete Marker command there.

Delete all Markers

Menu: Range

This function deletes all Markers in the currently focussed VIP or HD Wave Project.The command does not simultaneously delete from the VIP and all HD Wave files referenced to the VIP –the command must be applied separately to each HD Wave file.

In other words,deleting Markers from the VIP does not delete Markers from HD Wave files.

Recall last Range

Menu: Range

This function restores the last range that was selected. It comes in handy when a range was mistakenly deleted by a mouse click.

You can also have this by double clicking the last selected range on the timebar, displayed in light gray.

Range Editor

Menu: Range

The beginning, the end and length of a selected range can be numerically changed in different units of measurement. This function will let you specify minute details of a particular range you need to set.
If you change any of the values in the 'Range Start', 'Range Length' or 'Range End' sections, all other values will automatically be updated with the exceptions below:
Change values in the Range Start section: The end will be maintained.
Change values in the Range End section: The start will be maintained.
Change values in the Range Length section: The start will be maintained.
Please note the format of the 'Bar' dialog box. The format is displayed as a 4/4 beat with 96 clicks per quarter. Displayed are the bar, beat, and clicks.
The number of beats per minute (BPM) can be set in the BPM dialog box in View->Snap Setup.

Range Manager

Menu: Tools

The Range manager is a window illustrating all ranges of the current project. The current range is selected by a colored bar. The range bounds are selected by clicking on the range name. The range name can be changed in the lower line. Ranges can be deleted and new ranges can be saved.
The ranges with the names Backup 1..5 are the last five selected ranges to be quickly restored.
With the Play Once button you can playback the actual range once, with Play Loop it is played as a loop. This way you can use the range manager as a simple jingle player!

Object Lasso

Menu: Range

The normal way to select several objects at once would be to click on the free space on the right of the object in the lower area of the track and to pull a frame around the selected objects.
Sometimes, however, there is not enough space between the objects. The object lasso solves this problem.
Once activated, you can click on
an object and pull up a selection frame, without moving the object you clicked on (which would be the case in the standard mode).
Once you selected your objects the mouse returns to the standard mode, that means that you will have to reactivate the object lasso each and every time you want to use it.

Time Display

Menu: Window

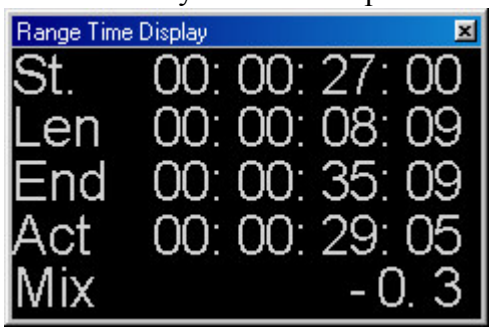
Shows or hides the time display window.

This window always shows the actual time position in the actual format. You can change this format with the menu ‘Units of Measurement’

. We recommend the SMPTE format: hours:minutes:seconds:frames. The colors and the font for the display can be changed in the context menu, opened by right-clicking in the Time display window. You can zoom the window to any size and position it anywhere on the screen!

Up to five rows

of information can be displayed. Click the right mouse button on the Time Display to display a pop-up menu that lets you choose the preferences for the Time Display.



St. - Start Position

This line shows the current range start position or the current real-time cursor position.

Len - Range Length

If a range is selected, this line displays the length of the range.

End - Range End Position

If a range is selected, this line displays the range end position.

Act - Current Cursor Position

This line shows the current cursor position.

Mix – Latest Mixer Position

This line shows the latest mixer position (not editable).

The same values are displayed in the time at the lower edge of the VIP Window

There you have the possibility to edit the values manually by double clicking in the corresponding field. You can also access this function by the keyboard shortcuts alt+ numpad 1..5 or with the corresponding menu items "menu rangeàedit time displayà

field 1..5"

Play Cursor to Beginning

Menu: Range

Sets the start position of the play cursor to the beginning of the project.

Shortcuts:

Keys: Home

Play Cursor to End

Menu: Range

Sets the start position of the play cursor to the end of the currently selected range.

Shortcuts:

Keys: Alt + cursor left

Move Play cursor to Range Start

Menu: Range

Sets the start position of the play cursor to the beginning of the currently selected range.

Shortcuts:

Keys: Alt + cursor left

Move Play cursor to Range End

Sets the start position of the play cursor to the end of the project.

Shortcuts:

Keys: Alt + cursor right

Left Move in Page Mode

Menu: Range

When a Range is selected,this option moves the left boundary of the Range to the left (ie lengthens the Range)in Page mode.Page mode scrolls offscreen on a sequential page basis.

When a Range is not selected,this option moves the Locator (Cursor)to the left in Page mode.

Shortcut :

Left arrow

Right Move in Page Mode

Menu: Range

When a Range is selected,this option moves the left boundary of the Range to the right (ie shortens the Range)in Page mode.Page mode scrolls offscreen on a sequential page basis.

When a Range is not selected,this option moves the Locator (Cursor)to the right in Page mode.

Shortcut :Right arrow

Left Move in Scroll Mode

Menu: Range

When a Range is selected,this option moves the left boundary of the Range to the left (ie lengthens the Range)in Scroll mode.Scroll mode scrolls offscreen on a continual basis.

When a Range is not selected,this option moves the Locator (Cursor)to the left in Scroll mode.

Shortcut :Shift +Left arrow

Right Move in Scroll Mode

Menu: Range

When a Range is selected,this option moves the left boundary of the Range to the right (ie shortens the Range)in Scroll mode.Scroll mode scrolls offscreen on a continual basis.

When a Range is not selected,this option moves the Locator (Cursor)to the right in Scroll mode.

Note:The above functions work best when using the keyboard shortcuts.

Shortcut :

Shift +Right arrow

Move play cursor to left object border

This option moves the Locator (Cursor)to the left border of the selected object.

Move play cursor to right object border

This option moves the Locator (Cursor)to the right border of the selected object.

Move play cursor to left marker

This option moves the Locator (Cursor)to the next marker to the left.
Shortcut:F2

Move play cursor to right marker

This option moves the Locator (Cursor)to the next marker to the right.
Shortcut:F3

Move range start left

Choose this option to quickly extend the current marked Range to the left.
Shortcut:Alt +"/"

Move range start right

Choose this option to quickly shorten the current marked Range from the left.
Shortcut:Alt +"*"

Move range end left

Choose this option to quickly shorten the current marked Range from the right.
Shortcut:Shift +Cursor left

Move range end right

Choose this option to quickly extend the current marked Range to the right.
Shortcut:Shift +cursor right

Range to Beginning

Menu: Range

The beginning of the range will be extended toward to the beginning of the project.

Shortcuts:

Keys: SHIFT + Home

Range to End

Menu: Range

The end of the range will be extended toward the end of the project.

Shortcuts:

Keys: SHIFT + End

Flip Range Left

Menu: Range

The current range is shifted left by the length of the range. Its end will be its former beginning. If there is not enough room to place the range, the command will not be executed.

Shortcuts:

Keys: CTRL + SHIFT + left

Flip Range Right

Menu: Range

The current range is shifted right by the length of the range. Its beginning will be its former end. Keep in mind that if there is not enough room to place the range, the command will not be executed.

Shortcuts:

Keys: CTRL + SHIFT +right

Beginning of Range -> 0

Menu: Range

This function shifts the beginning of range to the right of the next zero position.
The function can be called from the keyboard by pressing the left Shift + Alt keys and ‘6’ on the numeric keypad at the same time. You can also press the PgUp key.
Shortcuts:
Keys: Page Up

End of Range -> 0

Menu: Range

This function shifts the end of the range to the right of the next zero position (change in polarity). ‘Zero position’
is the next sample value with zero value or the boundary between a positive and a negative sample value (or vice versa).
This is particular useful for searching for loop points.
The function can be called from the keyboard by pressing the right Shift + Alt keys and ‘6’
on the numeric keypad or the PgDn keys.
Shortcuts:
Keys: Page Down

Beginning of Range <- 0

Menu: Range

This function shifts the beginning of the range to the left of the next zero position.

The function can be called from the keyboard by pressing of the left Shift + Alt keys and '4' on the numeric keypad. You can also press the PgDn key.

Shortcuts:

Keys: SHIFT + Page Up

End of Range <- 0

Menu: Range

This function shifts the end of the range to the left of the next zero position.

The function can be called from the keyboard by simultaneously pressing the right Shift + Alt keys and '4'

on the numeric keypad or by pressing the Shift + PgDn keys.

Shortcuts:

Keys: SHIFT + Page Down

Range Borders to Zero Crossing

Menu: Range

This function shifts the beginning of the range to the next zero position and the end of the range to the left of the next zero position.

Shortcuts:

Keys: SHIFT + Page Down / Page Up

Range Start to Left Marker

Menu: Range

Choose this option to extend the range to the next marker on the left.

Shortcut Shift +F2

Range Start to Left Object border

Menu: Range

Choose this option to extend the range to the left border of the next object.

Range End to Right Marker

Menu: Range

Choose this option to extend the range to the next right marker..

Shortcut Shift +F3

Range End to Right Object border

Menu: Range

Choose this option to extend the range to the right border of the next object.

Range over all selected Objects

Menu: Range

Choose this option to extend the range over all selected objects.

CD Menu

Menu Reference

Load Audio CD Track(s)	Loads Audio CD tracks from CD-ROM drives.
Set Track	Set a track marker.
Set SubIndex	Set a sub-index marker.
Set Pause	Set a pause marker.
Set Track Indices on Silence	Sets track markers on silence
Set Track Indices on Object Edges Options	Options for automatic track marker generation
Pause Indices on Objects End	Sets pause markers on object end
Set Track Indices on Object Edges	Set track markers automatically on object edges.
Remove Index	Remove an index marker on marker position.
Remove all Indices	Remove all index markers.
Make CD	Displays the Make CD Dialog, which allows the creation of an audio CD.
Show CD-R Drive Information	Shows information about the connected CD-R drive.
Show CD-R Disc Information	Shows information about the CD-R media in the CD-R drive.
CD Track Options	Shows CD-R track information.
CD Disk Options	Shows CD-R disc information.
Set Pause Time	Set the default pause time.
Set Start Pause Time	Set the default start pause time (before track 1).
Bouncing (Internal Mixdown)	Mix the selected range into one WAV file, replace the related objects in the VIP.

MAGIX music editor 2 allows you to create audio CDs directly from virtual projects and any Stereo Wave project, regardless how many tracks are in the VIP. The requirement is a sample rate of 44.1 kHz for the project.

When selecting the special "CD Arrange Mode" regardless of any selected range, the Wave projects are loaded by automatically inserting a pre-determined space between the songs or objects. The distance can be set with CD->Set Pause Time.

If a completed VIP represents a single track on the CD, use the Track Bouncing function to turn the multiple tracks into a single Wave project. This Wave project can then be loaded as a ‘Track Object’ in a new CD VIP to properly place it among other track objects.

Load CD Tracks

Menu: CD

Import entire audio CDs or single CD tracks in a project. However, as opposed to normal data, Audio CDs have to be read first (grabbed or ripped). The data import is 100% digital, so there are no losses in the sound quality.

If you want to import audio CD tracks, just follow these easy steps:

1. Insert an audio CD into your CD-ROM-drive and select "Load CD audio track" from the CD menu. A dialogue with a list of the CD tracks will appear. If you have more than one CD-drive (or for example an additional CD-writer) you will first have to choose the drive from which the CD is loaded. You can do this in the CD-drive options

2. Select the desired title(s) (pressing Shift + mouse button or Alt + arrow keys).

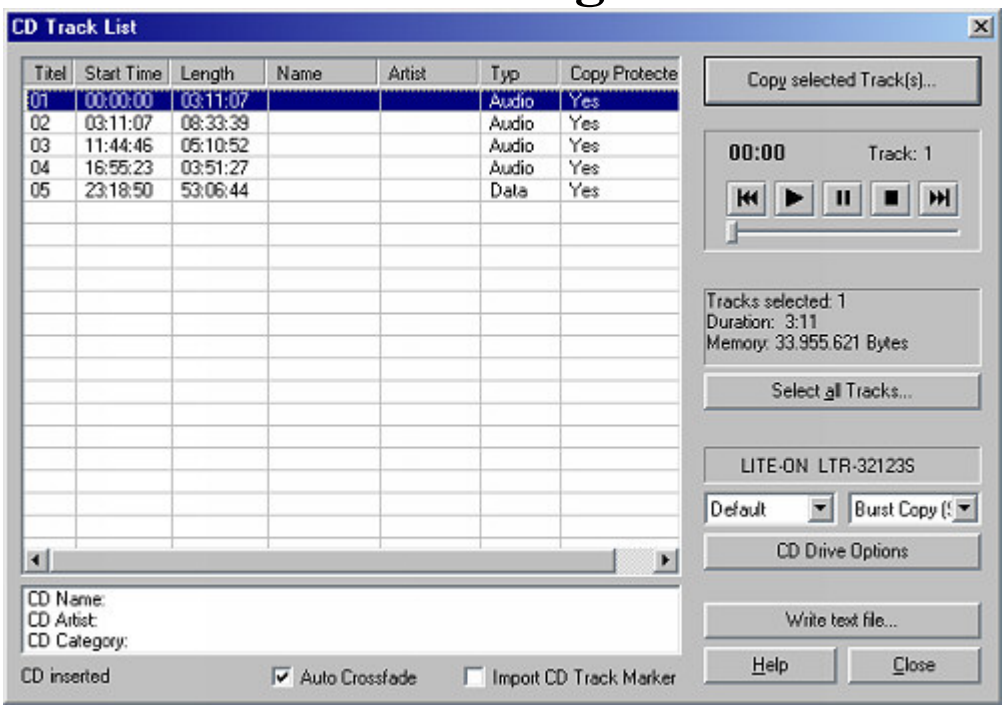
3. Click on "Copy selected track(s)..."

4. The "Project import" dialogue will appear. Here you can choose a file name and the target directory.

5. Now, the audio material will be copied from the CD-drive to the hard disk. A state display informs you of the current transfer state.

6. Once the audio data has been transferred, all dialogues will be closed and the tracks will be added to your master track as single objects.

The Track List Dialogue

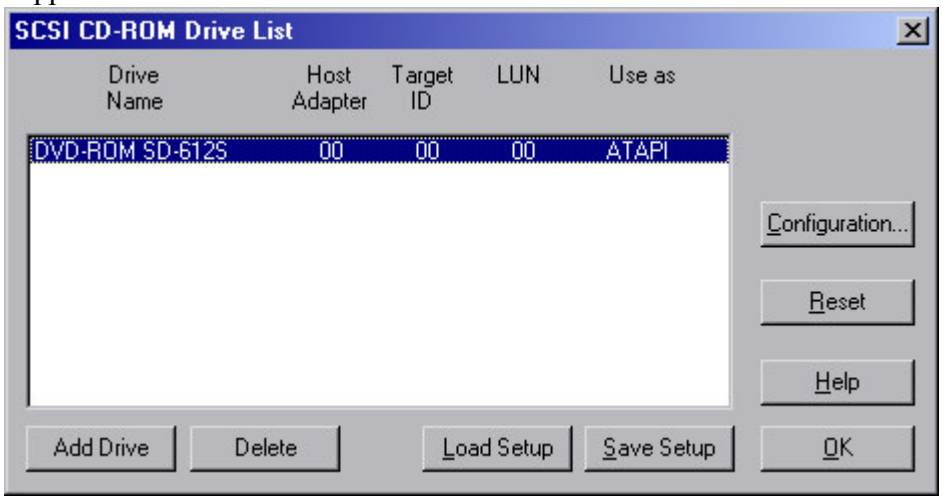


All CD tracks are shown including start time and length. In the name column the track name is shown, this is derived from the CD Text information, if the CD provides this information and the CD drive is able to read it. Select a track by clicking it with the left mouse button, select a range of tracks with SHIFT + mouse click, select several tracks with CTRL + mouse click.

Copy selected track(s):
This button starts the audio copy process. For each track, a new object and the corresponding track marker will be created in the arrangement.
Play:
Starts the audio-playback of the first selected track in the list (for testing).
Stop:
Stops playback.
Pause:
Stops playback that can subsequently be re-started with Play or with a renewed click on Pause
Skip:
Allows you to skip from song to song.
Auto Crossfade:
Turns on the automatic crossfade mode as you import audio tracks and automatically employs crossfades.
Transfer CD Markers:
Markers already set on the CD are transferred to the VIP.
Select all tracks:
All audio tracks are selected (for example, if you want to copy all tracks of a CD). Pressing Ctrl and clicking on the mouse button you can select more than one track.
CD-drive options: Here you can adjust some of the settings of the CD drive settings you are using and choose the drive for "Ripping" CDs if you have more than one CD-drive installed in your system (see The CD-drive dialogue
)

The CD-drive dialogue

Choose and configure your CD-drive. The CD manager permits the import of audio data using most SCSI- and ATAPI-CD-ROM drives and CD writers. In case of doubt, ask our technical support which drives are compatible. If you experience problems while reading audio tracks, you can choose between several reading processes in the Configuration dialogue, which differ in the way the data is read or "ripped".



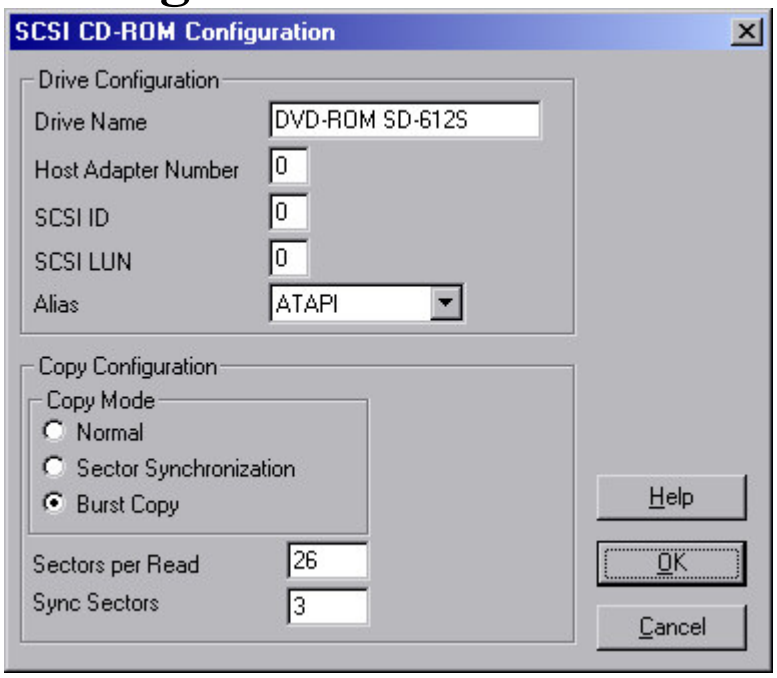
Configuration: This button opens the Config dialogue
, in which you can set different special features, SCSI-IDs etc.
Reset:
Restores the initial drive configuration.
Add Drive:
Adds a new entry to the drive list. However, you will have to adjust the specific settings.

Delete:
Deletes a selected drive from the list.
Save setup:
Saves the current drive list with all configuration-data in a *.cfg file.
Load setup:
Loads the current drive list and all configuration-data from a *.cfg file.

The "Import project" dialogue

The "Import project" dialogue appears after selecting the "Copy selected tracks" option. Type in a name and a target directory for the new audio files. The audio files will receive a number in addition to the name you chose ("name" -> name_1.wav, name_1.wav...).
The preset format for audio tracks (CDA files) is the WAV format. You are however free to convert them into a compressed format, like MP3 while still reading the data. Just choose your audio format in the "Import project" dialogue and click on the "Format settings" button to make your changes (More information concerning the audio formats under Import sample
)

CD-ROM Configuration - Drive Configuration:



Drive Name - Lets you edit the name of the drive in the list. This is useful if you create more than one entry accessing the same physical drive.
Host Adapter Number - Lets you specify the number of your SCSI adapter - normally 0.
SCSI-ID - Lets you set the ID of your CD ROM drive. Be sure to set the correct ID, there is no error checking!
SCSI-LUN - Select the SCSI LUN parameter, normally 0.
Alias - Lets you select a manufacturer type of your CD ROM drive.
CD-ROM Configuration - Copy Configuration:
Copy Mode Normal - Copies the audio data without any software correction.
Copy Mode Sector Synchronization - Copies the audio data using a software correction algorithm. This is useful, because some CD ROM drives cannot seek exactly to the same position between two read

accesses but MAGIX music editor 2 can correct these differences using this algorithm.
Copy Mode Burst - Optimizes the speed of the copy process, no software correction is done.
Sectors per Read - Defines the number of audio sectors per read cycle, the higher the number the faster the copy process will be. Not all SCSI adapters support more than 27 sectors!
Sync Sectors - Defines the number of audio sectors used for the Sector Synchronization. A higher number results in a better synchronization but also in a slower copy process.

Set Track

Menu: CD

Use this function to set a track marker (Index Marker) on the current play cursor position. All markers behind the insertion point will be renumbered.

Each track on your CD needs a track marker, typically set after a short pause at the beginning of the next title.

Use the function ‘Track markers on object edges’ to create the markers automatically on the borders of the sample objects!

To manage the markers or to rename them use the Marker / CD Track Manager in the menu ‘Tools’.

Shortcuts:

Toolbar:

Set Sub index

Menu: CD

Use this function to set a sub-index marker on the current play cursor position. All sub-index markers behind the insertion point will be renumbered. Sub indices are not necessary for your CD but useful for selecting several regions in one track.

Shortcuts:

Toolbar:

Set Pause

Menu: CD

Use this function to set a pause marker on the current play cursor position. This lets the CD player switch the output to absolute silence while continuing playback until to the next track index/marker is encountered.

Set CD End

Menu: CD

Marks the End of the CD. This is important for burning a CD, when the project produces still audio after the last objects end, for instance a reverb tail. To prevent MAGIX music editor 2 from cutting this audio, you can place the CD end marker after the last object in an appropriate distance. Another use of the CD end marker is to burn a project partially on CD. The CD Burning always starts with the first track marker set and ends with the end marker. All you have to do is to delete all preceding track markers before the first track you want to burn. All audio before the first track marker will not be burned on CD. The burning stops with the CD end marker. So you can place the CD end marker inside the project to mark the end of the CD.

