

GUITARCHORDSCHEMES

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guitar chord schemes and fingering scales with TikZ

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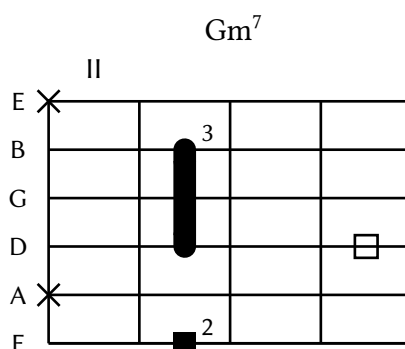


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1 License and Requirements

Permission is granted to copy, distribute and/or modify this software under the terms of the L^AT_EX Project Public License (LPPL), version 1.3 or later (<http://www.latex-project.org/lppl.txt>). The software has the status “maintained.”

`GUITARCHORDSCHEMES` loads the packages TikZ [Tan13], etoolbox [Leh11] and pgfopts [Wri11]. It also loads the TikZ libraries `shapes.misc`, `arrows` and `calc`.

2 The Commands

This package more or less provides a single command:

`\chordscheme[<options>]`
Typeset a guitar chord scheme.

`\scales[<option>]`
Typeset a fingering scale.

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

```
1 \chordscheme
```

E				
B				
G				
D				
A				
E				

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

```
1 \scales
```

E					
B					
G					
D					
A					
E					

2.1 Options for `\chordscheme`

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

`fret-number = {<number>}` Default: 4

Introduced in
version 0.6

The number of frets that are drawn. This number must be at least 4. The option should be set as first option since it influences other options.

name = {⟨*chordsymbol*⟩}

Set the chord symbol. This option accepts a comma separated list of entries.

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 comma separated 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 comma separated 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 comma separated 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 comma separated list of entries.

mute = {⟨*string*⟩}

Specify muted/un-played strings. This option accepts a comma separated 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 ]

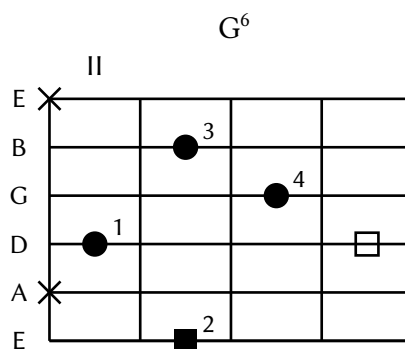
```

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 ]

```

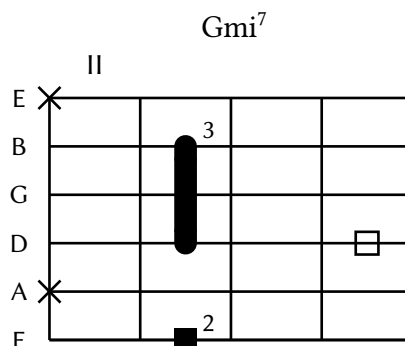


One with a barré:

```

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 ]

```



2.2 Options for \scales

The `<options>` argument for `\scales` are similar to the ones for `\chordscheme`:

`fret-number = {<number>}` Default: 6

Introduced in
version 0.6

The number of frets that are drawn. This number must be at least 6. The option should be set as first option since it influences other options.

`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 comma separated 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 comma separated list of entries. The :*<label>* is optional.

fret number = {*<integer>*} Default: 6

The number of frets displayed for a scale. The minimum number is 6.

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 an ionic scale and 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)

E	■ 1s		● 2		● 4	
B			● 2		● 4	
G		● 1	● 2		● 4	
D		● 1	■ 2		● 4	
A	● 1s		● 2		● 4	
E	■ 1s		● 2		● 4	

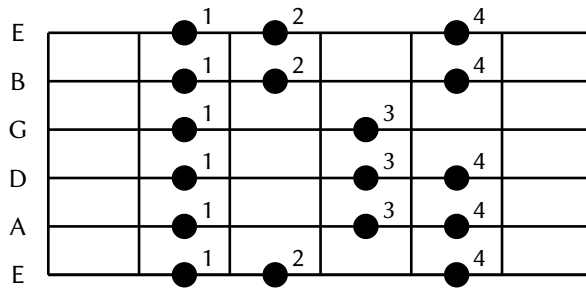
An example for **fingering***:

```

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

```

Fingering Type 3



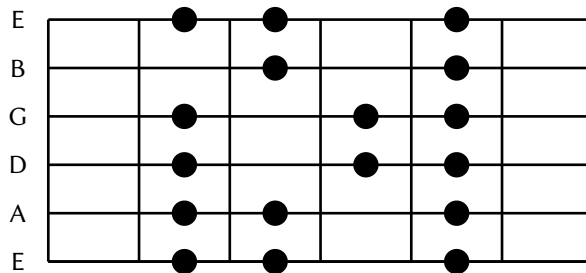
Now an example for **fingering?**:

```

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

