## **Buffers**

<u>Operation</u>	<u>Keystroke</u>	Functi	ion		<u> </u>	<u>Note</u>	
Emacs Buffers	Emacs information and edite PEL provides the pel-pkg-for						buffers.
2. <u>Buffer Selection Mode</u>							
3. Manage Buffers, Accumulating Text,		activates activates for the key binding.  activates first external package. See Help/Info for the key binding.  activates first external package which provides fast fuzzy search on buffer name (but also file finders, see File-mr					
Locking Buffer 4. Indirect Buffers &					fuzzy search on buffer <u>hydra</u> external package		
Buffer View Mode							buffer in hexadecimal.
5. <u>Buffer Menu Mode &amp; IBuffer</u>	☑ pel-use-popup-switche						
	PEL also provides a Hydra th	nat manipulates Ema	acs windows and	buffers. See the <u><b>V</b></u>	<u>/indows</u> table for its de	escription.	
Open this PDF file. See also: <u>▼ Help/Info</u>	<f11> b <f1></f1></f11>	(pel-help-pdf &optional OPEN-WEB-PAGE)		Open the <u>Note Buffers</u> local PDF. If the prefix argument (like <b>C-u</b> or <b>M</b> ) is used, then it opens the remote GitHub hosted raw PDF instead. If the <b>pel-flip-help-pdf-arg</b> useroption is set it's the other way around.			
<u> </u>	<f11> b <f2></f2></f11>	(pel-customize-pel &optional OTHER-WINDOW)		Customize PEL Buffer support: open PEL buffer support specific group.  • If OTHER-WINDOW is non-nil (use <b>C-u</b> ), display in other window.			
<u>S</u> Customize Emacs & external package buffer support	<f11> b <f3></f3></f11>	(pel-customize-library &optional OTHER-WINDOW)		Customize Emacs and external packages related to buffer. This includes the following customize groups: Buffer-menu, bs, ibuffer, iflipb, minibuffer, hexl, nhexl, popup-switcher. When a prefix argument (like <b>C-u</b> ) opens the buffer inside another window.  • If required file is not already loaded, PEL prompts to load and access its customization.			
List Buffers & Switch to Buffer	<ul> <li>buffer-menu-open is a</li> <li>psw-switch-buffer is a</li> </ul>	• first 2 commands open a menu overlaid on the current buffer that you can use to switch to another buffer: • buffer-menu-open is a drop-down hiererchical menu • psw-switch-buffer is a pop-up menu. • psw-switch-buffer command uses a prompt at the bottom of the frame. The list-buffers and ibuffer commands use a new buffer.				er.	
Open buffer menu	• C- <f10></f10>	(buffer-menu-ope		Start key navigation	of the buffer menu.		
See also: <u>Menus</u>	• <c-down-mouse-1></c-down-mouse-1>			List buffers in a drop-down menu: lists the buffers by major-mode when several buffers of the same major-mode are opened.  In graphics mode this can also be invoked using the <c-down-mouse-1></c-down-mouse-1>			
List open buffers in popup menu	<f11> b b</f11>	(psw-switch-buffe ARG)	er &optional	Show buffers list menu to switch buffer in a popup window menu.  If ARG show only buffers with files and without * in the beginning/end of buffer name.  Requires popup-switcher  PEL activates when pel-use-popup-switcher is t.			
List all buffers	С-ж С-в	(list-buffers &op     (ibuffer &options     WINDOW-P NAM	al OTHER-	Display a list of existing buffers in a buffer named "*Buffer List*", the buffer displays information about all buffers and enters the <b>Buffer Menu Mode</b> . See the keystrokes for the Buffer Menu Mode below.			
		QUALIFIERS NOSELECT SHRINK FILTER-GROUPS FORMATS)		the Buffer Menu Mode below.  The PEL package uses the 'ibuffer' function instead, which provides more functionality, working like dired, allowing to sort by name, size, mode, filtering by mode (hit return on the mode of a buffer). Type <f1> m to get the list of possible actions that can be done on the listed buffers.</f1>			
Switch to buffer	С-х в	(switch-to-buffer		Switch window to di	splay the previous, or a	another buffer (entered	at echo area prompt).
See also:  Completion/		NAME &optional North FORCE-SAME-WIN				•	ee them type space and
Input				tab and a list of those buffers will appear before the list of visible buffers.  ► To show what is currently used, type: <f11> M-c?  ► To change the main completion mode, type: <f11> M-c <f4>  ► See ∑ Completion/Input for more information.</f4></f11></f11>			
Switch buffer with fzf See also: <u>∑ File-mngt</u>	<f11> b z</f11>	(fzf-switch-buffer)		Uses the <u>fzf comr</u>	ent window by selectin mand line utility for fas	st & flexible search.	se-fzf .
