## Getting Help / Apropos / Descriptions / Info Manuals / Queries

<u>Description</u>	<u>Keystroke</u>	Function	<u>Note</u>
Getting Help			
Prefix Keys	Note on prefix: In the following rows, the description uses <b>C-h</b> as the prefix. For each of this you can also use the <b><f1></f1></b> prefix instead.		
List all keys that belong to a prefix	<pre><prefix> C-h</prefix></pre>		Type <b>C-h</b> after the prefix keystroke. For example to list all <b>C-x r</b> keys, type <b>C-x r C-h</b>
Describe Help	The following comm	nands display a description of the item	the command requests. The information is displayed in a read-only *Help* buffer.
Show all key commands for this buffer	• C-h b • <f1> b</f1>	(describe-bindings &optional PREFIX BUFFER)	Display a buffer showing a list of all defined keys, and their definitions.  The keys are displayed in order of precedence.
Help on key binding	• C-h k <keystroke> • <f1> k    <keystroke></keystroke></f1></keystroke>	(describe-key &optional KEY UNTRANSLATED UP-EVENT)	Display documentation of the function invoked by KEY.  KEY can be any kind of a key sequence; it can include keyboard events, mouse events, and/or menu events.  Get binding for the typed <keystroke> in the current context.  Displays the name of the command function, it's description, it's bindings.  The PEL system comes with an extensive key binding system entered around a set of function keys like <f11>, some of these are bindings for commands that already have standard Emacs bindings and sometimes the standard Emacs bindings are easier to type. Using C-h k (or the equivalent <f1>k) binding to get help on a specific binding may help you discover other, more efficient key bindings for the same command.</f1></f11></keystroke>
Print name of function invoked by key	• C-h c <keystroke> • <f1> c <keystroke></keystroke></f1></keystroke>	(describe-key-briefly &optional KEY INSERT UNTRANSLATED)	Print the name of the function KEY invokes. KEY is a string.
Describe active major/minor(s) modes and the key bindings	• C-h m • <f1> m • <f11> ? k m</f11></f1>	(describe-mode &optional BUFFER)	Lists the active major mode, all active minor modes and the bound keystrokes.
Describe a package See also: <u>Packages</u>	• C-h P • <f1> P</f1>	(describe-package PACKAGE)	Display the full documentation of PACKAGE (a symbol).  Prompts for the package name.  Shows whether it is installed or not, its version, the features it implements and some extra notes.
Describe a function	• C-h f • <f1> f</f1>	(describe-function FUNCTION)	Display the full documentation of <u>FUNCTION</u> (a symbol).  For example: <b>C-h f *-mode</b> : Get a completion list of all emacs modes  The buffer shown contains link to the file where the function is implemented. Following the link will open the file in a buffer, even if the file is compressed.
Describe symbol	• C-h o • <f1> o</f1>	(describe-symbol SYMBOL &optional BUFFER FRAME)	Display the full documentation of SYMBOL. Will show the info of SYMBOL as a function, variable, and/or face.
Describe variable	• C-h v • <f1> v</f1>	(describe-variable VARIABLE &optional BUFFER FRAME)	- For example: C-h v load-path: shows the emacs lisp path Reference: https://www.gnu.org/software/emacs/manual/html_node/eintr/Seevariable-current-value.html
Help on Input Method	• C-h I • C-h C-\	(describe-input-method INPUT- METHOD)	Provide information about the <u>input method</u> . Prompts for the name of an input method. See <b>Input Method</b> section for more info.
Key Sequence help	Emacs has a large number of key bindings as these tables clearly show. Emacs key strokes are extended in various ways and key prefixes is one of them.  You can use the which-key external package to help by showing the bindings of all keys following the last typed prefix (and wait long enough).  PEL makes which-key available when the pel-use-which-key user option is set to t. It's on by default to help use PEL at first. Set it to nil to disable it.  The keycast external package helps in another way: when the keyceast-mode is enabled, the typed keys are shown on the modeline. This help when you want to create a screen cast to show how to use Emacs.		
Toggle which-key mode	<f11> ? k K</f11>	(which-key-mode &optional ARG)	Toggle which-key-mode. When which-key mode is enabled, and you type a prefix key, all keys bound following this prefix are shown in the mini buffer.  This requires the which-key package. Under PEL set the pel-use-which-key user option to t to enable this. When this is set to t which-key-mode is turned on by pel-init.
