Key-Chords & Key-Seq

Action	<u>Keystroke</u>	Function	Note Note			
Two Characters	-		e same time to invoke a specific command.			
key-chord, or key-seq	 ▶ This requires the key-chord external package PEL activates it with the pel-use-key-chord user-option set to t or to use-from-start, • PEL activates the global and mode-specific key chord bindings identified in the pel-key-chords user option. • If pel-use-key-chord is set to use-from-start it activates the key-chords when Emacs starts, otherwise you must first activate the key-chord mode with the key-chord-mode command which PEL maps to the keystroke <f11> <f5> k k.</f5></f11> 					
See also: <u>∑ Customize</u>	The key-seq external package activated by pel-use-key-seq user option set to t, allows creation of key-chords as key-seq sequences. The key-seq sequences impose a key order for detection which might help fast typists: if you define "4r" as you key-seq sequence it will only trigger the action if you type '4' then 'r' quickly. Typing the 'r' then the '4' quickly will not trigger the action.					
		• A Note, however that key sequences defined with key-seq must only use ASCII characters in the decimal range of [32,126]. This means you cannot use control characters in key-seq sequences.				
	For key-chord sequence key-chords, type C-q foll	 For key-chord sequences you can use ASCII control characters; to include them in the 2 character sequence when editing you key-chord in the pel-key-chords, type C-q followed by the control key. For example type C-q C-i to insert a tab. PEL provides a set of pre-defined key-chords in the pel-key-chords user option and maps the the <f11> <f5> k <f2> to quickly access the</f2></f5></f11> 				
	PEL key-code customize buffer. and edit these values. You can add, delete or edit any of the provided key-chords, which provide examples of the ways to define your own key-chords. The list of key-chords PEL pre-defines and provides as default are show in the rows below. • A key chord is a group of 2 normal, non-modifier keys that must be typed simultaneously to activate the action identified in the key chord definition. • Here, we are not talking of something like the normal Emacs key bindings like C-s, where the Control key and the s key are type together to do a CONTROL-S or where M-b represents using the Meta key and the b key together. The key-chords discussed here allow you to define actions when you type, for example, the key 'j' and the key 'k' together, or when you type the '.' key twice quickly. When the key-chord-mode is active these special key-chord events are triggering the action you key-chord definition identifies. If the key-chord-mode is off, you get the normal Emacs behaviour of inserting the two keys inside the current buffer at point location.					
	• pel-key-chord-two-key	s-delay: Max time delay between	een two key press to be considered a key chord.			
	 pel-key-chord-one-key-delay: Max time delay between 2 press of the same key to be considered a key chord. This should normally be a little longer than 'key-chord-two-keys-delay'. pel-key-chord-in-macros: If nil, don't expand key chords when executing keyboard macros. If non-nil, expand chord sequences in macro but only if a similar chord was entered during the last interactive macro recording. (This carries a bit of guesswork. We can't know for sure when executing whether two keys were typed quickly or slowly when recorded.) Switching input-method (as described in Input Method) prevents key-chord from working properly. 					
	To fix the problem:	toggle the key-chord-mode of	f and back on.			
Open this PDF file. See also: <u>N Help/Info</u>	<f11> <f5> k <f1></f1></f5></f11>	(pel-help-pdf &optional OPEN-WEB-PAGE)	Open the <u>Ney-Chords</u> local PDF. If the prefix argument (like C-u or M) is used, then it opens the remote GitHub hosted raw PDF instead. If the pel-flip-help-pdf-arg user-option is set it's the other way around.			
∑ Customize PEL key- chord control	<f11> <f5> k <f2></f2></f5></f11>	(pel-cfg-pkg-key-chord &optional OTHER-WINDOW)	Customize PEL Key Chord support. • If OTHER-WINDOW is non-nil (use C-u), display in another window.			
<u>∑ Customize</u> Emacs keychord control	<f11> <f5> k <f3></f3></f5></f11>	(pel-customize-library &optional OTHER-WINDOW)	Customize Emacs support for: key-chord • If OTHER-WINDOW is non-nil (use C-u), display in another window.			
