

# HP Portable Plus Escape Sequences

## HP Two Character Escape Sequences



ESC 0	Print display memory to selected printer.
ESC A	Cursor Up.
ESC B	Cursor Down.
ESC C	Cursor Right.
ESC D	Cursor Left.
ESC E	Power on reset.
ESC F	Home Down.
ESC H	Home Up cursor.
ESC I	Horizontal Tab.
ESC J	Clear display from cursor to end of memory.
ESC K	Clear line from cursor to end of line.
ESC L	Insert line.
ESC M	Delete line.
ESC P	Delete character.
ESC Q	Turn on insert character mode.
ESC R	Turn off insert character mode.
ESC S	Roll Up Display.
ESC T	Roll Down Display.
ESC U	Next Page.
ESC V	Previous Page.
ESC Y	Display Functions On.
ESC Z	Display Functions Off.
ESC ^	Primary Terminal Status Request.
ESC `	Sense Cursor position (relative).
ESC a	Absolute Cursor Sense.
ESC d	Transmit a block of text to the computer.
ESC h	Home Up Cursor.
ESC i	Back Tab Cursor.

## HP Multi-character Escape Sequences

### Cursor Control Functions – ESC & a

Columns and rows are numbered starting with 0.

ESC & a <col>c<rows>Y	Screen relative addressing. Moves the cursor to column <col> and screen row <row> on the screen itself.
ESC & a <col>c<rows>R	Screen absolute addressing. Moves the cursor to column <col> and row <row> in memory.
ESC & a± <col>c± <rows>Y	Moves the cursor to <col> and <row> on the screen relative to its present position. <col> and <row> are signed integers. A positive number indicates right or downward movement and a negative number indicates left or upward movement.
ESC & a± <col>c± <rows>R	Moves the cursor to <col> and <row> on the screen relative to its present cursor position in memory. <col> and <row> are signed integers. A positive number indicates right or downward movement and a negative number indicates left or upward movement.

### Display Enhancement – ESC & d

ESC & d <character>	Selects the display enhancement indicated by <character> to begin at the current cursor position.															
	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Half Bright									■	■	■	■	■	■	■	■
Underline					■	■	■	■					■	■	■	■
Inverse Video			■	■			■	■			■	■			■	■
Blinking		■		■		■		■		■		■		■		■
End Enhancement	■															

### Define User Softkeys – ESC & f

ESC & f <attribute>a <key>k <label length>d <string length> 1 <label> <string>	Defines functions for the RETURN and function keys where the terms, symbols, meanings, are defined in the following table:
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## Reset options

1.
2.
3.
4. Reset Button

ESC [ <n> U	scroll down next <n> pages
ESC [ <n> V	scroll up previous <n> pages
ESC [ <r;c> f	cursor to absolute position <r;c> row;column
ESC [ <c> h	Set Mode <c> 4 insert character mode ON =0, =1 Alpha mode 40×25 ON, =2, =3 Alpha mode 80×25 ON =4, =5 Graphics mode 320×200 ON =6 Graphics mode 640×200 ON =7 end-of-line wrap mode ON =8 Alpha mode ON =10 Graphics mode ON ?? end-of-line wrap ON
ESC [ <c> l	Reset Mode <c> 4 insert character mode OFF =0, =1 Alpha mode 40×25 OFF, =2, =3 Alpha mode 80×25 OFF =4, =5 Graphics mode 320×200 OFF =6 Graphics mode 640×200 OFF =7 end-of-line wrap mode OFF =8 Alpha mode OFF =10 Graphics mode OFF ?? end-of-line wrap OFF
ESC [ <c> m	Set Graphics rendition <c> 0 all attributes OFF 1 halfbright ON 4 underline ON 5 blinking ON 7 inverse ON 10 use HP fonts 11 use Alt fonts
ESC [ 6 n	Request device status (see ESC [ <r;c>R)
ESC [ s	save cursor position
ESC [ u	restore cursor position

<attribute> a	0 Normal (N), default: 0 1 Local only (L) 2 Transmit only (T)
<key> k	1 f1 function key 2 f2 function key 3 f3 function key 4 f4 function key 5 f5 function key 6 f6 function key 7 f7 function key 8 f8 function key
<label length> d	0..80 Number of characters in the label, default: 0
<string length> l	0..80 Number of characters in the string, default: 1
	-1 Clears the content of the string
<label>	The label is entered at this point in the sequence.
<string>	The character string is entered at this point in the sequence.

