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Product Overview

Developed for use in kiosk applications the 2200 Series keyboard is suitable for use in exposed or hostile environments. The robust construction is highly resistant to hard use, abuse and vandalism.

These keyboards are sealed against water and dust to ensure responsive and reliable data entry in the most demanding situations.

Product options are available to suit different user preferences / kiosk environments.

Installation

Installation is usually underpanel, using the fixing kit 2210-MK000. CAD models for integration / installation are downloadable from www.storm-interface.com

2205 is the compact version (Note that 2210-MK000 is not required to install this version)

2210 is the standard footprint product

2210TB has an integral trackerball, with 2 click keys .

2220 has additional F1 – F12 keys

2230 has additional F1 – F12 keys + Number Pad

Alternative version to be inset into a countertop :

2212 is built into an extended stainless steel plate.

Build Variants

High contrast polymer keys or metal engraved/infilled keys are an option

Vandal Resistant versions have stainless steel front.

Robust versions have polymer front.

USB 2.0 connector is supplied fitted on a 2.5m cable

PS/2 compatible versions are also available to suit legacy host systems.
(PS/2 encoder discontinued on standard product Apr 2018).

Languages

All common language layouts are available (specials on request)

Custom firmware/layouts available to suit specific project requirements

Configuration options can be set for :-

Hidden keys for CTRL + ALT + DEL, Function keys F1 – F12 on 2210 top row, version reporting

Trackerball right-click function

Windows Explorer / Menu key on 2230 only

2205



2205 Keyboard - Vandal Resistant, High Contrast White Keys, 2.5m USB cable. Available in the following languages:
UK, US layouts.
195mm x 97mm panel cutout

2210 VR



2210 Keyboard - Vandal Resistant, High Contrast White or Metal Keys, 2.5m USB cable. Available in the following languages:
UK, US, German, French & Spanish layouts.
290mm x 118mm overall size

2210 VR + T/Ball



2210 Keyboard – Polymer Trackball, Vandal Resistant, High Contrast White or Metal Keys, 2.5m USB cable.
Available in the following languages:
UK, US, German, French & Spanish layouts.
360mm x 118mm overall size

2210 Robust + T/Ball



2210 Keyboard – Polymer Trackball, Robust, High Contrast White Keys, 2.5m USB cable.
Available in the following languages:
UK, US, German, French & Spanish layouts.
360mm x 118mm overall size

2212 Top Install



2212 Keyboard – Metal Keys & Trackball or Polymer Keys & Trackball, Vandal Resistant, Top Install, Extended top plate, 2.5m USB cable, Available in the following languages: UK, US, German, French & Spanish layouts.
384mm x 142mm overall size

2220 VR w/Function Keys



2220 Keyboard - Vandal Resistant, Function Keys, High Contrast White or Metal Keys, 2.5m USB cable, Available in the following languages :
UK & US, layouts.
290 mm x 138 mm overall size

2230 VR w/Function Keys + Number Pad



2230 Keyboard - Vandal Resistant, Function & Number Pad, High Contrast White Keys, 2.5m USB cable, Available in the following languages :
UK, US, German, French & Spanish layouts.
347 mm x 138 mm overall size

Product Range: Part Numbers

- *denotes standard option. Other PNs special order only*

2205 Compact Keyboard - Vandal Resistant, High Contrast White Keys, 2.5m USB cable (Underpanel Install only)

- 2205-55201 2205 KBD, VR, White Keys, USB, UK Layout
- 2205-55202 2205 KBD, VR, White Keys, USB, US Layout

2210 Keyboard - Vandal Resistant, High Contrast White Keys, 2.5m USB cable.

- 2210-55201 2210 KBD, VR, White Keys, USB cable, UK Layout
- 2210-55202 2210 KBD, VR, White Keys, USB cable, US Layout
- 2210-55203 2210 KBD, VR, White Keys, USB cable, French Layout
- 2210-55204 2210 KBD, VR, White Keys, USB cable, German Layout
- 2210-55207 2210 KBD, VR, White Keys, USB cable, Spanish Layout

2210 Keyboard – Metal Keys, 2.5m USB cable.

- 2210-35201 2210 KBD, Metal, USB cable, UK Layout
- 2210-35202 2210 KBD, Metal, USB cable, US Layout

2210 Keyboard – Vandal Resistant, Polymer Trackball, , High Contrast White Keys, 2.5m USB cable.

- 2210-55221 2210 KBD, VR, White Keys, USB cable, TBALL, UK Layout
- 2210-55222 2210 KBD, VR, White Keys, USB cable, TBALL, US Layout

2210 Keyboard – Metal Keys & Trackball, 2.5m USB cable.

- 2210-35231 2210 KBD, Metal, USB cable, TBALL, UK Layout
- 2210-35232 2210 KBD, Metal, USB cable, TBALL, US Layout

2210 Keyboard, Robust, Black Overlay, High Contrast White keys, Polymer Trackball 2.5m USB cable

- 2210-45221 2210 KBD, Robust, White Key, USB 2.5m cable, TBALL, UK Layout
- 2210-45222 2210 KBD, Robust, White Key, USB 2.5m cable, TBALL, US Layout
- 2210-45223 2210 KBD, Robust, White Key, USB 2.5m cable, TBALL, French Layout
- 2210-45224 2210 KBD, Robust, White Key, USB 2.5m cable, TBALL, German Layout
- 2210-45227 2210 KBD, Robust, White Key, USB 2.5m cable, TBALL, Spanish Layout

2212 Keyboard - Vandal Resistant, Top Install (extended top plate) High Contrast White Keys/Trackball 2.5m USB cable

- 2212-55221 2212 KBD, VR, White Keys, USB 2.5M Cable, UK Layout
- 2212-55222 2212 KBD, VR, White Keys, USB 2.5M Cable US Layout

2212 Keyboard - Vandal Resistant, Top Install (extended top plate) Metal Keys/ Trackball, 2.5m USB cable,

- 2212-35231 2212 KBD, Metal, USB 2.5M Cable, UK Layout
- 2212-35232 2212 KBD, Metal, USB 2.5M Cable, US Layout

2220 Keyboard - Vandal Resistant, High Contrast White Keys, 2.5m USB cable.

- 2220-55201 2220 KBD, VR, White Keys, USB 2.5M Cable, UK
- 2220-55202 2220 KBD, VR, White Keys, USB 2.5M Cable, US

2220 Keyboard - Vandal Resistant, Metal Keys, 2.5m USB cable.

- 2220-35201 2220 KBD, VR, Metal Keys, USB 2.5M Cable, UK
- 2220-35202 2220 KBD, VR, Metal Keys, USB 2.5M Cable, US

2230 Keyboard - Vandal Resistant, High Contrast White Keys, 2.5m USB cable.

- 2230-55201 2230 KBD, VR, White Keys, USB 2.5M Cable, UK
- 2230-55202 2230 KBD, VR, White Keys, USB 2.5M Cable, US

Accessories

- 2210-MK000 2200 Under panel Fixing Kit – contains 12 clips (not required on 2205 KBD)
- 2200-FK000 2200 Foot Kit – required for benchtop use (not recommended on 2205 KBD)



2200 Keyboard for Public Environments Technical Manual

Specifications

Electrical

Compatibility	Windows 10
Contact Bounce	5 ms (max)
Contact Resistance	100 ohms (max)
Insulation Resistance	50 Mohms (min)
Breakdown Voltage	500 V AC (max 60 secs.)
Rating	5V DC 50mA (max)

Dimensions (mm)

	W	x	H	x	D	W	x	D	x	H	Weight (kg)	Weight (kg)
2205	202		116		30	270		145		70	0.65 w/poly keys	-
2210	289.5		118.5		35.8	410		195		75	1.05 w/poly keys	1.71 w/metal keys
2210 T/B	360		118.5		50	410		195		75	1.8 w/poly keys	1.95 w/metal keys
2212 T/B	384.5		142.5		50	410		195		75	2.1 w/poly keys	2.5 w/metal keys
2220	289.5		137.5		35.8	410		195		75	1.7 w/poly keys	-
2230	346.5		137.5		35.8	410		195		75	1.8 w/poly keys	-

Mechanical

Operational Life	4 million cycles (min) per key
Keytop Travel	1.5mm nominal
Actuation Force	100 grams nominal
Key Pitch	19mm

Performance/Regulatory

Operational Temp	-20°C to +70°C
Impact Ratings	
VR & Metal keyboards	20 J
VR & Metal keyboard w/Trackball,	10 J
Compact 2205 keyboard	10 J
Robust keyboard w/ Trackball	5 J
Vibration/Shock	ETSI 300 019 5M3
Water / Dust sealed	IP65 (when fixed to suitable panel)
Certification	CE / FCC / UL / UKCA
USB Chapter 9 Test	Pass
HID Device	VID: 0CD3
	PID: 2210
EMC	
Emissions	CE
	FCC
Immunity	ESD
	Radiated Fields
Electrical Safety	UL62368-1

