Manual

MAGIX music maker

Much of todays music.... Techno, Trance, Industrial, House, Ambient, Jungle, TripHop etc. is based on sampling technology. Sampling gives you the power to combine elements of your favorite music to create your own work of art. Become the DJ, producer, and artist all in one without a formal musical background or years of lessons.

Aware of the incredible possibilities sampling offers, MAGIX started developing new techniques for using samples. The concept proved to be so successful that we have become Europe's trendsetter in multi-media music entertainment. With an easy-to-use interface, **MAGIX** entertainment software makes it possible for PC beginners and non-musicians to create their own music at home.

Expand your creativity beyond its limits!

Be sure to check out our extensive Sound Library for more sounds to choose from. Currently there are 11 CD-ROMs of various musical styles available.

Don't sit in front of your computer passively; work with it. With MAGIX entertainment software there are no limits to your creativity!

Enjoy!

Your MAGIX Entertainment Team

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32 Bit Program

MAGIX music maker is now a true 32 bit program and uses all modern possibilities of the 32 bit operating systems on PCs - Windows 95 and Windows NT.

16 Tracks

MAGIX music maker V3.0 now supports up to 16 tracks - this makes the software a true professional tool!

AVI / Bitmap Integration

The new MAGIX music maker V3.0 contains completely new developed features for integrating AVI videos and Pictures (bitmaps) in the MAGIX music maker arrangement! It is possible now to load AVIs and Bitmaps directly into the arrangement to any track. You can work with these objects like with wave objects.

AVI realtime effects

There is a large list of powerful video effects. The best is: All they can be previewed while playback in realtime!

So it is no problem to select an AVI clip, overlay it on a background Bitmap, adjust the colors or select a bluebox effect. Create a smooth fade to another video. Adjust the dancers in the movie exact to the right drum beat of the wave loops - all this with a few mouse clicks in the MAGIX music maker arranger!

MIDI-Integration

MAGIX music maker V3.0 lets you work with MIDI files as you could do it in older versions only with Wave files. No other software lets you arrange, combine and playback wave and MIDI in such an easy way!

Realtime Mixer

MAGIX music maker V3.0 contains a powerful realtime mixer, which allows you to change the volume of each track and the master volume. It even has a 5 band high quality equalizer for changing the sound in any way!

Resampling, Time Stretching and Pitch Shifting

With these 3 functions you get powerful routines for manipulating wave loops, which expand the capabilities of MAGIX music maker a lot!

Surround

This function manipulates an audio object to playback on the rear speakers when using a Dolby Surround Decoder. This makes it easy to produce impressive surround sound tracks for video or other purposes!

Join the MAGIX music NetWork

MAGIX music maker 3.0 is more than a software, it's your key to participating in the MAGIX music NetWork.

The registration form for the MAGIX music NetWork is enclosed in your package. Simply fill it out and send it in.

Send us your masterpieces. We`ll listen to everything and the best songs will be put on the MAGIX website (http://www.magix.net) for everyone to enjoy.

If your song ends up on our website, we will send you a MAGIX surprise-pack!Please check the website for information on how to submit your entries.

If you create it we want to hear it!

What's happening on the MAGIX website:

- Get information on our latest products and Sound Library updates and program patches.
- Contact our online support.
- Check our hotlinks for creative and interesting stuff. We have the links to the sites you want to see.
- Learn how to get the most out of your MAGIX products.
- Contact other MAGIX-addicts and join our forum.
- Download our demo-arrangements or creations from other members of the MAGIX music NetWork.

If you don't have internet access, but want to become a member of the MAGIX music NetWork,

Send your completed registration form with your track to:

MAGIX music NetWork
212 Piccadilly
London WIV 9LD

More sound energy for your MAGIX music maker 3.0

Ambient / Chill
more than 550 MB Ambient and Chill WAV-Samples. 100 BPM, 110 BPM, 120 BPM

HipHop/P-Funk/Rap
more than 550 MB HipHop, P-Funk & Rap WAV-Samples. 100 BPM, 120 BPM

TripHop / Jungle
more than 550 MB TripHop & Jungle WAV-Samples . 100 BPM, 160 BPM, 170 BPM

Slow Motion
more than 550 MB R&B and HipHop WAV-Samples. 80 BPM

Techno / Trance
more than 550 MB Techno and Trance WAV-Samples. 130 BPM, 140 BPM, 160 BPM

Soul/R&B/Funk
more than 550 MB Soul, R&B and Funk WAV-Samples. 90 BPM, 100 BPM

Funny Vocals
more than 550 MB WAV-Samples of various spoken words and vocals

Dance / House
more than 550 MB WAV-House-Samples. 120 BPM, 130 BPM, 140 BPM

Rock / Pop Vol. 1
more than 550 MB Rock & Pop WAV-Samples. 100 BPM, 120 BPM, 130 BPM

Rock / Pop Vol. 2
more than 550 MB Rock & Pop WAV-Samples. 100 BPM, 120 BPM, 130 BPM

House / Techno
more than 550 MB House & Techno WAV-Samples . 130 BPM, 160 BPM, 180 BPM

CD1/Installation (This CD is needed to install your software). On this CD you will find the MAGIX Music World and the MAGIX music maker 3.0. Furthermore you will find useful tips, demos as well as Bitmap and AVI files for use with the music maker on this CD.

CD2/Soundpool

(This CD is needed to access WAV files). This CD contains over 1.000 WAV files to use with MAGIX music maker 3.0. Don't forget: you always need to put in a Sound-pool CD in order to access the WAV files. The second Track on the Soundpool-CD is an audio track, the MAGIX Song!

Manual

All you want to know about MAGIX music maker 3.0.

Please make sure these objects are included!

Registration card

Please send us the completed registration card as soon as possible. This way we can keep you informed about our latest product updates and re-leases.

System Requirements

- 486DX or Pentium and 16 MB RAM (recommended 32 MB RAM)
- 30 MB available memory on hard drive
- VGA resolution
- CD-ROM drive 4x speed
- 16 bit soundcard
- Windows 95 or Windows NT

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

This calculation is based on maximum values using 44 kHz and stereo. Selecting an arrangement with only 22 kHz doubles the possible sample length; with additional reduction to mono it is quadrupled. MAGIX music maker 3.0 can use virtual memory, but it depends on the performance of your individual system whether or not the feedback functions correctly.

We recommend a 486/100 with 32 MB RAM and 100 MB available hard disk memory (for MIX-files and effects).

To play back MIDI files, a sound card or MIDI interface with MIDI synthesizer is needed.

For sychronized playback of AVI-videos 32 MB of memory is required and 16 bit color is recommended .

As well as MAGIX music maker 3.0, the **Installation-CD** contains:

* A step by step video tutorial on building an arrangement and
  how to use MAGIX music maker 3.0.
* A demo of MAGIX music studio.

First start Windows 3.x/95/NT

1 Start **Windows**

Put the CD1-**Installation** into the CD-ROM drive.
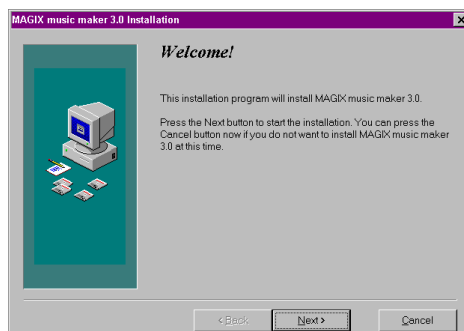
2 Insert CD 1 / Installation

With Windows 95/NT MAGIX music maker 3.0 is installed automatically. If it doesn't or you are using Windows 3.x, open the File Manager/Explorer and click on the drive of your CD-ROM. Double click on "Start.exe". The MAGIX Music World Installation starts.

3 Autostart of Installation program or
Activate the CD-ROM drive and
Double click on START.EXE

The **Music World** Installation Wizard appears. Simply follow the instructions and click on "NEXT" to continue. After having copied all files of the installation CD onto your harddisk, confirm with „FINISH". The **MAGIX Music World** will start automatically.

4 Go through the Music World Installation Wizard

MAGIX music maker 3.0 Installation

Welcome!

This installation program will install MAGIX music maker 3.0.

Press the Next button to start the installation. You can press the Cancel button now if you do not want to install MAGIX music maker 3.0 at this time.

< Back   Next >   Cancel

Choose the MAGIX music maker 3.0 package from the main screen. You will get into the installation screen.
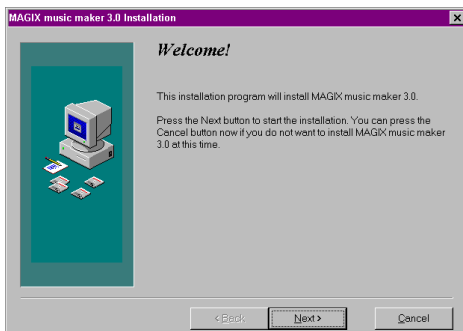
Click on the
package of MAGIX
5 music maker 3.0

Please note that MAGIX music maker 3.0 runs under MS Windows 95 / NT only. To continue installation click on the Windows 95/ NT button.

6
Choose the operating system

7
Go through the MAGIX music maker 3.0
Installation wizard

The MAGIX music maker 3.0 Installation Wizard appears. Simply follow the instructions and click on "NEXT" to continue. After having copied all files of the installation CD onto your harddisk, the program group will be installed. The installation is now finished. Please confirm with „FINISH", then you can start the program with the icon.

The **MAGIX Music World** is the entrance to all you'll find on your **Installation** CD. Along with MAGIX music maker 3.0 we have provided a tutorial in which four musicians give step by step instruction on their roles within a band. This tutorial will help you to understand how a song is constructed. Along with the musicians a guide will provide specific instructions on the use of MAGIX music maker 3.0.

Exit
Click here to quit the MAGIX Music World

Install
To install the MAGIX music maker 3.0 click on this symbol with the music maker package.

Market
Everything for the true Music World fan.

Products
Other software & sound pools by MAGIX Entertainment.

Tutorial
If you want to start the music maker tutorial with the musicians, click here.

Order
Order MAGIX products directly by clicking this button.

