

realbookchords

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Typesetting jazz chords the ‘Real Book’ way

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English documentation

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1 License and Requirements

REALBOOKCHORDS is placed under the terms of the LaTeX Project Public License, version 1.3 or later (<http://www.latex-project.org/lppl.txt>). It has the status “maintained”.

In order to function properly a rather up to date version of the `l3kernel`¹ is needed. **REALBOOKCHORDS** also needs `xparse` (part of the `l3packages`² bundle) and `fontspec`³ for proper font support.

REALBOOKCHORDS does not offer the fonts it uses. You need to install them on your system by yourself and then use this package with $\text{X}\text{E}\text{L}\text{A}\text{T}\text{E}\text{X}$ or $\text{L}\text{u}\text{a}\text{L}\text{A}\text{T}\text{E}\text{X}$ to be able to use its features.

¹ CTAN: `l3kernel` ² CTAN: `l3packages` ³ CTAN: `fontspec`

2 About

On his website Jochen Pietsch offers three fonts [Pie] which mimic the styles of the famous The Real Book⁴ [Varoo] and its successor The New Real Book [Varo9]:

- New Real Book Chords
- Real Book Title
- RealBook Chords

REALBOOKCHORDS does *not* offer these fonts. Instead it offers easy to use macros to use the first font with $\text{X}_{\text{Y}}\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$ or $\text{L}_{\text{u}}\text{a}\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$ if it is installed on your system. Especially a macro for the intuitive usage of the sometimes rather hidden symbols for the creation of chord symbols is offered.


3 Setup

REALBOOKCHORDS defines a few options which can be globally set using

► `\RBCsetup{<options>}`

The options follow a key/value system like in many other $\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$ packages.

4 The Fonts

Now first let's take a look at the fonts. You can get them⁵ at <http://notation.jochenpietsch.de/>. They are placed under the Creative Commons Attribution-Noncommercial-Share Alike 3.0 Unported License . Jochen Pietsch who designed the fonts says there that he doesn't develop the fonts any further so we have to live with any shortcomings:

Please note, these fonts are still in beta-stage, so you might note some missing characters, or you may need to tweak the layout. Because my interest in this project has decreased, I have no plans to do any further improvements. *Jochen Pietsch*

The license of the fonts forbids to use them for commercial purposes. This is not strictly true for this package but as it is rather useless without them, well...

This documentation defines new font families for two of the three fonts, the third one is defined by **REALBOOKCHORDS**.

```
1 % from the preamble of this document
2 \newfontfamily\RealBookTitle{Real Book Title}
3 \newfontfamily\RealBookChords{RealBook Chords}
```

⁴ The original illegal edition is no longer available, though. I am uncertain if the 6th edition still uses the same handwritten font. ⁵ Just in case the website isn't reachable any more or the fonts are no longer distributed there you can also get a copy from me. In this case just send me an email.

The package provides this font family switch:

- `\NewRealBookChords`
activate the font family “New Real Book Chords”

4.1 New Real Book Chords

The most important font for this package is “New Real Book Chords”. The font has only a limited number of characters since its purpose is to build chords. This also means that it has some unexpected symbols. But have a look for yourself:

```
1 \normalsize\NewRealBookChords ABCDEFGHIJKLMNOPQRSTUVWXYZ \\
2 a cdefghijklmnopqrstuvwxyz 0123456789 \\
3 .,:!/*='\"&()[]+-\textordmasculine\% \\
4 b\{a}\ss{\} \#{\~{a}}? < > ; {\makeatletter @} \_ \\
5 \'{a} \aa{\} \'{a} \^{a} \^{A} \^{A} \^{A} \~{A} \~{A} \AA{} \AE{} \'{E} \'{E}
  \'{E}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ
a cdefghijklmnopqrstuvwxyz 0123456789
.,:!*='\"&()[]+-\textordmasculine\%
b b # # MA MI omit ada dim.
b # b # 5 9 11 13 9 11 13 7 13 13
b # # b 5 5 5 5 9 9 9 6 11 13

4.2 Real Book Title

The following example is simply to show you the font, `REALBOOKCHORDS` does not use it at all.

```
1 \normalsize\RealBookTitle ABCDEFGHIJKLMNOPQRSTUVWXYZ \\
2 abcdefghijklmnopqrstuvwxyz 01234 6 -/_
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ 01234 6 -/_

4.3 RealBook Chords

The following example is simply to show you the font, `REALBOOKCHORDS` does not use it at all.

```
1 \normalsize\RealBookChords ABCDEFG ab s 01 34567 9 \#()+-\textasciicircum
```

ABCDEFG ab s 01 34567 9 \#()+-\textasciicircum

5 Shortcomings

Since the font is missing some symbols, for instance the uppercase delta for a maj7 chord or the striked through o (similar to ø) for a half-diminished chord, for one thing this package does workarounds and else we have to live with it.

