

**GNMIDI
MIDI TOOLS for
Windows**

(c) 1997 Günter Nagler

GNMIDI

A software for MIDI friends

by Günter Nagler

MIDI is the language that most electronic musical instruments, computers and recording studios have in common.

A MIDI file tells the playing device all the steps that the synthesizer must do to produce a song instead of only sound.

GNMIDI gives you the opportunity to join in the fun that musicians have with the use of MIDI.

Don't be afraid that working with MIDI is too difficult or requires too much knowledge of music, techniques or computers. With GNMIDI it's easy and fun to work with MIDI files.

GNMIDI is very efficient. It is small enough to put on a floppy disk and take with you anywhere. It will even run right from the disk. No installation necessary!

GNMIDI - MIDI tools for Windows

(c) 1997 Günter Nagler

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Programming

Günter Nagler, Austria

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1 Introducing GNMIDI

1.1 Why GNMIDI?

GNMIDI Software offers a huge list of operations that help preparing MIDI files for musicians. It is easier to use than a sequencer and is an ideal supplement to MIDI sequencer software. Many important operations that are difficult to do with a MIDI sequencer can be done within GNMIDI with few button clicks.

GNMIDI features are useful in following areas:

- Karaoke Playing and Editing
- Lyrics synchronization
- Lyrics conversion for many keyboard displays
- Sysex Dump
- MIDI Archive
- Information
- Entertainment
- Mobile phone melodies
- MIDI Recording
- MIDI Playing
- quick MIDI file information display
- Chord analysation
- Format conversions
- Check and Repair
- Compression
- Copy parts from a MIDI file
- View into MIDI file internals

GNMIDI contains also a few features for mp3 song files, but is mainly for MIDI users:

- enter mp3 song text
- synchronize mp3 song text line by line (Karaoke)
- play mp3 song with karaoke text
- find mp3 song files in archive by words
- remember additional information to mp3 song files in archive (rating, comment, ...)
- entertainment player plays mp3 song files in random order considering files that contains certain words, rating, playing frequency

1.2 About the GNMIDI project

Project author: Günter Nagler, Austria

From 1995-1999 I wrote many command line MIDI utilities for DOS. This program should offers many operations of these utilities and more. Many people are not familiar with computers using DOS or UNIX command lines, so **GNMIDI - for Windows** - is much easier to use. This project was also a programming test for me. I successfully used the sources of the DOS utilities without any changes in my Windows program.

The project started with some popular utilities and I may add new ones from time to time. The project has become a full featured program and is in a very stable state.

The software is available in **English** or **German**.

GNMIDI is currently tested under following environments: **Windows XP (32bit), Windows 7 (32bit)**.

GNMIDI might work with Windows systems Win95, WinME, Win98, WinNT4, Win2000, Vista, Windows7-64bit but this is not listed in supported systems because we currently do not test on these environments. We can not give any guarantees for these systems that a GNMIDI version will work for these systems. Test the demo carefully on your system to be sure that it works well. Please let us know your results if you are using one of these operating systems.

1.3 Copyright

GNMIDI (c) 1997 was created by Günter Nagler.

GNMIDI 2.0 and later is not free, it is **Shareware**. You can use it for 14 days to test it and then you must **register** if you want to use it further or delete the program. To use it longer than 14 days is a crime! Please don't be guilty of theft!

Prices subject to change. Download newest demo version for current price.

You can give GNMIDI 2.0 and later demo versions to your friends, on a shareware CD-ROM, www page, bbs etc. but must include the whole unmodified gnmidi.zip (including this .doc, program, picture, readme).

Registering GNMIDI Shareware is only licensing the permission to use GNMIDI software. It is not possible to resell or share a license, only the registered owner listed in the license file has permission to use GNMIDI.

Personal license files must not be distributed (they are never included in a gnmidi.zip). Users personal data is readable in the personal license files, so any illegal distribution of these files uncover the copyright violation with consequences by law. Registered users who violate the copyright rules (e.g. lend license to others) automatically lose the right to use the software. It is a crime to reproduce license files or use license files not purchased from the author or Shareit.de registration service. It is not allowed to sell this software or a registration without a written and signed contract with the author of GNMIDI.

Currently only Shareit.de is authorized to sell GNMIDI registrations.

Demo version of the software asks you at start if you are willing to accept our software usage conditions and copyright rules. You can quit immediately and delete the software from your computer if you don't agree. If you enter the software you agree to the conditions.

Registered user should keep the GNMIDI cdrom carefully, so that the software and license can be reinstalled at a later time (e.g. computer exchange, system reinstallation, hard disk crash). A replacement cdrom can be ordered only if the name and address still matches. Replacement license files are not sent by email. Replacement cdrom will only be sent postal way and the costs for production and delivery must be paid (5 Euro).

Read readme.txt carefully.

1.4 Disclaimer

GNMIDI was designed to handle 100% compatible **standard MIDI files**. So I give no guarantees of the results, especially with non 100% compatible MIDI files. If you find a MIDI file that you think to be 100% compatible MIDI that is not correctly converted, please send a sample file to info@gnmidi.com

Use GNMIDI at your **own risk**. Anything you do with GNMIDI is **your responsibility**, and not the author's. Any damage caused to any person, computer, software, hardware, company, or business by running GNMIDI is your responsibility, and the author will not be liable.

If you don't understand these terms, or are not sure of something, or are afraid something bad might come of using GNMIDI, don't use it! You are here forewarned.

Use GNMIDI only for legal purposes. **Respect the copyright rules** of music composers and MIDI file developers.

You can **test** each program version **14 days for free**, to see if it satisfies your needs. The demo is not for working, the purpose is to find out if you like the software before purchasing a registration.

After receiving error reports author will do the necessary tests and if error is reproducible and a program fault then will correct it till next program version. Author decides self between error and features and only includes new features that he thinks to be useful. For most situations it is necessary to include MIDI file examples (original files), because usually problems are MIDI content dependent and not reproducible with other files.

If you use a stolen license then you (as thief) are responsible for any actions of the program!

The demo behaves identical to full version, with exception of uncomfortable warnings. The **demo shows you all features of full version** and it would be silly of you to take any risk of software piracy, only to compare demo with full version and find no differences. If you have questions to differences between full version and demo at certain points, then simply ask the author.

When you ordered a license, we send you a **license file on a CD-ROM**. After we have sent the license file, it is not possible to give the license back and pay the payment back. Make use of the free testing offer before ordering.

It is not possible to sell a license to other persons (only the users who's name are mentioned in the license file have permission to use the license file). A **license** to GNMIDI is not a material thing, it is the **permission to use this software**.

1.5 Installation

This program runs under Microsoft Windows® versions **Windows XP (32bit), Windows 7 (32bit)**. It does not run under Windows 3.x and older. It is currently not tested with other Windows versions like **WinME, Win95, Win98, Win-NT, Win2000, Vista, Windows 7(64bit)** therefore we cannot guarantee that it works with them. If you need to use this software with those unsupported systems please try demo self and register with knowledge that we maybe cannot fix system depending software problems. You may try to use GNMIDI with these systems self without guarantee.

Move **GNMIDI.EXE** into a folder that is in your Windows path.

Start it with Explorer by clicking on the GNMIDI.EXE program item.

For future use you can add the **shortcut to GNMIDI.EXE** to one of your desktop groups (or create a new one), use Windows Explorer or Program Manager to do this.

At first program start GNMIDI creates a new readable file **gnmidi.ini** in your personal **My Documents** folder, which remembers your recent program settings.

When you registered then you need to install your **personal license file**:

Unzip the file with your personal data (that I send you when I get your correctly filled registration form and paid price) into directory where GNMIDI.EXE is installed. This disables the shareware reminder dialogs and program status bar immediately tells that you are registered. If you paid price but did not send correctly filled form then you are allowed to use it but you get the license file only

after the correct personal data is delivered.

Keep your GNMIDI cdrom or GNMIDI floppy disk at a safe location where you will find it again. You will need it if you want to reinstall GNMIDI later.

Backup your MIDI data carefully. Your hard disk alone is not a safe medium. Everytime it occurs that users loose their whole data after a hard disk crash and they didn't copy this data to an external backup media (DVD, CD, backup hard disk, USB stick, SD card, ...).

1.6 What is Shareware?

GNMIDI 2.0 and later is **not Freeware** it is **Shareware** (that is software that you can **try free before buying**).

A registration currently **costs only 25 Euro or 30 US\$**.

Fill the [order form](#) correctly that we can send you the license and newest program version on cdrom. The price might change anytime so check out the newest demo version for current price. So be quick to reserve your license for low price.

Registration is valid for GNMIDI 2.0 and minor upgrades 2.01-2.99, update versions can be [downloaded](#) free by registered users. It is not possible to get license for a certain minor version or an old version, only a major version. This is your benefit, since this includes fixing problems that might be found and advancing the product with new features.

Key rings are not accepted anymore as payment.

Shareware production takes much time, so please **register after testing (14 days) if you like it**. The concept makes it safe for you, you **don't purchase something that you haven't tried** and the feature list increases without purchasing extra for updates. You can **contact author directly** and discuss problems or wishes and you don't need to wait several month for an updated version, because this shareware updates more often.

1.7 How to register GNMIDI

A GNMIDI registration is personal license contract between user and software author that permits the user to use the software without demo limitations. See [copyright rules](#) that the user must agree before using the software.

Please read file README.TXT, this file explains all methods how GNMIDI can be registered, including prices and delivery.

GNMIDI is available in **English and German language**. By default we assume that customers from Germany, Austria, Switzerland prefer German language and all others prefer the English version. If you prefer the other language then please tell this wish immediately after order to info@gnmidi.com so that it can be considered in delivery or download the software in your language from <http://www.gnmidi.com>.

Currently a GNMIDI registration can be purchased from:

- company Sharelt.de
- directly from [Author](#)

You get a personal license file on a cdrom. Program and updates can be downloaded from <http://www.gnmidi.com> (Canada)

<http://www.gnmidi.at> (Austria)

1.8 Bonus GNMixer Registration

New GNMIDI registered users since 1.1.2010 have the opportunity to get a GNMixer Registration free of charge after their registration of GNMIDI software.

The current GNMixer demo version can be tried free: <http://www.gnmidi.com/gnmixeren.htm>

You find the conditions to the GNMixer bonus registration and the required registration form on your GNMIDI cdrom in the folder bonus.

The GNMixer bonus registration can only be requested using this correctly filled form. The bonus registration will be sent by email (only to the email address that was used at GNMIDI registration).

1.9 Registration Form

If you are using ShareIt.de for ordering then you don't need to fill this form! Instead you will find on the order page a secure online order form or you can order by phone or fax directly at these companies.

You can find the registration form inside file FORM.TXT in the demo. It is also available in the demo software in [menu_HELP](#).

Please first fill the form on the computer and then print it and send it with the payment to the address on the form or send the electronic form by email to info@gnmidi.com

If you have no printer then send the filled text directly to email address info@gnmidi.com or write your order good readable on paper.

Rules:

- Don't use pseudonyms or shortcuts, use full name
- The information must be complete that a license file for you can be generated (e.g. send missing information by email or with letter).
- Use your international post address
- Use (if possible) only English characters and no special characters from your language (e.g. Japanese, Chinese, ...)
- After valid registration we create a personal license file from your personal data normal License is only valid for single users, if more than one person will use the program (e.g. company) then tell us the number of users (price multiplies by this number) or ask us for conditions of a multi user license.

After valid registration we send license on cdrom with priority airmail to given address and name.

- In case of wrong registration (e.g. price changed, missing information, not enough payment) we try to contact you by email, we can't contact you if you specify no email address or a not working email address.
- Your personal data won't be given to others.

Send the registration fee and the filled registration form to

Günter Nagler
Dr. Robert-Herth Str. 5
A-8120 Peggau
Austria

1.10 How to print this help file

Best printing of these help pages can be done using the PDF version of this help. You can download this document from <http://www.gnmidi.com/gnmidien.pdf>

In order to view PDF files, the free [Acrobat Reader](#) from Adobe is required.

Delivery does not contain a printed manual.

1.11 GNMIDI.INI

gnmidi.ini is a text file in your **My Documents** folder which stores your personal program settings. This file will be created automatically at first program start. Most settings are done automatically by program.

Some very rarely used settings can only be modified by editing the [GNMIDI.INI](#) file with [Notepad text editor](#), this will be mentioned by the relating documentation to an operation.

Most settings can be found in section "Settings" after the line:

```
[Settings]
MidiMode=1
RecordDevice=0
MidiFollowLyrics=1
MidiAdjustVolume=0
MidiCommonVolume=1000000
MidiAllCommonVolume=1000000
MidiAutoCompression=0
TextFontAttrib=-13 0 0 0 700 0 0 0 0 3 2 1 18
TextFontName=Perpetua
KaraokeFontAttrib=-19 0 0 0 700 0 0 0 0 3 2 1 49
KaraokeFontName=Courier New
...
```

Hint: elder GNMIDI versions (till 2.49) use GNMIDI.INI file from your Windows folder. After changing to newer version your settings will be copied to the new location.

1.12 Notepad Editor

GNMIDI will write some results in text files and display them with the Windows text editor Notepad. This editor can not handle very big files.

Alternatives

There exist text editors which are compatible with Notepad and have more facilities than Notepad and less limitations

e.g: Notepad2 (Freeware), Notepad++

In internet you could find descriptions how to replace Windows Notepad.exe completely against some other trustable software.

[GNMIDI.INI](#) setting to use an other text editor than Notepad:

```
[Settings]
TextEditor=c:\utils\notepad2.exe
```

1.13 GNMIDI support

GNMIDI homepage

<http://www.gnmidi.com> (Canada)

<http://www.gnmidi.at> (Austria)

the homepage contains newest GNMIDI demo.

Free update for registered users: download newest GNMIDI demo in chosen language and install it in your GNMIDI folder.

Questions about GNMIDI

email: info@gnmidi.com

phone: there is no phone support available, questions will not be answered through phone.

Bug reports, comments, suggestions, spelling errors in software and help manual are welcome.

Support for registered users

email: support@gnmidi.com

Report abuses

email: abuse@gnmidi.com

2 GNMIDI user interface

2.1 The principles of using GNMIDI

Operations

GNMIDI consist of many operations. Some can be applied any time and most others must be applied to an open MIDI document.

The operations can be found in the menus and some important have icons on a toolbar. The menu or toolbar item is grayed if the operation is currently not available. Use File [Open](#) operation to load a MIDI file.

Document windows

Most GNMIDI operations don't modify your original files. Every time when you apply an operation to a MIDI file document then a new temporary file will be created in a temporary folder and opened in a new window. It is necessary to save the file after testing the result (by playing the file). Click on a window caption to activate the document, the window will get into front. You can close unnecessary windows of unused intermediate results when a work is done.

Drag and Drop

GNMIDI can open MIDI files by drag and drop method. Open Windows Explorer and GNMIDI and select MIDI files in Windows Explorer and drag them with pressed left mouse button into the GNMIDI application and drop them (release left mouse button).

Menus

The [menu](#) at top of application offers to start available commands. Use the underlined menu shortcut keys for quicker use of a command.

Dialogs

Many operations require parameters that will be offered in a dialog and they must be entered so that GNMIDI will do exactly what you want. When a dialog appears you should look at the current

parameter settings and modify them if necessary. Use the mouse buttons to click on the dialog controls and use keyboard to enter text into edit boxes. At end you can accept the parameters and start the operation with **OK** button or you can abort the dialog and operation with **Cancel** button.

Tool bars

Toolbars contain many symbols that can be clicked with left mouse button. Move the mouse over a symbol to display a tool tip that tells what it does and show a description in status bar. Toolbars can be moved to other positions.

Status bar

Status bar shows important messages on the left side and tells your name if you are using the registered software.

Hot keys

Some important operations can be started with a key combination. The menu entry shows the key code near the operation name. For key combinations you need to press more keys at same time (usually Alt or Ctrl or Shift key together with a letter key).

F1	Help
Space	Play or stop playing
Ctrl-Space	Play with standard MIDI player
Ctrl-A	Start entertainment player
Ctrl-I	Player status information
Ctrl-K	Karaoke editor
Ctrl-Z	Synchronizing editor
Ctrl-R	MIDI Recorder
Alt-X	Sysex transfer
Ctrl-O	Open MIDI file
Ctrl-S	Save MIDI file
Ctrl-E	Edit text
Alt-F4	Exit
Ctrl-F4	Close MIDI file

Hint: **Ctrl** key might be **Strg** key on your keyboard

Batch conversion

Some important operations can be applied to a folder full of MIDI files. The operations are listed in [File menu](#) under [Batch conversion](#). The results are stored in a destination folder using same file names.

Backup original MIDI files

Many operations are not reversible. Keep backup of original MIDI files before you are overwriting your original files!

2.2 Information displayed in a MIDI document window

The upper part of a MIDI document window contains following information if a standard MIDI file is loaded:

```
Filename:      C:\gnmixer\liebessp.mid
Filesize:     58757 Bytes
MIDI Version: 1 (logical tracks with single channel per track)
MIDI tracks:  13
MIDI resolution: 24 units per beat (1/96)
MIDI song time:      3:26.975
MIDI initial tempo: 100 beats per minute
MIDI copyright:     (c) 1990 Die Toten Hosen
MIDI lyrics: Karaoke words available
```

```
Track 1 [no channel]: "Liebesspieler (Die Toten Hosen)"
Track 2 [no channel]: "Soft Karaoke"
Track 3 [no channel]: "Words"
Track 4 [1]: "Melody" (Acordion)
Track 5 [3]: "whistling" (Whistle)
Track 6 [4]: "horse running" (WoodBlok)
Track 7 [5]: "choir" (AahChoir)
Track 8 [6]: "solo guitar" (Distortd)
Track 9 [10]: "Drums" (GM Drums)
Track 10 [12]: "Bass" (FngrBass)
Track 11 [13]: "Western guitar" (SteelGtr)
Track 12 [14]: "Western Guitar 2" (NylonGtr)
Track 13 [15]: "Mute guitar" (MuteGtr)
```

Text:

```
@K
@V0.V0
@I
@KMIDI KARAOKE FILE
@LGERMAN
@T"Liebesspieler"
@TBy Die Toten Hosen
@Tsequenced by Günter Nagler (gnagler@ihm.tu-graz.ac.at)
OK, Darling, schenk mir ein Ohr,
ich erzähl' dir, was dem König der Rentner geschah.
Hey, heute ist unser Tag,
alles auf Liebesspieler
Hey, heute ist unser Tag, alles auf meinen Sieger.
Und jetzt auf's Pferd!
Mein Geld ist knapp, doch der Tip ist heiß,
die Wetten stehen 10 zu 1!
Auf einmal sind die Pferde auf der Bahn und schon liegt Liebesspieler vorn!
Hey, heute ist unser Tag,
alles auf Liebesspieler
Hey, heute ist unser Tag, alles auf meinen Sieger.
Und weißt Du was
Nach dem Rennen führ ich Dich erst mal aus
und ich kauf Dir was Du willst.
Bisher machte ich Dir gar nichts aus,
doch heute bin ich Dein Glückspilz.
Hey, heute ist unser Tag,
alles auf Liebesspieler
Hey, heute ist unser Tag, alles auf meinen Sieger.
Meine Damen und Herren
hier der endgültige Richterspruch.
Durch Zielfotoentscheid: Kurzerkampf vor Liebesspieler
auf Platz: Kismequick.
Enttäuscht steh ich allein auf der Bahn,
denn Du gingst ziemlich schnell nach Haus.
Ich seh mir noch die neuesten Renntips an
```

und rechne meine Chancen aus.
Schade, das war heut nicht mein Tag,
wo war Liebesspieler?
Scheiße, das war heut nicht mein Tag, wo war mein Sieger?
Scheiße, das war heut nicht mein Tag,
wo war Liebesspieler?

Markers:
sequenced 1998 by GN

Here is the explanation of fields:

Filename:

the full pathname of the MIDI file, it is a path into the Windows temporary folder and filename starts with new00 if the file is temporary (not saved yet).

Filesize:

the number of bytes in this file

MIDI Version:

the version (also called MIDI format or MIDI type) is a number between 0 and 2. Version 0 MIDI file has only one track that contains all MIDI commands of all channels sorted by time.

Version 1 MIDI file has more tracks, where first track is reserved for conductor and all other tracks should only contain one channel.

Version 2 MIDI file has more tracks, where each track is a new song.

MIDI tracks:

The number of tracks in the MIDI file. Each track can contain MIDI commands.

MIDI resolution:

The resolution tells about the smallest possible note and pause steps in the song. 24 units per beat means that the smallest note length would be a 1/96 note.

MIDI song time:

The total time of the song in minutes:seconds:milliseconds

MIDI initial tempo:

The tempo that is used at start of the song, it is 120 beats per minute if no tempo is specified by the song.

MIDI copyright:

Copyright text of the MIDI publisher.

MIDI lyrics:

tells if lyrics are inside the song and which format it uses (karaoke words, lyrics, other).

Track list:

Each track can contain MIDI commands (channel number is shown in [] if the track has exactly one channel), a track title. A GM instrument name is shown that is used in this song (if the file will be played with a General MIDI device).

Window settings can extend this short track info to verbose track info, which tells also other initial parameters that are used in this track.

Text:

Lyric:

Marker:

Other:

The song can contain text information of different kind. This information is collected here for each of these types.

More fields are shown when extra information is added by the user e.g. artist, song title, melody channel, transpose value, rating, comment.

The MIDI document window contains following information if a text file generated by MIDI to ASCII text conversion is loaded:

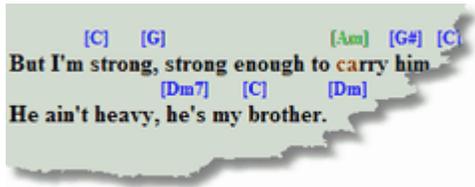
```
// C:\gnmixer\liebessp.mid
mthd
  version 1 // several tracks with separated channels to play all at once
  // 13 tracks
  unit 24 // is 1/4
end mthd

mtrk // track 1
/* U0 */ /* 0ms */ trackname "Liebesspieler (Die Toten Hosen)"
/* U0 */ /* 0ms */ copyright "(c) 1990 Die Toten Hosen"
/* U0 */ /* 0ms */ marker "sequenced 1998 by GN"
/* U0 */ /* 0ms */ tact 4 / 4 24 8
/* U0 */ /* 0ms */ beats 100.00000 /* 600000 microsec/beat */
  8279; /* U8279 */ /* 206975ms */
end mtrk

...

```

2.3 Karaoke display



[Load](#) a karaoke file (.kar, MIDI with text or lyrics or markers) and [play the song](#) with internal player. The bottom half of the MIDI document window displays the karaoke song text. During playing the position of the current song text is moved into visible area and the current syllable/word is colored [blue](#).

Hint:

you can resize the karaoke display by moving the splitter directly above.

Hint:

you can maximize the karaoke display area by clicking left mouse button taste when you are over the black area on the splitter (cursor will change when your mouse is over this part). The splitter will be moved to top and clicking again in this area will set the original size of the upper window area.

Hint:

You can change the karaoke text font and view syllable breaks (-) by menu [options](#).

Hint:

Chords of some known chord formats are displayed a line above song text.

Hint:

If chords should never be displayed above lyrics, they can be turned off in text file [GNMIDI.ini](#) with following setting:

```
[Settings]
SupportChordDisplay=0
```

Hint:

The chord font size can be specified percentually relative to song text font size in file [GNMIDI.ini](#) with following setting:

```
[Settings]
ChordTextPercent=80
```

Hint:

The colors used for background, song text and chord text can be defined in file [GNMIDI.ini](#) with following settings:

```
[Settings]
BackgroundColor=ffffff
ChordSelectedTextColor=00ff00
ChordTextColor=0000ff
LyricTextColor=000000
LyricSelectedTextColor=ff0000
```

The color values are hexadecimal values representing red green blue (rrggbb) as used in HTML pages. Searching for words "HTML colors" in internet you will find many pages that contain color tables where you can read the corresponding color value. The free graphic software [gimp](#) displays the color values in color chooser. There is also an [online application](#) for choosing a color (get hex value).

Hint:

Some chord formats use special characters to identify chords e.g. [Cm] {Cm} (Cm) %Cm "Cm". During karaoke lyrics display this special characters are not displayed (only Cm will be displayed). use following setting to display the original chord text:

```
[Settings]
DisplayOriginalChordFormat=1
```

2.4 Menu



Following items are in the menu bar at top:

- Alt-F [File menu](#)
- Alt-A [Analyse menu](#)
- Alt-C [Convert menu](#)
- Alt-M [Modify menu](#)
- Alt-P [Player menu](#)
- Alt-S [Settings menu](#)
- Alt-W [Window menu](#)
- Alt-H [Help menu](#)

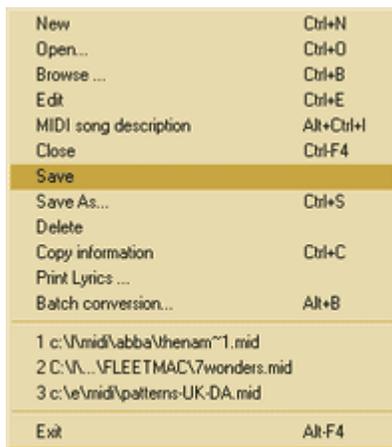
The main items can also be opened by keystrokes Alt+underlined character.

The submenu items can be selected by the up and down arrow keys or by pressing the underlined character in the menu item text.

A popup menu item ▾ can also be opened by right arrow key.

Some menu items contain a key shortcut in its menu title, this key combination can be used to start the operation directly.

2.4.1 File menu



 **New**
Create a new empty MIDI file

 **Open...**
Open an existing MIDI file.

 **Browse...**
Display folder content

 **Edit**
open a [text editor](#) for exporting MIDI information or to edit a MIDI file that is [converted to ASCII text](#).

[MIDI song description](#)
show and modify song description (author, title, rating, style etc.)

[Close](#)
Close active MIDI information window and stop MIDI song if this song is currently playing.

[Save](#)
Save modified song and overwrite the file

 **Save As...**
Save or rename song to a new filename and location

Delete
Erase current MIDI file

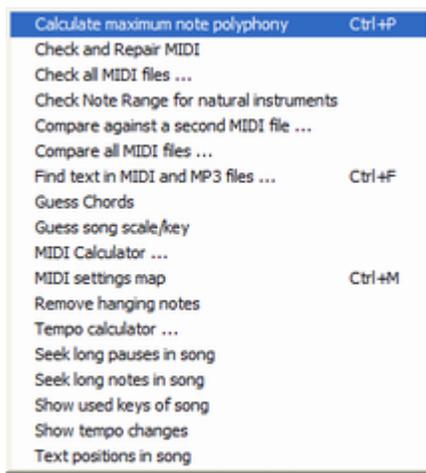
 **Copy information**
copy MIDI information into clipboard

 **Print Lyrics**
print song text

[Batch conversion](#)
apply operations to whole MIDI folder
Exit

Exit
close the application

2.4.2 Analyse menu



[Calculate maximum note polyphony](#)

Calculates maximum number of notes playing at same time in a MIDI song



[Check and Repair MIDI](#)

Checks if the MIDI file is standard MIDI compatible (.mid) and tries to repair corrupt MIDI files.



[Check all MIDI files ...](#)

Check validity of all MIDI files in a folder



[Check Note range for natural instruments](#)

check for some sound instruments if notes are used in a realistic range

[Compare against a second MIDI file](#)

shows differences between two similar MIDI files



[Find text in MIDI and MP3 files ...](#)

search text in MIDI files



[Guess Chords](#)

chord analysis for whole song



[Guess song scale/key](#)

calculate song key for a score sheet



[MIDI Calculator ...](#)

Calculate MIDI song positions



[MIDI settings map](#)

song parameters landscape



[Remove hanging notes](#)

stop notes that are not stopped and play forever



[Tempo calculator ...](#)

calculate bpm tempo of a song by clicking to the song rhythm

[Seek long pauses in song](#)

finds positions in MIDI song where longer pauses start

[Seek long notes in song](#)

finds notes in MIDI song with long durations



[Show used keys of song](#)

display song key changes used in MIDI song.

[Show tempo changes](#)

displays positions and tempo of all tempo changes in the MIDI song.

[Text positions in song](#)

displays text information contained in the MIDI song and their positions

2.4.3 Convert menu



[Change MIDI format](#)

Change MIDI format 0 to 1 or reverse

[RIFF MIDI to Standard MIDI](#)

Extract MIDI file from a .rmi file



[Generate MIDI Medley](#)

Combine MIDI files to one MIDI song (medley).



[Karaoke to MIDI with lyrics](#)

Converts MIDI files that contain song text to MIDI formats that can be displayed with certain keyboard displays and software.



[MIDI with lyrics to Karaoke \(.kar\)](#)

Converts MIDI files that contain song text to .kar format



[Compress MIDI](#)

Decreases MIDI file size without changing the musical content.



