

# **ZOC TERMINAL**

## **vttest vt100/vt102 Compatibility Score**

© [EmTec Innovative Software](#), Markus Schmidt

Table of Contents:

ZOC TERMINAL vtest vt100/vt102 Compatibility Score .....	1
1 Introduction .....	3
2 Test Results .....	3
2.1 Test of cursor movements .....	3
2.2 Test of screen features .....	4
2.2.1 Graphic Rendition test pattern, dark background .....	4
2.2.2 Graphic Rendition test pattern, light background .....	5
2.2.3 Save/Restore Cursor .....	5
2.3 Test of character sets .....	5
2.4 Test of double-sized chars .....	6
2.4.1 Test 1 in 80-column mode .....	6
2.4.2 Test 2 in 80-column mode .....	6
2.4.3 Test 1 in 132-column mode .....	6
2.4.4 Test 2 in 132-column mode .....	6
2.5 Test of keyboard .....	6
2.6 Test of Terminal Reports .....	7
2.7 Test of VT52 submenu .....	7
2.8 VT102 Features .....	8
2.9 Extra credit .....	8

## 1 Introduction

**vttest** is an application that is used to demonstrate features of [VT100](#) and related terminals, or emulations thereof, such as [xterm](#). The program was originally written in 1986 by Per Lindberg. It has been maintained and extended since 1996 by [Thomas Dickey](#), to test and demonstrate features of xterm. The score system in this document is based on the Columbia University [vttest score sheet](#).

[ZOC Terminal](#) is a multi-purpose [terminal emulator](#), [telnet-client](#) and [ssh-client](#) which features multiple emulations, including [VT100](#).

## 2 Overall Test Result

Program and version: [ZOC Terminal](#) v7.21

Date: 09/2018

**Score 97 + Extra credit 8 => Final score: 105 Points**

## 3 Individual Tests

Check if test passed.

Score 1 point per check mark.

Perfect score = 100 points.

Extra credit score at end.

### 3.1 Test of cursor movements

- ✓ 1. Text inside frame of E's inside frame of \*'s and +'s, 80 columns
- ✓ 2. Text inside frame of E's inside frame of \*'s and +'s, 132 columns
- ✓ 3. Cursor-control chars inside ESC sequences

- ✓ 4. Leading 0's in ESC sequences

### **3.2 Test of screen features**

- ✓ 5. Three identical lines of \*'s (test of wrap mode)
- ✓ 6. Test of tab setting/resetting
- ✓ 7. 132-column mode, light background
- ✓ 8. 80-column mode, light background
- ✓ 9. 132-column mode, dark background
- ✓ 10. 80-column mode, dark background
- 11. Soft scroll down
- 12. Soft scroll up / down
- ✓ 13. Jump scroll down
- ✓ 14. Jump scroll up / down
- ✓ 15. Origin mode test (2 parts)

#### **3.2.1 Graphic Rendition test pattern, dark background**

- ✓ 16. Normal ("vanilla")
- ✓ 17. Normal underlined distinct from normal
- ✓ 18. Normal blink distinct from all above
- ✓ 19. Normal underline blink distinct from all above
- ✓ 20. Normal reverse ("negative") distinct from all above
- ✓ 21. Normal underline reverse distinct from all above
- ✓ 22. Normal blink reverse distinct from all above
- ✓ 23. Normal underline blink reverse distinct from all above
- ✓ 24. Bold distinct from all above
- ✓ 25. Bold underlined distinct from all above
- ✓ 26. Bold blink distinct from all above
- ✓ 27. Bold underline blink distinct from all above
- ✓ 28. Bold reverse ("negative") distinct from all above
- ✓ 29. Bold underline reverse distinct from all above

- ✓ 30. Bold blink reverse distinct from all above
- ✓ 31. Bold underline blink reverse distinct from all above

### **3.2.2 Graphic Rendition test pattern, light background**

- ✓ 32. Normal ("vanilla")
- ✓ 33. Normal underlined distinct from normal
- ✓ 34. Normal blink distinct from all above
- ✓ 35. Normal underline blink distinct from all above
- ✓ 36. Normal reverse ("negative") distinct from all above
- ✓ 37. Normal underline reverse distinct from all above
- ✓ 38. Normal blink reverse distinct from all above
- ✓ 39. Normal underline blink reverse distinct from all above
- ✓ 40. Bold distinct from all above
- ✓ 41. Bold underlined distinct from all above
- ✓ 42. Bold blink distinct from all above
- ✓ 43. Bold underline blink distinct from all above
- ✓ 44. Bold reverse ("negative") distinct from all above
- ✓ 45. Bold underline reverse distinct from all above
- ✓ 46. Bold blink reverse distinct from all above
- ✓ 47. Bold underline blink reverse distinct from all above