There are plans for the future to extend this package for the use with the more professional font available here: <http://www.jazzfont.com/>. But for that I'll first have to be able to buy the font and experiment with it a bit. *Finis coronat opus.*

6 Typesetting Chords

It's time to get to the important stuff: the chords. To typeset them there is one basic command:

► `\rbc[<options>]{<chord specs>}`

The `{<chord specs>}` will be explained in detail in the rest of the documentation.

6.1 Basics

The basic usage is pretty self-explanatory:

```
\rbc{Ab9} \rbc{Cmi} \rbc{E+} \rbc{Gma9} \rbc{F\#mi9} \rbc{Db13}
```

$A^{b9} C_{mi} E^+ G_{ma}^9 F^{\#mi} D^{b13}$

Note that this is nearly but not exactly the same as using the font directly:

```
\NewRealBookChords Ab9 Cmi E+ Gma9 F\#mi9 Db13
```

$A^{b9} C_{mi} E^+ G_{ma}^9 F^{\#mi} D^{b13}$

The font provides the characters \mathbf{mi} and \mathbf{ma} . `\rbc` replaces the strings `mi` and `ma` with them. You have also seen that a `b` gives b for a flat root and `\#` gives $^{\#}$ for a sharp root.

6.2 Extensions

One very important aspect of “jazzy” chords is tensions. The basic tensions are clear – just insert the intervall number:

```
\rbc{G7} \rbc{A9} \rbc{F11} \rbc{E13} \rbc{B7+}
```

$G^7 A^9 F^{11} E^{13} B^{7+}$

Often enough one needs altered extensions. `REALBOOKCHORDS` defines macros to access the characters b and $^{\#}$ easily:

- `\b`^b
minor/diminished extension
- `\f`
alias for `\b`
- `\k`[#]
major/augmented extension
- `\s`
alias for `\k`

Note that these macros are only valid inside `\rbc` so that the usual meaning of, e.g., `\b` still holds outside. Now let's see them in action:

```
1 \rbc{Fmi7(\b5)} \rbc{G7(\k9)} \rbc{Eb7(\b9)} \rbc{Db9(\k11)} \rbc{Cmi7(5-)}
Fmi7(b5) G7(#9) Eb7(b9) Db9(#11) Cmi7(5-)
```

There are also some “extension descriptions”:

```
1 \rbc{Cmaj9} \rbc{Bbadd9} \rbc{Absus4} \rbc{Galt} \rbc{F7omit3} \rbc{E\#dim}
2 \rbc{Daug}
Cmaj9 Bbadd9 Absus4 Galt. F7omit3 E#dim. Daug
```

Since they're not all available as single characters, **REALBOOKCHORDS** fakes the missing ones. This results in inconsistent looks. That's why **REALBOOKCHORDS** provides an option so that all six are faked:

- `use-fake-symbols = true|false` Default: false
switch between original characters and faked ones.

```
1 \RBCsetup{use-fake-symbols}
2 \rbc{Cmaj9} \rbc{Bbadd9} \rbc{Absus4} \rbc{Galt} \rbc{F7omit3} \rbc{E\#dim}
3 \rbc{Daug}
Cmaj9 Bbadd9 Absus4 Galt. F7omit3 E#dim. Daug
```

6.3 Double Extensions

Sometimes more than one altered extension needs to be indicated. The “New Real Book Chords” font provides a number of characters for this purpose. **REALBOOKCHORDS** provides five macros to access them easily:

- ▶ `\bb{<intervalls>}`
`\rbc{\bb{13,9}}` $\left(\begin{smallmatrix} 13 \\ 9 \end{smallmatrix}\right)$
- ▶ `\ff`
alias for `\bb`
- ▶ `\bk{<intervalls>}`
`\rbc{\bk{13,9}}` $\left(\begin{smallmatrix} 13 \\ 9 \end{smallmatrix}\right)$
- ▶ `\fs`
alias for `\bk`
- ▶ `\bs`
alias for `\bk`
- ▶ `\kb{<intervalls>}`
`\rbc{\kb{13,9}}` $\left(\begin{smallmatrix} 13 \\ 9 \end{smallmatrix}\right)$
- ▶ `\sf`
alias for `\kb`
- ▶ `\sb`
alias for `\kb`
- ▶ `\kk{<intervalls>}`
`\rbc{\kk{13,9}}` $\left(\begin{smallmatrix} 13 \\ 9 \end{smallmatrix}\right)$
- ▶ `\ss`
alias for `\kk`
- ▶ `\dt[<alterations>]{<intervalls>}`
`\dt[bb]{13,9}` $\left(\begin{smallmatrix} 13 \\ 9 \end{smallmatrix}\right)$

There are four different combinations of alterations. For each there is a macro, for some of these there are also aliases since “k” (German: “Kreuz”) may not be the natural choice for everyone. The fifth macro also provides a possibility to access to the for combinations but also enables to only alterate only one of the two extensions. Unlike the first four macros `\dt` is *not only inside* `\rbc` defined but can also be used in normal text.