Navigate through Buffers in current window	PEL provides the pel-∑buffer Hydra the gives quick access to commands that changes the buffer shown in the current window.  • To gain access to the keys, type <f7> <f9> key sequence to start the pel-∑buffer Hydra.  • Then type the keys listed in the Hydra table below. Stop the Hydra with <f7>  in Requires the hydra external package Libert PEL provides Hydra when pel-use-hydra or the pel-use-iflipb user option is set to t.</f7></f9></f7>						
Activate the pel-∑buffer	* <f7> <f9></f9></f7>	-UUU:F1	pel_keys.	∍l Top (1,0)	Git-maste	r (Emacs-Lisp	WK LY Fly 2 Anz
Hydra		Buffer	Buffer Se	election	Flip	Same Mode	Other
**		M-n: next		, i	<f9>: next S-<f9>: prev M-k: kill</f9></f9>	]: next   [: previous	?: hint   <f7>: cancel</f7>
	Other keys can be typed who		ydra is active. T	he Hydra menu shows			
See <u><b>Vindows</b></u>	Syou may wan to switch to	· - ·		.,,,		ollowed by a cursor ke	у.
Next/Previous     Buffer	The following commands characteristics The commands are accessible accessible.					always available from	global key sequences.
Switch to next buffer	• C-x <right> • C-x C-<right> • <f11> b n  * <f7> <f9> M-n</f9></f7></f11></right></right>	(next-buffer)		Switch to the next be	uffer displayed in the c	urrent window.	
Switch to previous buffer	• C-x <left> • C-x C-<left> • <f11> b p  * <f7> <f9> M-p</f9></f7></f11></left></left>	(previous-buffer)		Switch to the previous buffer displayed in the current window.  • This command is also available in the pel-∑buffer Hydra as M-p			
Switch to previous buffer in window	<f11> b 1 * <f7> <f9> M-1</f9></f7></f11>	(pel-switch-to-last-used – buffer)		Switch buffer in curre Used twice returns to	ent window to the buffe o the same buffer.	er previously seen in th	is window.
Flip to next/ previous recently visited buffer	A list of buffers is shown in You can also identify buffer     This requires the iflipb expectations.	This requires the iflipb external package PEL activates it when pel-use-iflipb user-option is turned on (set to t). This also forces activation of the pel-\( \subseteq \text{buffer} \) by the pel-\( \s			Sbuffer Hydra above.		
Flip to next buffer	* <f7> <f9> <f9></f9></f9></f7>	iflipb commands are bound to the position (iflipb-next-buffer ARG)		Flip to the next buffe  Consecutive invoc  Buffers matching		ecent buffers in the bu	ffer list. red.
Flip to previous buffer	* <f7> <f9> <s-f9></s-f9></f9></f7>	(iflipb-previous-buffer)		Consecutive invocat	ouffer in the buffer list.		er list.
Kill buffer (but keep the flip buffer state)	* <f7> <f9> M-k</f9></f7>	(iflipb-kill-buffer)		Same as 'kill-buffer'	but keep the iflipb buff	er list state.	

Operation	<u>Keystroke</u>	Function	<u>Note</u>	
Cycle Trough buffers using same major-mode	The following 2 PEL commands cycle the buffers using the same major mode inside the current window.  • This works with any mode, including special buffer modes.  • The key bindings that start with <f7> <f9> starts a pel-∑buffer Hydra. After the initial key sequence, single key commands are available.</f9></f7>			
Show next buffer using same major mode	• <f11> b ] <b>*</b> <f7> <f9> ]</f9></f7></f11>	(pel-smb-next &optional REFRESH)	Open next buffer of same major-mode from the registered list.  • Refresh list when wrapping. With optional prefix argument: REFRESH the list of buffers.	
Show previous buffer using same major mode	• <f11> b [ * <f7> <f9> [</f9></f7></f11>	(pel-smb-previous &optional REFRESH)	Open previous buffer of same major-mode from the registered list.  • Refresh list when wrapping. With optional prefix argument: REFRESH the list of buffers.	
Buffer Selection		ands key bindings are also available through the pel-∑buffer Hydra when the <b>hydra</b> package is used. ing the built-in <b>bs.el</b> library. PEL provides extra commands that extends it.		
Show next buffer in selection	• <f11> b . * <f7> <f9> M</f9></f7></f11>	(pel-bs-next)	Show next buffer in current window.  Next buffer is selected by the list of buffers selected by the Buffer Selection Mode configuration and sorting order last identified. These can be controlled by opening the Buffer Selection Mode with the bs-show command and then using the commands available in this mode, such as: bs-select-next-configuration, bs-toggle-show-all and bs-show-sorted.	
