for Windows: Language English US with US keyboard QWERTY







AutoHotkey Kit for MuseScore 4

Apply Symbols from Palette

The MU4 development team has an ongoing effort to make all Palette symbols accessible via shortcuts. Much work has been done already by Rahul Garg VanSHOE in the Google Summer of Code 2022.

https://github.com/musescore/MuseScore/pull/12850 and https://musescore.org/en/user/3638616

It is an old wish of the community and surely a big job. It is unknown when it will be fully implemented.

In the meantime Musescorists on the Windows platform can benefit from AutoHotkey macros which make full use of the extended navigation shortcuts added to the program. Recommended reading:

<u>https://musescore.org/en/handbook/4/accessibility#navigating-ui</u> Moreover we can get extra functionality for quite a few palette symbols by giving them immediate access to the *Properties* side panel.

MuseScore: <u>https://musescore.org/en/download</u> Current version 4.0.2 (March 2023) **AutoHotkey**: <u>https://github.com/AutoHotkey/AutoHotkey/releases</u> Click 'Assets'. Download version 1.1.36.02, Dec 7, 2022 NB: **not** v2.00 or v2.0.2

This package contains Apply Symbols from Palette.pdf (this document) Master_MU4.ahk Apply_Palette_Symbols_MU4.ahk PixelMousing.ahk

In the attachments the .ahk files have been renamed as .txt files. Give them again the extension .ahk Create the folder called *AHK* in C:\.....\Documents\MuseScore4 This folder is called your *working directory*. Put the files there.

All hotkeys but those in *PixelMousing.ahk* are context-sensitive. They will only trigger their macros when MuseScore is active. So we have to tell *Master_MU4.ahk* and *Apply_Palette_Symbols_MU4.ahk* where to look for MuseScore. Open the scripts with Notepad. Check the path almost at the top.

Scope

All symbols of the Default workspace including those in the *More* fields can be created, except those in *Accordion* and *Bagpipe embellishments*.

Of the *Accidentals* only the standard ones and the *Gould arrow accidentals* are included plus *arrow down* and *arrow up*.

The two *Harp* pedal diagrams, new in recent nightly builds are included as well. Notice that all Palettes can be hidden. Only when activated they show up. A study of the macro $\mathbf{Z} + \mathbf{A}$ will reveal how you can expand this collection with other accidentals or with any symbol added in a custom palette. (*)

How it works

The macros operate in a fixed layout of your choice, called the *Defined State*. For instance you want the docked ToolBar Note Input TBNI horizontal, high and the side panels *Instruments*, *Properties* and *Palettes* docked left. NB: there is no need to position e.g. *Palettes* left and *Properties* right. The macros will automatically activate each panel on demand. We'll return to the *Defined State* later on.

Symbol shortcuts are entered in an InputBox.

Apply Symbols from Palette		×
Help = Questionmark		
ОК	Cancel	

(*) In a *custom palette*, where you have changed the symbol order the routes for symbols missing a unique identifier may have to be adjusted.

Let us say we type *ARP* (not case sensitive). Using the MuseScore shortcut Control + F9 the macro sends *arpe* to the Palette search field. Then it sends *Tab*, *Right* and *Down*. The arpeggio is selected. Now it sends *Space* to create the symbol.

Let us say we type *GLW* to get a wavy glissando. The macro now sends *wavy* which suffices as a unique identifier and again *Tab*, *Right*, *Down* and *Space* to create the symbol. It turns out that most symbols can be created this way in which only one symbol will appear or - as with *arpe* - the first one can be used.

Symbols which don't have a unique identifier get an extra treatment.

For instance all dynamics containing more than one p

The macro sends *pp* and pppppp, ppppp, pppp, ppp, pp and sfpp will appear. Say we have typed *PPP* in the InputBox. In this case *Down* will be added thrice. In general symbols are created via the shortest route which means that sometimes additional palettes are skipped.

After symbol creation the focus must return to the Canvas again, of course without using the mouse manually. The methods vary depending on the symbol and are different for a range selection compared with a single element.

In short: invest some time in the DIY items of this Kit. Go step by step. Happily the AutoHotkey lingo is in most cases self explanatory. Have a look.

DIY items

These images give AutoHotkey info about some important states of MU4.

Home	Def_State_Nav_to_Home.png	This one shows <i>Home</i> in its <u>selected</u> state. Press F6 repeatedly. Notice the black
::	Def_State_4_Dots.png	The four dots are part of the ToolBar Note Input TBNI vertical <i>and</i> horizontal.
Θ Θ	<pre>Def_State_Zoom_Tools.png</pre>	The image is found in the StatusBar search area.
Instruments	Instruments_selected.png	6 images, the titles of the Sidebar panels. They share the same search area
Instruments	Instruments_unselected.pn	g
Properties	Properties_selected.png	
Properties	Properties_unselected.png	
Palettes	Palettes_selected.png	
Palettes	Palettes_unselected.png	
Range selection;	StatusBar_Range_Selection	<pre>.png All StatusBar images have the same search area.</pre>
Note; Pitch:	StatusBar_Note_Pitch.png	
Voice: 1;	StatusBar_Voice1.png	
Rest; Duration: Measure;	StatusBar_Rest_Duration_M	easure.png
Barline:	StatusBar_Barline.png	
Barline: Right (end) repeat sign;	StatusBar_Barline_Right_E	nd_Repeat_Sign.png
Hairpin:	StatusBar_Hairpin.png	
Dynamic:	StatusBar_Dynamic.png	
Eighth;	StatusBar_Eighth.png	We need this image to prevent mistakes with Feathered Beams
	Nothing_Selected.png	The image appears in the Statusbar but has a much smaller search area

We use Windows Snipping Tool to create these images and put them in our *working directory*. We see that for the StatusBar images we need a high precision to limit them, cut them off just after the colon or semicolon. For this purpose we use the tool *PixelMousing*, an indispensable part of this Kit. See below p 11.

