

# Natural Termcap (NATTERMCP) Utility

The Natural Termcap (NATTERMCP) utility is used to create, modify and test terminal capabilities used by Natural. These terminal capabilities are stored in the terminal database SAGtermcap.

Since there are no standard terminal type definitions, Software AG does not assume any responsibility for the completeness and the correctness of the terminal types contained in SAGtermcap. A terminal type standard used for Digital Equipment Corporation's VT terminals is ANSI X3.64 (corresponds to ISO 6429).

The *Natural Termcap Utility* documentation covers the following topics:

- General Settings
- Invoking the Natural Termcap Utility
- Terminating the Natural Termcap Utility
- Terminal Copy Capabilities
- Key Definitions
- File Menu
- Edit Menu
- Search Menu
- Test Menu
- Options Menu
- Help Menu
- Terminal Capabilities - Overview
- Terminal Capabilities - Sorted by Name

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## General Settings

This section provides information on environment variables and parameters that can be used to specify general settings of the Natural Termcap utility. For the parameters that can be specified when invoking the Natural Termcap utility, see *Dynamic Parameters*.

- Environment Variables
- Terminal Mode
- Special Control Codes

## Environment Variables

The Natural Termcap utility uses the following environment variables:

Variable	Explanation
TERM	Used for the currently active terminal type.
NATTERM	Used for the Natural terminal type. If this variable is not set or defined, the value assigned to TERM (see above) is used.
NATTCAP	Used to specify a different terminal database than SAGtermcap.
COLUMNS	Used for terminal-screen width. If this variable is not set or defined, the current screen width is used. Otherwise, the value assigned to the capability <code>co</code> is used.
LINES	Used for terminal screen page size. If this variable is not set or defined, the current screen page size is used. Otherwise, the value assigned to the capability <code>li</code> is used.

## Terminal Mode

The Natural Termcap utility is a screen I/O application. Therefore, it needs a terminal database and a terminal type to display menus and windows on the screen. By default, the Natural Termcap utility uses the same terminal database and type that Natural uses.

Natural retrieves the terminal type as follows:

1. It takes the contents of the environment variable NATTERM.
2. If NATTERM is not set or defined, it takes the contents of the system environment variable TERM.

Natural retrieves the terminal database as follows:

1. It takes the contents of the environment variable NATTCAP.
2. If NATTCAP is not set, it retrieves the terminal database name from the NATTCAP entry in the local configuration file *NATURAL.INI*.
3. If this terminal database could not be found, the Natural Termcap utility tries to locate a terminal database named SAGtermcap in the current directory.

To avoid this automatism, the Natural Termcap utility offers a predefined terminal database in the dynamic parameter TERMCP with a limited number of terminal types. These types can be accessed by specifying the dynamic parameter DISPLAY.

## Special Control Codes

The following table gives an overview of unprintable characters, as well as characters that have a special meaning in terminal capability syntax:

Control Code	Explanation
\E	Escape character
\b	Backspace character
\n	New line
\r	Carriage return character
\t	Tab character
\xxx	Octal value of xxx; must be three characters
\072	The character colon (:); the Natural Termcap utility uses the colon (:) as an internal separator
^x	Control-x, where x is any letter

### Example:

If the function key PF10 is to be defined as F10 on a DEC VT220 terminal, the code of F10 is:

```
<ESCAPE>[21~
```

Specify the following for capability PF10:

```
\E[21~
```

If the character tilde (~) is not available on the keyboard, use the octal value of tilde instead. Tilde is defined as octal 176. The alternative specification is then:

```
\E[21\176
```

## Invoking the Natural Termcap Utility

### ▶ To invoke the Natural Termcap utility

- At the operating system prompt, enter the following:

```
nattermcap [dynamic-parameters]
```

where *dynamic-parameters* denotes one or more parameters that can be specified with the command (see *Dynamic Parameters*).

The **NATURAL Termcap Utility** screen appears with the name of the currently active terminal in the top right-hand corner of the screen.

The screen provides the following menu options:

Menu	Explanation
<b>File</b>	Creates, reads, saves and deletes a terminal entry.
<b>Edit</b>	Views and sets terminal capabilities.
<b>Search</b>	Searches for a specific capability by name.
<b>Test</b>	Tests capabilities.
<b>Options</b>	Modifies the default key definition and shows or hides terminal copy capabilities. Terminal copy capabilities are capabilities included from another terminal entry.
<b>Help</b>	Provides help on each capability and on the usage of the dynamic parameters.