Show previous buffer in selection	• <f11> b , * <f7> <f9> M-,</f9></f7></f11>	(pel-bs-previous)	Show previous buffer in current window.  Next buffer is selected by the same criteria as for pel-bs-next described above.	
Customize buffer selection	• <f11> b S</f11>	(bs-customize)	Customization of group bs for Buffer Selection Menu.  • Active configuration can be changed in the bs-show buffer. See below.	
Show Buffer Selection	• <f11> b s</f11>	(bs-show ARG)	Open the <b>bs-mode</b> buffer by splitting the current window  • Shows menu of buffers to select and manipulate buffers.  • With no prefix argument: show buffers selected by the <b>default</b> configuration.  • If a <b>C-u</b> prefix argument: show buffers selected by <b>alternative</b> configuration.  • With numeric argument ( <b>M-1</b> , <b>M-2</b> ,) show buffers selected by the <b>nth</b> configuration.  • The pre-configured configurations are: all, files, file-and-scratch, all-intern-last.	
Buffer Selection Menu (bs-mode) commands	There are many key commands similar to 'Buffer-menu-mode' for manipulating the buffer list and the buffers themselves. User can move with [up] or [down], select a buffer by RET or [SPC] Type q to leave Buffer Selection Menu without a selection. Type ? after invocation to get help on commands available. With prefix argument ARG show a different buffer list. Function 'bsconfiguration-name-for-prefix-arg' determine accordingly name of buffer configuration.			
Select current line's buffer : visit buffer	• RET • SPC • f	(bs-select)	Select current line's buffer and other marked buffers.  If there are no marked buffers the window configuration before starting Buffer Selection Menu will be restored. If there are marked buffers each marked buffer and the current line's buffer will be selected in a window.  Leave Buffer Selection Menu.	
View current line's buffer	v	(bs-view)	View current line's buffer in View mode. A minor mode for viewing text but not editing it.  • See Buffer View Mode below in this table.  • Leave Buffer Selection Menu.	
Move point down	• n • <down></down>	(bs-down ARG)	Move point vertically down ARG lines in Buffer Selection Menu.	
Move point up	• p • <up></up>	(bs-up ARG)	Move point vertically up ARG lines in Buffer Selection Menu.	
Refresh Buffer Selection Menu	g	(bs-refresh &rest IGNORED)	Refresh whole Buffer Selection Menu.	
Bury buffer	b	(bs-bury-buffer)	Bury (not kill!) the buffer on this line: move it to the end of buffer list.	
Cycle through buffer line sorting method	s	(bs-show-sorted)	Show buffer list sorted by next sort aspect.  • The sort methods supported are: by name, by size, by mode, by filename, by nothing (not sorted).	
Toggle show all buffers	a	(bs-toggle-show-all)	Toggle show all buffers / show buffers with current configuration.	
Cycle through buffer selection configuration: types of buffers iterated through	С	(bs-select-next-configuration &optional START-NAME)	Apply next configuration START-NAME and refresh buffer list.  If START-NAME is nil the current configuration 'bs-current-configuration' will be used.  Cycles through the following methods of buffer cycling: all, files, files-and-scratch, all-intern-last	
Prompt for buffer selection configuration	С	(bs-set-configuration-and-refresh)	Ask user for a configuration and apply selected configuration.  • Supports tab-based completion.  • Refresh whole Buffer Selection Menu.	
Add a new configuration to display only buffers of this major mode	•	(pel-bs-this-mode-only)	Add a Buffer Selection configuration for buffer of this mode only.  Add a Buffer Selection that will be named "only-X" where X is the major mode of the current line buffer.  This configuration will only show buffers that use the same major mode.	
	To iterate through buffers of a specific major mode only, do this:  1. Open the Buffer Selection Mode buffer: execute bs-show: type <f11> b s  2. Move point to a buffer line of the wanted major-mode.  1. If that mode is currently not displayed, change the configuration to all by typing C all RET first and then move point to the proper line.  3. Hit • to execute pel-bs-thi-mode-only and select the major mode of interest.  4. Hit RET to display the buffer and dismiss the Buffer Selection Mode buffer.  5. To select the next or previous buffer of the same major mode activate the pel-∑buffer Hydra by typing <f7> <f9> M-• or <f7> <f9> M-• and continue with M-• or M-•,</f9></f7></f9></f7></f11>			
Open selected buffer in other window	0	(bs-select-other-window)	The window configuration before starting Buffer Selection Menu will be restored unless there is no other window. In this case a new window will be created.  • Leave Buffer Selection Menu.	
