less Terminal pager

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

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.

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>

MOVING (cont.)

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

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

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

`r` Repaint the screen

SEARCHING

`/<pattern>`
Search forward

`?<pattern>`
Search backward

`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

SEARCHING (cont.)

`/^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

FILES AND COMMANDS (cont.)

`-<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

OPTIONS (cont.)

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

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

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

`less -s`
Squeeze blank lines

`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
```