The menus provided on the **NATURAL Termcap Utility** screen are explained in the following sections.

## Dynamic Parameters

The dynamic parameters that can be supplied with the NATTERMCA command when invoking the Natural Termcap utility are described in the following section. These parameters provide quick access to the capabilities of a terminal type. As an alternative, you can use the menu options provided on the **NATURAL Termcap Utility** screen.

For explanations of the symbols used in the parameter syntax, refer to *System Command Syntax* in the *System Commands* documentation.

Dynamic Parameter	Explanation
DISPLAY	<p>Used to define the terminal type for the Natural Termcap utility itself. If no <code>DISPLAY</code> parameter is specified, the Natural terminal database <code>SAGtermcap</code> is used and the same terminal type tracking mechanism as for Natural is in effect.</p> <p><b>Syntax:</b></p> <pre>DISPLAY = {#vt100 #vt100ng #vt220 #vt220ng wyse60 #tty other}</pre> <p><b>Possible Values:</b></p> <p><code>#vt100</code> Use the terminal entry <code>DEC vt100</code> from the internal terminal database.</p> <p><code>#vt100ng</code> Similar to <code>#vt100</code>, but graphic line characters will be replaced by single characters such as - (minus signs),   (vertical lines) and + (plus signs).</p> <p><code>#vt220</code> Use the terminal entry <code>DEC vt220</code> from the internal terminal database.</p> <p><code>#vt220ng</code> Similar to <code>#vt220</code>, but graphic line characters will be replaced by single characters such as - (minus signs),   (vertical lines) and + (plus signs).</p> <p><code>#wyse60</code> Use the terminal entry <code>wyse60</code> from the internal terminal database.</p> <p><code>#tty</code> Use the terminal entry <code>tty</code> from the internal terminal database. The <code>tty</code> terminal works in a line-oriented way without using escape control sequences. Only a few functions are available if this terminal entry is selected.</p> <p><code>other</code> Use any other terminal type in the terminal database, for example, <code>xterm</code>.</p>

Dynamic Parameter	Explanation
EDIT	<p>Used to view and/or modify a specific terminal capability. If the capability is found, the associated window is displayed and the cursor is positioned in the specified field. If the capability cannot be found, an error message will be displayed and the Natural Termcap utility terminates.</p> <p><b>Syntax:</b></p> <pre>EDIT = <i>capability</i></pre> <p><b>Capability:</b></p> <p>Any terminal capability known in Natural can be specified. A list of capabilities can be found in the sections <i>Terminal Capabilities - Overview</i> and <i>Terminal Capabilities - Sorted by Name</i>.</p>
EXIT	<p>Used to terminate the utility after all parameters have been processed.</p> <p><b>Example:</b></p> <pre>NATTERM EDIT = PF10 EXIT</pre> <p>After modifying the function key PF10, the utility terminates immediately.</p>
HELP	<p>Used to get help about a specific capability or about using the Natural Termcap utility.</p> <p><b>Syntax:</b></p> <pre>HELP = {CAP USAGE <i>capability</i>}</pre> <p><b>Possible Values:</b></p> <p>CAP                    Displays help for all capabilities sorted by capability name.</p> <p>USAGE                  Displays all dynamic parameters in the Natural Termcap utility.</p> <p><i>capability</i>            Displays help for a specific capability.</p>
REPORT	<p>Used to create by default a text file with a detailed description of the current terminal in the Natural TMP directory.</p> <p><b>Syntax:</b></p> <pre>REPORT [=<i>file-name</i> ]</pre> <p>where <i>file-name</i> is the name of the text file, which is to contain the description.</p> <p>If no name is specified, <i>terminal-name.txt</i> is used.</p>