### Activate User Softkeys – ESC & j

ESC & j @	Softkey labels OFF
ESC & j B	Softkey labels ON

### Keyboard Settings – ESC & k

ESC & k <x> \	Alt mode keyboard <x>=0: OFF, <x>=1: ON
ESC & k <x> A	Auto linefeed <x>=0: OFF, <x>=1: ON
ESC & k <x> D	Bell <x>=0: OFF, <x>=1: ON
ESC & k <x> O	Select keyboard mode <x>=0: turn keyboard modes OFF <x>=1: turn numeric keypad ON <x>=2: turn scancode mode ON <x>=3: turn modifier mode ON
ESC & k <x> P	Caps Lock <x>=0: OFF, <x>=1: ON

### Terminal Strap Control – ESC & s

ESC & s <x> A	Transmits Functions (A) where <x>=0: OFF <x>=1: ON
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ESC & s <x> C	Ends line wrap-around (C) where <x>=0: OFF <x>=1: ON
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## Graphics ESC Sequences

### Display Control – ESC \* d (terminal character of sequence must be uppercase)

ESC * d a	Clear graphics memory
ESC * d b	Set graphics memory
ESC * d c	Turn on graphics display
ESC * d d	Turn off graphics display
ESC * d e	Turn on alphanumeric display
ESC * d f	Turn off alphanumeric display
ESC * d k	Alpha: block cursor / Graphics: Gcursor ON
ESC * d l	Alpha: underline cursor / Graphics: Gcursor OFF
ESC * d <x,y> o	Move graphics cursor absolute to [0-479, 0-199]
ESC * d <dx,dy> p	Move graphics cursor relative by <dx, dy>
ESC * d <n> q	alphanumeric cursor <n>=0: primary <n>=1: secondary cursor
ESC * d r	Turn off alphanumeric cursor

### Vector Drawing Mode – ESC \* m (terminal character of sequence must be uppercase)

ESC * m <mode> a	Select drawing mode <m>=0: no change <m>=1: clear <m>=2: set <m>=3: complement <m>=4:jam
ESC * m <type> b	Select line type <type>=1...10
ESC * m <pattern > <scale> c	Define line pattern and scale (repeat)
ESC * m < x,y > j	Set relocatable origin to point x, y
ESC * m k	Set relocatable origin to Gcursor position
ESC * m l	Set relocatable origin to cursor position
ESC * m r	Set graphics defaults

### Graphics Plotting – ESC \* p (terminal character of sequence must be uppercase)

ESC * p a	Lift pen
ESC * p b	Lower pen
ESC * p c	Set pen position to cursor position
ESC * p d	Point plot
ESC * p e	Set relocatable origin to cursor position
ESC * p f	use ASCII absolute format
ESC * p g	use ASCII incremental format
ESC * p h	use ASCII relocatable format
ESC * p z	NOP/Sync
ESC * p <x,y>	Move pen to point x, y

### Graphics Status – ESC \* s

ESC * s 0 S , ESC * s 1 S	Read model number	“HP\r”
ESC * s 110 S	Read serial number	

### ANSI Escape Sequences

Columns and rows are numbered starting with 1.

ESC [ <n> A	cursor up <n> lines
ESC [ <n> B	cursor down <n> lines
ESC [ <n> C	cursor right <n> columns
ESC [ <n> D	cursor left <n> columns
ESC [ <r,c> H	cursor to absolute position <r,c> [1-62,1-80]
ESC [ <n> J	erase in display <n> = 0 from cursor to end of display <n> = 1 from cursor to start of display <n> = 2 entire display
ESC [ <n> K	erase in line <n> = 0 from cursor to end of line <n> = 1 from cursor to start of line <n> = 2 entire line
ESC [ <n> L	insert <n> lines
ESC [ <n> M	delete <n> lines
ESC [ <n> P	delete <n> characters
ESC [ <r,c> R	absolute cursor position report (see ESC [ 6 n)