# Specification

Model: X59 Description: Wired mechanical keyboard with frontal layout

#### 1 Description

#### 1.1 Overview

RGB 2-block 89 keys wired mechanical keyboard

1.2 Features

This wired professional mechanical backlight gaming keyboard is suitable for personal users.

- ✓ 18 backlight modes selectable;
- Adjust brightness and speed freely;
- Customized backlight zone;
- ✓ Support fully anti-ghosting;
- 2. Hardware Spec.
  - 2.1 Cosmetic Spec
    - 2.1.1 Keyboard

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Size: 358.4*130.4*40.3mm \pm 2mm;
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Weight: 1330g (with extra weight inside)



- 2.2 Environmental specifications
  - 2.2.1 Operating Environmental

| Working temperature | -5~ +45℃           |
|---------------------|--------------------|
| Storage temperature | <b>-20 ~ +60</b> ℃ |
| Working humidity    | 10 ~ 90 % RH       |

| Storage humidity | 5 ~ 95 % RH |
|------------------|-------------|
|------------------|-------------|

## 2.2.2 Available Voltage range

| Parameter  | MIN | MAX | Unit |
|------------|-----|-----|------|
| Input (Tx) | 4.  | 5.5 | V    |

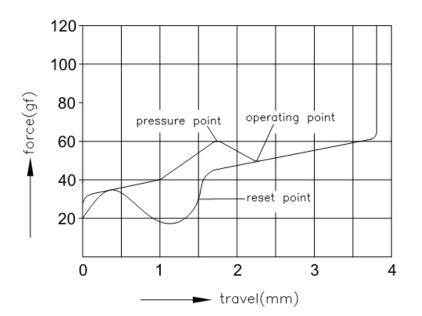
# 2.3 Main components specification

# 2.3.1 Keyboard

| Name of components       | Specification                     |
|--------------------------|-----------------------------------|
| Top case                 | ABS                               |
| Bottom case              | ABS                               |
| Keycaps                  | Double injection/ laser           |
| Feet                     | Double injection                  |
| Extra weight/Middle case | Metal ( <u>optional</u> )         |
| Pad                      | Black rubber                      |
| LOGO                     | laser/silkscreen/metal name plate |
| lampshade                | N/A                               |
| Rating label             | PET                               |
| МСИ                      | WTU811                            |
| Backlight                | RGB                               |
| Cable                    | 1.75 meter full length+ magnetic  |
| Cable                    | ring+ nickel plated USB           |

## 2.4 Mechanical properties

2.4.1 The standard keycaps of the keyboard



| Fp loading                      | 60±5gf        |
|---------------------------------|---------------|
| Work travel (Conductive travel) | 2.2±0.6mm     |
| Tactile Travel                  | 1.8±0.5mm     |
| Paragraph=(Fp-Fc)/Fp*100%       | (60-90)%      |
| Maximum travel (120g)           | 3.8±0.2mm     |
| Lifetime of switches            | 5000W, Outemu |

#### 2.5 Electrical spec

#### 2.5.1 Basic function

Definition of RGB Electrical Function

Insert USB and power on, 18 kinds of backlight modes cycled:

Waving to the Right side (default) - LED always ON - 7-color cycled breathing - single click to light up rotating horse racing - Spectrum of waving - waving to the middle zone - Ripple - Surfing - 3 glowing fish - Love Artifact - Colorful Fountain - Traffic LED - Gluttonous Snake - Dancing - Cross surfing - Neon - Random Waving

| А | <b>FN+</b> multi<br>media<br>hotkey | short cut key | shortcut key        |  |  |
|---|-------------------------------------|---------------|---------------------|--|--|
|   |                                     | Fn+ = music   | FN+ = previous song |  |  |

|   |                 | Fn+ = volut $Fn+ = volut$ $Fn+ = mut$ $Fn+ = stop$ $Fn+ = = stop$ | me +<br>e                  | Fn+= play/pauseFN+= next songFN+= backlight mode changeFN+= backlight mode changeFN+= PrintscreenFN+= Scroll lock/unlock |
|---|-----------------|---|----------------------------|--|
|   |                 |   | 1                          | FN+ = Pause  |
|   |                 | Short cut key   | Function                   | Status   |
|   |                 | lock  | Lock/Unlock Win<br>and APP | After lock the win key, this keyboard will be no function, press again, it will be unlock                                |
|   | <b>FN+</b> Keyb |   | Lighting mode<br>switch    | The default mode , wave to the right   |
|   | oard lock       |   | LED                        | 5-level of speed, only work when under dynamic   |
| В | functiona       | Fn+   | Speed down                 | backlight modes;   |
|   | l keys          | *   | LED                        | 5-level of speed, only work when under dynamic   |
|   |                 | FN+   | Speed up                   | backlight modes;   |
|   |                 | Fn+   | Increase LED<br>brightness | 5-level, works under all backlight modes;  |
|   |                 | Fn+   | Decrease LED<br>brightness | 5-level, works under all backlight modes;  |
|   |                 |   | Single color               | Only works when under backlight modes of LED   |
|   |                 |   | switch                     | always ON, 7-color cycled breathing, single click to   |
|   |                 | Fn+   | (forward)                  | light up, spectrum waving, ripple and Dancing  |
|   |                 |   | Single color               | Only works when under backlight modes of LED   |
|   |                 |   | switch                     | always ON, 7-color cycled breathing, single click to   |
|   |                 | Fn+   | (Backward)                 | light up, spectrum waving, ripple and Dancing  |
|   |                 | ffP   |                            |  |
|   |                 | En+   | side RGB switch            | Horse racing(default)/LED always ON<br>(6-color)/Neon/LED OFF  |
|   |                 | · · · · · · · · · · · · · · · · · · ·                             |                            | (6-COIOT)/NEOTI/LED OFF  |

## 2.5.2 Main Parameter of the keyboard

- 1) Working voltage : 5V $\pm$ 0.5V
- 2) Working current:  $\leq$  300Ma
- 3) Input method: USB
- 4) Backlight customized function (with driver)
- 5) Backlight effect of side lighting bars at two sides Horse racing - LED always ON - rainbow - Neon- LED OFF

|               | ſ | NI I |                                  |
|---------------|---|------|----------------------------------|
| By press FN + | ł | L    | to exchange the backlight modes. |

6) Automatic identification 6 key and N key, default 6 key

## 3. Software

- 3.1 Driver
  - ☑ YES □ NO
- 4. system requirement

XP/Vista/Vista 64/Win7/Win7 64/WIN8/WIN10