```

Fingering Type 2

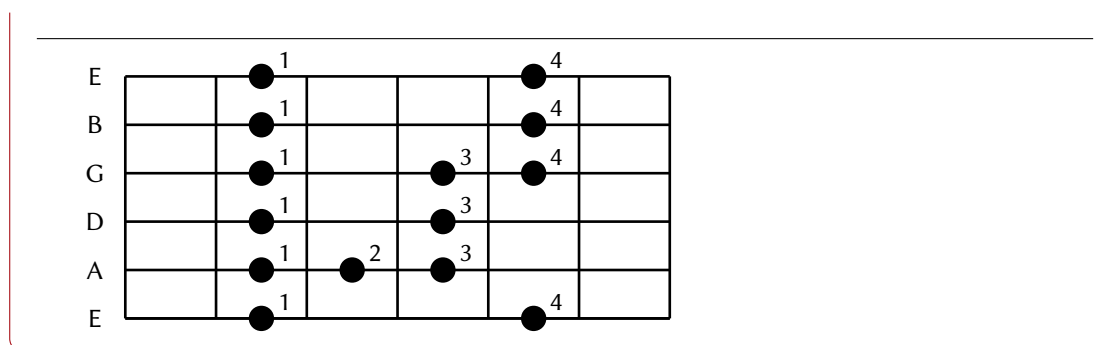


At last an example for an explicitly set scale:

```

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 The setup command for `GUITARCHORDSCHEMES`.

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`.

`chord-name-format = {<cs>}`

Default: `\@firstofone`

The command that is used to parse the chord name. `<cs>` needs to be a command that takes a mandatory argument.

Introduced in
version 0.5

3 Options

Introduced in version 0.5	<p><code>scales-name-format = {$\langle cs \rangle$}</code> Default: <code>\@firstofone</code></p> <p>The command that is used to parse the scales name. $\langle cs \rangle$ needs to be a command that takes a mandatory argument.</p>
	<p><code>string-name-format = {$\langle \TeX code \rangle$}</code> Default: <code>\sffamily\small</code></p> <p>The format the names of the strings are typeset with.</p>
	<p><code>string-name-format+ = {$\langle \TeX code \rangle$}</code> (initially empty)</p> <p>Code to be appended to <code>string-name-format</code>.</p>
Introduced in version 0.6	<p><code>chord-frets = {$\langle number \rangle$}</code> Default: 4</p> <p>The default number of frets of a chord scheme. $\langle number \rangle$ must be at least 4.</p>
Introduced in version 0.6	<p><code>scales-frets = {$\langle number \rangle$}</code> Default: 6</p> <p>The default number of frets of a scales scheme. $\langle number \rangle$ must be at least 6.</p>
	<p><code>line-width = {$\langle dim \rangle$}</code> Default: 1pt</p> <p>The line width used for all lines drawn in the chord scheme.</p>
	<p><code>finger-radius = {$\langle num \rangle$}</code> Default: .1875</p> <p>The radius of the circles that represent the fingers in multiples of <code>x-unit</code>. Also determines the size of the root markers and the barré.</p>
	<p><code>finger-x-offset = {$\langle num \rangle$}</code> Default: .375</p> <p>The x offset of the number with respect to the circle in multiples of <code>x-unit</code>.</p>
	<p><code>finger-y-offset = {$\langle num \rangle$}</code> Default: .375</p> <p>The y offset of the number with respect to the circle in multiples of <code>y-unit</code>.</p>
	<p><code>finger-style = {$\langle TikZ style \rangle$}</code> Default: fill</p> <p>The TikZ style the circles representing the fingers are drawn with. This is equivalent to <code>\tikzset{finger style/.style={$\langle TikZ style \rangle$}}</code>.</p>
	<p><code>root-style = {$\langle TikZ style \rangle$}</code> Default: fill</p> <p>The TikZ style the squares representing the roots are drawn with. This is equivalent to <code>\tikzset{root style/.style={$\langle TikZ style \rangle$}}</code>.</p>
	<p><code>show-root-style = {$\langle TikZ style \rangle$}</code> Default: draw</p> <p>The TikZ style the squares representing the "ghost roots" are drawn with. This is equivalent to <code>\tikzset{show root style/.style={$\langle TikZ style \rangle$}}</code>.</p>
	<p><code>ringing-style = {$\langle TikZ style \rangle$}</code> Default: draw</p> <p>The TikZ style the circles representing the open string markers are drawn with. This is equivalent to <code>\tikzset{ringing style/.style={$\langle TikZ style \rangle$}}</code>.</p>
	<p><code>muted-style = {$\langle TikZ style \rangle$}</code> Default: cross out,draw</p> <p>The TikZ style the nodes representing muted strings are drawn with. This is equivalent to <code>\tikzset{muted style/.style={$\langle TikZ style \rangle$}}</code>.</p>

`tuning = {⟨comma separated list of string names⟩}`
 The tuning.

Default: E, B, G, D, A, E

References

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