[MIDI to ASCII text](#)

Converts binary MIDI file to a readable text

A [ASCII text back to MIDI](#)

Converts modified text generated by MIDI to ASCII text operation back to MIDI file

 [Reverse MIDI song \(mirror\)](#)

Generates a MIDI song that allows to play a MIDI song reverse (from end to beginning)

[MIDI to RTTTL \(ring tones\) ...](#)

convert MIDI melody to a phone ring tone in RTTTL format

[RTTTL to MIDI](#)

convert RTTTL phone ring tones into a MIDI file.

[MIDI to Parsons code ...](#)

convert MIDI melody to Parsons code (for identifying a melody)

[Initialize GM/GS/XG/GM2 mode](#)

adds a reset mode sysex command or converts MIDI file to General MIDI.

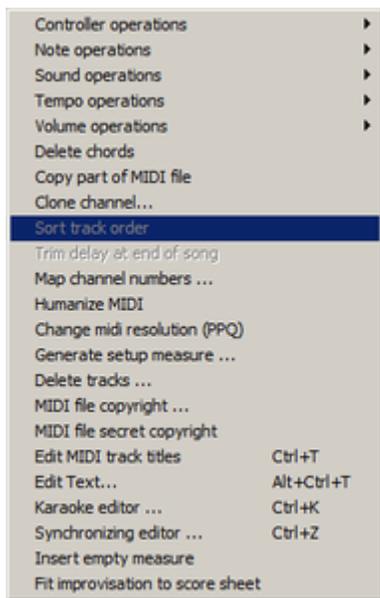
[Convert MIDI to \(.csv\) spreadsheet](#)

converts MIDI data into a table that can be viewed and modified using spreadsheet applications

[Convert \(.csv\) spreadsheet to MIDI file](#)

converts modified table back to MIDI file.

2.4.4 Modify menu



▶ [Controller operations](#)

▶ [Note operations](#)

▶ [Sound operations](#)

▶ [Tempo operations](#)

▶ [Volume operations](#)

[Delete chords](#)



[Copy part of MIDI](#)

Copies or deletes a part from a MIDI song

[Clone channel...](#)

Copies all commands of an existing channel to a new channel with optional delay



[Sort track order](#)

change the order of tracks



[Trim delay at end of song](#)

Deletes pauses behind ending of last note



[Map channel numbers ...](#)

renumber the MIDI channels



[Humanize MIDI](#)

add small random timing errors to a MIDI song



[Change MIDI resolution \(PPQ\)](#)

recalculate MIDI file to a new MIDI resolution



[Generate setup measure ...](#)

add a setup measure in front of MIDI song that initializes parameters



[Delete tracks](#)

remove selected MIDI tracks



[MIDI file copyright](#)

display existing copyright info or add a new copyright notice.



[MIDI file secret copyright](#)

show or add secret copyright information



[Edit MIDI track titles](#)

change track titles



[Edit Text...](#)

Modify song text and markers and track titles



[Karaoke editor ...](#)

Synchronize song text syllables to melody notes



[Synchronizing editor ...](#)

Synchronize song text line by line in real time during playing

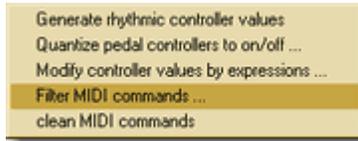
[Insert empty measure](#)

insert an empty measure of given length

[Fit improvisation to score sheet](#)

maps free recorded song with help of some markers to bar positions

2.4.4.1 Controller operations submenu



[Generate rhythmic controller values](#)

Add rhythmic controllers that change linear or randomly

[Quantize pedal controllers to on/off...](#)

modify pedal controllers between 0 and 127 to values on or off

[Modify controller values by expressions...](#)

changes controller values by self defined rules

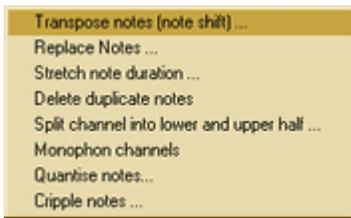
[Filter MIDI commands...](#)

delete selected MIDI command types

[Clean MIDI song](#)

delete and sort some commands

2.4.4.2 Note operations submenu



[Transpose notes \(note shift\)...](#)

transpose notes by some half tones up or down

[Replace Notes...](#)

replace note numbers by other notes

[Stretch note duration...](#)

increase note duration by percentage or incrementing length

[Delete duplicate notes](#)

remove duplicate notes that are playing at same time

[Split channel into lower and upper half](#)

split notes of a channel into left and right hand

[Monophon channels](#)

reduce note polyphony for all channels to single note at a time

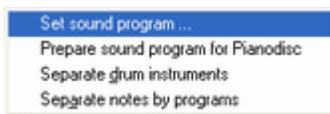
[Quantise notes...](#)

align positions and note durations

[Cripple notes](#)

encrypt MIDI file that makes it difficult to print score sheet.

2.4.4.3 Sound operations submenu



[Set sound program...](#)

assign a new sound for a MIDI channel

[Prepare sound program for PianoDisc](#)

convert to MIDI format 0 and set special piano sound for PianoDisc system that the piano keys play magically

[Separate drum instruments](#)

move each drum instrument into separate track

[Separate notes by programs](#)

move each instrument into a separate track

2.4.4.4 Tempo operations submenu

[Count-in tempo](#)

count-in tempo by adding some drum beats

[Set Tempo \(bpm\) ...](#)

set new constant tempo or change tempo by percentage

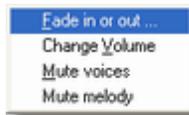
[Set tempo and adjust pauses to keep speed ...](#)

Set tempo by changing pause times

[Generate a tempo slide ...](#)

increase or decrease tempo steadily

2.4.4.5 Volume operations submenu

[Fade in or out](#)

Fade a MIDI song at beginning or end

[Change Volume](#)

change volume or note velocities by percentage

[Mute voices](#)

Mute channels or tracks that you want play or sing self

[Mute melody](#)

mute melody voice to play it self on keyboard or replace it by a singer

2.4.5 Player menu



[Play](#)

play current MIDI song with internal MIDI player

[Entertainment](#)

play random MIDI or MP3 files for entertainment

[Play with standard MIDI player](#)

play current MIDI song with your favourite MIDI player

[Player status information](#)

get information about playing and navigate the internal MIDI player

[Reset MIDI device](#)

initialize MIDI device by playing an initialization MIDI file

[Stop](#)

stops the internal MIDI player (toggles between play and stop)

[Pause](#)

Pause or continue playing current MIDI song

[Backward](#)

Continue to play 30 seconds before current MIDI song position

[Forward](#)

Continue to play 30 seconds after current MIDI song position

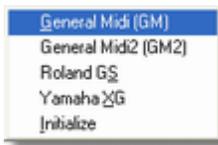
[MIDI Recorder...](#)

record MIDI song via MIDI cable from an external MIDI device

[Sysex transfer...](#)

transfer Sysex (dump) commands through MIDI cable to or from a MIDI device.

2.4.5.1 Reset midi device submenu



 [General MIDI \(GM\)](#)
plays GM reset sysex or a user defined reset MIDI file

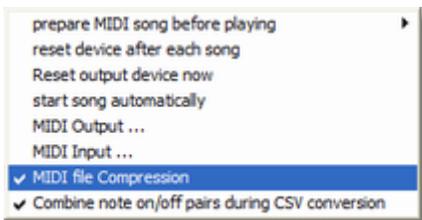
 [General Midi2 \(GM2\)](#)
plays GM2 reset sysex or a user defined reset MIDI file

 [Roland GS](#)
plays GS reset sysex or a user defined reset MIDI file

 [Yamaha XG](#)
plays XG reset sysex or a user defined reset MIDI file

 [Initialize](#)
plays initialization MIDI commands or a user defined reset MIDI file

2.4.6 Settings menu



[prepare MIDI song before playing](#)

Choose options to prepare your MIDI files before they are played (common volume, device mode initialization ...).

[reset device after each song](#)

Choose this option to send SOS MIDI commands whenever MIDI playing stops

[Reset output device now](#)

Sends SOS MIDI commands to current output device to stop playing of any notes now .

[MIDI Output ...](#)

Select an output device for playing MIDI.

[MIDI Input ...](#)

Select an input device for recording MIDI.

Start song automatically

play song file automatically when opening file or dropping file above application window.

[MIDI file compression](#)

Use standard MIDI file compression at save operation (suggested).

[Combine note on/off pairs during CSV conversion](#)

generates at conversion separate NoteOn and NoteOff lines or a Note line for each pair

2.4.7 Window menu



New window

Opens another window with same content

Cascade

Windows are moved so that one overlaps the other.

Tile

Windows are moved one beside the other

Arrange Icons

Minimized windows are arranged to get better overview

Close all windows

Quickly close all windows without saving changes

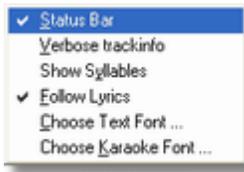
View

choose display options (text fonts, syllables, verbose track info ...)

Window list

Shows list of currently open document windows, the active document is checked. Selecting a document window will bring it into front and activate it.

2.4.7.1 View submenu



Status Bar

Hides or shows status bar at bottom of application

[Verbose track info](#)

display short or verbose track info

Show Syllables

displays syllable breaks in karaoke text e.g. in-for-ma-ti-on

Follow Lyrics

the option must be checked that the lyrics are highlighted during song playing (in [karaoke display](#))

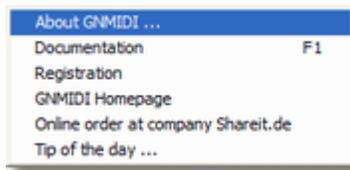
Choose Text Font ...

text font used in [MIDI information window](#)

Choose Karaoke Font ...

text font used in [karaoke display](#)

2.4.8 Help menu



About GNMIDI ...

displays copyright and version number

Documentation

open help document for current topic (key F1 can be used)

Registration

fill the registration order form if you want to [register](#) directly from author.

GNMIDI Homepage

goes directly to <http://www.gnmidi.com> (here you can download newer program versions)

Online order at company Shareit.de

online order with credit card, paypal or wire transfer

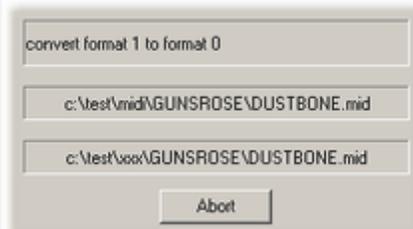
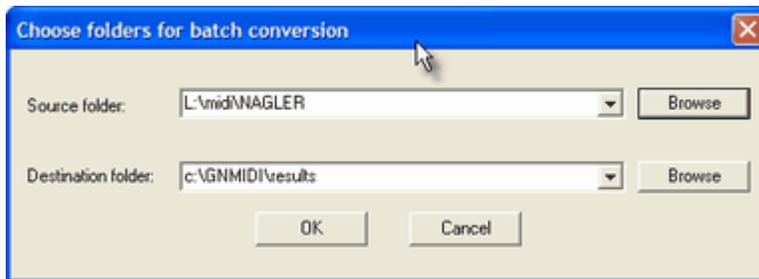
Tip of the day ...

read some useful hints about using this software

3 GNMIDI operations

3.1 Batch operations for favourite operations





A batch operation is an operation that is applied to all MIDI files in a MIDI folder (including all sub folders).

Operations usable for batch execution

Menu [File](#) contains item Batch conversion that displays the menu of currently available operations. When no MIDI document window is open then the menu and the toolbar displays only batch operations.

Steps

1. a dialog to fill required **parameters for the operation** appears and must be filled and completed with OK (this does not occur if the operation has no parameters). It is the same dialog that appears when performing the operation on a single MIDI document.
2. a **source folder** must be chosen that contains the original files that should be converted. Select folder from previous operations using drop down combo box.
3. a **destination folder** must be chosen (the folder must exist and should be empty), use *create new folder* to create a new folder (some operations don't need a destination folder when they don't generate output files e.g. [Check all MIDI files](#)). Select folder from previous operations using drop down combo box.
4. You will be asked if the conversion should be started, **continue with Yes** or **cancel** the operation with No. You should check if the displayed path information is correct.
5. **batch execution starts** after the above steps are accepted with OK or yes buttons.
6. The batch conversion displays the operation and current source and destination file. The batch conversion can be **aborted** when needed.
7. At completion of the batch conversion a text file will be displayed (with Notepad editor) with important information about certain file conversions (e.g. errors, warnings, information). You should take care about the information, and you can save or print the text file with Notepad editor.
8. The **destination folder contains the resulting files** with same names at successful conversion (some operations might change file extension automatically e.g. MIDI -> Text renames to *.txt).

Hint: The source MIDI folder must be different to the destination MIDI folder, this operation writes the resulting files into a new folder instead of overwriting your files. **Never try to convert from a folder into same folder, this could destroy your MIDI files!**

Hint: Choose a destination drive that has enough free disk space, else the operation might not complete successfully.

Demo limitation

the unregistered program demo (for testing only) limits the number of conversion for a batch operation. The registered program has no conversion limitation.

Functions

[Check all MIDI files](#)

[Compare all MIDI files](#)

[Rename file names to their song title](#)

[Rename track names to their MIDI filename](#)

[Compress MIDI files](#)

[Convert all ASCII text files back to MIDI](#)

[Convert all MIDI files to ASCII text](#)

[Convert all MIDI files to MIDI format 0](#)

[Convert all MIDI files to MIDI format 1](#)

[Convert all Karaoke to MIDI with lyrics](#)

[Add GM/XG/GS/GM2 initialization to all MIDI files](#)

[Fade all MIDI files](#)

[Filter MIDI commands in all MIDI files](#)

[Change volume of all MIDI files](#)

[Change midi resolution \(PPQ\) in all MIDI files](#)

[Copy part of all MIDI files into new files](#)

[Guess chords in all MIDI files](#)
[Map channel numbers in all MIDI files](#)
[Modify controller values in all MIDI files](#)
[Replace notes in all MIDI files](#)
[Separate drum instruments in all MIDI files](#)
[Separate notes by programs in all MIDI files](#)
[Set common volume in all MIDI files](#)
[Sound setup for Pianodisc in all MIDI files](#)
[Trim mute end of song in all MIDI files](#)

3.2 Open a MIDI file



A file dialog starts and you can choose the folder location and name of the MIDI file. Use the directory list and filename list to find it. Once you have specified an existing file, the MIDI information will automatically be analyzed and shown in a new window with filename as title.

If the MIDI song contains karaoke text then the information window has two parts:

- upper part shows [MIDI information](#)
- lower part shows [karaoke song text](#).

Both are separated by a **splitter**, which you can move up or down with left mouse button to get more space for upper or lower part.



splitter

It is also possible to open a text file that contains readable MIDI text (generated by [MIDI to ASCII converter](#)).

This text will be shown in the window. If the text is very large then it is cut at end, use [Ctrl-E](#) to display the full text with notepad editor or open the text with a [text editor](#) that can handle huge text files.

A vertical scroll bar on right side of window is available if the information in the windows is larger than the display size. You can scroll the text up and down with mouse and on some systems with a wheel mouse. A horizontal scroll bar on bottom of the window is available if the information width is larger than the window.

If the file is not a MIDI file or if the MIDI file is corrupt then an error message is shown instead of the MIDI file information. Try to [repair the MIDI file](#).

The file menu contains also the list of **recent loaded files**, this can be used to reopen one of these files quickly.

Importing other file formats

.kar

Karaoke files (.kar) are valid standard MIDI files, so just open them as MIDI files.

.rmi

RIFF MIDI files are multimedia archives, which can contain one or more MIDI songs. Using Open MIDI file will only import first standard MIDI song.

.st3

Karaoke files in format .st3 (only version 4.5 files supported) can be imported to MIDI song with song text.

.txt

Text files converted by function MIDI to ASCII text can be displayed and then converted back into MIDI file. Big files will not be displayed completely, use a [text editor](#) that can display and edit big text files instead.

.txt

small text files that contain ringing tones in format RTTTL will be displayed in a window. Such a file can be converted using function RTTTL to MIDI if content is valid RTTTL format.

.mp3

ID3 tag Information of a MP3 music file will be displayed in information window. Available MP3 song text is displayed in karaoke window.

A few operations can be applied to MP3 music files with GNMIDI (e.g. play, entertain, synchronize lyrics, find text).

3.3 Close a MIDI file

You can close a MIDI document window at any time, even if the song is currently playing. When closing new generated or modified MIDI files (marked with a * in title) then the program asks if you want to save it

Yes

will ask for a filename

No

does not save and removes the MIDI

Cancel

the window will remain open

If you want to close all MIDI files without saving modified ones then use [Close all windows](#) in [window menu](#). Save your important modified files before [exiting the software!](#)

Each document window has a close button on right top of its caption that can also be used for closing the MIDI document window.

3.4 Play a MIDI file



Play command will start the internal MIDI player for the MIDI file in window that currently has the focus (this window has a highlighted caption). It will automatically stop playing the file when [closing the file](#) or starting a new play command.

Space key starts playing the song.

With [menu settings](#) you can turn on options that the MIDI song will be prepared for your device before playing.

With [menu settings](#) you can also [select the output device](#) that should play this song.

[Player status window](#) displays information about playing and contains buttons to navigate.

Hint: since version 2.48 GNMIDI uses an own internal MIDI player (the one that is also used by

GNMixer Shareware) instead of the formerly used Microsoft MCI player to play MIDI files. If you want to use again the MCI player (for whatever reason) you can set this back with following [gnmidi.ini](#) setting:

```
[Settings]
PlayerUseMCI=1
```

Hint: since version 2.48 GNMIDI can also play MP3 songs (through Microsoft MCI) and display synchronized song text.

3.5 Stop the MIDI song player

The stop command stops the MIDI song currently played by the internal MIDI player. It does not stop an external MIDI player (for this use the stop command on your external player).

Space key stops current song playing.

3.6 Save a MIDI file

Save

The save command must be used to store a new generated or modified MIDI file. During editing modified files are kept in a temporary files folder and will be deleted when closing the application if they were not saved.

Save As ...

The save as command is used to store the file with a new name or to an other folder. It will ask for choosing the new file name and location.

Hint:

Working folder changes after Save As operation when a new location is selected. For copying files to a slow drive (e.g. floppy disk) better use Windows Explorer than Save As because future operations might access the slow drive and that could slow down the work speed unnecessarily.

3.7 Change MIDI format



This operation converts MIDI format (also called version or type) from 0 to 1 or 1 to 0.

0 Format 0:

all MIDI commands are in a single track and sorted by time. Some devices only support this file format.

1 Format 1:

MIDI commands are assigned to more tracks, each track should have not more than one channel. First track is reserved to conductor.

Convert all MIDI files to MIDI format 0:

These conversions are also available as [batch conversion](#).

The MIDI information window tells the file format of the MIDI file.

Hint:

Registered GNMIDI users can use the Shareware GNMIDFMT for converting between formats 0, 1, 2 comfortable with their personal license.

You don't need to register GNMIDFMT if you register GNMIDI first.

3.8 Check and repair a MIDI file



The operation checks the MIDI file against the Standard MIDI file format. For a valid MIDI file it will display the message

```
MIDI file has valid standard MIDI format. Repair not needed.
```

When opening a corrupt MIDI file an error message will be displayed in the MIDI information window. The operation can repair common MIDI file problems (e.g. invalid command parameters, truncated MIDI file), but it can not repair severe errors (e.g. if lost data at beginning of file) and repairing might lose data.

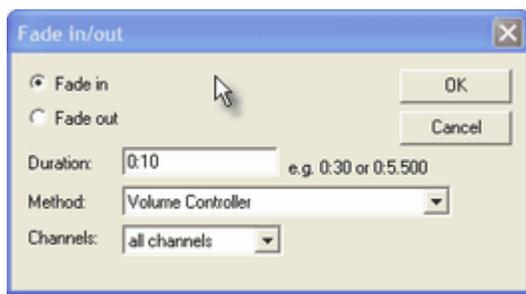


The operation is also available as [batch operation](#).

3.9 Convert RIFF MIDI (.rmi) to standard MIDI file (.mid)

This operation is only available when opening a file with extension .rmi (RIFF MIDI file). Those files are multimedia archives that can contain MIDI documents and other multimedia documents like WAV, AVI. The conversion extracts a contained MIDI file from the archive.

3.10 Fade a MIDI song



Fade operation increases or decreases volume level at beginning or ending of a MIDI song steadily so that the loudness fades linear.

The fade dialog occurs and you can choose if you want to **fade in** (at beginning of song) or **fade out** (at end of song). A duration of 10 seconds will be offered and can be changed. By default the volume changes by inserting increasing/decreasing volume controller (#7), you can choose between 3 different methods that affect song volume. Usually all channels are faded, choose a channel to operate only on this channel.

Fade in:

fades from beginning of song for the specified duration (from 0% to 100%, increasing note velocities).

Fade out:

fades till end of song for the specified duration (from 100% down to 0%, decreasing note velocities).

In **Duration** field you must enter a valid time in one of following formats:

- minutes:seconds.milliseconds (e.g. 1:25.300)
- minutes:seconds (e.g. 0:10)
- seconds.milliseconds (e.g. 5.500)
- seconds (e.g. 10)

Method

you can choose one of following kinds of changing volume , we suggest modifying volume controller

- Volume Controller: MIDI controllers #7 are inserted
- Expression Controller: MIDI controllers #11 are inserted
- Note Velocities: Note velocities of each note are adjusted

Hint:

Modifying note velocities can influence voice of instruments on some devices.

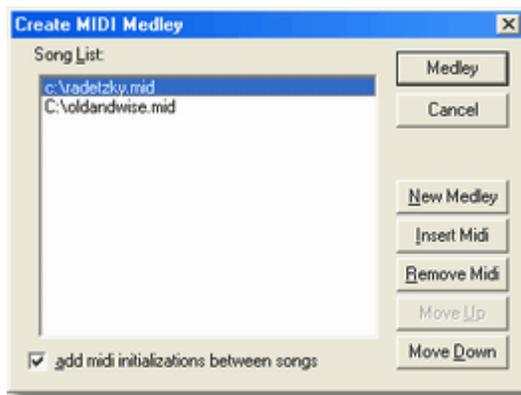
Channels:

By default all channels are faded, optionally you can choose a certain channel to fade.

In older versions a more difficult dialog was at this place, this old fade dialog can be reactivated by entering following lines into [gnmidi.ini](#) (only if you really need this old dialog):

```
[Settings]
SimpleFadeDialog=0
```

3.11 Make a MIDI medley



The MIDI medley operation displays a dialog where you can enter a list of MIDI files. After the list is ready and sorted in your preferred order press the **Medley** Button. Then the operation checks MIDI format of all input files and converts all MIDI files temporarily to format 0. If there are invalid files or files that are not format 0 or format 1 in the list then the operation stops and the first invalid file is opened. You could try to [repair the file](#). All MIDI files are concatenated to a file containing the songs in a sequence (medley).

No pauses are removed or inserted. If you want a pause between the songs then insert a small MIDI song that contains only the pause.

The MIDI medley will be opened as a new document.

The list box remembers recent used filenames, use **New Medley** button to clear this list when starting

a new medley.

Use **Insert MIDI** to add more files to the song list, a new file will be inserted before selected entry in the list.

Use **Remove MIDI** to delete the selected filename from the song list.

Use **Move Up** and **Move Down** to sort the list entries.

When the option **Add initializations between songs** is checked (default) then controllers and other important MIDI parameters are added to initialize settings of next song to avoid bad sound if the author of an input file has not initialized a parameter and in medley value of recent song is used for the next song. This option can be turned off if you are sure that all necessary MIDI parameters are initialized for each song and don't conflict. Especially when the result is not used as medley but as one song combined from several parts, then the extra initializations are not necessary (could cause a small delay).

3.12 Play MIDI with favorite MIDI player

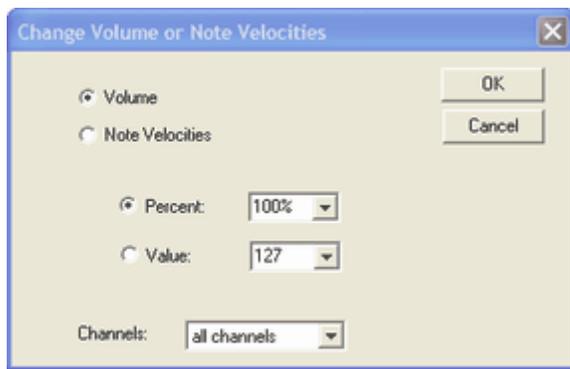


This operation starts the application that is associated with the file extension of current MIDI file (usually .mid, could also be .kar). It automatically adds the full location and name of current MIDI document as first parameter.

Applications can be associated to file extensions with help of Windows Explorer.

The external player can be started with Ctrl+Space key.

3.13 Change Volume (or Note velocities)



You can choose between modifying volume by **volume** controllers or **note velocities**. You can change original values percentually or set them to a new constant value.

Hint: Prefer modifying volume controllers but if the volume controllers are already at maximum level then only way might be to increase note velocities.

Percentage

Enter a percentage between 0% and 1000%. Percentage 100% does not change volume.

Value

Enter a value between 0 and 127. Value 0 is not allowed for setting note velocities, this value has a reserved meaning in MIDI.

Channels

Optionally choose a channel between 1 and 16 or all channels (default is all channels).

Turn off "adjust volume to common level" option in [menu settings](#), when you test the volume changes with [GNMIDI player](#), since this option will automatically adjust volume of played song to a common level.

3.14 Copy part from a MIDI file

**Copy part**

This operation copies a part of the MIDI song into a new MIDI file.

The range start-end will be copied into a new MIDI file. Notes that play at start or end position will be cut to a smaller note inside the new range. Settings are not removed, so the part will play with original settings. Duplicate controller settings before the start position are combined. Pitchbend commands before start are combined.

Remove part

This operation deletes a part of the MIDI song.

Notes and lyrics that are fully inside middle part are deleted, notes overlapping middle range are shortened, pauses in middle part are deleted. Controllers, Pitchbend inside the middle part are kept and optimized so that the settings necessary for playing right part correctly are not lost.

Time units:

Choose one of the 3 position formats for specifying start and ending of the cut range. Usually real time is wanted.

Realtime (mm:ss.ms)

Time position relative to the beginning of the MIDI song.

You can specify (minutes:seconds:milliseconds (e.g. 3:26.975) or minutes:seconds (e.g. 3:27) or seconds (e.g. 207).

MIDI units

Precise positions in MIDI file units (a number between 0 and last unit in MIDI song). MIDI units are

smallest usable note length or pause length in a MIDI song (e.g. at song resolution 96 a MIDI unit is a 1/384 note length).

Beats (quarter notes)

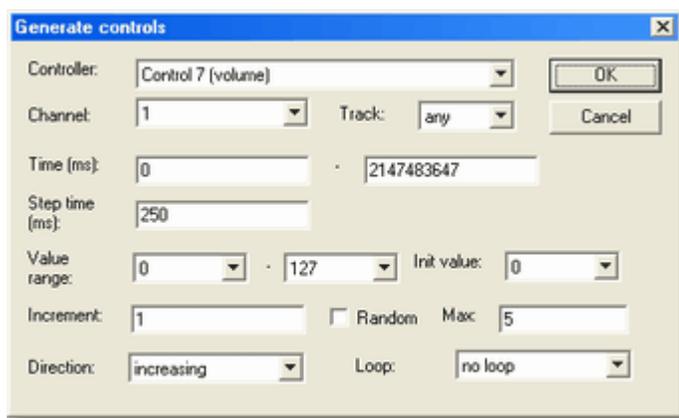
position specified in beats (a number between 0 and last beat in MIDI song) since start of song (a beat is a quarter note)

Starttime:

Endtime:

Enter start and end position in selected position format.

3.15 Generate control events in rhythmic or random way



This operation adds controllers that behave random or according to a linear rhythmic way. The parameters specify which controller should be added and how the controller values must behave during time

e.g.

- increase volume from one position to another
- change balance steadily from left to right and back
- modify expression controller

Controller:

Choose a controller number from the list. Controller commands of this kind will be generated. Usually volume or balance controllers are preferred here.

Channel:

choose one channel from the list, the controller commands will be added to this channel.

Track:

track number can be selected optionally (by default all tracks are considered). It could be useful if the chosen channel number is used by more than one track.

Time:

enter two millisecond values to generate controllers only within a certain time range (default is full MIDI song time range). Second value must be greater than first one (e.g. 30000-60000 is range between second 30 and 60).

Step time (ms):

specifies the delay between two generated controllers (two steps) in milliseconds. When the value is small then huge count of controllers might be generated.

Value range:

Controller values must be in range 0-127. Optionally you can force the generated controller values to be in an other value range (e.g. 64 - 80).

Init value:

Specify the initial controller value that should be generated at start.

Increment:

Specify an incremental value if the controller values should be increased or decreased by a value.

Random:

Check that option if the values should be generated by random instead of linear incrementation.

Max:

Random generated values maximum difference to previous generated value. This value restricts the random distance to the next generated value.

Direction:

- increasing next value is calculated by adding the increment value
- decreasing next value is calculated by subtracting the increment value
- random next value is calculated by adding or subtracting the increment value

Loop:

- no loop range stop generating values when the next generated value would exceed the value range
- loop cycle when value exceeds value range then restart with initial value again
- loop up and down direction when value exceeds value range in one direction then continue in reverse direction

3.16 Show short or verbose track information

With this option you can choose between short or large information about MIDI tracks that will be displayed in each MIDI information window.

