## ANSI.SYS CODES DOCUMENTATION AND MORE

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### **COLOR TABLES**

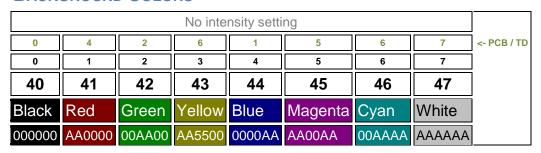
PCB /TD	0/8	4/12	2/10	6 / 14	1/9	5 / 13	3 / 11	7 / 15
<u>Intensity</u>	0	1	2	3	4	5	6	7
Normal	Black	Red	Green	Yellow	Blue	Magenta	Cyan	White
Bright	Black	Red	Green	Yellow	Blue	Magenta	Cyan	White

-Or -

### **FOREGROUND COLORS**

	Intensity = 0						Intensity = 1									
0	4	2	6	1	5	3	7	8	12 / C	10 / A	14 /E	9	13 / D	11 / B	15 / F	<- PCB / TD
0	1	2	3	4	5	6	7	8	9	10 / A	11 / B	12 / C	13 / D	14 / E	15 / F	
30	31	32	33	34	35	36	37	30	31	32	33	34	35	36	37	
Black	Red	Green	Yellow	Blue	Magenta	Cyan	White	Black	Red	Green	Yellow	Blue	Magenta	Cyan	White	
000000	AA0000	00AA00	AA5500	0000AA	AA00AA	00AAAA	AAAAA	555555	FF5555	55FF55	FFFF55	5555FF	FF55FF	55FFFF	FFFFFF	

### **BACKGROUND COLORS**



PCB / TD = PCBoard / TheDraw Color Numbering

### **SET DISPLAY ATTRIBUTES**

### Set Attribute {ESC}[<attr>m

Turns on a characteristic or attribute of the display, such as high intensity, blink, or foreground and background color.

<attr> specifies the display attribute to be turned on. More than one attribute can be specified by using a semicolon to separate the attribute numbers. <attr> can be any of the following:

Text Attribute	Value
None	0
High Intensity (bold)	1
Underline (monochrome display only)	4
Blink	5
Reverse	7
Invisible	8

Color	Foreground	Background
Black	30	40
Red	31	41
Green	32	42
Yellow	33	43
Blue	34	44
Magenta	35	45
Cyan	36	46
White	37	47

If you omit <attr>, all attributes are turned off (equivalent to specifying <attr> as 0).

examples {ESC}[1m High intensity.

{ESC}[1;5m High intensity and blink.

{ESC}[30;46m Black foreground, cyan background.

{ESC}[m Turn off all attributes. {ESC}[0m Turn off all attributes.

{ESC}[0;1;36m Turn off all attributes, then turn on high-intensity cyan foreground.

## **CURSOR ACTIONS**

ESC[#;#H or ESC[#;#	Moves cursor to line #, column #	
ESC[#A	Moves cursor up # lines	
ESC[#B	Moves cursor down # lines	
ESC[#C	Moves cursor forward # spaces	
ESC[#D	Moves cursor back # spaces	
ESC[6n	Reports current cursor position in the format ESC	#;#R
ESC[#;#R	Reported current cursor line & column	
ESC[s	Saves cursor position for recall later	
ESC[u	Return to saved cursor position	
Extended ANSI Standa	ard Options	
ESC[#Y	# vertical tabs	Default: 1
ESC[#W	# tab control	Default: 0
ESC[#Z	# backward tabs	Default: 1
ESC[#G	horizontal absolute position #	Default: 1
ESC[#I	# horizontal tabs	Default: 1
ESC[#E	next line	Default: 1
ESC[#F	preceding line	Default: 1
ESC[#`	horizontal absolute position #	Default: 1
ESC[#:#f	horizontal/vertical position	Default: 1;1
ESC[#U	next page	Default: 1
ESC[#V	preceding page	Default: 1
ESC[#L	insert # lines	Default: 1
ESC[#d	vertical position absolute	Default: 1
ESC[#b	repeat character	Default: 1

<b>Cursor Up</b>	{ESC}[ <row>A</row>
,	Moves the cursor up the specified number of rows without changing the column. <row> is a number from 1 through 24 that specifies how many rows the cursor is to be moved up.  If you omit <row>, DOS moves the cursor up one row.</row></row>
examples	{ESC}[13A Move the cursor up 13 rows {ESC}[A Move the cursor up 1 row
<b>Cursor Down</b>	{ESC}[ <row>B</row>
	Moves the cursor down the specified number of rows without changing the column.
	<row> is a number from 1 through 24 that specifies how many rows the cursor is to be moved down. If you omit <row>, DOS moves the cursor down one row.</row></row>
examples	{ESC}[8B Move the cursor down eight rows. {ESC}[B Move the cursor down one row.
<b>Cursor Right</b>	{ESC}[ <co></co> C
	, , <b>,</b>
	Moves the cursor right the specified number of columns without changing the row.
examples	Moves the cursor right the specified number of columns without changing the row. <col/> is a number from 1 through 79 that specifies how many columns that cursor is to be moved right.
	Moves the cursor right the specified number of columns without changing the row. <col/> is a number from 1 through 79 that specifies how many columns that cursor is to be moved right.  If you omit <col/> , DOS moves the cursor right one column.  {ESC}[40C Move the cursor right 40 columns.
examples	Moves the cursor right the specified number of columns without changing the row. <col/> is a number from 1 through 79 that specifies how many columns that cursor is to be moved right.  If you omit <col/> , DOS moves the cursor right one column.  {ESC}[40C Move the cursor right 40 columns.  {ESC}[C Move the cursor right one column.
examples	Moves the cursor right the specified number of columns without changing the row. <col/> is a number from 1 through 79 that specifies how many columns that cursor is to be moved right.  If you omit <col/> , DOS moves the cursor right one column.  {ESC}[40C Move the cursor right 40 columns.  {ESC}[C Move the cursor right one column.  {ESC}[ <col/> D

Move Cursor	{ESC}[ <row>;<col/>H or {ESC}<row>;<col/>f</row></row>								
	Moves the cursor to the specified row and column.								
	<row> is a number from 1 through 25 that specifies the row to which the cursor is to be moved. If you omit <row>, DOS moves the cursor to row 1. To omit <row> but specify <col/>, enter the semicolon to show the <row> is omitted. <col/> is a number from 1 through 80 that specifies the column to which the cursor is to be moved. If you omit <col/>, DOS moves the cursor to column 1. If you omit both <row> and <col/>, DOS moves the cursor to the home position (row 1, column 1the upper left corner of the screen).</row></row></row></row></row>								
examples	{ESC}[;10HMove the cursor to column 10, row 1. {ESC}[H Move the cursor to row 1, column 1.								
<b>Save Cursor Position</b>	{ESC}[s								
	Stores the current row and column position of the cursor.								
	You can move the cursor to this location with a Restore Cursor Position command.								
examples	{ESC}[s Save the current cursor position.								
<b>Report Cursor Position</b>	{ESC}[6n								
	Returns the current row and column position of the cursor in the form {ESC}[ <row>;<col/>R.</row>								
	<row> is a number from 1 through 25 that specifies the row where the cursor is located.<li><col/> is a number from 1 through 80 that specifies the column where the cursor is located.</li></row>								
examples	{ESC}[6n Report the current cursor position.								
<b>Restore Cursor Position</b>	{ESC}[u								
	Moves the cursor to the row and column position most recently saved with a Save Cursor Position command.								
examples	{ESC}[u Move the cursor the row and column last saved with a Save Cursor Position command.								

