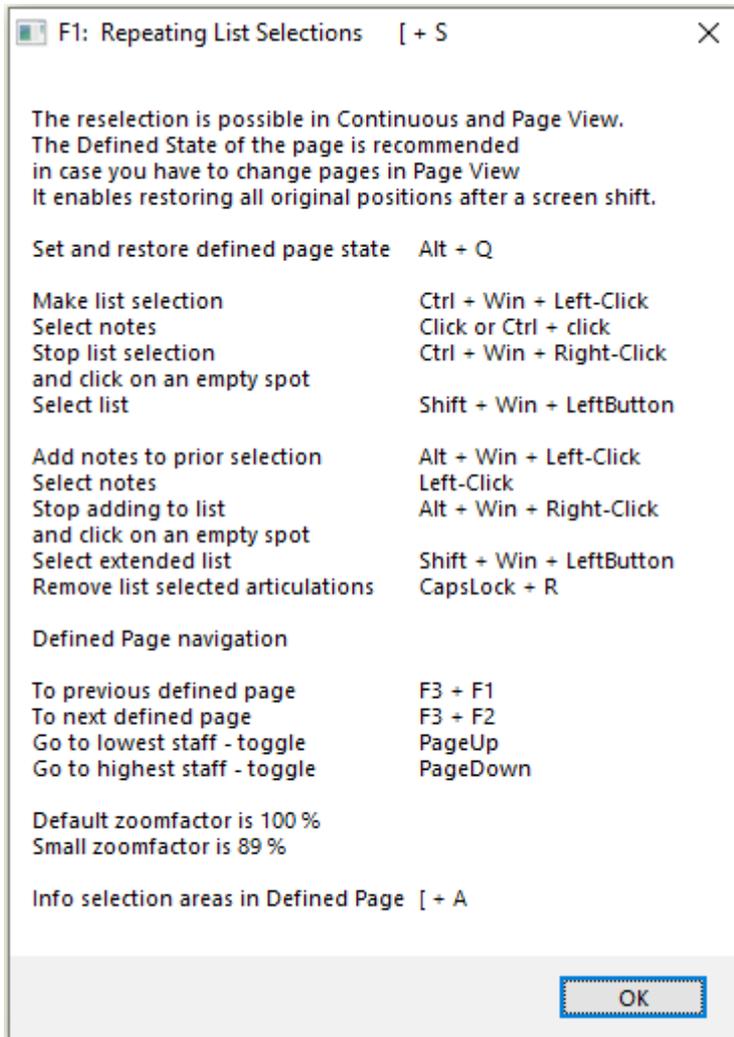


Reselection of a prior list selection. Change articulations. Navigation on a Defined Page.

AutoHotkey Kit for MuseScore - List Selection

These macros add List Selection to the **F1- Selection** macro group of the Kit. They are in *Extra__Selection_and_Navigation.txt* together with more info.

[+ S brings up the info screen



These macros will also work outside the *defined page state* when your edits don't need a change of page.

Add notes to the list selection by (Control) clicking them. Now we can instantly reselect them.

We can add new notes to the prior selection to enlarge the list.

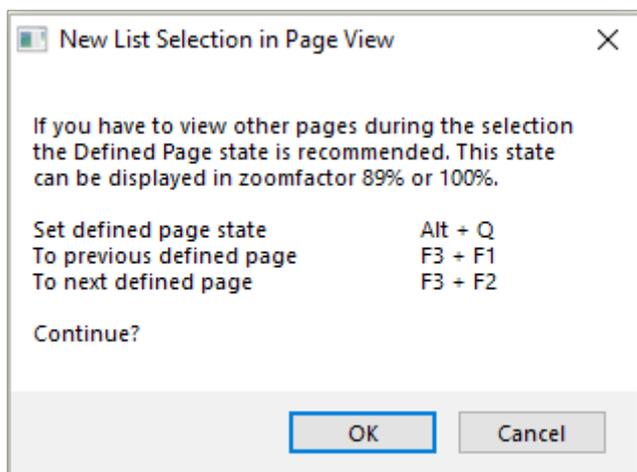
The DIY items are 2 Statusbar images, drag-distances, surfaces for lasso selection, numbers to position tooltips and the number of the Background Color.

