MAGIX music maker

Program Documentation, 20.10.95

What is MAGIX music maker?

MAGIX music maker is a program that lets you create music; it's so easy, even kids can use it. No musical knowledge is needed - a computer with a CD-ROM drive, a 16-Bit sound card and the MAGIX music maker software are all you need.

This **new way of making music** has been made possible through an ingenious new kind of software. The basic elements needed for creating music are all included on the CD-ROM. Professional MAGIX music makers and sound designers have created over 1000 samples (music and sounds) which are just waiting to be arranged by a simple mouse click.

The best part is that all important functions operate **while playing**, meaning that you can load another sound from the CD and place it, move it, blend it or even delete it again without interrupting playback. This feature is one you'll quickly learn to love.

All the samples are on the CD-ROM in **16 Bit, Stereo and 44.1 kHz**; absolutely top CD-quality. If however you want to save memory or use the arrangement for video sound mixing, you can convert the MAGIX music maker samples to 22 kHz and/or mono. This way you'll save up to ¾ of your memory capacity and can make long arrangements using less juice.

The samples are listed in a structured order on the CDs, so that you can quickly find matching drumloops or harmonizing chords!

An arrangement made from multiple samples can be saved anytime in a single hard-disk file (MIX-function), so that the RAM-Memory can be freed up and more tracks for new samples are made available. These hard-disk files can be easily loaded and edited again using the MAGIX Music Studio Harddisk recording program. Making arrangements from your own recordings is equally easy with the MAGIX music maker. There you have it: The **MAGIX music maker and Music Studio go together perfectly**!

Here are a **few examples** of how you can use MAGIX music maker:
-Drumbeat accompanyments
-combining techno-samples
-making jingles
-adding music and effects to videos
-making accompaning patterns to go with instrument practice
-simply having fun with 1000+ samples

Hardware-Requirements

MAGIX music maker runs on any computer with 386 DX and 4 MB RAM or more, a minimum of 10 MB available memory, VGA resolution, CD-ROM drive and 16-Bit sound card, and Windows. We recommend a **486/33** with **8 MB RAM** and **100 MB available hard disk memory** (for MIX-files and effects).

MAGIX music maker runs perfectly on the Windows versions **3.11, Windows-95 and Windows-NT**.

Synchonized playback of AVI-videos requires 8 MB memory and a color definition of 32000 is

recommended.
To playback MIDI-Files, a MIDI-interface or a sound card with MIDI-synthesizer as well as corresponding drives are needed (MIDI-mapper).
Please note that all samples used in an arrangement must be loaded in the computer's RAM.
As a general rule, a PC with
-16 MB RAM holds 100 seconds
- 8 MB RAM holds 50 seconds
- 4 MB RAM holds 20 seconds
of samples in the memory. This calculation is based on the maximum values using 44 kHz and stereo. Selection an arrangement with only 22 kHz doubles the possible sample length; with additional reduction to mono it is quadrupled.
Naturally MAGIX music maker can use virtual memory; nevertheless it depends on the performance of your individual system whether or not the feedback functions correctly.

Quickstart

In this chapter you should learn the first steps in using the MAGIX music maker. You'll be amazed how easy it really is!
A systematic description of all the functions is given in the descriptions of each individual menu.

Start the MAGIX music maker by double-clicking on the Windows-Desktop icon. The MAGIX music maker then opens.

First you should load some of the demo-tracks included in the package, in order to give you a better idea of what the MAGIX music maker can do.
To do this, go to the „File" button in the menu and activate the menu option „Load Arrangement". In the file window, enter the drive of your CD-ROM, i.e. D:. Then open the „Demos" file and load the first arrangement „**Demo-1.VIP**".
A 4-Track-Window will appear with numerous sample objects. Start the playback of the arrangement using the Play-button or by pressing the space bar.
Now the cursor will run along the screen and the you'll hear the music as it is being played. If you don't hear anything, check the **Setup-Window** (Button Screwdriver) to see if the correct sound card has been activated. Also make sure that the sound card is connected to speakers or an amplifier.
If you should still have no sound, refer to the chapter „Problems and Solutions" at the end of this manual.
Once the playback is working, you should try out a making a few changes in the arrangement: Using the mouse, grab the sample objects and reposition them. The **f** (5 small boxes found on the corners of the activated objects) let you adjust the following:
-**volume**(top middle)
-**fade in**(top left)
-**fade out(**top right)
-**Start sample**(bottom left) and
-**End sample** (bottom right)