All possible [`<alterations>`] are shown below:

```

1 \dt{13,9} \dt{bb}{13,9} \dt{bk}{13,9} \dt{kb}{13,9} \dt{kk}{13,9}
2 \dt{B}{13,9} \dt{K}{13,9} \dt{b}{13,9} \dt{k}{13,9}
3
4 % second possible representation:
5 \dt{13,9} \dt{ff}{13,9} \dt{fs}{13,9} \dt{sf}{13,9} \dt{ss}{13,9}
6 \dt{F}{13,9} \dt{S}{13,9} \dt{f}{13,9} \dt{s}{13,9}
7
8 % third possible representation:
9 \dt{13,9} \dt{bb}{13,9} \dt{bs}{13,9} \dt{sb}{13,9} \dt{ss}{13,9}
10 \dt{B}{13,9} \dt{S}{13,9} \dt{b}{13,9} \dt{s}{13,9}


$$\begin{pmatrix} 13 \\ 9 \end{pmatrix} \begin{pmatrix} b13 \\ b9 \end{pmatrix} \begin{pmatrix} b13 \\ \#9 \end{pmatrix} \begin{pmatrix} \#13 \\ b9 \end{pmatrix} \begin{pmatrix} \#13 \\ \#9 \end{pmatrix} \begin{pmatrix} b13 \\ 9 \end{pmatrix} \begin{pmatrix} \#13 \\ b9 \end{pmatrix} \begin{pmatrix} 13 \\ \#9 \end{pmatrix} \begin{pmatrix} 13 \\ \#9 \end{pmatrix}$$


$$\begin{pmatrix} 13 \\ 9 \end{pmatrix} \begin{pmatrix} b13 \\ b9 \end{pmatrix} \begin{pmatrix} b13 \\ \#9 \end{pmatrix} \begin{pmatrix} \#13 \\ b9 \end{pmatrix} \begin{pmatrix} \#13 \\ \#9 \end{pmatrix} \begin{pmatrix} b13 \\ 9 \end{pmatrix} \begin{pmatrix} \#13 \\ b9 \end{pmatrix} \begin{pmatrix} 13 \\ \#9 \end{pmatrix} \begin{pmatrix} 13 \\ \#9 \end{pmatrix}$$


$$\begin{pmatrix} 13 \\ 9 \end{pmatrix} \begin{pmatrix} b13 \\ b9 \end{pmatrix} \begin{pmatrix} b13 \\ \#9 \end{pmatrix} \begin{pmatrix} \#13 \\ b9 \end{pmatrix} \begin{pmatrix} \#13 \\ \#9 \end{pmatrix} \begin{pmatrix} b13 \\ 9 \end{pmatrix} \begin{pmatrix} \#13 \\ b9 \end{pmatrix} \begin{pmatrix} 13 \\ \#9 \end{pmatrix} \begin{pmatrix} 13 \\ \#9 \end{pmatrix}$$


```

The intervall numbers for both extensions are given seperated with a comma. If the combination is present as a character like for example $\begin{pmatrix} 13 \\ 9 \end{pmatrix}$ then the character is used else it is faked:
 $\begin{pmatrix} 13 \\ 9 \end{pmatrix}$
 $\begin{pmatrix} 13 \\ 6 \end{pmatrix}$

- `fake-double-extensions = true|false` Default: false
when true *all* double extension numbers are faked.
- `double-extensions-brackets = true|false` Default: false
enclose the double extensions in brackets or not.

There is a shortcut for the `double-extensions-brackets` option: `\rbc*`. The brackets can also be set explicitly using `[` and `]`.

```

1 \rbc{Eb7\bk{9,5}} \rbc[double-extensions-brackets=false]{C\dt{9,6}} \rbc*{C\
dt{9,6}} \rbc*{C[\bk{13,9}]}


$$E^{b7}_{\begin{pmatrix} b9 \\ \#5 \end{pmatrix}} C^9_6 C^9_6 C^{\begin{pmatrix} b13 \\ \#9 \end{pmatrix}}$$


```

6.4 Bass Notes

If you want to indicate a different bass note for the chord you simply seperate the main chord from the bass note with a slash. Please note: if the bass note is a flat or sharp note you have to enclose it in braces:

```

1 \rbc{Cmi7/{Bb}} \rbc{C7/G} \rbc{C/G} \rbc{E7/{G\#}}


$$C^{mi7}_{B^b} C^7_G C_G E^7_{G^\#}$$


```

6.5 Disabling the Parsing

If you don't want all the parsing of the `\rbc` command but simply access the “New Real Book Chords” font you can of course use the font family switch presented earlier:

```
1 \NewRealBookChords Ama7(omit3) [major] Ama7(omit3) (major)
```

You can also use the following option:

