MUSIC MAKER 2013

MAGIX

English language manual

Copyright

Preface

MAGIX Music Maker 2013 offers an easy start and the option to dive deeper into the world of music production. A giant, high-quality sound archive, an especially intuitive approach to creating original music, plus many useful functions result in an unbeatable complete package for making your own songs.

The handling is especially easy and consistent. The included sound files can be combined with the software synthesizers easily. MP3 songs can be used with audio CD tracks, your own music recordings and even videos, photos or graphics. Even VST and DirectX plug-ins or MIDI files can be added easily.

This turns your computer into a universal production studio for music and all other kinds of multimedia files. The included CD-quality musical building blocks can all be easily combined since they are all categorized according to tempo and harmony. And for those of you who want to start making songs effortlessly and straight away, the integrated "Song Maker" will take care of almost everything for you.

The tutorial (view page 21) starts off by explaining all of the basic features in the program and then goes on to provide complete, detailed descriptions of each of the functions. If you prefer to discover the many possibilities of the program by yourself, you can also use the PDF manual and the Help feature as references. An alphabetical index is included at the very end.

Have fun with MAGIX Music Maker 2013.

The MAGIX Team

Support

Dear MAGIX customer,

Our aim is to provide fast, convenient, solution-focused support at all times. To this end, we offer a wide range of services:

- **Unlimited web support:**
  As a registered MAGIX customer, you have unlimited access to web support offered via the convenient MAGIX service portal on http://support.magix.net, including an intelligent help assistant, high-quality FAQs, patches and user reports that are constantly updated.
  The only requirement for use is product registration at www.magix.com
- **The online community, on-the-spot support and a platform for exchange:**
  MAGIX customers have free and unlimited access to the online community at www.magix.info, which includes approx. 150,000 members and offers the opportunity to ask members questions concerning MAGIX products as well as use the search function to search for specific topics or answers. In addition to questions & answers, the knowledge pool includes a glossary, video tutorials and a discussion forum. The multiple experts, found round-the-clock at www.magix.info guarantee quick answers, which sometimes come within minutes of a question being posted.
- **Email support for MAGIX products:**
  For every new MAGIX product you will receive, as of date purchase, 12 months of email based customer service.
  Premium email support:
  For priority support, or if you want the MAGIX support team to help with non-MAGIX related hardware problems you can purchase a Premium email support ticket. Log in at http://support.magix.net and click on "Purchase access code", the ticket is for a specific problem, and is valid until it is solved, it is not restricted to an email.

Please note: To be able to use the Premium email support and free product email support via the Internet, you have to register your MAGIX product using the serial number provided. This can be found on the CD case of your installation CD or on the inside of the DVD box.

- **Additional telephone service:**
  Besides the large number of free customer service offers, we also offer a fee-based telephone customer service.

Here you can find a summary of our technical support telephone numbers:
http://support.magix.net/

Mail (Europe): MAGIX Development Support, P.O. Box 20 09 14, 01194 Dresden, Germany

Mail (North America): MAGIX Customer Service, 1105 Terminal Way #302, Reno, NV 89502, USA

Please make sure you have the following information at hand:

- Program version
- Configuration details (operating system, processor, memory, hard drive, etc.), sound card configuration (type, driver)
- Information regarding other audio software installed

MAGIX Sales Department

You can reach the MAGIX Sales Department workdays for help with the following questions and problems:

- Orders
- Product consulting (pre-purchase)
- Upgrade requests
- Returns

Europe

Monday - Friday, 09:00-16:00 GMT

U.K.: 0203 3189218
Denmark: 45 699 18763
Sweden: 46 852 500713
Finland: 35 89 42419023
Norway: 47 210 35843

North America

9 am to 4 pm EST Mon-Fri
Phone: 1-305-722-5810

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Introduction

What is MAGIX Music Maker 2013?

MAGIX Music Maker 2013 is the ideal program for creating professional sounding recordings without having to learn any complicated musical theory. You can simply combine the professionally produced loops in the intuitive arranger and mix them to create your own personal sound.

Are you aiming for a unique sound that will set you apart from the crowd? Then try creating your own special sounds with the included software synthesizers or load your own plug-in synthesizers. High-quality effects help to give your tracks the final polish or you can take things in the other direction and distort them until they are almost unrecognizable. Express your own creativity by recording your vocals or instruments and adding them to the arrangement.

Whether rock, techno or film music, you can produce all kinds of tracks using the wide range of styles available in the program. When you combine elements from different style libraries the tempo is adjusted automatically to make sure your arrangement fits together perfectly. Who knows? Maybe flamenco rock or country techno is the next big thing.

If you need even more sounds and samples, Catooh offers a rich selection of audio, video, images and professionally created sound effects, which can add even more variety to your project.

Or how about a remix? Load up your favorite hits from the past and add some fat bass or a totally modern beat! When you load audio CD tracks and MP3s into Music Maker the tempo of the song is recognized and adjusted to fit the arrangement. The track can also automatically be cut into loops.

But music alone isn't everything! You can import images and video files to your arrangement, include text and add video effects and cool visuals. The finished video can be directly exported from Music Maker and posted on MAGIX Online Album, Youtube or Facebook

What's new in MAGIX Music Maker 2013?

New Sounds and Loops

As usual there is a brand new sound archive with various styles ranging from "trendy" to "retro". In addition to the included sound loops, an additional 1000 loops can be downloaded for free from the Internet. To download sounds, click on the "Catooh" button after installing the software and follow instructions.

New Synthesizers

The Vita Sample Player has a new interface and a lot more instruments like the new Vita Solo Instruments String Ensemble and Rock Drums and the Bass Machine and World Percussion included in the Premium version.

Improved Interface

The user interface and the workflow have been improved and simplified. The main windows for the arranger, the Media Pool and the video monitor (peak meter) can be adjusted for size and position and the track height is now completely customizable.

Improved Soundpool Control

The Soundpool display has been completely redesigned and many of the most important functions have been enhanced. You can now use the full text search to find loops and list them according to pitch or type, i.e. MIDI or audio loops. You can also filter the search to display only the favorites that you have selected. The sample list can also be sorted according to properties, e.g. key, bar length, date, etc.

Improved Compatibility

Music Maker arrangements can be opened in Music Studio 2013. All of the functions in Music Maker are reconstructed perfectly in Music Studio. In the rare case that this doesn't work, you can also export arrangements from Music Maker as single tracks.

More Tracks

The number of tracks you can use in the Premium version is unlimited and has been increased from 64 to 96 in the standard version.

New Program Performance Features

Music Maker can now be started faster and has been enhanced for better performance and stability. The new WASAPI driver support (starting with Windows Vista) for audio playback reduces latency (delays between hitting a note on the keyboard and the production of sound) and provides more stability. It's also a good alternative to ASIO divers for complicated audio output devices.

Improved Audio Effects

The parametric equalizer has a redesigned interface and six channels instead of four. The new and improved Premium version also includes the Vintage FX Suite, essential FX Suite and the Mastering Suite.

Additional features new in the Premium version

- Larger sound archive: Over 5000 new sounds and MIDI loops from all genres can be accessed via the "Soundpools" button in the Media Pool.
- Essential FX Vocal Strip: This combination of effects is specifically designed for editing speech and vocal recordings.
- Two Brand New Synthesizers: World Percussion offers a huge selection of percussion instruments like bongos, congas or timbales that are perfect for

creating Latin American rhythms or simply adding an exotic flair. The **Bass Machine** is special synth for creating booming bass sounds for Dubstep and Hip Hop productions.

The Features

Multimedia Library

The included multimedia library provides audio and video building blocks ("samples") that can be combined in the arranger. The program also offers lots of melodies, effect presets and graphic animations that you can add to your songs and video clips. In short: just about anything can be combined with anything else. The sky's the limit to your creativity.

BeatBox 2

BeatBox 2, the new groove synthesizer, lets you make great beats with ease. It can be accessed in the Media Pool via the "Synthesizers" button. Easy mode must be switched off to access it.

Audio Effects

MAGIX Music Maker 2013 provides lots of different audio effects. A short overview:

- You can correct tempo and pitch in real time using **Resampling**, **Timestretching** or **Pitchshifting**.
- The **Audio Effect Rack** supplies **Reverb**, **Echo**, **Equalizer**, **Compressor**, **Time Processor**, **Distortion**, **Filter** - all classic effects which can be used to produce almost any sound. The reverb effect, for example, provides professional, realistic reverb algorithms to add depth and spaciousness to your material.
- The **Gater** enables rhythmic splitting of surface sounds
- **Vandal SE** is a guitar amplifier from MAGIX. You can adjust all the typical settings on its realistic user interface.
- **essentialFX:** important bread-and-butter effects that are embedded like VST plug-ins.
- The **Vintage Effects Suite** covers "good old" guitar effects that were activated using a foot pedal in Jimi Hendrix's era: more warmth and fullness with **Chorus**, jet-like special effects with the **Flanger** or ping-pong effects with **Delay**. The **Filter** enables tempo-synchronous frequency filtering.

In general, there are three ways of implementing filters:

- **Object effects:** Effects for selected objects. These effects can be found in "Effects > Audio > Audio effects" or in the context menu (right mouse click).
- **Track effects:** Effects for complete tracks. These effects can be found in the track box or in the mixer channels.
- **Master effects:** Effects for the overall sound. These effects can be found in the mastering area of the mixer (or in the "Effects" menu).

Note: In the track box, you will only find pre-configured track effects, while the mixer channels contain editable effect devices.

Media database

Find your recordings, sounds, pictures, and videos quicker and faster with the MAGIX media database. An existing MAGIX database from the MAGIX Photo Manager or MAGIX Media Manager is integrated in the Media Pool and can be updated directly from MAGIX Music Maker 2013. Use the simple search function to find suitable pictures or MP3 files for your arrangement.

Import

You have the following options for using your own material:

- **Audio files** in a wide range of formats. You can also use MIDI, video and bitmaps. The files can be dragged to a track from the Media Pool with a held-down mouse key (drag & drop). You can find a list of supported formats below (view page 16).
- **Audio CDs** can be imported directly in the program. Simply place the CD into the drive and press "CD/DVD" and all the tracks are ready to be dragged & dropped into the Arranger. Whether for remixes or as sound material for your own compositions - your personal CD collection has a whole new meaning.
- Use the **recording function** to record vocals, noises, or instruments and integrate them into the arrangement.

High-end 32-bit floating point

All sound changes are executed using 32-bit floating point calculation for especially differentiated and high-quality sounds. This technology is also used in professional studios. This way, an audio picture with especially high dynamics can be created. Digital overmodulation and clipping become virtually impossible.

Own recordings

Use this recording function from MAGIX Music Maker 2013 to record vocals, noises, or instruments and integrate them into the arrangement.

Audio & MIDI

The MIDI format is extremely important in modern music production. You can use MIDI files to control external devices such as synthesizers and samplers and internal software audio generators such as VST plug-ins from your computer.

With MAGIX Music Maker 2013 you can arrange, load, record, edit, and play MIDI data just as easily as audio data. For MIDI recordings and editing you can use the specialized MIDI Editor with Piano Roll, Drum Editor, Velocity/Controller Editor and Event List. Recording can be started directly from the arranger by setting the recording mode in the track header to "MIDI record" or "Audio record".

VST Support

Now it is possible to use external VST instruments and effects in all MAGIX Music Maker 2013 versions. A wide range of DirectX and VST plug-ins are offered in retail stores or directly on the Internet, greatly expanding the possibilities of MAGIX Music Maker 2013.

VST instruments and effects are external programs, which must first be installed before being used in MAGIX Music Maker 2013. You can then find them in the mixer plug-in slots and in the track boxes at the start of every track. VST effects are applied to an entire track. VST instruments are controlled by MIDI objects.

Mixer

MAGIX Music Maker 2013 contains a professional real-time mixer with an Effect Rack and two Insert Effects per channel and for the Master, as well as additional Mastering Effects. You can group a number of faders of a specific type (for example, volume or panorama) and use them all together by holding down the Ctrl key. The quickest way to open and close the mixer is by using the M key.

Harmony Agent

The Harmony Agent provides harmony recognition automatically and determines the key and chord of any music title. See the guitar tablature of your favorite song in real time for the arrangement!

Formats and interfaces

Import: WAV, MP3, OGG Vorbis, WMA, QuickTimeTM, MIDI, CD-A (without copy protection), BMP, JPG, AVI, MXV, WMV

Export: WAV, MP3, OGG Vorbis, WMA, QuickTime, MIDI, BMP, JPG, AVI, MXV, WMV, CD-A (Premium version)

Song Maker

The Song Maker lets you create new arrangements quickly and easily and complement existing arrangements by automating the complicated steps such as sample selection and combination. The Song Maker takes over arranging whole sections such as intro and refrain. Therefore, you do not have to do everything yourself – you can omit the arranging and process your selection from the suggestions.

InfoBox

Thanks to the new info box, all important functions can be easily understood as they are applied. Just hold the mouse over a button that you would like to learn about and read the info text in the preview monitor.

Live Sessions

While the virtual instruments and sounds are played on the available tracks, a new track can be recorded simultaneously in realtime. What's more, you can also add realtime effects.

SoundVision

SoundVision is a new way of visualizing music which shows audio material at a glance in the form of a musical galaxy. Similar sounds are clustered close together; different sounds are organized further apart. SoundVision can be activated in the Media Pool via the corresponding button. Easy mode must be switched off to access it.

Internet upload to many platforms

When the song is finished, it should be heard not just by your friends, but preferably the whole world. This is achieved, naturally, with the help of the web. Under "File > Export > Community upload" you will find the most impotant communities, where you can upload your songs.

Additional features of the Premium version

Additional Audio Effects

- Elastic Audio for total control over vocals. Voice samples or melodies you sing yourself can be "tuned" to match automatically. With the "Harmonizer" in the Elastic Audio Editor, you can add a suitable second vocal or a whole choir to a specified melody.
- Vocoder: Produces distorted vocals from synthesized sounds.
- Mastering Suite: A special effect rack for "Mastering". In this process, the mixed-down music track is "polished" using parametric equalizer, multimax, limiter and stereo enhancers. All this can be found in the mixer (M key).
- Am-Track SE: This analog vintage compressor produces an especially warm, pumping sound. Launch it via the effects menu for selected audio objects or via the plug-in slot in the mixer.

Additional Styles & Samples

More content: The Premium version comes with more styles and ca. 2,000 additional samples.

Additional Instruments

- Revolta 2: An analog, especially variable and "professional" sounding, 12-tone synthesizer. With sound matrix, noise generator and nine effect types.
- BeatBox 2 plus: The ultimate groove tool with even more drum kits, automations and an even more flexible effects section.
- New features: Century Guitars & Electric Bass.

Object and track curve automation

Effect and volume progressions can be controlled using freely drawable curves – for individual objects as well as for complete tracks. In addition, you can fade an echo in or out at a specific position in the song by drawing in a curve peak at the corresponding position.

Video recording

In addition to audio recording, MAGIX Music Maker 2013 provides a recording function for video from analog video sources for your own video clips.

DirectX and VST plug-ins

MAGIX Music Maker 2013 enables the direct use of DirectX and VST plug-ins, a large variety of which is available in retail stores or directly online. Such plug-ins (audio effects or synthesizers from third party manufacturers) can significantly increase the functionality of MAGIX Music Maker 2013.

MAGIX Mastering Suite 2.0

Impressive studio sound just like you hear on store-bought CDs! MAGIX Mastering Suite is a special effects rack for use with the mixer master channel. The included effects help you with so-called "mastering"; put the final touch on your completed and mixed music piece using parametric equalizers, MultiMax, limiter, and stereo enhancers.

Real 5.1 Surround Sound

MAGIX Music Maker 2013 deluxe provides real 5.1 Surround Sound. 5.1 Surround is the preferred home cinema sound format, which is also supported in the Premium version when importing, editing, and exporting. With the 5.1 Surround Editor you can move your sound around the room.

MAGIX Music Editor

Detailed audio editing in real time and specialist for CD burning, sound restoration, sampling and audio editing.

Revolta 2

Revolta 2 is a powerful-sounding, varied 12-voice analog synthesizer with highly advanced functions, sound matrix, noise generator, and a complete effects section featuring nine effect types.

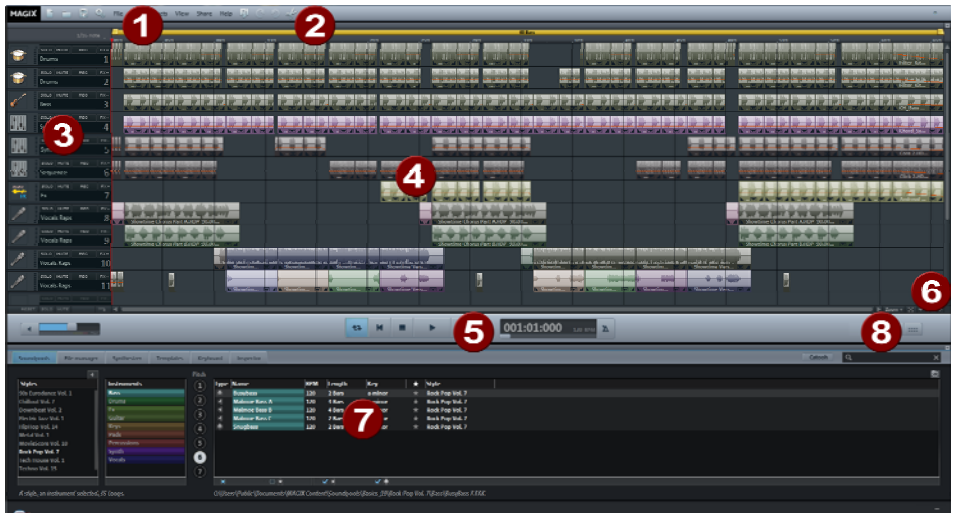
This synthesizer can create any electronic music you can imagine. The sound presets were created by sound designers for Access Virus and Rob Papens Albino, which makes Revolta 2 the number 1 choice for beginners and professionals alike.

Also in the Premium version

- **Additional tracks:** The Premium version offers unlimited tracks (instead of 96 - more space for even more complex arrangements.

- **Timecode sync:** For creating songs in teams on multiple PCs. Simply connect two notebooks to each other via MIDI and jam together.
- **MIDI step recording:** Provided for composers unsure of their keyboard playing skills who want to play perfect melodies. The MIDI editor can be opened by double-clicking on a MIDI object.
- **ReWire:** For embedding of other music programs. Programs such as Propellerhead Reason or Ableton Live can be controlled in MAGIX Music Maker 2013 like a software synthesizer using MIDI objects.
- **Video recoding:** In addition to audio recording, MAGIX Music Maker 2013 Premium provides a recording function for video from analog video sources – for your own video clips. It can be found in the "File" menu under "Import > Video recording".
- **Curve automation:** Effect and volume progressions can be controlled using freely drawable curves – for individual objects as well as for complete tracks. In addition, you can fade in or out an echo at a specific position in the song by drawing in a curve peak at the corresponding position.
- **MAGIX Music Editor:** Detailed audio editing in real time and specialist for CD burning, sound restoration, sampling and audio editing.
- **MAGIX Xtreme Print Center** for quickly creating CD covers, inlays and labels.

Overview of the program interface



1 Menu bar	This bar provides the most important editing commands.
2 Toolbar	This contains the buttons for quick editing and the different mouse modes.
3 Track headers	Complete tracks can be turned on or off (muted) or played separately (solo). Use the FX buttons to apply track effects.
4 Arranger	You can freely position any multimedia material on all of the arranger's tracks.
5 Transport console	In the middle you'll find the volume control, the transport console for the playback functions and the tempo display.
6 Zoom functions	Here you can enlarge or reduce the view. The horizontal scrollbar can be stretched and compressed for zooming.
7 Media Pool	All files listed here can be added to the arranger using drag & drop.
8 Arranger buttons	Buttons for displaying the mixer, Live Performer and video monitor with peak meter.

The arranger, video monitor and Media Pool can be positioned anywhere on the screen or completely hidden. In the "View" menu (F11 key) you can reset the standard layout for Music Maker.

The maximize buttons on the arranger, the video monitor and the Media Pool let you display them on the full screen, e.g. to make positioning and editing objects in the arranger easier.

For very large arrangements, the video monitor can be used as an overview display (Menu -> Video monitor -> Arrangement overview).

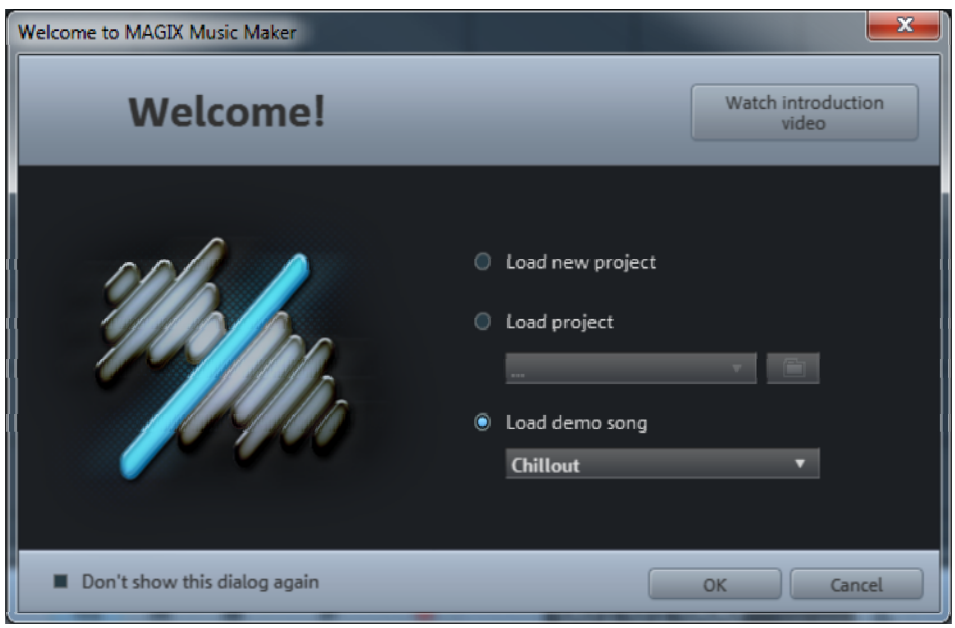
Quick start

This chapter explains the basic functions of MAGIX Music Maker 2013 with a step-by-step introduction. A systematic description of all program functions can be found towards the end of the manual.

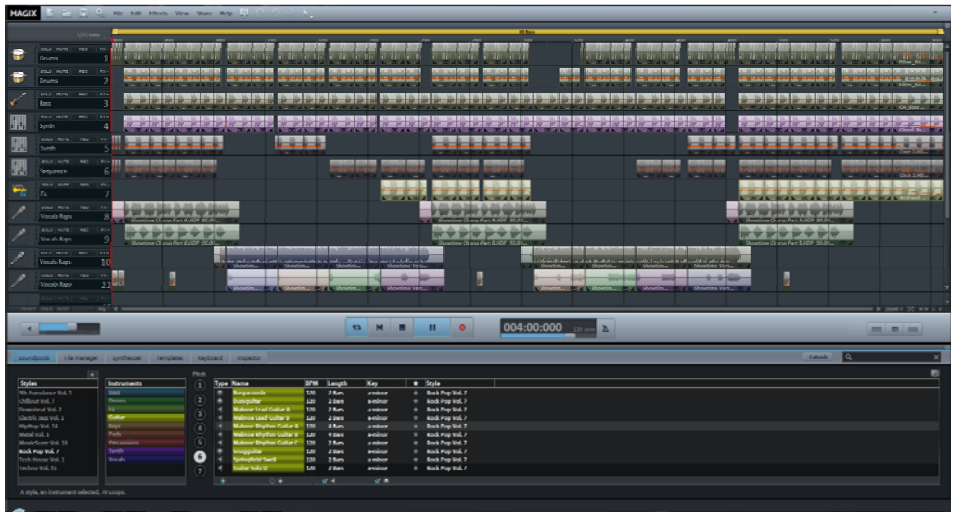
Tip: Watch the introductory videos and learn some tips and tricks from other users at magix.info http://www.magix.info/de/suche/Music+Maker/.

Play demo project

When MAGIX Music Maker 2013 is started for the first time it will display a welcome screen.



To get an idea of what Music Maker can do, click on "Load demo song" and select a demo song from the menu. Once it is loaded, the Music Maker interface will be displayed.



The large area with the horizontal tracks is the arranger. The colored rectangles are objects. They represent various samples, synthesizers and other sounds. There are also objects for titles, images and video files.

Look at the individual tracks of the song in the arranger: In MAGIX Music Maker 2013 you can create a complete song by compiling objects. Click on the vertical scroll bar on the right-hand side of the screen and drag them down (hold down the left mouse button) in order to be able to see each track.

In the middle you'll find a large volume control, the transport console (view page 35) and some buttons for opening important windows..

In the lower section of the program interface you can find the Media Pool. You can switch between the different areas. In **Soundpools** you will find the included loops that you can load into the arrangement by drag & drop while holding the mouse key or by double-clicking.

To play the demo, click on the Play button with the mouse or press the space bar on your keyboard. A vertical red line (the playback marker) runs across the screen and music will play from the speakers.

Note: If you do not hear anything, check if the correct sound card is active for playback in the Setup window (P key). Also make sure that the output of the sound card is connected to the speakers.

Previewing and loading sounds

Now you can load your first sound into the arranger.

Create another new, empty arrangement. Simply click on this button.

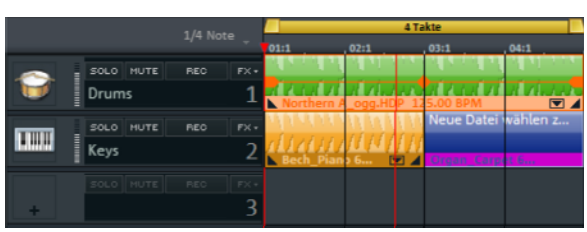
- Now click on **"Soundpools"** (1) in the Media Pool.
- Various **"Styles"** (2) are shown on the left hand side of the Media Pool. Styles represent particular musical genres. Click on one of the styles to display the loops that match this genre.

- Now, select which instrument you would like to use under **instruments** (3). On the right all of the **loops** (5) will be listed and you can select the sound you want. The selected sound will play back automatically.
- Most instruments are categorized according to pitch. Click on the **pitch** (4) to listen to the sound in the corresponding pitch. Other instruments, like drums, are not categorized according to pitch.
- To load a file into the arranger, simply press the Enter key. You can also drag the file from a table onto a track in the arranger. Once you let go of the mouse button, the file will appear as an audio object (or MIDI object) at that position.

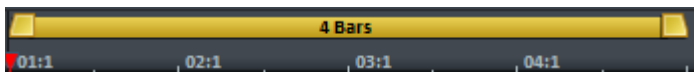
Creating an arrangement

Start playback now.

To load new samples into the arranger, you do not need to interrupt playback. MAGIX Music Maker 2013 has a "Smart Preview" function: You can simultaneously preview new samples in the Media Pool – they always run in sync with the song in the arranger. This function considerably simplifies the search for suitable samples for a song you wish to create.



This way, any number of loops from any style can be dragged from any folder into the arranger and placed on top of one another, on multiple tracks, or behind one another.



Take note of the two markers at the top of the bar ruler – they represent the start and end points of the range to be played (playback range). Playback is "looped" in this range which means that it repeats continuously. New loops can be added when possible.

If you want to create a new part for the song you can reposition the start marker by left-clicking on the bar ruler and the end marker by right-clicking on the bar ruler. Or you can use the right arrow key to move the playback area its entire length to the right.

Each object can be moved in any way in the arranger with the mouse, horizontally on a track as well as vertically between tracks.

Note: There is one important limitation to the movement of objects on tracks. The Soundpools contain two different kinds of loops: audio & MIDI. You can recognize MIDI loops by their icon in the list. You can recognize MIDI loops by their corresponding icon in the list  . These loops only produce a sound when combined with a software synthesizer (view page 102). This synthesizer is automatically loaded to the track where the MIDI object is placed. These objects should not be moved to other tracks once the synthesizer is loaded to a particular track.

Editing Objects

Even though it's possible to make great arrangements with the audio building blocks provided, you will probably get to a point where you want to add your own personal touch by shortening or removing objects or adjusting the loops in specific areas.

All objects can be shortened or looped by moving the mouse to one of the lower corners of the object until it turns into a stretch symbol. You can now stretch or compress the object length as much as you like. If you make the object longer than it originally was, it will be played back as a loop. This way you can create rhythm tracks from short drum samples simply by stretching them.

If an object is selected, additional "handles" will appear on it.

At the top corners of every object there are two fade handles that can be adjusted to fade an object in or out. The handle at the top center can be used to adjust the volume of audio objects and the transparency of video objects.

All objects can be split into multiple objects. To do so, select "Split objects" from the "Edit" menu. The selected object will be split at the position where the playback marker is.

This can be done even faster using the special splitting mouse mode, found in the mouse mode button in the tool bar, or by pressing Alt + 6.

Right-clicking on an object opens the context menu with the options available for that specific object in the Timeline mode.

Tip: You'll really notice the advantages of object-based editing when you start to use Object Effects! You can apply audio effects to each individual audio object. For example, you can cut a sample to create an object for the last beat before a pause in the arrangement and add an echo effect! Or create a some crazy drums by applying various filter effects to each beat in the loop. There's no limit to the creative possibilities!

Adding software instruments

The included audio loops in the Soundpool are of the highest quality and melodically synchronized. But sometimes it's good to have a bigger selection of beats and melodies or a way to create your own ideas. In this case you need software instruments.

While audio objects consist of pre-made recordings, the sound from software instruments (synthesizers) is created during playback on the computer. The resulting sounds are not as refined but allow for total control of every musical detail.

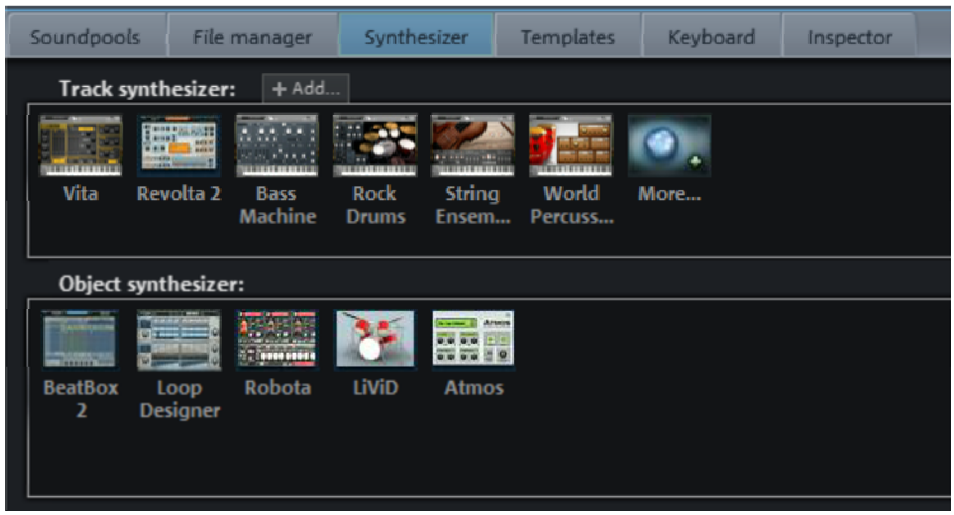
A selection of the loops included in Music Maker are intended as control files for software synthesizers (MIDI loops). The sound progressions of these loops can be edited in the MIDI Editor (view page 80). You can also record your own melodies by connecting a MIDI keyboard.

In MAGIX Music Maker 2013 a distinction is made between VST instruments and object synthesizers.

Object synthesizers are standalone objects in the track and can be moved, cut and arranged just like any other objects. Various object synthesizers can also be put together on one track. The control of the sound creation takes place within the object synthesizer.

VST Instruments are always loaded to one track and controlled by MIDI objects in the track. MIDI objects only contain control information (notes) that is used to create sounds in VST instruments. Various MIDI objects arranged on one track control the same synthesizer and that means a maximum of one instrument per track.

To open the folder with the software instruments in MAGIX Music Maker 2013 switch to the **Instruments** folder in the Media Pool.



- As with all Media Pool objects, the instrument that is selected will automatically produce a preview sound.
- Drag the desired synthesizer into an arrangement track by holding down the mouse button.
- For object synthesizers a Synth Object will be created and a settings dialog for the synthesizer will open. You can "program" the synth here. The resulting Synth object can be moved, cut, stretched or adjusted with effects just like an audio object.
- VST instruments are loaded to a track and a preset MIDI object is added to the track. Double-clicking on it opens the MIDI Editor where you can make adjustments to the melody.
- Or you can switch the the Media Pool **Keyboard** view. Here you can play the synthesizer using your computer keyboard. You can also record your playing by clicking on the large red record button.

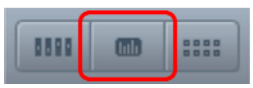
Tip: You can access the sound programs of the included VST instruments Vita 2 and Revolta (only Premium version) with the button on the far left of the track.

Experiment with the various synthesizers in MAGIX Music Maker 2013 and take advantage of each of their individual strengths.

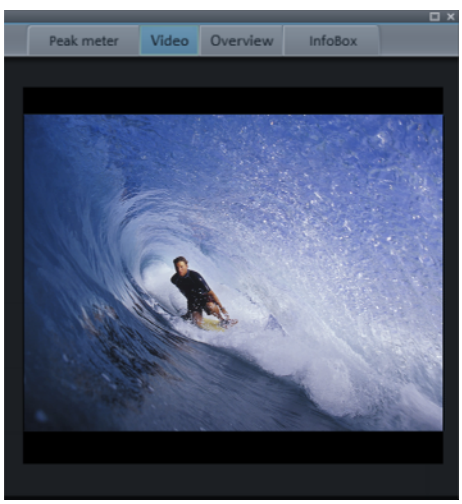
Add videos or images

Perhaps you would like to make a video clip? To do so, open a folder with video or photo files in the Media Pool under **Data Manager** and select the ones you want to use in your project.

You can activate a video monitor using the middle button on the right below the arranger.



A preview of the selected video file is shown on the video monitor.



Once you have found a matching video, use the mouse button to drag it onto any track (like previously with the audio files). You can place as many video and photo files as you like under your music.

You can adjust the length of the individual image objects with the help of object handles (view page 24).

In the Media Pool **templates** you will also find animated text templates (view page 176) (Titles), video effects (Video FX) and visualizations that you can use to spice up your videos.

Effects

You should take time to experiment with the effects. In the context menu you can select the effects for the objects. Effect modules can be opened and adjusted to get the exact sound you want.

Effects can also be dragged onto objects by holding the left mouse button or double-clicking. Simply open the **Templates** folder in the Media Pool and test out the effects listed in **Audio FX** by clicking on them. As with all other entries in the Media Pool, effects in this folder always have a preview as well. If you like an effect and wish to apply it to an object in the arranger, simply click on it, drag it onto the object, and release the mouse button.

Tip: Use the object inspector in the Media Pool to display all important object effects.

Another option for using effects is to apply **Track Effects**. These effects influence all of the signals on a track making it a quick way to apply the same effect to several objects. They also affect the audio output of track synthesizers. There are no audio effects available for MIDI objects so object effects can't be used on them.

FX You can also select from a variety of useful track effect presets by clicking on the button on the corresponding track. These are organized according to the instruments and applications.

Export Arrangement

When your arrangement is ready, you would normally want to do something with it "out in the real world". For example, show it to friends. To do so, you must first export your work from MAGIX Music Maker 2013.

You can find the most important functions in "File > Export > Common export functions".

- **Export as MP3:** You can transfer your arrangement in MP3 format to a portable player.
- **Burn onto CD or DVD:** The classic way to present music. You can burn single songs or complete albums directly to CDs.

Tip: In the Premium version, you can use the integrated CD mastering and burn program to do this. Click on "File" and select the "Export arrangement -> Burn audio CD-R(W)" option to export your arrangement. The arrangement will be loaded into the CD mastering program MAGIX Music Editor and can be burned straight to disc from there.

- **Upload to the MAGIX Online Album:** When the song is finished, it should be heard not just by your friends, but preferably the whole world. The easiest way to do this is with a MAGIX Online Album of your own.
- **Publish on Facebook (YouTube/SoundCloud):** With these options you can publish directly on the popular online platforms.
- **Export in various formats:** In the "File > Export" menu you will also find all supported export formats for creating an audio or video file (for music videos) from your arrangement.

Note: The export calculations don't affect playback performance. Even if playback on your computer begins to stutter because too much RAM is being used for videos and effects, the export file will still be calculated correctly. We recommend placing already finished passages of complex arrangements via the export or mixdown function into a single file to free up some processing power (and tracks). This kind of file can be reloaded into the arrangement and edited further with the other parts.

Burn audio CD

To burn an audio CD, first export your arrangement as a WAV file:

- Click "File" and select the "Export arrangement -> Audio as wave..." option.

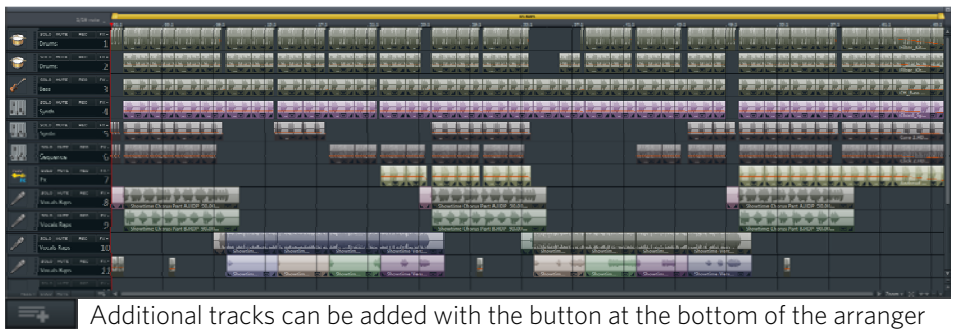
The WAV file created can be burned as an audio CD with the included burn program MAGIX Speed burnR.

Tip: You can use an integrated CD mastering tool in the Premium version and a burn program to do this. Click on "File" and select the option "Export arrangement -> Burn audio CD-R(W)" to export your arrangement. The arrangement will be loaded into the CD mastering program MAGIX Music Editor and can be burned straight to disc from there.

Arranger

Tracks

The arranger is organized into tracks. Each track corresponds to a channel on the mixer (view page 179). You can use this channel to control volume, apply effects, mute or solo all of the objects in the track. The loops of the same instrument are typically grouped together on one track (bass track, vocal track, etc.) which makes it easier to edit them.



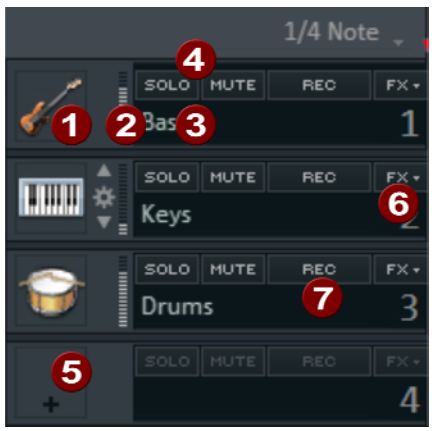
Additional tracks can be added with the button at the bottom of the arranger or by selecting the "Add track" option in "Edit" menu (Ctrl + I)

In total, up to 96 tracks can be used for an arrangement. To move a track you can open the Effects menu (view page 31) of the track and select "Move Track Up" or "Move Track Down". Tracks cannot be deleted, but those that don't have any audio objects are automatically deactivated and that means they don't use any computing power!

If the tracks in the arranger are not long enough, you can increase their length by pressing the minus button (-) to the right. The size of the arrangement adapts itself automatically when objects exceed the space for them on the right-hand side or when new objects are loaded.

Track headers and Instrument icons

At the beginning of each track there is a **track header** with controls and displays.



1. **Instrument icon**: When you drag & drop a MAGIX Soundpool sample onto an empty track an icon will appear in the track header. You can replace this icon by **right-clicking** on it and selecting a different one. A left-click on the icon opens the menu for the track synthesizer (see below).
2. The **Peak Meter** can be found beside the icons. This way, you can control the volume of the track and see if the track produces any audio sound at all.
3. The **track name** is located to the left of the track number. You can rename the track by double-clicking on the field.
4. You can use the **Mute** button to shut off the sound of a track or the **Solo** button to play only the sound from one particular track. The Solo function is not exclusive which means you can use it to play back the sound from several tracks. On the lower border of the arranger underneath the track headers you will find the buttons **Reset Solo / Mute** which you can use to restore the previous solo and mute settings of all tracks with one click.
5.  Left-clicking on the field with the instrument icon opens a menu with the sounds from the included software synthesizer which can be loaded to the track. This software instrument will then be used by all MIDI objects in the track. You can find out more about this in the chapters Software Synthesizers (view page 102) and MIDI objects (view page 80).

   The track header of a track with a loaded synthesizer has a few additional controls. With the arrows (**2, 4**) you can switch back and forth from the previous to the next sound in the software instrument and the gear icon (**3**) opens the instrument editor.
6.  Here you can open the Track Effects menu. In it you will find presets for track effects sorted according to the instrument type.
   With the "Move track up/down" commands you can sort your tracks.
7.  With REC you can activate the track for an Audio or MIDI recording.

AUDIO REC A simple click puts the track into Audio Recording mode. This also activates monitoring which means you can hear the input signal of your sound card during playback. (Find out more in the "Mixer" chapter, "Recording/Live Monitoring" (view page 182)) If you start recording now (R key), the audio recording dialog (view page 60) will open. The recorded audio material is added to this track in the playback range (view page 34).

MIDI REC Clicking this button again puts the track into MIDI Recording mode. If a software instrument is loaded, you can play it with a hooked-up MIDI keyboard (Monitoring). If you start recording now, a new MIDI object will be created in the track, the MIDI Editor will open and the MIDI recording (view page 86) will begin.

Zooming

The vertical zoom function sets the number of visible tracks. On many tracks zooming is useful to be able to selectively edit a track or an object in full view.

Use the horizontal zoom functions to set up the visible section of the arrangement on the timeline.

Clicking and dragging on the bottom border of a track allows you to adjust the height of the display.

Move/Zoom with the scroll bar

If you move the mouse to the edge of the scroll bar, the cursor will turn into a double-arrow symbol which can be used to select and compress/stretch the scroll bar. This way, you can zoom in and out quickly. Dragging the middle of the scroll bar moves the visible section.

You can tell which part of the entire arrangement is being played by the size and position of the scroll bar. If the whole arrangement is displayed, then the scroll bar will fill out the bar. Complete view may be set by doublke clicking the scroll bar.

A track may not be diminished without any limit, and the number of maximum displayable tracks is also limited, meaning not all tracks may be able to be viewed at once.

Zoom buttons

Zoom **Zoom menu:** Certain zoom levels may be selected by right clicking the horizontal scroll bar or by clicking the zoom menu. You can also jump to certain positions in the arrangement here.

Enlarge objects: Vertical and horizontal zoom stages are enlarged so that all of the selected objects are displayed at maximum size. If the function is switched off, the regular zoom stage will be restored.

 **Optimize view** (view page 223)

 **Zoom buttons:** Buttons for zooming in and out

Move/Zoom with the mouse wheel

The visible section can be moved, reduced, and increased in size by using the mouse wheel.

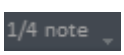
Moving a visible section	Mouse wheel
Enlarge or reduce the visible section (Zoom)	Ctrl + Mouse wheel
Displayed tracks	Shift + Mouse wheel
Number of displayed tracks, increase/decrease track height	Ctrl + Shift + Mouse wheel

Grid

Timestretching in the arrangement is displayed by the vertical progress of the tracks. To structure this progression, a timeline displaying time units has been positioned at the top of the first track.

Two consecutive objects will seamlessly snap together even if they are on different tracks. This avoids undesired gaps or overlaps.

The bar grid makes sure that the objects and the start, end & play markers only snap into place at specific positions so that they can be positioned precisely according to the beat.



The grid width can be set using the button to the top left.

If, for example, "1/2 beat" has been set, then the objects and markers snap into position at all half beat positions when moved. This way there won't be any gaps between the objects and precisely beat-matched cuts are possible. The selection ranges from full beats to 1/16 grid sizes. Triplet values are also possible.

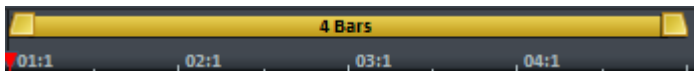
The "Frame" setting allows fine positioning using the time code. The time display in the timeline and transport control automatically changes from bars:beats:ticks to hours:minutes:seconds:frames.

"Objects" deactivates the beat grid and the grid will now only affect the object edges. You can also deactivate the grind entirely by selecting "No grid" or by pressing "Ctrl + F12".

"Select beat type" switches the timeline to irregular bars like ¾ beat.

Playback area, Start and end markers

In the upper area of the timeline, there are two markers between which playback area is displayed, and this area can be played back as a loop (endless).



The length of the playback area is shown in blue. The number before the point indicates the number of bars, the number following it indicates the number of fragments corresponding to the selected grid, e.g. 3.3 on a 1/16 grid = 3 bars and 3/16. A tilde (~) in the display means that the playback area doesn't have the exact raster length and the loop is therefore "non-circular". Double clicking on the playback area sets it to cover the whole arrangement; double clicking again sets it between the start of the arrangement and the last object.

This area also determines which positions are copied or inserted into the clipboard's memory by the the edit menu commands "Edit range" or the keyboard shortcuts "Ctrl + Alt + C" for "copy", "Ctrl + Alt + V" for "paste" or "Ctrl + Alt + X" for "cut".