Internet
To get the latest information about the MAGIX visit us on the Internet.

go Back!
To go back to the MAGIX Music World main screen.

Video-Lessons
Gives you a lesson in arranging and handling music maker.

Video-Screen
All Videos will be shown on this screen.

Bass / John explains how he arranges the bass-line in an arrangement.

Drummer / Matt gives you a glimpse into the work of a drummer.

Guitar / Chris plays the guitar and shows you how to arrange the instrument correctly.

Keyboards / Steve explains how, where and when a keyboard should be placed.

INTRODUCTION

What is MAGIX music maker?

MAGIX music maker 3.0 is a new way of making music that has been made possible through an ingenious kind of software which has never existed before. A computer with a CD ROM drive, a 16 bit sound card, MAGIX music maker 3.0, and your creativity are all you need!

MAGIX music maker 3.0 is a program that makes creating your own music tracks easy.

You don't need any musical background or years of lessons!

The basic elements needed for creating music are all included in the MAGIX music maker 3.0. Professional musicians and sound designers have created over 1000 WAV files 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 a sound from the CD and place it, move it, blend it or even delete it without interrupting playback. This feature is unique to MAGIX music maker 3.0.

All the WAV files are CD quality (44.1 kHz) ,16 bit, stereo, If you want to save memory you can convert the MAGIX music maker 3.0 WAV files to 22 kHz and/or mono while loading. This way you´ll save up to ¾ of your memory capacity. This helps when working with larger arrangements or video sound editing. Both WAV and MIDI files are listed in a structured order, so that sound files that work well together can be found quickly.

Using MIX DOWN an arrangement made from multiple sound files can be saved at any time in a single hard disk file. This frees RAM memory allowing more room for tracks and samples. These hard disk files can be easily loaded and edited using the MAGIX music studio. Be sure to check out the demo of MAGIX music studio on the Installation CD!

Quickstart

Before beginning this section MAGIX music maker 3.0 must be installed. In this chapter you will learn the first steps to using MAGIX music maker 3.0. You'll be amazed how easy it is! Later in the manual a systematic explanation of all the functions is given in the descriptions of each individual menu.

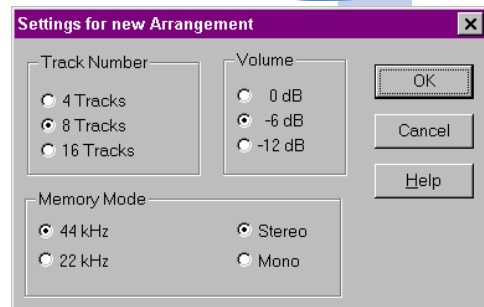**1** Make sure that the CD Sound Pool is in your CD-ROM drive.

Start MAGIX music maker3.0 from the Windows desktop with a double click on the icon. The screen MAGIX music maker will then open.

2

3

First choose the number of tracks, the sample rate and whether you want your arrangement in stereo or mono.

Settings for new Arrangement

Track Number
- ○ 4 Tracks
- ● 8 Tracks
- ○ 16 Tracks

Volume
- ○ 0 dB
- ● -6 dB
- ○ -12 dB

Memory Mode
- ● 44 kHz
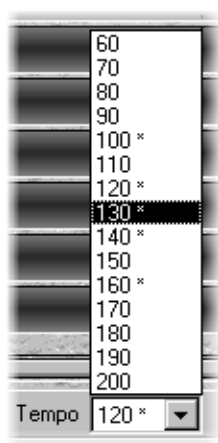- ○ 22 kHz

- ● Stereo
- ○ Mono

OK

Cancel

Help

4

At the lower border of the screen you can find the Instruments Bar. Click on the Scan CD-ROM button and the Soundpool CD-ROM will be scanned for all existing instruments/WAV files.

5

Also at the lower border you will find the selected tempo. Click on the down arrow and a list of available tempi will appear. A star behind the figure indicates that sound files are available in this tempo. Click on 130*.

| 60 |
| 70 |
| 80 |
| 90 |
| 100 * |
| 110 |
| 120 * |
| 130 * |
| 140 * |
| 150 |
| 160 * |
| 170 |
| 180 |
| 190 |
| 200 |

Tempo 120 *

After chosing the tempo for your arrangement, click on the desired instrument in the Instruments Bar. A list with all available instruments will appear in the File List.
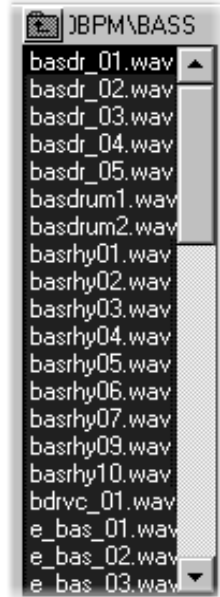
6

7

On the left side of the screen you will see the File List. Here you will find the available WAV files.

Click on a WAV file and the sound will be played. This way you can listen to each element before using it. This also works with MIDI files.

8

Now move the sound file to the arranger by holding the left mouse button while dragging it to the right. Release it at the desired position.
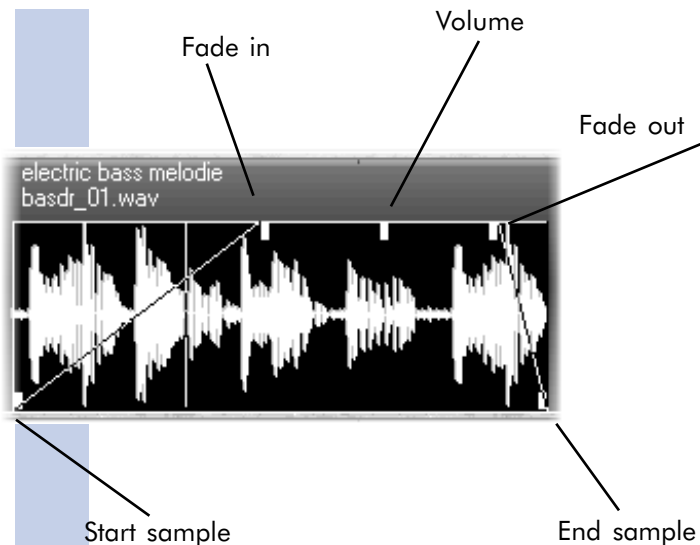
Repeat this process until several sound files are in the Arranger window. Press the space bar in order to play the arrangement.
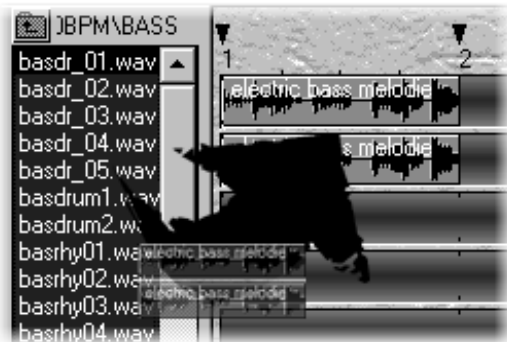
9

By moving the handlers (5 small boxes found in the activated sound file) you can add dynamics to your arrangement.

Fade in

Volume

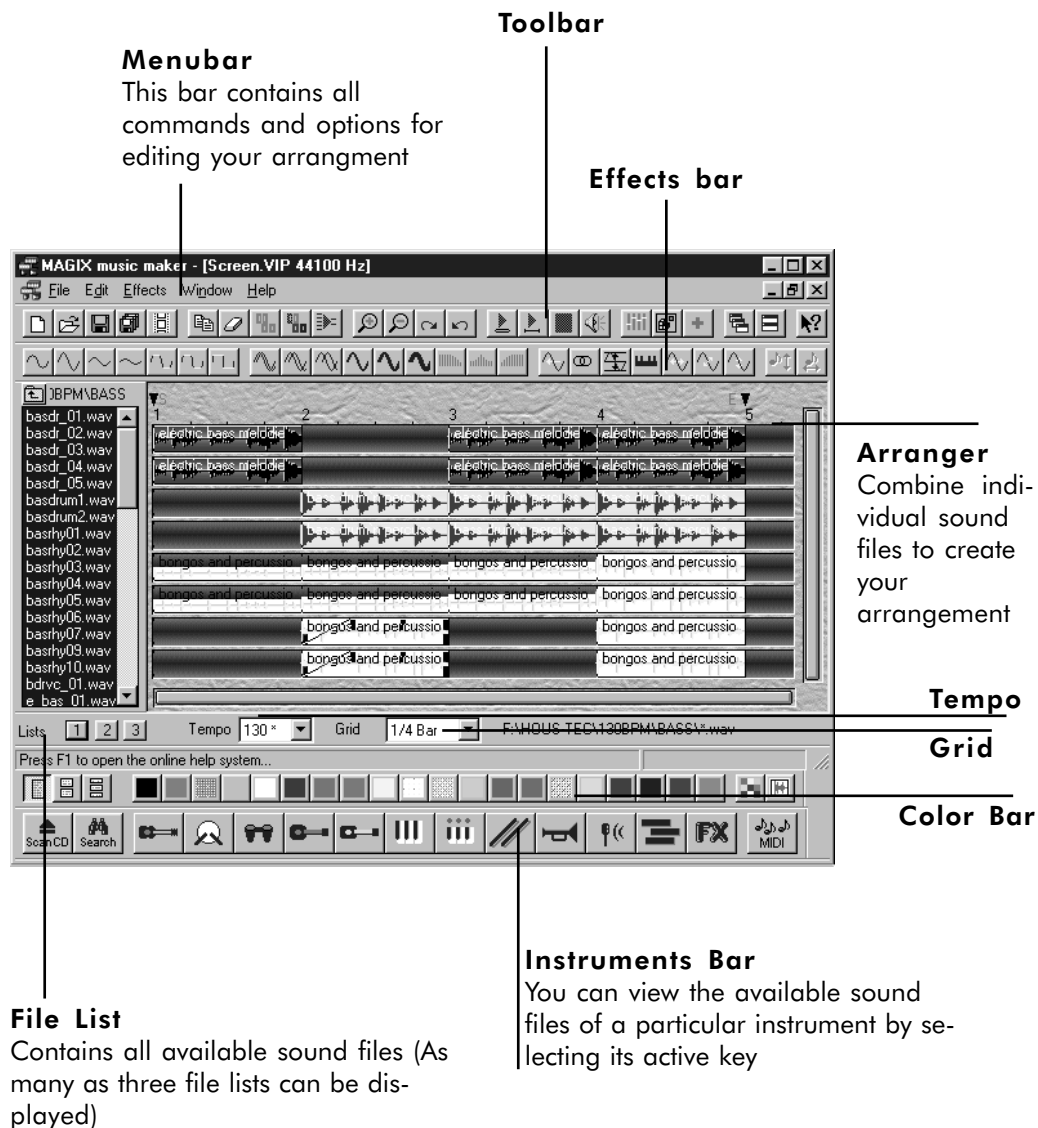Fade out

Start sample

End sample

10

Your MAGIX music maker 3.0 screen should look something like this. Press the space bar to play your arrangement. You can add more sound files to your arrangement by choosing from the current File list or by loading one of the other Soundpool CD's from the MAGIX sound library.