## ANSI.SYS Command Codes Documentation by Carsten Cumbrowski aka Roy/SAC (http://www.roysac.com/)

## **ERASE FUNCTIONS**

ESC[2J		Clear screen and home cursor	
ESC[1J		Erase from beginning of screen to cursor	
ESC[0J ESC[J		Erase from cursor to end of screen	
ESC[2K		Erase line containing cursor	
ESC[1K		Erase from beginning of line to cursor	
ESC[0K	ESC[K	Clear to end of line	

<b>Erase Display</b>	{ESC}[2J						
	Erases the entire display (equivalent to the DOS Clear Screen or CLS command).						
examples	{ESC}[2J	Erase the screen.					

## **Erase to End of Line {ESC}[K**

Erases from the current cursor position through the end of the line that contains the cursor.

examples {ESC}[K Erase from the cursor to the end of the line.

### **SET DISPLAY MODE**

### **Set Display Mode**

### {ESC}[=<mode>h

Sets the width and color capability of the display (generally equivalent to the DOS MODE command). This command can also be used to cause lines longer than 80 characters to be broken at the 80th character and continued on the next line, rather than truncated at the 80th column; this is called line wrap. It can be turned off with the Turn Off Line Wrap command. Note the equal sign (=) that precedes <*mode*>.

ESC[=<mode>h (= is ? or char(63)

Display <mode></mode>	Value
40 columns by 25 rows, black and white	0
40 columns by 25 rows, color on	1
80 columns by 25 rows, black and white	2
80 columns by 25 rows, color on	3
320 by 200 graphics, color on	4
320 by 200 graphics, black and white	5
640 by 200 graphics, black and white	6
Turn on line wrap	7

examples

{*ESC*}[=1h

Set the display to 40 by 25 color on.

 $\{ESC\}$ [=7h]

Continued lines longer than 80 characters, don't truncate them.

### **Turn Off Line Wrap**

### {ESC}[=71

Causes lines longer than 80 characters to be truncated at the 80th character, rather than continued to the next line.

examples

{ESC}[=71

Truncate lines longer than 80 characters.

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#### **KEYBOARD COMMANDS**

### Define Key {ESC}[<key code>;<result>p

Assigns one or more characters to be produced when you press a key.

<key code> specifies the key to be defined. If the key is one of the standard ASCII characters, <key code> is a number from 1 through 127. If the key is a function key, keypad key, or a combination of the <Shift>, <Ctrl>, or <Alt> key and another key, <key code> is two numbers separated by a semicolon and can be found in the ANSI.SYS key code table.

<result> is the character or characters to be produced when a key is pressed. It can be specified as an ASCII code, an ANSI.SYS key code, a string enclosed in quotation marks, or any combination of codes and strings separated by semicolons.

To restore a key to its original meaning, enter a Define Key command that sets < result> equal to < key code>.

examples {ESC}[126;92p Redefine the tilde <~> key as a backslash <\>.

{ESC}[126;126p Restore the tilde <~> key to its original meaning.

{ESC}[0;112;"dir|sort";13p Redefine <Alt><F9> as a Directory command piped to a Sort command, followed by a Carriage

Return.

{ESC}[0;112;0;112p Restore <Alt><F9> to its original meaning.

### **ANSI.SYS KEY AND EXTENDED KEY CODES**

Key	Code	Shift-	Ctrl-	Alt-	Key	Code	Shift-	Ctrl-	Alt-	Key	Code	Shift-	Ctrl-	Alt-
a [A]	97	65	1	0;30	1 [!]	49	33		0;120	F1	0;59	0;84	0;94	0;104
b [B]	98	66	2	0;48	2 [@]	50	64		0;121	F2	0;60	0;85	0;95	0;105
c [C]	99	67	3	0:46	3 [#]	51	35		0;122	F3	0;61	0;86	0;96	0;106
d [D]	100	68	4	0;32	4 [\$]	52	36		0;123	F4	0;62	0;87	0;97	0;107
e [E]	101	69	5	0;18	5 [%]	53	37		0;124	F5	0;63	0;88	0;98	0;108
f [F]	102	70	6	0;33	6 [^]	54	94		0;125	F6	0;64	0;89	0;99	0;109
g [G]	103	71	7	0;34	7 [&]	55	38		0;126	F7	0;65	0;90	0;100	0;110
h [H]	104	72	8	0;35	8 [*]	56	42		0;127	F8	0;66	0;91	0;101	0;111
i [l]	105	73	9	0;23	9 [(]	57	40		0;128	F9	0;67	0;92	0;102	0;112
j [J]	106	74	10	0;36	0 [)]	48	41		0;129	F10	0;68	0;93	0;103	0;113
k [K]	107	75	11	0;37	- [_]	45	95		0;130	F11	0;133	0;135	0;137	0;139
I [L]	108	76	12	0;38	= [+]	61	43		0;131	F12	0;134	0;136	0;138	0;140
m [M]	109	77	13	0;50	Home [7]	0;71	55	0;119		Esc	27			0;1
n [N]	110	78	14	0;49	Up Arrow [8]	0;72	56	0;141		PrtScrn			0;114	
o [O]	111	79	15	0;24	PgUp [9]	0;73	57	0;132		Home	0;71	55	0;119	0;151
p [P]	112	80	16	0;25	Left Arrow [4]	0;75	52	0;115		Up Arrow	0;72	56		0;152
q [Q]	113	81	17	0;16	Right Arrow [6]	0;77	54	0;116		PageUp	0;73	57	0;132	0;153
r [R]	114	82	18	0;19	End [1]	0;79	49	0;117		Left Arrow	0;75	52	0;115	0;155
s [S]	115	83	19	0;31	Down Arrow [2]	0;80	50	0;145		Right Arrow	0;77	54	0;116	0;157
t [T]	116	84	20	0;20	PgDn [3]	0;81	51	0;118		End	0;79	49	0;117	0;159
u [U]	117	85	21	0;22	Ins [0]	0;82	48	0;146		Down Arrow	0;80	50		0;160
v [V]	118	86	22	0;47	Del [.]	0;83	46	0;147		PageDown	0;81	51	0;118	0;161
w [W]	119	87	23	0;17	[5]	53	53	0;143		Insert	0;82	48		0;162
x [X]	120	88	24	0;45	* (keypad)	42		0;150	0;55	Delete	0;83	46		0;163
y [Y]	121	89	25	0;21	+ (keypad)	43		0;144	0;78					
z [Z]	122	90	26	0;44	- (keypad)	45		0;142	0;74					
Backspace	127			0;14	/ (keypad)	47		0;149	0;164					
Enter	13			0;28										
Tab	9	0;15	0;148	0;165										
Enter (keypad)	13		0;166	0;166										
Null	0;3													

Notes: Standard Codes are single-byte numbers. Extended Codes are two-byte numbers. Extended codes always begin with zero.