The right end marker is always moved together with the start marker so that the length of the looped playback area remains constant as the start marker is moved. So always move the start marker first and then the end marker.

The start and end markers can be moved in different ways with the mouse. You can move them to any position via drag & drop or directly with a mouse click: a left mouse click in the timeline moves the start marker; right clicking moves the end marker.

It's even easier with the keyboard: The cursor keys move the playback area forward or backward by a whole playback area's length. Press "Ctrl" as well to move the playback area by a quarter of its length. "Shift" + cursor keys halves or doubles the playback area's length.

"**Ctrl + Shift" +cursor keys** enables you to lengthen or shorten the playback area by a bar. Use this function as well to quickly move the playback area onto a smooth bar length.

When you move the playback area while a playback is running, the old area is always played to the end and smoothly changed into the new one after. In this way you can remix your tracks in real-time with the keyboard!

Note: If the starting marker does not move to the right with a left click or via the keyboard, it is because the end marker would then have to be shifted beyond the end of the arrangement. In this case, move the start marker via drag & drop or position the end marker!

Move playback marker

The playback marker can be moved independent of the start marker. Just click on the lower portion of the timeline Once the playback marker reaches the end marker playback will recommence at the position of the start marker. If the playback marker has been set to the right outside of the area, the arrangement will be played to the end. The stretched out playback range will then be played as a loop.

Transport Bar (playback functions)

The transport bar's functions enable you to control the playback behavior of the arrangement using the mouse.

Tip: Using the space bar on your computer's keyboard you can start and stop playback much more easily. An overview of all keyboard shortcuts is available at the back of the manual.

Playing an endless loop (looped object) can be deactivated here. Playback will always stop when the end marker is reached.

Back to start: With this button the start marker is quickly moved to the beginning of the arrangement. Another click on "Back to start" moves the start marker and the playback range to the beginning of the arrangement.

Stop: This button ends playback. The playback marker returns to the position from which it started.

Play/Pause: This button starts continuous playback of the arrangement. If the playback marker reaches the end marker, the range between the start and end marker will be played back as a loop. Another click on Play stops it at the current position of the playback marker (Pause).

Record: Depending on the settings in the track header (view page 31) an audio (view page 60) or MIDI recording (view page 86) will be started.

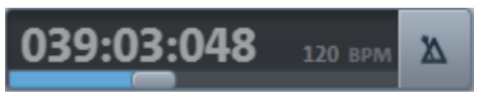
Volume control

The volume control is to the left of the transport controller. With it, you can quickly control the overall volume of your arrangement. To regulate the volume of individual tracks, use the mixer (view page 179).

Clicking on the speaker icon mutes the entire sound output.

Under the volume control there is a peak meter that displays the master signal peak level and an indicator for incoming MIDI signals.

Time display

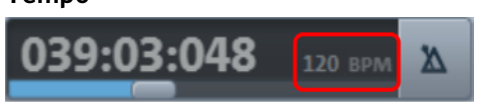


The time display is beside the transport console. This is where the current playback position is displayed. With the position slider you can quickly move the playback marker within visible range. By right-clicking it is also possible to switch the time display to show the remaining time (relative to the end of the project) or to choose various units of measurement, e.g. hh:mm:ss or frames.

Metronome

If this icon is active, then a metronome (click) will play during playback and recording. This provides helps you orient yourself with the arrangement tempo while you make your own recordings.

Tempo



Here, the song's beat is displayed in BPM (Beats per minute). The arrangement tempo is set automatically by the first sample used in the arrangement. To enter a new tempo, click on the number and enter a BPM value in the field. Finalize the entry by pressing the Enter key. The objects in the arrangement are adapted using timestretching.

Click on **BPM** to open the **Tap Tempo Dialog** where you can set the tempo by "tapping" it out. Simply click the tap button at your desired tempo or press the T key. The tempo is measured and displayed in the dialog. Pressing OK accepts the tempo.

Arranger buttons

The Arranger buttons for quickly opening and closing all the most important windows can be found underneath the last track in the Arranger.

Opens the mixer (view page 179) where tracks can be mixed by adjusting volume, setting the position in the stereo panorama and adding effects.

Opens or closes the video monitor (view page 174). The video monitor displays the video and images files that have been loaded into Music Maker. It can also be used as a peak meter, overview of the arrangement or as an info box for help text.

Media Pool

The Media Pool in MAGIX Music Maker 2013 lets you access, preview and load all supported media types online and offline, e.g. the included audio and MIDI loops, audio CDs, MP3s, software instruments or effects.

All media types are loaded into an arrangement from local drives or directly from the Internet by double-clicking or dragging & dropping.

The upper edge of the Media Pool contains seven buttons which operate the Media Pool in different ways:

- The setting **Soundpools** offers a database view of all Soundpools.
- The **File manager** is very similar to Windows Explorer. It controls and loads media files of all types from the hard drive.
- The **Instruments** (view page 102) setting displays a list of the available software instruments.
- Under **Templates** (view page 44) you can find the presets for all types of audio, video and title effects.
- The **Keyboard** enables software synthesizers to be played and recorded directly via the on-screen keyboard.
- The object **Inspector** offers quick access to properties of objects, e.g. audio effects for audio objects. For MIDI objects (view page 80), a smaller version of the MIDI Editor is shown, which allows you to edit the selected object.
- **Catooh** connects directly to Catooh (view page 202).

Preview function

There is a preview function for all files: By simply clicking an audio object, the pre-listening function starts via the sound card. Video, graphics and text objects are shown on the video screen.

As the arrangement plays on, you can experiment with sounds from the Media Pool (see Smart Preview (view page 57)).

Note: Even while previewing, audio files are adapted to the current tempo using timestretching (you can deactivate this in the "Audio/Video options" menu).

Soundpool settings

This setting can be used to access the Soundpools. You can access the included Soundpools through the clearly laid out database view that lets you arrange the display of the loops according to styles, instruments and pitch.

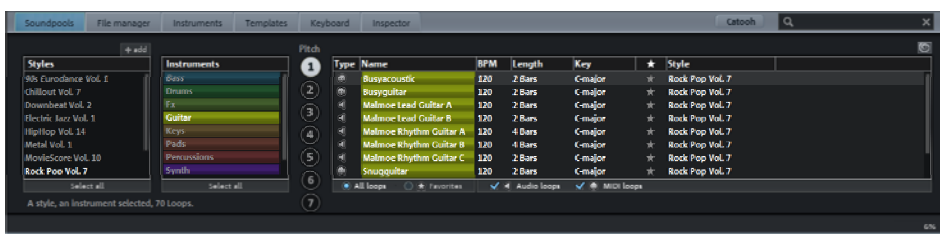
During installation, if you no longer have the Soundpools on your hard disk, insert the MAGIX Music Maker 2013 installation DVD into the drive. The contents of the Soundpool media will now be imported into the database. Other Soundpool media are automatically recognized and added to the media database.

Note: Under program settings -> General (view page 204), you will find different options for maintaining and displaying the Soundpool database.

Soundpools already present on the hard disk can be imported into the database by clicking "Add styles".

Soundpools from previous versions of Music Maker or additional Soundpool collections that you have purchased can also be integrated into the Media Pool this way.

A Soundpool consists of one or more **styles**. Styles are sound libraries that belong together and cover a certain musical style. The sounds (sample or MIDI loops) of one style all have a certain tempo. You can mix loops from different styles, and the tempos will be adjusted accordingly. Within a style, loops are ordered according to instruments, and one instrument folder contains different sounds. Each sound can have a different pitch (except for drums and effects sounds).



All of the styles that are available in the database are displayed in the first column. The second column lists the instruments.

The list of samples found is created after entry selection in the first two columns. With "Ctrl + click" you can reduce or expand a selection. No selection ("Ctrl + click" on a single selected element) or clicking on "Select all" shows all entries from this category. If you select an instrument (e.g. "Drums" and "Percussion") and no style, all drums and percussion samples in the whole database will be displayed.

Simply clicking on the loop starts the preview. Clicking on the numbers 1 to 7 changes the pitch. The pitch for that loop is set when you click on a different loop.

You can sort the list according to criteria (Type, Name, BPM, Length in bars, Favorite, Style) by clicking on the column header.

The list can also be filtered:

Clicking on the star in the sample list marks the loop as a favorite. You can use the filter "Favorites" to display only the loops that you have marked as favorites.

You can display only audio loops, MIDI loops or both. For the difference between audio and MIDI loops see below.

An entry field for full text search is located above the match list.

In the search field, you can search the list of the samples found according to a certain sound file name.

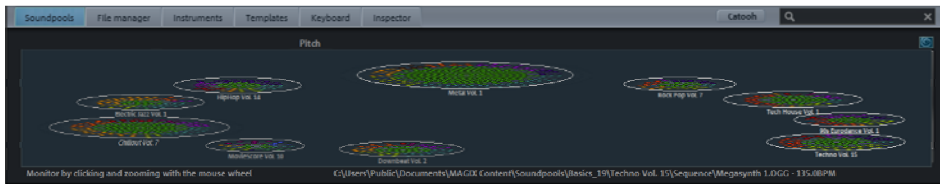
Sound Vision view: This button displays all Soundpools as galaxies.

Audio Loops and MIDI Loops

In Music Maker a distinction is made between audio and MIDI loops. Audio loops are normal audio files that have a specific number of bars (1, 2, or 4) and can be played back as loops. MIDI loops consist of a MIDI Take (view page 54) that contains the notes (MIDI file) and the sound settings for a particular software instrument. Both types of loop have advantages and disadvantages:

	Icon	Advantages	Disadvantages
Audio		• Recordings made on professional studio equipment with top quality instruments and expensive synthesizers. • They require less computer power than sounds reproduced in realtime.	• If the original tempo of the loop is changed with timestretching the sound quality can be negatively affected. • The melody and rhythm are already set in the recording and can only be adjusted with complicated pitchshifting.
MIDI		• Pitch and tempo changes don't require additional computer power and don't affect the sound quality. • You can use the MIDI Editor to change the melody of the loop any way you want.	• Software instruments process the sound in realtime and therefore require more computer power. • Even the most high-quality samples don't sound quite as natural as real instruments.

SoundVision



This alternative display of the Soundpool library shows all available sounds graphically. No matter how large the Soundpool collection is, you can view the entire library using this 2-dimensional display. This "galaxy" can now be accessed via the mouse to collect all of the sounds you want.

The large clusters of "stars" are the styles, and these are arranged from inside to outside with increasing tempo. Eventually they form a center - the styles furthest out have the highest tempo.

Within a style are the individual instruments (e.g. keys, pads, sequence) formed in a circle, and the drums are in the middle. Every instrument group has a certain color assigned to it which is the same in every style. The individual sounds are points encircled by the individual pitches, if available.

You navigate throughout the Sound Vision view by moving the selection displayed with the mouse; the mouse wheel enlarges or diminishes the view. The points (which symbolize the sound loops) can be manipulated exactly as in the Media Pool list view, i.e. select by double clicking and load by double clicking or via drag & drop.

File manager settings

MAGIX Music Maker 2013's file manager works very similarly to Windows Explorer. It can be used to access and load media files of all kinds, e.g. videos, bitmaps, MP3 audio files, audio CD tracks, RTF text files for titles.

The Media Pool consists of a file list to the right (the actual “Media Pool”), in which all loadable media types (and, if required, further subfolders) are listed, and the navigation area on the left-hand side.

In the file list, all supported multimedia files and subdirectories of the currently chosen directory are displayed. All entries can be loaded into the arranger tracks by double clicking or via drag & drop.

In the navigation area, you can find different buttons for directly accessing preset subfolders.

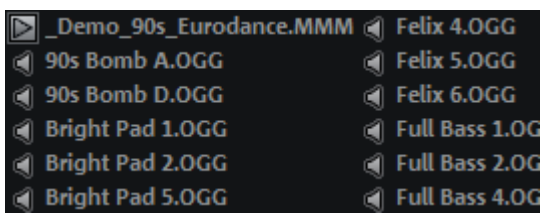
You can right click in the file list to define further buttons ("links"). Switch to the folder which you would like to create a link to and select the option "Link to folder" from the context menu.

Navigation buttons

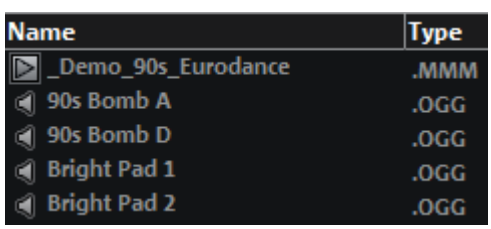
Forwards/Back		The "Back" button always returns you to the folder where you were previously.
Up		The "Up" button brings you to the next highest folder level.
View		These buttons switch the file view list between icons, lists, or details.

Various file list view modes

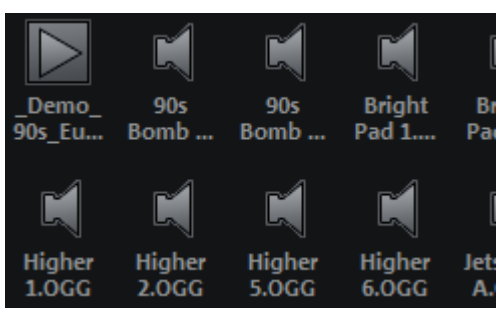
The **file list** displays all supported multimedia files and subfolders of the currently selected folder. Three different views (list, detail, large symbols) can be set by right clicking on the options or Media Pool's context menu.



List: Only file names are listed. This view mode displays the most files simultaneously.



Details: The details section displays the type, size, and date of modification for every media file beside the name. The list can be sorted by clicking on any of these details.



Large symbols: These can be quite useful, since they show a preview frame for each movie and picture file. This allows you to sort through the material quicker. The disadvantage is that it takes longer for the file list to be displayed.

Deleting, copying, and moving files

All files listed in the media window can be selected, deleted, or moved into other folders via drag & drop, just like via Windows Explorer. This way, all objects desired for placement in an arrangement can be collected in a separate folder beforehand.

Additional functions can be accessed via the context menu, i.e. by right clicking an entry.

My Projects

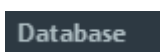
This button opens the "My Projects" folder. This is a subfolder of "My Projects" that is named after the program (i.e. MAGIX Music Maker 2013, only featuring "_" instead of empty spaces). This is created automatically when the program is installed. All new recordings and arrangements are saved here automatically as a preset, and finished arrangements are exported here. You may change the save location as you see fit via Program settings > Folders (view page 204, view page 203).

My Files: This displays the contents of the "My Files" folder. This is normally the save location of videos, pictures, music, etc. (in the corresponding subfolders).

My MP3s

This provides quick access to your own MP3 collection. When this button is pressed for the first time, you can select the folder where your MP3 files are saved. You may also change this path later via "Program settings", the "Folder" tab (Y key or "File" menu > "Settings" > "Program settings").

Database



This button displays the media files on your computer in a well-structured database view.

This means the files are no longer displayed according to where they are stored in the different folders but are grouped according to general characteristics. The top "folder level" is the difference in audio, video or image files; subfolders would be, for instance, the date for photos or the artist for MP3 files.

In order to present media data on your PC in a database view, you first have to add them to the MAGIX database. To do this, click on the database button to the right and select the option **Start media manager for photos and music**.

This opens the corresponding MAGIX program and the database scan function of the program.

MAGIX Music Maker 2013 comes with the free photo and music management programs MAGIX Photo Manager and MAGIX Music Manager. If you have the corresponding free versions, MAGIX MP3 Maker or MAGIX Digital Photo Maker, they will be used instead.

By right clicking on "Database" and clicking on "Database search", you can open a special search dialog in which you can carry out a targeted search for media.

Search the database

Quick search: Simply enter a keyword and highlight the data type (photo, audio, video). All available Database columns are searched for the keyword.

Expert search: Here you can restrict your search by stating search criteria in the following way:

	Database column	Condition	Comparison item
e.g.	dimensions	greater than	800

You can search up to three database columns that are connected via "and" or "or" simultaneously.

"**AND**" means only those files will be listed that match all criteria.

"**OR**" means only those files will be listed that match at least one of the criteria.

Instrument settings

This button opens the folder containing your software instruments. You can read more on this in the Software Instruments (view page 102) chapter.

Template settings

This opens the folders for installed effects presets. Saved audio and video effects presets as well as title templates also land in these folders, so that over time a complete library of your own presets will develop.

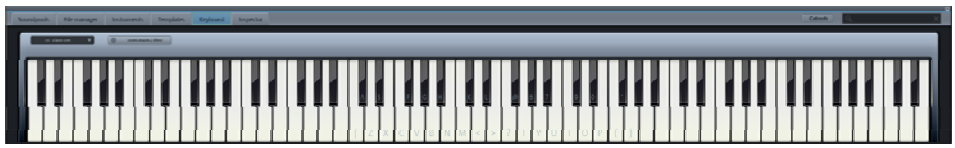
The buttons to the left open the folders for audio effects ("Audio FX"), presets for the Vintage Effects Suite ("Vintage FX"), presets for the Live Performer ("Live Pads"), the LiViD drums synthesizer, title templates ("Titles"), video effects ("Video FX", "Video Mix FX"), and animations ("Visuals").

You can also add effects via drag & drop. Simply drag these onto the corresponding object using the mouse.

The context menu for audio objects enables you to to set audio effects in the effects rack (view page 132) precisely!

Keyboard settings

The keyboard enables software synthesizers (view page 124) to be played and recorded directly via the on-screen keyboard.

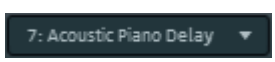


If a track synthesizer is not present, then a new track will be added and a new synthesizer plug-in will be added when the view is switched to "Keyboard" (Vita with Sound Acoustic Bar Piano).

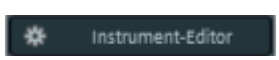
The keyboard always controls the synthesizer in the track for which MIDI recording has been activated.

You can click the keyboard with the mouse to play the instrument. The closer to the bottom edge you click on the "virtual keys", the louder the sound will play. Of course, you can't seriously play music by clicking with the mouse (this function is more suitable for testing out sounds quickly). That's why you can also play the keyboard with the keys on your computer's own keyboard.

Note: This works only after you first click once on the keyboard using your mouse. Otherwise, pressing the computer keys will function as key shortcuts (view page 232) for the different features in Music Maker. If the computer keys control the program's keyboard, then the piano keys feature the corresponding characters on your keyboard.



A sound program for the synthesizer may be selected from this list.



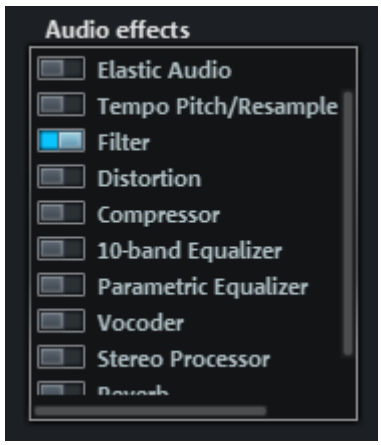
This button opens the editor window for the synthesizer for fine tuning the sound.

Object Inspector settings

The Object Inspector offers quick access to properties of objects, e.g. audio effects for audio objects. For MIDI objects (view page 80), a smaller version of the MIDI Editor is shown, which allows you to edit the selected object.

Audio Objects

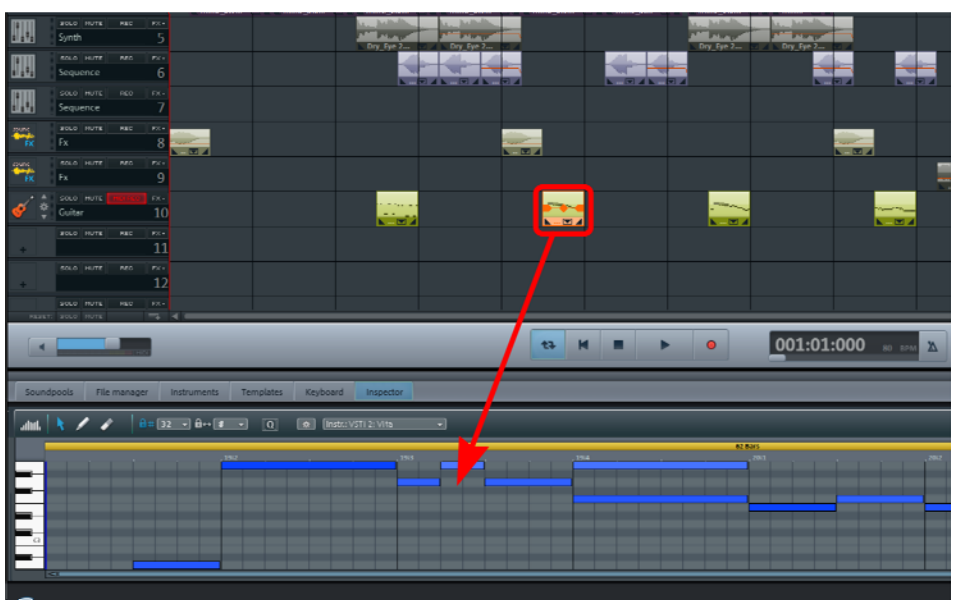
If an audio object is selected the object inspector will open featuring the audio object view



This displays the available object effects (view page 133) in a clearly laid out list. The button at the front switches the effects on and off. Clicking on the effect name opens the settings dialog.

MIDI objects

If a MIDI object is selected, then the Object Inspector shows a smaller version of the MIDI Editor. The MIDI Editor in the Object Inspector operates in the same way as the "bigger" version in its own window, but the menu and several playback and recording settings are not available.



For more information, please read the section MIDI Editor in the chapter "MIDI objects"!

Setting Catooh

You can preview multimedia files from the Online Content Library Catooh, load them into the arrangement, and edit them further .

Please read the chapter entitled Catooh (view page 202)!

Mouse modes

MAGIX Music Maker 2013 offers special mouse modes for arranging and editing objects.

A small arrow next to the mouse pointer symbol allows different modes to be set.

Move selection

This is the preset mouse mode in which most changes are made.

Left clicking selects an object. When the "Shift" or "Control" keys are pressed, multiple objects can be selected. Hold down the mouse button to move selected objects.

In this mode the objects can be faded in or out or their lengths can be changed using any of the five handles. Please refer to the "Arranging objects" (view page 50) chapter. Right clicking on an object opens the context menu with the most important effects and settings available for that specific object.

If an effect curve is active in the deluxe version, the curve handles can be selected and moved. Double clicking on the curve creates new handles.

Shortcut: Ctrl + 1, number key 1

Move to track

This mouse mode behaves basically like the mouse mode for individual objects, but moving objects

results in all other objects behind the object moving in sync on the track. This is practical if space is needed at the start of a track, since all objects can be moved together without moving them underneath each other.

Shortcut: Ctrl + 2, number key 2

Move all

This mouse mode behaves in principal just like the "Single object mouse mode",

but during moving, all objects on all tracks will be moved together from the mouse position.

Shortcut: Ctrl + 3, number key 3

Draw

In this mode you can insert further similar objects behind an already loaded object.

Starting from the first object, the following objects are always inserted synchronously so that you can also think of this mode as the insertion of a "Mute" automation from a continuous loop. You can read more about this in the section "Drawing in loops (view page 54)" in the chapter "Arranging objects".

Shortcut: Ctrl + 5, number key 5

Split

You can split objects quickly with this mouse mode in order to remove unwanted parts or attach various effects to parts

of objects.

Shortcut: Ctrl + 6, number key 6

Stretch

This special mode is for customizing the length of objects.

Objects can be on the lower handles stretched or compressed. Audio material is therefore lengthened via timestretching without changing the pitch itself The middle object handles allow the object's pitch to be changed using pitchshifting in the range of -7... +7.

Shortcut: Ctrl + 7, number key 7

Preview audio

This mode allows you to preview audio objects (as long as the mouse button is held down)

for the entire duration and independent of the start and end markers in the timeline. Other object types are protected against unwanted moving.

Shortcut: Ctrl 8, number key 8

Scrubbing

By holding down the mouse button, the arrangement can be previewed at the point where the cursor is positioned.

The playback marker follows the mouse movements. This mode is especially suited to searching for specific parts of an arrangement.

Shortcut: Ctrl + 9, number key 9

Replace

This mouse mode simplifies searching for suitable samples: Left mouse click on a MAGIX

Soundpool object to switch the object automatically with another from the same instrument category. Shift + left mouse click keeps the object but changes the pitch. Ideal for quick experimentation!

Shortcut: Ctrl + 0, number key 0

Context help

This mouse mode allows you to open the corresponding "Help" section by clicking on any area of the MAGIX Music Maker 2013 screen.

Shortcut: Alt + F1

Arranging Objects

In MAGIX Music Maker 2013 you can jointly and uniformly load, arrange, edit, and export different multimedia file formats. This chapter describes the basic way of working with multimedia objects. This includes audio objects, video objects, graphics, midi objects, and synth objects. Later chapters will describe the particulars of the respective formats.

All object editing is virtual, non-destructive, and is calculated in real time during play. The multimedia material is thus not destroyed (non-destructive editing) and any change can be cancelled with the multi-stage undo function ("Ctrl + Z"). You can experiment to your heart's content without having to fear that you will change or damage the original material.

Loading and saving arrangements

"Arrangement" refers to the objects found in the arranger (Audio, Video, MIDI, songs, graphics, synthesizers) along with all its positions, fades, length, volume, brightness settings and effects.

Arrangements can be saved via the menu **"File"**as an MMM file and loaded again.

When loading arrangements you must ensure that all the used objects are available in their respective folders. Often is it advisable to **"Save Arrangement and Used Media"** from the menu "File" > "Backup". Then the entire arrangement with all objects and effects are saved to a configurable folder on the hard disk and can be easily downloaded from there.

Multimedia files and objects

All multimedia files supported by MAGIX Music Maker 2013 can be previewed or listened to in the File Manager by clicking and dragging into the arranger via drag & drop. The files are displayed as objects in the tracks after the mouse is released.

Using the "Tab" button, you can switch between two object display views.

In alternative display modes, the objects are not represented frame by frame, but simplified. This is useful for quicker representations of video objects: RAM is saved and the overall performance improved. Audio objects will be shown using one or two (for stereo) waveform representations.

Right clicking on an object opens the context menu with the most important editing options available for that specific object.

Select objects

To edit or delete objects using the menus, you must first select them. To do so, simply click on the object you wish to select. When the "Shift" key is pressed, multiple objects are selected. Object modifications like cutting, moving, effects assignment and so on, apply to all selected objects together.

The handles of selected objects light up to show that the accompanying object has been selected and can be edited using the menu functions.

Several objects can be selected quickly by clicking on the first object in the first track with the mouse and dragging out a square for selection. All objects entirely or partially within the square will be selected (rubberband selection).

Mute objects

Each object can be muted individually. Simply select the objects you want to mute and press Ctrl + M (or use the corresponding command from the context menu).

Build or split object groups

Several objects can be combined to make up a group, to avoid the objects being unintentionally moved out of relation to each other.

Once they are combined, clicking on one object of a group will select the entire group.

To group or separate groups, use the buttons in the toolbar or the corresponding commands in the "edit" menu.

Splitting objects

All objects can be split. Each object section that is created becomes a separate object. To do this you can select the object you want to cut and move the playback marker to the position where you want to cut. .

Click on this button in the upper toolbar (view page 232) or click on **„Edit"** and select the option **„Split objects"** or press the **„T" key.** It's even easier with the mouse mode "Split objects (view page 49)".

To rejoin these split objects at a later stage, simply highlight the individual parts and select the command **"group"** to join the selected objects together into one group.

Duplicate objects

Objects can be duplicated very easily in order to create larger arrangements. First, the objects that need to be duplicated must be selected.

Then select the command "Edit menu -> Duplicate objects"

A copy of the object appears right beside the original which can be moved to any position with the mouse.

> It's even faster if you click on the object that has to be copied and hold down "Ctrl" at the same time. An object is then created which can be dragged to the desired position. Furthermore, object copies require virtually no additional memory!

Another way to duplicate is by using the copy/edit commands from the "Edit" menu.

Object handles

With the help of the object handles, fine positioning, volume and brightness settings, fading in and fading out as well as loops can be carried out directly in the arranger.

All editing is carried out in real time and is already calculated during playing. The multimedia material is not destroyed in the process (non-destructive editing); any change can be cancelled with the multi-stage undo function ("Ctrl + Z").

Object fades

Use the handles on the top left and right to fade an object in or out. By fading objects in and out onto different tracks, it is possible to produce crossfades between different objects. The length of the crossfading can be directly regulated with the handles.

Shortening or looping objects

Objects are "cut" virtually by "compressing" them with the mouse. "Pulling" them to the right will stretch them, which results in the object being played as a loop until the play cursor reaches the end of the object representation. In this way it is possible to very quickly create an entire drum track from one single drum loop or to create a long video from a short video sequence.

Guide the mouse to one of the bottom corners of the object until the mouse pointer turns into a stretch symbol. Now you can stretch or compress the object until it has reached the desired length.

Normally an object is always looped over the full length of the underlying data material (audio or video file). To set a clip from a file as a loop, shorten the object at the front and the back with the handles and choose the command "Edit menu -> Insert user-defined loop". This function is very useful for setting your own recording as a loop, as the silence at the beginning of a recording can be cut away.

Adjusting volume/brightness

With the volume/brightness handle in the top center of the object, you can change the volume of audio and MIDI objects or adjust the brightness of video and bitmap objects.

If several objects are played in parallel, it is possible to individually adjust the volume or brightness ratios between objects in this manner.

The volume and brightness ratios between tracks are adjusted in the mixer.

"Draw in" loops

Audio loops can be drawn into the arranger tracks with the mouse.

For this you have to set the mouse mode to "Draw objects" by clicking on the corresponding icon in the mouse modes menu. Now an audio sample has to be loaded which will serve as a template and which will then be drawn into the following area of the track as a loop in the track.

This works as follows:

1. Load any loop from the Media Pool into the arranger.

2. Click on an area further back on the same track and hold down the mouse button to draw in the loop.

Starting from the first object, the drawn-in loop area is always synchronous with the beat. This means that the drawn-in loop is not played from the beginning, but rather starts from the position where the original loop would be if you had continued to this position. Or, to put it differently, a running loop can be found on the track and you can draw in at which position you can hear it ("Mute automation").

The synchronous start of the object in this mode has another consequence: If an object is moved, then only object borders are moved, but the underlying loop, however, always remains intact.

Takes

Every object can be saved as a "Take". Takes save all editing done on an object, like object length, fade settings and all object effects. MIDI takes save the instrument controlled by them (MIDI output or software instrument).

Takes are saved as "TAK" (*.tak) files and take up virtually no space on the hard disk. This means you can cut a sample, add various effects to it and save it as various takes in order to use these together with all their editing in other MAGIX Music Maker 2013 arrangements. Instead of repeatedly saving the original sample, only the object and effect settings are saved. You can also save Synth objects (view page 124) as takes which creates your own preset libraries for the synthesizer.

The MIDI loops included with MAGIX Music Maker 2013 (you'll recognize them in the Media Pool by this icon) are also takes because the MIDI files (view page 80) only sound the way they were intended when combined with the right synthesizer sound.

Attention When loading takes, the audio or video file for which the take was added must be in the original folder.

Keyboard shortcut: Alt + Shift + S

Object properties

This function displays all the information about the currently selected objects, such as file name, position on the hard disk, tempo, etc. The object editor also defines the foreground and background color of every object in the arrangement.

In the "Tempo/Pitch" tab, information on the patched/determined tempo and pitch of the audio object is shown. Furthermore, there is an overview of how the various timestretching/pitchshifting operations affect the entire audio object. The tempo/pitch adjustment when loading the sample, the effect of the master tempo fader, and the time processor as object effect tracks are offset against one another, but they may not mesh properly. For this reason, there are two buttons which can be used to double/halve the object speed. Try using these buttons if the tempo of some loops is incorrectly interpreted as twice or half the speed.

Mixdown audio

If the arranger becomes too full to manage, the system is out of RAM, or you just want to "summarize" your production, use the mix down function to convert the entire audio arrangement into a single audio and/or video file.

To do so, choose the "Mixdown" function from the "Edit" menu. You can choose a name and a destination for storing the mix down object. The default directory is "My Projects". If only audio objects are in the tracks, a wave file will be created. If audio and video objects are combined, you can choose whether an audio or a video file will be created.

The objects of the arranger or the area will be replaced by the new object.

MAGIX Music Maker 2013 automatically normalizes the audio file, i.e. the loudest part of the wave audio object is identical with the highest figure of the 16-bit resolution ceiling. This guarantees the same sound quality, even if you repeat the mix down procedure or you combine the mix down file with other wave audio objects again and again.

Tip: The mix down function is very helpful if you want to go on working with the mix-down object. To create the finished end version of the song or video it is recommended to select the "Export arrangement" function in the "File" menu instead of the "Mixdown" function.

Shortcut: Ctrl + Shift + G

Audio Objects

Audio formats

MAGIX Music Maker 2013 loads and edits audio files in the formats Wave (.wav), OGG Vorbis (.ogg), Windows Media Audio (.wma), MPEG (.mpg), MP3 (.mp3) and CDA (audio CD tracks). The stereo or mono data of a file are displayed as an object in the arranger of the MAGIX Music Maker 2013. The material will be displayed as a waveform, optically representing the sound to make editing easier.

Along with wave files, MP3 files, OGG Vorbis (.ogg), and ringtones can also be exported.

In addition, the Premium version can load and export the Surround formats (after activating the encoder) MP3 Surround, Surround WMA and wave (6-channel interleaved).

Load and process audio files

All importable audio files can be accessed via the File Manager and previewed (audio) by clicking the file name. Tracks from audio CDs can also be integrated by dragging & dropping them into the arrangement.

Editing, fine positioning, volume adjustment, fading in and out, is all processed using the "Object" tab directly in the arranger.

Please see the chapter "Arranging objects"

Smart preview for the included samples.

The included samples can be previewed while the arrangement is being played. They are always played in time with the song. This means that if you combine loops from different styles that have different tempos they will automatically be adjusted to the current arrangement tempo even in the preview.

You can compose a song in realtime by loading different samples and searching for suitable new building blocks during playback.

By simply clicking on the mouse or pressing the Enter key you can add the loop to the arrangement or remove it by pressing the Del key.

Tip: You can also use key commands to quickly change the playback area (view page 34) by using the arrow keys. This will let you add loops to your arrangement with more precision.

Audio recording

Your own sounds like vocals, speech, noises, or instruments can be easily recorded in MAGIX Music Maker 2013 using the audio recording function.

Click the **REC** button in the track box to specify the track for the recording.

The display in the track box will change 

Assuming you have everything connected properly (see below), the input signal will be played back featuring all track effects (if there are any) (live monitoring (view page 182)).

Live monitoring requires the use of ASIO drivers (view page 206).

Click the red button on the transport bar to start the actual recording.

Connecting the source for recording

First of all, the source of the audio material must be connected to the sound card input. Again, there are several possibilities which primarily depend on the type of equipment you have.

If you are recording from a microphone, then please connect the microphone to the microphone jack on your sound card (usually red).

If you want to record material from a stereo system, then you can use the line-out or AUX out jacks on the back of your amplifier or tape deck. This involves connecting them to the sound card input (usually red).

If your amplifier has no separate output (other than for the speakers), then you can use the connection intended for headphones for your recordings. In most cases, you will need a cable with two mini-stereo jacks. This type of connection has the advantage of being able to set the headphone input signal level with a separate volume. As headphone connections generally are not the best, it is advised that you use the line outputs if possible.

When recording cassettes from a tape deck, you can connect the tape deck's line out directly to the sound card input.

When recording from vinyl records, you should not connect the record player's output directly with the sound card because the phono signal needs to be pre-amplified. A more suitable method would be to use the headphone connection or an external pre-amp.

Adjusting the Signal Level

Adjusting the signal level to the sound card is also recommended to get the best sound quality during digital recording.

Once a recording source is connected to the sound card, the "Record" button opens the recording dialog and starts the recording source.

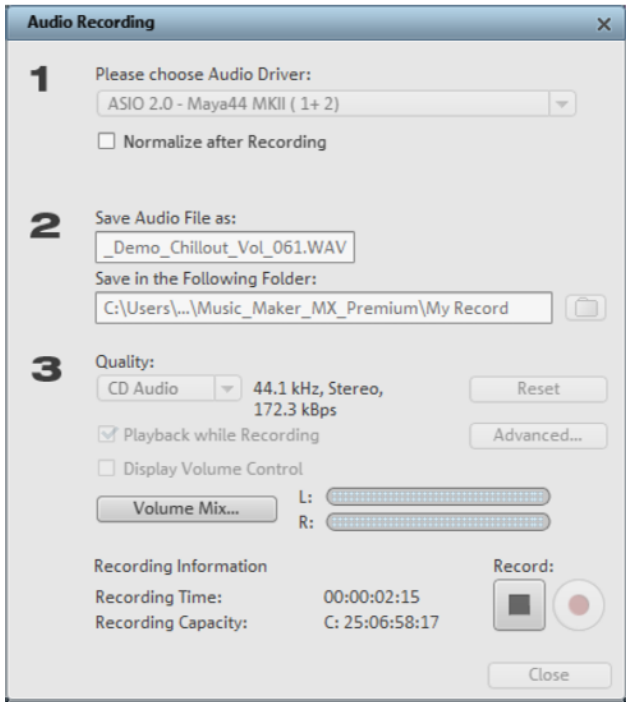
You can now adjust the recording level with the help of the LED display in the recording dialog. For this, you must first check off "Show Levels".

If the adjustment is set too high, distortion occurs and the incoming signal must be reduced. If you have connected the source through either an amplifier or tape deck output to the sound card, you can only reduce the signal level in your sound card's software mixer interface. You can access the mixer directly from within the recording dialog via the "Recording Level" button.

If you reduce input sensitivity by using the input fader, the resolution at which the analog signal is digitized is also reduced. Try to set these automatic controllers to the loudest sound level possible.

The maximum setting for an optimal level is the loudest part of the material. The loudest part should be adjusted to be the maximum. The actual recording begins when you press the "Record" button. At the end of the the recording you will be asked if you want to use the recording. Upon confirmation, the newly-recorded material will be placed at the next free position of the start maker in the arrangement.

Audio recording dialog



Normalize after recording: This option raises your material to the correct volume level after recording is completed. In order to achieve good audio results, you should try to record the source as loud as possible without overmodulating it. The Peak Meter display helps in the recording dialog.

Audio driver: This selects the sound card for recording.

Save audio file as/save in the following folder: This select the title of the audio file you wish to record. You can also select the folder where you wish to store the file.

Recording quality: Sets the sound quality of the recording. The preset menu allows you to choose between AM tuner, FM Radio, DAT (Digital Audio Tape), and CD quality.

Display volume control (monitor): The peak meter allows you to monitor the level of the incoming signal. Please read more on this in the section 'Adjusting levels (view page 59)'.

Record: This button begins recording. The next free track will be used for recording the audio material.

Stop: Click this button to stop recording

Play during recording: If this option is active, then the arrangement will play back during recording. This allows you to add recordings to the existing arrangement.

Advanced: Use this button to open a window containing a selection of three special functions.

Advanced settings for audio recordings

- **Mono recording:** Activate to record in mono. This reduces the required memory space in half. Mono recordings are recommended for voice recordings made using only one standard mono microphone.
- **Real-time resample to project's current sample rate:** Automatically matches the sample rate of a new file to be recorded with the sample rate of the current movie's sound track (set in the video recording).
- **Automatic volume reduction of other audio tracks ("ducking"):** To add narration or other sound material to a video that already has sound volume levels set, activate the option "Automatic reduction of sound volume of remaining audio tracks". This automatically reduces the volume of audio objects in the arrangement during the recording session ("ducking"). This is achieved using an automatically configured volume curve: Before and after the recording, other tracks will be faded in or out, resulting in a homogeneous total volume level. (Lowering of volume level during spoken comments is also called "Ducking".)

Import audio CD

Importing an audio CD works the same way as adding other audio files into the arrangement:

- Insert an audio CD into the CD/DVD drive of the PC
- Go to your CD/DVD drive in the Media Pool (File Manager, Computer). The individual CD titles appear in the file list.
- A simple mouse click starts the playback of the CD title for sampling purposes
- Drag & drop the track from the CD into a track of the current arrangement and it will be digitally scanned and copied to the hard-drive. The files will be saved in the import folder (may be specified under File > Settings > Program > Folders (More information can be found in the section "Folders" on page 209)).
- The CD track appears in the track as an audio object and can be played back or edited immediately.

CD Manager

This option opens the CD manager to select tracks from audio CDs and partially or fully import them into the arrangement. You can also select and configure the used drive if you have more than one drive.

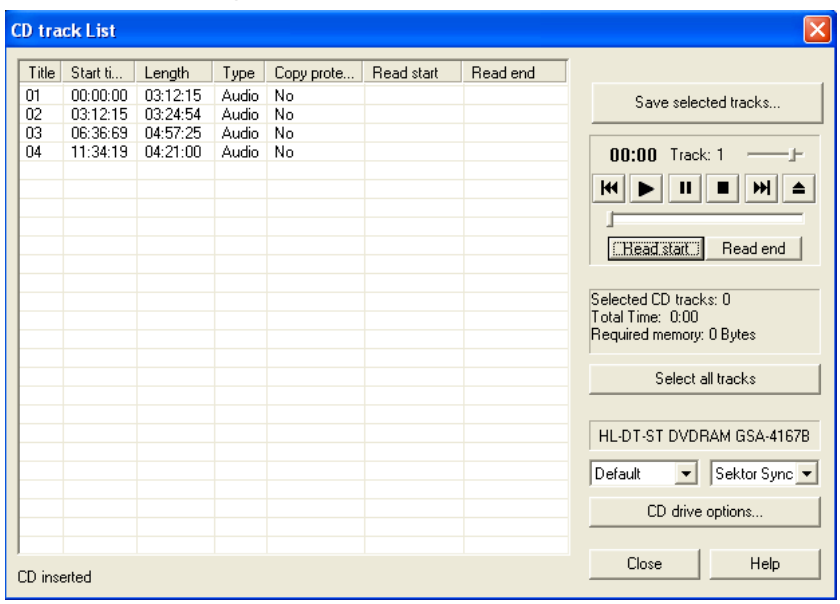
The CD manager lets you import audio data using most CD and DVD drives. You may have to contact your technical support to find out which drive is suitable. The data is

imported digitally, thus eliminating loss in sound quality. Audio tracks are imported into the arrangement as Wave files. The files are saved in the import folder ("File -> Properties > Program settings -> System -> Path settings (More information can be found in the section "Folders" on page 209)").

To import audio tracks via the CD manager you should proceed as follows:

1. Insert an audio CD into the drive and select "Import audio CD track(s)" from the "File" menu. A dialog with a list of the CD tracks will open. If you have more than one drive, you may have to first select the drive containing the CD. You can do this in CD drive options.
2. Select the desired tracks (multiple selection by "Ctrl" + mouse-click).
3. Click on "Copy selected track(s)...".
4. The "Import project" dialog will now appear. Here you can enter the file name and select the target directory.
5. The audio material is then copied from the drive onto the hard disk. A progress bar is displayed.
6. Once copying is complete, the dialog will be closed and the tracks are inserted into the arrangement as individual objects.

The track list dialog



On the left-hand side in the list you can choose which track(s)/title(s) you wish to import from the CD. Several subsequent tracks can also be selected by holding "Shift" and left-clicking; "Ctrl" + clicking selects several tracks; "**Copy selected track(s)**" starts the audio copying process. A new object is created for every track in the arrangement and the corresponding track marker is created.

Transport control: This lets you start and stop playback just like on a real CD player and skip forward and backward in the playlist.

Use the small faders to control the preview volume. With the faders at the bottom you can go to a specific position in a track. To import just one section of a CD track, choose "**Start selection**" at the beginning of the section and "**End selection**" at the end.

Below the transport control details on the total length and the memory capacity of the selected track/section are displayed.

Select all tracks: All tracks are selected, for instance, to copy the entire CD.

In the right selection box you can select the read speed, and in the left one you can select the export mode (see Configuring the CD-ROM).

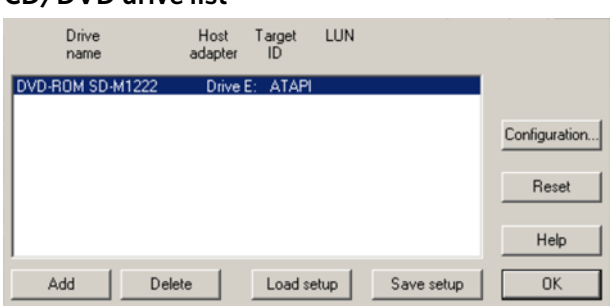
CD drive options: Here you can change the settings and select the drive for grabbing the CD if you have installed several CD drives (see also CD-ROM drive dialog).

"Import project" dialog: The "Import project" dialog appears after you have selected the option "Copy selected tracks". Here you can specify name and target address of the audio files. The audio files are subsequently numbered (name -> name_1.wav, name_1.wav).

Copy-protected audio CDs

According to the copyright act, it is forbidden to copy a CD with copy protection. However, an owner of a CD may create a backup copy for himself. The problem is, however, that you cannot create a copy from copy-protected CDs because they cannot be read using a conventional PC drive. In order to create a backup of such a copy-protected CD, you have to play it on an audio CD player and record it as a regular analog recording via the sound card.

CD/DVD drive list



Configuration: This button opens the configuration dialog, where various special settings can be made.

Reset: sets drive settings back to default.