Set Markers automatically

Menu: Range

MAGIX music editor 2 automatically detects Silence and places a Marker each time Silence is encountered. When working in a VIP, you can set MAGIX music editor 2 to split Objects wherever the Silence is encountered.

Important Tip: Only audio to the right of the Locator (Cursor), or audio within a marked Range will be searched! If you wish to search the entire audio flippers the HOME key to place the Locator (Cursor)at the beginning of the file.

Set Track Indices on Object Edges

Menu: CD

This function sets track markers (Index Markers) automatically to the beginning of each VIP object in the first VIP track.

Prior to using the function, execute Remove All Indices to delete any possible track markers.

If there are multiple objects that make up a single track or title, you may want to use the Bouncing function to combine the objects to ensure proper track assignments.

Shortcuts:

Toolbar:

Remove Index

Menu: CD

Use this function to remove a previously set track or sub-index marker
. First, click on the marker (the small rectangle below the number), then activate this function to delete it!

Shortcuts:

Keys: Delete

Remove all Indices

Menu: CD

Use this function to remove all previously set track or sub-index markers. This can be helpful before calling the function ‘Set track markers on object edges’

!

Make CD

Menu: CD

This dialog starts the CD writing process. MAGIX music editor 2
contains high-grade CD creation routines that are constantly updated. The software code is licensed from Point Software & Systems.
If you want to find out which CD-R drives are supported, please read the file "CDR_Readme.txt" in the installation folder or visit our web sites at http://support.magix.net
. .
MAGIX music editor 2
creates a TOC (Table of Contents) file prior to starting the CD creation. The name of the current VIP is used and the extension *.tcx is added to the file. The TOC file is located in the same folder as the current VIP. It is therefore important to save the VIP to the hard disk prior to starting the burning process.
For more Information on CD Mastering read here!

Burn "On The Fly":

Use this extremely powerful mode if you want to create the CD directly from within the VIP. All necessary calculations are performed in real-time during the burning process. The following real-time tasks are calculated during the process:

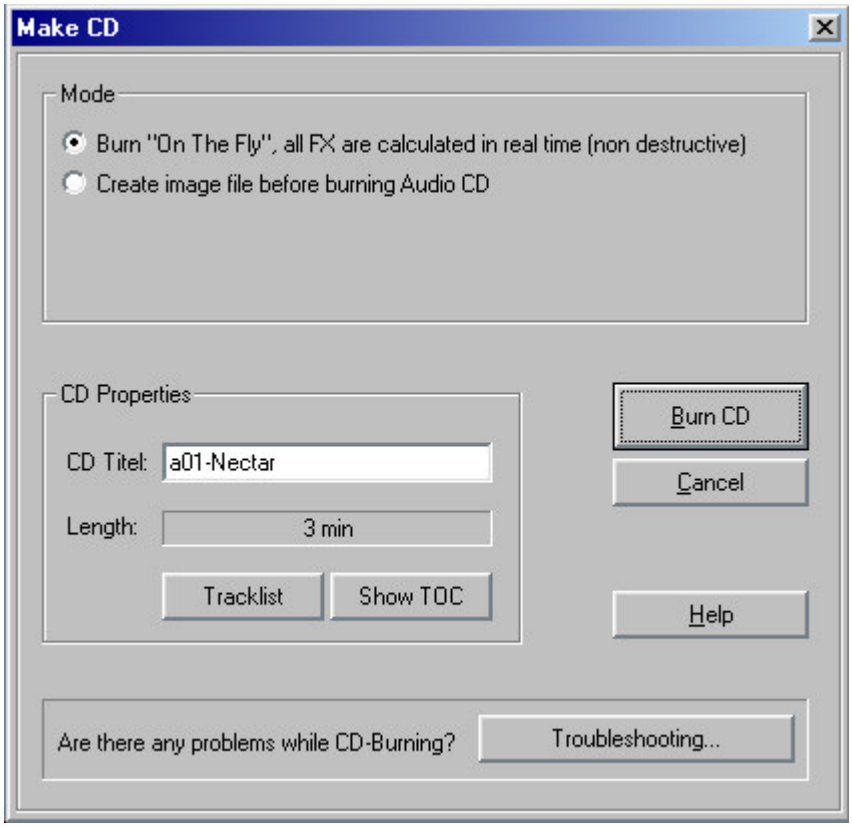
- Object effects, volume and panorama settings
- Fades and crossfades
- Mixing of tracks
- Mixer track effects
- Mixer section effects
- 32-bit Float to 16-bit conversion and dithering

To get a good idea whether your system is able to sustain the real-time processing needed for this functionality, try this:
Play back the VIP sections that contain the largest number of tracks and/or where the most real-time effects are used. Watch the DSP meter (bottom left-hand). Below are the expected performances at the different DSP values:

- Below 25%: CD creation with up to 4x mode
- Below 50%: CD creation with up to 2x mode
- Below 90%: CD creation with up to 1x mode
- Above 90%: Real-time creation is not possible, use the second mode (Bouncing)

Shortcuts:

Toolbar:



Generate a complete new file

Use this option if your system is not fast enough to sustain the real-time creation of the CD (see above). This mode calculates all WAV files, including fades, crossfades, and volume automation into a new audio file

. Any other real-time processing is also part of the newly created audio file. Make sure that you have sufficient hard disk space prior to starting the process (approx. 700 MB for a complete CD).
The original WAV files used in the VIP remain unchanged. This makes this procedure non-destructive!

Use Uni Code for TOC

This is the default setting and is used for the internal CD creation process as well as the 32-bit version of Point CDAudio.

Use ASCII Code for TOC

This format should only be chosen when using the 16-bit version of Point CDAudio.

Call external CDAudio Software

This lets you determine whether you want to automatically start the CD creation application 'CDAudio'. The current TOC information is passed to the application, so that the CD creation in the external program can be immediately started. All MAGIX music editor 2
projects are closed and the application itself is closed down to prevent any type of file access conflicts. If CDAudio is installed in any other folder than 'C:\CDAUDIO'

you will need to enter the location of the application.
Only use this option if you do not want to use MAGIX music editor 2 '
s internal audio CD creation and purposely want to use an external program.

Start CD-R burning module

Starts the MAGIX CD burning utility to burn any data files, e.g. mp3 files on CD.

Print TOC

This starts the external TOC Printer application. This convenient tool allows you to print the contents information of the current CD. You may choose between a text style format to print the production documentation and a formatted printout for the CD jewel case. Please refer to the on-line help for the TOC Printer for more specific information!

Show TOC

This button opens a text window, which shows the contents of the current TOC. The 'Copy' function can be used to copy the contents to the Windows Clipboard for use with other text editing applications.

Export TOC

This function allows you to save a TOC file (*.TOC, *.TCX).

Burn On The Fly

See above description.

Show CD-R Drive Information

Menu: CD

This dialog shows you information about the active CD-R drive(s).
Among the information displayed is the manufacturer, drive name, hardware revision, cache size, and the features supported by the drive mechanism.
The feature ‘Disc At Once’
is extremely important, since it is needed to produce Red Book compatible Audio CDs that are accepted as masters by pressing plants

Show CD-R Disc Information

Menu: CD

This dialog shows information about the currently inserted CD-R media.
The most important information is the maximum length that can not be exceeded during the production (i.e. 74 minutes and 5 seconds).

Marker / CD Track Manager

Menu: Tools

All currently saved markers of the active project are shown with their name and position in this dialog. The play cursor is moved to the respective marker position by clicking on the dialog entry of the desired marker.

You can also change the marker names and create new markers. In addition, the dialog lets you delete individual or all markers of a project.

Marker:

creates a new Marker at the actual Play cursor position

CD Track:

creates a new CD Track Marker at the actual Play cursor position

CD Sub index:

creates a new CD Sub index at the actual Play cursor position

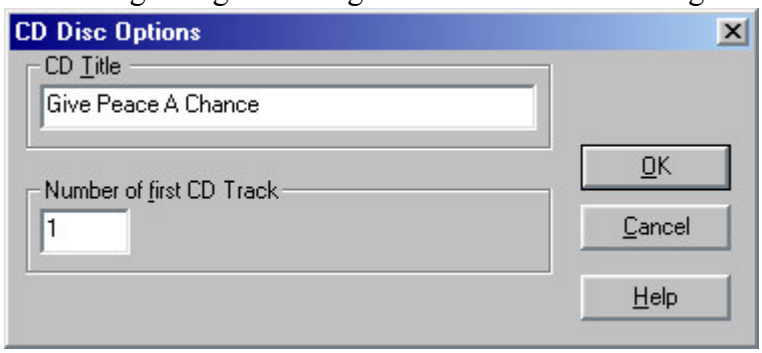
CD Pause:

inserts a pause at the actual Play cursor position

CD Disc Options

Menu: CD

This dialog configures settings for the current CD. Among them are:



CD Title –

The title is written to the CD and is used in the TOC Printer application to print the CD information.

UPC/EAN Code –

this code is also written to the CD and can be requested by special CD players that work with this format.

Number of first CD Track –

Under certain circumstances, such as writing with Track-At-Once, the number of the first track can be determined with this setting. When using the Disk-At-Once mode this setting does not have any significance. The CD will always start with track 1 in this mode.

CD Text / MPEG ID3 Editor

This function allows you to supply data regarding a song or CD content – such as album, artist etc. MP3 files do not only transport audio data, but also information about the coded music piece through so-called "ID3 tags". These are file appendages into which an encoder can write standardized information. The ID3 tags are recognized by the decoders and displayed as music data by the MP3 player.

Set Pause Time

Menu: CD

Use this function to set the length of the default pause between two tracks. These pause length is needed for the grid function, which lets the sample objects snap to the edges of other objects + this pause time. Normally a pause time of 2 seconds is used.

Set Start Pause Time

Menu: CD

Use this function to set the length of the default pause before the first track. Normally a start pause time of 2 seconds is used.

CD Arrange Mode

Menu: CD

When you activate this menu item, MAGIX music editor 2
rearranges newly inserted objects and inserts pauses (conforming to the Red Book Standard) between the objects.
We recommend the following procedure:

1.
1. Open a new VIP
2.
2. Activate the Special CD Arrange mode in the CD menu.
3.
3. Load wave files, audio tracks or make a recording using a microphone.

In the VIP you can see gaps between the individual objects – these are the pauses inserted. The length of the inserted pause can be set in the dialog "Set Pause Time
".

Set Track Indices on Object Edges Options

Menu: CD

Here you can set various options for the automatic track marker generation.

Set Also Pause Indices on Objects Ends

Using this option Pause Markers are generated automatically on Objects ends when running function "Set Track Indices on Object Edges Options ".

Time Offset for Indices on Object Edges

This option lets you set an offset for the generated track Markers.

No Indices on Object Crossfades

This option prevents Track Indices being placed between two overlapping Objects which segue via a Crossfade. This makes it possible to use automatic track Marker generation even if crossfades are used inside each track.

Pause Indices on Objects End

Menu: CD

Using this option pause markers are generated automatically on objects ends when running function "Set Track Indices on Object Edges Options".

Time Offset for Indices on Object Edges

{bmc Sam20002.BMP} Menu: CD

This option lets you set an offset for automatically generated track markers when running function "Set Track Indices on Object Edges Options".

CD manufactures often demand a minimum offset of 300ms between the track marker and the beginning of the audio, which therfore here can be provided.

Tools Menu

Menu Reference

Track Bouncing	Converts a VIP to a HDP or WAV file.
Waveform Generator	Creates Standard Waveforms.
Range Manager...	The window of the range manager is opened.
Marker / CD Track Manager...	The window of the marker manager is opened.
Object Manager	Opens the Object Manager.
External Program1,2	Runs an external program with actual project file.(only HDP).

Track Bouncing

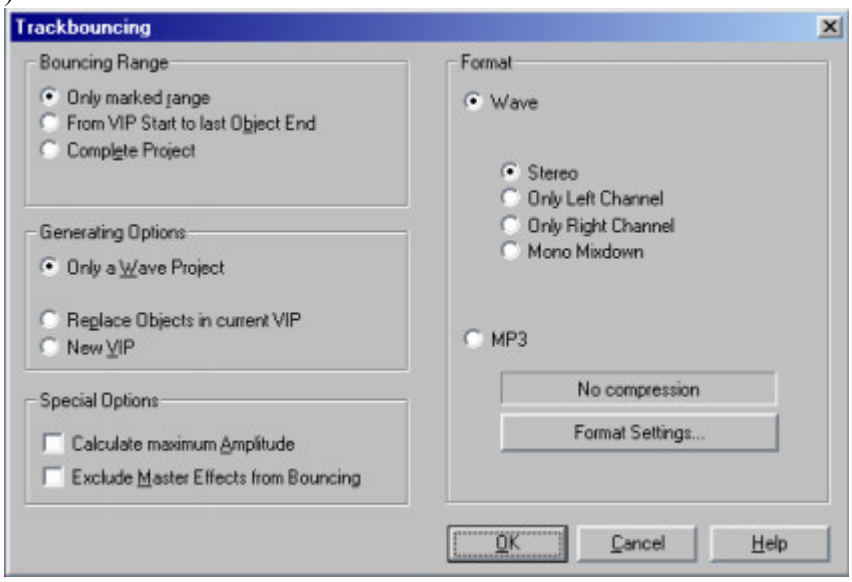
Menu: Tools

The current virtual multi-track project (VIP) can be converted into a WAV file or MAGIX music editor 2 HD Wave project and saved with a new name. All tracks in the VIP are mixed and all real-time processing, cuts, crossfades, all Mixer settings, Mixer effects, DirectX Plug-Ins, Volume automation, Panorama automation are included in the bounced version.

The function 'Track Bouncing' may require a large amount of storage, depending on the length of the VIP.

Four track projects are internally mixed to combine two tracks for playback on each channel. To prevent clipping, an amplitude reduction of 6 dB is applied (which corresponds with a 50% representation of the source material).

For eight track projects, the reduction is normally 12 dB. However, you can change the value in File->Properties->Project Info (shortcut: i).



Bouncing Sub Mix Busses

You can also bounce a Sub Mix bus, every track routed to the sub mix bus will be included in the bouncing process, even recursive (if the track sending to the bus is a bus itself).

This becomes handy when you want to Mixdown all tracks sending to a specific submix bus.

If you bounce several tracks or just the active track (Option: only marked tracks/active track) with the Option "New object in actual VIP" or "replace objects" and this selection includes a Sub Mix bus, then it is possible that the resulting object will be placed at just this sub mix bus. It's even most likely, this is because busses usually not contain objects (although they can) and the object will be placed at the first empty track found. In this case the track FX (including pan/volume automation) of the sub mix bus will be excluded from the bouncing progress. This prevents that the fx are applied twice (once from bouncing and once from the track real-time fx).

You cannot bounce Aux Busses in this way, you have to include the tracks, which are sending to these busses to have the correct result.

Bouncing (internal Mixdown)

Menu: CD

Use this function to convert the objects within a selected range to a new WAV file. The selected objects in the VIP are replaced with the track-bounced version. This is very useful to combine multiple objects into a single object so that the function to create track markers automatically can be used.

If the VIP contains 24-bit objects, a dialog box will ask you whether the new file will be created as a 32-bit Float or 16-bit file.

16-bit (Integer):

The resulting file is a 16-bit resolution audio file. This is most useful if a CD is created that does not contain any 24-bit objects.

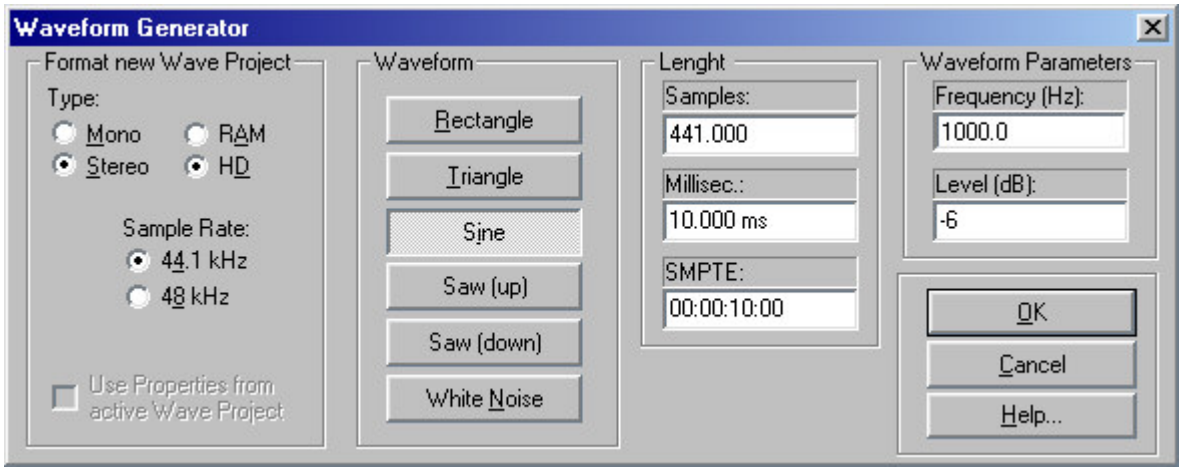
However, if 24-bit objects are used, the bouncing process converts them to 16-bit material by using the dithering settings.

32-bit (Float):

The resulting file is 32-bit (Float) resolution audio file. Use this option if the VIP also contains 24-bit objects that are to maintain their high resolution.

Waveform Generator

Menu: Tools



This dialog contains a powerful generator of several test tones. Please be sure to have activated a Wave project (HDP or RAP) before opening this dialog!
The generated waveform is stored in the Clipboard with the same properties as the opened wave project. Please rename the Clip
after generating the waveform, so it can be easily included into other projects without naming conflicts.
The generated samples are always fully amplified. The volume level can be easily reduced with the normalizing function (Normalizing
).
Format new Wave Project:
select type and resolution of the new Wave Project
Waveform:
The following types can be selected:
Square, pulse, triangle, sine, saw up, saw down and white noise.
Length:
adjust the length of the new wave project
Waveform Parameters:
set the frequency and volume of the new waveform

Range Manager

Menu: Tools

The Range manager is a window illustrating all ranges of the current project. The current range is selected by a colored bar. The range bounds are selected by clicking on the range name. The range name can be changed in the lower line. Ranges can be deleted and new ranges can be saved.
The ranges with the names Backup 1..5 are the last five selected ranges to be quickly restored.
With the Play Once button you can playback the actual range once, with Play Loop it is played as a loop. This way you can use the range manager as a simple jingle player!

Marker / CD Track Manager

Menu: Tools

All currently saved markers of the active project are shown with their name and position in this dialog. The play cursor is moved to the respective marker position by clicking on the dialog entry of the desired marker.

You can also change the marker names and create new markers. In addition, the dialog lets you delete individual or all markers of a project.

Marker:

creates a new Marker at the actual Play cursor position

CD Track:

creates a new CD Track Marker at the actual Play cursor position

CD Sub index:

creates a new CD Sub index at the actual Play cursor position

CD Pause:

inserts a pause at the actual Play cursor position

Object Manager

Menu: Tools

In the object manager all objects used in a VIP are indicated in sequence of their temporal appearance. With this option the object manager features a function which is often offered in other programs with"Play Lists".

In the object manager objects can be selected, which are also activated in the VIP. If you press play, a range over the selected object is applied. Small objects can be identified and manipulated easily.

Ctrl + a mouse click will select several objects; Shift + a mouse click will select all objects between two selects (like in the Windows Explorer).

Particularly productive in the object manager is the search function :

You can look for certain objects with it in full text mode rather than just the graphical representation of the objects. For example you could look for all HD Wave projects with the name"XYZ.HDP' or all objects that contain the name"Intro". You simply enter the search criteria in the text field and click on"Search". All found objects will be selected and are available for further processing.

External program 1,2

Menu: Tools

This menu item in menu ‘Special’ runs an external program with the actual project as parameter. This makes it easy to export a MAGIX music editor 2
project to another audio software for special edits.
Use the ?-button to select the external program you want to run. After editing and saving the file in the external program you can load it back to MAGIX music editor 2 using the recent file list in menu ‘Project’

.

This function works only with HDPs in Mono or Stereo Wave format!

Timestretch Patcher

Overview

This tool enables wave files used in Samplitude and other MAGIX programs (e.g. MAGIX music maker) to be patched.

Additional information and settings are written into the wave project to make them easier to find, thus ensuring better Timestretching or Pitchshifting results.

The following can be patched:

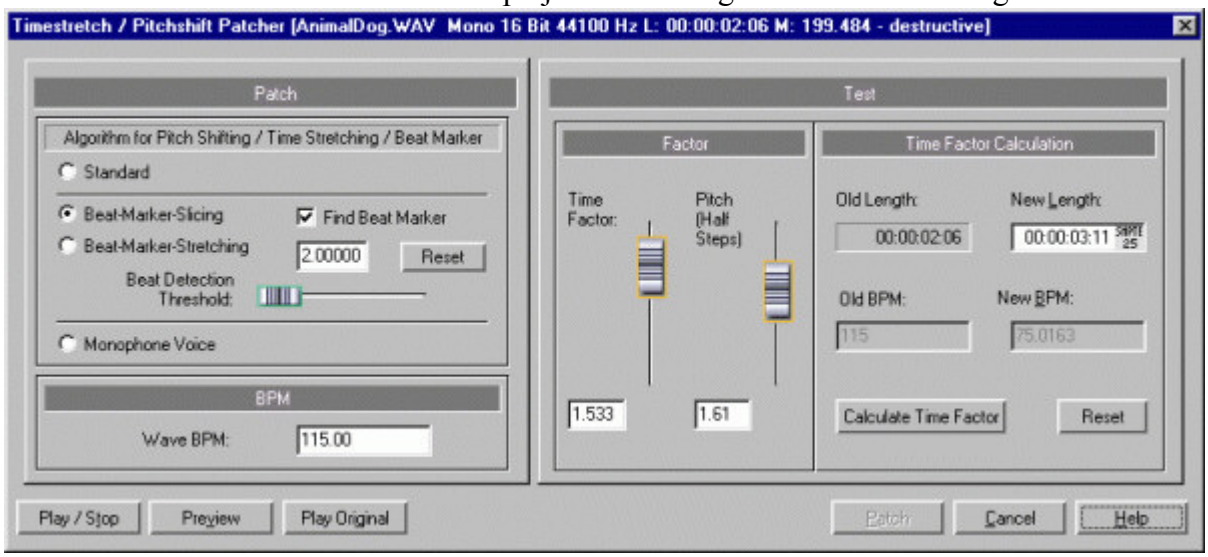
-
- Algorithms for Timestretching/ Pitchshifting
-
- BPMs
-
- Beat markers

Algorithms for Timestretching/ Pitchshifting

Different algorithms (besides the standard algorithm) can be used for real-time Timestretching and/or Pitchshifting for better results. Check Resampling/ Timestretching/ Pitchshifting for more details. With the Patcher you can store the optimal Timestretching algorithm in the wave project. This ensures that the "correct" algorithm is used automatically when Timestretching/Pitchshifting is used on these projects as object effects (e.g. with the Timestretch mouse mode).

