
Section 11. Characters and Keystrokes

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Available Code Pages

DOS allows switching among several pairs of code pages, depending on country, as shown in the table below.

Country	Country Code	Code Pages	Keyboard ID	Keyboard Layout
Belgium (French-speaking)	032	850, 437	120	FR
Belgium (Dutch-speaking)	032	850, 437	120	FR
Canada (French-speaking)	002	850, 863	058	CF
Canada (English-speaking)	001	850, 437	103	US
Denmark	045	850, 865	159	DK
Finland	358	850, 437	153	SU
France	033	850, 437	120	FR
Germany	049	850, 437	129	GR
Italy	039	850, 437	142	IT
Netherlands	031	850, 437	143	NL
Norway	047	850, 865	155	NL
Portugal	351	850, 860	163	PO
Spain	034	850, 437	172	SP
Sweden	046	850, 437	153	SV
Switzerland	041	850, 437	150	SF
(French-speaking)				
Switzerland	041	850, 437	000	SG
(German-speaking)				
United Kingdom	044	850, 437	166	UK
United States	001	437, 850	103	US

Character Codes

This section provides charts showing the decimal values, hexadecimal values, and keystrokes for each character. The notes referred to in the charts are located following the charts.

The graphic characters in the charts are those found in Code Page 437, the U.S. default. They are used as an example. Other code pages are shown in the "Quick Reference" beginning on page 11-11. The keystrokes in the charts cause the active code page characters to be displayed.

Many programs use some hexadecimal values for control functions and do not allow the assigned graphic characters in the charts to be displayed. Hexadecimal values having standard control functions are indicated with a note.

Value		As Characters		
Hex	Dec	Symbol	Keystrokes	Notes
00	0	Blank (Null)	Ctrl 2	
01	1	☺	Ctrl A	
02	2	☹	Ctrl B	
03	3	♥	Ctrl C	
04	4	♦	Ctrl D	
05	5	♣	Ctrl E	
06	6	♠	Ctrl F	
07	7	●	Ctrl G	Note 7
08	8	●	Ctrl H, Backspace, Shift Backspace	Note 7
09	9	○	Ctrl I Tab	Note 7
0A	10	○	Ctrl J, Ctrl ↵	Note 7
0B	11	♂	Ctrl K	Note 7
0C	12	♀	Ctrl L	Note 7
0D	13	♪	Ctrl M, ↵, Shift ↵	Note 7
0E	14	🎵	Ctrl N	Note 7
0F	15	☀	Ctrl O	Note 7
10	16	▶	Ctrl P	Note 7
11	17	◀	Ctrl Q	Note 7
12	18	↑	Ctrl R	Note 7
13	19	!!	Ctrl S	Note 7
14	20	¶	Ctrl T	Note 7
15	21	§	Ctrl U	
16	22	▬	Ctrl V	
17	23	↓	Ctrl W	

Value		As Characters		
Hex	Dec	Symbol	Keystrokes	Notes
18	24	↑	Ctrl X	Note 7
19	25	↓	Ctrl Y	
1A	26	←	Ctrl Z	
1B	27	←	Ctrl [, Esc, Shift Esc, Ctrl Esc	Note 7
1C	28	└	Ctrl /	
1D	29	→	Ctrl]	
1E	30	▲	Ctrl 6	
1F	31	▼	Ctrl -	
20	32	Blank Space	Space Bar, Shift, Space, Ctrl Space, Alt Space	
21	33	!	!	Shift
22	34	”	”	Shift
23	35	#	#	Shift
24	36	\$	\$	Shift
25	37	%	%	Shift
26	38	&	&	Shift
27	39	,	,	Shift
28	40	(	(	Shift
29	41))	
2A	42	*	*	Note 1
2B	43	+	+	Shift
2C	44	,	,	
2D	45	-	-	
2E	46	.	.	Note 2

Value		As Characters		
Hex	Dec	Symbol	Keystrokes	Notes
2F	47	/	/	
30	48	0	0	Note 3
31	49	1	1	Note 3
32	50	2	2	Note 3
33	51	3	3	Note 3
34	52	4	4	Note 3
35	53	5	5	Note 3
36	54	6	6	Note 3
37	55	7	7	Note 3
38	56	8	8	Note 3
39	57	9	9	Note 3
3A	58	:	:	Shift
3B	59	;	;	
3C	60	<	<	Shift
3D	61	=	=	
3E	62	>	>	Shift
3F	63	?	?	Shift
40	64	@	@	Shift
41	65	A	A	Note 4
42	66	B	B	Note 4
43	67	C	C	Note 4
44	68	D	D	Note 4
45	69	E	E	Note 4
46	70	F	F	Note 4
47	71	G	G	Note 4
48	72	H	H	Note 4
49	73	I	I	Note 4
4A	74	J	J	Note 4