PEL Key-chords	 The following rows describe the key-chords PEL defines by default in the pel-key-chords user option. You can use them when the key-chord-mode is active. You can also decide to change them if they do not suit you, delete or add new ones by customizing the pel-key-chords user option. PEL provides a key binding to quickly access the customize buffer for key-chord control: <f11> <f2> P M-K</f2></f11> The pel-key-chords user option has complete docstring that describes how to add news values. 					
Toggle key-chord mode	<f11> <f5> k k</f5></f11>	(key-chord-mode ARG)	 Toggle key chord mode. With positive ARG enable the mode. With zero or negative arg disable the mode. A key chord is two keys that are pressed simultaneously, or one key quickly pressed twice. Requires key-chord PEL activates it with pel-use-key-chord. 			
Show state of key-chord mode	• <f11> <f5> k ? • <f11> ? k M-K</f11></f5></f11>	(pel-key-chord-describe)	Show state of key-chord-mode. When key-chord mode is on, list key chord bindings in a help buffer. See also: Help/Info			
PEL Pre-defined key- chords	 PEL default for pel-key-chords are identified in the tables of this document with the characters underlined. In some cases the key-chord is a simple binding to execute a command or an Emacs Lisp lambda form. In that case the 2 key-chord keys are shown in the keystroke column alone, simply underlined. In other cases, the key-chord inserts characters and execute commands. In such as case, the 2 key-chord keys are also shown in the keystroke column alone, but instead of describing the function in the function column, the cell shows the key-chord string which represent both the character inserted and the key code for the command. For example, the key-chord that consist of typing the < key and the > key together is represented as the ≤> key-chord and the expansion is show as "<>\C-b". The effect is to insert both angle brackets and put point in between, since C-b is bound to to command backward-char. The color of the key-chord corresponds to the availability of the commands used, if any. A key-chord that depends only on Emacs standard commands or simple characters is therefore shown in black. PEL pre-defined key-chords are key-chords, not key-seq. Note that key-seq cannot use tab the way it is used for pel-indent-rigidly below. With key-chord or key-seq defined as lambdas, you can pass arguments to the called command, just as any other key binding. You can control whether a key-chord is allowed in a read-only buffer for example, and/or pass numeric arguments. PEL uses this ability in the definitions of the key-chords using pel commands but it could be applied to anything defined with a lambda. 					
Insert <> and place point between them	<>	<>\C-b	Global: available in all modes.			
Insert [] and place point between them	П	[]/C-b	Global: available in all modes.			
Insert {} and place cursor between	Ω	{\n\n}\C-p\C-p	Available in c-mode and c++-mode			
Move to window above	уш	(windmove-up &optional ARG)	Select the window above the current one. With no prefix argument, or with prefix argument equal to zero, "up" is relative to the position of point in the window; otherwise it is relative to the left edge (for positive ARG) or the right edge (for negative ARG) of the current window. If no window is at the desired location, an error is signaled. Global: available in all modes.			
Move to window below	<u>bn</u>	(windmove-down &optional ARG)	Select the window below the current one. With no prefix argument, or with prefix argument equal to zero, "down" is relative to the position of point in the window; otherwise it is relative to the left edge (for positive ARG) or the right edge (for negative ARG) of the current window. If no window is at the desired location, an error is signaled. Global: available in all modes.			
Move to window at left	gf	(windmove-left &optional ARG)	Select the window to the left of the current one. With no prefix argument, or with prefix argument equal to zero, "left" is relative to the position of point in the window; otherwise it is relative to the top edge (for positive ARG) or the bottom edge (for negative ARG) of the current window. If no window is at the desired location, an error is signalled. Global: available in all modes.			
	This key chord might be problematic for programming or writing English text. Using key-seq will help, as you will have to type the letter 'g' before the letter 'f'. To remove its customize value: use <f11> <f5> k <f2>.</f2></f5></f11>					

Action	<u>Keystroke</u>	Function	Note		
Move to window at right	ik	(windmove-right &optional ARG)	Select the window to the right of the current one. With no prefix argument, or with prefix argument equal to zero, "right" is relative to the position of point in the window; otherwise it is relative to the top edge (for positive ARG) or the bottom edge (for negative ARG) of the current window. If no window is at the desired location, an error is signaled. Global: available in all modes.		
Indent rigidly	<tab>q</tab>	(pel-indent-rigidly &optional N)	Indent rigidly the marked region or current line N times.		
