

GUITARCHORDSCHEMES

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guitar chord schemes and fingering scales with TikZ

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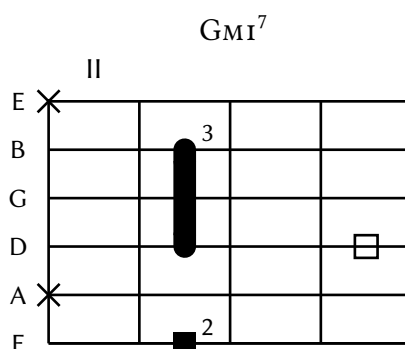


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1 License and Requirements

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`:

`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 = $\langle \text{fret} \rangle / \langle \text{string} \rangle : \langle \text{label} \rangle$

Specify the finger positions for a chord. This option accepts a comma separated list of entries. The $: \langle \text{label} \rangle$ is optional.

root = $\langle \text{fret} \rangle / \langle \text{string} \rangle : \langle \text{label} \rangle$

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 $: \langle \text{label} \rangle$ is optional.

show-root = $\langle \text{fret} \rangle / \langle \text{string} \rangle$

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 = $\langle \text{fret} \rangle / \langle \text{string range} \rangle : \langle \text{label} \rangle$

Specify a barré position for a chord. The $\langle \text{string range} \rangle$ part must contain a two string numbers separated with a dash. This option accepts a list of entries. The $: \langle \text{label} \rangle$ is optional.

ring = $\{ \langle \text{string} \rangle \}$

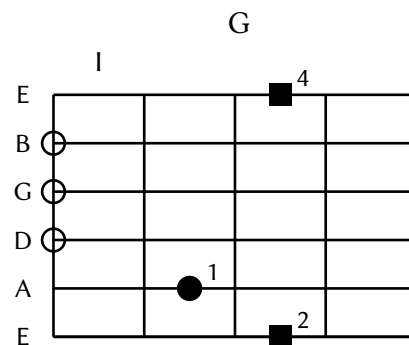
Specify open strings. This option accepts a comma separated list of entries.

mute = $\{ \langle \text{string} \rangle \}$

Specify muted/un-played strings. This option accepts a comma separated list of entries.

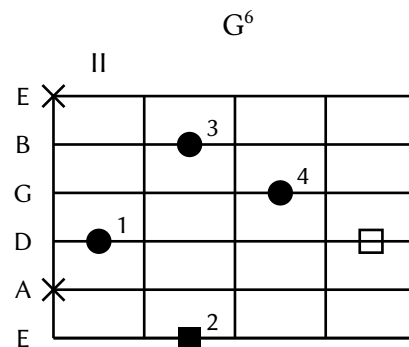
Let's take a look at a few examples:

```
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 ]
```

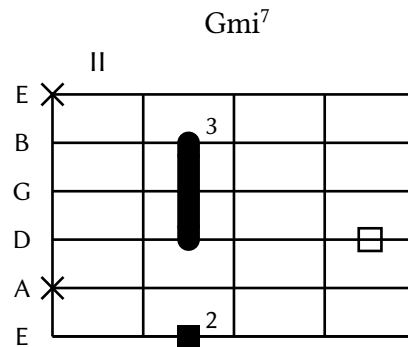


One with a barré:

```

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 $\langle options \rangle$ argument for `\scales` are similar to the ones for `\chordscheme`:

name = $\{\langle title \rangle\}$

Set a title for the scale.

position = $\{\langle position \rangle\}$

Set the position for the first of the six frets.

finger = $\langle fret \rangle / \langle string \rangle : \langle label \rangle$

Specify the finger positions for the scale. This option accepts a comma separated list of entries. The $: \langle label \rangle$ is optional.

root = $\langle fret \rangle / \langle string \rangle : \langle label \rangle$

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 $: \langle label \rangle$ is optional.

fret number = $\{\langle integer \rangle\}$

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 no 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

E		1	2		4
B		1	2		4
G		1		3	
D		1		3	4
A		1		3	4
E		1	2		4

Now an example for **fingering?**:

```

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

```

Fingering Type 2

E		●	●		●	
B			●		●	
G		●		●	●	
D		●		●	●	
A		●	●		●	
E		●	●		●	

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 ]

```

E		● ¹			● ⁴	
B		● ¹			● ⁴	
G		● ¹		● ³	● ⁴	
D		● ¹		● ³		
A		● ¹	● ²	● ³		
E		● ¹			● ⁴	

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.

3 Options

`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.

`scales-name-format = {⟨cs⟩}` Default: `\@firstofone`

The command that is used to parse the scales name. `⟨cs⟩` needs to be a command that takes a mandatory argument.

`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 = {⟨num⟩}` 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 = {⟨num⟩}` Default: `.375`

The x offset of the number with respect to the circle in multiples of `x-unit`.

`finger-y-offset = {⟨num⟩}` Default: `.375`

The y offset of the number with respect to the circle in multiples of `y-unit`.

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

root-style = { \langle TikZ style \rangle } Default: fill
The TikZ style the squares representing the roots are drawn with. This is equivalent to `\tikzset{root style/.style={ \langle TikZ style \rangle }}`.

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

ringing-style = { \langle TikZ style \rangle } Default: draw
The TikZ style the circles representing the open string markers are drawn with. This is equivalent to `\tikzset{ringing style/.style={ \langle TikZ style \rangle }}`.

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

tuning = { \langle comma separated list of string names \rangle } Default: E, B, G, D, A, E
The tuning.

References

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