USB Connection

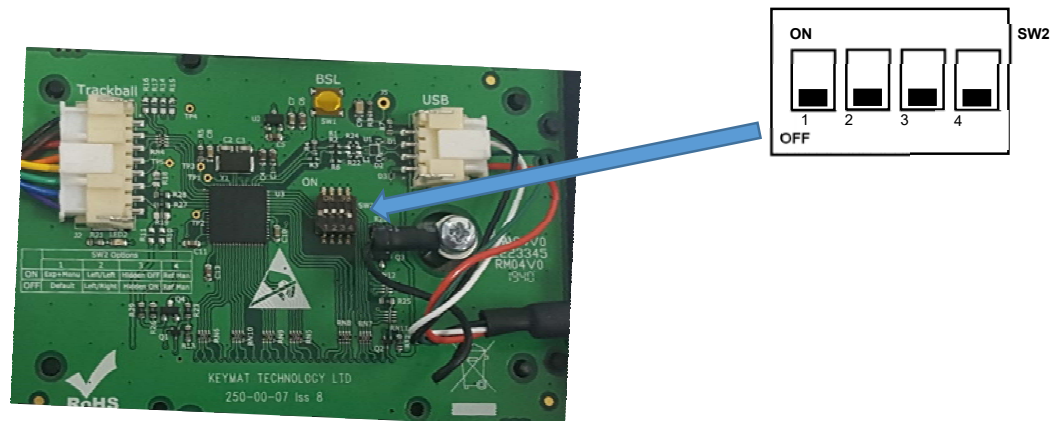
The keyboard is fitted with the 250 Series encoder and a 2.5m USB 2.0 cable. Alternative functions are available for Windows Explorer & menus Keys, Left/Left click and to disable/enable hidden function keys for CTRL + ALT + DEL and for firmware reporting.

Hidden Key Function	Press these keys to access the function	Applies to
Report Firmware version in use	Left Arrow + Right Arrow + V	All keyboards
Enable Hidden Function Keys F1- F12	Left Arrow + Right Arrow + 1 = F1 Left Arrow + Right Arrow + 2 = F2 etc	1200, 2205 and 2210
Ctrl-Alt-Del	Left Arrow + Right Arrow + Backspace	1200,2205, 2210 and 2220

To access these remove the pod from the back of the keyboard and set DIP switch (SW2) accordingly.

On 2230 keyboard Position 1 ON changes Printscreen -> Menu, and Right Ctrl -> Windows Explorer

SW2			
	1	2	3
ON	Enable Windows Explorer and Menu Key	Left / Left Click operation	Hidden keys Disabled
OFF	Factory Default	Left / Right Click operation	Hidden Keys Enabled
			4 Not used



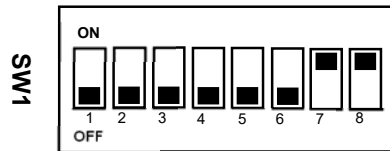
View of encoder

USB (240 encoder with Cypress microcontroller) – no longer available

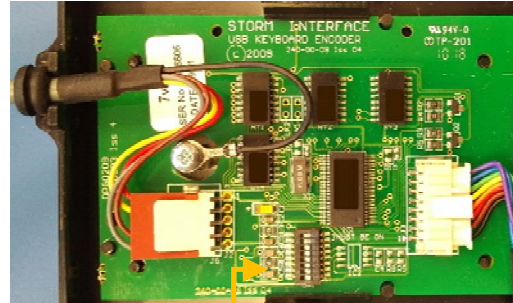
This information is retained here to support any field service questions

These are fitted with a 2.5m USB 2.0 cable. Alternative functions are available for Windows Explorer & menus Keys, Left/Left click and to disable/enable hidden function keys. To access these remove the pod lid from the back of the keyboard. The DIP switch (SW1), can be found on the PCB. Note: position of DIP #2 does not matter.

Default Switch Positions



SW1			
	1	2	3
ON	Windows Explorer and Menu Key	Left / Left Click operation	Hidden keys Disabled
OFF	Factory Default	Left / Right Click operation	Hidden Keys Enabled



PS2/USB – no longer available

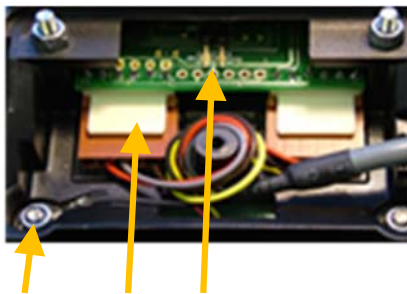
This information is retained here to support any field service questions. Legacy PS2 / USB versions were not supplied with cables.

The DIP switch (SW1), is on the PCB on the rear of the keyboard. Select the correct settings for your cable/host (PS/2 or USB).

Plug in the keyboard cable molex connector
Connect the earth tag to the securing nut and tighten

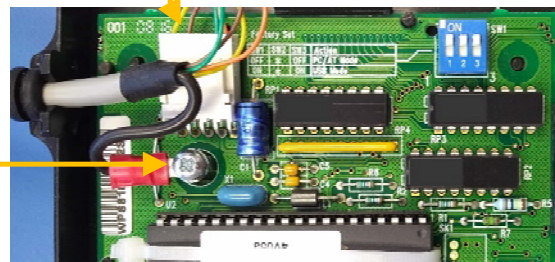
Plug in the trackerball cable to P3
Connect the earth tag to the securing nut and tighten

If left-left click switch operation is required then fit the supplied jumper over the two central pins of the trackball



Earth P3 Jumper

SW1			
	1	2	3
PS/2 Mode	OFF	N/A	OFF
USB Mode	ON	N/A	ON

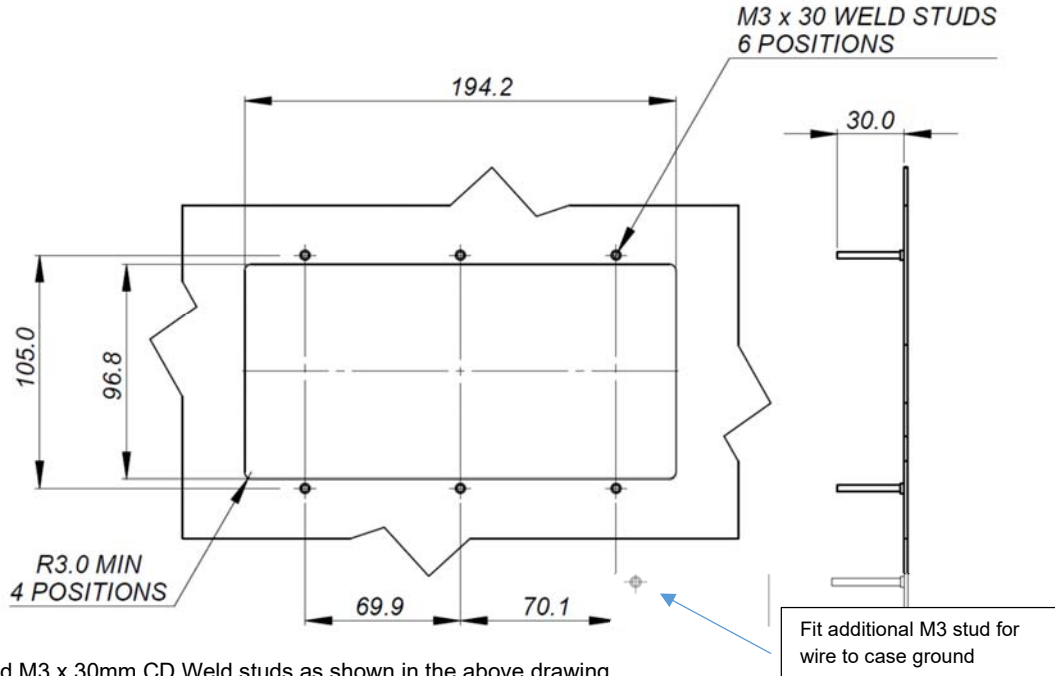


Fit the supplied trackerball cover and keyboard pod lid (ensure the 4 clips are engaged)

If you need a replacement cable then we do have some limited stock of spares (for PS/2 then order PN 1200-00100)

Installation – 2205 Compact Keyboard

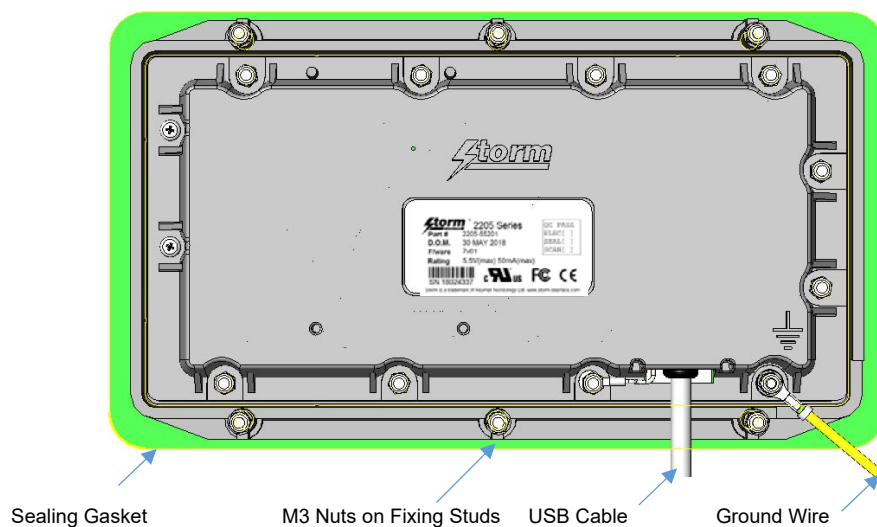
Prepare a panel with studs. Ensure a suitable panel material is used to support the keyboard. e.g. 1.6mm – 2.0mm steel. This must provide sufficient rigidity for sealing keyboard to panel. The underside of the panel should be flat, clean, and free of debris.



