

user' s manual

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1. GENERAL

DK-2788UH model is a special game playing keyboard.

The keyboard configures special key layout with language according to the customer requirement. It is quite convenient for playing the computer game . Allowing this keyboard to be used with IBM PC or it is compatible running in WinNT,WIN2000,WIN XP and WIN Vista operating system.

The model has 7 hotkeys, And 2 USB hubs. And the keyboard's keys area can shine colour light or shut down through controlling the one of hotkeys.

2. MECHANICAL SPECIFICATION

2.1 Dimension and weight

2.1.1 Unpacked keyboard's structured dimensions and weight

Length: 364mm

Width : 214mm

High : 32.5mm

Obliquity: 3.0°

Fixation fashion: Used 9 screws to lock uppercase from lowercase.

Unpacked keyboard's weight: 0.94kg±0.01kg

2.1.2 Gift box's dimensions and the total weight including keyboard

Length:	384mm+/-1mm
Width:	245mm+/-1mm
High:	36.5mm+/-1mm
Total weight:	1.07kg±0.01kg

2.1.3 Carton's dimensions and the total weight including 10 PCS keyboards and 10 PCS gift boxes

Length:	401mm±3mm
Width:	376mm±3mm
High:	275mm±3mm
Total weight:	11.6kg±0.1kg

2.2. Material and texture

Key cap:	ABS 94HB	MT11010
Uppercase:	HIPS 94HB	MT11010
Lowercase:	HIPS 94HB	MT11010
Insert panel:	HIPS 94HB	Polished
Hot key:	ABS 94HB	Polished
Middle board:	ABS 94HB	Polished
Bracket:	ABS 94HB	YS1285B

Back light:	PMMA	Polished
Metal plate:	SGCC	
Metal bar:	SGCC	
Rubber dome:	SILICON DY35-700 /KE1940-40	
Rubber buffer:	Poron	
Foot pad:	SILICON	
IC:	AU9462	
Membrane:	Top:0.075mm, Septa:0.1mm, Bottom:0.10mm Printing SILVER on the basic material of PET	
Cable:	PVC, 5 pins, Extended length 1.80m, USB connector	

2.3 Color and feature

Uppercase:	#Black	Painting rubber oil and printing logo
Lowercase:	#Black	
Insert panel:	#Black	Painting UV
Key cap:	#Black	Used laser to mark
Hot key:	#Shine argent	Plating and printing mark
Bracket:	#Black	
Foot pad:	#Black	
Back light:	#Blue	
Cable:	#Black	

2.4 Rubber dome and switch characteristics

2.4.1. Rubber major characteristics

Peak force:	58±8gf
Total travel:	3.0±0.3mm
Bounce:	5ms max
Travel to make:	before 2.0mm
Return force:	≥15gf
Life:	≥10 millions cycle

2.4.2. Switch major characteristics

Peak force:	250±50gf
Total travel:	0.25±0.1mm
Life:	≥0.3 millions cycle

2.5 Back light major characteristics

Light color: blue or others

Luminance:

Life: more than 50 thousands hours

2.5 Test conditions

2.5.1. Drop test

Keyboard does not mar after the keyboard that was Packed with gift box dropped freely onto hard steel floor from 500mm height place.

Keyboard does not mar after the unpacked keyboard dropped freely onto hard steel floor from 400mm height place.

Keyboard does not mar after the keyboard that Was Packed With gift box in carton dropped freely onto hard Steel Floor from 500mm height place.

2.5.2 High temperature and low temperature storage test (no operation)

The keyboard store consecutively 96 hours in the room that's Temperature been in -30 degree to 70 degree and the Humidity been under 90% RH .

2.5.3 Cable strain fatigue test

Clamp keyboard in a stationary position pull cable with 4 kg force in different directions. And no function failure and cable damaged.

3. ELECTRICAL SPECIFICATION

3.1 Operating voltage

Voltage is supplied for keyboard : $5\pm 0.25V$.

3.2 Current consumption

Under normal 5 volt power supplied and no USB device connected ,

the current is no more than 150mA

3.3 Power consumption

Under USB device isn't connected to keyboard hub and backlight on , the power is no more than 0.8W.

3.4 Setting connector's (USB) level and timing of signal.

3.4.1 Signal Timing and Level

It is compliance with USB spec 1.1 full-speed requirement

3.4.2 Pin out of 4 pin USB connector

Should compatible with 4-Pin USB connection specified in USB spec Ver.1.1

3.5 Circuitry

3.5.1 PCBA

Microprocessor Alcor AU9462 technology performs most functions internally. Components and circuitry are laid out and routed on double side PCB.

3.5.2 Membrane

Key matrix traces with switch contact fingers are laid out and routed on a 3 layers membrane sheet.

3.5.3 Connecting PCBA and Membrane

Mechanical clamping mechanism provides contact between membrane and PCBA for connection scan lines and return lines on membrane key matrix to PCBA circuit via contact fingers.

3.5.4 Interface specification with host PC

The keyboard uses bi-directional serial interface to transmit and receive signals between the keyboard and the host unit

3.5.5 Logic Signals

The 'D+/D-' two lines used for data transmission between keyboard and host are compatible with USB SPEC 1.1

3.6 This product have obtained certificate of CE、FCC

3.6.1 EMS

EN61000-4-2, ESD (Electrostatic Discharge)

Air Discharge: 2,4,8KV

Contact Discharge: 2,4KV

EN61000-4-3, RS (Radiated Electromagnetic fields)

Test Level: 1V/m, 3V/m, 10V/m.

3.6.2 EMI

FCC part 15, subpart B, Class B

EN55022 Class B (CISPR 22 Class B).

4. OPERATION AND STORAGE ENVIRONMENT

4.1 Storage temperature: $-30^{\circ}\text{C} \sim +70^{\circ}\text{C}$.

4.2 Operating temperature: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$.

4.3 Storage humidity: Relative humidity within 30% RH~90% RH without condensation.

5. INSTALLATION EXPLANATION

Put the USB connector of keyboard into computer's USB Hub. And Make sure the icon in screen showed the device had connected , Then You can use it at your pleasure.

WOLF KING™

MADE IN CHINA
VOLTS: 5V 
AMPS: 150mA
Model: DK-2788UH
FCC ID: T8XWKKBDK2788UH

S/N: 

 Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE



PATENT NO. : ZL02245827.1
ZL 200430006884.9

The Windows logo is a registered trademark of Microsoft Corporation.

This device complies with Part 15 of the FCC rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Improper Or Prolonged Keyboard Use Result In Injury.

Caution

Keep dry. Precipitation, humidity, and liquids, contain minerals that will corrode electronic circuits.

Do not use or store in dusty, dirty areas.

Do not store in hot areas. High temperatures can shorten the life of electronic devices and warp or melt certain plastics.

Do not store in very cold areas. Moisture can form inside the case, which may damage electronic circuit boards.

Do not attempt to open the case. Non-expert handling of the device may damage the system.

Avoid dropping and strong impact.

Do not change or modification. It is not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.