## **IMPORTANT ASCII CHARACTERS**

CHR	DEC	HEX	CHR	DEC	HEX
ESC	27	1B	f	102	66
[	91	5B	h	104	68
;	59	3B	I	108	6C
0	48	30	m	109	6D
1	49	31	n	110	6E
2	50	32	S	115	73
3	51	33	u	117	75
4	52	34	A	65	41
5	53	35	В	66	42
6	54	36	С	67	43
7	55	37	D	68	44
8	56	38	J	74	4A
9	57	39	K	75	4B
CR	13	0D	TAB	9	09
LF	10	0A	SPACE	32	20

## "BLOCK" ASCII DISPLAY IN WINDOWS

There are 3 general options available to view Block ASCII's properly in Windows.

#### Option 1

you have to open a DOS Window and use the classic "type" command or a classic MS DOS Text Viewer/Editor to display the ASCII properly.

#### Option 2

you can also use Windows Notepad as alternative. You must set the Font used by Notepad to "Terminal". The result is not the same as in a MS DOS Window. It is more looking like an inverted version of it. You can design ASCII's that look great in a DOS Window and ugly in Notepad and vice versa or one that looks good in both. You can see what I mean in the following example (screenshot image).

#### Option 3

Use a Windows Tool that emulates Block ASCII. The best Tool I know of is ACiD View for Windows.

p.s. for the best viewer and editor for ANSI and ASCII text art for Windows PC's, Macintosh, Linux or MS DOS, download the free tool PABLODRAW written by Curtis Wensley aka "Eto" at <a href="http://picoe.ca/products/pablodraw/">http://picoe.ca/products/pablodraw/</a>



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### **ANSI.SYS**

Defines functions that change display graphics, control cursor movement, and reassign keys

The ANSI.SYS device driver supports ANSI terminal emulation of escape sequences to control your system's screen and keyboard. An ANSI escape sequence is a sequence of ASCII characters, the first two of which are the escape character (1Bh) and the left-bracket character (5Bh). The character or characters following the escape and left-bracket characters specify an alphanumeric code that controls a keyboard or display function. ANSI escape sequences distinguish between uppercase and lowercase letters; for example, "A" and "a" have completely different meanings.

This device driver must be loaded by a DEVICE or DEVICEHIGH command in your CONFIG.SYS file.

#### Note:

In this topic uppercase letters in syntax and ANSI escape sequences indicate text you must type exactly as it appears.

#### **Syntax**

DEVICE=[drive:][path]ANSI.SYS [/X] [/K] [/R]

#### Parameter

[drive:][path]

Specifies the location of the ANSI.SYS file

#### **Switches**

/X

Remaps extended keys independently on 101-key keyboards.

/K

Causes ANSI.SYS to treat a 101-key keyboard like an 84-key keyboard; this is equivalent to the command SWITCHES=/K. If you usually use the SWITCHES=/K command, you will need to use the /K switch with ANSI.SYS.

/R

Adjusts line scrolling to improve readability when ANSI.SYS is used with screen-reading programs (... Making computers to people with disabilities more accessible)

## ENTERING THE {ESC} CHARACTER

- In DOS: Press and hold the <Alt> key, then type 27 on the keypad.
- In Windows: Press and hold the <Alt> key, then type 0027 on the keypad.
- Exceptions: Sometimes the above keystrokes do not work. Try one of the following methods:
  - In MS-DOS EDITOR and QBASIC, type any one of these:
    - <Ctrl>P, <Alt>027
    - <Ctrl>P, <Ctrl>[
    - <Ctrl>P, <Esc>
  - In Microsoft WORD, use a macro:
    - Sub AsciiEscChar()

       Insert ASCII Esc character.
       Selection.TypeText Chr(027)
       End Sub
    - Save the file as "Text Only" or "MS-DOS Text".
  - In Microsoft NOTEPAD and WORDPAD:
    - Copy the {ESC} character from another text file and paste it into the document.

#### **ENABLING ANSI.SYS**

Before using escape sequences, ANSI.SYS must be named as a device driver in the CONFIG system file.

For Windows 95, Windows 98 and DOS:

- Create or edit the CONFIG.SYS file. (Found in the root directory.)
- Add the following line to the file: DEVICE=<path>\ANSI.SYS

where <path> is the full path of the ANSI.SYS file. (Usually found in the WINDOWS directory.)

- Save CONFIG.SYS with the new line.
- Check that a copy of ANSI.SYS exists in the specified path location.
- Restart the computer to complete the change.

For Windows NT, Windows 2000 and Windows XP:

- Create or edit the CONFIG.NT file. (Usually found in the WINNT\SYSTEM32 directory.)
- Add the following line to the file:

DEVICE=%systemroot%\system32\ANSI.SYS

- Save CONFIG.NT with the new line.
- Check that a copy of ANSI.SYS exists in the specified path location.
- Restart the computer to complete the change.

#### Restrictions:

- Windows NT does not support ANSI.SYS escape sequences in Win32 Console applications.
- The Windows 2000/NT Command Interpreter, CMD.EXE, does not support ANSI.SYS. Use COMMAND.COM instead.

### USING ANSI.SYS ESCAPE SEQUENCES

Because ANSI.SYS commands control the console device, they must be typed at the keyboard or sent to the display.

- Put the ANSI.SYS commands in a file and display the file with the TYPE or COPY command.
- Use the PROMPT command with the **command prompt code**, \$e.

#### Example:

prompt \$e[1;37;44m (Set the text color to bright white and the screen color to blue.)

Use the ECHO command in a batch file.

#### Example:

echo {ESC}[8;26H (Move the cursor to row 8, column 26.)

To execute a batch file containing ANSI commands in Windows 2000/NT, use one of the following methods:

- Open a DOS command prompt window and type the <batch path>.
- Type %SystemRoot%\system32\COMMAND.COM /c <batch path> at the Run command line.
- Create a program information file (PIF) by making a shortcut of COMMAND.COM, then set the *Cmd Line* property to the *<batch path>* and the *Advanced Program* properties to %SystemRoot%\system32\AUTOEXEC.NT and %SystemRoot%\system32\CONFIG.NT.
- Use the WRITE, PRINT or a similiar command in FORTRAN, C, BASIC, etc.

### Example:

WRITE(\*,\*)'{ESC}[2J' (Clear the screen.)

### **DOS COMMAND PROMPT CODES**

- \$\$ Display the dollar sign, \$
- \$ Move to a new line
- \$B Display the pipe symbol, |
- **\$D** Display the current system date
- **\$E** ASCII escape character, {ESC} (ASCII code 27)
- \$G Display the greater-than symbol, >
- \$H Cause the cursor to backspace, erasing the previous character
- **\$L** Display the less-than symbol, <
- **\$N** Display the current logged drive letter
- **\$P** Display the current logged directory path name
- \$Q Display the equals symbol, =
- **\$T** Display the current system time
- **\$V** Display the MS-DOS version number message
- **\$X**c Imbeds the following character "c", verbatim, in the prompt string ("c" is a character, space, comma, or semicolon.)