- `parse = true|false` Default: true
switch off the parsing.

```
1 \texttt{parse=true}: \rbc{Ama7(omit3) [major]} \\  
2 \texttt{parse=false}: \rbc[parse=false]{Ama7(omit3) [major]}  
  
parse=true: Ama7(omit3) (major)  
parse=false: Ama7(omit3) (major)
```

7 Song Titles

- `\SongTitle[<left>]{<center>}[<right>]`
A centered title with options to put text to the left and the right of it.
- `songtitle-format-left = <code>` Default: `\NewRealBookChords\footnotesize`
Format of the text to the left.
- `songtitle-format-center = <code>` Default: `\NewRealBookChords\Large\centering`
Format of the text in the center.
- `songtitle-format-right = <code>` Default: `\NewRealBookChords\footnotesize`
Format of the text to the right.
- `songtitle-pos-left = l|c|r` Default: l
Alignment of the text to the left.
- `songtitle-pos-right = l|c|r` Default: l
Alignment of the text to the right.

As an example: the following code ...

```
1 \SongTitle{Begin The Beguine}  
2 \par\vskip\baselineskip  
3 \SongTitle[Medium Swing Tempo]{Begin The Beguine}  
4 \par\vskip\baselineskip  
5 \SongTitle{Begin The Beguine}[Cole Porter\arr.: Jerry Sears]
```



```

6 \par\vskip\baselineskip
7 \RBCsetup{songtitle-pos-right=r}
8 \SongTitle{Begin The Beguine}[Cole Porter\arr.: Jerry Sears]

```

... produces this:

	<i>Begin The Beguine</i>	
<i>Medium Swing Tempo</i>	<i>Begin The Beguine</i>	
	<i>Begin The Beguine</i>	<i>Cole Porter</i> <i>arr.: Jerry Sears</i>
	<i>Begin The Beguine</i>	<i>Cole Porter</i> <i>arr.: Jerry Sears</i>

8 See it in Action

Let's use the `\rbc` command together with `musixtex`⁶ for a real example. Both `fontspec` which is loaded by `REALBOOKCHORDS` and `musixtex` define the command `\breve`. The definition by `fontspec` takes place `\AtBeginDocument`.

A similar problem arises when `musixtex` is used together with `biblatex`⁷: they both define `\addspace`.

You can do something like the following to get them to work together:

```

1 \documentclass{article}
2 \usepackage{musixtex}
3 \let\mbreve\breve
4 \let\breve\relax
5 \usepackage{realbookchords}
6 \begin{document}
7   do stuff, e.g. restore the 'musixtex' definition of \breve
8 \end{document}

```

Or – even easier – load `REALBOOKCHORDS` with the `load-musixtex` option and let it handle things. However, this doesn't always work as expected, yet.

```

1 \documentclass{article}
2 \usepackage[load-musixtex]{realbookchords}
3 \begin{document}
4   do stuff, e.g. restore the 'musixtex' definition of \breve
5 \end{document}

```

⁶ CTAN: `musixtex` ⁷ CTAN: `biblatex`

Note that this option should be used as a package option and *not* via `\RBCsetup`.

If you use this option `REALBOOKCHORDS` loads `musixtex` and sets `\breve` to the meaning of `fontspec`. You have the possibility to access `musixtex`'s version:

- ▶ `\musixtexbreve`
musixtex's original definition.
- ▶ `\fontspecbreve`
fontspec's original definition.
- ▶ `breve-version = fontspec|musixtex`
sets `\breve` to the definition of the specified package.
- ▶ `\musixtexaddspace`
`REALBOOKCHORDS` undefines `musixtex`'s `\addspace` but stores the definition in `\musixtexaddspace`. You'll probably need to restore `musixtex`'s definition. If you don't use `biblatex` in the same document there shouldn't be a problem.
- ▶ `addspace-version = musixtex`
restores `musixtex`'s definition.

Let's take the first eight bars of Kenny Durham's "Blue Bossa" as an example:

```
1 \begin{music}
2 \let\addspace\musixtexaddspace
3 \parindent0pt \generalmeter{\meterfrac44}\setsign{1}{-3}\nobarnumbers
4 \SongTitle{Blue Bossa}[\Kenny Durham]
5 \startpiece
6 \addspace{.5\afterruleskip}%
7 \Notes\qa g\en
8 \doublebar % 1
9 \Notes\Uptext{\rbc{Cmi6}}\qlp n\en
10 \Notes\ca l\en
11 \Notes\qa k\en
12 \Notes\isluru0j\ca j\en
13 \bar % 2
14 \Notes\tslur0j\hlp j\en
15 \Notes\qa i\en
16 \bar % 3
17 \Notes\Uptext{\rbc{Fmi7}}\ha h\en
18 \Notes\qlp n\en
19 \Notes\isluru0m\ca m\en
20 \bar % 4
21 \NOTES\tslur0m\wh m\en
22 \bar % 5
23 \Notes\Uptext{\rbc{Dmi7(\b5)}}\qlp m\en
24 \Notes\ca{lk}\qa j\en
25 \Notes\isluru0i\ca i\en
26 \bar % 6
27 \NOTES\Uptext{\rbc{G7(\k5)}}\tslur0i\hlp i\en
```

```

28 \Notes\qa h\en
29 \bar % 7
30 \NOTes\Uptext{\rbc{Cmi6}}\ha g\en
31 \Notes\qlp m\isluru0l\ca l\en
32 \bar % 8
33 \NOTes\tslur0l\wh l\en
34 \endpiece
35 \end{music}