You can load a DEMO-Arrangement into the music maker, just to see how it can look like to have a really full arrangment!

In the following chapter you will learn how to get the most out of MAGIX music maker 3.0.

To better understand this chapter you should first familiarize yourself with the quickstart section of this manual. In the following section you will gain a deeper insight into working with MAGIX music maker 3.0. You can learn more about composing and arranging in the MAGIX Music Wold tutorial on your CD-Rom Installation.

Toolbar

Menubar
This bar contains all commands and options for editing your arrangment

Effects bar

Arranger
Combine individual sound files to create your arrangement

Tempo

Grid

Color Bar

Instruments Bar
You can view the available sound files of a particular instrument by selecting its active key

File List
Contains all available sound files (As many as three file lists can be displayed)

Getting started

Click the New Arrangement button to open the Settings for a new arrangement window. Select the desired Track Number, Volume and Memory Mode for your arrangement.

If no sound files appear in your File List, click the Scan CD-ROM button.

Select the desired tempo for your arrangement. A list of available tempi appears by clicking on the down arrow in the Tempo area (A star behind the figure indicates that WAV files in this tempo are available on the CD-ROM)

By clicking on the Search Drum button in the Instruments Bar all drum WAV files will be listed.

(An alternative way to access the available WAV files is to activate the drive letter of your CD-ROM.)
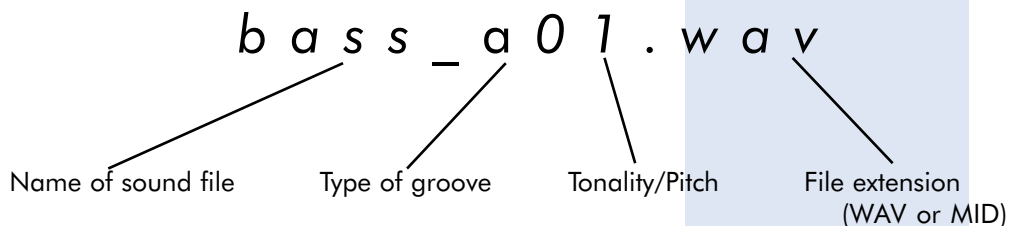
WAV files are organized by style, tempo and instrument.

(Clicking on "[..]" will take you up one level in your directory structure).

Note: A single click on a sound file while in the File list allows you to preview the file without first moving it to the arranger. A second click stops the playing of the sound file.

Defining a sound file

The name of each sound file gives you detailed information about its content.

$$bass\_a01.wav$$

Name of sound file   Type of groove   Tonality/Pitch   File extension
                                                                            (WAV or MID)

You can tell which sound files work well together by their names. For example: sound files with the number 01 sound good together. String section, trumpet, singer or keyboard, it doesn't matter. You can create melodies by combining various combinations of numbers. e.g. bass_a01, bass_a04, bass_a02, bass_a03. For some interesting harmonies try combining different instruments using the same order. e.g. keys_a01, keys_a04, keys_a02, keys_a03.

The type of groove the sound file has is expressed by a letter. A possible combination could be: bass_a01, bass_b04, bass_a02, bass_c03. The pitch remains the same while the rhythm changes.

Here are several combinations to get you started:

drum_01	drum_01	drum_01	drum_01	Schlagzeug
bass_a01	bass_b04	bass_a02	bass_c03	Bass
keys_a01	keys_a04	keys_a02	keys_b03	Keyboard
guit_a01	guit_c04	guit_b02	guit_d03	Gitarre

You'll be amazed with the possibilities.There is no such thing as a bad combination. If you like it then it's good.

After listening to a few sound files, select one you want to work with and move it to the arranger window. To do this click and hold on to the name of the sound file while dragging it into the arranger window. A rectangle the size of your selection will appear. The sound file will be loaded into the arranger at the position you release the mouse button. You can repeat this process as many times as you like to build your arrangement. To play two or more sound files simultaneously, place the new sound file in a seperate track.

You can remove sound files from the arrangement by pressing the delete key!

To play your arrangement press the space bar! Your arrangement will be played from the first to the last sound file.

By moving the "S" and "E" arrows located at the top of the arranger window you can adjust the points that playback begins and ends. This can be helpful when you want to listen to a specific section of a long or complex arrangement.

The first-aid function places the "S" and "E" arrows at

the first and last sound file of your arrangement.

With the numerical keys 1 to 0 (above the letter keys) the "S" arrow can be put on beat 1 to 10. You can achieve some great live effects by doing this in real time during playback.

With the function keys F1 to F10 you can select a specific measure to be looped. This can also be done in real time.

You can manipulate several aspects of your sound file by using one of the five handlers. All manipulations will be calculated in real time while playing. The advantage is that you can listen to all changes immediately without affecting the original sound file (non destructive editing). If you don't like the changes you have made, use the multi-level UnDo function to return your sound file to its previous state (Ctrl + z). (For example: Extend the length of your sound file by dragging the handler in the lower right hand corner to the right)

 To increase the length of the arrangement visible in your arranger window, use the Zoom Out button.

If you want to use a specific portion of a sound file, you can do so by adjusting the handlers in the two lower corners. Magix music maker 3.0 accurately displays the sound files sample data, making it much easier to locate the desired portion of the sound file.   If needed, the sample display can be switched off with the "TAB" key in order to increase the performance of your computer. (For example: the picture development on computers with slow graphic cards.)

 You can change the volume of individual sound files with the volume handler in the upper middle. This can be used to arrange the balance between several sound files being played simultaneously. Stereo sound files always take two tracks in the arrangement. If you wish to alter the balance of a stereo sound file, you must first make the upper and lower sides independant by using the Ungroup button. The upper track normally lies on the left in your stereo field. If it doesn't, be sure to check that your cables are connected correctly.

By using the handlers in the upper left and right corners of a selected sound file you can create a fade in or a fade out. You can also create crossfades between different sound files by combining fade ins and fade outs on several tracks. (For example: Let a string section go smoothly over into a birds chirp.) The duration of the crossfade can be specifically controlled with the handlers.

The copy function is important for creating larger arrangements . Just highlight the sound file you wish to copy by clicking on it, then click the Copy Objects button.   A copy of the object will appear next to the original. This copy can now be moved to the desired position. These (virtual) sound file copies consume practically no additional memory.

Some words about frames and grids in MAGIX music maker 3.0:

At this point you may have noticed that there are frames for positioning sound files in arrangements. These frames provide for seamless transitions between sound files. By adjusting the position of your frames you can more accurately place your sound files. The frames of your arranger window can be adjusted by altering Tempo and Grid.

For video sound editing use the Grid selection Time display in which case minutes and seconds instead of beats are indicated. With this an effect can be quickly placed at the correct position in the video.

Depending upon your PCs capabilities you may have memory problems after building a complex arrangement.

This is the point when the Mix Down function is needed:

With the Mix Down function all sound files on all tracks are summarized on to one hard disk file. This frees up both RAM memory and track space, allowing room for additional sound files.The harddisk file created is optimized by MAGIX music maker 3.0 so that the loudest part corresponds exactly to the 16 bit value interval (normalization). Even after several applications of Mix Down no losses in the sound material will occur.

You could then take the newly created hard disk file and edit it in MAGIX music studio!

Effects: Not only do you have thousands of sound files to choose from, but you can make each one your own by altering it with one of the many effects available. With effects like Distortion, Reverb, Echo and Filter the combinations are endless! Highlight the desired sound file in the arranger window and select the desired effect in the Effects menu.
MAGIX music maker 3.0 then creates a new file from the original sample which is saved in the RAM directory of MAGIX music maker 3.0. This new file will be automati-

cally integrated into your arrangement so that you can hear the effect immediately after closing the dialogue box.

Try adding a short delay to a drum loop or test the special **gater** effect with which you can create rhythmic shatter and filter sounds.

(You can use the right mouse button as an alternate way of activating the **effects** menu.)

Using multiple file lists & WAV-file information

One of the most interesting features of MAGIX music maker 3.0 is the ability to access up to three directories at a time. This makes choosing from available sound files much easier! Use the buttons labeled 1,2 and 3 directly below the File list window to choose how many directories you wish to see.

If you click on a WAV file in the File list window with the right mouse button a window with important information on the sample, e.g. the sample's name, tempo and tonality, as well as further comments and copyright information, will appear. This only works if the WAV file also contains this information. Recent MAGIX music maker CD-ROMs contain this information.

With MAGIX music maker 3.0 you can choose to display sound files in two forms. A sound file can be displayed graphically, giving an accurate representation of its wave form or with a symbol giving information about its BPM, instrument family and name. To alternate between the two use the "Tab" key.

AVI/Bitmap-Integration

The new MAGIX music maker V3.0 contains completely new developed features for integrating AVI videos and Pictures (bitmaps) in the MAGIX music maker arrangement! It is possible now to load AVIs and Bitmaps directly into the arrangement to any track. Simply drag the AVI or Bitmap from the file list on the left screen border to the track in the arranger and the video object appears. You can work with these objects like with wave objects: Move them by dragging the object, create smooth fades with the handles in the upper corners or change the brightness with the upper middle handle. Create looped video clips using the lower right object handle - so it is easy to create a perfect background video from a 1 second clip!
Overlapping video objects on different tracks are mixed, you can adjust the levels using the object volume handles or the 8 track mixer.
All this can be done while playback in realtime!
To speed up the display when using several video objects you can switch with the Tab key to another display mode, which only draws one video frame per object.
Making it possible for you to start right away, we've included about 600 picture and

AVI files on CD 1 (Installation CD).

