

KD-202-B-1/ KD-202B-2 Examination lamp

# USER MANUAL

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## I Brief introduction

**Scope of application:** KD-202-B-1/ KD-202-B-2 ceiling examination lamp (can also be classified as operation light, is suitable for the auxiliary lighting in the operating room, examination room and veterinary hospital.

**Characteristic:** The lamp uses the long-life and low-energy LED light source which has the characteristics of simple operation, easy installation, safety with low voltage, hard to be damaged.

**Product component:** Lamp holder, lifting arm, rotating arm etc.

## II Performance Summarize

It is designed with the system of low voltage output cold lighting, wide voltage power supply which can adapt to the voltage of the countries all over the world.

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 are guaranteed in safety.

## III Main technical parameters

Input voltage: 90V~240V 50Hz-60Hz

Color temperature: 6000K $\pm$ 500K

Center Luminance:  $\geq 80000\text{lx}+80000\text{lx}$  (1000mm point)

Spot diameter: 110~200mm (1000mm point)

Lighting depth: 200mm

Maximum wingspan length: 1800mm

Fluctuation displacement: 1100mm

Lamp rotating angle: 300°

Led light bulb: 3W\*36

Input power:  $\leq 120\text{W}$

DC voltage: 12V

Fuse protector: F3A-250V

## IV Security tips and symbol instructions

When the check lamp is in use, you should always abide by the basic safety precautions in order to avoid fire, electric shock or the risk

of injury.

(1) Please read the instructions carefully, and operating according to the specifications and requirements.

(2) Before cleaning the light, please unplugged the power cord and close the total power supply.

(3) The maintenance, installation, commission of the light should be operated by professional personnel.

(4) The introduction of the following symbols



Attention! Check the random documents!



Protect the grounding!



Disconnect the power



Connect the power



Open the lamp



Close the lamp



Minimum brightness



Maximum brightness

## VI Product list

### 1.KD-202B-1

Rotating arm: one

Lifting arm: one

Lamp holder: one

Installation disk: one

Disinfecting knob: one

## 2.KD-202B-2

Rotating arm: two

Lifting arm: two

Lamp holder: two

Installation disk: one

Disinfecting knob: two

## VII. Product interface

(1) Lamp holder: luminophor of the lamp

(2) Disinfecting knob: the regulating handle of the lamp holder in the operation process

(3) Operating box: light switch and brightness adjustment

(4) Lifting arm: supporting arm to adjust the height of the lamp

(5) Rotating arm: connector to the support of the subpanel

(6) Subpanel: the fixed device to connect the lamp to the roof

(7) Lamp holder connector: connector of the lamp holder and the lifting arm.

(8) Lifting arm connector: connector of the lifting arm and the rotating arm.

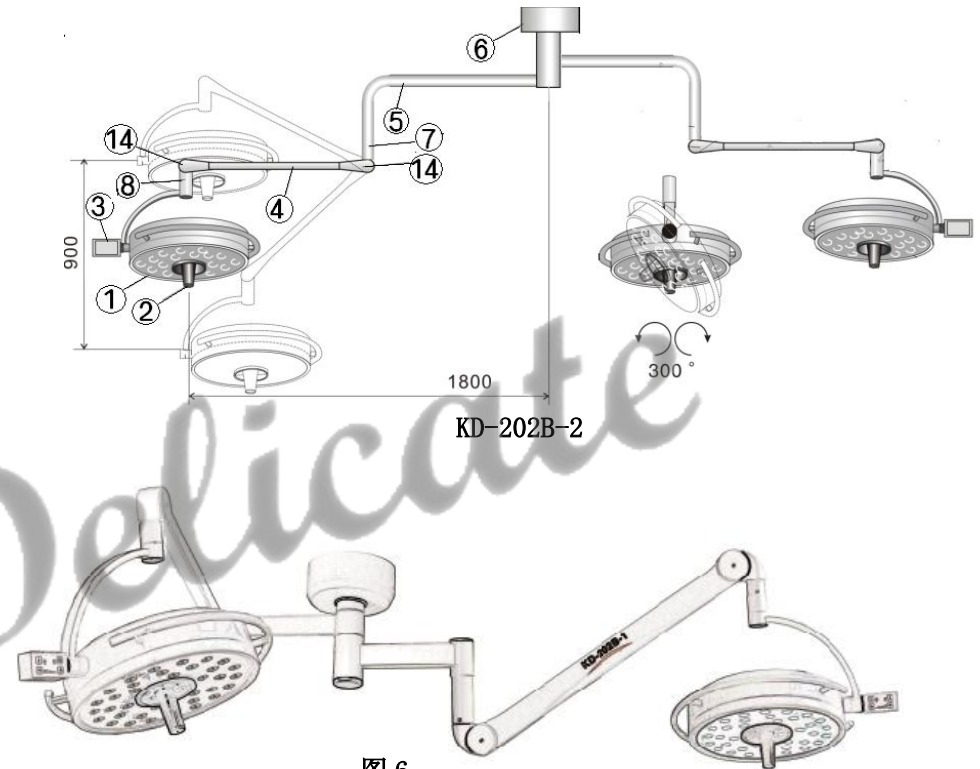
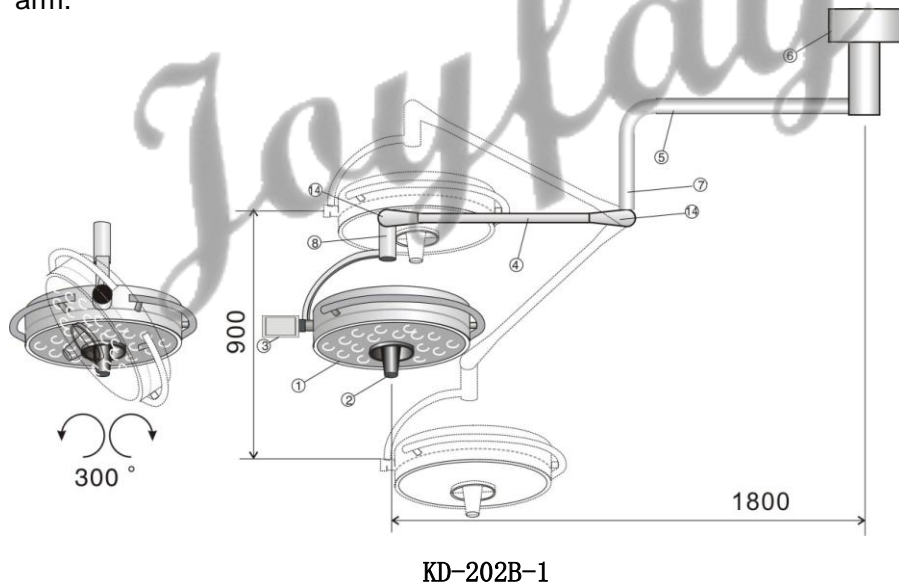