```

Blue Bossa Kenny Durham

References

- [Pie] Jochen Pietsch. *Jazz Fonts*. URL: http://notation.jochenpietsch.de/index_e.html (visited on 05/10/2012).
- [Varoo] Various. *The Real Book Volume I. C Edition*. 6th edition. Hal Leonard Publishing Corporation, Jan. 1, 2000. ISBN: 978-0634060380.
- [Varo9] Various. *The New Real Book Volume I. C Edition*. 1st edition. Ama Verlag, Feb. 12, 2009. ISBN: 978-0961470142.

Implementation

```

35 \ProvidesExplPackage
36   {realbookchords}
37   {2013/04/29}
38   {0.1}
39   {Typesetting jazz chords the ‘Real Book’ way}
40
41 \msg_new:nnnn { realbookchords } { wrong-engine }
42 { ‘realbookchords’~needs~either~to~be~run~with~XeLaTeX~or~with~LuaLaTeX. }
43 {
44   ‘realbookchords’~needs~either~to~be~run~with~XeLaTeX~or~with~LuaLaTeX.~
45   Since~you’re~using~something~different~I~will~abort!
46 }

```

```

47
48 \bool_if:nF { \xetex_if_engine_p: || \luatex_if_engine_p: }
49   { \msg_error:nn { realbookchords } { wrong-engine } \tex_endinput:D }
50
51 \RequirePackage { xparse , l3keys2e }
52
53 \tl_new:N \l__rbc_tmpa_tl
54 \tl_new:N \l__rbc_tmpb_tl
55
56 % Options:
57 \bool_new:N      \l__rbc_tensions_brackets_bool
58 \bool_set_true:N \l__rbc_tensions_brackets_bool
59 \bool_new:N      \l__rbc_fake_symbols_bool
60 \bool_new:N      \l__rbc_parse_chord_bool
61 \bool_set_true:N \l__rbc_parse_chord_bool
62 \bool_new:N      \l__rbc_fake_double_numbers_bool
63 \bool_new:N      \l__rbc_load_musixtex_bool
64
65 \keys_define:nn { rbc }
66   {
67     double-extensions-brackets .bool_set:N = \l__rbc_tensions_brackets_bool ,
68     double-extensions-brackets .default:n  = true ,
69     use-fake-symbols           .bool_set:N = \l__rbc_fake_symbols_bool ,
70     use-fake-symbols           .default:n  = true ,
71     fake-double-extensions     .bool_set:N = \l__rbc_fake_double_numbers_bool ,
72     fake-double-extensions     .default:n  = true ,
73     parse                      .bool_set:N = \l__rbc_parse_chord_bool ,
74     parse                      .default:n  = true ,
75     load-musixtex              .code:n     =
76       \bool_set_true:N \l__rbc_load_musixtex_bool
77       \@ifpackageloaded{musixtex}{}
78       {
79         \RequirePackage { musixtex }
80         \cs_set_eq:NN \musixtexbreve \breve
81         \cs_undefine:N \breve
82         \cs_set_eq:NN \musixtexaddspace \addspace
83         \cs_undefine:N \addspace
84       }
85   }
86
87 % double tensions
88 \cs_new:Npn \rbc_bb:n #1 { \rbc_read_double_tensions:nn { bb } { #1 } }
89 \cs_new:Npn \rbc_kk:n #1 { \rbc_read_double_tensions:nn { kk } { #1 } }
90 \cs_new:Npn \rbc_bk:n #1 { \rbc_read_double_tensions:nn { bk } { #1 } }
91 \cs_new:Npn \rbc_kb:n #1 { \rbc_read_double_tensions:nn { kb } { #1 } }
92
93 \cs_new:Npn \rbc_b: { \B }
94 \cs_new:Npn \rbc_k: { ? }
95