The second function of the tool is to determine the coordinates of the search areas. We must tell AutoHotkey where to look for the images. At this point we must make up our mind. Which screen layout we prefer, which *Defined State*?

Defined State

Your favorite screen layout reflects of course your workflow. In this respect there are in principle zillions of screen arrangements possible. In practice however we only have to consider a few situations:

Screen size: maximized or full. This influences also the search area of the StatusBar, the surface within which its images can be found. Notice that the StatusBar always must be visible.

The ToolBar Note Input TBNI. Do we want it to be visible? If yes, it must exist in one of its 4 possible docked positions, high or low horizontally, left or right vertically. For the Defined State check we need to determine 4 search areas.

Finally the position of the SideBar, housing the panels *Instruments*, *Properties* and *Palettes*. (the order in which they appear is not relevant). The SideBar in the default layout is docked *left*. Your preference could be *right*.

You set your favorite screen size and TBNI position in the *auto execute section*, the first part of Apply_Palette_Symbols_MU4.ahk. Positioning the SideBar to the left or the right influences also two special

search areas, one within the *Palettes*, the other in the *Properties* side panel. See below under *Search areas* and also the *auto execute section* of the script.

Defined State check

A complete layout check - including the position of the TBNI - happens each time you launch the file Apply_Palette_Symbols_MU4.ahk.

When you press Z + A however the main check concerns the window size. The handling of maximized and full screen in MuseScore 4.0.2 has some quirks. To avoid those we let AHK set the window size. We have to tell it something like MU4_Max_Window_Height := 1392

To find this height: run PixelMousing and put the cursor in the upper left corner ULC of the screen. Press **WIN + Up** to maximize the MU4 window. Check the coordinates. If they are *not* 0,0 press **WIN + Up** again. The coordinates must become 0,0. Now put the mouse cursor in the ribbon of Windows' toolbar. Pixel mouse upward until the cursor changes shape. Go 1 px down, the cursor appears as an arrow again. Write down the number of MU4_Max_Window_Height.

An advantage of this setting is that both maximized and full screen behave the same, they function as just another window. We can immediately minimize them using the Windows shortcut **WIN + Down**.

The hotkey **CapsLock + A** toggles between full and maximized screen. Determine MU4_Max_Window_Height and use this hotkey to set the screen in its Defined State before determining search areas.

Search areas

Once you have established your screen layout and input the value of MU4_Max_Window_Height you continue by determining the coordinates of the search areas. Here **X1** and **Y1** define the upper left corner of the (rectangular) search area while **X2** and **Y2** define its lower right corner.

	View Add Format Tool	s Plugins	Help Diagr	nostic	Enter your own values in
Instruments	Properties Palettes ····		Navigation	×	the auto-execute section
	Add Palettes	Q			F7_F8_F9_Tab_Title_X1 := 0 F7_F8_F9_Tab_Title_Y1 := 68 F7_F8_F9_Tab_Title_X2 := 300 F7_F8_F9_Tab_Title_Y2 := 104
Accider File Edit	Example: No Tool View Add Format Tool				At the left we see the vertical left position of the TBNI.
Home S	core Publish				4_Dots_VL_X1 := 33 4 Dots_VL_Y1 := 69
	Instruments Properties	Palettes ···		Navigation $ imes$	4_Dots_VL_Y1 := 69 4_Dots_VL_X2 := 67 4_Dots_VL_Y2 := 98
	Add Palette	25	Q		Determine also the values for the other 3
	AccidentalsArpeggios & glissandi				possible positions of the TBNI, the search areas of Def_State_4_Dots.png

Example: ToolBar Note Input TBNI vertical left

View	Edit	File
Score	ne	Hor
	0	

After pressing F6 the radio button *Home* is selected (it gets a black border). The surface in which Def_State_Nav_to_Home.png must be found is defined by Nav_Home_X1 := 0

1101		_^	•	U
Nav	_Home_	_Y1	:=	32
Nav	_Home_	_X2	:=	70
Nav	Home	_Y2	:=	68

After finding the image controlled navigation to any part of the UI can begin. Here we use a simple trick to arrive in the side panels: the macros send Shift + F6. The route is now: Home \rightarrow Workspace \rightarrow Score title tab \rightarrow Side panel. The number of keystrokes is now predictable because in this way we avoid the TBNI, which after all may be absent.

• Dynam	ics		Ū
pppppp	ppppp	pppp	ppp
pp	p	mp	mf
f	ſſ	ſſſ	ſſſſ
ſſſſſ	ſſſſſſ	fp	pf
sf	sfz	sff	sffz
sfp	sfpp	rfz	rf
f^z	m	r	8
z	n	cresc	dim
	-	mf —	
Lines			

When attaching a symbol the macro determines its position in the Palette using the *color* of the selected cell. It finds its upper left corner ULC.

If we want to apply an already selected symbol - e.g. a tremolo - again the fastest way is pressing **WIN + /** AutoHotkey adds an offset to the ULC, clicks the field on a safe spot and can return to the Canvas, now searching for the *voice color* of the selected note or rest. More about this powerful color feature below.

Offset_Glyph := 15 (added to X and Y of ULC)

The picture shows the biggest search area we need.

