

Songlib: key signatures

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Revision Date: April 3, 2012

Using key signatures

The **songlib** system allows you to compose within the structure of a key. By setting a key within your **songlib** program, you can use special chord generating functions that do all the work for you in figuring out what sounds pleasing (or not so pleasing if you choose). To start, set the key by using the *setKey* function. Here are some example calls to *setKey*:

```
setKey(C);  
setKey(D);  
setKey(Gb);
```

The default key for **songlib** is C.

The next step is to set the mode using the *setMode* function. The **songlib** system currently supports 9 modes:

- IONIAN
- DORIAN
- PHRYGIAN
- LYDIAN
- MIXOLIDIAN
- AEOLIAN
- LOCRIAN
- MELODIC_MINOR
- HARMONIC_MINOR

Here is an example call to *setMode*:

```
setMode(AEOLIAN);
```

The default mode for **songlib** is IONIAN. The mode determines the ‘mood’ of your composition, with IONIAN, LYDIAN, and MIXOLIDIAN generating a brighter mood and the rest generating darker moods.

Finally, call the chord function to generate chords appropriate for your chosen mode. Here is an example call to *c*, which plays the first of seven chords in the chosen mode:

```
c(1,beats,instrument,octave);
```

The `c(1,...)` function call will play a chord whose root note (or base note) is C if the key is C, D if the key is D and so on. The `c(2,...)` function call will play a chord whose root note is one note higher, and so on. To play individual notes, rather than chords, do something similar to the following:

```
play(beats,instrument,octave,degree(1));  
n(1,beats,instrument,octave,0);
```

Both these calls will play a C note in the key of C, a D note in the key of D and so on. Calling:

```
play(beats,instrument,octave,degree(2));  
n(2,beats,instrument,octave,0);  
n(1,beats,instrument,octave,1);
```

will all play the next higher note in the key, and so on.

If you following these conventions, you can change your key and your mode just by calling *setKey* and *setMode*, with no other changes.

For more on keys and modes, see [modes](#) .