```

```

96 \prop_new:N \l__rbc_double_tensions_signs_prop
97 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { bb } { \'{a} }
98 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { ff } { \'{a} }
99 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { kk } { \aa{ } }
100 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { ss } { \aa{ } }
101 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { bk } { \'{a} }
102 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { fs } { \'{a} }
103 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { bs } { \'{a} }
104 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { kb } { \^{a} }
105 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { sf } { \^{a} }
106 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { sb } { \^{a} }
107 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { B } { \rbc b: }
108 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { F } { \rbc b: }
109 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { K } { \rbc k: }
110 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { S } { \rbc k: }
111 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { b } { \'{a} }
112 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { f } { \'{a} }
113 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { k } { \~{a} }
114 \prop_put:Nnn \l__rbc_double_tensions_signs_prop { s } { \~{a} }
115
116 \prop_new:N \l__rbc_double_tensions_numbers_prop
117 \prop_put:Nnn \l__rbc_double_tensions_numbers_prop { 5,5 } { \'{A} }
118 \prop_put:Nnn \l__rbc_double_tensions_numbers_prop { 9,5 } { \'{A} }
119 \prop_put:Nnn \l__rbc_double_tensions_numbers_prop { 11,5 } { \^{A} }
120 \prop_put:Nnn \l__rbc_double_tensions_numbers_prop { 13,5 } { \~{A} }
121 \prop_put:Nnn \l__rbc_double_tensions_numbers_prop { 7,6 } { \'{E} }
122 \prop_put:Nnn \l__rbc_double_tensions_numbers_prop { 9,9 } { \^{A} }
123 \prop_put:Nnn \l__rbc_double_tensions_numbers_prop { 11,9 } { \AA{ } }
124 \prop_put:Nnn \l__rbc_double_tensions_numbers_prop { 13,9 } { \AE{ } }
125 \prop_put:Nnn \l__rbc_double_tensions_numbers_prop { 13,11 } { \'{E} }
126 \prop_put:Nnn \l__rbc_double_tensions_numbers_prop { 13,13 } { \'{E} }
127
128 \cs_new_protected:Npn \rbc_read_double_tensions:nn #1#2
129 {
130   \bool_if:NT \l__rbc_tensions_brackets_bool { [ ] }
131   \prop_get:NnNT \l__rbc_double_tensions_signs_prop { #1 } \l__rbc_tmpa_tl
132   { \tl_use:N \l__rbc_tmpa_tl \tl_clear:N \l__rbc_tmpa_tl }
133   \bool_if:NTF \l__rbc_fake_double_numbers_bool
134   { \rbc_fake_double_numbers:w #2 \q_stop }
135   {
136     \prop_get:NnNTF \l__rbc_double_tensions_numbers_prop { #2 } \l__rbc_tmpb_tl
137     { \tl_use:N \l__rbc_tmpb_tl \tl_clear:N \l__rbc_tmpb_tl }
138     { \rbc_fake_double_numbers:w #2 \q_stop }
139   }
140   \bool_if:NT \l__rbc_tensions_brackets_bool { ] }
141 }
142
143 \cs_new_protected:Npn \rbc_dt:w
144 { \peek_meaning:NTF [ { \rbc_dt_auxi:w } { \rbc_dt_auxii:n } }

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```

145
146 \cs_new:Npn \rbc_dt_auxi:w [#1]#2
147   { \rbc_read_double_tensions:nn { #1 } { #2 } }
148
149 \cs_new:Npn \rbc_dt_auxii:n #1
150   { \rbc_read_double_tensions:nn { } { #1 } }
151
152 \cs_new:Npn \rbc_fake_double_numbers:w #1,#2 \q_stop
153   {
154     \box_move_up:nn { .0ex } { \hbox:n { \addfontfeatures { Scale=.9 } #1 } }
155     \tex_kern:D -.5ex
156     \box_move_down:nn { .85ex } { \hbox:n { \addfontfeatures { Scale=.9 } #2 } }
157   }
158
159 % main command:
160 \cs_new_protected:Npn \rbc_rbc:n #1
161   {
162     \group_begin:
163     \cs_set_eq:NN \bb \rbc_bb:n
164     \cs_set_eq:NN \ff \rbc_bb:n
165     \cs_set_eq:NN \bk \rbc_bk:n
166     \cs_set_eq:NN \fs \rbc_bk:n
167     \cs_set_eq:NN \bs \rbc_bk:n
168     \cs_set_eq:NN \kb \rbc_kb:n
169     \cs_set_eq:NN \sf \rbc_kb:n
170     \cs_set_eq:NN \sb \rbc_kb:n