### **Additional Windows 2000/NT Command Prompt Codes**

- \$A Display the ampersand symbol, &
- \$C Display the left parenthesis symbol, (
- \$F Display the right parenthesis symbol, )
- \$S Display a blank space
- **\$V** Display the Windows version number message

## **PCBOARD @-SEQUENCES**

Used by the <u>Bulletin Board System (BBS) Software</u> PCBoard by Clark Development Company for IBM PC/Compatible General Color Coding Format: <u>@Xbf</u> where "@X" are literal and "b" standing for the background color code (0-7) and "f" for the foreground color code (0-F). See color code tables below.

#### BACKGROUND COLORS

0	1	2	3	4	5	6	7
Black	Dark Blue	Dark Green	Dark Cyan	Dark Red	Purple	Brown	Gray
000000	0000AA	00AA00	00AAAA	AA0000	AA00AA	AA5500	AAAAAA

#### FOREGROUND COLORS

0	1	2	3	4	5	6	7	8	9	<b>A</b> (10)	<b>B</b> (11)	<b>C</b> (12)	<b>D</b> (13)	<b>E</b> (14)	<b>F</b> (15)
Black	Dark Blue	Dark Green	Dark Cyan	Dark Red	Purple	Brown	Gray	Dark Gray	Blue	Green	Cyan	Red	Magenta	Yellow	White
000000	0000AA	00AA00	00AAAA	AA0000	AA00AA	AA5500	AAAAA	555555	5555FF	55FF55	55FFFF	FF5555	FF55FF	FFFF55	FFFFFF

#### Examples:

@X1F	White Text on Blue Background
@X0E	Yellow Text on Black Background
@X70	Black Text on Gray Background

Commands and System Variables are enclosed by the AT sign "@". For example: the "clear screen" command is @CLS@. Other notable commands are: @POFF@ = Turn of "Paging" (pause after 23 lines) and @PON@ to turn "paging" back on.

## ASCII CODE TABLE CODE PAGE S 437 (US), 2152 (WINDOWS) AND 850 (WESTERN EUROPE)

						Codep	ages 437	- Defa	ult (No	orth Amei	rica)	Windo	ws CP1	1252			Codep	ages 8	50 - We	estern Eu	rope
		AS	CII						Unico	de				Unico	de				Unicod	de	
NUM	HEX	BIN	HTML	xHTML	ОСТ	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML
0	00	0000000			001		NULL	0	0000	0x0000											
1	01	0000001			002	©	SOH	1	0004	0x0004											
2	02	00000010			003	•	STX	2	0008	0x0008											
3	03	0000011			004	•	ETX	3	000C	0x000C											
4	04	00000100			005	+	EOT	4	0010	0x0010											
5	05	00000101			006	*	ENQ	5	0014	0x0014											
6	06	00000110			007	<b>^</b>	ACK	6	0018	0x0018											
7	07	00000111			010		BEL	7	001C	0x001C											
8	80	00001000			011		BS	8	0020	0x0020											
9	09	00001001			012		TAB/HT	9	0024	0x0024											
10	0A	00001010			013		LF	10	0028	0x0028											
11	ОВ	00001011			014	ð	VT	11	002C	0x002C											
12	0C	00001100			015	Q	FF	12	0030	0x0030											
13	0D	00001101			016		CR	13	0034	0x0034											
14	0E	00001110			017	IJ	SO	14	0038	0x0038											
15	OF	00001111			020	¢	SI	15	003C	0x003C											
16	10	00010000			021	•	DLE	16	0040	0x0040											

						Codepa	ages 437	- Defa	ult (No	orth Ame	rica)	Windo	ws CP	1252			Codep	ages 8	50 - We	estern Eu	rope
		AS	CII						Unico	de				Unico	de				Unico	de	
NUM	HEX	BIN	HTML	xHTML	ост	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML
17	11	00010001			022	•	DC1	17	0044	0x0044											
18	12	00010010			023		DC2	18	0048	0x0048											
19	13	00010011			024	!!	DC3	19	004C	0x004C											
20	14	00010100			025	¶	DC4	20	0050	0x0050											
21	15	00010101			026	§	NAK	21	0054	0x0054											
22	16	00010110			027	•	SYN	22	0058	0x0058											
23	17	00010111			030		ETB	23	005C	0x005C											
24	18	00011000			031	1	CAN	24	0060	0x0060											
25	19	00011001			032	Ţ	EM	25	0064	0x0064											
26	1A	00011010			033		SUB	26	0068	0x0068											
27	1B	00011011			034		ESC	27	006C	0x006C											
28	1C	00011100			035	Γ	FS	28	0070	0x0070											
29	1D	00011101			036	<b>↔</b>	GS	29	0074	0x0074											
30	1E	00011110			037	•	RS	30	0078	0x0078											
31	1F	00011111			040	•	US	31	007C	0x007C											
32	20	00100000			041	SPACE	SP	32	00A0	0x00A0											
33	21	00100001	!	!	042	!		33	00A5	0x00A5	!										
34	22	00100010	" <i>;</i>	"	043	11		34	00B0	0x00B0	"										

						Codepa	ages 437	- Defa	ult (No	orth Ame	rica)	Windo	ws CP:	1252			Codep	ages 8	50 - We	estern Eu	rope
		AS	CII						Unico	de				Unico	de				Unicod	de	
NUM	HEX	BIN	HTML	xHTML	ОСТ	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML
35	23	00100011	#	#	044	#		35	00B7	0x00B7	#										
36	24	00100100	\$	\$	045	\$		36	00BD	0x00BD	\$										
37	25	00100101	%	%	046	o/o		37	00C6	0x00C6	%										
38	26	00100110	&	&	047	&		38	00D6	0x00D6	&										
39	27	00100111	' <i>;</i>	'	050	1		39	00E1	0x00E1	'										
40	28	00101000	(	(	051	(		40	00E6	0x00E6	(										
41	29	00101001	)	)	052	)		41	00EA	0x00EA	)										
42	2A	00101010	*	*	053	*		42	00EE	0x00EE	*										
43	2B	00101011	+	+	054	+		43	00F3	0x00F3											
44	2C	00101100	,	,	055	,		44	00F9	0x00F9	,										
45	2D	00101101	&# <b>4</b> 5;	-	056	1		45	00FF	0x00FF	–										
46	2E	00101110	.	.	057	•		46	03A3	0x03A3	.										
47	2F	00101111	/	/	060	/		47	03B4	0x03B4	/										
48	30	00110000	0	0	061	0		48	03C4	0x03C4											
49	31	00110001	1	1	062	1		49	2219	0x2219											
50	32	00110010	2	2	063	2		50	2248	0x2248											
51	33	00110011	3	3	064	3		51	2310	0x2310											
52	34	00110100	4	4	065	4		52	2502	0x2502											
53	35	00110101	5	5	066	5		53	2518	0x2518											

