

# OpenBSD's CSI sequences succinct reference

## Info

<b>ESC</b>	oct <b>033</b> , hex <b>0x1B</b> , dec <b>27</b> , <b>\e</b> in printf	
<b>ESC[</b>	<b>CSI</b> (Control Sequence Introducer)	
<b>CSI</b> in pd ksh's <b>print</b>	<b>\033[</b>	
<b>CSI</b> in <b>printf</b>	<b>\033[</b> or <b>\x1b[</b> or <b>\e[</b>	
<b>CSI</b> parameters <b>m</b>	<b>SGR</b> (Select Graphic Rendition) sets display attributes	
<b>m</b>	indicates the end of <b>SGR</b> sequence	
<i>example in pd ksh</i>	<code>print -n -- "\033[1;1H\033[0J'</code>	<i># clears the screen</i>
<i>example in pd ksh</i>	<code>print -- 'Hello \033[32mWorld\033[0m!'</code>	<i># prints "World" in green</i>
<i>example (not CSI)</i>	<code>print -- 'Price: 97\033(0)\033(B'</code>	<i># prints "Price: 97£"</i>

## Colors

<b>CSI30..37m</b>	regular <b>foreground</b> colors
<b>CSI90..97m</b>	bright <b>foreground</b> colors
<b>CSI38;5;0..255m</b>	<b>foreground</b> colors from 0 to 255
<b>CSI38;2;r;g;b;bm</b>	<b>foreground</b> RGB colors from 0 to 255 each
<b>CSI39m</b>	default <b>foreground</b> color

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<b>CSI40..47m</b>	regular <b>background</b> colors
<b>CSI100..107m</b>	bright <b>background</b> colors
<b>CSI48;5;0..255m</b>	<b>background</b> colors from 0 to 255
<b>CSI48;2;r;g;b;bm</b>	<b>background</b> RGB colors from 0 to 255 each
<b>CSI49m</b>	default <b>background</b> color

## Other

CSI0m	<b>resets</b> all text and color attributes, 0 can be omitted (CSI m)
CSI1m	<b>bold</b>
CSI2m	<b>dim</b> (rarely supported)
CSI3m	<b>italic</b>
CSI4m	<b>underline</b>
CSI5m	<b>blink</b>
CSI7m	<b>reverse video</b>
CSI9m	<b>strike-through</b>
CSI21m	<b>double underline</b> , or <b>bold underline</b>
CSI22m	normal font (cancels <b>bold</b> and <b>dim</b> )
CSI23m	normal font (cancels <b>italic</b> )
CSI24m	normal font (cancels <b>underline</b> )
CSI25m	normal font (cancels <b>blink</b> )
CSI27m	normal font (cancels <b>reverse video</b> )
CSI29m	normal font (cancels <b>strike-through</b> )
<hr/>	
CSIcolG	<b>moves</b> cursor to specified <b>column</b> (leftmost is <b>1</b> )
CSIrow;colH	<b>moves</b> cursor to specified <b>row</b> and <b>column</b> (top left is <b>1;1</b> ) (CUP)
CSIrow;colf	<b>same as above</b> on most terminals (format effector function)
CSI0J	<b>erases</b> screen <b>below</b> the cursor
CSI1J	<b>erases</b> screen <b>above</b> the cursor
CSI2J	<b>erases</b> everything on screen
CSIs	<b>saves</b> cursor's position
CSIu	<b>restores</b> cursor's position
CSI?5h	<b>inverts</b> terminal colors
CSI?5l	<b>restores</b> terminal colors back to normal
CSI?25l	<b>hides</b> the cursor
CSI?25h	<b>shows</b> the cursor

## Not CSI

<code>\033(O</code>	<b>starts</b> alternate character set (not CSI)
<code>\033(B</code>	<b>ends</b> alternate character set (not CSI)
<code>\033%@"</code>	<b>sets</b> character set to <b>ISO 8859-1</b> (default character set) (not CSI)
<code>\033%G</code>	<b>sets</b> character set to <b>UTF-8</b> (not CSI)
<code>\033c</code>	<b>resets</b> the terminal (not CSI)
<code>\033]0;title\07</code>	<b>sets</b> window title (not CSI, uses closing square bracket)

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