Fast Navigation in a Defined Page has its own DIY items. See page 6.

These numbers don't have variables. You enter them in the lines marked (***change***?).

Ctrl + Win + Left-click

This command starts a new List Selection



Dependent on the size of your screen the biggest part of two pages could be visible.

The commands work best when after **Alt + Q** two pages are visible in 100% on equal distance of Palettes resp. Inspector. On the test screen the lowest staff is only partially visible.

If only one page is wholly visible you're advised to change the default zoomfactor. The explanations in the macro hopefully suffice for the changes to be made.

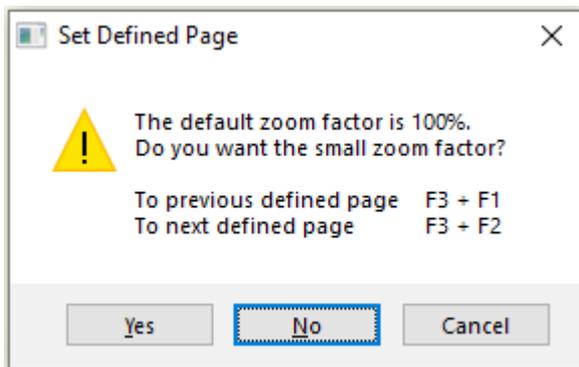
Alt + Q Set defined page state

After the usual Inspector check of the Defined State of the *screen* the macro first resets the zoomfactor of the *page* to 100%. Next follow the commands *Ctrl + PageDown* and *Ctrl + PageUp* which move the Canvas to the highest possible position on the screen and then a *PixelSearch* command, looking for the background color. That is the color of the narrow space between an odd and an even page.

The color number is in Preferences → Canvas → Background, click rectangle. For the test screen **ColorBackground := 0xdd6d8**

If you use a Wallpaper find its most used color with **Z + /** and enter the found number in **ColorBackground :=** Enter the values in **Coordinates.ahk**.

The macro searches only two rows of pixels at one third of the screen height across the whole width of the Canvas. If the color is not found - the Canvas occupies the whole screen at this height - it moves the Canvas a bit to the right which makes the background color visible. This message appears:



Choosing *Yes* causes a *Control + WheelDown* command - which on the test screen results in a small zoomfactor of 89% - followed again by *Ctrl + PageDown* and *Ctrl + PageUp* and again a search for the background color.

In 100% as well in 89% the mouse now clicks the most left point where the background color is found. So this 'drag spot' is outside the Canvas.

Small zoomfactor

We see two pages on the screen. The Canvas is dragged to a **destination point** where the borders of the pages have *the same distance* to Palettes resp. Inspector. **MouseMove, 172, Color_BG_Y** Replace **172** by your number. As usual the line is marked by **(*change*?)**. Next the macro has to find if the left page is even or odd. A new search for the X-coordinate of the background color gives us the answer: if the color is found to the left of **1/4** of the screenwidth the left page is even, if not the left page is odd. We need this knowledge to move safely from a page to the next or the previous one.

Default zoomfactor

The macro searches for the background color and moves the Canvas to the left to a spot where the background color just has become invisible. So initially the left page will always be even. **MouseMove, 85, Color_BG_Y**. Replace **85** by your number.

Selecting note or rest in the first measure of the page

Determine for both zoomfactors the coordinates of a lasso selection in the highest staff. Take care that the chosen surface does not include instrument name or page number but will select a range somewhere in the first measure in the highest staff. The macro commands *Right* followed by *Ctrl + Left* will select the first note (or rest) of the left page. The same surface coordinates have also to be entered in the commands for next and previous defined page.

F3 + F2 To next defined page **F3 + F1** To previous defined page

NB: In Independent_Hotkeys.ahk there is the command **F3 + F2** for Unicode Input. If you use this macro change its hotkey combination in **F3 + F4**.