Side_Bar_X1 := 0 Side_Bar_Y1 := 180 Side_Bar_X2 := 300 Side_Bar_Y2 := 520



In general: we want safe clicks, also on the titles of the side panels. So we add offsets to the found upper left corner.

X_Offset_F7_F8_F9_Tab_Title := 20
Y_Offset_F7_F8_F9_Tab_Title := 15

An exceptional case

The feathered beam is *not* created by the Palette *Beam properties*. It needs its own surface area.

Beam type	9					£
AUTO	N		7	7	₹	
Feathered	beams	5				
Non	е				175	

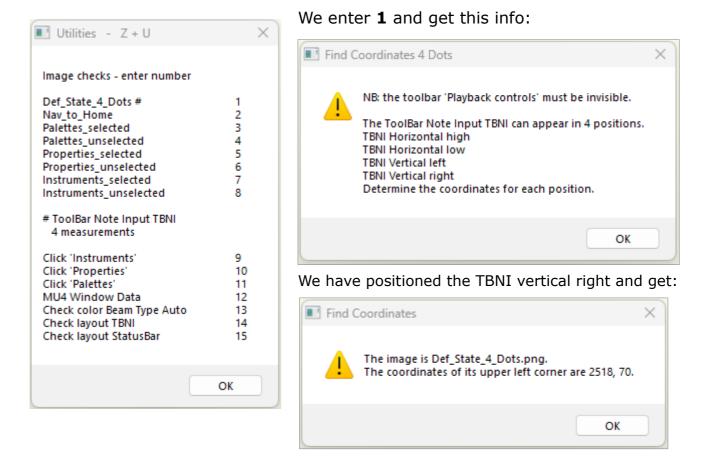
The best way to create a feathered beam is using the *Properties* side panel. Now we can select a beamed 16th note instead of the beam. This enables a safe return to the Canvas, which is impossible when a beam is selected.

<pre>Beam_Type_Auto_X1 :</pre>	= 18	for an explanation
Beam_Type_Auto_Y1 :	= 403	see the auto-execute
Beam_Type_Auto_X2 :	= 59	section
<pre>Beam_Type_Auto_Y2 :</pre>	= 443	

Help in determining a search area

As we have seen the AHK command *ImageSearch* can find the upper left corner ULC of the image. We can use this in determining a small search area. While doing this the screen size must of course be in its Defined State.

Z + **U** Utilities. An InputBox appears. We press *Enter* and get info.



Notice that the search can be rather slow. The whole screen must be scanned.

To prevent finding the 4 dots of the (docked) toolbar *Playback controls* we make it temporarily invisible.

When showing the last message the mouse moves to the ULC of the TBNI. We make a note of the coordinates. To determine the *lower right corner* LRC we add offsets to the ULC. To find these offsets we doubleclick the image Def_State_4_Dots.png and measure the width and height of the image using PixelMousing. It is a safe policy to make the search areas a little bigger than the image. See also the auto-execute section.

The search area of the titles of *Instruments*, *Properties* and *Palettes* we have already determined. Here the utility can be useful to check if the images are recognized at all. In rare circumstances we have to increase the 'shades of variation' number. This parameter is set to *40 to allow for variations in the coloring of the image. If after an increase the image still is not recognized we better create a new image. But again this is a rare situation.

The StatusBar search area

The area occupies a ribbon across the screen width. The images have to fit in so their height is always less than the height of the StatusBar. We use PixelMousing to find the Y-coordinates.

SB_X1 := 0	
SB_Y1 := 1411 ;	Full Screen
; SB_Y1 := 1364 ;	Maximized Screen (here outcommented)
<pre>SB_X2 := A_ScreenWidth ;</pre>	AHK inbuilt variables
<pre>SB_Y2 := A_ScreenHeight ;</pre>	A_ScreenWidth and A_ScreenHeight
; SB_Y2 := 1392 ;	Maximized Screen (here outcommented)



This image is always present in the Statusbar. So we can use Def_State_zoom_Tools.png to check if the screen has its defined size.

The image Nothing_Selected.png lives in the StatusBar. But its search area must be limited to its width (plus a few pixels extra). Otherwise it will always be found. Width_Nothing_Selected := 60

The other StatusBar images enable a safe return to the Canvas or add extra functionality to the macros. For instance Dynamic: We have attached f to a note and we want to replace the dynamic by mf. We select the note, press Z + A and input =*MF*. The old dynamic will be deleted, the new one attached. For instance Hairpin: We want to create a crescendo (or diminuendo) line but the line part of the symbol must be invisible. In the InputBox we enter CINV resp. *DINV*. The symbol is created the usual way via *Palettes* but the line part will be set invisible after an automated visit to *Properties*.

The Canvas search area

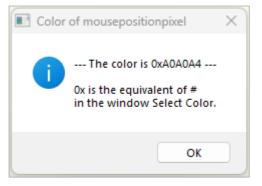
Aka the *Real Estate*. The AHK command *PixelSearch* searches for a specific color. An important application is to let the mouse move to the found spot and click it. This enables an easy return to the Canvas when a single element - note or rest - is selected. We inform AHK about the Canvas Search Area.

CSA_X1 := 304 CSA_Y1 := 96 CSA_X2 := 2559 CSA_Y2 := 1410

Setting the colors

```
ColorV1 := 0x0065bf
ColorV2 := 0x007f00
ColorV3 := 0xc53f00
ColorV4 := 0xc31989
Color_LBC := 0xa0a0a4
Color_Selected_PalCell := 0xb7d7f4
Color_Beam_Type_Auto := 0xb7d7f4
(Voice colors V1234: default values)
```

See the auto-execute section for more info. Use the utility $\mathbf{Z} + \mathbf{/}$ to find the last three colors.