						Codepa	ages 437	- Defa	ult (No	orth Ame	rica)	Windo	ws CP:	1252			Codep	ages 8	50 - We	estern Eu	rope
		AS	CII						Unico	de				Unico	de				Unicod	de	
NUM	HEX	BIN	HTML	xHTML	ОСТ	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML
54	36	00110110	6 <i>;</i>	6	067	6		54	2534	0x2534											
55	37	00110111	7 <i>;</i>	7	070	7		55	2552	0x2552											
56	38	00111000	8	8	071	8		56	2556	0x2556											
57	39	00111001	9	9	072	9		57	255A	0x255A											
58	3A	00111010	:	:	073	:		58	255E	0x255E	:										
59	3B	00111011	;	;	074	;		59	2562	0x2562	;										
60	3C	00111100	<	<	075	<		60	2566	0x2566	<										
61	3D	00111101	=	=	076	=		61	256A	0x256A	=										
62	3E	00111110	>	>	077	>		62	2584	0x2584	>										
63	3F	00111111	?	?	100	?		63	2591	0x2591	?										
64	40	01000000	@	@	101	@		64	0001	0x0001	@										
65	41	01000001	A	A	102	A		65	0005	0x0005											
66	42	01000010	B	B	103	В		66	0009	0x0009											
67	43	01000011	C	C	104	С		67	000D	0x000D											
68	44	01000100	D	D	105	D		68	0011	0x0011											
69	45	01000101	E	E	106	E		69	0015	0x0015											
70	46	01000110	F	F	107	F		70	0019	0x0019											
71	47	01000111	G	G	110	G		71	001D	0x001D											
72	48	01001000	H	H	111	Н		72	0021	0x0021											

						Codep	ages 437	- Defa	ult (No	orth Ame	rica)	Windo	ws CP:	1252			Codep	ages 8	50 - We	estern Eu	rope
		AS	CII						Unico	de				Unico	de				Unicod	de	
NUM	HEX	BIN	HTML	xHTML	ОСТ	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML
73	49	01001001	I	I	112	I		73	0025	0x0025											
74	4A	01001010	J	J	113	J		74	0029	0x0029											
75	4B	01001011	K <i>;</i>	K	114	K		75	002D	0x002D											
76	4C	01001100	L <i>;</i>	L	115	L		76	0031	0x0031											
77	4D	01001101	M <i>;</i>	M	116	М		77	0035	0x0035											
78	4E	01001110	N	N	117	N		78	0039	0x0039											
79	4F	01001111	O	O	120	0		79	003D	0x003D											
80	50	01010000	P	P	121	P		80	0041	0x0041											
81	51	01010001	Q	Q	122	Q		81	0045	0x0045											
82	52	01010010	R	R	123	R		82	0049	0x0049											
83	53	01010011	S	S	124	S		83	004D	0x004D											
84	54	01010100	T	T	125	Т		84	0051	0x0051											
85	55	01010101	U <i>;</i>	U	126	ŭ		85	0055	0x0055											
86	56	01010110	V <i>;</i>	V	127	V		86	0059	0x0059											
87	57	01010111	W	W	130	M		87	005D	0x005D											
88	58	01011000	X <i>;</i>	X	131	х		88	0061	0x0061											
89	59	01011001	Y	Y	132	Y		89	0065	0x0065											
90	5A	01011010	Z	Z	133	Z		90	0069	0x0069											
91	5B	01011011	[	[	134	[		91	006D	0x006D	[										

						Codepa	ages 437	- Defa	ult (No	orth Ame	rica)	Windo	ws CP:	1252			Codep	ages 8	50 - We	estern Eu	rope
		AS	CII						Unico	de				Unico	de				Unicod	de	
NUM	HEX	BIN	HTML	xHTML	ОСТ	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML
92	5C	01011100	\ <i>;</i>	\	135	\		92	0071	0x0071	\										
93	5D	01011101	] <i>;</i>	]	136	]		93	0075	0x0075	]										
94	5E	01011110	^	^	137	^		94	0079	0x0079	ˆ										
95	5F	01011111	_ <i>;</i>	_	140	-		95	007D	0x007D	_										
96	60	01100000	` <i>;</i>	`	141	,		96	0060	0x0060	`										
97	61	01100001	a <i>;</i>	a	142	a		97	00AA	0x00AA											
98	62	01100010	b	b	143	b		98	00B1	0x00B1											
99	63	01100011	c	c	144	С		99	00BA	0x00BA											
100	64	01100100	d	d	145	d		100	00BF	0x00BF											
101	65	01100101	e	e	146	е		101	00C7	0x00C7											
102	66	01100110	f	f	147	f		102	00DC	0x00DC											
103	67	01100111	g	g	150	g		103	00E2	0x00E2											
104	68	01101000	h	h	151	h		104	00E7	0x00E7											
105	69	01101001	i	i	152	i		105	00EB	0x00EB											
106	6A	01101010	j	j	153	j		106	00EF	0x00EF											
107	6B	01101011	k	k	154	k		107	00F4	0x00F4											
108	6C	01101100	l	l	155	1		108	00FA	0x00FA											
109	6D	01101101	m	m	156	m		109	0192	0x0192											
110	6E	01101110	n	n	157	n		110	03A6	0x03A6											

						Codep	ages 437	- Defa	ult (No	orth Ame	rica)	Windo	ws CP:	1252			Codep	ages 8	50 - We	estern Eui	rope
		AS	CII						Unico	de				Unico	de				Unicod	de	
NUM	HEX	BIN	HTML	xHTML	ост	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML
111	6F	01101111	o	o	160	0		111	03B5	0x03B5											
112	70	01110000	p	p	161	р		112	03C6	0x03C6											
113	71	01110001	q	q	162	q		113	221A	0x221A											
114	72	01110010	r	r	163	r		114	2261	0x2261											
115	73	01110011	s	s	164	Ø		115	2320	0x2320											
116	74	01110100	t	t	165	t		116	250C	0x250C											
117	75	01110101	u	u	166	u		117	251C	0x251C											
118	76	01110110	v	v	167	v		118	253C	0x253C											
119	77	01110111	w	w	170	w		119	2553	0x2553											
120	78	01111000	x	x	171	х		120	2557	0x2557											
121	79	01111001	y	y	172	У		121	255B	0x255B											
122	7A	01111010	z	z	173	z		122	255F	0x255F											
123	7B	01111011	{	{	174	{		123	2563	0x2563	{										
124	7C	01111100			175			124	2567	0x2567											
125	7D	01111101	}	}	176	}		125	256B	0x256B	}										
126	7E	01111110	~	~	177	~		126	2588	0x2588	˜										
127	7F	01111111			200	DEL	DEL	127	2592	0x2592											
128	80	10000000	€	€	201	Ç		199	0002	0x0002	Ç	€	128	0800	0x0080	€					
129	81	10000001			202	ü		252	0006	0x0006	ü	•	129	0081	0x0081						