Open selected buffer in other window - stay in Buffer Selection buffer	C-0	(bs-tmp-select-other-window)	Make the other window select this line's buffer.  • The current window remains selected.	
Save buffer	s	(bs-save)	Save buffer on current line.	
Kill buffer  Toggle buffer read-	k %	(bs-delete) (bs-toggle-readonly)	Kill buffer on current line.  Toggle read-only status for buffer on current line.	
only status			Uses function 'read-only-mode'.	
Clear buffer modified-flag	~	(bs-clear-modified)	Set modified flag for buffer on current line to nil.  Be sure you don't want to save these modifications:  Emacs won't prompt you for that modified buffer when closing.	
Visit tags table file	t	(bs-visit-tags-table)	Visit the tags table in the buffer on this line. See 'visit-tags-table' bound to <f11> x t in PEL. See ∑ Xref - Cross References.</f11>	

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>		
Mark line's buffer to be displayed	m	(bs-mark-current COUNT)	Mark buffers. Move point vertically down COUNT lines.  COUNT is the number of buffers to mark.		
Mark line's buffer to	+	(bs-set-current-buffer-to-show-	Toggle status of buffer on line to 'always shown'.		
show always		always &optional NOT-TO-SHOW-P)	NOT-TO-SHOW-P: prefix argument. With no prefix argument the buffer on current line is marked to show always. Otherwise it is marked to show never.		
Toggle line's buffer show always/never/ normal	м	(bs-toggle-current-to-show)	Toggle status of showing flag for buffer in current line through: never show, always show, show normally		
Unmark previous line buffer to be displayed	DEL	(bs-unmark-previous COUNT)	Unmark previous COUNT buffers.  • Move point vertically up COUNT lines.  • When called interactively a numeric prefix argument sets COUNT.		
Unmark line's buffer to be displayed	u	(bs-unmark-current COUNT)	Unmark buffers. Move point vertically down COUNT lines.  • COUNT is the number of buffers to unmark.		
Unmark all buffer lines	U	(bs-unmark-all)	Unmark all buffers.		
Scroll right	• > • C-x >	(scroll-right &optional ARG SET-MINIMUM)	Scroll selected window display ARG columns right.  • Default for ARG is window width minus 2.		
Scroll left	• < • C-x <	(scroll-left &optional ARG SET-MINIMUM)	Scroll selected window display ARG columns left.  • Default for ARG is window width minus 2.		
Close Buffer- Selection-Menu	• q • C-c C-c	(bs-kill)	Let buffer disappear and reset window configuration.		
Abort	• C-g • C-]	(bs-abort)	Ding and leave Buffer Selection Menu without a selection.		
Display Help	?	(bs-help)	Display help in the Help buffer.  ⚠ This conflicts with PEL pel-∑buffer hint key which takes precedence.		
Manage Buffers	The following commands sup	pport buffer management: display in	formation, change read-only mode, clone buffer, rename buffer, kill buffer, etc		
Show name of previous buffer in window	<f11> b ?</f11>	(pel-show-window-previous- buffer)	Show the name of previous buffer used in the current window.		
Show all buffers, including internal hidden buffers	<f11> b a</f11>	(pel-show-all-buffers &optional FILES-ONLY)	Display all buffers, including hidden internal buffers, listed inside a *Buffer List* buffer.  • If the optional FILES-ONLY argument is set then it displays only buffer associated with files. Interactively, use C-u.  • Do not manipulate internal buffers unless you understand the consequences. This		
Toggle read-only status	• C-x C-q	(read-only-mode &optional ARG)	command should not be used by Emacs novices. It is meant as an aid for Emacs Lisp code development.  When the buffer is in read-only mode the mode line shows '%%' on the left side, in the		
of buffer	• <f11> b r</f11>		'ch' area of "cs:ch-fr buf pos line (major minor)".  The manual states: "For a read-only buffer, it shows "%*" if the buffer is modified, and "% "otherwise."  See also: the View Mode activating commands toward the end of this table.  A buffer in View Mode cannot be modified.  The View Mode may be used to ensure that no modifications are made to a buffer (visiting a file or not).		
Clone buffer	<f11> b c</f11>	(clone-buffer &optional NEWNAME DISPLAY-FLAG)	Create and return a twin copy of the current buffer.  • Unlike an indirect buffer, the new buffer can be edited independently of the old one (if it is not read-only). NEWNAME is the name of the new buffer. It may be modified by adding or incrementing <n> at the end as necessary to create a unique buffer name.  • For example if buffer *Help* is opened it opens another one named *Help*&lt;2&gt; (or *Help*&lt;3&gt; if *Help*&lt;2&gt; already exists, etc)</n>		
Rename a buffer	<f11> b R</f11>	(rename-buffer NEWNAME &optional UNIQUE)	If UNIQUE argument is non-nil via C-u M-x rename-buffer, the name is auto generated to be unique.		