Recommend M3 x 30mm CD Weld studs as shown in the above drawing. Locate the gasket over the studs on the panel, then offer the keyboard up to the rear of the panel. Fit the M3 nuts over the studs and tighten.

Connect the ground wire to the case ground

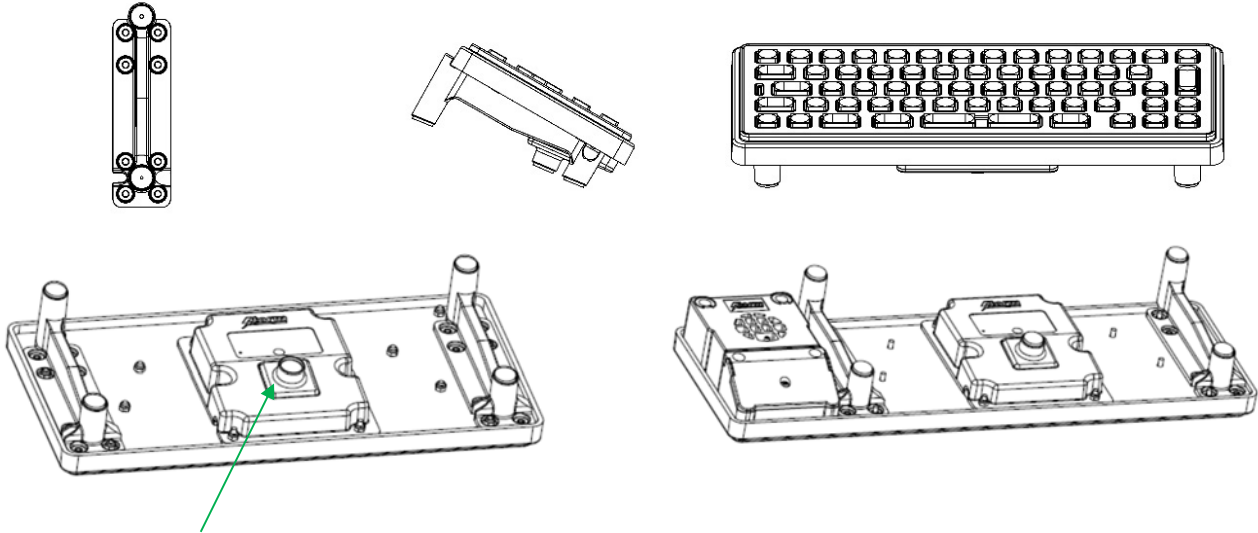
Rear View of Keyboard (installed)



Installation – Desktop (2210/2220/2230)

This Foot Kit enables a Storm 2200 Series Keyboard to be used as a Free-Standing Desktop Unit.

- Place the keyboard face down
- Attach the feet by removing the relevant nuts, place feet in position and refit the nuts.

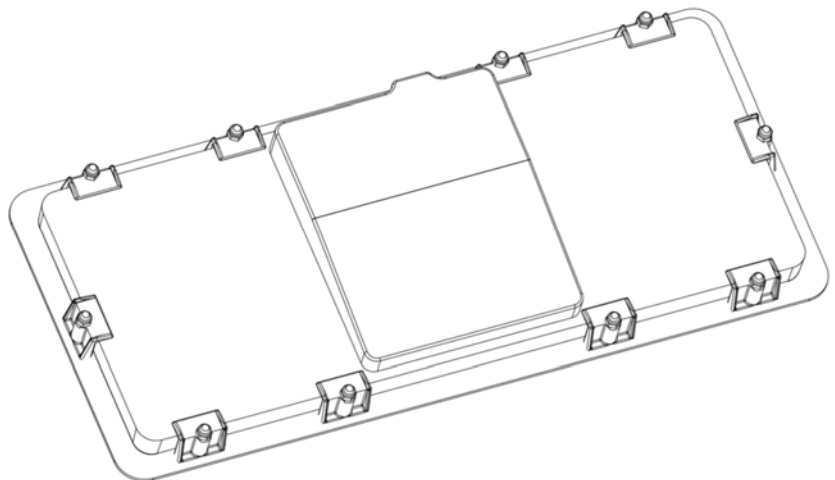
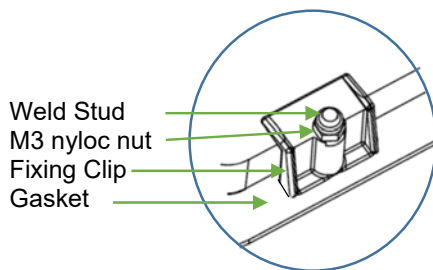


- Place the bumpstop on pod lid in position shown.

Installation – Under panel (2210/2220/2230)

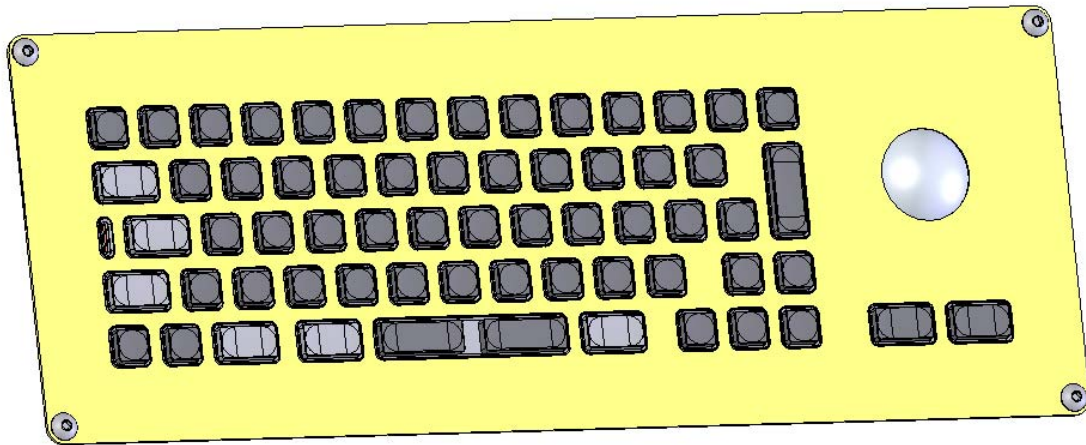
Use the 2200 Under panel Fixing Kit – contains 12 clips (Order PN 2210-MK000)

- Prepare a front panel with cut out and weld studs for the keyboard.
- Place the gasket over the weld studs.
- Place the keyboard into the panel cut out,
- Place one clip over each weld stud, and secure with M3 Nyloc nut

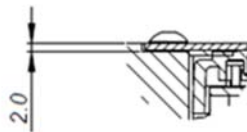


Installation – Inset into panel (2212 only)

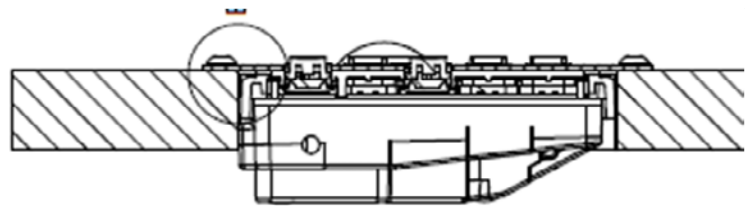
- Machine panel with 4 holes and recess detail if required (see below)
- Attach keyboard using the supplied 4x M5 x 30 A2 stainless steel socket button head screws, 4x M5 stainless steel washers and 4x M5 stainless steel nyloc nuts.