Now you're ready to **create your own arrangement**.:
Open a new 4-track-screen by clicking the New-Button; This is done for you automatically when you start the MAGIX music maker.
On the lefthand side of the screen you'll see a list of sample tracks. If you haven't already, activate the CD-Rom drive by clicking on the corresponding letter, i.e. D:.

Now the Index-framework of the CD appears on the list. Click with the mouse to move about through the many index listings, i.e. **DRUMS230\GROOVE01.WAV** (with **...** you can jump back a level).
Clicking on a sample with a .wav ending will let you play the material quickly to test it out. This lets you get a quick overview of the samples in an index, without having to load it's entirety.

Now arrange your own 4-track project. Click on the name of one of the samples, hold the mouse-button down and drag the mouse the first of the four tracks. An inverted color square covers the largeness of the sample. When you now let go of the mouse-button, the sample will be loaded into that position. You can load more samples in the same way, either singlely or parallel. If you arrange samples onto parallel tracks, they will be played back simultaneously.
Samples can be deleted from the arrangement using the **Delete key**.

Now start the **playback** by pressing the **space bar**. The arrangement you made will be played from the first to the last object. If you place another sample after the last, the length of your arrangement automatically adjusts accordingly.
With the **number keys 1 to 0** (found above the letter keys) the playback start of the arrangement can be set to a certain bar, from 1 to 0. This function works also during playback and is a cool live effect!
Using the **control keys F1 to F10**, the play range can be adjusted bar wise. Changing back and forth between bars 1...10 is therefore as easy as pressing a button, and can be done during playback.
The **< key** lets you switch between backward and forward playback, another SUPER live effect!

You can manually move the cursor to adjust the playback start and end positions in the row of sample objects, so that you could for example loop only a certain section of a complex arrangement. The **Panic-function** Funktion (Red Cross Button) sets the start and end back to the first and last object, respectively. Experiment around by making adjustments to the sample objects! All manipulations will be played back in real time. This has the advantage that you can immediately hear the changes you make without destroying the sample track itself (non-destructive editing). This also makes the multi-level Undo function possible, letting you reverse changes that you make. This makes it very easy for example to change one drumloop by extending it (using the bottom right button) into a long drum piece. If it still isn't as long as you want, you can use the **Zoom-out function** to extend it even more verlängern (Magnify + Button) !

If you only want to use one sound from a drum loop (say the Hi-hat from the 2. counter) you can mark the object using the buttons below it and thereby remove all other sounds. You'll love the way that MAGIX music maker grafically displays the sample tracks- this is certainly not the case with other programs! The sample display can be turned off by using the **TAB-key**, which lets you i.e. speed up the screen display on computers with slow grafic-cards.
Using the volume control button in the top middle row you can adjust the volume of objects individually. When numerous sounds are played back simultaneously, you can also adjust the balance. Stereo sounds always take up two tracks in the arrangement. In order to move the stereo panorama right or left, first delete the grouping of both samples (**UnGroup Button**). Now the volume of each object can be set individually. The top track is usually set to the left, the next one to the right, etc. If the tracking is different in your case, it's probabably due to a faulty connection to the speakers or amplifier.

With the command buttons on the top right or left you can **fade a sample in or out**. By combining in- and out- fading over several tracks, you can realize **cross fades** between different objects. Try making a snare drum blend gently into bird song! The length of the cross fade can be regulated with the handlers.

An important function in setting up larger arrangements is the **copy function**. Simply select an object with the mouse and activate the Copy Button. A copy of the object will appear right next to the original. This copy can then be placed in the desired position. And you'll be happy to know that such (virtual) objects take up almost no additional memory!