Important:
For working with AVI and Bitmap objects you need at least a 32000 colors (16 Bit) display, we strongly recommend a 800*600 or higher display resolution! For perfect results of the video effects AVIs and Bitmaps need to contain true color data (24 bit colors).

AVI realtime effects
There is a large list of powerful video effects. The best is: All they can be previewed while playback in realtime!
So it is no problem to select an AVI clip, overlay it on a background Bitmap, adjust the colors or select a bluebox effect. Create a smooth fade to another video. Adjust the dancers in the movie exact to the right drum beat of the wave loops - all this with a few mouse clicks in the MAGIX music maker arranger!
Have a look at the chapter "Video Effects" later in this document to read more about all video effects!

Important:
When starting playback MAGIX music maker creates a video preview frame after each audio buffer - you can adjust this buffer size in the Setup dialog. Use short buffers for a smooth video display (4096 or smaller) on fast machines! If the audio sounds interrupted while playback you need to increase the buffers or reduce the number of simultaneous video effects.

Also very useful: "Video Srubbing": Simply take your mouse and draw the start cursor at the top of the arrangement forwards or backwards - you will then immediately see the corresponding video picture for each position. As this includes all effects, the modus is perfect to preview complex video scenes.

If your arrangement is perfect - simply create a standard AVI file containing all audio and video data of your project! This can be done with the **export arrangement function** - after the calculation you get a video file, which can be played on every computer in the universe - even from CD-ROMs!

AVI audio Import/Export
You also can extract the audio track from the AVI using the button "AVI / MIDI link", the audio appears on the first track of your arrangement. This makes it easy to add special effects, sounds etc. to your AVI to create a perfect sound track. The complete arrangement can be exported later back into your AVI file (button "Replace audio in existing AVI" !
With these functions MAGIX music maker 3.0 is the perfect tool for audio to video

editing without the need of expansive video hardware!

MIDI-Integration

MAGIX music maker V3.0 lets you work with MIDI files as you could do it in older versions only with Wave files. No other software lets you arrange, combine and playback wave and MIDI in such an easy way!

MIDI files do not contain the final sounds like wave files - they only contain notes, which produce sound while playback on the sound cards synthesizer chip. This has some advantages:

1.   MIDI files only need a few Kbytes storage space on hard disk.
2.   MIDI files can be adapted to any tempo (bpm) value without loosing quality. So you don´t need several version of the same file for different speeds!
3.   MIDI files can also be transposed very simply to another keys - so there is no need for several version of the same loop in different pitches! Simply open the effects pop up menu with the right mouse button an a MIDI object and use the function "MIDI transpose"!
4.   There is also a disadvantage of MIDI files: The final sound will be produced by the sound card - thats why the sound quality depends on your sound cards MIDI chip. We recommend high quality sound cards with a wave table synthesizer chip!

To **integrate MIDI files into your arrangement** follow these steps:

First look for a directory with MIDI files in one of the files lists on the left screen border or use the "Search MIDI" button in the lower toolbar. A mouse click on the MIDI file starts and stops the playback. Now drag the file into your arrangement - that's it!

You see an object with small colored pixels - these are the MIDI notes. The height of the pixels corresponds to the pitch of the notes. The color corresponds to the velocity of the notes - bright colors are loud notes, dark pixels are notes with a low volume.
Like wave objects you can manipulate the MIDI objects with the 5 handles. Simply give the MIDI loop fades or change the volume with the upper handles. Or set the loop range with the lower handles!

If you don´t hear sound from the MIDI objects please check the MIDI playback device in the Playback Control Windows (key p)! Here you have to select the Windows driver for your MIDI synthesizer. For "FX" choose "1.0" first, this factor can be used later for correcting small timing differences between Wave audio and MIDI, if any delays should occur.

Realtime mixer

MAGIX music maker V3.0 contains a powerful realtime mixer, which allows you to change the volume of each track and the master volume. It even has a 5 band high quality equalizer for changing the sound in any way!

With the 8 volume faders you can change the volume of each track like on a traditional mixing device. To move two sliders of one stereo track together simply hold the Shift key while moving one of the faders! These faders also change the volume of MIDI objects by scaling the velocity of the notes. Even the brightness of AVI or Bitmap objects can be controlled by this mixer!

In a 16 track arrangement each slider controls 2 tracks or one stereo track. With the Master Volume sliders you can change the overall volume of the wave audio playback. MIDI output is not controlled by these faders - so you can use them to adjust the relation between wave and MIDI!

Each slider has its own LED peakmeter, which displays the exact level while playback. This makes it easy to control the volume and avoid overmodulation!

The best of the mixer is the Realtime Equalizer: It allows any changes of the wave sound of your complete mix - from HIFI to telephone sounds everything is possible! This equalizer is programmed in high optimized 32 bit assembly language, but it needs a certain processing power (Pentium 90 or faster). If your machine is not fast enough to produce all 5 bands in realtime, use 1 or 2 bands instead and set the other bands to zero. A double click on each fader sets it to the zero (passive) position. In this position they need no calculating time and do not change the audio material.

You can open the mixer with the "M" key if it has been closed before.

Resampling, Time Stretching and Pitch Shifting

With these 3 functions you get powerful routines for manipulating wave loops, which expand the capabilities of MAGIX music maker a lot:

Resampling: This function changes the playback speed of your object by a certain value (%). The effect is the same as on a tape machine on faster or slower speed: The material becomes faster and higher when using values of more than 100%.

Time Stretching: This function changes the length of a sample without changing the pitch. It simply adapts the object from the tempo you can input to the current selected tempo of your arrangement. So it is the perfect function to include loops with different tempo values into one arrangement!
Please be careful: Time Stretching works fine with small tempo changes but may

produce distortion effects when using too large tempo differences!

Pitch Shifting: This effect is the opposite to Time Stretching: It changes the pitch without changing the length of the object. This makes it easy to transpose a keyboard loop by 2 halftones to fit into the actual arrangement. Simply type in the number of halftones you want to transpose!
Also here it is true: Small changes work best, more than 5 halftones pitch shifting may produce unwanted effects!

Surround
This function manipulates an audio object to playback on the rear speakers when using a Dolby Surround Decoder. This makes it easy to produce impressive surround sound tracks for video or other purposes!

MIDI Transpos
This function lets you change the key of a MIDI object. Simply type in the number of halftones you want to transpose the MIDI file!

MIDI change tempo
Here you can adjust the tempo of a MIDI object to the tempo of your current arrangement. This is done normally automatically while dragging the MIDI file into the arrangement. But if you later change the tempo of the arrangement this function can be useful!

Media Link
With Media Link, a MAGIX music maker 3.0 arrangement can be played simultane-ously with a media file. The most commonly used media files are "*.MID" (MIDI-Songs) or "*.AVI" (Video for Windows movies), but any media format 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 that you wish to add your own sound effects to. Open the File menu and select Media Link... In File name type the path to the .AVI file you wish to use. Using the Preview button, you can see the video you are selecting. Load the .AVI file into the arrangement window by pressing O.K. Now the video will be played along with your arrangement. Under Grid you'll find the grid pattern Time Display. This is the appropriate selection when working with Video. Now you can arrange all your sound files according to the scenes in the arranger window!

Please note that the color reproduction in MAGIX music maker 3.0 and in the video window are only independent when using (Hi Color) 16 bit or better. With 256 or 16 colors, either MAGIX music maker 3.0 or the video will show distorted colors, since all

windows have to share the same color palette.

One more hint:

For a complete music video arrangement, the MAGIX music studio program is a great accompaniment to MAGIX music maker 3.0. Simply create a MIX-file with MAGIX music maker 3.0 and load it into the MAGIX music studio as a hard disk arrangement! In this way all the MAGIX music maker 3.0 effects can be combined with original sounds and self-recorded music on up to 8 hard disk tracks of unlimited length.

Adding a MIDI-Song can be done in much the same way. For example, you can fine-tune a demo-song by using effects in MAGIX music maker 3.0. Don´t forget that MIDI-files are always reproduced using the MIDI mapper (system control). Make sure that the correct driver for your sound card or MIDI interface is installed.

Microsoft Intellimouse support:

MAGIX music maker now supports the middle wheel of the new Microsoft Intellimouse:

middle mouse click:	Playback Start/Stop
Wheel:	Scroll horizontally
+ Ctrl	Zoom In/Out horizontally
+ Shift	Zoom In/Out vertically

DEFINITIONS - GLOSSARY

The following section provides definitions of terms which will appear frequently in the description of MAGIX music maker. PC typical terms such as button, window and requester will not be defined here. Please refer to the PC manual.

VIP file

This is the file extention used when saving an arrangement to your hard drive.

HDP file

An HDP file takes the samples and effects used in your arrangement and saves them to your hard drive.

Wave file

A WAV-file is a file with digital audio information. The MAGIX music maker CD ROMs include such files. WAV-files are compatible with most audio software programs.

MAGIX music maker WAV files are recorded with 16 bit stereo resolution and a sample rate of 44.1 kHz (CD quality). If you use WAV files from other sources, please be aware that 8 bit samples have a much lower sound quality.

Bitmap, Bitmap file, Bitmap Object

A computer graphic file is often called a bitmap. There exist a lot of different graphic files and MAGIX music maker can work with the following:

BMP, PCX, EPS, JPG, TIF, PCD

Sound file

A WAV or MIDI file becomes a sound file when you move it from the File list into a Arranger window (drag & drop). In MAGIX music maker sound files/objects are the basis for most manipulations. (e.g. moving, changing volume or fades, group sounds, etc.)