Either recess the top plate into the panel (2mm deep rebate



Or simply drill the 4 holes and the top plate then will be on top of your panel

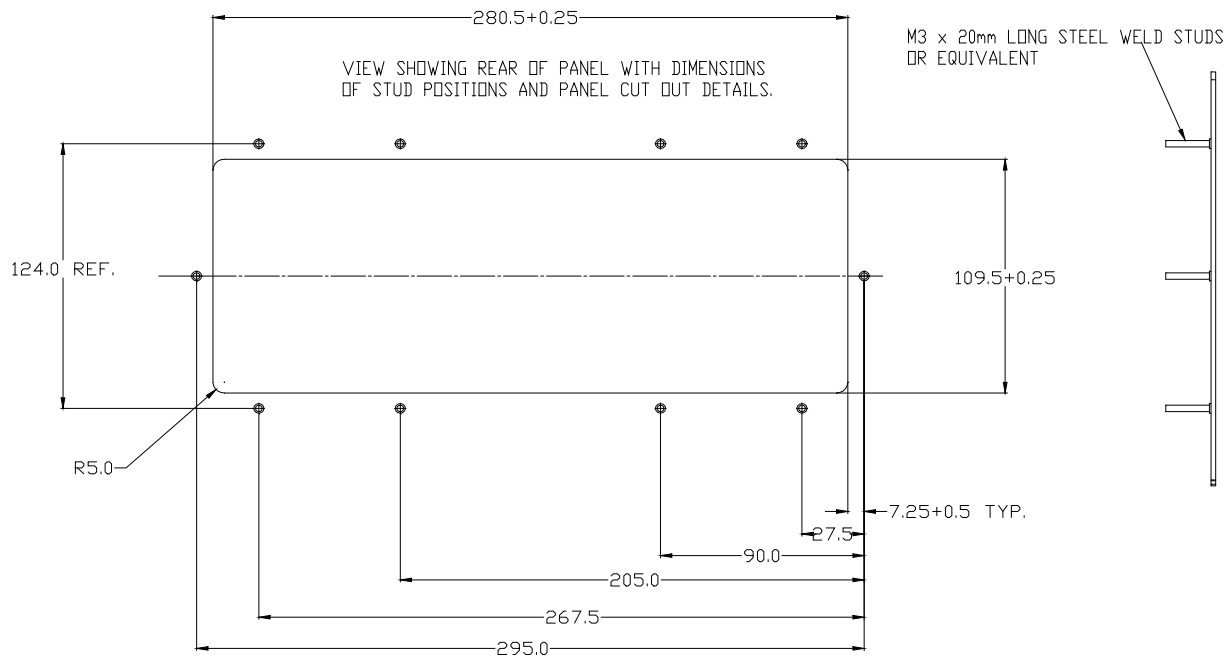


Panel Cut-out Drawings

2210 Panel Cut-out

The 2210 Keyboard is designed to be secured under panel with brackets and lock nuts. Torque to 25N.cm. Gasket to be positioned between keyboard and fixing panel prior to installation.

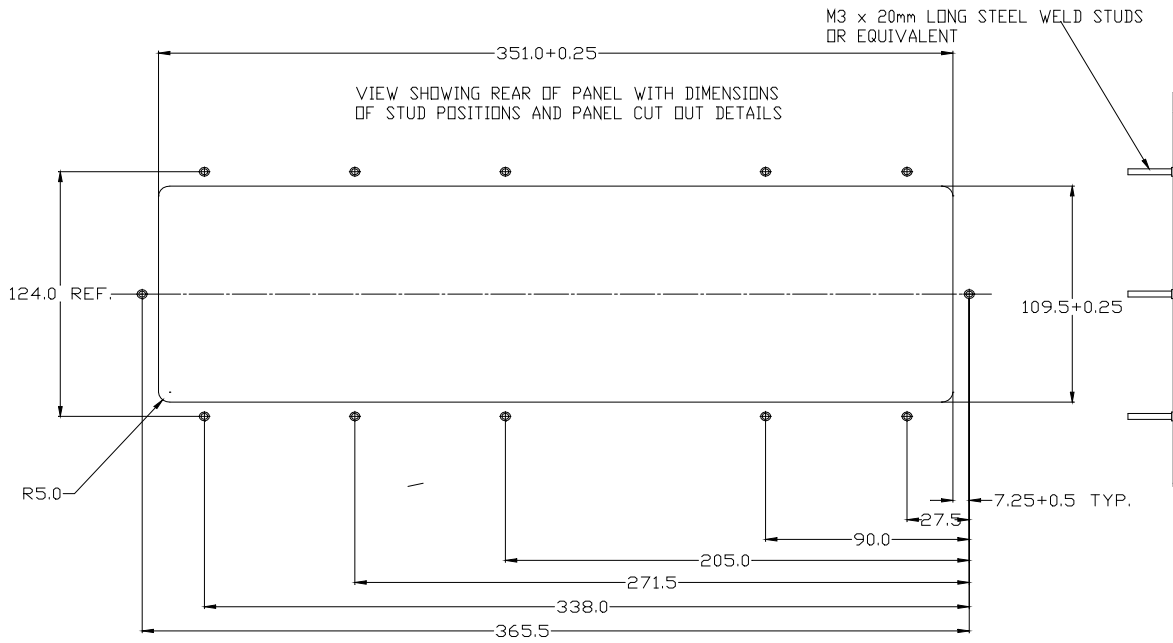
Please ensure a suitable panel material is used to support the keyboard. e.g. 1.6mm – 2.0mm steel.
This must provide sufficient rigidity for sealing keyboard to panel. The underside of the panel should be flat, clean, and free of debris



2210 Trackball Panel Cut-out

The 2210TB keyboard is designed to be secured with brackets and lock nuts. Torque to 25N.cm.
Gasket to be positioned between keyboard and fixing panel prior to installation.

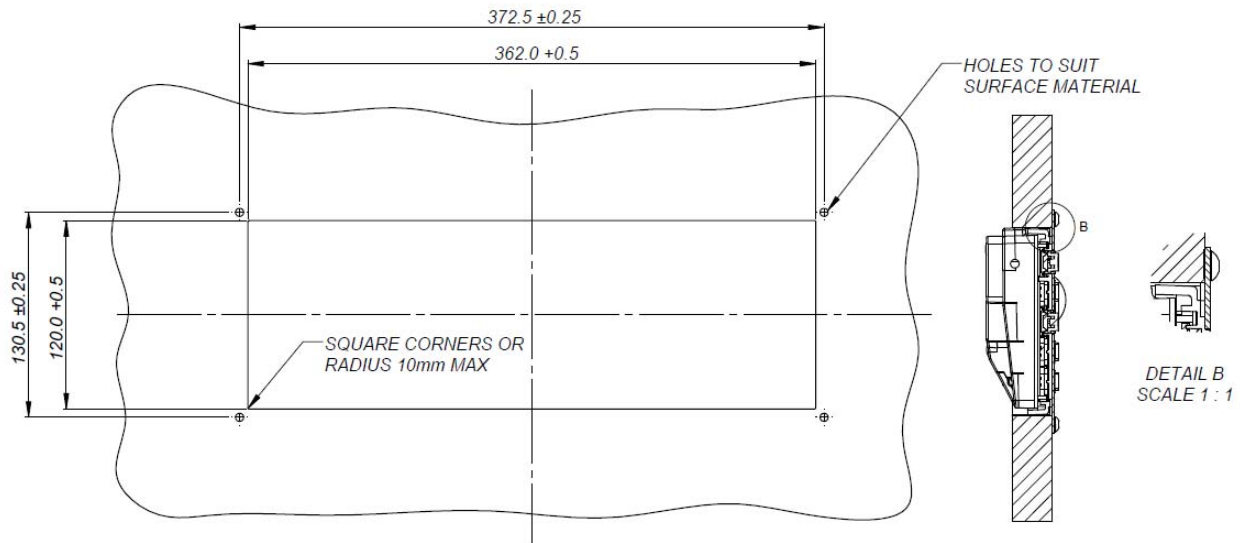
Please ensure a suitable panel material is used to support the keyboard. e.g. 1.6mm – 2.0mm steel.
This must provide sufficient rigidity for sealing keyboard to panel. The underside of the panel should be flat,
clean, and free of debris.



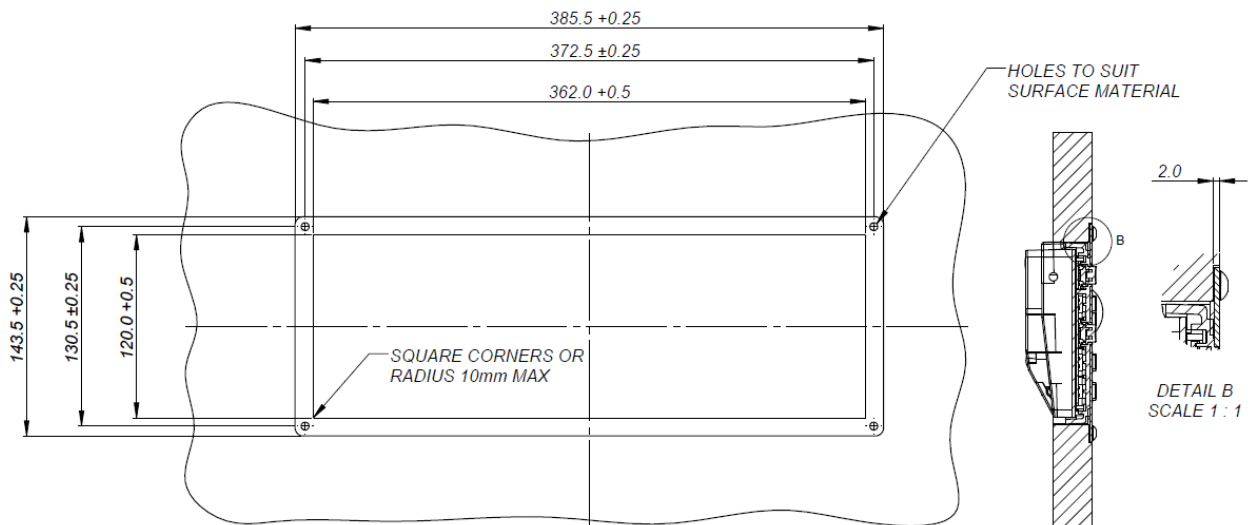
2212 Trackball Panel Cut-out

The Storm 2212-T/B Series keyboard is configured to allow a convenient installation onto a work surface or desktop. Using simple hand tools (jig saw and hand drill) the work surface can be easily prepared to accept this robust, responsive and reliable keyboard.