F3 + F2 **Determination of drag distances** *To next defined page*

Start with one instrument and hide the instrument name. As Time Signature choose 4/4. As Key Signature choose C major. The title page has a title frame and eight staves on the page. All staves have three measures. In voice 1 we fill each measure with 16 16th notes on the middle staff line. We create eleven staves on each of the next five pages and again we fill all measures with 16 16th notes on the middle line. So all pages after page one look the same. We switch PixelMousing on. Now we press **Alt + Q**.

Small zoomfactor

Select the first note of the left page and press **Alt + Z** (from the F1-macro group) to let the mouse click the note. Make a note of the X-left-coordinate. Next select the first note of the right page, press **Alt + Z** again and write down the X-right-coordinate of that note. Subtract X-left from X-right. Now we have found the first drag distance for the left page which can be odd or even. Most probably the first situation you have found is *left page is odd*. We have to repeat the procedure for the other situation to find the second drag distance. But it could be difficult to get *left page is even* after **Alt + Q**. In that case you enter the first found drag distance - *left page is odd* - in the macro, save and reload the F1 group. Do **Alt + Q**, choose 'small' and press **F3 + F2**. Verify that the first note of the new 'left even' page has the same X-coordinate as the first note of the former 'left odd' page. If that is correct select the first note of the 'right odd' page to find its X-coordinate. The difference between the two is the drag distance for 'left page is even'. Perform a test across several pages to check the X-coordinate of the first note.

Default zoomfactor

If a search for the background color fails the left page is even. We drag the paper from a high right-side spot in the background color ribbon to the left so that the X-coordinates of the first note of the the new left page is the same as that of the old left page. We repeat the procedure for the case 'left page is odd'. See the attached txt (ahk) file for further explanations.

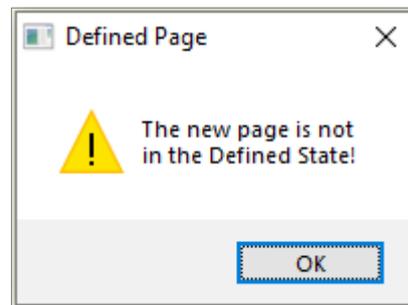
F3 + F1 **Determination of drag distances** *To previous defined page*

The procedure is of course comparable. Look in the txt (ahk) file for ~f3 & f1:: to get further explanations. The numbers will be the same as those of **F3 + F2** but used the other way around.

As in **F3 + F2** for the default *and* the small zoomfactor the Canvas is dragged from a spot in the background color, so there is no risk of dragging elements. In the default zoomfactor the dragpoint is in the upper-background color ribbon just above the Canvas. In the small zoomfactor the dragpoint is in one of the vertical background color ribbons between the pages.

After having entered the values for **F3 + F2** and **F3 + F1** perform a series of tests by repeatedly pressing the hotkey combinations. A maximum deviation of one pixel is acceptable. If after lasso selection nothing gets selected the new page loses its Defined State.

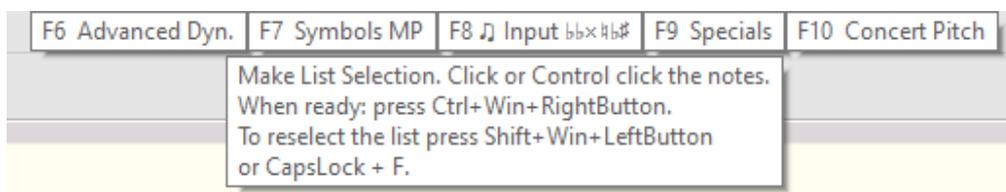
This message is off by default. Enable its appearance by removing the semicolons in front of the lines at the end of the macro. Also create **Statusbar_Nothing_Selected.png** For the surface coordinates of the Statusbar images: see page 38 of *AutoHotkey_for_MuseScore.pdf*



Make List Selection

Ctrl + Win + Left-click

High in the middle of the screen this tooltip appears:



The tooltip needs an Y-coordinate in a line marked by **(*change*)**. A comparable tooltip pops up after **Alt + Win + Left-click**, *add notes to prior selection*.