Dynamic Parameter	Explanation
SAVE	<p>Used to save all modifications of the current terminal entry.</p> <p><b>Syntax:</b></p> <p><code>SAVE [=terminal-name]</code></p> <p>where <i>terminal-name</i> is a new terminal entry in the terminal database where all capabilities of the current terminal are stored. Corresponding menu option: <b>File &gt; Save As.</b></p> <p>If no name is specified, the current <i>terminal-name</i> is used. Corresponding menu option: <b>File &gt; Save.</b></p>
TERM	<p>Used to read in a different terminal entry. If this parameter is not specified, the current Natural terminal type is used (NATTERM or TERM).</p> <p><b>Syntax:</b></p> <p><code>TERM = terminal-name</code></p> <p>where <i>terminal-name</i> is any type of a given terminal contained in the terminal database.</p>
TERMCAP	<p>Used to work with a different terminal database. If this parameter is not specified, the current Natural terminal database is used (NATTCAP).</p> <p><b>Syntax:</b></p> <p><code>TERMCAP = database-name</code></p> <p>where <i>database-name</i> is the database path and file name.</p>

Dynamic Parameter	Explanation										
TEST	<p data-bbox="342 243 688 275">Opens the specified test window.</p> <p data-bbox="342 344 431 375"><b>Syntax:</b></p> <p data-bbox="342 401 1073 432">TEST = {CONSISTENCY   COLORS   GRAPHICS   KEYS   VIDEO}</p> <p data-bbox="342 501 524 533"><b>Possible Values:</b></p> <table data-bbox="342 602 1289 1125"> <tr> <td data-bbox="342 602 516 634">CONSISTENCY</td> <td data-bbox="691 602 1273 634">Checks whether the function keys are uniquely defined.</td> </tr> <tr> <td data-bbox="342 703 440 735">COLORS</td> <td data-bbox="691 703 1224 735">All available colors are displayed with sample text.</td> </tr> <tr> <td data-bbox="342 804 472 835">GRAPHICS</td> <td data-bbox="691 804 1208 835">A single-line and a double-line box are displayed.</td> </tr> <tr> <td data-bbox="342 905 407 936">KEYS</td> <td data-bbox="691 905 1289 999">A text on any pressed key will be displayed. The window can be closed by pressing one of the following character keys: E, Q, X, or . (period).</td> </tr> <tr> <td data-bbox="342 1068 423 1100">VIDEO</td> <td data-bbox="691 1068 1252 1125">Displays video attributes such as blinking, underlined and reversed video.</td> </tr> </table>	CONSISTENCY	Checks whether the function keys are uniquely defined.	COLORS	All available colors are displayed with sample text.	GRAPHICS	A single-line and a double-line box are displayed.	KEYS	A text on any pressed key will be displayed. The window can be closed by pressing one of the following character keys: E, Q, X, or . (period).	VIDEO	Displays video attributes such as blinking, underlined and reversed video.
CONSISTENCY	Checks whether the function keys are uniquely defined.										
COLORS	All available colors are displayed with sample text.										
GRAPHICS	A single-line and a double-line box are displayed.										
KEYS	A text on any pressed key will be displayed. The window can be closed by pressing one of the following character keys: E, Q, X, or . (period).										
VIDEO	Displays video attributes such as blinking, underlined and reversed video.										

## Terminating the Natural Termcap Utility

### ▶ To terminate the Natural Termcap utility

- From the **File** menu, choose **Exit**.

Or:

Set the EXIT parameter as described in *Dynamic Parameters*.

The Natural Termcap utility is terminated and the operating system prompt appears.

## Terminal Copy Capabilities

Terminal copy capabilities (TCs) are capabilities transferred from another terminal entry, like the `#include` directive of a C program. However, if capabilities are already defined in the current entry, the transferred capabilities are ignored. This makes the entries more efficient, not only by reducing redundancies, but also by ensuring that related entries are kept consistent. Capabilities read from a terminal copy entry are marked with [TC] to the right of the input field. Additionally, the name of the entry from where this capability is transferred is shown in the top right corner of the menu, above the



terminal name.

Once a terminal capability has been modified, it loses the link to the transferred terminal entry and the modification is made to the current terminal entry.

 **To display the current terminal entry without any terminal copy capabilities**

1. On the **NATURAL Termcap Utility** screen, choose **Terminal Copy Capabilities** from the **Options** menu.

The **Terminal Copy Capabilities** window appears.

2. Select **HIDE**.

**Example:**

Assume `TERM` is set to `vt100` and the `vt100` (`vt220`) terminal entry in the terminal database looks as follows:

**vt100 entry:**

```
ti = \E =
ESC = \E
ETO = 300
tc = vt220
```

**vt220 entry:**

```
ti = \E[0m
cr = \r
```

The combined terminal entry for the terminal type `vt100` would be:

**vt100:**

```
ti = \E = /* taken from the original vt100 entry
ESC = \E /* taken from the original vt100 entry
ETO = 300 /* taken from the original vt100 entry
cr = \r /* transferred from vt220 entry
```

The capability `ti( = \E[0m)` from the `vt220` terminal is ignored, because `ti` is already defined in the `vt100` entry.