This option is inside [window menu](#).

short track information

A short track information line contains
track number [channel number]: "track title" (initial program)

```
Track 1 [no channel]: "Liebesspieler (Die Toten Hosen)"
Track 2 [no channel]: "Soft Karaoke"
Track 3 [no channel]: "Words"
Track 4 [1]: "Melody" (Acordion)
Track 5 [3]: "whistling" (Whistle)
Track 6 [4]: "horse running" (WoodBlok)
Track 7 [5]: "choir" (AahChoir)
Track 8 [6]: "solo guitar" (Distortd)
Track 9 [10]: "Drums" (GM Drums)
Track 10 [12]: "Bass" (FngrBass)
Track 11 [13]: "Western guitar" (SteelGtr)
Track 12 [14]: "Western Guitar 2" (NylonGtr)
Track 13 [15]: "Mute guitar" (MuteGtr)
```

Example:

```
Track 4 [1]: "Melody" (Acordion)
that means: track number is 4, contains only one channel with number 1,
track title is "Melody" and initial program (sound) is Accordion.
```

verbose track information

A verbose track information contains

track number:

channel: channel number

Name: "track title"

Program: sound program

Volume: volume (0-127)

Balance: balance (0=left, 64=middle, 127=right)

chorus: chorus effect level (0-127)

reverb: reverb effect level (0-127)

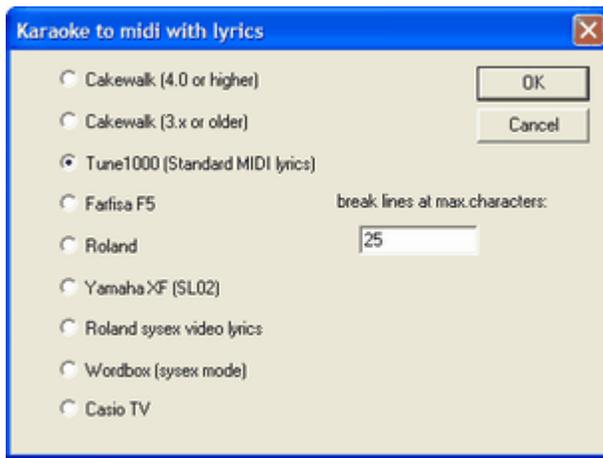
notes: deepest and highest note used (note range size in half tones)

```
Track 1:
channel: no channel
Name: "Liebesspieler (Die Toten Hosen)"
Track 2:
channel: no channel
Name: "Soft Karaoke"
Track 3:
channel: no channel
Name: "Words"
Track 4:
channel: 1
Name: "Melody"
Program: Acordion
Volume: 127 (0=mute,127=full)
Balance: 64 (0=left, 64=mid, 127=right)
```

```
chorus: 14 (0-127)
  reverb: 42 (0-127)
  notes: g#5 - e6 (9)
Track 5:
  channel: 3
  Name: "whistling"
  Program: Whistle
  Volume: 70 (0=mute,127=full)
  Balance: 97 (0=left, 64=mid, 127=right)
  chorus: 14 (0-127)
  reverb: 42 (0-127)
  notes: g#6 - b7 (16)
Track 6:
  channel: 4
  Name: "horse running"
  Program: WoodBlok
  Volume: 90 (0=mute,127=full)
  Balance: 93 (0=left, 64=mid, 127=right)
  chorus: 14 (0-127)
  reverb: 42 (0-127)
  notes: g#4 - c#5 (6)
Track 7:
  channel: 5
  Name: "choir"
  Program: AahChoir
  Volume: 80 (0=mute,127=full)
  Balance: 30 (0=left, 64=mid, 127=right)
  chorus: 14 (0-127)
  reverb: 42 (0-127)
  notes: g#5 - e6 (9)
Track 8:
  channel: 6
  Name: "solo guitar"
  Program: Distortd
  Volume: 90 (0=mute,127=full)
  Balance: 38 (0=left, 64=mid, 127=right)
  chorus: 56 (0-127)
  reverb: 113 (0-127)
  notes: b4 - b5 (13)
Track 9:
  channel: 10
  Name: "Drums"
  Program: GM Drums
  Volume: 111 (0=mute,127=full)
  chorus: 0 (0-127)
  notes: c3 - a4 (22)
Track 10:
  channel: 12
  Name: "Bass"
  Program: FngrBass
  Volume: 95 (0=mute,127=full)
  Balance: 64 (0=left, 64=mid, 127=right)
  chorus: 0 (0-127)
  reverb: 0 (0-127)
  notes: d#2 - g#3 (18)
Track 11:
  channel: 13
  Name: "Western guitar"
  Program: SteelGtr
  Volume: 77 (0=mute,127=full)
  Balance: 85 (0=left, 64=mid, 127=right)
  chorus: 56 (0-127)
  reverb: 56 (0-127)
  notes: g#3 - c#6 (30)
Track 12:
  channel: 14
```

```
Name: "Western Guitar 2"  
  Program: NylonGtr  
  Volume: 86 (0=mute,127=full)  
  chorus: 42 (0-127)  
  reverb: 42 (0-127)  
  notes: d#4 - g#5 (18)  
Track 13:  
  channel: 15  
  Name: "Mute guitar"  
  Program: MuteGtr  
  Volume: 95 (0=mute,127=full)  
  chorus: 42 (0-127)  
  reverb: 42 (0-127)  
  notes: g#3 - c#5 (18)
```

3.17 Karaoke to MIDI with lyrics



A karaoke MIDI file contains song text in different kind of formats. This utility converts the song into MIDI format 0 and writes the lyrics in a format that is used by different keyboard models or software players.

Choose one of following formats, try some of them if you don't know what your keyboard supports:

- Cakewalk (4.0 or higher, META lyric commands)
- Cakewalk (3.x or higher, META marker commands)
- Tune 1000 (standard MIDI lyrics)
- Farfisa F5 (sysex commands)
- Roland (META lyrics)
- Yamaha XF (SL02)
- Roland sysex video lyrics
- M-Live Wordbox sysex

break lines at max. characters:

Enter a maximum line length (default 40 characters) to limit the line length for certain karaoke display. Enter 0 if no limit is set (no breaking). Line breaks are inserted when song text lines are longer than this limit, in most cases the line break is done at a space, in rare cases it is done within word (e.g. when no space near end of limit).

Try different formats for use with your keyboard and choose the best one, start with option Tune 1000 that works with many keyboard displays. Some keyboard displays don't accept longer lines, specify a maximum line length that GNMIDI automatically breaks the lines into smaller ones.

.kar format

.kar files are MIDI file format 1 files that contain META text commands to store the text in a special formatting.

This operation can convert .kar files into other lyric formats.

Use [Convert MIDI with lyrics to Karaoke MIDI](#) to convert a MIDI file to a MIDI file with .kar formatted lyrics.

3.18 Convert MIDI with lyrics to Karaoke MIDI



This operation converts a MIDI file that contains song text into a .kar compatible MIDI file. Save the files with file extension .kar to play them with other karaoke players that support .kar.

The conversion creates a format 1 MIDI file that contains .kar formatted META text commands (line breaks, paragraphs, karaoke info).

3.19 Trim mute song ending



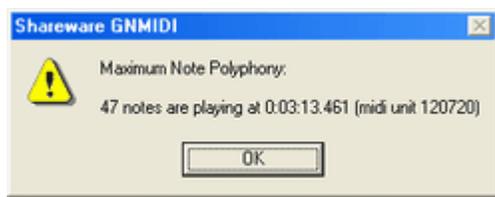
This operation deletes a pause (that is longer than a second) at end of MIDI song (only pause that is behind end of last playing note).

Hint: If a MIDI song contains notes that are not stopped correctly ([hanging notes](#)) or if a long note at end of song becomes silent before it is really stopped then this operation is not available, because there is not really a pause at end of the song (there are still notes not turned off). Use [cut operation](#) to get copy a part of the MIDI song into a new MIDI file.

Hint: The silence at end of the song must be longer than a second that this operation deletes the pause.

Hint: This operation is available as [batch operation](#).

3.20 Calculate maximum note polyphony



This operation calculates the maximum number of notes playing at same time (considering influence of used piano pedals).

It displays a message box with following info:

- number of notes playing at same time
- time position where this number of notes are playing (hour:minute:second:millisecond)
- MIDI position where this number of notes are playing (in MIDI units)

Notes that are not stopped correctly can increase the calculated maximum note polyphony. If the value is high and the position is near end of song then you should check if the song contains [hanging notes](#).

3.21 Reset GM, GM2, GS, XG, INIT



These commands play

- a common used [standard sysex command](#) (default)
- or
- a [user defined MIDI file](#) (one for each button).

It is useful to reset the sound card or force it into a certain mode before playing MIDI files, otherwise certain MIDI devices can react unexpectedly by playing wrong sounds (e.g. drums play piano sound). The standard sysex commands will work only if your sound device supports GM, GM2, GS or XG compatible modes.

Read about supported MIDI commands in MIDI implementation chart of your keyboard manual.

INIT

by default INIT button sends MIDI commands that reset common used controllers, pitch bend, sound programs.

You can redefine the buttons for playing your own initialization MIDI files by modifying [GNMIDI.INI](#) file:

```
[Settings]
GM=drive:\path\filename.mid
GM2=drive:\path\filename.mid
GS=drive:\path\filename.mid
XG=drive:\path\filename.mid
Init=drive:\path\filename.mid
```

Replace the right sides of = by path of an existing MIDI file, e.g.

```
GS=c:\gnmidi\gsreset.mid
```

The content of your user defined initialization MIDI files is not limited by any rules, you can even play notes in such a file.

3.22 Reset device (SOS)



SOS command sends few MIDI commands to current output device in order to stop playing notes, reset controllers and settings that future songs will start playing at a defined state.

This command is usually used, if a currently stopped song did not stop all notes.

Hint: This command can be set as player option, so that it SOS will be automatically done after each stop of player.

3.23 Prepare MIDI song before playing



These options prepare a MIDI file before it is played with internal or standard MIDI player, selecting one or more options will play a temporary MIDI file instead of the original MIDI file.

No mode changes

plays the original MIDI file without any initialization or program modifications, except common volume option that will be considered.

GM only

removes all non-GM MIDI commands (bank controls, sysex) and add GM Reset sysex. This option is useful for GM compatible MIDI devices that would play GM2, GS or XG MIDI files wrong.

GM reset

adds a GM sysex.

GM2 reset

adds a GM2 sysex.

GS reset

adds a GS sysex.

XG reset

adds a XG sysex.

Common volume

adjust volume level to a common volume level by modifying some controller values.

3.24 Sort tracks in a format 1 MIDI file



This operation is used to change the current order of tracks in a MIDI format 1 file. This is useful when you need a track at certain position or when your MIDI device can only play few tracks.

The dialog shows current tracks of a MIDI song. Each line contains:

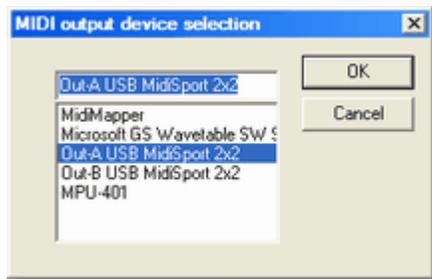
- Original track number: Track 1 etc.
- Track channel number: 1-16 or - (if no channel MIDI events) or multi (if more than one channel used in this track)
- Track title: Title "..." or Tempo track or none
- Track initial program: Program ... or none

Move Up

Move Down

select a line and move it up or down. It is not allowed to move track 1 (Tempo track). It is not allowed to move a track in front of Tempo track. It is not possible to move last track down. The buttons are disabled in these cases.

3.25 Select MIDI output device for internal MIDI player



Windows system allows to install more than one MCI compatible MIDI devices (sound card, software synthesizer, external MIDI device connection, ...).

GNMIDI [internal player](#) plays MIDI files through the device selected from this list of output devices. This setting does not affect external MIDI players, they should have their own settings.

MidiMapper

Choose MidiMapper if you want to use the device that is used by Mediaplayer as standard output device.

3.26 Compress MIDI



This operation tries to compress your MIDI file. The compression does not change your MIDI song content, it only stores the data more compact if possible. After compression some statistics on compression are displayed. The compression ratio depends on input, the results can be 10%-15% smaller than original file size.

A compressed file can't be compressed again, in this case the operation will tell
Compression not necessary

Invalid files can't be compressed:
Operation failed

3.27 Humanize MIDI



Use this function to make computer sequenced or generated MIDI songs with exact timing more like played by human, with little inexactness in timing and key pressure. Try different levels to find a middle between too exact and too inexact.

humanize timing

produces little random timing errors within the selected level. Timing is limited to remain within 1/16 note of original timing. This affects the position of all commands and notes and duration of notes.

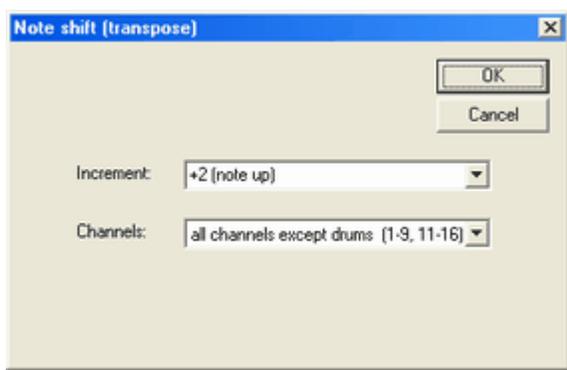
humanize note velocities

varies all note velocities by random within selected level. This affects the key pressure of note on/off commands, usually this influences notes volume and sound effects.

Level of humanizing

choose a level between 1 and 10, where 3 is soft, 5 is medium, 10 is heavy.

3.28 Transpose MIDI



Use this operation e.g. if you need to transpose song notes to the song key of the lead singer. Transpose operation (also called shift note) transposes note values some half tones up or down.

Increment

Enter a increment number of half tones between -12..+12. Negative values shift notes downward, positive values shift notes upward. 12 half tones are an octave.

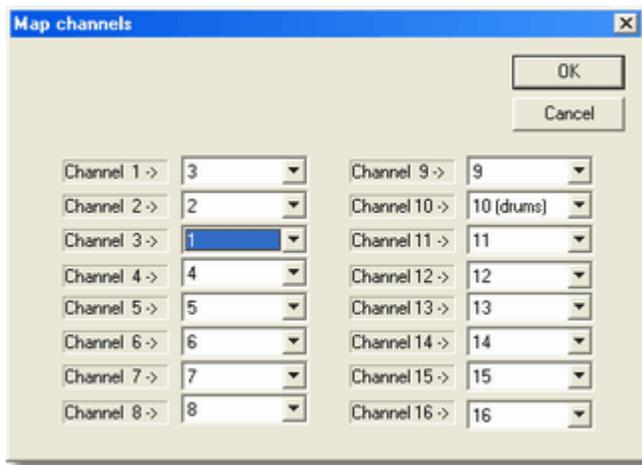
Channels

Transpose can be applied to

- all channels (1-16)
- all channels except drums (1-9,11-16 assuming GM drum channel 10)
- single channel (1-16)

Usually the operation is applied to all channels except drum channel.

3.29 Map Channel Numbers



This utility rennumbers the channel numbers of all MIDI commands. Fill the mapping table for each channel that you want to renumber.

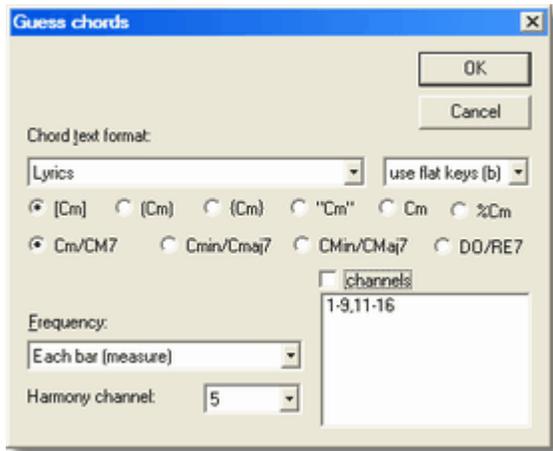
E.g. map channel 1 to 3 and channel 3 to 1 will exchange current channels 1 and 3.

Hint:

You can map one or more channel numbers at once (exchange their numbers). If more track use same channel number then changes are done in all these tracks.

This operation is also available for [batch application](#)

3.30 Guess Chords



This operation analyzes chords for a MIDI song. It is called "guess" chords because in many situations there are more than one possible chords and an automatic analysis must decide for probably best chord.

The chord text format defines how the resulting chord info should be stored inside the resulting MIDI file. Choose the MIDI commands that are to use and how the chord names should be formatted as text.

Chord output

- Markers
- Lyrics
- Text
- Harmony notes (produces chord notes instead of named chords)
- Yamaha PSR meta
- M-Live Wordbox sysex
- Pgmusic Inc. Band-in-the-Box

Sharps or Flat keys

- use sharp keys (#) e.g. F# is preferred instead of Gb
- use flat keys (b) e.g. Bb is preferred instead of A#

Chord text formatting

- [Cm]
- (Cm)
- {Cm}
- "Cm"
- Cm
- %Cm (used by Technics KN keyboards)

Chord name formatting

- Cm/CM7 short chord names
- Cmin/Cmaj7 long chord names beginning with lower case letter
- CMin/CMaj7 long chord names beginning with upper case letter
- DO/RE7 italian chord names (DO, RE, MI, FA, SO, LA, SI)

Frequency

- Each bar (measure)
- twice each bar (half measure)
- each beat (quarter note)

Hint: It is important that the bar information in the MIDI file is correct else notes start at random positions within a bar and that causes inexact results!

Hint: analyzing chords for each bar usually gives better results than doing it for each beat.

Harmony channel

is only used for chord output **Harmony notes**, the generated chord notes will be added to this channel. Harmony notes are used for controlling a vocal harmonizer.

Channels

- all channels except drum channel 10
- single channel 1-16

By default all channels are considered for analyzing (melody, bass, accompaniment, ...) together. Only the notes matching the given channel will be used for analyzing chords. This might give better results if the MIDI song already contains a chord notes track (specify the channel of these chord notes).

Recognized chord types

- Major chords
- minor chords
- sus4
- 9th
- dim
- aug
- 6th
- 7th
- 7Maj

Hint:

If too few notes are available within a bar then the analysis won't guess the chord and the missing chord will be marked with ? (e.g. [?]). If you want to ignore the [?] marks then add following setting to the [gnmidi.ini](#) file:

```
[Settings]
GuessChordsSkipFailChord=1
```

Hint: Missing notes can cause that a chord is not found, e.g. C-G-A won't be recognized as C6 chord since note E is missing.

Hint: If chords are not recognized (or wrong) because of missing notes then you could add the complete chord notes in a new track (silent) and repeat chord guessing.

The text events are synchronized to the bar positions. Some MIDI players can show them while playing (e.g. midimach, GNMIDI, GNMixer).

Wordbox

Wordbox is a MIDI text player from [Italian producer M-Live](#), which transfers song text and chord names through MIDI cable and mainly supports musicians on stage during singing.

Instead of exporting guessed chords directly into a Wordbox compatible format, you can first merge the chord text enclosed in [...] with song text (choose lyric or text depending on the current used song text format) and later [convert song text including chord names into a Wordbox compatible format](#). This has advantage, that the analyzed [chord names can be checked and modified](#) if necessary, which can't be done after exporting them into a Wordbox sysex format using GNMIDI.

Hint: Most chords are stored as readable text, they could be modified with operations like [modify text](#). Other formats are very special for a certain device and can not be modified with GNMIDI. Chords in format Yamaha PSR meta could be modified with GNMIDI using conversion to ASCII text and back (there the psr chords look like [psrmeta chord "Am"](#)).

Band-In-The-Box™

is a famous MIDI Software by company [Pgmusic Inc.](#) which uses chords as a key feature during work with MIDI files. The generated chords usually can only be used with the software products of this company.

Following setting in [gnmidi.ini](#) can be used to force generating of empty chord lead measures:

```
[Settings]
BIABLEadMeasures=0
```

Hint:

GNMIDI shows chords of some known chord formats above the song text line and also displays chords using operations copy and print song lyrics.

3.31 Split Drums



General MIDI drums are always at channel 10. Each note is an other drum instrument. This operation generates a new track for each used drum instrument and moves the notes into the corresponding track. Each generated drum track is named by the GM drum instrument.

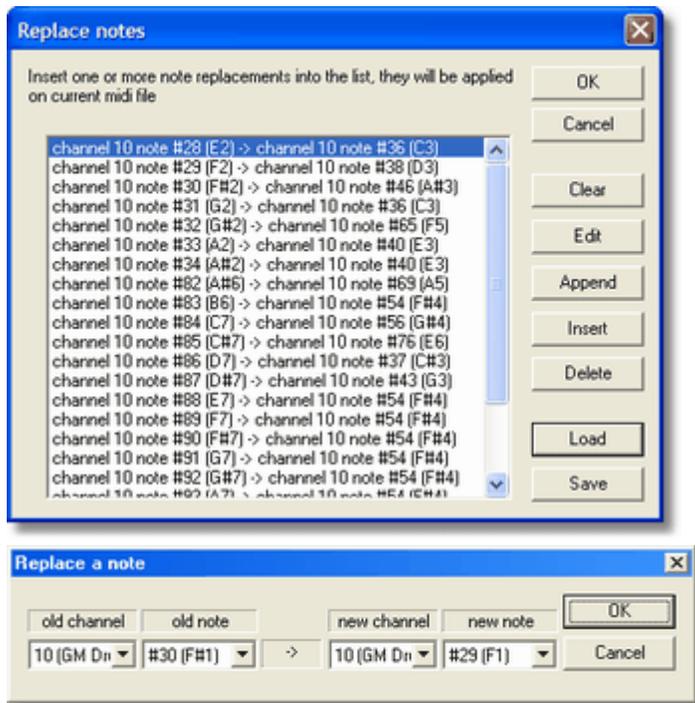
When loading such a file into a sequencer then the drum tracks have separate lines for each drum instrument, which is sometimes easier to edit or understand.

3.32 Split Programs



This operation separates all channels that contain more sound program changes into own tracks (one for each sound program). The channel number and sound does not change, only the display changes when loading the file into a sequencer.

3.33 Replace Notes



This operation replaces notes numbers that match the given channel number by new channel and new note number. The translations are entered in a note replacement table which can be stored and reloaded for future sessions. The table remembers its last content. Each row in the table defines a note replacement. Replacing is done in order of table entries.

Hint: drum channel contains drum notes where each note number is an other drum instrument. This operation can be used to convert drum tables between two devices (e.g. keyboard drums to GM drums)

Hint: set old channel to "any" if you want to replace or delete notes on all channels.

Hint: set new channel to "same" if you don't want to change the channel number against a new channel number.

Clear

start a new replacement table.

Edit

edit the current selected replacement in an own dialog. Double click with left mouse button on the line does same.

Append

add a new note replacement at end of table.

Insert

enter a new note replacement before current selected row.

Delete

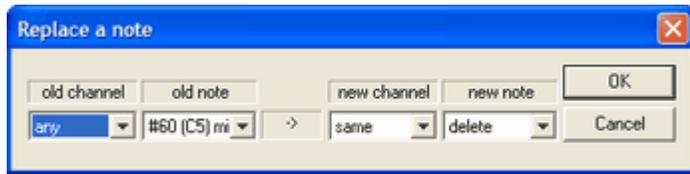
deletes current selected row

Load

Previously saved replacement tables (*.rpl files) can be reloaded. You can also edit *.rpl files with notepad, they are simple text files.

Save

Save your replacement table in a .rpl file that the replacement can be used later again for other MIDI files.

**Deleting notes**

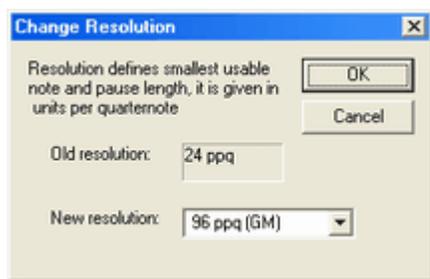
This operation is also usable for deleting certain note numbers from given or any channel by setting new note to value "delete".

Moving notes

This operation is also usable for moving certain note numbers from one channel to a new channel. To renumber a whole channel you should use operation [Map channel numbers](#).

This operation is also available for [batch application](#)

3.34 Change Resolution



MIDI resolution can be changed without changing tempo, the pauses are quantised to the new resolution steps.

Old resolution

current MIDI song resolution

New resolution

choose new resolution value from a list of common used resolution values.

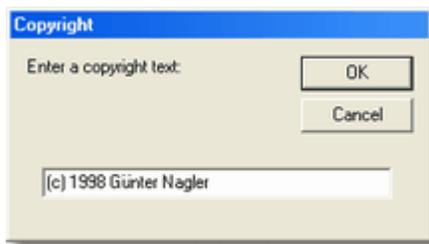
MIDI Resolution (ppq)

MIDI resolution defines number of units per quarter note for whole song (resolution). A MIDI unit is the smallest usable pause or note duration in the song. The smallest usable pause or note is $1/(4 \cdot \text{resolution})$ units (e.g. for resolution 96 the smallest note is $1/384 = 1/(3 \cdot 128)$, that means that it can be used precisely for trioles of $1/128$ notes).

Hint: 96 ppq is recommended for General MIDI compatible songs.

Hint: Some players might not be able to play songs with too high resolution, reducing resolution with this operation should help.

3.35 Set copyright information



If the current MIDI document **contains a copyright notice** then the copyright is displayed (the info is also displayed in the document window).

```
Copyright:  
(c) 1990 Die Toten Hosen
```

If **no copyright** command is in the file then the operation allows to enter a new copyright text. The new copyright notice is added to first track.

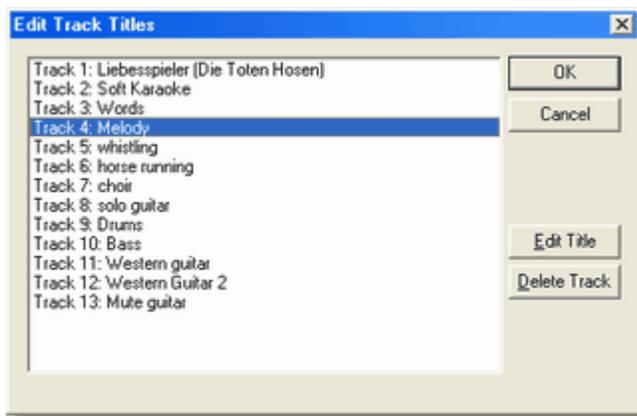
It is not possible to modify an existing copyright with this operation!

Legal notice:

Add copyright only if you are owner of copyright, i.e. you are composer of the song or you have licensed the distribution rights for this song from the copyright owner.

3.36 Edit track titles





This utility is used to rename track titles (also called track names) or optionally delete a track. Select a track before editing or deleting a track.

Edit Title

Current selected track title will be displayed and can be replaced by a new title.

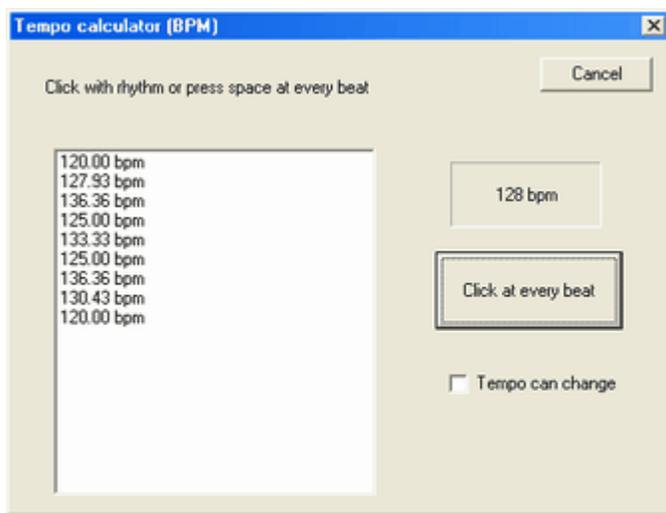
Delete Track

Marks track title of selected track with !delete! With OK button all marked tracks that way will be deleted.

Hint:

if a track contains more than one track titles (should not occur in a standard MIDI file) then all old track titles are removed and the new track title will be inserted at beginning of the track.

3.37 Calculate tempo (BPM)



This tempo calculator is used to find out tempo of an existing song on CD or tape. The dialog shows the calculated tempo in **bpm** (beats per minute)

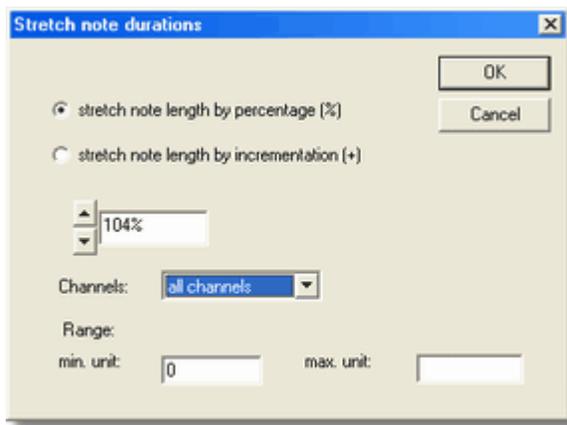
Click at every beat

Click left mouse button or press Space key at every beat in the song. Try to hold the speed of the rhythm. The average delay between clicks will be calculated into bpm tempo values. For constant tempo the calculated value gets more and more precise when you click longer in same tempo.