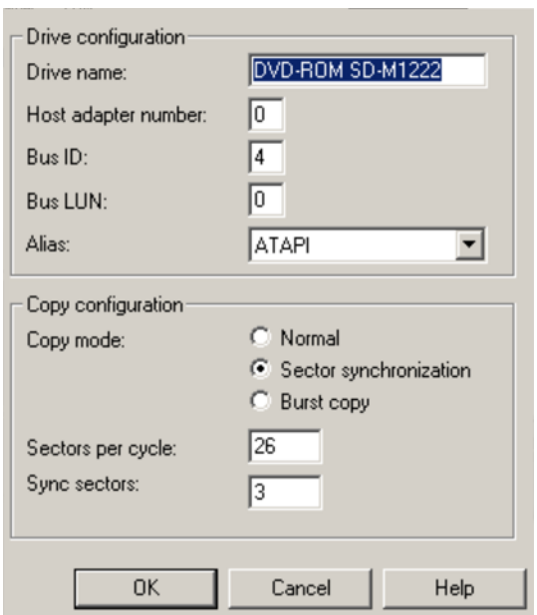
Add: Creates a new drive in the list, which first requires special settings.

Delete: Deletes selected drive from the list.

Load setup: Loads the current drive list and all configuration data from a *.cfg file.

Save setup: Saves the current drive list and all configuration files in a *.cfg file.

CD/DVD-ROM 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.

Bus ID: Here you can enter the ID of your CD-ROM drive. Be sure to set the correct ID, there is no error checking!

Bus LUN: sets the LUN parameter, normally 0.

Alias: Lets you select the manufacturer type of your CD ROM drive.

Normal copy mode: copies audio files without any software correction.

Copy mode sector synchronization: copies audio files with a special correction algorithm. This is especially useful, since many CD drives have problems finding an exact position again and gaps can occur.

Burst copy mode: optimizes the speed of the copy process, no software correction is used.

Sectors per cycle: defines the audio sector count that should be read from the audio CD in one cycle. The higher the number of sectors, the faster the copying process. Numerous SCSI systems have problems with more than 27 sectors.

Sync sectors: sets the count of audio sectors, which should be used for software correction. A higher number results in a better synchronization but also in a slower copying process.

Recording Audio CDs

In some cases the CD can be copied during recording. The CD track is simply played on the CD/DVD-ROM drive and recorded by the sound card. You should note that the digital track data from the digital analog converters of the CD-ROM drive have to be converted into analog signals and then into digital data by the analog/digital converters. Depending on the quality of the converter used, this can lead to losses in quality.

Before beginning this, the "Load tracks via record dialog" option under "File -> Properties -> Program settings -> Audio" has to be activated. The audio output of the CD-R drive must also be connected with the input of the sound card. This is already the case with most multimedia PCs (if not, then it can be accomplished with a small cable inside the computer).

When "Load CD tracks via record dialog" is active, song parts can also be added to the arrangement without having to load the entire track.

Change the playback tempo or pitch

If you want to combine audio material you have recorded yourself from different sources, samples from Soundpools, or songs from CD with each other, then you will often need to adjust the tempo or pitch of audio objects to match each other. There's an automatic function which automatically adjusts the tempo of audio objects when they are loaded to the arrangement's tempo, plus advanced tools like the Remix Agent and the Loop Finder (view page 220).

Automatic tempo adjustment when loading

In general, MAGIX Music Maker 2013 automatically adjusts audio files to the arrangement tempo. In normal cases, you won't need to worry about the different tempo of audio files and Soundpool samples, since these are automatically matched. But since automatic processes can fail too, the following process explains when you may need to "manually" adjust things.

In the new arrangement (empty), the tempo will be determined by the first samples loaded into it. All additional audio files will then be automatically adjusted to this tempo. If you are planning a remix which is composed of different samples with different tempo, then try to add the most important sample first. This minimizes sound distortions compared to the other samples via timestretching.

In order to be able to correctly adjust an audio object to the tempo, its output tempo must first be detected. If the sound is a Soundpool sample, then the tempo saved therein ("patched") will be used, and the tempo adjustment will always work.

For all other (short) samples, an attempt will be made to automatically provide the tempo. If the sample is not cut exactly, i.e. it does not contain an exact number of beats or is incorrectly interpreted by the automatic detection process, then this may not work. The sample will then be incorrectly stretched or an incorrect arrangement tempo will be set.

In this case, use the Loop Finder to specify the tempo semi-automatically (more about this under the chapter "Menu effects -> Audio -> Loop Finder (view page 220)"). This allows the sample to be cut to an even loop and the arrangement will adjust to the detected tempo or vice versa.

The Remix Agent launches optionally for longer samples (>15 seconds), e.g. entire songs from CD or MP3s. This also gives you the option of either adjusting the sample to match the arrangement or the arrangement to the sample.

MIDI objects for controlling synth objects always have the correct tempo because they are always aligned with the arrangement tempo.

In the dialog "Program settings (view page 205) -> Import" ("Y" key), you can deactivate the automatic tempo adjustment or limit it to patched samples.

Change tempo or pitch of individual objects manually

"Resampling", "timestretching", and "pitchshifting" provide high-quality effects for you to change the pitch and tempo of selected audio objects dependent on or independent from each other. You can access these tools via the "Effects" menu or the object FX effects tracks.

These functions can be used for all audio files, i.e. for the included samples as well as your own recordings, CD tracks, CD tracks, or sounds from the Internet.

The playback tempo can be quickly changed via "Timestrech" mouse mode, i.e. by compressing/stretching the audio object's lower handles, in which case the tempo will change but the pitch will not be influenced (compare with chapter "Mouse mode"). The middle handles can also be used to change the pitch.

Detailed access can be accessed via the time processor effect (see chapter "Audio effects -> Timestretch/Resample"). This allows you to specify different timestretch

algorithms for the corresponding object, since the best results often depend on the respective audio material and the different algorithms.

The tempo setting on the transport controller allow the arrangement's tempo to be changed retroactively. This affects all objects contained in the arrangement, and in some circumstances this can lead to an increased demand on the system and dropping out during playback. If this occurs, use Apply function in the effects rack (view page 137) or the Combine audio (view page 214) function.

Song Maker

With the help of the Song Maker, you can automatically arrange multiple audio objects (loops) using included samples for songs or song parts without having to drag them individually from the Media Pool into the corresponding tracks. Considering the relatively random selection of loops that are combined you shouldn't expect the Song Maker to produce a chart-topping hit, but it can be very helpful as a basis for making your own adjustments and additions to create a cool arrangement.

Activate the Song Maker by pressing the "Song Maker" button or from the Effects menu.

1. Select a music style.
2. Select the instruments that you want to use. If, for example, you only want a rhythm section with drums and bass, deactivate the other instruments with a mouse-click.
3. Select the song part or parts that you want to create. The parts differ in their harmonic structure and instrument density, for example verses have fewer instruments than refrains, while there are accompaniment variations between the 1st and 2nd verses as well as in the refrains. The pitch sequence from verse to verse remains the same. If you activate all parts, Song Maker creates a complete song in the typical structure of a classic pop song, i.e. intro-verse-chorus-verse-chorus-bridge-(transition or solo)-chorus-outro.
4. Use the sliders to the right to set the speed and the length of your song.

5. "Chaos" draws a different loop of the corresponding instrument for each new object. Normally, the same loop is continuously used in various pitches for each element of the song such as verse, chorus etc. If you use "Automatic", a new song in a randomly generated style will be created automatically, as soon as a song has been played.
6. Now click on "Create Song". Song Maker automatically compiles an arrangement. The following is only a suggestion.
7. Use the play button to preview the song maker's suggestion. If you don't like the results, you can repeat the process. Before you do this, right-click on the instruments you want to keep in the arrangement to prevent them from being overwritten. You can return to a previous status anytime by clicking on "Undo" or "Redo".
8. Once you're happy with Song Maker's suggestion, click on "Apply". The building blocks are only now added to the arranger. A click on “Cancel” closes Song Maker and returns to the original arrangement status.

Tip: If you start the Song Maker for an arrangement that already has audio material in it, this material will not be affected. This means you can apply the Song Maker repeatedly saving only the parts you like until you have a final arrangement. You can also create song parts one after the other. The results from the Song Maker are always added at the start marker position. If you decide you want to replace the chorus you can simply set the start marker (view page 34) at that position.

Keyboard shortcut: W

Remix agent - Tempo and beat assignment

The Remix Agent is a powerful tool that determines the tempo (measured in beats per minute, or BPM) as well as the timing of the beats for a song's quarter notes. This is important if an audio CD title is imported into MAGIX Music Maker 2013, and you want to mix in sounds like drum loops, effects, or synthesizer voices.

When to use the Auto Remix Assistant:

- When the tempo of the arrangement must be adapted to the tempo of the song.
- When the tempo of the song must be adapted to the tempo of an existing arrangement.

- When the song is to be cut up precisely to create a remix object which can then be rearranged as desired.

Requirements for using the Remix Agent

- The song must be longer than 15 seconds.
- The song must be “rhythmic” (danceable).
- The song must be in stereo format.

Note: For analysis, it is presumed that the song is recorded in 4/4 time. If one of the above requirements is not fulfilled, the Loop Finder can be used.

If songs longer than 15 seconds are dragged into the arrangement, the Remix Agent is started automatically. When loading short samples (< 15 sec) the tempo is specified automatically and some loops are similarly automatically customized to the tempo of the arrangement. This also applies to previewing in the Media Pool (Smart Preview).

This method can be deactivated individually in the audio/video options ("A" key). You can find out more in the "File -> Properties -> Program settings" section.

Preparation - Setting the start marker and object end

Before opening the Auto Remix Assistant, you should set the start marker at the position in the song object in the arranger where you want detection to start. If the song contains a long intro without beats, set the start marker after the intro. As a rule of thumb, the Auto Remix Assistant should always be "fed" dance music.

- The start marker should be set before a quarter note beat or, better still, briefly before a beat at the start of a bar.
- If the start marker lies before the song object, the object is examined from the beginning.
- If detection is not performed by the end of the song, the object can be shortened accordingly with the object handle at the end of the object.

Checking the automatic tempo recognition

The song has to meet the following three requirements to be successfully analyzed:

- It must be longer than 15 seconds.
- It must contain "rhythmic" (danceable) music.
- It must be in stereo format.

The analysis takes place in three steps:

Step 1: Checking the start marker
Step 2: Tempo recognition
Step 3: Specifying beat starts
Step 4: Application of BPM and beat recognition

Step 1: Start marker check

Before analysis can begin, you should set the start marker in the project at the position where rhythmic material begins. This means, it should be located after the intro. If the assistant can't find any rhythmic information, it will ask if the marker is located behind the intro. In the dialog, you can move it to the appropriate location.

If the beginning of the track has no rhythmic information, you will be asked if the start marker should be moved.

Step 2: Checking automatic tempo recognition

The Remix Agent will begin the audio file analysis and try to determine the tempo. The object will be played back while a metronome click will sound and numbered beat lines will appear in the waveform display.

Below the waveform display to the left is an indicator of the found tempo in BPM. A small transport control is available in the middle to make navigation easier. The slider enables position control. To control the metronome volume, an additional slider as well as a mute button is found to the right.

Automatic tempo recognition doesn't always work on the first try. If you don't hear the metronome clicking in time with the music, click the "No" button in the upper section of the dialog in order to access the manual tempo input dialog.

To correct metronome tempo and move metronome clicks if needed, use the tempo correction and "Tap tempo" buttons.

Tempo correction: The Remix Agent offers you a number of tempos. The tempo, which the Remix Agent considers most likely to be the case is already preset. If the calculated tempo is incorrect, select one that better fits from the list. When the object is played again, metronome clicks should be synchronized.

On/off beat correction: It can also be the case that the tempo is correct, but the beats are shifted. "On/off beat correction" provides a number of alternatives for moving the beats according to the complexity of the rhythm. Try out different alternatives until you can hear that the metronome clicks are synchronous to the beat.

Tap tempo: Alternatively to tempo selection under "Tempo correction" you can also click on the "Tap tempo" button or the **"T" key** to the beat of the music. Additional blue lines are displayed in the wave display. After at least four taps, the Remix Agent attempts to select the correct tempo from the list in "Tempo correction". The display next to the "Tap tempo" button displays the current status. Keep tapping until the red display showing "Unlocked" changes to the green "Locked" setting.

Use the **"0" key** to manually set the quarter beats while the music plays. Placed markers will be removed automatically in such a way that the set tempo will be maintained.

You can move the markers with the mouse. If you press the "Ctrl" key at the same time, all following markers will be moved.

If the metronome clicks now correspond with the music, you can continue to the next step.

Step 3: Determining the start of a bar:

First set the type of beat. 4/4 beat is the default preset. If needed, correct the start of the beat. The beat at the start of the beat should always match with the high-pitched metronome click or the red line in the waveform display.

Correction cat take place in just one step: If you can hear the start of the beat, click once with the mouse on the"**Tap one**" or press the **"T" key** on the keyboard.

Alternatively, select how many quarter notes the "One" is to be moved back.

Use the **"0" key** to manually tap the position of the beginnings of the bars during playback. This offers an efficient option to correct the beat start of longer ranges.

Continue to the last step if the starts of the bars are now correct.

Step 4: Apply

The last step applies the musical information into the audio material.

Video cuts will now be inserted into the video material on track 1 based on this information

Setting the manual and Onbeat/Offbeat

If the result is incorrect, you can help the Auto Remix Assistant with a few mouse clicks on the correction buttons.

There are two possibilities:

On the one hand, the "Tempo correction" list offers alternative BPM numbers which could also fit with the music. The adjustable BPM values are detected automatically – the total BPM can therefore deviate from song to song.

For more difficult audio material, we recommend using the "Tapping input" mode. Either the "T" key must be pressed or the "Tap tempo" button must be clicked with the mouse in time with the music. With repeated tapping of the tempo correction button, one should keep an eye on the color in the BPM display. In the "unlocked" condition (red), the tapping is not in time with the music. One should tap until the "locked" condition is displayed. After a short time, you will hear if the result is correct via the metronome.

Subsequently, offbeat correction takes place as required. If the detected quarter note beats lie around the length of an eighth note (transferred behind the real positions of

the quarter note beats), one or more alternatives can be selected from the onbeat/offbeat correction list.

Determining the start of a measure

Next, the starting point of the measure is corrected. The beat at the start of the measure must always agree with the high tone of the metronome and/or the red line in the wave-shaped display.

Corrections can be made by tapping; If the start of the measure can be be heard, tap with the mouse or press the "T" key. Alternatively, you can also select how many quarter notes the "one" is to be pushed to back.

If the starting marker was set briefly before the first beat of a measure, this correction is not necessary.

Note: With all corrections, the metronome and visualization react to the lines in the wave-shaped display only after a short delay.

Using BPM and beat detection

Now you may select one of the actions to be adapted to the arrangement song (or vice versa) or cut up the songs at the ends of a measure.

Save only Tempo & Beat information

Only wave file data is stored. This makes sense if some manual post-correction is required for determining beat/tempo.

When the data is stored, tempo & beat regulation can be released for future tempo adjustments or to create object remixes.

Tempo adjustment

Setting the object tempo to the arrangement tempo

This fits the object length to the existing arrangement. Three different procedures are possible: timestretching, resampling, or audio quantization.

- Timestretching keeps the pitch of the song constant, but sometimes the sound quality can suffer.
- Resampling changes the pitch (similar to changing the speed of a record player), and retains the sound quality of the song as much as is possible.
- During audio quantization, the audio file takes the tempo adjustments into consideration as if the first remix object (see below) were created and combined immediately into a new audio file. If the recognition is uncertain, extreme tempo fluctuation may result. It is particularly important to set the starting marker so that the tempo is recognized definitely. The advantage of audio quantization is that small tempo fluctuations in the music balance out. The start of the measure

always agrees with the start of the arrangement measure and never plays out of time.

Setting the arrangement tempo to the object tempo

The arrangement adopts the detected BPM value. If you would like to use the cut-up song as the basis for a new composition (e.g. for remixes), then this option should be active.

Creating remix objects

The song is cut by beat into individual objects. Some applications may include:

- To produce loops from complete songs which can then be used with other material. Most importantly, not all remix objects are suitable as loops. Ideally, less complex material should be used, e.g. drums from an intro.
- To remix songs, thus changing the sequence of the objects, cutting or doubling beats or to enrich the song with other loops or synth objects.
- To mix two songs: If percussion and tempo fit perfectly, can you blend the songs without "side effects"?

This option can be activated later from the "Object" menu, provided that the tempo data is stored.

The "Audio quantization" option: Audio quantization fits new objects exactly in time with the arrangement.

With homemade music, tempo fluctuations are common, and therefore different measure lengths may result. Nevertheless, so that the objects fit into the rigid timing pattern of the VIPs, the time processor is activated automatically and object timestretching is used to correct the different lengths.

Setting resampling for small corrections: If the necessary corrections are very small, better quality resampling can be used instead of timestretching. Afterwards, you should not change the master tempo any longer, since definite pitch changes may arise.

Remix objects in "Loop" mode: New objects are set in "Loop" mode. When extending the object with the right object mouse handle, the original length of the object is played again and again.

Setting the arrangement tempo to the object tempo: (see above)

Note: Time correction assigned to objects can be subsequently cancelled if the time processor is called up and edited ("Timestretch/Resample object", or double click on the object to open the FX racks associated with the time processor).

Cancel: The dialog is closed.

Problems and Remedies regarding the Auto Remix Assistant

Problem: The playback stutters, the metronome is suspended, the computer is overloaded... (on older computers.)

Remedy: We recommend changing to wave drivers ("P" key, "Playback parameter" dialog) instead of DirectSound.

Problem: The metronome does not work and there are no lines on the the wave-shaped display.

Probable cause: The material does not contain beats or the song contains a passage without beats.

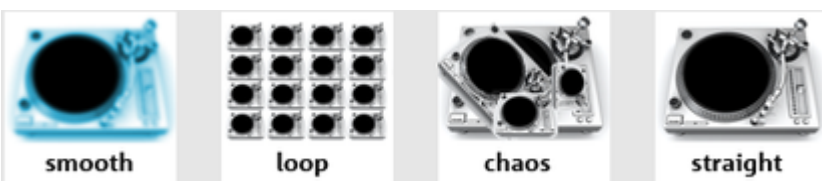
Remedy: The song should be limited in such a way that only rhythmic passages are contained.

Possible 2nd reason: Inaccurate tapping or a false BPM value has been entered.

Remedy: Try the tempo correction buttons or tap until the "locked" condition is attained.

Problem: The metronome sounds inaccurately or is jerky, the lines in the wave-shaped display are irregular and thinly drawn.

Remix Maker



The Remix Maker is connected directly to the Remix Agent.

Use it to automatically generate remixes. The loop objects sliced by the Remix Agent are regrouped according to defined criteria. Simply choose one of the four "virtual DJs", each of which represents a different remix style, and set the remix length and structure.

Opening the Remix Maker

1. New song

- Load the new song you want to remix. This should contain clearly defined rhythms.
- When the song is loaded, the Remix Agent pops up to give you the option of dividing the song into its structural segments (see "Remix Agent" above).

- Select the option "Open Remix Maker" from the Remix Agent dialog box.
- Once the Remix Agent has sliced your song, the Remix Maker is started automatically.

2. Existing, edited song (in the arranger)

- Load a song arrangement that is made up of loop objects.
- Select one of the loop objects.
- Select "Remix Maker" from the shortcut menu (right mouse click).

3. Long, unedited audio object (in the arranger)

- Load an arrangement containing a long, unedited audio object.
- Select "Remix Maker" from the shortcut menu (right mouse click).
- You are then given the option of generating remix objects.

Presets

Choose one of four virtual DJs with different remix characteristics. We recommend you try them all out and see which results you like best!

Remix length

Very short: around 20 seconds

Short: half the length of the original song

Normal: regular length of the original song

Double: twice the length of the original song

Shuffle mode

This determines the selection and order of the objects.

Do not change: The order of the objects are not changed.

Change slightly: A "pattern" (sequence of objects) is either repeated or the next pattern inserted.

Distant: Objects that are far apart in the original song are placed close to each other.

Random: The objects are ordered randomly.

Fill mode

A "fill" or "fill-in" is created when the loop object sliced by the Remix Agent again to produce very short objects that are looped or played in rapid succession. Fills are used to liven up the regular beat.

None: No fills are included.

Use slightly: A few simple fills are included.

Strong accentuation: Many complex fills are included.

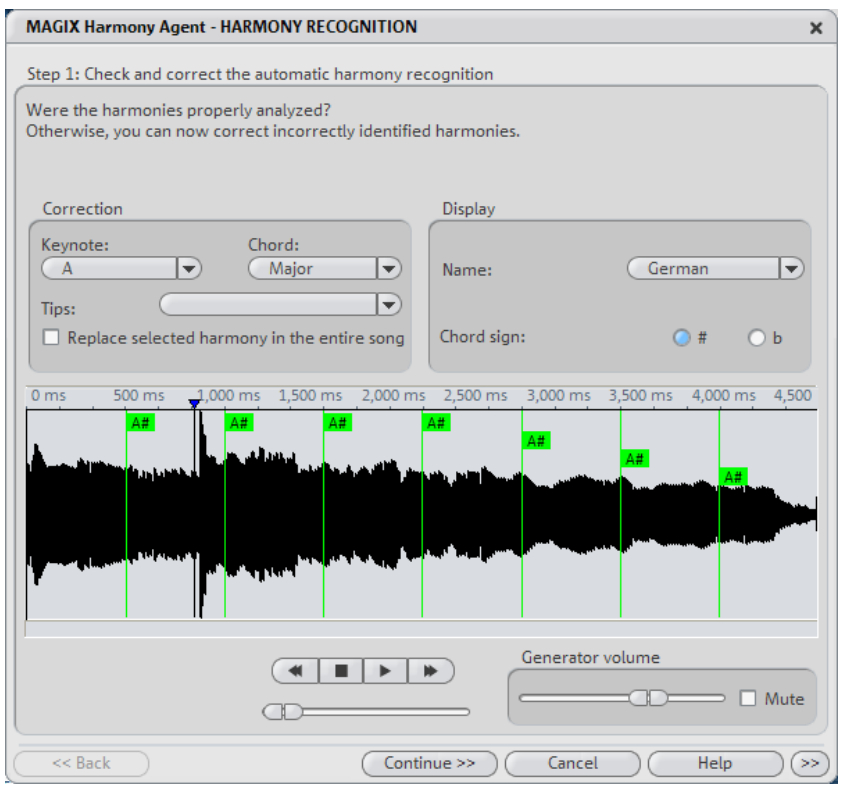
Use randomly: Different kinds of fills are used in a random order.

Loop Finder

The Loop Finder has been developed to find the BPM in short rhythmic passages, to integrate short loops in an existing arrangement, or to yield drum loops from short rhythmic passages. Otherwise, the BPM Finder helps in this regard.

More information under “Effects” menu.

Harmony Agent



The Harmony Agent is designed to analyze harmonies.

The music track is analyzed first when you open the Harmony Agent. The Harmony Agent tries to automatically identify the harmonies for each beat of the music. Thus

the right beat information is an important prerequisite for a properly-functioning Harmony Agent.

During subsequent playback, the detected harmony is played by an internal generator for verification purposes. You can adjust the volume with "Volume Generator". "Mute" deactivates the generator.

The transport control controls playback of the music track. The position slider below lets you quickly move to a certain passage.

Check and correct the automatic harmony recognition

After the analysis, you can manually correct harmonies which were not correctly identified. Note that major chords are written with capital letters and minor chords with lower-case letters.

Left click on the respective harmony symbol in the wave display. Hold the key if you want to mark several subsequent harmonies. If you right-click on selected harmony symbols, a menu containing alternatives will be displayed. The initially recognized harmony is marked with an *.

If there are no alternatives, you can select the correct "**Keytone**" or "**Chord**" from the "**Correction**" section of the menus. Use the option "**Replace selected harmony in the entire song**" if you are sure that the incorrectly recognized harmony is not included in the entire song. A mix-up between major and minor is typical in this case.

Once you are sure that all harmonies are set correctly, click on "**Continue**".

Use harmony recognition

Here you can use the information from the Harmony Agent. There are different possibilities to output harmonies.

- You can create picture objects in the arrangement that display harmonies graphically in the video monitor and in sync with the music.
- You can save the information in the audio file. This also ensures that the harmonies are available later. For instance, if you want to display the harmony information in the timeline ("Edit -> Display Object Marker -> Harmony Marker").
- You can choose between different displays of the harmony symbols. You can use German, English or Roman symbols to name the tones. Furthermore, you can set the "preceding symbol" to force single harmony interpretation. With #, all notes are shown as "sharps" (C#, D#, F#), with B they are displayed as flats.

Text to speech

In this dialog reached in the Effects > Audio dialog, you can get speech from typed text. You can choose from a range of different types of voices. You can change the

speed and volume of the spoken passages. Once you've settled on a suitable voice a WAV file will be created. This can of course be used in the arranger like any other audio object.

Load text: Here you can load any text file (formats: *.txt or *.rtf).

Save text: Your entered text can be saved.

Test: After entering your text, you can preview the result.

Voice: You can choose from various voice types.

Speed: Playback speed can be regulated with this controller.

Volume: Output volume is regulated with this control.

Format: Here you can determine the quality of the created wave file (.wav).

File: Path selection for the wave file to be created.

MIDI Objects

Arrange MIDI objects

MIDI objects may be moved, the volume may be modified (middle handle), or fades (in/out) may be added (top right and left handles) in the same way as audio, video, or synthesizer objects. Use the lower handles to "stretch out" individual MIDI loops so that they easily fit onto a whole track.

Pay attention to the following:

- Volume changes in MIDI objects (central handle or fades in/out) are controlled by adjusting the velocity level (MIDI velocity). Many synthesizers do not change the volume, but rather the sound in relation to the velocity level. In this case, use the effects curve automation function.
- MIDI objects always control a single synthesizer per track. If you move a MIDI object onto another track, then a different synthesizer will be controlled and the sound of the arrangement changes accordingly.

Transpose MIDI

This function in the the context-menu is used to change the pitch of a MIDI object. Simply enter the number of half tone steps by which the playback is to be transposed up or down! The transposition is shown in the MIDI Object in the arranger with "+n" and "-n" (n is the number of halftones).

Load MIDI files

Proceed as follows to integrate MIDI files into an arrangement:

1. Open a directory containing MIDI files using the Media Pool.
2. Click a MIDI file and it will be played back immediately; this makes it easy to load audio files without guessing.
3. Now drag the desired file into the arrangement and that's it!
4. An MIDI object will appear in which the MIDI notes are shown by dots; the high notes are dots in the upper section, and the lower notes are the dots further down in the lower section. You can even see the velocity of the notes: the louder the note is played, the darker it appears on the screen.

MAGIX Music Maker 2013 uses the external MIDI device (view page 82) to preview a MIDI file in the Media Pool without using software instruments. If you can't hear the MIDI file, then there may be different reasons for this:

- Check the MIDI output device in the "Program settings" window via the "Audio/MIDI" tab (P key or "File > Settings > Program settings"). "Microsoft CD Wavetable SW synth", a standard software synthesizer included in Windows® as

an OS component, should be set as the default. If sound cards with their own synthesizer are used or in case MIDI hardware synthesizers are connected, set the sound card's MIDI driver or a MIDI interface!

- The sound car synthesizer's volume is set via the the sound card mixer. Double click the small loudspeaker icon in the tray and find the controller for the SW synthesizer.
- Several sound cards cannot use the SW synth simultaneously with ASIO drivers.

The "Microsoft GS Wavetable SW-Synth" is treated as an external MIDI device, which means that even while it produces sounds in the computer, it is still not a component of MAGIX Music Maker 2013. If you want to export a sound from the arrangement, then you will have to record it beforehand (see Converting MIDI objects to audio files (view page 83)). The sound quality of the device is rather modest compared to "proper" software synthesizers like MAGIX Vita or Revolta.

It's easier if you assign different software synthesizers to the MIDI object after you load it. MIDI files of complete songs, for example like you might find on the Internet, often contain multiple tracks that control different instruments. MAGIX Music Maker 2013 is able to use one software synthesizer per track. For this reason, duplicate your MIDI one beneath the other as often as there are different instruments involved and set the corresponding Channel filters (view page 87) in the MIDI objects ("Options" menu in the MIDI Editor) so that each object only plays the notes for a single channel. Next, assign software instruments for the individual channels via the Track (view page 31) menu.

Connect external equipment

USB-MIDI keyboards

Over the last few years, controls for software synthesizers have produced a new class of devices: USB-MIDI keyboards. These devices usually do not contain separate sound generators, but rather consist of just a keyboard, different controls, and a MIDI interface that is connected via USB cable to the computer.

These keyboards usually do not need special drivers - they only need to be connected. Make sure that the device is switched on and is able to be detected prior to starting MAGIX Music Maker 2013, since the available MIDI ports are only able to be discovered during program launch!

Under some circumstances, you may have to select the MIDI input device via the Program settings ("Audio" tab) (view page 206). This is usually called "USB audio device"

Note: Some older devices do not function in some cases in Windows XP. Even though the device has been detected, the corresponding MIDI drivers do not appear in the list. In this case, please contact MAGIX customer support!

MIDI cabling

MIDI inputs/outputs: If your computer has an internal or external MIDI port, or has a MIDI-capable sound card installed, connect your MIDI keyboard's "MIDI out" to the computer's "MIDI in" (on the interface, sound card, and so on).

If your MIDI keyboard can generate its own sounds, connect the computer's "MIDI out" to the keyboard's "MIDI in". If your computer (or the MIDI device) offers more than one MIDI output, connect any other sound synthesizers to these. If the computer only has one MIDI output, you need to connect the second sound synthesizer's "MIDI in" to the keyboard's "MIDI thru" port. A third device can be connected to the second's "MIDI thru", and so on. The "MIDI thru" port always delivers a copy of the signals coming into the device's "MIDI in". It is preferable, however, to use a direct connection from a computer's "MIDI out" to a device, rather than chaining too many devices one after the other. Timing problems may occur in the chain if a lot of MIDI commands are sent in a short space of time. This is due to the slight delays introduced by each "MIDI in" to "MIDI thru" transaction. If your computer also features several MIDI inputs, they can be used for the connection of MIDI expanders.

MIDI local off: If your keyboard features an internal sound source, it is important that you stop the keyboard from generating sounds directly from its own keyboard. If you buy a new keyboard that is to be used without a sequencer and connect it straight to an amplifier, you would expect the device to make a sound when you press its keys. In other words, the keyboard is internally connected to the sound synthesizer. This behavior, however, is not what you want to happen when using your keyboard with MAGIX Music Maker 2013. In this scenario, the keyboard is used as the computer's input device, and MAGIX Music Maker 2013 is sending (i.e. playing) MIDI information to any connected sound synthesizer, be they the keyboard's own sound generator, a sound card, or any other connected sound module.

If you wanted to control and record another sound module using your keyboard as the input device, its own sounds would play alongside those of the other sound synthesizer, which is why the keyboard must be separated from its own internal synthesizer. This function is known as "Local OFF", and is set directly on your keyboard. Refer to your keyboard's manual for information on how to do this. Don't worry about "breaking" the link between the keyboard and its internal sound generator – MAGIX Music Maker 2013 will act as the "missing link" in this scenario.

External synthesizers

Naturally, MIDI objects can also be played back over a MIDI interface onto external synthesizers, sound modules, etc. "Pure" MIDI output takes place (i.e. without using software synthesizer plug-ins) assuming that the MIDI output device has been properly set (see previous sections); in this way, any MIDI object may be sent to an external synthesizer.

Note: If a MIDI object is on a track which features a software synthesizer, then this will be controlled first. To play the object on an external sound synthesizer via MIDI output, select "no VSTi" from the list of software synthesizer.

Convert MIDI objects into audio files

If you use VST instruments, you won't have to convert these MIDI objects into audio data before exporting your entire arrangement, since the sound is created on your computer and can be processed there. If you wish to do this nevertheless (e.g. to provide some relief to your PC), then use the function 'Combine audio (view page 55)'

All MIDI objects that control external synthesizers via a MIDI interface (view page 82) will have to be converted into audio objects if you want them to be exported as well. They only contain control information for sound generation.

In order to do this, the output of the MIDI synthesizer (e.g., the sound card) must be connected to the input of the sound card. The MIDI data can then be played and recorded simultaneously via the record function. This produces an audio file that can be edited and exported together with the multimedia files as usual.

Playing and recording MIDI synthesizer

MAGIX Music Maker 2013 allows you to play and record software synthesizers or external MIDI devices from the arranger. The MIDI Editor does not need to be opened for this, which was previously the case in the former version.

Presuming that the MIDI input and output devices are set correctly (see above), then you should be able to play any synthesizer that is loaded via the MIDI keyboard.

MIDI recording mode must be activated in the corresponding track by clicking "Rec" twice in the track box. Now, all of the notes that you play via the keyboard will be played back through the synthesizer.

If a software instrument is loaded via the track box or opened via the MIDI Editor, then MIDI recording mode is activated automatically.

Tip: You can also play a synthesizer live without an external MIDI keyboard. The Media Pool features an On-screen keyboard that may also be operated via the computer keyboard.

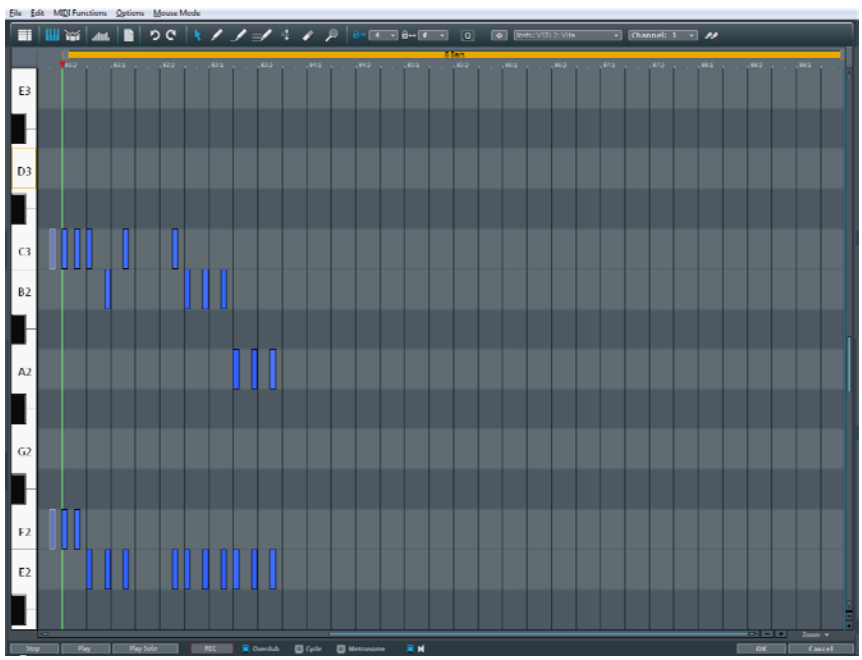
In order to record a new MIDI object, simply click the red "Record" button in the transport bar

MIDI Editor

The MIDI Editor makes it possible for you to edit MIDI objects. The MIDI Editor provides different sub-editors, views, areas, and aids to do this.

Double clicking a MIDI object opens the MIDI Piano Roll Editor for advanced recording/editing of MIDI objects.

Tip: The Media Pool features a smaller version of the MIDI Editor. Select the MIDI object you would like to edit and then click the Settings Object Inspector button. This MIDI Editor may be operated identically to the "bigger" version that features its own window; of course, the menu and different play and recording settings will not be available.



In the center you'll find the Piano Roll Editor in which the notes are displayed as bars and from which they can be edited using the mouse. There are various buttons located just above the Piano Roll.

Clicking on this button opens the Event list (view page 92). In this list you can view all MIDI data of a MIDI object, including those that cannot be edited in the piano roll or controller editor. You can use the Event List to remove unwanted commands included with imported MIDI files.

Use this button to switch to Drum Editor (view page 98) mode.

You can use this to leave the Drum Editor and return to the Piano Roll section.

Clicking on this button opens the Controller Editor (view page 90) in the bottom area. This allows you to edit features such as the note velocity, pitchwheel, and controller data.

Deletes all MIDI data from the object. Now you can begin from the start again...

Of course, "Undo/Redo" is also available for all changes you make in the MIDI Editor.

Along the top edge, you will also find the buttons for selecting the editing tools (view page 88), for quantization (More information can be found in the section "Quantization settings" on page 94), and for the output (view page 85) used by the MIDI object (MIDI out or VST instrument).

Select sounds

The sound of virtual instruments (VST plug-ins), is produced by the synthesizer chip of the sound card or by external MIDI synthesizers. Each MIDI object can produce as many sounds as the corresponding synthesizer offers. The sounds themselves can be specified in the instrument – regardless whether its a virtual VST Instrument or a hardware device.

If there is no VST instrument loaded, the MIDI object uses the MIDI output for the external synthesizer or for the Microsoft™ Windows® supplied synthesizer. The MIDI output can be adjusted in the "Program settings" window in the "Audio/MIDI" tab (P key or via "File" menu > Settings > Program settings"

Select the desired VST instrument from the menu. You can test the same MIDI object with various VST synthesizers. You can set the sound of VST instruments in the VST instrument editor (view page 126). You can open the instrument editor with a right-click on the VSTi name or a left mouse click on the cogwheel symbol.

You can set up the MIDI output channel under **MIDI channel**. This is important for VST instruments which can receive MIDI notes on multiple channels and play several different sounds simultaneously (multi-timbral).

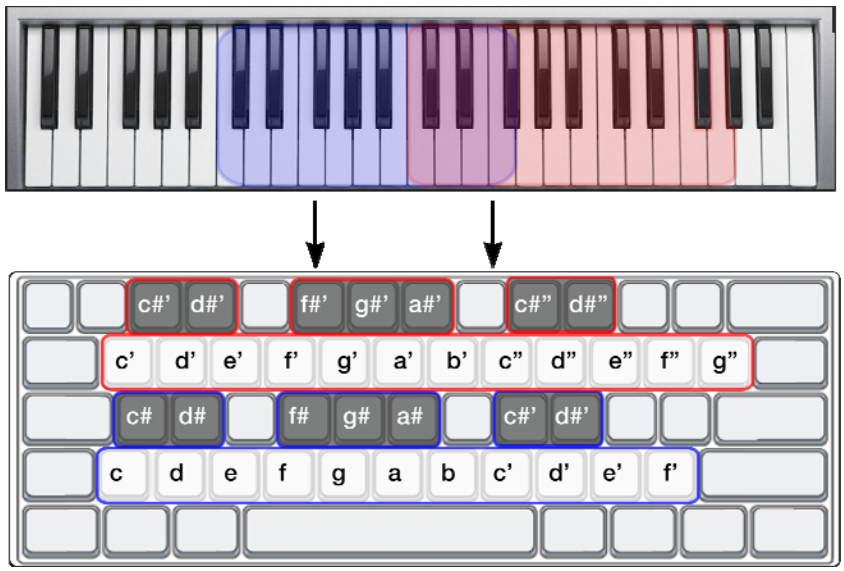
Play/ PlaySolo

Play solo only plays the MIDI object for which the MIDI editor is opened (corresponding with the filter settings of the options menu).

Play all plays the entire arrangement.

Playing instruments with the keyboard

Open the MIDI editor to be able to play software instruments directly via the computer keyboard. The assignment of the notes to the computer keyboard is displayed in the following graphic.



"Page up" and "Page down" move the octave up or down.

MIDI Record options

You may also begin MIDI recording directly in the MIDI Editor. To do so, simply click the red "REC" button. Compared to the simple "Record" featured directly in the "Arranger", this version features several additional options for you to select

Overdub: Normally, existing notes are deleted with each new recording. "Overdub" simply adds new MIDI notes to the existing MIDI recording. "Overdub" allows you to create a completely new MIDI song step-by-step (or take-for-take).

Cycle: This plays the MIDI object in a loop during recording. This enables you to let the object play through a few times before you get started recording your own melody.

Metronome: In order to play back the proper tempo, you can activate the MIDI metronome to provide the beats. This is only for orientation while you play and is not recorded.

Play arrangement during recording: If this option is active, then the arrangement will play during recording.

Notation display, movement, zoom

MIDI data can be edited in three main areas in the MIDI editor.

- Piano roll (view page 89)
- Velocity editor (view page 90)
- Lists editor (view page 92)

Here various tools are available, e.g. pencil or eraser.

Fundamentally, changes, e.g. moving or deleting notes, always refer to all selected MIDI events (red) with just a few exceptions. Changes to the selection in a range always apply to every other range as well. For example, you can select a group of notes in the piano roll and then change the velocity of these note groups which modifies all selected notes simultaneously.

Note display in the piano roll and the controller editor (with velocity curves)

All of the **unselected notes** are highlighted in blue. The intensity of the color indicates the velocity of the note; the darker/stronger the color, the higher the velocity.

Selected notes are highlighted in red. Again, higher velocity notes are brighter than lower velocity ones.

Note: You can also customize the velocity color range for selected notes. To do this, open the graphics file "vel_sel_map.bmp" from the bitmap directory and modify the color spectrum accordingly.

Current event: This is displayed in bright red and with a red outline. The properties of the currently selected event are displayed in the edit fields above the piano roll. An event is "current" when it is selected with the mouse.

Event display filters

To get a better overview of a MIDI object's events, you can filter specific events for the display.

A MIDI object can contain events in up to 16 channels and up to 16 MIDI tracks (original track from the imported standard MIDI file). For example, it's possible to control a multi-output VST instrument using a single object on several MIDI channels. Notes in the corresponding MIDI editor can be edited simultaneously or only in one selected channel within this object.

There are comfortable viewing options available for this:

- A channel filter ("Options" menu) enables all or only selected channels to be displayed. Notes in the remaining channels are grayed out and cannot be manipulated by the selection tool.

Example: The MIDI object includes notes in the MIDI channels 1, 2, and 5. You can now make all notes in channels 2 and 5 accessible for the selection and editing tools via the selection of the MIDI channels in the channel filter by selecting the two channels from the menu. All unselected, filtered notes in channel 1 are displayed in gray in the piano editor and the list editor.

Events in the filtered channels can be completely hidden using the "Hide filtered MIDI data" in the "Options" menu.

- A track filter (also "Options" menu) enables data to be filtered according to an imported MIDI file in the same way.
- The list editor (view page 92) provides additional display filters that only function within the list. The display filters are activated by the playback filter settings (mute settings), but the filters can be set independently of one another.

Muted events display

Events that lie ahead of the object start point or behind the object end point (the start and end points are displayed as blue lines in the editor) are also paler than the un-muted events within the object's boundaries. If display transparency is activated, the outside events are grayed out.

Events above or below the currently visible selection

There are two small red indicators above and below the vertical scroll bar on the right border of the MIDI editor window. These light up correspondingly if there are other notes outside of the currently displayed screen selection.

Piano Roll - Edit events

There are various editing options for notes within the Piano Roll, as well as mouse modes. In all modes (except Delete) the same functions also apply to notes when editing them, so that these modes only differ in behavior when you click on empty areas.

Editing tools

	Selection (Ctrl + 1)	Lasso: Press and hold down the mouse button to draw out a rectangular selection frame. Clicking on a free range highlights an existing selection.
	Draw (Ctrl + 2)	A note can be drawn with a left-click. The beginning and length are set according to the current quantization settings (above).
	Drum (draw) (Ctrl + 3)	Draws a series of notes. The note length and distances are calculated from the current quantization settings. When holding Alt: The pitch of the first note is also maintained for all notes drawn subsequently. Moving the mouse backwards (to the left) while depressing the mouse button removes drawn notes.

	Pattern (draw) (Ctrl + 4)	This mode allows you to draw entire Drum Patterns (or melody patterns). If you want to create a new pattern, you have to select it first in "Selection Mode" and press the keys Ctrl+N simultaneously (or go to menu "Edit" in the "MIDI/Drum Editor > Create pattern from selection"). If you have created a pattern, you can start drawing at any position. Draw the pattern at the position of the deepest note of the pattern. This makes an original pitch sound, but you can, of course, draw in a different pitch. If <Alt> is pressed when drawing, the pitch of the first note will be applied to all notes drawn that follow it. Moving the mouse back (to the left) while holding down the mouse button removes the notes which were just drawn.
	Velocity Mode (Ctrl + 5)	This mode allows you to mark events and change the velocity values of all selected events in relation to each other. Absolute values are entered when you hold the Shift key, i.e. all changed events receive the same velocity value.
	Delete (Ctrl + 6)	Clicking on the selected note deletes all selected notes. Dragging the mouse deletes all notes underneath the eraser. The Delete mode can be activated anytime by clicking with the right mouse button. For instance, you can use the pen to insert new notes when left-clicking and remove already inserted notes with a right-click, without having to change tools.
	Magnifying glass (Ctrl + 7)	Left mouse button: Zoom in Right Mouse Button: Zoom out Left mouse button + drag: Zooms in on the range.

Selecting MIDI events

(Piano roll, velocity editor, list editor,)

Select event	Left click event
Add/delete event from selection	Ctrl + left click event
Select current event and unselect all other events	Double click event
Change or set current event within multiple selection	Left click selected event
Select events from the same line or area	Click while pressing the "Shift" key
Selects all notes of the same pitch	Double click the desired key on the keyboard ruler to the left
Selects all notes	Ctrl + A (if a pitch is selected on the keyboard ruler, only notes with this pitch are selected)
Selects the next or previous note	Arrow keys

As you can see from this list, a simple click is all it takes to choose a specific event for editing – even from selections containing several events such as a pattern.