Beat marker

Beat markers are also saved in the wave project when using beat marker-based algorithms.



In contrast to the Timestretching dialog, the patcher is non-modal, meaning that if the patcher is open, you can move beat markers in a wave project while checking out the Timestretching result.

BPM value

Patches the BPM value (beats per minute). This is useful for when the Timestretching factor must be determined later in order to adapt the wave project to the tempo of an existing arrangement.

Patches in brief

Patches only work if you have opened the wave project in destructive wave editing mode and if it is not open in a VIP simultaneously.

On the right of the dialog (Patch) you can select the algorithm to be used and specify the wave file tempo. On the left side (Test) is the control element from the Timestretching/Pitchshifting Dialog.

It allows you to test the selected algorithm in connection with the Play/Stop and Play original buttons. Patch saves the information in the wave file.

Samples from the MAGIX "music maker" product range soundpool contain the ptch information as of version MAGIX music maker 2003.

Menu Playback

Menu Reference

This menu gives you access to special functions dealing with manipulation of projects.

Playback->

Play once	Plays selected range (or from play cursor) once.
Play loop	Plays selected range (or from play cursor) looped.
Play into Loop	Plays from beginning of the project into a selected range and loops it.
Stop	Stops playback.
Restart-Play	Restart playback from the beginning.
Playback Options	Select sample rate and output device for playback, control scrubbing and varipitch.
Live Input Mode active	Activates the Live Input mode.
Record	Start Record on all tracks with activated REC buttons
Record...	The Record properties window for the selected track is opened.

Punch-In>

Punch In Mode active	Activates the Punch-In mode.
Punch In Record	Starts Punch-In recording.
Set Punch In Marker	Sets Punch-In marker.
Set Punch Out Marker	Sets Punch-Out marker.
Remove Punch Markers	Removes Punch-In and Punch-Out markers.

Play Once

Menu: Playback

The project or the range is played once. You can switch between single and looped playback on the transport control with the "Loop" button.

Shortcuts:

Toolbar:

Keys: Space

Play Loop

Menu: Playback

The project or the range is played in a loop. You can switch between single and looped playback on the transport control with the "Loop" button.

Shortcuts:

Toolbar:

Keys: Space

Play into Loop

Menu: Playback

Yet another way to play back in MAGIX music editor 2
is the Play Into Loop function. This will start the playback at the beginning of the audio tracks or the current Position Line position and continues the playback until the end of a selected range is reached. Once the end of the range is reached, the playback is then continued from the beginning of the range. This is also a quick way of testing sample loops for playback samplers that work with MIDI sample dump standard.

Tip: When working on loops, position the beginning of the audio sample at the beginning of the VIP track or Wave project and select the range that would contain the loop. When the playback starts, the beginning of the VIP track of Wave project is played back and continues to loop the selected range.

Tip: Don’t worry about destroying the set range when placing the position line. With the new range history function the range will automatically restored when you start "play into loop"

Shortcuts:

Toolbar:

Stop

Menu: Playback

The playback is stopped for all projects types.

Shortcuts:

Toolbar:

Keys: Space

Stop and go to current position

Menu: Playback

Stops playback and moves play cursor to actual position.

Keyboard Shortcut: ,

Change play direction

Menu: Playback

Plays backwards and in case that it already plays backward, forward.

Restart Play

Menu: Playback

Playback will start at the beginning even during the actual playback.

Shortcut is the Backspace key

.

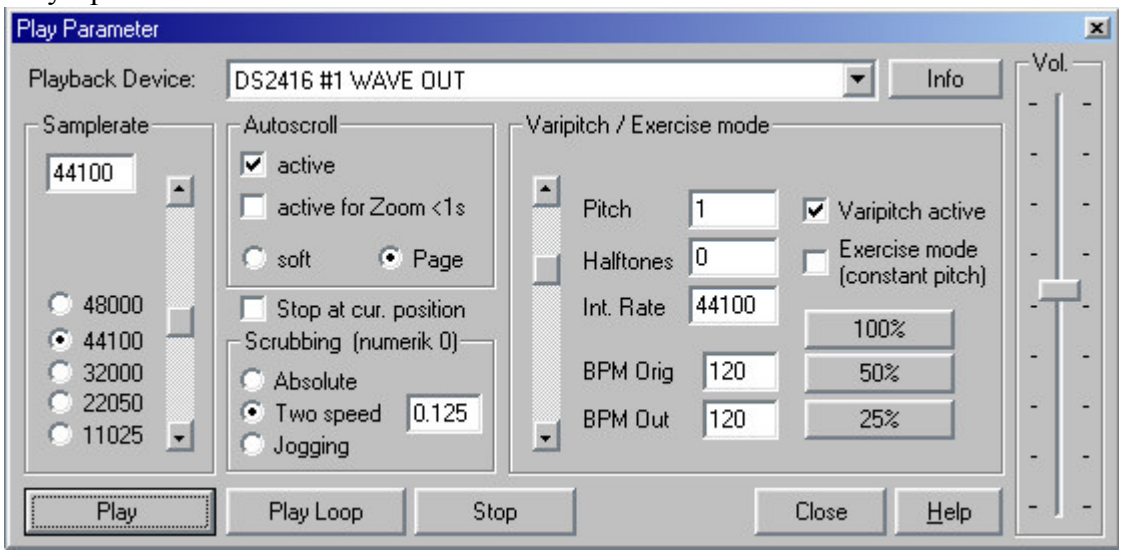
Playback Options

Menu: Options

The Play Parameter window which appears after selecting this menu option is designed to quickly enter playback parameters. Below is an explanation of the options available in this window.

Shortcuts:

Keys: p



Sample Rate

The sample rate can be changed here as long as the soundcard supports the new rate (some soundcards even support changing the rate while playing the sample!). This is especially useful to hear notes in a sample range played in a different octave. When selecting half the sample rate the pitch should be the same. It would be played one octave lower.

Device

To specify the driver of the sound card use this dialog box. This is necessary if playback takes place through a single sound card device (non Multi-Card Mode). This is especially important if multiple output devices are located in the computer.

AutoScroll

The 'AutoScroll' section will let you activate the AutoScroll feature. It is especially useful when working with long disk files. The HD Wave project window will follow the play cursor during playback.

When working in '2' or '3' section display mode, the AutoScroll feature will cause the individual sections to follow the play cursor as well. If you have zoomed into one of the sections, the play cursor will move through the section faster resulting in more screen redraws.

There are two alternatives in auto scrolling.

The 'Soft'

option performs a smooth scrolling of the whole waveform, the play cursor stays in the center of the display. This mode needs a fast graphics board, because the complete screen is scrolled between the marker steps.

The 'Page' option performs a page by page scrolling.

Please note, that the auto scrolling requires certain processing power based on your processor, graphic card and the resolution of the display. For this reason you might encounter small interruptions in playing the audio files. Should this occur simply disable the auto scroll feature or raise the buffer size (select 'Setup' menu and click on 'System'

).

Stop at Position

Normally the play cursor returns to its starting position when the playback has been stopped by pressing the space key. With this option you can change that behavior in a way, that the starting position will be moved to the actual stop position (like a tape deck does). This works only when no range is selected. (cf. Stop and go to current position)

Scrubbing

While pressing the 0 key on the numeric block (Num lock active) and moving the mouse you can perform scrubbing. MAGIX music editor 2
starts playback at a very low speed, the mouse position relative to the start play cursor controls the speed.

There are two scrubbing modes (in playback parameter window - key p):

Note:

When working with smaller buffer sizes (4000, 2000 samples) the scrolling becomes 'softer'. Please verify the performance of your computer system and smaller buffer sizes to not produce playback interruption.

The scrolling becomes ‘softer’

when using small buffer sizes (2000, 4000 samples). You may need to test your system for error free playback with these small settings. Combined with the Soft Scroll mode, editing becomes very convenient on faster computers.

Relative

The distance between the play cursor and the mouse sets the playback speed.

Absolute

The position of the mouse in the window sets the playback speed - at the left border playback speed is 200% backward, at the right border speed is 200 % forward, in the middle of the window the speed is 0.

There is a real time resampling performed for changing the playback rate without changing the sample rate of the sound card. For best performance, use small play buffer sizes and a fast processor (Pentium II recommended)!

Varipitch

MAGIX music editor 2
supports smooth changes of the pitch while playback, even in multi track projects (vertical slider in playback parameter window - key p).

Activate the Varispeed mode with the ‘active’

button, then you can change the playback speed in various kinds:

Vertical slider

Changes the playback speed from -200% to +200%

Pitch Factor

Lets you specify a certain pitch factor manually

Halftones

Lets you specify a value of halftones. The playback will be transposed the number of halftones.

Internal Rate

Here you can set a sample rate for the varipitch calculation. If you want to play a WAV file with a sample rate of 48 kHz but your sound card can only play rates up to 44.1 kHz simply set the internal rate to 48 and activate Varispeed. You hear the same result as playing back with real 48 kHz!

This function is also very useful for digital playback to DAT with 44.1 kHz samples and vice versa!

BPM

Here you can type in the original bpm value of your material and a destination bpm value, which is reached using the varipitch.

Important

Varipitch works also while recording! So you can set the pitch to -2 halftones, sing a song into the computer, then switch off the varipitch - your track is transposed two halftones higher!

There is a real time resampling performed for changing the playback rate without changing the sample

rate of the sound card. For best performance use small play buffer sizes and a fast processor (Pentium II recommended)!

Live Input Mode

Menu: playback

This is another very powerful feature of MAGIX music editor 2 – the Live Input Mode! When working with this mode, MAGIX music editor 2
lets you use the real-time Mixer to mix live inputs from the sound card channels.
This turns MAGIX music editor 2 into a full-scale digital real-time Mixer with unlimited channels, internal 32-bit processing and effects, including DirectX
Plug-Ins!

The Basics:

The Live Input Mode basically functions similar to recording with multiple sound cards. All channels/tracks that are to be used for live mixing have to be armed for recording –
each track has to be configured with the correct recording device and the track arming buttons need to be active.
Once the playback of the VIP is started with the Spacebar, the live signals on the inputs of the audio device(s) are routed through the Mixer. Use the controls in the Mixer window to create a mix. In addition, any VIP object is also played back while
the live inputs are processed.

Latency:

The audio processing in MAGIX music editor 2
obviously takes time. This may lead to small delays at the outputs versus the incoming signal. This delay is very much dependent on the VIP Buffer size. The latency can be reduced by using smaller VIP buffer settings. Use settings that enable the program to process the real-time audio without introducing any errors. A setting of 4 buffers at a buffer size of 8000 stereo samples creates a delay of 0.7 seconds. A buffer size reduction to 2000 samples results in a delay of only 0.2 seconds. Experiment with the buffer settings to find the optimal settings for your system!
The latency may not make it possible to use the Live Input Mode to replace an analog mixing console. However, it leaves room for some very interesting application aspects.

Applications:

The Live Input Mode may be used for some of the following applications:

- Digital Mixer for ADATs – or other multi-track tape machines. During playback of an ADAT tape the 8 tracks are transferred via a digital audio card, such as the Prodif Gold, and processed by the MAGIX music editor 2 Live Mixer. Since the material is transferred digitally, no quality loss is encountered, and the latency is not significant, since the ADAT tape does not have any 'live'
relevance.
- Effects and Mix Down during Recording – Use the function 'Mix to File' in the Mixer to create a new WAV file from the master signal. This allows MAGIX music editor 2 to record through the Mixer into an audio file. Don't forget to rename the newly created audio file afterwards. Otherwise, the next 'Mix to File'
process will overwrite the contents of the previous take.
- MAGIX music editor 2 as Live Effect Processor – If you are looking for fancy effects that are not offered by effect units in your rack, try to use some of the integrated effects in MAGIX music editor 2
. A live signal can be processed with the FFT Filter, the Multi Band Dynamics processor, and the Stereo Enhancer. You may also use the many DirectX Plug-Ins available. There is no limit to your creativity!

Record

Menu: Playback

Starts the Recording immediately on all tracks armed for recording.

Shortcuts: Shift + R

Toolbar:

or just click the red button on the transport control.

Record Options

Menu: Playback

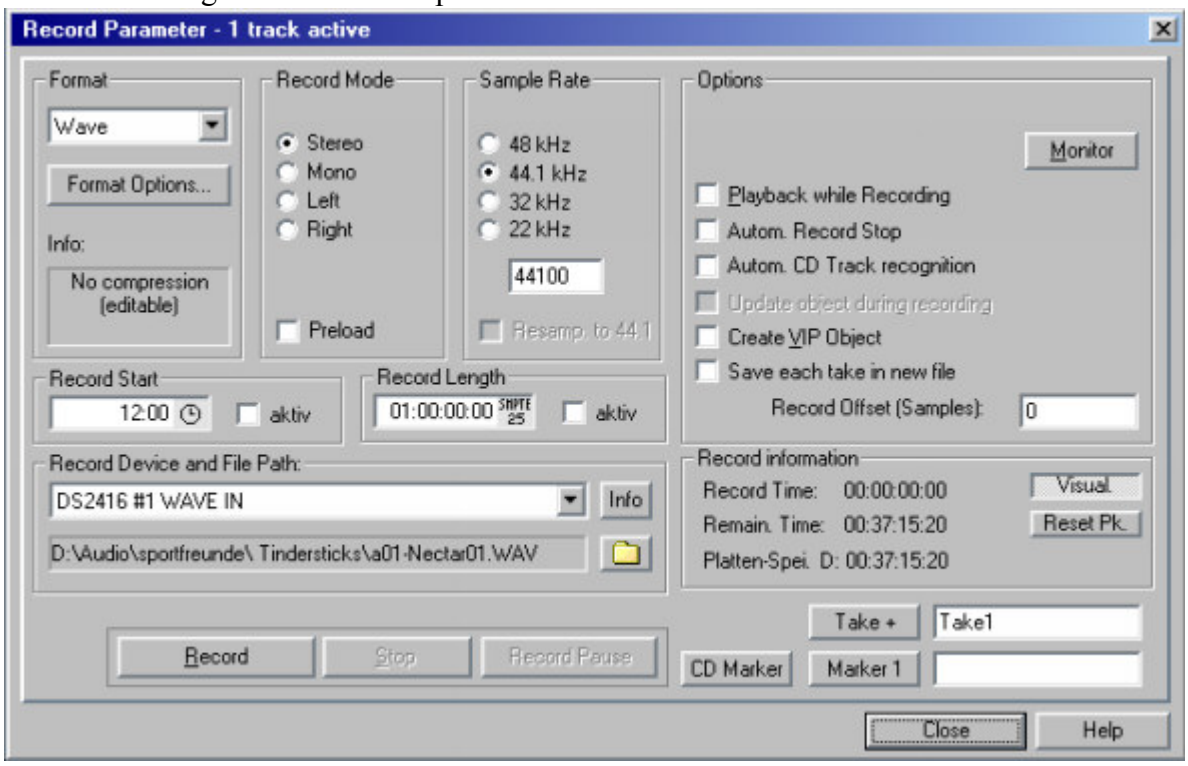
This menu option opens the Record window. All necessary settings for the recording can be performed here. If once set, you don't need to open the dialog again, just start record by the record button at the transport control or clicking the toolbar icon

Shortcuts:

Toolbar:

Key: r (second r starts recording)

Click on the image for further descriptions!



Record without Playback

Menu: Playback

To conserve system resources and keep the recording error free on slower systems. If you turn this feature on, you can't hear existing tracks while recording a new track.

Playback While Recording

Menu: Playback

Simultaneous record and playback is especially important when wanting to monitor existing tracks while recording a new track. This option allows you to turn the feature on. To conserve system resources and keep the recording error free on slower systems, you may need to turn this feature off.

Record without Playback

Punch In Mode

Menu: Playback

This option activates the Punch mode. Punch-In and Punch-Out are a process automating the recording start and end of an audio segment. Once the Punch mode is active, the Punch-In Record can be used to record audio segments without stopping the playback.

Requirements for this mode are one or more armed tracks. The tracks have to be configured in the same way as for multi-track record – each track has to have a specific device selection. Use the 'R' button for each track to click the right mouse button and make the needed selection.

Punch Recording can be done in two ways:

1. Punch-In/Out 'On-The-Fly'

This allows you to start the recording (punch in) at any time during the playback. Once the recording commences, it can be stopped at any time (punch out), while the playback continues.

This is very similar to tape based multi-track recorders, which allow you to correct mistakes during previous recording takes by overwriting segments of the tape.

Simply start the playback with the Spacebar. The Punch-In recording can be started by clicking on the Punch Record button in the toolbar. The same button punches out of the recording mode, while the playback continues. To stop the playback, press the Spacebar.

2. Punch-In/Out with Markers

The second method is the punching in and out of recording using special markers. This is a more automated way of dealing with punch-in/out recording. This is useful when specific punch-in and punch-out points are determined and you don't want to take any risks in possible punching in or out of the recording. Don't panic though! The punching in and out with markers lets you specify the exact points the recording is to start and stop. Since you are working in a non-linear, non-destructive environment, any mistake or unwanted take can be removed or undone without any problems. The previous material in the track would still be there!

This is simply a very convenient way when it's midnight and your fingers are getting tired!

To operate in this mode, a range has to be selected, which defines the beginning and end of the recording. The functions Set Punch-In Marker and Set Punch-Out Marker are used to tell MAGIX music editor 2 where to punch in and where to punch out. Next, set the play cursor to an appropriate position prior to the punch-in point and start the playback/recording with the Punch Record button in the Punch Toolbar.

Important: When working with the punch in/out functionality, make sure that the Auto Crossfade mode is activated, by clicking on the corresponding button in the MAGIX music editor 2 toolbar. The auto crossfade will create smooth transitions between the takes. This helps to prevent little pops and clicks!

There is also a way to perform looped punch-in recording ! Simply select a range over the desired punch region. The range is played back until you stop the playback with the Spacebar. Each time the program loops through the range, new takes are recorded at the punch markers.

Live Input Mode

Menu: playback

This is another very powerful feature of MAGIX music editor 2 – the Live Input Mode! When working with this mode, MAGIX music editor 2
lets you use the real-time Mixer to mix live inputs from the sound card channels.
This turns MAGIX music editor 2 into a full-scale digital real-time Mixer with unlimited channels, internal 32-bit processing and effects, including DirectX
Plug-Ins!

The Basics:

The Live Input Mode basically functions similar to recording with multiple sound cards. All channels/tracks that are to be used for live mixing have to be armed for recording –
each track has to be configured with the correct recording device and the track arming buttons need to be active.
Once the playback of the VIP is started with the Spacebar, the live signals on the inputs of the audio device(s) are routed through the Mixer. Use the controls in the Mixer window to create a mix. In addition, any VIP object is also played back while
the live inputs are processed.

Latency:

The audio processing in MAGIX music editor 2
obviously takes time. This may lead to small delays at the outputs versus the incoming signal. This delay is very much dependent on the VIP Buffer size. The latency can be reduced by using smaller VIP buffer settings. Use settings that enable the program to process the real-time audio without introducing any errors. A setting of 4 buffers at a buffer size of 8000 stereo samples creates a delay of 0.7 seconds. A buffer size reduction to 2000 samples results in a delay of only 0.2 seconds. Experiment with the buffer settings to find the optimal settings for your system!
The latency may not make it possible to use the Live Input Mode to replace an analog mixing console. However, it leaves room for some very interesting application aspects.

Applications:

The Live Input Mode may be used for some of the following applications:

- Digital Mixer for ADATs – or other multi-track tape machines. During playback of an ADAT tape the 8 tracks are transferred via a digital audio card, such as the Prodif Gold, and processed by the MAGIX music editor 2 Live Mixer. Since the material is transferred digitally, no quality loss is encountered, and the latency is not significant, since the ADAT tape does not have any 'live'
relevance.
- Effects and Mix Down during Recording – Use the function 'Mix to File' in the Mixer to create a new WAV file from the master signal. This allows MAGIX music editor 2 to record through the Mixer into an audio file. Don't forget to rename the newly created audio file afterwards. Otherwise, the next 'Mix to File'
process will overwrite the contents of the previous take.
- MAGIX music editor 2 as Live Effect Processor – If you are looking for fancy effects that are not offered by effect units in your rack, try to use some of the integrated effects in MAGIX music editor 2
. A live signal can be processed with the FFT Filter, the Multi Band Dynamics processor, and the Stereo Enhancer. You may also use the many DirectX Plug-Ins available. There is no limit to your creativity!

Punch In Record

Menu: Playback

This function/button starts and stops the punch-in recording.

Set Punch In Marker

Menu: Playback

This function/button sets the punch-in marker

.

Set Punch Out Marker

Menu Playback

This function/button sets the punch-out marker

.

Remove Punch Markers

Menu: Playback

This function/button deletes the punch-in and punch-out markers.

