

How to write music with LaTeX (../how-to-write-music-with-latex/)

Contents

- It is possible to write music with LaTeX. My girlfriend was quite surprised of this, so I decided to ~~write a little~~ [write a little](#) tutorial show some examples.
- Symbolstutorial
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Symbols ¶

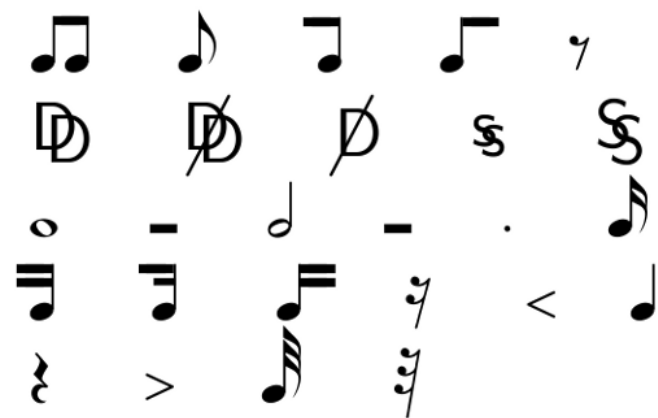


(../images/2012/08/music-notes.png)

Some basic music symbols

```
\documentclass[a4paper,12pt]{article}
\usepackage{wasysym}
\begin{document}
\eighthnote ~~~ \halfnote ~~~ \twonotes ~~~
\quarternote ~~~ $\natural$ ~~~ $\flat$ ~~~
\end{document}
```

The harmony package offers some additional symbols:



(../images/2012/08/latex-music-harmony.png)

music symbols form the LaTeX-harmony package

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Category

The Web
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Contact



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```
\documentclass[a4paper,12pt]{article}
\usepackage{harmony}

\begin{document}
  \noindent \AAcht ~~~ \Acht ~~~ \AchtBI
  \DD ~~~ \DDohne ~~~ \Dohne ~~~ \Ds ~~~
  \Ganz ~~~ \GaPa ~~~ \Halb ~~~ \HaPa ~~~
  \SechBL ~~~ \SechBl ~~~ \SechBR ~~~ \
  \ViPa ~~~ \VM ~~~ \Zwdr ~~~ \ZwPa
\end{document}
```


thoma.de)



([https://github.com](https://github.com/MartinThoma)
/MartinThoma)

([http://stackoverflow.com](http://stackoverflow.com/users/562769/martin-thoma)
/users
/562769
/martin-
thoma)

musixtex ¶

This is a clef:  - a simple example
for the L^AT_EX package musixtex.

(../images/2012/08/latex-musixtex.png)

musixtex example

```
\documentclass[a4paper,12pt]{article}
\usepackage{musixtex}

\begin{document}
  \noindent This is a clef:
  \begin{music}\trebleclef\end{music}
  - a simple example\\
  for the \LaTeX{} package musixtex.
\end{document}
```

ABC ¶

Preparation ¶

You have to have ABC installed. For Ubuntu-Users:

```
sudo apt-get install abcm2ps
```

Example ¶

```
\documentclass[a4paper]{article}
\usepackage{abc}

\begin{document}
  You can create music sheets within the
  \begin{abc}[name=c-dur]
    X: 1 % start of header
    K: C % scale: C major
    "Text"c2 G4 | (3FED c4 G2 |
  \end{abc}
\end{document}
```

compile with

```
pdflatex --shell-escape myTexFile.tex
```

to get this:

You can create music sheets within the abc-environment:



(../images/2012/07/abc-example.png)

ABC example for creating music sheets with LaTeX

LilyPond ¶

Preparation ¶

Make sure that you have installed GNU LilyPond
(http://en.wikipedia.org/wiki/GNU_LilyPond) and LaTeX.

Ubuntu-Users have to type

```
sudo apt-get install lilypond
```

to install Lilypond.

Example ¶

From the Documentation ¶

Save the following source as `lilybook.lytex`:

```

\documentclass[a4paper]{article}

\begin{document}
  Documents for \verb+lilypond-book+ may
  For example,

  \begin{lilypond}
    \relative c' {
      c2 g'2 \times 2/3 { f8 e d } c'2
    }
  \end{lilypond}

  Options are put in brackets.
  \begin[fragment,quote,staffsize=26,ver
    c'4 f16
  \end{lilypond}

  Larger examples can be put into a sepa
  with \verb+\lilypondfile+.
\end{document}

```

Compile it with these commands:

```

lilypond-book --output=out --pdf lilybook.
cd out/
pdflatex lilybook
mv lilybook.pdf ../lilybook.pdf
cd ..
rm -rf out

```

For simplification, you can save this as `compile.sh`,
execute `chmod +x compile.sh` and now you only have
to enter `./compile.sh` to generate the PDF.

Output:

Documents for `lilypond-book` may freely mix music and text. For example,



Options are put in brackets.

`c'4 f16`



Larger examples can be put into a separate file, and introduced with `\lilypondfile`.
(If needed, replace `screech-boink.ly` by any `.ly` file you put in the same di-
rectory as this file.)

(../images/2012/07/lilypond-example.png)

Lilypond example - output was a PDF

Further Reading ¶

- ABC
 - ABC-environment Documentation (<http://www.tug.org/texlive/Contents/live/texmf-dist/doc/latex/abc/abc.pdf>)
- LilyPond
 - LilyPond — Learning Manual (<http://lilypond.org/doc/v2.14/Documentation/learning/index#top>)
 - Lilypond 2.14 Documentation (<http://lilypond.org/doc/v2.14/Documentation/essay.pdf>)
 - Lilypond: Free, Beautiful Music Notation Engraving for Anyone (<http://createdigitalmusic.com/2010/05/lilypond-free-beautiful-music-notation-engraving-for-anyone/>) by Peter Kirn
 - Including Lilypond in LaTeX (<http://stackoverflow.com/q/10152486/562769>)
 - Beautiful example (<http://tex.stackexchange.com/a/69804/5645>)
- Creating a custom songbook with the songs package (<http://tex.stackexchange.com/questions/19813/creating-a-custom-songbook-with-the-songs-package>)
- MusiXTeX (<http://homepage2.nifty.com/tonomu/score/musixtex/musixtexe.html>)

If you've made some more complex examples with LaTeX, I'd be happy if you added them in the comments.

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hello, you can follow and just run under Linux or FreeBSD the following makefile : <https://github.com/spartrek...>

[^](#) | [v](#) • [Reply](#) • [Share](#) ›**Dan** • 2 years ago

Thanks a lot! Is there a way to compile it faster? For example to include the [compile.sh](#) in "Texmaker", so I can just press the button and texmaker make all the different steps by it own?

And - sometimes it says

! I can't find file `lilybook'.

<*> lilybook

without I changed a lot in the file. Any idea why that happens?

[^](#) | [v](#) • [Reply](#) • [Share](#) ›**James Fore** • 3 years ago

It's turning out to be quite an epic odyssey to compile even just one of these simple examples, with a trap at every step of the way. TeXworks automatically adds its own directory to the Windows 8.1 PATH variable, but Lilypond does not. I have an abc2mps folder with a bunch of DLLs, ABC, EPS and FMT files

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