Value		As Characters		
Hex	Dec	Symbol	Keystrokes	Notes
4B	75	K	K	Note 4
4C	76	L	L	Note 4
4D	77	M	M	Note 4
4E	78	N	N	Note 4
4F	79	O	O	Note 4
50	80	P	P	Note 4
51	81	Q	Q	Note 4
52	82	R	R	Note 4
53	83	S	S	Note 4
54	84	T	T	Note 4
55	85	U	U	Note 4
56	86	V	V	Note 4
57	87	W	W	Note 4
58	88	X	X	Note 4
59	89	Y	Y	Note 4
5A	90	Z	Z	Note 4
5B	91	[[
5C	92	\	\	Note 4
5D	93]]	
5E	94	^	^	Shift
5F	95	_	_	Shift
60	96	•	•	
61	97	a	a	Note 5
62	98	b	b	Note 5
63	99	c	c	Note 5
64	100	d	d	Note 5
65	101	e	e	Note 5
66	102	f	f	Note 5

Value		As Characters		
Hex	Dec	Symbol	Keystrokes	Notes
67	103	g	g	Note 5
68	104	h	h	Note 5
69	105	i	i	Note 5
6A	106	j	j	Note 5
6B	107	k	k	Note 5
6C	108	l	l	Note 5
6D	109	m	m	Note 5
6E	110	n	n	Note 5
6F	111	o	o	Note 5
70	112	p	p	Note 5
71	113	q	q	Note 5
72	114	r	r	Note 5
73	115	s	s	Note 5
74	116	t	t	Note 5
75	117	u	u	Note 5
76	118	v	v	Note 5
77	119	w	w	Note 5
78	120	x	x	Note 5
79	121	y	y	Note 5
7A	122	z	z	Note 5
7B	123	{	{	Shift
7C	124	;	;	Shift
7D	125	}	}	Shift
7E	126	~	~	Shift
7F	127	␣	Ctrl Backspace	

Value		As Characters		
Hex	Dec	Symbol	Keystrokes	Notes
80	128	Ç	Alt 128	Note 6
81	129	ü	Alt 129	Note 6
82	130	é	Alt 130	Note 6
83	131	â	Alt 131	Note 6
84	132	ã	Alt 132	Note 6
85	133	ä	Alt 133	Note 6
86	134	å	Alt 134	Note 6
87	135	ç	Alt 135	Note 6
88	136	ê	Alt 136	Note 6
89	137	ë	Alt 137	Note 6
8A	138	è	Alt 138	Note 6
8B	139	ı	Alt 139	Note 6
8C	140	ı	Alt 140	Note 6
8D	141	ı	Alt 141	Note 6
8E	142	Ä	Alt 142	Note 6
8F	143	Å	Alt 143	Note 6
90	144	É	Alt 144	Note 6
91	145	æ	Alt 145	Note 6
92	146	Æ	Alt 146	Note 6
93	147	ó	Alt 147	Note 6
94	148	ó	Alt 148	Note 6
95	149	ó	Alt 149	Note 6
96	150	ú	Alt 150	Note 6
97	151	ù	Alt 151	Note 6
98	152	ý	Alt 152	Note 6
99	153	Ó	Alt 153	Note 6
9A	154	Û	Alt 154	Note 6

Value		As Characters		
Hex	Dec	Symbol	Keystrokes	Notes
9B	155	¢	Alt 155	Note 6
9C	156	£	Alt 156	Note 6
9D	157	¥	Alt 157	Note 6
9E	158	Pt	Alt 158	Note 6
9F	159	ƒ	Alt 159	Note 6
A0	160	á	Alt 160	Note 6
A1	161	í	Alt 161	Note 6
A2	162	ó	Alt 162	Note 6
A3	163	ú	Alt 163	Note 6
A4	164	ñ	Alt 164	Note 6
A5	165	Ñ	Alt 165	Note 6
A6	166	ä	Alt 166	Note 6
A7	167	ö	Alt 167	Note 6
A8	168	¿	Alt 168	Note 6
A9	169	¡	Alt 169	Note 6
AA	170	¬	Alt 170	Note 6
AB	171	½	Alt 171	Note 6
AC	172	¼	Alt 172	Note 6
AD	173	¡	Alt 173	Note 6
AE	174	<<	Alt 174	Note 6
AF	175	>>	Alt 175	Note 6
B0	176	⋮	Alt 176	Note 6
B1	177	⋮	Alt 177	Note 6
B2	178	⋮	Alt 178	Note 6
B3	179		Alt 179	Note 6
B4	180		Alt 180	Note 6
B5	181		Alt 181	Note 6
B6	182		Alt 182	Note 6

