



THE PORTSET *BrailleKeyG2* KEYBOARD.



The Portset *BrailleKeyG2* Keyboard is designed as an alternative to the standard QWERTY keyboard, for the entry of information into a personal computer. This device can be used as a replacement to 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.

OPERATION.

Braille requires one or more keys to be pressed to form either a character or a string of characters this is done when all the keys are released. This however does not apply to the control and cursor keys which respond on the key press or key down action.

BRAILLE KEY ACTION.

The Portset *BrailleKeyG2* provides Braille input from the key action and produces English text in accordance to Grade2 British Braille. The following contractions and signs are available. **Shortforms, Composite Groupsigns, Composite Wordsigns, Lower Contractions, Simple Upper Groupsigns, Simple Upper Wordsigns, Numbers and Letters of the Alphabet.**

CONTROL FUNCTIONS.

The Portset *BrailleKeyG2* 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. Other control functions are provided through the Corded functions.

CURSOR CONTROL.

BrailleKeyG2 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, Corded functions are provided by incorporating the Space key with a combination of other keys. The Portset *BrailleKeyG2* has five control functions TAB, ESC, HOME, END and a Toggled SHIFT. Also available are single alphabet characters such as in Grade 1 literary Braille.

The Keyboard supports a SHIFT function which is selected by keys 5,6 and the Space Bar released together, repeat the same key combination to turn SHIFT off. Include the SHIFT function and this will provide 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 CTRL key.



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CORDED COMMANDS.

TAB = 3,4,5,Space. ESC = 4,5,6,Space. HOME = 1,6,Space. END = 1,4,5,6,Space

SHIFT = 5,6,Space to turn on and 5,6,Space to turn off, this is a toggled command.
 Capitals can be created by the inclusion of the SHIFT command.

Alpha Characters are created by including the Space with the dots, = Dots,Space
 eg. **f = 1,2,4,Space; \$ = 1,2,4,6,Space**

CORDED PUNCTUATION. Within a text string.
For single characters include the Space

1,2,3,5,6	(2,3,4,5,6)	2,4,6	[1,2,4,5,6]
1,2,3,4,5,6	=	3,4,6	+	2,6	<	3,5,6	>
1,2,3,4,6	&	1,2,4,6	\$	1,2,5,6	£	3,4	/
1,4,6	%	4	@	3,4,5,6	#	2,3,4,6	\
4,6	*	6	-	2,5,6	.		

Some punctuation, composition and print character used in Braille printing and formatting are not supported.

COMPOSITE WORDSIGNS.

These are preceded by 4,5.		These are preceded by 4,5,6.	
1,3,6	UPON	1,4	CANNOT
2,4,5,6	WORD	1,2,5	HAD
2,3,4,6	THESE	1,3,4	MANY
1,4,5,6	THOSE	2,3,4	SPIRIT
1,5,6	WHOSE	2,4,5,6	WORLD
		2,3,4,6	THEIR

These are preceded by 5.

1,4,5	DAY	1,2,3,5	RIGHT
1,5	EVER	2,3,4	SOME
1,2,4	FATHER	2,3,4,5	TIME
1,2,5	HERE	1,3,6	UNDER
1,3	KNOW	2,4,5,6	WORK
1,2,3	LORD	1,3,4,5,6	YOUNG
1,3,4	MOTHER	2,3,4,6	THERE
1,3,4,5	NAME	1,6	CHARACTER
1,3,5	ONE	1,4,5,6	THROUGH
1,2,3,4	PART	1,5,6	WHERE
1,2,3,4,5	QUESTION	1,2,5,6	OUGHT



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COMPOSITE GROUPSIGNS.

These are preceded by 4,6.	These are preceded by 5,6.	These are preceded by 6.
1,4,5 OUND	1,5 ENCE	1,3,4,5 ATION
1,5 ANCE	1,2,4,5 ONG	1,3,4,5,6 ALLY
1,3,4,5 SION	1,2,3 FUL	
2,3,4 LESS	1.3.4.5 TION	
2,3,4,5 OUNT	2,3,4 NESS	
	2,3,4,5 MENT	
	1,3,4,5,6 ITY	

SIMPLE UPPER WORDSIGNS.