Edit notes with the mouse

If you move the mouse over a note, the mouse cursor will change and, depending on the part of the note, the following options will be available:


Change note start time (Grab note bar at the beginning, note end remains the same)


Change note length (Grab note length at end)


+ Shift Set fixed note length for multi-selection: Hold "Shift" and drag the current reference note longer/shorter – all notes will have the same length


+ Ctrl Scale note length for multi-selection: Hold "Ctrl" and drag current reference note longer – all notes will be lengthened by the same factor


Move note freely, pitch and start time change


If in "Move" mode "Alt" is also pressed, the note will only be moved horizontally, retain pitch (in free move mode, hold "Alt")


If "Shift" is pressed while in "Free draw" mode, only the pitch can be changed, the position will remain the same.


"Ranges for limited moving": If you activate this setting in the "Options" menu, clicking and dragging in the start portion of the note only results in a change to the position, while clicking on the end portion changes the pitch.

Moving and zooming

The vertical and horizontal view or zoom are adjusted with the scroll bars just like in the project window.

Mouse wheel: Scroll horizontally
Shift + mouse wheel: Zoom vertically
Shift + Ctrl + mouse wheel: Scroll vertically
Ctrl + mouse wheel: Zoom horizontally

Controller editor - Selecting and editing events

The controller editor is located below the piano roll and can be hidden.


It is opened either with a click on the button below the keyboard or via "Alt + V".

The velocity values of existing events are displayed as colored bars in the controller editor, whereby darker and higher bars symbolize larger values. The bars are located directly below the notes.

The values of all other controllers will appear in controller editor as ramps. Here, too the height of the ramps and their color intensity represent the last defined value of

each event. The length of the represented ramps reached to the next varying event. Selected event ramps are also represented in red.

Controller Editor Hints

- In polyphonic events, the bars are layered on top of each other, which can make it difficult to single out specific notes. To edit only notes with a certain pitch (such as all C1 notes in the controller editor), click the corresponding key in the keyboard ruler. The key and the background color of the selected pitch are highlighted, and only the notes with this pitch are displayed in the controller editor.
- Notes with different pitches (such as all C1, D1 and A1 notes) can be displayed simultaneously by pressing "Ctrl" while clicking them (or "Shift" for areas between notes). This is basically a velocity editor view option. Multiple notes can be selected with a double-click.
- Another aspect of working with the controller editor's layered controller bars is that the bar of the currently selected note (mouse selection/editing) is always on top. To change this, click on the note you want to edit in the piano roll, or click directly on the layered bars and switch between the notes with the arrow keys. You can then change the controller value by clicking on the top third of the red (current) part of the top bar.
- After drawing controller values with the pen tool, click on an unselected area and drag the mouse to change several velocity values in sequence. Move the mouse in a curve to create velocity curves. Existing (multiple) selections are ignored. This is a great method for creating crescendos or decrescendos.

Tools

The Controller Editor has its own tools for editing curves and values.

Controller selection: A click on the menu area of the button opens a selection menu in which the MIDI controller for editing can be selected.

Selection: This is a combi tool used for value changes as well as freehand and line drawing.

Click in the upper range of a controller bar to modify the controller value immediately by dragging. Clicking in the lower two thirds of the bar selects the corresponding note which is then highlighted in red in the editors.

Select multiple controller bars by clicking and dragging a range in the Controller Editor; individual values can be selected by single-clicking within the bar. Selected controller events will be highlighted red.

Combi tool editing options:

- **Click on the bar end + drag:** The controller value can now be adjusted by dragging vertically. If you hold the "Shift" key down while dragging, all of the selected

events will be set to the same value. If you also hold down "Ctrl", then the values of multiple selected controllers will be changed relative to one another.

- **Alt + Drag:** This activates freehand drawing; the mouse pointer becomes a pencil. By dragging in the corresponding controller area, you can draw in any number of controller curves.
- **Shift + Drag:** This activates line drawing and the mouse pointer becomes a cross hairs. By dragging horizontally, you can draw in linear value curves (ramps).

Freehand drawing: Draws new controller value curves or individual values by single-clicking without dragging.

By dragging backwards, you can delete your curve during drawing. Shift + Drag with the cross hairs to draw a line.

Draw lines: Use the line function to insert a transition between two different controller values.

Hint: If you edit velocity with the draw tools, no new notes are generated; only existing velocity values are modified.

Quantize controller events

MIDI controller events can be quantized and thinned out; select the "MIDI functions" menu and the "Quantize/Thin out controller" command to do this. Quantization occurs according to the quantization settings (view page 94).

List Editor

The MIDI editor contains an integrated list display of all events with additional view and edit options. This list editor is opened either by clicking on the button above the keyboard or using the shortcut "Alt + L".

When the list editor is open and ready to receive input, it will have a narrow red border. This makes it clear that certain functions, for example, select next/previous event (cursor keys) or the "Select all" (Ctrl + A) command, only refer to the list.

In the list editor, not only note events but also the MIDI controller and Sysex messages are displayed. These controllers and messages can be displayed or even filtered out during playback ("Mute").

"Note on" and "Note Off" events belong to each note, which are then selected as pairs and edited ("Note off" events can be displayed and hidden with a tick in the check box below the editor).

To edit specific events only, the list editor provides a view filter for each column. These are small check boxes below the columns of the list editor.

Select a representative event. For example, this could be a note with a certain pitch. Then click on a display filter for a specific column to only display events of this type with the selected pitch. All other events will now be faded out.

Display filters can be combined with one another. This way, when working with the "Select all" command (Ctrl + A), you can select and edit all control change events of type 10 (volume) on MIDI channel 6.

Quantize

Small irregularities when playing to record can be smoothened with the quantization function. In contrast to this, mechanical sounding sequences can be made a little more groovy by applying the **Swing** function.

Clicking on the **Quantize** button shifts all selected notes to a customizable quantization grid.

All notes are quantized without previous selection.

1/4, 1/8, 1/16, and 1/32 notes and corresponding triplets can be selected as starting points (grid) and lengths.

The **Quantize** button always performs standard quantization (the note's start point and length are preset). MIDI functions (view page 95) -> Advanced quantization provides other quantization modes (e.g. length only or Soft Q).

The quantization options enable the type and scope of the quantization to be set more precisely.

Quantization grid ("Snap")

If snap is activated, the notes "snap" to the quantization values when they are created or edited.

The quantization values are also considered. For instance, the notes snap to the corresponding positions within the quantization window.

The snap positions are displayed within the piano roll as a matrix. A swing quantization is displayed by the different intervals of the vertical partitions in the piano roll. The grid can be hidden with the "Show quantization grid" command in the options menu ("Alt + G").

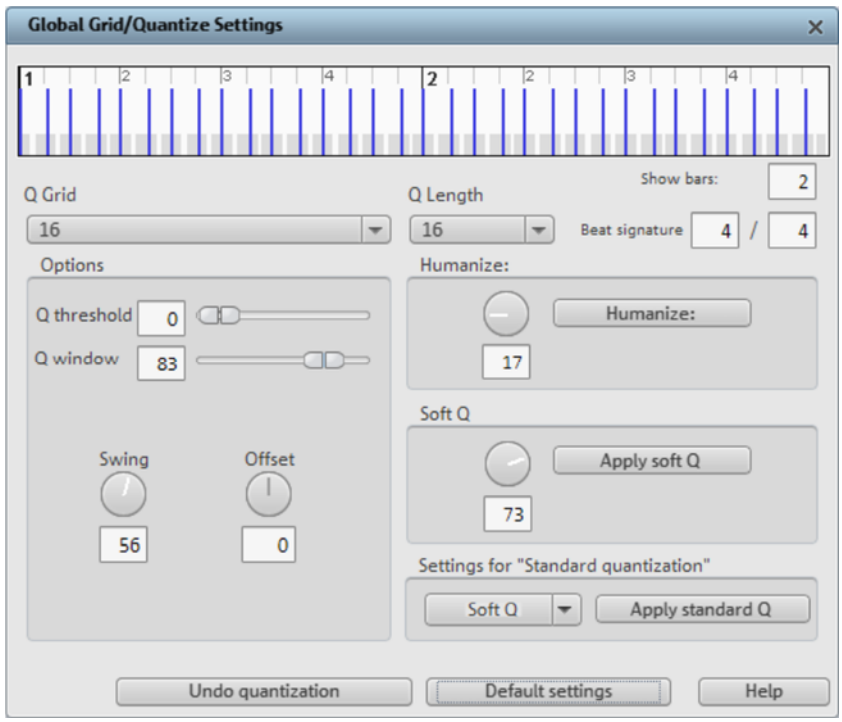
You can deactivate the snap function while creating or editing notes by holding down "Alt" as you draw them.

Move relatively on grid ("Options" menu): If this option is active, then notes keep their original intervals relative to the grid and not to the note start when they are moved; the distance moved snaps to the quantization value. Use this option if you want to move unquantized notes a certain distance without disturbing the timing.

Keyboard shortcut: Shift + G

Quantization settings

The quantization settings can be found in the menu "MIDI functions -> Extended quantization" in the MIDI editor. The dialog with the settings is not "modal", i. e. you can open it as required and test certain passages with different settings.



The selected quantization settings may be visualized in the top of the dialog. The blue lines indicate the target positions for the quantized notes, i.e. the snap points. The gray area around this show the quantization window i.e. the target positions that are affected by the quantization.

Q-grid/length: The quantization grid and length at which target points within the beat on which the note start points or lengths move (see above).

Q threshold/ Q window: This parameter may be used to slightly vary quantization by excluding notes from quantization that are very close to the next quantization value. "Q window" refers to the interval to the left and right of a grid point; events will be quantized within this range. Quantization does not take place outside of this window. This means that events with distance less than the "threshold" or more then the "window" from the grid point will not be quantized. The affected target range will be indicated in gray in the dialog graphic.

Swing: Starts swinging, groovy playback (for example, triplet). Specifies the division for uneven grid points.

- 50 ... “50-50” division: The odd eighths are exactly half way between the even eighth notes (“even” playing method)
- 67... triplet playing method, 3-2 division

Offset: The value range in this parameter stretches from -100 to +100. By changing the offset values, you move the whole quantization grid. Negative values move the quantization to the left, i.e. forward in time; positive values move to the right i.e. further in time. The maximum of 100 corresponds with an offset of half the grid width.

Presentation of blue grid points in the dialog and the grid in the MIDI editor directly reflects changes to these values.

Humanize: The "Humanize" parameter creates another variation option, i.e. notes are able to be assigned according to the randomization principle up to a specific interval to positions around the exact quantization value. The setting occurs in % of a 16th note. The value specified therefore determines the possible interval between the quantized notes and the exact quantization value.

Soft Q: This value sets the strength or "Soft Q" value of the quantization.

- "100" moves the event precisely to the quantize grid point,
- "50" shifts the event to the middle between the current position and the quantization grid point,
- "0" means no movement -> Quantization off

The command "Soft Q" command considers the current level value in the quantization options. The simple quantization command always occurs at 100%. In this manner, you can always select between approximation (soft) and a harder quantization without having to adjust the quantization options every time.

Standard quantization settings: Select from a list of quantization actions (see MIDI functions) that are listed by clicking the "Quantization" button.

Reset quantization: All notes are rest to there original positions.

Standard settings: Restores the default values.

MIDI functions

The "MIDI functions" menu contains advanced quantization (More information can be found in the section "Quantization settings" on page 94) and editing functions for MIDI notes.

The commands in the "MIDI functions" menu always affect the selected notes. If no notes have been selected, all functions are applied to all notes.

Legato: Notes may be sustained until the next note, i.e. legato.

Quantize notes (default): A default quantization is applied to all of the selected notes. If no notes are selected, then all notes will be quantized. The default action may be specified in the Quantization settings (view page 94) dialog. "Quantize notes (start and length)" is the default. This function can be accessed via the "Quantization" button in the MIDI editor.

Advanced quantization

This submenu contains additional quantization commands.

Start Q: Selected notes will be quantized corresponding to the set grid quantization value. Note lengths remain unaffected.

Start and length Q: Selected notes will be quantized corresponding to the set grid and length quantization values. Hard quantization always occurs at 100%.

Soft Q: This command considers the current level values in the quantization options. The simple quantization command always occurs at 100%. In this manner, you can always select between approximation (soft) and a harder quantization without having to adjust the quantization options every time.

Length Q: Selected notes will be quantized according to the set length quantization value. The start time remains unaffected.

Quantize notes to grid: The end of selected notes will be quantized according to the set grid quantization value. The start time remains unaffected, but the note lengths will change.

Reverse quantization: With this command, you can reverse all completed quantization steps. This functions even after the arrangement has been saved.

Quantization settings: Opens the selection dialog for the Quantization settings (view page 94).

Quantize controller events: Allows you to quantize controller events (view page 92) to reduce their number.

Mute notes (Mute): Mutes and unmutes notes or selected note groups with a click.

Remove overlaps (polyphonic): Notes may be shortened so that there no longer are any overlaps. Chords (simultaneously played notes) are recognized and not corrected, i. e. chords are not split up.

Remove overlaps (monophonic): Notes may be shortened so that there no longer are any overlaps. Forces monophonic voice leading.

Convert sustain pedal to note lengths: This function converts sustain pedal controller events (controller 64) into note lengths. All notes which were started after a "Pedal

pressed" event (CC64 > 64) will be extended to the "Release pedal" event (CC64 < 64), and the pedal events removed.

MIDI editor techniques

You can cut-and-paste MIDI notes within the editor and between MIDI objects. The notes are always inserted at the play cursor's position.

Duplicate: The selected notes are copied and inserted after the next grid point if the quantization grid is active (menu "Options -> Quantization grid on"), or immediately after the selection if the grid is inactive.

Create pattern from selection ("Ctrl + P"): The length of the pattern is quantized if the grid is active. The pattern can be "painted" into the MIDI object using the mouse mode "Pattern painting".

To directly select notes with a specific pitch, double click on an empty area in the piano roll editor or in the keyboard ruler.

MIDI Editor shortcuts

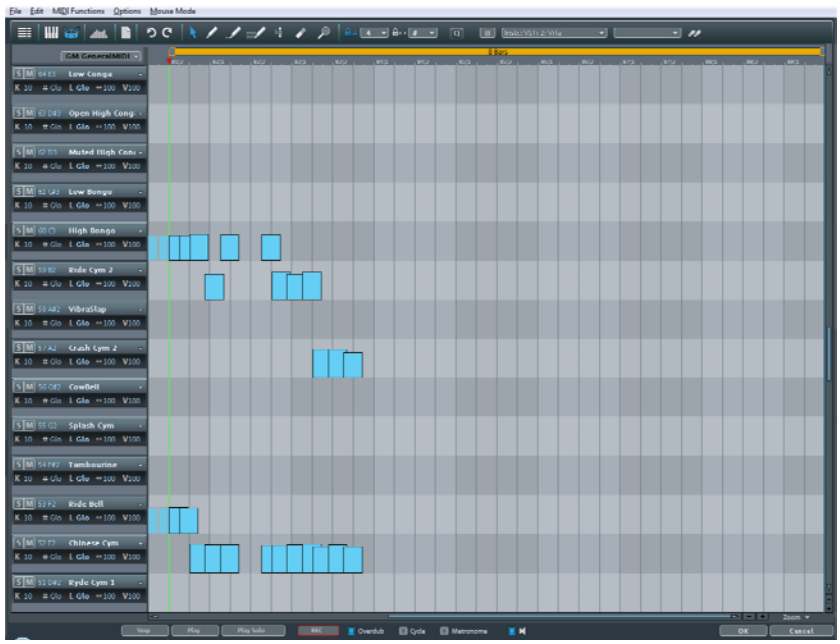
Playback/Stop	Space
Stop at position	'0' (Number block)
Delete all selected events	Ctrl + Del
Delete selected MIDI notes	Del
Select all non display-filtered notes (piano roll) or events (list)	Ctrl + A
Mute notes	Ctrl + M
Create pattern from selection	Ctrl+W
MIDI recordings	Ctrl+R
Undo (Undo)	Ctrl + Z
Restore (Redo)	Ctrl + Y
Cut	Ctrl+X
Copy	Ctrl+C
Insert	Ctrl+V
duplicating	Ctrl+D
Imported standard MIDI file	Ctrl+I
Exported standard MIDI file	Ctrl + E
Fade in/Out Event Editor	Ctrl+L
Fade Velocity In/Out	Ctrl + T
Show Quantization grid	Ctrl+K
Mode selection	Ctrl + 1
Drawing mode	Ctrl + 2
Drum (Draw Mode)	Ctrl + 3
Pattern (Drawing) Mode	Ctrl + 4
Change velocity	Ctrl + 5
Delete Mode	Ctrl + 6

Zoom Tool	Ctrl + 7
Quantize	Ctrl + Q
Quantization options	Alt + Q
Select previous Note/Event	Up/Left arrow
Select next Note/Event	Tight/Down arrow
Play selected notes	Ctrl+N
End all notes	Ctrl+P
Grid on/off	Ctrl+G
Auto-scrolling during playback	Ctrl+F
Vertical zoom in	Ctrl + Up arrow
Vertical zoom out	Ctrl + Down arrow
Horizontal zoom in	Ctrl + Left arrow
Horizontal zoom out	Ctrl + Right arrow
Horizontal scrolling	Mouse wheel
Vertical scrolling	Shift + Mouse wheel
Zooming	Ctrl + Mouse wheel

Drum Editor

After opening the MIDI Editor (double-click on the MIDI object), switch to the corresponding field

in the Drum Editor by clicking. Instead of the piano keys to the left, you now see a list of drum instruments.



Note: If a drum map is active in the Arranger track (recognizable by the word "map" in t he MIDI area of the Track Editor), the Drum Editor is loaded automatically when the MIDI Editor is loaded.

Drum Editor track box: In the individual track boxes of the Drum Editor you can individually adjust MIDI channel, grid, quantization length, display width in cell mode and velocity scaling for each drum instrument in %.

Velocity scaling: The velocity value of each note is multiplied by the V value/100 and adjusted to the MIDI velocity between 1 and 127. Scaling is audible, however, it is not visualized further. Scaling is audible, but is not visualized further.

Cell Editing Mode: (view page 100) When the Drum Editor opens, Cell Mode activates by default. In addition, you can individually set the display width for each track box in the Drum Editor.

Switch to Drum Editor Mode and back.

After opening the MIDI editor (double click the MIDI object), switch to "Drum editor" mode by pressing the drum editor button.

Instead of the piano keys to the left, you now see a list of drum instruments.

When you switch from "Drum editor" mode back to the normal piano roll, you will be asked if you wish to apply mapping or not. If you add mapping, all mapping settings (which makes a note sound different to how it is displayed) will be applied to the MIDI object. If notes, for example, are routed through channel 10 (GM drum channel) via mapping, the notes will be replaced by corresponding "real" note events on channel 10.

Cell mode

"Cell" mode serves to improve the overview as it limits the display to only the most important information, note starting points, and velocity.

Each time position of a bar is displayed as a row of cells in on/off states. The note length is not displayed, but rather a unified display width is used. This way, it all looks similar to the step sequencer of a drum computer (see Robota (view page 121)).

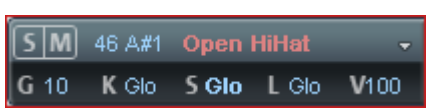
The set quantization grid can be read from the width of cells. "Swing" and "Offset" settings of the quantization options are also made clearer thanks to cells of various widths and by repositioning.

The height of cells displays the velocity of the note. When drawing new drum notes the velocity can be specified via the vertical drawing position within the cells. In connection with the "Drum draw" mode, increasingly loud drum rolls can be drawn in easily.

By clicking on the upper edge of a cell and dragging it vertically with the mouse, the velocity can be adjusted directly without having to use the controller editor. In "Velocity" mouse mode ("Ctrl + 5") it's even easier; all you need to do is click anywhere on the cell.

Drum Editor trackbox

In the drum editor, each individual note has its own trackbox, and individual settings can be specified for each instrument. When zoomed out, each trackbox can be increased in size with a simple mouse click.



S/M: Each individual instrument can be played solo (**S**) or muted (**M**).

Note number: The output note from the instrument can be set here. This can be different to the note currently displayed in the MIDI object so that individual drum instruments can be substituted. To put the display of notes back into the usual order (deep notes at the bottom, highs at the top), click on "Map" at the top and use the "Sort drum map" command.

Instrument name: Double clicking on this field lets you rename your drum instrument.

Quantization options/colors: Use this menu to assign any one of the eight different colors to the cells of a drum instrument. The dialog for the instrument's quantization options is also opened here.

The dialog is the same as for global quantization options (view page 94), but the settings only apply to the individual quantization options if an individual grid value is set for the note as well.

K Output channel
\# Quantization grid, "Glo" refers to the global value (More information can be found in the section "Quantization settings" on page 94)
L Note length, # corresponds to the grid value, "Glo" to the global value
 Length of the notation, # corresponds to the grid value (i. e. the entire cell width), "Glo" refers to the global value of the note length
V Velocity scaling: The velocity value of each note is multiplied by the value set here in %.

Scaling is audible, but is not visualized further. The purpose of this setting is the customization of the volume ratio between the individual drum instruments. Software instruments usually provide their own mixers.

Drum Maps

Drum maps specify individual instruments, e.g. bass, drum, hi hat, snare, etc. An individual output note, MIDI channel, and velocity scaling can be set for each of these instruments.

The drum map can be set in the drum editor by clicking the "Map" field.

To split the drum names a "General MIDI" map is used by default. It may be the case that your synthesizer (regardless if real or virtual) uses a different mapping setup.

This means that when you play the drum event, the sound you wish to hear may not be heard (for example, instead of a bass drum, you get a high tom). In this case you will have to re-sort your mapping setup. The settings for individual instruments can be specified in the trackbox. For more extensive changes we recommend using the drum map editor. There you can save your drum map as a file.

A project may contain various different drum maps. All drum maps saved in the project can be selected via the menu. If you require a drum map from a *.map file, you

will have to load it into the drum map editor first so that if can be shown in the menu. You can edit the individual drum maps in the drum map editor.

Drum Map Editor

The drum map editor can be used to create and edit drum maps.

The "Drum maps" list on the left-hand side displays all drum maps which are available to the project. The drum map **GM General MIDI** is always available to start off with.

New: Creates a new, empty drum map.

Copy: Creates a copy of the existing map. This way you can quickly create variations of a drum map with various note allocations which can then be toggled via the drum editor.

Load/Save: Use this to save a drum map (*.map file). This way you can use a drum map you created for a synthesizer in other projects as well. All loaded maps will be displayed in the "Map" menu of the drum editor.

Delete: Removes the selected drum map from the project.

Use the **name** field to rename the selected drum map. The settings (mapping) of the individual notes for each drum map will be displayed below this in tabular format.

Pitch: This is the incoming MIDI note.

Instrument: Displays the name of the drum instrument, e.g. "Bassdrum 1".

Grid: If desired, you can set up a grid for the starting point of the drum events.

Length: In this field you can set the grid for the note length.

Output note: This is the note value to which the drum instrument (the incoming MIDI note in the "Pitch" field) should be routed or mapped.

Channel: You can set up an individual channel for each instrument here.

Quantization options: This opens the dialog for the each instrument's quantization options (view page 94).

Instrument, grid, length... apply to all: This applies the corresponding setting of the selected instrument to all other instruments.

Software Instruments

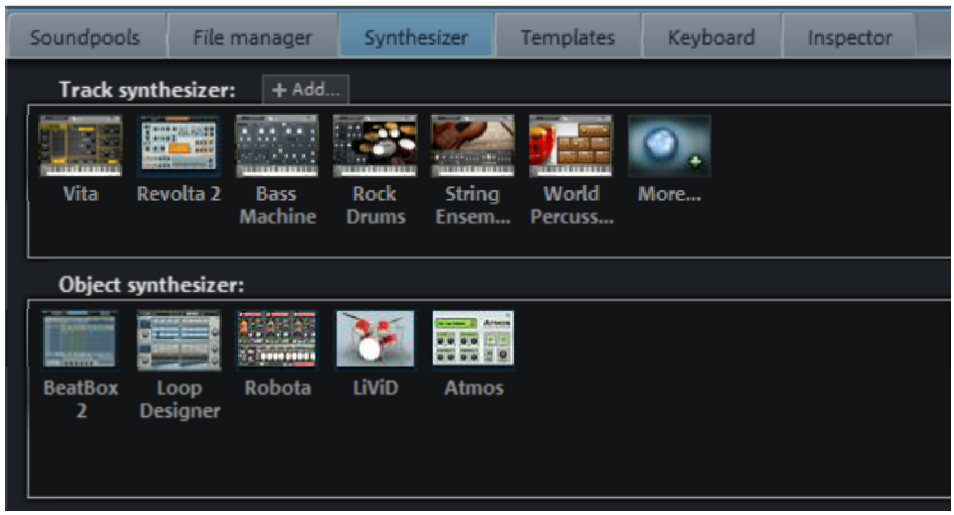
MAGIX Music Maker 2013 has many software synthesizers and synthesizer plug-ins (VST instruments) for creating your own sound material. The synthesizers are either VST plug-ins that are controlled by MIDI objects or Synth objects that can be arranged with other objects in the tracks.

Here's an overview:

Synthesizers	Type	Use scenario
Atmos	Synth object	Background noise
BeatBox 2 or BeatBox 2 plus (Premium Version)	Synth object	Nature and electronic beats
Loop Designer (view page 111)	Synth object	Breakbeats, bass lines
Livid	Synth object	acoustic drums (complete song parts)
Robota	Synth object	electronic drums
Revolta 2 (only Premium-Version)	VST Plug-in	Synthesizer leads, pads, sequence figures
Vita	VST Plug-in	Nature instruments, guitar, bass, acoustic drums, piano, strings, horns
Vita Solo instruments	VST Plug-in	
VST plug-ins	VST Plug-in	depends on plug-ins installed

Opening the synthesizers

The software synthesizers can be loaded just like any other objects in MAGIX Music Maker 2013 through the Media Pool. To do this open the **Instruments** settings for the Media Pool.



You will find icons for all available software synthesizers in the Media Pool. The upper section contains all the VST instruments; the lower section displays the object synthesizers.

Synth objects

MAGIX Music Maker 2013 contains many internal synthesizers for creating your own drum patterns, break beats, bass lines, or ambient noise. The synthesizers are represented either by internal synth objects that can be arranged together with other objects on the tracks.

Every software synthesizer can be loaded into the arrangement via drag & drop. A synth object appears in the appropriate track and the synthesizer interface opens, and synth objects can be programmed via this interface. You should also read the sections about the individual synthesizers.

You can start or stop the playback with the space bar. If the synth object has a play button of its own (e.g. BeatBox), the plug-in can start it solo without playing the other arrangement tracks.

If the synth objects melodies or rhythms are programmed, you can close the the control console and arrange the synth object in the track. Synth objects are handled like normal objects and can be edited with all available effects (view page 132), drawn longer or made shorter using handles, or have their volume adjusted.

The interface of any synth object can be opened for further editing by double clicking it. In addition, any number of synth-objects from the same software synthesizer be dragged onto the track and programmed separately. You can also split up synth objects.

BeatBox 2

BeatBox 2 is a 16-voice drum computer with hybrid sound synthesis and a step sequencer. The proven handling concepts of the "old" BeatBox like matrix programming with auto copy have been expanded with comfortable editing of velocities and significantly improved sound synthesis, including a multi-effects section (one effect per drum instrument).

A drum sound is created in BeatBox 2 using a sample (analogously to the old BeatBox) which is combined with a synthetic sound that can be created using up to three different synthesis models (hybrid sound synthesis). BeatBox 2 plus enables detailed editing and automation of all sound parameters.

There are two styles of interface in BeatBox 2. While closed, you can listen to included sounds or those you've made in BeatBox 2 without using too much window space.

Only the most important control elements are displayed when the program window is minimized.

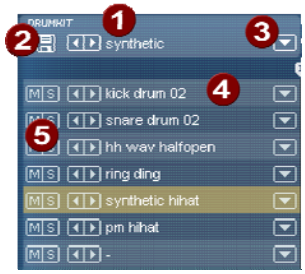
1. **Volume controller:** Controls the volume.
2. **Peakmeter and preset name:** The peakmeter lets you visually control BeatBox 2. Click on the triangle beside the preset name to open the preset list.
2. **Next/Previous preset**
4. **Save preset:** The preset includes the drum kit in use, the pattern, and any possible automations.
5. **Play/Stop:** The playback controller in BeatBox 2 starts BeatBox without playing the arrangement, too.
6. **Edit button:** The edit button opens BeatBox 2 for you to program your own beats and sounds.

Maximized BeatBox 2 window

1. **Drum kit:** This section loads drum kits (collections of different drum instruments) and the individual drum instruments.
2. **Selected drum instrument:** The settings in the synthesis section (6) and velocity/automation (5) always affect the selected drum instrument.
2. **Pattern editor:** Programs the beat sequence. In the top part, different patterns (sequences) can be loaded and saved as well as different settings for the view and function of the pattern editor. The matrix is where the beat is programmed: One line corresponds to a drum instrument, and a column matches a specific time position within 1-4 beats. If a cell is clicked on, then the respective drum instrument will be triggered at this position.
4. **Velocity:** In the **velocity** section, the velocity levels for the selected instrument's beats are displayed as a bar for detailed editing.
5. **Synthesis:** Selected sound parameters and the level of the effect for the selected drum instrument can be edited here.

In the following, the sections of BeatBox 2 will be discussed individually:

Drum kit



This section loads drum kits (collections of different drum instruments) and the individual drum instruments. You can also try out an already programmed pattern with different kits or exchange individual drum instruments.

1. **Select drum kit:** Use the <> buttons to switch through the different drum kits. A drum kit is a collection of percussion instruments with matching sounds, e.g. rock kit or electronic drums à la TR 808. By changing the drum kit, you can add an entirely different sound to the rhythm you have already created.
2. **Save drum kit:** Use this button to save the current collection of drum instruments as a kit.
2. **Drum kit list:** Click on the arrow right of the name to open a complete list of available drum kits.
4. **Select drum kit:** The arrow buttons function analogously to those of the drum kit. The sequence of drum instruments in the kit can be resorted via drag & drop.
5. **Mute/Solo:** The "solo" button switches a drum instrument solo, i.e. all other instruments which are not "solo" will be muted. The "mute" button mutes a drum instrument.

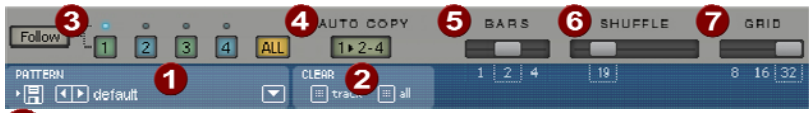
New drum or effect sounds can by added to the current drum kit by **drag & drop** from Windows Explorer. Drag a wave file to a drum instrument to create a new drum sound based on this sample. BeatBox 2 copies the sample into the sample folder to make sure that the instrument or kit created can be used again later. You can drag a complete folder with wave files to the drum kit to create a kit based on those samples.

Context menu

Right clicking a drum instrument always opens a context menu:

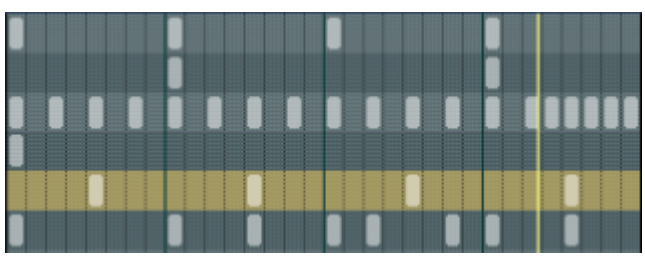
- **Copy/Paste:** Copy an instrument from a track and paste it to another one.
- **Empty instrument:** An empty instrument is added. No sound is played, it has no name, and is used to clean up an unused track.
- **Default instrument:** The standard instrument is added. It has the standard parameter for all synthesis shapes and serves as the starting point for your own sounds.
- **Reset automation:** BeatBox 2's own presets contain automations. These are dynamic sound parameters like filter curves or pitch changes. This command allows you to completely remove these for the selected instruments.

Pattern editor buttons



1. **Pattern:** Use the <> buttons to switch through the different patterns. The arrow to the right opens a list of all available patterns, and the save button stores the current pattern.
2. **Clear track/all:** All events for the selected instrument (**track**) or all events for the pattern (**all**) are removed by clicking this button.
2. **Bar selection:** The bar you wish to edit can be selected via the corresponding number button. Use the "**Follow**" button to select follow mode, i.e. the step display follows the steps of the currently played beat. **All** shows all bars of the pattern.
4. "**1>2-4**" **Auto copy:** If more than one bar is set as the pattern length, "Auto copy" mode makes sure that the drum notes set in the first bar are automatically placed into the next bars. This also makes it easy to create a continuous beat, even with a loop length of four bars. Notes set in the bars further back are not affected by the "Auto draw" function, which, for example, makes faint variations detectable only in the fourth bar.
5. **Bars:** The maximum length of a drum pattern is four beats. The length can be selected via the small scroll bar.
6. **Shuffle:** This controller changes BeatBox 2's timing. If the fader is turned to the right, the eighth of a rhythm is played more and more like a triplet. If that sounds a bit too abstract – simply try it out, ideally with a pure 1/16 hi hat figure; you'll soon see what the shuffle fader is capable of.
7. **Grid:** Here you can set the time resolution of the BeatBox. You can choose from 1/8 notes (only for very simple rhythms), 1/16 (default), 1/32 (for more refined constructions).

Pattern editor - matrix



This is the heart of BeatBox. A click on any position in the drum matrix creates or deletes drum notes (events). Clicking and dragging draws in a series of notes. Together with the velocity editing options (view page 109) (velocity), you can easily create drum rolls.

If "Shift" is held when you click on notes in the range, a rectangle can be drawn out which selects the notes contained within this rectangle (lasso selection). Selected notes can be copied by dragging them to a new position. If "Ctrl" is also held down,

then existing notes will remain at the target position. Delete all selected notes by right clicking.

A simple mouse click cancels the selection. The selection is automatically canceled after copying. If you want to keep your selection, hold down "Ctrl" while copying.

Keyboard shortcuts

Many functions in BeatBox 2 can be controlled with the keyboard, for example a beat can be triggered with the "Enter" key live in a running pattern. Here's a complete list of the keyboard commands:

General	Key command
Open/Close editor	e
Pattern editor - options	
"1>2-4" Auto copy	a
Follow	f
Display bar 1... 4	1... 4
Show all bars	0
Grid finer/rougher	+/-
Selected drum instrument	
Previous/Next	Cursor up/down
Preview	p
Live input	Enter
Mute on/off	m
Solo on/off	sec

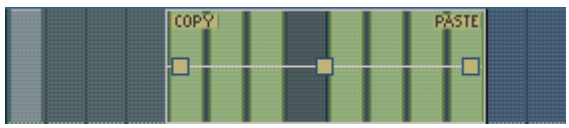
Velocity

The velocity section serves for editing the velocity of the individual drum notes for the selected drum instrument.

1. **Reset:** Sets all velocity levels to 100%
2. **Random:** The random parameter adds random variations to the set velocities. This helps make your beats sound more natural.
2. **Velocity level:** Every set note for the selected instrument is displayed as a column and can be edited. Multiple columns can be edited at once - see Editing velocity values (view page 109).

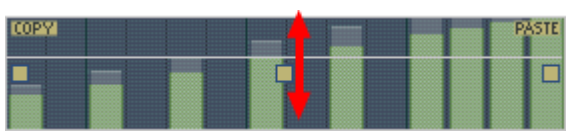
Editing velocity values

Hold down "Shift" and select any number of columns with the mouse.

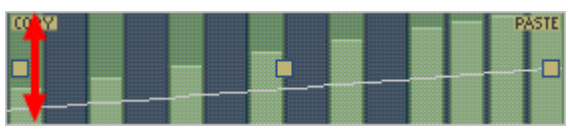


The "Copy" button copies the selection to the clipboard. If you select this or that track in another editor, then you can paste the notes there now from the clipboard. If the target selection is larger than the contents of the clipboard, then it will be inserted again. This lets you quickly add a short section throughout the complete length of the pattern.

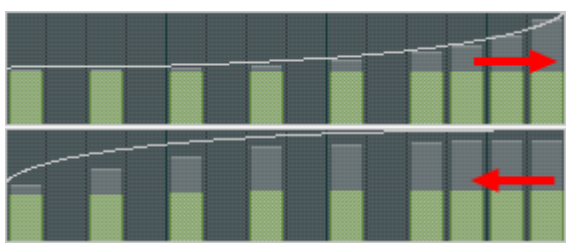
The three handles allow the velocity values to be edited together.



The middle handle increases or lowers the values together.



An object can be faded in or out with the handles to the left and right upper corners of the object.



If you move the handles horizontally you can change the curve shape of the transition.

A single click in the velocity section cancels the selection again.

Note: A selection of velocity values matches the selection of corresponding notes in the matrix editor.

Synthesizer

In the lower section of BeatBox, you can set the sound for the selected drum instrument.

The synthesis in BeatBox 2 consists of a combination of a simple drum sampler and a synthesizer. There are three different synthesis models possible for the synthesizer: "Phase Distortion Synth" (FM synthesis), "Filtered Noise", and "Physical Modeling". The mixed signal of both components is then processed by a multi-mode filter. An envelope curve ("envelope generator") time-dependently controls modulations of in all components.

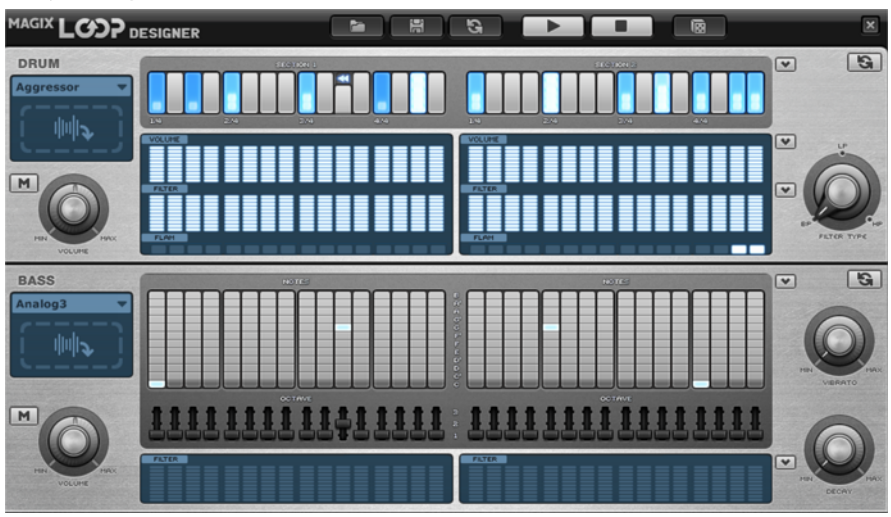
1. **Preview drum istrument**
2. **Mix:** Mix relationship between drum sampler and synthesizer.
2. **Parameter controller:** All six sound parameters for a drum sound can be directly set and automated via the parameter controllers. The parameters in question depend on the drum sound currently loaded.
4. **Effects level:** Each of BeatBox 2's drum instruments includes an effects unit which is fed in after the actual sound synthesis and editing. The type of effect depends on the selected drum sound.

Loop Designer

The loop designer unites both stellar design elements of drum'n'bass style in a "device": turned-up beats and rumbling bass lines. With the Loop Designer you can create authentic drum'n'bass sounds without any specialized knowledge.

Tip: Drum'n'bass tracks usually have between 160 and 180 BPMs. The Drum&Bass Machine can also be used for other music styles. e.g. for BigBeat (120 BPM) or TripHop (80-90 BPM).

Loop Designer: overview



The top half of the synthesizer controls the rhythm section, the lower half - the bass section. You can mute both sections using the M symbol on the left border. This way you can, for example, turn off the bass section in order to take only the drum section into the arrangement. Only the drum section will then be added to the mixdown file when mixing down the arrangement. Next to this are the volume controls, which control the volume of both sections.

You can preview and stop your drum'n'bass creations using the "play" and "stop" buttons.

Additional buttons:

Loads a saved pattern with all settings.

Saves a pattern.

Undo for all settings made in all sections.

Makes random settings changes in both sections. You can change settings later as you wish.

Drum section (top half).

Here complex, authentic-sounding Jungle-Breakbeats can be put together easily. In professional recording studios Jungle-breakbeats are made by chopping up arbitrary drum loops and putting them back together in a different order. These laborious work steps are significantly simplified by Loop Designer.

The new sequence is determined in the top row, the so-called "step" row. The grey cells represent the individual sections ("counts") into which the loop is separated.

Pick a different note or playback by left-clicking a grey cell. Various notes will be represented with a light bar which "grows" toward the top with each mouse click. This way, each time you click on the grey cell, the bar expands by one step.

1 of 4: Play Drum Loop starting from the first note.

2 of 4: Play Drum Loop starting from the second note.

3 of 4: Play Drum Loop starting from the third note.

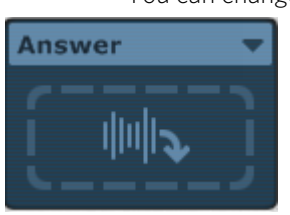
Full bar: Play Drum Loop starting from the fourth note.

Reverse icon: Play backwards from this position

Stop icon: Stop playback

The right mouse key deletes settings of a step bar and the Drum Loop is played in its original order.

Pressing the double-arrow button generates a random step sequence. You can change this rhythm as you like.



Clicking into the blue field in the left part of the drum section opens a pop-up menu where you can pick the sound of the Drum Loop. When you select another drum loop it will load and be played in the way you programmed it.

Tip: You can also send a loop from Soundpool or a wave file to Loop Designer. To do so, select the desired loop or file and drag it into the field while holding down the mouse key ("drag & drop").

In the field under the "steps" row the sound of the loops is defined. The intensity of the settings is determined with a control similar to a peakmeter. The higher the bar, the stronger the influence on the loop is. With the help of the left mouse key, values can be smoothly adjusted. "Volume" controls the loudness (full = loud, empty = quiet), "filter" the filter strength (full = clear, empty = muffled). In the "Flam" row you have the option to make the note repeat itself twice in quick succession. This is how to program rolls and fill ins.

Using the top arrow buttons at the right edge you can load pre-defined pattern settings. The originally set loop will not be changed. The two lower arrow buttons offer presets in the form of standard curves for "volume" and "filter".

The "Filter type" controller selects the type of the filter sound: "BP" stands for "bandpass", "LP" for "low pass" and "HP" for "high pass".

Bass section (lower pane)

The bass section produces suitable bass lines.

- The first row of the "Notes" row, determines the order of the sounds i.e. the series of notes. Select a cell with the left mouse click, where the lowermost represents the lowest note and the topmost - the highest. A right mouse click deletes a cell.
- In the "Octave" row you can specify the octave of the bass. The slide control positions represent the various octave values. If the controller is down, a deep sound is produced, if it is in the top position, you will get a high tone. If the controller is in the middle, the pitch will be balanced.

Just like in the drum section, here you will also find arrow buttons on the right side for opening pre-defined patterns and and a double-arrow button for setting arrows. The filter can be set analogously to the drum section. The arrow button next to the filter area select presets in the form of standard curves.

You can determine the bass sound in the blue selection field at the left side. You can drag loops and WAV sounds into the field using drag & drop just like in the drum section.

Additionally, there are two slide controllers for sound changes to the right:

The "Vibrato" slider makes the bass tone's pitch change. When the control is to the far right, the sound vibrates more, if it's to the far left pitch isn't changed at all.

The slider "Decay" determines how long should it take to for the sound to subside. Set to the far right the sound is very fast (about 1 / 4 of a second), on the far left the sound lasts longer.

LiViD - Little Virtual Drummer

MAGIX LiViD helps you to turn your ideas into songs. Enter a few basic details and LiViD will play a full drum track, complete with intro, verses, choruses, fills, bridges etc.; the entire song structure is laid out for your convenience. Brilliant stereo drum samples recorded by professional studio musicians and a freely adjustable "Humanize" function will create an authentic drum feel with perfect sound quality.

LiViD features four styles (pop, rock, funk, latin), each of which is subdivided into four further substyles, as well as six song sections for each substyle (intro, verse, bridge, chorus, outro, fill-in).

Scramble: A random sequence of four one-bar patterns is generated internally for each style/substyle/song section. "Scramble" generates a new pattern order.

Shuffle: Shifts the second and fourth 16th note of a beat back by a freely definable amount (100% = triplet rhythm).

Humanize: Randomly shifts all events backwards or forwards, or leaves them unaffected. Note: these shifts are very subtle and not always immediately perceptible!

Snare: Sets the snare stick style to “normal”, “side stick” (stick hits the rim while resting on the skin) or “rim shot” (sticks hits the rim and skin simultaneously). Exception: the snare’s quietest velocity level (the "ghost notes") is always “normal”.

Hi-hat: Sets the hi-hat sound to “soft” (fully closed) or to “hard” (half-open). Exception: completely opened hi-hat (pop, type1, verse).

Ride: Sets the ride cymbal sound to “ride” (cymbal is hit on the rim) or “ride bell” (cymbal is hit on the bell at the center).

Robota

The Robota is a four-part drum computer with virtual analog and sample-based sound production. Virtual analog sound production means that the sounds are synthesized in real-time, i.e. produced with a synthesizer to recreate the typical analog sounds of classical drum computers, such as the Roland Tr-808 and Tr-909, or more recent devices such as the Korg Electribe or the Jomox x-cousin. Sample sound production uses drum sound recordings (or even other recordings) as the basis for sound production.

After selecting the elementary sound production technique, the sounds of each of the 4 parts (or instruments) can be edited using modulators.