Top Installation



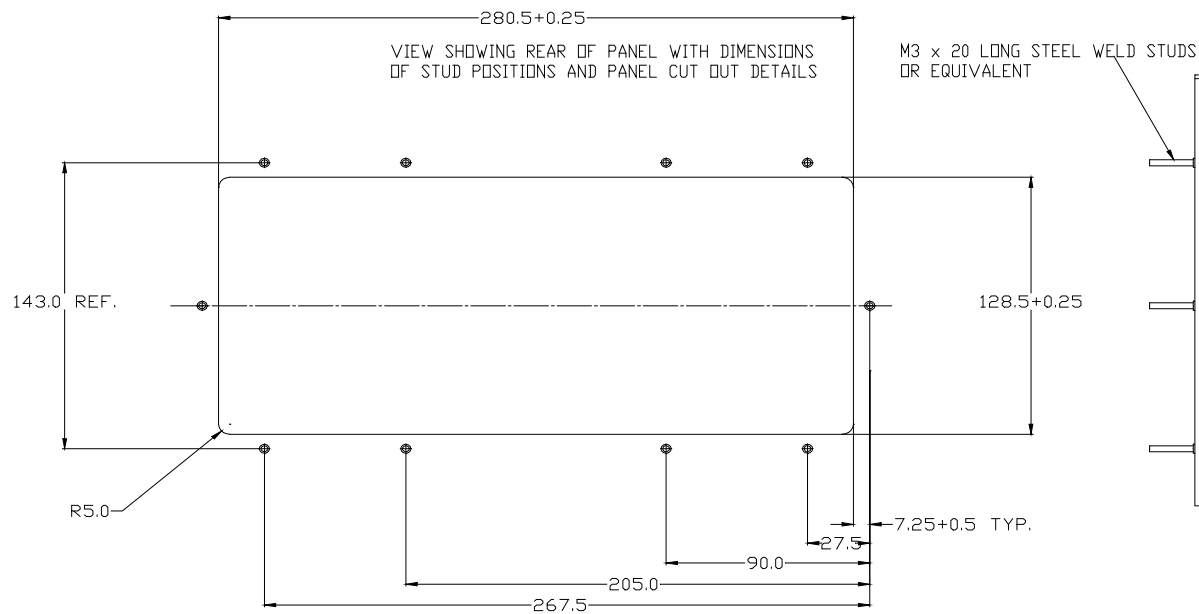
Flush Installation



2220 Panel Cut-out

The 2220 keyboard is designed to be secured with brackets and lock nuts. Torque to 25N.cm.
Gasket to be positioned between keyboard and fixing panel prior to installation.

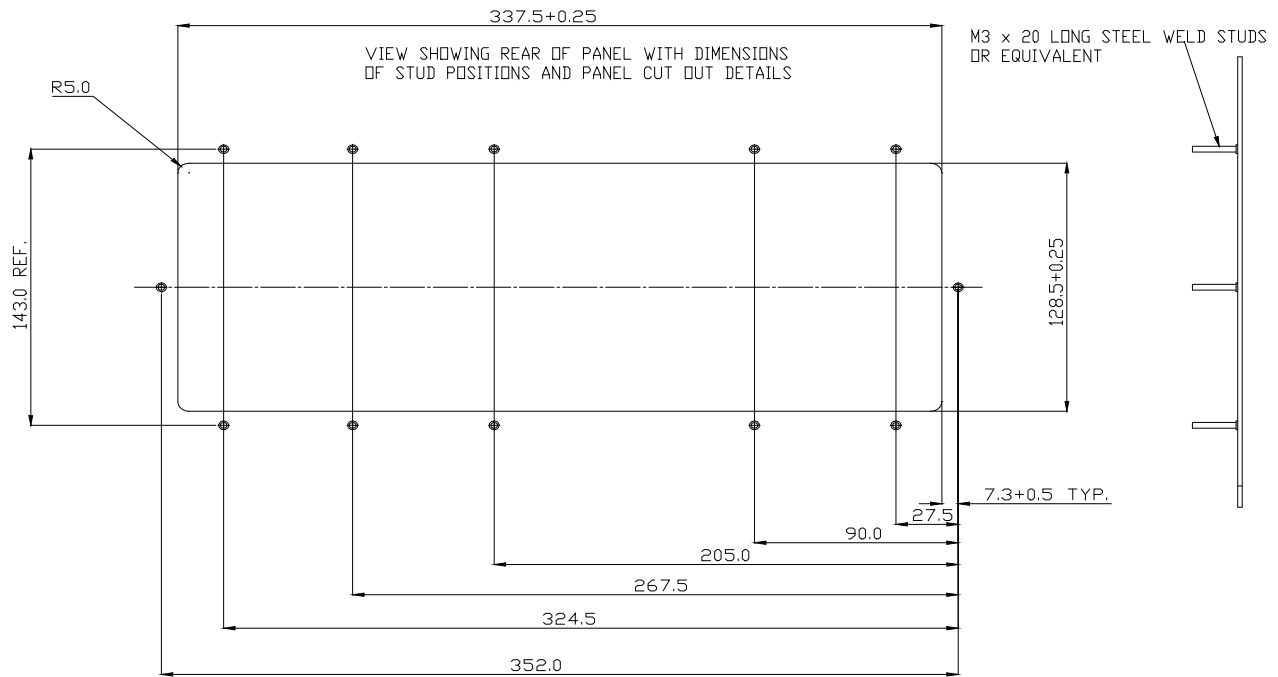
Please ensure a suitable panel material is used to support the keyboard. e.g. 1.6mm – 2.0mm steel.
This must provide sufficient rigidity for sealing keyboard to panel. The underside of the panel should be flat, clean, and free of debris.



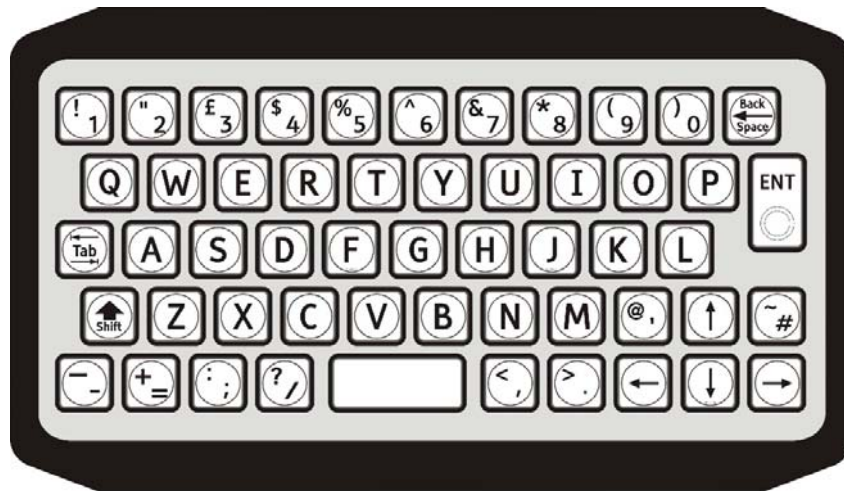
2230 Panel Cut-out

The 2230 keyboard is designed to be secured with brackets and lock nuts. Torque to 25N.cm.
Gasket to be positioned between keyboard and fixing panel prior to installation.

Please ensure a suitable panel material is used to support the keyboard. e.g. 1.6mm – 2.0mm steel.
This must provide sufficient rigidity for sealing keyboard to panel. The underside of the panel should be flat, clean, and free of debris.

