

**NAME**

stty – change and print terminal line settings

**SYNOPSIS**

**stty** [-F *DEVICE* | --file=*DEVICE*] [*SETTING*]...

**stty** [-F *DEVICE* | --file=*DEVICE*] [-a|--all]

**stty** [-F *DEVICE* | --file=*DEVICE*] [-g|--save]

**DESCRIPTION**

Print or change terminal characteristics.

Mandatory arguments to long options are mandatory for short options too.

**-a, --all**

print all current settings in human-readable form

**-g, --save**

print all current settings in a stty-readable form

**-F, --file=DEVICE**

open and use the specified *DEVICE* instead of stdin

**--help** display this help and exit

**--version**

output version information and exit

Optional – before *SETTING* indicates negation. An \* marks non-POSIX settings. The underlying system defines which settings are available.

**Special characters:**

\* discard CHAR

CHAR will toggle discarding of output

eof CHAR

CHAR will send an end of file (terminate the input)

eol CHAR

CHAR will end the line

\* eol2 CHAR

alternate CHAR for ending the line

erase CHAR

CHAR will erase the last character typed

intr CHAR

CHAR will send an interrupt signal

kill CHAR

CHAR will erase the current line

\* lnext CHAR

CHAR will enter the next character quoted

quit CHAR

CHAR will send a quit signal

\* rprnt CHAR

CHAR will redraw the current line

start CHAR

CHAR will restart the output after stopping it

stop CHAR

CHAR will stop the output

susp CHAR

CHAR will send a terminal stop signal

\* swch CHAR

CHAR will switch to a different shell layer

\* werase CHAR

CHAR will erase the last word typed

### Special settings:

N set the input and output speeds to N bauds

\* cols N

tell the kernel that the terminal has N columns

\* columns N

same as cols N

\* [-]drain

wait for transmission before applying settings (on by default)

ispeed N

set the input speed to N

\* line N

use line discipline N

min N with **-icanon**, set N characters minimum for a completed read

ospeed N

set the output speed to N

\* rows N

tell the kernel that the terminal has N rows

\* size print the number of rows and columns according to the kernel

speed print the terminal speed

time N with **-icanon**, set read timeout of N tenths of a second

### Control settings:

[-]clocal

disable modem control signals

[-]cread

allow input to be received

\* [-]crtcts

enable RTS/CTS handshaking

csN set character size to N bits, N in [5..8]

[-]cstopb

use two stop bits per character (one with '—')

[-]hup send a hangup signal when the last process closes the tty

[-]hupcl

same as [-]hup

[-]parenb

generate parity bit in output and expect parity bit in input

[-]parodd

set odd parity (or even parity with '—')

- \* [-]cmspar  
use "stick" (mark/space) parity

**Input settings:**

- [-]brkint  
breaks cause an interrupt signal
- [-]icrnl translate carriage return to newline
- [-]ignbrk  
ignore break characters
- [-]igncr  
ignore carriage return
- [-]ignpar  
ignore characters with parity errors
- \* [-]imaxbel  
beep and do not flush a full input buffer on a character
- [-]inlcr translate newline to carriage return
- [-]inpck  
enable input parity checking
- [-]istrip  
clear high (8th) bit of input characters
- \* [-]iutf8  
assume input characters are UTF-8 encoded
- \* [-]iuclc  
translate uppercase characters to lowercase
- \* [-]ixany  
let any character restart output, not only start character
- [-]ixoff  
enable sending of start/stop characters
- [-]ixon enable XON/XOFF flow control
- [-]parmrk  
mark parity errors (with a 255-0-character sequence)
- [-]tandem  
same as [-]ixoff

**Output settings:**

- \* bsN backspace delay style, N in [0..1]
- \* crN carriage return delay style, N in [0..3]
- \* ffN form feed delay style, N in [0..1]
- \* nlN newline delay style, N in [0..1]
- \* [-]ocrnl  
translate carriage return to newline
- \* [-]ofdel  
use delete characters for fill instead of NUL characters
- \* [-]ofill  
use fill (padding) characters instead of timing for delays