Show top level bindings in the map of the current major mode	<f11> ? k k</f11>	(which-key-show-major-mode)	Show top-level bindings in the map of the current major mode. This function will also detect evil bindings made using 'evil-define-key' in this map. These bindings will depend on the current evil state.  This requires the which-key package.  Under PEL set the pel-use-which-key user option to t to enable this. When this is set to t which-key-mode is turned on by pel-init.
Toggle keyceast mode on/off	<f11> ? k c</f11>	(keycast-mode &optional ARG)	Show current command and its key binding in the mode line.  This requires the keycast external package  PEL makes keycast available when the pel-use-keycast user option is set to t.
Getting Help with Emacs Help, Apropos, and Info.	The following commafter the command	nands search, gather and open informatilist. As with everything in Emacs you c	tion in buffers using the info reader format. The info reader mode commands are shown an always get help on the current mode, that applies to the info reader mode as well.
Show information available about specified pattern	<f11> ? a a</f11>	(apropos PATTERN &optional DO-ALL)	Show all meaningful Lisp symbols whose names match PATTERN.  Symbols are shown if they are defined as functions, variables, or faces, or if they have nonempty property lists.  PATTERN can be a word, a list of words (separated by spaces), or a regexp (using some regexp special characters). If it is a word, search for matches for that word as a
Get a-propos info on command	• C-h a • <f1> a • <f11> ? a c</f11></f1>	(apropos-command PATTERN &optional DO-ALL VAR-PREDICATE)	substring. If it is a list of words, search for matches for any two (or more) of those words.  Show commands (interactively callable functions) that match PATTERN.  PATTERN can be a word, a list of words (separated by spaces), or a regexp (using some regexp special characters). If it is a word, search for matches for that word as a substring. If it is a list of words, search for matches for any two (or more) of those words.  With C-u prefix, or if 'apropos-do-all' is non-nil, also show non interactive functions.  Examples: <f1> a mode: list all modes available in the Emacs session, showing their key bindings and a quick description. Old Emacs command name was: command-apropos.</f1>

<u>Description</u>	Keystroke	Function	<u>Note</u>
Look for topic in all info documents	<f11> ? i a</f11>	(info-apropos STRING)	Prompts for a string and looks up for that string in all the indices of <b>all</b> the Info documents installed in the system. Opens an Apropos index menu with the links to the found topics. Use this to <i>find the manual section(s) that describe a specific function or variable</i> .
Open the Info Reader on specific topic	• C-h i • <f1> i • <f11> ? i i • %-?</f11></f1>	(info &optional FILE-OR-NODE BUFFER)	<ul> <li>Open the *info* buffer if already opened. If not, open the info reader for the top node.</li> <li>A non-numeric prefix argument (C-u) directs this command to read a file name from the minibuffer. It is possible to open a compressed .info.gz file directly! Emacs will uncompress it and open it.</li> <li>A numeric prefix argument of N selects an Info buffer named "*info*<n>".</n></li> <li>Called from a program, or from M-:, FILE-OR-NODE may specify an Info node of the form "(FILENAME)NODENAME".</li> <li>See the Info Reader Mode Keys table below for the following actions available once emacs is in the Info Reader Mode.</li> </ul>
Search for text in function and variables doc strings	• C-h d • <f1> d • <f11> ? a d</f11></f1>	(apropos-documentation PATTERN & optional DO-ALL)	Search for functions and variables whose documentation strings match the specified pattern and display the appropriate info pages.
List variables and functions defined in Emacs Lisp file.	<f11> ? a u</f11>	(apropos-library FILE)	List the variables and functions defined by library FILE. FILE should be one of the libraries currently loaded and should thus be found in 'load-history'.
Show buffer-local variables	<f11> ? a 1</f11>	(apropos-local-variable PATTERN &optional BUFFER)	Show buffer-local variables that match PATTERN. Optional arg BUFFER (default: current buffer) is the buffer to check.
Show user option	<f11> ? a o</f11>	(apropos-user-option PATTERN & optional DO-ALL)	Show user options that match PATTERN.  PATTERN can be a word, a list of words (separated by spaces), or a regexp (using some regexp special characters). If it is a word, search for matches for that word as a substring. If it is a list of words, search for matches for any two (or more) of those words.