## Key Definitions

The function keys provided in the definition windows of the Natural Termcap utility are described in the following table:

Key	Explanation
CTRL+A	Inserts ANSI definitions.
CTRL+E	Evaluates keys automatically.
CTRL+N	Inserts non-graphic characters for frames.
CTRL+P	Gets help.
CTRL+V	Tests capabilities.

### ► To modify the predefined function keys

1. On the **NATURAL Termcap Utility** screen, choose **Key Assignments** from the **Options** menu.

The **Key Assignments** window appears.

2. Modify the required function key(s) listed under the **Key Name** column.

You can only specify control keys (CTRL+A to CTRL+Z).

## File Menu

When you select **File** from the **NATURAL Termcap Utility** screen, a selection list containing the following functions is displayed:

Function	Explanation
<b>New</b>	Creates a new terminal entry in the current terminal database.
<b>Read</b>	Reads a terminal entry from the terminal database.
<b>Save</b>	Saves terminal capabilities to the current terminal entry.
<b>Save As</b>	Saves terminal capabilities to a different or new terminal entry.
<b>Delete</b>	Removes the current terminal entry from the terminal database.
<b>Generate Report</b>	Generates a text file including information about the description, aliases and capabilities of the current terminal entry. The text file will be stored by default in the Natural TMP directory as <i>terminal-name.txt</i> , for example, <i>xterm.txt</i> .
<b>Move</b>	Moves the terminal entry physically to the top of the terminal database. If a terminal is on top of the database, the access time during the terminal initialization will be improved.
<b>Import Database</b>	Allows working with a terminal database other than Natural's SAGtermcap.
<b>Export Database</b>	Saves the whole terminal database and all terminal entries with a different path and/or name than Natural's SAGtermcap.
<b>Properties</b>	Displays detailed information about the terminal database, terminal entry, environment variables and display type.
<b>Exit</b>	Exits the Natural Termcap utility.

## Edit Menu

When you select **Edit** from the **NATURAL Termcap Utility** screen, a selection list containing all capabilities grouped by topic is displayed:

- **Colors**
- **Cursor Keys and Modes**
- **Description and Comments**
- **Editing Key**
- **Initialization and Reset**
- **Keypad Keys for Mathematical Operations**
- **Line Graphics**
- **Miscellaneous**
- **Name and Aliases**
- **PA and PF Keys**
- **Right-To-Left Support**
- **Screen Dimension and Appearance**
- **Video Attributes**

After you have selected a topic, the corresponding window is displayed in which you can edit individual Natural terminal capabilities.

Depending on the window displayed, the following different types of input fields are provided:

- boolean, where only ON or OFF can be specified.
- numeric, where only digits (0 to 9) can be specified.
- string, where 32 alphanumeric characters can be specified, with the exception of terminal capabilities `te` and `ti`, for which 132 characters can be specified;
- description, where 132 alphanumeric characters can be specified.

For further information on the individual Natural terminal capabilities to be edited, see the sections *Terminal Capabilities - Overview* and *Terminal Capabilities - Sorted by Name*.

## Search Menu

When you select **Search** from the **NATURAL Termcap Utility** screen, a selection list containing all capabilities sorted by name is displayed: see *Terminal Capabilities - Sorted by Name*. After you have selected a capability, a window is displayed which corresponds to the window invoked with the

appropriate **Edit** menu option.

## Test Menu

When you select **Test** from the **NATURAL Termcap Utility** screen, a selection list containing the following functions is displayed:

Function	Explanation
<b>Colors</b>	Tests all foreground and background colors.
<b>Consistency</b>	Searches for inconsistent key definitions. A list of affected keys is displayed if they are not unique.
<b>Keys</b>	Displays the name of a pressed key. Leave this functions by pressing one of the following character keys: E, Q, X, or . (period).
<b>Line Graphics</b>	Tests the graphic line capabilities used for drawing window frames.
<b>Video Attributes</b>	Tests all video attributes.