Menu Options

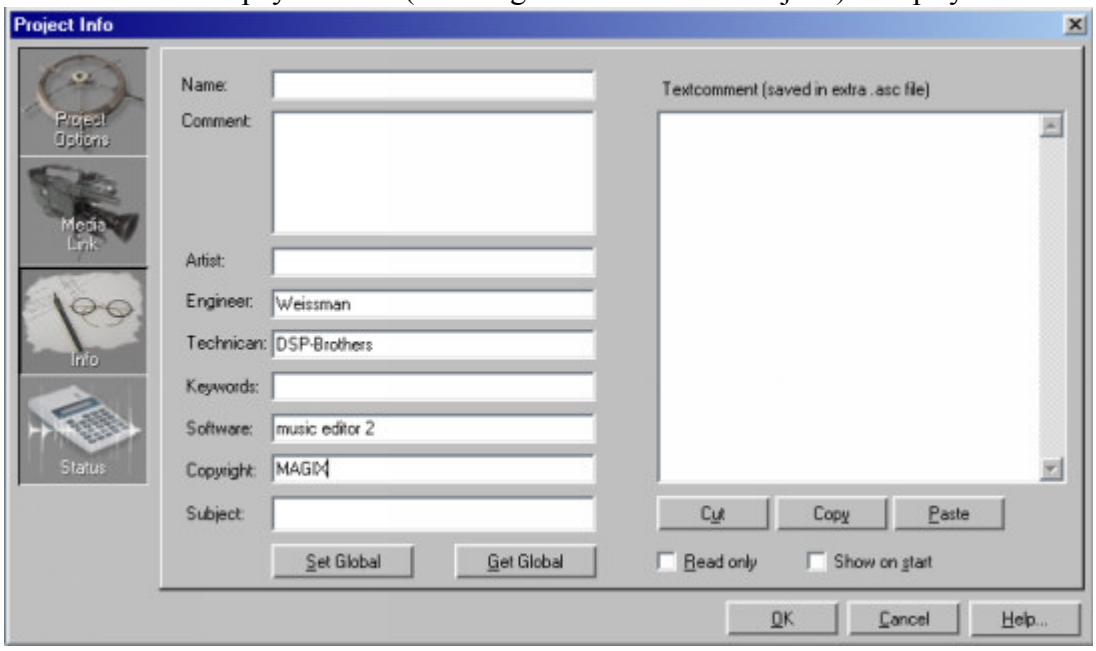
Menu Reference

Project Information	Shows information about the actual project.
Synchronization	Options for external synchronization.(deLuxe Version only!
System / Audio	Global system parameters .
Properties >	Sub menu for project properties
Show Playback Options	The Play Parameter window which appears after selecting this menu option is designed to quickly enter playback parameters.
Media-Link...	Synchronizes .AVI files to a MAGIX music editor 2 project.
Text Comments	Edit text comments for the actual project.
Units of Measurement	'Units of Measurement' is used to specify the grid dimensions.
Preferences >	Select global preferences
Undo-Definitions...	Select Undo options
Enable Profiling	Activates the DSP power display in the lower left corner.
VIP_Mouse Mode	Switches between different mouse modes in VIPs.
Wave Project Mouse Mode	Switches between different mouse modes in HD and RAM Wave Projects.
Object Lock Definitions	Options for object locking
Snap Setup	Options for snap function
Grid Setup HID Setup	With this option, you can define the type of grid that is used for the Show Grid option. Select between several line styles.
Keyboard Shortcuts...	Defines keyboard shortcuts for all menu items. .
Edit Toolbars	Lets you customize toolbars
Reset Toolbars	Restores original toolbar state
Video Height	Set Height for Video track display
Font Selection	Selects font for grid and objects.
Font for Time Display	Selects font for the Time Display.
Color Settings	Select colors for the MAGIX music editor 2 display.
Set Preroll Time	Sets the Pre-Roll time.
Draw Setup	Controls VIP display options

Project Information

Menu: Options

Select this option to display Project Information (an "over-view")about the current active Project (HD Wave, RAP, or VIP).This includes creation date, memory size, path and file names. For Virtual Projects, a list of all included physical files (including linked HD Wave Projects) is displayed.



The Project Information window will display: File Name, Path (location on hard disk), Number of Stored Ranges, Number of Stored Cursors (Markers), Date the File was created, Date the File was last edited, Number of Objects in the VIP, and a List of ALL Hard Disk and RAM Projects (HD Wave, RAP) used in the VIP.

You can also add (type in) the following information:

Name, Comment, Subject, Artist, Engineer, Technician, Keywords, Software, and Copyright. This dialog also allows you to set automatic backup options which run while the Project is open.

Set Global

Click on this button to Save the information you added (typed in) as a Global setting.

Get Global

Click on this button to recall the Saved information (Global setting) and add it to the current active Project. This allows you to quickly add the same information to every Project you work on.

Cancel

Click on this button to close the Project Information window without accepting changes to the settings.

OK

Click on this button to accept the current settings and close the Project Information window.

Shortcuts:

Key: i

Synchronization

Menu: Options

For a quick intro to synchronization issues refer to Synchronization - An Overview

MAGIX music editor 2
will slave to SMPTE/MTC/MC and can act as the master for MIDI Clock and MIDI Time Code.
To run MAGIX music editor 2 in multitasking with a sequencer a MIDI connection must exist between the sequencer and MAGIX music editor 2
. That can be done through simple connection of a MIDI input to a MIDI output with for example a MIDI interface of a soundcard.
Better is an internal combination of the programs through a Multi MIDI driver (available as shareware software, e.g. Hubis MIDI Loopback from the MAGIX music editor 2 CD-ROM), which connects the output of one program to the input of another one. Keep in mind that one program will need to act as the 'master', while the other takes the position of the 'slave'. Select the modes in the programs accordingly. Starting and stopping is done from within the 'master'. If possible MAGIX music editor 2
should be the slave!
If MAGIX music editor 2
needs to be synchronized to a tape machine, such as a video recorder or a multi-track recorder, a SMPTE interface with Windows driver is necessary.
Internally the computer interfaces process the SMPTE code as MIDI Time Code (MTC). You can also use an external SMPTE to MTC converter and feed the MTC signal to a MIDI input port on a MIDI interface in the computer.
MAGIX music editor 2 supports real chase lock sync (MIDI Clock and MIDI Time Code/SMPTE). This means, that the internal sample rate of MAGIX music editor 2 ’s playback or recording is varied in small steps, so that MAGIX music editor 2 can follow little timing changes of the sync master. This is very useful when using sync between a tape or video recorder (master) and MAGIX music editor 2 (slave), because most tape machines always produce small pitch changes, which results in delays between
the tape and MAGIX music editor 2 , when not using chase lock sync. If the timing changes are too big, MAGIX music editor 2
produces heavy pitch changes, which may be reduced by entering smaller values for the Sync Velocity in the sync dialog. Try values of 200 or more, when you need fast pitch changes in sync mode! In the lower right status bar you can read the actual/maximal pitch change in cents (1 cent = 1/100 halftone).
Please know, that the chase lock sync performs a real time resampling (if not using ARC44), which needs a certain processing power, so be carefully on slow machines!
When receiving SMPTE/MTC you can start and stop playback with the space key - MAGIX music editor 2
will always be in sync!

Shortcut:

Key g

Description of the Dialog

Synchronization - MIDI Clock Input

Here the driver must be selected from which MAGIX music editor 2
will receive MIDI Clocks for the synchronization.

Synchronization - BPM

Enter the tempo to match MAGIX music editor 2 ’
s time-line with that of the external MIDI sequencer or sync equipment.

Synchronization - MIDI Clock Output
Select the driver through which MAGIX music editor 2
will send MIDI Clocks to the synchronized equipment.
Synchronization - SMPTE / MTC Input
Select the device driver through which MAGIX music editor 2
will receive the SMPTE/MTC signal.
Synchronization - MTC Output
Select the device driver through which MAGIX music editor 2
will send the MIDI Time Code master signal.
Synchronization – Type
Select the proper frame rate. Use 24 frames for cinematic synchronization, 25 frames for PAL video, and audio synchronization, 30 frames for NTSC video.
Synchronization - Pre-Roll Frames
You can specify, how many frames MAGIX music editor 2 is to ignore before the synchronization starts. Here you can account for the fact, that certain analog instruments need time to reach the correct speed. In order to have MAGIX music editor 2
link up to the proper time values, a certain pre-roll frame count can be specified.
Synchronization - Sync Velocity
You can specify how fast MAGIX music editor 2 follows a pitch change of the sync master. A value of 100 is good for normal purposes. If you need faster pitch changes, try 200 or 300. If you want to reduce the pitch changes in MAGIX music editor 2
try a setting of 50 or 30!
Synchronization - SMPTE Offset
The SMPTE offset is indicated in milliseconds and in SMPTE frames. The offset is removed from the incoming SMPTE time code signal to line up differences between tape material and recorded samples in MAGIX music editor 2 . With an offset of '60:00:00' milliseconds (1 hour) a tape that was previously stripped can be synchronized, if the start point for the recording/playback starts at 1 hour. MAGIX music editor 2
will, however, start at the correct beginning position.
Synchronization - FX
With this parameter, possible inaccuracies during the positioning of long samples can be equalized. Requirement is a flawless synchronization at the sample beginning. Follow the instructions in the chapter 'Problem Solutions'.
Synchronization - Active
Activates the section.
Synchronization - Use Hardware Pitch
This option uses the hardware’s pitch shifting capabilities to compensate for minor chase lock adjustments. If this option is not checked, or if the sound card does not support the option, MAGIX music editor 2
uses the computer CPU to apply any pitch corrections when sync variations occur.

System / Global Audio Options

Menu: Options
Shortcuts:
Keys: y
In the ‘System’ dialog, you have options to fine-tune MAGIX music editor 2
. You can specify parameters play and recording buffers , you can set internal resolution and the resolution used for the sound device , furthermore you can name and order your playback and recording devices.

Buffer Settings

A principal rule about buffers: the larger the buffer, the more reliability you gain in playing back audio files (especially on slow systems or in full 16-track mode). However, if you increase the buffer size too much, the computers processing time becomes longer and delays might be introduced in the overall command handling. You will need to find a compromise between these two factors for each individual computer system.

System Dialog - HD /Scrub Buffer

The default setting is 8000 Samples. This buffer is used for the playback of HD Wave projects. To gain faster response times, try smaller settings.

System Dialog - VIP Buffers

Default setting is 16000 Samples. The buffer is used for the playback of virtual projects. Since an error free playback is more important than fast response times, we suggest using a setting between 16000 and 32000 when working with a large number of tracks. This setting is the most important setting when working with virtual projects and the real-time Mixer. Any of the other buffer types and settings are not utilized in VIPs and the Mixer window!

System Dialog - Test Buffer

The default setting is 8000 Samples. This buffer is only used for the real-time preview in the Effect menu dialogs.

System Dialog - Buffer Number

This setting determines how many of the above buffers are to be utilized (values between 2 and 9). A higher setting for Buffer Number secures a more stable operation. However, the memory requirement increases and the response time decreases. The actual buffer utilization can be monitored with the status bar in the lower right-hand of the MAGIX music editor 2 screen.

Naming and rearranging devices

You can:

-
- disable several non used input/output device by unchecking the box
-

- reorder the devices with the up/down buttons
-
- name your devices to be more expressive by pressing rename
-
- obtain capability info by clicking info

Directories

This dialog is the place to set the default folders for the HDP, RAP, VIP and temporary files. MAGIX music editor 2 uses these folders to store the various files. Unless you assign a different path and folder to a project, MAGIX music editor 2
will use the settings specified by you in this dialog.

Project Files

To adjust the default path for Wave projects.

New Virtual Projects

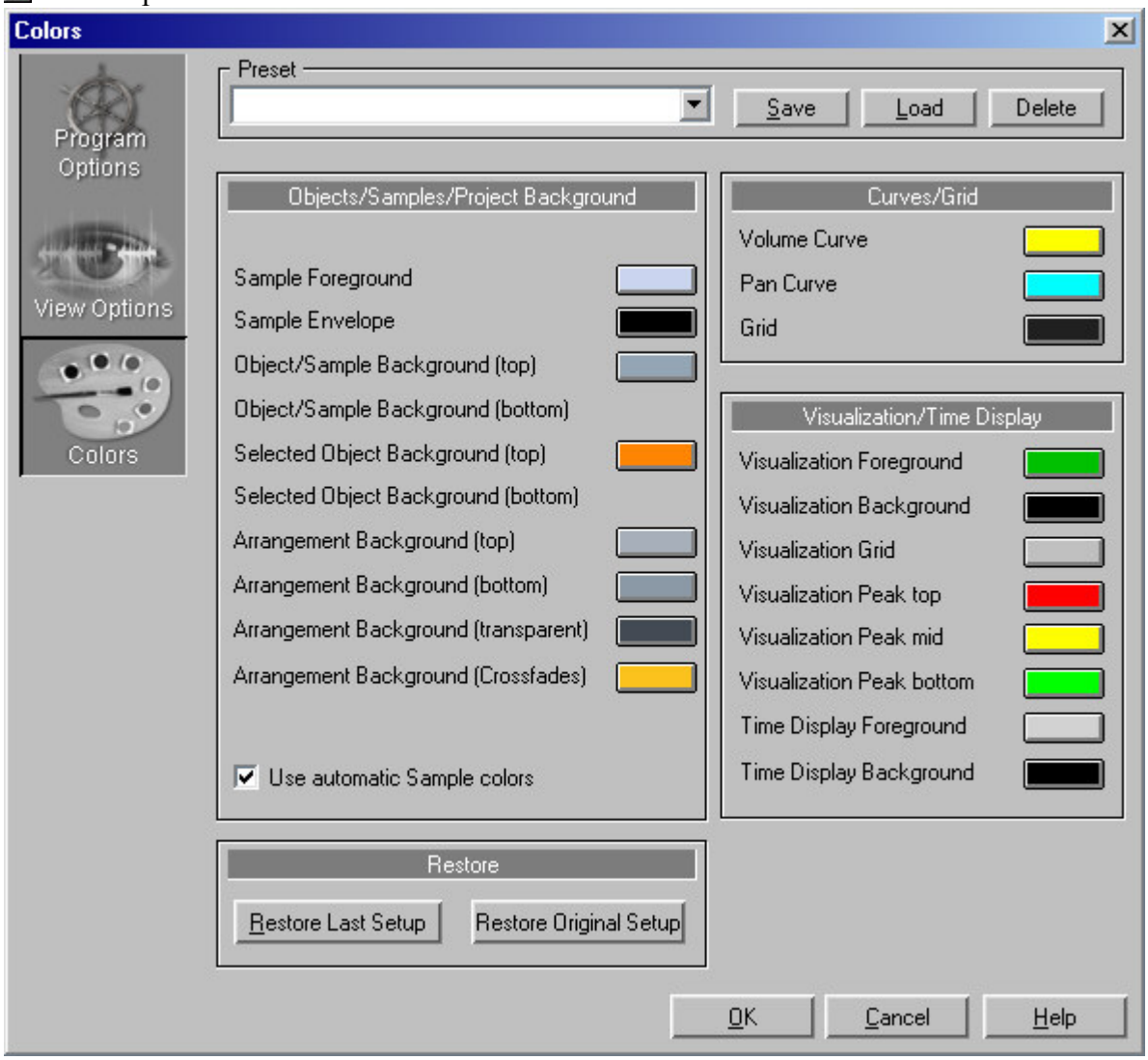
To adjust the default path for virtual projects.

Temporary Files

To set the default path for the temporary files.

Color Settings

Menu: Options



MAGIX music editor 2

lets you specify the color for various areas of the screen. Use this menu option if you want to change the default colors to another one. You can save / load your color schemes via the load save buttons, they are saved by default in the fx-presets folder and will be listed in the presets list on top of the dialog.

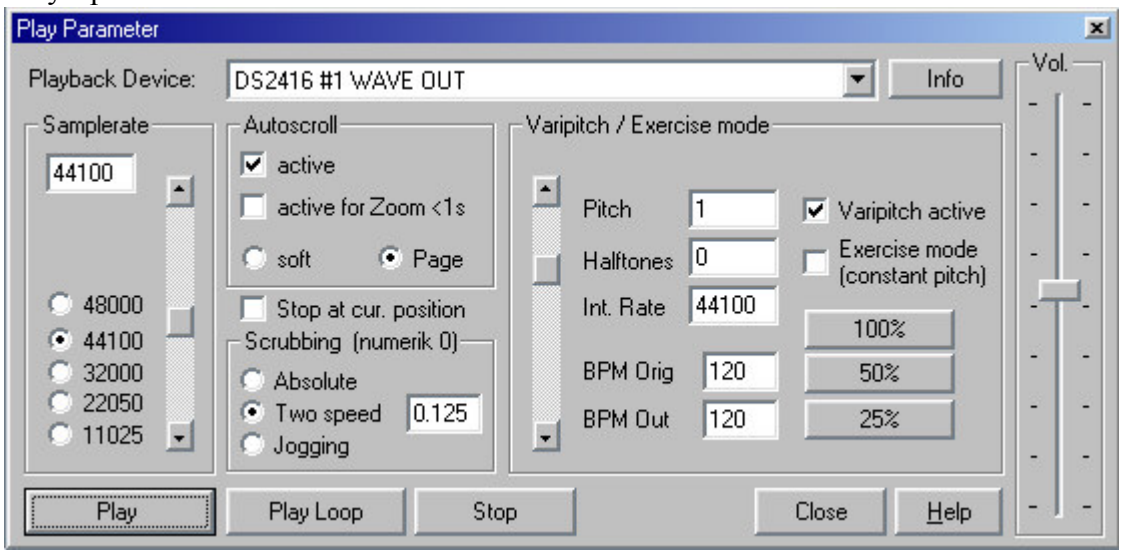
Playback Options

Menu: Options

The Play Parameter window which appears after selecting this menu option is designed to quickly enter playback parameters. Below is an explanation of the options available in this window.

Shortcuts:

Keys: p



Sample Rate

The sample rate can be changed here as long as the soundcard supports the new rate (some soundcards even support changing the rate while playing the sample!). This is especially useful to hear notes in a sample range played in a different octave. When selecting half the sample rate the pitch should be the same. It would be played one octave lower.

Device

To specify the driver of the sound card use this dialog box. This is necessary if playback takes place through a single sound card device (non Multi-Card Mode). This is especially important if multiple output devices are located in the computer.

AutoScroll

The 'AutoScroll' section will let you activate the AutoScroll feature. It is especially useful when working with long disk files. The HD Wave project window will follow the play cursor during playback.

When working in '2' or '3' section display mode, the AutoScroll feature will cause the individual sections to follow the play cursor as well. If you have zoomed into one of the sections, the play cursor will move through the section faster resulting in more screen redraws.

There are two alternatives in auto scrolling.

The 'Soft'

option performs a smooth scrolling of the whole waveform, the play cursor stays in the center of the display. This mode needs a fast graphics board, because the complete screen is scrolled between the marker steps.

The 'Page' option performs a page by page scrolling.

Please note, that the auto scrolling requires certain processing power based on your processor, graphic card and the resolution of the display. For this reason you might encounter small interruptions in playing the audio files. Should this occur simply disable the auto scroll feature or raise the buffer size (select 'Setup' menu and click on 'System'

).

Stop at Position

Normally the play cursor returns to its starting position when the playback has been stopped by pressing the space key. With this option you can change that behavior in a way, that the starting position will be moved to the actual stop position (like a tape deck does). This works only when no range is selected. (cf. Stop and go to current position)

Scrubbing

While pressing the 0 key on the numeric block (Num lock active) and moving the mouse you can perform scrubbing. MAGIX music editor 2
starts playback at a very low speed, the mouse position relative to the start play cursor controls the speed.

There are two scrubbing modes (in playback parameter window - key p):

Note:

When working with smaller buffer sizes (4000, 2000 samples) the scrolling becomes 'softer'. Please verify the performance of your computer system and smaller buffer sizes to not produce playback interruption.

The scrolling becomes ‘softer’

when using small buffer sizes (2000, 4000 samples). You may need to test your system for error free playback with these small settings. Combined with the Soft Scroll mode, editing becomes very convenient on faster computers.

Relative

The distance between the play cursor and the mouse sets the playback speed.

Absolute

The position of the mouse in the window sets the playback speed - at the left border playback speed is 200% backward, at the right border speed is 200 % forward, in the middle of the window the speed is 0.

There is a real time resampling performed for changing the playback rate without changing the sample rate of the sound card. For best performance, use small play buffer sizes and a fast processor (Pentium II recommended)!

Varipitch

MAGIX music editor 2
supports smooth changes of the pitch while playback, even in multi track projects (vertical slider in playback parameter window - key p).

Activate the Varispeed mode with the ‘active’

button, then you can change the playback speed in various kinds:

Vertical slider

Changes the playback speed from -200% to +200%

Pitch Factor

Lets you specify a certain pitch factor manually

Halftones

Lets you specify a value of halftones. The playback will be transposed the number of halftones.

Internal Rate

Here you can set a sample rate for the varipitch calculation. If you want to play a WAV file with a sample rate of 48 kHz but your sound card can only play rates up to 44.1 kHz simply set the internal rate to 48 and activate Varispeed. You hear the same result as playing back with real 48 kHz!

This function is also very useful for digital playback to DAT with 44.1 kHz samples and vice versa!

BPM

Here you can type in the original bpm value of your material and a destination bpm value, which is reached using the varipitch.

Important

Varipitch works also while recording! So you can set the pitch to -2 halftones, sing a song into the computer, then switch off the varipitch - your track is transposed two halftones higher!

There is a real time resampling performed for changing the playback rate without changing the sample

rate of the sound card. For best performance use small play buffer sizes and a fast processor (Pentium II recommended)!