Please note that all the samples used in an arrangement must be loaded into the RAM of your PC. Sufficient memory must be available or parts of the sample will have to be stored on the hard drive (virtual memory). This leads to slower processing and can cause playback interruptions. 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 sample in its memory. This calculation is based on maximum values using 44 kHz, stereo samples. Selecting an arrangement with only 22 kHz doubles the possible sample length; with additional reduction to mono it is quadrupled. MAGIX music maker 3.0 can use virtual memory, but the performance of your individual system depends on whether or not playback functions correctly. Enlarging the playback buffer in the Setup-Dialogue may help. Be sure not to increase the Buffer Size by too large of an increment as this may adversely effect playback as well.

Samplerate

When digitizing audio material, the value of the analogous WAV forms are measured and recorded at a rate of several thousand times per second. The more this is done, the better the quality. Generally, high frequencies can be measured up to half as fast as the sample rate, e.g. with a scanning of 44100 Hz (44100 sample per second) frequencies of 22000 Hz are measured higher than the human ear can hear.

If you are working with a reduced sample rate in order to save memory, you may notice a slight decrease in the highest frequencies. For example, with 22 kHz sample rates only frequencies of up to 11 kHz can be processed.

Sample resolution

MAGIX music maker 3.0 works with a 16 bit sample resolution, meaning the analog wave forms are divided among 65000 "stepping scales". This resolution helps guarantee a high (>90 dB) of soundquality.

If you are using 8 bit samples from other sources in MAGIX music maker 3.0 arrangements (which can be done), don´t be surprised by the loss of sound quality. These samples have only 256 "stepping scales" of memory available. This takes half as much memory (freeing disk space), while compromising sound quality.

Arrangement

Arrangements are the contents of a 4 to 16 track window, i.e. all the sound files, hard disk files and effects found therein. You can open numerous arrangements simultaneously. Change the order using the "Return" key and then move objects back and forth! This makes it easy to copy a passage from one arrangement to another.

Cursor

The cursor shows your current position in the playback (vertical strip). It moves across the screen according to the buffer-size setting in the Setup-Dialogue. If you decrease the buffer size, the cursor will move more slowly. If playback should be disrupted, try increasing the Buffer size until this is corrected.

There is also a cursor for starting "S" and ending "E" playback. Both of these cursors can be moved with the mouse in order to select a specific section of your arrangement for playback.

Tempo and Grids

In the lowest portion of your screen there are two settings for tempo and grid type. Both settings are based on the frame which lets you precisely adjust sound files.

With Tempo you can select the BPM (Beats per minute). If you are using drum loops with 120 bpm as the basis for your arrangement, selecting an equivalent tempo will ensure the grids on the screen fit rhythmically with your material.

With Grid the frequency of the frames can be set, e.g. whole notes (1/1), eighth notes (1/8) or even triplet frames can be set (1/8).

Sometimes it makes sense to work with no frames at all, e.g. when setting music to video. For this we recommend the grid Time Display, which changes the grid display to real time (minute:second:frames) and the frame itself is deleted.

New arrangement

With this menu selection a new MAGIX music maker 3.0 arrangement window is created. Sound files can be dragged to the arrangement window from the file list on the left screen border (Drag & Drop)!
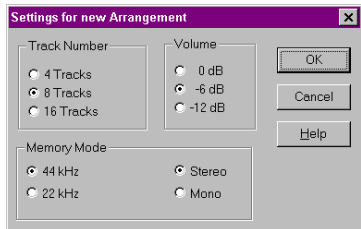
Track number: (Except for the LE version, only 8 tracks) you can set the number of tracks in the arrangement. (4, 8 or 16).

Volume: You can indicate by how many dB you want to lower the volume of each track. Lowering the volume is necessary in order to avoid the sum of all the tracks exceeding 16 Bits (0 dB). For 4 tracks ste reo, 6 dB is pre-selected and for 4 tracks mono or 8 tracks stereo 12 dB. If you do not work with maximum amplitude material on all tracks simultaneously, the decrease in volume will be minimal. However, you risk clipping in loud passages!

Memory mode: Here you can select the format MAGIX music maker 3.0 should use when loading WAV-files into the RAM.

Mono/Stereo: Stereo waves are converted into mono when loading sounds. This means that only half as much memory is needed. Moreover, with mono you double the amount of tracks.

44/22 kHz: WAV-files with 44 Khz sample rates are converted to 22 kHz when loaded. This also takes half as much memory.

Shortcuts:

Toolbar:

Key: E

Load arrangement

With this menu selection a previously saved arrangement can be loaded. The sound files used in your arrangement must be accessed from either a file saved on your hard disk or a Sound Pool CD placed in your CD ROM drive.

Shortcuts:

Toolbar:

Key: L

Save arrangement

The current project will be saved under its existing name. If a name has not been chosen a file requester will open where the path and name can be defined.

Shortcuts:

Toolbar:

Key: S

Save arrangement as...

A file requester will open in which you can define the path and name of the project that you wish to save.

Shortcuts:

Key: SHIFT + S

Save arrangement to...

This selection lets you save a complete MAGIX music maker 3.0 arrangement, including all sound files, in one folder. This is especially useful when you have created a complex arrangement using WAV files from various CDs and multiple effects.

A File Requester opens in which you can write the name of the disk drive and folder you wish to save your arrangement to.

Shortcuts:

Toolbar:

Export arrangement as WAV/AVI

This selection lets you export a complete arrangement including all sound files in the form of a WAV or AVI file. This allows you for example to edit a WAV file in another software such as MAGIX music studio.

Media Link
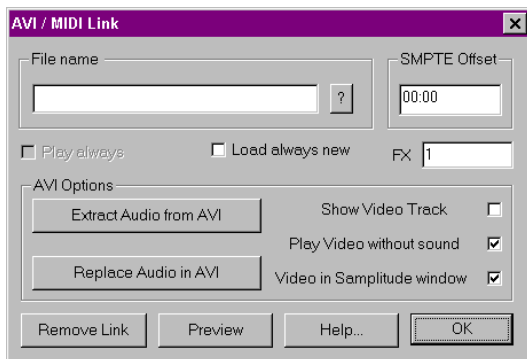
This is one of the hottest features in MAGIX music maker 3.0: With Media Link, a MAGIX music maker 3.0 arrangement can be played simultaneously with a media file. The most commonly used media files are "*.MID" (MIDI-Songs) or "*.AVI" (Video for Windows movies), but any media format for which you have an installed MCI-Driver can be used as well.

Connecting MAGIX music maker 3.0 with MIDI songs:

This lets you combine an existing MIDI song with audio tracks or insert existing audio effects in arrangements with MIDI material (e.g., drumloops, scratches, etc.). The recording of a project can also be synchronized with MIDI and Audio materials, so that the MIDI and Audio work perfectly together. Don´t forget that MIDI-files are always reproduced using the MIDI mapper, i.e. parameters like playback device, channel order and key maps can be arranged in the MIDI manager.

Combining MAGIX music maker 3.0 projects with Video-for-Windows Movies:
MAGIX music maker 3.0 is excellent for setting music to video. The video you use must first be saved as an AVI-file. There are many file conversion programs available for this purpose. Then you can combine the AVI file in MAGIX music maker 3.0 with any arrangement. In this way, music, speech, effects, etc. can be placed in the timeline and simultaneously played back with the AVI video. When you have everything perfect, the soundtrack can then be saved (sound overlay) on the video or mixed with an overlay. The AVI video is used in this manner only during preview of the sound recording, so picture quality should not be a problem. Nevertheless, a fast computer is necessary in order to properly process the audio and visual material. i.e. Pentium/120 Mhz with 32 MB RAM or higher and a fast graphics card.

Video (AVI) Options

Filename: Here you can enter the name of the media file to which you wish to link the current arrangement. Please note that the file type may be pre-selected in the file requester (.MID, .AVI).

Play always: This button activates the synchronized playback in MAGIX music maker 3.0.

Load always new: This button determines whether or not the media file should be newly loaded before every playback. If the media file is finished, this option should not be activated. The file will then be loaded only once, which is practical when using .AVI files. The window with the video remains open allowing the cursor positioning to be used to control the picture display and playback to start more quickly.

Extract Audio from AVI: If the file type is an AVI file with video and audio data, audio streams are extracted from all other information and the audio information

itself is put into a data window. This allows you to extract and edit the audio apart from the rest of the contents in the imported file.
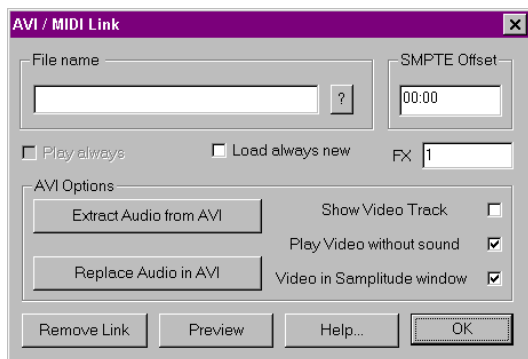
Replace Audio in AVI: This option performes a track bouncing of the current arrangement into 1 wave file. This file is merged into the selected AVI file, so the AVI gets a new audio track.

Play Video without sound: With this option MAGIX music maker 3.0 integrates the AVI without its own sound so that only the MAGIX music maker soundtrack is heard.

Video in music maker 3.0: This option opens the AVI window only in the Magix music maker main screen. This is often more practical than opening a completely independent AVI window.

Show Video Track: This is a new feature in MAGIX music maker! With this option you can display a video track in the arrangement window, which shows individual frames of the AVI file. This allows you to position audio events and material at exact frame positions. If you zoom into the window, the video track is also enlarged, showing the video frames at a lower zoom level as well.

SMPTE-Offset: Here you can enter an offset to help you align a media file to MAGIX music maker 3.0. A value of 30:00 (30 seconds, 0 frames) means that the beginning of the MAGIX music maker arrangement starts not at 0 seconds but rather at 30.

FX: Here you can enter a correction factor to optimize the preciseness in positioning of MAGIX music maker 3.0 and the media file.