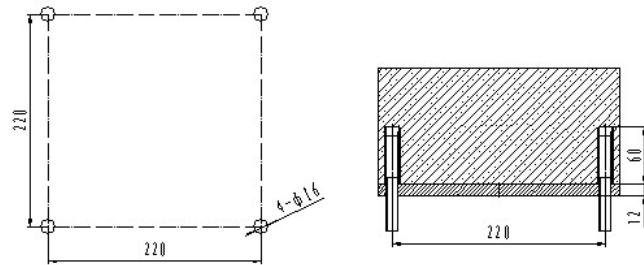
图 6

## VIII Installation instructions

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, please contact with the dealer or manufacturer in time to get solved properly.

1. Installation of the subpanel: Mounting dimensions is as shown in picture 2, lifting arm connector in the subpanel must be firmly welded to the steel frame or prefabricated steel in the roof. It needs 10 days that you can do the next operation before the coagulation time of the cement cast (as shown in picture 3-1). **Note: You mustn't use expand bolt or other simple, easy installation. To ensure safety, you must use the**

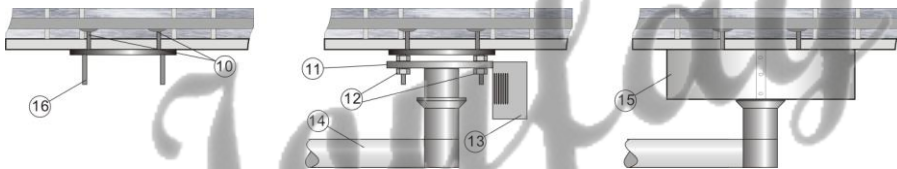
way of pouring concrete or embedded board to connect the light!!



**picture 2**

2. Installation of the rotating arm: first install it to the positioning stem (16), and then set it into the ring flange (11) in the rotating arm (5), install the adjustable nut (12). Adjust the rotating arm (2) level by the adjusting nut, tighten the fixed nut (as shown in picture 2-2).

3. Installation of the top cover: first connect it to the AC power supply, make sure that both the connection and insulation are good. Then thrown up the top cover, fix it with screw nuts to make it immovable.