Extra functionality for some symbols

Some symbols usually need a follow up immediately after their creation. For instance a staff spacer wants its height to be set. An acciaccatura often comes as a diatonically raised slurred grace note. Some lines need extra treatment in Properties more or less by nature.

nfo Special Symbols			Text Lines	×
Extra functionality using 'Prope	rties'		To get immediate access to proper	ties:
Staff type change # Line # Fext line # Sarré line # Staff text line #	STC L TL BL STTL		Select the line. Avoid edit mode with Escape. Press Z when ready.	
System text line # Staff spacer down, set height Staff spacer up, set height Staff spacer fixed, set height	SYTL SSD SSU SSF		OK Can	cel
Cresc. line invisible # Dim. line invisible # Reset (short) barlines # nsert and set vertical frame nsert and set horizontal frame nsert and set text frame nsert one measure before selection	CINV DINV RBL IVF IHF ITF I1MBS		Navigate with Left/Right. Press Escape + L/R to skip an input field. Space to toggle a switch. Press F1 when ready.	
Feathered beams Decelerate/slower # Accelerate/faster # Reset FB's	= FBD = FBA = RFB	=FBS =FBF	Use up/down to adjust height. Press Z when ready	
Repeated Palette use 1: :r2	1: :2		1.	
Window Special Characters Finger substituton above Finger substituton below	FSA FSB			
Note anchored line	NAL		$\frac{1}{45}$	
		ок	window Spec → Musical Syr Fingering. Siz	nbols -

New: the harp pedal diagrams are created in edit mode.

To set position and size of Special Characters the AHK inbuilt utility Window Spy comes in handy.

Active V	Vindow Po	sition:		
	x: 336	y: 175	w: 496	h: 502
Client:	x: 0	y: 0	w: 480	h: 463

And we can change this line according to our preference: WinMove, Special Characters, , 336, 175, 496, 502

The Prefix keys

In the hotkey combination **Z** + **A** Z is called the *prefix* key. The prefix key must be free in MuseScore, not in use as a shortcut. If you use **Z** as a shortcut try to redefine it e.g. in Shift + Z. **Z** is one of the most accessible keys, an ideal prefix key.

Other prefix keys in these macros:

CapsLock	no shortcut function possible in MU4
[opening bracket, used in navigation and to open files
]	closing bracket, used to close files
/	Pixelmousing prefix key.
	In MU4 Add acciaccatura, redefine e.g. in Shift + /
Ρ	In MU4 <i>Piano keyboard</i>
	You could redefine it or use $\mathbf{P} + \mathbf{K}$ in the Master_MU4.ahk

Apply Symbols from Palette P + H MU4 Master [+ H

You can customize tooltip positions. Search (*change*?)

Help

💽 Palette Help - P + H	×	Master MuseScore 4 - [+ H	×
Apply symbols from palette Recreate current symbol Reset palette search field	Z + A Win + /	Launch apply symbols from Palette Palette Help	[+ S P + H
Escape from navigation	CapsLock + P CapsLock + X	Run PixelMousing PixelMousing Help	[+/ /+H
Toggle toolbar note input Toggle full/max screen Preferences - shortcuts	CapsLock + 1 CapsLock + A CapsLock + S	Highlight mouse position Run Snipping Tool	CapsLock + LButton [+ NumPadAdd
Click selected element From element to voice 1	Alt + Z Shift + Alt + Z	Reload Master MU4 Exit Master MU4	[+]]+[
Navigation To 'Home' Fast access Instruments Fast access Properties Fast access Palettes	[+ Home [+ I [+ O [+ P	Piano keyboard Scroll up Scroll down Scroll left Scroll right	P + K Z + Up Z + Down Z + Left Z + Right
Get color mouse position Other utilities	Z + / Z + U		ОК
Relaunch apply symbols # Exit apply symbols # In Master MU4	[+ S] + S	↑ The <i>Master</i> simplifies	launching
Selection Range - all similar Range - same subtype	Control + RButton CapsLock + RButton	AHK files while MuseSco	-
Range - same voice Staff - all similar Staff - same subtype	Alt + Shift + RButton Shift + RButton Control + Shift + RButton	← The selection hotkeys the rightclick contextual The windows Select and	menus.
	ОК	are protected against m	

PixelMousing

Х PixelMousing Coordinates are relative to the active window Show/hide coordinates CapsLock Copy coordinates /+C Move the mouse: 1 px slow Up / + Up CapsLock + Up Down / + Down CapsLock + Down Left / + Left CapsLock + Left Right / + Right CapsLock + Right Move the mouse: 25 px slow / + U Up CapsLock + PageUp Down / + D CapsLock + PageDown Left /+L CapsLock + Home Right / + R CapsLock + End Move the mouse: 100 px fast Up CapsLock + NumPad 8 Down CapsLock + NumPad 2 Left CapsLock + NumPad 4 CapsLock + NumPad 6 Right /+, Left Click /+. Right Click Drag enable # / + N CapsLock + E / + M Drag disable # CapsLock + D # While using Windows Snipping Tool: Start/Stop image creation Exit PixelMousing] + /OK

PixelMousing counteracts small hand vibrations and gives us the pixel precision we'll sometimes need.

The prefix key **/** was chosen because it is well accessible in combination with the arrow keys.

With the Drag en/disable keys you can start/stop image creation.

The **CapsLock** combinations offer an ergonomical alternative.

