# MusiX142: Typesetting Jazz with MusiXT<sub>E</sub>X

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#### 1 Introduction

This document explains in detail how to use the new package MusiX**1422** to create MusiXT<sub>E</sub>X scores that look like a jazz fake book. It is assumed here that T<sub>E</sub>X and MusiXT<sub>E</sub>X version 1.15 or later are already present. If not, <u>WIMA</u> provides instructions and links for acquiring and installing those programs. On the contrary, the preprocessor **PMX** is not required; however, as usual it is highly recommended, and all of the necessary commands can easily be inserted into a **PMX** source file as inline T<sub>E</sub>X.

It is also assumed that you are familiar with using MusiXTEX and/or PMX, that you are producing postscript scores, and that they will be in the standard size \normalmusicsize.

To enable jazz typesetting you will need to have emplaced within your TEX system the files musixjaz.tex, musixjazZ.pfb, musixjazZ.tfm, LilyJazzText.pfb and LilyJazzText.tfm, and to have appropriately modified psfonts.map. Details will be given elsewhere.

# 2 Getting started

The first step is to insert into the MusiXTEX file for your score the statement \input musixjaz, somewhere after \input musixtex. This file will replace all of the usual MusiXTEX text fonts with jazz text equivalents from LilyJAZZText, define macros for entering jazz chord symbols, replace clefs, accidentals, time signatures, rests, and some ornaments with the jazz font versions from the font musixJAZZ, and define various macros whose usage is detailed in the following.

# 3 Jazz chord symbols

The basic command for entering a chord symbol is \jcn, with a single argument. For example the command \jcn{Bmi} would produce **%MI**. This example also highlights the fact that in the jazz text font, the lower case m is a small upper case m, so minor chords must be indicated either by MI or - (minus sign). Flats, sharps, and naturals in chord symbols are given by \jfl, \jsh, and \jna. The command \sup, with a single argument, makes that argument a superscript. So e.g. \jcn{B\jfl\sup7} generates **%**7. Rarely you may need a 2-level superscript; this is done with \dsup with two arguments, the upper and lower members of the superscript. So e.g.

 $\label{linear_section} $$ \ \int_{A} \exp^{A} \sup_{-5} e^{-5} .$ 

The default vertical position of the chord symbol relative to the staff is controlled by \jcheight which is initially set to -10, meaning the baseline of the chord characters would be 10 \internotes below the bottom line of the staff. But if you want the default position to be elsewhere, say just above the top line of the staff, you could enter for example \jcheight{9} near

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the start of your input file. To place a single chord symbol at a different height than the default, use \jc{#1}{#2} where #1 is the height and #2 is the coding for the chord symbol as described above. So as you may have guessed, \jcn is defined by \def\jcn#1{\jc{\jcheight}{#1}}.

The default horizontal position of the start of the chord symbol is just the current input position, which in a MusiXTEX score is normally the position of the next spacing note in the input file. The command \jcf is an alternative to \jcn which shifts the chord symbol one notehead width to the left. More generally, any symbol can be shifted horizontally with \kern used within the argument of \jcn, so e.g. \jcn{\kern5pt G} would produce a G shifted 5 pt to the right of the default.

It may sometimes be convenient or necessary to include several consecutive chords within the same \jcn command, e.g. if there are two successive chords on the same note. This is fine, and the two chord symbols can be shifted as needed using \kern.

There are three sizes available for chord symbols. The size can be set near the start of the input file by entering \smallchords, \medchords, or \bigchords. The default is \medchords.

### 4 Arbitrary text

\musixjaz.tex redefines the standard MusiXTEX font names \eightrm, \ninerm, \tenrm, \twelverm, \bigfont, \Bigfont, and \BIgfont to provide different sizes of the jazz text font LilyJAZZtext. In a score, you can use these for example within the second argument of \zcharnote to insert any text anywhere.

#### 5 Ornaments and other symbols

The following MusiXTEX commands have been redefined in \musixjaz.tex so that the associated symbol is automatically replaced with one from one of the jazz fonts, with no user intervention required: \fermataup (upward fermata ), \fermatadown (downward fermata ),

\ust (upward tenuto  $\_$ ), \lst (downward tenuto  $\_$ ), \usf (upward accent >), \lsf (downward accent >), \usfz (duncecap accent  $\land$ ).

The coda symbol can be posted using \jcoda. Its default vertical position and horizontal offset are 14 and 0. To alter either of these, use \jcodap{#1}{#2} where the two arguments are the desired vertical position in \internotes and horizontal offset in \Internotes. If you wish to include the text CODA near the symbol, you can post it in the usual way, using e.g. \zcharnote{10}{\Bigfont Coda}}.

The segno symbol is posted similarly to a coda, using \jsegno or \jsegnop{#1}{#2}.

The rehearsal letter (A) for example can be entered as \reh A. The default vertical position and horizontal offset are 12 \internotes and -15 pts. To place it at a different position, use the command \rehp{#1}{#2}{#3} where the three arguments are the desired letter, vertical position in \internotes, and horizontal offset in pts.