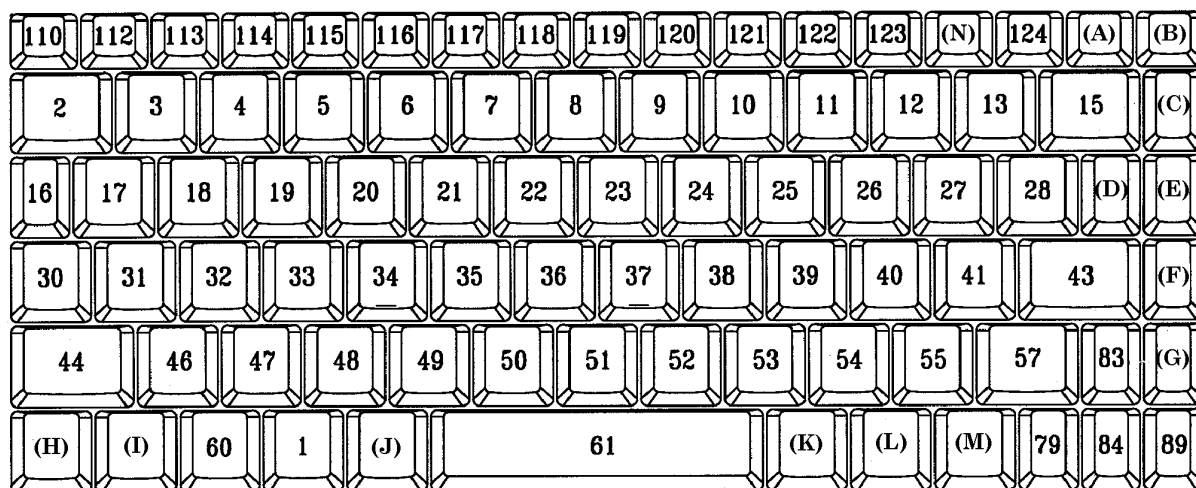


USB Mini Keyboard

1 Electrical

Connector	USB
USB speed	Low speed(1.5MBPS)
Operating voltage range	4.0~5.5V
Operating current	Max 100mA
Operating temperature	0 ~ 40℃
Storage temperature	-40 ~ 60℃
Operating humidity	0~90% RH non-condensing
Storage humidity	0~95% RH non-condensing

