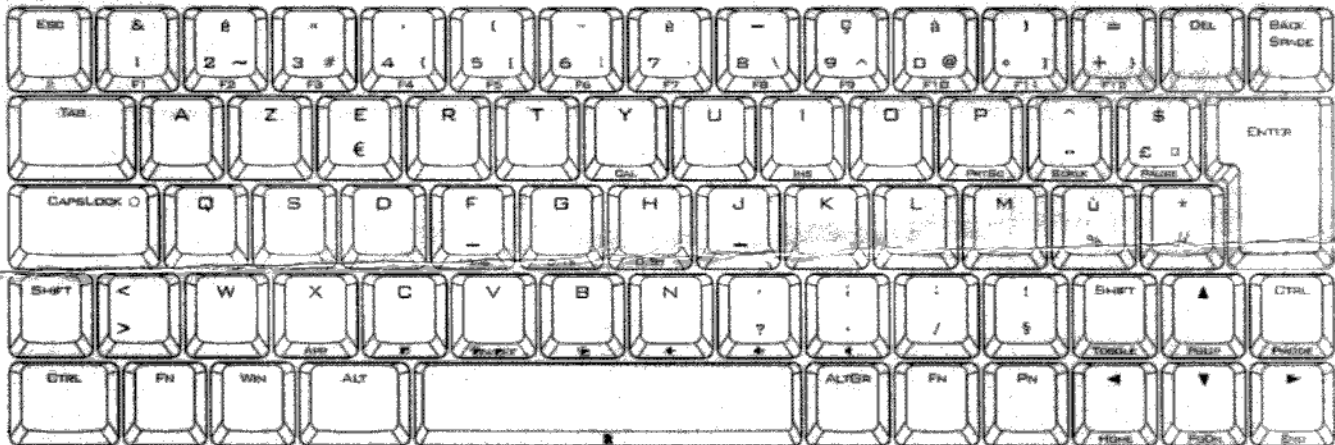# User Manual

FR Layout

Main Features:

1. Removable
2. 60% keyboard with QWERTY layout (67/68 Keys)
3. Cherry MX key switch (Black, Blue, Brown, Red)
4. Dual layer PCB
5. Key cap material: ABS(UV coating- Backlit version only), PBT
6. LED backlight (Backlit version only)
7. USB Interface

Package Material

1. Keyboard x 1
2. User Manual x 1
3. USB Cable x 1

Technical Specification

Number of keys:
US ASCII (67 keys) = US Layout
DE ASCII (68 keys) = DE Layout
ES ASCII (68 keys) = ES Layout
FR ASCII (68 keys) = FR Layout
UK ASCII (68 keys) = UK Layout

Available layout:

US	USA
DE	Germany
ES	Spain
FR	France
UK	United Kingdom

Dimension:
29.5 x 10.2 x 3.8cm (Keyboard)

Cable:
1.5 meters (mini USB B type)

Interface:
USB (DC5V ----300mA)

Key switch life time:
Cherry: >50 million actuations

Package:
20 keyboards / 1 outer box

Programming Instruction

1. Press PMode(FN + Right CTRL) to enter the programming mode (PN LED flashing)
2. Press the key you want to program (PN LED on)
3. Key in the programming content and then press PN (PN LED flashing again)
4. Repeat step 2 and step 3 to program other keys
5. Press PMode(FN + Right CTRL) to exit programming mode (PN LED off)

Note:

- Support FN layer programming, you can select the FN combination key (e.g., FN + A) to program it
- Under SELECT state (step 1), you can press PN + any key to view its content in a word processing software (e.g., Notepad)
- Support time delay, press 15ms key(FN + F) each time to delay 15ms, press 0.1s key(FN + G) each time to delay 0.1s, press 0.5s key(FN + H) each time to delay 0.5s. Consecutive delay will add up but will only be counted as 1 key stroke
- Every key can program up to 14 key strokes
- If there is no key pressed for 15 sec in programming, it will exit to normal mode

Programming Usage

Press PN + Programmed key, OR

Press Toggle(FN + Right SHIFT) to light up right FN key first. Then press the programmed key directly. If you press PN + Programmed key at this moment, it will output the original key code.