## Options Menu

When you select **Options** from the **NATURAL Termcap Utility** screen, a selection list containing the following functions is displayed:

Function	Explanation
<b>Terminal Copy Capabilities</b>	Shows or hides the terminal capabilities included from a different terminal entry specified by the capability <code>tc</code> .
<b>Key Assignments</b>	Modifies the default key assignments of the utility.

## Help Menu

When you select **Help** from the **NATURAL Termcap Utility** screen, a selection list containing the following functions is displayed:

Function	Explanation
<b>Topics</b>	Invokes a detailed help section for a given topic, such as NAME, REPORT, TC or TEST.
<b>Capabilities</b>	Invokes a detailed help section for each capability.
<b>Usage</b>	Displays information on how the dynamic parameters are used.
<b>About</b>	Displays product information.

# Terminal Capabilities - Overview

This section provides an overview of all terminal capabilities sorted by topic. The topics correspond to the items in the **Edit** menu.

- Colors
- Cursor Keys and Modes
- Description and Comments
- Editing Keys
- Initialization and Reset
- Keypad Keys for Mathematical Operations
- Line Graphics
- Miscellaneous
- Name and Aliases
- PA and PF Keys
- Right-To-Left Support
- Screen Dimension and Appearance
- Video Attributes

## Colors

Name	Description
ct	Terminal type: color (ON) or monochrome (OFF)
bgbla	Screen background color
fgblu	Foreground color blue; Natural color definition CD=BL (*)
fggre	Foreground color green; Natural color definition CD=GR (*)
fgmag	Foreground color pink; Natural color definition CD=PI (*)
fgred	Foreground color red; Natural color definition CD=RE (*)
fgcya	Foreground color turquoise; Natural color definition CD=TU (*)
fgwhi	Foreground color white; Natural color definition CD=NE (*)
fgyel	Foreground color yellow; Natural color definition CD=YE (*)
ctres	Foreground color for reverse video; Natural attribute definition AD=V (*)
bgblu	Background color blue
bggre	Background color green
bgmag	Background color pink
bgred	Background color red
bgcya	Background color turquoise
bgwhi	Background color white
bgyel	Background color yellow

\* For detailed information on the Natural definitions AD and CD, see the appropriate session parameters AD and CD described in the *Natural Reference* documentation.

## Cursor Keys and Modes

Cursor keys can be set in two modes: application mode or normal (numeric) mode. In application mode, the numeric keypad keys are assigned different tasks than when in normal mode.

<b>Name</b>	<b>Description</b>
kd	Cursor key down (in normal mode)
kl	Cursor key left (in normal mode)
kr	Cursor key right (in normal mode)
ku	Cursor key up (in normal mode)
@7	Cursor key end
kh	Cursor key home
CKNO	Normal cursor key mode
CKAP	Application cursor key mode
cm	Cursor motion
CNL	Cursor next line
ve	Cursor visible
vi	Cursor invisible
DK	Cursor key down (in application mode)
LK	Cursor key left (in application mode)
RK	Cursor key right (in application mode)
UK	Cursor key up (in application mode)

## Description and Comments

These fields can be used to describe the terminal entry or to add some comments.

## Editing Keys

<b>Name</b>	<b>Description</b>
bc	Backspace key
bcvt	Alternative backspace key
bt	Backtab key
cr	Carriage return key
dc	Delete character key
KDEL	Delete to end of field key
ESC	Escape key
ETO	Escape timeout value in milliseconds
%1	Help key
kI	Insert or overstrike mode key
NLFF	Next line first field key
kN	Page down (next) key
PD	Alternative page down (next) key
kP	Page up (previous) key
PU	Alternative page up (previous) key
&2	Refresh key
ta	Tab key

## Initialization and Reset



<b>Name</b>	<b>Description</b>
TICL	Clear screen after initialization
TIRA	Reset attributes after initialization
TIGR	Enable line graphics after initialization
TICI	Cursor invisible after initialization
TICV	Cursor visible after initialization
TIAK	Application keypad after initialization
TINK	Numeric keypad after initialization
TIAC	Application cursor key mode after initialization
TINC	Normal cursor key mode after initialization
TIDB	Dark background after initialization
TILB	Light background after initialization
TIIM	Insert mode after initialization
TIOM	Overstrike mode after initialization
ti	Additional initialization sequence
TECL	Clear screen after termination
TERA	Reset video attributes after termination
TENL	Cursor next to line after termination
TECV	Cursor visible after termination
TECI	Cursor invisible after termination
TEAK	Application keypad after termination
TENK	Numeric keypad after termination
TEAC	Application cursor key mode after termination
TENC	Normal cursor key mode after termination
TEDB	Dark background after termination
TELB	Light background after termination
te	Additional sequence after termination