When the beginning of an arrangement corresponds to the beginning of a media file, under no circumstances

should the files come apart during playback. If this should occur, it is a sign that your system is overburdened. If you are positioned in the middle of an arrangement and start playback, slight delays may appear because sound cards frequently do not have exactly the same sample rates needed for the positioning of the samples used. This problem can be overcome by using the correction factor.
Go through the following steps:

• Make sure that the start functions exactly (cursor home)
• Highlight the cursor shortly before the end of the arrangement
• Vary the FX slightly (i.e. 1.0001, 0.9999 ...) and start before the cursor on each side respectively until the speed is perfected. Now you can start from any position without encountering delays. Once you have found the right value you can use it again and again.

Preview: This lets you playback the active media file for testing.

Remove Link: This ends the connection between MAGIX music maker 3.0 and the media file.
Shortcuts:

Toolbar:

Project info
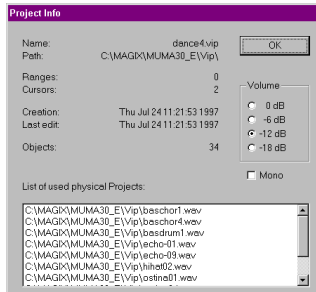
Here current information about the active arrangement is displayed. This includes the date of creation, memory size, drive and file name.

Virtual projects contain a list of all integrated physical files. In addition, the volume reduction is presented in 6 dB steps and can be edited. This volume reduction is necessary with multi track projects as the sum of all tracks must not exceed 16 Bit (0 dB). Thus each track of a 4-track-stereo-project has to be lowered by 1 Bit (6 dB). In many situations you will not be working with fully driven material on all tracks simultaneously so a reduction in level may not be needed.

Shortcuts:

Key: I

Delete objects

This menu option lets you delete all selected sound files from the arrangement. To highlight or select more than one object, use the "Shift" key while you click with the mouse.
Shortcuts:

Toolbar:

Key: Del

Copy objects

This menu option lets you copy all selected sound files. The copy appears next to the original sound files and can be moved easily by holding the left mouse button (drag and drop).
Shortcuts:

Toolbar:

Key: CTRL + C or C

Build group

This menu option lets you group all selected sound files together. As soon as one sound files of a group is selected, all sound files of the group will be selected in order to edit them simultaneously.
Shortcuts:

Toolbar:

Ungroup

All selected sound files become independent again.
Shortcut:

Toolbar:

Mix-Down

Using the MIX Down function, all objects on all tracks are summarized into a hard disk file. Afterwards, your arrangement no longer takes up RAM-memory, but instead a few bits of your hard drive (10 Mbyte per minute of stereo). Moreover, only two tracks are now occupied (only 1 with mono arrangements), so that after mixing, you can add more sample objects. The hard disk file created is optimized by the MAGIX music maker so that the loudest portion equals exactly 16 Bit (normalizing). This prevents any loss in sound quality, even if you mix over and over again.
This hard disk file can also be easily loaded into the twin-program, MAGIX music studio, for more processing!

When using AVI or Bitmap objects in your arrangement you are asked whether you want to create an AVI file from your tracks. If so please select the compression format, e.g. Intel Indeo or Cinepak Codec for the target video. This option lets you combine all audio and video objects into one AVI file, which can be played on all PCs, even from CD-ROM very smoothly!
Shortcuts:

Toolbar:

Undo

With MAGIX music makers 3.0 powerful Undo function, up to 10 changes 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.
Shortcuts:

Toolbar:

Key: CTRL+Z

Redo

Redo lets you reverse the last Undo command.
Shortcuts:

Toolbar:

Key: CTRL+A

Clear up

This function resets some of the basic settings in case they were changed during editing. This means:
• The screen display zooms to include the complete project
• The start and end cursors go back to their original positions.
• If several windows were opened, they will be arranged in a row beneath each other, in order to make it easier to drag and drop.
Shortcuts:

Toolbar:

Playback parameters

This menu option opens the window with playback parameters that you can set.
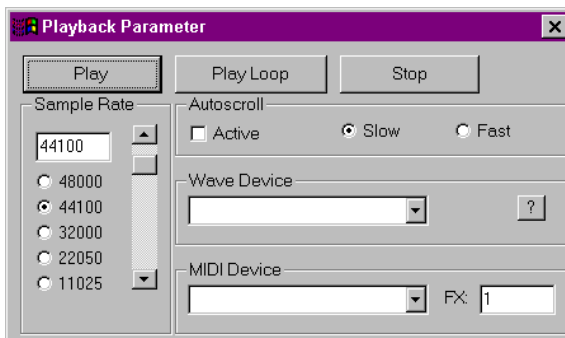
The **Sample Rate** adjusts the playback speed of the original as far as the sound card allows (some cards let you adjust speed even during playback). This can be useful if you want to hear each note of an arrangement carefully (slow-motion); if you reduce the speed by one half, the sound will go down an octave.

With **Wave Device**, the driver of the sound card for

the playback can be set. This is especially important if you have more than one sound card on your computer.

With **MIDI Device** you can select the driver for playback of MIDI files.

Autoscroll lets you activate an especially useful function, particularly for working with longer arrangements. The graphic display scrolls automatically when the cursor reaches the end of the screen display. You can select between scrolling page-wise or by half pages. Careful: the scrolling process requires a certain processing time (depending on the processor, graphic card and resolution), so that this may overburden your PC, possibly causing major problems during playback. You may need to deactivate the autoscroll mode.
Shortcut:

Toolbar:

Key: P

Setup

This menu function opens a setup window.
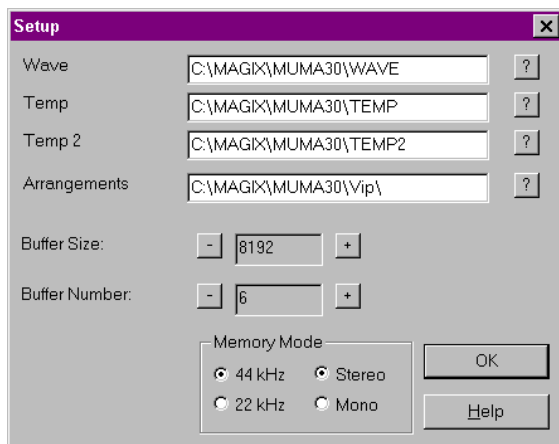
Wave: Here you can set the path for importing and exporting WAV files.

Temp/Temp2: Here you can set two paths for MIX-files and effect-files.

Arrangements: Here you can set the path for arrangements (VIP files).

Buffer Size: Standard setting is 8192 samples of buffer, which are used during playback of arrangements. Because a perfect playback is generally more important

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than a quick reaction time, this value should be increased to 16384 or 32768 if you hear playback interruptions.

Buffer Number: Here you can enter the number of buffers to be used (between 2 and 10). The higher the number, the higher the safety, but also the amount of memory needed. During playback, the current buffer count can be seen in the status row located at the bottom right corner of the screen.

Memory Mode: Here you can enter the format MAGIX music maker 3.0 should use when loading WAV-files into your RAM.

Mono: Stereo WAV files are converted to mono when you load sounds. This means that only half as much memory is needed. Moreover, with mono you have twice the number of tracks available.

22 kHz: Waves with 44 Khz sample rates are converted to 22 kHz when loaded. This takes half the amount of memory as well.

Automatic adaption from AVI to BPM: If this option is selected (Preselection) the play tempo of AVI objects will be automatically adapted to the tempo (BPM) of the arrangements. Thus rhythmical videos immediately run in perfect timing, regardless of the BPM number used by the arrangement.

Video Play Priority: Normally the sound (Wave Audio) has priority to the video effects while playing. When the computer is overcharged with too many effects the video playback becomes bumpy, whereas the sound remains clear. If you prefer otherwise the priority of the video can be put above the priority of the audio playback. Then the video playback will be renewed after each audio buffer but which may lead to sound interruptions. However, the positive result is a better video preview.

Shortcuts:

Toolbar:

Key: Y

The effects menu can also be accessed by right clicking your mouse.

Volume

This control increases or decreases the volume of the highlighted sound files. You can also use this function to create an overdrive effect. The selected sound files volume can be doubled, quadrupled, halved or quartered.
Shortcuts:

Effects bar:
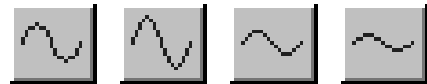
Distortion

There are 3 different distortion levels to choose from: low, medium, and strong.
Shortcuts:

Effects bar:

Reverb

"Reverb" adds a reverberation effect to your sound files. You can choose 3 kinds of reverb: short, medium and long.
Shortcuts:

Effects bar:

Echo

By applying "Echo" the sound file will be given a slight time delay. You can choose from several different delay types which function in relation to the sample length. e.g. If you select the value 1/8 for a 1-beat drum loop , the delay will be in 1/8th notes. You can choose between 1/

16, 1/8, and 1/4.
Shortcuts:

Effects bar:

Filter

With Filter you can adjust the frequency of a sample. There are three possible filter settings, low, medium and high.

Low boost filter: A low frequency filter only lets pass frequencies below the medium frequency. Frequencies above will be moderated. This can be useful for reducing high end noise.

Medium boost filter: A medium frequency filter just lets pass frequencies of a certain filter. All other frequencies will be moderated.

High boost filter: A high frequency filter moderates the frequencies below the limit frequency; frequency parts above will go through. The high frequency filter can be used to moderate low frequency noises such as humming,rumbling, etc.
Shortcuts:

Effects bar:

Backwards

When Backwards is applyed the sound file will be played in reverse.
Shortcuts:

Effects bar:

Surround

This function manipulates the object so that it will be played on the rear channel of a surround playback

system (Home Cinema). This effect is very useful for audio to video productions!
Shortcuts:

Effects bar:

Normalize

This effect maximizes the volume of a WAV file without overdriving the material. MAGIX music maker 3.0 searches for the peak level of the sample and increases the volume until it reaches its maximum. Use the Normalise function to adjust sound files that need their level increased due to filter calculations or a low recording level.
Shortcuts:

Effects bar:

Gater

This effect divides a sample into a specified number of equally spaced pieces (2 - 16). First enter the number of cuts you want, then create smooth or hard level changes by moving the sliders to adjust the volume for each individual step.

The **Gater** function can also be applied to filters, creating interesting sound distorsions, especially for techno.