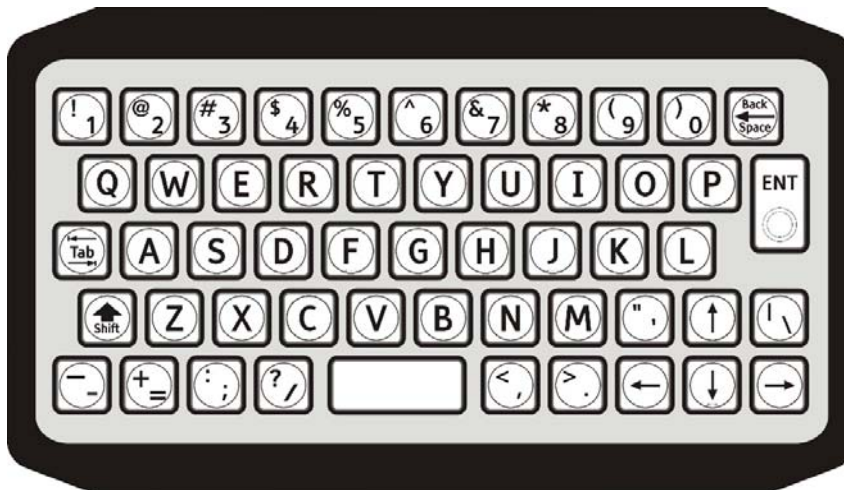


2205 UK Layout



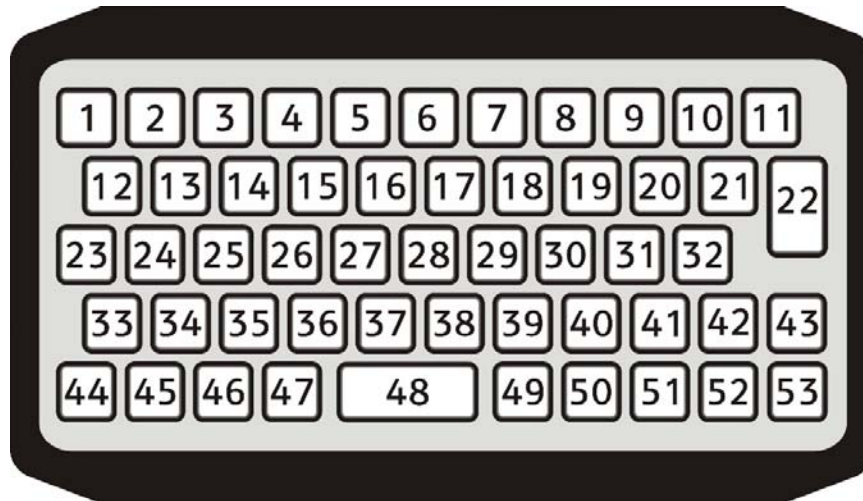
F, J and Down Arrow have home Pip
Ent Key has raised circle.

2205 USA Layout



F, J and Down Arrow have home Pip
Ent Key has raised circle.

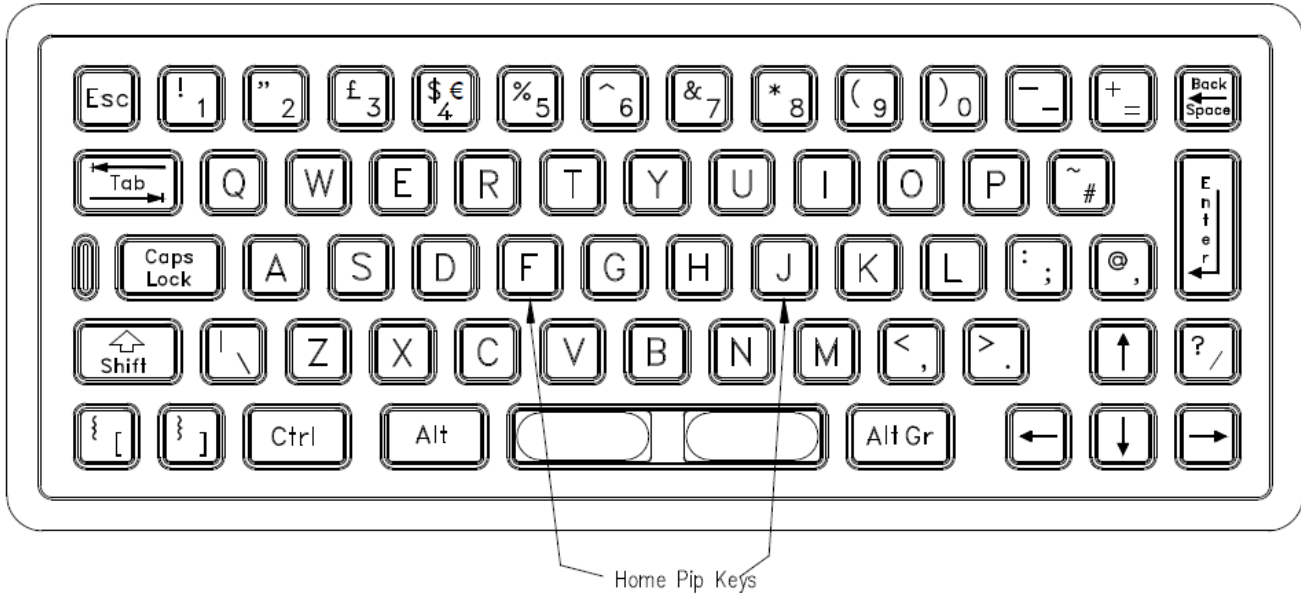
2205 Positions and Codes



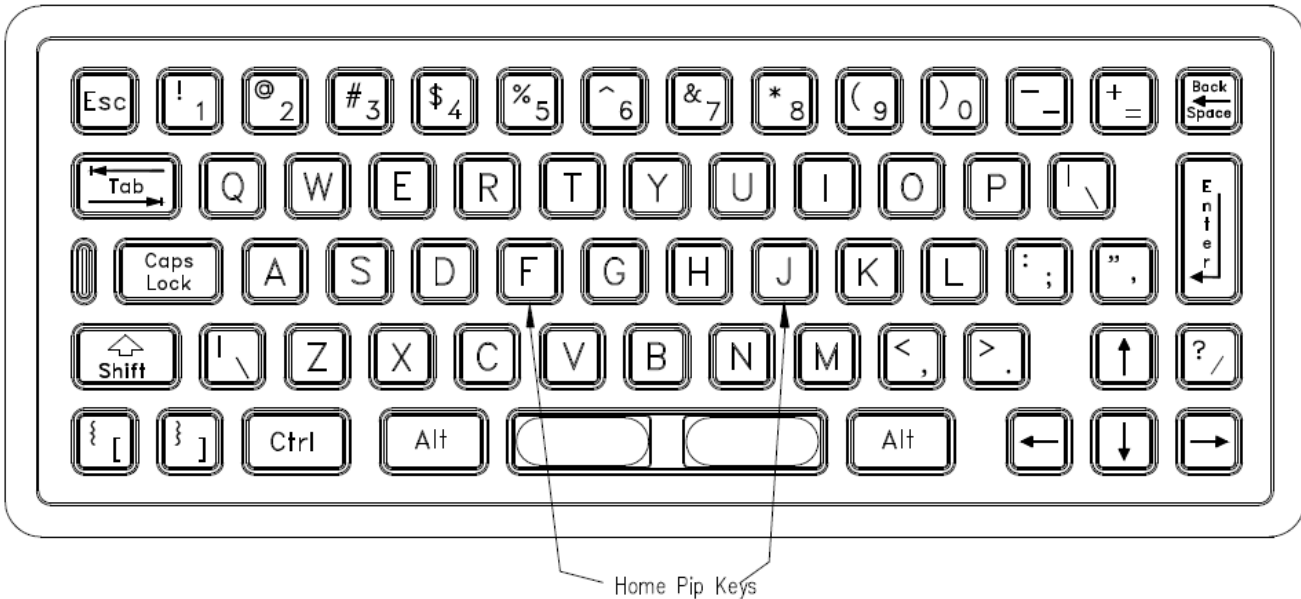
Key Position	Row / Column	2205 UK Layout.		2205 US Layout.		USB / HID Code (Decimal)
		Base	Shifted	Base	Shifted	
1	R1C2	1	!	1	!	30
2	R1C3	2	"	2	@	31
3	R1C4	3	£	3	#	32
4	R1C5	4	\$	4	\$	33
5	R1C6	5	%	5	%	34
6	R1C7	6	^	6	^	35
7	R1C8	7	&	7	&	36
8	R1C9	8	*	8	*	37
9	R1C10	9	(	9	(	38
10	R1C11	0	)	0	)	39
11	R3C13	Backspace		Backspace		42
12	R2C2	Q	Q	q	Q	20
13	R2C3	W	W	w	W	26
14	R2C4	E	E	e	E	08
15	R2C5	R	R	r	R	21
16	R2C6	T	T	t	T	23
17	R2C7	Y	Y	y	Y	28
18	R2C8	U	U	u	U	24
19	R2C9	I	I	i	I	12
20	R2C10	O	O	o	O	18
21	R2C11	P	P	p	P	19
22	R4C13	Enter		Enter		40
23	R2C1	Tab		Tab		43
24	R3C2	A	A	a	A	04
25	R3C3	S	S	s	S	22
26	R3C4	D	D	d	D	07
27	R3C5	F	F	f	F	09
28	R3C6	G	G	g	G	10
29	R3C7	H	H	h	H	11
30	R3C8	J	J	j	J	13
31	R3C9	K	K	k	K	14

Key Position	Row / Column	2205 UK Layout.		2205 US Layout.		USB / HID Code (Decimal)
		Base	Shifted	Base	Shifted	
32	R3C10	L	L	l	L	15
33	R4C14	Shift (Left)		Shift (Left)		225
34	R4C3	Z	Z	z	Z	29
35	R4C4	X	X	x	X	27
36	R4C5	C	C	c	C	06
37	R4C6	V	V	v	V	25
38	R4C7	B	B	b	B	05
39	R4C8	N	N	n	N	17
40	R4C9	M	M	m	M	16
41	R3C12	'	@	'	"	52
42	R6C11	↑		↑		82
43	R2C12	#	~	\		50
44	R1C12	-		-		45
45	R1C13	=	+	=	+	46
46	R3C11	;	:	;	:	51
47	R4C12	/	?	/	?	56
48	R5C7	Space		Space		44
49	R4C10	,	<	,	<	54
50	R4C11	.	>	.	>	55
51	R6C10	←		←		80
52	R6C12	↓		↓		81
53	R6C13	→		→		79