Rename buffer - use unique name	<f11> b U</f11>	(rename-uniquely)	Rename the current buffer by adding ' <number>' to the end.  • Use this if you want multiple *Buffer* or *Info* buffers for example.  • Example: StackExchange: How can I have multiple help buffer with different content</number>		
Kill current buffer See also: <u>▼ Windows</u>	• <f11> b k •</f11>	(kill-current-buffer)	<ul> <li>Kill (close) the current buffer. Does not prompt if there is no change in the buffer.</li> <li>PEL also provides a window management Hydra with ability to kill the current buffer.</li> <li>See <u>Y Windows</u> for more info.</li> </ul>		
Kill buffer See also: <u>Windows</u>	• C-x k * <f7> k</f7>	(kill-buffer &optional BUFFER-OR-NAME)	Kill (close) the current buffer. Prompt to identify a buffer unless inside a Window Hydra which does not prompt.		
Kill current buffer and close window See also: Windows	• C-x 4 0 * <f7> K</f7>	(kill-buffer-and-window)	Kill the current buffer and delete the selected window.  PEL also provides a window management Hydra when the <a href="hydra">hydra</a> package is used. with ability to kill the current buffer and close windows in separate operations.		
Kill some buffer		(kill-some-buffers &optional LIST)	Kill some buffers. Asks the user whether to kill each one of them.		
Delete all windows of a specific buffer		(delete-windows-on &optional BUFFER-OR-NAME FRAME)	Deletes all windows showing BUFFER-OR-NAME, by calling 'delete-window' on those windows.		
Accumulating Text	Emacs provides the following	g commands to insert text in buffer f	rom various sources.		
Append region to specified buffer	<f11> b M-a</f11>	(append-to-buffer BUFFER START END)	Append to specified BUFFER the text of the region.  The text is inserted into that buffer before its point.  BUFFER can be a buffer or the name of a buffer; this function will create BUFFER if it doesn't already exist.		
Prepend region to specified buffer	<f11> b M-p</f11>	(prepend-to-buffer BUFFER START END)	Prepend to specified BUFFER the text of the region.  The text is inserted into that buffer after its point.  BUFFER can be a buffer or the name of a buffer; this function will create BUFFER if it doesn't already exist.		
Copy region to specified buffer (replacing old content)	<f11> b C-c</f11>	(copy-to-buffer BUFFER START END)	Copy to specified BUFFER the text of the region.  The text is inserted into that buffer, replacing existing text there.  BUFFER can be a buffer or the name of a buffer; this function will create BUFFER if it doesn't already exist.		
Insert content of specified buffer at point	<f11> b i</f11>	(insert-buffer BUFFER)	Insert after point the contents of BUFFER.  • Puts mark after the inserted text.  • BUFFER may be a buffer or a buffer name.		
Append region's text to specified file	<f11> b f</f11>	(append-to-file START END FILENAME)	Append the contents of the region to the end of file FILENAME.  • This does character code conversion and applies annotations like 'write-region' does.		
Locking Buffer	Lock a buffer against: exit, ki	,	killing of the buffer. Controlled by 'emacs-lock-default-locking-mode' normally set to all.		
Toggle emacs lock- mode	<f11> b L</f11>	(emacs-lock-mode &optional ARG)	Toggle Emacs Lock mode in the current buffer. With prefix arg: prompt for locking mode.  • Normally set to all: buffer locked against killing buffer and exiting Emacs.		
		Andi	, , , , , , , , , , , , , , , , , , , ,		

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>	
Indirect Buffers	As described in <a href="Emacs Indirect Buffer section">Emacs Indirect Buffer section</a> , "an indirect buffer shares the text of some other buffer, called the base buffer of the indirect buffer.  • In some ways it is a buffer analogue of a <b>symbolic link</b> between files.  • The text of the indirect buffer is always identical to the text of its base buffer; changes made by editing either one are visible immediately in the other.  • But in all other respects, the indirect buffer and its base buffer are completely separate.  • They can have different names, different values of point, different narrowing, different markers, different major modes, and different local variables."			
⊌ ⊷	Use indirect buffers to show the same file in 2 or more windows but want to narrow an area in 1 buffer while seeing the complete text in the other window.			