Value		As Characters		
Hex	Dec	Symbol	Keystrokes	Notes
B7	183		Alt 183	Note 6
B8	184		Alt 184	Note 6
B9	185		Alt 185	Note 6
BA	186		Alt 186	Note 6
BB	187		Alt 187	Note 6
BC	188		Alt 188	Note 6
BD	189		Alt 189	Note 6
BE	190		Alt 190	Note 6
BF	191		Alt 191	Note 6
C0	192		Alt 192	Note 6
C1	193		Alt 193	Note 6
C2	194		Alt 194	Note 6
C3	195		Alt 195	Note 6
C4	196		Alt 196	Note 6
C5	197		Alt 197	Note 6
C6	198		Alt 198	Note 6
C7	199		Alt 199	Note 6
C8	200		Alt 200	Note 6
C9	201		Alt 201	Note 6
CA	202		Alt 202	Note 6
CB	203		Alt 203	Note 6
CC	204		Alt 204	Note 6
CD	205		Alt 205	Note 6
CE	206		Alt 206	Note 6
CF	207		Alt 207	Note 6
D0	208		Alt 208	Note 6

Value		As Characters		
Hex	Dec	Symbol	Keystrokes	Notes
D1	209		Alt 209	Note 6
D2	210		Alt 210	Note 6
D3	211		Alt 211	Note 6
D4	212		Alt 212	Note 6
D5	213		Alt 213	Note 6
D6	214		Alt 214	Note 6
D7	215		Alt 215	Note 6
D8	216		Alt 216	Note 6
D9	217		Alt 217	Note 6
DA	218		Alt 218	Note 6
DB	219		Alt 219	Note 6
DC	220		Alt 220	Note 6
DD	221		Alt 221	Note 6
DE	222		Alt 222	Note 6
DF	223		Alt 223	Note 6
EO	224	α	Alt 224	Note 6
E1	225	β	Alt 225	Note 6
E2	226	Γ	Alt 226	Note 6
E3	227	π	Alt 227	Note 6
E4	228	Σ	Alt 228	Note 6
E5	229	σ	Alt 229	Note 6
E6	230	μ	Alt 230	Note 6
E7	231	τ	Alt 231	Note 6
E8	232	Φ	Alt 232	Note 6
E9	233	θ	Alt 233	Note 6
EA	234	Ω	Alt 234	Note 6
EB	235	δ	Alt 235	Note 6

Value		As Characters		
Hex	Dec	Symbol	Keystrokes	Notes
EC	236	∞	Alt 236	Note 6
ED	237	φ	Alt 237	Note 6
EE	238	€	Alt 238	Note 6
EF	239	∩	Alt 239	Note 6
F0	240	≡	Alt 240	Note 6
F1	241	±	Alt 241	Note 6
F2	242	≥	Alt 242	Note 6
F3	243	≤	Alt 243	Note 6
F4	244	∫	Alt 244	Note 6
F5	245	∫	Alt 245	Note 6
F6	246	+	Alt 246	Note 6
F7	247	=	Alt 247	Note 6
F8	248	○	Alt 248	Note 6
F9	249	●	Alt 249	Note 6
FA	250	•	Alt 250	Note 6
FB	251	√	Alt 251	Note 6
FC	252	ⁿ	Alt 252	Note 6
FD	253	²	Alt 253	Note 6
FE	254	■	Alt 254	Note 6
FF	255	BLANK	Alt 255	Note 6