Tempo can change

By default the calculator assumes that the rhythm plays at constant tempo. Check the option if the tempo can change during the song.

3.38 Stretch notes duration



This operation increases or decreases note durations by specified percentage or value.

stretch note length by percentage (%)

enter a percentage value, all note durations in given range and channels will be stretched by this percentage.

stretch note length by incrementation (+)

enter a value, this value will be added to all note length (MIDI units), negative values will decrease note length.

value

enter a value into the edit field or use the arrows to increase or decrease the value

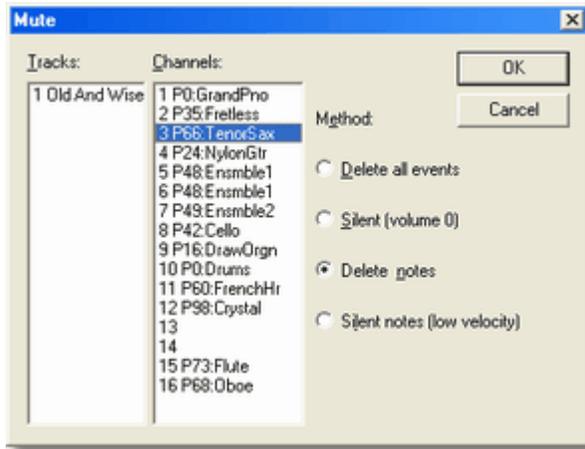
Channels

choose all channels (1-16, default) or select a single channel (1-16)

Range (min. unit - max. unit)

by default the operation will be applied to notes of any length, in the two range value fields you can define that the note length must be in given range (MIDI units) that the operation should applied (e.g. min=0 max=5 would modify only very small notes). If the max value is missing then no max value is defined (min .. any higher value)

3.39 Mute voices



This operation mutes a MIDI voice by one of four available methods. This is useful to remove parts that real musicians play live in a band or for muting voices that are replaced by karaoke singers.

Tracks:

Choose track if you want to mute all channels in a certain track or if you want to mute a certain channel only in one track.

Channels:

Select one or more channels that should be muted.

Hint: If you select only tracks then any channels on this track are used for mute operation.

Hint: If you select only channels then any tracks that contain these channels are used for mute operation.

Hint: If you select tracks and channels then only those tracks are used that contain one of the given channels.

Method:

- Delete all events deletes all commands on the matching channels and tracks
- Silent (volume 0) sets volume of matching channels to 0
- Delete notes deletes only the notes on the matching channels and tracks
- Silent notes (low velocity) sets velocity values of the notes on the matching channels and tracks to a low value (1)

Hint: Silent (volume 0) method is useful if you want to sing a muted melody (karaoke) and still need the notes displayed on screen with a sequencer or a special MIDI player.

Hint: Delete notes method is useful if you want to play these deleted notes self with original settings.

Hint: The operation can't be undone so you need to keep your original MIDI files if you want the muted tracks back.

3.40 Generate setup measure



This operation inserts a new tact bar (measure) with optional initialization commands.

- GM Reset initialize General MIDI compatible devices
- XG Reset initialize Yamaha XG compatible devices
- GS Reset initialize Roland GS compatible devices

Following MIDI parameters are initialized to GM default values if the parameters are not initialized before playing first note in track:

- volume controller: 100
- balance controller: center
- program: Piano (except drum channel 10)
- pitch bend: center (no pitch bending)
- pitch bend range: +/-2 halftones (with RPN commands, not supported on all devices)

3.41 Show or add secret copyright



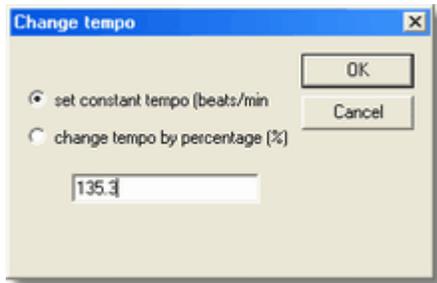
This function adds encoded copyright information to the MIDI file. In cases that somebody illegally removes or changes the standard visible copyright field, the secret copyright information remains in the file hidden. The secret copyright can prove your copyright when somebody else tries to steal it.

If a secret copyright (done with GNMIDI) already exists then it **displays the secret copyright** information.

If no secret copyright found, but standard copyright is available then this copyright information is **added as secret copyright** into the file.

If no standard and no secret copyright found then program [asks for a copyright line](#). Use only ASCII characters (characters blank - ~), other characters (like international characters e.g. ü) are not stored.

3.42 Set tempo (bpm and percentually)



This operation changes tempo of a MIDI song by two different ways.

- **set constant tempo (beats/min)**
enter a number of beats per minutes (bpm) between 40 and 240 in the edit field below. All existing tempo changes in the MIDI file are removed and the new tempo change will be inserted at beginning of the song.
- **change tempo by percentage (%)**
enter a percentage value between 1 and 200 in the edit field below. All existing tempo changes in the MIDI song are changed by the given percentage. A new tempo change might be inserted at beginning of the song if the song used default tempo 120 bpm at beginning of song (no tempo change at start position)

edit box

Enter a number in this edit box. Floating point values are allowed (e.g. 100.3). The radio options above determine the meaning of the value (bpm or %)

3.43 Check all MIDI files

This [batch operation checks](#) all MIDI files for being valid in specified MIDI folder. At completion a list of errors is shown and you are asked if you want that GNMIDI tries to repair the files. Repaired files will be opened in a document window. You need to check if the repairing is acceptable and then save the MIDI file.

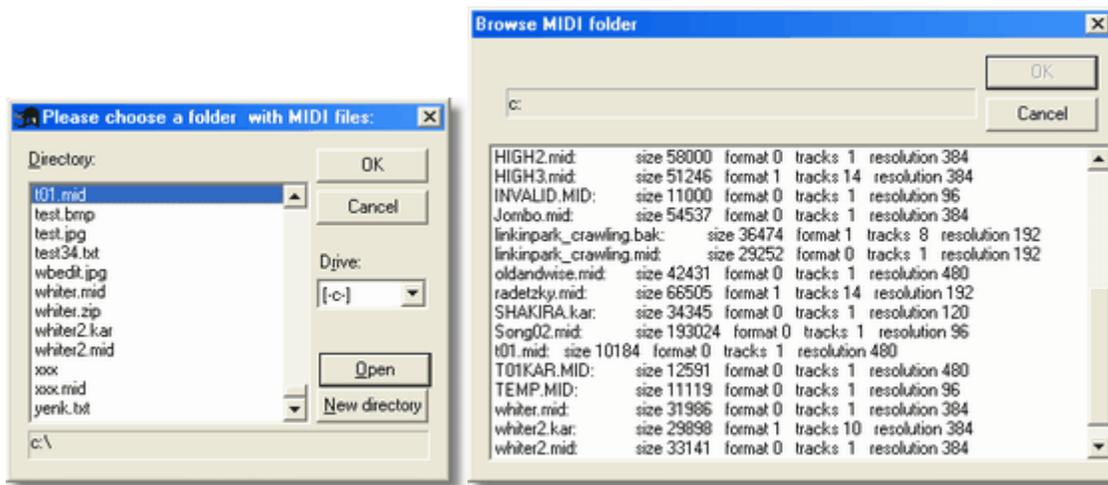
Checking same folder again will work quicker, since it won't check those files again which didn't change. If you check all files in this folder again then you can delete the file with extension .chk

3.44 Create new MIDI file



This operation creates an empty format 1 MIDI file with some initializations and one measure without notes. You can use it as start for sequencing a new song.

3.45 Browse MIDI folder



The browse operations displays folder content. It displays basic MIDI file information and can be used to select one or more MIDI files at once for [opening](#). The operation uses information that is generated by [check all MIDI files](#) operation (*.chk) to load information quicker if the check operation was used previously. Selecting more files at once can be done with combinations of Ctrl, Shift and arrow keys.

This dialog is also used by most [batch operations](#).

3.46 Reverse MIDI song



This operation mirrors position of notes within current MIDI song. This gives possibility to play a song reverse. The mirrored result can be reversed again but it might be slightly different to the original MIDI song.

3.47 Check midi natural instrument note ranges



The operation checks if notes played with natural sounds (e.g. trumpet, violin) are within a **realistic note range**. Too high or too low notes might cause to play this sound in an unrealistic way. The note range definition file for a certain device (usually the text file gm.rng which contains note ranges of some General MIDI standard instruments) will be loaded. All notes in current MIDI file are checked against the note range definitions and a warning is reported if a note is outside the range specified in the range definitions for the instrument which plays the note.

The note range definition file can be modified or a new definition file defined and activated by changing [gnmidi.ini](#) file :

```
[Settings]
RangeDefinitions=myranges.rng
```

The range definition file should be in GNMIDI installation folder, else a full path must be specified.

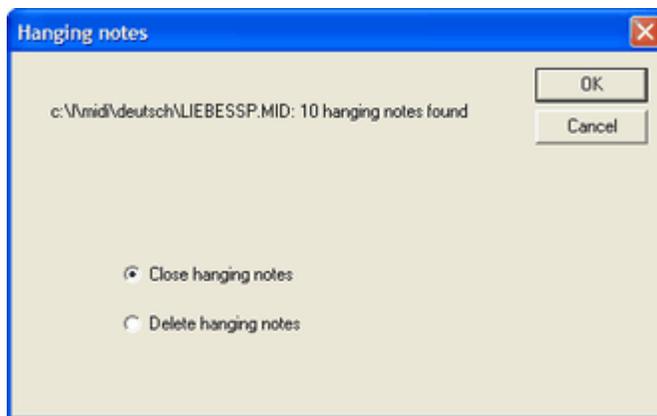
When all notes are in a valid range then following message is displayed:

```
All notes are in range (according to note range definitions)
```

When some notes are in an invalid range then the information is displayed in a text file with notepad editor:

```
checking note ranges according to gm.rng:
track 3 channel 2 measure 3 Violin (40) note f3 range g3-c7
track 3 channel 2 measure 3 Violin (40) note e3 range g3-c7
track 3 channel 2 measure 3 Violin (40) note f3 range g3-c7
track 3 channel 2 measure 3 Violin (40) note e3 range g3-c7
track 3 channel 2 measure 4 Violin (40) note c3 range g3-c7
track 3 channel 2 measure 7 Violin (40) note f3 range g3-c7
track 3 channel 2 measure 8 Violin (40) note e3 range g3-c7
track 3 channel 2 measure 8 Violin (40) note c3 range g3-c7
track 5 channel 4 measure 98 Ovrdrive (29) note d2 range e2-d6
track 5 channel 4 measure 101 Ovrdrive (29) note g#1 range e2-d6
track 5 channel 4 measure 101 Ovrdrive (29) note b1 range e2-d6
track 5 channel 4 measure 101 Ovrdrive (29) note c#2 range e2-d6
track 5 channel 4 measure 101 Ovrdrive (29) note d#2 range e2-d6
track 5 channel 4 measure 101 Ovrdrive (29) note c#2 range e2-d6
track 5 channel 4 measure 101 Ovrdrive (29) note b1 range e2-d6
```

3.48 Remove hanging notes



This operation checks if current MIDI file contains notes that are not stopped (a note on command is missing note off command). It considers pedal commands hold and sostenuto and all-notes-off. When such notes are found then the operation offers to stop those notes or remove those notes.

Hanging notes cause that polyphony increases unnecessarily and depending on the used sound it can be heard. The notes are on till end of song, some sounds are fading out earlier so that the problem might not be noticed. Such notes are usually unwanted bugs in MIDI files.

3.49 Delete midi tracks



This operation starts same dialog as [edit track titles operation](#).

3.50 MIDI to ASCII Text

A

This operation converts a MIDI file into a readable ASCII text that represents the MIDI content. You can [edit](#) this text file with a [text editor \(Notepad editor\)](#). The (modified) text can be [converted back to a MIDI file](#).

Here you find some information about the used [grammar](#).

Here is a part of the generated text:

```
mthd
  version 1 // several tracks with separated channels to play all at once
  // 8 tracks
  unit 96 // is 1/4
end mthd

mtrk // track 1
/* U0 */ /* 0ms */ beats 142.38051 /* 421406 microsec/beat */
/* U0 */ /* 0ms */ trackname "Gasp For Breath (G\xfcnter Nagler, 23.2.1999)"
/* U0 */ /* 0ms */ text "This song is composed and sequenced by Günter Nagler."
/* U0 */ /* 0ms */ text "Freely distributed for personal, non-commercial use
only."
/* U0 */ /* 0ms */ text "Contact: info@gnmidi.com"
/* U0 */ /* 0ms */ tact 4 / 4 24 8
  536/4; /* U51456 */ /* 225873ms */
end mtrk

mtrk(1) // track 2
/* U0 */ /* 0ms */ trackname "More strings at Refrain"
/* U0 */ /* 0ms */ program Ensmble1
/* U0 */ /* 0ms */ volume 127
/* U0 */ /* 0ms */ balance 46
/* U0 */ /* 0ms */ reverb 52
/* U0 */ /* 0ms */ chorus 65
  7765; /* U7765 */ /* 34085ms */ +a4 $58;
  42; /* U7807 */ /* 34269ms */ -a4 $40;
  11; /* U7818 */ /* 34318ms */ +a#4 $52;
  44; /* U7862 */ /* 34511ms */ -a#4 $40;
  3; /* U7865 */ /* 34524ms */ +a4 $52;
  47; /* U7912 */ /* 34730ms */ +g4 $4E;
  5; /* U7917 */ /* 34752ms */ -a4 $40;
  25; /* U7942 */ /* 34862ms */ -g4 $40;
  19; /* U7961 */ /* 34945ms */ +f4 $4E;
  92; /* U8053 */ /* 35349ms */ -f4 $40;
  3; /* U8056 */ /* 35362ms */ +e4 $58;
  94; /* U8150 */ /* 35775ms */ +c5 $52;
  12; /* U8162 */ /* 35828ms */ -e4 $40;
  11; /* U8173 */ /* 35876ms */ -c5 $40;
  27; /* U8200 */ /* 35995ms */ +c5 $4A;
  26; /* U8226 */ /* 36109ms */ -c5 $40;
  26; /* U8252 */ /* 36223ms */ +a#4 $46;
  35; /* U8287 */ /* 36376ms */ -a#4 $40;
  ...
end mtrk
```

3.51 ASCII Text to MIDI

A

This operation converts a text generated by operation [MIDI to ASCII text](#) back to a MIDI file, if the text has [valid syntax](#). The text can be modified by the user, but must not contain syntax errors that it can be converted to MIDI.

3.52 ASCII Text syntax

MIDI unit position and time position are shown in comments before each command:

```
/* U7765 */ /* 34085ms */
```

Comments are inside `/* ... */` or start with `//` till end of line.

Pauses are shown before commands either in MIDI units (47;) or musical notation (536/4;).

MIDI notes consists of pairs of commands: Note on is displayed as + and Note off is displayed as -

MIDI channel are displayed in `mtrk(channel number)` or as `[channel number]` inside a track before a command.

Values are shown decimal (0-127) or hexadecimal (\$00 - \$7F).

Most commands begin with a keyword and have parameters e.g.

```
beats 142.38051
text "Contact: info@gnmidi.com"
program Ensmble1
```

Program names (of GM instruments) can be used by number 0-127 or from following GM instrument list:

```
0 GrandPno
1 BritePno
2 El.Grand
3 HnkyTonk
4 ElPiano1
5 ElPiano2
6 Harpsich
7 Clavi.
8 Celesta
9 Glocken
10 MusicBox
11 Vibes
12 Marimba
13 Xylophon
14 TubulBel
15 Dulcimer
16 DrawOrgn
17 PercOrgn
18 RockOrgn
19 ChrcOrgn
20 ReedOrgn
21 Acordion
22 Harmnica
23 TangoAcid
24 NylonGtr
25 SteelGtr
26 JazzGtr
27 CleanGtr
28 MuteGtr
29 Ovrdrive
30 Distortd
31 Harmnics
32 WoodBass
33 FngrBass
34 PickBass
35 Fretless
36 SlapBas1
37 SlapBas2
38 SynBass1
39 SynBass2
```

40 Violin

41 Viola
42 Cello
43 Contra
44 TremStrg
45 Pizzicto
46 Harp
47 Timpani
48 Ensmble1
49 Ensmble2
50 SynStrg1
51 SynStrg2
52 AahChoir
53 OohChoir
54 SynChoir
55 OrchHit
56 Trumpet
57 Trombone
58 Tuba
59 MuteTrum
60 FrenchHr
61 BrasSect
62 SynBras1
63 SynBras2
64 SprnoSax
65 AltoSax
66 TenorSax
67 BariSax
68 Oboe
69 EnglHorn
70 Bassoon
71 Clarinet
72 Piccolo
73 Flute
74 Recorder
75 PanFlute
76 Bottle
77 Shakhchi
78 Whistle
79 Ocarina
80 SquareLd
81 SawLd
82 CaliopLd
83 ChiffLd
84 CharanLd
85 VoiceLd
86 FifthLd
87 Bass&Ld
88 NewAgePd
89 WarmPd
90 PolySyPd
91 ChoirPd
92 BowedPd
93 MetalPd
94 HaloPd
95 SweepPd
96 Rain
97 SoundTrk
98 Crystal
99 Atmosphr
100 Bright
101 Goblin
102 Echoes
103 SciFi
104 Sitar
105 Banjo

```

106 Shamisen
    107 Koto
    108 Kalimba
    109 Bagpipe
    110 Fiddle
    111 Shanai
    112 TnklBell
    113 Agogo
    114 StlDrum
    115 WoodBlok
    116 TaikoDrm
    117 MelodTom
    118 SynthTom
    119 RevCymb1
    120 FretNoiz
    121 BrthNoiz
    122 Seashore
    123 Tweet
    124 Telephone
    125 Helicptr
    126 Applause
    127 Gunshot

```

The names must be written exactly.

The following scheme explains the syntax of MIDI ASCII text in E-BNF (Extended Backus-Naur-Form).

Extended BNF rules:

```

symbol ::= expr ;           rule for symbol
expr can be:
expr*   optional list of expr's
expr+   repetition of expr's (at least 1)
[expr]  optional expr (0 or 1 occurrences)
expr1 expr2 ... exprN  sequence of expr1 ... exprN (in this order)
expr1|expr2|...|exprN  alternatives between expr1...exprN (choose one)
(expr)  expr itself for grouping (e.g. ("+"|"-"*)
"mthd" "("  keywords and operators (case sensitive, use
              without " characters)
// text    comment until next line
literal ::= characters enclosed in "..." e.g. "Track 1"
              (special characters can be escaped by preceding \
              e.g. "\" is " character itself

```

lexical symbols (in E-BNF):

```

digit ::= "0"|"1"|"2"|"3"|"4"|"5"|"6"|"7"|"8"|"9" ;
hexdigit ::= digit|"A"|"B"|"C"|"D"|"E"|"F"|"a"|"b"|"c"|"d"|"e"|"f" ;
decnumber ::= digit+ ;
hexnumber ::= "0" ("x"|"X") hexdigit+
              | "$" hexdigit+
              ;
number ::= decnumber | hexnumber ;
floatnumber ::= decnumber | decnumber "." decnumber ;
notekey ::= "C"|"D"|"E"|"F"|"G"|"A"|"H"|"B"
           | "c"|"d"|"e"|"f"|"g"|"a"|"h"|"b" ;
           // notekey "h" used in German language is equal to
           // notekey "b"

notename ::= notekey ["#" | "is" | "b" | "es"] decnumber ;
           // only legal notes as known in music theory are allowed
           // suffixes "is" and "es" are used in German language
           // "is" is equal to "#"
           // "es" is equal to "b"
           // exceptions rules (in German language):
           //   As is equal to Ab
           //   Es is equal to Eb
           //   Use F instead of Eis
           //   Use C instead of His
           //   Use As instead of Aes

```

```

// Use Es instead of Ees
// Use H instead of Ces
// Use E instead of Fes

note ::= notename | number ;

programname ::=
// korg i2/i3 only:
"Dr1"|"Dr2"|"Dr3"|"Dr4"|"Dr5"|"Dr6"|"Dr7"|"Dr8"
// new program names
"GrandPno"|"BritePno"|"El.Grand"|"HnkyTonk"|"ElPiano1"|"ElPiano2"
"HarpSich"|"Clavi."|"Celesta"|"Glocken"|"MusicBox"|"Vibes"|"Marimba"
"Xylophon"|"TubulBel"|"Dulcimer"|"DrawOrgn"|"PercOrgn"|"RockOrgn"|"ChrcOrgn"
"ReedOrgn"|"Acordion"|"Harmnica"|"TangoAcd"|"NylonGtr"|"SteelGtr"|"JazzGtr"
"CleanGtr"|"MuteGtr"|"Ovrdrive"|"Distortd"|"Harmnics"|"WoodBass"|"FngrBass"
"PickBass"|"Fretless"|"SlapBas1"|"SlapBas2"|"SynBass1"|"SynBass2"|"Violin"
"Viola"|"Cello"|"Contra"|"TremStrg"|"Pizzicto"|"Harp"|"Timpani"|"Ensmble1"
"Ensmble2"|"SynStrg1"|"SynStrg2"|"AahChoir"|"OohChoir"|"SynChoir"|"OrchHit"
"Trumpet"|"Trombone"|"Tuba"|"MuteTrum"|"FrenchHr"|"BrasSect"|"SynBras1"
"SynBras2"|"SprnoSax"|"AltoSax"|"TenorSax"|"BariSax"|"Oboe"|"EnglHorn"
"Bassoon"|"Clarinet"|"Piccolo"|"Flute"|"Recorder"|"PanFlute"|"Bottle"
"Shakhchi"|"Whistle"|"Ocarina"|"SquareLd"|"SawLd"|"CallioLd"|"ChiffLd"
"CharanLd"|"VoiceLd"|"FifthLd"|"Bass&Ld"|"NewAgePd"|"WarmPd"|"PolySyPd"
"ChoirPd"|"BowedPs"|"MetalPd"|"HaloPd"|"SweepPd"|"Rain"|"SoundTrk"
"Crystal"|"Atmosphr"|"Bright"|"Goblin"|"Echoes"|"SciFi"|"Sitar"|"Banjo"
"Shamisen"|"Koto"|"Kalimba"|"Bagpipe"|"Fiddle"|"Shanai"|"TnklBell"
"Agogo"|"StlDrum"|"WoodBlok"|"TaikoDrm"|"MelodTom"|"SynthTom"|"RevCymb"
"FretNoiz"|"BrthNoiz"|"Seashore"|"Tweet"|"Telephone"|"Helicptr"|"Applause"
"Gunshot"
// old general MIDI programs (GM):
"Piano"|"BritePiano"|"HammerPiano"|"HonkeyTonk"|"NewTines"|"DigiPiano"|"HarpSicord"|"Clav"
"Celesta"|"Glocken"|"MusicBox"|"Vibes"|"Marimba"|"Xylophon"|"Tubular"|"Santur"
"FullOrgan"|"PercOrgan"|"BX-3Organ"|"ChurchPipe"|"Positive"|"Musette"|"Harmonica"|"Tango"
"ClassicGtr"|"A.Guitar"|"JazzGuitar"|"CleanGtr"|"MuteGuitar"|"OverDrive"|"DistGuitar"|"RockMonics"
"JazzBass"|"DeepBass"|"PickBass"|"FretLess"|"SlapBass1"|"SlapBass2"|"SynthBass1"|"SynthBass2"
"Violin"|"Viola"|"Cello"|"ContraBass"|"TremoloStr"|"Pizzicato"|"Harp"|"Timpani"
"Marcato"|"SlowString"|"AnalogPad"|"StringPad"|"Choir"|"DooVoice"|"Voices"|"OrchHit"
"Trumpet"|"Trombone"|"Tuba"|"MutedTrumpet"|"FrenchHorn"|"Brass"|"SynBrass1"|"SynBrass2"
"SopranoSax"|"AltoSax"|"TenorSax"|"BariSax"|"SweetOboe"|"EnglishHorn"|"BasoonOboe"|"Clarinet"
"Piccolo"|"Flute"|"Recorder"|"PanFlute"|"Bottle"|"Shakuhachi"|"Whistle"|"Ocarina"
"SquareWave"|"SawWave"|"SynCalinope"|"SynChiff"|"Charang"|"AirChorus"|"Rezzo4ths"|"Bass&Lead"
"Fantasia"|"WarmPad"|"PolyPad"|"GhostPad"|"BowedGlas"|"MetalPad"|"HaloPad"|"Sweep"
"lceRain"|"SoundTrack"|"Crystal"|"Atmosphere"|"Brightness"|"Goblin"|"EchoDrop"|"StarTheme"
"Sitar"|"Banjo"|"Shamisen"|"Koto"|"Kalimba"|"Scotland"|"Fiddle"|"Shanai"
"MetalBell"|"Agogo"|"SteelDrums"|"Woodblock"|"Taiko"|"Tom"|"SynthTom"|"RevCymbal"
"FretNoise"|"NoiseChiff"|"Seashore"|"Birds"|"Telephone"|"Helicopter"|"Stadium!!"|"GunShot"
;

Grammar in extended BNF
midifile ::= midisong
;

midisong ::= songoption* midihead songoption* miditrack+
;

songoption ::= "mute" channel+ // ignore these channels
| "solo" channel+ // use these channels only
;

channel ::= number // only 1-16 are valid channels
; // channel 10 should be used for drums

midihead ::= "mthd" [version] [unit] "end" "mthd"
;

version ::= "version" number // default version: 1
// currently only versions 0-2 are allowed
// version 0 = single multichannel track
// version 1 = some singlechannel tracks playing together
// version 2 = some multichannel tracks playing one after one

```

```

unit ::= "unit" number          // default unit: 192
;

miditrack ::= "mtrk" [ "(" channel ")" ]
              event*
              "end" "mtrk"
;

event ::= [ "[" channel "]" ] midievent
| "velocityon" number // default is 127
| "velocityoff" number // default is 0
| duration sep // pause: delay between events
| "print" sep
| "transpose" ["+"|-"] number sep
| sep
| "copy" "part" literal ;
| "part" literal
  event*
  "end" "part" literal
;
| "loop" number
  event*
  "end" "loop"
;

sep ::= ";";

midievent ::=
  "seqnumber" number
  | "text" literal
  | "copyright" literal
  | "trackname" literal
  | "instrument" literal
  | "lyric" literal
  | "prefixchannel" channel // following sysex or meta event is applied to this channel
  | "prefixport" number // following sysex or meta event is applied to this port
  | "smppteofs" number number ":" number ":" number ":" number ":" number
    // SMPTE mode hour:minute:second:frame:fractional_frame
    // mode 0: 24 frames/second
    // mode 1: 25 frames/second
    // mode 2: 30 frames/second allow dropping frames
    // mode 3: 30 frames/second no dropping allowed
  | "tact" number "/" number number number // tactnom / (2 ^^ tactdenom) clicks/beat 32th/beat
  | "tempo" number // microseconds per quarter note
  | "beats" floatnumber // same as 60.000.000/tempo
    // quarter notes per minute
  | "key" literal // literal must contain a valid key:
    // "Cmin" "Cmaj" "1bmin" "1bmaj" ... "7#min" "7#maj"
  | "event" // enter event bytes without change
    bytes // no length is added
    "end" "event"
  | "metaevent" number // metaevent nr. 0-127
    bytes // length will be automatically added
    "end" "metaevent" // metaevents are 0xff-codes
  | "psrmeta" "chord" literal psrbasschord // special meta events for Yamaha PSR chords
  | "sysevent" // sysex event (0xf0)
    bytes // length will be automatically added
    "end" "sysevent"
    // end sysevent code 0xf7 is appended automatically!
  | "syshex" // sysex event (0xf0)
    hexbytes // length will be automatically added
    "eox"
    // end sysevent code 0xf7 is appended automatically!
  | "gmreset" // common sysex command to set GM mode on
  | "gsreset" // common sysex command to set GS mode on (mainly used for Roland, Yamaha)
  | "gsenter" // same as command gsreset
  | "gsexit" // common sysex command to set GS mode off (mainly used for Roland, Yamaha)
  | "program" (programname | number | ("A"|"B"|"C"|"D") number
  | "control" number number
  | "hbank" number
  | "lbank" number

```

```

| "banka"
| "bankb"
| "bankc"
| "bankd"
| "bankdrum" // bank*: korg i2/i3 only!
| "balance" ("left" | "right" | number)
  // number is a value between 0 and 127: 0 is left and 127 is right
| "hold" ("on" | "off" | number)
| "reverb" number
| "chorus" number
| "brightness" number
| "expression" number
| "pitchmodulation" number
| "wheel" number
| "breath" number
| "foot" number
| "portamentotime" number
| "portamento" number
| "data" number
| "volume" number
| "sustain" number
| "sostenuto" number
| "softpedal" number
| "datainc" number
| "datadec" number
| "highRPN" number
| "lowRPN" number
| "pitchbendrange" number
| "localon"
| "localoff"
| "silent"
| "allnotesoff"
| "omnioff"
| "omnion"
| "monoon"
| "polyon"
| "songpos" number
| "songselect" number
| "tunerequest"
| "timingclock"
| "start"
| "continue"
| "stop"
| "activesensing"
| "polyaftertouch" note number
| "aftertouch" number
| "pitch bend" number
| notename duration number sep
| "+" notename (number|"velocityon") sep
| "-" notename (number|"velocityoff") sep
| "+" number number sep // note on with velocity
| "-" number number sep // note off with velocity
;

psrbasschord ::= // optional
| "basschord" literal ;

duration ::=
  number // units as defined in header
| number "/" number (tact units, e.g. 3/4)
;

program ::= number | programname ;

bytes ::= (number|literal)+ ;

hexsequence ::= (hexdigits|literal)+ ;

hexdigits ::= hexdigit+ ;

```

3.53 Guess song key and optionally set MIDI song key



This operation analyzes the MIDI song and suggests a song key that you can assign to the song. It chooses the song key (number of # or b, major or minor) that will produce minimum number of #, b exceptions on a score sheet. Change the selected key if you want to set an other key.

