guitarchordschemes

v0.3a 2013/05/01

Guitar Chord and Scale Tablatures with TikZ

Clemens NIEDERBERGER

https://bitbucket.org/cgnieder/guitarchordschemes/
contact@mychemistry.eu

English documentation
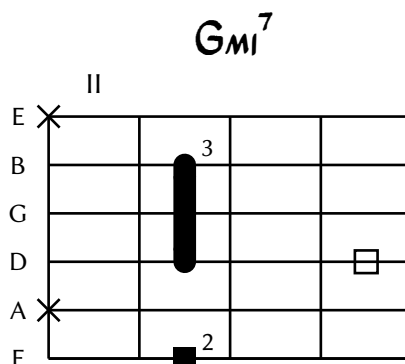
Contents

1 License and Requirements

GUITARCHORDSCHEMES 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".

  GUITARCHORDSCHEMES loads the packages TikZ [TWF10], etoolbox [Leh11] and pgfopts [Wri11]. It also loads the TikZ libraries shapes.misc, arrows and calc. Depending on an option it

1

also loads realbookchords [Nie13]. This package is not yet published on CTAN[1] and thus not part of any TeX distribution. Until it is you can find it at `https://bitbucket.org/cgnieder/realbookchords/`. See section 4 for details on this option.

2 The Commands

This package more or less provides a single command:

▸ `\chordscheme[<options>]`

▸ `\scales[<option>]`

These commands set the frame for the chord and scale tablatures and can be used to create sheets for manually writing down tablatures:

Similarly `\scales` creates a frame with two more frets:

2.1 Options for `\chordscheme`

The [options] argument is where the actual details for a chord happen. These are the available ones for `\chordscheme`:

▸ `name = <chordsymbol>`
Set the chord symbol. This option accepts a list of entries.

---

[1] the Comprehensive TeX Archive Network

▶ `position = <position>`
   Set the position for the first of the four frets.

▶ `finger = <fret>/<string>:<label>`
   Specify the finger positions for a chord. This option accepts a list of entries. The `:<label>` is optional.

▶ `root = <fret>/<string>:<label>`
   The same as finger but uses a square instead of a circle to indicate that this finger is playing the root of the chord. This option accepts a list of entries. The `:<label>` is optional.

▶ `show-root = <fret>/<string>`
   Specify positions of the root that are *not* part of the actual chord but are somewhere in the vicinity of it on the guitar neck. This option accepts a list of entries.

▶ `barre = <fret>/<string range>:<label>`
   Specify a barré position for a chord. The `<string range>` part must contain a two string numbers separated with a dash. This option accepts a list of entries. The `:<label>` is optional.

▶ `ring = <string>`
   Specify open strings. This option accepts a list of entries.

▶ `mute = <string>`
   Specify muted/un-played strings This option accepts a list of entries.

   Let's take a look at a few examples:

```
1  \chordscheme[
2    name      = G ,
3    position  = I ,
4    finger    = {2/5:1} ,
5    root      = {3/6:2, 3/1:4} ,
6    ring      = {2,3,4}
7  ]
```
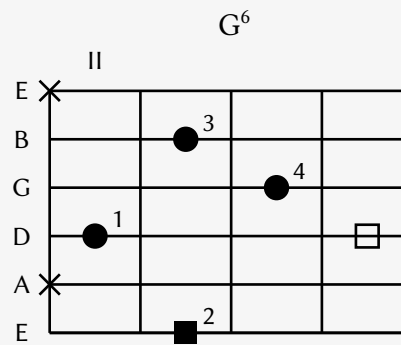

Or a more "jazzy" chord:

```
1  \chordscheme[
2    name     = G\textsuperscript{6} ,
3    position = II ,
4    finger   = {1/4:1, 3/3:4, 2/2:3} ,
5    root     = 2/6:2 ,
6    show-root = 4/4 ,
7    mute     = {1,5}
8  ]
```

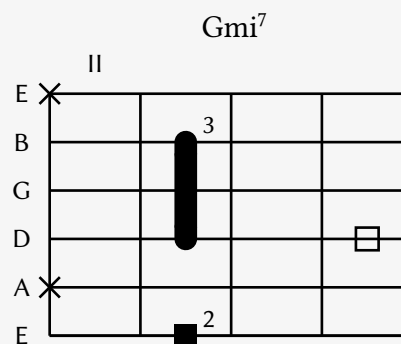G^6

One with a barré:

```
1  \chordscheme[
2    name     = Gmi\textsuperscript{7} ,
3    position = II ,
4    barre    = 2/2-4:3 ,
5    show-root = 4/4 ,
6    root     = 2/6:2 ,
7    mute     = {1,5}
8  ]
```

Gmi^7

2.2 Options for \scales

The [options] argument for \scales are similar to the ones for \chordscheme:

▸ name = <title>
  Set a title for the scale.