This function can be useful if you want to create a grooving sound file by using a sound level which fits well with drumloops, etc.
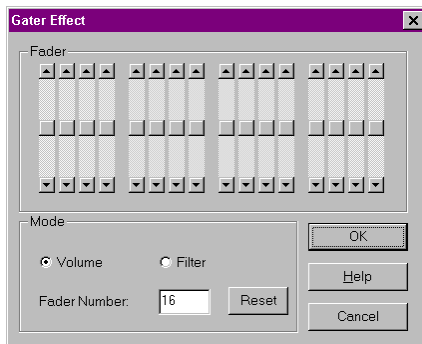
With **Fader number** you can select the number of divisions in your object (2-16).
Shortcuts:

Effects bar:

Resampling

With this function you can change the tempo and speed of an audio object (sample rate conversion). Simply type in the factor for pitch and speed in %.
Shortcuts:

Effects bar:

Time Stretching

Using this function you can change the tempo of a wave object without changing the pitch. You can set original tempo and destination tempo in BPM (beats per minute). Also, you can use wave files in a tempo range other than the original speed of the wave file!

Please note: Time stretching gives perfect results only in a small tempo range. When using larger scaling factors, you may hear some artifacts in the audio material.
Shortcuts:

Effects bar:

Pitch Shifting

With this function you can change the pitch of a wave object without changing the speed (bpm); So you can use e.g. chord samples also in another key than the original key.
Simply type in the number of halve tones you want to transpose the sample!
Shortcuts:

Effects bar:

Midi transpose

With this function you can transpose a MIDI object to

another key without any losses for MIDI files, so you can use any MIDI file in any key!
Shortcuts:

Effects bar:

Midi tempo change

This function adapts the tempo (BPM) of a MIDI object to the current tempo of the arrangement.
For MIDI files this is a procedure without any losses, so you can use any MIDI file in any tempo you want!
Shortcuts:

Effects bar:

Object information

This function displays information about the current object, e.g. file name, path name, tempo etc...

With this menu the real time video effects are controlled. It appears as PopUp-Menu when clicking the right mouse button on an AVI or Bitmap object, or as sub menu in the MAGIX Music Maker effects menu. In principle you can assign to every AV or Bitmap object an optional combination of effects such as mix mode stamp, additional wrong color effects and double play speed.

When overlaying several videos or bitmaps MAGIX Music Maker works from top to bottom. The top video object always forms the background and is overlaid by inferior objects or mixed up with them.

In order to let a dancer dance in front of a landscape by means of the blue box effect, the landscape has to be put on track 1 and the dancer on track 2 for example. Now activate the blue box effect for the dancer and the show is ready!

Mix

This menu option activates the mix mode for overlapping video objects (preselection).
With fade handlers you can very easily create smooth fades between AVI and bitmap objects.

Stamp

This menu option activates the stamp mode for overlapping video objects. A video object on the inferior track overlays an object on a superior track. This makes particularly sense if the inferior object only takes a special part from the video window.

Blue Box

This menu option activates the blue box mode for overlapping video objects. A video object on a lower track overlaps an object on a superior track. Then all the blue areas appear transparent.
With this option it is e. g. possible to put people drawn in front of a blue background in front of a background of any color.

Black Box

This menu option activates the black box mode for overlapping video objects. A video object on the lower track overlaps an object on a superior track, then all

black or dark areas appear transparent. Thus it is for example possible to put computer animations with a black background in front of any scenery.

White Box

This menu option activates the white box mode for overlapping video objects. A video object on the lower track overlaps an object on a superior track, then all white or bright areas appear transparent.
Thus it is for example possible to put computer animations with a white background in front of any scenery.

Color Keying

This menu option activates the color transparency mode for overlapping objects. A video object on the lower track overlaps an object on a superior track, then certain color areas appear transparent. These color areas can be defined with menu option "Mix Settings > Color Keying Range".

Range (position and size)

This menu option activates a choice for position and size of the video clip.
After selecting the menu simply highlight the desired clip in the video window with your mouse. Thus you have fixed the future position of the video object - It couldn't be more easy!

Reset position and size

This menu option resets the presentation of a video object back to full screen. This makes sense if a certain clip has been chosen before and is not wanted any more.

Blue Box Threshold

This menu option opens a small dialogue in which the threshold value for the blue box effect can be arranged. Please see to it that first of all the start cursor is in the top screen line above the current video object, then the video window immediately shows the result of the modified threshold value.

With this arrangement option the effect can be changed in a way that even with different models the results are excellent!

Black Box Threshold

This menu option opens a small dialogue in which the threshold value for the black box effect an be arranged. Please see to it that first of all the start Cursor is in the upper screen line above the current video object, then the video window immediately shows the result of the modified threshold value.

With this arrangement option the effect can be changed in a way that even with different models the results are excellent!

White Box Threshold

This menu option opens a small dialogue in which the threshold value for the white box effect can be arranged. Please see to it that first of all the start Cursor is in the upper screen line above the current video object, then the video window immediately shows the result of the modified threshold value.

With this arrangement option the effect can be changed in a way that even with different models the results are excellent!

Color Keying Range

This menu option activates a selection for the color keying range. After selecting the menu simply highlight the desired area in the video window with your mouse. All colors in this area will be transparent from this

moment. Thus you can also fade out color shades which cannot be covered by blue-, black - or white-box effects.

Attention: If the area selection happens with pressed control bar, the covered colors will be added to the ones that have already been selected. It is thus possible to summarize several selections in order to have a really perfect result!

Adapt Tempo

This menu option opens a small dialogue in which you can enter a new value for the playback tempo of the video object. There is a preinstalled value which causes a tempo adaptation to the current tempo (BPM) of the arrangement. It is assumed that the AVI is originally tuned to tempo 120, that it is for example exactly 2, 4 or 6 seconds long. Of course you can enter any other speed and thus simply get quick or slow motion effects!

Half speed

This menu option halves the playback speed of an AVI object, based on the tempo in %. The AVI keeps the rhythm but plays with half speed (slow motion).

Double speed

This menu option doubles the playback speed of an AVI object, based on the tempo in %. The AVI keeps the rhythm but plays with double speed (quick motion).

Backwards

This menu option is responsible for playing a video object backwards, based on the current tempo. The AVI keeps the rhythm but plays backwards.

Mirror horizontal

This menu option activates a reflection of the video object at a horizontal mirror - it is then positioned top bottom.

Mirror vertical

This menu option activates a reflection of the video object at a vertical mirror - it will then appear the wrong way round.

Horizontal symmetrie

This menu option reflects the left half of the video object to the right half.

Vertical Symmetrie

This menu option reflects the upper half of the video object to the lower half.

Kaleidoscope

This menu option reflects the upper left edge of the video object horizontally and vertically.

Inverse

This menu option activates the inversion of all color values of a video object. Blue color get a red shade and green colors appear with a violet touch.
Even from the most boring photographs interesting effects can be achieved!

Greyscale

This menu option presents the video object in grey levels. For each pixel the average of the 3 colors red,

green and blue is determined - this average forms the grey level.

Quantize

This menu option activates a quantize of the video object's color values. All colors are quantized (rounded up or down) in 3 levels with different intensity so that the number of different colors in the picture is reduced. This causes effects which are similar to ancient computer animations when the graphic cards for PC's have not been as good as today.
You can thus create very striking grids and patterns!

Color Cycle

This menu option activates 3 different wrong color displays. The red, green and blue parts of the video object are interchanged in a way that sophisticated color effects are created.
You can quickly create surrealist landscapes or a green face!

Reset all effects

This menu option switches off all video effects and activates the standard mix mode. This is extremely helpful when testing the diverse effects in order to clear up again!

Info

This menu option gives information about the selected object, e.g. file name and file path.

Cascade

This function arranges all open windows in a cascade
style
Shortcuts:

Toolbar:

Tile

All open windows are moved next to each other, making
use of the whole display area. This is useful when
dragging objects from physical to virtual arrangements.
Shortcuts:

Toolbar:

Key: Return/Enter

Untile

This function will return the window order to its previous
state.
Shortcuts:

Key: Shift + Return.

Toolbar

Use this command to show or hide the upper tool bar.

Here you can find frequently used MAGIX music
maker 3.0 commands. A checkmark beside the
toolbar indicates that it is visible.

. . . .
. . . .
. . . .
. . . .
. . . .
MENU - WINDOW :
. . . .

Status bar

Use this command to hide or show the status bar. A checkmark beside the menu point indicates that the status bar is visible.

Realtime mixer

Shows or hides the real time mixer window in the lower portion of the display.
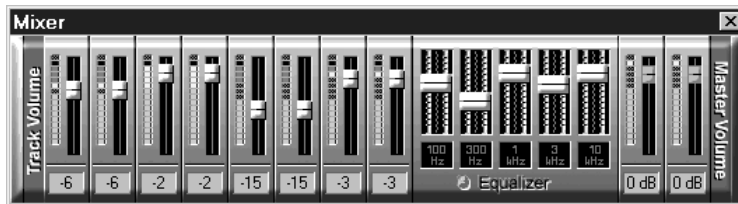
With the **8 Track Faders** you can set the volume of each track (controls Wave, MIDI, AVI and Bitmap objects).

When holding the Shift key you can move both faders of a stereo channel together. In 16 track arrangements each fader controls a stereo track.

The **5 Equalizer Faders** give you a maximum control over the sound of your arrangement. These Eqs use highly optimized assembled language routines, so a fast Pentium processor can perform all 5 bands in real time. This equalizer does not affect MIDI objects, because they produce the sound directly on the sound card or in the MIDI keyboard.

The **2 Master Faders** control the overall volume of the wave output. They do not effect the MIDI volume, so these faders can be used to create a proper balance between wave and MIDI output.

Shortcuts:

Toolbar:

Key: M

Effects toolbar

Use this command to hide or show the Effects toolbar.

Colors toolbar

Use this command to hide or show the Color toolbar.
The Color toolbar is a useful tool for highlighting
specific sound files in your arrangement

Instruments toolbar

Shows or hides the Instruments Toolbar.

With this toolbar you can easily select sounds for your
current arrangement. First activate the left button (Scan
CD). Now all available instrument group buttons for the
selected tempo are activated.

