Cursor / Multiple-Cursors

Operation	Keystroke	Function	Note

Controlling Emacs' Cursor
 	
See also: ∑ **Customize**
	You can control Emacs cursor color and shape **when Emacs is running in graphical mode** (X mode) only.
	▦ Emacs provide the **cursor-type** customize option to select the default cursor shape. This is part of the **display** customization group.
	🔲 PEL provides the following user options cursor control for Emacs running in graphics mode:
	  • **pel-cursor-overwrite-mode-color** : Selects the cursor color when overwrite-mode is active.
	              Default is black on white background and white on black background.
	  • **pel-cursor-type-when-mark** : Selects the cursor type (shape) when mark is active.
	              Default to no cursor type change. Set it to a different type than 'cursor'.
	              A popular setting is to use 'bar' type when mark is on to help see what is in the region.
	Also, the **cursor-chg.el** file also exists but I have found it to slow Emacs. Therefore PEL implements its own control.		

Open this PDF file. See also: ∑ **Help/Info**	**\<f11\> m \<f1\>**	(**pel-help-pdf** &optional OPEN-WEB-PAGE)	Open the ∑ **Cursor** PDF using method specified by the **pel-open-pdf-method** user-option or the alternate one if a command prefix (like **C-u**) was used.
Customize PEL Cursor control	**\<f11\> m \<f2\>**	(**pel-customize-pel** &optional OTHER-WINDOW)	Customize PEL support for cursor and multiple-cursors. • If OTHER-WINDOW is non-nil (use **C-u**), display in other window.

Customize Emacs cursor control.	**\<f11\> m \<f3\>**	(**pel-customize-library** &optional OTHER-WINDOW)	Customize Emacs support for cursor and multiple-cursors: provide access to the following customization groups:
			  • **cursor** : where most cursor settings are, including the PEL user-options.
			  • **display**: where **cursor-type** is defined. To change default cursor only.
			  • **multiple-cursor**: for controlling the multiple cursor settings.

Temporary change the cursor's color	**\<f11\> C-c**	(**pel-set-cursor-color** COLORNAME)	Set cursor to specified COLORNAME string. Prompts for the color name, support color name completion with tab. ⚠️ Only available in graphics mode.
			• Ignore the request when color is not a string. Return the COLOR string on success, nil otherwise. • ⚠️ When used as an interactive command the new cursor color sticks only until the overwrite-mode is toggled. • ☝ To make the color change persist, modify the \`cursor' or the \`**pel-cursor-overwrite-mode-color**' user options.
Permanently change the cursor's color See also: ∑ **Customize**	**\<f11\> \<f2\> E C-c**	(**pel-customize-cursor** &optional OTHER-WINDOW)	Quicks access to the customize buffer to set the cursor default color. • It sets the color permanently if the customization is saved. ⚠️ Only available in graphics mode.

Multiple Cursors Mode
 	
See **demo on Emacs-Rocks**
 	
See also:
∑ **Windows**
 	
See also:
∑ **Keyboard Macros**
	With this set of commands you can set multiple cursors in the window to operate on each location simultaneously.
	📦 This requires the **multiple-cursors** external package. 🔲 With PEL, set the **pel-use-multiple-cursors** user-option set to t to install and activate it.
	There's 2 main methods with this package, both start by identifying the locations of the cursors:
	  • Make a vertical selection of several lines (on any column) and use the **mc/edit-lines** (mapped to **\<f11\> m m**) to activate one cursor per line.
	  • Highlight some text and then use the other 3 commands to activate a cursor before the marked area and on the next, previous or all instances of the same text in the buffer:
	    • **mc/mark-next-like-this**
	    • **mc/mark-previous-like-this**
	    • **mc/mark-all-like-this**
	There are other methods to set the cursors:
	  • Another one is to use Visual Regexp (see below).
	  • See also 🅿️ IM- **Lispy** which supports multiple cursor on potentially different text in multiple locations of Lisp source code.
	
	⚠️ While this is fine and very useful for editing commands be away that every command issued from the buffer with multiple cursor actives will also be potentially applied at the location of each cursor. Therefore if you issue another type of command, like execution via **M-x** or help request with **C-h** or **\<f1\>**, Emacs will prompt asking whether that command applies to all cursors.
	