						Codepa	ages 437	- Defa	ult (No	orth Ame	rica)	Windo	ws CP:	1252			Codep	ages 8	50 - We	estern Eu	rope
		AS	SCII						Unico	de				Unico	de				Unicod	de	
NUM	HEX	BIN	HTML	xHTML	ОСТ	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML
130	82	10000010	'	'	203	é		233	000A	0x000A	é	,	130	0082	0x0082	'					
131	83	10000011	ƒ	ƒ	204	â		226	000E	0x000E	â	f	131	0083	0x0083	ƒ					
132	84	10000100	"	"	205	ä		228	0012	0x0012	ä	,,	132	0084	0x0084	"					
133	85	10000101	…	…	206	à		224	0016	0x0016	à		133	0085	0x0085	…					
134	86	10000110	†	†	207	å		229	001A	0x001A	å	†	134	0086	0x0086	†					
135	87	10000111	‡ <b>;</b>	‡	210	Ç		231	001E	0x001E	ç	‡	135	0087	0x0087	‡					
136	88	10001000	ˆ	ˆ	211	ê		234	0022	0x0022	ê	^	136	0088	0x0088	ˆ					
137	89	10001001	‰	‰	212	ë		235	0026	0x0026	ë	%	137	0089	0x0089	‰					
138	8A	10001010	Š	Š	213	è		232	002A	0x002A	è	š	138	008A	0x008A	Š					
139	8B	10001011	‹	‹	214	ï		239	002E	0x002E	ï	<	139	008B	0x008B	<					
140	8C	10001100	Œ	Œ	215	î		238	0032	0x0032	î	Œ	140	008C	0x008C	Œ					
141	8D	10001101			216	ì		236	0036	0x0036	ì	•	141	008D	0x008D						
142	8E	10001110	Ž	Ž	217	Ä		196	003A	0x003A	Ä	ž	142	008E	0x008E	Ž					
143	8F	10001111			220	Å		197	003E	0x003E	Å	•	143	008F	0x008F						
144	90	10010000			221	É		201	0042	0x0042	É	•	144	0090	0x0090						
145	91	10010001	'	'	222	æ		230	0046	0x0046	æ	,	145	0091	0x0091	'					
146	92	10010010	'	'	223	Æ		198	004A	0x004A	&Aelig	,	146	0092	0x0092	'					
147	93	10010011	"	"	224	ô		244	004E	0x004E	ô	w	147	0093	0x0093	"					
148	94	10010100	"	"	225	ö		246	0052	0x0052	ö	"	148	0094	0x0094	"					

						Codep	ages 437	- Defa	ult (No	orth Ame	rica)	Windo	ws CP:	1252			Codep	ages 8	50 - We	estern Eu	rope
		AS	SCII						Unico	de				Unico	de				Unico	de	
NUM	HEX	BIN	HTML	xHTML	ОСТ	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML
149	95	10010101	•	•	226	ò		242	0056	0x0056	ò	•	149	0095	0x0095	•					
150	96	10010110	–	–	227	û		251	005A	0x005A	û	-	150	0096	0x0096	–					
151	97	10010111	—	—	230	ù		249	005E	0x005E	ù	1	151	0097	0x0097	—					
152	98	10011000	˜	˜	231	ÿ		255	0062	0x0062	ÿ	4	152	0098	0x0098	&tile					
153	99	10011001	™	™	232	ö		214	0066	0x0066	Ö	ТМ	153	0099	0x0099	™					
154	9A	10011010	š	š	233	Ü		220	006A	0x006A	Ü	š	154	009A	0x009A	š					
155	9В	10011011	› <b>;</b>	›	234	¢		162	006E	0x006E	¢	>	155	009B	0x009B	>	Ø	248	00F8	0x00F8	ø
156	9C	10011100	œ <b>;</b>	œ	235	£		163	0072	0x0072	£	œ	156	009C	0x009C	œ					
157	9D	10011101			236	¥		165	0076	0x0076	¥	•	157	009D	0x009D		Ø	216	00D8	0x00D8	Ø
158	9E	10011110	ž	ž	237	Pts		8359	007A	0x007A		ž	158	009E	0x009E	ž	×	215	00D7	0x00D7	×
159	9F	10011111	Ÿ	Ÿ	240	f		402	007E	0x007E	ƒ	Ÿ	159	009F	0x009F	Ÿ					
160	A0	10100000			241	á		225	00A2	0x00A2	á	SPACE	160	00A0	0x00A0						
161	A1	10100001	¡	¡	242	í		237	00AB	0x00AB	í	i	161	00A1	0x00A1	¡					
162	A2	10100010	¢	¢	243	ó		243	00B2	0x00B2	ó	¢	162	00A2	0x00A2	¢					
163	А3	10100011	£	£	244	ú		250	00BB	0x00BB	ú	£	163	00A3	0x00A3	£					
164	A4	10100100	¤	¤	245	ñ		241	00C4	0x00C4	ñ	п	164	00A4	0x00A4	¤					
165	A5	10100101	¥	¥	246	Ñ		209	00C9	0x00C9	Ñ	¥	165	00A5	0x00A5	¥					
166	A6	10100110	¦	¦	247	a		170	00DF	0x00DF	ª	-	166	00A6	0x00A6	¦					
167	A7	10100111	§	§	250	0		186	00E4	0x00E4	º	§	167	00A7	0x00A7	§					

						Codepages 437 - Default (North America)							Windows CP1252						Codepages 850 - Western Europe					
		AS	SCII						Unico	de			Unicode						Unico	de				
NUM	HEX	BIN	HTML	xHTML	ОСТ	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML			
168	A8	10101000	¨	¨	251	٠٠		191	00E8	0x00E8	¿	:	168	00A8	0x00A8	¨								
169	A9	10101001	©	©	252	٦		8976	2310	0x2310		©	169	00A9	0x00A9	©	®	174	00AE	0x00AE	®			
170	АА	10101010	ª	ª	253	٦		172	00F1	0x00F1	¬	a	170	00AA	0x00AA	ª								
171	AB	10101011	«	«	254	1/2		189	00F6	0x00F6	½	<b>&lt; &lt;</b>	171	00AB	0x00AB	«								
172	AC	10101100	¬ <b>;</b>	¬	255	1/4		188	00FB	0x00FB	¼	٦	172	00AC	0x00AC	¬								
173	AD	10101101	­ <b>;</b>	­	256	i		161	0393	0x0393	¡		173	00AD	0x00AD	­								
174	AE	10101110	®	®	257	«		171	03A9	0x03A9	«	®	174	00AE	0x00AE	®								
175	AF	10101111	¯ <b>;</b>	¯	260	<b>»</b>		187	03C0	0x03C0	»	-	175	00AF	0x00AF	¯								
176	В0	10110000	°	°	261			9617	207F	0x207F	░	0	176	00B0	0x00B0	º								
177	B1	10110001	± <b>;</b>	±	262	*****		9618	221E	0x221E	▒	±	177	00B1	0x00B1	±								
178	B2	10110010	² <b>;</b>	²	263			9619	2264	0x2264	▓	2	178	00B2	0x00B2	²								
179	В3	10110011	³	³	264	_		9474	2321	0x2321		3	179	00B3	0x00B3	³								
180	B4	10110100	´	´	265	7		9508	2510	0x2510			180	00B4	0x00B4	´								
181	B5	10110101	µ	µ	266	ī		9569	2524	0x2524		μ	181	00B5	0x00B5	µ	Á	193	00C1	0x00C1	Á			
182	В6	10110110	¶	¶	267	=		9570	2550	0x2550		P	182	00B6	0x00B6	¶	Â	194	00C2	0x00C2	Â			
183	В7	10110111	·	·	270	П		9558	2554	0x2554			183	00B7	0x00B7	·	À	192	00C0	0x00C0	À			
184	В8	10111000	¸	¸	271	٦		9557	2558	0x2558			184	00B8	0x00B8	¸	©	169	00A9	0x00A9	©			
185	В9	10111001	¹ <b>;</b>	¹	272	4		9571	255C	0x255C		1	185	00B9	0x00B9	¹								
186	ВА	10111010	º <b>;</b>	º	273			9553	2560	0x2560		0	186	00BA	0x00BA	º								