<u>Create indirect buffer</u> explicitly	<f11> b I m</f11>	(make-indirect-buffer BASE-BUFFER NAME &optional CLONE)	Create and return an indirect buffer for buffer BASE-BUFFER, named NAME.  BASE-BUFFER should be a live buffer, or the name of an existing buffer.  NAME should be a string which is not the name of an existing buffer.  Optional argument CLONE non-nil means preserve BASE-BUFFER's state, such as major and minor modes, in the indirect buffer.  CLONE nil means the indirect buffer's state is reset to default values.	
Create indirect buffer of current buffer	<f11> b I c</f11>	(clone-indirect-buffer NEWNAME DISPLAY-FLAG &optional NORECORD)	Create an indirect buffer that is a twin copy of the current buffer.	
	<ul> <li>Give the indirect buffer name NEWNAME. Interactively, read NEWNAME from the minibuffer when invoked with a prefix arg. If NEWNAME is nil or if no called with a prefix arg, NEWNAME defaults to the current buffer's name. The name is modified by adding a '<n>' suffix to it or by incrementing the N i an existing suffix. Trying to clone a buffer whose major mode symbol has a non-nil 'no-clone-indirect' property results in an error.</n></li> <li>DISPLAY-FLAG non-nil means show the new buffer with 'pop-to-buffer'. This is always done when called interactively.</li> <li>Optional third arg NORECORD non-nil means do not put this buffer at the front of the list of recently selected ones.</li> </ul>			
Create indirect buffer of current buffer in another window	• C-x 4 c • <f11> b I w</f11>	(clone-indirect-buffer-other- window NEWNAME DISPLAY- FLAG &optional NORECORD)	Like 'clone-indirect-buffer' but display in another window.	
Buffer View Mode	Several commands (view-buffer, etc, see at top of this table) activate the View Mode for a buffer where the buffer is essentially read-only and special commands are available.  • Emacs commands editing the buffer contents are not available; instead, a special set of commands (mostly letters and punctuation) are defined for moving around in the buffer.  • Space scrolls forward, Delete scrolls backward.			
		v commands. See the View Mode co	ommand list below.	
Prompt for buffer to view in view-mode	<f11> b V</f11>	(view-buffer BUFFER &optional EXIT-ACTION)	View BUFFER in View mode, returning to previous buffer when done.  • Prompt for buffer to open in view-mode.	
Toggle Buffer view- mode	<f11> b v * <f7> <f9> M-v</f9></f7></f11>	(view-mode &optional ARG)	When View mode is enabled, commands that do not change the buffer contents are available as usual. Kill commands save text but do not delete it from the buffer. Most other commands beep and tell the user that the buffer is read-only.      The <f7> <f9> M-▼ Hydra key sequence is available when the hydra package is used.</f9></f7>	
In view-mode no modifications are allowed.	Digits provide progrative comparities and provide properties and provide provi	is message. prefix arguments. e prefix argument. the beginning of buffer. the end of buffer. the end of buffer. that buffer end is at last line of window. rward "page size" lines. With prefix scroll forward prefix lines. tokward "page size" lines. With prefix scroll backward prefix lines. C but with prefix sets "page size" to prefix. but with prefix sets "page size" to prefix. ward "half page size" lines. With prefix, sets "half page size" to prefix lines and scrolls forward that much. tokward "half page size" lines. With prefix, sets "half page size" to prefix lines and scrolls backward that much. tokward "half page size" lines. With prefix, sets "half page size" to prefix lines and scrolls backward that much. tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s). tokward one line. With prefix scroll backward prefix line(s).		

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>
Buffer Menu Mode		nside its own buffer, *Buffer List* whos is available via the <f1> m key.</f1>	en (list-buffer) is executed. This buffer support the following commands.
	Note that PEL uses (ibu		so the list of commands and key bindings that are available differ. They are listed in the
Buffer Menu Mode keys	next section.  ? : Get help  g : Update buffer  C-n : next buffer in    spc : next buffer in    n : next buffer in    C-p : previous buffer  C-d : mark buffer fo  d : mark buffer fo  k : mark buffer fo  s : save buffer  < DEL> : Move to previous a previous buffer  ! Apple to mark buffer fo  spc : Save buffer fo  spc : Move to previous buffer  u : unmark all mark all mar	list list list cr in list or in list or deletion r deletion r deletion r deletion ous line, remove all marks on buffer ecific mark from all buffers	: Immediately : deleted when pressing x : deleted when pressing x : deleted when pressing x : saved when pressing x : immediately if just after marking : immediately if just after marking : immediately if just after marking
	<ul> <li>mark buffer as</li> <li>toggle read-or</li> <li>display emacs</li> <li>Display this br</li> <li>replace other</li> <li>mark buffer to</li> <li>display buffers</li> <li>quit buffer list</li> </ul>	nly s in full emacs screen uffer & next in horizontal window (next) window with this buffer be displayed in windows s marked with in as many windows a	d for deletion) : immediately : when pressing v
iBuffer Mode See also: ∑ ibuffer-mode	The commands available in t	the ibuffer window. If binding open the Ibuffer window	v.