▸ position = <position>
  Set the position for the first of the six frets.

▸ finger = <fret>/<string>:<label>
  Specify the finger positions for the scale. This option accepts a list of entries. The :<label> is optional.

▸ root = <fret>/<string>:<label>
  The same as finger but uses a square instead of a circle to indicate that this finger is playing the root of the scale. This option accepts a list of entries. The :<label> is optional.

▸ fingering = type 1|type 1A|type 2|type 3|type 4
  Set a whole predefined fingering. The types correspond to ones taught in Leavitt's *A Modern Method for Guitar* [Lea66]. This option assumes a ionic scale a places the roots correspondingly.

▸ `fingering*` = type 1|type 1A|type 2|type 3|type 4
  The same as `fingering` but not scale is assumed and no roots are indicated.

▸ `fingering?` = type 1|type 1A|type 2|type 3|type 4
  The same as `fingering*` but also no labels for the fingers are given.

Let's see an example:

```
1  \scales[
2    name       = F-major (Fingering Type~1A) ,
3    position  = I ,
4    fingering = type 1A
5  ]
```

F-major (Fingering Type 1A)

An example for `fingering*`:

```
1  \scales[
2    name       = Fingering Type~3 ,
3    fingering* = type 3
4  ]
```
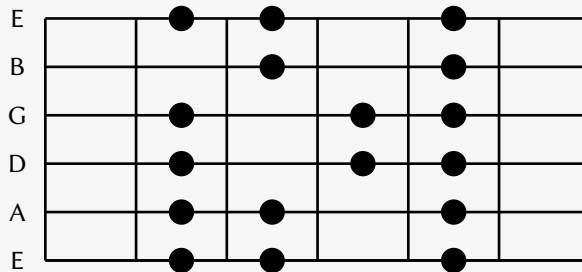
Fingering Type 3

Now an example for `fingering?`:

```
1  \scales[
2    name      = Fingering Type~2 ,
3    fingering? = type 2
4  ]
```


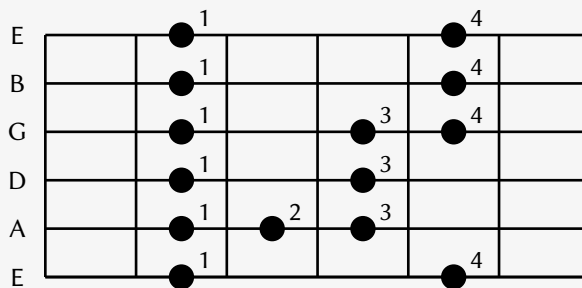At last an example for an explicitly set scale:

```
1  \scales[
2    finger = {
3      2/1:1,                  5/1:4,
4      2/2:1,                  5/2:4,
5      2/3:1,          4/3:3, 5/3:4,
6      2/4:1,          4/4:3,
7      2/5:1, 3/5:2, 4/5:3,
8      2/6:1,                  5/6:4
9    }
10  ]
```


3 Options

There are quite a number of options determining the layout of the tablatures. They can either be set as package options or via the setup command:

▶ \setchordscheme{<options>}

Below every option and its corresponding default setting is described.

▶ `x-unit` = `<dim>`   Default: `.8cm`
  The basic x unit for the TikZ picture the chord scheme is set in.

▶ `y-unit` = `<dim>`   Default: `.8cm`
  The basic y unit for the TikZ picture the chord scheme is set in.

▶ `finger-format` = `<TeX code>`   Default: `\sffamily\small`
  The format the numbers for the fingers are typeset with.

▶ `finger-format+` = `<TeX code>`   (initially empty)
  Code to be appended to `finger-format`.

▶ `position-format` = `<TeX code>`   Default: `\sffamily`
  The format the number for the position is typeset with.

▶ `position-format+` = `<TeX code>`   (initially empty)
  Code to be appended to `position-format`.

▶ `name-format` = `<TeX code>`   Default: `\large`
  The format the chord name/symbol is typeset with.

▶ `name-format+` = `<TeX code>`   (initially empty)
  Code to be appended to `name-format`.

▶ `string-name-format` = `<TeX code>`   Default: `\sffamily\small`
  The format the names of the strings are typeset with.

▶ `string-name-format+` = `<TeX code>`   (initially empty)
  Code to be appended to `string-name-format`.

▶ `line-width` = `<dim>`   Default: `1pt`
  The line width used for all lines drawn in the chord scheme.

