

# Specification

Model: X56

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.

- ◀ 14 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

Size: 352.4\*124.4\*36.9mm ±2mm

Weight: 1330g (with extra weight inside)



### 2.2 Environmental specifications

#### 2.2.1 Operating Environmental

Working temperature	-5~ +45°C
Storage temperature	-20 ~ +60°C
Working humidity	10 ~ 90 % RH

Storage humidity	5 ~ 95 % RH
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### 2.2.2 Available Voltage range

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

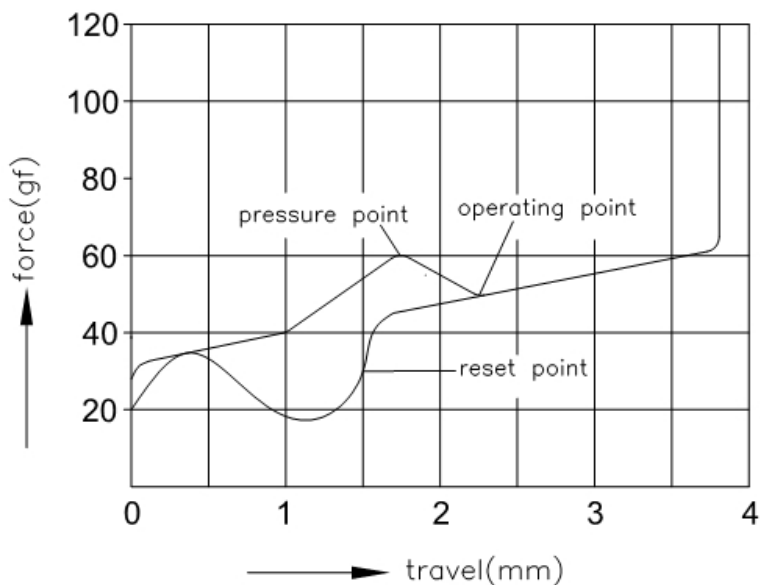
## 2.3 Main components specification

### 2.3.1 Keyboard

Name of components	Specification
Top case	Sandblasting oxidation black, edge wash around + highlight
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
Rating label	PET
MCU	BYK816
Backlight	RGB
Cable	1.5 meter full length+ magnetic ring+ nickel plated USB

## 2.4 Mechanical properties



### 2.4.1 The standard keycaps of the keyboard



Fp loading	$60 \pm 5\text{gf}$
Work travel (Conductive travel)	$2.2 \pm 0.6\text{mm}$
Tactile Travel	$1.8 \pm 0.5\text{mm}$
Paragaph= $(Fp-Fc)/Fp*100\%$	(60-90)%
Maximum travel (120g)	$3.8 \pm 0.2\text{mm}$
Lifetime of switches	5000W, Outemu









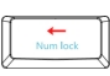









## 2.5 Electrical spec





### 2.5.1 Basic function

Definition of RGB Electrical Function			
Insert USB and power on, 14 kinds of backlight modes cycled: Star dot - no trace of snow - continuous flow - spectral cycle - breathing mode - constant bright mode - ripple diffusion - like a shadow and a touch - sine wave - walk in the rain - drift with the wave - Rainbow wheel - flowers blooming. (the default factory mode is star dot status)			
A	FN+multi media hotkey	short cut key	shortcut key
		Fn+  = music	Fn+  = previous song

B

**FN+Keyboard lock functional keys**

Fn+		= volume -	Fn+		= play/pause
Fn+		= volume +	FN+		= next song
Fn+		= mute	FN+		= backlight mode change
Fn+		= stop	FN+		= Printscreen
Fn+		= Num lock/unlock	FN+		= Scroll lock/unlock
			FN+		= Pause
Short cut key	Function	Status			
FN+		Reset function	Press and hold the FN + Del key for 5 seconds, the backlight flashes three times, and the keyboard factory settings are restored, and all user settings are restored to the factory mode		
Fn+		Record key / store key	First press and hold FN + 1 to define the backlight of CM1, and then press and hold FN + ESC to enter the recording mode. At this time, you can select the key you want to light up. After that, press and hold FN + ESC to save the backlight recording. The other four groups of operations are the same		
Fn+		Lock/Unlock Win and APP	After lock the win key, this keyboard will be no function, press again, it will be unlock		
FN+		Lighting mode switch	The default mode , star dot		
Fn+		LED Speed down	5-level of speed, only work when under dynamic backlight modes;		
FN+		LED Speed up	5-level of speed, only work when under dynamic backlight modes;		
Fn+		Increase LED brightness	5-level, works under all backlight modes;		

Fn+ 	Decrease LED brightness	5-level, works under all backlight modes;
Fn+ 	Single color switch (forward)	Only works when under backlight modes of LED always ON, 7-color cycled breathing, single click to light up, spectrum waving, ripple and Dancing
Fn+ 	Single color switch (Backward)	Only works when under backlight modes of LED always ON, 7-color cycled breathing, single click to light up, spectrum waving, ripple and Dancing
Fn+ 	side RGB switch	Horse racing(default)/LED always ON (6-color)/Neon/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

The method is as follows: first press and hold FN + 1 to define the backlight of CM1, and then press and hold FN + ESC to enter the recording mode. At this time, you can select the key you want to light up, and then press and hold FN + ESC to save and record the backlight. The other four groups have the same operation. For example: FN + CM1 and FN + ESC, the caps and num lights will flash quickly. At this time, you can press any key and have different light colors. Then press FN + ESC to save and record

#### Function description of indicator light

CAPS LOCK ; White light when functional

WIN LOCK ; White light when functional

Small number keypad: FN+ , Num LED lights up, and the number in the digital key area can be input directly

### Software

#### 3.1 Driver

YES  NO

### 3. system requirement

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