IBuffer Mode commands	S : Save the marked buffers.  A : View the marked buffers in the selected frame.  H : View the marked buffers in another frame.  V : Revert the marked buffers.  T : Toggle read-only state of marked buffers.  L : Toggle lock state of marked buffers.  D : Kill the marked buffers.  M-s a C-s : Do incremental search in the marked buffers.		
	r         : Replace           Q         : Query re           I         : As abov           P         : Print the           O         : List lines           X         : Pipe the           N         : Replace           !         : Run a sl           E         : Evaluate           For ex           W         : As abov           k         : Remove	contents of the marked buffers to a the contents of the marked buffers nell command with the buffer's file as a a form in each of the marked buffer cample, if you want to make all of the e, but view each buffer while the form	a given regexp (like the function 'occur'). shell command. with the output of a shell command. s an argument. s. This is a very flexible command. e marked buffers read-only, try using (read-only-mode 1) as the input form.
IBuffer Mode Marking commands	m : Mark the buffer at point. t : Unmark all currently marked buffers, and mark all unmarked buffers. c : Change the mark used on marked buffers. u : Unmark the buffer at point.  DEL : Unmark the previous buffer.  M-DEL : Unmark buffers marked with MARK. U : Unmark all marked buffers.  * M : Mark buffers by major mode.  * u : Mark all "unsaved" buffers. This means that the buffer is modified, and has an associated file.  * m : Mark all modified buffers, regardless of whether they have an associated file.  * s : Mark all buffers whose name begins and ends with '''.  * e : Mark all buffers whose name begins and ends with '''.  * e : Mark all buffers which have an associated file, but that file doesn't currently exist.  * r : Mark all fread-only buffers.  * / : Mark buffers in 'dired-mode'.  * h : Mark buffers in 'help-mode', 'apropos-mode', etc.  • Mark buffers by their name, using a regexp.  * m : Mark buffers by their major mode, using a regexp.  * g : Mark buffers by their filename, using a regexp.  * g : Mark buffers by their content, using a regexp.  * g : Mark buffers by their content, using a regexp.  * L : Mark buffers by their content, using a regexp.		
IBuffer Mode Filtering commands		(ibuffer-filter-chosen-by- completion)	Select and apply filter chosen by completion against available filters.  Indicates corresponding key sequences in echo area after filtering.  The completion matches against the filter description text of ach filter in 'ibuffer-filtering-alist'.
		(ibuffer-filter-by-directory QUALIFIER)	Limit current view to buffers with directory matching QUALIFIER.  • For a buffer associated with file '/a/b/c.d', this matches against '/a/b'. For a buffer not associated with a file, this matches against the value of 'default-directory' in that buffer.

<u>Operation</u>	Keystroke Function		<u>Note</u>	
	/ > : Add a filter by buff / < : Add a filter by buff / * : Add a filter by spe / v : Add a filter by buff / s : Save the current fi / r : Switch to previous / a : Add saved filters to / a : Replace the top tw /   : Replace the top fil / ! : Invert the logical s / d : Break down the to	ajor mode now in use. ved mode. eer name. eer content. eename. aame. eextension. diffied buffers. arbitrary Lisp predicate. eer size. eer size. cial buffers. eers visiting files. lters with a name. ely saved filters. o current filters. vo filters with their logical AND. vo filters with their logical OR. ter. eense of the top filter.		
IBuffer Mode Filter commands	/ g : Create filter group from filters. / P : Remove top filter group.  TAB : Move to the next filter group.  M-p : Move to the previous filter group. / \ : Remove all active filter groups / S : Save the current groups with a name. / R : Restore previously saved groups. / X : Delete previously saved groups.			
