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
```