1. QTLA Hardware Macro – Functions

- XG1-R LED has an extra internal memory and it supports hardware macro function which records the user defined macro keys directly and promptly without any SW.
- Hardware Macro doesn’t need any software or extra driver to set/use Macro feature. Even though user connects XG1-R LED to other PCs, user can use the same macro features instantly without any installation of SW or Driver. Just it’s true plug and play.
- XG1-R LED supports professional hardware macro features (4 distinct and different modes: Quick, Timing, Loop, Auto). So, we call it ‘QTLA’ Hardware Macro after the first initials of them.
- Factory defaults of 8 macro keys are same with F1~F8. ‘FN’ key also works as ‘ESC’ when it’s (pressed) entered alone.
- ‘Macro’ is to record the sequences of keystrokes and run the sequences when the nominated macro key is entered.

2. QTLA Hardware Macro

Quick Macro (Q1~Q3)  
- When a macro is recorded and programmed via Quick Macro, it ignores the time interval among each key input and runs the macro (nominated and input keys) with the fastest speed (30CPS) which OS can accept and support.
- For sample, even though user records and program "He..l...lo!" with different time interval among each character via Quick Macro, it runs "Hello!" with the fastest speed when the macro key is entered. It’s very useful for users to use their frequently used or repetitive sequences in gaming and office.

Timing Macro (T1~T3)  
- When a macro is recorded and programmed via Timing Macro, it remembers not only the input keys, but also the exact time interval among each key input. So, the macro runs the input keys with the same time intervals which user make in the previous macro setting.
- For example, if user record and program "He..l...lo!" with different time interval among each character via Timing Macro, it also runs "Hello!" with the same speed (which user set) when the macro key is entered. It’s very useful function when gaming to have exact timing, when you replay your Macro.
**Loop Macro (L1)**
- When a macro is recorded and programmed via Loop Macro, it remembers both the input keys and each time interval among input keys as it is, and then it runs and repeat it endlessly.
- For example, user record and program “He..l. . ..l..o!” with different time interval among each character via Loop Macro, it runs and repeats “He..l. . ..l..o! He..l. . ..l. . He.l. . ..l. . He..l. . ..l..o! He..l. . ..l..o! He..l. . ..l..o! He..l. . ..l..o!...” endlessly.
  It’s the great skill in the gaming because it can save the input timing intervals of keystrokes and repeat it endlessly.
- To stop “Loop Macro” function, press “Loop Macro” key again.
- User can input other keys additionally while running ‘Loop Macro’.

**Auto Macro (A1)**
- When a macro is recorded and programmed via Auto Macro, it remembers the input keys and make (keep) the nominated keys to be pressed continuously.
- For example, if user record and program a macro “ABCD” via Auto Macro, when the -macro (Auto Macro) run, the nominated keys “ABCD” are pressed and kept continuously. It’s good skill in the gaming where user need to any key (keys) to be pressed continuously.
- To stop Auto Macro, press “Auto Macro” key again.
- User can input other keys additionally while running ‘Auto Macro’.

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**3. How to set & use QTLA Hardware Macro**

**Macro Setting (How to set)**
1. Press any macro key (Q.T.L.A) you want to set while pressing <FN> key.
   For example, press “FN + Quick1” together.
2. When LED on <FN> key start blinking, start key inputs. It’s available to input and set max 180 keystrokes.
3. When you complete the key inputs for your macro, press <FN> key again. The nominated macro is finished and saved. The LED on <FN> key blinks fast and then stops blinking. It shows that the macro setting is finished.

**Macro Use (How to use)**
- To run the nominated macro, press ‘the Macro key’ one time.
- To stop the action of Quick Macro or Timing Macro, just press any key on the keyboard.
- To stop the action of Loop Macro, just press <Loop Macro> key again.
- To stop the action of Auto Macro, just press <Auto Macro> key again.