						Codepages 437 - Default (North America)							Windows CP1252						Codepages 850 - Western Europe					
		AS	SCII						Unico	de			Unicode						Unico	de				
NUM	HEX	BIN	HTML	xHTML	ОСТ	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML			
187	ВВ	10111011	» <b>;</b>	»	274	П		9559	2564	0x2564		<b>&gt;&gt;</b>	187	00BB	0x00BB	»								
188	вс	10111100	¼	¼	275			9565	2568	0x2568		1/4	188	00BC	0x00BC	¼								
189	BD	10111101	½	½	276	F		9564	256C	0x256C		1/2	189	00BD	0x00BD	½	¢	162	00A2	0x00A2	¢			
190	BE	10111110	¾	¾	277	T.		9563	258C	0x258C		3/4	190	00BE	0x00BE	¾	¥	165	00A5	0x00A5	¥			
191	BF	10111111	¿	¿	300	٦		9488	2593	0x2593		ن	191	00BF	0x00BF	¿								
192	CO	11000000	À	À	301	L		9492	0003	0x0003		À	192	00C0	0x00C0	À								
193	C1	11000001	Á	Á	302	Т		9524	0007	0x0007		Á	193	00C1	0x00C1	Á								
194	C2	11000010	Â	Â	303	Т		9516	000B	0x000B		Â	194	00C2	0x00C2	Â								
195	C3	11000011	Ã	Ã	304	ŀ		9500	000F	0x000F		Ã	195	00C3	0x00C3	Ã								
196	C4	11000100	Ä	Ä	305	_		9472	0013	0x0013		Ä	196	00C4	0x00C4	Ä								
197	<b>C</b> 5	11000101	Å	Å	306	+		9532	0017	0x0017		Å	197	00C5	0x00C5	Å								
198	<b>C</b> 6	11000110	Æ	Æ	307	F		9566	001B	0x001B		Æ	198	00C6	0x00C6	&Aelig	ã	227	00E3	0x00E3	ã			
199	<b>C</b> 7	11000111	Ç	Ç	310	⊩		9567	001F	0x001F		Ç	199	00C7	0x00C7	Ç	Ã	195	00C3	0x00C3	Ã			
200	C8	11001000	È	È	311	L		9562	0023	0x0023		È	200	00C8	0x00C8	È								
201	<b>C</b> 9	11001001	É	É	312	F		9556	0027	0x0027		É	201	00C9	0x00C9	É								
202	CA	11001010	Ê	Ê	313	止		9577	002B	0x002B		Ê	202	00CA	0x00CA	Ê								
203	СВ	11001011	Ë	Ë	314	ī		9574	002F	0x002F		Ë	203	00CB	0x00CB	Ë								
204	СС	11001100	Ì	Ì	315	ŀ		9568	0033	0x0033		Ì	204	00CC	0x00CC	Ì								
205	CD	11001101	Í	Í	316	=		9552	0037	0x0037		Í	205	00CD	0x00CD	Í								

						Codepages 437 - Default (North America)							Windows CP1252						Codepages 850 - Western Europe					
		AS	SCII						Unico	de				Unico	de			Unicode						
NUM	HEX	BIN	HTML	xHTML	ОСТ	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML			
206	CE	11001110	Î <b>;</b>	Î	317	#		9580	003B	0x003B		Î	206	00CE	0x00CE	Î								
207	CF	11001111	Ï <b>;</b>	Ï	320	⊥		9575	003F	0x003F		Ϊ	207	00CF	0x00CF	Ï	¤	164	00A4	0x00A4	¤			
208	D0	11010000	Ð	Ð	321	Щ		9576	0043	0x0043		Đ	208	00D0	0x00D0	Ð	ð	240	00F0	0x00F0	ð			
209	D1	11010001	Ñ	Ñ	322	₹		9572	0047	0x0047		Ñ	209	00D1	0x00D1	Ñ	Đ	208	00D0	0x00D0	Ð			
210	D2	11010010	Ò	Ò	323	Т		9573	004B	0x004B		Ò	210	00D2	0x00D2	Ò	Ê	202	00CA	0x00CA	Ê			
211	D3	11010011	Ó	Ó	324	F		9561	004F	0x004F		Ó	211	00D3	0x00D3	Ó	Ë	203	00CB	0x00CB	Ë			
212	D4	11010100	Ô <b>;</b>	Ô	325	П		9560	0053	0x0053		ô	212	00D4	0x00D4	Ô	È	200	00C8	0x00C8	È			
213	D5	11010101	Õ	Õ	326	F		9554	0057	0x0057		õ	213	00D5	0x00D5	Õ	I	305	0131	0x0131				
214	D6	11010110	Ö	Ö	327	Г		9555	005B	0x005B		Ö	214	00D6	0x00D6	Ö	Í	205	00CD	0x00CD	Í			
215	D7	11010111	× <b>;</b>	×	330	#		9579	005F	0x005F		×	215	00D7	0x00D7	×	Î	206	00CE	0x00CE	Î			
216	D8	11011000	Ø	Ø	331	+		9578	0063	0x0063		Ø	216	00D8	0x00D8	Ø	Ϊ	207	00CF	0x00CF	Ï			
217	D9	11011001	Ù <b>;</b>	Ù	332	Г		9496	0067	0x0067		Ù	217	00D9	0x00D9	Ù								
218	DA	11011010	Ú	Ú	333	Г		9484	006B	0x006B		Ú	218	00DA	0x00DA	Ú								
219	DB	11011011	Û	Û	334			9608	006F	0x006F	█	Û	219	00DB	0x00DB	Û								
220	DC	11011100	Ü	Ü	335	•		9604	0073	0x0073	▄	Ü	220	00DC	0x00DC	Ü								
221	DD	11011101	Ý	Ý	336	_		9612	0077	0x0077		Ý	221	00DD	0x00DD	Ý	-	166	00A6	0x00A6	¦			
222	DE	11011110	Þ	Þ	337	I		9616	007B	0x007B		Þ	222	00DE	0x00DE	Þ	Ì	204	00CC	0x00CC	Ì			
223	DF	11011111	ß <b>;</b>	ß	340	•		9600	007F	0x007F	▀	a	223	00DF	0x00DF	ß								
224	EO	11100000	à	à	341	α		945	00A3	0x00A3	α	à	224	00E0	0x00E0	à	ó	211	00D3	0x00D3	Ó			