Show all symbols that have a specific value	<f11> ? a u</f11>	(apropos-value PATTERN &optional DO-ALL)	With <b>C-u</b> prefix, also show variables, not just user options.  Show all symbols whose value's printed representation matches PATTERN.  PATTERN can be a word, a list of words (separated by spaces), or a regexp (using some regexp special characters). If it is a word, search for matches for that word as a substring. If it is a list of words, search for matches for any two (or more) of those words.  With <b>C-u</b> prefix, or if 'apropos-do-all' is non-nil, also looks at function definitions (arguments, documentation and body) and at the names and values of properties.
Show variables that match a specific name pattern	<f11> ? a v</f11>	(apropos-variable PATTERN & optional DO-NOT-ALL)	Show variables that match PATTERN. With the optional argument DO-NOT-ALL non-nil (or when called interactively with the prefix C-u), show user options only, i.e. behave like 'apropos-user-option'.
Open specified info manual	<f11> ? i m</f11>	(info-display-manual MANUAL)	Prompt for a specific Info manual to open in a buffer. Example: "eintr" := Introduction to Emacs Lisp.
Open Emacs Manual describing a specified command function	• C-h F • <f1> F</f1>	(Info-goto-emacs-command-node COMMAND)	Go to the Info node in the Emacs manual for command COMMAND. The command is found by looking up in Emacs manual's indices or in another manual found via COMMAND's 'info-file' property or the variable 'Info-file-list-for-emacs'. COMMAND must be a symbol or string.
Find specified function function or variable in info	• C-h S • <f1> F</f1>	(info-lookup-symbol SYMBOL &optional MODE)	Display the definition of SYMBOL, as found in the relevant <b>info</b> manual. When this command is called interactively, it reads SYMBOL from the minibuffer. In the minibuffer, use M-n to yank the default argument value into the minibuffer so you can edit it. The default symbol is the one found at point. With prefix arg MODE a query for the symbol help mode is offered.
Info reader mode keys	? SPC <page down=""> <del> <page up=""> t n o  p ] [ u 1 r L m  <ret> 1-9</ret></page></del></page>		

<u>Description</u>	<u>Keystroke</u>	Function	<u>Note</u>
Extra Descriptions	PEL implements a s	et of extra commands and bindings to	built-in Emacs commands to display other the following extra information.
Show symbols of currently active major mode	<f11> ? ?</f11>	(pel-show-major-mode)	Display the symbol of the currently active major mode.
Show which search tool is currently used	<f1> ? s</f1>	(pel-show-active-search-tool)	Display the currently used search tool.
Show what completion mode is currently used.	<f11> ? c</f11>	(pel-show-active-completion-mode)	Display the completion mode currently used.
Show available colours	<f11> ? d c</f11>	(list-colors-display &optional LIST BUFFER-NAME CALLBACK	Display names of defined colors, and show what they look like.
List all available faces	<f11> ? d F</f11>	(list-faces-display &optional REGEXP)	List all faces, using the same sample text in each.
Show buffer and file name	<f11> ? d f</f11>	(pel-show-window-filename-or- buffer-name)	Show the (full path) name of the file or buffer of current window.
Show information about an input method	<f11> ? d i</f11>	(list-input-methods)	Display information about all input methods.
Display content of kill ring	<f11> ? d k</f11>	(pel-show-kill-ring)	Display content of 'kill-ring' in *Help* buffer.
Print current buffer line # (and narrowed line #)	<f11> ? d 1</f11>	(what-line)	Print the current buffer line number and narrowed line number of point.
Query info about point	• C-x = • <f11> ? d p</f11>	(what-cursor-position &optional DETAIL)	Displays information about point oil the echo area: position, character, encoding.  • Unit any prefix argument opens a *Help* buffer and show the complete information of character at point with all properties, face, etc.
Show syntax of char at point	<f11> ? d s</f11>	(pel-show-char-syntax)	Display a message showing the character syntax of character at point.
Show window dimension	<f11> ? d w</f11>	(pel-show-window-sizes)	Show the height & width of the current window.
Show state of PEL numlock	<f11> ? k #</f11>	(pel-show-mac-numlock)	Display state of 'pel-mac-keypad-numlocked' used to control the numeric keypad.