171     \cs_set_eq:NN \kk \rbc_kk:n
172     \cs_set_eq:NN \ss \rbc_kk:n
173     \cs_set_eq:NN \dt \rbc_dt:w
174     \cs_set_eq:NN \b \rbc_b:
175     \cs_set_eq:NN \f \rbc_b:
176     \cs_set_eq:NN \k \rbc_k:
177     \cs_set_eq:NN \s \rbc_k:
178     \tl_set:Nn \l__rbc_tmpa_tl { #1 }
179     \prop_map_inline:Nn \l__rbc_symbols_prop
180       {
181         \tl_set_rescan:Nnn \l__rbc_tmpb_tl { } { ##1 }
182         \tl_replace_all:Nvn \l__rbc_tmpa_tl { \l__rbc_tmpb_tl } { ##2 }
183       }
184     \NewRealBookChords \tl_use:N \l__rbc_tmpa_tl
185     \group_end:
186   }
187 \cs_generate_variant:Nn \tl_replace_all:Nnn { NV }
188
189 % bass notes:
190 \cs_new:Npn \rbc_bass_note:n #1
191   { / \box_move_down:nn { 1.25ex } { \hbox:n { \addfontfeatures { Scale=.75 } #1 } }
192   }

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193 \cs_new_protected:Npn \rbc_is_bass:
194   { \peek_meaning:NT \rbc_bass_note:n { \tex_kern:D -.35ex } }
195
196 % fake symbols:
197 \cs_new:Npn \rbc_fake_symbol:nn #1#2
198   {
199     \bool_if:nTF { \tl_if_blank_p:n { #2 } || \l__rbc_fake_symbols_bool }
200     {
201       \box_move_up:nn { 1.05ex }
202       { \hbox:n { \addfontfeatures { Scale=.565 } #1 \tex_kern:D .1ex } }
203     }
204     { #2 }
205   }
206
207 \cs_new_protected:Npn \__rbc_peek_mima:
208   {
209     \peek_meaning:NTF >
210     { \tex_kern:D -.4ex }
211     { \peek_meaning:NTF > { \tex_kern:D -.4ex } }
212   }
213
214 \group_begin:
215 \char_set_catcode_letter:N \@
216 \cs_gset:Npn \rbc_real_add: { @ }
217 \group_end:
218
219 % symbols; strings to be replaced when parse=true
220 \prop_new:N \l__rbc_symbols_prop
221 \prop_put:Nnn \l__rbc_symbols_prop { omit } { \rbc_fake_symbol:nn { omit } { ; } }
222 \prop_put:Nnn \l__rbc_symbols_prop { dim } { \rbc_fake_symbol:nn { dim. } { \_ } }
223 \prop_put:Nnn \l__rbc_symbols_prop { maj } { \rbc_fake_symbol:nn { maj } { } }
224 \prop_put:Nnn \l__rbc_symbols_prop { ma } { < }
225 \prop_put:Nnn \l__rbc_symbols_prop { mi } { > }
226 \prop_put:Nnn \l__rbc_symbols_prop { alt } { \rbc_fake_symbol:nn { alt. } { } }
227 \prop_put:Nnn \l__rbc_symbols_prop { sus } { \rbc_fake_symbol:nn { sus } { } }
228 \prop_put:Nnn \l__rbc_symbols_prop { add } { \rbc_fake_symbol:nn { add } { \rbc_
  real_add: } }
229 \prop_put:Nnn \l__rbc_symbols_prop { aug } { \rbc_fake_symbol:nn { aug } { } }
230 \prop_put:Nnn \l__rbc_symbols_prop { b } { b \__rbc_peek_mima: }
231 \prop_put:Nnn \l__rbc_symbols_prop { \# } { \# \__rbc_peek_mima: }
232 \prop_put:Nnn \l__rbc_symbols_prop { * } { * }
233 \prop_put:Nnn \l__rbc_symbols_prop { \k } { ? }
234 \prop_put:Nnn \l__rbc_symbols_prop { \s } { ? }
235 \prop_put:Nnn \l__rbc_symbols_prop { \b } { \b }
236 \prop_put:Nnn \l__rbc_symbols_prop { \f } { \b }
237 \prop_put:Nnn \l__rbc_symbols_prop { 6/9 } { \% }
238 \prop_put:Nnn \l__rbc_symbols_prop { / } { \rbc_bass_note:n }
239 \prop_put:Nnn \l__rbc_symbols_prop { + } { + }
240 \prop_put:Nnn \l__rbc_symbols_prop { - } { - }

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241 \prop_put:Nnn \l__rbc_symbols_prop { ° } { \textordmasculine }
242 \prop_put:Nnn \l__rbc_symbols_prop { \dim } { \textordmasculine }
243 \prop_put:Nnn \l__rbc_symbols_prop { ( } { ( }
244 \prop_put:Nnn \l__rbc_symbols_prop { ) } { ) }
245 \prop_put:Nnn \l__rbc_symbols_prop { 0 } { 0 \rbc_is_bass: }
246 \prop_put:Nnn \l__rbc_symbols_prop { 1 } { 1 \rbc_is_bass: }
247 \prop_put:Nnn \l__rbc_symbols_prop { 2 } { 2 \rbc_is_bass: }
248 \prop_put:Nnn \l__rbc_symbols_prop { 3 } { 3 \rbc_is_bass: }
249 \prop_put:Nnn \l__rbc_symbols_prop { 4 } { 4 \rbc_is_bass: }
250 \prop_put:Nnn \l__rbc_symbols_prop { 5 } { 5 \rbc_is_bass: }
251 \prop_put:Nnn \l__rbc_symbols_prop { 6 } { 6 \rbc_is_bass: }
252 \prop_put:Nnn \l__rbc_symbols_prop { 7 } { 7 \rbc_is_bass: }
253 \prop_put:Nnn \l__rbc_symbols_prop { 8 } { 8 \rbc_is_bass: }