A word about **Frames and Grids** in MAGIX music maker:

Surely you've noticed by now that frames are involved in the positioning of sample objects in an arrangement. These frames help ensure that the movement from one section to the next occurs

perfectly smoothly. Each object's frame touches that of the next. Furthermore, grids are usually active, which seperate the frames according to the counts in a bar of a certain tempo, i.e. every fourth beat of a 120 bpm (beats per minute) Tempo. 120 bpm means that the frequency is 2 beats per second. The higher the bpm value, the faster the tempo. Modern techno-titles often have tempos of 160 or higher!
The grids can be adjusted in the bottom row of your screen, i.e. from 120 to 160 bpm. The frames can also be changed from quarter-notes to whole notes or eighth notes simply by changing the setting. For setting music to videos, the grid with time display has been constructed, in which instead of beats, minutes and seconds are displayed. In this way you can position sounds and effects to correspond exactly with the video.

Once you have created a relatively complex arrangement, you may
find that the memory of your PC is nearly used up or that the overview is missing. After all, all the samples you used must fit onto the RAM of your computer.
This is the time to bring the **MIX function** into action. With the MIX-function (Mixer Button) all objects on all four tracks are compiled onto one harddisk file. Afterwards, your arrangement no longer takes up any RAM memory any longer, but instead just a few megabytes on your hard drive. Furthermore, only 2 tracks (or 1 with Mono-projects) are used up, so that after the MIX procedure you can continue to arrange more objects. The hard disk file created is so optimized by MAGIX music maker that the loudest tone has exactly a 16-Bit value (**normalizing**). In this way, the MAGIX music maker ensures that even numerous MIX-ings won't damage the sound quality! Such a hard disk file can also be opened in the accompanying program Music Studio, in order to edit it more there!

Effects: Since one can always make a good thing better, we have given MAGIX music maker not only 1000 first-class samples, but also lots of effect-algorithms as well. With theses you can add to every sample object in your arrangement special effects such as echo, distortion or filtering in order to get a completely new sound. To do so, simply mark the the object in the four-track window and select the desired effect from the Menu list „Effect". MAGIX music maker creates a new file from the original, which is saved in MAGIX music maker's window. This new file will be automatically integrated into the arrangement, so that immediately after the adjustment you can here the new sound-effect. Try giving a drum loop a short delay or changing a sound using the filter-effect or test our new **techno-like gater effect**!
You can also open the effects menu with the right mouse button in the arrangement window!

At the end of this short introduction to MAGIX music maker, you should test out the Menu „**Media Link**"! With this menu, a MAGIX music maker arrangement can be can be played back synchroneously with a media file. The Media-files you could use are for example MIDI-Songs (*.MID) or Video for Windows movies (*.AVI). But all other media for which you have an installed MCI-Driver can be used as well.
Let's assume that you have an AVI-movie on your hard drive to which you wish to add your own sound effects. Open the Menu „File /Media Link" and load the video-file. Using the Test button, you can open the video in a test. End the dialog by pressing O.K., and now the video will be played along with your arrangement. Since generally a beat time isn't very practical for videos, select the grid pattern „time display" (in the lowest screen row). Now you can arrange all your sample objects exactly according to the scenes in the 4-track window!
Please note that the color reproduction in MAGIX music maker and in the video window are only independent at a color level of 32000 or higher. With 256 or 16 colors, either MAGIX music maker or the video will show distorted colors, since all windows have to share the same color palette.
One more tip: for a complete music-video arrangement, the Music Studio program is a great accompaniment, in which all the MAGIX music maker effects can be combined with original sounds and self-recorded music in up to 4 hard disk tracks of unlimited length. Simply create a MIX-file and load this into the Music Studio as a hard disk arrangement!

Adding a MIDI-Song can be done in much the same way. For example, you can fine-tune a demo-song through effects in the MAGIX music maker. Don't forget that MIDI-files are always

reproduced using the MIDI-mapper (system control). There you need to make sure that the right driver for your sound card or the MIDI-interface is installed.