	☝ To cancel a multi-cursor operation you often have to issue **C-g** twice: once to cancel the text marking and then again to cancel the multi-cursor mode.
	☝ The number of matches is shown on the window mode-line with something like "mc:**56**" identifying 56 matches.
	  💡 You can use these commands to quickly get a count of matches in the buffer: look at the count displayed in the mode-line. Just remember to cancel.
	
	💡 To see all cursors in a larger area of the current buffer that your screen height can show, split your window with several side-by side ones (with **C-x 3**) and use the follow-mode (with **\<f11\> w f**) to line up the windows. Exit follow-mode and then use the multi-cursor command to perform the change.
	☝ Once you have identified some matches, use the **C-'** or **\<f11\> m /** key to hide non-matching lines to see more of those matches then proceed with your editing commands.
	
	Alternatives to multiple-cursor technique:
	  • The **iedit-mode**, describe later in this page, can be used to replace all or some instances of selected text like variables, function names, etc…
	  • See Xah Lee comment on this promoting the use of keyboard macros and other techniques instead of using multi-cursors.
	    • Personally I like multi-cursor when modifying text inside a single buffer and use keyboard macros when modifying text in a buffer taking data from another or several other windows. I often use multi-cursor *and* keyboard macros together for even better leverage.		

Hide un-matched	Once you have selected matched patterns with the commands below, you can hide the other, non-matched lines, showing only lines with matched area, with some lines before and after. Possibly several such sections separated by special lines. Hiding these non matching lines help see the modifications over a large number of separated matching lines.		
Hide/show unmatched lines	**C-'** **\<f11\> m /**	(**mc-hide-unmatched-lines-mode** ARG)	Hide/show all lines that do not have one of the multiple-cursors. Show some lines before and after. • If there are several group of matches in several areas, show separating lines between them. • Issue the command again to restore a normal, complete view to the buffer.
• Set Multiple	**Cursors on all instances of guessed area based on position of point**		
Mark all from point, repeat to increase number of selections	**\<f11\> m m**	(**mc/mark-all-like-this-dwim**)	Tries to guess what you want to mark all of. • Can be pressed multiple times to increase selection to a larger area. • You can also use **\<f5\>** to 'repeat' instead of retyping **\<f1\> m m** . • With prefix, it behaves the same as \`mc/mark-all-like-this'
Mark all from point	**\<f11\> m M-m**	(**mc/mark-all-dwim**)	Tries even harder to guess what you want to mark all of. • If the region is active and spans multiple lines, it will behave as if \`mc/mark-all-in-region'. • With the prefix ARG, it will call \`mc/edit-lines' instead. • If the region is inactive or on a single line, it will behave like \`mc/mark-all-like-this-dwim'.

Mark more like this at point using cursor navigation	**\<f11\> m .**	(**mc/mark-more-like-this-extended**)	Like mark-more-like-this, but then lets you adjust with arrows key.
			• The adjustments work like this:
			  • **\<up\>** Mark previous like this and set direction to 'up. While going up:
			    • **\<left\>** Skip past the cursor furthest up
			    • **\<right\>** Remove the cursor furthest up
			  • **\<down\>** Mark next like this and set direction to 'down. While going down:
			    • **\<left\>** Remove the cursor furthest down
			    • **\<right\>** Skip past the cursor furthest down

• Set Multiple	**Cursors on the some columns of multiple lines.**		☛ Note: no need to mark lines first

Mark multiple lines on a column ★
    ★
    ★
    ★
	\<f11\> m c	(**set-rectangular-region-anchor**)	Anchors the rectangular region at point.
			• Think of this one as \`set-mark' except you're marking a rectangular region.
			• It is an exceedingly quick way of adding multiple cursors to multiple lines.
			  • Issue the command then move cursor to identify area.
			    • ☝ Unaffected by 'void' space on sorter lines! Making this very useful to:
			      • insert or remove indentation after some leading text (like inside a table).
			      • delete or fill a rectangle of text with any columns of text.