1,3,5,6 as	2,4,5 just	2,3,4 so
1,2 but	1,3 knowledge	3,4 still
1,4 can	1,2,3 like	2,3,4,5 that
1,6 child	1,3,4 more	1,4,5,6 this
1,4,5 do	1,3,4,5 not	1,3,6 us
1,5 every	1,2,5,6 out	1,2,3,6 very
1,2,4 from	1,2,3,4 people	1,5,6 which
1,2,4,5 go	1,2,3,4,5 quite	2,4,5,6 will
1,2,5 have	1,2,3,5 rather	1,3,4,5,6 you
1,3,4,,6 it	1,4,6 shall	

PUNCTUATION.

2 comma	2,3 semicolon	2,5 colon
2,5,6 full stop	2,3,5 exclamation	2,3,6 question
3 apostrophe	3,6 hyphen	

SIMPLE UPPER GROUPSIGNS.

1,2,3,4,6 AND	1,6 CH	1,2,4,6 ED
3,4,5,6 BLE	1,2,3,4,5,6 FOR	1,2,6 GH
1,2,4,5,6 ER	3,4,6 ING	1,2,3,5,6 OF
1,4,6 SH	1,2,5,6 OU	2,3,4,6 THE
1,4,5,6 TH	2.4.6 OW	2,3,4,5,6 WITH
1,5,6 WH	3,4 ST	3,4,5 AR

LOWER CONTRACTIONS.

Wordsigns.	Initial-Medial-Terminal Groupsigns.	
2,6 ENOUGH	2,6 EN	
2,3,5 TO (sequenced)	3,5 IN (also used as word)	
2,3,5,6 WERE	Medial Groupsigns.	
2,3,6 HIS	2 EA	2,3,5 FF
3,5 + 2,3,5 INTO (sequenced)	2,3 BB	2,3,5,6 GG
3,5,6 BY (sequenced)	2,5 CC	2,5,6 DD
3,5,6 WAS		



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Initial Groupsigns.

2,3	BE (also used as word)	2,5	CON
2,5,6	DIS	3,6	COM

SHORTFORMS.

ab	about	CHn	children	nei	neither
abv	above	CONcv	conceive	o'c	o'clock
ac	according	CONcv	conceiving	OUrvs	ourselves
acr	across	cd	could	pd	paid
af	after	dcv	deceive	pERcv	perceive
afn	afternoon	dcvg	deceiving	pERcv	perceiving
afw	afterward	dcl	declare	pERh	perhaps
ag	again	dclg	declaring	qk	quick
agST	against	ei	either	rcv	receive
alm	almost	fST	first	rcvg	receiving
alr	already	fr	friend	rjc	rejoice
al	also	gd	good	rjcg	rejoicing
aLTH	although	grt	great	sd	said
alt	altogether	hERf	herself	SHd	should
alw	always	hm	him	sCH	such
BEc	because	hmf	himself	THEmvs	themselves
BEf	before	imm	immediate	THyf	thymself
BEh	behind	xs	its	td	today
BEI	below	xf	itself	tgr	together
BEn	beneath	lr	letter	tm	tomorrow
BEs	beside	ll	little	to	tonight
BEt	between	mCH	much	wd	would
BEy	beyond	mST	must	yr	your
bl	blind	myf	myself	yrf	yourself
brl	braille	nec	necessary	yrvs	yourselves

Single letters and numbers.

Char	Key/Dot	Char	Key/Dot	Char	Key/Dot
a	1	j	2,4,5	s	2,3,4
b	1,2	k	1,3	t	2,3,4,5
c	1,4	l	1,2,3	u	1,3,6
d	1,4,5	m	1,3,4	v	1,2,3,6
e	1,5	n	1,3,4,5	w	2,4,5,6
f	1,2,4	o	1,3,5	x	1,3,4,6
g	1,2,4,5	p	1,2,3,4	y	1,3,4,5,6
h	1,2,5	q	1,2,3,4,5	z	1,3,5,6
i	2,4	r	1,2,3,5		

Numbers preceded with 3,4,5,6

Char	Key/Dot	Char	Key/Dot
1	1	6	1,2,4
2	1,2	7	1,2,4,5
3	1,4	8	1,2,5
4	1,4,5	9	2,4
5	1,5	0	2,4,5