**Macro Delete (How to delete)**
- To delete all the nominated macro keys at one time, just press <FN> + <G> key together for 3 seconds. LED on <FN> key start blinking and delete all macros.
- To delete each macro key separately, just don’t input any key in the process of Macro Setting.
  While pressing <FN> key, just press the macro key (you want to delete) together and then, just press <FN> key again without selecting or input any key.
- If user set new macro on the nominated macro, the previous macro automatically is deleted.
• Factory defaults of 8 macro keys are same with F1–F8. If there’s no macro setting, they work F1–F8 in order.

Tip: ‘Macro’ in ‘Macro’ combination
• User can make and use ‘Macro’ in “Macro” function via the combination of QTLA Macro.
• First, record and nominate a Macro (ex: Q1)
  Second, record and nominate new Timing or Quick Macro. When recording the new Timing or Quick Macro, just nominate the first Macro (ex: Q1) key as the last input key. Then, 2 Macro keys run in order.
  We call it ‘Macro in Macro’. It’s a unique and special function of XG1-R LED.

4. LED Control

| Introduction | • XG1-R LED supports innovative and brilliant LED effects which you’ve never experienced.  
|             | • Press <FN> button and keep it pressed, it shows the current LED mode and status. (LED on each related key lights on)  
|             | • If “Back Light” brightness is set (adjusted) brightly and “Key LED” brightness is set darkly, it can make the reversed feeling like the pressed keys are turn off. |
| Light ON/OFF | • Turn On or Off LED backlit effect. |
| <FN> + <ESC> |  
| BackLight | • Adjust the brightness of backlit. |
| Brightness Control | <FN> + <F1> becomes dark and <FN> + <F2> becomes bright gradationally. |
| <FN>+<F1>~<F2> |  
| KeyLED | • Adjust the brightness of the key LED.  
| Brightness control | <FN> + <F3> becomes dark and <FN> + <F4> becomes bright gradationally.  
| <FN>+<F3>~<F4> | The brightness of Backlit and Key LED is significantly different; Key LED shows more distinct and clear LED effects. |
| Key Touch Mode | • The pressed keycap LED only turn on.  
| <FN> + <F5> |  
| Key Wave Mode | • Not only the pressed keycap LED, but also near keycaps LED turn on together. It shows the soft and beautiful wave effect, push <FN> + <F6> again to get 2 more lightning effects.  
| <FN> + <F6> |  
| Key LED Mode | • Turn on your favorite keycaps (LED) only. After pressing <FN> + <F12>, then |
<FN> + <F7> select your favorite keycaps you want to light up.

Key Mask Mode
<FN> + <F8>
- Turn on your favorite keycaps (LED) only, and then the lighted keys work only.
- In this mode, other keys don’t work even though they’re pressed.
- After pressing <FN> + <F12>, then select your favorite keycaps you want to light up and work.
- Caps lock, Scroll lock, num lock, Vol +, Vol -, Mute works normal regardless of Key Mask Mode.

Demo Mode
<FN> + <F9>
- 5 different patterns. Pressing <FN> + <F9> runs 5 different LED demo effect one by one.

Breath Mode
<FN> + <F10>
- Beautiful LED Breathing Mode at regular interval.
- All LED including FN, G, Caps lock, Scroll lock, num lock turn on and off together.

Equalizer Mode
<FN> + <F11>
- Fantastic LED Equalizer effect (5 different) moving according to the sound-level outside. Pressing <FN> + <F11> run 5 different LED effect one by one.
- AGC (Internal amplifier auto-controlling) function supported.

Define mode
<FN> + <F12>
- Define the nominated keys in ‘Key LED’ and ‘Key Made’ mode. After pressing <FN> + <F12>, select the keys. The selected Keycaps (LED) turn on.
- To cancel the key, just press the selected keys again.

5. Repeat Speed Control

- Repeat Speed Control (10 steps)
- To adjust and change the Repeat Speed, press <FN> + <Num Pad 0~9> together.
- <FN> + <Num 0> is standard speed and <FN> + <Num 9> is the fastest repeat speed.
- Repeat Speed means the input speed of one key which is pressed continuously.

6. Function Key

- Volume Down
- Volume Up
- Mute
- Windows key lock

“Calculator” Run by ‘Num Lock’: If you double click ‘Num Lock’ Calculator starts.