Answering **yes** will write the song key information (META event) into the MIDI file.

Hint: A song could be printed on score sheet with any key, with a bad key choice the number of necessary exception symbols (#, b) within the measures might be high and the scores might be difficult to read.

3.54 Show original MIDI song keys



This operation analyzes the MIDI file and writes a list of used key settings into a text file that is shown with notepad text browser.

The song position (MIDI unit) is shown where the key is changed, and key name meaning is explained by the number of # or b on a score sheet.

e.g. key C Major has no #, key Am has no b,
key D Major has two #, key Bm has 2 b.

Default key is C, if it is not set within song.

```
MIDI-Unit      Song key
00000000:      C (0 #)
```

3.55 MIDI time calculator (calculate position, time, tact, tempo within a song)



The MIDI calculator does position calculations for current MIDI song between different position formats. Enter a position in one of the 4 different position fields (in correct format for the field) and it automatically calculates corresponding positions in the other formats and shows meter and tempo info at this position.

Unit

MIDI unit number, exact position within a MIDI file (0=start of song)

Beat

Number of quarter notes since start of song, and remaining MIDI units within the beat (starts at 1.000)

Time

Time position since start of song (minutes:seconds.milliseconds)

Measure

Bar position (measures.beat.unit) starts at 1.1.000

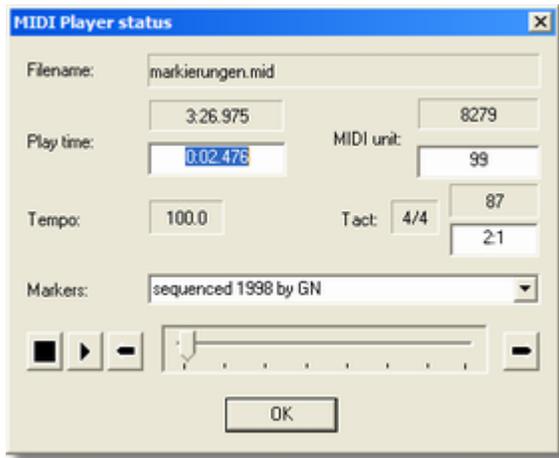
Tact

meter info, length of the measure at given position (nominator/denominator) e.g. 4/4, 3/4, 6/8 ..., this information can't be modified here

Tempo

tempo (bpm, beats per minute e.g. 120.0) , this information can't be modified here

3.56 Player status information



The player status dialog can be displayed while playing a MIDI song with internal player. It contains information about the playing position and has button controls to navigate the player.

Filename

path of the currently played MIDI file

Play time

current play (or pause) time position (in minutes:seconds.milliseconds). While the player is paused it is allowed to enter a new play time position into the edit field. After short pause the song plays from the position if the entered value is a valid play time.

Possible inputs are: 120 (second), 1:30 (minute:second), 3:22.350 (minute:second:millisecond)

MIDI unit

current MIDI position (in MIDI units). While the MIDI player is paused it is allowed to enter a new play unit position (a number) into the edit field. After short time the song plays from the unit position if it was a valid unit number within song.

Tempo

current MIDI tempo (in bpm)

Tact

current measure length (in nominator/denominator)

Measure:Beat

current MIDI song position (measure number, beat number) e.g. counts 23:1, 23:2, 23:3, 23:4 in a 4/4 measure. While the player is paused it is allowed to enter a new MIDI song position into the edit field. After short time the song plays from the song position if it is a valid position within the song.

Possible inputs are: 47 (measure number counting beginning from 1), 23:3 (measure number and beat number counting from 1).

Hint: In a 4/4 measure the beats within the measure are 1,2,3,4. Beat 5 belongs to next measure and therefore 23:5 is same as 24:1

Hint: 1:100 is the 100th beat within the song (independent of the measures).

Markers

the drop down box contains marker text found in the MIDI file which are sorted by time. During playing the marker directly before current playing position will be displayed. After selecting a marker

from the box the player jumps to the marker position in the song. Markers usually define beginnings of sections (e.g. intro, refrain, verse) or notices to positions in the song (e.g. contra point, scalar transposition ...).

**Stop**

stops playing the song

**Play**

starts or continues to play current song

**Pause**

pauses current song

**Backward**

jumps to position 30 seconds before current position

**Position slider**

the slider shows current song playing position relative to song duration. The duration between the position markers is 30 seconds. You can drag the thumb by clicking left mouse button on the thumb and move the mouse. The player will jump to the position where the mouse button is released.

**Forward**

jumps to position 30 seconds after current position

3.57 Insert Marker



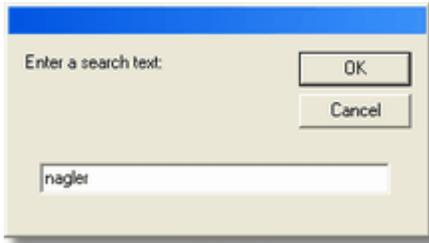
This operation is only available while a MIDI song is played and the player is currently **paused**. Use the [MIDI Player Status](#) dialog to move current play position to a location where you want to add a marker (e.g. intro, refrain, verse, scale transposition ...). Use the pause operation  to hold this position and then start the insert marker operation.

A dialog opens where you can enter a text that describes the mark (single line). Then use OK button to write the marker into the current active MIDI song (be sure that the correct MIDI file is active if more files are open).

The new marker will be known to the player only when you play the new result MIDI file.

Abort the dialog using cancel if no modifications are wanted.

3.58 Find text in MIDI and MP3 files



This operation searches text in MIDI or MP3 files in a chosen folder and all music files in the sub folders.

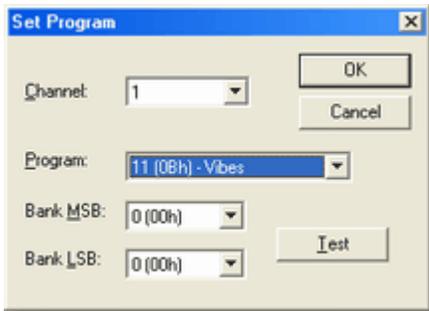
First search might take long time, information will be collected for future searches. Additional searches in this folder will be quicker. The **search optimization** only works with not write protected folders. GNMIDI generates a file **gnmidtxt.fnd** in each not write protected folder.

The **matching filenames** are written into a text file that will be shown with notepad editor.

MP3 information:

the word is searched in filename (often contains artist and song title) and MP3 ID3 tag fields.

3.59 Set programs and banks (with sound check)



This operation shows initial sound program addresses for each channel and lets assign new sound programs. The operation removes all program and bank settings of channels that were modified in this dialog and inserts the new settings before first note starts to play.

Channel

Select a channel to inspect the currently assigned sound program for this channel.

Program

Select a sound program number between 0 and 127. The GM instrument names are displayed in the list. Some device manuals count the program number from 1-128 (in this case you need to subtract 1 for entering the value here).

Bank MSB and Bank LSB

Use bank changes to access more than 128 programs on your sound device (both values are required, use 0 if the manual does not specify one of the values).

Hint: When you change a program or bank parameter the info is remembered for all 16 channels till

you exit the dialog.

Hint: Your device manual contains a table of available sounds and their values. General MIDI has only 128 GM Programs and a GM standard drum kit (channel 10).

Some manuals show the parameters in **hexadecimal numbers**, here is a table to **convert the hex numbers to decimal numbers** for 0-127:

00->	0	10->	16	20->	32	30->	48	40->	64	50->	80	60->	96	70->	112
01->	1	11->	17	21->	33	31->	49	41->	65	51->	81	61->	97	71->	113
02->	2	12->	18	22->	34	32->	50	42->	66	52->	82	62->	98	72->	114
03->	3	13->	19	23->	35	33->	51	43->	67	53->	83	63->	99	73->	115
04->	4	14->	20	24->	36	34->	52	44->	68	54->	84	64->	100	74->	116
05->	5	15->	21	25->	37	35->	53	45->	69	55->	85	65->	101	75->	117
06->	6	16->	22	26->	38	36->	54	46->	70	56->	86	66->	102	76->	118
07->	7	17->	23	27->	39	37->	55	47->	71	57->	87	67->	103	77->	119
08->	8	18->	24	28->	40	38->	56	48->	72	58->	88	68->	104	78->	120
09->	9	19->	25	29->	41	39->	57	49->	73	59->	89	69->	105	79->	121
0A->	10	1A->	26	2A->	42	3A->	58	4A->	74	5A->	90	6A->	106	7A->	122
0B->	11	1B->	27	2B->	43	3B->	59	4B->	75	5B->	91	6B->	107	7B->	123
0C->	12	1C->	28	2C->	44	3C->	60	4C->	76	5C->	92	6C->	108	7C->	124
0D->	13	1D->	29	2D->	45	3D->	61	4D->	77	5D->	93	6D->	109	7D->	125
0E->	14	1E->	30	2E->	46	3E->	62	4E->	78	5E->	94	6E->	110	7E->	126
0F->	15	1F->	31	2F->	47	3F->	63	4F->	79	5F->	95	6F->	111	7F->	127

Test

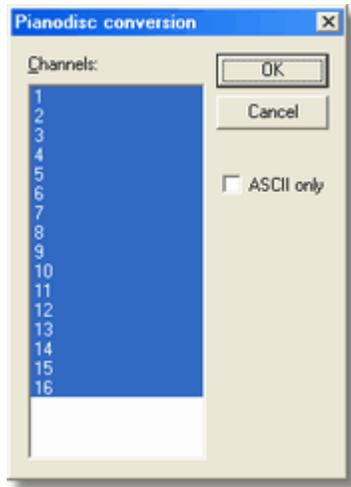
test the chosen sound before you assign it to the song press test button, this plays a small arpeggio of notes with current selected sound through internal MIDI player (any song currently playing will be stopped). This is useful if your destination device is connected to your computer (e.g. sound card, soft synthesizer, keyboard with MIDI cable) .

The test melody MIDI file can be replaced by any other MIDI file that plays notes on channel 1. Set following setting in your [gnmidi.ini](#) file if you want to use an other MIDI file:

```
[Settings]
MidiProgTest=c:\gnmidi\mytest.mid
```

Hint: Drum programs can not be tested with the test button.

3.60 Prepare MIDI file for PianoDisc



PianoDisc <http://www.pianodisc.com> modules let a piano play the keys self ("ghost player"). MIDI files control the playing of a piano song.

This operation **converts the current MIDI song to format 0** and **assigns a special piano sound** to the selected channels that forces the PianoDisc to play the piano keys.

Hint: The song should only play at channel 1 (use [map_channels](#) or [mute_channels](#)).

Channels

select one or more channels (default all) where the piano sound will be assigned

ASCII only

it seems that some older PianoDisc versions don't load MIDI files that contain international characters. This option replaces non-ASCII characters.

Sound address

this operation assigns sound address Program 0 (piano) MSB=5 LSB=87 in selected channels by default.

This address can be adjusted in file [gnmidi.ini](#) using following setting line:

```
[Settings]
```

```
Pianodisc=0 5 87
```

You can find the address numbers in your device manual.

3.61 Cripple notes



This operation encrypts the notes of the MIDI song. This is useful for making MIDI file unusable for printing or editing. The operation can't be reversed.

Two different methods are available:

Chaos Encoder

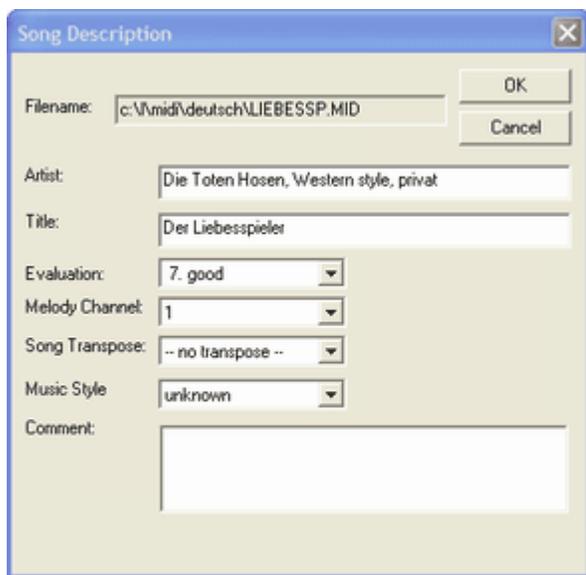
creates a little chaos in the song, the commands are moved into random tracks which causes bad printings but still plays correctly.

Pitch Encoder

changes notes by random half tones and uses pitch bending to put them back to pitch.

Hint: Check carefully if the song plays identically after cripple operation, since the operation applies changes to the notes and pitch bending.

3.62 Song description



This operation displays or adds additional info to the current MIDI or MP3 file.

The description to the file will be stored outside of the MIDI/MP3 file.

Some of this information will be displayed in the [MIDI document window](#). Some of the fields can be

[searched](#). Some field values are used by the [entertainment player](#).

Filename

Path and name of the song file

Artist

composer or singer of the song

Title

song title

Evaluation

Rate the song by one of the attributes in the list. Rating values are considered by [Entertainment player](#).

MELODY_CHANNEL Melody Channel

If you know which channel plays the melody notes then you can set this info here. 1-16 or unknown if you don't know or don't need it. The information is required by operation [Mute Melody](#).

Hint:

Melody channel is not used for MP3 files.

SONG_TRANSPOSE Song Transpose

enter a transpose value (-12 .. +12) e.g. if you use a score sheet with the song notes in other key. Operation [Mute Melody](#) transposes the song by given value. -- no transpose -- if transposing is not necessary or not wanted.

Hint:

MP3 songs are not transposed before playing.

Music Style

select a music style category from the list of categories for a song. The list of styles is read from file **gnstyles.ini** in your gnmidi directory, it will be created once you start GNMIDI. You can add categories self to this text file or choose unknown for all that have a category that is not existing in the list.

Comment

enter own commentary text to the song

3.63 Adjust volume to common level before playing midi song (optional)

This MIDI player setting [Common volume](#) can be turned on or off by checking or unchecking the menu item.

Adjusting volume level is done by changing volume and expression controllers percentually up or down so that the song maximum volume level is close to common volume level. It does not change note velocities because that could influence the sound.

If the songs are generally too loud or too silent after adjusting to common level then you should adjust your speaker volume or keyboard main volume slider.

In some cases it is not possible to reach a level close to common level, e.g. if one channel already has maximum level then it can't be increased further.

Default common volume level is 1000000, this value is written into [gnmidi.ini](#) file:

```
[Settings]
MidiAdjustVolume=1
```

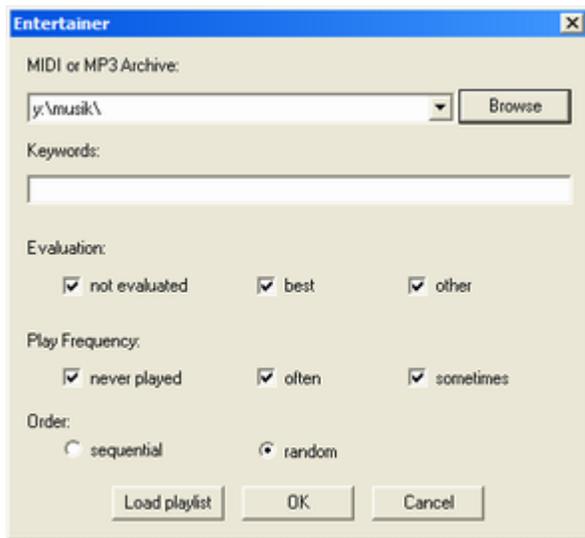
MidiCommonVolume=1000000

If you want change this value then use only values between 300000 and 1700000, values lower or higher lead to extreme use of volume changes which might cause bad arrangement. If the setting is checked then it is turned on and starting MIDI player (play or play extern) will produce a temporary MIDI file for playing that has adjusted volume. In some cases volume is already at limit and can't be adjusted to the wanted level (e.g. if expression controls or note velocities prevent from getting higher volume).

3.64 Set all MIDI to common volume level

This [batch operation](#) applies same function all MIDI files in specified MIDI folder that option [common volume](#) does to current MIDI song.

3.65 Entertainment player



The Entertainment music player chooses MIDI and MP3 files from your song archive and plays them (e.g. in random order) one after one.

The operation offers search criteria's to restrict the entertainment to certain songs from your archive.

MIDI/MP3 Archive

select your previous used song archive folder from the drop down list box or use **browse button** to add a new song folder. Only MIDI or MP3 songs from this folder or its sub folders are considered for entertainment.

Keywords

enter one or more simple words (separated by spaces), all keywords must appear somewhere in the MIDI/MP3 file text if the keyword field is not empty. The words might match filename, author, title, comment, lyrics, tracknames, markers, copyright, ...
Wildcards * and ? are allowed as search patterns (reduces search speed).

Evaluation:

each song can be [rated](#), these values are considered here. Select between

- not evaluated considers songs that have no rating
- best considers songs that have good rating
- other considers songs that have bad rating

Play Frequency

every time when a song is played with the Entertainment player, a frequency counter will be increased for a song. Select between

- never played considers songs that were never played with Entertainment player
- often considers songs that were often played with Entertainment player
- sometimes
(but at least once) considers songs that were not often played with Entertainment player

Order

the Entertainment player supports two playing orders

- sequential plays the songs in the order of a play list or as they match the search criteria's
- random plays the songs from the play list or song archive folder in random order

Load Playlist

instead of considering whole song archive folder you can load the list of filenames from a text file. Each line of the play list file should contain one filename (including folder path) . The play list files should have file extension .lst . Filenames that are not found (e.g. because of wrong spelling) are ignored. When a play list is loaded then the search fields are disabled, all valid MIDI/MP3 files in the play list are considered by the Entertainment player.

```
e.g. winner.lst
c:\MIDI\abba\thewinnertakesital1.mid
c:\MIDI\queen\wearethechampions.mid
c:\MP3\hot chocolate\everyone 's a winner.mp3
```

OK

with OK the entertainment player starts to search for matching songs in your song file archive, depending on the number of songs in the archive it can take some time. The Entertainment player starts to play a song (with internal player) when at least one matching song is found and it will continue to search for more songs in background while playing a song.

The dialog hides automatically when first matching song is found.

When a song finishes to play or when you [stop the internal player](#) manually, the next matching song in selected order will be started automatically soon.

Stop entertainment player

Click on the entertainment player symbol or press Ctrl-A to stop the Entertainment playing.

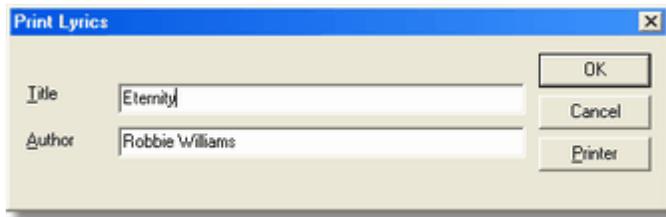
Hint: While a dialog is open (e.g. status, description...) the entertainment player does not continue automatically with next song. Close the dialog to continue.

Hint: Entertainment player uses internal player which requires working installation of MIDI/MP3 MCI drivers.

3.66 Delete duplicate notes

This operation removes notes that are duplicated in a MIDI song. The duplicate notes must be at **same MIDI position** (or less than 3 MIDI units away from this position) and must have **same channel and note number**. If no duplicate notes are found then no result is generated and a message is displayed in status bar.

3.67 Print Lyrics



Karaoke songs usually contain song text inside the MIDI file. This operation prints the song text and song title and song author.

Title

enter the song title

Author

enter the song author or composer

Printer

choose printer and modify printer settings.

3.68 Pause/Continue MIDI Player commands

While a song is played by internal MIDI player you can use this command to pause the song. Use it again to continue to play the song.



In [player status dialog](#) a button exists for pause command. After pressing pause the symbol changes to a play command (continue)

3.69 Backward/Forward MIDI Player commands

While a song is played by internal MIDI player these operations are available.

Backward

continues to play 30 seconds before current song position

Forward

continues to play 30 seconds later after current song position

Both commands are available in [player status dialog](#).

3.70 Mute Melody

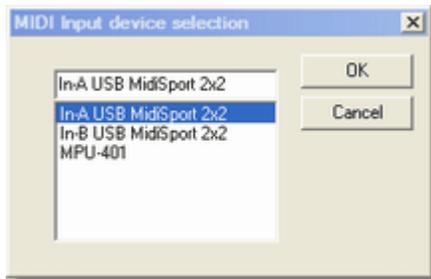


This operation removes the notes from melody channel. That is useful for karaoke purpose or to play the melody self on a MIDI keyboard along to the remaining song accompaniment.

First you need to [define the MIDI melody channel](#) of the song once in the [MIDI descriptions](#) of the file. This operation automatically starts the description dialog if the melody channel is not set.

The description dialog offers also to [define a transpose value](#) for the MIDI file. This is useful when your score sheet contains the notes in other song key and the notes (except drums) will be automatically transposed to same song key when applying this operation.

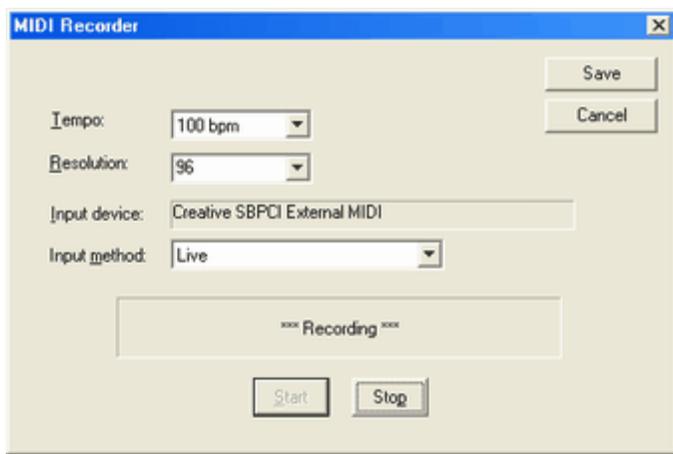
3.71 Select a Midi Input



Select a MIDI input device from the given list of input devices that is used for [recording MIDI song](#) or [recording sysex dump data](#).

The operation can be found in menu [Settings](#).

3.72 MIDI Recorder



This operation records MIDI data from an external MIDI device through MIDI cable and stores it as a standard MIDI file. Demo program version only allows to record 20 seconds and then automatically stops recording.

Tempo

select song tempo (bpm=quarter notes/minute). The resulting MIDI file will have this constant tempo when recording using input method Live (independent which tempo you are playing).

Resolution

select song resolution (MIDI units per quarter note) for the resulting MIDI song.

Input device

select the [input device](#) in menu [Settings](#). This field shows the current selected device name.

Input method

- Live
real time (milliseconds) is used to record. The song will have constant tempo. This works even in MIDI modes that don't send MIDI clock signals.
- Synchronized to MIDI clock
device must send 24 MIDI clock commands (F8) per beat. Tempo changes are guessed from speed of the clock commands.
- Delayed
useful for devices that can't produce MIDI data in real time (e.g. analyzing tools) and send them delayed. This method works well with e.g. Autoscore pitch-to-MIDI software.

MIDI data receiving indicator *

While ***** Recording ***** at the right side a **star * will blink** which indicates that MIDI clock or active sense commands are received, which are important because that means that MIDI connection works.

Start

Start recording a song from MIDI cable input

Stop

Stop the MIDI recording. A dialog will tell if MIDI data was received that could be saved.

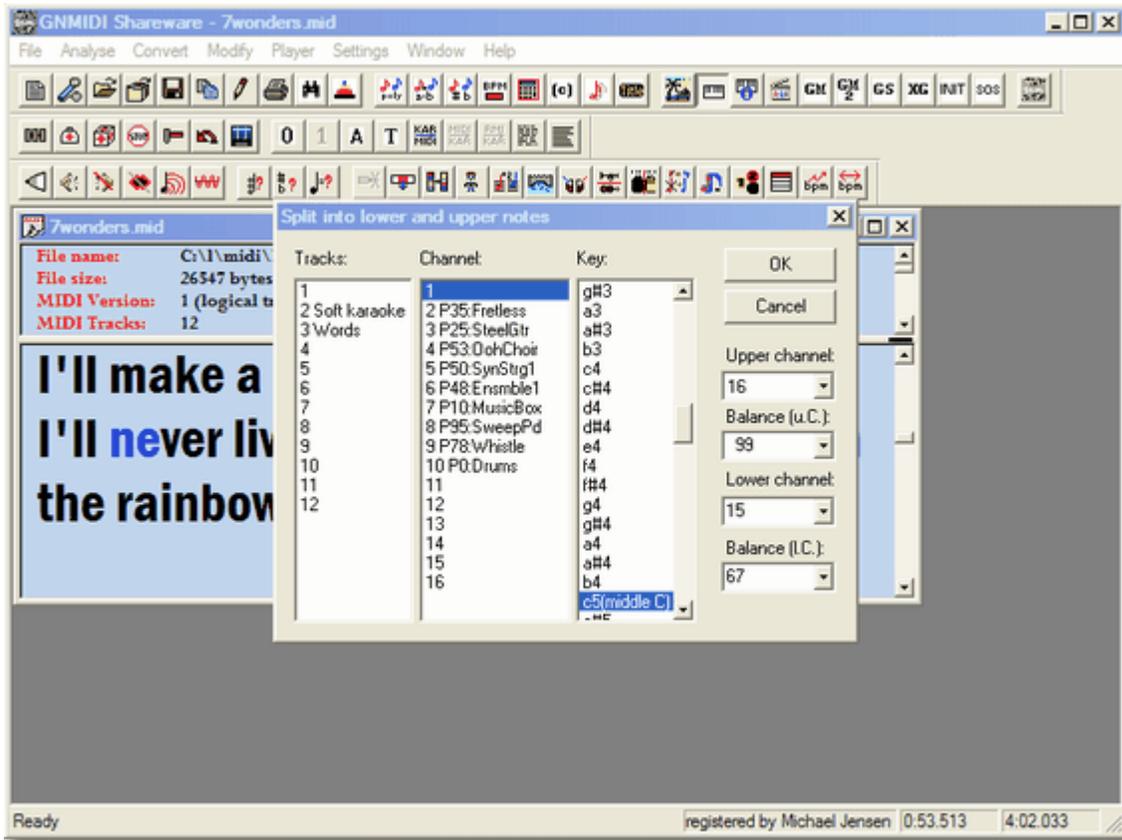
Save

Generate a MIDI song from the recorded input data. This will open a temporary MIDI document window. Don't forget to save this document to a MIDI file.

Important:

It is necessary that the Windows MIDI device driver is correctly installed and working, that data can be recorded successfully. Some keyboards or synthesizers send MIDI data only in certain mode (e.g. song mode) or need keyboard settings to enable sending of MIDI data. Some keyboards you need to force to send initialization settings (sounds, volume...) through MIDI cable, by pressing e.g. reset button, changing mode or similar.

3.73 Split notes into lower and upper half at splitpoint (left and right hand)



This command splits a channel at a given splitting point note into lower track (left hand) and upper track (right hand). You can optionally assign new MIDI channels to both parts so that both parts can play with different sounds.

Tracks

optionally select a track number only if the channel number is used in two different tracks and you want to split only one of them.

Channel

select a channel number that contains notes for left and right hand

Key

a note number where to split the selected channel into two parts. **Middle piano C is called C5** in this list. The key note and higher notes belong to the upper part (right hand), the notes that are lower than key note belong to the lower part (left hand).

Upper channel

channel number of upper part (right hand)

Balance (u.C.)

Balance -64...0...63 of the upper part (right Hand), 0 is center, -64 is full left, 63 is full right

Lower channel

channel number of lower part (left hand)

Balance (I.C.)