Show personal key bindings	<f11> ? k b</f11>	(describe-personal-keybindings)	Display all the personal keybindings defined by 'bind-key'.
List command history See also:  Undo/Redo/Repeat/Arg	<f11> ? d H</f11>	(list-command-history)	List history of commands that used the minibuffer.  • Show list of commands in the *Command History* buffer as a list of Emacs Lisp forms.
Display free keys	<f11> ? k f</f11>	(free-keys &optional PREFIX BUFFER)	Display free keys in current buffer.  • A free key is a key that has no associated key-binding as determined by function 'key-binding'.  • By default, keys on 'free-keys-keys' list with no prefix sequence are considered, possibly together with modifier keys from 'free-keys-modifiers'. You can change the prefix sequence by hitting 'p' in the *Free keys* buffer. Prefix is supplied in format recognized by 'kbd', for example "C-x".  • Requires the package free-keys.  • PEL activates this when the pel-use-free-keys user option is t.
Display ASCII table	<f11> ? A</f11>	(ascii-table)	Show an interactive ASCII table in the other (next) window.  Requires the ascii-table package
See also: <u>Input Method</u>			PEL activates this when the <b>pel-use-ascii-table</b> user option is <b>t</b> .
More Help			
Open Emacs Tutorial	• C-h t • <f1> t</f1>	(help-with-tutorial &optional ARG DONT-ASK-FOR-REVERT)	Open an Emacs Tutorial. Restore location if used before (after prompt).
Find Elisp Package See also: <u>▶ Packages</u>	• C-h p • <f1> p</f1>	(finder-by-keyword)	Find packages matching a given keyword. Useful to search for packages supporting a specific concept.
Open Emacs FAQ	• C-h C-f • <f1> C-f</f1>	(view-emacs-FAQ)	Display the Emacs Frequently Asked Questions (FAQ) file.
Emacs news	• C-h n • <f1> n</f1>	(view-emacs-news &optional VERSION)	Display info on recent changes to Emacs. With argument, display info only for the selected version. Includes code modifications of each version of Emacs.
About Emacs	Information about E	macs, its environment and configuratio	n is available through a set of commands listed below
Show <u>loaded files</u> & <u>features</u>	<f11> ? e 1</f11>	(pel-emacs-load-stats)	Display the number of loaded files (the length of <i>load-history</i> ) and the number of features currently loaded.
Display Emacs Memory Usage	<f11> ? e m</f11>	(pel-emacs-mem-stats)	Display Emacs memory statistics inside an *emacs-mem-stats* buffer.
Display load-path	<f11> ? e p</f11>	(pel-emacs-load-path &optional N)	Show the current load-path inside a new *load-path* buffer.  Open the buffer in the current window or the one identified by N, with the display-line-number-mode on.  The buffer is NOT committed to a file.  If a buffer with the name *load-path* already exists, creates a new buffer name that contains the string *load-path*.  Window selection:  If N is not specified, nil or 1: open buffer in current window.  If N is negative, create a new window and open buffer inside it.  If N is 0: open buffer in other window  If N in [2,8] range, open buffer in window identified by the direction corresponding to the cursor in a numeric keypad:  8:='up  4:='left 5:='current 6:='right  2:='down  If N is 9 or larger: search in window below.
Check/display list of shadowed Emacs Lisp files	<f11> ? e s</f11>	(list-load-path-shadows &optional STRINGP)	Display a list of Emacs Lisp files that shadow other files  • Shows any shadows in a "Shadows" buffer

<u>Description</u>	<u>Keystroke</u>	Function	<u>Note</u>
Display Emacs initialization time with benchmark information if available	• <f11> ? e t • <m-s-f9></m-s-f9></f11>	(pel-show-init-time)	Display benchmark startup time.  Display the benchmark initialization and duration tree in 2 buffers if the benchmark-init library is installed and loaded in the init.el file. It also display the Emacs startup time inside the echo area.  Uses the benchmark-init library to measure time of the various loaded modules.  Use M-x list-package, select benchmark-init and install it.  Then update your init.el file and place the following lines as close as possible to the top of the file:  Setup Benchmark Measurement  Caution: Modify the path when a new version is available. (require 'benchmark-init (expand-file-name "-/.emacs.d/elpa/benchmark-init-20150905.938/benchmark-init")) (add-hook 'after-init-hook 'benchmark-init/deactivate)  Update the path if necessary.