The step sequencer programmed with incident lighting helps Robota to play. 4 beats in sixteenths (or 2 beats in thirty-seconds) are processed as a loop. At each beat position, the playing positions can be set by clicking a button. In "Event" mode, the instruments are distributed within the beat pattern. In "Snapshot" mode you can adjust additional instrument sound settings.

Sound synthesis

The four instruments of the Robota are built identically. Each instrument can create all kinds of drum sounds – from hissing hi-hats to phat bass drums.

During elementary sound production, you can choose between an oscillator with selectable wave shapes (sine, triangle or saw tooth) or a sample. In addition, you can add a noise generator can be added. The oscillator has a pitch envelope (pitch env.) and a volume envelope (attack/decay). It can also be frequency and ring-modulated. The depth of the modulation can be controlled via an envelope parameter (Fm/rng dcy). There’s also a “Lo-fi” section consisting of distortion (Rectify), bit rate reduction (Crush) and sampling rate reduction (down sample).

Temporal control via an envelope (lofi dcy) will get the best out of the lo-fi effects. A multi-mode filter (low-pass/band-pass filter/high-pass) with 12/24 dB steep-side. A comb filter can be inserted. The filter frequency can be likewise modulated via an

envelope. For extra pressure, an adjustable compressor (compressor, comp resp) is included, as well as tube amplifier simulation (tube).

Parameter (1): To simplify matters, not all parameters can be changed on a sound - only those that are meaningful for the selected drum sound may be changed (snare, kick, high etc.). There are four selected variable parameters coordinated exactly with the selected preset sound.
Oscillator waveform (2): The fundamental waveform of the Oscillators is selected here. You can choose from sinus/triangle/sawtooth/sample. If you have selected "Smpl" you can use the rotary knob to select a sample, i.e. a previously recorded drum sound. These samples are saved in the folder /synth/robota/samples/. If select custom samples, they will appear in the selection list.
(3): For each part you can regulate: Filter Cutoff, Resonance, Tube, Volume and Panorama (view page 118).

With **select** choose the instrument for editing in the step sequencer.

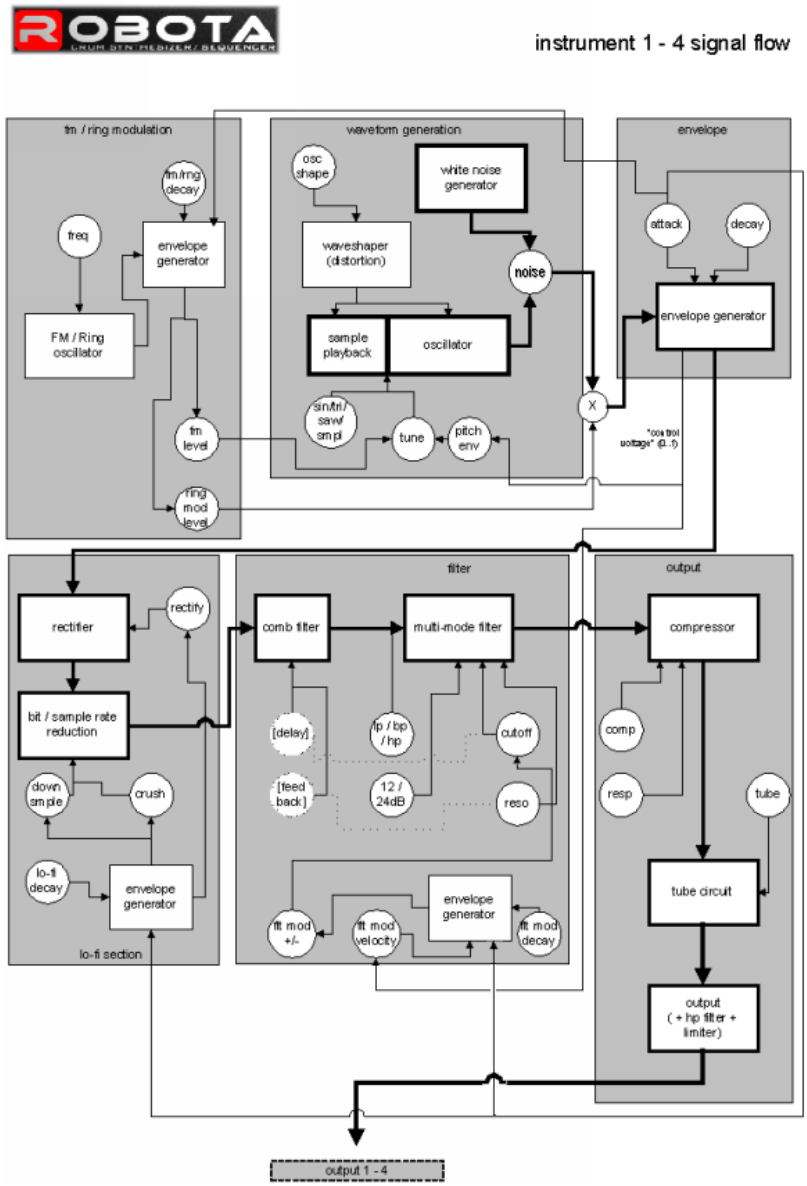
"**M**" mutes the instrument, "**S**" makes it solo

The **loudspeaker** button allows you to hear a preview.

Master Section

Volume regulates the total volume of the Robota. **Distortion** adds an adjustable tube distortion to make the sound "dirtier" and more powerful. The peak meter helps control the output level – when it enters the red area, reduce the total volume.

Schematic illustration of the Robota synthesis



Here is a detailed circuit diagram of a Robota voice with a description of all control parameters.

Pitch envelope (pitch env)

Controls the pitch envelope level.

Tune

Tunes the instrument.

Oscillator shape (osc shape)
The shaper adds additional frequency shares to the basic sound of the oscillator by artificially reshaping the wave shape. A sine wave (shape = 0) can be reshaped up to a square curve (shape = max).

Oscillator waveform
The fundamental waveform of the oscillators is selected here. You can choose from sine/triangle/sawtooth/sample. If "Sample" is selected, you can use the controller to select a sample, i.e. a previously recorded drum sound. These samples are saved in the folder /Synth/robota/samples/. If you select custom samples, they will appear in the selection list. If you are playing your own samples, they will appear in the selection list.

Noise
Adjust the ratio between the oscillator sound and the noise generator.

Attack
Adjusts the attack time. The greater the set value, the softer the attack of the sound. The attack rate is also applied to the lo-fi and filter envelope curves.

Decay
Adjusts the decay curve. The greater the value, the slower the instrument will decay.

FM/Ring modulation frequency (Fm/rng frq)
The fundamental frequency of the frequency or ring modulation.

FM level (fm lvl)
At a low frequency FM first adds vibration to the sound, at high frequencies and low levels it creates bell-like sounds, as the level increases metal sounds, and finally noise.

Ring modulation level (rng lvl)
Ring modulation creates typical auxiliary frequencies.

FM/Ring modulation decay (Fm/rng dcy)
Time constant of FM/ring modulation by-product. Only the beginning of the drum sound is affected by the modulation.

Rectify
Distorts the audio signal.

Crush
Bit rate reduction. Digital artifacts become audible with higher settings.

Down sample (dwnsmple)
Sample rate reduction. Ideal for creating the "old school sound" of older digital drum machines. As it is increased, the result becomes darker.

Lo-fi decay (lofi dcy)

Time constant of the by-product of the three lo-fi effects which makes the sound "dirty". Only the beginning of the drum sound of the lo-fi effects is affected if the decay is low. For instance, this makes the kick of a kick drum sound more interesting.

Filter modes (flt mode)
Filter mode: High cut – sound portions above the cut-off frequency are filtered out. Band pass (BP) – Sound portions above and below the cut-off frequency are filtered out. Low cut - All sound portions below the cut-off frequency are filtered out. This mode is set as a preset and can not be changed.

Filter frequency (flt freq)
The cut-off frequency of the filter.

Filter resonance (flt reso)
Filter resonance which increases the sound portions at the cut-off frequency of the filter. If the resonance is high, the filter itself can also be used as an oscillator.

Filter modulation -/+ (flt mod -+)

Regulates how much and in which direction the filter envelope curve moves the filter frequency in which direction.

Filter-Modulation decay (flt mod dcy)
Decay time of the filter curve. Smaller values with high resonance create a "zapping" sound of the filter, greater values create the typical sweep sound.

Filter modulation velocity (flt mod vel)
Specifies how much the filter modulation depth depends on the velocity. If this value is increased, louder beats will generate higher filter curves than quieter ones.

24 dB
The filter can operate with a slope of 12 dB or 24 dB. This mode is set as a preset and cannot be changed.

Comb filter (comb filt on)
You can activate a comb filter, a feedback delay that creates resonance-like sounds comparable to a plucked string. The delay time and feedback levels are permanently linked fo the filter parameters (frequency and resonance). This comb filter is set as a preset and can not be changed.

Compressor
Controls the compressor strength. This lets you increase the "power" of the drum sound.

Compressor response (comp resp)
Controls the compressor time. The lower the value, the faster the compressor follows the volume.

Tube

Controls the level of the tube amp simulation. It "saturates" the output signal of the voice and adds warmth to the sound if the settings are moderate. Increasing the settings makes the sound "dirtier".

Volume/Pan
Controls the volume and panorama position of the drum instruments.

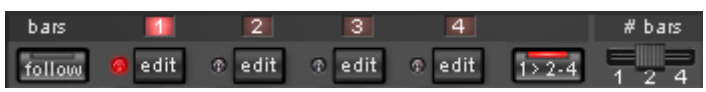
Sequencer

Incident lighting is used to control the drum patterns just like in all classical drum computers and groove boxes. The step sequencer consists of 16 individual step buttons with LEDs corresponding to the appropriate partitioning of a beat:

16ths or 32nds (a half beat is in each case displayed). A button lights up to indicate the releasing of the instrument at this point in the beat (= step).

A left click turns on the step, a further left click deletes the step again.

A pattern can be a maximum of 4 beats long. The length can be modified using the fader on the button bar.



The beat to be edited can be selected with the applicable “edit” button. The “Follow” button specifies whether the step of a beat is in time.

"**1 > 2-4" auto draw:** If more than 1 beat is activated as the loop length, the "Auto draw" mode ensures that the drum note set in the first beat is set automatically for the following beats. This makes it very simple to produce a continuous beat from a loop length of 4 beats. Notes set in the rear beats are not affected by auto draw.

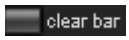
How to program a drum pattern:

- Select the pattern length with the fader.

- Select “Event” mode.

- If you edit during playback, turn off “**Follow**”. Select the beat with the “**Edit**” buttons.

- Use “**Select**” to choose an instrument to edit.



- Use the "**Clear bar**" button to delete all steps in the selected instrument.

- Turn on the appropriate **step** buttons, and use the "**Velocity**" controller to adjust the beat velocity.

- Repeat the procedure with the other instruments

Snapshots

In addition, you can automate programming of the editable sound parameter of a drum sound via so-called "snapshots". You can thereby save the sound parameters of a drum instrument on the step buttons of the sequencers.

Automating the drum instrument with snapshots.:

- Set the edit mode to "Snap".
- If you edit during playback, turn off "Follow". Select the beat with the "Edit" buttons.
- Select an instrument and edit the sound. You can control the sound of an instrument even when playback has stopped by using the loudspeaker button.
- Save the sound as a snapshot to one of the step buttons.
- Change the sound of an instrument and save the settings to other step button

Warning: The parameters are not changed abruptly but are faded internally instead, in order to avoid crackling. If two snapshots with extreme parameter differences are too close together, the drum sounds will sound differently when the pattern is played.

- Using the arrow keys, you can jump between the individual snapshots during stopped playback.

- Press "**on**" to activate snapshot automation.

Groove Control

The secret behind "groove" beats lies in delay. That is, individual beats are either anticipated or delayed according to patterns. For example house beats use the "shuffle" whereby straight 1/16s are delayed at certain times.

In the Robota there are **groove velocity** and **groove swing** presets. Groove velocity presets contain for each step of a beat a certain offset to increase or reduce the original beat velocity. Groove swing presets contain for each step a time alignment that is either anticipated or delayed. The result is a livelier-sounding sequence. The strength of the effect can be adjusted with the % regulator.

Setups, drum kits, presets, and patterns

A single instrument sound is saved as a preset.

Presets containing all four instruments are saved as drum kits.

All note information plus the snapshots are saved as a pattern.

Together (drum kit + pattern) they are know as a setup.

Load/Save

Presets, drum kits, patterns and setups can be selected with the continuous rotary regulators next to the display area. For storing, click on the "Save" button. Then specify a new name in the input field. To store, press "Enter".

Note: A drum kit stores only the names of the presets, not the actual parameters. If you want to store your own drum sounds that were created by changing existing presets, you must first store them as new presets and then as a new drum kit! The same applies to the setups, which contain only the pattern and drum kit names.

If necessary, always store in this order: preset -> drum kit -> pattern -> setup. This applies only when creating your own "templates". If you store your arrangement normally, the complete current status (synthesizer + sequencer) of the Robota is always stored and correctly loaded later with the arrangement.

Atmos

Atmos is a synthesizer which can be used to easily create realistic nature sounds in no time. From thunder and lightning to animal sounds and traffic noise, Atmos helps you design natural-sounding atmospheric noises for your projects.

- In the upper border window, select the top category "Scenario". You can select a desired nature sounds category (for example, "Thunder and Lightning").
- In the middle of the window, a collection of control elements appears for designing the desired "Ambience". Each element has its own description (e.g. "Thunder") and two faders, i.e. "Volume" and "Intensity". The "volume" control adjusts the loudness portion of the element. The "Intensity" fader controls the behavior of the sound, depending on controller element. For example, with "Thunder", you can set how often thunder and lightning should sound; with "Rain", the strength of the rain can be regulated (if moved to the far left, light rain can be heard, while if moved to the far right, a downpour with loud splashing noises is audible).
- At the bottom right border you will find a master volume fader with which the master volume of the synthesizer can be set. Furthermore, the "Randomize" setting is also located here. This way you can change the settings of the control elements by yourself.

Synthesizer plug-ins

MAGIX Music Maker 2013 includes Vita and the Revolta, two VST plug-in-based software synthesizers (see below). Compared with other synthesizers that are addressed via synth objects, these feature several differences:

- Generally, VST instrument plug-ins (VSTi) do not feature sequencers of their own and are controlled via MIDI objects.

- VST instruments are always loaded onto a certain track, and all MIDI objects on this track control this VST instrument. The MIDI objects cannot be moved between tracks freely like synth objects.
- Effects may be only applied on the track level.

Nevertheless, these are much more easier to manipulate in MAGIX Music Maker 2013 due to MIDI control, and sequences may also be recorded (view page 86) using MIDI keyboard.

What are VST and DirectX plug-ins?

A plug-in is an independent program section which can be added to another program, to broaden its range of functions. Various standards were developed for including plug-ins. "VST" and "DirectX" have become the most widely used.

"VST" stands for "Virtual Studio Technology". VST plug-ins offer an elegant way of copying and making virtual devices that are normally used in recording studios.

"DirectX" is a Microsoft standard for plug-ins similar to VST plug-ins.

The advantages:

- Purchasing expensive synthesizers or effect devices is no longer necessary.
- An expensive sound card is no longer necessary for high-quality recordings from external devices.
- VST instruments and VST/DirectX effects provided by lots of third party providers are better value or are even made available as freeware.

The disadvantages: Each of these plug-ins uses up processor power. The more a plug-in is used, the faster your computer should be. The required processing power is, of course, also dependent on the size, state, and complexity of the plug-in.

Using VST instruments

VST instruments are loaded via the Media Pool. These appear in the area below the "Synthesizer" setting (synthesizer track).

If you have just freshly installed MAGIX Music Maker 2013, then you will not see any additional synthesizers here at first (other than those that were included). You will have to enter the folder first in which Music Maker should look for VST instruments. VST plug-ins may be installed in any folder on your hard drive.

Click "**Add**" (on the right edge of the Media Pool) and find the VST folder. If you use other programs with VST plug-ins or if you have already created a folder for your VST plug-ins, you can enter the folder here. You can add another extra folder at any time in case you you have installed additional plug-ins in another folder; plug-ins that have already been "identified" will always be located regardless of the path set. Pressing **OK** causes Music Maker to scan the folder for usable plug-ins that are available in the Media Pool.

Vita and Revolta 2 (Premium version only) feature their own icon in the Media Pool; all other VST instruments use a standard icon. To use VST instruments, drag the VSTi Synth into a free track in the arranger.

A preset MIDI object will appear in the track and the MIDI Editor will open.

You can open Vita and Revolta 2 (Premium version only) directly by selecting one of their preset sounds in the instrument menu of the track box. At the very bottom in the menu, a sub-menu is provided for software instruments that lists the other VST instruments.

To use the MIDI objects and the MIDI Editor, please read the chapter MIDI Objects (view page 80).

VST Plug-in Editor

The VST Plug-in Editor can be opened by right-clicking on the instrument's name in the MIDI Editor, via the corresponding plug-in slot in the Mixer, or via the "VST Instruments Editor" entry in the instrument list.

The Instrument Editor has two views, the so-called "GUI" of the plug-in (Graphical User Interface) and the parameter view. This is either automatically activated when the VST plug-in does not have its own GUI or can be used if the GUI of the plug-in is too unclear or takes up too much space on the screen. The parameter view displays the eight parameters of the plug-in as sliders. In the File menu you can change between these views (plug-in dialog/plug-in parameter).

Load/save patch/bank: The instrument settings can be saved and loaded in the patch formats typical for VST plug-ins (*.fxp) and bank formats (*.fxb).

Random parameters: This function can be an important source of inspiration. However, before using it please save the current preset you've just created as this feature does not ask before it is applied.

Menu program: Here you can select the presets integrated into the plug-in or loaded via the File menu.

MAGIX Vita

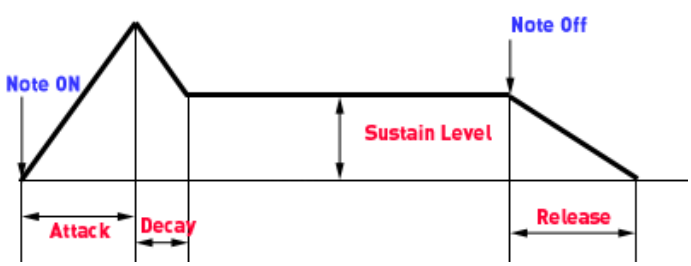
MAGIX Vita Synthesizer specializes on realistic playback of "real" instruments for which it uses sampling technology. This means that short samples of real instruments in different pitches, playing techniques and volumes are used, combined, and played again at the correct pitch.

The Vita interface

1. Layer selection/Peak meter: The Vita sounds, also known as layers, can be selected here using the arrows. Right-clicking on the display opens the layer menu.

2. Main parameter: Here the volume, panorama position, pitch characteristics ("transpose") and the fundamental frequency ("master tune") can be set.

3. AMP: This is the volume envelope. With this you can control the timing of a sound's volume. **A**(ttack) stands for the volume increase at the start, **D**(ecay) for the length of time the decrease in volume takes on a section set with **S**(ustain) at the maximum volume. **R**(elease) is the length of time it takes for the sound to fade out.



4. FILTER: Here you can switch on a filter which influences the sound. With FILTER TYPE you can select the kind of filter you want to use. Cutoff controls the filter frequency and "Resonance" controls the strength of the emphasized filter frequency. "Velocity" indicates how much the velocity influences the filter frequency, using

"Gain" you can balance the volume. The filter envelope (ADSR slider) influences the filter frequency depending on the time.

5. DELAY: Here you can switch on an echo effect. "Time" controls the delay time and "Level" controls the strength of the echo sound.

6. REVERB: Here you can switch on a reverb effect. "Time" controls the delay time and "Level" controls the strength of the echo sound.

7. TUBE DISTORTION: This is a tube distortion effect like those found in guitar amplifiers. This is normally used for electric guitars but you can also get creative and use it for other things. "Drive" controls the strength of the distortion. "High-cut" and "Low-cut" filter out the high and low frequencies.

8. VALUE DISPLAY: This always displays the exact values of the parameter that was just adjusted.

9. DYNAMIC RANGE: Usually the relationship between the created volume and the MIDI velocity is proportional. You can compensate for the fact that some MIDI keyboards need to be pressed forcefully to produce loud sounds (or conversely produce loud sounds with a soft touch) using the "MIDI Input Curve". Using "Dynamic and "Dynamic curve" you can manipulate the dynamics of a sound, i.e. the relationship between the loudest and quietest sounds.

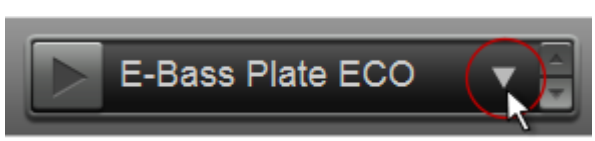
10. Voices: Here you can control the number of voices played simultaneously. If notes are no longer played, as is the case in some fast passages, you can increase the number of voices at the expense of performance.

11. Keyboard: Here you can preview the Vita sounds. This only works during playback or recording. **12.** lets you hide the keyboard.

Additional Vita Solo Instruments

Additional software included in MAGIX Music Maker 2013 such as the Rock Drums or String Ensemble are sampler, whose sounds are prerecorded. The advantage to the virtual synthesizers such as Robota is that the sounds don't have to be recalculated each time, which frees up a lot of computation capacity. They are "simply" called up, instead of being created anew. The disadvantage, however, is that the finished sounds don't sound as "professional" as those produced with virtual "sound magic".

The basic controls are identical for all synthesizers.



One click on the arrow symbol opens a fold-out menu where you can determine the general sound of the instrument. If "ECO" appears in the description, this refers to especially performance-improving settings which may not sound so "smooth". In addition, you can also save your settings and add them to a favorites list for later use.

You can control the overall loudness of the instrument.

You can turn the instrument keyboard on or off with this controller.

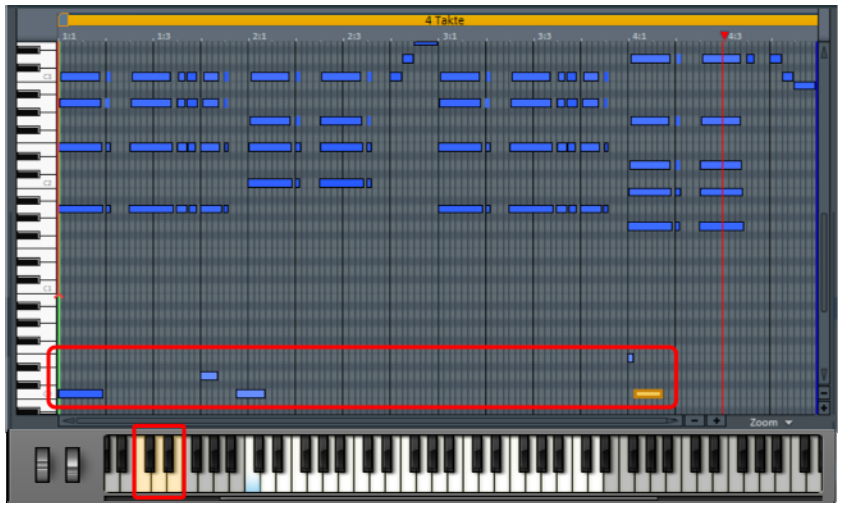
Because these samplers are enhanced for each instrument by tuned effects, the rest of controls function analogously to the already familiar synthesizers such as Vita. If you would like to know which result certain effects have, you will find explanations in the Essential FX (view page 149), Vintage Effects (view page 156), Reverb (view page 142) and Distorsion & Filter (view page 145) chapters.

Additional information is also available in the Synthesizer plug-ins (view page 124) chapter.

Articulation

Some Vita Solo Instruments have a special feature: In a bass octave (on the keyboard (C0-H0), there are special notes, which let you control the playing style (articulation). An alternative sample set is loaded, which lets the bass sound even more realistic using various playing styles such as note bending and flageolet.

Articulation is switched on and continues until normal articulation is switched on again through the corresponding note (C0).

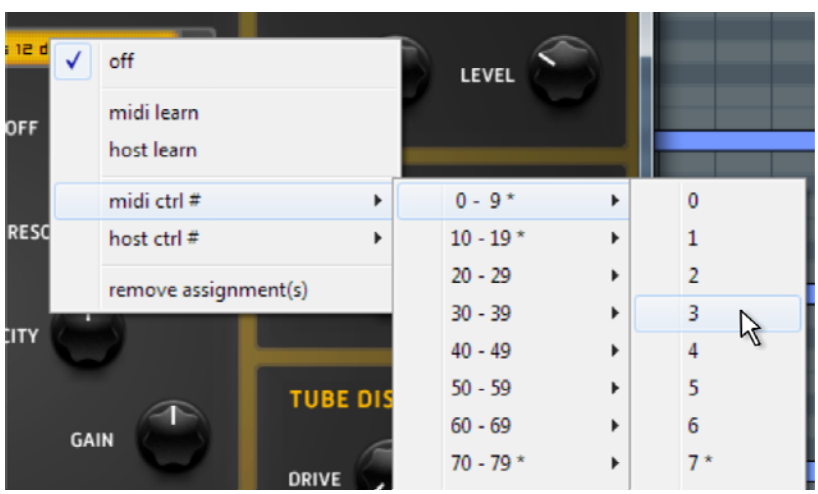


On the keyboard at the bottom of the synthesizer interface are the buttons to switch articulation, displayed in different colors. In the MIDI Editor appearing above, you can watch a practical application of articulation. The notes on 1:4 and 4:1 will be played back with varying articulation. Before the next "right" note, normal articulation will be switched on again through C0.

Automation of Vita and Vita Solo instruments

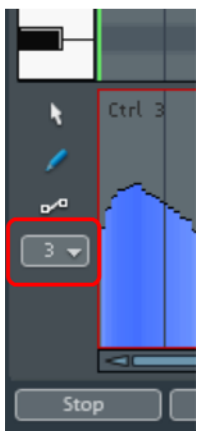
In MAGIX Music Maker 2013 it is possible to automate Vita Solo instruments. This allows you to change a specific value during playback using an automation curve automatically. Below we describe how to work using an automation curve.

1. Right-click on an effect knob. This opens a context menu where you can select a MIDI controller number for the automation using "midi ctrl #". A few standard controller settings are preset, e.g. 7 for volume, 10 for panorama, 91 for reverb.



2. Open the MIDI Editor (Y key) and switch into the "Velocity/Controller Editor".

3. At the bottom right you can now select the pre-selected controller number in the MIDI controller selection field.



4. You can now draw the desired automation curve.

Additional information can be found in the Controller Editor - Select and edit events (view page 90).

Tip: If you are using an external controller, you can also use it to control and automate values. To do so, select "Learn MIDI" in the Vita Solo Instruments context menu. Also read the Using external equipment (view page 81) chapter.

Audio effects

MAGIX Music Maker 2013 offers you a multitude of infinitely variable and intuitively adjustable audio effects.

Effects

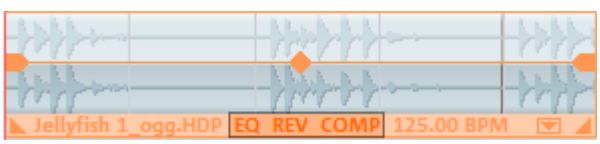
The effects in MAGIX Music Maker 2013 allow the sound spectrum of all of the audio objects and synthesizers to be thoroughly manipulated. Since most effects operate in real time, the effects offer ideal room for experimenting with creative sound design.

Real-time effects

Real-time effects are calculated the first time the object is played back. The audio file (original material) itself remains unaffected. The effect is recalculated in real time each time it is played back. The object always retains its original status when real-time effects are applied.

To change a real-time effect, open the effects rack or the effect's settings dialog and drag the respective control elements; the changes will be audible immediately.

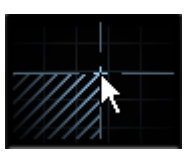
The lower edge of an audio object in the arranger lists all currently active object effects with abbreviations.



Effect devices controls

Some effect options open a graphic window, which has the appearance of the studio effect device that it simulates (such as the "Echo/reverb" or "Timestretching" effect menus).

These virtual effect devices are controlled either with common sliders, knobs and buttons or alternatively with graphic sensor fields.



Sensor fields: Sensor fields can be controlled intuitively with mouse movements, with the graphic and the corresponding effect setting changing in relation to each other.

Power switch: Every effect device in the rack may be switched on or off separately. This button allows you to directly compare the neutral, unedited sound of the audio object with the effect setting you have chosen.

Reset: Every effect has a reset button that restores the effect device's initial default. In this state, the effect is not calculated into the sound, and the effect is not rendered.

Preset selection list: Each effect device has a selection of proven presets which can be selected from a drop-down menu.

A/B: The A/B button compares two settings with each other. If you have selected a preset for the effect and make manual changes to it later, you can compare the original preset sound with the new settings by using the A/B button.

Note: The displayed graphics serve only examples and can differ from device to device.

Non real-time effects

A few audio effects are not calculated in real time; instead, after the settings dialog is closed, copies of the audio material are added for calculating the effect. This way, no additional calculations will be required during playback.

To change these effects, use the undo function.

The following effects don't work in real time: Freely-drawn filters, gater, reverse, invert phase.

Using audio effects

Audio effects can be added at different positions in the arrangement, at object level, in a complete track, or in the master (i.e. everything you can hear).

Audio object effects

Object effects do not affect the entire arranger track, but rather individual objects. The advantage to this is that effects which are only required at a specific point in the arrangement only use up processing power at that particular point.

There are several ways to apply audio effects to individual audio objects:

1. **Drag & drop:** In the Media Pool setting "templates", the following folders are visible "Audio FX", "Vintage FX". These contain presets for the most important effects. These presets have a preview function and can be dragged & dropped on an audio object in the arranger.
2. **Right clicking** on an audio object or via the "Effects -> Audio" menu opens individual audio effects via a menu command.

3. **Double clicking** on an audio object opens the audio effects rack (view page 136). The most important effects are compiled into one dialog and some special functions are still available, as is the option of saving all of the effects settings.

Track effects

Besides the object audio effects, a separate track effects rack with equalizer, reverb/echo, compressor as well as the Vintage Effects Suite plug-ins can be used.

There is also a separate 6-channel parametric equalizer (view page 139) that may be opened via the small EQ button beside the panorama controller.

The plug-ins are loaded via the plug-in slot.

You can open the track audio effects rack with the FX button.

A bright blue track effects button signifies that effects are active in the track.

The track effects can also be applied without having to open the mixer.

The arranger's trackbox (view page 31) also features the track FX menu. In it, you will find presets for track effects (view page 134) sorted according to the instrument type.

Track effects always apply to all audio objects of a track. In comparison to applying an effect to each object individually, this saves storage space. The effect itself works the same way as object effects.

Master effects

Master effects influence the mixed sum of all audio tracks. For this purpose a Master Audio Effects Rack and further plug-ins are installed in the Mixer window. Also included: the special MAGIX Mastering Suite for perfect sound.

Effect curves

Many effects can be adjusted using the effect curves for a more dynamic application of the effect. This means that certain effect settings can be changed during playback. The effect curves are available as object curves and track curves. Object curves are always object-related, i.e. they only apply to one object and are moved or copied together with the object. The track curves are saved in the track and affect all of the objects the track.

To learn more about editing effect curves you can refer to the chapter „Effect curves“.

Using plug-in effects

For introductory information about plug-ins, please read the section Synthesizer Plug-ins (view page 124) in the "Synthesizers" chapter!

At different positions in MAGIX Music Maker 2013, you can also utilize effects from third-party developers in the VST or DirectX format. Several of the included effects (EssentialFX, Vintage FX Suite, Vandal SE) are also applied as plug-ins.

Track effects

Track effects can be selected and specified in the Mixer. They refer to all objects in the corresponding track.

Tip: An effect set in the Mixer uses up processing power at every playback position in the arrangement. Consider whether or not it would be enough simply to use an effect as an object effect.

Two slots for track effects are located in the channel strip of the mixer for the corresponding track as well as in the FX tracks (view page 181).

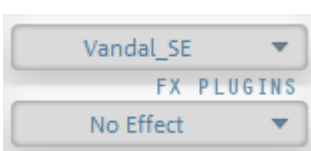
If you click on the small triangle here, MAGIX Music Maker 2013 compiles a list of available effects. Now you can select any effect from the list.

The list consists of multiple subfolders: Direct X plug-ins, VST plug-ins, and the MAGIX plug-ins folder for the included plug-ins Vintage Effects Suite (view page 156), Essential FX Suite, and Vandal SE.

Select "No effect" to remove a plug-in from the slot. Left clicking temporarily disables the plug-in. Active plug-ins are displayed in light blue. Right clicking on the slot opens the settings dialog of the plug-in.

Object Effects

The audio effects rack can be opened by double-clicking an audio object.



The module at the very bottom enables two plug-in effects to be used. This functions just like the mixer's plug-in slots:

1. Click on the box.
2. Select the effect you want.
3. Adjust the effect settings in the dialog.

The effect relates to the selected object (in contrast to track effects)and only needs computing power when the object is played.

Master Effects

In the master channel you can find two slots for selecting a master effect. Often, for example, compressors are used in the master so as to give the whole signal a more booming and louder sound.Effects selection here is the same as by the track effects:

1. Click on the box
2. Wait until the list of available effects is compiled
3. Select effect and configure

Object and master effects rack

The audio effects rack for objects can be opened by double-clicking the audio object. The audio effects rack for the individual tracks or for the entire sound ("master effect") can be opened using the FX buttons in the mixer window ("M" key).

In addition to the most important effects like the 10-band equalizer, reverb/delay, compressor, time processor (objects only), filter and stereo enhancer (track only), the following features are also available:

Object Volume

Here you can set the master level for the selected object. With some effect combinations undesired distortion may appear as many effects increase frequency ranges. In this case, you can reduce the master volume.

The faders for each stereo channel are usually moved together.

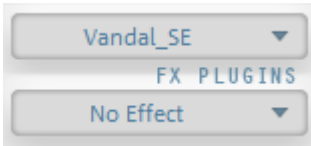
If you deactivate the left button, the object can be made into stereo panorama by separate volume controlling for left and right.

Load/Save

The current settings for each applied effects device in the rack can be saved as an effect preset, e.g. so that it can be used for other objects. Only the rack effects that were used will be saved and loaded during this process. This means that effects presets can also be combined.

This function is not yet available for the track effects rack.

Effects plug-ins



If external plug-ins are installed on your computer, then you can activate them via the button to the bottom right. These buttons also open the effects in the Vintage Effects Suite (view page 156).

For more information about plug-ins, please read the chapter Using VST/DirectX effects (view page 135).

Apply (destructive editing)

With "**Apply**" the current setting of an effect or of an entire effect rack can be "calculated into" the audio object.

This has the advantage that no more processing power will be required for the effect. The object will be replaced by a new audio file which contains the sound of the object with the effect. This will then only be played – processor-heavy "realtime" effect calculation is no longer required.

The disadvantage: Changing the effect settings is not a simple any more. You can undo these "destructive" changes straight after using the Undo function in the Edit menu (like every editing operation in MAGIX Music Maker 2013). After saving the project this is no longer possible.

In the master effects rack there are no Apply buttons. Instead, the function can be found in the Edit menu (Audio Mixdown (view page 214))

Play object/Play arrangement

To the bottom right of the Audio FX Rack you will find two playback buttons which either play the selected object or the entire range. This lets you preview all effect settings in realtime.

Equalizer

The 10-band equalizer subdivides the frequency spectrum into ten areas ('bands') and equips them with separate volume controls. This way it is possible to create many impressive effects, from a simple boosting of the bass to complete elimination of a certain range of frequencies. Note: If low frequencies are boosted too much, the

overall sound level is heavily increased which may lead to distortion. In this event, adjust the overall volume downward by using the 'master volume' control situated at the bottom center of the effect rack.

Slider control: Each of the ten frequency ranges can be separately boosted or turned down with the ten volume controls.

Link bands: Using this button randomly combines the frequency ranges with each other in to avoid artificial-sounding overemphasis of an individual frequency range.

Touch screen (right EQ section): This is the 'sensor field' of the EQ. Here you can draw any type of curve with the mouse. This will be immediately translated into a corresponding control setting on the left side of the EQ.

Compressor

The compressor is an automated dynamic volume control. It limits overall dynamics, maintains the volume of loud passages so they stay loud, and increases the volume of low passages. A compressor can be put to good use for e. g bass recordings and vocals, but also as a master effect in the mixer for subsequent editing of the overall sound.

Processing is carried out using a "look-ahead" method, similar to high-quality studio appliances. There are no peak overmodulations or other artifacts as the algorithm can never be 'surprised' by sudden level peaks.

Ratio: This parameter controls the compression level.

Threshold: This sets the volume threshold below and above which compression is applied.

Attack: Sets the algorithm's reaction time to increasing sound levels. Short attack times can create an undesirable "pumping" sound, as the volume is quickly reduced or increased correspondingly.

Release: Sets the algorithm's reaction time to falling sound levels.

Gain: The gain controller amplifies the compressed signal.

6 Band Equalizer

The parametric equalizer has six filter bands that you can use to shape the sound of the music track. Each band is a filter with a typical "bell shape". Within a certain frequency range around an adjustable middle **frequency** you can increase or reduce the signal level **gain**. The width of this frequency range is called bandwidth. The bandwidth is defined by the **Q** value. The higher the Q value, the narrower and steeper the filter curve.

You can influence the basic sound of the mix by increasing and decreasing the broadband so as to give it more "depth" (lower center 200-600 Hz) or more "air" (Highs 10Khz). You can also decrease the narrowband width (high Q-value) in the frequency response to remove disruptive frequencies.

Sensor field: The sensor field displays the resulting frequency response of the equalizer´. The frequency is displayed horizontally and the increase or decrease of the respective frequency is displayed vertically.

The **blue bullets 1-6** symbolize the six frequency bands. You can move them around with the mouse until you find the frequency response you want.

You can control the output level of the equalizer with the **Peak Meter** . With the **Master Gain Controller** beside it you can offset the level changes resulting from the EQ adjustments.

You can access additional settings for each frequency band by clicking on the bullets.

You can use the knobs to set the values for each band. There is also a numeric field for each parameter where values can be entered.

Gain: This controller allows you to raise or lower the filter. Setting the controller to 0 deactivates the filter so it does not use any CPU power.

Freq: The center frequency of the individual filters can be set between 10 Hz and 24 kHz with the frequency controller. Freely choosing the frequency enables multiple filters to be set to the same frequency in order to have a greater effect.

Q (Bandwidth)**:** Here you can set the bandwidth of the individual filters to between 10 Hz and 10 kHz.

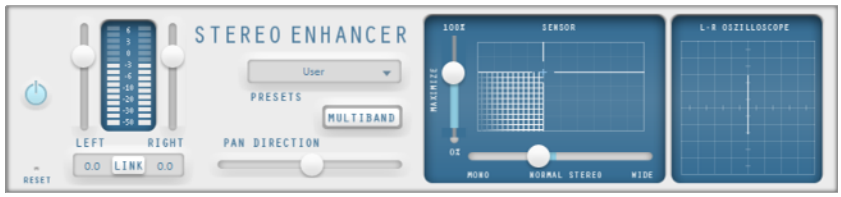
Bands 1 and 6 are special: Their **Filter Curves** can be edited in three different modes. The four editing points in the graphic have different functions in each mode.

- **Peaking:** Here the effect curve is brought closer to the working point (which represents the peak of the curve) from both sides simultaneously.
- **Shelving** (Basic setting): Here the working point displays the beginning of the filter curve. From this point on there is a gentle increase or decrease in the frequency.
- **High** or **Low Pass:**In Band 1 the working point displays the frequency which is filtered out of particularly high or low frequencies.

Enhancer

The Enhancer enables the justification of the audio material in the stereo panorama to be adjusted. If the stereo recordings sound unfocused and undifferentiated, an extension of the stereo base-width can often provide better transparency.

Use the maximize function to move the echo and improve the stereo picture, for example, into the foreground.



Volume controller: Adjusts the volume of every single channel to adjust the complete panorama. The reduction of left and right levels is displayed under the control buttons.

Pan-direction: Use this controller to move the sound source from the middle into stereo panorama. The signals at the outer edges of the sound picture remain unchanged.

Multiband: This option switches from "Stereo FX" to "Multiband" mode. Stereo editing only applies to the middle frequency, the bass and highs remain unchanged.

Bandwidth/maximize sensor field: Adjusts the base width between mono (extreme left), unchanged base width (normal stereo), and maximum base width (wide, extreme right). Raising the bandwidth (values over 100) diminishes the mono compatibility. This means that recordings edited this way sound hollow when listened to in mono.

Maximize strengthens the spatial component of the recording, which also increases the stereo transparency without influencing the mono compatibility.

Stereo meter (correlation gauge): This provides a graphical display of the phase relation of the audio signal. You can use it to review the orientation of the signal in the stereo balance and the effect of the stereo enhancer. To maintain mono-compatibility, the "cloud" shown should always be higher than it is wide.

Invert phase

This function moves the object to the rear loudspeakers of a dolby surround system.

Quite an impressive effect for the audio tracks of video productions.

Reverb

The reverb effect device offers newly developed and very realistic reverb algorithms to add more room depth to your recording.

Reverb is probably the most important but also the most difficult effect to generate.

Fundamentals

Our everyday experience shows that not every room matches every instrument. Thus we have designed "virtual" rooms. However, it still remains important to find the correct parameters. Here are some examples of parameters that are decisive for the sound impression in real and virtual rooms:

- **Size of room:** The larger a room, the longer the sound travels between walls or objects. Our brain "calculates" the size from the time difference. The size impression is mainly determined from so-called first reflections and the discreet echo. We don't notice a (diffused) reverb.
- The **reverberation time** is mainly influenced by the composition of the walls, ceilings and floors. This reverb time is highly frequency-dependent. For instance, the highs and mids are dampened more in rooms with curtains, carpets, furniture and some corners than in an empty and tiled room.
- **The density of the reflection:** The sequence of the first reflection is particularly important. A room with many individually recognizable echoes feels alive, especially if they are quite far apart.
- **The Diffusion:** Simple reverb machines do not take into account that reflections become more and more complex as they develop. They blur the first echoes at the beginning, which sounds artificial and "two-dimensional" for many signals. Our reverb effect works like a real room instead where individual echoes can still be heard at the beginning of the reverb but then reflect amongst each other more and more until they disappear in the signal sustain as a so-called "diffused hiss".

The 24 presets include many rooms that were designed for certain instruments and applications and whose internal parameters have been optimized for these applications. However, you can influence most of the characteristics of the room using the provided sliders.

In addition to the rooms we have modeled two device types in the reverb effect that allow you to create an artificial reverb for a longer time: Plate Reverb and Spring Reverb.

Plate Reverb: A plate reverb consists of a large metal plate (often 0.5 to 1m² thick or more), that is put into motion by a magnet and coil system (similar to a loudspeaker). On the reverb plate so-called "taps" are positioned at different locations. These are pick-ups comparable to those on a guitar. Reverb plates have a very dense sound (high diffusion); no direct echo can be heard. They are therefore ideal for percussive metal. With vocals a plate reverb generates a smooth "wellness effect".

Spring Reverb: You probably remember Spring Reverb from guitar and keyboard amps, particularly older ones. At the bottom of these amps a unit consisting of two to four spirals is mounted on a vibration-free carriage. As with the reverb plate it uses systems for transforming the electric signal into a mechanical one. There are different designs and sizes of spring reverb; however, they all have the same quite peculiar sound: the typical "bloing" sound when the springs are moved, similar to splashing. When the reverb dies away the basic pitch of the spring(s) can usually be heard quite clearly. Furthermore, the frequency range is considerably limited due to the losses in the spirals and in the used pick-up/transmitter. Despite this, the sound is special and some of the latest music styles (e.g. dub & reggae) would hardly be possible without spring reverb.

Parameters

The reverb effect has the following parameters:

Size: defines the size of the room (or the system for the plate and spring). With some low "size" settings you can also reduce the distance between the individual reflections. This allows resonance to develop (accentuated frequency ranges), which can sound oppressive if the reverb sustain is too long. The proper size for each instrument can be gauged by taking into account the interplay between the room and the resonance.

Time: reverberation time. With this controller you can define how far the echo will be absorbed, i.e. the time for the reverb to die away. Turning this knob to the left minimizes the time. You will then only hear the first reflection. Turning the knob to the right minimizes the absorption and thus results in a long sustained reverberation.

Color: within certain limits you can influence the sound characteristic of the effect. The effect of this controller depends on the used preset. In rooms "Color" controls the dampening of the highs in the reverb (from dark to bright) as well as pre-filtering of the signal. The controllers for plate and spring presets also determine the dampening of the basses.

Mix: this controller sets the mix ratio between the original and the edited signal. For rooms you can therefore quite easily move a signal further into the room by increasing the effect share. The last four presets are intended for use in an AUX channel of the mixer and are set to 100%.

Presets

The presets are primarily sorted by instruments; however, you can (and should) choose which preset you want to use for which instrument. The rooms in particular have completely different characteristics which are noticeable for some and more subtle for others. Generally we recommend reverb with many individually audible reflections and slight diffusions for dense arrangements. On the other hand you can use Plate Reverb for minimally arranged songs in order to create a dense atmosphere.

However, you should avoid adding reverb to too many instruments. Sometimes some extra mixing is sufficient to move an instrument slightly away from the total sound. It is often recommendable to adjust the sustain to the song tempo, i.e. the faster the track, the shorter the reverb. Otherwise the sound easily sounds washed-out and indifferent.

