

Gofigure: a font for Figured Bass

Gofigure is designed to provide a rudimentary set of stacked bass figures, covering the most common combinations, in a conventional fashion, in any text environment. It is also designed to work in Dorico as a *partial* replacement for Figurato, a font designed by Florian Kretlow to be a comprehensive figured bass system.

History, Background and Mission Statement

Florian created Figurato before most notation software had dedicated figured bass functionality. Invariably, you would have to use Lyrics as the mechanism for assigning figures. Dorico introduced its own figured bass function in 2020 (v 3.5), though it still has some limitations, which Figurato can be used to overcome. Users will also have generated ‘legacy’ documents using Figurato, which they may not want or have time to convert.

Unfortunately, due to a change in the method by which Dorico draws Lyrics, Figurato now causes massive spacing issues in version 4.1 and later. (A Paragraph Style is now used, which takes notice of the bounding box of the font characters, which in Figurato’s case is absurdly enormous, in order to handle the stacking of figures.)

Gofigure has been created primarily for use in Dorico outside the limitations of the figured bass system, e.g. on the upper staff of a keyboard instrument. Its *secondary* function is to ‘fix’ the issue of the huge vertical offset in Figurato; which it does at the cost of being much less comprehensive in the figures it can represent. Every sequence of stacked figures must be explicitly included as one glyph in the font.

Ideally, old documents with Lyrics for bass figures should have them replaced with ‘real’ Bass figures where possible, and Gofigure should be used only where this is not possible, or as a temporary fix *in extremis*.

Usage

Gofigure uses a similar syntax to Figurato and Dorico. Valid characters are the numbers **0** to **9**; **b**, **n**, **s**, **#**, **x**, **bb** for accidentals; **d** or **endash** for dash. You can also use single-row parentheses and square brackets. Curly brackets { } create double-row square brackets, and Angled brackets < > create double-row curved brackets.

To create stacks of figures, Gofigure uses font ligatures. In the same way that the sequence of characters **f f** and **f f i** are substituted by the combined forms **ff** and **ffi** in a text font, Gofigure substitutes known sequences of characters with stacked forms. Thus **54** becomes $\frac{5}{4}$.

Accidentals must typically come BEFORE the numeral. Syntax such as **b6** will be written on one line as $\flat 6$, but **6b** will be interpreted as $\frac{6}{\flat}$. This is the major difference between Gofigure and Figurato. Figurato would interpret **6b** as $\flat 6$ on one line, but interpret **b6b** as $\flat 6$ over \flat . You will need to check your documents to ensure that no figures are misinterpreted. If you want to display $\flat 6$, then use **6.b**, which will place an invisible period dot between the two characters, thus breaking the ligature group. (This will work for any ligature group that you don’t want.)

For compatibility with Figurato and Dorico, Gofigure understands the comma to force a new line. So **5,#** will be interpreted as 5 over #. (**5#** will be 'natively' interpreted as **5** over #.) The plus sign after **2**, **4** and **5** will produce the 2+, 4+, and 5+ single figure. It also understands **,#**, **,n** and **,3** as a figure on the lower row, to be used as the resolution of, say, a preceding 54 figure. **6** followed by a single quote (or plus) will generate a 6 with a slash.

Combinations

The fonts now can display:

5, 6, 7 and 8 with accidentals below:

5 5 5 6 6 6 7 7 7 8 8 8
♯ ♭ # ♯ ♭ # ♯ ♭ # ♯ ♭

The following numeral groups:

5 5 6 7 7 8 8 9 9 9 10 7 6 6
3 4 5 3 4 3 6 4 5 7 9 4 4 4
2 2 2

64, 75, 74 and #,2 with accidentals beside either numeral:

6 6 7 6 6 6 7 7 #
♯4 ♭4 ♭5 #4 ♭4 4+ ♯4 ♯5 2

Any accidental can precede the top numeral in any group. No provision has yet been made for double-accidentals on the lower row. Please let me know if there are any glaringly commonplace combinations that should be included.

Gofigure also contains glyphs in the SMuFL range for bass figures, so it can be used as the standard Figured Bass font in Dorico and other SMuFL-compliant apps.

Gofigure v0.5

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