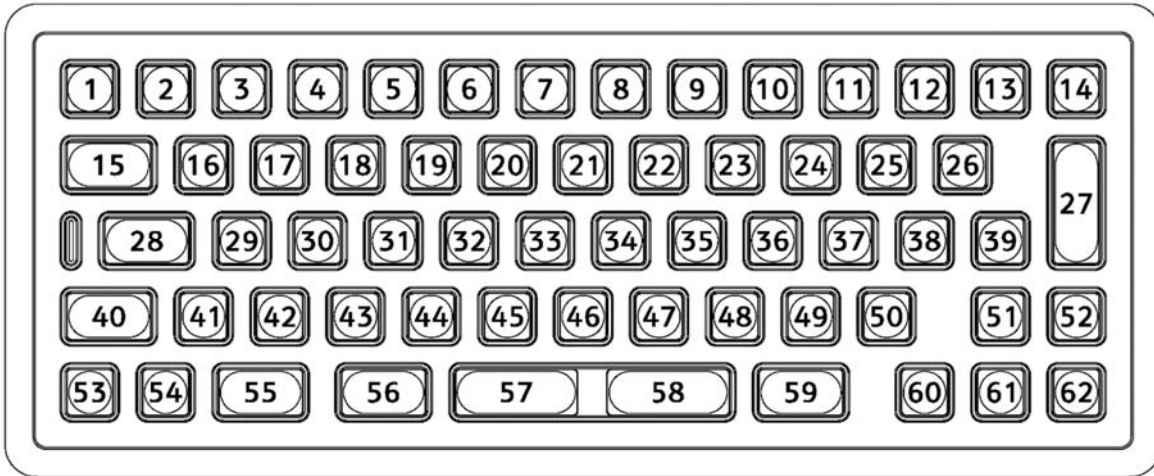
2210 UK Layout



2210 US Layout



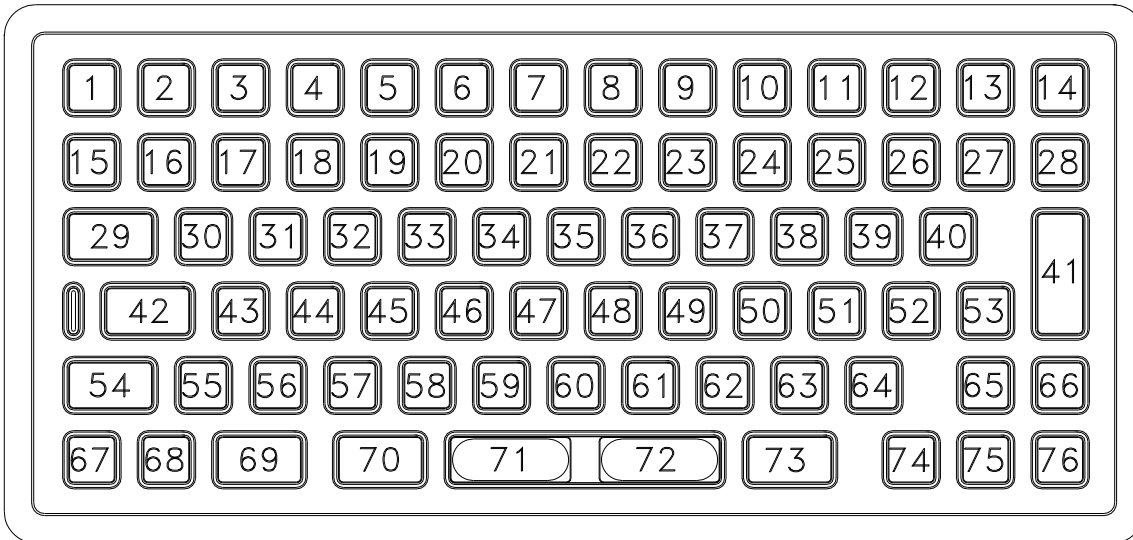
2210/12 Positions and Codes



Key Position	Row / Column	2210 UK Layout.		2210 US Layout.		USB / HID Code (Decimal)
		Base	Shifted	Base	Shifted	
1	R0C0	Escape		Escape		41
2	R1C1	1	!	1	!	30
3	R1C2	2	"	2	@	31
4	R1C3	3	£	3	#	32
5	R1C4	4	\$	4	\$	33
6	R1C5	5	%	5	%	34
7	R1C6	6	^	6	^	35
8	R1C7	7	&	7	&	36
9	R1C8	8	*	8	*	37
10	R1C9	9	(	9	(	38
11	R1C10	0	)	0	)	39
12	R1C11	-	_	-	_	45
13	R1C55	=	+	=	+	46
14	R3C12	Backspace		Backspace		42
15	R2C0	Tab		Tab		43
16	R2C1	Q	Q	q	Q	20
17	R2C2	W	W	w	W	26
18	R2C3	E	E	e	E	8
19	R2C4	R	R	r	R	21
20	R2C5	T	T	t	T	23
21	R2C6	Y	Y	y	Y	28
22	R2C7	U	U	u	U	24
23	R2C8	I	I	i	I	12
24	R2C9	O	O	o	O	18
25	R2C10	P	P	p	P	19
26	R2C11	#	~	\		50
27	R4C12	Enter		Enter		40
28	R4C0	Caps		Caps		57
29	R3C1	A	A	a	A	4
30	R3C2	S	S	s	S	22
31	R3C3	D	D	d	D	7
32	R3C4	F	F	f	F	9
33	R3C5	G	G	g	G	10
34	R3C6	H	H	h	H	11
35	R3C7	J	J	j	J	13

Key Position	Row / Column	2210 UK Layout.		2210 US Layout.		USB / HID Code (Decimal)
		Base	Shifted	Base	Shifted	
36	R3C8	K	K	k	K	14
37	R3C9	L	L	l	L	15
38	R3C10	;	:	;	:	51
39	R3C11	'	@	'	"	52
40	R4C14	Shift		Shift		225
41	R4C1	\		\		49
42	R4C2	Z	Z	z	Z	29
43	R4CE	X	X	x	X	27
44	R4C4	C	C	c	C	6
45	R4C5	V	V	v	V	25
46	R4C6	B	B	b	B	5
47	R4C7	N	N	n	N	16
48	R4C8	M	M	m	M	17
49	R4C9	,	<	,	<	54
50	R4C10	.	>	.	>	55
51	R7C10	↑		↑		82
52	R4C11	/	?	/	?	56
53	R5C0	[	{	[	{	47
54	R5C1	]	}	]	}	48
55	R5C10	Control		Control		224
56	R6C13	Alt		Alt		226
57	R5C5	Space		Space		44
58	R5C6	Space		Space		44
59	R7C13	Alt Gr		Alt Gr		230
60	R7C9	←		←		80
61	R7C11	↓		↓		81
62	R7C12	→		→		79

2220 Positions and Codes



Key Posi	Row /	2220			2220		USB / HID Code (Decimal)
		Base			Base	Shifted	
1	R0C0	Escape			Escape		41
2	R0C1	F1			F1		58
3	R0C2	F2			F2		59
4	R0C3	F3			F3		60
5	R0C4	F4			F4		61
6	R0C5	F5			F5		62
7	R0C6	F6			F6		63
8	R0C7	F7			F7		64
9	R0C8	F8			F8		65
10	R0C9	F9			F9		66
11	R0C10	F10			F10		67
12	R0C11	F11			F11		68
13	R0C12	F12			F12		69
14	R3C0	Print Scrn			Print Scrn		70
15	R1C0	`	~	!	'	~	53
16	R1C1	1	!		1	!	30
17	R1C2	2	"		2	@	31
18	R1C3	3	£		3	#	32
19	R1C4	4	\$		4	\$	33
20	R1C5	5	%		5	%	34
21	R1C6	6	^		6	^	35
22	R1C7	7	&		7	&	36
23	R1C8	8	*		8	*	37
24	R1C9	9	(		9	(	38
25	R1C10	0	)		0	)	39