						Codepages 437 - Default (North America)							Windows CP1252						Codepages 850 - Western Europe					
		AS	SCII						Unico	de			Unicode						Unico	de				
NUM HEX BIN HTML XHTML OCT			CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML						
225	E1	11100001	á <b>;</b>	á	342	a		223	00AC	0x00AC	ß	á	225	00E1	0x00E1	á								
226	E2	11100010	â <b>;</b>	â	343	Г		915	00B5	0x00B5	Γ	â	226	00E2	0x00E2	â	ô	212	00D4	0x00D4	Ô			
227	E3	11100011	ã <b>;</b>	ã	344	п		960	00BC	0x00BC	π	ã	227	00E3	0x00E3	ã	Ò	210	00D2	0x00D2	Ò			
228	E4	11100100	ä	ä	345	Σ		931	00C5	0x00C5	Σ	ä	228	00E4	0x00E4	ä	õ	245	00F5	0x00F5	õ			
229	E5	11100101	å	å	346	σ		963	00D1	0x00D1	σ	å	229	00E5	0x00E5	å	õ	213	00D5	0x00D5	Õ			
230	E6	11100110	æ	æ	347	μ		181	00E0	0x00E0	µ	æ	230	00E6	0x00E6	æ								
231	E7	11100111	ç	ç	350	τ		964	00E5	0x00E5	τ	Ç	231	00E7	0x00E7	ç	þ	254	00FE	0x00FE	þ			
232	E8	11101000	è	è	351	Φ		934	00E9	0x00E9	Φ	è	232	00E8	0x00E8	è	Þ	222	00DE	0x00DE	Þ			
233	E9	11101001	é	é	352	Θ		920	00ED	0x00ED	Θ	é	233	00E9	0x00E9	é	Ú	218	00DA	0x00DA	Ú			
234	EA	11101010	ê	ê	353	Ω		937	00F2	0x00F2	Ω	ê	234	00EA	0x00EA	ê	Û	219	00DB	0x00DB	Û			
235	ЕВ	11101011	ë	ë	354	δ		948	00F7	0x00F7	δ	ë	235	00EB	0x00EB	ë	Ù	217	00D9	0x00D9	Ù			
236	EC	11101100	ì	ì	355	∞		8734	00FC	0x00FC	∞	ì	236	00EC	0x00EC	ì	ý	253	00FD	0x00FD	ý			
237	ED	11101101	í <b>;</b>	í	356	φ		966	0398	0x0398	φ	í	237	00ED	0x00ED	í	Ý	221	00DD	0x00DD	Ý			
238	EE	11101110	î	î	357	ε		949	03B1	0x03B1	ε	î	238	00EE	0x00EE	î	-	175	00AF	0x00AF	¯			
239	EF	11101111	ï	ï	360	Λ		8745	03C3	0x03C3	∩	ï	239	00EF	0x00EF	ï		180	00B4	0x00B4	´			
240	F0	11110000	ð	ð	361	≡		8801	20A7	0x20A7	≡	ð	240	00F0	0x00F0	ð		173	00AD	0x00AD	­			
241	F1	11110001	ñ	ñ	362	±		177	2229	0x2229	±	ñ	241	00F1	0x00F1	ñ								
242	F2	11110010	ò <b>;</b>	ò	363	2		8805	2265	0x2265	≥	ò	242	00F2	0x00F2	ò	=	8215	2017	0x2017				
243	F3	11110011	ó <b>;</b>	ó	364	≤		8804	2500	0x2500	≤	ó	243	00F3	0x00F3	ó	3/4	190	00BE	0x00BE	¾			

						Codep	ages 437	- Defa	ult (No	orth Ame	rica)	Windows CP1252						Codepages 850 - Western Europe					
		AS	CII						Unico	de			Unicode						Unico				
NUM	HEX	BIN	HTML	xHTML	ост	CHAR		NUM	HEX	HEX2	HTML	CHAR	NUM	HEX	HEX2	HTML	ChAR	NUM	HEX	HEX2	HTML		
244	F4	11110100	ô	ô	365	ſ		8992	2514	0x2514	⌈	ô	244	00F4	0x00F4	ô	P	182	00B6	0x00B6	¶		
245	F5	11110101	õ <b>;</b>	õ	366	J		8993	252C	0x252C	⌋	õ	245	00F5	0x00F5	õ	§	167	00A7	0x00A7	§		
246	F6	11110110	ö	ö	367	÷		247	2551	0x2551	÷	ö	246	00F6	0x00F6	ö							
247	F7	11110111	÷ <b>;</b>	÷	370	*		8776	2555	0x2555	≈	÷	247	00F7	0x00F7	÷	2	184	00B8	0x00B8	¸		
248	F8	11111000	ø	ø	371	0		176	2559	0x2559	°	ø	248	00F8	0x00F8	ø							
249	F9	11111001	ù <b>;</b>	ù	372	•		8729	255D	0x255D	⋅	ù	249	00F9	0x00F9	ù		168	00A8	0x00A8	¨		
250	FA	11111010	ú <b>;</b>	ú	373	•		183	2561	0x2561	·	ú	250	00FA	0x00FA	ú							
251	FB	11111011	û	û	374	$\sqrt{}$		8730	2565	0x2565	√	û	251	00FB	0x00FB	û	1	185	00B9	0x00B9	¹		
252	FC	11111100	ü <b>;</b>	ü	375	n		8319	2569	0x2569	-	ü	252	00FC	0x00FC	ü	3	179	00B3	0x00B3	³		
253	FD	11111101	ý <b>;</b>	ý	376	2		178	2580	0x2580	²	ý	253	00FD	0x00FD	ý							
254	FE	11111110	þ <b>;</b>	þ	377	•		9632	25A0	0x25A0	▪	þ	254	00FE	0x00FE	þ							
255	FF	11111111			378		NOBRSP/NL	160	25A0	0x25A0		ÿ	255	00FF	0x00FF	ÿ							

## **ADDITIONAL RESOURCES**

Visit the ASCII Art Academy on my Website. There you can learn about the history and art styles of text art, find tutorials and other useful information.

http://www.roysac.com/learn/

Find downloads for tools to view, create or use ANSI or ASCII text art using Windows, Linux, Macintosh or "Oldskool" MS DOS platforms.

http://www.roysac.com/roy-sac\_downloads\_links.asp#ansedit

Find more stuff online, such as art collections and art group homepages and additional info-sources.

http://www.roysac.com/links

View a large selection of text art online at my art galleries

http://www.roysac.com/galleries

For the largest collection of scene text art available for browsing and downloading on the internet visit "Lord Scarlett's"

http://www.sixteencolors.net/

For a large selection of scene artifacts like NFO text files and more visit Ben Garrett's

http://www.defacto2.org/

A big pile of BBS and scene related documents and collections can be found at Jason Scott's

http://artscene.textfiles.com/