less Terminal pager

CONCEPTS

less is a pager: it reads lazily, so huge files open at once and you can scroll back, which a plain cat cannot do.

Input file or pipe
↓ read
Buffer lazy, scrollable
↓ show
Screen keys, search, options

Keys are case sensitive. Many accept a count first: 10j moves 10 lines, 50% jumps halfway.

Press h inside less for the full key summary; the same keys work in man, git log and systemctl.

MOVING

`Space` / `f` Forward one screen

`b` Back one screen

`j` / `Enter` Forward one line

`k` / `y` Back one line

`d` Forward half a screen

`u` Back half a screen

`g` / `<` Go to the first line

`G` / `>` Go to the last line

`<n>g` Go to line <n>

`<n>%`
Go to <n> percent into the file

`Right` / `Left`
Scroll sideways half a screen

`ESC-Space`
Forward one screen, past end of file

`z` / `w`
Forward / back one screen, set its size

SEARCHING

`/<pattern>` Search forward

`?<pattern>` Search backward

SEARCHING (cont.)

`n` Next match

`N` Previous match

`&<pattern>`
Show only matching lines

`&!<pattern>`
Show only non-matching lines

`ESC-u`
Toggle match highlighting

`/!<pattern>`
Search for lines not matching

`/^R<pattern>`
Search literally, no regex

Searches are regular expressions. With -i they ignore case unless the pattern has capitals.

MARKS AND JUMPING

`m<letter>` Mark the top line

`'<letter>` Jump to a mark

`''`
Jump back to previous position

`{` / `}` Jump to matching bracket

FILES AND COMMANDS

`F` Follow the end, like tail -f

`:n` Next file

`:p` Previous file

`:e` › *<file>* Open another file

`=` / `Ctrl` + `G`
Show file name and position

`-<flag>` Toggle an option live

`v` Edit the file in $EDITOR

`!<cmd>` Run a shell command

`s` › *<file>*
Save piped input to a file

`h` Show help

`q` Quit

OPTIONS

less -S *<file>*
Chop long lines instead of wrapping

less -N *<file>*
Show line numbers

less -R
Pass ANSI colours through

less -F
Quit if it fits on one screen

less -X
Do not clear screen on exit

less -i
Ignore case when searching

less -I
Ignore case always

less +F *<file>*
Start in follow mode

less +*<n>* *<file>*
Start at line <n>

less +/*<pattern>* *<file>*
Start at first match

less -p *<pattern>*
Start at first match

less -s
Squeeze blank lines

less -M
Verbose prompt with percent

less *<a>* *<b>*
View several files, :n / :p to switch

RECIPES

Colour output, then page it

```
git diff --color=always | less -R
grep -rn --color=always TODO . |
less -R
```

Watch a log, search, resume

```
less +F /var/log/syslog
# Ctrl+C to stop following
# /error then n to step through
hits
# F to follow again
```

Wide table without wrapping

```
ps aux | less -S
# Left / Right to scroll sideways
```

Make options permanent

```
export LESS='-iRFX'
export PAGER=less
```