Sleep times

When AutoHotkey sends a command it must give MuseScore or the Windows OS some time to respond. E.g. a mouse move + click usually needs some 200 ms. It takes MuseScore about 150 ms to produce a text in the Status-Bar. Navigation with F6, Tab and arrow keys however often needs only 30 ms.

Also, the time needed to open a window very much depends on the complexity of the window. And so on. When you doubleclick an AHK file in the systemtray you'll get more info about response times.

In the *auto execute section* you can optimize the sleep times for your system in one go. For instance to change all sleep times set on 100 ms to 90 ms: Sleep_100 := 90

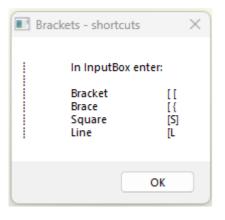
Palette shortcuts

Infoscreens start with $\ref{eq:classical}$, Clefs start with CL , Fretboard diagrams with Q , Noteheads with * , Beam properties with =

The standard accidentals use @ (at) for natural and reflect the qwerty layout. E.g. *Articulations* and *Tempo* show symbols having more than one shortcut. In this mass of shortcuts the nomenclature tries to follow a system which hopefully reveals itself after frequent use.

Reference section

💵 Info Palettes	×	Accidentals - shortcuts			
Enter a help shortcut or a symb	ol shortcut	In InputBox enter:			
▼ Accidentals	?AC	Flat	1		
	?AG	Natural	@		
 Arpeggios & Glissandi Articulations 	?AG ?AR	Sharp	#		
▼ Barlines	?BL	Double sharp	##		
 Beam Properties 	?BE	Double flat			
▼ Brackets	?BR	Natural Flat	@!		
▼ Breath's & Pauses	?BP	Natural Sharp	@#		
▼ Clefs	?CL	Arrow down guarter-tone flat	ARDN	ARF	
▼ Dynamics	?DY	Arrow guarter-tone sharp	ARUP	ARS	
▼ Fingering	?FI	Anow quarter-tone sharp	Anor	AND	
 Fretboard Diagrams 	?FD	Gould arrow guartertone accider	tals (24-ED)	0)	
▼ Grace Notes	?GN	Godia anow quarterione acciden	1013 (24-20)	0,	
▼ Guitar	?GT	Ouarter-tone flat	UPB	tb	1FB
▼ Harp	?HA	Three-quarter-tones flat	DNB	16	3FB
▼ Keyboard	?KB	Quarter-tone sharp	UPN	t k	15N
 Key Signatures 	?KS	Ouarter-tone flat	NDN	41	1FN
▼ Layout	?LO	Three-guarter-tones sharp	SUP	#t	3S#
▼ Lines	211	Quarter-tone sharp	DNS	1\$	1S#
Noteheads	?NH	Five-guarter-tones sharp	XUP	×t	5SX
▼ Ornaments	?OR	Three-quarter-tones sharp	DNX	1×	3SX
▼ Pitch	?PI	Three-guarter-tones flat	BUPB	btb	3FBB
▼ Repeats & Jumps	?RJ	Five-quarter-tones flat	DNBB	166	5FBB
▼ Tempo	?TM				
▼ Text	?TX	Add brackets to accidental	[]		
Time Signatures	?TS	Add parentheses to element	ö		
▼ Tremolo	?TR				
Repeat last command	R				
					OK
NB: if palette is open				_	
and macro finished					
Repeat last command	WIN + /				
		🔳 Arpeggios & Glissandi - short	cuts	×	
Close palette search field	CapsLock + P	Alpeggios or dissarial - shore	cuis	~	
and show Palette list					
Info Special Symbols	??	In InputBox enter:			
-					
		Arpeggio ARP			
	ОК	Arpeggio point up ARU Arpeggio point down ARD			
	()K	Arpeggio point down ARD			



In InputBox enter:		
Arpeggio Arpeggio point up Arpeggio point down Arpeggio bracket Arpeggio arrow up Arpeggio arrow down Glissando line straight Glissando line wavy Fall Doit Plop Scoop Slide out down Slide out up Slide in above Slide in below	ARP ARU ARD ARB ARRU ARRD GLS GLW FAL DOI PLO SCO SOD SOD SOU SIA SIB	
		ОК