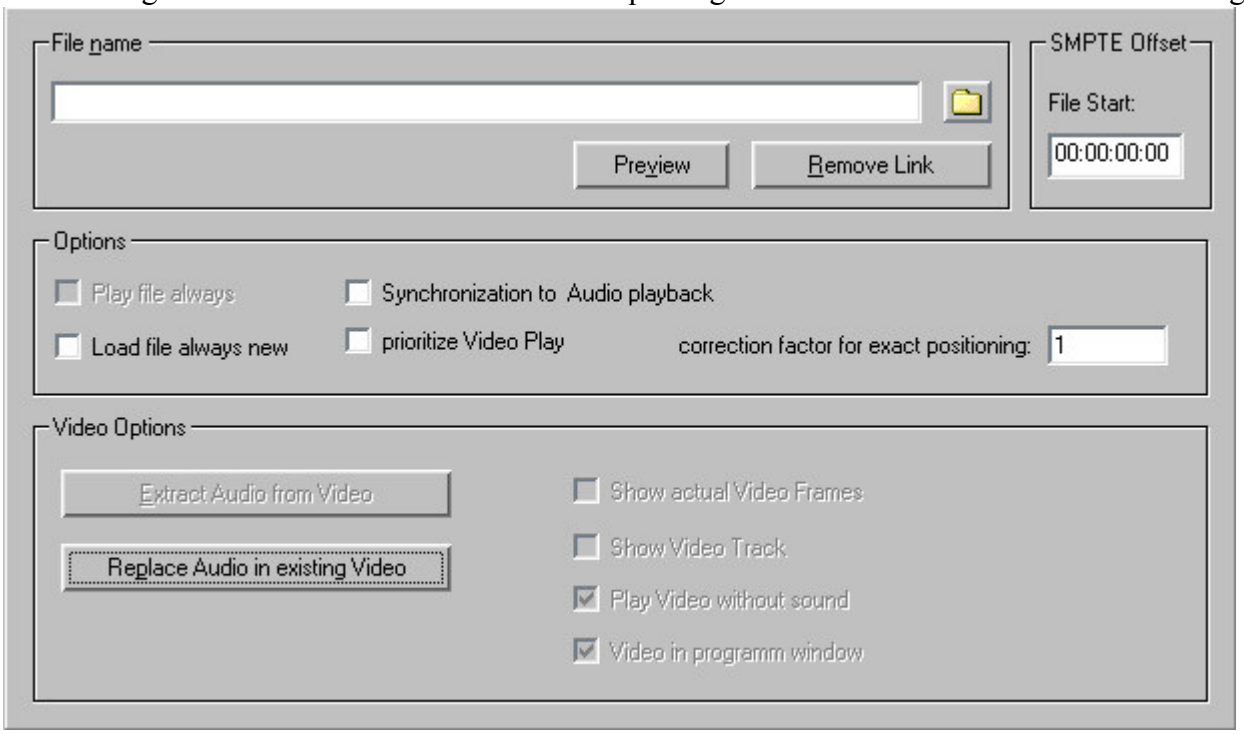
Media Link

Menu: Options

Media Link is one of the most powerful features of MAGIX music editor 2
. With this option, you have the opportunity to synchronize media files such as MIDI files or AVI files. These can be complete MIDI songs or sequences (*.MID files), Video clips (*.AVI files) or other files for which a MCI driver is installed in Windows.

Synchronizing of MAGIX music editor 2 projects with Video-for-Windows movies (AVI)

With this capability, MAGIX music editor 2 is an excellent tool for film music arrangements. Film and video clips are recorded as AVI files. A MAGIX music editor 2
virtual project can then be synchronized with it. The music, original sound, voice tracks, effects and much more can be adjusted on the time line and played with the AVI video simultaneously. As the final step, the audio signal can be recorded back to the videotapes original audio tracks or mixed for broadcasting.



File Name

Here you can specify the file name and directory where the media file is located. By clicking on the '?' button you will receive a file requester dialog that allows you not only to look for the location on your hard disk(s), but also let's you specify which media file type you are looking for. Once you have found the media file, simply click on OK and MAGIX music editor 2
will make the link.

Offset

The Offset allows you to specify a different start time for the media file. The default is a zero position, which means that the media file would be started at exactly 0 position, which is the beginning of the file. If the offset is different than the 0 position the playback of the media file starts at the position you entered. Here is an example:

Let's assume that we are working on the audio for an AVI file and the audio section does not appear until 15 minutes into the AVI file. It would be unnecessary to create 15 minutes of empty space at the beginning of the VIP in order to line up the AVI frames and the audio. Instead we can specify an offset of

15 minutes and the AVI file would start playback at 15 minutes into the video file. However, all the audio in MAGIX music editor 2
would start at position 0.
It makes good sense to write down the offsets you are specifying for the individual projects you are working with. This way you can easily identify offset references for your work.
Play Always
This checkbox allows you to specify whether MAGIX music editor 2 is to play the media file every time you start playback or recording in MAGIX music editor 2 . If you uncheck the option, MAGIX music editor 2
will not play back the media file. This is a quick way to turn off the playback of the media file.
Load Always New
If this option is checked, MAGIX music editor 2
will always load the media file for every playback or recording of your VIP or Wave project. If the box is not checked the playback of the media file is performed with the contents of the memory. If the media file is too large for the buffers, the playback is performed from the hard disk.
Synchronization to Audio playback
Synchronizes the new media link (e.g. AVI-Files) with the existing VIP
Extract Audio from AVI
If the file type is an AVI file with video and audio data, audio streams are extracted from all other information and the audio information itself is put into a Wave project. This allows you to extract and edit the audio apart from the rest of the contents in the imported file.
Replace Audio in Existing AVI
This option performs a track bouncing of the current VIP into 1 WAV file. This file is merged into the selected AVI file, so the AVI gets a new audio track.
Create AVI / Audio Copy
This option performs a track bouncing of the current VIP into 1 WAV file. The AVI file is copied to a new file, which contains the new audio track. This option keeps the original AVI.
Video Without Sound
This option applies for AVI files only. If the AVI file contains audio the playback of the AVI file and it's audio could interfere with the audio playback in MAGIX music editor 2
. For this reason, it is suggested that you turn the audio playback for the AVI file off.

Video in MAGIX music editor 2 Window

This option also applies to the AVI file playback only. Normally, the AVI file is played back in a completely independent window. This means, that if you run the MAGIX music editor 2 window enlarged you will not see the playback of the AVI window. You would need to minimize the MAGIX music editor 2 window or scale the window in order to display both windows on the screen. However, by checking this option you can display the AVI window as another MAGIX music editor 2 related window, which always stays on top during playback. This allows you to display the AVI movie at any time the playback or recording in MAGIX music editor 2
takes place.
Show Video Tracks
This is a new feature in MAGIX music editor 2
! With this option, you can display a video track in the VIP window, which shows individual frames of the AVI file. In the upper left-hand corner of the VIP window, the current frame is displayed when clicking the play cursor at a particular location in the VIP tracks. This allows you to position audio events and material at exact frame positions.
If you zoom into the window, the video track is also enlarged, showing the video frames at a lower zoom level as well. If you select to display the window at its lowest zoom level, each frame is shown in the video track.

FX

The FX option allows the adjusting of small delays that can occur on slower computer systems for example. The linking of media files with VIP or Wave projects is based on two playback processes, one for the MAGIX music editor 2
window and one for the media file window. No synchronizing of material takes place during the playback process. This means that on computers that have timing problems due to insufficient system resources or speed the digital audio tracks and the media file may run 'out of sync'. With the FX option you can specify a factor that is used to do internal sample rate conversion. How does that work?
Since we can not influence the playback speed of the media file, we need to adjust the playback speed of the digital audio tracks. Imagine that a normal playback speed is represented with a factor of 100. If the digital tracks play ahead of the media file, the playback needs to be slowed down. This would be accomplished by multiplying the regular playback speed of 100 with a FX factor just a little below 1, for example 0.998. This would result in a playback speed of 99.8, which is a little bit slower than the regular speed. This way we would align the digital tracks with the media file.
On the other hand, if the digital audio tracks lag behind the media file playback, a factor higher and 1 would need to the entered. A value of 1.002 would be an example.
Rule of thumb for this factor is to use small value increments. The values should stay around 1. You will need to experiment with this setting, since there is no hard rule about the system performance of an individual computer system.
If you do not have any problems with the digital audio tracks and the media file playback staying in sync, you should not enter any values in this field!

Remove Link

This button will unlink the media file from the MAGIX music editor 2
window. This effectively stops all association with the media file. If you do not need any further referenced to the media file, you may use this option.

Preview

The Test button allows testing of the current link. By clicking the button the playback of the media file should commence. If no playback is visible in a MAGIX music editor 2 window, you may need to check the Video in MAGIX music editor 2
window option for AVI files. Other media files should be playing back through the Windows multimedia extension, such as the MIDI file player.

Show Actual Frames

This options shows the actual video frames in the preview windows in the video track and the preview section.

Text Comments

Menu: Options

You can enter text comments to the current project via a simple text editor. This text can be displayed at each new opening of the project. This will preserve important information about the project together with the audio material.

Text Comments

Enter the text you would like to associate with the project here.

Text Comments - Show on Start

When this option is checked, MAGIX music editor 2
will display the text comment window when the associated project is loaded.

Text Comments - Read Only

This option makes the text comments read only, which does not allow any changes.

CD Arrange Mode

Menu: CD

When you activate this menu item, MAGIX music editor 2
rearranges newly inserted objects and inserts pauses (conforming to the Red Book Standard) between the objects.
We recommend the following procedure:

1.
1. Open a new VIP
2.
2. Activate the Special CD Arrange mode in the CD menu.
3.
3. Load wave files, audio tracks or make a recording using a microphone.

In the VIP you can see gaps between the individual objects – these are the pauses inserted. The length of the inserted pause can be set in the dialog "Set Pause Time
".

Wave Editing / Destructive Editing

Introduction

MAGIX music editor 2 is primarily a non-linear, non-destructive audio editor. This means that most of your work is usually completed in the virtual domain (VIP), without making changes to the original audio. However, there are some situations which are best completed by working directly on a Wave Project, as if you were using a conventional audio editor. MAGIX music editor 2 can also function as a conventional audio editor, but now offers two alternatives - Destructive Editing or the new virtual Wave Editing. When working directly on Wave Projects, the powerful options offered by the Wave Editing system place MAGIX music editor 2
a "cut" above other conventional audio editors!

Wave Editing / Destructive Or Virtual?

Using Wave Editing or Destructive Editing may not necessarily be the best method of completing your editing task. For example, if you have duplicated an Object several times, all of the Objects would contain the same edits after changes are applied and saved directly to the Wave Project window. But this can also be an advantage at the other hand.
Please keep in mind that editing functions such as cut, copy, fades, crossfades, and so on can also all be applied to the audio material in a non-destructive way in the VIP. Almost all effects can be used from within the Virtual Project and applied to the Objects in the VIP Tracks.
With regard to the Effect Menu functions, the editing can also be performed "offline", in a destructive or semi-destructive fashion which has similarities to Wave Editing. For example, the Effect Menu Room Simulator function is always performed "offline". However, the option Create Copy (checked by default) makes sure that a copy of the original material is processed with the effect and not the original audio segment. The copy of the audio segment allows the use of Undo in the Virtual Project to return the Object to its original state. Of course, this process utilizes additional hard disc space.
Also, remember that even if you work extensively with WAV files, you can complete all editing tasks within a VIP. By importing the Wave Project into a VIP, you can complete editing steps faster and more conveniently than in any destructive Wave editing application! For example, any type of cutting and rearranging of audio segments can be performed in a non-linear, non-destructive, and extremely fast way in the VIP. The Track Bouncing option in the Tools Menu allows you to take any material in a VIP and turn it into a new WAV file which can then be imported into a VIP Project.
Note : As we shall see in this chapter, the new non-destructive Wave Editing mode is very similar to working within a VIP , but the editing is carried out directly on the Wave Project
. This saves a lot of time in some cases (such as when working with sound or loop libraries).
Editing on Wave projects can be performed in two different modes, in the old "Destructive Editing" mode or in (virtual) "Wave editing" mode.

Destructive Editing

This is the term used to describe the method for working directly on Wave projects in earlier versions of MAGIX music editor 2
.

When editing in Destructive Editing mode, the physical audio files are edited on a ‘destructive’ basis. This means that the audio file is reconstructed with whatever effect or editing process you choose. There will be Undo backups (assuming Undo is enabled), but these only exist while the file is open. Once the Project is closed, the changes to the file are permanent. Of course, the Undo files consume large quantities of hard disk space and can also take a long time to write to the hard disk!
When using Destructive Editing on a Wave Project, the changes are in general written back to the audio file without having to use the Save Project command, as the changes are directly applied to the audio material contained in the file. Once editing is finished, you simply close the Project. However, the Save Project command needs to be used for saving marker information and other workspace specific items.
A RAP project needs to be saved to the hard disk to make the changes available the next time the project is loaded. Since any editing is applied to the computers volatile RAM memory, the changes would be lost as soon as the computer is turned off. The contents of the RAP project are loaded into the RAM memory of the computer and are played back and edited in RAM. The Save Project command will save any changes to the hard disk for storage and retrieval.
The Save Project As dialog lets you make a duplicate copy of the Wave Project window.
The original audio files are kept intact when using this command. Instead, a copy with the exact same content is created. This can be a useful option for Destructive Editing.
MAGIX music editor 2 ’s development team designed a way to circumvent the disk space and time inefficiencies associated with Destructive Editing. MAGIX music editor 2
introduces this new method, called Wave Editing :

Virtual Wave Editing

This is the new virtual wave editing mode introduced with MAGIX music editor 2
.
Read the new features quickstart "Virtual Wave Editing"
for an introduction to this mode.
There are some differences between the "destructive" and the "Wave editing" mode when working on wave projects:

Rendering edit operations on saving

All edits: cut, paste, delete and insert are virtual. The positions, where the edit took place, are marked by dotted lines. There will be no time consuming undo file creation any more. All the edit operations are applied on the wave project, when you save it.

Section:

You can call the mixer, while working in the wave project. There you can apply every fx manipulation as in the normal VIP section in real-time. These effects will be applied on the wave project, when you save it. For more information on the Mixer section, read here
!

Menu fileàSave in format:

This will call the track bouncing Track bouncing dialog (format conversions are possible). (Toolsà Trackbouncing)

Auto Crossfade

The Auto crossfade option (Menu Edit) works in wave projects too, on every cut or insert operation the default crossfades are applied, when auto crossfade is active. You can use the Crossfade Editor to edit that crossfade, when you select the crossfade by selecting a range over the crossfade.

New File with Drag and Drop

You can mark a range in the wave project and drag this range to an empty space somewhere t the program desktop. A new wave project (untitled.wav) will appear. So you can easily make copies of the whole or parts of the wave project.

Units of Measurement

Menu: Options

'Units of Measurement'

is used to specify the grid dimensions. Several display options are available which will appear at the upper section of the grid.

The units supplied with MAGIX music editor 2 are 'Samples', 'Milliseconds', three SMPTE Frame options, the MSF format for red book CDs (SMPTE with 75 frames), SMPTE + Milliseconds (instead frames), 'Bars'

for BPM display and feets and frames for 16/36 mm film..

VIP Mouse Mode

Menu: Options

Functions of the Individual Mouse Modes in Detail

VIP Mouse Modes – This submenu makes the following selections available. (These are also accessible via the Mouse Modes Toolbar
):

Universal Mode – This is the default mode in MAGIX music editor 2
. All necessary functions can be executed with the left mouse button. The right mouse button accesses a context sensitive pop-up menu.

The vertical position within each VIP track determines between Object handling or marker and range manipulation. The upper half of a track lets you select ranges and set the position of the play cursor. The lower half of the track makes object selection and manipulation possible. Object handles, and volume and panorama curve events take precedence and can be modified at any position within the track.

Range Mode (Secure Mode) –
This mode lets you only modify the ranges and the play cursor position. Using two special keys, additional functionality is available:

Period Key '.': If the period key is pressed, MAGIX music editor 2
changes temporarily into the Object Mode. Once in the Object Mode you can easily select and manipulate objects.

Minus Key '-': Pressing this key, MAGIX music editor 2
temporarily changes into the Curve Mode. In the Curve Mode, you can change the volume and panorama automation curves.

These special functions provide a way to quickly reach all of the important functions, while protecting an object from accidental moving. This is why this mode is also called 'Secure Mode'
!

Object and Curve Mode –
The Object and Curve mode allow you to manipulate objects and automation curves with the left mouse button.

Volume Draw Mode – The left mouse button draws volume automation curves. Before using this mode, make sure the 'V'
button for the desired track is active.

Panorama Draw Mode – The left mouse button draws panorama automation curves. Before using this mode, make sure the 'P'
button for the desired track is active.

Curve Mode –
The Curve mode allows you to manipulate existing volume and panorama automation curves.

Wave Mouse Mode

Menu: Options

You can select between two draw modes for Wave projects (HD and RAM Wave projects):

Ranges Mode

:

The left mouse button is used to set the real-time cursor, select , and markers (default).

Draw Wave

In this mode you can use ‘freehand drawing’

to manipulate the waveform. This is useful to correct single samples, small distortion peaks, clicks etc...

Please use a zoom level of 1:1 or larger for exact handling!

Draw Volume

In this mode you can draw the volume of the sample, e.g. to create a special fade curve.

The middle of the display is volume 100%, the lower border is volume 0%, and the upper corner is volume 200%.

Object Mode

Link Curves to Objects:

This mode lets you combine the volume and panorama automation curve events with the object below the events. Once linked, the curve events are moved with the objects. This is especially helpful, if the curves are tailored to specific objects and need to be moved with the objects.

Link One Track:

This mode selects and collectively moves all objects in the same track that are located behind the current mouse position. This is useful when the later parts of a track are already completed and additional work needs to be performed at the beginning of the track. The later section of the track remains intact, even if certain objects in the beginning need to be moved or space needs to be inserted.

Keyboard Shortcuts

Menu: Options

The keyboard shortcuts in MAGIX music editor 2
can be customized to your own preferences. Any command found in the menus can be used to assign a specific keyboard shortcut. We would suggest familiarizing yourself with the default settings before changing the keyboard shortcuts. Most default assignments follow certain logic and many shortcuts are related.

If you have made any mistake in assigning new shortcuts, you can always return to the default setting with the ‘Restore Default’
button.

The shortcut settings are saved to the file '??????_TB.ini' (???? Stands for the your program version executable file name) in the MAGIX music editor 2
directory when exiting the program. The next time the program is loaded, the customized shortcuts will be retained.

A convenient option is the saving of Shortcut templates. The buttons ‘Save Shortcuts’ and ‘Load Shortcuts’
allow you to customize the shortcut assignments and save them to templates that you can recall at any time. For the first time two or more engineers can work on the same station and each having their own set of customized keyboard shortcuts!

You can also customize the menus and hide menu items you not frequently or never use, e.g. Im-& Export of unusual file formats if you never intend to use it.

The most important aspect of the dialog is the display of the MAGIX music editor 2 menu tree. You can select which menu option is to be reassigned a new key. To accomplish this, simply click on the desired menu option in the tree and then on the 'New Shortcut' box. Next, press the new key or key combination and press or click on the 'Assign new Shortcut' button. Any possible combination of Shift, Alt, and Ctrl with other keys is possible. Please do not use the space bar, ESC, or the Insert key. These functions are hardcoded into MAGIX music editor 2
and can not be changed!

Edit Toolbars

Menu: Options

With this command you open the tool bar editor for the according toolbar. The same function can be called by right-clicking on the tool bar. All tool bars are customizable. You can customize any toolbar by adding or removing any command, which is available as a toolbar icon.
Inside the toolbar editor there is a context-sensitive pop-up help.

Reset Toolbars

Menu: Options

This menu lets you reset several toolbars.

Grid Lines

Menu: Options

With this option, you can define the type of grid that is used for the Show Grid option. Select between several line styles.

Video Height

Menu: Options

MAGIX music editor 2

allows you to link to an AVI file. The AVI movie is played back whenever the VIP or Wave project is played back or recorded into. If the option to display the AVI frames in the VIP window, the height of the AVI pictures is determined with this setting.

Font Selection

Menu: Options

MAGIX music editor 2

will also let you specify the font used for text display in the various objects.

Font

Select the font here.

Font Style

Select the style of the font.

Size

Select the font size.

Font for Time Display

Menu: Options

This option lets you select the display font for the Time Display (Window->Time Display).

Font

Select the font here.

Style

Select the style of the font.

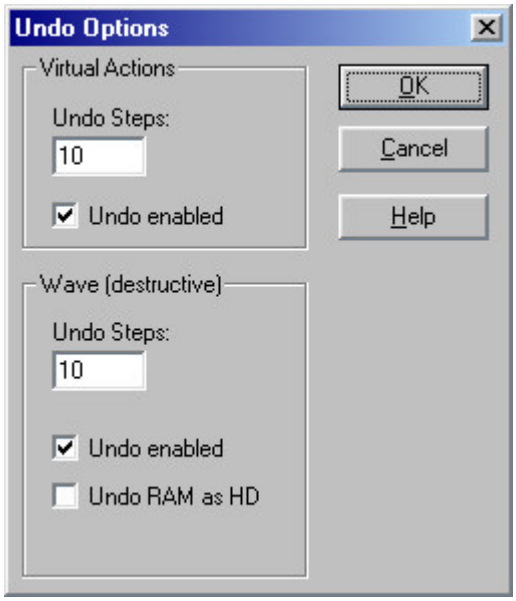
Size

Select the font size.

Undo Definitions

Menu: Options

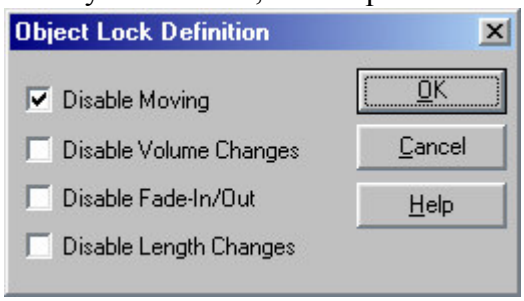
The depth of undo can be specified when working with VIP's. A value of '20' means that the last 20 changes can be undone.



Lock Definitions

Menu: Object

Here you can select, which options should be disabled:



Disable Moving

Disables moving of objects (default). This is useful in multi-track projects to avoid delays between several tracks.

Disable Volume Changes

The volume handles are disabled.

Disable Fade In/Fade Out

The fade handles are disabled.