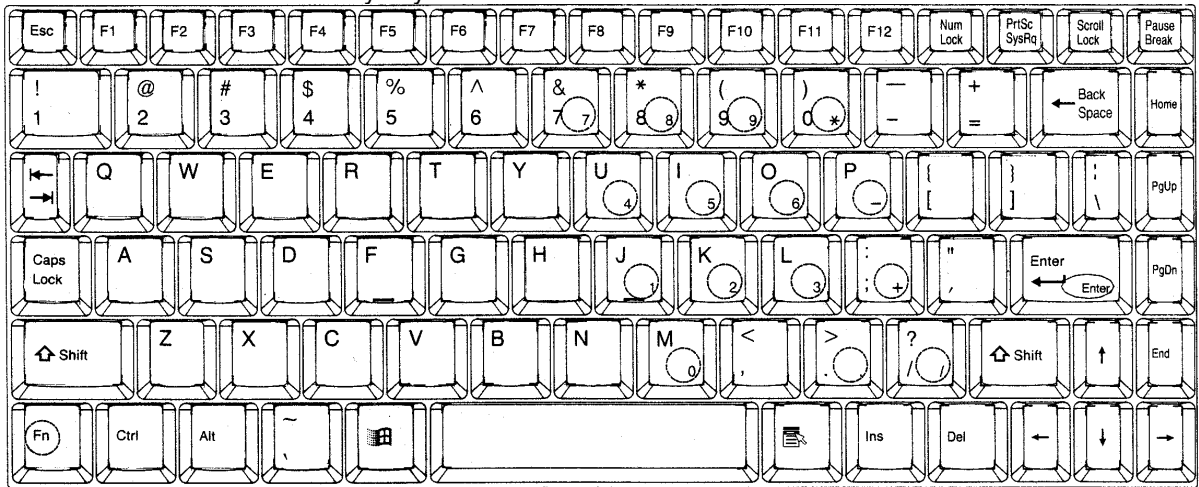
2 Key position number for keyboard



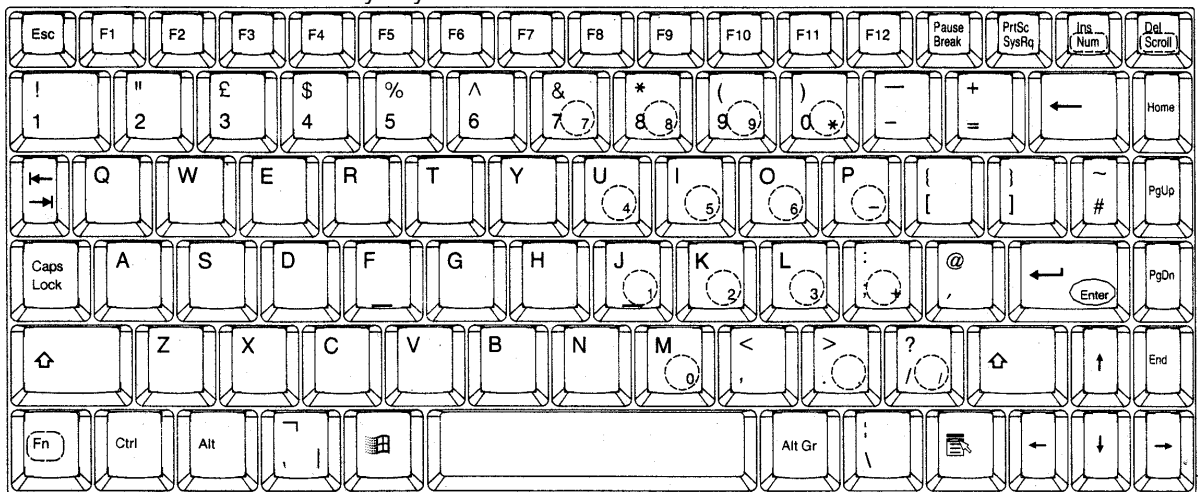
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
US	125	126	80	29	85	86	81	160	58	127	129	75	76	90
Korean	75	76	80	29	85	86	81	160	58	127	129	150	151	126
EU	75	76	80	42	85	86	81	160	58	127	62	45	129	126
Japanese	75	76	14	42	56	85	86	58	160	131	132	133	62	126

3 Key Layout

3.1 US Version Key Layout



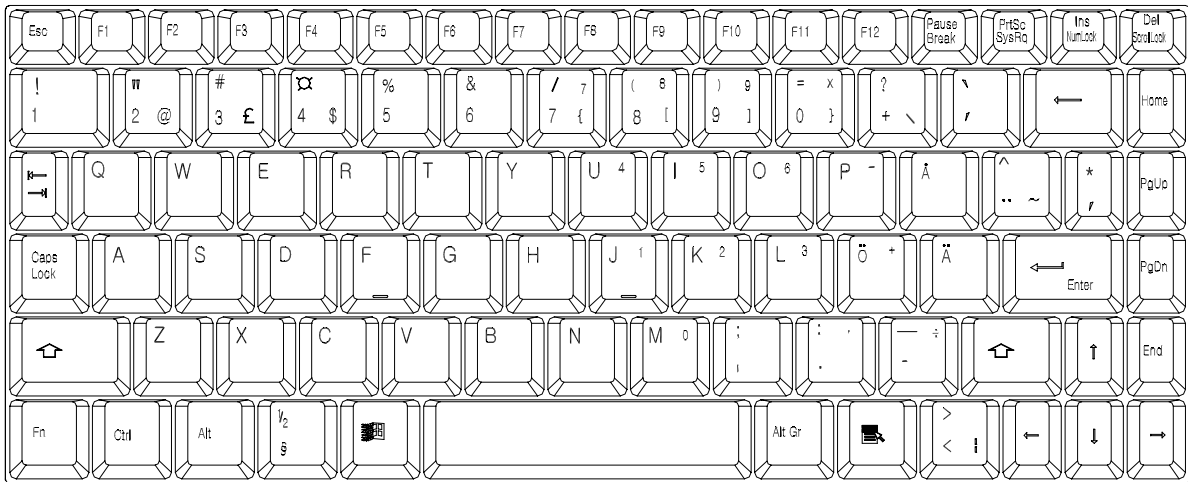
3.2 UK Version Key Layout



[illegible]