n InputBox enter:					In li	nputBox enter:			
Accent Accent staccato Bend Downbow Fade in Fade out Harmonic Laissez vibrer Louré Marcato Marcato staccato	A A. B DB FI FO H LV L. M	> .A .M	>.	.>	Sing Dou Star End Hea Hea Das Fina Rev	gle barline uble barline rt repeat barline d repeat barline d-start repeat barline avy barline avy double barline shed barline al barline rerse final barline line dotted	 : : : HBL HDBL DASH FBL RFBL BL		
Marcato tenuto Muted Open Portato Gawtooth line segment dem wide line segment Gnap pizzicato	MT + O P. SLS SWLS SP	тм	^_	_^	Barl Barl Barl Barl # R	line tick 1 span # line tick 2 span # line short 1 span # line short 2 span # eset barlines sing 'Properties'	BT1 BT2 BS1 BS2 RBL		
Soft accent Soft accent staccato Soft accent tenuto dem SAT staccato Staccato	SA SA. SAT SAT.	<> <> <> <>	<>			mbination −ı: :r−2−−	1: :2		
Staccatissimo Staccatissimo stroke Staccatissimo wedge	 S W STR	S W	/ .:	/ 				ОК	
Stress	2117								
Tenuto Tenuto accent Tenuto staccato Tremolo bar Unstress Upbow Vibrato large faster	T TA T. TB UNSTR UB VLF	ĀT .T	2 2	>_ ~					
Tenuto Tenuto accent Tenuto staccato Tremolo bar Unstress Upbow Vibrato large faster Vibrato large slowest	T TA T. TB UNSTR UB					Breath's & Pau	uses - sho	ortcuts	
Stress Tenuto Tenuto accent Tenuto staccato Tremolo bar Unstress Upbow Vibrato large faster Vibrato large slowest Volume swell	T TA T. TB UNSTR UB VLF VLS VS			~	×	Breath's & Pau		ortcuts	
Tenuto Tenuto accent Tenuto staccato Tremolo bar Unstress Upbow Vibrato large faster Vibrato large slowest Volume swell Beam Properties - short	T TA T. TB UNSTR UB VLF VLS VS	.т		 ОК	×	In InputBox enter Breath mark (com Breathmark tick-li Breathmark salze	r: ima) ike do	BMC BMT BMS	SALZ
Tenuto Tenuto accent Tenuto staccato Tremolo bar Unstress Upbow Vibrato large faster Vibrato large slowest Volume swell Beam Properties - short	T TA T. TB UNSTR UB VLF VLS VS tcuts tcuts		' MU3 N Auto t No be Start t Middli Start 2	 OK		In InputBox enter Breath mark (com Breathmark tick-li	r: ima) ike do ow-like	BMC BMT	SALZ

Clefs - shortcuts In InputBox enter: Treble CLT Treble 8va CLT8VA Treble 15ma CLT15MA Treble 8vb CLT8VB Treble 15vb CLT15VB Double Treble 8vb CLDT8VB Treble optional 8vb CLT08VB French violin clef CLFVC Soprano CLS Mezzo Soprano CLMS Alto CLA Tenor CLTEN Baritone CLBAR Bass CLB
TrebleCLTTreble 8vaCLT8VATreble 15maCLT15MATreble 8vbCLT8VBTreble 15vbCLT15VBDouble Treble 8vbCLD78VBTreble optional 8vbCLT08VBFrench violin clefCLFVCSopranoCLSMezzo SopranoCLMSAltoCLATenorCLTENBaritoneCLBAR
TrebleCLTTreble 8vaCLT8VATreble 15maCLT15MATreble 8vbCLT8VBTreble 15vbCLT15VBDouble Treble 8vbCLD78VBTreble optional 8vbCLT08VBFrench violin clefCLFVCSopranoCLSMezzo SopranoCLMSAltoCLATenorCLTENBaritoneCLBAR
Treble 8vaCLT8VATreble 15maCLT15MATreble 8vbCLT8VBTreble 15vbCLT15VBDouble Treble 8vbCLD78VBTreble optional 8vbCLT08VBFrench violin clefCLFVCSopranoCLSMezzo SopranoCLMSAltoCLATenorCLTENBaritoneCLBAR
Treble 15maCLT 15MATreble 8vbCLT 8VBTreble 15vbCLT 15VBDouble Treble 8vbCLDT 8VBTreble optional 8vbCLT 8VBFrench violin clefCLFVCSopranoCLSMezzo SopranoCLMSAltoCLATenorCLTENBaritoneCLBAR
Treble 8vbCLT8VBTreble 15vbCLT15VBDouble Treble 8vbCLDT8VBTreble optional 8vbCLT08VBFrench violin clefCLFVCSopranoCLSMezzo SopranoCLMSAltoCLATenorCLTENBaritoneCLBAR
Treble 15vbCLT15VBDouble Treble 8vbCLDT8VBTreble optional 8vbCLT08VBFrench violin clefCLFVCSopranoCLSMezzo SopranoCLMSAltoCLATenorCLTENBaritoneCLBAR
Double Treble 8vbCLDT8VBTreble optional 8vbCLT08VBFrench violin clefCLFVCSopranoCLSMezzo SopranoCLMSAltoCLATenorCLTENBaritoneCLBAR
Treble optional 8vbCLTO8VBFrench violin clefCLFVCSopranoCLSMezzo SopranoCLMSAltoCLATenorCLTENBaritoneCLBAR
French violin clef CLFVC Soprano CLS Mezzo Soprano CLMS Alto CLA Tenor CLTEN Baritone CLBAR
Soprano CLS Mezzo Soprano CLMS Alto CLA Tenor CLTEN Baritone CLBAR
Mezzo Soprano CLMS Alto CLA Tenor CLTEN Baritone CLBAR
Alto CLA Tenor CLTEN Baritone CLBAR
Tenor CLTEN Baritone CLBAR
Baritone CLBAR
Bass CLB
Bass 8va CLB8VA
Bass 15ma CLB15MA
Bass 8vb CLB8VB
Bass 15mb CLB15MB
Baritone F clef CLBARF
Subbass CLSB
Percussion CLP
Percussion 2 CLP2 Tablature CLTAB
Tablature 4 lines CLTAB4
Tablature serif CLTABS
Tablature serif 4 lines CLTABS4
French 18th century
Soprano CLS18
Alto CLA18
Tenor CLT18 F clef CLF18
F def CLF18
19th century
C clef H shape CLC19
F clef CLF19
French 20th century
Soprano CLS20
Alto CLA20
Tenor CLT20
ОК

💽 Fretboar	rd diagrams - short	cuts X
QA QB QC QD QE QF QG	QA7 QB7 QC7 QD7 QE7 QF7 QG7	QAm QBm QCm QDm QEm QFm QGm
		ОК