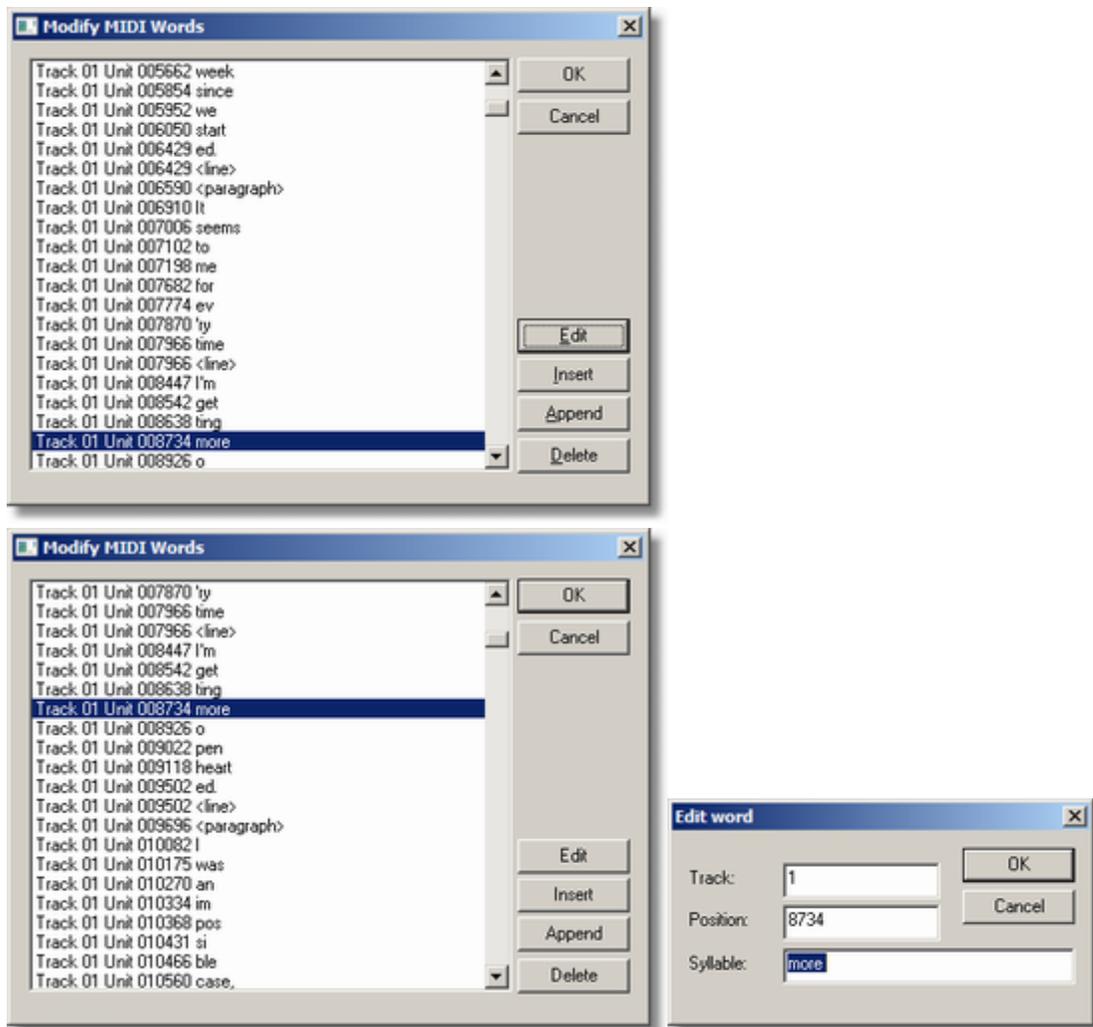
Balance -64...0...63 of the lower part (left Hand), 0 is center, -64 is full left, 63 is full right

Hint: Middle C (piano-C) is named here as C5. Elder GNMIDI versions (till 2.49) called this **note C4**. If you prefer to use old octave numbering then you could add following setting into [GNMIDI.INI](#):

```
[Settings]
MidiMiddleOctave=4
```

Hint: Balance (also called Pan/panning) defines relation between left and right stereo output.

3.74 Edit Text



This command is used to modify text commands and their position.

Select a MIDI word type in first dialog and continue with OK

- Text can be karaoke song text (.kar) or other text

- Lyric contains song text
- Marker can be word markers for song positions or additional text
- Tracktitle title of track, title of first track is usually used for song title
- Instrument name of used instruments or sounds
- Cuepoint name or description of a song position, e.g. refrain

Hint: MIDI information window contains at end of the information (you probably need to scroll the window down) contains all text of different types.

List box content

each list item shows

- Track number track that contains this text command
- Unit MIDI position (MIDI unit)
- Word text stored by this text command

```
Track 03 Unit 037680 /And
```

Hint: use the scroll bar to find more lines with text commands

Edit

modify the text (syllable or word or sentence) or the MIDI unit position. Use <line> and <paragraph> keywords to specify a line break or paragraph break. In .kar files the lines and paragraphs must be formatted according to .kar rules.

Insert

create a new text item before current selected text item, or modify the suggested MIDI unit position to insert the item at certain MIDI position.

Append

create a new text item behind last text item, or at given MIDI unit position.

Delete

remove current selected text item

Hint:

This operation does not support editing of Yamaha XF, Roland sysex video lyrics, Farfisa sysex lyrics.

Hint:

For entering and synchronizing **song text** you should use [Karaoke editor](#) and [Synchronization editor](#).

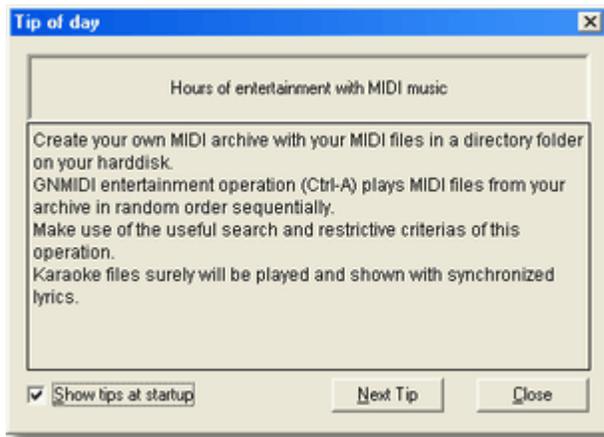
Hint:

A text item may contain a syllable, a word or a text line.

Hint:

Track number (1-255) must reference an existing track in MIDI file, otherwise the text will not be inserted.

3.75 Tip of the day



This dialog shows short articles about GNMIDI operations or interesting features. At startup of GNMIDI a tip of the day might be shown. It can be activated in [help menu](#).

Show tips at startup

If it should not start automatically at each GNMIDI session, you can deactivate this feature in the tip of the day dialog by unchecking the option.

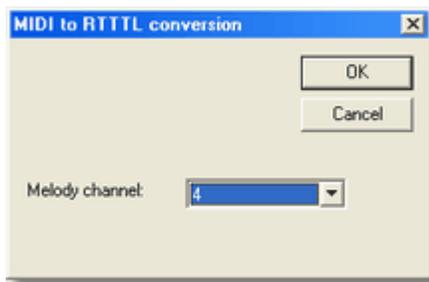
Next Tip

show next article.

Close

exit this dialog (also <Esc> key closes dialog).

3.76 MIDI melody to mobile phone ring tones (RTTTL)



Some mobile phones can be loaded with RTTTL ring tones. This function converts a MIDI melody channel to ring tone format.

Melody channel:

Choose the channel that should be converted. The channel must contain notes (should be mono phon) that the conversion can be done successfully.

Result is a text file that contains the melody notes in RTTTL format.

Hint: the melody notes should not overlap because RTTTL ring tones are mono phon only.

Hint: Some mobile phones might limit the length of the RTTTL, so choose a small part of the song.

E.g. a small part of a song converted to RTTTL:

```
Eternity:d=4,o=5,b=78:16p,16d.,32p,32f,32p,8f.,8d,32f,32p,8f.,a.,g.,2p,16g.,32p,32a#,32p,8a#,8g,8a#,8g,16p,c.,2p,p,16p,16d.,32p,16p,8f.,8d,8f,16d.,32p,a.
```

The result text also offers

[keystrokes for entering the melody into a Nokia 3310/3300 cell phone.](#)

3.77 RTTTL to MIDI song

This operation converts an [RTTTL](#) file [loaded into a document window](#) into a MIDI file.

The MIDI song will contain **mono phone melody**, program **Vibes** is assigned to the MIDI channel 1.

3.78 MIDI to parsons code conversion



Parsons code describes the contour changes of a mono phon melody by simple character symbols. With parsons code it is possible to identify melody by inexact tone height changes, it does not require a precise interpretation of notes, duration and transposition.

The result will be written into a new text edit window (Notepad). Longer melodies might create long parsons code.

Longer pauses between melody notes will break the parsons code and a new parsons code will start with * in a new line.

Melody channel:

Choose a melody channel that contains the melody notes, which should be converted. This channel must contains melody notes (and should be mono phon, because Parsons code only supports mono phon melodies), that it can be converted to parsons code.

Short note overlappings will be corrected automatically. If the channel contains long note overlappings this could infect the results unwanted.

Parsons code format:

Parsons code of a melody usually begins with a * symbol, that is the placeholder for any start tone height.

Following tone changes are allowed and will be described by following characters:

D (Down) tone height will be lower relative to the previous tone

- U (Up) tone height will be higher relative to the previous tone
- R (Repeat) last tone height will be repeated

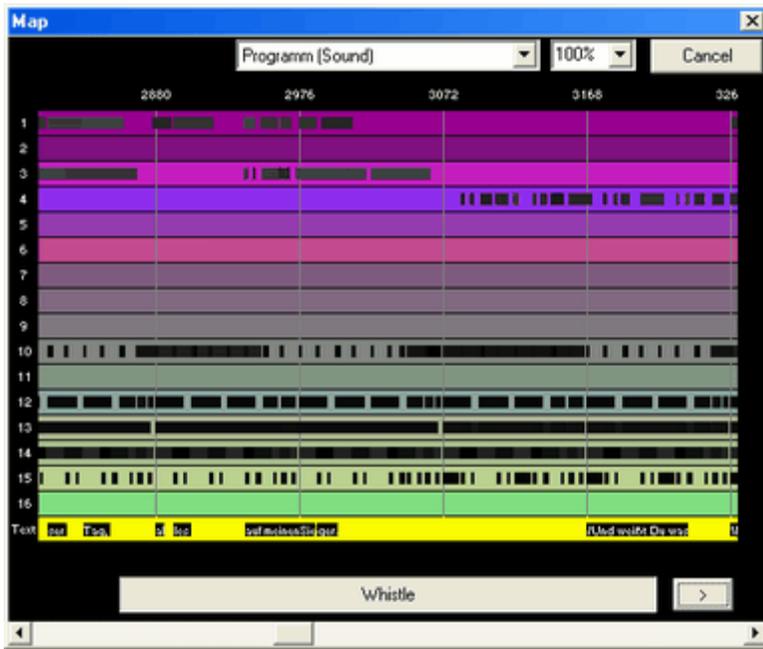
Example: *DUDUDUDDDUUUUUUU

that is the Parsons code of main melody Beethoven "Per Elise" which was produced from the notes E D# E D# E B D C A, C E A B, E G# B C.

<http://www.musipedia.org> provides a search engine for melody searching using parsons code. Above example was found in classic range at first place. When searching in all music ranges "Per Elise" was found at 3rd place, there are other melodies (z.B. Rolling Stones) that produce similar parsons code. It does not mean that the melodies are identical.

A conversion from Parsons code back to MIDI can not be done unique, because Parsons code does not contain notes or durations.

3.79 MIDI settings landscape view



The MIDI settings map displays the parameter values used within the MIDI song. Loading this info can take some time.

The coloured table has 16 rows for channels and one extra row for song lyrics.

The columns are divided into measures by grey vertical lines. The distance is depending on the current zoom state. Some measures have a number above the line which is the MIDI unit position of this bar line.

The smaller black blocks inside the rows are the positions where notes are playing.

The colour is brighter if the notes are not pressed so hard (note velocity value).

The row background colours are different for each row. The colour intensity increases with the control value (e.g. volume 0-127).

Move mouse cursor over coloured areas to show the value below in the grey info field.

Use the scroll bar arrows to show the parts that are currently outside of screen.

Parameters:

- Program (Sound)
- Tempo
- Volume
- Expression
- Balance
- Chorus
- Reverb

Zoom:

choose a zoom percentage value to check out a smaller range of MIDI units in more detail or a larger range of MIDI units in less detail.

Play (>)

The grey button on right bottom plays song beginning at current map position.

3.80 Count-In 1,2,3,4

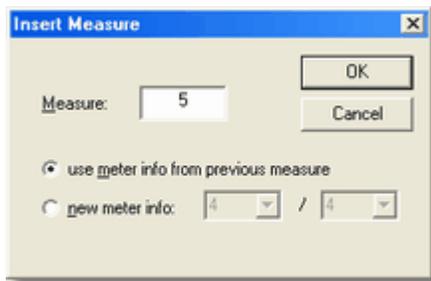


This operation adds some drum notes to count in the beats of initial song tempo.

If first song measure contains notes then an empty measure will be added in front of the song, else the drum notes are written into first measure.

Hint: It is important that the meter information of the MIDI file is correct, so that the beginning of the first measure is at start of song (MIDI unit 0). Wrong initial measure position will result in a wrong count-in.

3.81 Insert empty measure



This operation inserts a new empty measure.

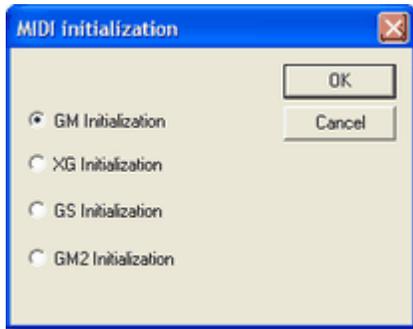
Measure

Measure number of the new measure, existing measures behind this number will be moved back. First measure has number 1.

Measure length

- use meter info from previous measure the new measure will have the same length as the measure before
- new meter info (nominator / denominator) the new measure will get a new length (e.g. 4/4, 3/4, 6/8 ...)

3.82 Initialize GM/GS/XG/GM2 mode



This operation adds an initialization MIDI command (**MIDI RESET**) to beginning current MIDI song.

For GM initialization it adds GM MIDI Reset Sysex and **removes GM incompatible MIDI commands** (e.g. sound bank references, sysex commands).

3.83 Optional MIDI compression during save operation

This option can be turned on/off in [menu settings](#).

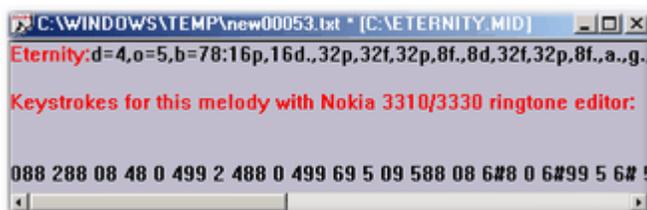
Most MIDI players, keyboards, software, sound cards support this kind of MIDI compression. MIDI Compression does not change the musical content, it still produces valid standard MIDI files, but reduces MIDI file size (up to 15% smaller).

Most files that are found in Internet or sold by music companies are compressed.

Usually this option should be checked (ON), since it only uses capabilities that MIDI standard suggests. Turn this operation off when your MIDI device does not accept format 0 MIDI files that are compressed.

Some older Yamaha keyboards seem not to support compression and reject valid MIDI format 0 files at loading.

3.84 Keystrokes for Nokia 3310/3330 mobile phone tone editor



Nokia phone model 3330 includes a ring tone editor where a new ring tone melody can be edited by pressing the phone keys.

[MIDI to RTTTL ring tone conversion](#) creates this info and displays the keystrokes in the window.

Start the tone editor on your Nokia 3310 or 3330 for entering a new melody. Be sure that the current octave and note length are initialized.

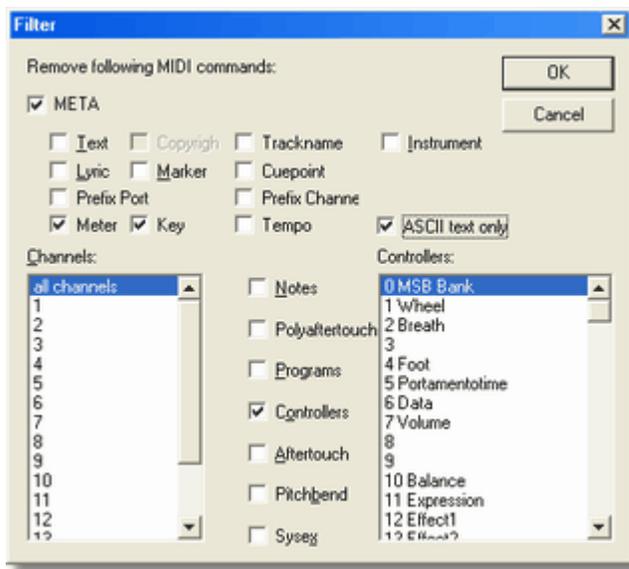
enter 1 that should show 4c1 on display (if not then use keys 8,9,*)
 enter <c> to remove the 4c1 from display

Hint: Enter the digits, *,# exactly as displayed in the document window (don't miss one, each is important to create correct melody).

Hint: The melody input on the phone might be limited (e.g. 50 notes).

Hint: It can't be guaranteed that the keystrokes are working with all mobile phones of these types (version or country depending differences can cause it to fail).

3.85 MIDI command filter



This operation removes MIDI commands (also called MIDI events) of chosen types. It can also change international text characters contained in text commands into ASCII text characters.

META commands

- Text
- Copyright (this is disabled, the operation does not allow to remove existing copyright information)
- Trackname
- Instrument
- Lyric
- Marker
- Cue point
- Prefix Port
- Prefix Channel
- Meter (bar length info)
- Key (song key)
- Tempo

Hint: Turn on META check box that you can select META command types

Sysex commands

remove all sysex commands when checked (check META option that this check box can be used)

Channel depending commands

- Notes
- Aftertouch
- Controller changes select controller command numbers in right side list box
- Program changes
- Polyaftertouch
- Pitchbend

Channels

select one or more channel numbers, only those channel depending commands that match a selected channel will be removed

Controller change commands

Check box Controller changes must be selected first, then select one or more controller numbers that will be removed for selected channel numbers

ASCII text only

all non-ASCII text characters (e.g. international characters like è, ü, ß ...) are replaced against ASCII characters. This is useful if a MIDI device can't display international characters.

3.86 Seek long pauses in song

The operation searches for positions within song that don't play a note for at least 5 seconds. The result is written to a text file and displayed by notepad editor. This operation useful when you record several songs at once with pauses between and then want to know where each part starts.

```
c:\mysong.mid:
0:04:24.230 large pause found: 0:00:17.000
0:08:53.730 ** end song
```

Time position and pause durations are displayed in format h:mm:ss.ms (hours, minutes, seconds, milliseconds).

The 5 seconds period can be changed with following setting in [gnmidi.ini](#) file:

```
[Settings]
LongPauseSeconds=1
```

3.87 Show tempo changes

The operation collects all tempo changes within current MIDI song. Time position are displayed in format h:mm:ss.ms and tempo is displayed in beats per minute (bpm).

The information is written to a temporary text file and displayed with notepad editor.

```
c:\mysong.mid:

0:00:00.000 default tempo: 120.00
0:00:00.000 tempo: 120.00
0:00:00.000 tempo: 78.00
0:04:24.230 tempo: 120.00
0:04:41.230 tempo: 63.00
0:08:53.730 ** end song
```

3.88 Show text positions

The operation collects all text commands within current MIDI song and displays them with text position (h:mm:ss.ms) and type name.

Type names:

- Text
- Copyright
- Trackname
- Instrument
- Lyric
- Marker
- Cue point

The information is written to a text file and displayed with Notepad editor.

```
0:00:00.000 Trackname "Eternity"
0:00:00.000 Trackname "Soft karaoke"
0:00:00.000 Text "@KMIDI KARAOKE FILE"
0:00:00.000 Trackname "Words"
0:00:00.000 Text "@LENGL"
0:00:00.000 Text "@Teternity"
0:00:00.000 Text "@Trobbe williams"
0:00:16.153 Text "\CLOSE"
0:00:16.538 Text " YOUR"
0:00:16.730 Text " EYES"
```

3.89 Quantize pedal controllers to on/off

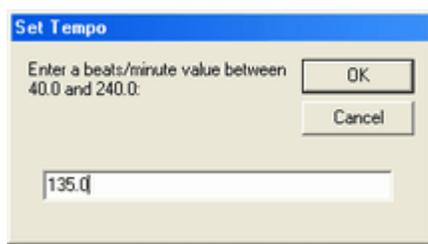
This operation modifies pedal controllers **hold** (controller #64) and **soft pedal** (#67). It maps lower controller values to **pedal OFF** and higher values to **pedal ON**.

```
0 - 63 ..... OFF ..... 0
64 - 127 ..... ON ..... 127
```

Hint: Duplicated values are removed to reduce the number of pedal controller changes.

Hint: This operation is useful for PianoDisc and Disklavier players which may react with noises when many pedal controllers are used that are not pedal ON/OFF values.

3.90 Set MIDI tempo without changing timing



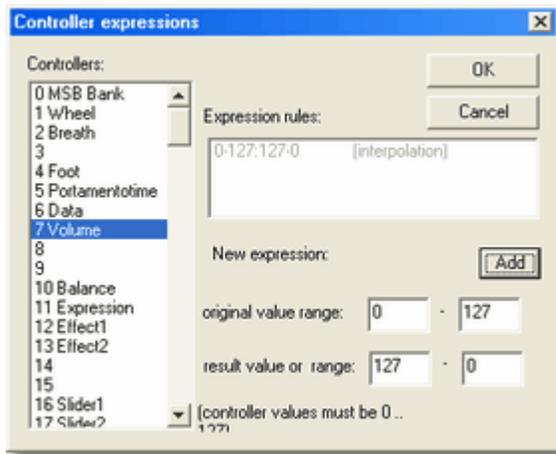
This operation replaces all tempo changes in the song by a constant tempo but keeps the original song speed by adjusting all pauses (instead of [setting tempo commands](#)).

Tempo

Enter a tempo (bpm, beats per minute) value into the edit field.

Hint: This operation is useful if your song plays in correct tempo but you would prefer that it uses an other tempo value and song still plays with same speed.

3.91 Modify controller values by expressions



The operation modifies controller values by expression rules.

Controllers

Choose a controller number that should be modified

Expression rules

displays current expression rules that are applied in this order.

Add new expression

fill original value range and result value range and then press Add to add the expression to the expression rules list.

At least one controller expression must be added that the operation can be done. The button is disabled till valid numbers are entered into the range value fields.

Original value range

enter values between 0 and 127 that the controller should have in original MIDI song that the values are modified by this expression. Values outside the given range are not modified by this expression. Value in first field must be smaller or equal to second field value.

Result value range

enter values between 0 and 127. Leave second value field empty if you want to set all original range values to same value. Here the values in first field can be higher than value in second field (for increasing the lower values and decreasing the higher values).

Possible expressions

- set result value to a constant value
 - fill only the left field of the result value field/range, left the right field empty (e.g. set all values between 0 and 63 to value 0)
- add value to the original values

enter values in result fields that differ to the original range values by the given value (e.g. add value 10 to all values between 0 and 63: 10 - 73)

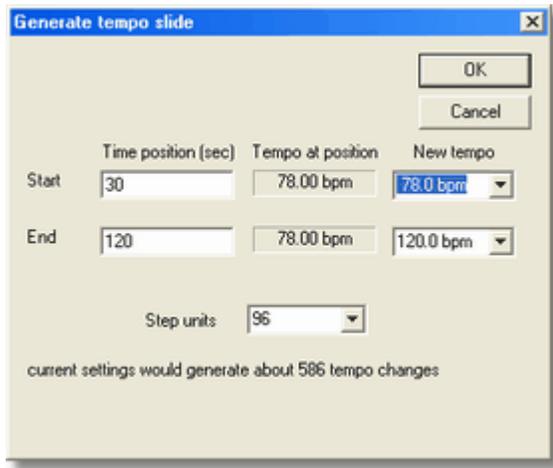
- interpolation of value range
enter values in both result fields, the result range width can be different to original range width (e.g. interpolate values 0-63 linear to 0-127).

Hint: The result values can also be entered reverse then the value ranges are interpolated reverse (e.g. set values 0-127 to 127-0)

Hint: The operation is applied to all channels.

Hint: This operation can be started as [batch operation](#).

3.92 Generate tempo slide



This operation sets a series of tempo changes (increasing or decreasing) for a certain time range. This is used to increase or decrease tempo linear between two song positions.

Start time position

start time (in seconds) from beginning of the song (e.g. 10.7)

End time position

end time (in seconds) from beginning of song (e.g. 30.0)

Tempo at start position

current song tempo at start position (a hint)

Tempo at end position

current song tempo at end position (a hint)

New start tempo

tempo at start position in beats per minute (e.g. 98.0)

New end tempo

tempo at end position in beats per minute (e.g. 106.0)

Step units

distance between two tempo changes in MIDI units

Hint: Start time position must be lower than end time position.

Hint: Start tempo and end tempo must be in range 30.0-255.0 bpm.

Hint: If start tempo is smaller than end tempo then tempo will slowly increase

Hint: If end tempo is smaller than start tempo then tempo will slowly decrease.

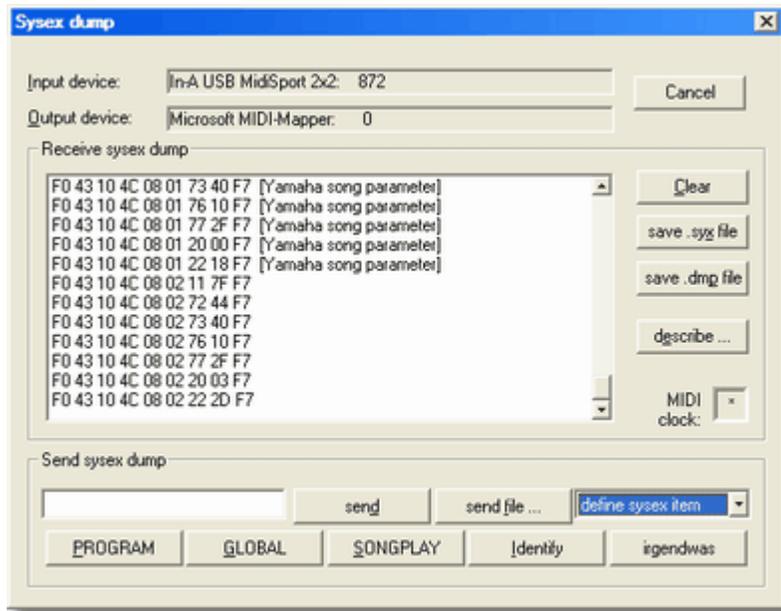
Hint: If start tempo is same as end tempo then only one tempo change will be added and existing tempo changes in given range will be removed.

Number of generated tempo changes

After all required fields are entered the message below the edit fields appears which tells how many tempo changes would be generated using current settings.

Hint: Be sure that the number of tempo changes is not too high, because this could produce big MIDI file size and could be a problem for some MIDI players. If the number is too high then choose higher step units value till the number is acceptable.

3.93 Sysex Transfer



This dialog is used for **sending and receiving sysex data dumps** between computer and external MIDI devices (keyboard, sound modules ...) and reverse through MIDI cable. It has comfortable features like describing a MIDI sysex command or assign a sysex command (or sysex file) to a button to quickly send the data by a click.

Hint: key combination **Alt+X** opens this dialog.

Input device

displays the current selected [MIDI input device](#) name. It can be changed in menu [Settings](#). The number behind the name tells the **number of bytes received**.

Output device

displays the current selected [MIDI output device](#) name. It can be changed in menu [Settings](#). The number behind the name tells the **number of bytes sent**.

Receiving box

The list box in the Receive sysex dump group contains information about incoming sysex data (one line per sysex command).

Clear

deletes the content of the receiving box. Resets the number of transferred data back to 0.

save .syx file

saves all selected sysex data lines of the receiving box into a binary sysex data file (.syx).

save .dmp file

saves all selected sysex data lines of the receiving box into a readable and editable sysex data text file (.dmp). The .dmp file contains hexadecimal values.

describe ...

select a received sysex data line of the receiving box and describe the meaning of the sysex data. Few data bytes from beginning of the sysex command are used to recognize the meaning of a sysex in future when receiving a similar sysex again e.g. receiving song data dump ...

MIDI clock

displays a star symbol in the rectangle box when receiving MIDI data. It should blink when the MIDI connection is working.