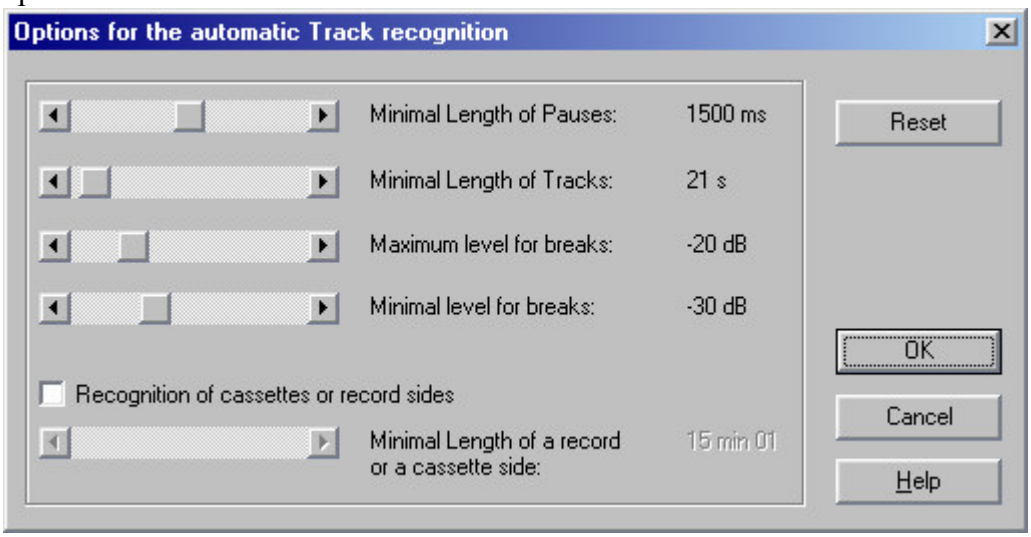
Disable Length Changes

The length handles are disabled.

Options for Track Marker recognition

Options for automatic track marker

Based on many tests using tapes and LPs, we preset values that will yield very precise results in most of the cases. Should you be satisfied with an individual result, you can change these values under this option.



Minimum length of breaks:

This is the time that the audio material must remain below a certain level in order to be recognized as a break.

The longer this value, the fewer breaks will be detected. If the value is shorter, there is a possibility that short silent sequences in a title might be recognized as a break.

Minimum length of tracks:

A new pause will only be recognized once this amount of time has passed since the last track marker. If you are recording a tape with a pop song and want to write it on CD, you can set this value to 3 minutes. But if the tape contains short sound samples, the value has to be consequently much shorter.

Maximum level for breaks and Minimum level for breaks:

During the first step, music editor 2 searches for a suitable volume level for the break detection. With these two parameters, you can limit the results before the process continues. If too many breaks were detected, then you should move both controllers more to the right. In the opposite case, move them to the left.

Detection of LP and cassette side:

In certain occasions you might want to record both sides of an LP immediately one after the other, without interrupting the recording at the computer. The result is normally a very long audio file that includes a very silent passage in the middle of the recording (the moment when you turned the LP or CD over). Music editor 2 detects this as only one section and splits the object into two new objects and tries the same with both of the resulting objects. In the best case, even the noises produced while turning the LP or cassette over will be eliminated. You can increase the precision of this process, adjusting the minimum length of the side of your LP or MC. Here are a few proposals:

Single:

10 minutes

LP:

15 minutes
60 min MC
: 25 minutes
90 min MC
: 40 minutes
This is also correct for recordings that you made earlier and want to want to load into music editor 2 using the "Load audio file...".
If you are sure that the recording has not been made from 2 LP sides, than you should switch off this function
Some final remarks:
- Sometimes it may be helpful to set first 2 or 3 markers by hand and to separate the objects using the "T" key, especially if there are no big level differences in the recording. Music editor 2 will analyse the new objects separately and will then obtain more precise results.
- Music editor 2 cannot detect the correct track markers in all and every case (for example, in live recordings or classic music). If you have tried various different settings and are still not satisfied with the result, then you should set the track markers by hand.
- If you want to edit audio CDs in the music editor 2, then you should insert the CD in your CD-ROM drive and select the "Load Audio CD track(s)" function. In this case, all the necessary information concerning the position of the track markers is directly imported from the CD.
Key: Strg+m

Menu Window

Menu Reference

Cascade	Arranges all open windows.
Tile	Arranges all open windows.
Untile	Restores previous arrangement.
Arrange Icons	Arranges all icons.
Main Toolbar	Shows or hides the Main Toolbar. You cannot use this command J
Positionbar	Shows or hides the Position Bar.
Punch/Playbar	Shows or hides the Punch/Play Bar, including the Live Input option.
Mouse Mode Bar	Shows or hides the Mouse Mode toolbar.
Rangebar	Shows or hides the Range Bar.
Statusbar	Shows or hides the Status Bar.
Mixer	Shows or hides the real time Mixer window.
Time Display	Shows or hides the Time Display window.
Visualization	Shows or hides the Visualization window.
Transport Control	Shows or hides the Transport Control window.
Close All Windows	Closes all open windows..
Iconise All Wave Projects	Changes all Wave projects to icons, VIPs stay in full size.
Hide All Wave Projects	Hides all Wave project windows, VIPs stay in full size.
Half Height	Changes the MAGIX music editor 2 screen to half the height.
Window 1, 2, ...	Activates the window 1,2...

Cascade

Menu: Window

This function arranges all open windows in a cascade style.

Tile

Menu: Window

All open windows are moved next to each other, making use of the whole display area. This is useful when dragging physical sample ranges into VIP’
s.

Shortcuts:

Keys: Return/Enter

Untile

Menu: Window

This function will return the window order to the previous state.

Shortcut is Shift + Return

.

Arrange Icons

Menu: Window

All icons are rearranged along the lower portion of the screen.

Show Main Toolbar

Menu: Window

Shows or hides the Upper Toolbar

.

Show Position bar

Menu: Window

Shows or hides the positioning bar on the lower portion of the display.

Mouse Mode Toolbar

Menu: Window

Shows or hides the mouse mode toolbar with buttons to select different mouse modes in VIPs

.

Show Range bar

Menu: Window

Shows or hides the range bar on the lower portion of the display.

Button bar

Menu: Window

Shows or hides the Button bar on the lower portion of the display. With the buttons on the button bar you can open / close the main windows of MAGIX music editor 2

Show Status bar

Menu: Window

Shows or hides the status bar on the lower portion of the display.

Mixer

Menu: Window

Shows or hides the Mixer Window.

Read more about the powerful real-time mixer in the Mixer chapter in the section Working with MAGIX music editor 2

.

Time Display

Menu: Window

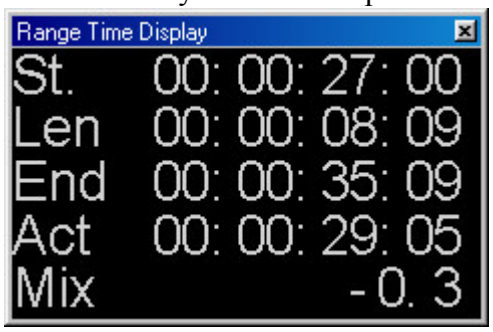
Shows or hides the time display window.

This window always shows the actual time position in the actual format. You can change this format with the menu ‘Units of Measurement’

. We recommend the SMPTE format: hours:minutes:seconds:frames. The colors and the font for the display can be changed in the context menu, opened by right-clicking in the Time display window. You can zoom the window to any size and position it anywhere on the screen!

Up to five rows

of information can be displayed. Click the right mouse button on the Time Display to display a pop-up menu that lets you choose the preferences for the Time Display.



St. - Start Position

This line shows the current range start position or the current real-time cursor position.

Len - Range Length

If a range is selected, this line displays the length of the range.

End - Range End Position

If a range is selected, this line displays the range end position.

Act - Current Cursor Position

This line shows the current cursor position.

Mix – Latest Mixer Position

This line shows the latest mixer position (not editable).

The same values are displayed in the time at the lower edge of the VIP Window

There you have the possibility to edit the values manually by double clicking in the corresponding field. You can also access this function by the keyboard shortcuts alt+ numpad 1..5 or with the corresponding menu items "menu rangeàedit time displayà

field 1..5"

Visualization

Menu: Window

MAGIX music editor 2

provides you with a special window featuring multiple ways to display the original volume level and spectral structure of your projects. Default setting is a high resolution stereo peak-meter.

By clicking on the "Setup" button in the upper left corner of the visualization window you can made all settings:

Mode:

You can choose between Oscilloscope, Peakmeter, Spectroscope (which is actually an spectrum analyzer), Phase correlation (Goniometer) and Spectrogram (visualizes the spectral structure in time).

Value/Range:

You can set the minimum/maximum value for all visualization modes and for the peakmeter furthermore if it should show absolute peaks or RMS and the actual maximum value numerically.

Speed:

Here you define three different display speed for all visualizations, you can set custom values for the damping: set the time value in ms that the visualization needs to change its display, if the input value has changed by 10 dB.

Peak hold:

You can switch on/off Peak hold and define peak hold and decay time.

Spectral options:

Here you can make several settings for the Spectrum Analyzer visualizations Spectrogram and Spectrograph, the number of used bands, if the bands are distributed linear or logarithmic, how the bands value is calculated from the signal and the stereo options, where you can choose to display just left /right signal or the sum or difference of the two channels.

Colors:

You can set the color for the Osci/Correlator line/grid/background and for the peakmeter/Spectrum bars. The latter can work in solid (3 fixed colors for minimum-middle-maximum value) or gradient mode (the three colors will be blended into each other).

Reset all:

all open visualization windows are reseted

Audio device

Open new Visualization:

Opens a new visualization window, where you can choose an alternate mode to have optimum control over the signal. You can have up to four visualizations windows open, three for playback and one for an input signal (opened by the record dialog).

Load/Save preset:

Choose from nice designed presets or save your own design for later use.

Transport Control

Menu: Window

MAGIX music editor 2 provides a very cool transport console!

Start / Stop / Forward / Rewind Buttons:

This allows positioning similar to that of a tape machine.

The little button in the upper right hand corner of the Playback button (or right-clicking the Playback button) opens the Playback Parameter window for the stereo master operation. This lets you determine the sample rate, playback device, and the Scrubbing/Varipitch options.

Record button:

Starts the recording for all active tracks. This means that tracks with the red REC button enabled need to be configured with the proper recording devices prior to starting the recording. Right-click on the REC button for each track to select the device.

The little button in the upper right hand corner of the Record button (or right-clicking the Record button) displays the Record Parameter window. This lets you make settings such as 'Playback during recording' and also lets you record material directly from the Record Parameter window.

Time Display:

This displays the current playback position of the project. Double-clicking on the window lets you numerically enter a new playback position. Clicking the green arrow lets you set various units of measurement.

L/R Time Display:

This displays the length of a selected range and is editable by double clicking the display.

Marker Buttons 1-12:

Clicking on one of the marker buttons saves the current playback position to the button. If it already contains a previously saved position (marker appears in light color), the program will place the playback position to the saved position. A right click clears the button memory and allows you to store a new position to the button.

Marker Button:

This button open the Marker Manager for more detailed Marker editing.

Punch Button: This button switch MAGIX music editor 2 into punch record mode. This means that the recording process can be started any time during playback. This is also called 'On-The-Fly Recording'. This can be repeated numerous times. Punch In and Out markers are set automatically. You can stop a punch in recording process with another click on the Record button. However, this does not stop the playback of the project.

Punch In Button:

This sets the punch in position.

Punch Out Button:

This sets the punch out position. If the both the punch in and punch out markers are set, the punch recording can be started with the Playback button. The program will play back the project until it reaches

the punch in point. At the punch in point the program switches into record mode and continues until the punch out marker has been reached. At the punch out marker the program switches back into playback mode and continues the playback until it is stopped.

Sync Button:

This button opens the Synchronization window.

Loop Button:

The loop button activates the Loop mode, meaning that playback continues to loop through a previously selected range.

RCMON Button: This button activates the Record Monitoring feature of MAGIX music editor 2 . All tracks that have their REC buttons activated are monitored with the peak meters. The inputs of the audio device(s) are directly routed to the outputs of the soundcard, if the soundcard offers this functionality (check with your soundcard manufacturer). This offers the same functionality as with real tape machines.

Jog Shuttle:

The jog shuttle wheel varies the playback speed. This can be used to audibly spot material in your project.

Scrub >> & Scrub <<:

These buttons allow you to scrub through your project. During scrubbing the playback of the project continues with varying speed while the playback direction can be changed. This also offers a convenient way of finding audio sections such as clicks or mistakes in the audio material.

Close All Windows

Menu: Window

Closes all opened projects. Before closing a window/project, MAGIX music editor 2 will ask you whether you would like to save the project.

Wave Projects to Icons

Menu: Window

This function will reduce all Wave projects to their icons to make room for the display of the virtual projects.

Hide All Wave Projects

Menu: Window

This function will hide all Wave projects to make room for the display of the virtual projects.

Half Height

Menu: Window

The MAGIX music editor 2
screen is shown in the upper half of the display.
This is useful, when using a sequencer program in multitasking. So you can switch between MAGIX music editor 2
and the sequencer without the need of complete screen redraws.

Open Project Windows: 1, 2,...

Menu: Window

Choose active window from the list.

Menu Help

Menu Reference

This menu contains the context sensitive online help functions of MAGIX music editor 2 .

Help Index	Shows the items, for which help is available.
Context Help	Activates the context sensitive help system.
About Help...	How to use the online help system.
About MAGIX music editor 2 ...	Shows copyright notice and the version of MAGIX music editor 2 .
System Information	Shows information about memory usage etc...

Help Index

Menu: Help

Use this command to show the contents of the help system. Click the command, for which help is needed!

Context Help

Menu: Help

Use this command, to get help about any part of MAGIX music editor 2
. Press <Shift+F1> and then click on any button or menu item to get the help information.

About Help

Menu: Help

Use this command for getting information about the online help system.

System Information

Menu: Help

A window is displayed, containing information about the memory status and other parameters. Particularly useful is the display of the free storage on all connected disk drives, the used system resources utilized by MAGIX music editor 2 and the memory usage. Make sure the parameter for system memory used by MAGIX music editor 2 never grows larger than the displayed overall system memory available (physical RAM). If this happens, the performance of MAGIX music editor 2 is reduced caused by page swapping (virtual memory) done to compensate for the missing memory.

Virtual Project Components

VIP Window components allow you to set properties for the respective audio track and contains the main editing area.

Window Title Bar

The title bar shows the name of the VIP and the sampling rate. It also shows the length of the project in samples.

Lock

Locking a track will prevent you from accidentally moving or deleting objects in the track display. The Lock Definitions in Object->Lock Object can be used to prevent or allow certain editing steps.

Volume Automation

MAGIX music editor 2 has extensive support for volume automation. Clicking on this button activates the volume automation for a track. Once active you can assign certain volume fades by creating so-called ‘volume nodes’ along the volume automation line. These events are also referred to as ‘volume rubber bands’
because of their rubber band like nature when moving them.
The volume automation can be enabled on a track by track basis. Once automation events are created, they will reside on the track until the volume automation is turned off. However, the outline of the line or curve is not lost. Once the automation is turned back on, the automation events are restored to where you left them.
MAGIX music editor 2 allows you to change the automation events even during playback and has several functions to make them ‘stick’
to specific objects.

Panorama Automation

Just like the volume automation the panorama or panning automation is a convenient way of adding fades

from the left to the right channel and vice versa. It adheres to the same guidelines as the volume automation.

Volume Fader

This fader sets the main level for the track volume. If the volume automation is active, the events along the automation line will determine the level at a specific time event. However, the volume fader will allow you to alter the overall level of the track and the automation events are scaled to the new main level setting. This will prevent having to redraw the volume automation if the overall volume of track needs to be adjusted.

Panning Fader

The panning fader works much like the volume fader and will have the same effect on any panning automation assigned to the track.

LED Display

The LED display shows the track volume levels during recording and playback. It is updated in a manner that closely resembles LED'
s on hardware consoles. However, on slower systems it is recommended to turn them off (Shift+TAB).

Object

Some DAW applications use so-called 'regions' that contain audio events. We chose to call these regions 'objects'
since they more closely resemble a separate entity that can be edited as an independent object. They are like building blocks in a Lego™ house if you will. Each contains specific instructions about the audio section that is edited and played back by the object.
Keep in mind that objects do not contain the actual audio material. Rather they are 'pointers' to the audio in the physical audio files or windows (RAP and HDP). This is the reason why editing steps such as moving, copying, dividing (splitting), cutting (deleting), or duplicating are extremely fast. After all, we are only editing instructions
and not the actual audio itself.
Objects can also have their own Fade In, Fade Out and volume setting.

Range

Ranges in VIPs allow you to selectively edit objects that are located within a range. Ranges can be moved, extended, or shortened to size them for specific needs. Let'
s assume that you wanted to select objects up to 2 minutes into the project. Selecting a range over the contents up to the 2-minute position and choosing Object->Select Objects would do the trick!

Screen Formatting Buttons

These buttons can be assigned with a specific screen formatting setting. For example, clicking on the second 'S'
button while holding the Shift key and zooming into the window will always return the same setting when clicking on this button again.
The 'S' buttons store complete Zoom/Scrolling setups, while the 'Z'
buttons only store a custom zoom level.

Scroll Bars

The scroll bars allow you to move along the time line of the project if you have zoomed into the window

horizontally..
You can also control the horizontal zoom level by dragging the borders of the scroll bar. The magnifying glass buttons will also zoom in and out of the project display in preset increments.

Markers

These marker positions can be set with the Shift and number keys. This will even work during playback to give you a quick way of marking your track.
Special markers are the Punch-In and Punch-Out markers as well as track index markers for CD creation.
Any of the markers can be picked up with the left mouse button and dragged to a desired position. When doing detailed work you may increase the resolution of the track display by zooming horizontally into the track window.

Toolbars

Toolbars are designed to help you work more efficiently with MAGIX music editor 2 . They are shortcuts to major functions in MAGIX music editor 2

. Any of the toolbars can be moved. If you drag a particular toolbar to a new location, the toolbar turns into a floating toolbar, which can be placed anywhere on the screen.

Show / hide any Toolbar in the Menu Window.

You can customize any toolbar by adding or removing any command, which is available as a toolbar icon. So the following listing represents just the default configuration, which you can easily design to suit your needs.

Main Toolbar

New virtual Project

Open VIP

Open WAV File

Save Project

Cut Range

Copy Range

Paste

Split Object

Snap on/off

Auto Crossfade Mode

Crossfade Editor

Group objects

Ungroup objects

Set Marker

Set Track Index

Set Sub Index

Set Pause

Auto Track Markers

Make CD

Record

Record Options

Mixer

Mouse Mode Toolbar (see Details on Mouse Modes)

Universal Mode

Range Mode

Curve Move and Grab Mode

Object and Curve Mode

Cut Mouse Mode

Timestretch Mouse mode

Draw Volume Mode

Draw Panorama Mode

Draw Wave Mode (only on Wave Projects)

Scrubbing Mouse Mode

Zoom Mouse Mode

Normal Objectmode

Link Curves to Object

Link Objects of one Track

Position Toolbar

Section to beginning

Section one length left

Section half of its length left

Section half of its length right

Section one length right

Section to end

Set section in a VIP to the next/previous object border

Set section to the next/previous marker

Set the zoom depth to 1, 10, 60 sec and 10 min

Zoom Wave In/ Out vertical

Range Toolbar

Play Cursor on left range border

Play Cursor on right range border

One range length left

One range length right

Range start to previous zero crossing

Range start to next zero crossing

Range end to previous zero crossing

Range end to next zero crossing

Range Editor

Details about the Individual Mouse Modes

Click on the image for a shortcut!

The Universal Mode

Right Mouse Button:
Displays context sensitive pop-up menu.
Left Mouse Button:
Upper Track Pane:

Range:	Selecting ranges and moving ranges (with Shift key).
Play Cursor:	Single click sets the real-time cursor anywhere in the track.
Zoom:	Double click outside of a selected range (or no range) zooms out. Double click inside a selected range zooms in.

Lower Track Pane:

Selecting Objects:	Single click selects objects (or group of objects.) Single click + Shift selects multiple objects, including all objects between the two clicks. Single click + Ctrl selects multiple single objects.
Moving Objects:	Dragging moves objects or object groups. Dragging + Shift moves objects or object groups up or down the track list without changing the time position.
Duplicating Objects:	Dragging + Ctrl duplicates one or more objects. Dragging + Shift + Ctrl duplicates one or more objects, while allowing the objects to be moved up or down the track list without changing the time position.
Lasso Function:	Clicking next to an object while right dragging the marquee (lasso) across

	multiple objects selects the objects within the marquee. Clicking next to an object while left dragging the marquee (lasso) selects multiple volume or panorama curve events.
Complete Track Object Handles:	The upper handles changes the object volume. The changed level is shown in dB in the upper left-hand corner of the VIP. The upper left and right handles change the Fade In and Fade Out of the object. The lower handles resize the object.
Volume and Panorama Automation Curves	Double click on the automation curve creates a new curve event. Another double click on the same curve event deletes the event. Single click on an event selects the automation curve event. Single click + Ctrl allows selection of multiple events. Dragging of a curve event moves the selected event. Dragging + Ctrl moves several events. To delete events, select the events and use Edit->Delete … Handle.

The Range Mode (Secure Mode)

Right Mouse Button:
Displays context sensitive pop-up menu.
Left Mouse Button:

Range:	Selecting ranges and moving ranges (with Shift key). Objects or automation curves can not be changed by accident (therefore called 'Secure Mode').
Play Cursor:	Single click sets the play cursor anywhere in the track.
Zoom:	Double click outside of a selected range (or no range) zooms out. Double click inside a selected range zooms in.
Select Object Mode temporarily:	Using the '.' (Period key) temporarily switches to the object

	mode, which allows moving of objects.
Select Curve Mode temporarily:	Using the '-' (Minus key) temporarily switches to the curve mode, which allows moving and manipulating of automation curve events.

The Curve Mode

Right Mouse Button:
Displays context sensitive pop-up menu.
Left Mouse Button:

Lasso Function:	Dragging the marquee or lasso selects multiple volume or panorama automation curve events.
Volume and Panorama Automation Curves	Double click on the automation curve creates a new curve event. Another double click on the same curve event deletes the event. Single click on an event selects the automation curve event. Single click + Ctrl allows selection of multiple events. Dragging of a curve event moves the selected event. Dragging + Ctrl moves several events. To delete events, select the events and use Edit->Delete … Handle.