## Keypad Keys for Mathematical Operations

<b>Keypad</b>	<b>Description</b>
KP01	Single null
KP1	One
KP2	Two
KP3	Three
KP4	Four
KP5	Five
KP6	Six
KP7	Seven
KP8	Eight
KP9	Nine
KPADD	Add
KPSUB	Subtract
KPDIV	Divide
KPMUL	Multiply
KPTS	Thousand separator
KPDP	Decimal point
KPRES	Result

## Line Graphics

Name	Description
eA	Enable line graphics
as	Graphics mode on
ae	Graphics mode off
G1	Single upper-right corner character
GD1	Double upper-right corner character
G2	Single upper-left corner character
GD2	Double upper-left corner character
G3	Single lower-left corner character
GD3	Double lower-left corner character
G4	Single lower-right corner character
GD4	Double lower-right corner character
GH	Single horizontal bar character
GDH	Double horizontal bar character
GV	Single vertical bar character
GDV	Double vertical bar character

## Miscellaneous

Name	Description
bl	Audio bell
vb	Visual bell
cl	Clear screen
ce	Clear to end of line
ks	Keypad mode application
ke	Keypad mode numeric
xi	Scroll glitch
TCS	External terminal/printer character set, for more information, see <i>Support of Different Character Sets with NATCONV.INI</i> in the <i>Operations</i> documentation.
tc	Terminal copy

## Name and Aliases

A name and up to 30 aliases can be defined for each entry.

## PA and PF Keys

Key	Description
PA1	Attention key PA1
PA2	Attention key PA2
PA3	Attention key PA3
PF1	Function key PF1
PF2	Function key PF2
...	
PF47	Function key PF47
PF48	Function key PF48

## Right-To-Left Support

Name	Description
RTL	Right-to-left language toggle key for fields
RTLS	Right-to-left screen toggle key

## Screen Dimension and Appearance

Name	Description
li	Number of screen rows (if not specified, take the current screen size)
co	Number of screen columns (if not specified, take the current screen size)
DAR	Dark background, light text
LIG	Light background, dark text

## Video Attributes

Name	Description
mb	Blinking on; Natural attribute definition AD=B (*)
BR	Blinking off
adc	Cursive/italics on; Natural attribute definition AD=C (*)
adc0	Cursive/italics off
md	Intensified (bold) on; Natural attribute definition AD=I (*)
HR	Intensified off
mr	Reversed on; Natural attribute definition AD=V (*)
mr0	Reversed off
us	Underlined on; Natural attribute definition AD=U (*)
ue	Underlined off
me	Reset attributes; Natural attribute definition AD=D (*)
so	Standout mode on
se	Standout mode off
xs	Standout glitch

\* For detailed information on the Natural attribute definition AD, see the appropriate session parameter AD described in the *Natural Reference* documentation.

## Terminal Capabilities - Sorted by Name

This section lists all terminal capabilities sorted by name. These capabilities correspond to the capabilities in the **Search** menu.

Name	Description
%1	Help key
&2	Refresh key
@7	Cursor key end
adc	Cursive/italic on; Natural attribute definition AD=C (*)
adc0	Cursive/italic off
ae	Graphics mode off
as	Graphics mode on
bc	Backspace key
bcbt	Alternative backspace key
bgbla	Screen background
bgblu	Background color blue
bgcya	Background color turquoise

