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

r Repaint the screen

SEARCHING

/<pattern> Search forward

?<pattern> Search backward

n Next match

SEARCHING (cont.)

N Previous match

&<pattern>
Show only matching lines

&!<pattern>
Show only non-matching lines

ESC-u
Toggle match highlighting

ESC-n
Next match, continuing into the next file

/!<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

M<letter> Mark the bottom 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

FILES AND COMMANDS (cont.)

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 -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
```