Send sysex edit field

enter a short hexadecimal sysex command or a filename of a predefined .syx or .dmp file to send the data using send button

send

sends data entered in the send sysex edit field (left side of the button).

send file ...

choose a .syx or .dmp file that will be sent

choose sysex item

this combo box contains user defined sysex elements that will be sent when the item is selected. The combo box contains also possibility to define a new sysex element self.

define sysex item

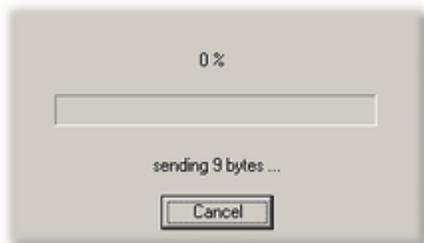
user defined sysex elements can be named and assigned to a button or chosen from sysex item combo box. A dialog is opened where the new sysex element can be defined.

sysex element buttons

some space in the dialog is reserved for your own buttons that send certain sysex commands. The buttons show the name of the sysex element in the caption. Two buttons are already defined (Identify, GM Reset). They can be removed in file sendsysex.txt and replaced using define sysex item if wanted.

Sysex messages

a sysex message (system exclusive message) starts with F0 (SOX) then follow data bytes of range 0-127 and at end the sysex is terminated by F7 (EOX). Short sysex messages are used to transfer simple commands with some parameters. Large sysex messages are used to transfer songs or data dumps (which store the current settings of a device). Since the transferred data are only 7bit values, transferred data is usually encoded.

**Send hexadecimal sysex message**

enter a sysex command in hexadecimal representation. That is the usual form used in device

manuals to list all supported MIDI sysex commands. Press send button or Enter or Return key to send the data to the output device if it is a valid sysex message F0 ... F7. It does not care if the hexadecimal characters are written in lower or upper case.

e.g. some KORG models accept following identify command

```
f0 7e 0 6 1 f7
```

If the hexadecimal sysex string is not valid then the dialog will beep and select the part of the string that looks wrong. After correct sending the connected device might respond or perform some action.

After sending the data GNMIDI will **wait certain delay time** to give the device enough time to handle the transferred data.

The delay can be modified in [gnmidi.ini](#) file by following setting:

```
[Settings]
SendSyxDelay=5000
```

Hint: If you are sure that the command is done and the device doesn't need more time then you could abort the delay by pressing **<Esc>** key.

Send sysex file (.syx)

sysex files (with file extension .syx) contain one or more sysex commands. The files can be huge (e.g. dump of all keyboard songs, all keyboard settings). Press button send file and choose a valid .syx file to send all valid sysex commands in this file to the output device. Or enter the full path of the sysex file into the sysex edit field and press send button. If the file exists and contains valid sysex data then it will be transferred.

After sending each sysex the program will **wait certain delay** to give the device enough time to handle the data.

Send readable sysex file (.dmp)

.dmp file contains hexadecimal formatted sysex data lines. The lines look like:

```
00000: F0 42 30 49 4E 06 F7
```

The hexadecimal number before the sysex data bytes (including the colon) is optional, specifying only

```
F0 42 30 49 4E 06 F7
```

in a .dmp file is allowed). GNMIDI stores the current byte position of a corresponding .syx file in this offset number when saving sysex data to a .dmp file. You can change the .dmp file without need for updating the offset values, the values are not used at reading a .dmp file.

Optionally a ! character can be used to append a comment to a line.

```
F0 42 30 49 4E 06 F7 ! GM Reset
```

The comment is not part of the sysex data. GNMIDI inserts such comment for each known sysex.

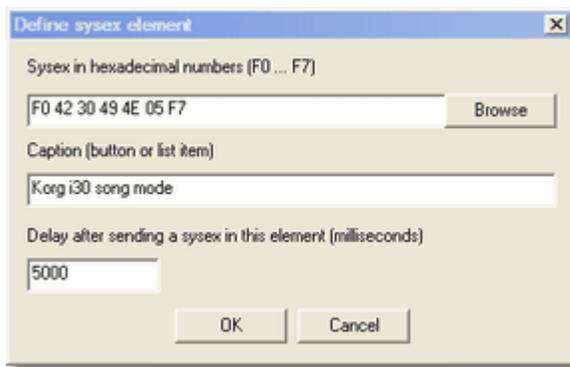
E.g.

```
00000: F0 42 30 49 4E 06 F7 ! KORG i30 change to song mode
```

Maximum line length is 1024 characters in a .dmp file. Insert line breaks between data values that the lines are short (which is easier for reading and editing). GNMIDI writes 16 data bytes per line.

When the .dmp file contains invalid formatted line then the sending will not be performed and an error message tells which line contains the problem.

After sending the data from .dmp file the program will wait certain delay after each sysex command to give the device enough time to handle the data.



Define own sysex data items

Often used sysex commands can be stored as sysex items. They can be sent comfortably by selecting a list box item or pressing a self defined button.

The second item in the send sysex combo drop down list is always "define sysex item". This item opens a dialog that defines a new sysex item that will be added to the combo drop down list and will be assigned to a send button if it is one of the first 5 items.

A sysex data item consists of fields

- sysex enter a sysex command F0 ... F7 in hexadecimal numbers or enter a .syx or .dmp filename, use Browse to select a file.
- caption enter a caption text for the combo list box item or for a button, use & prefix to declare a key shortcut Alt+(next character)
- delay enter a delay time in milliseconds that the program must wait after sending this sysex command (default 5000 ms).

After entering a complete and correct sysex data item the combo drop down list and up to five send item buttons will be updated and can be used. Currently this dialog can only be used to define new items. Modifying or deleting existing items can only be done by modifying the text file where the definitions are stored.

[gnmidi.ini](#) contains a setting that tells which file contains the sysex item definitions:

```
[Settings]
SendSyxFile=sendsyx.txt
```

The self defined items are added to the combo drop down list and first 5 ones are assigned to buttons in the send sysex area.

The text file contains the item descriptions in following form:

```
[SendSyx]
Caption=&Identify
Sysex=f0 7e 0 6 1 f7
Delay=500

[SendSyx]
Caption=&Church Sounds
Sysex=c:\sounds\sysex\organ.syx
Delay=23000

[SendSyx]
...
[SendSyx]
...
```

Hint: gnmidi.log will contain error messages if the sysex item definitions file contains incorrect definitions.

Send sysex data item from self defined button

First 5 valid self defined data items are assigned to 5 reserved buttons in the send sysex area. The caption is displayed on the button. If caption contains an ampersand character & then next character can be used for a key shortcut Alt+(next character) if this shortcut is not used elsewhere in the dialog.

e.g. caption &Identify will be displayed as Identify on the button and key combination Alt+I can be used to send this sysex item (if Alt+I key is not used elsewhere in the dialog as shortcut).

Send sysex data items from the user defined combo box items

All valid self defined sysex items are added to the combo box in the send area. The first item does not send anything, it clears the send sysex edit field. The second item opens the dialog to define a new sysex data item.

When opening the drop down combo box list and selecting a sysex data item with left mouse click then this item will be sent to the output device.

When selecting combo box list items with arrow keys then the item info will be copied into the send sysex edit box and then this data can be sent from the edit box (send button or Enter/Return key).

Receive sysex dumps

First [choose the input MIDI device](#) that will be used for receiving MIDI data.

The small box in the receive sysex dump area should blink, this is a proof that the input device is active (a working MIDI device is sending MIDI clock F8 or activesense FE command steadily!).

In order to receive sysex data you either need to start a send sysex dump operation on the MIDI device or send a sysex request command to the device first. Some operations on the MIDI device might automatically send a sysex notification (e.g. change to certain mode). Some MIDI devices send sysex data only when certain option on the device is set.

Every caught sysex command will be added to the list in the center, it will be displayed in hexadecimal numbers F0 ... F7 (longer sysex data will only be displayed partially, but the complete received sysex is still remembered) . While the sysex command is not complete it will be displayed ... without the F7 at end, when the sysex transfer completes then the ... F7 will be added.

The current list of sysex messages can be cleared (removes all sysex and resets transfer counters to 0). Individual sysex commands can be selected inside the list by clicking with the mouse on the line. Selected sysex commands can be removed by using clear after selection. Selected sysex commands can be saved to file (.syx or .dmp).

Describe sysex commands

Select one of the received sysex commands and click on the describe ... button. Look into your MIDI device manual to find out what this sysex command means. First 10 hexadecimal values of the received sysex are displayed in the edit field. Only a part of the sysex beginning is necessary to identify the type of command. You can delete unnecessary numbers at end of the sysex or insert more numbers if less or more bytes are significant to identify the meaning.

Special characters can be used as **wildcards** to skip meaningless numbers or numbers that are counters:

? this character inside the hexadecimal sysex part will match any byte number [0-7f]

this character inside the hexadecimal sysex part will match any byte number [0-7f] and

remembers the byte number of a matching sysex at this position. The number can be added to the sysex description using the # character as placeholder

A sysex description text to a matching sysex will be

- displayed for received sysex as [...]
- displayed when sending such a sysex
- added as comment when saving a .dmp file

Currently the describe sysex dialog can only be used to define new descriptions. Modifying or deleting existing descriptions can only be done by modifying the **sysex description file** where the descriptions are stored:

Following setting in [gnmidi.ini](#) tells which file contains the sysex descriptions:

```
[Settings]
SysexDescriptionFile=describesyx.txt
```

A stored sysex description in the sysex description file looks like

```
[KORG i30 change to song mode]
F0 42 30 49 4E 06 F7
```

This will display description when this sysex is received as:

```
F0 42 30 49 4E 06 F7 [KORG i30 change to song mode]
```

For longer sysex data it is sufficient to specify beginning of sysex, the character # can be used as place holder of a number information that can be used in the description of sysex, e.g.

```
[KORG i30 style block #]
F0 42 30 49 65 #
```

will describe sysex F0 42 30 49 65 02 by following line:

```
F0 42 30 49 65 02 00 20 00 00 00 [KORG i30 style block 2]
```

Hint: Sysex data in hexadecimal numbers and their meaning can be found in manual of your MIDI device. Read also in manual to your MIDI device how to receive and send sysex dumps.

Important notice for sending sysex from file

the program waits a certain delay to give the MIDI device enough time to consummate and handle sysex data (default 5 seconds additionally to the transfer time). That is usually enough time to decode and store larger data block but can be too small if sending a series of dump requests where each might deliver much data. If the device has not enough time then it could fail to handle (larger) sysex data properly.

The default waiting time between sending sysex commands can be changed with following [gnmidi.ini](#) setting:

```
[Settings]
SendSyxDelay=15000
```

(this would set the delay to 15 seconds)

Hint: For self defined sysex items you can define the wait time individually for each sysex item.

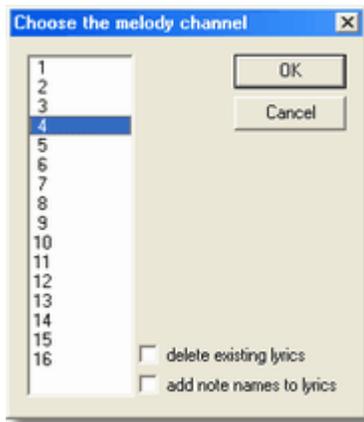
3.94 Karaoke Editor

This karaoke editor adds your song text to a MIDI file and is used to synchronize song text syllables to melody notes.

Hint: Unregistered demo version (to try this [Shareware product](#)) allows to synchronize first half of the song only (for testing purpose). [Registered program version](#) allows to synchronize whole song.

Important: The **melody notes** must be already available in the MIDI file, without existing melody notes this editor is not useful to synchronize comfortable, use [Synchronization editor](#) instead to synchronize song text lines.

Start the karaoke editor for the current MIDI document with shortcut key **Ctrl-K**.



Choose the melody channel

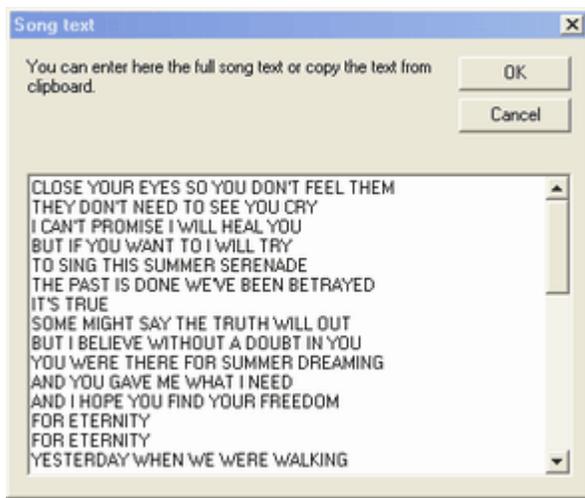
You are asked to enter the melody channel (1-16).

delete existing lyrics

check this option if existing lyrics should be ignored (that you can start editing from beginning with empty lyrics)

add note names to lyrics

check this option to add the note names of melody notes as default lyrics (instead of entering a song text)



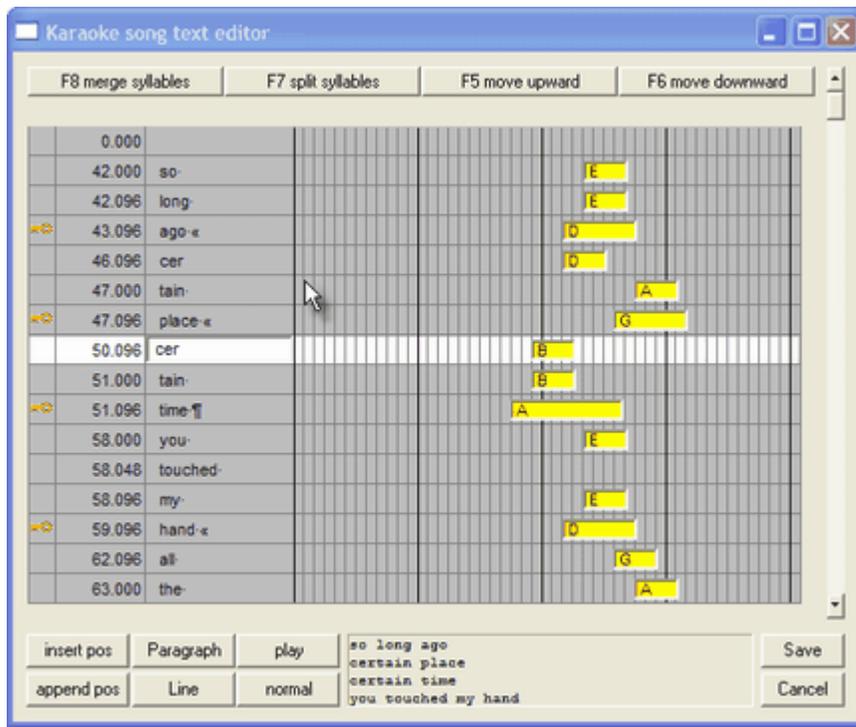
Song text

If the song does not contain lyrics yet a dialog is presented where you can enter the full song text.

You can copy the song text from clipboard into

the edit field (open context menu with right mouse click). It is not necessary to enter the song text here, the song lyrics (syllables) can be entered later direct to the corresponding melody notes.

The entered song text will be split into words and assigned to the melody notes word by word. The words can be split into syllables later in the editor simply whenever it is required for assigning word part to a note (the grammar rules for splitting words into syllables don't apply here for this purpose).



The **Karaoke Editor** dialog shows a scrollable table of melody notes and available lyrics:

Columns

- **LOCK/UNLOCK** (key symbol )
this small column area is used to mark a table row locked (locked when key symbol is displayed). A locked row is protected against moving or modifying. Use this feature when a line is completely synchronized so that it won't be moved away by accident. It is not necessary to lock all lines, add the lock to the last syllable of the line. When adding a line or paragraph row then this row will get the lock automatically.
- **POSITION** (beat number.MIDI unit)
this column contains a logical MIDI position for each row, positions cannot be moved, new positions can be entered between existing positions.
- **LYRIC**
this column contains words or syllables that are currently assigned to a melody note or other position. During editing a row (that is not locked) can be selected and then the lyric column will display an edit field where the lyric text can be entered or modified.
 - < is shown in a table cell to break the song text line at this position.
 - ¶ is shown in a table cell to break a paragraph at this position.
- **NOTE**
This column displays melody notes as coloured bars which display the note name. The horizontal beginning position of the bar gives a visible hint about the note height (it starts more right if note is higher). The bar width gives a hint about the note duration (the wider the more longer the note is played).

Hint: Click (with left mouse button) into LOCK column will toggle the locking state. Click into the other columns will select the row and offer an edit field for changing the lyric.

Scroll bar

Use the scroll bar to show the rows before or after current table page. Use the arrow keys UP, DOWN, PAGEUP, PAGEDOWN scroll the rows manually.

Text preview

The text currently contained in the page rows is displayed in preview area below, this displays also the line and paragraph breaks, that helps to find out where line or paragraph breaks are still missing.

insert pos

inserts a new row before current selected row. It suggests a position in the middle of previous and current row position. The position must be specified in beat.unit e.g. 16.32 . Use this operation when there are syllables in the song text that should be assigned to a position between two melody notes.

append pos

inserts a new row between current selected row and next row.

Paragraph

appends a paragraph end marker ¶ to current row text. A paragraph separates melody lines that don't belong to same verse. The row will be locked to prevent it from being moved without intention. Add paragraph when a song text line is correctly synchronized.

Line

appends a line end marker < to end of current cell text. A line separates two melody sentences that belong to same verse. The row will be locked to prevent it from being moved without intention. Add line when a song text line is correctly synchronized.

play/stop

starts playing from song position of the top row of this page till stopped by user or end of song. The rows will be highlighted at matching row positions. The playing speed is controlled by option normal/slow. The button caption toggles between play and stop depending on the current playing state. *Warning:* Space key can't be used here to start/stop the player since space key is used to enter the space character into the edit field.

Hint: Playing automatically stops when using an edit operation or selecting a row (by click on the row).

Hint: Player starts to play directly at the time when the melody note first on the current page begins. You can force the editor to play some time (in milliseconds) earlier before top row note begins with following [gnmidi.ini](#) setting:

```
[Settings]
KaraokeEditPlayerStartDelay=2000
```

normal/slow

the option defines the playing speed when using the play button. Toggle between normal speed and slow speed. Normal speed will play the MIDI song in original tempo. Slow speed is defined to default 60% of original song tempo.

This setting can be changed in [gnmidi.ini](#) file:

```
[Settings]
KaraokeEditSlowPercent=60
```

Save

This button saves current karaoke song to a temporary MIDI document (opens a document window). Don't forget to use [Save](#) or [Save As](#) operation in the [file menu](#). The resulting MIDI file will be in format 0 and contain standard MIDI lyrics. Use [karaoke conversion](#) or [.kar conversion](#) operations to change the lyrics format.

Cancel

use this button only if you want to abort the editing without saving the modifications. You are asked to confirm this decision. This is useful when you are trying the Karaoke editor functions.

Move upward

moves the text in current selected row and rows above up one row till an empty row is found. The operation will fail if no previous empty row is currently available till first row. Key F5 can be used for this function.

Move downward

moves the text in current selected row and rows below down one row till an empty row is found. The operation will fail if no next empty row is currently available till last row. Key F6 can be used for this function.

Hint: GNMIDI appends empty rows at end of song so that there will be new space for moving downward when necessary. If there is no free row till next move downward, GNMIDI will try to generate a new free row by merging the last to syllables before next locked row.

Split syllables

splits a word in current row at cursor position into two syllables. The syllable on the right side will be moved down one row (including text in next rows) till a free row is found. The operation will fail if no next empty row is currently available till last row. Key F7 can be used for this function.

Hint: Each time when you split a word into two syllables GNMIDI searches for same words after current position and tries to split it into syllables same way (only possible if not locked and free row available till next locked row). This auto split syllables behavior can be turned off with following

[gnmidi.ini](#) setting:

```
[Settings]
KaraokeEditAutoSplit=0
```

Merge syllables

merges the text of current row and next row to one text in current row. The text of next row will then be empty. The selection moves down to the empty row. Key F8 can be used for this function. This function is also necessary when moving text fails, because the function generates empty rows after merging text rows.

Editor Modes

The Karaoke editor has two modes that can be switched any time by pressing play/stop button:

- **PLAY MODE**

this mode is used to check if the synchronization is correct by playing from beginning from a song position where top row is located. Define the playing speed with normal/slow button and play/stop the current song part. The **rows are highlighted** white whenever the song reaches a row position and rows are automatically scrolled into view.

- **EDIT MODE**

this mode is used to **enter or modify lyrics** in rows, move rows up or down insert/append new rows, append line or paragraph breaks, split or merge syllables. Select a row to perform a function at this text or position.

Enter/modify song text

click with left mouse button into a row (columns 2-4) to select the row for editing. An edit box will be displayed in this row inside column 2 that contains the current lyric text. You can enter new text or modify existing text in this edit field. Use arrow keys UP/DOWN to get directly into previous/next row edit box.

Hint: While entering text it is not important that words/syllables are already entered into the correct synchronized row. It is easier to synchronize the entered text later where you can split/merge syllables, move lyrics up or down later quicker.

Important: **Space** characters are shown with a **point in the middle of the character**, so that they are visible during editing. Spaces between words should be always at end of a syllable. Look into preview text area so that you can see if words are correctly separated by spaces and that no space is in middle of one word that is split into syllables.

Hint: Don't enter special formatting (e.g. .kar format) instructions except line break « and ¶ at end of syllable. The save operation will save in a standard lyrics format that can be converted with GNMIDI later (to [.kar](#) or [other karaoke formats](#)).

Synchronizing song text

for synchronizing syllables you need to move the lyric syllable to the row of the corresponding melody note or a self defined position between two melody notes. Notes can't be moved only the text content can be moved up or down into a row that contains the melody note. For moving a row with empty syllable/word must be available in this direction. Locked rows can't be moved, an error message will be displayed when no available free row is found that is necessary for moving.

Example for moving text upward (before and after pressing key F5):

17.022		17.022	Save
18.021	Save	18.021	the
19.021	the	19.021	last
22.000	last	22.000	dance
25.008	dance	25.008	

Example for moving text downward (before and after pressing key F6):

17.022	Save	17.022		17.022	Save
18.021	the	18.021	Save	18.021	the
19.021	last	19.021	the	19.021	last
22.000	dance	22.000	last	22.000	dance
25.008		25.008	dance	25.008	

When **no empty row** can be found or generated (or a locked row prevents from being moved) then following message will be displayed:

No free element found that elements can be moved.

Hint: **Lock some rows** that contain already synchronized text so that this text is not again moved away by accident by a further move operation.

Hint: It is not necessary that all melody notes have corresponding syllables, sometimes a syllable is specially interpreted by a series of notes. Rows that don't contain text will be ignored at save. Look also at position information, when two positions are very close then it can be better that only first of these rows contains text and second is left empty.

Split words into syllables

First select the row that contains the word, move the cursor in the edit field to the position between the two characters that are to split into two syllables. Press F7 to split the current word into two parts. The right half of the word will be moved down into row below. For successful splitting it is necessary that a row with empty content is available somewhere down, so that next row content can be moved down.

If no empty row is available then this will be displayed in an error message. Then you should look at rows below and merge some rows so that at least one free row will be generated. It is possible that the MIDI song contains less melody notes than are necessary for synchronizing all verses. In this case it is necessary to delete some verses.

Example for splitting a word into syllables (before and after pressing key F7):

17.022	You-	17.022	You-
18.021	be,ong	18.021	be
19.021	to-	19.021	,ong
22.000	me.	22.000	to-
25.008		25.008	me.

Hint: Since splitting moves down rows content it is recommended to lock important rows behind current row that are already synchronized.

Hint: Since the splitting is only done for synchronizing spoken parts of word to notes you don't need to follow any rules of language grammar here. Split wherever you think that word parts are played by different notes.

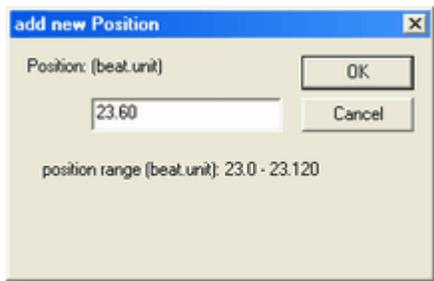
Hint: After each splitting of a word GNMIDI tries to find identical words behind current position and splits it same way if possible.

Merge syllables to a word or sentence

select the first row of two adjacent rows that contain text that should be merged into one row content. Press F8 to merge the text of current and next row.

Example for merging two rows to a word or sentence (before and after pressing key F8):

17.022	r	17.022	ri-
18.021	il-	18.021	
19.021	be-	19.021	be
22.000	watch	22.000	watch
25.008	ing-	25.008	ing
25.020	you.	25.020	you.



Insert a syllable between two melody notes

Usually song text is directly assigned to melody notes, but in certain cases there is no melody note available for a syllable (e.g. the song author made a little mistake and forgot to play a note, or the author uses the pitch bend wheel to play certain parts).

Use the insert or append pos buttons to define a new position between the two melody note positions. A new row will be inserted where you can enter the text for this position.

Hint: Currently no modify or delete position function is available. Leave the row empty if the position is not useful for the syllable. Empty rows are not saved.

Add line breaks or paragraph breaks behind synchronized text lines

Each song text lines should be ended with a line break or a paragraph break. Look into the preview

text area, if the lines are too large then you should break them directly after last syllable of the sentence. Use line break for lines inside a verse, use paragraph break after last line of a verse. Rows that contain a line break or a paragraph break will automatically be locked with the key symbol. That prevents that the synchronized line might be moved by accident. If the line break was added wrong then unlock this row (click into first column of this row) and delete the « character manually.

Hint: Don't use paragraph break and line break « at same position.

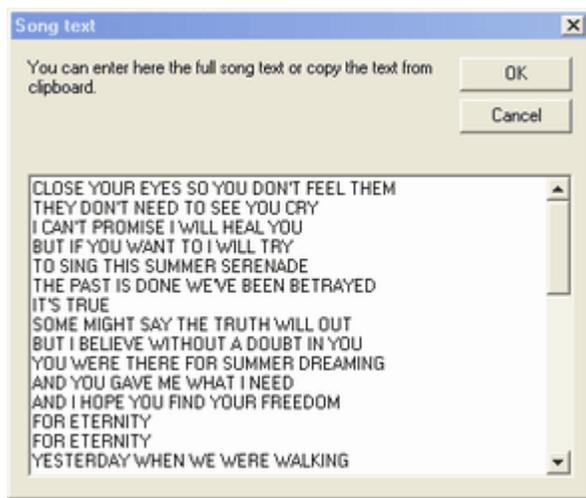
Hint: Unlock all locked lines at once on your own risk with key F9. Use that only when you want synchronize whole song again from beginning, e.g. if you started with line synchronization editor and now want to synchronize syllables. It is dangerous to unlock synchronized lines, that lines could be moved unwanted to wrong positions.

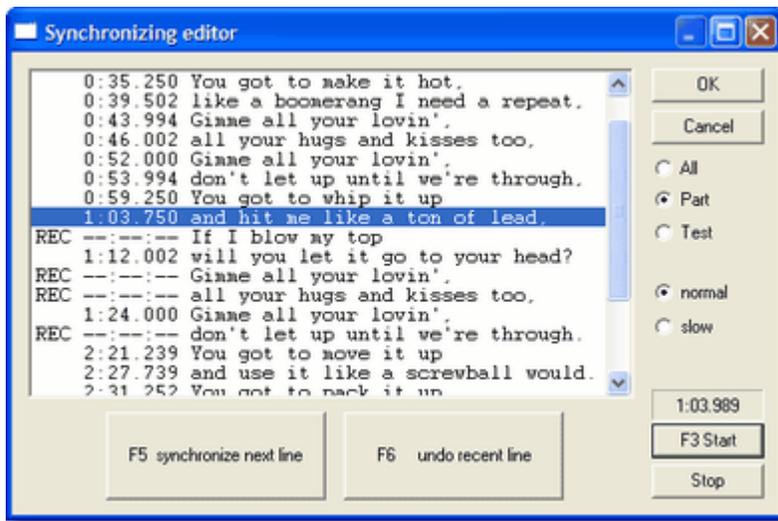
Save a modified karaoke song

First exit the dialog with save button. That will create a MIDI document window in your GNMIDI environment. Use [Save As](#) operation to save the MIDI file.

Hint: The dialog can be resized with help of dialog frame and title bar.

3.95 Synchronization Editor





The Synchronization Editor is used to enter song text line and synchronize the song text lines to MIDI or MP3 song positions. Synchronization can be done comfortably during playing the song.

Hint: If you plan to synchronize syllables, you should directly use [Karaoke Editor](#). For beginners and for applications where text line synchronization is enough the synchronization editor is simpler and quicker to use.

Demo limitation

In unregistered demo version (which is for testing only) you can only synchronize first half of the song. Registered program version synchronizes all song text lines.

Choose a MIDI document window and start the synchronization editor. Shortcut key Ctrl+Z can be used.

Warning about synchronized syllables that are probably synchronized

If the MIDI file contains song text that is already split into syllables and probably synchronized syllable by syllable then a warning appears. You should abort if you want to keep the syllables and better use karaoke editor to check and modify syllables synchronization. If you continue then the song text will offered for synchronization line by line. Unmodified lines will keep synchronization time of first syllable in this line, you don't need to synchronize them all again if they are already ok.