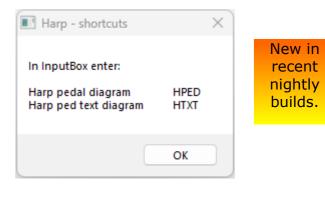
💽 Dyna	mics - sh	ortcuts						\times
PPPPPP FFFFFF RF	FFFFF	PPPP FFFF FZ		PP FF SFZ R*		MP MF SFFZ Z*	N*	
	Box enter	r prefix =	followed	by selectir 1 by the n =SFF	ew dynai			
mf < cre # Cresc # Dim _			MF≺ C D	CINV DINV				
# CINV a	and DINV	make the	e lines in	visible				
						(DK	

Fing	ering - s	hortcuts		\times
in inpu	itBox ent	er:		
Piano		LH Guita		
0	P0	0	0	
1	P1 P2	1	1	
2 3	P2 P3	2 3	â	
4	P4	4	2 3 4 5	
5	P5	5	5	
		т	тн	
Circled	String	RH Guit	ar	
0	S0 _	р	-P	
1	S1	i	-1	
2 3 4 5	S2	m	-M	
3	S3 S4	a c	-A -C	
5	54 S5	Thpos	TP	
6	S6	mpos		
Lute				
RH thu			LT	
	t finger		L1	
	ond fing	er	L2	
RH thi	d finger		L3	
		tion above		
Finger	substitut	ion below	FSB	
			0 K	
			ОК	

Grace Notes - shortcuts		×	💽 Keyl
In InputBox enter: Acciaccatura Acciaccatura + slur # Appogiatura Appogiatura + slur # Grace quarter Grace 16th Grace 32nd	AC ACS AP G4 G16 G32 C2A		In Inpu I
Grace eight after Grace 16th after Grace 32nd after # Grace note diatonically rai			Ped Ped
NB: if palette is open and m Repeat last command to add more grace notes	WIN + /		
	OK		

Keyboard - shortcuts X					
In InputBox enter:					
I	Pedline start-release	PSR			
/	Pedline start-continue	PSC			
\/	Pedline continue-continue	PCC			
\I	Pedline continue-release	PCR			
Ped*	Pedline start-asterisk	PS*			
Ped	Pedline start-stop (release)	PSS			
		ОК			

🔳 Guitar - shor	tcuts			×
In InputBox ent	er:			
Barré line Palm mute Let ring Bend Tremolo bar Guitar vibrato Guitar vibrato w Distort Overdrive Harmonics Jazz tone	ride	BL PM LR B TB GV GVW DIS OD HAR JT		
LH Guitar	Circle	d String	RH Guit	ar
0 0 1 1 2 2 3 3 4 4 5 5 T TH	0 1 2 3 4 5 6	S0 S1 S2 S3 S4 S5 S6	p i m a c Th pos	-P -I -M -A -C TP
Lute RH thumb RH first finger RH second fing RH third finger	er	LT L1 L2 L3		
			0	к



💽 Key Si	ignatures	- shor	×
In Input	Box enter	:	
MAJOR	MINOR	ENTER	
G D A E B F≉ C≇	E B C# G# D# A#	1# 2# 3# 4# 5# 6# 7#	
F ВЬ АЬ ОЬ GЬ СЬ	D G F Bb Eb Ab	1b 2b 3b 4b 5b 6b 7b	
с	А	0#0b	
Open At	onal	XSIG	
		OK	

Lines - shortcuts

Octave lines in Pedal lines in Text lines in Ornament lines in Guitar lines in Volta lines in mf cresc pin in In InputBox enter	▼ Keyboard ▼ Text ▼ Ornaments ▼ Guitar ▼ Repeats & Jumps ▼ Dynamics	
Ambitus # Cresc * Dim * Downprall line Guitar vibrato Guitar vibrato wid Let ring Line mf cresc pin Note anchored lin Palm mute Prall prall line Prima volta Seconda volta op Terza volta Seconda volta op Terza volta Text line Staff text line System text line Tremolo sawtooth Trill line Upprall line	LR L MF< PM PPL 1V 2V en 2VO 3V TL STTL SYTL n wide TSAW TRL UPL	
# Select clef * CINV and DINV	make the lines invisible	•
PEDAL		
 / \/ \ Ped* Ped	Pedline start-release Pedline start-continu Pedline continue-con Pedline continue-rele Pedline start-asterisk Pedline start-stop	tinue PC
OCTAVES	Input 8VA 8VB 15MA	15MB 22MA 22MB
		ОК

Layout - shortcuts		×
In InputBox enter: System break Page break Section break Staff spacer down Staff spacer up Staff spacer fixed Staff type change Insert vertical frame Insert horizontal frame Insert text frame Insert text frame Insert one measure before selection Keep measures on same system	SB PB SSD SSU SSF STC IVF IHF ITF I1MBS KMOSS	
	ОК	

 \times

PSR PSC PCC PCR PS* PSS

Noteheads - short	cuts	×
In InputBox enter:		
Alt brevis Circled Circled large Cross Diamond Diamond old Heavy cross Heavy cross hat Large arrow Large diamond Normal Plus Slash Slashed forwards Slashed backwards Triangle up Triangle down With X X circle	*AB *C *D *D0 *HX *HXH *LA *LD *N *+ *// */ *TU *TD *XX *XC	
Do Re Mi Fa Sol La Ti Add parentheses to element	DO RE MI FA SOL LA TI	
	ОК	