See also: • \$\mathbb{B}\tilde{\text{I}} - \mathbb{C} • \$\mathbb{B}\tilde{\text{I}} - \mathbb{C}++ • \$\mathbb{B}\tilde{\text{I}} - \mathbb{D}	 Left a region is marked, it uses 'indent-rigidly' and provides the same prompts to control indentation changes. If no region is marked, it operates on current line(s) identified by the numeric argument N (or if not specified N=1): N = [-1, 0, 1] : operate on current line and N-1 lines below. N < 1 : operate on the current line and (abs N) -1 lines above. Command numeric prefix is available with the key-chord binding. Indent all lines starting in the region. If called interactively with no prefix argument, activate a transient mode in which the indentation can be adjusted interactively by typing <left>, <right>, <s-left>, or <s-right>.</s-right></s-left></right></left> These commands activate a transient mode where Emacs prompts for extra keys to control how to indent. Indenting and un-indenting is possible. The capabilities are controlled by the variable indent-rigidly-map with by default provides: S-<right> indent-rigidly-right-to-tab-stop</right> <s-(sight) indent-rigidly-left-to-tab-stop<="" li=""> <sight> indent-rigidly-left</sight> </s-(sight)> Typing any other key deactivates the transient mode. The S-<right> and S-<left> keys indent/de-indent to the next tab-stop position, which is controlled by the tab-width user option.</left></right> 				
Correct mode at point	<u>4r</u>	(flyspell-correct-word- before-point &optional EVENT OPOINT)	Pop up a menu of possible corrections for misspelled word before point. • Available when current buffer has flyspell-mode or flyspell-prog-mode enabled. • A fci-mode interferes with pop-up menu displays in terminal-mode, at least with the one used by flyspell-correct-word-before-point: the menu lines become all jagged, they do		
See also: <u>∑Highlight</u>	. 611	(nel-open at saint	not line up vertically. The problem does not affect Emacs running in graphics mode.		
Open file or web-page whose name is at point See: ∑ File mngt ★★ Command is generic and is also specialized for: MreStructuredText Part - C	• 6y • M- <f6> • <f11> f .</f11></f6>	(pel-open-at-point &optional N)	Open the file, library or the URL, named at point, with potential line & column #s. • If necessary will search source code files in current project as specified by pel-filename-at-point-finders user-option. Type <f12> <f4>? to show used file search method for supporting major modes. Supports glob characters, partial directory path. When multiple files are found it prompts using the method selected by pel-prompt-read-method user-option. The 6y key-chord is available if pel-use-key-chord is non-nil.</f4></f12>		
• <u>\$1 - C++</u>	-	•	od for some major modes, like C, C++, Erlang, reStructuredText, shell scripts.		
• <u>野江 - Erlang</u> • <u>野江 - UNIX Shell</u>	 See their respective pages for the major mode specific features. When executed from with a buffer in sh-mode, the '=' and ':' characters are used as additional delimiters. Shell variables (such as \$HOME) are expanded. 				
Delimiting characters File identification	In general the command extracts the file or directory name, and possibly line and column numbers, from text at point and tries to open the file or directory. The generic mode extraction works by identifying the beginning & end of the file/directory/library/URL name string by delimiter characters, one of: tab, newline and: "`' () [] {} <> '' "" 「] () (
heuristic					
Select multi-file	if the string is a file or directory name it opens it. If the file name is followed by line and column numbers the point is moved to that position in the buffer.				
selection method 🖛	When finding several file names, the command lists them and prompts using the method selected by pel-prompt-read-method user-option. The default is a very primitive function implemented by PEL. You can select a more powerful <u>ivy</u> prompting instead. With <u>ivy</u> selected, PEL will automatically set <u>read pel-use-ivy</u> to t <u>read automatically when you restart Emacs. Note that the command shows all files found by the specified search method, it does not only use the first one found.</u>				
Select target window -	 Use this to detect potential duplication in header file names in large include paths. The command opens the file in the window selected by the following logic controlled by presence or absence of typed numerical prefix arguments: Select target window: Without argument: If file or directory is already opened in a window, move point to that window and to the line column coordinates if specified. If no window holds that file, select the target window according to the number of editable windows in frame: if 1, split that window and use the new window, if 2: use the other window, if 3 or more, use the current window. 				