Simply click on one of these buttons to load the samples
into one of the wave lists on the left screen border!

Close all windows

Closes all open projects. Before closing you will be
asked if you want the projects to be saved.

Half height

The MAGIX music maker 3.0 screen is shown in the upper half of the display. This avoids having to constantly alternate between screens when working simultaneously with a sequencer program.

1, 2, …

At the bottom of the Window menu MAGIX music maker 3.0 shows a list with the currently open arrangements. A checkmark highlights the activated project. You can use this list to activate an arrangement.

Help

Issue this command, to display the main help screen. From here you can jump to help on certain commands or step by step read through instructions.

Help index

Use this command to get information on the use of on-line help.

Context help

Use this command to get help on any part of MAGIX music maker 3.0.

By pressing the Context Help button in the tool bar the mouse indicator will become an arrow with a question mark. More detailed information on the subject will appear when you click on any menu or button in one of the two tool bars.

About music maker

Here you will find information regarding the copyright and the version number of MAGIX music maker 3.0.

System information

A window is displayed containing information about the memory status, etc.

Particularly useful is the display of the free storage on all connected disk drives, the system resources utilized by MAGIX music maker 3.0 and the memory usage. Make sure the parameter for system memory used by MAGIX music maker 3.0 never exceeds the overall system memory available (physical RAM). If this happens, the performance of MAGIX music maker 3.0 is reduced due to page swapping.

Here are some important tips for working with music maker:

Use the "Return" key to arrange all windows.

Hide toolbars that you do not need (Window menu). This way you will have more room for the arranger window.

To quickly view available WAV files, use the Instruments bar. You can show or hide the Insruments bar by selecting it under the Windows menu.

Use the "P" key to open the Playback Parameter window.

With the "Tab" key you can switch between two ways of displaying the sound files in your arrangement.

With "Control" + the right mouse key you can copy objects into VIPs.

With the "Delete" key you can erase objects in arrangements.

With the numerical keys 1 to 0 you can change the starting point for playback from bar 1 to 10. This can be done in realtime during playback to achieve some great effects!

With the function keys F1 to F10 you can playback bar 1 to bar 10 in loop mode. This can also be done in realtime during playback!

With the "<" key you can reverse playback and by selecting it again return playback to normal!

With the right mouse button you can activate a pop-up menu for sound effects. This makes applying effects to sound files quick and easy.

Installation process is interrupted

If the installation process interrupts, but all paths have been specified correctly, it is usually an indication of either a defective installation disk or your hard disk simply doesn´t have enough space left to install MAGIX music maker 3.0. MAGIX music maker 3.0 needs at least 2.5 MB or hard disk space for proper installation.

No sound while playing

If you do not hear any sound, but the cursor still moves through the project, you will need to check the following possibilities:
• The wrong driver in the Play Parameter Window ("p"key) has been chosen
• No Windows driver has been installed for your sound card.
• The volume setting in your sound cards mixer program is set too low.
• Faulty connection of the speakers or the amplifier to the sound card

A good idea is to check audio playback apart from MAGIX music maker 3.0. If there is any doubt about the proper sound card setup, use the Windows Media Player to test the sound card. Load a WAV file in the Media Player and play it. If you are still having problems, check that the driver for your sound card has been properly installed.

Can't open waveform device

MAGIX music maker 3.0 informs you that the audio outputs of your sound card have been opened by another program, e.g. voice commander, media player, etc. Close these programs and try loading MAGIX music maker 3.0 again.gabe etc..

Can't play this wave format

This message appears when you try to play a wave format which is not supported by your sound card. Because MAGIX music maker 3.0 requires a 16 bit sound card, the useof 8 bit cards causes this message.

Another reason for this message is that your card doesn´t support all sampling rates available in MAGIX music maker 3.0. To check the capabilities of your sound card use the standard sampling rates such as 44 kHz, 32 kHz, and 22 kHz.

Short interruptions during playback

After starting playback, especially when working with HD Projects and VIP´s, you might encounter short dropouts. This usually means that your system (processor or disk) is too slow for the adjusted buffer size and sampling rate.

Try the following steps:

• Raise the buffer value for RAM, HD or VIP in the dialogue window by selecting **Setup** under the **Edit** menu. Higher buffer values will increase overall performance, but it will also slow down cursor movement and requires more RAM memory.
• Increase the buffer number. This also requires more memory.
• If it still doesn´t work, then you must reduce the sampling rate. Reduce it from 44.1 to 22 kHz. In most cases the audio quality is still sufficient.

Can't stop playback

If you can start playback by pressing the Spacebar but are unable to stop it your system might have become too busy with data processing. The only way to stop playback is by pressing the "ESC' key.

Media files are not in sync

Should you encounter delays while playing media files in sync with your digital audio you can adjust the playback by specifying a correction factor. Select **FX** under the menu **Project, Media Link**. (See the description in the **Menu** chapter of this manual).

If you are unable to correct your problem despite the previous suggestions contact MAGIX support.

When contacting please have the following information ready:

• MAGIX music maker version, dealer
• Computer configuration (processor, memory, disk...)
• Sound card configuration (type, driver)
• Information on other installed audio software.

EMail: support@magix.net

From our HotLine, we have collected a list of frequently asked questions.

Can I change the speed of WAVs? For example from 120BPM to 130 BPM!

Yes, this is possible with Magix music maker 3.0. With the Time Stretching function one or more WAV files can be adapted to the desired tempo. For further information please consult the manual. (pg 45)

Can I use WAV files from from seperate Sound Pool CDs in one arrangement?

Yes, but you have to use **Save Arrangement to** under the **File menu** when saving. The used WAV files are then copied into a hard disk directory. (pg 32)

How many add-on CDs are there?

Currently our Sound Library includes 11 add-on CDs of various styles. To see the latest available CDs please visit our website at http://www.magix.net (pg 9)

How many WAV files are provided in the MAGIX music maker 3.0 basic version?

More than 1200 Rock/Pop and House/Techno.samples.

Can I integrate MIDI?

Yes, you can integrate MIDI- and AVI-files (video) using Media Link under the File menu. (pg 33)

Is music maker a sound card?

No, MAGIX music maker 3.0 is a software program for creating music and requires a 16 bit sound card.

Which soundcards are supported?

All 16 bit sound cards can be used.

Are there minimum system requirements and if yes, which ones?

The minimum system requirements are indicated on the packaging and on page 11 of your manual.

Is the software also available for AMIGA or MACINTOSH?

No, for neither of the two.

How can I put my complete piece on tape?

Connect a tape recorder with the line out of your sound card. Start recording and play the song with music maker.

Can I also put my songs on CD?

Yes, export your song as a WAV file and pay attention that it remains at 44.1 KHz (CDs have 44.1 KHz!)

Can I also record with the MAGIX music maker 3.0?

No, in order to record your own songs or samples you will need MAGIX music studio. MAGIX music maker 3.0 is a tool for arranging preproduced WAV-files and putting together your own songs.

Can I also create my own Wave- or AVI-files?

Yes. With MAGIX music maker 3.0 you can export an arranged piece as a WAV- or AVI-file with the **Export** function.

What can I do when I have used all of the 16 tracks in the arranger window?

You can summarize the sixteen tracks onto two tracks. This frees the remaining fourteen tracks. This process can be repeated as many times as desired.

Can I publish the arrangements I create?

Only in agreement with MAGIX Entertainment. MAGIX Sound Pool WAV-files are intended exclusively for private use.

Can I find MAGIX on the Internet?

Yes, you can get more information about the MAGIX Music Network at http://www.magix.net.

What can I do when problems occur?

First check to see if the solution to your problem is coverd in the manual. If you still have questions please contact MAGIX Entertainment via EMail at:

support@magix.net

What is a WAV-file?

WAV is a standard Windows format for sample files. A sound is sampled with the help of a sound card and saved as a WAV file on the hard disk.

What does MIDI mean?

MIDI is the abbreviation for "Musical Instrument Digital Interface". This has nothing to do with WAV files. With MIDI musical information indicating which sound is to be played at which time is transmitted to a sound module (e.g. external synthesizer) for playback.

In which languages is MAGIX music maker available?

It is available in German, English, Spanish, French, Dutch and Italian.

In general

Ctrl + A	Redo
C	Copy loop element
E	Settings for new Arrangement
I	Project information
M	Show/Hide mixer
O	Load arrangement
P	Playback parameter
S	Save Arrangement
Shift + S	Save project under a new name
Y	Set Up
Ctrl + Z	Undo
TAB	Change display of loop element
Shift + TAB	Define mode object is presented in
Spacebar	Play on/off
Enter	Regroup windows
Esc	interupt playback
Del	Remove selected object(s)

Numerical keys 1 – 0

Sets playback starting point to bar 1...10

Function keys F1 – F10

Sets playback range to bar 1...10

Right mouse button

Effects Pop-Up menu

Microsoft Intellimouse

middle mouse click:	Playback Start/Stop
Wheel:	Scroll horizontally
+ Ctrl	Zoom In/Out horizontally
+ Shift	Zoom In/Out vertically

MAGIX music maker 3.0 features

New Arrangement		Setup
Load Arrangement		Clean up
Save Arrangement		
Save Arrangement. + sounds		Cascade
AVI / MIDI Link		Arrange
		Context help
Copy Objects		
Delete Objects		Volume x2
Build Group		Volume X4
Ungroup		Volume / 2
Mix-Down		Volume / 4
		Low Distortion
Zoom In		Medium distortion
Zoom Out		Strong distortion
UnDo		
ReDo		1/16 echo
		1/8 echo
Play Loop		1/4 echo
Play Once		Short reverb
Stop		Medium reverb
Play Parameter		Long reverb
Show/Hide mixer		

Filter Medium

Filter Low

Filter High

Backward

Surround

Normalize

Gater

Timestretching

Resampling

Pitchshift

MIDI transpose

Change MIDI tempo

Scan CD-ROM

Search name

Search Bass

Search Drums

Search Percussion

Search Guitar

Search el. Guitar

Search Piano

Search Keyboards

Search Strings

Search Brass

Search Vocals

Search Mix

Search FX

Search for MIDI