Programming Examples

1. Program A as 123: FN + Right CTRL, A, 1, 2, 3, PN
2. Continue to program FN + A as 456: FN + A, 4, 5, 6, PN
3. Continue to program B as CTRL + C: B, CTRL(Not release), C, Release CTRL and C, PN
4. Continue to program C invoking CMD under WIN7: WIN, C, FN + G, M, FN + G, D, FN + H, ENTER, PN
5. Finish programming: FN + Right CTRL
6. Invoking programmed A: PN + A => Output 123
7. Invoking programmed FN + A: PN + FN+ A => Output 456
8. Invoking programmed C: PN + C => Running CMD.EXE

9. Switch to PN layer: Toggle(FN + Right SHIFT) => Right FN LED on
   (1) Invoking programmed B: B => Output CTRL + C (Same as copy)
   (2) Invoking programmed FN + A: FN+ A => Output 456(No need to press PN)
   (3) Invoking programmed C: C=> Running CMD.EXE
   (4) If you need to get the A back (Now pressing A is 123): PN + A => A

Restore to factory default

Press and hold FN + R, Toggle LED is flashing after 3 sec. Continue to hold FN + R until the Toggle LED flashes for 9 times will restore to factory default.

FN General keys					Remark
FN	+	1	=	F1	Key code change
		2		F2	
		3		F3	
		4		F4	
		5		F5	
		6		F6	
		7		F7	
		8		F8	
		9		F9	
		0		F10	
		- _		F11	
		= +		F12	
		I		INS	
		P		Print Screen	
		[{		Scroll Lock	
		] }		Pause	
		X		APP	
		↑		Page Up	
		↓		Page Down	
		←		HOME	
		→		END	

FN Multimedia keys					Remark
FN	+	Y	=	Calculator	Key code change
		N		Volume Down	
		M		Volume Up	
		<		Mute	

FN LED Control keys					Remark
FN	+	V	=	Backlit LED on (Except Left FN, Right FN and PN)	Press the 1st time
				Backlit LED off	Press the 2nd time
		C		Reduce LED brightness	Totally 7 level of brightness, backlight status and brightness will be saved after power down
		B		Increase LED brightness	

FN Programming Control keys					Remark
FN	+	R	=	Restore to factory default	Need to hold for 12 sec
		Right SHIFT		Switch to program layer	Press the 1st time (Right FN on)
				Switch to visible layer	Press the 2nd time (Right FN LED off)
		Right CTRL		Enter Programming Mode	Press the 1st time (PN LED flashing)
				Exit Programming Mode	Press the 2nd time (PN LED off)
		F		Delay 15ms	Only valid in Programming Mode
		G		Delay 0.1s	
		H		Delay 0.5s	

FN Special keys					Remark
FN	+	Z	=	SHIFT key is down even when the SHIFT key is released. Press the SHIFT key again will make the SHIFT key up	Press the 1st time (Left FN LED on)
				SHIFT key returns to normal	Press the 2nd time (Left FN LED off)

DIP Switch				
	ON	**OFF**	**Remark**	
SW 1	CAP = Left FN CAP LED = Left FN LED	CAP = CAP CAP LED = CAP LED	Default = OFF	
	Left FN = CAP Left FN LED = CAP LED	Left FN = Left FN Left FN LED = Left FN LED		
SW 2	Right CTRL = ` ~	Right CTRL = Right CTRL	Default = OFF	
SW 3	N/A	N/A	Default = OFF	
SW 4	Write protect, try to press FN+R to program a key will cause PN LED flashing quickly for one sec and then returns to normal		Default = OFF	