### **3.2.3 Save/Restore Cursor**

- ✓ 48. AAAA's correctly placed
- ✓ 49. Lines correctly rendered (middle of character cell)
- ✓ 50. Diamonds correctly rendered

## **3.3 Test of character sets**

- ✓ 51. UK/National shows Pound Sterling sign in 3rd position

- ✓ 52. US ASCII shows number sign in 3rd position
- ✓ 53. SO/SI works (right columns identical with left columns)
- ✓ 54. True special graphics & line drawing chars, not simulated by ASCII

### **3.4 Test of double-sized chars**

#### **3.4.1 Test 1 in 80-column mode**

- ✓ 55. Left margin correct
- ✓ 56. Width correct

#### **3.4.2 Test 2 in 80-column mode**

- ✓ 57. Left margin correct
- ✓ 58. Width correct

#### **3.4.3 Test 1 in 132-column mode**

- ✓ 59. Left margin correct
- ✓ 60. Width correct

#### **3.4.4 Test 2 in 132-column mode**

- ✓ 61. Left margin correct
- ✓ 62. Width correct
- ✓ 63. "The man programmer strikes again" test pattern
- ✓ 64. "Exactly half the box should remain"

### **3.5 Test of keyboard**

- ✓ 65. LEDs.
- 66. Autorepeat

- ✓ 67. "Press each key" (ability to send each ASCII graphic char)
- ✓ 68. Arrow keys (ANSI/Cursor key mode reset)
- ✓ 69. Arrow keys (ANSI/Cursor key mode set)
- ✓ 70. Arrow keys VT52 mode
- ✓ 71. PF keys numeric mode
- ✓ 72. PF keys application mode
- ✓ 73. PF keys VT52 numeric mode
- ✓ 74. PF keys VT52 application mode
- ✓ 75. Send answerback message from keyboard
- ✓ 76. Ability to send every control character

### **3.6 Test of Terminal Reports**

- ✓ 77. Respond to ENQ with answerback
- ✓ 78. Newline mode set
- ✓ 79. Newline mode reset
- ✓ 80. Device status report 5
- ✓ 81. Device status report 6
- ✓ 82. Device attributes report
- ✓ 83. Request terminal parameters 0
- ✓ 84. Request terminal parameters 1

### **3.7 Test of VT52 submode**

- ✓ 85. Centered rectangle
- ✓ 86. Normal character set
- ✓ 87. Graphics character set
- ✓ 88. Identify query

### 3.8 VT102 Features

- ✓ 89. Insert/delete line, 80 columns
- ✓ 90. Insert (character) mode, 80 columns
- ✓ 91. Delete character, 80 columns
- ✓ 92. Right column staggered by 1 (normal chars), 80 columns
- ✓ 93. Right column staggered by 1 (double-wide chars)14:21 21.08.2018, 80 columns
- ✓ 94. ANSI insert character, 80 columns
- ✓ 95. Insert/delete line, 132 columns
- ✓ 96. Insert (character) mode, 132 columns
- ✓ 97. Delete character, 132 columns
- ✓ 98. Right column staggered by 1 (normal chars), 132 columns
- ✓ 99. Right column staggered by 1 (double-wide chars), 132 columns
- ✓ 100. ANSI insert character, 132 columns

### 3.9 Extra credit

- 101. True soft (smooth) scroll
- ✓ 102. True underline
- ✓ 103. True blink
- ✓ 104. True double-high/wide lines, not simulated
- ✓ 105. Reset terminal (\*)
- ✓ 106. Interpret controls (debug mode) (\*)
- ✓ 107. Send BREAK (250 msec) (\*)
- ✓ 108. Send Long BREAK (1.5 sec) (\*)
- ✓ 109. Host-controlled transparent / controller print (\*)
- 110. Host-controlled autoprint (\*)

(\*) Features of VT100 not tested by vttest.