254 \prop_put:Nnn \l__rbc_symbols_prop { 9 } { 9 \rbc_is_bass: }
255
256 % user commands:
257 % the chords:
258 \NewDocumentCommand \rbc { som }
259 {
260   \group_begin:
261     \IfBooleanT { #1 } { \bool_set_false:N \l__rbc_tensions_brackets_bool }
262     \IfNoValueF { #2 } { \keys_set:nn { rbc } { #2 } }
263     \bool_if:NTF \l__rbc_parse_chord_bool
264       { \rbc_rbc:n { #3 } }
265       { \NewRealBookChords #3 }
266   \group_end:
267 }
268
269 % double extensions:
270 \NewDocumentCommand \dt { om }
271 {
272   \group_begin:
273     \NewRealBookChords
274     \rbc_read_double_tensions:nn { #1 } { #2 }
275   \group_end:
276 }
277
278 % song titles:
279 \tl_new:N \l__rbc_songtitle_format_left_tl
280 \tl_set:Nn \l__rbc_songtitle_format_left_tl
281 { \NewRealBookChords\footnotesize }
282 \tl_new:N \l__rbc_songtitle_format_center_tl
283 \tl_set:Nn \l__rbc_songtitle_format_center_tl
284 { \NewRealBookChords\Large\centering }
285 \tl_new:N \l__rbc_songtitle_format_right_tl
286 \tl_set:Nn \l__rbc_songtitle_format_right_tl
287 { \NewRealBookChords\footnotesize }
288 \tl_new:N \l__rbc_songtitle_position_left_tl
289 \tl_set:Nn \l__rbc_songtitle_position_left_tl { l }

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290 \tl_new:N \l__rbc_songtitle_position_right_tl
291 \tl_set:Nn \l__rbc_songtitle_position_right_tl { l }
292
293 \keys_define:nn { rbc }
294 {
295     songtitle-format-left .tl_set:N = \l__rbc_songtitle_format_left_tl ,
296     songtitle-format-center .tl_set:N = \l__rbc_songtitle_format_center_tl ,
297     songtitle-format-right .tl_set:N = \l__rbc_songtitle_format_right_tl ,
298     songtitle-pos-left .tl_set:N = \l__rbc_songtitle_position_left_tl ,
299     songtitle-pos-right .tl_set:N = \l__rbc_songtitle_position_right_tl
300 }
301
302 \NewDocumentCommand \SongTitle { omo }
303 {
304     \IfNoValueF { #1 }
305     {
306         \hbox_overlap_right:n
307         {
308             \tl_use:N \l__rbc_songtitle_format_left_tl
309             \tabular { @{} \l__rbc_songtitle_position_left_tl } #1 \endtabular
310         }
311     }
312     \parbox [ b ] { \dim_eval:n { \linewidth - \parindent } }
313     { \tl_use:N \l__rbc_songtitle_format_center_tl #2 }
314     \IfNoValueF { #3 }
315     {
316         \hbox_overlap_left:n
317         {
318             \tl_use:N \l__rbc_songtitle_format_right_tl
319             \tabular { @{} \l__rbc_songtitle_position_right_tl } #3 \endtabular
320         }
321     }
322 }
323
324 % setup
325 \NewDocumentCommand \RBCsetup { m } { \keys_set:nn { rbc } { #1 } }
326
327 \ProcessKeysOptions { rbc }
328
329 \RequirePackage { fontspec }
330
331 \cs_set_eq:NN \fontspecbreve \breve
332
333 \cs_set:Nn \rbc_new_font_family:Nnn { \newfontfamily #1 [ #2 ] { #3 } }
334
335 \rbc_new_font_family:Nnn \NewRealBookChords
336 {
337     BoldFont = New~Real~Book~Chords ,
338     ItalicFont = New~Real~Book~Chords ,

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339     BoldItalicFont = New~Real~Book~Chords ,
340     SlantedFont     = New~Real~Book~Chords ,
341     BoldSlantedFont = New~Real~Book~Chords ,
342     SmallCapsFont   = New~Real~Book~Chords ,
343   }
344   { New~Real~Book~Chords}
345
346   \keys_define:nn { rbc }
347   {
348     breve-version .choice: ,
349     breve-version / musixtex .code:n = \cs_set_eq:NN \breve \musixtexbreve ,
350     breve-version / fontspec .code:n = \cs_set_eq:NN \breve \fontspecbreve ,
351     addspace-version .choice: ,
352     addspace-version / musixtex .code:n =
353       \bool_if:NT \l__rbc_load_musixtex_bool
354       { \cs_set_eq:NN \addspace \musixtexaddspace }
355   }
356
357   \tex_endinput:D
358
359   2013/04/25 v 0.1beta-a - minor adjustments
360   2013/04/29 v 0.1      - added aliases f for b (flat) and s for k (sharp)

```

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