

## APPENDIX H: QUARTER TONES

### Introduction





Music Publisher 5 can take a series of add-on modules, and this document describes the *Quarter tone* module.

In this document the British English musical terms *tone* and *semitone* are used. US English usage prefers *step* and *half-step* although *quarter tone* seems to be universal. I have avoided the term “half sharp”, which while consistent with current *double sharp* is completely confusable with the American *half step*.

### Capabilities

The program extends the sequence of accidentals from the standard list of double flat, flat, natural, sharp and double sharp to include  $\frac{1}{4}$  tone sharp;  $\frac{3}{4}$  tone sharp;  $\frac{1}{4}$  tone flat and  $\frac{3}{4}$  tone flat.

The symbols used in Music Publisher 5 are

Function	Notation	Comments
$\frac{1}{4}$ tone sharp		This notation is called the “Tartini sharp” as it was proposed as early as 1756 by Giuseppe Tartini. The symbolism is clear, it being half of a normal semitone sharp.
$\frac{3}{4}$ tone sharp		Also by Tartini. Visually clear: it is three times the sharpening power of the quartertone above.
$\frac{1}{4}$ tone flat		There is no universally accepted notation for quarter flats. However this reversed form has near standard status in atonal woodwind music, which also uses the Tartini sharps above.
$\frac{3}{4}$ tone flat		There is less agreement about the $\frac{3}{4}$ flat, but this symbol here seems clear being the admixture of a half and a quarter. It's also rather pretty.

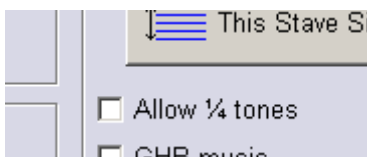
### *Quarter tones in key signatures.*

Currently Music Publisher 5 does not support this facility, just as it does not support mixed key signatures of sharps and flats.

### *Placing the quarter tone accidentals*

To enable quartertones to be used in a score it is necessary to enable it for that score. This is done on the **Options>Configure** menu. Select the **Score** tab (only visible when a score is loaded) and tick the **Enable ¼ tones** box.

If you wish you could load an existing template, enable this option, and then save as a template (**File>Save as Template**) so that you have quarter tone templates available if required.



*On the menu Options>Configure>Score*

However it's done, once this option is enabled the following commands are available:

### *The keystrokes **q** and **Q***

**Q** or **q** can be used in a similar manner to **S**, **V**, **X**, **W** and **N** which are used for placing the standard sharps, flats and naturals - they can be used to *start* placing a quarter tone sign or to *convert* a provisional note to a quartertone sign. Repeated pressing of the key will cycle through the four possible quarter tone signs, but **Q** (=shift+q) will start with the two quarter sharp signs and **q** will start with the flat ones.

The keys **Q** and **q** can also be used to edit an existing accidental, in exactly the same way as **S**, **C**, **X**, **W**, **N** and **#**.

### *The keystroke #*

With the score enabled for quarter tones, repeated pressing of the # key will now cycle through the additional quarter tone signs as well as the standard sharps and flats.

### *Right-clicking*

Right-clicking any flat or sharp sign in the music brings a pop-up menu which allows the change. With the module activated this menu is extended to include the four new symbols.

### *Playback*

The notation plays back as you would expect it. However there are two restrictions:

- a You cannot use more than 7 different instruments in the music to be heard (as defined in Stave Properties>Sound). This is due to a technical limitation of midi which limits it to 14 tracks and the fact that it takes 2 tracks to produce both normal and superchromatic notes simultaneously.
- b You can only have one instrumental sound per stave. When quartertones are enabled then the stem-down notes will sound in the same voice as the stem-up notes when on the same stave. (When quarter tones are disabled then you can have different voices for the different parts). This is because the second track is now being used for the 12 extra sounds in each octave.

### *Relationship with other versions of Music Publisher 5*

If a male friend has version 5.12 (or later) of Music Publisher then he will be able to play back and print your score if you send it to him, but he will not be able to create his own quarter tones, or amend yours (except in the normal ways). If he saves the file you sent then it will still contain the quartertones. In other words it's just the ability to creation the notation which the upgrade gives you.

Surprisingly the same applies to a female friend.