Display Emacs version	<f11> ? e v</f11>	(emacs-version)	Display Emacs version
Using Man inside Emacs See also: • Pt - Erlang	<ul> <li>Emacs provide 2 main commands to display man pages inside buffers.</li> <li>Both of these are much more powerful than the usual man reader available on the shell allowing navigation across man pages and opening hyperlinks.</li> <li>The man command uses the system man utility, while woman is a complete implementation. It has some formatting limitations compared to man but it's very useful in systems where man is not available.</li> <li>The man command will find pages that the system's man can find. This can be extended or modified by setting the MANPATH environment variable. Inside Emacs you can also customize the Emacs Man-switches user option to provide extra configuration including a different MANPATH by using the -M switch. For an example see how to add Erlang man pages in the \$\partial \tau\$.</li> </ul>		
Open a man page inside an Emacs buffer	• <f11> ? m • ₩-M</f11>	(man MAN-ARGS)	Using man pages inside emacs is even better than using it from the shell because:  • the links are active and can be followed. When the man page describes a directory or file, emacs will open the file or the directory (in direct mode) when pressing <ret> over the link.  • You can navigate easily between sections (n/p will move to the next/previous section)  • You can use any of the searches.  • You can use any of the options to the man command at the prompt, like the -a option to access all man pages of the same name. Then use M-n and M-p to move from one to the other page, inside the same buffer.  • See all keys available in mode, with <f1> m or <f11>? k m.  • The man command prompts, using the word at point as the default.  • PEL key sequence to customize man: <f11> <f1> M-g m  • The man command provides completion at prompt. However, if you set up a MANPATH to isolate on directory to get only the list of commands in a specified set of man pages (eg. for Erlang commands only), the completion will only work if the man directory contains a whatsis database file. See my description on how to create whatis file for local man directory.</f1></f11></f11></f1></ret>
Open a man page without external man process: woman	<f11> ? w</f11>	(woman &optional TOPIC RE-CACHE)	Open a man page file in Emacs using the woman mode, completely implemented in Emacs Lisp (and therefore without using the external 'man' process). That can be very useful under environments where man is not available (such as basic Windows).  PEL key sequence to customize man: <f11> <f1> M-g w  text width, use word at point, etc  With ace-link external package activated when the pel-use-ace-link user option is set to t., the following key is activated:  Culck navigation: highlight each target with a target key.</f1></f11>

## Help — References

Topic & Link	Description		
Emacs Help			
GNU Emacs Manuals Online	The page with the list of all available online GNU Emacs manuals.		
GNU Emacs Manual - Help	Emacs manual - Help chapter		
Gnu Emacs Manual - Help Mode	Describes the command and key bindings that can be used in the Help-mode buffer window, which shows the help information.		
Emacs Manuals	Note that all Emacs manuals are available inside of Emacs. It's better to test, investigate code, etc		
GNU Emacs Manuals Online	Lists all GNU Emacs manuals, reference cards, etc		
GNU Emacs Manual	Points to different formats of the manual. The format where all is inside one HTML file is useful to search. There's also the PDF formats.		
GNU Reference Cards	This is accessible via the first link.		
Emacs Papers			
EMACS: The Extensible, Customizable Display Editor	This paper was written by Richard Stallman in 1981 and delivered in the ACM Conference on Text Processing.		
<b>Emacs Tutorials</b>			
A Guided Tour of Emacs	The official Emacs Tutorial. Part of Emacs. Best used <i>inside</i> Emacs. A good starting point. Use the others to get different point of views.		
Absolute Beginner's Guide to Emacs			
A Tutorial Introduction to GNU Emacs			
Practical Emacs Tutorial @ ErgoEmacs			
Emacs Cheat Sheet / Keystroke Lists			
Emacs Cheat Sheet			
List of Emacs Keystrokes			
Emacs Videos			
Emacs Rocks - home	A collection of Youtube homed videos about various Emacs features.  Well documented with keystrokes showing on the screen cast. Worth watching slowly to catch what is being done.		
Emacs and Man files			
How to create a local whatis file	Show how to create aa missing whatis file for a set of man pages.		