

KD-202A-3 Head Lamp

USER MANUAL

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I .Brief introduction

Model: KD-202A-3

Scope of application: The product is elaborately designed for the auxiliary lighting of local examination and operation which are occasions of frequent mobility. It is used in dental department, operating rooms, doctor consultation and wild healing.

Characteristic: Adopt high power LED for lighting, long life of about 50000 hours. KD-202 A-3 has the fuction of AC and DC amphibious. It can work at the same time with charging.

Product component: lamp holder, hood, power box, power line etc.

II. Performance Summary:

This product uses wide voltage power supply system, high power LED lighting. Lamp holder is composed of optical lens and grating. Uniform distribution of light, clear and flare adjustable. The joint design of lamp holder and hood can realize the effective regulation of up and down angle. AC and DC can all supply power. This product is equipped with a magnifying glass joint, can be used together with a magnifying glass.

The design and production of this light source strictly executes the first part of the safety requirements of medical electrical equipment GB4793.1-2007: general requirements which is guaranteed in safety.

III Main technical parameters:

Color temperature: $6000k \pm 500k$

Lamp Power: 3W

Input power: $\leq 5W$

Charge Time: 5H

Power supply time: 4H

Input voltage: 100V-245V 50HZ-60HZ

IV Requirements of working environment

A. Environmental temperature: $-10^{\circ}C \sim +40^{\circ}C$

B. Relative humidity : $\leq 75\%$

C. The atmosphere: 86.0 kPa \sim 106.0kPa

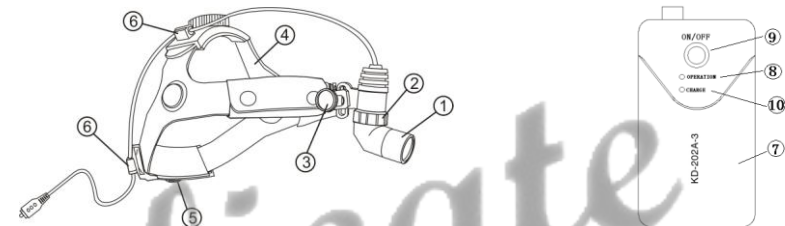
V Product list

Head light: one

Power box of A-3: one

Power line: one

VI Product interface



KD-202A-3

A-3 Power box

- | | | |
|------------------------------------|------------------------------------|-----------------|
| 1.Lamp holder | 2. Flare-adjusting ring | 3. Lock switch |
| 4.Head band | 5.Tightness-adjusting knob | 6.Card slot |
| 7.Power box | 8. Working indicator light (green) | 9. Power switch |
| 10. Charging indicator light (red) | | |

VII Assembly, debugging, operation

Assembly:

Open the packing box, check whether there are missing parts or damage phenomenon of the products according to the product list. If there is any problem, pls contact with the dealer or manufacturer in time to get solved properly.

Insert the power plug into the output port of the power supply box, turn on the power switch (8), the lamp lights up.

Debugging and operation

1. Wear the head lamp on head, adjust the tightness-adjusting knob(5) on the top and the back. It is advisable if the lamp is stable and you feel comfortable when looking up, down and sway your head.
2. Flare-adjusting ring (2) can help you to get the right spot size.
3. Loosen the lock switch (3) to adjust the angle and the height of lamp

holder. Lock it after it is appropriate.

4. Clip the back splint on the power box into the belt clip, or you can put the power box to your pocket.

VIII Note

1. When use the battery power supply, you need to charge in time if brightness of the light significantly weakened.
2. KD-202A-3 can work at the same time with charging.
3. You can't use liquid spray cleaners to clean the product.
4. You need to recharge in time when the battery power is not full, or the battery will be scrapped.
5. Battery life is of about 500 times to charge and discharge, please put the abandoned battery into a designated chemical waste.

IX Failure Judgment and Eliminating Methods

Fault phenomena	Fault cause	Solution
Turn on the power switch, the indicator is not bright	A.Run out of power	Charging in time
	B.Battery damage	Replace the same specification battery(2200mA)
	C.Power board fault	Contact with the after-sale service department for solution
Turn on the power switch, the indicator	A.Ligature of lamp holder hasn't been connected well	Connect the ligature well

is bright but the lamp is not bright	B.Not open the flare-adjusting ring	Transfer the flare-adjusting ring clockwise to the maximum
	C..Bulb is damaged	Replace the bulb
Other fault		Contact with the after-sale service department for solution

X After-sales service warranty

Warranty of 18 months, provide maintenance service all user's life.

◆In the warranty period, in normally using, the trouble because of the product quality, the consumer depends on the warranty slip and invoice enjoys free maintenance service.

◆If the error caused by remodel or install other functions which is without our company's permission, is not within the scope of warranty

◆If the model, number, release date is modified, deleted, moved or illegibility, will not enjoy the maintenance service.

◆The error caused by human factor such as falling, squeezing, dip in, wetting, etc. is not within the scope of warranty.

◆Once receiving the goods, please sign and accept it after opening the package to inspect and confirm whether the instrument is crushed, scratched or not. Make sure there is no special unnumbered inside. If the goods are damaged and you did not inspect before sign it, It will be at your own risk.

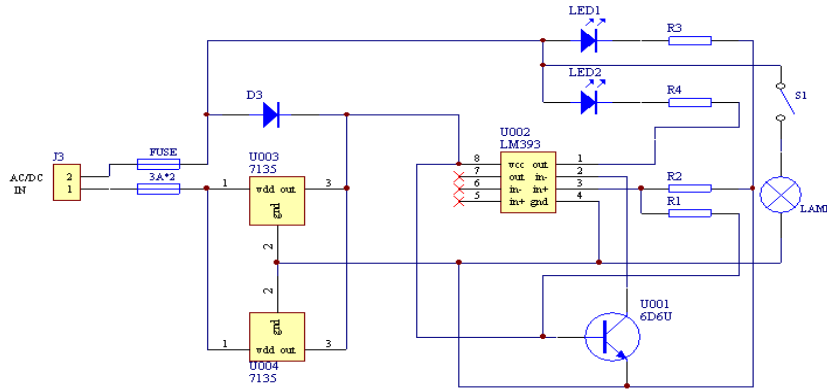
XI Transportation and rage conditions

A. Environmental temperature: -40℃~55℃

B. Relative humidity : ≤70%

C. The atmosphere: 50Kpa~106Kpa

XII Electrical schematic diagram and components list



N0.	Material name	Specification	Quantity	Remark
1	Circuit board		1	
2	Socket	2*2.54	1	
3	Fuse	F2A-L250	2	
4	Electric current detection chip	7135	2	
5	diode	IN4148	1	
6	Integrated circuit	LM393	1	
7	Indicator light	yellow/green	2	
8	Integrated circuit	6D6U	1	
9	Power switch	---	1	
10	Resistor	390Ω /0.125W	2	
11	Resistor	300K/0.125W	1	
12	Resistor	33K/0.125W	1	

Any products may be updated or improved. The change of circuit or element specifications of the product will not with prior notice.

2012 edition

Warranty card

Company name:			
Address		Phone No.	
Product name		Model	
Serial Number		Manufacture date	
Sale date			
Fault description:			
Remark: The warranty of our products is 18 months since the release date.			

(Please truthfully fill in this form, cut it according to the dotted line and send it back to our company, thank you for your cooperation)

Maintenance card

Company name:			
Address		Phone No.	
Product name		Model	
Serial Number		Manufacture date	
Sale date			
Fault description:			
Remark: You can enjoy seventy percent discount for the maintenance services even if you use this card over the quality assurance period.			