Name	Description
bggre	Background color green
bgmag	Background color pink
bgred	Background color red
bgwhi	Background color white
bgyel	Background color yellow
bl	Audio bell
BR	Blinking off
bt	Backtab key
ce	Clear to end of line
CKAP	Application cursor key mode
CKNO	Normal cursor key mode
cl	Clear screen
cm	Cursor motion
CNL	Cursor next line
co	Number of screen columns; if not specified, take the current screen size
cr	Carriage return key
ct	Color terminal
ctres	Foreground color for reverse video; Natural attribute definition AD=V (*)
DAR	Dark background, light text
dc	Delete character key
DK	Cursor key down (in application mode)
eA	Enable line graphics
ESC	Escape key
ETO	Escape timeout value
fgblu	Foreground color blue; Natural color definition CD=BL (*)
fgcya	Foreground color turquoise; Natural color definition CD=TU (*)
fggre	Foreground color green; Natural color definition CD=GR (*)
fgmag	Foreground color pink; Natural color definition CD=PI (*)
fgred	Foreground color red; Natural color definition CD=RE (*)
fgwhi	Foreground color white; Natural color definition CD=NE (*)
fgyel	Foreground color yellow; Natural color definition CD=YE (*)
G1	Single upper-right corner character
G2	Single upper-left corner character

<b>Name</b>	<b>Description</b>
G3	Single lower-left corner character
G4	Single lower-right corner character
GD1	Double upper-right corner character
GD2	Double upper-left corner character
GD3	Double lower-left corner character
GD4	Double lower-right corner character
GDH	Double horizontal bar character
GDV	Double vertical bar character
GH	Single horizontal bar character
GV	Single vertical bar character
HR	Intensified off
kd	Cursor key down (in normal mode)
KDEL	Delete to end of field key
ke	Keypad mode numeric
kh	Cursor key home
kI	Insert or overstrike mode key
kl	Cursor key left (in normal mode)
kN	Page down (next) key
kP	Page up (previous) key
KP01	Single zero (0) keypad key
KP1	One
KP2	Two
KP3	Three
KP4	Four
KP5	Five
KP6	Six
KP7	Seven
KP8	Eight
KP9	Nine
KPADD	Add
KPDIV	Divide
KPDP	Decimal point
KPMUL	Multiply

Name	Description
KPRES	Result
KPSUB	Subtract
KPTS	Thousand separator
kr	Cursor key right (in normal mode)
ks	Keypad mode application
ku	Cursor key up (in normal mode)
li	Number of screen rows; if not specified, take the current screen size
LIG	Light background, dark text
LK	Cursor key left (in application mode)
mb	Blinking on; Natural attribute definition AD=B (*)
md	Intensified (bold) on; Natural attribute definition AD=I (*)
me	Reset attributes; Natural attribute definition AD=D (*)
mr	Reversed on; Natural attribute definition AD=V (*)
mr0	Reversed off
NLFF	Next line first field key
PA1	Attention key PA1
PA2	Attention key PA2
PA3	Attention key PA3
PD	Alternative page down (next) key
PF1	Function key PF1
PF2	Function key PF2
...	
PF47	Function key PF47
PF48	Function key PF48
PU	Alternative page up (previous) key
RK	Cursor key right (in application mode)
RTLFF	Right-to-left language toggle key for fields
RTLS	Right-to-left screen toggle key
se	Standout mode off
so	Standout mode on
ta	Tab key
tc	Terminal copy
TCS	External terminal/printer character set.



<b>Name</b>	<b>Description</b>
te	Additional sequence after termination
TEAC	Application cursor key mode after termination
TEAK	Application keypad after termination
TECI	Cursor invisible after termination
TECL	Clear screen after termination
TECV	Cursor visible after termination
TEDB	Dark background after termination
TELB	Light background after termination
TENC	Normal cursor key mode after termination
TENK	Numeric keypad after termination
TENL	Cursor next to line after termination
TERA	Reset video attributes after termination
ti	Additional initialization sequence
TIAC	Application cursor key mode after initialization
TIAK	Application keypad after initialization
TICI	Cursor invisible after initialization
TICL	Clear screen after initialization
TICV	Cursor visible after initialization
TIDB	Dark background after initialization
TIGR	Enable line graphics after initialization
TIIM	Insert mode after initialization
TILB	Light background after initialization
TINC	Normal cursor key mode after initialization
TINK	Numeric keypad after initialization
TIOM	Overstrike mode after initialization
TIRA	Reset attributes after initialization
ue	Underlined off
UK	Cursor key up (in application mode)
us	Underline on; Natural attribute definition AD=U (*)
vb	Visual bell
ve	Cursor visible
vi	Cursor invisible
xi	Scroll glitch

Name	Description
xs	Standout glitch

\* For detailed information on the Natural definitions AD and CD, see the appropriate session parameters AD and CD described in the *Natural Reference* documentation.