Operation	Keystroke	Function	Note
• Set Multiple	**Cursors on marked lines …**		☛ Note: the lines must be marked first!
… on same column	`<f11> m l`	(mc/edit-lines &optional ARG)	Add one cursor to each line of the active region. Starts from mark and moves in straight down or up towards the line point is on. • What is done with lines which are not long enough is governed by 'mc/edit-lines-empty-lines'. The prefix argument ARG can be used to override this. • If ARG negative, short lines will be ignored. • Any other non-nil value will cause short lines to be padded.
… at beginning of line	`<f11> m C-a`	(mc/edit-beginnings-of-lines)	Add one cursor to the beginning of each line in the active region.
… at end of line	`<f11> m C-e`	(mc/edit-ends-of-lines)	Add one cursor to the end of each line in the active region.
• Set Multiple	**Cursors on marked area like this …**		(on the same side as point on currently marked area)
… in buffer	`<f11> m a`	(mc/mark-all-like-this)	Find and mark all the parts of the buffer matching the currently active region.
… in defun	`<f11> m C-M-a`	(mc/mark-all-like-this-in-defun)	Mark all like this in defun. ⚠️ The concept of "defun" depends on the major mode. The area actually selected is controlled by the function **narrow-to-defun** and its support by the current major mode.
… in region	`<f11> m ?`	(mc/mark-all-in-region)	Find and mark all the parts in the region matching the given search. • Prompt for string to search inside the marked region.
• Add more	**cursors like the current one(s)..**		
… set cursor to next instance of current match	`<f11> m n`	(mc/mark-next-like-this ARG)	Find and mark the next part of the buffer matching the currently active region • If no region is active add a cursor on the next line. • With negative ARG, delete the last one instead. • With zero ARG, skip the last one and mark next.
… set cursor to previous instance of current match	`<f11> m p`	(mc/mark-previous-like-this ARG)	Find and mark the previous part of the buffer matching the currently active region • If no region is active add a cursor on the previous line • With negative ARG, delete the last one instead. • With zero ARG, skip the last one and mark next.
• Remove	**cursors like the current one(s)…**		
… from the end of selected ones	`<f11> m N`	(mc/unmark-next-like-this)	Deselect next part of the buffer matching the currently active region.
… from the beginning of selected ones	`<f11> m P`	(mc/unmark-previous-like-this)	Deselect previous part of the buffer matching the currently active region.
• Skip to …			
… the next match	`<f11> m M-n`	(mc/skip-to-next-like-this)	Skip the current one and select the next part of the buffer matching the currently active region.
… the previous match	`<f11> m M-p`	(mc/skip-to-previous-like-this)	Skip the current one and select the prev part of the buffer matching the currently active region.
• By Word:	**Set cursor(s) to the…**		
• Match next instance currently highlighted word, or • cursor on next line	`<f11> m w`	(mc/mark-next-word-like-this ARG)	Find and mark the next word of the buffer matching the currently active region. • The matching region must be a whole word to be a match. • If no region is active add a cursor on the next line. • With negative ARG, delete the last one instead. • With zero ARG, skip the last one and mark next.
• Match next instance of marked region, or • Match current word its next instance	`<f11> m M-w`	(mc/mark-next-like-this-word ARG)	Find and mark the next part of the buffer matching the currently active region. • If no region is active, mark the word at the point and find the next match. • With negative ARG, delete the last one instead. • With zero ARG, skip the last one and mark next.
• Match previous instance currently highlighted word, or • cursor on previous line	`<f11> m W`	(mc/mark-previous-word-like-this ARG)	Find and mark the previous part of the buffer matching the currently active region. • The matching region must be a whole word to be a match. • If no region is active add a cursor on the previous line. • With negative ARG, delete the last one instead. • With zero ARG, skip the last one and mark next.
• Match previous instance of marked region, or • Match current word its previous instance	`<f11> m M-W`	(mc/mark-previous-like-this-word ARG)	Find and mark the previous part of the buffer matching the currently active region. • If no region is active, mark the word at the point and find the previous match. • With negative ARG, delete the last one instead. • With zero ARG, skip the last one and mark previous.
Match all words matching: • word at point, or • currently marked area	`<f11> m C-w`	(mc/mark-all-words-like-this)	Find and mark all words in the buffer matching the word at point or currently marked.
Match all words like current word, in the current defun	`<f11> m C-M-w`	(mc/mark-all-words-like-this-in-defun)	Mark all words like this in defun.
• By Symbol:	**Set cursor(s) to the…**		
• Match next instance currently highlighted symbol, or • cursor on next line	`<f11> m s`	(mc/mark-next-symbol-like-this ARG)	Find and mark the next symbol of the buffer matching the currently active region. • The matching region must be a whole symbol to be a match. • If no region is active add a cursor on the next line. • With negative ARG, delete the last one instead. • With zero ARG, skip the last one and mark next.
• Match next instance of marked region, or • Match current symbol its next instance	`<f11> m M-s`	(mc/mark-next-like-this-symbol ARG)	Find and mark the next part of the buffer matching the currently active region. • If no region is active, mark the symbol at the point and find the next match. • With negative ARG, delete the last one instead. • With zero ARG, skip the last one and mark next.
• Match previous instance currently highlighted symbol, or • cursor on previous line	`<f11> m S`	(mc/mark-previous-symbol-like-this ARG)	Find and mark the previous part of the buffer matching the currently active region. • The matching region must be a whole symbol to be a match. • If no region is active add a cursor on the previous line. • With negative ARG, delete the last one instead. • With zero ARG, skip the last one and mark next.
• Match previous instance of marked region, or • Match current symbol its previous instance	`<f11> m M-S`	(mc/mark-previous-like-this-symbol ARG)	Find and mark the previous part of the buffer matching the currently active region. • If no region is active, mark the symbol at the point and find the previous match. • With negative ARG, delete the last one instead. • With zero ARG, skip the last one and mark previous.
Match all symbols matching: • symbol at point, or • currently marked area	`<f11> m C-s`	(mc/mark-all-symbols-like-this)	Find and mark all symbols in the buffer matching the symbol at point or currently marked.