During List Selection Palettes and Inspector must be visible!

This macro originates from a feature request on the forum.

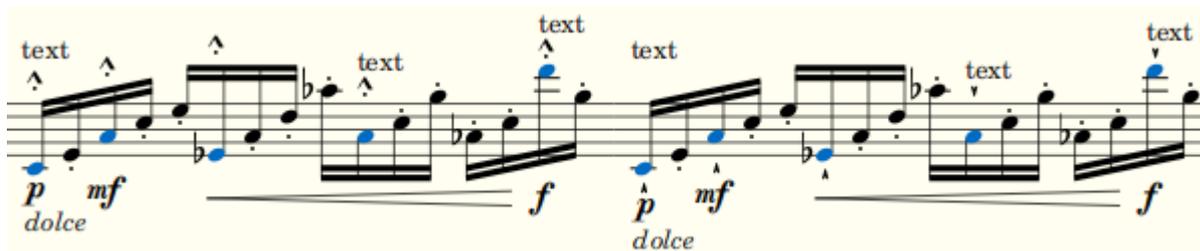
The coordinates of the notes of the List Selection are written to the clipboard. They will be overwritten by a new copy command.

Alt + Win + Left-click add to the list

Shift + Win + Left-click or **CapsLock + F** reselect the list

CapsLock + R Remove list selected articulations

In this example we have made a List Selection with **Control + Win + LeftButton**. We have selected the first 5 blue notes .



With macro group F2 active we press **Z + A** *Apply Symbols from Palette* and in the InputBox we have entered **M.** for marcato staccato.

We change our mind and want to replace them by staccatissimi as shown in the second half of the image.

We press **CapsLock + R**. This deletes the marcato staccato articulations.

With **CapsLock + F** or **Shift + Win + LeftButton** we reselect the list. This selection is fast. We press **Z + A** again and in the InputBox we enter **..**. The list selected notes get the articulation staccatissimo.

How the macro works

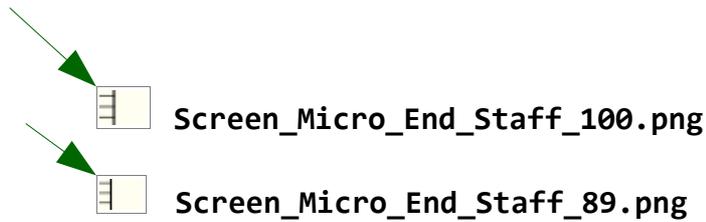
After selecting the first note of the list the macro sends **Escape** to MuseScore to get out of the List Selection, followed by **Alt + right**. The command is in a loop with an ImageSearch for **Statusbar_Articulation.png**. **Articulation:** The loop makes it possible to pass through a maximum of 3 attached elements as texts, dynamics or hairpins. On recognition of the image the articulation is deleted and the next note of the list is selected etc.

CapsLock + R is not really fast mainly because MuseScore needs time to react. The delete process takes half a second per note. But the alternative of manually selecting the articulation, deleting it and adding a new articulation consumes considerably more time.

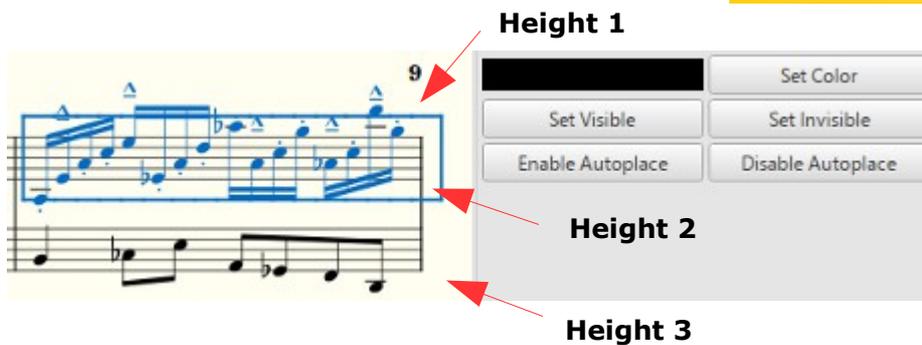
General remark

When your list selections are always on non-moving pages you don't need the Defined Page commands and the corresponding determination of coordinates.