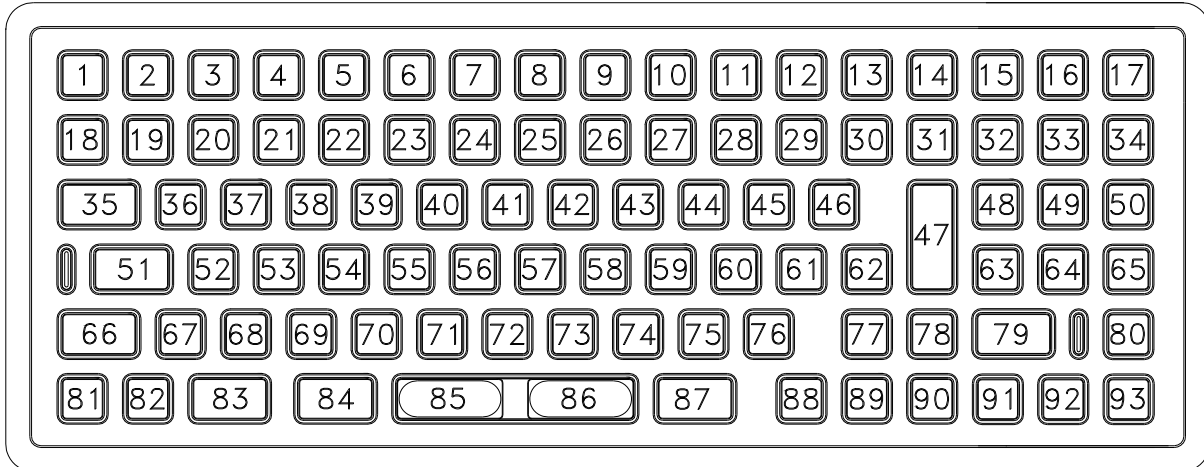
Key Posi	Row /	2220			2220		USB / HID Code (Decimal)
		Base			Base	Shifted	
26	R1C11	-	—		-	—	45
27	R1C55	=	+		=	+	46
28	R3C12	Backspace			Backspace		42
29	R2C0	Tab			Tab		43
30	R2C1	q	Q		q	Q	20
31	R2C2	w	W		w	W	26
32	R2C3	e	E		e	E	8
33	R2C4	r	R		r	R	21
34	R2C5	t	T		t	T	23
35	R2C6	y	Y		y	Y	28
36	R2C7	u	U		u	U	24
37	R2C8	i	I		i	I	12
38	R2C9	o	O		o	O	18
39	R2C10	p	P		p	P	19
40	R2C11	#	~		\		50
41	R4C12	Enter			Enter		40
42	R4C0	Caps			Caps		57
43	R3C1	a	A		a	A	4
44	R3C2	s	S		s	S	22
45	R3C3	d	D		d	D	7
46	R3C4	f	F		f	F	9
47	R3C5	g	G		g	G	10
48	R3C6	h	H		h	H	11
49	R3C7	j	J		j	J	13
50	R3C8	k	K		k	K	14
51	R3C9	l	L		l	L	15
52	R3C10	;	:		;	:	51
53	R3C11	'	@		'	"	52
54	R4C14	Shift			Shift		225
55	R4C1	\			\		49
56	R4C2	z	Z		z	Z	29
57	R4C3	x	X		x	X	27
58	R4C4	c	C		c	C	6
59	R4C5	v	V		v	V	25
60	R4C6	b	B		b	B	5
61	R4C7	n	N		n	N	17
62	R4C8	m	M		m	M	16
63	R4C9	,	<		,	<	54
64	R4C10	.	>		.	>	55
65	R7C10	↑			↑		82
66	R4C11	/	?		/	?	56
67	R5C0	[	{		[	{	47
68	R5C1	]	}		]	}	48
69	R5C10	Left Control			Left Control		224
70	R6C13	Alt			Alt		226
71	R5C5	Space			Space		44
72	R5C6	Space			Space		44



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Key Posi	Row /	2220			2220		USB / HID Code (Decimal)
		Base			Base	Shifted	
73	R7C13	Alt Gr			Alt Gr		230
74	R7C9	←			←		80
75	R7C11	↓			↓		81
76	R7C12	→			→		79

2230 Positions and Codes



Key Position.	Row / Column	2230 UK Layout.				2230 US Layout.			USB / HID Code (Decimal)
		Base	Shifted	Ctrl+Alt	Num Lock	Base	Shifted	Num Lock	
1	R0C0	Escape				Escape			41
2	R0C1	F1				F1			58
3	R0C2	F2				F2			59
4	R0C3	F3				F3			60
5	R0C4	F4				F4			61
6	R0C5	F5				F5			62
7	R0C6	F6				F6			63
8	R0C7	F7				F7			64
9	R0C8	F8				F8			65
10	R0C9	F9				F9			66
11	R0C10	F10				F10			67
12	R0C11	F11				F11			68
13	R0C12	F12				F12			69
14	R3C0	Print Scrn				Print Scrn			70
15	R0C13	Home			7	Home		7	95
16	R0C14	↑			8	↑		8	96
17	R0C15	Pg Up			9	Pg Up		9	97
18	R1C0	`	~	!		'	~		53
19	R1C1	1	!			1	!		30
20	R1C2	2	"			2	@		31
21	R1C3	3	£			3	#		32
22	R1C4	4	\$			4	\$		33
23	R1C5	5	%			5	%		34
24	R1C6	6	^			6	^		35
25	R1C7	7	&			7	&		36
26	R1C8	8	*			8	*		37

Key Position.	Row / Column	2230 UK Layout.				2230 US Layout.			USB / HID Code (Decimal)
		Base	Shifted	Ctrl+Alt	Num Lock	Base	Shifted	Num Lock	
27	R1C9	9	(			9	(		38
28	R1C10	0	)			0	)		39
29	R1C11	-	_			-	_		45
30	R1C55	=	+			=	+		46
31	R3C12	Backspace				Backspace			42
32	R1C13	←			4	←		4	92
33	R1C14				5			5	93
34	R1C15	→			6	→		6	94
35	R2C0	Tab				Tab			43
36	R2C1	q	Q			q	Q		20
37	R2C2	w	W			w	W		26
38	R2C3	e	E			e	E		8
39	R2C4	r	R			r	R		21
40	R2C5	t	T			t	T		23
41	R2C6	y	Y			y	Y		28
42	R2C7	u	U			u	U		24
43	R2C8	i	I			i	I		12
44	R2C9	o	O			o	O		18
45	R2C10	p	P			p	P		19
46	R2C11	#	~			\			50
47	R4C12	Enter				Enter			40
48	R2C13	End			1	End		1	89
49	R2C14	↓			2	↓		2	90
50	R2C15	Pg Dn			3	Pg Dn		3	91
51	R4C0	Caps				Caps			57
52	R3C1	a	A			a	A		4
53	R3C2	s	S			s	S		22
54	R3C3	d	D			d	D		7
55	R3C4	f	F			f	F		9
56	R3C5	g	G			g	G		10
57	R3C6	h	H			h	H		11
58	R3C7	j	J			j	J		13
59	R3C8	k	K			k	K		14
60	R3C9	l	L			l	L		15
61	R3C10	;	:			;	:		51
62	R3C11	'	@			'	"		52
63	R3C13	+				+			87
64	R3C14	Ins			0	Ins		0	98
65	R2C12	Del			.	Del		.	99
66	R4C14	Lt Shift				Lt Shift			225
67	R4C1	\				\			49
68	R4C2	z	Z			z	Z		29
69	R4C3	x	X			x	X		27
70	R4C4	c	C			c	C		6
71	R4C5	v	V			v	V		25
72	R4C6	b	B			b	B		5
73	R4C7	n	N			n	N		17

Key Position.	Row / Column	2230 UK Layout.				2230 US Layout.			USB / HID Code (Decimal)
		Base	Shifted	Ctrl+Alt	Num Lock	Base	Shifted	Num Lock	
74	R4C8	m	M			m	M		16
75	R4C9	,	<			,	<		54
76	R4C10	.	>			.	>		55
77	R7C10	↑				↑			82
78	R4C11	/	?			/	?		56
79	R5C14	Rt Shift				Rt Shift			229
80	R5C11	Num Lock				Num Lock			83
81	R5C0	[	{			[	{		47
82	R5C1	]	}			]	}		48
83	R5C10	Lt Control				Lt Control			224
84	R6C13	Lt Alt				Lt Alt			226
85	R5C5	Space				Space			44
86	R5C6	Space				Space			44
87	R7C13	Alt Gr				Alt Gr			230
88	R7C9	←				←			80
89	R7C11	↓				↓			81
90	R7C12	→				→			79
91	R5C10	Rt Control				Rt Control			231
92	R6C15	www.				www.			26,26,26,55
93	R7C15	.com				.com			55,6,18,16

Change History

Version	Date	Description of Change	Author
13	Sep 2024	Rear pod change – updated pictures	JS
12	Jan 2022	Rear pod change – page 6 updated	JS
11	June 2022	Firmware update for non-trackerball products to remove the HID mouse device from the encoder. New Firmware 11v01	JS
10	July 2021	White key products now have tactile ident on Enter and Down arrow keys No change to metal key products.	JS
9	Dec 2020	Added explanation of hidden code functions	JS
8	Oct 2020	Corrected temp to +70	JS
7	Jun 2020	Added Polymer Key version of 2212	JS
6	Jan 2020	Change to 250 Series encoder	JS
5	Oct 2019	PS/2 Codes removed	RP
4	July 2018	Added Compact 2205 version	JS
3	Apr 2018	Added Impact Rating for Robust version / Immunity now EN55032	JS
2	Jan 2017	Review and update to current range (PS/2 variant special order only)	RG