Here is a list of the presets and their characteristics:

Drums and percussion
Drums: Studio A: small room, high diffusion, e.g. for percussion instruments
Drums: Studio B: slightly larger & more lively than A, medium diffusion, distinct first reflections, signals seem closer than A
Drums: Medium-sized room: medium-sized room, moderate reverb, medium diffusion, relatively few first reflections
Drums: empty hall: medium-sized empty hall, medium diffusion
Drums: Snare reverb plate A: plate reverb, high diffusion, relatively bright sound character, typical hissing of a reverb plate.
Drums: Snare reverb plate B: reverb plate, high diffusion, slight dampening of highs & basses, sound moves more to mids with time, stereo panorama narrower than for A

Vocals
Voice: main hall A: standard hall, e.g. for monitoring/recording, medium-sized room, medium diffusion, minimum sustain time
Voice: main hall B: like A, but as a small hall (longer delay times than A), distinct reflection pattern, longer reverb time
Voice: early reflections: medium-sized room, low reverberation share, very distinct early reflection pattern, e.g. for spreading vocals
Voice: warmer room: small, intimate room, dark character
Voice: studio reverb plate A: reverb plate with medium diffusion, slight dark adjustment, comprehensive sound characteristics
Voice: studio reverb plate B: Like A, but more diffusion and bright to medium sound adjustment, slight vintage character
Voice: large hall: large hall, medium diffusion, relatively long reverb time
Voice: cathedral: delayed attack, slight diffusion, complex echo pattern, some hard reflections, dark voice adjustment, long reverb sustain

Guitar
Guitar: Spring reverb mono A: spring reverb simulation, typical oscillating sound of the springs, limited frequency range

Guitar: Spring reverb mono B: Like A, slightly broader frequency range, greater diffusion
Guitar: Spring hall stereo A: similar to spring hall mono A, but one spring/transmission system per channel (L/R)As a result of the mechanical interlinking of the systems, the reverberations meet at the middle of the stereo field
Guitar: Spring reverb stereo B: Like stereo A, slightly broader frequency range, greater diffusion

Keys (Piano, Synthesizer)
Keys: Stage reverb: Larger room with stage, high amount of complex first reflections, slightly delayed attack, medium reverberation
Keys: piano reverb: concert hall, long reverberation, medium diffusion, minimum dark adjustment

Aux (to be used as a send effect in a mixer FX track)
Aux: Room: Standard room for the aux path, mix 100%, medium-sized, medium diffusion, some distinct first reflections, low reverberation
Aux: Hall: Medium-sized hall (100% wet), medium diffusion, short reverberation
Aux: Reverb plate: Reverb plate (100% wet), high diffusion, light bright adjustment
Aux: Spring reverb: Reverb spring (100% wet), stereo, high diffusion, slightly medium sound characteristics

Delay (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 echo's can be determined; the more you turn the control to the left, the faster the echo's will follow each other.

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

Sound Warper

Distortion

This is a distorter, which over-modulates the audio object.

Gain: With these controls you adjust the degree of distortion. 'Gain' designates the prestage to an amplifier.

Cut off: Here you adjust the frequency ranges that are to be distorted.

Volume: Here you can adjust the volume of the distorter. The higher you set the 'gain' control, the louder the distortion when compared to the overall volume.

Filter

Similar to an equalizer, the filter controls the volume of certain frequency ranges. It is however also possible to completely suppress frequencies so that very impressive distortions are possible.

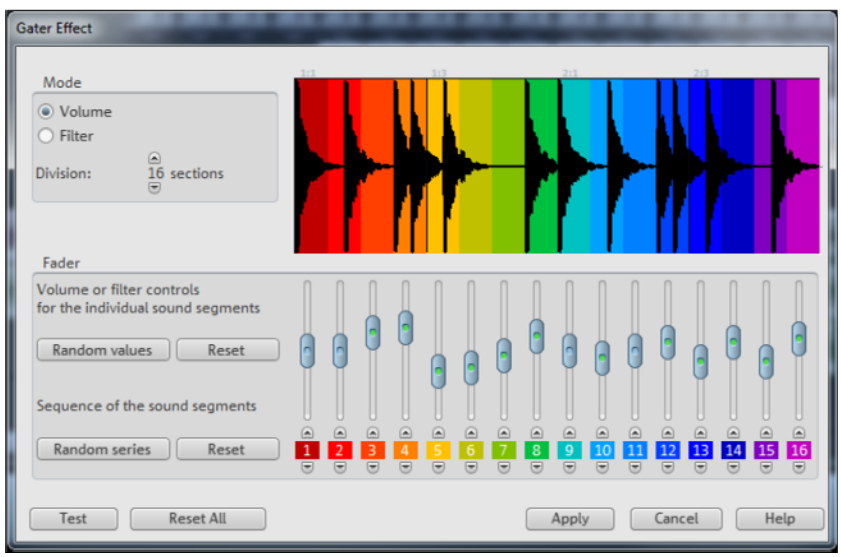
Frequency: Here you set the frequency that is to be filtered.

Level: Here the filtering intensity is adjusted.

Resonance: Here you set the range (band width) around the frequency which is to be boosted together with the frequency.

Volume: Here the filter volume can be adjusted separately.

Gater



This special effect "chops up" a sample into a given number of parts (16-128) Select the number of steps, which will then be distributed over the duration of the sample. Additionally you can set the volume for each individual step using the fader, so that the hard sections can be produced in the same way as soft levels.

The Gater function can also work as a filter to create interesting sound deformations which are particularly good for Techno! This is useful when you want to create a cool sample from a sound without its own rhythm.

In "Division" you can set more than 16 sections to produce even more variations in the sound. . The fader settings are then repeated which means that step 17 has the same value as step 1 etc.

A real-time monitoring function allows immediate musical control of any fader change.

Principally, there are two operating modes which can be combined with each other:

Volume or filter progressions

The objective of this function is to change the volume or the sound character of the audio material in 16 or more steps with the aid of the 16 faders. The default setting of every fader corresponds with one sixteenth of the audio material – i.e. a sixteenth note in a 1 bar loop or an eighth note for a two bar loop, etc.

This leads to interesting rhythmic results, e.g. by lowering the volume of individual faders or through stepped volume increases. Various progressions can also be quickly created with the help of the random function. The real-time screening function permits constant acoustic control while this is being done!

Gater progressions make it very simple to create rhythmic sounds from a simple strings or synthesizer section or to emphasize or tone down certain beats in a drum loop.

Reordering

The playback sequence of the 16 steps can be changed with the colored key fields located below the faders. This makes it possible to repeat a beat from the first sixteenth in the fourth sixteenth. To do this, the number under Fader No. 1 must be the figure 1. The fact that item 4 will now play back the material in item 1 is shown in color.

Does this sound complicated?

If so, simply try the Random function. It instantly pronumerous variations. If you have the Real-time screening function running, you can then quickly decide for yourself, which groove you like better!

You can use the Re-order function to derive totally different variations from a drum loop quickly and impressively.

Backwards

When Backwards is applied the sound file will be played in reverse. This way you can create very interesting effects, not to mention the “hidden messages” in many songs...

Timestretch/Resample

This effect device changes the object's speed and/or pitch.

Pitch: This control changes the pitch independently of the object's speed ('pitch-shifting').

Tempo: This control changes the tempo independently of the pitch ("time-stretching"). The object acts as if it were compressed or stretched on the track.

Tones/BPM: These fields are used to numerically enter the pitch or speed change. Only MAGIX Soundpool files are suitable for numeric entries because they are equipped with information regarding pitch and speed.

Setup: This button opens a setup dialog where you can select various pitchshifting and timestretching procedures.

- **Standard**: Timestretching and pitchshifting in standard quality. This method is suitable for audio material without a pronounced beat. Existing beat markers are evaluated to improve audio quality.
- **Smoothed**: Timestretching and pitchshifting for audio material without pulsing elements. The method is suitable for several voice orchestra instruments, surfaces, speech and singing. Beat markers will not be evaluated.
- **Beat marker slicing:** Beat-synchronous timestretching and pitchshifting via splitting and temporal repositioning. Precisely set beat markers are required at the beats or transients. Markers can be generated in real time (automatically) or read out from the source file, as long as they are available (patched). In the Premium version's included MAGIX Music Editor, a patching tool is provided for users to set the markers themselves.
- **Beat marker stretching**: Beat-synchronized timestretching and pitchshifting in high audio quality. The material is stretched between beat markers positions so that the impacts or attacks at the beat markers positions are not impaired by stretching. The markers can be generated in real time from the audio material (automatically), provided they are present (patched).
- **Beat marker stretching (smoothed)**: Beat-synchronized timestretching and pitchshifting in high audio quality, even with extreme time extension. Beat markers are used at the beats or transients. The markers can be generated in real time from the audio material (automatically), or read out from the wave file, provided they are present (patched).

- **Universal HQ**: Universal method for timestretching and pitchshifting in very high audio quality. Suitable for all types of audio material.
- **Monophonic voice:** Time-stretching and pitch-shifting for vocal solos, speech or solo instruments.
- **Resampling:** Pitch shift and tempo cannot be changed individually. This method requires comparably little CPU time.

essential FX

MAGIX essential FX is a collection of "bread and butter effects" for the most important applications. They are embedded as VST plug-ins (MAGIX plug-ins directory) and may be used in the object or in the track. For object application, see "FX plug-ins (view page 137)" in the "Audio effects" chapter or "Track effects (view page 134)" in the "Mixer" chapter.

These are simple but solid tools with clear feature sets for daily application. They include fewer controllers and require less resources.

MAGIX Plug-Ins

Console

Some MAGIX plug-ins show a so-called "Console at the top edge when they are opened – a display bar for managing presets with expanded settings options.

A menu containing available presets is located behind the display. To the right is a prev/next button, which lets you leaf through presets.

Presets can be saved with this button. MAGIX plug-ins use its own save format (*.fxml)

You can return the presets to their initial settings by clicking on the "Reset" button.

Bypass switch: Routes the signal directly to the output instead and bypasses processing. Internally, processing is continued so that you can toggle between processed and unprocessed material anytime.

A/B comparison: Very useful for trying out settings. The controller setting "A" memory is normally activated when the interface is opened.

As this is the initial status, "B" also contains the same settings. If you would like to experiment without losing the current setting, press the "B" buttons and try other settings. To transfer the values to "A", press the copy button between the two letters.

"?" button: This opens the online help for the plug-in.

Parameter Smoothing

Each plug-in offers soft controlling. Pot settings are softly faded internally from the old value to the new one. This is particularly noticeable when playing in "Live" mode. Due to performance reasons, switches (e.g. on/off) and some settings of VariVerb Pro that change delay times directly or indirectly are excluded from this action.

Vpot Controls

Some controllers snap to the middle setting, which may be useful for quickly returning to a "neutral" status. It is extremely difficult to adjust the fine settings within close proximity of this snap point. You can temporarily deactivate this snap mode by holding "Shift" before touching the controller.

Use the mouse wheel to adjust the controllers. A combination of the mouse wheel and "Shift" key reduces the increase/decrease by factor ten.

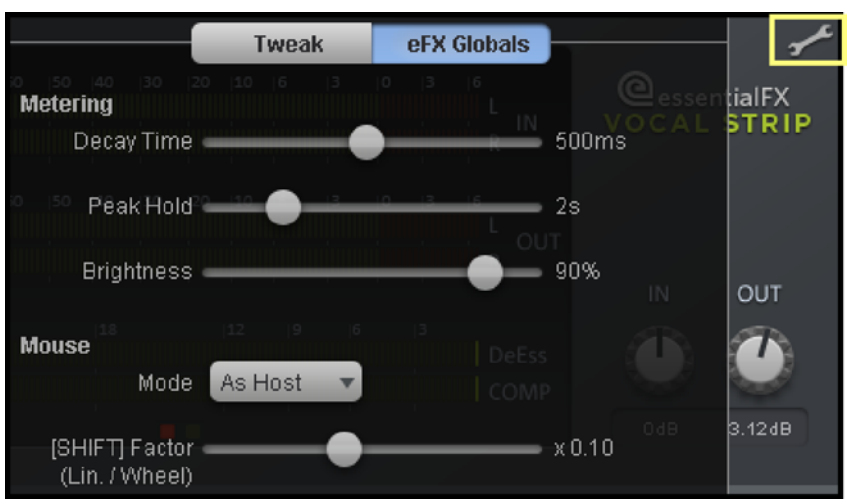
Apropos the controller movement, note that all plug-ins follow the host settings regarding linear or circular mouse movement. You can usually choose whether you prefer up/down or a circular movement to adjust the value.

essentialFX presets

By clicking on the tool symbol in the graphic display, you can open the presets.

Under "**Tweak**" you can find specific settings options for each effects device.

Under "**eFX Globals**" you can find settings options for graphic level display as well as mouse control.



eFX Globals

These settings are valid for all essentialFX.

Metering: Here you can set the meter display.

- **Decay Time** controls reaction speed.
- **Peak Hold** controls the hold of the highest peak.
- **Brightness** controls the display brightness.

Mouse: Here you can set the display reaction to mouse movements in the essential FX graphic display.

- **Linear mode** lets the faders move in response to vertical and horizontal mouse movements.
- **Circular mode** lets the faders be controlled by circular mouse movements.
- **Mode As Host** lets the faders move in response to the mouse exactly how mouse settings in MAGIX Music Maker 2013 specify it.
- **[Shift] Factor** specifies the factor for fine adjustment of individual faders with the mouse with simultaneously held Shift key.

Chorus/Flanger

This plug-in offers a simple way to make signals sound more interesting, "spacier", thicker, etc. by modulating or delaying the pitch - the classical domain of application is for guitars, Hammond organs, electric pianos, or synths.

Chorus and flanger are two closely related effects, which are combined into a single plug-in. They normally differentiate in terms of delay time, type of modulation, and degree of internal feedback.

Chorus flanger parameters

IN / OUT: Here you can set the input and output level.

mode:

- **Stereo chorus:** Compared to mono chorus, two copies of the original are created, modulated against each other in pitch, and then fed accordingly to the set mix ratio to the left and right output channel.

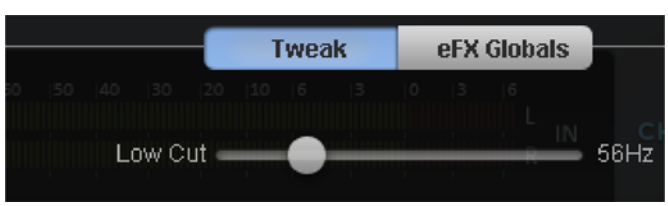
- **Mono Flanger & Stereo Flanger** In contrast to the Chorus Effects the lower delay periods and a slightly changed modulation are processed.

- Ensemble: This creates a denser chorus, similar to Boss/Roland CE-1: Instead of two voices, six are generated. Two internal sine LFOs for de-tuning, whereby for both LFOs the second and third voice phase length by 120°. This results in a denser-sounding effect that is also less warped.

- **Rate:** This specifies the speed of the modulation. Lower rates provide slight hovering effects, and high speeds produce a wobbling, typically distorted "underwater" sound.
- **Depth:** This parameter specifies the depth of the modulation, i. e. the maximum deviation of the modulation and the resulting pitch bending.
- **phase:** This fader moves the right channel's oscillator phasing relative to the left, wave is put back to the right. So that the Tremolo effect drifts apart in the stereo field with ever increasing values. At 180° both oscillators work in reverse, therefore the stereo effect is at its strongest.
- **Feedback:** This parameter defines the portion of the delay that is sent back to the input. Feedback causes the effects of modulation to be more drastic and cutting. Nullification of the feedback is set at the middle of the fader. Set to the right, the feedback is fed to the input equi-phasal; to the left, the feedback occurs. Both variants may sound very different depending on the signal, since they prefer different frequency ranges for dissonance.
- **Mix:** Regulates the mix ratio of the original signal and the delayed portion.

Tweak

- **Low Cut:** This knob sets the filter frequency of a high-pass filter. Signal components below this frequency will be filtered out.



Phaser

The phaser is often mistaken for a flanger due to its typically sharper and cutting effect. In any case, the pitch is not modulated. Instead, the modulation process burrows multiple notches into the frequency response, somewhat like a comb filter. Just like an airplane taking off, the phaser functions with a similar jet effect. It is suitable for enduring signals like synth surfaces or for producing sound designs to create atmosphere or distortion effects.

Phaser parameters

IN / OUT: Here you can set the input and output level.

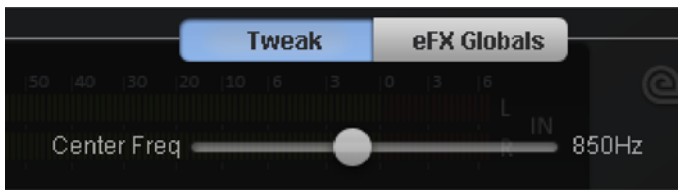
Mode: The selection includes a number of filter stages. At **4 stages**/**8 stages**, a more plastic effect is achieved, and more complex patterns are reached at **16 stages**. Please note that the more stages are involved, the more computing time will be needed.

- **Rate:** Speed of filter modulation. The essential effect is the same for both chorus and flanger.
- **Depth:** Similar to chorus/flanger, whereby it's the filter notches that are addressed, and not the pitch modulation.
- **phase:** This fader moves the right channel's oscillator phasing relative to the left, wave is put back to the right. So that the Tremolo effect drifts apart in the stereo field with ever increasing values. At 180° both oscillators work in reverse, therefore the stereo effect is at its strongest.
- **Feedback:** The feedback portion produces a more drastic effect in this case. Similarly to the chorus/flanger, co-phasal or opposite-phase feedback is possible.

- **Mix:** Regulates the mix ratio of the original signal and the delayed portion.

Tweak

- **Center Freq:** Sets the mid-frequencies of the phaser. The filter modulation acts on these frequencies.



Stereo Delay

The stereo delay is a simple too for typical bread and butter delay effects. The stereo delay offers the "analog algorithm", which features the sound of echo devices of yesteryear.

Stereo delay parameters

IN / OUT: Here you can set the input and output level.

Mode: This selects between the essential algorithms.

Digital: Normal, transparent delay

- **Analog tape:** Analog tape delay simulation. In this mode, a band echo is simulated with a typical compression and saturation behavior, including phase shifts with high feedback settings.

Analog BBD: Simulation of a bucket brigade delay (BBD, bucket brigade delay). These devices, which originate from the pre-digital era, used analog building blocks for storage. The signal was held for a short time in a relatively simple circuit and then moved on to the next. This "bucket brigade" principle created a longer signal delay. BBDs create different delay times by varying the system beat (clock), meaning that for short delays the beat is faster, and for longer it is slower.

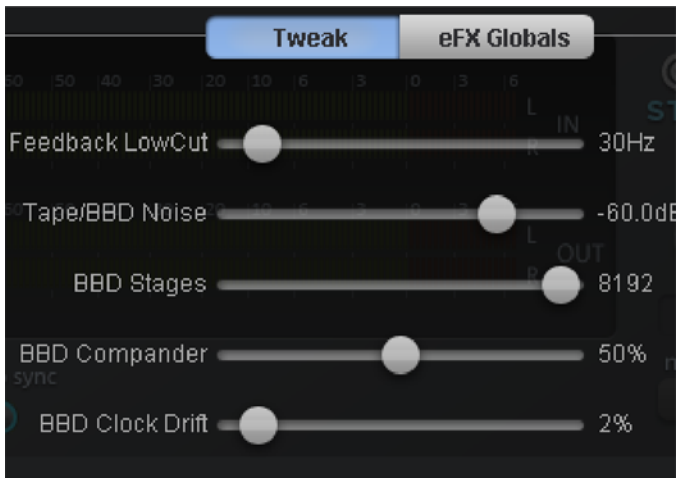
- **Tempo sync:** If this button is active, the plug-in is directed at the host/sequencer tempo. In this mode, changes are made to the delay period via the L/R delay using the musical snap grid (e. g. 1/4 note).
- **Delay L/Delay R:** Specify the delay period for the left and right channels here.
- **Damping:** This specifies the cut-off frequency at which the highs are dampened during the delay. This useful for making the delays reverberate more naturally or for creating special effects (reggae/dub-style effects).
- **Feedback:** This parameter regulates the internal amplitude of the delayed signal that is fed back to the input. In "Digital" mode, this process is completely transparent; in "Analog", on the other hand, higher values, a very loud input signal, or the sum of these will make the use of dynamics compression audible. In both modes, the nullification of the feedback parameter is in the center of the fader. To the right, the plug-in works in "Dual delay" mode (both sides work independently), and to the left, "Ping pong" mode will be activated (the delayed signal alternates between the left and right sides).
- **Mix:** Regulates the mix ratio of the original signal and the delayed portion.

Tweak

- **Feedback Low Cut:** This control sets the filter frequency of a high-pass filter for the "feedback". Signal components below this frequency will be filtered out.
- **Tape / BBD Noise:** Here you can control system noise for both analog modes. Especially if you work with high feedback rates, noise can create quick or stable oscillation, making the effect even more authentic.
- **BBD Stages:** Here you can determine the count of For very long delays, chips with many memory cells are used. This explains why bucket brigade echoes with long delays sound so muffled and dirty. Please keep in mind that the shorter the delay, the faster is the "virtual" system beat. For performance reasons, the system beat is limited. The limit is displayed below the delay control (with deactivated "tempo sync") as soon as it is reached, e. g. 46 ms **(min)**.
- **BBD Compander:** Here you can simulate Compander settings. Due to per-cell loss, BBDs have low system dynamics. For this reason, some have an integrated compander (compression at the input, counter-expansion at the output). Strong compander settings interact noticeably with the input signal, especially with high

feedback, because the input effects the expansion ration at the output, even when there is no signal at the input.

- **BBD Clock Drift:** This parameter can add drift (during audible jitter effects) by slightly varying the system beat of BBD cells. It works similarly to an LFO, but is randomized.



Vintage Effects Suite

If you're a guitar, bass or keyboard player, you'll probably recognize the look of our new "vintage effects" suite. They are accurate digital models of analog "standard effects" used by live musicians. Although we have adopted the appearance of stomp boxes and have given these effect a typical analog sound they are ideal for studio use.

All effects of the Vintage Effects Suite are subject to a soft rule behavior – internally, parameters are softly faded from the old to the new value. This is particularly noticeable when presets change and is of a particular benefit when playing in live mode.

In the following we will present the effects of this suite and explain how and where to use them.

Analog Delay

This delay offers creative playing along with common delay effects. "Analog" in this case means, for instance, that you can change the delay times while playing without the risk of typical, scratching artefacts developing. Instead, the times are softly faded out, similar to the old tape echo machines that used the tape speed to change the delay and where the system also had a certain sluggishness.

"analog" in terms of this delay also means that typical tape echo sounds can be mimicked, e.g. tape speed fluctuations and reduced highs during playback ("feedback"). The feedback has a two-band filter that can be used to create dark, high, or mid repetitions depending on the settings.

These properties can be useful, for example to create "wild" dub/reggae-style delays that move towards the center of the sound with each repetition and even grind slightly. In this case, "analog" means that you cannot digitally overdrive the delay. Even in a 'looped' repetition, the signal cannot be distorted indefinitely, but it is compressed by an increasingly slight degree and distorted similar to a tape.

Analog delay parameter

Analog delay has the following parameters:

Delay type

Delay type (l + r): Left and right delay times can be controlled separately (see below). You can choose a note value for the control pots to snap to. Even and syncopated note values from 1/2 to 1/32 are available. Note that the delay times are always in relation to the project's current tempo.

 **Link button (lock symbol):** Press this button to control the "delay type" pots for both channels simultaneously.

Mix: Adjusts the ration between the original signal and the echo.

Modulation

Speed: The tape warble speed. Low values result in very light fluctuations, high values result in drastic warbling.

Depth: The warble intensity. When this control is turned all the way to the left, there is no pitch modulation. For a subtle "analog" feel, we recommend a setting between the 9 and 11 o'clock position.

Filter

"Low"  This control progressively reduces the bass frequency as it is turned to the right, making the signal sound "thinner".

"High"  Once turned all the way to the right, the control only attenuates the treble very lightly; turned completely to the left, the delay repetitions become progressively less treble.

Feedback

Width: This controls the stereo width of the delay repetitions. When you turn "Width" to the right, an additional effect is produced: the panning of the delays increases. This is commonly referred to as a "ping-pong" delay.

Drive: When this control is turned all the way to the left, the delayed signal is repeated only once. Turned all the way to the right, the feedback is seemingly endless and the repetitions continue for a long time.

The actual strength of the effect is dependent on the material, since the feedback loop (as explained earlier) is addressed via compression and uses a "tape saturation" effect. If you send a "loud" signal to the delay, then the feedback will sound longer than at a lower level as compression "brings it up" to a certain level. If you are used to "purely digital" delays, then this might take some getting used to, but it will probably sound "livelier".

Flanger

The "Flange" effect is similar to that of the chorus, but does have a different technical and historical background. It came about by chance: Someone (various sources say John Lennon) slowed down one of two running interconnected tape machines in a studio with his hand. The result: The rather brief delay of the second signal compared to the first resulted in cancellations within the frequency spectrum, leading to a so-called comb filter effect (the sum of both signals creates "peaks" and "lows" in the spectrum that look familiar to the teeth of a comb).

Flanging is basically a chorus effect, but it has a lower delay time (less than 10 ms). "Release" or signal doubling is not highlighted here; the result is a much more creative frequency response deformation.

A "complete" flange effect will definitely require feedback: The flange portion is returned to the input to increase the effect. People often talk about the "jet effect", since it resembles a jet on take-off.

Flanger parameters

Speed: Modulation speed.

Depth: The overall amount of modulation.

Feedback: The volume of the internal feedback loop.

Mode:

Normal: Flanging.

Dual: Two parts, panned left and right.

Quad: Four parts, alternately panned left and right.

Quad pan: Like “Quad”, but the “Depth” control also sets the intensity of the signal’s pan movements between left and right.

Filter

"Filter" is a "modulation" effect like chorus and flanger. However, it controls the frequency response of a modulation source as well as the pitch. There are various filter types and modulation sizes available for this.

Possible areas of application are synthesizer sounds (filter sweeps on pads) or creative distortions of drumloops (e.g. for variations, fills, etc). With guitars you can create typical 'wah' effects: either by tempo modulation or in a special mode, modulation via the envelope curve. The decisive factor is the current signal strength above the frequency set for the filter.

Filter parameters

Speed: The modulation speed is set by note values ranging from 1/1 to 1/16 (even or dotted). Similar to analog delay, the tempo information is automatically provided by the arrangement.

A peculiarity of the final position of the controller: 
Tempo synchronization stops and modulation is controlled via the signal level.

Freq: This is the base frequency for modulating the filter, and generally takes place above this frequency, i.e. the modulation increases the filter frequency.

Depth: This control determines the modulation depth, i.e. the amount by which the speed control (or envelope mode, as described above) increases the base frequency. For extreme effects, turn "Freq" all the way to the left and "Depth" all the way to the right.

Filter modes

Low-pass 
A filter with a slope of 24 dB/octave and a small amount of resonance. The treble frequencies above the base frequency (cut-off frequency) are filtered steeply. This is great for filter sweeps on synth pads and drum loops.

Band-pass 
Only the frequencies around the base frequency are passed through the filter (24 dB slope with resonance). Use this mode to create wah-wah effects for guitars.

Band elimination („Notch-Filter") 
Two parallel filters (–36 dB) with linked base frequencies create two 'notches' in the frequency spectrum. This allows you to create interesting sounds (e.g. guitar chords), and it sounds similar to a phaser.

High-pass 
This mode achieves the opposite effect to the low-pass filter. Frequencies below the base frequency are filtered steeply. If you 'thin out' sections of your track (for example, a drum track) with a tempo-based modulation, this can sound very effective when contrasted with the full-range frequency spectrum (for example, if the filter is turned off for the next object).

Chorus

The chorus pedal creates characteristic "floating" sounds which one typically recognizes from guitar or synth pads. You can add acoustic "depth" to an instrument to add more power to the sound or to create the illusion that it exists multiple times.

The chorus sound is created by using the so-called Doppler effect. You probably have noticed this phenomenon daily life: The sound of an approaching ambulance sounds higher than when it is moving away. This effect is a result of the speed of the sound which first increases and then decreases, thus also changing the sound pitch. If there were a second siren at your location, an oscillation would develop between both sounds (just like when two instruments are out of tune).

Chorus also splits the signal in at least two: direct sound and effects part. The double effect is created by a short signal delay of the effect.

This delay is within the range of 10-30 ms (as in this one), this means that it is short enough to be perceived as an "echo". The times would also be similarly short if you were to double a guitar track for instance. A short delay in the mix already sounds "doubled" but is not authentic. This is where the above-mentioned "out-of-tune" effect comes in: The pitch of the effect signal is slightly modulated by gently "drifting" forward and backward in the delay curve. The result is a floating effect where the speed is influenced by drifting

Chorus parameters

You can enter the following parameters to control the floating effect:

Speed: Modulation speed. Low speeds create an even, continuous development. High speeds produce vibrato-like qualities, but can also result in an "underwater" effect.

Depth: Modulation depth. This determines how strongly the speed affects the pitch modulation.

Mix: This sets the balance between the direct signal and the effects signal.

Mode: You can choose between **four operating modes** of the chorus effect:

"Normal" is a combination of the direct signal and the detuned delay signal.

"Normal, low-pass" is designed for bass-heavy signals like bass guitar. The bottom end of the signal stays clear and well-defined, the effect is only audible for the mid and treble frequencies.

"Dual" makes the source sound more lively than a single "part". The sound is spread over the stereo panorama, which makes this mode seem "wider". The character of the sound becomes livelier than with a single voice only, and it is also distributed over the stereo panorama, making the mode sound "broader".

"Quad, low-pass" is ideal for creating sounds such as deep synth pads with tight bass frequencies.

Tip: Similar to the stomp boxes our vintage effects are modeled on, there is a "footswitch" below the pedal's logo that can be clicked to turn the effect on or off for A/B comparisons. All the effects of the Vintage Effects Suite have been designed like this.

Distortion

The distortion pedal is a "high gain" distorter for crunch and lead guitar sounds. If you like typically "British" amp sounds and want to quickly record a guitar track with little effort, this pedal is for you.

An entire valve pre-amp circuit has been modeled, including the typical EQ curve. The amplification is "valve-typical", i.e. it doesn't start quickly but is harmonic and soft. Even at full power the pedal still reacts softly to a guitar and its settings (e.g. pick-up choice and tone controller). For instance, you can influence the distortion even more by using the volume knob on the guitar.

There are only three parameters on this effect; however, these interact with each other and can thus generate quite a variable sound:

- **Low:** The "bass" controller. This allows you to set the share of basses, even after the distortion. The type of prefiltering is important for guitar amps in particular, and is characteristic for the basic sound. You should set the bass controller depending on the basic sound of the guitar and the sound you are aiming for ("powerful" or "cut").
- **High:** Mainly controls the share of highs before and after the distortion. If you are not using an external guitar speaker as a monitor, we recommend setting the controller to the middle position or even moving it slightly to the right. This way the "sharp" highs disappear, which all guitar amps generate without the suitable loudspeaker. At the same time the mids stand out more, which gives the sound

more "kick". On the other hand you can further emphasize the highs if you want the sound to be more neutral.

- **Drive:** The level of distortion. This controls the amplification used to operate the "virtual valve circuit" (max. 60 dB). As the level increases, the valve goes into overdrive and generates typical distortions. For a slightly distorted sound ("crunch"), it's sufficient to set the controller to 10-11 hours at maximum; the modeled circuit also provides the usual "weight" for power rock chords, and more. The further you turn this controller to the right, the more the mids of the signal move to the fore so that the "high-gain" lead sound is better heard.

You can also use the distortion effect in combination with the amp simulation!

BitMachine

Audio material can always be edited into high quality with MAGIX Music Maker 2013. Nevertheless, there are some situations, for example, a more imperfect lo-fi sound would perfectly suit a drum loop or a synthesizer sound.

Remember, for example, the first hardware samplers from the 80s that usually only ran at 8 or 12-bit rates and at low sample rates. With the BitMachine, changing the sound with such an "antique" device is no problem.

You can use the BitMachine to bring back to life the times when minimalist and scratchy soundchips in home computers were commonplace.

The BitMachine opens up a gateway to "acoustic time travel" where you can encounter bit and sample rate reduction and downstream filters based on analog models.

Furthermore, the effect has a modulation section with which you can control individual parameters using an oscillator (LFO) or the input signal.

We have designed a range of "typical" presets to demonstrate the time travel abilities of the BitMachine. These can be opened at the top right of the interface

The following section describes the details of BitMachine:

"Reduction" section

Bits

This dial controls the resolution of the audio material. Turning the dial to the left results in 16-bit quantization (CD quality). The further it is turned to the right, the lesser the signal dynamic becomes. In extreme cases (1-bit), there are only "on“ or "off“ states.

At the intermediate levels, you'll notice an increase in the background noise and a decrease in the dynamics. For example, 8-bit quantization will exhibit dynamics of only 48 dB. Quieter points in the material sound noisy and very quiet points sound "capped“. This effect is amplified the more you turn the dial to the left until it starts crackling or "groaning".

Sample rate

The audio material is "down-calculated" with this dial, i.e. the internal sample rate is reduced. A new separation ratio between old and new rates is created. In relation to this ratio, a sample from the data stream will be "dropped“ at the various points.

Note: The two smaller dials from this section are explained under **Modulation**.

"Filter" section

The filter in the BitMachine is a digital model of one of the most well-known filters in music electronics, i.e. the "Chamberlin 2-pole" filter used in old Oberheim synthesizers. These types of filters sound exceptionally musical. They can also be used quite creatively in the BitMachine, but should not be used exclusively to smooth out existing artifacts.

The filter works in the so-called "high-pass" mode, i.e. it lets through deep frequency (or medium) material according to setting, and dampens highs and medium areas.

Freq:

You can specify the cut-off frequency of the filter using "Freq". Filtering starts above this frequency.

Reso:

The signal in the area around the cut-off frequency can be strongly elevated to just below self-oscillation. Sharp, cutting sounds are possible at this level, and the effect becomes even clearer when you vary the cut-off frequency.

Drive:

Both of the individual filters of the connections mentioned above have the ability to overmodulate themselves internally. With the "Drive“ dial, you can regulate the amount of overmodulation. The more you turn this dial up, the more the signal is overmodulated. In this case, the parameters of the internal workings of the filter

interact with one another. Increasing drive weakens the resonance, but, at the same time, the signal gets more volume, more bass and becomes acoustically fuller.

Note: The two smaller dials from this section are explained under "Modulation".

"Modulation" section

You can automate your effects via the settings in the modulation section.

Here, you'll find the so-called low frequency oscillator (LFO), which resonates with adjustable speed. You can influence the speed and type of resonance.

To influence the resonance, use the two small dials in both the reduction and filter areas. These four dials display modulation targets.

Example: You've left the dial for the sample rate at its default setting. Change the small dial beneath from its middle position to either side. The modulation for the dial value is added to the sample rate: The LFO now controls these parameters proportionately and the sample rate reduction resonates at this modulation.

You can use this technique on other dials as well. You just have to make sure that the main dial isn't turned up to full, because then the modulation wouldn't have any effect. The modulation is always added to the set value.

Example: Turn the small dial beneath the "bits" dial fully to the left (Value: -50) and the one beside it (beneath "sample rate") to the right (+50). You've now assigned a modulation to both parameters with the LFO. They are not changed uniformly, but rather opposite to one another: A negative setting is nothing more than an inversion of the modulation, so you're effectively turning down the control signal.

Waveforms of the modulation section

We've already explained this example with the help of sine oscillation. The LFO can be in:

- Sine form
- Square wave (0 or 1, no intermediate level)
- Random value (an internal randomizer will be queried at the set speed)

Oscillator speed

The LFO speed is specified with the "speed" dial. If the "sync" button is active, then the LFO adapts to the song speed, and the dial locks musical values into place (e.g. ¼ note). Rhythmic paths of the sound distortion are therefore enabled. You can also switch off this synchronization and set the speed manually (in Hz).

Modulation with the "Envelope follower"

In the modulation section you'll find a fourth button, the audio input signal. If this mode is active, then the signal itself can be called upon to extract "modulation tension"; a so-called "envelope follower" continuously scans the volume of the input signal.

Note: The BitMachine doesn't recognize the type of audio signal automatically. For this reason, you should set the input sensitivity roughly with the "gain" dial. To do this, use the control LED: With accurate detection of the signal dynamics, assigning the four small dials to modulation lows is easier and you can use the full control range.

In envelope mode, the "speed" dial is used to control the response speed of the envelope (the display now switches to milliseconds). Lower times result in a faster response, higher times make the envelope rise (and fall) slower. You should experiment with the signal according to its complexity. The presets provided can only point you in a rough direction.

Vandal SE

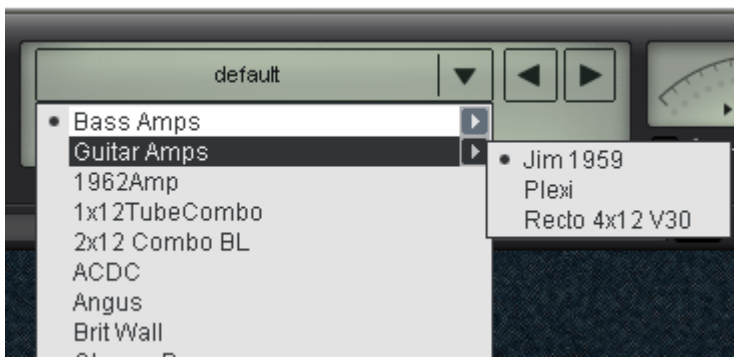
Virtual Guitar & Bass Amplification

VANDAL is a complete simulation suite for guitarists and bassists. The plug-in is capable of simulating the entire signal chain, from input to stomp boxes, amplifiers, microphone loudspeaker boxes and post-processing studio effects, all in top quality.

Quick start via preset selection

Would you like to know about everything that's possible with Vandal SE? Play yourself or use some of the presets. These are available via the list in the upper edge of the interface.

A preset includes all settings for the main elements of Vandal SE: Stomps, amp settings, cabinet simulation, and studio effects.



Tuner

The best amp or the best simulation is useless if the guitar is out of tune. VANDAL offers its own chromatic tuning device for this. You can use it like any analog device: It automatically displays the note that has been struck (in octave) and the display visualizes deviations (in cents).

The following describes the major components of VANDAL. The stations are described according to their position in the signal chain.

Input

The station that you will most likely want to activate first is the input controller. Just like with a genuine guitar or bass setup, it's important to ensure the highest possible input level, in order to work optimally. This is even more important for distorted sounds and natural high-gain playing styles. Use metering for this, too.
As required, activate the noise gate and adjust it so that it lightly suppresses the input

signal during pauses in playing. VANDAL does not cut the input on classic gates too hard, but rather regulates them finely via the signal energy beginning at the highs (where noise is most audible).

Stomp boxes

The real world has produced a series of effect devices popular with guitarists and bassists in the "stomp box" format. We've also included a rich palette of these devices. Vandal SE includes four "stomp slots" that can be equipped with effects from the list. The signal flow within this chain runs from left to right. Since all of the controls are self-explanatory, we won't describe them here.

Vandal - Amplifier

Vandal SE basically offers 2 different amplifiers: Guitar Amp and Bass Amp. The amplifier type depends on the selected preset.

During development, a large selection of famous amplifier brands and models were not included. To guarantee that you are nevertheless able to get a number of different sound characteristics out of your Vandal SE amp, the amplifiers are set up variably. Internally, circuit designs work absolutely the same as the real devices. In several ways, however, Vandal SE goes in its own direction in terms of the sound it offers.

Guitar amp

The Vandal SE guitar amp offers three different pre-amp modes and two switchable end stage models. These basic configurations differ according to the selected preset.

The guitar amp is set up with three channels. These may be set up with the pre and post gain controllers per channel (**Clean**, **Crunch**, and **Lead**) for the desired mix ratio. Don't worry about switching things around: The amplifier will remember the gain settings when channels are changed. These are the gain presets for the different playing styles within a song.

Voicing: We have provided Vandal SE pre-amps with something that we call Curve EQ. For example, if you take a simple EQ pedal and shape the signal a little before the amp, then this may change the sound quite drastically. Curve EQ does something similar: It's located (in some cases multiply) at strategically important points between individual amplifier stages and filters the signal, before it is distorted by the next stage. Move the curve in both directions and navigate through the spectrum using the "Freq" controller. This will give the amp a completely different character...

Equalization: The actual sound control (the "tone stack") functions rather conventionally: Vandal SE offers low, mid & high settings. Everything functions like the passive sound regulation network in genuine amps, so that the controllers influence each other to produce numerous variations.

Reverb: Surf and twang simply need on-board spring reverb. We relied on well-known reverb springs for modeling. Everything sounds natural with complete authenticity.

Bass amp

After roughly setting the **Gain controller**, the bass signal will first be treated with the **Contour** circuit. This filtering stage works similarly to the "Loudness" function by cutting the (lower) mids and lifting the deep bass and highs. It's sort of like an "instant slap".

Next, the signal passes through the compressor stage **(Comp)**. This is a simple but extremely musical, visual design: The bass triggers a light source that is coupled with a photo resistor which dampens the signal. This may already be familiar to you from the most famous studio compressor for bassists, i.e. Urei LA2A, which functions according to the same principle.

After any possible compression, **Drive** provides the option to take the bass sound to the next level. Saturating the signal takes place depending on the frequency: In spite of a possibly high level of distortion, the basses remain relatively clean and contoured.

The equalization stage offers 4 frequency ranges, whereby the two mid bands are variable. The final master volume controller specifies the volume of the final stage. As with the guitar amp, the end tubes are also engaged in this case as much as remains sensible.

Rack effects (FX1/FX2)

There are effects that don't always work well before the amp, e.g. reverb or delay, especially when they are distorted. Normally, these effects are better placed at the end of the signal chain.

For final processing and enriching, we offer two separate studio-quality effects units just like real 19" rack devices.

Many algorithms create a stereo signal. Take care that the sequencer track operates the duct in "stereo" mode.

Effects units may be selectively operated one behind the other (serial) or parallel. Switching may be changed via the mode switch.

The following algorithms & effects are available:

- **Mono delay** (msec & tempo sync): Possibly a simple delay with free selection of delay time or synched to the sequencer tempo with a musical raster. In case of high feedback values, a reduction of the damping frequency is required to provide naturalness to echoes.
- **Stereo delay** (msec & tempo sync): Like mono delay; features two models. Repetitions may take place on separate channels (feedback controller to the right: dual delay) or in ping-pong mode (controller to the left), whereby the signal alternates between the sides.
- **Chorus:** Produces a typical "floating/shimmering sound" by modulated detuning of a signal to "thicken up" its sound or spread it across the stereo field. Detuning is achieved by a short delay, the length of which can be varied by the modulation. This produces the so-called "Doppler" effect and broadens the signal.
- **Flanger:** Algorithmically similar to chorus, but different in that the delay time is significantly lower and delay works with repetitions (feedback). A flanger sounds more "cutting" and up-front than a chorus.
- **Phaser:** A modulation effect just like chorus & flanger, but in this case no detuning takes place. Filter components periodically alter the signal's "phase response" (principle of the "phase shifter"). Characteristic notches are produced in the frequency spectrum response (comb filter effects).
- **Room reverb/hall reverb:** Reverb offers realistic simulation of realistic reverberation. **Room** creates the impression of a small to mid-sized recording room, while **Hall** produces the sound impression of a concert hall. A particular is that both effects algorithms provide a **modulation** parameter, which may remove

possible resonance at low dosages and can produce a soft chorus effect at higher values.

- **LoFi:** This algorithm gives the sound a little bit of "grit", or a certain measure of signal destruction depending on its setting. Turn down the internal sample rate as much as you like to steal a few bits from the sound's resolution. This is definitely unconventional...
- **Vintage compressor:** Ideal for thickening up the signal a little. The algorithm emulates an older popular circuit design that is similar to studio legends like the Urei 1176 or simple compressor pedals. A so-called "FET building block" controls the volume via the input level simply, effectively, and quite musically, as well as the set compression ratio and the attack and release.
- **3-band EQ:** This sound controller works like a conventional mixer with controller for bass, highs, and two controllers for the (variable) mids. This adds the final polish to your sound.

Video and Bitmap Objects

Video and bitmap formats

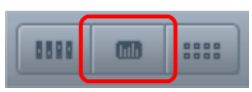
MAGIX Music Maker 2013 can load and export videos in the following formats: AVI, Windows Media (*.wmv, *.asf), MAGIX Video (*.mxv) and Quicktime Movie (*.mov).

Graphics can be loaded and exported in BMP and JPEG formats. Also RTF text files can be loaded and used as subtitles.

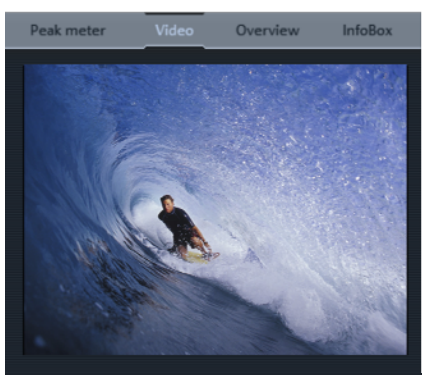
On the content media you will find the included image and video files. You can also use your own files or even record your own videos.

To get the best results with video effects, you should save the video and bitmap files used in True Color (24-bit color).

Video monitor



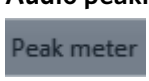
The video monitor can be opened by clicking on this button or pressing the **F3** key.



