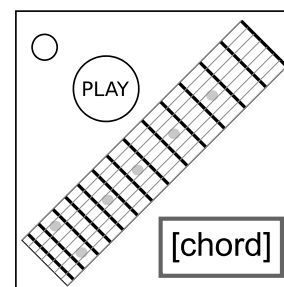


## On the Subject of Broken Guitar Chords

*You hum it, I'll play it. On a guitar with a broken string!*

- The module consists of a guitar fretboard, a display and a Play button.
- Press a fret to select it. Press it again to deselect it. Press a button just above the fretboard to mute or unmute a string. Press the Play button to submit the chord.
- To defuse the module, enter any finger positions that result in the chord shown in the display.
  - All notes belonging to the chord must be played on at least one string, regardless of octave.
  - No notes that are not part of the chord may be played on any string.
  - No string can have more than one fret selected.
  - A muted string can't have any frets selected.
  - **One of the guitar strings is broken and cannot be used.**
- The semitones in an octave are: C, C<sup>♯</sup>/D<sup>♭</sup>, D, D<sup>♯</sup>/E<sup>♭</sup>, E, F, F<sup>♯</sup>/G<sup>♭</sup>, G, G<sup>♯</sup>/A<sup>♭</sup>, A, A<sup>♯</sup>/B<sup>♭</sup>, B. After B, the list wraps around back to C. "Transposing up" a number of semitones means moving forward in this list that many steps.
- A chord consists of a root note from the above list and a chord quality from the table on the right. The table shows the chords with C as their root note. Transpose the chords by a consistent number of semitones to obtain the chord demanded by the module.
- The strings are, from left to right: E, A, D, G, B, E. Selecting a fret on a string transposes that string's note up the relevant number of semitones.



**Chords**

<b>C</b>	C, E, G
<b>Cm</b>	C, E <sup>♭</sup> , G
<b>C6</b>	C, E, G, A
<b>C7</b>	C, E, G, B <sup>♭</sup>
<b>C9</b>	C, D, E, B <sup>♭</sup>
<b>Cadd9</b>	C, D, E, G
<b>Cm6</b>	C, E <sup>♭</sup> , G, A
<b>Cm7</b>	C, E <sup>♭</sup> , G, B <sup>♭</sup>
<b>Cmaj7</b>	C, E, G, B
<b>Cdim</b>	C, E <sup>♭</sup> , G <sup>♭</sup>
<b>Cdim7</b>	C, E <sup>♭</sup> , G <sup>♭</sup> , A
<b>C+</b>	C, E, G <sup>♯</sup>
<b>Csus</b>	C, F, G