The diagram illustrates a standard Japanese keyboard layout. The keys are arranged in four rows. The first row includes function keys (Esc, F1-F12, Pause Break, PrtSc SysRq, Ins Num, Del Scroll). The second row contains alphanumeric keys with Japanese characters (1-0, BkSp, Yen). The third row contains alphanumeric keys with Japanese characters (Q-0, Enter, PgUp Home). The fourth row contains alphanumeric keys with Japanese characters (Shift, Z-A, X-S, C-V, B-N, M, comma/semicolon, greater/less than, question/exclamation mark, Shift, Up arrow, PgDn End). The fifth row includes function keys (Ctrl, Fn, Alt, Half/Angle, Full-width, Kanji, Empty space, Previous/Next page, Full-width, Alt, Left arrow, Down arrow, Right arrow). The keys are labeled with their English and Japanese names. Circled numbers 1 through 10 highlight specific keys: 1 on the 'J' key, 2 on the 'K' key, 3 on the 'L' key, 4 on the 'U' key, 5 on the 'I' key, 6 on the 'O' key, 7 on the 'Y' key, 8 on the 'H' key, 9 on the 'N' key, and 10 on the 'M' key.

3.6 Swedish & Finnish Version Key Layout



4 USB data report format

4.1 Packet format for keyboard data report

	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Byte 1	R-Windows	R-Alt	R-Shift	R-Ctrl	L-Windows	L-Alt	L-Shift	L-Ctrl
Byte 2	0	0	0	0	0	0	0	0
Byte 3	Key code 1							
Byte 4	Key code 2							
Byte 5	Key code 3							
Byte 6	Key code 4							
Byte 7	Key code 5							
Byte 8	Key code 6							

Note: The first byte indicates the state of all modifier keys. When a modifier key down, the assigned bit sets as 1.

If more than six keys are depressed, the receiver will report an overrun code that all key code fields are 01.

If less than six keys are depressed, the rest of key code fields will be filled with 00.

4.1.1 Key codes

Key Name	Key Position No.	Modifier Byte (Byte 1)	Key code field	Remark.
~ `	1	00h	35h	
1 !	2	00h	1Eh	
2 @	3	00h	1Fh	
3 #	4	00h	20h	
4 \$	5	00h	21h	
5 %	6	00h	22h	
6 ^	7	00h	23h	
7 &	8	00h	24h	
8 *	9	00h	29h	
9 (	10	00h	26h	
0)	11	00h	27h	
- _	12	00h	2Dh	

Key Name	Key Position No.	Modifier Byte (Byte 1)	Key code field	Remark.
+ =	13	00h	2Eh	
¥	14	00h	89h	Japanese Version only
Back Space	15	00h	2Ah	
TAB	16	00h	2Bh	
Q	17	00h	14h	
W	18	00h	1Ah	
E	19	00h	08h	
R	20	00h	15h	
T	21	00h	17h	
Y	22	00h	1Ch	
U	23	00h	18h	
I	24	00h	0Ch	
O	25	00h	12h	
P	26	00h	13h	
{ [	27	00h	2Fh	
}]	28	00h	30h	
\	29	00h	31h	
Caps Lock	30	00h	39h	
A	31	00h	04h	
S	32	00h	16h	
D	33	00h	07h	
F	34	00h	09h	
G	35	00h	0Ah	
H	36	00h	0Bh	
J	37	00h	0Dh	
K	38	00h	0Eh	
L	39	00h	0Fh	
: ;	40	00h	33h	
“ ”	41	00h	34h	
#~(European) む(Japanese)	42	00h	32h	EU & Japanese Version only
Enter	43	00h	28h	
L-Shift	44	02h	00h	
\	45	00h	64h	European Version Only
Z	46	00h	1Dh	
X	47	00h	1Bh	
C	48	00h	06h	
V	49	00h	19h	
B	50	00h	05h	
N	51	00h	11h	
M	52	00h	10h	
< ,	53	00h	36h	
> .	54	00h	37h	
? /	55	00h	38h	
	56	00h	87h	Japanese Version only