The Object and Curve Mode

Right Mouse Button:
Displays context sensitive pop-up menu.
Left Mouse Button:

Selecting Objects:	Single click selects objects (or group of objects.) Single click + Shift selects multiple objects, including all objects between the two clicks. Single click + Ctrl selects multiple single objects.
Moving Objects:	Dragging moves objects or object groups. Dragging + Shift moves objects or object groups up or down the track

	list without changing the time position.
Duplicating Objects:	Dragging + Ctrl duplicates one or more objects. Dragging + Shift + Ctrl duplicates one or more objects, while allowing the objects to be moved up or down the track list without changing the time position.
Lasso Function:	Clicking next to an object while right dragging the marquee (lasso) across multiple objects selects the objects within the marquee. Clicking next to an object while left dragging the marquee (lasso) selects multiple volume or panorama curve events.
Object Handles:	The upper handles changes the object volume. The changed level is shown in dB in the upper left-hand corner of the VIP. The upper left and right change the Fade In and Fade Out of the object. The lower handles resize the object.
Volume and Panorama Automation Curves	Double click on the automation curve creates a new curve event. Another double click on the same curve event deletes the event. Single click on an event selects the automation curve event. Single click + Ctrl allows selection of multiple events. Dragging of a curve event moves the selected event. Dragging + Ctrl moves several events. To delete events, select the events and use Edit->Delete … Handle.

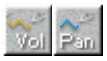
The Cut Mouse Mode

Right Mouse Button
: Displays context sensitive pop-up menu
Left Mouse Button
: Use the mouse as scissors to cut objects

The Pitch-shift/Time stretch mode

Right Mouse Button
: Context menu
Left Mouse Button:
The lower right Handle allows compression or stretching of an object. A time stretching effect is created: The object is not played as a loop or shorter version, but simply in a different play tempo.
Using the center handle, the pitch can be altered using pitch shifting.

The Draw Volume /Draw Panorama Mode



Right Mouse Button:
Displays context sensitive pop-up menu.
Left Mouse Button: Draws volume automation curves into VIP tracks. The ‘ Vol’ or ‘Pan’ button for a respective track needs to be active prior to drawing the volume or panorama curve.

The Scrub Mode

Right Mouse button:
Context menu
Left Mouse button:
Scrub function
Click into project: Pre-listen with control over play tempo. The project will be played forward and back controlled by the distance of the mouse pointer from the actual play cursor position. The larger the distance the faster the play tempo. You can set 3 individual scrub modes in the play parameter window
Read more on scrubbing here!

The Zoom Mode

Right Mouse Button
: Zoom out
Left Mouse Button
: Zoom in

Screen Elements

Program Title Bar

This bar not only shows you the current version of MAGIX music editor 2
, but also indicates which project is open and active.

Menu Bar

The menu bar shows you the available functions in MAGIX music editor 2
.
à Menu Reference

Toolbars

Toolbars are designed to help you work more efficiently with MAGIX music editor 2 . They are shortcuts to major functions in MAGIX music editor 2
. Any of the toolbars can be moved. If you drag a particular toolbar to a new location, the toolbar turns into a floating toolbar, which can be placed anywhere on the screen.
à Toolbars Reference

Floating Transport Control

The floating transport control window provides convenient audio transport buttons for the following functions:
Record, Play, Stop, Reverse Play, Go To Start, Backward, Forward, Jog/Shuttle, Scrub, open Synchronization dialog, open Playback dialog, open Record dialog, set Loop Mode, Position Control, Input Monitor, Punch In/Out and Store Markers.
àTransport Control

Status Bar

The Status Bar shows information about the audio caching state and pertinent information about which track is selected.
Also it gives you an indication of the buffer utilization. Buffers are used in MAGIX music editor 2
to achieve a larger number of tracks and handle the real time processing. They are largely responsible for a smooth operation of the program. Improper buffer settings will result in audio interruptions or other anomalies.
When first installing MAGIX music editor 2
you may want to stick with the default buffer settings until you have a better understanding how they affect performance of your audio tracks. Please refer to the Reference Manual on a detailed description of the buffers.

DSP Display

Many times, you would like to know how much more ‘room’ you have to add more tracks or enable additional real time effects. MAGIX music editor 2 displays a CPU DSP meter in the lower left-hand corner of the status bar in MAGIX music editor 2
. This meter gives you an idea what the load on the CPU looks like. The more tracks you add to your multi-track project and/or the more real time effects you enable the more CPU processing power is needed. The display will show you this increase.
It will also give you an indication if your operating system is configured optimally or if there is some other process that all of a sudden kicks in. For example, if you are recording a 60 minute life recording from a

DAT tape and at 45 minutes into the process the DSP display increases and you see errors being introduced, there is a good chance that Windows is doing something in the background. Among the possibilities are system cleaning tools or screen savers. It is best to disable those applications when working with MAGIX music editor 2

.

The DSP display will give you a good idea how well your system performs. If an overload is indicated you may either remedy the problem by increasing the buffer settings in MAGIX music editor 2 or by reducing the number of tracks and real time processing. At times, this may also be do to some other problem caused by improper computer settings.

Mixer Window Components

Click on the individual components to see a description.

Keyboard Shortcuts and Microsoft Intellimouse™

Below are the default MAGIX music editor 2 shortcuts for the program. You may change the shortcuts at any time with File->Preferences->Keyboard Shortcuts. For a description of the toolbar functions, please refer to Toolbars

.

Sorted by Menu you'll find it here.

Sorted by Function you'll find it here

General

A	Range all
Ctrl-A	Redo
B	Split range into 3 Sections
Shift-B	Display gets 1 view
C or Ctrl-C	Copy range
Shift-C	Copy As
Alt-C	Copy and Clear (VIP)
E	New VIP
F	Fade In/Out
G	Synchronization
H	Close all Windows
I	Project Information
Ctrl-I	Import Sample
L	Load RAM-project
Shift-l	Load HD-project
K	Activate "link one track" temporarily
M	Open Mixer
ctrl+M	Mute Object
alt + M	Mute Track
N	Normalize (virtual)
Shift-N	Normalize (destructive)
O	Load virtual project
P	Play parameter
R	Record Dialog
Ctrl-R	Grid on/off
Shift-R	Grid definition
S, ctrl+S	Save project
Shift + S	Save project with new name
T	Split objects
Shift-T	Transport control
Ctrl-T	Trim objects
V	Paste
Alt-V	Overwrite with Clip (VIP)
ctrl+V	Paste with ripple
W	Load wave

X	Cut range
ctrl + X	Cut with ripple
Y	System preferences
Ctrl-Z	Undo
Tab	Toggle object draw mode
Shift + Tab	Define object draw mode
Space	Playback on/off
Enter	Tile windows
Shift + Enter	Untile Windows
Esc	Abort playback, recording and physical sample manipulations
Del	Delete range
Del + Ctrl	Delete with ripple
Shift+Del	Cut
Backspace	Restart Playback
Alt+ Backspace	Undo
Shift +Backspace	Recall last Range
Insert	Overwrite with Clip
Ctrl+ Insert	Copy into Clip
Shift+Insert	Paste Clip
Numeric 0	Scrubbing
Numeric ‘,’	Stop and go to actual position
#	Switch Grid on/off
‘	Set Marker (auto numbered)
?	Set Marker with name
0-9	Get Marker 1...10
0-9 + Shift	Store Marker 1 .. 10

Store Setups/Zoom

Numpad 1, 2, 3	Get Position and Zoom Level 1..3
Numpad 1, 2, 3	Get Zoom Level 1..3
ctrl+Numpad 1, 2, 3	Store Position and Zoom Level 1..3
ctrl+Numpad 4, 5, 6	Store Zoom Level 1..3
Range	
Cursor left :	Scrolling left (page mode)
Cursor left+ Ctrl	Zoom In
Cursor left+ Alt	Scrolling left (scroll mode)
Cursor left+ Shift + Ctrl	Flip range left
Cursor right	Scrolling right (page mode)
Cursor right+ Ctrl	Zoom Out
Cursor right+ Alt	Scrolling right (scroll mode)
Cursor right+ Shift + Ctrl	Flip range right
Home	Play Cursor to beginning of project
Home+ Shift	range to beginning of project
Home+ Ctrl	Play Cursor to beginning of the range

Home + alt	Section to range start
End	Play Cursor to end of project
End+ Shift	Range to end of project
End+ Ctrl	Play Cursor to end of range
End + alt	Section to range end
PgUp	Activate previous section
PgUp + ctrl	Range start to next zero crossing
PgUp + Shift	Range start to previous zero crossing
PgDn	Activate next section
PgDn + ctrl	Range end to next zero crossing
PgDn + Shift	Range end to previous zero crossing
Cursor up	
Cursor up+ Ctrl	Zoom in vertically in VIPs
Cursor up+ Shift	Half section up (vertical scroll)
Cursor down	
Cursor down +ctrl	Zoom out vertically in VIPs
Cursor down+ Shift	Half section down (vertical scroll)
Function keys	
F1	Help
F1 + shift	Context Help
F2	Go to left marker
F3	Go to right marker
F4	Play over cut
F5	Play to cut start
F6	Play from cut start
F7	Play to cut end
F8	Play from cut end
F2-F10 + ctrl	Get range 1-10
F2-F10 + alt	Store range 1-10
F2-F10+ Shift + Ctrl	Get range length
F11+alt	Store range with new name

Mouse

For a full description of the mouse shortcuts, please see the section on Detailed Information about Individual Mouse Modes

Microsoft Intellimouse:

Middle mouse click: Playback Start/Stop

Wheel: Scroll horizontally

knobs and faders can be tuned in fine ranges

+ Ctrl Zoom In/Out horizontally

+ Shift Zoom In/Out vertically

+ Ctrl + Shift Scroll vertically in VIPs

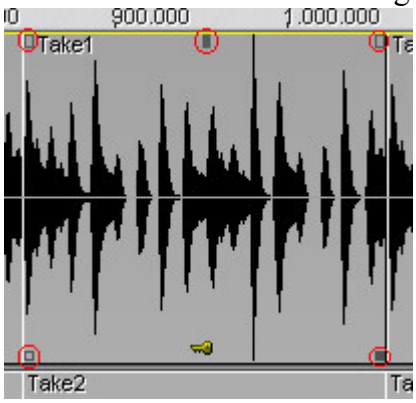
Terminology

The following lists some specific terms that where defined to describe components of MAGIX music editor 2
that are mentioned frequently throughout the documentation. Even if you were somewhat familiar with some of the particulars, we would like to encourage you to read the definitions for the individual terms. The terms are specific context related and are not further covered in the rest of the documentation. PC typical terms such as button, window, and file requester are not explained here. Please refer to a PC or Windows™ manual for further details on those terms.

Handle
Section
Range
Marker
Play Cursor
Object
Virtual Project
Wave Project
Wave_Editing

Handle

Handles are the five little rectangles that appear on the outline of a selected object.



With the handles you can adjust several object properties:

Lower Handles:

The left handle adjusts the object start time, where the object starts playing audio from the referred wave project

The right handle adjusts the objects end time, where the object stops playing audio from the referred wave project.

Note that you cannot move the left/right handle further than the start/end of the physical audio file.

Upper Handles:

The left handle adjusts the fade in time, the time span until fade in reaches the maximum object volume.

The right handle adjusts the fade out time, the time when fade begins to lower the object's volume.

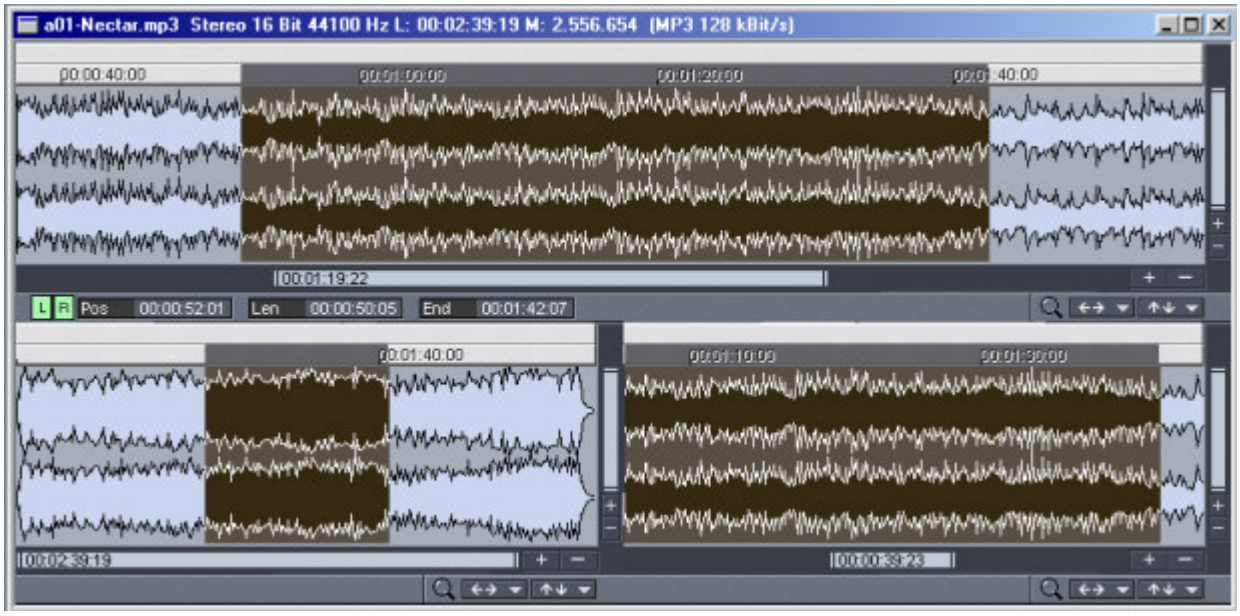
The middle handle

adjusts object volume. This works independently from the track volume fader or volume automation curves.

For further information read Virtual Editing Concepts

.

Section



"Section" means the visible part of a project. Which part of the project (or the whole one) is displayed, depends on the zoom level.

MAGIX music editor 2

offers the possibility of displaying any project window in up to three sections. This enables you to show the complete sample in one section while displaying smaller sections in one or two other sections. Each section can be accessed and edited in separately.

Active Section when using Zoom Levels

If Zoom commands are used on one of the display sections, such as the buttons on the Position bar, it is important to designate the section that is to be zoomed. Click on the left or right scrollbar of a section to activate it.

You can step through the sections with the Page Up/Page Down keys!

Also see:

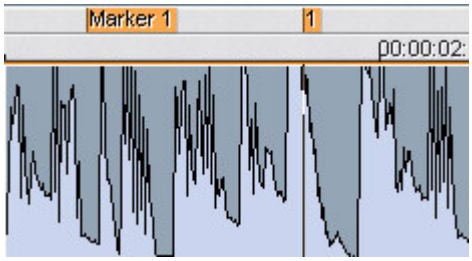
Sections

Split Ranges

Range

A range can be selected with the mouse. Ranges can be played back with the Spacebar. It is defined by the beginning and end .
The range is utilized to earmark sections, which will be used to manipulate the material in the range (Cut, Insert, Normalize, Fade In, Fade Out, Move, Effects, Delete, etc.).
The second function is the definition of loops, which are repeated during playback.
The third task of the range is the configuration of section edges in which graphical data is displayed.
Every project can have an unlimited number of ranges defined. Up to 10 ranges can be accessed directly through the function keys. Additional ranges can be accessed with the Range Manager. The vertical range borders can be locked with the function Fix Vertically (Menu 'View'
). This will set the height of the range to a maximum value, which is the default setting for virtual projects.
Read More in Navigating with Ranges

Marker



Markers are used to store positions. They are displayed as red bars carrying the marker name on a special line (marker bar) on the upper edge of the project. Markers can be moved using the left mouse button.

In a project any number of markers can be defined. 10 markers can be directly switched using the number block.

Markers assigned to the number block are named "1" to "10". The menu item Range > Store Marker > Additional

can be used to define and name additional markers, which will be displayed by name.

Additional markers besides the standard markers (red bars) are the triangular marker for the CD Burn functions; red: CD track marker, green: CD sub index marker, blue: CD pause marker. For further information see Functions for Creating CDs

When you click the right mouse button on the marker bar, a context menu appears, which offers you convenient access to all important commands.

Markers can be managed and named using the Marker Manager...

(Tools menu or Marker context menu).

To put on a range between any two markers, you first click the first marker. Then you hold down the Shift key and click the second marker. This will mark a new range.

Read more in Navigating with Markers

Play Cursor

The Play Cursor or the Position Line is the vertical moving line during playback that shows the current playback position.
The start position of the Play Cursor (playback start) is set by clicking the left mouse button into the grid bar or marker bar. This deselects any previous range
.
You can restore the previously selected range by double clicking on the grid bar in the gray range.

Objects

Objects in MAGIX music editor 2 simply are instructions to play a range from an audio file. The VIP window contains objects in a virtual track. The term ‘virtual’
is used, because the object does not contain any audio itself. What it does contain is information to move to a particular starting time in the physical audio file and play back the audio for the duration of the range length specified by the length of the object.
In virtual projects the audio data is represented by rectangles („Objects" as it is called). An Object is the representation of a sample or a segment marked within the sample. In other words: The Object is used as a reference to the audio data, which is stored in the wave projects.
The lock symbol , which can be hidden and which is positioned on the lower border of each object, can be used to protect an object against accidental modifications. The attributes to be protected can be selected using Options for Locking Objects
.
For further information on Objects see term definitions of virtual projects.
Virtual Projects

Virtual Project

Show the Virtual Project Window Components

Virtual projects are the centerpiece of MAGIX music editor 2

! In virtual projects you can arrange objects taken from multiple Wave projects and arrange complex audio projects. All cut operations, volume level changes, fades, and more are completely virtual, meaning that the audio material is not destroyed! This allows you to select the proper cut position, cut length, volume level, effect setting, etc. by experimenting without loosing audio material or alter it.

Detailed information about working with virtual projects can be found in the Virtual Editing Concepts

.

The actual audio data is represented by rectangles („objects" as they are called. That is, an object is the „image" of a sample or of an area marked therein. In other words: The object refers to the audio data. Even if the present audio hardware can only play back up to 2 channels of audio (Stereo), tracks beyond a stereo pair can be played back in a virtual project..

The display of the virtual project can be switched between two definitions. The Tab key allows you to switch between the two modes. The key combination Shift + Tab displays the Editor dialog for the virtual project display preferences. Attributes such as displaying only a single graphic form for Stereo tracks can be chosen next to whether you want text displayed in the objects.

Using the mouse in virtual projects

The functions of the left mouse button for virtual work depend on the mouse mode selected in the mouse mode bar.

VIP Mouse mode

Mouse functions of the different modes in detail

Vertical Zoom function in virtual projects

Hold down the Control key and use the vertical cursor keys to zoom in and out of the waveform display in virtual projects. This comes in handy when you want to exactly evaluate soft sections in VIPs, for example.

In addition you can use the commands of the position bar to navigate. Read more about Zooming here

!

Context menu

Click the right mouse button to open the context menu. Here all important commands for virtual work can be found.

VIP window components

MARKER
00:01:00:00
00:02
Vol
0 dB
Pan
0.0
you stole the eggs
Setup
Zoom
1
2
3
4
Pos
00:00:24:06
Len
End

Wave Projects

Menu: File

Wave project contain audio data. VIP Objects refer to this audio data. Access to the Wave project is obtained by selecting the corresponding Wave Project window.

All wave project files particular to a VIP are open in the background, but are hidden by default. This is because you don't need to open the window of a wave project that is used in a VIP manually. You do that more elegant by right-clicking a object and choosing "Wave Editing" from the context menu. The corresponding Wave Project window for a VIP Object is brought into focus i.e. opened into the foreground.

The focussed Wave Project contains the audio material that is referenced in the VIP Object. The selected Range in the displayed Wave Project is the material used in the VIP Object – if a Range is not selected, the audio material corresponding to the entire Object will automatically be selected as a Range in the HD Wave Project.

Another elegant way to open a VIP's wave project for editing is to open the Project information dialog (key: "i") and double-click on the according wave project in the list.

If you close an Wave project window, it is hidden again. To unhide the windows, select "Iconise all wave projects" from the windows menu.

The project file will not
be closed, since the file is referenced in any open VIP.

Wave projects can be opened and saved separately from VIPs, too. It is not necessary to open a VIP to work on a Wave Project - you can open Wave Projects directly into the MAGIX music editor 2 workspace (File>Open Project>Wave Project, key W, drag from Explorer etc).

To open a wave file for editing you have to minimize a recently open VIP. Otherwise when you load a wave project and a VIP is open, the wave project will be inserted in the VIP (and the wave project window will be hidden). That can be a disadvantage, because MAGIX music editor 2
forbids all destructive changes on a wave project, if the affected part is used in a VIP object, an error message appears: "This range of a physical project cannot be changed because it is used by VIP objects!". If this occurs, either delete the VIP object (if it was inserted unintentionally) or save a copy of the wave project with "save as...".

The title bar of the window displays the name of the Wave Project, the bit resolution, the length of the sample, the resulting storage requirement and the edit mode. To activate the window, simply clicking into the project window. MAGIX music editor 2
can work with an unlimited number of Wave Project windows displayed on the screen.

Most of the recording and playback concepts in VIPs also apply to the Wave Project windows. For example, playback of a Wave Project window is also started and stopped with the Spacebar. You can also use the buttons in the Transport Control window or the controls in the toolbar.

In previous versions of MAGIX music editor 2
, working in a Wave Project window worked much the same as with conventional sample editing programs - you may already be used to those conventions. Any edits or processes applied to Wave Projects were immediately written back to the hard disk file, as is the case with conventional tape recorders.

In MAGIX music editor 2 , you can physically edit the audio material you recorded or imported direct in a window we call a Wave Editing window (or the previous Destructive Editing window). The technical term in MAGIX music editor 2
is HD Wave (*.hdp+*.wav) for Hard Disk Project and RAP for RAM Project, but this manual refers to the collective files as Wave Projects.

Differences between RAM and HD Wave Projects:

The HD Wave Project is an audio file that is recorded to your hard disk, played back, and edited from

the hard disk. You can work with Wave Project files that are theoretically infinitely long. In a VIP, these files are still used, but are kept beneath the VIP interface - the files are referenced (re-created) as Objects and the Objects are edited instead of the actual Wave Projects.
The RAM Wave project (called ‘RAP’
in earlier program versions) load their complete content into the RAM memory of the computer. When working with RAM Wave projects, you can decide at the end, whether you want to keep the changes or whether you want to discard them by simply not saving the changes to the file stored on the hard disk. Since the material is completely loaded into the RAM memory of the computer, any changes will be lost unless they are saved to the file stored to the hard disk (Shortcut: ‘s’
).
This method of editing and processing is equivalent to the computer’
s native behavior. However, with large data content as is the case with audio files, the computer suffers from extreme speed loss since the operating system starts to transfer the memory contents to the virtual memory file on the hard disk.