Addition to F1-Selection - Fast navigation on a Defined Page



There are 13 commands **J + F1, F2, F3...F12, 1** to select the last measure of a staff. Two images for 89% resp. 100% zoomfactor are used. The selection depends on the height of the search area.



Selecting the *first* measure could have been more attractive. But this fails because of possible present brackets.

The Canvas is divided in 13 surfaces. Determine the heights and enter them in this and subsequent lines **If (Height = 1) && (Zoomfactor = "normal")** Dependent on the zoomfactor an ImageSearch command searches for Image **100** or Image **89**. As we can see in the picture of the range selection above the image extends a bit to the right of the barline. Notice also that the image does *not* include the highest and lowest staff line.

How narrower the search area how faster the selection.

For each zoomfactor we have two search areas. One for the left page and one for the right. Look in the macro for the variables **Def_L_X1** and **Def_L_X2**. They describe for each zoomfactor two columns at the end of a staff.

The first Y-coordinate indicates from which height the search starts. For all columns the lowest point is the same: **CSA_Y2**, the lower border of the Canvas. The prefix of all commands is **J**. With **J + F1** the mouse will click the highest barline. The macro sends *Alt + Left* in a loop. When **Statusbar_Note_Pitch.png** is recognized the measure will be selected with *Control + Shift + Left*. Pressing **J + F1** again will select a range in the next staff. In the higher staff the blue selection frame has changed appearance and thus prevents recognition.

The **red arrows** point to the optimal heights for zoomfactor 100%. The next height is chosen just under the staff above it. A second set is for 89%.

The **green arrows** point to the upper-left corner of the image. The mouse must click the barline so you have to find two small numbers as **offsets**.

See the lines **Micro_X + 6** resp. **Micro_X + 7** for the two zoomfactors.

The position of the mouse determines if the macro searches on the left or on the right page. Two commands using adjacent keys move the mouse fast:

; + ' Send the mouse almost to the right border of the Canvas
; + L Send the mouse almost to the left border of the Canvas