Operation	Keystroke	Function	Note
Match all symbols like current symbol, in the current defun	`<f11> m C-M-s`	**(mc/mark-all-symbols-like-this-in-defun)**	Mark all symbols like this in defun.
• Special …			
Mark current SGML tag and its pair	`<f11> m t`	**(mc/mark-sgml-tag-pair)**	Mark the SGLM tag we're in and its pair for renaming. ☞ Useful for editing SGML, HTML, etc…
Insert increasing numbers at each cursor	`<f11> m 0`	**(mc/insert-numbers** ARG)	Insert increasing numbers for each cursor, starting at \`**mc/insert-numbers-default**' or ARG. • **mc/insert-numbers-default** is u user-option in the multiple-cursors customization group that defaults to 0.
Insert increasing letter at each cursor	`<f11> m A`	**(mc/insert-letters** ARG)	Insert increasing letters for each cursor, starting at 0 or ARG. • Where letter[0]=a letter[2]=c letter[26]=aa
Sort marked ares of lines	`<f11> m o`	**(mc/sort-regions)**	Sort the marked portion of the lines that have one of the cursors. ⚠ The non-marked areas of the lines affected are **NOT** moved.
Reverse order of marked area	`<f11> m O`	**(mc/reverse-regions)**	Reverse the order of the marked regions. ⚠ The non-marked areas of the lines affected are **NOT** moved.
Vertical align with spaces	`<f11> m |`	**(mc/vertical-align-with-space)**	Aligns all cursors with whitespace to the one with the highest column number (the rightest). • Keep multiple cursors active, use this to align text while working with the multiple cursors. • Might not behave as intended if more than one cursors are on the same line.
Visual Regexp to multiple cursors See also: ∑ **Search/Replace**		Another way to create multiple cursor is to use the following commands that perform a regular expression search to identify the location of each cursor. 📦 Both require the **multiple-cursors** external package. 🔲 With PEL, set the **pel-use-multiple-cursors** user-option set to t to install and activate it. 📦 **vr/mc-mark** requires the **visual-regexp** external package. 🔲 With PEL, set the **pel-use-visual-regexp** user-option set to t to install and activate it. 📦 **vr/select-mc-mark** requires the **visual-regexp** external package. 🔲 With PEL, set the **pel-use-visual-regexp-steroids** user-option set to t to install and activate it.	
Visual Regexp Search to multiple-cursors	• `<f11> s x M` • `C-c m`	**(vr/mc-mark** REGEXP START END)	Convert regexp selection to multiple cursors. • First performs a Visual regexp search. When the result of the search is accepted (by hitting **RET**) all matches are converted to multiple cursors, which allows performing the same operations on all matches until the user quits the multiple cursor operation with **C-g**. 🔲 PEL only activates the **C-c m** binding if the **pel-bind-keys-for-regexp** user option is set to **t**.
Visual Regexp Search to multiple-cursors with engine selection	`<f11> s x M-m`	**(vr/select-mc-mark)**	
Highlight Current Line		Highlighting the current line may help to find the cursor when editing with big windows. These commands control line highlighting.	