Notes

1. Asterisk (*) can be typed in the Shift state by pressing the 8 key.
2. Period (.) can be typed by pressing the . key or, in Num Lock state, by pressing the Del key on the numeric pad.
3. Numeric characters 0-9 can be typed by pressing the numeric keys on the top row of the keyboard or, in Num Lock state, by pressing the numeric keys in the keypad portion of the keyboard.
4. Uppercase alphabetical characters (A-Z) can be typed by pressing the character key in the Shift state or the Caps Lock state.
5. Lowercase alphabetical characters (a-z) can be typed by pressing the character key in the normal state or in Caps Lock and Shift state combined.
6. The three digits are typed on the numeric keypad while holding down the Alt key. Character codes 001-255 may be entered in this fashion.
7. Standard control functions are assigned to hexadecimal values as follows:

07 = Bel	0F = Shift In
08 = Backspace	11 = Device Control 1
09 = Horizontal Tab	12 = Device Control 2
0A = Line Feed	13 = Device Control 3
0B = Vertical Tab	14 = Device Control 4
0C = Form Feed	18 = Cancel
0D = Carriage Return	1B = Escape
0E = Shift Out	20 = Space

Quick Reference

Code Page 437

1- 2	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
1 → 2 ↓		▲		0	@	P	`	p	Ç	É	á	▣	L	⊥	α	≡
	☺	▼	!	1	A	Q	a	q	ü	æ	í	▤	⊥	≡	β	±
	☻	↕	"	2	B	R	b	r	é	Æ	ó	▥	⊥	≡	Γ	≥
	♦	!!	#	3	C	S	c	s	â	ô	ú	|	⊥	≡	π	≤
	♣	¶	\$	4	D	T	d	t	ä	ö	ñ	⊥	—	≡	Σ	ƒ
	♠	§	%	5	E	U	e	u	à	ò	Ñ	≡	⊥	≡	σ	∫
	♣	—	&	6	F	V	f	v	á	ù	±	⊥	≡	≡	μ	÷
	•	↕	'	7	G	W	g	w	ç	ù	°	⊥	≡	≡	τ	≈
	■	↑	(	8	H	X	h	x	ê	ÿ	¿	≡	≡	≡	Φ	°
	○	↓	)	9	I	Y	i	y	ë	Ö	Γ	≡	≡	≡	⊙	•
	☒	→	*	:	J	Z	j	z	è	Ü	⊥	≡	≡	≡	Ω	•
	♂	←	+	;	K	[	k	{	ï	ø	½	≡	≡	■	δ	√
	♀	⊥	,	<	L	\	l	|	î	£	¼	≡	≡	■	∞	∞
	♪	↔	-	=	M	]	m	}	ï	¥	ı	≡	≡	■	∅	²
	♫	▲	.	>	N	^	n	~	Ä	Pl	«	≡	≡	■	ε	■
	☼	▼	/	?	O	_	o	△	Å	f	»	≡	≡	■	∩	■

1 → 2 ↓	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
		▶		0	@	P	`	p	Ç	É	á	⋮	L	ø	ó	.
	☺	◀	!	1	A	Q	a	q	ü	æ	í	⋈	┌	Ð	ß	±
	☹	↑	"	2	B	R	b	r	é	Æ	ó	⋮	└	Ê	Ô	=
	♥	!!	#	3	C	S	c	s	â	ô	ú	|	┘	Ë	Ò	¼
	♦	↑	\$	4	D	T	d	t	ã	ö	ñ	└	—	È	ø	¶
	♣	§	%	5	E	U	e	u	à	ò	Ñ	Á	+	Ì	Ö	§
	♠	—	&	6	F	V	f	v	á	û	±	Á	ã	Í	µ	÷
	•	↑↓	'	7	G	W	g	w	ç	ù	°	À	Ä	Î	þ	˘
	☐	↑	(	8	H	X	h	x	ê	ÿ	¿	©	ℒ	Ï	°	°
	○	↓	)	9	I	Y	i	y	ë	ÿ	®	℥	℔	Ĵ	Ú	˙
	☉	→	*	:	J	Z	j	z	è	Û	⌚	℥	℔	Ů	Û	˙
	♂	←	+	;	K	I	k	{	ï	ø	½	⌚	℔	Ù	ı	ı
	♀	└	,	<	L	\	l	|	í	£	¼	℔	℔	Ý	³	³
	♪	↔	.	=	M	|	m	}	ì	∅	ı	℔	≡	ı	²	²
	♫	▲	.	>	N	^	n	~	ï	×	«	✳	≠	ı	.	■
	☼	▼	/	?	O	_	o	△	Ä	f	»	⌚	□	'	'	■

Code Page 860 (Portuguese)

