

Micro-Emacs

Quick Reference Guide

UCLA Math Series E-2

Version 1.1 of October 4, 1994

A reconfigurable public domain file editor

How to Use

The basic command line is **emacs filename**. To enter text, simply start typing. Press **Return** for each new line. **Tab** ([^]I) works. [^]J in place of **Return** matches the indentation of the previous line.

See the directory /usr/local/lib/emacs. The hard-copy manual is emacsref.txt (101 pages). A tutorial is in emacs.tut; copy and edit the file. For Gnu compatibility see the on-line handout.

EMACS Key Notation

- [^]X Hold down **Ctrl** like a shift key, then press the letter X.
- [^]XZ Press [^]X once as above, then press the letter Z
- [^]X[^]Z Press letters X and then Z while holding down **Ctrl**
- M-Z Called "meta-Z", press the **Esc** key once, then press the letter Z.
- M-nbr To specify a number such as 72, press **Esc** then type the number. Most commands will repeat so many times when preceded by M-nbr.

The letter key may be upper or lower case. For [^]^ (control caret) on some keyboards you need to simultaneously press shift and ctrl and the caret (6) key; on Wyse terminals you can use **Home**. Similarly to get [^]_ (control underbar) you may need shift-ctrl-minus.

Getting Out

- [^]X[^]C Get out without saving file
- M-Z Save all files then exit
- [^]X[^][^] Save file but continue editing
- [^]G Abort (when command demands input)

Help Commands

- [^]X? key Show title of the key you press next
- M-A word List of keys whose titles include "word"
- M-? Show help file (see below for movement commands)
- [^]X0 Close window after M-A or M-?

Motion and Searching

- | | | |
|------------|----------------|----------------|
| How Far | Up-Left | Down-Right |
| Whole File | M-< | M-> |
| Screenfuls | [^] Z | [^] V |
| Paragraphs | M-P | M-N |

- | | | |
|--------------------|-----------------|---------------------------|
| Lines | [^] P | [^] N |
| Ends of Line | [^] A | [^] E |
| Words | M-B | M-F |
| Characters | [^] B | [^] F |
| Line by Number | | M-nbr M-G |
| Search | [^] R | [^] [^] |
| Incremental Search | [^] XR | [^] XS |

Arrow keys work on ANSI and VT-100 terminals, but not Wyse or TVI. When you move off the screen (horizontal or vertical) the text jumps so the cursor remains visible.

To search, press the key (such as [^][^]) then type what to find, ended by **Esc**. Due to local terminal communication setup, do not use the traditional [^]S. Use [^][^] (control-caret) instead. Incremental search starts looking as you type. To abort a search, use [^]G. "hunt-forward" and "hunt-backward" repeat searches without asking for the string. Regular expression characters in magic mode only:

- | | |
|--------------|------------------------------------|
| . | Any one character |
| * | Zero or more of previous character |
| [^] | Beginning of line |
| \$ | End of line |
| [] | Character class, e.g. [A-Z] |
| \ | Un-magic the next character |

Deleting and Moving Text

- | | | |
|-----------------------|---------------------------------------|-------------------------------|
| How Much to Kill | Previous | Next |
| Characters | Backspace | [^] D |
| Words | M- Backspace | M-D |
| Rest of Line | [^] K (twice for whole line) | |
| Blank Lines | | [^] X [^] O |
| Set Mark | M-space | |
| Kill Region (to mark) | | [^] W |
| Copy Region | | M-W |
| Yank Killed Text | | [^] Y |

Deleted text (except individual characters) can be brought back at the same or a different place with [^]Y; it can be brought back several times. M-W stores the Region for [^]Y but does not delete it. This is how you move or copy text.

The Region is the range of text from the Mark to the Point (where the cursor is). The Mark is not visible on the screen.

Replacing

M-R replaces the first string with the second, from the Point (cursor) to the end of the file; strings are

entered similarly to a search. M-^R asks at each replacement; your answers are:

y	Yes replace
n	No don't replace
u	Un-do and retry last replacement
!	Replace everything (change to M-R)
.	No more, return to start
^G	No more, stop here
?	Show this list

Unlike vi, you can undo only the last replacement; replacements before it are irreversible.

Operating Modes

^XM	Add mode, this buffer
M-M	Add mode, all new buffers
^X^M	Delete mode, this buffer
M-^M	Delete mode, all new buffers

Then specify the mode name:

Over	Overwrite, don't insert new text
Wrap	Automatic carriage return
View	Prevent changing the text
Cmode	Automatic indentation for "C"
Exact	Case matters in searching
Magic	Regular expressions work in searching

Word Processing Features

M-nbr means press **Esc** then type the number.

M-nbr ^XF	Set right margin (default 72)
M-nbr Tab	Tab spacing (0 for hardware tabs)
M-Q	Neaten paragraph to fit right margin
^X=	Show current line number etc.
M-^C	Count words etc. in Region

For neatening, a "paragraph" starts at any line beginning with a blank or tab. The newline just before it is included; don't be confused.

Files and Buffers

A buffer is memory space. It usually contains a file, and is usually named after the file it contains. Do not use traditional ^X^S for saving, use ^X^^ (control-caret) instead. When you give a file or buffer name, press **Esc** and an attempt will be made to complete the name.

^X^F	Find file; if not existing, buffer and file will be created.
^X^V	Find file, set View mode (no changes)
^X^R	Replace buffer contents with this file
^X^I	Insert file contents at cursor
^X^^	Save buffer and continue editing
^X^W	Write buffer to a different file
^XB	Switch to another buffer (give name)
^X^B	Show list of buffers

Windows

A window shows (part of) a particular buffer. It is sometimes useful to have two windows on the same buffer. You can have arbitrarily many windows.

^X0	Close current window (zero)
^X1	Make current window the only one
^X2	Split window in two
^XO	Change to next window (letter O)
^XP	Change to previous window
^X^N	Slide text up / window down
^X^P	Slide text down / window up
M-nbr M-!	Slide text putting cursor on n'th line
M-nbr ^XW	Make window n lines high

UNIX Commands

^X!	Execute command, press Return after
^X@	Run command, output in a new buffer, close window before next ^X@
^X#	Filter buffer through command, e.g. sort
^XC	Fork an interactive shell
^XD	Suspend Emacs (like ^Z in vi; don't abuse it)

Miscellaneous

Keyboard macro: Press ^X(, then everything you type will be remembered up to ^X). Press ^XE to play it back again.

^X^X	Exchange Point and Mark (move cursor)
M-X	Execute command (specify title)
M-~	Don't have to save this buffer
^L	Redraw screen spoiled by biff

Startup File

To customize your own keybindings, create a file \$HOME/.emacsrc. Look at the *.rc files in /usr/local/lib/emacs for hints (and other useful goodies).