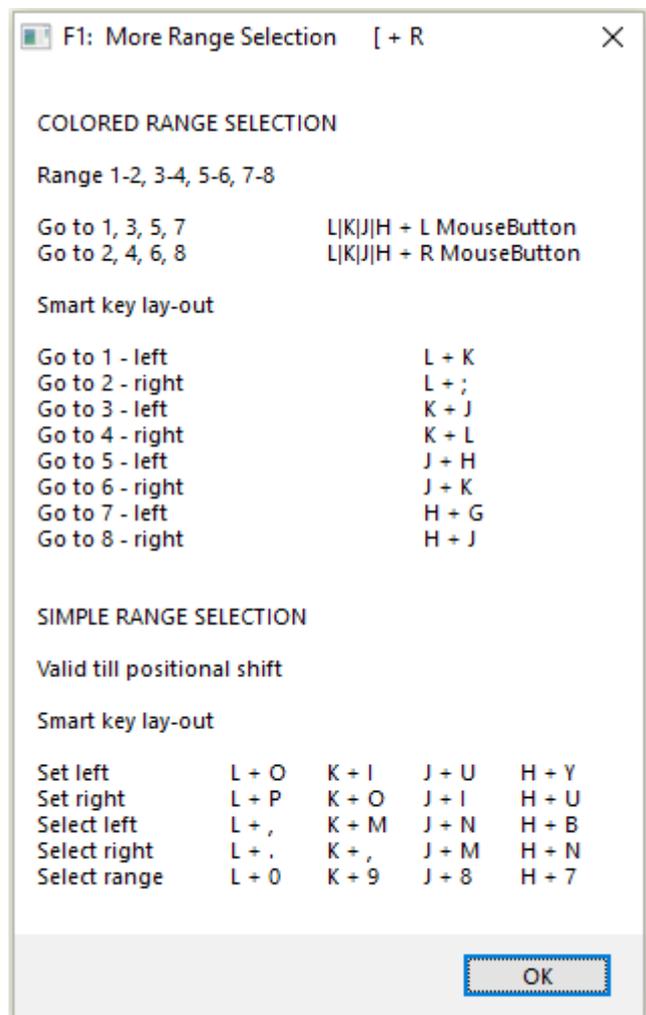
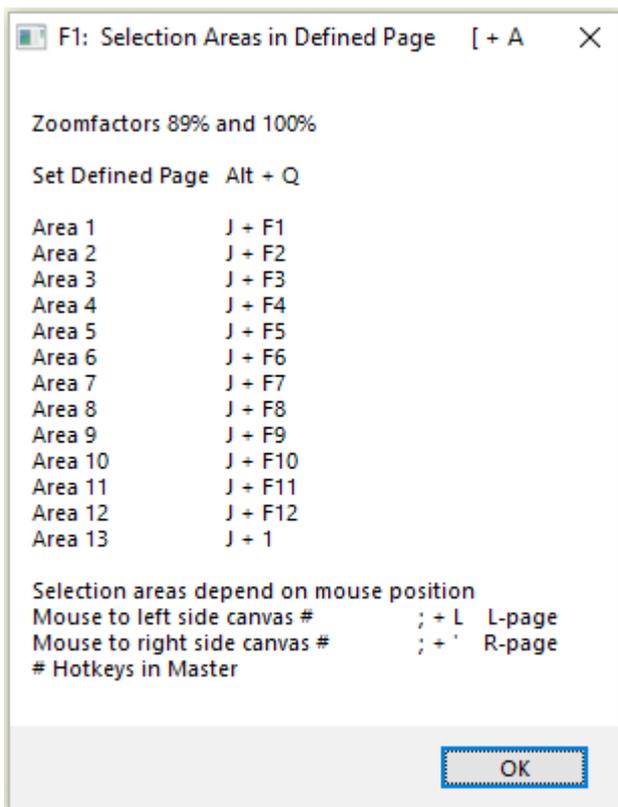
These commands belong in Master.ahk. See *Navigation in Page View* below.

New Info screens

Additions to the **F1- Selection** group of the kit

[+ A Info screen Selection areas Defined Page

[+ R Info screen More Range Selection
 Smart key layout in Colored Range Selection
 Smart key layout in Simple Range Selection
 See next page



Smart key layout in Colored Range Selection

The *Colored Range commands* with the prefix keys **L, K, H and M** for *select left* and *select right* lacked keyboard alternatives using the same prefixes.

In addition to **L, K, J or M + Left or Right Button** the following combinations are recommended. It concerns adjacent keys to the left and right of the prefix.

Put these commands above the corresponding prefix + L/RButton commands.

L + K	select L-left
L + ;	select L-right *
K + J	select K-left
K + L	select K-right
J + H	select J-left
J + K	select J-right
H + G	select H-left
H + J	select H-right

* The semicolon must be preceded by an escape sign: `~L & `;::`

Smart key layout in Simple Range Selection

~ `	!	@	#	\$	%	^	&	*	()	-	=	Backspace
Tab	Q	W	E	R	T	Y	U	I	O	P	{	}	
Caps Lock	A	S	D	F	G	H	J	K	L	:	"	'	Enter
Shift	Z	X	C	V	B	N	M	<	>	?	Shift		
Ctrl	Win	Alt							Alt	Win	Menu	Ctrl	

When there are no edits which change the position of elements in the *Defined Page State* a simple alternative for the colored range selection method could be attractive. All hotkeys use adjacent keys. The *set* commands are preceded by a 4-voice PixelSearch so selection of elements by the arrow keys suffices.

