

# Quarter tone accidentals notation

26th of July 2020, Johannes Keller, Studio31

This tabulature is based on the quarter tone accidentals that Sibelius provides and safely exports to musicXML.

This notation is considered a tabulature because it describes specific keys on the Arciorgano keyboard. The resulting pitch is entirely defined by the tuning of the Arciorgano, this notation doesn't imply pitch.

Any conventional accidental (natural / sharp / flat) references a key on the lower manual, following the conventions of the 16th and 17th centuries. Any quartertone accidental (quarter sharp / quarter flat / three-quarter sharp / three-quarter flat) references a key on the upper manual.

- quarter sharp: natural key on the upper manual
- three-quarter sharp: sharp-key on the upper manual (following historical conventions)
- quarter-flat: flat-key on the upper manual (following historical conventions)
- three-quarter flat: this is an alternative way to notate natural keys on the upper manual. It is synonymous with the quarter-sharp alteration of the note below.

The following example shows how to notate all the keys of the Arciorgano. Blue noteheads stand for keys of the lower manual. Red noteheads for keys on the upper manual. Notes grouped together with square brackets notate the same key and can be used synonymously.

This notation can be mixed with the double-accidental tabulature, the combination doesn't create contradicting definitions.

Please note that the quarter tone notation described here is more powerful than the double-accidental notation because it can represent all the 36 keys per octave found in the Arciorgano, while the double-accidental notation can only describe 31 pitches per octave. Depending on the chosen Arciorgano tuning, this fact might be important.

The image displays a musical score in 4/4 time, spanning 33 measures. The notation is presented in a grand staff with a treble and bass clef. The score is divided into five systems, each containing two staves. The notation uses blue noteheads for the lower manual and red noteheads for the upper manual. Square brackets are used to group notes that represent the same key, indicating they can be used synonymously. The score illustrates the 36 keys per octave of the Arciorgano, showing how quarter tone accidentals (quarter sharp, quarter flat, three-quarter sharp, three-quarter flat) are used to notate keys on the upper manual. The first system (measures 1-8) shows a sequence of notes in the bass staff, with some notes in the treble staff. The second system (measures 9-16) continues the sequence. The third system (measures 17-24) shows a more complex sequence of notes. The fourth system (measures 25-32) shows a sequence of notes in the treble staff. The fifth system (measures 33) shows a final sequence of notes. The score is a demonstration of the notation system, showing how it can represent all 36 keys per octave of the Arciorgano.