Enter the song text

First a dialog is displayed where you **must enter the song text**. Existing lyrics will be collected from the MIDI file and displayed in the edit box. You can also copy text from clipboard (use right mouse button and choose paste). Next dialog does not contain possibility to enter or modify lyrics, so that must be done in this dialog.

All

when this setting is chosen all lines will be synchronized. Use this to restart synchronization from beginning.

Part

when this setting is chosen only lines will be synchronized that are set to recordable (REC). To set lines to state recordable you need to select one or more lines with left mouse button and then click on option range. Lines without times (---:---) don't need to be selected, those lines are automatically treated as recordable (REC).

Hint: It is important that you first click into lines in the list box and then on the Part check box (even if

it is already selected). This will set the selected lines to REC. In part mode the player will start some seconds before the first REC position, so you can easily repeat recording from other positions.

Hint: Double click with left mouse button into the list box to unselect all list items at once.

Test

when this setting is chosen all lines are set to not recordable which prevents from modifying current synchronization during playing. Use this to check synchronization of lines and find out which lines should be synchronized better.

Synchronization list box

The list box contains song text lines. In front of every synchronized line there is a time position specified in minutes:seconds.milliseconds e.g. 0:16.168 .

Not yet synchronized lines display a --:--:-- in front of the lines. It will be replaced by the time when clicking F5 during synchronization.

In front of the lines that are intended to be synchronized at next start (F3) you find word REC (recordable). All other lines don't have this state, so they won't be changed during playing. Lines without time --:--:-- are recordable (except in mode Test).

Start (key F3)

starts to play the MIDI song from beginning in selected speed and listens on user key input for synchronizing next line. Using Start will forget all previous synchronization times from last Start.

Time display

current playing time will be displayed during playing of the MIDI song, it is not displayed when stopped.

Stop (key F3 while playing)

stops playing the MIDI song and aborts synchronizing. All synchronized song text lines till now are remembered and can be saved. Use again Start when you want to forget the recent synchronization try and try it again from beginning. While the song is playing you can use key F3 to stop.

normal / slow speed

select normal or slow speed for playing the MIDI song in original tempo or in a slower tempo (default 60% of the original speed). This setting can be changed in [gnmidi.ini](#) file:

```
[Settings]
KaraokeEditSlowPercent=60
```

Synchronize next line (key F5 while song is playing)

press the Synchronize button or key F5 every time when the beginning of next line is currently about to be sung. The next line will be selected and the time position will be displayed in the list box, if the next line is recordable (REC) otherwise the user command will be ignored with a warning beep.

Undo recent line synchronization (key F6 while song is playing)

when **key F5 was pressed too early** (before the next song text line really starts) then you can correct this when you are quickly. Press Undo button or key F6 to set the synchronization status of previous synchronized line back to --:--:-- (not synchronized yet). At the correct position synchronize this line again with key F5. If recent line is not recordable (REC) then this operation is ignored with a warning beep.

Hint: When you pressed key F5 too late then undo doesn't help, you can either accept the wrong position if it was not too late or stop synchronization and restart again from beginning of the song. Use option Range to modify synchronization of some selected lines instead of option All where you need to synchronize all lines again.

Save song with synchronized lyrics

Save button integrates standard MIDI lyrics at synchronized times into a MIDI file. All lines that are not synchronized will get the time of the last synchronized time. Save only creates a temporary MIDI document, you need to use [Save As](#) operation to save the modified song to a MIDI file.

In demo only half synchronization of song will be saved, [register](#) to be able to save full song synchronization.

Results will be saved in standard MIDI lyrics format, use [.kar conversion](#) or other [lyrics conversion](#) operations to convert the file.

Synchronize MP3 song text

For playing MP3 song with internal GNMIDI player a working MCI MP3 driver must be installed in Windows system.

After synchronizing lyric lines the lyrics are stored in a temporary copy of the original MP3 file.

GNMIDI and newest versions of Windows Media player can play MP3 with integrated synchronized lyrics.

3.96 Seek long notes in song

The operation searches notes within song that play a note for at least 5 seconds or are incomplete (NOTE ON or NOTE OFF command missing). The result is written to a text file and displayed by notepad editor. This operation useful when think that there are playing notes too long and want to find out the reason.

```
c:\mysong.mid:
channel 6 note c5 vel 91 started at unit 157200 plays for duration 11.054 seconds
channel 6 note d5 vel 91 started at unit 159120 plays for duration 5.048 seconds
channel 6 note f5 vel 89 started at unit 159120 plays for duration 5.580 seconds
channel 6 note a#5 vel 101 started at unit 159120 plays for duration 41.038 seconds
channel 6 note d#5 vel 102 started at unit 162480 plays for duration 9.554 seconds
```

Note start position is displayed in MIDI units. With MIDI calculator you can convert MIDI units to time or beats or measures.

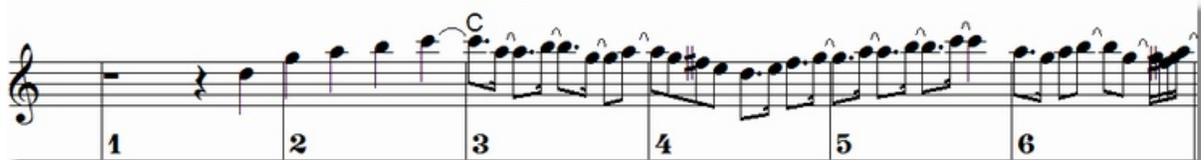
The 5 seconds period can be changed with following setting in [gnmidi.ini](#) file in your personal *My Documents* folder:

```
[Settings]
LongNoteSeconds=10
```

3.97 Fit improvisation to a score sheet

An **improvisation** is a music piece that is played live without metronome.

Example of an improvisation (Mozart): in original scores it was 3/4

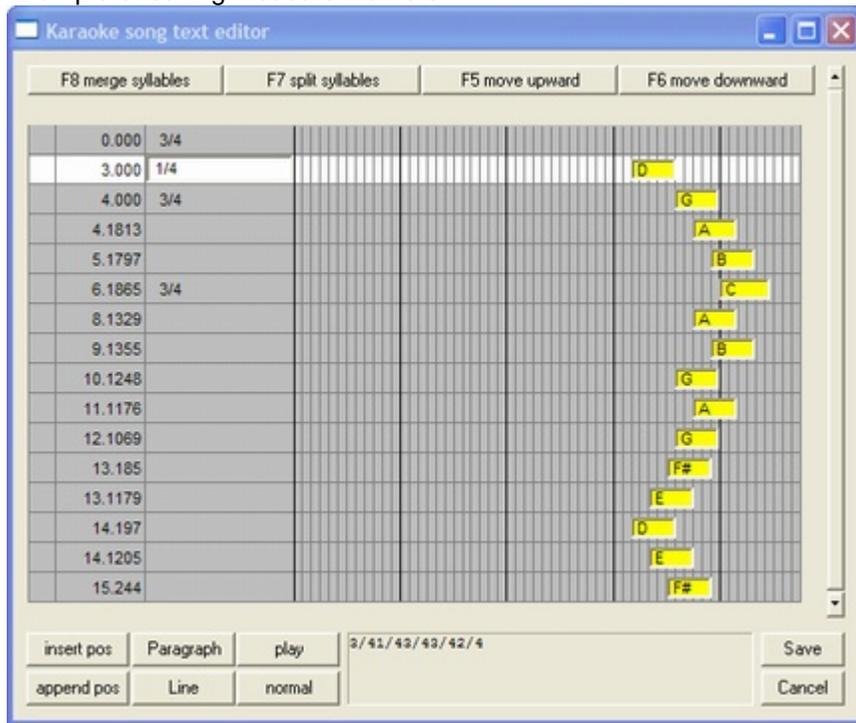


The MIDI song does not contain enough information to display the song correct as a score sheet (missing or wrong measures). Minimal tempo differences or playing errors cause unwanted score

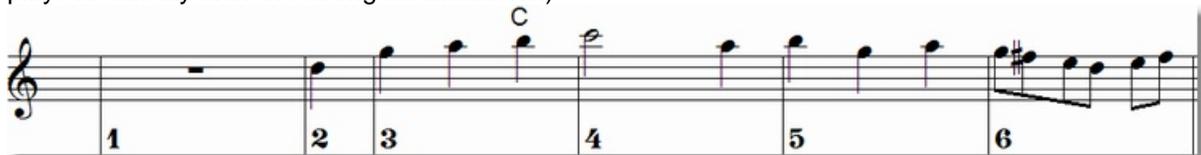
display, the notes are placed at not intended positions and that makes the score sheet hard to read.

This operation does not try to correct errors, instead it uses given **measure markers** to move these tact markers to correct logical score sheet positions, without changing the playing noticeably. The score display will become better the more measure markers are placed precisely.

Example of editing measure markers



Example of an improvisation that was fit to score sheet with this operation (while the MIDI song still plays identically after the strong modifications!)



Format of measure markers

Measure markers must be entered into the MIDI file before using this operation. Measure markers are simple text command, which must be inserted at correct position where measures start and which contain only measure meter information:

Example

4/4

3/4

1/4

6/8

Hint: The measure information must not contain any characters or other symbols in front of this

number format (e.g. T4/4 or 4:4 is not valid). The measure information may contain other text (separated by a space) or line separator behind the text (e.g. 1/4 Measure 1). Only one measure information is allowed per field and position (4/4 3/4 is not valid).

Insert measure markers

Inserting measure markers works best with [karaoke editor](#), when the song does not contain lyrics yet and when you choose a channel that contains notes which can be used easy to identify a position where a measure should start. Simply enter the measure information (e.g. 4/4) at the position where the measure (and often also a note starts). If there is already a karaoke text at same position then it is best to insert a new karaoke text position with same position where you can enter the measure information.

Also [synchronization editor](#) can be used to enter measure markers, but make sure that you click at time where the measure starts very precise, which often does not work so exact. If the song already contains karaoke text then this text might disturb synchronization of measures.

Hint: You need to enter at least two measure markers in a row, that GNMIDI can estimate the measure duration and guess missing measure markers self. Optimal results require inserting all measure markers. When tempo of song changes then additional measure markers are required that GNMIDI knows the new measure duration.

Hint: If no or too few measure markers are inserted then a message will be displayed that more measure information is necessary.

Hint: GNMIDI tries to modify logical improvised measure length to correct measure length by changing tempo of this measure without changing duration of the improvisation measure MIDI Tempo is limited to a certain value range 8-500 bpm. Wrong or extreme measure information could lead to extreme cases where a very short part must be extended to a very large part (e.g. played part 1/96 to displayed part 4/4) which could only be reached using a tempo range outside of the valid tempo range, and so in this case GNMIDI must give up. Try to play the improvisation very close to the original or imaginary score sheet and try to place all measure markers exactly. Don't force to fit very short played parts into large displayed measures and reverse.

Hint: The first measure and also an incomplete rest of a measure between start of midi song and first measure info is very critical. Also this remaining part must fit into a valid measure, a score sheet does not allow unaligned beginnings. For this area it is recommended to use shorter measure length (e.g. 1/4) to reduce the risk of tempo range overflow.

Warning: MIDI file assumes measure info 4/4 for any part before first explicit set meter info!

Testing

After generating a new MIDI song load this new file into your MIDI sequencer or any software that can display or print score sheets from midi file input.

Check if the notes are displayed at correct positions, if you have the original score sheets then compare it with the displayed results.

If notes are positioned inexactly within a measure (e.g. notes that should be at beginning of a measure are starting early or late) then try to correct the measure markers for this measure position (move or modify existing measure information or insert a new correct measure marker if it was missing at this position).

Hint: GNMIDI does not display score sheet, you need a 3rd party MIDI software that is able to display and print score sheets.

Hint: Real playing errors are not corrected with this operation. If two notes should be displayed at same measure position but were played with inexact timing then this error could be visible in score

sheet after fitting. Try to play more precise or correct the playing errors with a MIDI sequencer or using ASCII conversion.

3.98 Monophon channels

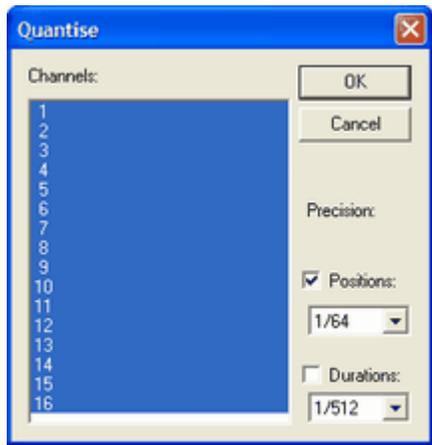
Poly phon channels play more notes at a time. This operation reduces and **removes overlapping notes** so that each channel plays only single note at a time. Pedal MIDI controllers are removed, since they influence polyphony too.

Mono phon melody is used in some applications like phone melodies, search by melody (e.g. parsons code).

Hint:

Create a MIDI file from a poly phon MIDI song by removing all channels except melody channel and then use this operation to ensure that the melody channel will be mono phon.

3.99 Quantise notes



Quantise

This operation aligns command positions and note duration at given raster. Quantising is usually used to correct minimal imprecise note starts (which are caused during live playing).

Channels

This operation can be used with all channels or single channel or some channels at once. Select the channel numbers in the list box.

Positions

The command positions will be set to closest matching raster position. Raster precision will be specified in score sheet pause units (e.g. 1/64). This is optional and set by default.

Durations

Note durations will be aligned to an own raster that is given in score sheet note units (e.g. 1/16). Chosen raster size is minimal note duration too. This is optional and off by default.

Hint:

Pitchbend commands are not aligned. Use only small raster size when a channel uses Pitchbend commands.

3.100 Compare MIDI files

Choose second MIDI file

Open dialog is used to choose a second MIDI file.

Active MIDI file (in current active window) will be compared against the second MIDI file.

Result

A text file will be generated and opened as result that contains two columns (one per file) with different MIDI commands.

Hint: Comparing could take longer if MIDI files are not very similar (since all differences will be listed in the file).

Example: only tempo was changed in a MIDI file

```
FILE c:\midi\deutsch\LIEBESSP.MID      FILE C:\Temp\new00170.mid
Trk 1      Unit      0 Tempo 100.000 bpm      Trk 1      Unit      0 Tempo 110.000 bpm
```

Example: Some text was modified in a file

```
FILE c:\midi\deutsch\LIEBESSP.MID      FILE C:\Temp\new00176.mid
Trk 3      Unit      0 Text type 1 length 56 @Tsequenced by Günter Nagler (...
Trk 3      Unit      0 Text type 1 length 46
@Tsequenced by Günter Nagler
Trk 4      Unit      0 Text type 3 length 6 Melody      Trk 4      Unit      0 Text type 3 length 7 Melodie
Trk 5      Unit      0 Text type 3 length 9 whistling      Trk 5      Unit      0 Text type 3 length 8 Pfeiffen
Trk 6      Unit      0 Text type 3 length 13 horse running      Trk 6      Unit      0 Text type 3 length 12
Pferdegalopp
```

Example: PSR META chords were added to a file

```
FILE c:\midi\deutsch\LIEBESSP.MID      FILE C:\Temp\new00178.mid
guessed by {GNMIDI}      Trk 14      Unit      0 Text type 3 length 48 Chords
00 58 46 30 31 00 11      Trk 14      Unit      0 Meta type 7F length 9 43 7B
01 33 00 7F 7F      Trk 14      Unit      0 Meta type 7F length 7 43 7B
01 45 00 7F 7F      Trk 14      Unit      480 Meta type 7F length 7 43 7B
01 33 00 7F 7F      Trk 14      Unit      576 Meta type 7F length 7 43 7B
01 41 08 7F 7F      Trk 14      Unit      672 Meta type 7F length 7 43 7B
01 33 00 7F 7F      Trk 14      Unit      768 Meta type 7F length 7 43 7B
01 45 00 7F 7F      Trk 14      Unit      1056 Meta type 7F length 7 43 7B
01 37 00 7F 7F      Trk 14      Unit      1152 Meta type 7F length 7 43 7B
01 41 08 7F 7F      Trk 14      Unit      1248 Meta type 7F length 7 43 7B
01 37 00 7F 7F      Trk 14      Unit      1344 Meta type 7F length 7 43 7B
01 41 08 7F 7F      Trk 14      Unit      1440 Meta type 7F length 7 43 7B
01 37 00 7F 7F      Trk 14      Unit      1536 Meta type 7F length 7 43 7B
01 41 08 7F 7F      Trk 14      Unit      1632 Meta type 7F length 7 43 7B
01 37 00 7F 7F      Trk 14      Unit      1728 Meta type 7F length 7 43 7B
01 41 08 7F 7F      Trk 14      Unit      1824 Meta type 7F length 7 43 7B
```

Trk 14	Unit 1920	Meta type 7F	length 7	43 7B 01 37 00 7F 7F
01 00 22 7F 7F	Trk 14	Unit 2016	Meta type 7F	length 7 43 7B
01 41 08 7F 7F	Trk 14	Unit 2112	Meta type 7F	length 7 43 7B
01 33 00 7F 7F	Trk 14	Unit 2304	Meta type 7F	length 7 43 7B
01 45 00 7F 7F	Trk 14	Unit 2400	Meta type 7F	length 7 43 7B
01 33 00 7F 7F	Trk 14	Unit 2496	Meta type 7F	length 7 43 7B
01 41 08 7F 7F	Trk 14	Unit 2592	Meta type 7F	length 7 43 7B
01 33 00 7F 7F	Trk 14	Unit 2688	Meta type 7F	length 7 43 7B
01 45 00 7F 7F	Trk 14	Unit 2976	Meta type 7F	length 7 43 7B
01 37 00 7F 7F	Trk 14	Unit 3072	Meta type 7F	length 7 43 7B
01 41 08 7F 7F	Trk 14	Unit 3168	Meta type 7F	length 7 43 7B
01 37 00 7F 7F	Trk 14	Unit 3264	Meta type 7F	length 7 43 7B
01 41 08 7F 7F	Trk 14	Unit 3360	Meta type 7F	length 7 43 7B
01 37 00 7F 7F	Trk 14	Unit 3456	Meta type 7F	length 7 43 7B
01 41 08 7F 7F	Trk 14	Unit 3552	Meta type 7F	length 7 43 7B
01 37 00 7F 7F	Trk 14	Unit 3648	Meta type 7F	length 7 43 7B
01 41 08 7F 7F	Trk 14	Unit 3744	Meta type 7F	length 7 43 7B
01 37 00 7F 7F	Trk 14	Unit 3840	Meta type 7F	length 7 43 7B
01 41 08 7F 7F	Trk 14	Unit 3936	Meta type 7F	length 7 43 7B
01 33 00 7F 7F	Trk 14	Unit 4224	Meta type 7F	length 7 43 7B
01 41 08 7F 7F	Trk 14	Unit 4320	Meta type 7F	length 7 43 7B
01 33 00 7F 7F	Trk 14	Unit 4416	Meta type 7F	length 7 43 7B
01 45 00 7F 7F	Trk 14	Unit 4512	Meta type 7F	length 7 43 7B
01 33 00 7F 7F	Trk 14	Unit 4608	Meta type 7F	length 7 43 7B
01 45 08 7F 7F	Trk 14	Unit 4704	Meta type 7F	length 7 43 7B
01 33 00 7F 7F	Trk 14	Unit 4800	Meta type 7F	length 7 43 7B
01 45 00 7F 7F	Trk 14	Unit 4896	Meta type 7F	length 7 43 7B
01 37 00 7F 7F	Trk 14	Unit 4992	Meta type 7F	length 7 43 7B
01 41 0A 7F 7F	Trk 14	Unit 5088	Meta type 7F	length 7 43 7B
01 37 00 7F 7F	Trk 14	Unit 5184	Meta type 7F	length 7 43 7B
01 41 08 7F 7F	Trk 14	Unit 5280	Meta type 7F	length 7 43 7B
01 37 00 7F 7F	Trk 14	Unit 5376	Meta type 7F	length 7 43 7B
01 41 08 7F 7F	Trk 14	Unit 5472	Meta type 7F	length 7 43 7B
01 37 00 7F 7F	Trk 14	Unit 5568	Meta type 7F	length 7 43 7B
01 45 00 7F 7F	Trk 14	Unit 5664	Meta type 7F	length 7 43 7B
01 37 00 7F 7F	Trk 14	Unit 5856	Meta type 7F	length 7 43 7B
01 41 08 7F 7F	Trk 14	Unit 5952	Meta type 7F	length 7 43 7B
01 37 00 7F 7F	Trk 14	Unit 6048	Meta type 7F	length 7 43 7B

```

Trk 14      Unit 6144 Meta type 7F length 7 43 7B 01 41 08 7F 7F
01 37 00 7F 7F      Trk 14      Unit 6240 Meta type 7F length 7 43 7B
01 41 08 7F 7F      Trk 14      Unit 6336 Meta type 7F length 7 43 7B
01 37 00 7F 7F      Trk 14      Unit 6432 Meta type 7F length 7 43 7B
01 41 08 7F 7F      Trk 14      Unit 6528 Meta type 7F length 7 43 7B
01 45 08 7F 7F      Trk 14      Unit 6912 Meta type 7F length 7 43 7B
01 45 00 7F 7F      Trk 14      Unit 7008 Meta type 7F length 7 43 7B
01 45 08 7F 7F      Trk 14      Unit 7104 Meta type 7F length 7 43 7B
01 41 08 7F 7F      Trk 14      Unit 7200 Meta type 7F length 7 43 7B
01 45 08 7F 7F      Trk 14      Unit 7296 Meta type 7F length 7 43 7B
01 33 00 7F 7F      Trk 14      Unit 7392 Meta type 7F length 7 43 7B
01 45 08 7F 7F      Trk 14      Unit 7488 Meta type 7F length 7 43 7B
01 41 08 7F 7F      Trk 14      Unit 7584 Meta type 7F length 7 43 7B
01 45 08 7F 7F      Trk 14      Unit 7680 Meta type 7F length 7 43 7B
01 41 08 7F 7F      Trk 14      Unit 7776 Meta type 7F length 7 43 7B
01 33 00 7F 7F      Trk 14      Unit 7872 Meta type 7F length 7 43 7B
01 41 08 7F 7F      Trk 14      Unit 7968 Meta type 7F length 7 43 7B
Trk 14      Unit 7968 EndTrk

```

3.101 Compare all MIDI files

This batch operation searches for similar or identical MIDI files in two folders.

Source folders

Instead of choosing one source and one destination folder (as most other batch operations ask for) you must choose two source folders. The MIDI files within these folders are not modified.

Hint: Only this batch operation allows that both folders are identical folder in order to search for similar MIDI files within one folder. In this case both folder path names must be identically, else it will be assumed that they are different folders and that would cause finding many duplicate files.

Duration

Before comparing starts it will collect MIDI files and some MIDI information from both folders. Then it will compare those MIDI files that have similiar information. The duration for this depends on number of MIDI files in the folder (and sub folders). It could take more time.

Result

At end it generates a text file and displays it with notepad editor, which contains the list of identical or similar MIDI files.

Differences

To get the difference in more detail you could [compare two MIDI files](#).

3.102 Rename MIDI files by song titles

The first track titles will be read from each MIDI file of selected folder (and sub folders). The title will be modified to be compatible for filename use and a file extension .mid will be added.

Danger: The original filenames will be renamed! Only use this function with copies of your original files.

Hint:

First track title should contain reasonable song title that the generated file names will help to find your MIDI songs within archive.

Hint: This operation can not handle unicode characters if used in song title.

Character translation:

Spaces are replaced against underscores _. Except few special characters from German and French language special characters are replaced against _ . Some characters that are not allowed in file names are replaced too.

Limit name length for compatibility:

modified title will be cut at maximum length 100 characters.

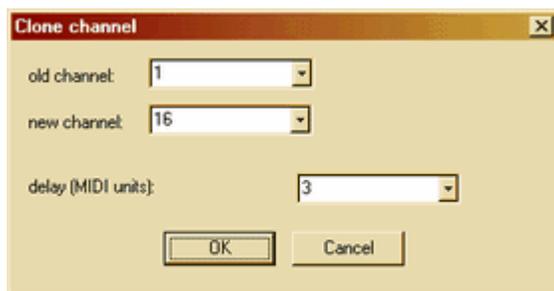
3.103 Rename track names to their MIDI filename

The file names (without path and file extension) of all MIDI files in selected folder (and sub folders) will be set as first track titles.

Danger: The files will be modified! Only use copies of your original files to work with this operation!

Hint: Your file names should contain song name or artist/song name.

3.104 Clone channel



Clone

This operation copies an original channel to a new channel (which should not be free yet) and supports a small delay of the copied MIDI commands. This function will often be used to enhance melody channel by duplication. The delay causes a kind of echo effect.

Old Channel

Der alte Kanal muss in der Originaldatei existieren und MIDI Befehle enthalten. Falls mehrere Spuren diesen Kanal benutzen wird nur aus der Spur mit den meisten Befehlen kopiert.

New Channel

The new channel should not contain MIDI commands before this operation is used. If all channels are already in use then one less important channel needs to be deleted before.

Delay (MIDI units)

All copied MIDI commands can be moved by the specified number of MIDI units back (a pause will be inserted at beginning). Standard value 0 does not cause a delay. Negative values move the commands towards beginning of the song (pauses are removed). In this case there should be an existing pause at beginning of original channel which can be reduced.

3.105 Clean MIDI song

Clean

This operation removes unnecessary (unused) MIDI commands before first note plays and removes repeated (identical) commands during note area.

Sort

MIDI commands during initial area before first note plays (except drum intro notes) are sorted when they are at same MIDI unit.

Distribute

MIDI commands during initial area before first note plays are distributed by one midi unit and different unit ranges for each channel (if there is enough time till first note available) so that the number of initial MIDI commands that occur at same time are reduced.

You might turn off sort completely or partly using following settings in [GNMID.LINI](#) file:

```
[Settings]
MidiCleanAllowSort=0
MidiCleanAllowModifyTime=0
MidiCleanAllowDistributeInitTime=0
```

Hint:

Some critical MIDI commands are not moved or removed (e.g. system exclusive, data controller, all controls off, RPN controller).

Hint:

This operation is only usable for not more than 16 MIDI channels. If your MIDI device supports more than 16 channels and your MIDI song uses them then you should not use this function.

Hint:

Check if the resulting file sounds identical to your original file.

3.106 Remove chords

This function removes chords of some common chord formats used in MIDI files:

- text, lyric, marker chords with following formatting: [Am] (Am) {Am} "Am" %Am DO RE SOL
(Warning: some words like A, Am used without [], (), {}, %, "", b, #, aug, sus, ... are not removed, they could be lyrics too)
- PSR Meta chords
- BIAB chords

- Wordbox sysex chords

Removing chords might be necessary if you need to add chords in a certain format and the song already contains chords in an other format.

3.107 Convert MIDI to (.csv) spreadsheet

This converter generates a table in format CSV that contains the MIDI content of a MIDI file (for viewing and modifying with external applications like Microsoft Excel, Microsoft Works, [OpenOffice.org](#) ...).

separator: comma (,) or semicolon (;)

character set: ASCII

special characters: are converted into HTML entities (e.g.  ;).

Hint: The separator can be defined in [GNMIDI.ini file](#)

```
[Settings]
CSVColumnSeparator=;
```

Settings: in [menu settings](#) you can decide if related NoteOn/NoteOff pairs should be combined to a Note line.

Hint: Since version 2.56 the .csv table contains new columns: **Time** (for all commands) and **Duration** (for Note, NoteOn commands), which present the position and note duration in milliseconds, **NoteNumber** (for Note, NoteOn, NoteOff commands), which show the MIDI note number corresponding to the note name.

Hint: The .csv file can be modified and [may be converted back to a MIDI file](#).

Hint: If during modification of the table a value in column **Unit** will be removed then the conversion to MIDI file will use the value from column **Time** of same line for the position calculation.

Hint: If during modification of the table a value from a line Note Zeile the value in column **Length** will be removed then the conversion to MIDI file will use the value from column **Duration** of this line for the note length calculation.

Hint: If during modification of the table the entry in column NoteName is missing or invalid then the number 0-127 from column NoteNumber will be used for Note, NoteOn, NoteOff commands.

3.108 Convert (.csv) spreadsheet to MIDI file

This operation converts tables back to MIDI file that were generated by operation [Convert MIDI to \(.csv\) spreadsheet](#).

The .csv file can be viewed or modified with a spreadsheet application (e.g. Microsoft Excel, Microsoft Works, [OpenOffice.org](#))

separator: comma , or semicolon ;

character set: ASCII

special characters: will be treated as characters from Windows ANSI character set

HTML entities: some HTML entities (e.g.  ;) are converted back to a special character.

3.109 Future operations

New utilities might be added from time to time. Check out one of the following websites for new program versions

- <http://www.gnmidi.com> (Canada)
- <http://www.gnmidi.at> (Austria)

Send ideas for future operations to info@gnmidi.com (it can't be guaranteed that the ideas will be implemented in GNMIDI software).

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The GNMIDI Shareware may be tested free for 14 days. Download the demo from <http://www.gnmidi.com> . We hope that you will enjoy GNMIDI as much as many satisfied users have told us yet. If you like GNMIDI please register the software.

Günter Nagler,
GNMIDI author