Both video monitors can even be positioned freely on the screen and adjusted for size. To adjust the size, right-click on the monitor screen and select the size you want in the context menu or make your own (user-defined). Please note that larger video monitors require more computing power.

The video monitor's size can be increased to the full size of the screen by double-clicking on the video monitor or by pressing Alt-Enter. You can end fullscreen by pressing Escape (Esc). Apart from the video monitor size, you can also add a large time display on the video monitor. Select “display play time” in the context menu and the current playback marker position is displayed on the video monitor. Foreground color, background color and transparency are selectable

Audio peakmeter



The video monitor is transformed into an analyzer which displays the sound as a graphic.

Shortcut: Shift + F4

Overview

In the Overview mode, you can view the whole arrangement and you are also able to access any object you want in a split second; zoom in directly to the video monitor or move around the clip displayed in the arranger.

Shortcut: Shift + F2

Infobox

The InfoBox mode shows help text in the preview monitor if you hold the mouse pointer over a button on the screen.

Shortcut: Shift + F1

Loading and editing videos and bitmaps

Video and image objects can be loaded and edited just like other objects. In order for you not having to decide which file is to be loaded, you can use the preview function on the video monitor. Simply click on a video or graphics file in the Media Pool: The corresponding video or graphic is displayed or played in the video monitor.

- Via the context menu (right mouse-click into the list) you can choose between different views ("List", "Details", "Large symbols"). In the "Large Symbols" view the videos are displayed with a preview frame – very useful to preview the available images.
- If you want to use the video for your arrangement, drag the video or bitmap file onto a track in the arranger while holding the mouse key. During playback in the arranger, the entire video and image material on all tracks, including all effects, is played back in real-time.
- Video and image objects can be edited in the same manner as other objects: You can touch and move them with the mouse, fade them in or out with the handles at the top corners, or change their brightness with the middle handle, etc. Please also read the chapter "Arranging objects (view page 50)".

Simplify object presentation

With the TAB key you can switch between two object presentations. The objects in the alternative presentation are not displayed frame by frame in the arranger, but in simplified form. This saves working memory and improves overall play performance. Scrolling and zooming in the arranger as wee as various object manipulations are far quicker in TAB mode. The video display in the video monitor is not influenced by the simplified object display.

Video scrubbing

The scrub mouse mode is particularly useful for quickly finding certain positions within a video. To do this, activate the scrubb mode in the mouse mode bar and drag the mouse pointer over a video object while holding down the mouse key. The video is played back according to the speed and position of the mouse, including all effects.

Extract sound from videos

Video with sound material appears in the arranger on two tracks as two objects (an audio object and a video object). The two objects automatically form a group.

To edit the video and audio material separately from one another, the objects can be separated with the Ungroup (view page 213) function in the "Edit" menu or button in the arranger. Now you can replace the audio or the video track, or process each file separately. Rejoin/regroup the tracks with the "Export arrangement" function.

Video effects

All video effects work in real time. In principle, almost any combination of effects may be assigned to any video or image object: For example, mix mode stanzas with a false color effect and a double playback velocity.

By overlaying of multiple videos or bitmaps, MAGIX Music Maker 2013 proceeds from the bottom up. The background video object must be placed in the upper track. It will be overlaid by and mixed with objects lying below.

Example, if you want to put a dancer on a landscape, place the landscape on track 1, the dancer on track 2 and activate the Blue Screen effect for the dancer.

Video effects are stored in the "Video FX" directory. Open the directory by clicking "Templates" in the Media Pool. All video effects have a preview function and can be dragged & dropped on a video object into the Arranger.

Title Editor

Text objects and title templates

MAGIX Music Maker 2013 includes a function which simplifies insertion and editing of titles. Titles are shown as text in music videos, usually animated, for example to display the artist and song names.

The basis of these titles is the titles templates settings in the "Templates", and these may be reached via the "Titles" button. To integrate a title template into your project, proceed as follows:

- Select a file. As usual, a simple click generates a preview in the video window. This way, you can see how certain title settings will look and the effect they will have in advance.
- Once you've found the right title for your purposes, drag & drop it onto a track in the arranger. It will now be displayed there as a title object. Several title templates (e.g. YouTube templates) contain additional image objects, these titles require two tracks.
- The title editor (see above) opens automatically. You can open it again later by double clicking (or by right clicking in the context menu below "Title Editor").

Video Compression

Compressed video data is typically saved in AVI files. AVI stands for 'Audio and Video Interleaved', i.e. mixed picture and sound. Depending on the compression rate, high data rates will be required – a good video starts at about 2 MB per second, equivalent to compression of about 1:10 as opposed to uncompressed video with 20 MB per second data flow rate. High quality video systems only work with a compression of 3 or 2 – i.e. creating up to 10 MB per second data for video flow. Even uncompressed video can be used. MAGIX Music Maker 2013 can also process such high-resolution video data completely. Within MAGIX Music Maker 2013, video data is processed in uncompressed format – all effects, mixes etc are carried out in the highest quality. It is possible that replay of a project with several videos or realtime effects may 'jump' more than is the case with smaller videos. This does not harm the end result though – video export is calculated frame by frame.

General notes on AVI videos

The AVI format (**A**udio **V**ideo **I**nterleaved) isn't actually a proper video format! Rather, it is a so-called "container", where the conventions for transferring audio and video files to the program are only loosely defined. The codec (**co**der/**dec**oder) actually defines what storage format is used. A codec compresses audio/video data into its own unique format which can only be read by the codec itself and is decoded when the film is played.

In concrete terms, a computer-generated AVI file **can only** be loaded by and played on a different computer if the same codec is installed on it.

Many codecs (e.g. Intel Indeo® video) have now become standard components of the Windows™ installation. Others like the popular DivX codec are not standard. If you are generating an AVI file for future play on another computer using one of these codecs, you should first install this codec on the other PC. The best method available is to copy the codec installer to your export directory and burn it every time you create a video disc (slideshow disc) for play on computers.

You may encounter some problems when using older video editing cards with codecs which only function with the card's hardware. Such AVIs can **only** be used on the computer which was used to create them. Try to avoid using this kind of codec.

Mixer

MAGIX Music Maker 2013 includes a real-time mixer with a master effects section that professionally mixes all the tracks within an arrangement. The Mixer can be opened by pressing the "M" key or via the toolbar in the main window (also: "View" menu > "Mixer").

The Mixer displays eight tracks simultaneously by default. With the «/» buttons beside the scroll bars at the bottom, the Mixer can be increased or reduced in size. You can view further tracks using the scroll bar.

The limiter, which prevents overmodulation, can then be connected.

Fader

Every channel has its own volume or brightness fader. As a result, the volume can be lowered quickly and accurately, to add more bass or to fade out a video that is just playing. This fader also acts on any linked MIDI files.

The stereo position for each track can be defined with the Pan controls.

The "Solo" button switches a track to solo mode, i.e. all other tracks are muted. Mute: The mute button mutes the active track.

Double clicking on each of the controls resets it to the passive basic setting, in which no processor output is needed.

Control groups

The volume, panorama, and FX send faders of the various tracks can be compiled into control groups. To do this, first click on a fader and then, while holding down "Ctrl", click on all other faders that you wish to include in your group. If you select "Shift", all faders in between the first one selected and the next one will be grouped.

Now you can set the volume of multiple tracks together without having to change the volume ratios of the tracks. For example, you can set the volume of an individual instrument of a drumset (kick, snare, HighHat) in such a way that they can harmonize with one another. Now, if you group together the volume faders of the tracks, you can set the master volume of the drumset.

To ungroup a fader from a control group, click the instrument and press "Ctrl" again. There may only be one control group active at a time, creating a new group automatically deactivates an existing group.

Track effects

Besides the object audio effects, a separate track effects rack with equalizer, reverb/echo, compressor as well as the Vintage Effects Suite plug-ins can be used.

There is also a separate 6-channel parametric equalizer (view page 139) that may be opened via the small EQ button beside the panorama controller.

The plug-ins are loaded via the plug-in slot.

You can open the track audio effects rack with the FX button.

A bright blue track effects button signifies that effects are active in the track.

The track effects can also be applied without having to open the mixer.

The arranger's trackbox (view page 31) also features the track FX menu. In it, you will find presets for track effects (view page 134) sorted according to the instrument type.

Track effects always apply to all audio objects of a track. In comparison to applying an effect to each object individually, this saves storage space. The effect itself works the same way as object effects. For more information on using and controlling the individual effects, please read the chapter Audio effects (view page 132).

VST and DirectX audio plugins

MAGIX Music Maker 2013 supports VST and DirectX audio plug-ins. Most of these are effects modules such as reverbs, equalizers and so on, but there are also many software synthesizer modules as well as other types of controller modules. Thanks to their standardized formats, these plug-ins can also be used in the mixer section of MAGIX Music Maker 2013.

Before DirectX plug-ins can be used, the DirectX system needs to be installed on your computer. Manual installation is rarely required as most Windows installations include DirectX. If, however, your computer does not have DirectX or just an older version, you can use the up-to-date DirectX installer provided on the MAGIX Music Maker 2013 installation CD.

Naturally, the DirectX plug-ins themselves also need to be installed before they can be used! Installation procedures may vary from plug-in to plug-in.

Two so-called slots for track effects are located in the channel strip of the mixer for the corresponding track as well as in the FX tracks.

Clicking on the small triangle will let you select an effect from the list. Select "No effect" to remove a plugin from the slot. A left-click temporarily disables the plug-in. Active plug-ins are displayed in light blue. Right-clicking on the slot opens the settings dialog of the plug-in.

FX tracks

Two FX send controllers (FX1 and FX2) are located below the plugin slots.

You can determine the volume at which you want the signal to be routed to the two available FX tracks.

An FX track is a complete, additional mixer track which provides a complete track FX rack and two plugin slots for use as a send effect.

A send effect differs from a normal effect found in the track (Insert) insofar as it can edit the signals from multiple tracks or objects simultaneously.

The FX are usually hidden in the Mixer. They will be displayed as soon as one of the FX send controllers is used.

In the first FX track the hall function is activated as standard as it is the most important application of the send effects.

The volume controllers serve to regulate the volume of the FX track and corresponds to the old AUX return controller. The mute button is used to switch the FX function on and off. The solo button enables you to single out FX individual tracks. The peak meter of the tracks, which send to the FX track, are displayed in grey.

Live monitoring

Click the speaker button in a mixer channel to activate "low latency" monitoring.

Instead of the objects, the channel now plays the audio signal arriving at the sound card's input – through all the channel's effects and without latency! This also applies to the AUX and master effects.

You can now add effects to your vocal or instrumental performance while recording them, and you can 'jam' along to a complete arrangement in real-time. (Please note that this only works during recording and playback, not while the arrangement is stopped.)

This monitoring method requires an ASIO driver to be installed. ASIO drivers are usually supplied with professional sound cards. For all cards without a proprietary driver, MAGIX has included a MAGIX Low Latency driver. This provides an ASIO driver for any sound card (or on-board sound chip) that can use WDM drivers. For further information, please refer to the chapter "Menu File – Settings/Information – Playback parameters..."

The MultiMax effect has a high-latency design, which is why it is deactivated during live monitoring.

Master track

The FX button and the plug-in slots function exactly like in the tracks. The FX button will open the **Master Audio Effect Rack**. The complete mixer settings including the FX tracks can be reset with the **"FX reset"** button.

Both faders control the total volume.

Link button: If you deactivate the Link Button, you can control the volume of the right and left channels individually.

Master limiter: Effectively prevents overmodulation.

Reprocess arrangement

Export wizard

The export wizard can be opened through "File" > "Export" > "Common export options".

This bundles different options for exporting your arrangement in different formats, for burning onto CD, or publishing on the Internet with different platforms.

Export as MP3: This selection exports the arrangement in the popular MP3 format for use on the Internet or on mobile playback devices (MP3 players, mobile phones, etc.). More details about the export dialog are provided in the "Export" (view page 191) section of the "File menu" chapter.

Burn to CD/DVD: This selection exports the arrangement in the best possible quality and opens an additional program for burning an audio CD. The option is also available to backup the entire arrangement with all involved files onto CD or DVD. See Burn audio CD (view page 189).

Upload to MAGIX Online Album laden: Uploads the arrangement to MAGIX Online Album. This platform enables friends and acquaintances to experience your work. The MAGIX Online Album online player may also be embedded into any other websites. More information about MAGIX Online Album is available in the"File menu" (view page 199)

Publish on Facebook: You can send the arrangement directly to your Facebook profile. It will then appear as a post on your wall.

Publish on YouTube™: This selection uploads the arrangement as a music video to YouTube. To use video in MAGIX Music Maker 2013 read the chapter Video and Image Objects (view page 174). More info about YouTube export is available in "Export to YouTube" (view page 187) in this chapter.

Publish on Soundcloud: The arrangement will be uploaded to Soundcloud. Additional info about this innovative music environment can be found in the Upload audio to Soundcloud (view page 188) chapter.

Send by email: Converts the arrangement into Windows Media and adds it as an attachment to an email. An email program (e. g. Outlook Express) must be installed and setup.

Note: You cannot use this function if you only access your email through a browser. However, you could invite others to listen to your uploaded music via email to your MAGIX Online Album or Youtube™. To do so, you will have to use the functions of the respective website (for MAGIX, this is MAGIX Online Media Manager).

Export as E-Mail attachment

The option "Send arrangement as email" in the "File" > "Export" menu creates a file in the Windows Media format. Your mail program is activated simultaneously and the created file is added as an attachment of an opened message. Thus, any arrangement can be compressed without intermediate steps and sent as an email immediately.

Export as ringtone

With MAGIX Music Maker 2013 you can produce your own individual ringtone melodies. Once completed, export the arrangement using the "Audio as Wave/ADPCM" or "Audio as MP3" option in the File menu under "Export". Exactly which format to choose can vary depending on the capabilities of your phone.

Take a look at the "File menu"chapter for more information on the audio export dialog and the for specific export format settings.

Some advice on creating ring tones

Audio material: When designing your ring tone please take into account that the loudspeakers of your mobile phone can only poorly reproduce bass tones. High tones are also heard more easily in a loud environment. If your ring tone includes MIDI Objects, you should activate VST Instruments on the respective tracks in the arrangement, so that MIDI information included in your ring tone becomes audible.

Some manufacturers offer VST effects which simulate the loudspeaker of your mobile phone on the PC.

Length: Typical ring tones have a length of about five to sixty seconds. MAGIX Music Maker 2013 lets you create longer ring tones; however, you should note that large ring tone files require sufficient memory in your mobile phone.

File format: First, select a format suitable for your mobile phone from the Export dialog. If several formats are possible, please note that the resulting audio quality will vary. In general, the quality increases in tandem with the size of the file. If your mobile does not support stereo audio playback, you can activate the "mono" export option which reduces the required memory space by about half. The size of the file that will be generated using your current settings is displayed in the Export dialog.

Transferring the ringtone to your mobile phone: Depending on the type of mobile phone and the items included in delivery there are several possibilities to transfer your ringtone from the PC to the phone:

1. Wireless via infrared (IrDA) or BlueTooth link
2. Using a data cable and, if applicable, the transfer software supplied by the manufacturer
3. By WAP or MMS

Transfer with Bluetooth

Note: The procedure described here refers to Windows XP with Service Pack 2! Dialogs may be different depending on the Bluetooth driver and operating system version, or their order may vary (e.g. for password allocation) when transferring to your mobile phone. However, the process is usually similar if other drivers are used. Read more on this in the help files or the corresponding chapters of your operating system's manual and Bluetooth adapter.

- Should you own a Bluetooth device, you can export the movie straight to your device. For this to happen, your device and your PC must both have Bluetooth interfaces. If you system has a Bluetooth device, you can activate the **Transfer via Bluetooth** option

- After converting the movie into the desired format, the Bluetooth file **transfer assistant** opens.
- The first time you try to transfer files to your device via Bluetooth, you have to specify your device as the receiver in the dialog by clicking on the **Browse...** button and selecting your device. The name of your device in the Bluetooth network is specified in the Bluetooth settings of the device. Check your device manual for this. Select your device and confirm your choice by pressing "OK".
- Now enter a password of your choice, which you will later have to confirm on your device and click on the "Continue" button in the assistant. Since connections between multiple Bluetooth devices can be set up simultaneously in a room, the password serves to identify certain connections as well as to safeguard your data.

The order can also be the other way around depending on the Bluetooth device driver, and the device will then request a password which must be confirmed on your computer. It's important that you use the same password in each case.

- You may be asked once again to enter the file name and path of the movie. In this case we recommend, when exporting the file, using a folder that you will be able to find again quickly (for example, "...My Files/My Videos").
- Click on "Browse...".Now, in the assistant, click on the "Continue" button. In the assistant, click on the "Continue" button.
- Next, you may have to activate the reception of files on the device and re-enter the password. Afterwards, the transfer of the videos will begin automatically.
- Once the transfer has been completed successfully, "1 new message" will display on your device. Read more on how to save and play videos in the corresponding device manual.

Note: We only recommend activating data reception via Bluetooth on your device once this function is actually required, for example, for transferring files. Once you have completed the uploading process you should deactivate Bluetooth again, as permanently activated Bluetooth reception can constitute a security risk!

Transfer with Infrared

For devices with infrared interfaces, the transmission of movies works similarly to using the Bluetooth transfer method. To do this, your PC and your device have to have infrared interfaces. Many notebooks are already fitted with such IrDA interfaces.

- Before starting the export, an infrared connection must already be established between the computer and the device. Activate the infrared interface on your device and establish the connection to your computer. You can check if a connection has been established via a corresponding symbol in the task bar. More information on this can be found in the Windows help under the keyword "Wireless connection".

Note: Some devices deactivate the infrared interface when no data is exchanged after a certain amount of time. In this case, you can search for the exported movie in the Media Pool again, reactivate the infrared interface of your device, open the context menu of the file, and then send the video to your device again by clicking "Transfer".

- Open the "Export" dialog via the export button, and under "Play after export", select the option "Export with infrared". Confirm with "OK". A window will now be displayed which informs you of the current status of the transmission.
- Once the transfer has been completed successfully, "1 new message" will display on your device. Read more on how to save and play videos in the corresponding device manual.

Community upload

The menu entries featured under "File" > "Export" >"Community upload" or via the Export assistant allow you to upload the finished song to different web communities.

Export to Facebook

You can export your arrangement from MAGIX Music Maker 2013 directly to Facebook.

The command opens a dialog where the arrangement name (displayed according to the settings in MAGIX Music Maker 2013), a description and search words (tags) can be entered. After confirming this data with "OK", the arrangement will be exported and uploaded to Facebook. For connecting and transmitting the video file, you must login with your Facebook username and password. If you aren't registered on Facebook, first open your browser and create a Facebook account.

After a successful upload, your browser will open to show you your video's info page so you can check the entered data once again. If everything is as you want it, you can leave the page and the new video will now appear in the list of your own videos.

Export to YouTube

You can upload your arrangement to YouTube® directly from within MAGIX Music Maker 2013.

You can find this function in the menu "File -> Export -> Youtube".

The command opens a dialog where you can set the name of the arrangement for YouTube (default is the same as in MAGIX Music Maker 2013), description, keywords (so-called "tags"), and the category for the video. After submitting this data by pressing "OK", the arrangement is exported and uploaded to YouTube®. This is why you have to enter your YouTube® account access data (username, etc.) to

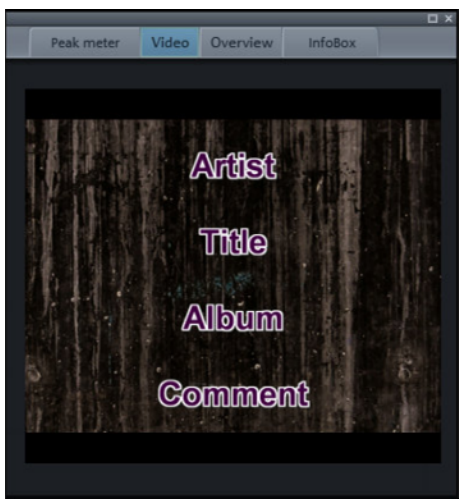
connect to YouTube®. If you don't have an account open your browser and go to YouTube® to sign up for an account first.

If uploading was successful, your browser will open the info page for the video you just uploaded to YouTube® to double check your description and tags. If everything looks correct, just leave this page and the new video is already listed under your videos. YouTube® takes some time to process the video for online presentation, but after this period you and every web user around the world will be able to watch it.

Title templates for YouTube

If your arrangement does not contain a proper video, then you can still upload it to YouTube® with an attractive still image.

In the Media Pool, under the setting "Templates" you will find the subfolder "YouTube" under the "Title". This contains spezial title templates for use with YouTube videos. These templates feature neutral designs or match the style of the Soundpool (hip hop, rock etc.), and contain standard text for artists, title, album, and comments. These titles also appear throughout the entire length of the arrangement.



Upload song to Soundcloud

Soundcloud is a community that is especially designed for musicians. The free version provides 120 minutes of storage space for your songs. Every song may be embedded as a player widget into external websites; the widget even allows comments along the timeline of the song and an optional download of the original song.

If you have an Internet connection, then you will see the Soundcloud player here

For more information about the possibilities provided by the Soundcloud community and the different premium accounts see www.soundcloud.com http://www.soundcloud.com.

Additional editing

You can send your arrangement directly into other MAGIX programs for further editing. In the "Mixdown" menu you can find the applications available in Music Maker.

MAGIX Music Maker 2013 Premium lets you use your arrangement

- as background music in slideshows and videos
- to be added to an existing music collection, for example in MAGIX MP3 deluxe 17
- to be edited with an external editor such as MAGIX Audio Cleaning Lab 17 deluxe

Note: to use this function, the corresponding MAGIX program must be installed. If this is not the case, not all options may be available. You can find out which programs are necessary for each option in the Edit Manu (view page 225) chapter.

Burn audio CD

To burn an Audio CD, export your arrangement as a wave file: Click on "File" and select the "Export arrangement" option > "Audio as Wave/ADPCM". The WAV file created can be burned as an Audio CD with any burn program.

In the Premium version, the burner program <goyaburn> as well as the <Music Editor> are at your disposal. You can load your arrangement into the MAGIX Music Editor with the help of the option from the menu command: "File" > "Export arrangement" > Burn arrangement on audio CD-R(W), and burn an audio CD using this CD mastering tool. Or you can open <goyaburn>, for example, with the help of the context menu in the Media Pool. An MP3 data CD can also be created with <goyaburn>.

File Menu

New arrangement

A new MAGIX Music Maker 2013 arrangement is created with this menu item, with 16 tracks. More tracks can be added via the menu “Edit”.

Shortcut: Ctrl + N

Load arrangement

A previously saved MAGIX Music Maker 2013 arrangement is loaded with this menu item. Please note that the object files for the arrangement must also be available! MAGIX Music Maker 2013 will look for the sounds and videos that were used first in the path where they were located when the arrangement was saved. If they are not found there, then the MAGIX Music Maker 2013 Arrangement will look for the objects in the same directory as the arrangement itself.

Shortcut: Ctrl + O

Save arrangement

The current arrangement is saved under the existing name. If no name has been selected, then a File requester opens, where the path and name can be defined.

Shortcut: Ctrl + S

Save arrangement as...

A dialog opens where the path and name of the arrangement can be specified.

Shortcut: Ctrl+Shift+S

Import

Import audio CD tracks

You can simply import one or more CD tracks like a regular file from the Media Pool via drag & drop. If this convenient method fails for some reason, then this menu command may be accessed via the CD manager to insert tracks from audio CDs directly into the arrangement. More on this can be found in the section "Importing Audio CDs (view page 61)" in the "Audio objects" chapter.

Shortcut: C

Audio recording

See Audio recording (view page 58).

Shortcut: R

Export

Common export options

You will find a quick selection of the most common export options here.

Please read more on this in the section Export wizard (view page 183).

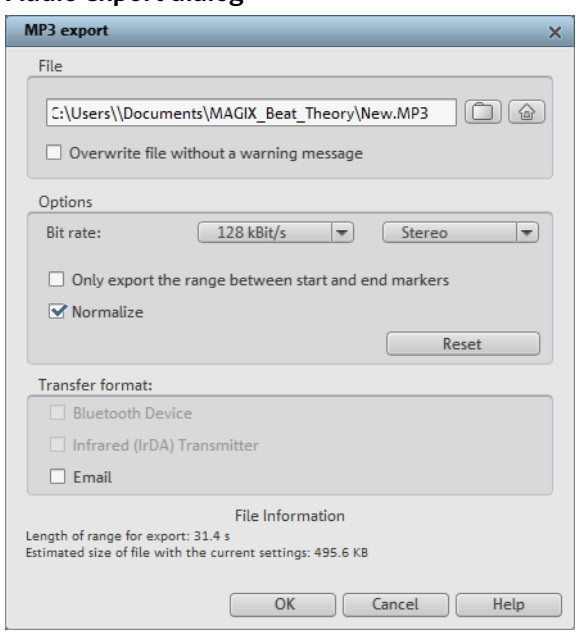
Keyboard shortcut: X

Burn audio to CD-R(W)

With this option the arrangement will be exported as a WAV file and loaded into an additional program called MAGIX Music Editor. From there it can be burned straight to disc.

Shortcut: Shift + C

Audio export dialog



File

In **File** you can enter the file name for you exported file.


Use the folder symbol to select the folder into which you want to export it. The dialog will remember the export path for future exports.


Use the "home" symbol to restore the original preset (More information can be found in the section "Folders" on page 209) path.

With "**Overwrite file automatically**" you can perform multiple exports from the same file.

Options

Only export the area between the start and end markers: Set the option if you wish to export only one of the clippings from the arrangement.

Bit rate: The "Bit rate" selection specifies the level of compression: The higher the bit rate, the higher the quality of the exported audio file. On the other hand, the bit rate determines the final file size: The smaller the bit rate, the smaller the files.

Mono/Stereo/5.1 Surround: Most mobile devices have only one loudspeaker. To save on memory, you can export in mono as well. In 5.1 Surround Mode (see Mixer in Surround Mode) you can also export in MP3surround.

Advanced: Here you can open the advanced settings dialog for the corresponding audio format (see below).

Normalize: This function should always be activated. It guarantees that the music is not too loud/overmodulated or too quiet.

Transfer format:

Here you can state whether you want to send he exported arrangement to mobile devices via Bluetooth, infrared or email. Read more in the Reprocess arrangement (view page 183)chapter.

Audio as WAV/ADPCM

The audio material is exported as a standard wave file. This is the conventional format for further use on Windows PCs. These files are not compressed and retain their full sound quality.

Compression (IMA ADPCM): This option compresses the WAV file in to the ADPCM format. This format is needed for playing WAV files on mobile phones. A lot of mobile phones also need a lowered sample rate. (usually 16000 Hz).

Note: You can also export single tracks. TO do so, simply "mute" those tracks that you don't want. Then, only the active tracks will be exported with this function.

Shortcut: Shift + W

Audio as MP3

MAGIX Music Maker 2013 supplies an optional MP3 encoder for especially fast, top-quality conversions into the popular MP3 audio format.

Hint: The MP3 encoder cannot be used as a codec for audio tracks from AVI audio files.

Transfer format:

Here you can specify how you wish to send the audio file to the mobile device. Read more on this under Transferring files (view page 184).

Options

In the "Options" section you can set the format and the compression of the audio file.

Bit rate: The "Bit rate" selection specifies the level of compression: The higher the bit rate, the higher the quality of the exported audio file. On the other hand, the bit rate determines the final file size: The smaller the bit rate, the smaller the files.

Mono/Stereo/5.1 Surround: Most mobile devices have only one loudspeaker. To save memory, you can also export in mono. In 5.1 Surround mode (see Mixer in Surround mode) you can also export in MP3 Surround.

Note: Before you can use the MP3 encoder for MP3 Surround, you will have to activate it first. Activation is fee-based! For more information, read the Activate additional functions chapter.

Normalize: This function should always be activated. It guarantees that the music is not too loud/overmodulated or too quiet.

Shortcut: Shift + M

Audio as Ogg Vorbis

"OGG Vorbis" is a license-free open source audio codec with very good sound characteristics for comparably small files – similar to the MP3 file format.

In the settings under "Advanced" you can still choose from three various encoder modes and bit rate. Set quality. Constant bit rate enables streaming and maximum compatibility; with variable bit rate a better audio quality with the same size files can be achieved.

Shortcut: Shift + O

Audio as Windows Media

Exports the arrangement in Windows Media Audio format. Please read more on the advanced settings in the Windows Media Video Export (view page 197) section.

Shortcut: Shift + E

Audio as AIFF

The audio material is exported as an AIFF file. This is the most commonly used audio format for Apple™ computers.

Shortcut: Shift + I

Audio as FLAC

FLAC is the abbreviation for "Free Lossless Audio Codec". This is a freely savable format that can be used to compress your audio data to 50% of their original size. Unlike lossy compression methods like MP3 or OGG, the full sound quality is kept intact with FLAC.

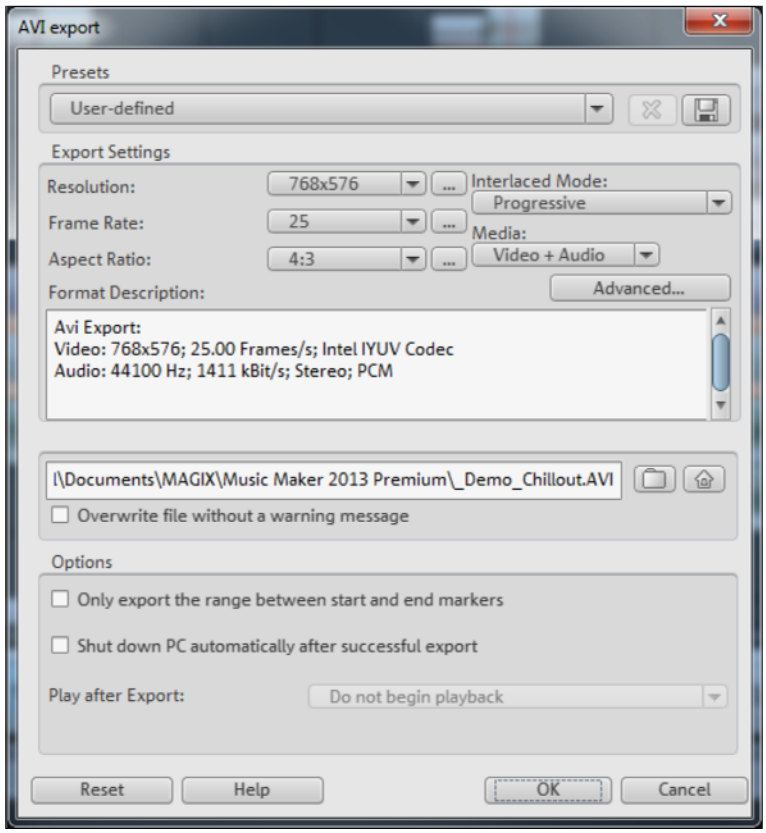
Shortcut: Shift + F

Audio tracks as single waves

Opens the WAV export dialog with activated "Export single tracks" option. Clicking on OK saves each track as a separate wave file in the export folder.

Shortcut: Shift + U

Video export dialog



You can export your arranagement into various video formats. The options on offer can vary according to the selected format.

Presets: Under "Presets", you'll find the typical settings for the selected format for the most important applications.

You can save your personal settings by pressing the **"Save**" button and remove them by pressing the **"Delete**" button.

Export settings: You can set up the general export parameters like resolution, page proportions and frame rate in the dialogs. Select the most-used values from the list field, to set your own values click on the "**...**" button. The "**Advanced**" button opens the specific settings dialog for selected video format (see below).

In **File** you can enter the file name for you exported file.

Use the folder symbol to select the folder into which you want to export it. The dialog will remember the export path for future exports.

Use the "home" symbol to restore the original preset (More information can

be found in the section "Folders" on page 209) path.

With "**Overwrite file automatically**" you can perform multiple exports from the same file.

Options

Shut down PC automatically after successful export: Use this option to have the computer switch off automatically after lengthy export processes.

Only export the area between the start and end markers: Set the option if you wish to export only one of the clippings from the arrangement.

Play after export: Here you can state whether you want to send he exported arrangement to mobile devices via Bluetooth, infrared or email. Read more in the Reprocess arrangement (view page 183)chapter.

Video as AVI

When exporting to AVI video you can set and configure the size and frame rate of the AVI video and the compression codec for audio (audio compression) and video (Codec). Please also observe the general information on AVI video formats (view page 177, view page 196) in the PDF manual.

Shortcut: Shift + A

General info on AVI videos

The AVI format (**A**udio **V**ideo **I**nterleaved) isn't actually a proper video format! It's rather a so-called container where very general conventions can be specified like audio and video data and sent to a program. The exact memory format of the files is specified via the codec **(coder/dec**oder). A codec compresses audio/video files into its own private format with which only the codec can work and decodes the files on playback again.

This means that an AVI file created on your computer can **only** be loaded/played on computer B if this computer has the same codec installed.

Many codecs (for example, Intel Indeo® video) have now become standard components of the Windows installation, others, such as the popular DivX codec are not. If you create an AVI file with such a codec and you wish to use it other computers, install the corresponding codec on them as well.

On older video editing cards certain codecs that function only with the hardware of the corresponding cards can be problematic. This type of AVI can **only** be used on the computer on which they were created. Avoid using this type of codec when possible.

Video as MAGIX video

Exports the project in MAGIX video format.

This format is used for video recording by MAGIX Music Maker 2013 video software and is optimized for digitally editing high quality video material.

Shortcut: Shift + X

Video as Quicktime Movie

Exports the movie in Quicktime Movie format. This format enables streaming playback of audio or video files via the Internet.

Like with Real Media Export, you can make corresponding settings for video size, frame rate and codecs for Quicktime export. However, the export dialog doesn't offer the option of saving comments for the video.

Tip: For Quicktime files (*.mov), the Quicktime library must be installed.

Shortcut: Shift +Q

Video as Windows Media

Exports the arrangement in Windows Media format. This is a universal audio/video format from Microsoft. The setting options in the "**Advanced**"dialog are correspondingly complex.

Manual configuration

Audio/Video codec: Various codecs are available, corresponding to the various Windows Media versions (7, 8 or 9). Should compatibility problems arise on playback, try an older codec with a lower version number.

Bitrate mode: Constant and variable bitrates are possible; most devices and streaming applications demand constant bitrate. For VBR two pass modes the movie is compressed in two passes in order to optimally use the bandwidth for highly-compressed movies for the Internet.

Bitrate/quality/audio format: The bitrate determines display and audio quality. The higher this is, the better your videos will look and the larger the files and the required encoding time will be. For variable bit rates, the bit rate is adapted dynamically to the requirements of the corresponding picture or sound material. Either the quality value can be set between 1-100 or, for two-pass encoding, an average or maximum bit rate. For audio, the bit rate is set additionally by the audio format.

Import from system profile (export type): For the most used methods (other than playback on mobile devices,for which you should use the supplied presets), like Internet streaming, etc., Microsoft provides diverse system profiles to choose from. If you have the Windows Media Encoder 9 installed, which is available from Microsoft as a free download, you can edit the profiles or create your own. These can be loaded by pressing the "**Import from profile file**" button.

Go to **Clip info** to insert title, author name, copyright details, and a description.

Shortcut: Shift + V

Single picture as BMP

Exports the picture located at the current start marker and displayed in the video monitor as a bitmap (.BMP) file.

Shortcut: Shift + B

Picture as JPG

Exports the image located at the current start marker and displayed on the video monitor as a jpeg file.

Shortcut: Shift + J

Sending your arrangement as an email.

This option creates a compressed file in Windows Media format. Your mail program is activated simultaneously and the created file of an opened message is added as an attachment. This lets you compress and send your arrangement immediately without having to go through any intermediate steps.

Backup

Load backup arrangement

Using this command you can load a backup arrangement. Backup arrangements are created automatically by MAGIX Music Maker 2013 and can be used when, for instance, a program crashes in order to recover the last status of files. This type of automatic backup gets the file extension MM_ (underscore). This command is also useful if you unintentionally saved your change and wish to return to the previous version.

Save arrangement and used media

With this menu point, you can put a complete MAGIX Music Maker 2013 arrangement, including all used multimedia files into one folder. This is especially useful when you wish to reuse or archive such an arrangement later on or when the files can be found on multiple CDs so that on loading you continually have to change CDs. Furthermore, the effect files used are saved in one folder with the other files.

A dialog opens where you can specify the path and name of the arrangement.

Shortcut: Ctrl + Alt + S

Save arrangement and used media (audio as OGG Vorbis)

You can create a backup copy as an OGG file, whereby all audio files used will be compressed into OGG format. This way you can compactly archive your song or put it on the web as a remix kit.

Shortcut: Ctrl + Shift + C

Burn arrangement and used media onto CD/DVD-R(W)

Use this option to burn the arrangement as well as all the relevant files to CD or DVD.

Even larger arrangements can be burned straight to disc. The arrangement, if necessary, will then be split up and burned automatically to multiple discs. A restore program which is burned to the first disc of such a backup, guarantees easy re-recording of the backup.

Shortcut: Ctrl + B

Burn manually selected files to CD/DVD-R (W)

Opens MAGIX Speed burnR to burn videos or other files onto CD/DVD. File selection is done via drag & drop from MAGIX Speed burnR's Explorer.

Keyboard shortcut: Ctrl + B

Internet

MAGIX Online Album

In the MAGIX Online Album, you can post your favorite photos online and then send the link to your friends. All photos are immediately available from anywhere in the world on a professionally-designed photo website, in well-organized photo galleries, as full-screen slideshows, or in the form of a personal photo e-card.

- Personalized photo website in many designs.
- Unique Internet address (URL).
- Upload your pictures directly from a camera phone, send the link, and share the picture with other camera phone users.
- Full-screen online slideshows with fade effects and music.
- Send custom designed e-cards with your own photos.
- Share your photos with friends, including Internet management and password access to private albums.

Your photos online

MAGIX Online Album is available in three versions, of which the smallest (the FREE album with 500MB webspace for your photos) is entirely free.

The larger versions (CLASSIC or PREMIUM) are available for a monthly charge, but also come with many handy features, such as a faster website, 2,000 MB or 5,000 MB storage space, more website designs or access by mobile phone/PDA.

More information about prices and included services is available at www.magix-photos.com.

Just three easy steps: Within minutes your first pictures will appear on the Internet:

1. Select photos

Choose your favorite photos directly from the program and optimize them in just a few clicks. Put completed photo albums together and integrate music of your choice.

Do it all offline on your PC - saves you money! Then select "Services" from the program's menu bar "MAGIX Online Print Service -> Send selected".

2. Upload photos

In order to upload photos to your MAGIX Online Album simply log in using your email address. Naturally, access is protected via your personal password.

If you still don't have access, click on **Register now!** to activate your own album in just a few minutes. Then off you go!

3. Done! Your own personal photo website is finished

and your best photo memories are on the net. As a photo gallery or fully automatic slideshow (fullscreen).

Now, invite all your friends with just one click or show your photos on the road using your WAP-compatible camera phone.

Using your **MAGIX Online Media Manager**, you can quickly manage your photo website, upload photos and music, create new albums, add designs and text, and much more. All **online** without even having to download any extra software! Worldwide, easy, and quick in just a few clicks. At http://www.magix-photos.com

The following options are also available:

Send e-cards and photo emails

Send your photos as unique e-cards with great designs, or as a photo email to your friends and acquaintances.

Order photo prints and gifts

Order paper prints or great photo gifts from your MAGIX Online Album and have them delivered directly to your home, or pick them up from a photo lab in your area. Delivery time is usually just 2 - 3 days.

Download media

This command loads files from MAGIX Online Album to your PC.

Open my online album...

This command opens your own MAGIX Online website. You must login and enter the page's Internet address (URL) to continue.

MAGIX Website Maker

Not only is Internet surfing easy! Thanks to MAGIX Website Maker creating websites also becomes child's play!

This service offers:

- Your desired domain (www.desiredname.com) and a subdomain (http://your-name.magix.net/website).
- 250 MB memory space with 5 email accounts, 1 GB each.
- Website Maker with website templates, intros. Also animations, text effects, form and design objects, picture and graphic templates, and buttons. And everything without any ad banners!
- Photo (*.jpeg), video (*.wmv) & music (*.mp3) options.
- Additional software: MAGIX web mail for managing your email inbox.

MAGIX Website Maker offers 3 months of free, non-binding service. This way, you have enough time to find out everything about MAGIX Website Maker and all existing possibilities for editing and managing your homepage.

MAGIX Website Maker offers everything for the perfect Flash website:

- **Design templates:** Numerous high-quality website templates in the latest professional Flash® design with pre-finished, customizable subpages, start pages, profile pages, photo pages, video pages, and much more.
- **Text & text effects:** Freely positionable text fields with fantastic fonts and animated text effects can be added and individually formatted with ease.

- **Multimedia content:** Select your favorite photos, spectacular slideshows, videos and an online video player with your own background music, or integrate it all as an online music player with playlists.
- **Decorative elements:** Attractive design objects, plenty of vector shapes, background images, buttons, and much more offer more possibilities for designing unique websites than ever.
- **Animation objects:** Large selection of dynamic, impressive animation objects for breathtaking, moving websites.
- **Links:** Easily add links to your own or external websites.
- **Top extras:** Enhance your website with a visitor counter, guest book, contact form, and many other useful extras.

  Export function: Conveniently add individual components of your website (e.g. video player, slideshow, online music player) or even the entire website to external sites as an embedded website.

Proceed as follows:

After registering your desired domain, you can start creating your website right away.

1. First, select a design for your website in MAGIX Website Maker
2. If you would like to place an intro (start animation) at the start of your domain, select your intro as a next step.
3. Now you can replace the mock text with your own text as you see fit. All free-standing elements on all webpages can also be moved as you please. To do so, click to select the element and move it using your mouse.
4. Once everything is just how you want it, you can put your page online, so that your domain can be accessed.

Catooh – the Online Content Library

Catooh provides you with high-quality photos, videos, and music for every theme, expanded by intelligent iContent with professional Soundpools, DVD menu templates, and brilliant MAGIX ShowMaker styles to help you make your photo, video, and music projects reality. All of this is available directly from your MAGIX software.

Just choose "Share" from the menu "Catooh" to set up an Internet connection.

Browse through the thematically sorted categories or view the results directly by entering a keyword. After downloading, you can drag the objects from the Media Pool directly into your arrangement.

Tip: Read the introduction online http://rdir.magix.net/?page=JRF6LASAR2Z3!

Find media and download in the arrangement...

Opens Catooh and loads your files directly into the arrangement.

Shortcut: O

Import media backup

iContent (for example, 3D transitions) which you buy and download from Catooh is stored directly in your central **My files\MAGIX Downloads\Backup** directory. If you have downloaded these files from other MAGIX programs, then you can use the command "Import media backup" to make them accessible for use in MAGIX Music Maker 2013.

Manage login details

These are options for managing user names (email addresses) and the associated passwords so that you are able to access your Online Services without having to enter the details each time.

This information applies to all of my Online Services: If this option is activated, then the account details you have entered will be applied to all Online Services. Deactivate this option if you have different details for individual services, then choose the corresponding service via "Select service and enter the associated login details.

Find out more about MAGIX Online World

Opens an Internet browser at the MAGIX Online World website.

Settings

Arrangement settings

In this dialog, the general properties of the arrangement can be set. Statistical information about the arrangement is also displayed.

Shortcut: E

General

Name: Here you can enter the name of the current arrangement.

General arrangement settings
Path: This is where you determine the folder on your hard drive in which your arrangement is saved.
Save automatically: Saves the arrangement automatically according to the settings used for automatic backups in the program settings.
Use settings as presets for new projects: The settings entered in this dialog are applied to all new projects.
Number of tracks: Here you can set the number of tracks you want to use.

Audio sample rate: The sample rate determines the pitch and the speed at which audio objects are played back. The sample rate you can use depends on your sound card (some sound cards even permit changing the sample rate during playback). The sample rate you can use depends on your sound card (some sound cards even permit changing the sample rate during playback). If you halve the sample rate, wave audio objects are played one octave lower.
Time signature: Several types of bars are available to choose from, for example ¾ beat. With various grid settings you can also set additional time signatures. For example, with a set 3/4 beat and a 1/8 note grid a 6/8 beat would be the result.
Video resolution: Here you can specify the presets for the video resolution used and the video format.

Synchronization

Options for Synchronization and ReWire support.

Information

Name/Path: See above
Created on: Displays the time the arrangement was created.
Last changes: Displays the time when last saved.
Number of used objects: Displays the number of all objects in the arrangement.
Used files: Here the names and paths to all multimedia files used in the arrangement are shown.

Audio recording

See Audio recording (view page 58).

Keyboard shortcut: Shift + R

Program settings

Here you can set MAGIX Music Maker 2013 according to your needs and wishes.

Shortcut: P

General options

Autoscroll: If autoscroll is activated, the screen view automatically shifts when the playback marker reaches the right edge of the screen, which is particularly useful for longer arrangements. Scrolling requires constant recalculation of the screen view, which may lead to interrupted playback if the amount of system RAM is too low. If this happens, simply deactivate the autoscroll feature.

Simplified Object Display: This option determines whether the objects are displayed with one or two waveforms. When it is activated, the waveforms are displayed in stereo, i.e. with a right and left channel.

Shift: Ctrl + Alt + Z

Automatic saving of backup arrangements: Here you can the time intervals at which automatic backup arrangements will be saved.

Soundpool

Hide unavailable loops: All Soundpools are saved into a database automatically. The Media Pool lists all loops saved in the database, i.e. also those which originate from external media (Soundpool discs) that may not be in the drive at the moment. These results can be hidden, but this slows down the search results in the Media Pool.