▶ `finger-radius` = `<dim>`   Default: `.1875`
  The radius of the circles that represent the fingers in multiples of `x-unit`. Also determines the
  size of the root markers and the barré.

▶ `finger-x-offset` = `<dim>`   Default: `.375`
  The x offset of the number with respect to the circle in multiples of `x-unit`.

▶ `finger-y-offset` = `<dim>`   Default: `.375`
  The y offset of the number with respect to the circle in multiples of `y-unit`.

▶ `finger-style` = `<tikz style>`   Default: `fill`
  The TikZ style the circles representing the fingers are drawn with. This is equivalent to
  `\tikzset{finger style/.style={<tikz style>}}`.

▸ root-style = <tikz style>   Default: fill
   The TikZ style the squares representing the roots are drawn with. This is equivalent to
   \tikzset{root style/.style={<tikz style>}}.

▸ show-root-style = <tikz style>   Default: draw
   The TikZ style the squares representing the "ghost roots" are drawn with. This is equivalent
   to \tikzset{show root style/.style={<tikz style>}}.

▸ ringing-style = <tikz style>   Default: draw
   The TikZ style the circles representing the open string markers are drawn with. This is equiv-
   alent to \tikzset{ringing style/.style={<tikz style>}}.

▸ muted-style = <tikz style>   Default: {cross out,draw}
   The TikZ style the nodes representing muted strings are drawn with. This is equivalent to
   \tikzset{muted style/.style={<tikz style>}}.

▸ tuning = <comma list of string names>   Default: {E,B,G,D,A,E}
   The tuning.

▸ use-rbc = true|false   Default: false
   If set to true the name will be set in the command \rbc from the realbookchords. If this option
   is not used as a package option then make sure you also load realbookchords [Nie13]. Please
   be aware that the latter requires XᴇLᴬTᴇX or LuaLᴬTᴇX. See section 4 for details.

4 Using realbookchords

Setting \setchordscheme{use-rbc=true} or using the same as package option will set the
chord names/symbols in realbookchords' command \rbc.

   In order to use this option you need to install the realbookchords package [Nie13]. I expect
it to go to CTAN eventually but until then you can get it at https://bitbucket.org/cgnieder/
realbookchords/. The package uses Jochen Pietsch's "New Real Book" font [Pie] for typeset-
ting the chord symbols which you can get at http://notation.jochenpietsch.de/. It is placed
under the Creative Commons Attribution-Noncommercial-Share Alike 3.0 Unported License
©(i)(s)(o).

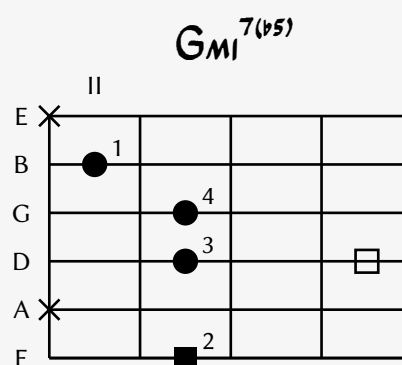   realbookchords requires that you compile your document with XᴇLᴬTᴇX or LuaLᴬTᴇX.

   Here is an example of how the chord symbol looks with realbookchords:

```
1  \setchordscheme{use-rbc=true}
2  \chordscheme[
3    name      = Gmi7(\b5) ,
4    position  = II ,
5    finger    = {1/2:1, 2/3:4, 2/4:3} ,
6    show-root = {4/4} ,
7    root      = {2/6:2} ,
8    mute      = {1,5}
9  ]
```

References

[Lea66]   William G. Leavitt. *A Modern Method for Guitar*. Vol. 1. Berklee Press Publications, Boston, 1966.

[Leh11]   Philipp Lehman. etoolbox. Version 2.1, Jan. 21, 2011. URL: http://mirror.ctan.org/macros/latex/contrib/etoolbox.

[Nie13]   Clemens Niederberger. realbookchords. Version 0.1, Apr. 29, 2013. URL: https://bitbucket.org/cgnieder/guitarchordschemes/.

[Pie]   Jochen Pietsch. *Jazz Fonts*. URL: http://notation.jochenpietsch.de/index_e.html (visited on 05/10/2012).

[TWF10]   Till Tantau, Mark Wibrow, and Christian Feuersänger. Ti*k*Z/pgf. Version 2.10, Feb. 25, 2010. URL: http://sourceforge.net/projects/pgf/ (visited on 04/18/2013).

[Wri11]   Joseph Wright. pgfopts. Version 2.1, June 2, 2011. URL: http://mirror.ctan.org/macros/latex/contrib/pgfopts.

Index