THE PORTSET BRAILLE KEYBOARD Universal Computer Version (G1) USA
Version 7 USA (Grade 1)

The Portset Braille Keyboard is designed as an alternative to the standard QWERTY keyboard, for the entry of information into a personal computer. This device does not replace the standard keyboard for control of the computer.

DESCRIPTION
The Portset Braille Keyboard is an oblong case, with the face sloping slightly from the back to the front.
Connection is via a USB leaded plug from the rear of the case. The USB plug is inserted into a USB port of the personal computer. There is no power cable, like the standard keyboard the power needed to operate the device is taken directly from the computer.

The keys are laid out in the familiar "Perkins" fashion. That is with the six Braille keys at the top, arranged in the sequence 3, 2, 1 and 4, 5, 6. Below these six keys are three other keys, these are from left to right:- Carriage return or "enter" key, space bar, and the back-space delete key. Below these keys on the left are the control keys Ctrl and Alt. On the right side is a cluster of four keys providing cursor up, down, left and right.
These keys are all round in shape and provide additional support for Window based programs.

OPERATION
Because several keys may need to be pressed to form a single character, a character is only sent to the computer when all keys are released.
Shifted (upper case and some other symbols) are obtained by holding down the "enter" key (bottom left, Dot 7) while pressing the keys to make up the standard character.

AMERICAN "UNIVERSAL" COMPUTER BRAILLE
In this character set, the alphabetic characters are as the standard Braille character set. The convention used in this character set for numbers is to take the letters A to J, and move them from the top of the cell to the bottom. Thus 1 is dot 2, 2 is dots 2 and 3, 3 is dots 2 and 5 etc. This of course uses up some of the dot combinations we usually use for punctuation marks, so other dot combinations have been allocated for these, but rather than try to list these here, we suggest some experimentation to familiarise yourself with these signs.

CONTROL FUNCTIONS.
The Portset *BrailleKey* provides direct key control of the Ctrl and Alt keys found on a normal QWERTY keyboard. These keys operate on the key press or key down action and are single key functions.

CURSOR CONTROL.
BrailleKey has four cursor keys in a cluster. They perform the same functions as on a QWERTY keyboard and act on the key press action.

SPECIAL FUNCTIONS.
These are called CORDED COMMANDS, The following functions are available:
Keys 5,6,SPACE toggle a SHIFT command. To turn on SHIFT enter the 3 keys 5,6,SPACE and to turn off SHIFT repeat the key combination. HOME = 1,6,SPACE; END = 1,4,5,6,SPACE; TAB = 3,4,5,SPACE; ESC = 4,5,6,SPACE. Include the SHIFT function and this will provided text highlighting as you move the cursor keys. Remember the SHIFT is a toggle function so you need to turn it off after use.
Once you have created highlighted text you can conduct CUT, PAST, DELETE using the characters C, V and X with the CRTL key.

THE PORTSET BRAILLE KEYBOARD.
US International Set. US Keyboard Windows.

Char	Key/Dot	+Dot 7	
a	1	A	Alpha
b	1,2	B	Beta
c	1,4	C	Charlie
d	1,4,5	D	Delta
e	1,5	E	Echo
f	1,2,4	F	Foxtrot
g	1,2,4,5	G	Golf
h	1,2,5	H	Hotel
i	2,4	I	India
j	2,4,5	J	Juliet
k	1,3	K	Kilo
l	1,2,3	L	Lima
m	1,3,4	M	Mike
n	1,3,4,5	N	November
o	1,3,5	O	Oscar
p	1,2,3,4	P	Papa
q	1,2,3,4,5	Q	Quebec
r	1,2,3,5	R	Romeo
s	2,3,4	S	Sierra
t	2,3,4,5	T	Tango
u	1,3,6	U	Uniform
v	1,2,3,6	V	Victor
w	2,4,5,6	W	Whisky
x	1,3,4,6	X	Xray
y	1,3,4,5,6	Y	Yankee
z	1,3,5,6	Z	Zulu
1	2	!	
2	2,3	@	
3	2,5	#	
4	2,5,6	$	
5	2,6	%	
6	2,3,5	^	
7	2,3,5,6	&	
8	2,3,6	*	
9	3,5	(	
0	3,5,6	)	

Char	Key/Dot	+Dot 7	
,	6	<	
;	5,6	:	
.	4,6	>	
:	1,5,6	:	colon
[	2,4,6	{	
]	1,2,4,5,6	}	
&	1,2,3,4,6	&	ampersand
+	3,4,6	+	plus
-	3,6	_	
@	4	@	at
=	1,2,3,4,5,6	+	
<	1,2,6	<	
"	5	"	
?	1,4,5,6	?	question
'	3	"	
/	3,4	?	
)	2,3,4,5,6	)	
!	2,3,4,6	!	exclamation
_	4,5,6	_	underscore
*	1,6	*	asterisk
>	3,4,5	>	
(	1,2,3,5,6	(	
$	1,2,4,6	$	
%	1,4,6	%	percent
\	1,2,5,6	|	
#	3,4,5,6	#	hash
^	4,5	^	