Ornaments - shortcuts			\times
In InputBox enter: Tremblement Turn Turn with slash Inverted turn Trill Short trill Trill line Mordent Up mordent Down mordent Mordent + upper prefix Slide Prall Mordent Up prall Prall down Prall up Line Prall Upprall line Downprall line Prall prall line	TRMB +T +T/ -T TR SHTR TRL MOR UPM DNM MUP SL PRM UPR PDN PUP LPR UPL DPL PPL	SLIDE	
		ОК	

Text - shortcuts	\times
In InputBox enter:	
Stafftext	STT STTL
Stafftext line System text	SYT
System text line	SYTL
Expression text	EXT
Text line	TL
Arco	ARC
Col legno Détaché	CL DT
Detache	DIS
Harmonics	HAR
Change instrument	CI
Jazz tone	л
Legato Martelé	LG MAR
Normal	NM
Measure number	MN
Mute	MU
Open Overdrive	OP OD
Pizzicato	PIZ
Rehearsal mark	RM
Sul ponticello	SULP
Sul tasto Tremolo	SULT TREM
Vibrato	VIB
S/A Soprano/Alto T/B Tenor/Bass	S/A T/B
T/L Tenor Lead	T/L
B/B Bari/Bass	B/B
	ОК

Pitch Lines - shortcuts	×
In InputBox enter: 8va alta 8va bassa 15ma alta 15ma bassa 22ma alta 22ma bassa Ambitus * * Select clef	8va 8vb 15ma 15mb 22ma 22mb AMB
	ок

In InputBox enter:Repeat last measureRLMRepeat last 2 measuresR2MRepeat last 4 measuresR4MSegnoSEGSegno variation §SEGVCoda ΦCODACoda variationCODAVFineFINETo Coda textTCTTo Coda textTCTTo Coda symbol ΦTCSDa CapoDCDa Capo al FineDCAFDa Capo al CodaDCACD.S. al CodaDSACD.S. al FineDSAFD.S.DSDa Capo al Double CodaDSAACD.S.S. al Double CodaDSAACD.S.S. al CodaDSAAFD.S.S. al CodaDSAAFDa CodaDACODADa CodaDACODADa CodaDACODADa CodaDACODADa Double CodaDACODADa Double CodaDACODADa Double CodaDA2CODAPrima volta1VSeconda volta2V
FineFINETo Coda textTCTTo Coda symbol ΦTCSDa CapoDCDa Capo al FineDCAFDa Capo al CodaDCACD.S. al CodaDSACD.S. al FineDSAFD.S.DSDa Capo al Double CodaDCADCD.S.S. al CodaDSSACD.S.S. al CodaDSSACD.S.S. al CodaDSSACD.S.S. al CodaDSSACD.S.S. al FineDSSAFDa CodaDACODADa Double CodaDACODADa Double CodaDA2CODAPrima volta1V
D.S.S al Coda DSSAC D.S.S. al Double Coda DSSADC D.S.S. al Fine DSSAF Da Coda DACODA Da Double Coda DA2CODA Prima volta 1V
Seconda volta, open 2VO
Terza volta 3V Vibrato sawtooth - line VIBSAW Tremolo sawtooth wide - line TREMSAW Start repeat : End repeat : End-start repeat : Combination
г-1 1: :2

Tempo - shortcuts					×
In InputBox enter:					
Half note =80 Half note dotted =80 Quarter =80 Quarter dotted =80 Eight =80 Eight dotted =80	M2 M2. M4 M8 M8.	MINIM MINIM. CROTCH CROTCH QUAVER QUAVER.	ET.		
Grave 35 Largo 50 Lento 52 Adagio 71 Andante 92 Moderato 114 Allegretto 116 Allegro 144 Vivace 172 Presto 187 Prestissimo 200	GRA LAR ADA AND AND ALTO ALRO VIV PRE ISSIMO	GRAV LARG LENT ADAG ANDA MODE A< A> VIVA PRES PRESTISS	MODER ALLEGRE ALLEGRC VIVAC PREST	ANDANTE MODERATO ALLEGRETTO	
Accelerando Allargando Ritardando Swing Straight Calando Lentando Morendo Precipitando Smorzando Sostenuto Stringendo	ACCEL ALLAR RITAR SWING STRAIG CALAN LENTA MOREN PRECI SMORZ SOSTE STRIN				
METRIC MODULATION Quarter=dotted quarter Dotted quarter=quarter Dotted eight=quarter Half=quarter Quarter=half Eight=eight Quarter=quarter		MM4=4. MM4.=4 MM8.=4 MM2=4 MM4=2 MM8=8 MM4=4		MMC=C. MMC.=C MMQ.=C MMM=C MMC=M MMQ=Q MMC=C	
				ОК	

💽 Tren	nolos - shortcuts			×
in inpu	tBox enter:			
1/8 1/16 1/32 1/64	stroke through stem stroke through stem stroke through stem stroke through stem	8 16 32 64	Q SQ DSQ HDSQ	
1/8 1/16 1/32 1/64	between notes between notes between notes between notes	-8- -16- -32- -64-	-Q- -SQ- -DSQ- -HDSQ-	
Buzzrol	II	BR	BUZZ	
			ОК	

💽 Time Signa	tures - shor 🗙				
In InputBox enter:					
FOR	ENTER				
2/4 3/4 4/4 5/4 6/4 C 2/2 Cut time C Bach 2/2 3/2 4/2 3/8 4/8 5/8 6/8 7/8 9/8 Cut 3 # 12/8	2/4 3/4 4/4 5/4 6/4 C4/4 2/2 C2/2 B2/2 3/2 4/2 3/8 4/8 5/8 6/8 7/8 9/8 C9/8 12/8				
# Cut triple time (9/8)					
	ОК				