Wave Editing / Destructive Editing

Introduction

MAGIX music editor 2 is primarily a non-linear, non-destructive audio editor. This means that most of your work is usually completed in the virtual domain (VIP), without making changes to the original audio. However, there are some situations which are best completed by working directly on a Wave Project, as if you were using a conventional audio editor. MAGIX music editor 2 can also function as a conventional audio editor, but now offers two alternatives - Destructive Editing or the new virtual Wave Editing. When working directly on Wave Projects, the powerful options offered by the Wave Editing system place MAGIX music editor 2
a "cut" above other conventional audio editors!

Wave Editing / Destructive Or Virtual?

Using Wave Editing or Destructive Editing may not necessarily be the best method of completing your editing task. For example, if you have duplicated an Object several times, all of the Objects would contain the same edits after changes are applied and saved directly to the Wave Project window. But this can also be an advantage at the other hand.
Please keep in mind that editing functions such as cut, copy, fades, crossfades, and so on can also all be applied to the audio material in a non-destructive way in the VIP. Almost all effects can be used from within the Virtual Project and applied to the Objects in the VIP Tracks.
With regard to the Effect Menu functions, the editing can also be performed "offline", in a destructive or semi-destructive fashion which has similarities to Wave Editing. For example, the Effect Menu Room Simulator function is always performed "offline". However, the option Create Copy (checked by default) makes sure that a copy of the original material is processed with the effect and not the original audio segment. The copy of the audio segment allows the use of Undo in the Virtual Project to return the Object to its original state. Of course, this process utilizes additional hard disc space.
Also, remember that even if you work extensively with WAV files, you can complete all editing tasks within a VIP. By importing the Wave Project into a VIP, you can complete editing steps faster and more conveniently than in any destructive Wave editing application! For example, any type of cutting and rearranging of audio segments can be performed in a non-linear, non-destructive, and extremely fast way in the VIP. The Track Bouncing option in the Tools Menu allows you to take any material in a VIP and turn it into a new WAV file which can then be imported into a VIP Project.
Note : As we shall see in this chapter, the new non-destructive Wave Editing mode is very similar to working within a VIP , but the editing is carried out directly on the Wave Project
. This saves a lot of time in some cases (such as when working with sound or loop libraries).
Editing on Wave projects can be performed in two different modes, in the old "Destructive Editing" mode or in (virtual) "Wave editing" mode.

Destructive Editing

This is the term used to describe the method for working directly on Wave projects in earlier versions of MAGIX music editor 2
.

When editing in Destructive Editing mode, the physical audio files are edited on a ‘destructive’ basis. This means that the audio file is reconstructed with whatever effect or editing process you choose. There will be Undo backups (assuming Undo is enabled), but these only exist while the file is open. Once the Project is closed, the changes to the file are permanent. Of course, the Undo files consume large quantities of hard disk space and can also take a long time to write to the hard disk!
When using Destructive Editing on a Wave Project, the changes are in general written back to the audio file without having to use the Save Project command, as the changes are directly applied to the audio material contained in the file. Once editing is finished, you simply close the Project. However, the Save Project command needs to be used for saving marker information and other workspace specific items.
A RAP project needs to be saved to the hard disk to make the changes available the next time the project is loaded. Since any editing is applied to the computers volatile RAM memory, the changes would be lost as soon as the computer is turned off. The contents of the RAP project are loaded into the RAM memory of the computer and are played back and edited in RAM. The Save Project command will save any changes to the hard disk for storage and retrieval.
The Save Project As dialog lets you make a duplicate copy of the Wave Project window.
The original audio files are kept intact when using this command. Instead, a copy with the exact same content is created. This can be a useful option for Destructive Editing.
MAGIX music editor 2 ’s development team designed a way to circumvent the disk space and time inefficiencies associated with Destructive Editing. MAGIX music editor 2
introduces this new method, called Wave Editing :

Virtual Wave Editing

This is the new virtual wave editing mode introduced with MAGIX music editor 2
.
Read the new features quickstart "Virtual Wave Editing"
for an introduction to this mode.
There are some differences between the "destructive" and the "Wave editing" mode when working on wave projects:

Rendering edit operations on saving

All edits: cut, paste, delete and insert are virtual. The positions, where the edit took place, are marked by dotted lines. There will be no time consuming undo file creation any more. All the edit operations are applied on the wave project, when you save it.

Section:

You can call the mixer, while working in the wave project. There you can apply every fx manipulation as in the normal VIP section in real-time. These effects will be applied on the wave project, when you save it. For more information on the Mixer section, read here
!

Menu fileàSave in format:

This will call the track bouncing Track bouncing dialog (format conversions are possible). (Toolsà Trackbouncing)

Auto Crossfade

The Auto crossfade option (Menu Edit) works in wave projects too, on every cut or insert operation the default crossfades are applied, when auto crossfade is active. You can use the Crossfade Editor to edit that crossfade, when you select the crossfade by selecting a range over the crossfade.

New File with Drag and Drop

You can mark a range in the wave project and drag this range to an empty space somewhere t the program desktop. A new wave project (untitled.wav) will appear. So you can easily make copies of the whole or parts of the wave project.

Navigating with Markers

Markers play an important role in your daily work with MAGIX music editor 2 . Markers are a way to same time positions to ‘markers’
that can be recalled at any time. For example, when mastering a live recording from a DAT tape, it helps tremendously if you could drop markers at every beginning of a song during the recording of the tape. The markers can be dropped into the window to help you remember certain editing positions.
Selecting of markers is relatively easy. There are three main methods of selecting markers:
Click on the marker head on the marker bar above the track pane.
Press the corresponding number on the keyboard for numbered markers.
Step between Markers with "RangeàMove Play Cursorà
Marker left/right" Keyboard shortcuts F2 /F3
Another method of finding and selecting markers is with the Marker Manager. The Marker Manager lists all markers in the project. A marker can be selected by simply clicking on the entry in the manager. The Marker Manager also allows you to rename markers.
Examples for using Markers

Example 1:

The mastering of an audio CD requires so-called ‘index markers’. These are markers that are configured either automatically (using the ‘Auto Track Markers’ button in the toolbar) or manually by clicking on the ‘Set Track Index’
button in the toolbar. The markers can be moved to adjust the relative starting position of a CD track.

Example 2:

Use the markers to simulate cuts in your audio tracks. By setting a marker and moving it around you can audition cut positions. You may want to zoom into the window to work at a higher detail. The movement of the marker will follow smaller increments.

Example 3:

Markers can be named with the Marker Manager in the Tools menu. By naming markers, you can easily set up a few markers that you name according to sections in the audio. For example, you could use markers to indicate ‘Verse 1’, ‘Bridge’, ‘Chorus 1’, ‘Intro’
and so on. You can quickly jump to those locations by selecting the marker head or by clicking on the entry in the Marker Manager.
Another practical use is to quickly select a range between markers by double clicking between two markers on the marker bar. If the play cursor stands between two markers, you can select the range over this two markers by pressing shift-F2 /shift-F3 ("RangeàEdit Rangeà
Range start to left marker/Range end to right marker")

Navigating with Ranges

Working with ranges in MAGIX music editor 2 is an important aspect for successful digital audio editing and multi-tracking. A range in MAGIX music editor 2
simply outlines the area of a VIP or Wave project window that is being edited or altered in some way. In fact, a range in a virtual project determines which tracks and objects are played and edited. Ranges can be set, moved, extended, inverted, stored, recalled, and edited.
When working with special features of MAGIX music editor 2
, ranges become an important part, such as the track bouncing, for example. It is possible to combine the contents of a VIP and bounce them into a single stereo audio file. During the track bouncing process, the program asks you whether you want to use a selected range or whether the complete project is to be used for the bouncing process.
When selecting a range in MAGIX music editor 2
, it is possible to select the range in one track only or across several tracks. By simply staying within the horizontal limits of a track, the range would be selected within that track. To select the range across two tracks, the range is extended beyond the horizontal limitations of the first track and drawn into the second track. This can be applied to any number of tracks in the VIP display. It may be necessary to vertically zoom in or out of the VIP window to display the desired tracks.
Ranges can be selected on a per-track basis. Once a range is selected it can easily be customized in length (directional within one track) and height (across several tracks).
When using the range manipulation examples below, keep in mind that any
range can be selected. We will work with the snap function to make things a bit easier. However, using a range that does not necessarily end with an object edge, allows you to manipulate material in any form and length.

Example 1:

Multiple objects on adjacent tracks need to be selected to drag-copy them to a new location. Rather than holding the Shift key and clicking on each of the objects to select them, simply select a range over the desired objects and choose Object->Select Objects. This will select all objects that are covered, either in part or completely, by the selected range.

Example 2:

A section needs to be completely cut out of the VIP tracks. For example, the producer decided that a complete verse is to be cut out of the song to make it shorter and fit it into a radio play length. This could be accomplished by selecting a range over all the tracks that represents the unwanted verse. Using Edit->Cut will take the section out and closes the gap between the objects. This results in a shorter version of the song.
Use the tools discussed below to adjust the range so that the exact borders of the unwanted section can be established.

Example 3:

In Dance music, drum loops are often used for a good portion of the song. Rather than using precious hard disk space to record the entire loop, you could simply create a virtual loop. This plays the loop repeatedly, by starting the audio section from the beginning. Virtual loops can be stretched for any period within a track to adjust the length of the desired loop.
Building virtual loop objects with Object->Build Loop Object requires the use of a selected range. The range needs to stay within the confines of the selected object. Once the function is activated, the lower right hand object handle can be used to drag the right edge of the object to the desired length of the

virtual loop.

Example 4:

A selected range can be played back, using the various playback options of MAGIX music editor 2 . You may even adjust the range length and position while the playback takes place.
During editing of a news piece for radio, the producer of the show previews several ranges to cut the full-length audio of the news report down to a usable length. Ranges can be used to audition the cuts and to further edit objects.

Selecting a Range:

To select a range, move the mouse pointer to a section in the window display (if in Universal or Range mouse mode) and click the left mouse button. While holding the button clicked, drag a range by moving the mouse to the right. The range is indicated by the vertical rectangle displayed in the window.
Next, release the mouse button. MAGIX music editor 2
displays the range values in the time fields underneath the horizontal scroll bar of the project window.
The Range can also be selected by dragging the range on the time bar. This at firsts selects a range only for playback, not for editing functions. Only the according area on the time bar will be shown in another color. A double click on this time bar area selects a range in the selected track, another double click selects the range in all tracks, the next double click returns to the timebar only selection.

De-Selecting a Range:

If you want to select a different range or want to deactivate the current range selection, click the mouse button once into the project window. The previous range disappears and the window can be used to select a new range.

Reactivate Range

If you have deselected a range, you will notice, that the prior range is displayed as a gray area on the time bar. Double clicking on this range selects the prior range again. You can also call "RangeàReactivate Range" or press shift-Backspace. By further executing this command you can reactivate the last five selected ranges.

Changing a Range:

If you want to change an already selected range outline (beginning, end, upper, and lower border), simply click the left mouse button into the range and while holding the button, move the mouse in the direction you want to extend or shorten the range. As soon as the mouse pointer crosses over the current range border, the program picks up the border and snaps it to the mouse pointer. You now can move the range border to the new point and release the mouse button.
You can also move the horizontal range borders with the keyboard: cursor left/right moves the start, shift-cursor left/right the end of the range.

Moving a Range Horizontally:

Hold the Shift key while clicking inside a range. Next, hold the left mouse button clicked and move the range to the new position. Release the mouse button to place the range at the new location.

Saving Ranges and Special Range Commands:

Ranges and markers can be saved with the help of menu functions or keyboard shortcuts.
MAGIX music editor 2 can store an unlimited number of ranges and markers. These and other special functions to define, change, and use ranges can be found in the menu Ranges

.
To manage saved ranges, use the Range Manager (Menu ‘Tools’
).

Changing Range Ends in Increments Using the Mouse:

This is most often needed when searching for optimized loop borders in Wave projects. The sections can be split with a keyboard shortcut (Shortcut: ‘b’) or with Range->Split Range. All range borders are displayed with a high-resolution zoom level.

Using Shift + b returns the display to a single section.

Zooming

Zooming is used to display more or less information in a VIP window. When using higher zoom levels, the track contents are displayed in higher detail. For example, automation curves may be edited more easily by using a higher zoom level. The individual curve events are further apart and allow work that is more detailed.
On the other hand, a long project may already be at a high zoom level and in order to see the complete contents of the VIP you may need to zoom out.
MAGIX music editor 2
offers you a large number of options working with zoom levels in a VIP. For example, ranges can be used to quickly zoom into the project by double clicking on the selected range. The length of the range is used to make it the visible contents of the VIP window.
Another example is the double clicking of left mouse button in upper half of a track. This will zoom out of the VIP window.
Here is a list of all the zoom features of MAGIX music editor 2
:

Zoom using the Position Toolbar:

The Buttons are quite self-explanatory, the red buttons are for zooming horizontally the wave form, the blue ones for zooming tracks vertically. All Options are also available in the View Menu- Horizontal / Vertical. So you can map your preferred keyboard shortcuts on it.

Zoom using the Mouse:

The mouse is used to select ranges for zooming. You can double click the mouse into the upper half of the track pane to quickly zoom out of the VIP window. Each double click zooms out at a preset interval. If a range is marked, you can zoom in the range by double clicking inside the range.
The most elegant method for zooming with the mouse is to click on the grid bar or marker bar and drag the mouse vertically. Dragging up zooms out, dragging down zooms in.

Zoom using the Keyboard

Ctrl + Right Arrow zooms out of the window, Ctrl + Left Arrow zooms into the window. You can use alt+ Arrow keys by themselves to 'slide'
the track sections in the window to the left or right if the zoom level allows you to.

Zoom using the Scrollbar

The vertical and horizontal scrollbars of the VIP window can be used to change the zoom level of the window. If the mouse pointer is positioned over the left or right end of the horizontal scrollbar, the pointer changes into a left-right arrow. This lets you grab the ends of the scrollbar and change the zoom level of the window. The length of the window section displayed is indicated on the left side of the horizontal scrollbar. In other words, the numbers shown on the scrollbar tell you the length of the audio section displayed in SMPTE time (minutes, seconds and frames).
The scrollbar can be dragged to the left or right to scroll through the window contents.
The vertical scrollbar lets you scroll through the available VIP tracks if the zoom level has changed to a higher track display resolution. In other words, if you zoomed vertically into the VIP window, fewer tracks are visible. At the same time the vertical scrollbar was reduced in length. You can grab the scrollbar to display the other tracks in the VIP.

Zoom using the Scrollbar Zoom Buttons:

To the right of the horizontal scrollbar are two sets of zoom buttons which allow you to zoom in and out of the VIP window. The zoom increments are preset. Use the buttons below the vertical scrollbar to zoom in and out of the vertical track display. The buttons to the right of the horizontal scrollbar can be used to horizontally zoom in and out of the window (timeline zoom).

You may want to experiment with the different zoom methods and modes. Once you are more familiar with their functionality you may find that you prefer one method to another. Make the most use of these functions by using the one that seems most intuitive to you.

Saving the zoom levels allows you to quickly change back and forth between the two display resolutions. Located at the right-hand bottom of the VIP window are 8 buttons that assist you with saving zoom levels and scroll positions of the VIP window. They are labeled ‘S’ and ‘Z’. The ‘S’ setup button will save the zoom level and scrolling position of the window. The ‘Z’

setup button only saves the zoom level.

Holding the Shift key and clicking on one of the setup buttons saves the zoom levels and relative scrolling position.

Scrubbing

Scrubbing is the ability to quickly move through the audio material for preview purposes. This is similar to switching a reel-to-reel tape machine into the edit mode in which the motors are disengaged from the transports and the reels can be turned by hand. However, the playback heads are still engaged and as the reels are turned by hand, the audio is played back with the speed of the movement of the reels. This enables you to quickly move to a position in the audio material or preview edits with a very slow speed. Scrubbing in the digital world is a bit more complicated, since there are no real mechanics involved and a subsequent 'passing by'
of audio is achieved using different methods.
MAGIX music editor 2 accomplishes scrubbing by performing what is called 'Varipitch'
real time sample rate conversion, which means that the pitch of the audio is increased or decreased, while the playback speed stays the same. This effectively speeds up or slows the scrubbing speed. To test the theory behind the varipitch function is to take a 44.1 kHz sample and convert it to a 48 kHz sample without doing time stretching. The pitch will go up and the overall length of the audio material shortens. However, the internal playback rate stays the same.
The rate of the sample conversion depends on the mouse movement. If the movement is large, the playback pitch increases and the audio material 'passes by' faster. If the movement is small or moves in the opposite direction, the playback pitch decreases, and the audio is 'passing by'
slower or is reversed.

You enable scrubbing with the "0" on the numeric keypad or with the Scrub mouse mode. .
Furthermore you can scrub with the transport control
.
You can set the scrubbing type in the playback parameters dialog
(Keyboard short: p)
Playback Dialog – Scrubbing: While pressing the 0 key on the numeric block (Num lock active) or set the VIP Mouse Mode to scrub mode and moving the mouse you can perform scrubbing. MAGIX music editor 2
starts playback at a very low speed, the mouse position relative to the start play cursor controls the speed.
Jogging:
The distance between the play cursor and the mouse sets the playback speed.
Absolute:
The position of the mouse in the window sets the playback speed - at the left border playback speed is 200% backward, at the right border speed is 200 % forward, in the middle of the window the speed is 0.
Two Speed:
You can define a user speed, this will be used for scrubbing with the scrub buttons in the transport control.

A Tip About Scrubbing!

Scrubbing can be used to perform detailed work on audio sections in your material. Using the Relative scrubbing mode may be the ticket to a more useful application of the scrubbing feature. Since the Relative mode allows the audio playback to slow down, the closer the Real Time Position Line gets to the mouse pointer position, you may be able to find sections in your audio material that represent a crucial cut or event.
As soon as the numeric '0'

key is released, the playback stops, and the Position Line is moved to the exact location where the scrubbing playback stopped.
You may wish to work with different zoom levels to perform detailed work with the Relative scrubbing mode.

Virtual Editing Concepts

General Information
Integrating a WAV File as a VIP Object
Integrating a WAV File Section as a VIP Object
Selecting an Object with the Mouse
Selecting Multiple Objects with the Mouse

Virtual Project

Show the Virtual Project Window Components

Virtual projects are the centerpiece of MAGIX music editor 2

! In virtual projects you can arrange objects taken from multiple Wave projects and arrange complex audio projects. All cut operations, volume level changes, fades, and more are completely virtual, meaning that the audio material is not destroyed! This allows you to select the proper cut position, cut length, volume level, effect setting, etc. by experimenting without loosing audio material or alter it.

Detailed information about working with virtual projects can be found in the Virtual Editing Concepts

.

The actual audio data is represented by rectangles („objects" as they are called. That is, an object is the „image" of a sample or of an area marked therein. In other words: The object refers to the audio data. Even if the present audio hardware can only play back up to 2 channels of audio (Stereo), tracks beyond a stereo pair can be played back in a virtual project..

The display of the virtual project can be switched between two definitions. The Tab key allows you to switch between the two modes. The key combination Shift + Tab displays the Editor dialog for the virtual project display preferences. Attributes such as displaying only a single graphic form for Stereo tracks can be chosen next to whether you want text displayed in the objects.

Using the mouse in virtual projects

The functions of the left mouse button for virtual work depend on the mouse mode selected in the mouse mode bar.

VIP Mouse mode

Mouse functions of the different modes in detail

Vertical Zoom function in virtual projects

Hold down the Control key and use the vertical cursor keys to zoom in and out of the waveform display in virtual projects. This comes in handy when you want to exactly evaluate soft sections in VIPs, for example.

In addition you can use the commands of the position bar to navigate. Read more about Zooming here

!

Context menu

Click the right mouse button to open the context menu. Here all important commands for virtual work can be found.

VIP window components

MARKER
00:01:00:00
00:02
Vol
0 dB
Pan
0.0
you stole the eggs
Setup
Zoom
1
2
3
4
Pos
00:00:24:06
Len
End

Integrating WAV projects as a VIP Object

Method 1: Loading a WAV File into a VIP

Mark a range in the VIP and load the WAV file with File->Open->WAV Project. The file is inserted at the beginning of the selected range as an object. The range also denotes the track into which the WAV file is inserted. If no range is marked, the Object is inserted in the selected track, starting with the actual play cursor position.

Method 2: Drag & Drop from the Explorer

The Tools menu lists the Explorer menu options. You may use the Explorer to display the contents of the HDP Folder. The WAV files can be dragged into the VIP. The program automatically creates objects and their associated HD Wave projects.

Integrating a WAV project range as a VIP Object

Drag & Drop from a WAV Project

- Open a WAV Project.
- Mark a range, which is to be incorporated into a virtual project (Complete Range: key ‘a’).
- Create a new virtual project with File->New Virtual Project (Shortcut: ‘e’) or with the corresponding button in the toolbar.
- Tile the open windows by pressing the ‘Enter’ key.
- Drag the selected range in the Wave project into the virtual project by clicking the left mouse button into the range and dragging the range into a VIP track.
- A new object is created in the VIP at the position the mouse button was released.

Inserting Object by Menu Object->New Object

Open a Wave Project

- Mark a range, which is to be incorporated into a virtual project (Complete Range: key ‘a’).
- Activate the VIP (or create one)
- With the menu command Object- New Object the marked range of the wave project is inserted at the actual play cursor position of the currently selected track of the VIP.

Selecting an Object with the Mouse

Clicking the left mouse button selects the desired object.
Prerequisite for this is the selection of the correct Mouse Mode: Object Mode, Object & Curve Mode, and Universal Tool Mode all offer this functionality. In the Universal Tool Mode, the object is selected by clicking on the lower half of the object.
The five handles
on the outline of the objects identify any selection of objects. While the mouse button is held clicked, the outline of the object is also displayed.
Clicking the mouse button outside of the object confines deselects any object selection.
Also, see the information in Mouse Functions of the Individual Mouse Modes
.