	L-range	K-range	J-range	H-range
set left	L + O	K + I	J + U	H + Y
set right	L + P	K + O	J + I	H + U
select left	L + ,	K + M	J + N	H + B
select right	L + .	K + ,	J + M	H + N
select range	L + 0	K + 9	J + 8	H + 7

Master - extra Navigation commands

Navigation in Page View

The method is the same as that followed for the Defined Page. See page 5. Again the Canvas is strategically divided in surfaces starting at different heights with `CSA_Y2` as lower border. There are hotkeys for 14 surfaces. The hotkeys are:

H + F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, 1, 2

It's best to place these macros after the set zoomfactor master commands:

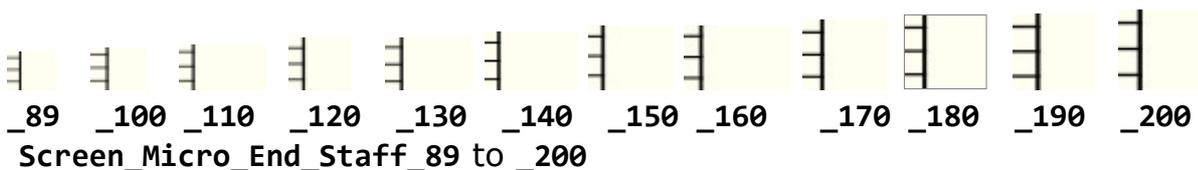
P + \ , O, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0, E, R

for 89, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 300, 400 %.

Page Navigation uses the png's for factors 89 → 200.

After setting the zoomfactor the correct png is selected.

The ImageSearch commands use rather high numbers for the option *shades of variation*. Try to determine the lowest possible number. If a navigation command does not select a range on a staff increase the number of ***n**.



As you can see in the macro the 14 heights are only relevant for the smallest zoomfactor of 89%. For all other factors **H + F12, H + 1 and H + 2** operate on the same height. Determine the heights and enter them in `Height_Y1 := xxx`

At zoomfactors 89% and 100% possibly the screen can accommodate two pages. As in Defined Page:

The position of the mouse determines if the macro searches on the left or on the right page. You don't have to mouse the mouse by hand. Two commands with adjacent keys move the mouse fast:

; + ' Send the mouse almost to the right border of the Canvas

; + L Send the mouse almost to the left border of the Canvas

As distinct from the Defined Page situation a determination of the search columns is not needed. The left page is searched from the left Canvas border to half screenwidth, the right page from half screenwidth to the right border.

A funny case in 89%



Here the command selects first the second measure. Repeating it selects the first. The stem of the G is seen as a barline with trailing space of `_89.png`

Master - Updated version Info Screen Zoom & View

[+ Z

Master Zoom & View - [+ Z

VIEW

Page	P + V
Continuous	P + C
Page ↔ Continuous	P + L
Single Page	P + S
Page Width	P + W
Whole Page	P + H
Two Pages	P + T

MIXER

Show/hide	F10 + F11
Info Mixer	F10 + H

ZOOMFACTOR FIXED

89%	P + \ #	H + F1
100%	P + O #	H + F2
110%	P + 1	H + F3
120%	P + 2	H + F4
130%	P + 3	H + F5
140%	P + 4	H + F6
150%	P + 5	H + F7
160%	P + 6	H + F8
170%	P + 7	H + F9
180%	P + 8	H + F10
190%	P + 9	H + F11
200%	P + 0	H + F12
300%	P + E	H + 1
400%	P + R	H + 2

PAGE AREA SELECTION

Selection areas dependent on mouse position

Mouse to left side canvas	; + L	L-page
Mouse to right side canvas	; + '	R-page

ZOOMFACTOR VARIABLE

Open utilities	Z + U
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Enter a number between 30 and 1600

General Hotkeyinfo	[+ H
Ergonomy	[+ E
More Hotkeyinfo	[+ M
Utilities	[+ U
WorkFlow	[+ W

OK