Key Name	Key Position No.	Modifier Byte (Byte 1)	Key code field	Remark.
R-Shift	57	20h	00h	
L-Ctrl	58	01h	00h	
L-Alt	60	04h	00h	
Space	61	00h	2Ch	
R-Alt	62	40h	00h	Not in US version
Insert	75	00h	49h	
Delete	76	00h	4Ch	
←	79	00h	50h	
Home	80	00h	4Ah	
End	81	00h	4Dh	
↑	83	00h	52h	
↓	84	00h	51h	
Page Up	85	00h	4Bh	
Page Down	86	00h	4Eh	
→	89	00h	4Fh	
Num Lock	90	00h	53h	
Esc	110	00h	29h	
F1	112	00h	3Ah	
F2	113	00h	3Bh	
F3	114	00h	3Ch	
F4	115	00h	3Dh	
F5	116	00h	3Eh	
F6	117	00h	3Fh	
F7	118	00h	40h	
F8	119	00h	41h	
F9	120	00h	42h	
F10	121	00h	43h	
F11	122	00h	44h	
F12	123	00h	45h	
Print Screen	124	00h	46h	
Scroll Lock	125	00h	47h	
Pause	126	00h	48h	
無變換	131	00h	8Bh	Japanese Version only
前候補變換	132	00h	8Ah	Japanese Version only
カタカナ	133	00h	88h	Japanese Version only
한자	150	00h	91h	Korean Version only
한/영	151	00h	90h	Korean Version only
Fn	160	No code	No code	
L-Windows	161	08h	00h	
Application	163	00h	65h	
7 Home	8	00h	5Fh	Embedded Numeric key pad
8 ↑	9	00h	60h	Embedded Numeric key pad
9 PgUp	10	00h	61h	Embedded Numeric key pad
*	11	00h	55h	Embedded Numeric key pad

Key Name	Key Position No.	Modifier Byte (Byte 1)	Key code field	Remark.
4 ←	23	00h	5Ch	Embedded Numeric key pad
5	24	00h	5Dh	Embedded Numeric key pad
6 →	25	00h	5Eh	Embedded Numeric key pad
-	26	00h	56h	Embedded Numeric key pad
1 End	37	00h	59h	Embedded Numeric key pad
2 ↓	38	00h	5Ah	Embedded Numeric key pad
3 PgDn	39	00h	5Bh	Embedded Numeric key pad
+	40	00h	57h	Embedded Numeric key pad
N-Enter	43	00h	58h	Embedded Numeric key pad
0 Ins	52	00h	62h	Embedded Numeric key pad
. Del	54	00h	63h	Embedded Numeric key pad
/	55	00h	54h	Embedded Numeric key pad

Note: The Fn key does not generate any code itself; instead, it affects the next depressed key code generation of which is listed in the table on chapter 4.1.3.

4.1.2 Embedded numeric key pad operations

Key Name		IBM® desktop key position No.		Numlock LED Off, Fn key Up	Numlock LED Off, Fn key Dn	Numlock LED On, Fn key Up	Numlock LED On, Fn key Dn
7 &	7 Home	8	91	7 &	Home	7	7 &
8 *	8 ↑	9	96	8 *	↑	8	8 *
9 (	9 PgUp	10	101	9 (	PgUp	9	9 (
0)	*	11	100	0)	*	*	0)
U	4 ←	23	92	U	←	4	U
I	5	24	97	I		5	I
O	6 →	25	102	O	→	6	O
P	-	26	105	P	-	-	P
J	1 End	37	93	J	End	1	J
K	2 ↓	38	98	K	↓	2	K
L	3 PgDn	39	103	L	PgDn	3	L
; :	+	40	106	; :	+	+	; :
Enter	N-Enter	43	108	Enter	N-Enter	N-Enter	Enter
M	0 Ins	52	99	M	Ins	0	M
. >	. Del	54	104	. >	Del	.	. >
/ ?	/	55	95	/ ?	/	/	/ ?

4.1.3 Embedded key operations

Key Name		IBM® desktop key position No.		Key operation in Fn key Up	Key operation in Fn key Dn	Remark
Ins	Num	75	90	Ins	Num	Not in US Version
Del	Scroll	76	125	Del	Scroll	Not in US Version
PgUp	Home	85	80	PgUp	Home	Japanese Version only
PgDn	End	86	81	PgDn	End	Japanese Version only

4.2 Report data for LED control (Set report for Interface 0)

	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Byte 1	0	0	0	Kana	Compose	Scroll	Caps	Num

Note: The Compose and the Kana indication LED is not available on the keyboard.