N>20 : open the directory See function docstring for more info.	 With prefix numeric argument N: N < 0: create a new window and use that. (abs N) > 20: then open the directory instead of the file. Interpret the window position from the N value adjusted: N-20 (or N+20 if N is negative) N = 0: use the 'other' (the next) window. N = 1, 3, 7or above (excluding 8, 9 and 10): select the target window based on the number of editable windows in frame: if 1 window: split that window and use the new window, if 2 windows: use the other window, if 3 or more windows: use the current window. N is: 8: up, 2: down, 4:left, 5:current, 6:right. N is 9: force opening the file in the OS associated application (with N=29 or N=-29, open the file's directory with the OS associated application (eg. macOS Finder, Windows Explorer). If this is a URL, open it in the OS default web browser. Selecting Minibuffer, inexistent or dedicated window is not allowed. 				
Open filename at point in a browser See also: File mngt	<u>6u</u>	(pel-browse-filename-at- point)	Open the file name at point inside the system's browser. • If point is at a directory name, open the systems application that browses directories (eg. macOS Finder, Windows Explorer).		
	Shis is the same as using pel-open-at-point with the argument N set to 9. It is easier to type and PEL assigns its own key-chord for it.				
Open URL at point in a browser	<u>7u</u>	(pel-browse-at-point)	Open the URL at point inside the system's browser.		
See also: File mngt	His is the same as using	g pel-open-at-point with the a	argument N set to 10. It is easier to type and PEL assigns its own key-chord for it.		

<u>Action</u>	<u>Keystroke</u>	Function	<u>Note</u>		
Search word at point from top of current buffer	<u>.;</u>	(pel-search-word-from-top &optional N)	Search word at point from top/bottom of buffer in window identified by N. Global: available in all modes.		
	 Search direction: If N is nil, 0 or larger, perform a search-forward from the top of the buffer in window identified by N. If N is negative: perform a isearch-backward from the bottom of the buffer in the window selected by the absolute value of N. Window selection: If N is not specified, nil, 1, 3, 7 or 9 and larger: search in current window. If N is 0: : search in other window If N in [2,8] range, search in window identified by the direction corresponding to the cursor in a numeric keypad: 8 := 'up 4 := 'left 5 := 'current 6 := 'right 2 := 'down Temporary word mode toggle: detecting a 'word' is affected by the subword-mode and superword-mode. When searching in current buffer, the following values of N temporary toggle the mode when grabbing the word: If N is 7: temporary toggle subword-mode to grab the word. If N is 9: temporary toggle superword-mode to grab the word. 				
	 Explicitly selecting the minibuffer window, or a non-existing window is not allowed, and search is done in current window. Searched word is remembered and can be used again to repeat an interactive search with C-s or C-r. Position before searched word is pushed on the mark ring. Using superword-mode allows you to search for function names in buffer for programming languages. If you do not want to change the mode but want to search for the word as interpreted by the other state of the mode type the command with N equal to 9: M-9 <f11> s .</f11> Command numeric prefix is available with the key-chord binding. 				

Key-Chords — References

Topic & Link	Description	
Emacs normal key sequences	Emacs supports binding commands to key sequences of your choice. In the sequence you can have keys that are typed along with one or several key modifiers (Control, Meta, Super, Hyper, Alt) and you can use several keys: the first set(s) being used as key prefixes.	
Key Sequences @ EmacsWiki	Describes what a normal/standard Emacs key sequence is.	
Key-Chord extension package	The key-chord package provides the ability to unbind commands to an event consisting of typing 2 keys simultaneously, those keys not using key modifiers. For example you could bing a command to pressing the '4' and the 'r' key simultaneously.	
key-chord @ MELPA	This page shows the doc coming from the key-chord.el. It's where PEL gets the file from.	
Key Chords @ Emacs Wiki	Some interesting discussion about key-chord.	
key-chord.el @ Emacs Wiki		
Key-Set extension package	The key-seq package builds on key-chord package. It changes the way simultaneous keys are detected and imposes an order to these keys. So for a key-seq of "jk" it only accepts the keys if 'j' is type before and 'k' is typed quickly following it. Depending of your typing skills this may help reduce the unwanted triggers of key chords. PEL supports both key-chord and key-seq to the level where you can define a mix of bindings: they can be key-chord or key-seq bindings.	
key-seq @ MELPA		
key-seq @ GitHub		