1 → 2 ↓	0	1	2	3	4	5	6	7	8	9	A-	B-	C-	D-	E-	F-
▶	◀	↑	!!	¶	§	—	↕	↑	↓	→	←	↔	▲	▼	≡	±
☺	☹	♥	♦	♣	♠	•	◼	◯	◻	♂	♀	♪	♫	☼	α	β
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Γ
p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	«	»
ç	ü	é	á	ã	à	Á	ç	é	ê	ê	í	ó	¼	½	¾	∞
É	À	È	ó	õ	ò	Ú	ù	í	õ	Û	í	½	¼	¾	∞	²
Á	Ñ	ã	õ	õ	Ú	ù	í	õ	Û	í	½	¼	¾	∞	²	ε
◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻	◻

Code Page 863 (Canadian-French)

1- 2	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
1 → 2 ↓		▲		0	@	P	`			É	ì	▒	L	⌚	α	≡
-0	☺	▼	!	1	A	Q	a	p	Ç	È	'	▒	┌	≡	β	±
-1	☹	↑	"	2	B	R	b	q	ü	Ê	ó	▒	└	Γ	Γ	≥
-2	♥	!!	#	3	C	S	c	r	â	ê	ù	|	┌	⌚	π	≤
-3	♦	¶	\$	4	D	T	d	t	Â	È	"	┌	┌	⌚	Σ	∫
-4	♣	§	%	5	E	U	e	u	à	Ï	.	≡	┌	F	σ	∫
-5	♠	—	&	6	F	V	f	v	¶	û	³	┌	F	⌚	μ	÷
-6	•	↑	'	7	G	W	g	w	ç	ù	-	▒	┌	⌚	τ	≈
-7	■	↑	(	8	H	X	h	x	é	û	ı	≡	┌	Φ	Φ	°
-8	○	↓	)	9	I	Y	i	y	ē	Ô	ı	┌	┌	⊙	⊙	•
-9	☑	→	*	:	J	Z	j	z	è	Û	ı	┌	┌	Ω	Ω	•
-A	♂	←	+	;	K	[	k	{	ı	ı	½	▒	▒	δ	δ	√
-B	♀	┌	,	<	L	\	l	|	ı	ı	¼	▒	▒	∞	∞	∞
-C	♫	↔	-	=	M	] m	m	}	=	Û	¾	▒	▒	∅	∅	²
-D	♫	▲	.	>	N	^	n	~	Á	Ü	«	≡	≡	ε	ε	■
-E	⚙	▼	/	?	O	_	o	△	§	ı	»	┌	┌	∅	∅	■
-F																

Code Page 865 (Nordic)

1 → 2 ↓	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0	☺	▶	!	0	@	P	'	p	Ç	É	á	☐	L	⌌	α	≡
-1	☹	◀	"	1	A	Q	a	q	ü	æ	í	☒	T	≡	β	±
-2	♥	↕	#	2	B	R	b	r	é	Æ	ó	☓	T	≡	Γ	∠
-3	♦	!!	\$	3	C	S	c	s	á	ô	ú	|	T	⌌	π	∑
-4	♣	¶	%	4	D	T	d	t	ä	ö	ñ	|	—	F	Σ	f
-5	♠	§	&	5	E	U	e	u	á	ò	Ñ	≡	+	F	σ	J
-6	♣	—	'	6	F	V	f	v	ä	û	ä	≡	F	≡	μ	÷
-7	•	↕	(	7	G	W	g	w	ç	ù	°	≡	≡	≡	τ	≈
-8	■	↑	)	8	H	X	h	x	é	ý	ı	≡	≡	≡	Φ	°
-9	○	↓	)	9	I	Y	i	y	é	ö	ı	≡	≡	≡	Θ	•
-A	☑	→	*	:	J	Z	j	z	è	ü	ı	≡	≡	≡	Ω	•
-B	♂	←	+	;	K	[	k	{	ï	ø	½	≡	≡	■	δ	√
-C	♀	⌌	,	<	L	\	l	|	ı	£	¼	≡	≡	■	∞	²
-D	♪	↔	-	=	M	]	m	}	ı	ø	ı	≡	≡	■	∅	²
-E	♫	▲	.	>	N	^	n	~	Ä	Pt	«	≡	≡	■	ε	■
-F	⚙	▼	/	?	O	_	o	△	Å	f	□	≡	≡	■	∩	□