- \* [-]olcuc  
translate lowercase characters to uppercase
- \* [-]onlcr  
translate newline to carriage return–newline
- \* [-]onlret  
newline performs a carriage return
- \* [-]onocr  
do not print carriage returns in the first column
- [-]opost  
postprocess output
- \* tabN horizontal tab delay style, N in [0..3]
- \* tabs same as tab0
- \* **-tabs** same as tab3
- \* vtN vertical tab delay style, N in [0..1]

**Local settings:**

- [-]crterase  
echo erase characters as backspace–space–backspace
- \* crtkill  
kill all line by obeying the echopt and echoe settings
- \* **-crtkill**  
kill all line by obeying the echoctl and echok settings
- \* [-]ctlecho  
echo control characters in hat notation ('^c')
- [-]echo  
echo input characters
- \* [-]echoctl  
same as [-]ctlecho
- [-]echoe  
same as [-]crterase
- [-]echok  
echo a newline after a kill character
- \* [-]echoke  
same as [-]crtkill
- [-]echonl  
echo newline even if not echoing other characters
- \* [-]echopt  
echo erased characters backward, between '\` and `/
- \* [-]extproc  
enable "LINEMODE"; useful with high latency links
- \* [-]flusho  
discard output
- [-]icanon  
enable special characters: erase, kill, werase, rprnt

[-]iexten  
enable non-POSIX special characters

[-]isig enable interrupt, quit, and suspend special characters

[-]noflsh  
disable flushing after interrupt and quit special characters

\* [-]prterase  
same as [-]echoprt

\* [-]tostop  
stop background jobs that try to write to the terminal

\* [-]xcase  
with icanon, escape with '\ ' for uppercase characters

### Combination settings:

\* [-]LCASE  
same as [-]lcase

cbreak same as **-icanon**

**-cbreak**  
same as icanon

cooked same as brkint ignpar istrip icrnl ixon opost isig icanon, eof and eol characters to their default values

**-cooked**  
same as raw

crt same as echoe echoctl echoke

dec same as echoe echoctl echoke **-ixany** intr ^c erase 0177 kill ^u

\* [-]decctlq  
same as [-]ixany

ek erase and kill characters to their default values

evenp same as parenb **-parodd** cs7

**-evenp** same as **-parenb** cs8

\* [-]lcase  
same as xcase iuclc olcuc

litout same as **-parenb -istrip -opost** cs8

**-litout** same as parenb istrip opost cs7

nl same as **-icrnl -onlcr**

**-nl** same as icrnl **-inlcr -igncr** onlcr **-ocrnl -onlret**

oddp same as parenb parodd cs7

**-oddp** same as **-parenb** cs8

[-]parity  
same as [-]evenp

pass8 same as **-parenb -istrip** cs8

**-pass8** same as parenb istrip cs7

raw same as **-ignbrk -brkint -ignpar -parmrk -inpck -istrip -inlcr -igncr -icrnl -ixon -ixoff -icanon -opost -isig -iuclc -ixany -imaxbel -xcase** min 1 time 0

**-raw** same as cooked

sane same as cread **-ignbrk** brkint **-inlcr** **-igncr** icrnl icanon iexten echo echoe echok **-echonl** **-noflsh** **-ixoff** **-iutf8** **-iucle** **-ixany** imaxbel **-xcase** **-olcuc** **-ocrnl** opost **-ofill** onlcr **-onocr** **-onlret** nl0 cr0 tab0 bs0 vt0 ff0 isig **-tostop** **-ofdel** **-echoprt** echoctl echoke **-extproc** **-flusho**, all special characters to their default values

Handle the tty line connected to standard input. Without arguments, prints baud rate, line discipline, and deviations from stty sane. In settings, CHAR is taken literally, or coded as in ^c, 0x37, 0177 or 127; special values ^- or undef used to disable special characters.

## AUTHOR

Written by David MacKenzie.

## REPORTING BUGS

GNU coreutils online help: <<https://www.gnu.org/software/coreutils/>>

Report stty translation bugs to <<https://translationproject.org/team/>>

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## SEE ALSO

Full documentation at: <<https://www.gnu.org/software/coreutils/stty>>  
or available locally via: info '(coreutils) stty invocation'