Toggle line highlight mode See also: ∑ **Highlight**	• `<f11> h -` • `<f11> 0`	**(hl-line-mode** &optional ARG)	Toggle highlighting of the current line (HI-Line mode) in the current buffer. • With a prefix argument ARG, enable HI-Line mode if ARG is positive, and disable it otherwise. • When same buffer is shown in several windows, the highlighting might show in each of them. Change that with pel-toggle-hl-line-sticky with: `<f11> h s` ☞ A quick way to find where your cursor is located is to hit `<f11> 0` quickly to toggle line highlighting on and off (that key binding is easier to type than the alternative, which exists for consistency, remember that you can use `<f1> k` to get help for a specific key binding and see all the key bindings for a command, allowing you to discover its other bindings.)
Change color of highlight line for session See also: ∑ **Highlight**	`<f11> h h`	**(pel-set-highlight-color** COLORNAME)	Set the colour of the highlight line used in the line highlight mode (affects all buffers). • Prompt for color name, use tab completion to show available colours with their names. • The change does not persist when Emacs is closed. To select a persistent color, then customize the **highlight** user option (see next row).
Set highlight color and attributes permanently See also: ∑ **Highlight**	`<f11> h H`	**(pel-customize-highlight)**	Open the customize buffer to change the **highlight** user option color and other attributes. • As with all customizations, you can activate the change for this Emacs session or save it to make it persist across Emacs sessions. • With this you can set other attributes such as underlining (which will underline only text present in the buffer, useful to detect end-of-line whitespace), and other attributes.
Toggle line highlighting affecting all windows See also: ∑ **Highlight**	`<f11> h s`	**(pel-toggle-hl-line-sticky)**	Toggle current line highlight to all windows showing the current buffer or just the current one. • Toggles the value of 'hl-line-sticky-flag' between t and nil.
Highlight current column		The following command provide a vertical line across the entire window at the cursor location. • Useful when creating tables or checking indentation manually. • vline also provides the vline-global-mode to activate the vertical line in all buffers; PEL has no binding for it because it slows Emacs too much.	
Toggle Vline Mode See also: ∑ **Highlight**, ∑ **Hide/Show**	`<f11> h |`	**(vline-mode** &optional ARG)	Toggle the display of a vertical line spanning the entire window at the cursor column. 📦 Requires: vline.el 🔲 PEL activates this when **pel-use-vline** user option is **t**.
iEdit mode		iEdit Mode - **Edit multiple regions in the same way simultaneously** 📦 This requires the **iedit** external package. 🔲 PEL downloads, installs it when any of the **pel-use-iedit** or **pel-use-lispy** user options is set to **t**.	
Toggle iedit mode See also: • ∑ **Search/Replace** • ∑ **Highlight**	• `C-;` • `<f11> e` • `<f11> h i` • `<f11> m i`	**(iedit-mode** &optional ARG)	Toggle iEdit mode: **edit all symbols in scope or region simultaneously**. ⚠ Both iEdit and Flyspell use the `C-;` key as their default binding. • PEL detects and reports that situation: modify the binding of one of them if you see it. ➤ See ∑ **Search/Replace** where all the iedit-mode commands are described.