Hide instruments which are left empty in the style selection: Instrument groups for which there are no loops present in a certain style are completely hidden in the Media Pool (instead of being grayed out).

Clean up Soundpool: Every detected Soundpool (on CD/DVD or on the hard drive) is added to the database and displayed there, even if the corresponding medium is currently not in the drive or if the Soundpool has been deleted or moved. This option helps to remove these entries in the database.

Reset Soundpool: Deletes the Soundpool database. You have the option of maintaining the included and installed factory-provided Soundpool in the database.

Hide advanced tooltips: The additional information for the detected loops in the Media Pool will be hidden.

Instruction dialogs: In its newly installed state, MAGIX Music Maker 2013 displays a number of security queries at various parts of the program. Every one of them can be switched off by clicking the small box at the bottom that says "Don't show this message again". To display these warning messages, select the "**Reactivate dialogs**" option.

Program interface

Darken screen when dialogs are opened: Darkening signals modal dialogs which need to be closed before the rest of the program can be operated. This can be deactivated if it disturbs you.

Hide news: This option deactivates the MAGIX News Center in the main interface of MAGIX Music Maker 2013.

Import

Preview samples (Wav, OGG): Preview Wave files while playing the arrangement: Here you can switch off the preview when a playback is running (Smart preview).

Adapt waves automatically to the BPM: When loading to the arrangement or previewing, MAGIX Music Maker 2013 tries to adapt the samples to the speed of the arrangement. This always works properly with newer MAGIX soundpool samples as the tempo information is saved in the wave file. It usually works with all other loops as

well, provided the loops are clean, that is, they are cut to entire bar lengths (see the Arranger chapter).

With "For patched samples only", automatic timestretching can be deactivated for all other samples. With "Apply to longer samples as well", longer samples will also be adapted if they contain tempo and bar information provided by the Remix Agent.

Remix Agent for the tempo and beat recognition of longer samples (>15 s): Here you can deactivate the automatic opening of the Remix Agent for longer samples (for example, CD tracks or MP3s).

Automatically adjust waves to pitch: A wave's pitch can be adjusted automatically using pitchshifting. For this to work however, the used samples (much like the samples on the MAGIX soundpool CDs) must have the corresponding key and pitch information. The pitch of the arrangement will then correspond to the pitch information of the first sample in the arrangement.

Use destructive adjustment for shorter samples: Usually, loaded samples are adapted to the arrangement in realtime with timestretching. For computers with lower processing power, this method can be deactivated – the timestretching effect will then be calculated into a new file which is copied to the hard disk.

Import CD tracks analog instead of digitally: If this option is activated, you can record audio CDs via the record button in the transport control. Read more on this in the "Recording audio CDs" section in the "Audio objects" chapter. (view page 65)

Automatically open MIDI editor during import of MIDI files: The MIDI Editor will automatically open after the loading of MIDI files, allowing you to make changes to channel and instrument assignment and other settings.

Start file preview in Media Pool for...: Here you can deselect automatic file preview start for Media Pool files and certain file types.

Import formats: You can deselect file formats that you never use, and these will no longer be imported. Please keep in mind that for some file types (AVI, WMA) several import modules exist, and MAGIX Music Maker 2013 uses the fastest one in each case. If you experience problems during the import of certain files, you can experiment with deactivation of certain import modules, forcing the program to use the slower, but more compatible import module.

Audio

Output device: This option determines which sound card and which output plays back the wave audio objects and the drivers that should be used.

Advanced: Use these buttons to access the playback options window which provides information on the current sound card. ASIO provides the settings dialog for the ASIO driver, e.g. the MAGIX Low Latency ASIO driver.

Wave/Direct Sound/ASIO/WASAPI: Specifies which of the conventional Windows wave drivers should be used for the sound card, i.e. the DirectSound system or ASIO. Starting with Windows Vista, the WASAPI driver model is also an option.

Windows **wave** drivers have the advantage of being relatively stable against strained peaks caused by large buffers. If playback becomes jerky as a result of processor-heavy effects like time-stretching, switching to wave drivers may solve the problem. Otherwise the system may react more slowly with wave drivers because of the large buffers, that is, all changes are heard with a delay.

16/24-bit wave/driver communication: If your sound card is able to play 24-bit audio, your arrangement will be played at this higher resolution (internal 32-bit float calculation). This is applicable only to wave drivers.

When using live monitoring and when playing and recording VST instruments in real time, i.e. with as low a reaction time (latency) as possible, it's recommended that you use **ASIO** drivers. If your sound cards do not have ASIO drivers, you can use the MAGIX Low Latency driver.

If you select ASIO as the driver model, you can set the output in the upper list field (for cards with multiple outputs) and the ASIO driver in the lower list field. **Advanced** opens the settings dialog of the ASIO driver. Please refer to the sound card manual for more information.

WASAPI is a new Windows (native) driver model for low latency and can be used as an alternative to ASIO drivers. WASAPI is recommended for Windows Vista or later Windows versions when the sound card does not have its own ASIO driver and the MAGIX Low Latency driver isn't compatible.

Audio buffer:Here you can specify the buffer size that should be used for playback of the entire arrangement or for previewing audio files in the Media Pool.

As a rule of thumb: If response and loading times are too slow, reduce the buffer size; otherwise increase the buffer size if the audio playback is choppy or if real-time effect computation errors occur.

As error-free playback is usually more important than fast reaction times, the buffer size should be raised to 16384 or 32768 if dropouts occur.

MIDI
Output device: MAGIX Music Maker 2013 uses an external MIDI device when no software instruments are applied and to preview MIDI files in the Media Pool. Here the "Microsoft GS Wavetable SW synth", a standard software synthesizer included in Windows® as an OS component, should be set as default. If sound cards with their own synthesizer are used or in case MIDI hardware synthesizers are connected, the MIDI driver of the sound card or a MIDI interface should be set!

FX: If MIDI playback is too fast or lagging behind, you can enter a speed correction factor here.

Input device: Lets you select the MIDI driver for your MIDI recording, i.e. the driver for the MIDI device that is connected to your MIDI keyboard or the driver for your USB keyboard.

Use MIDI target channel: The MIDI system offers 16 different channels to control 16 different sounds. Normally, MAGIX Music Maker 2013 receives MIDI notes on all channels simultaneously. With this option, you can select a specific channel. Next you have to set the desired sound together with the MIDI channel on the device and select the MIDI recording options on this channel.

Synthesizer latency: Some synthesizers, especially software synthesizers like VST instruments, create delay during playing, i.e. playback of the sound is delayed when the key is pressed. This value lets you even this out, causing all notes to be moved over by a certain temporal value.

Integrate MIDI keyboard with Live Performer: The MIDI keyboard can be used to remotely control the Live Performer (only in Premium version); see Live Performer MIDI assignment.

Options

Create "Undo" before destructive editing of audio data: To undo destructive effects, the original files must be saved to the hard disk. If you use this type of effect quite often, you can switch off the undo function and save on time used to create an undo file as well as save space in memory.

Write real-time audio to wave file: If this option is activated, the entire arrangement can be mixed live and recorded simultaneously. During playback you can, for example, control mixer fades and effects or, with the help of keyboard shortcuts, you can play the beats in the arrangement – all activities will be recorded and written to a separate wave file. Every time playback stops you will be asked if the portion you just played should be saved as a wave file, loaded into the arrangement, or deleted.

Video

Video standard: PAL is used in Europe, the US and Japan use NTSC. This setting should not be changed.

Video display: The resolutions that can be set here concern only the picture display of DV videos in the Arranger. If playback becomes jerky, we recommend entering a lower value. The quality of exported videos is not influenced by this.

Extract sound from videos during import: If a video contains audio data as well, you can use this function to extract the audio track from the video. It will be loaded directly underneath the video track and grouped together with it. If you ungroup them (in Edit menu), you can edit the sound as an independent object.

Automatically adjust videos to BPM during import: With the available BPM information you can automatically create a video in which the rhythm and order of pictures are synchronized. This does not play all frames of a video, but some are excluded according to the BPM setting on frame playback. The video appears faster at a higher BPM setting; it "dances" to the rhythm. The tempo can be set before every new arrangement in the transport control. Otherwise, the arrangement applies the BPM tempo of the first sample that is loaded.

Adjust minor deviations from 04:03 aspect ratio during export: This option automatically customizes photos that have an approximate 04:03 aspect ratio to 04:03 TV screen format. The pictures are therefore easily stretched or compressed. This inevitably brings about distortions in the picture. If this option is deactivated, black bars appear along the sides.

Automatically preview exported clips: This option starts the clip immediately after exporting for verification.

Automatically copy exported material to clipboard: This option is particularly useful when used with other programs, such as Microsoft PowerPoint. If switched on, the created multimedia file will be available straight after being inserted.

Video priority: Usually, audio objects have priority over playback. Here, an overloading of the computer as a result of too many effects can bring about jerky video playback while the audio continues to play without any problems.

To change this, you can give the video playback precedence over the audio. Video playback is then renewed after every audio buffer, which may lead to interruptions in the sound.

Folders

Here you can set the path where

- arrangements will be saved (**Arrangements**)
- files are exported (**Export**) or imported (**Import**), and recordings (**Recordings**) are saved,
- files from the Soundpool are loacted (**Soundpool**)
- your MP3 collection is available (**My MP3s**)

Keyboard shortcuts

Opens the dialog for editing shortcuts used in MAGIX Music Maker 2013.

Shortcut: U

Language

Here you can change the language used in MAGIX Music Maker 2013. Normally the language that is used for installation is set as the program language.

Reset Program Settings to Default...

Use this function to reset all program settings (view page 204, view page 203) you made in MAGIX Music Maker 2013 to their original settings.

Exit

Exits MAGIX Music Maker 2013.

Keyboard shortcut: Alt + F4

Edit Menu

Undo

10 commands can be undone, including object and cursor manipulations. If you don't like the result of a change in your arrangement, the Undo function will take you back to the previous arrangement.

Shortcut: Ctrl + Z

Redo

Redo lets you reverse the last Undo command.

Shortcut: Ctrl + Y

Object

Create a new object

Record a new object

A new audio object is recorded; see Audio recording.

Keyboard shortcut: R

Create a new MIDI object

This function creates a new MIDI object in the current track. After invoking the function, a pop-up menu opens in which you can choose between an empty MIDI object or several standard templates.

Shortcut: Ctrl + Alt + N

Text to speech

Please refer to the Audio objects (view page 78) chapter.

Shortcut: Ctrl + Shift + T

Create a new title object

Creates a new title object and opens the title editor (view page 176).

Shortcut: Alt + Shift+ T

Cut

The marked objects are cut out of the current arrangement and placed onto the clipboard. They can then be inserted at different positions.

Shortcut: Ctrl + X

Copy objects

Objects selected from the current arrangement will be cut out and saved to the clipboard. They can then be pasted to a different location.

Keyboard shortcut: Ctrl + C

Duplicate objects

This menu option lets you copy all selected objects. The copy appears next to the original and can be moved easily by holding the left mouse button (drag & drop).

Shortcut: Ctrl + D

Inserting objects

The contents of the clipboard are added into the current arrangement at the position of the start marker.

The playback marker is positioned at the end of the most recently inserted object so that the quick and easy multiple use of the command is also possible. Existing objects now become overwritten.

Keyboard shortcut: Ctrl + V

Inserting multiple objects

This function is similar to "Insert", but you can choose how often the content of the clipboard is to be inserted.

Shortcut: Ctrl + Numeric pad '+'

Deleting objects

Objects selected from the current arrangement will be deleted.

Shortcut: Del

Split objects

You can cut up a selected object at the S marker position. If you have not selected an object, all objects will be cut into pieces at the S marker position.

Later on, if you want to re-join the pieces of an object, select “Build group” to join all selected objects to a group.

Shortcut: T

Save objects as takes

The selected objects are saved in the takes directory. For more about using takes, please refer to the section „Takes“ (view page 54) in the chapter "Arranging Objects".

Keyboard shortcut: Alt + Shift + S

Grouping

Group objects

Orders all selected objects into groups. As soon as an object is selected in the group, all objects in the group become highlighted so that you can work on them collectively.

Shortcut: Ctrl + G

Ungroup objects

Any selected objects that are part of an object group will become independent objects again in this case.

Shortcut: Ctrl + U

Loop range

Set user-defined loop

Normally an object is always looped over the full length of the underlying data material (audio or video file). To set a clip from a file as a loop, shorten the object at the front and the back with the handles and choose the menu option **"Edit > Object > Loop range > Insert user-defined loop"**. This function is very useful for setting your own recording as a loop, as the silence at the beginning of a recording can be cut away.

Remove user-defined loop

The user-defined loop length is reset.

Object properties

This function displays all the information about the currently selected objects such as file name, position on the hard-drive, tempo, etc. More information is available under Object properties.

Shortcut: Ctrl + P

Track

Add track

A new empty track will be added to the arranger. In the "File > Arrangement properties" the count of tracks can be set in large increments.

Shortcut: Ctrl + I

Mixdown audio...

This function can combine the arrangement or segments of the arrangement into a single audio/video object. Please refer to the "Track mixdown" (view page 55) section in the "Arrange objects" chapter.

Tip: To create the finished end version of the song or video, it is recommended you select the "Export arrangement" function in the "File" menu instead of the "Mixdown" function.

Shortcut: Ctrl+Shift+G

Range

MAGIX Music Maker 2013 provides object-based functions as well as "band-oriented" editing functions. These always refer to the whole arrangement from the first to the last track as well as to the area between the start and end marker.

Cut range

The section between the in and out points is cut from the current arrangement and placed on the clipboard. This section can be reinserted elsewhere.

Shortcut: Ctrl + Alt + X

Copy range

The section between the in and out points is copied from the current arrangement to the clipboard. This section can be reinserted elsewhere.

Shortcut: Ctrl + Alt + X

Insert range

The contents of the clipboard are inserted at the current arrangement's position of the in point.

Shortcut: Ctrl + Alt + V

Insert segment multiple times

Similar in function to "Insert", but you can stipulate how often the content of the clipboard is to be inserted.

Shortcut: Ctrl + Alt + Number key

Delete range

The section between the in and out points is deleted from the current arrangement and not copied to the clipboard.

Shortcut: Ctrl + Del

Extract range

The section between the in and out points is preserved, and all of the material in front and behind it are deleted. Use this option to isolate a specific part of an arrangement for further individual editing.

Shortcut: Ctrl + Alt + E

Navigation

Move screen view

Using these commands, a viewable portion together with the start marker will be moved in the timeline. You can quickly skip between different jump markers and object edges.

Shortcuts: See keyboard shortcut overview in the Arranger View (view page 236) section.

Move playback position

This sets the playback marker to the position of a jump marker. This function can best be used via the keyboard.

When stopped, you can immediately move the playback markers to the position of the saved jump markers. During playback, the playback marker along with the playback range will be moved. Here, the old range is always played until the end so that you can remix your arrangement live once the jump markers have been placed where you want them without losing the beat.

Shortcuts: 1..0

Set jump marker

This sets a jump marker at the position of the current playback marker. Here you can note specific parts of the arrangement. With the "Move playback position" function you can quickly jump to these positions.

Shortcut: Shift + 1...0

Create jump marker sequence

This option duplicates the currently selected playback area between the start and end markers by setting start markers equidistant to one another in the bar ruler. Now you can jump to every jump marker using keyboard shortcuts.

Shortcut: Ctrl + Alt + M

Delete all jump markers

Deletes all jump markers

Shortcut: Alt+Shift+M

Select all objects

All objects in the arrangement will be selected.

Shortcut: Ctrl + A

Menu effects

Song Maker

This command opens the Song Maker (view page 67) to make arrangements semi-automatically.

Keyboard shortcut: W

Audio

Please read the chapter "Audio effects (view page 132)" for more details on audio effects.

Master audio effect rack

Opens or closes the master effects rack; you can also use the "Master FX" button in the mixer window for this.

Shortcut: B

Text to speech

Please refer to the Audio objects (view page 78) chapter.

Shortcut: Ctrl + Shift + T

Object effect rack

See Object and master effects rack (view page 136).

Shortcut: E

Audio effects

This submenu includes all audio object effects plus the vintage effects and the effects from the MAGIX Mastering Suite (Premium version only); the latter can be used individually.

Individual effects can be found in the chapter "Audio effects (view page 132)".

Volume

An assortment of different menu commands which influence the volume of your audio objects.

Mute/Unmute

Use this command you can mute one or more selected objects. Selecting this command again makes it audible once again.

Shortcut: Ctrl + M

Set volume

This function, located in both the effects menu and the context menu, controls the sound volume for individual objects, just like the object handles in the arranger.

Automatic volume damping

This command automatically dampens the volume of other audio objects. This can be used to insert voiceovers into your arrangement or add commentary to a film (with the original sound). You can also specify whether you want to dampen the original sound of existing videos or all soundtracks equally.

In the dialog you can activate and deactivate the value of the dampening.

You can use this command while recording audio (view page 60) (Audio recording, advanced options).

Shortcut: Ctrl+Shift+D

Normalize

The function "Normalize" raises the level of an audio object to the maximum possible level without clipping the material. This searches for the largest signal peak in the audio material and raises the level of the object so that this position matches exactly 0 dB (maximum overdrive).

Shortcut: Alt + N

Tempo and pitch

An assortment of different menu commands which influence the pitch and tempo of your audio objects.

MIDI transposition

This command is only available for MIDI objects. It increases/decreases the pitch of a MIDI object's notes by a specific value (in semitones). Use this function, for example, to adjust the sound of imported MIDI files to other audio objects. This is more effective than repositioning audio objects (pitchshifting), since this can diminish the sound; transposition does not diminish the quality of MIDI objects because they are produced by the synthesizer.

Shortcut: Ctrl + T

Timestretch and pitchshift

See Timestretch/pitchshift.

Shortcut: Shift + P

Harmony Agent

The Harmony Agent is designed to analyze harmonies.

Read more on this in the corresponding section of the "Audio Objects (view page 77)" chapter.

Shortcut: H

One pitch higher/lower

You can quickly alter the octave of an included sample without having to access the corresponding Soundpool folder in the Media Pool.

The "*" and "÷" keys on the numeric keypad (right on the keyboard) place the sample one level higher or lower.

The "+" and "-" keys on the numeric keypad change the pitch via pitchshifting; the respective effect in the audio effects rack is utilized for this.

Set pitch

Use this command (only in the Soundpool sample's context menu) to quickly change the pitch of the selected object (if present). This also functions when working with multiple selection. Simply select all the objects which are under one another and select a new pitch to create variations in the arrangement.

Remix

These are the commands for MAGIX Music Maker 2013's remix functions.

Create Remix objects

If, while running the Remix Agent, the tempo and beat information were saved to the audio file, this command can be used to create remix objects. If the Remix Agent has not yet been implemented, this command starts it and opens the presets dialog for creating remix objects.

Shortcut: Ctrl + J

Remix Maker

With the Remix Maker, automatic remixes can be created from Remix Agent loop objects.

Please refer to the Audio objects (view page 75) chapter.

Shortcut: Shift + K

Tempo & beat recognition

MAGIX Music Maker 2013 provides a Remix Agent for the automatic determination of the speed in BPM (beats per minute) and for the creation of loop objects.

Please refer to the "<Remix Agent>"chapter.

Shortcut: J

Loop finder

The Loop Finder was developed for the purpose of finding BPMs in short rhythmic passages and placing BPMs into the arrangement. The Loop Finder can also help to fit short loops into an existing arrangement or extract short rhythmic passages from drum loops.

Note: For longer passages (e. g. complete CD tracks), you can use the <Remix Agent> (view page 69, view page 220).

The waveform of the audio material is displayed in the upper part of the dialog, preset at a zoom level of about 10 seconds.

The principle involves moving the green start marker to the start of the beat and the red end marker to the start of the next beat. The BPM display to the left then shows the tempo of the loop in beats per minute (BPM). Here we presume that there are exactly the same amount of beats in the selected passage as is displayed in the "Beats" input field – 4 is the default. If there are two full bars between the start and end markers, the number of beats has to be increased to eight, otherwise the Loop Finder will only correlate half the speed.

The precise marking of the beat length is required for exactly defining the loop length. This is also possible manually by moving the start and end markers, and can be similarly precise when using the zoom functions. But it's easier to do so using the following:

Tap tempo: activates the automatic step-sequence to determine the tempo. First, audio playback begins at the start marker position. Then you will be requested to tap in the beat with "Tap" or by pressing the "T" key, that is, the "T" key should be pressed in time with the music. Playback stops after the number of beats set above is reached. The start marker is now positioned at the start of the tap process and at the end marker at the end. And that's it! The beat has now been set and the tempo can be read. Program automation makes sure that the start and end positions are placed

exactly at the next beat. Even if the tap process didn't work out exactly, automation nearly always finds the right beat meant when tapping.

Snap marker: You can use the red and green arrow buttons at the top beside the wave display for moving the start and end marker one beat forward or one beat back. This makes it very easy to select "round loops", i.e. whole bars, during running playback.

As long as a loop runs through without any problems, the correct tempo will be able to be read to the left.

Here you should make sure that the number of beats per bar (default: 4) has to adapted to the actual loop length. That means if four bars are selected as a loop, 16 has to be entered into this field.

Start (S) and End (E) Markers: These markers indicate the beginning and the end of a loop. You can move them around with the mouse to fine-tune the range.

Cut: Once a correct loop has been found, it can be cut using the this function in order to be able to use it again later.

Use new BPM: The arrangement applies the BPM value found.

Timestretching: Adapts the object to the tempo of the arrangement (as a result of the determined tempo) using timestretching.

Resampling: Adapts the object to the tempo of the arrangement (as a result of the determined tempo) using resampling.

Shortcut: L

Load/Save/Reset audio effects

You can save the current effect combination of an audio object separately and apply it to other objects later. Or you can deactivate all currently used effects entirely (Reset) if you want to undo the changes.

Keyboard shortcut:	Load audio effects	Ctrl + Alt + O
	Save audio effects	Ctrl + Alt + S
	Reset audio effects	Ctrl + Alt + R

Convert stereo into two mono objects

With this option stereo recordings can be split into two mono objects which are then connected to a group. You can use the "Ungroup" button to edit the channels as independent objects.

Shortcut: Shift + Z

Edit in external editor

A selected audio object into the external program MAGIX Music Editor where it can be edited with lots of special features. Once editing has been completed, the edited material is used in MAGIX Music Maker 2013 instead of the original object.

Shortcut: Ctrl + Shift + M

Video

Edit image in external editor

Graphics files (BMPs or JPEGs) may be edited retroactively with an external graphics program from the arranger. The selected image file is loaded automatically and, once editing has been completed, is used in the MAGIX Music Maker 2013 instead of the original material.

Shortcut: Ctrl+Shift+B

Load video effects

This command enables a saved effects combination to be loaded for the currently loaded object. If multiple objects are selected, then the effects combination will be applied to each selected object.

Save video effects

This command saves the current effects combination for each object separately.

Reset video effects

This option allows you to deactivate all currently used effects. The material will be reset to the state it was in before you applied the effect.

Title

Title Editor

Opens the title editor (More information can be found in the section "Title Editor" on page 176) for the selected photo or video object.

Shortcut: Alt + Shift + T

Load title template

Use this command to load previously saved title effects for the current object.

Save title template

You can save the current effect combination for each title object separately and apply it to other title objects later.

View menu

Standard layout

This option determines, whether the video monitor and Media Pool are integrated in the main window or appear as a separate window which can be closed or opened.

Shortcut: F11

Zoom Soundpool and Keyboard

This setting enlarges the display of the loops in the Soundpool view of the Media Pool. The keyboard is also shown with a larger display. This makes it easier to use MAGIX Music Maker 2013 on touchscreens.

Shortcut: Tab

Arranger

Arranger visible

This turns the arranger on and off.

Shortcut: F4

Optimize view

The start marker is set at the beginning of the arrangement and the end marker is set at the end of the last object in the arrangement, so that the arrangement may be played back in full.

Zooms out of the arrangement so that the complete duration of the arrangement is visible. The vertical zoom steps (track height) remain preserved.

Shortcut: F12

Objects with stereo imaging

This option determines whether the objects are displayed with one or two waveforms. When it is activated, the waveforms are displayed in stereo, i.e. with a right and left channel.

Shortcut: Ctrl + Alt + Z

Highlight loop area

With this option, you can fade the loop area in and out, visible by the stripe above the first track that indicates the area that will be played as an endless loop.

Show object marker > Show bar marker/harmony marker

After using the Remix agent or the Harmony Agent, the analysed material receives beat and harmony information which is then shown in the arranger via these commands.

Shortcut:	Bar Marker	Ctrl + Shift + F9
	Harmony Markers	Ctrl + Shift + F10
	Beat Markers	Ctrl + Shift + F11

Media Pool

Show Media Pool...

This option hides or displays the Media Pool.

Shortcut: F2

Media Pool views / template folders

Opens the corresponding folder in the Media Pool.

It's even easier to access the corresponding Media Pool views and folders via the corresponding keyboard shortcut.

Video monitor

Show video monitor

Opens and closes the video window.

Shortcut: F3

Full-screen Video Monitor

This option shows the video preview monitor in full-screen mode. The right mouse button opens the context menu, the Esc-key returns you to normal viewing mode.

Shortcut: Alt + Enter

Video output

This option switches the preview monitor on or off to display the existing video objects in the Arranger.

Shortcut: Shift + F3

Arrangement overview

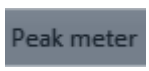
With this option you can display an overview of the entire arrangement on the video screen. It is particularly suitable for long and complex arrangements to prevent you from losing track.

You can view the whole arrangement and and still be able to access the sought-after object in a split second – you can zoom in directly on the video monitor or move around the clip displayed in the Arranger.

The function can also be opened via "Overview" on the video monitor.

Shortcut: Shift + F2

Audio peakmeter



The video monitor is transformed into an analyzer which displays the sound as a graphic.

Shortcut: Shift + F4

Infobox

The InfoBox mode shows help text in the preview monitor if you hold the mouse pointer over a button on the screen.

Shortcut: Shift + F1

Mix

Mixer

With this option you can open and close the real-time mixer. Further information can be found in the Mixer (view page 179) chapter.

Shortcut: M

Master audio effect rack

Opens or closes the master effects rack; you can also use the "Master FX" button in the mixer window for this.

Shortcut: B

The "Share" menu

The Share menu provides access to online social networks as well as transfer functions to other MAGIX programs.

Here you'll find options for uploading individual objects in the arranger or files from the Media Pool as well as the entire arrangement, as audio or video. You can also transfer your arrangement to another MAGIX program (if it is installed) e.g. to use it as background music for your slideshow.

Community upload

The menu entries featured under "File" > "Export" >"Community upload" or via the Export assistant allow you to upload the finished song to different web communities.

Upload arrangement as MP3 to MAGIX Online Album

Converts your arrangement into an MP3 file and uploads it to your personal MAGIX Online Album.

Upload video to Facebook.

Uploads he current arrangement to Facebook. You can find additional information under Export to Facebook (view page 187).

Upload video to YouTube

Uploads the current arrangement to YouTube. See Export to YouTube (view page 187) for details.

Shortcut: Shift + Y

Upload audio to Soundcloud.

Uploads the arrangement to the Soundcloud music platform. You can find additional information under Upload audio to Soundcloud (view page 188).

Sending your arrangement as an email.

This option creates a compressed file in Windows Media format. Your mail program is activated simultaneously and the created file of an opened message is added as an attachment. This lets you compress and send your arrangement immediately without having to go through any intermediate steps.

Present music on magix.info

Opens an Internet browser at the MAGIX Online World media upload page. There you can choose the file you would like to present on the website.

Note: You first have to export (view page 183) your arrangement.

Use as background music

Converts your arrangement into MP3 format and sends it to one of the specified programs, where it can be used as background music.

- Video easy 3 SE
- Video easy 3 HD
- Movie Edit Pro MX HD
- Movie Edit Pro MX Plus HD
- Movie Edit Pro MX Premium HD
- Photo Manager 10
- Photo Manager 10 deluxe
- Photo Manager MX
- Photo Manager MX deluxe

Note: This function is only available if you have at least one of the above programs installed.

Add to music collection

Converts your arrangement into MP3 format and sends it directly to a MAGIX music management program (e. g. MP3 deluxe MX), where it is added to an existing music collection.

Note: This function is only available if you have installed an appropriate MAGIX program.

Edit audio objects in external editors

Converts your arrangement into WAV format and sends it directly to one of the specified programs where it can be edited further.

- Music Editor
- Audio Cleaning Lab

Note: This function is only available if you have at least one of the above programs installed.

Burn audio to CD-R(W)

Your arrangement will be sent to MAGIX Speed burnR, where it can be burned as an audio CD. The Premium version offers you MAGIX Music Editor.

Keyboard shortcut: Shift + C

Burn arrangement and used media onto CD/DVD-R(W)

You arrangement will be sent to MAGIX Speed burnR, where it can be burned to CD or DVD.

Shortcut: Ctrl + B

Help Menu

Show welcome dialog

With this command you can display the "Welcome" dialog again. There, you have a quick access to important functions during program start.

Documentation

Content

Use the command "Content" in the "Help" menu to open the start page of the help file. You can read through the help file step-by-step and jump to specific sections via the tree structure on the right hand side.

PDF manual

Opens the manual in PDF format.

Context Help mouse mode

The mouse cursor will turn into an arrow with a question mark.

Click on any button of the main screen, to open program help which will describe the control element in question.

Shortcut: Alt + F1

Display tooltips

Tooltips are small information windows that open up automatically if the mouse pointer stops briefly on a button or some other area. They provide information about the function of the button. These information boxes can be switched on or off with this option.

Start introductory video

The introductory video shows you how all the most important features work. Specific topics are explained in detail in additional tutorial videos.

Keyboard shortcut: Ctrl + F1

To play the introductory video you may have to insert the program CD.

Watch more tutorials online...

Opens the magix.info with online tutorial videos.

Update program / Upgrade functions

Register online

This option opens the MAGIX homepage for online registration where you can register yourself as a MAGIX user.

Registration grants you access to the MAGIX support website http://support.magix.net (see support) where various program updates and help programs can be downloaded.

With the registration form supplied (start menu under "MAGIX Music Maker 2013 -> Service and support -> Register") you can register via post or fax. Simply print it out, fill it in, and send it off!

Keyboard shortcut: F12

Online Update

Connects directly to the online update page where you can get the latest version of your program.

magix.info - Multimedia Knowledge Community

Help others and find help Directly from within the program you'll be able to access magix.info – the new MAGIX knowledge base. You'll find answers to all the most frequently asked questions about MAGIX products and multimedia in general. Couldn't find an answer to your particular question? No problem, just ask the question yourself.

Ask the Knowledge Community a question online

Ask magix.info a question.

Find knowledge & workshops

Have a look at the newest workshops at magix.info and read useful tips from other MAGIX Music Maker 2013 users.

Present music on magix.info

Opens an Internet browser at the MAGIX Online World media upload page. There you can choose the file you would like to present on the website.

Note: You first have to export (view page 183) your arrangement.

Open magix.info - Multimedia Community

Opens the magix.info main page.

MAGIX Screenshare

This function makes it possible for you to offer assistance to other users directly via the Internet, or to get help from others. To do this, you have to register MAGIX Music Maker 2013 first.

Hint: To inform the screensharing guests of exactly what is being shown, it is also a good idea to telephone or chat simultaneously.

Register as host for a screen transfer

1. If you want to start a screenshare instance yourself, then you have to register as a host first. To do this, open the menu "Share" and then select "Screen transfer as host...".
2. In the dialog you can enter a name for the screen session. Your user account name is used here by default.
3. Now click on "Start session". A small window will now open in the bottom right corner which displays the status of your screen session. A number will also be displayed (session ID) which serves as a password for your guests.
4. Start the screenshare instance.

Register as guest of a screen session

1. You have to register as a guest to view a screensharing instance. To do this, open the menu "Share" and then select "Screen transfer as guest...".
2. Enter the password you received from your host (8-digit session ID).
3. Now click on "Start session". A window will open displaying a smaller version of your host's screen.

About MAGIX Music Maker 2013

Displays copyright info and version number of MAGIX Music Maker 2013.

Buttons overview and keyboard shortcuts

Toolbar

 New arrangement

 Load arrangement

 Save arrangement

 Settings (view page 204, view page 203)

 magix.info

 Redo action

 Undo last action (Undo)

 Split Object

 Select mouse mode (view page 48)

Keyboard shortcuts

In MAGIX Music Maker 2013, there are many functions for which key commands can be used to open your desired program at the touch of a button. In detail:

- Menu and object context menu entries
- Functions of the Media Pools (Options menu)
- The video monitor menu
- Move and zoom of the arranger view
- Playback control (Moving the playback marker and the playback area)
- Mouse modes
- Smart preview function (Previewing Media Pool files in the arrangement context)

File menu

Load/Save arrangement

New arrangement	Ctrl + N
Load arrangement	Ctrl + O
Save arrangement	Ctrl + S
Save arrangement as	Shift + S

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Import Audio CD track(s)	C
Audio recording	R

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Common export options	X

Burn audio to CD-R(W)	Shift + C
Audio as Wave/ADPCM	Shift + W
Audio as MP3	Shift + M
Audio as OGG Vorbis	Shift + O
Audio as Windows Media	Shift + E
Audio as AIFF	Shift + I
Audio as FLAC	Shift + F
Audio tracks as single waves	Shift + U
Video as AVI	Shift + A
Video as MAGIX video	Shift + X
Video as Quicktime Movie	Shift + Q
Video as Windows Media video	Shift + V
Picture as BMP	Shift + B
Picture as JPEG	Shift + J
Upload Video to YouTube	Shift + Y
Upload audio to MySpace	Shift + S

Backup copy

Save arrangement and used media	Ctrl + Alt + S
Save arrangement and used media (audio as OGG Vorbis)	Ctrl + Shift + C
Burn arrangement and used media onto CD/DVD-R(W)	Ctrl + B
Burn manually selected files to CD/DVD	Ctrl + Alt + B

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Exit	Alt + F4

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undo	Ctrl + Z
Restore	Ctrl + Y
Select all	Ctrl + A

Object

Record new audio object	R
New MIDI object	Ctrl + Alt + N
Text to speech	Ctrl + T
Create a new title object	Alt + Shift + T

Cut	Ctrl + X
Copy	Ctrl + C
duplicating	Ctrl+D
Insert	Ctrl + V
Multiple insert	Ctrl + "Num+"
Delete	Del
Select all	Ctrl + A
Split	T
Save objects as takes	Alt + Shift + S
Group objects	Ctrl+G
Ungroup objects	Ctrl+U
Object properties	Ctrl+P

Range

Cut	Ctrl+Alt+X
Copy	Ctrl+Alt+C
Insert	Ctrl + Alt + V
Multiple insert	Ctrl + Alt + "Num+"
Delete	Ctrl + Del
Extract	Ctrl + Alt + E

Navigation: Set jump marker, move playback position (see Playback control), move view (see Move arranger view (view page 236)).

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Song Maker	W

Audio

Master audio effects rack	B
Text to speech	Ctrl + Shift + T
Object effect rack	E
10 Band Equalizer	Q
Compressor	Shift + D
Invert phase	Ctrl + Shift + I
Echo/Reverb	Shift + H
Distortion/Filter	Shift + F
Gater	Ctrl + G
Backwards	Ctrl + Shift + R
Mute/Unmute	Ctrl + M
Volume settings	Ctrl + Shift + D
Normalize	Shift + N
Timestretch/pitchshift	Shift + P

MIDI transposition	Ctrl + T
Harmony Agent	H
One pitch higher	Num *
One pitch lower	Num /
Create remix objects	Shift + J
Remix Maker	Shift + K
Loop Finder	L
Remix Agent – Tempo and beat recognition	J
Load audio effects	Ctrl + Alt + O
Reset audio effects	Ctrl + Alt + H
Convert stereo into two mono objects	Shift + Z
Edit wave in external editor	Ctrl + Shift + M

Video

Edit image in external editor	Ctrl + Shift + B

Title

Title editor	Ctrl + T

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Zoom Soundpool and Keyboard	Tab

Arranger

Arranger visible	F4
Optimize view	F12
Change object presentation	Ctrl + Alt + Z

Show object marker

Bar marker	Ctrl + Shift + F9
Harmony marker	Ctrl + Shift + F10
Beat marker	Ctrl + Shift + F11

Media Pool

Show Media Pool	F2
Soundpool	F5
File Browser	F6
Synthesizers	F7
Templates	F8
Catooh	O

Video monitor

Show video monitor	F3

Fullscreen video monitor	Alt + Enter
Video output	Shift + F3
Arrangement overview	Shift + F2
Audio peakmeter	Shift + F4
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Mix

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Master audio effects rack	B

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Help menu

Context help mouse mode	Alt + F1
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MIDI objects context menu

MIDI editor	Ctrl + Shift + D
Track VSTi editor	Ctrl + Shift + F
MIDI transposition	Alt + Shift + D

Media Pool

Settings

Soundpool	F5
File Browser	F6
Synthesizer	F7
Templates	F8
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Object inspector	F10
Catooh	O

Video Monitor

Show video monitor	F3
Fullscreen video monitor	Alt + Enter
Video output	Shift + F3
Arrangement overview	Shift + F2
Audio peakmeter	Shift + F4
Info Box	Shift + F1

Move Arranger view

Note: These commands similarly move the playback marker when it's stopped, the marker always remains visible in the arrangement clip.

To next object edge	Ctrl + 0
To the previous object edge	Ctrl + 9
Go to beginning of arrangement	Home
Go to end of arrangement	end cap

Go to start marker	Ctrl + Home
Go to end marker	Ctrl+End.
Page right/left	Page Up/Down
Grid unit right/left	Ctrl+PgUp/PgDn
Go to the next jump marker	Ctrl + Shift + PgDn
Go to the previous jump marker	Ctrl + Shift + PgUp

Arranger view - Increase/Reduce clip size (zoom)

Increase clip size (zoom in)	Ctrl+Arrow up
Reduce clip size (zoom out)	Ctrl+Arrow down
Zoom 1 frame	Ctrl+1
Zoom 5 frames	Ctrl+2
Zoom 1 sec	Ctrl+3
Zoom 10 sec	Ctrl+4
Zoom 1 min	Ctrl+5
Zoom 10 min	Ctrl+6
Zoom view between start and end marker	Ctrl+7
Zoom over whole arrangement	Ctrl+8
Increase track pitch	Alt+Arrow up
Reduce track pitch	Alt+Arrow down

Move playback control / playback marker / playback area

Start/Stop playback	Space bar
Stop at position (stop playback, move playback marker to current position)	Escape
Set jump marker	Shift+1...0
Playback marker to jump marker	1..0

Note: When stopped, the playback marker is moved to the jump marker (after the end of the current loop).

Create jump marker sequence (10 markers with intervals equal to the current playback area)	Ctrl+Shift+M
Delete all jump markers	Alt+Shift+M
Move playback range	Arrow left/right
Move playback one quarter of its length	Ctrl+Arrow left/right
Double/Halve playback area length	Shift+Arrow right/left
Double/Halve playback area length by a bar	Ctrl+Shift+Arrow left/right

Mouse modes

Mouse modes for individual objects	Alt + 1

Connect objects in one track	Alt + 2
Connect objects in all tracks	Alt + 3
Curve mouse mode	Alt + 4
Draw objects	Alt + 5
Splitting objects	Alt + 6
Object stretch mouse mode	Alt + 7
Preview objects mode	Alt + 8
Scrub mode	Alt + 9
Replace mouse mode	Alt + 0

Preview/Smart preview

Preview of pitches	Numbers 0..9
Change preview object	Arrow keys
Insert into arrangement	Enter
Delete smart preview object	Del

If you still have questions

Tips for program help

The "Help" file features hints on how to use the program and additional information. Many important terms are indicated in the text in italics and clicking on them displays an explanation.

Context help: Press the "F1" key at any point in the opened program and the help file will open with the matching topic (context help).

Search function: Use the search function to find out information about specific words. Enter either the individual word or use logical operators (OR, AND, NEAR) to refine your search if you have several search words.

- "**OR**" (between two words): All topics which contain both words or one of the words will be listed.
- "**AND**" (between two words): Only those topics will be listed which contain both words.
- "**NEAR**" (between two words): Only those topics will be listed which contain both words. A maximum of six other words may be added between the search terms.
- "**NOT**" (before a word): Topics which contain this word will **not** be listed.

Print: Use the help program's print function to make a printout of individual topics or entire sections. The print button is located at the top of the help window in the toolbar.

Uninstalling the program

If you would like to uninstall MAGIX Music Maker 2013, you can do this in the control panel under "Software" or go to "Programs > MAGIX > MAGIX Music Maker 2013 > Service and Support > Uninstall MAGIX Music Maker 2013".

System Requirements

For Microsoft® Windows® 7 | XP® | Vista

Minimum configuration:

- PC with 2 GHz processor
- 1 GB RAM (2 GB recommended)
- Free hard disk space: 6 GB
- Minimum screen resolution 1024 x 768 pixels
- Sound card

- DVD drive

Optional:

- Burn CDs/DVDs with a CD/DVD±R(W) burner
- MP3 export with Windows Media® Player 10 or higher

Serial number

A serial number is included in each product. This serial number is required for the installation of the software and enables usage of additional bonus services. Please store this number in a safe place.

What can a serial number do?

With a serial number your program is clearly assigned to you and only you. This will allow you take advantage of the free email support service. Serial numbers also help to protect against software piracy which ensures that we are able to continually provide our customers with an optimal price/performance ratio.

Where can the serial number be found?

The serial number can be found on the reverse side of your CD/DVD case. If your product is packed in a DVD box, you'll find the serial number on the inside.

If you have purchased the download version, you will receive a confirmation email with the serial number.

When will you need the serial number?

The serial number is required when you start or register the program for the first time.

Note: We explicitly recommend registering your product (free), since only then are you entitled to download updates and to use MAGIX support services (view page 4) or activate codecs.

Publishing works created in MAGIX Music Maker 2013

What needs to be taken into account when publishing a music or video production?

A distinction is made between "non-commercial use" and "commercial use".

1. What constitutes non-commercial use?
If songs are created with MAGIX Music Maker 2013 or if music is added to private videos, they can be shared with others on social networks (e.g. YouTube, Facebook, Soundcloud, Twitter or personal blogs/websites). The decisive factor in these cases is that no money is made or will be made from the song or video soundtrack.

Examples of non-commercial use:

- A user creates a song with Music Maker and uploads it to their SoundCloud page or YouTube channel.
- A user produces a song using Music Maker, burns it to CD then sends it to their friends.

2. What constitutes commercial use?
Commercial use refers to videos with soundtracks or songs created using Music Maker for commercial purposes. Commercial use if if sales are made, if revenue is accrued through advertising (e.g. as a YouTube partner or through the process of monetizing) or if contracts are concluded. In this case the necessary licenses must be purchased from Catooh The Online Media Marketplace http://www.catooh.com/de/sys/id/search/?&search[mode]=fast&search[keywords]=music%20maker&search[category]=8563.

Examples of commercial use:

- A user creates a song in MAGIX Music Maker and uploads it to their YouTube channel, which they've enabled for advertising (YouTube Partner Program).
- A user produces a song in MAGIX Music Maker and makes it available for purchase from an online download shop (e.g. iTunes, Musicload).
- A musician produces a song with MAGIX Music Maker for a CD Compilation, which is sold at concerts.
- A user makes a video in which they advertise their company or one of their company's products.

Important: The downloadable styles in Catooh that are licensed for commercial use consist of high quality WAV files. Any "normal" Music Maker content from the installation DVD is in .ogg format for space reasons.

More about MAGIX

MAGIX Online World

MAGIX Online World from MAGIX offers you a range of new services for your photos, videos, and music that are accessible directly from the "Share" menu in MAGIX Music Maker 2013:

MAGIX Online Album

MAGIX Online Album (view page 199) is your personal multimedia album on the Internet. If you want to present slideshows or videos online, then MAGIX Online Album is the perfect service.

MAGIX Website Maker

MAGIX Website Maker helps you create a personal Internet showcase with a professional design in just a few mouse clicks – without prior knowledge, including your own chosen domain and email address. Publish slideshows and videos and accessorize your site with music and various effects – anything from a simple business card to a fireworks display of effects, professional or private – show your best side!

More about this topic can be found under MAGIX Website Maker. (view page 201)

Catooh – the Online Content Library

If your project is missing pictures, videos, DVD menus, sounds, or samples, then you should have a look at the huge selection available at Catooh. There you'll be able to buy media in excellent quality for low prices: DVD menus, Slideshow Maker styles, decorative elements, 3D power effects, 3D transition series, MAGIX Soundpools, songs, ringtones... Perfectly suited to all MAGIX photo, video, and music projects.

magix.info

Do you have questions, need help, or are looking for expert tips and tutorial videos on using your MAGIX product? At magix.info you will find answers and solutions as well as workshops and a comprehensive user forum for software and multimedia queries.

You can access magix.info online at www.magix.info

Soundpool DVD Collection

MAGIX Music Maker 2013 includes thousands of sound and video building blocks. Other media can be ordered later. MAGIX Sound Essentials includes professionally produced loops and samples in impressive quality – the ideal enhancement for the most varying of music styles, including:

- Ambient
- Big Beat
- Easy listening
- Dance / Electro
- Disco / House
- Soundtrack
- Hip hop
- Rock/Pop
- Techno / trance
- Special effects

In the upper menu bar under "Tasks" > "Discover more", you can order the MAGIX Sound Essentials directly.

Tip: At www.magix.com you'll always find the latest soundpool offers.

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