IBuffer Mode Sorting commands	<ul> <li>r Rotate between the various sorting modes.</li> <li>s i : Reverse the current sorting order.</li> <li>s a : Sort the buffers lexicographically.</li> <li>s f : Sort the buffers by the file name.</li> <li>s v : Sort the buffers by last viewing time.</li> <li>s s : Sort the buffers by size.</li> <li>s m : Sort the buffers by major mode.</li> </ul>			
Buffer Mode Other commands  Edit Binary file	g : Regenerate the list of all buffers. Prefix arg means to toggle whether buffers that match 'ibuffer-maybe-show-predicates' should be displayed.  : Change the current display format. Use this to see the complete file name when the file name is long.  SPC : Move point to the next line.  C-p : Move point to the previous line.  h : Show this help.  = : View the differences between this buffer and its associated file.  RET : View the buffer on this line.  o : As above, but in another window.  C-o : As both above, but don't select the new window.  b : Bury (not kill!) the buffer on this line.  Emacs provides the built-in hext mode to edit files in hexadecimal mode. To use it you must:			
with hexl	<ul> <li>use the hexl-find-file to open the file in binary mode, or</li> <li>use the hexl-mode command to convert an already opened buffer. To exit this mode and go back to the original mode type C-c C-c</li> </ul>			
Open a file in hexl-mode	<f11> f M-x</f11>	(hexl-find-file FILENAME)	Edit file FILENAME as a binary file in hex dump format.  • Switch to a buffer visiting file FILENAME, creating one if none exists, and edit the file in	
See also: <u>∑ File-mngt</u> Toggle hexl mode	<f11> b M-x</f11>	(hexl-mode &optional ARG)	'hexl-mode'.  Toggle the hexl mode: a mode for editing binary files in hex dump format.	
	<ul> <li>This is not an ordinary major mode; it alters some aspects of the current mode's behavior, but not all; also, you can exit Hexl mode and return to the previous mode using 'hexl-mode-exit'.</li> <li>This function automatically converts a buffer into the hexl format using the function 'hexlify-buffer'.</li> <li>Each line in the buffer has an "address" (displayed in hexadecimal) representing the offset into the file that the characters on this line are at and 16 characters from the file (displayed as hexadecimal values grouped every 'hexl-bits' bits, and as their ASCII values).</li> <li>If any of the characters (displayed as ASCII characters) are unprintable (control or meta characters) they will be replaced by periods.</li> </ul>			
Insert a byte in decimal	C-M-d	(hexl-insert-decimal-char ARG)	Insert a character given by its decimal code ARG times at point.	
Insert a byte in octal	С-М-о	(hexl-insert-octal-char ARG)	Insert a character given by its octal code ARG times at point.	
Insert a byte in hex	С-М-х	(hexl-insert-hex-char ARG)	Insert a character given by its hexadecimal code ARG times at point.	
Goto 512-byte page start	С-М-а	(hexl-beginning-of-512b-page)	Go to beginning of 512 byte boundary.	
Goto to 512-byte page end	С-М-е	(hexl-end-of-512b-page)	Go to end of 512 byte boundary.	
Goto 1K end	C-x ]	(hexl-end-of-1k-page)	Go to end of 1KB boundary.	
Goto 1K beginning	C-x [	(hexl-beginning-of-1k-page)	Go to beginning of 1KB boundary.	
Goto address entered in hexadecimal	M-g	(hexl-goto-hex-address HEX- ADDRESS)	Go to Hexl mode address (hex string) HEX-ADDRESS.  • Signal error if HEX-ADDRESS is out of range.	
Goto to address entered in decimal	м-ј	(hexl-goto-address ADDRESS)	Go to hexl-mode (decimal) address ADDRESS.  • Signal error if ADDRESS is out of range.	
Exit hexl mode	C-c C-c (hexl-mode-exit &optional ARG)		Exit Hexl mode, returning to previous mode.  • With arg, don't unhexlify buffer.	
Hexadecimal Editing with nhexl	The <a href="mailto:nhext-mode">nhext-mode</a> external package used to display and manipulate the content of the current buffer in hexadecimal and manipulate hex dump files.  PEL downloads installs and activates this package when the <a href="mailto:pel-use-nhext">pel-use-nhext</a> user option is set to <a href="mailto:thexadecimal">t</a> .  Use the <a href="mailto:sf11">sf2&gt;</a> key sequence to open the PEL buffer customization buffer to access this user option. Once the hexadecimal mode is on, turn it off by executing the nhexl-mode command again.  Good nhexl-mode features:  The nhexl-mode keeps the undo history when you toggle the nhexl mode. Something that the helx mode does not do.  You can use all of the normal navigation commands. You don't need to use specialized commands. PEL home and end commands work.			
Toggle buffer between normal and hex display	<f11> b x</f11>	(nhexl-mode &optional ARG)	Toggle minor mode to edit files via hex-dump format.  Requires the <u>nhexI-mode</u> package activated when pel-use-nhexI user option is t.	
Activate Hex nibble editing mode	<f11> b X</f11>	(nhexl-nibble-edit-mode &optional ARG)	Minor mode to edit the hex nibbles in 'nhexl-mode'.  Note: only works after nhexl-mode has been activated once.  Requires the <a href="mailto:nhexl-mode">nhexl-mode</a> package <a href="mailto:activated when pel-use-nhexl">pel-use-nhexl</a> user option is t.	