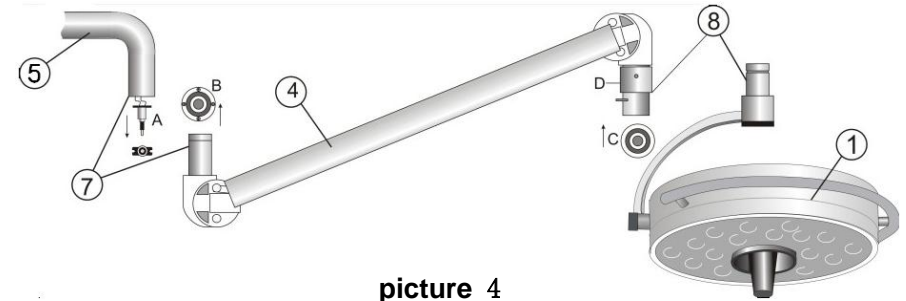
**picture 3-1**

**picture 3-2**

**picture 3-3**

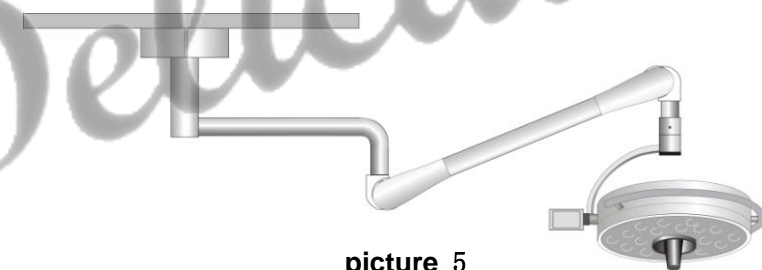
4. Installation of the lifting arm: first connect the lifting arm (4) and rotating arm (5) (as shown in picture 3). Insert the electrode bar in the joint point A of the lifting stem into point B, tighten the two fixed screws and then throw up the adapting piece (7) into the rotating arm, screw down the four fixed screw.

5. Installation of the lamp holder: joint the power supply connectors of the lifting stem and the lamp holder, loosen the fixed screw in point D, push the sheath up, take out the fixed pin, insert the lamp holder connector (8) into the lifting arm, install the fixed pins, set down the slide bushing and screw down the screws (as shown in picture 4).



**picture 4**

Cover the guard board (14) in the lifting arm and the installation process of KD-202B-1 is over (as shown in picture 5).



**picture 5**

The install method of KD-202B-2 is the same as KD-202B-2 and the complete figure is as shown in picture 6.



**picture 5**

## IX operating instructions

The examination lamp consists of three parts: lamp holder, lifting arm and rotating arm. You can electrify operate it when the installation is completed.

1. There are four control buttons in the control box (3), namely the power on, power off, the largest and smallest brightness.
2. By pressing ON, the lamp begins to work, pressing Min or Max can adjust the light intensity, pressing Off the lamp stops working.
3. Adjusting the handle in the lamp external, you can adjust the lighting angle.
4. Rotating disinfecting handle (2) can change the flare size.

## X Note

1. When installation, please assembly and reinforce according to the instruction of the technical requirements.
2. Illuminating position in the operation process is controlled by the handle of the disinfecting knob.
3. You should disinfect the disinfecting knob in time after operation.
4. Before cleaning the light, please unplugged the power cord and close the total power supply.
5. Never put any item on the power line.
6. Do not use liquid spray to clean the light.
7. The maintenance, installation, commission of the light should be operated by professional personnel.

## XI Failure Judgment and Eliminating Methods

(It should be operated by the professionals)

Fault phenomena	Fault cause	Solution
Turn on the power switch, the lamp is not bright	Power lines have no electricity	Connect to the circuit where there is electricity supply
	The power cord is not connected well	Reconnect the power cord
	Fuse damage	Change the fuse
	(7) and (8) in picture 4 are not connected well	Reconnect them well
	Brightness adjustment button is not open	Re-install the bulb firmly
Other fault	System line fault	Contact with the after-sale service department for solution
		Contact with the after-sale service department for solution

## XII 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.

◆The bulb of the lamp is LED and the normal life of LED bulb is about 50000 hours. Generally, you do not need to change them.

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

- ◆ If the model, number, release date is modified, deleted, moved or unrecognized, 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.

A. Environmental temperature:  $-40^{\circ}\text{C} \sim 55^{\circ}\text{C}$   
 B. Relative humidity:  $\leq 70\%$   
 C. The atmosphere:  $50\text{Kpa} \sim 106\text{Kpa}$

[illegible]

N0.	Material name	Specification	Quantity	Remark
1	Circuit board	7D1A	1	
2	Field-effect tube	SL20C20U	1	
3	Filter choke	220mH	1	
4	Inductance	470mH	1	
5	Capacitance	F103M/2KV	3	
6	Capacitance	22nj/T100V	1	
7	Capacitance	102M/2KV	1	
8	Electrolytic capacitor	50V/1uf	1	
9	Capacitance	222J/250V	1	
10	Capacitance	102J/100P	1	
11	Electrolytic capacitor	50V/4.7uf	3	
12	Filter capacitance	0.1uf	2	
13	Resistance	150K/0.25VA	1	
14	Resistance	15Ω /0.25VA	2	
15	Resistance	120KΩ /0.25VA	1	
16	Resistance	1.2KΩ /0.25VA	1	
17	Resistance	3.9KΩ /0.25VA	1	
18	Resistance	680KΩ /0.25VA	1	
19	Resistance	24Ω /0.25VA	2	
20	Resistance	3.9K/0.25VA	2	
21	Resistance	100Ω /3VA	1	
22	Resistance	680Ω /3VA	1	
23	Diode	F107	6	
24	Diode	IN4752	2	
25	Diode	IN4148	2	
26	Audion	1815	3	
27	Thermistor	5D-15	1	
28	Piezoresistor	10D471K	1	
29	Integrated circuit	LM494	1	
30	Rectifier bridge	KBU810	1	

31	lamp	LED	54	
32	Power socket		1	
33	Power line		1	
34	Fuse block		2	

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. <input type="text"/>
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)

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## Maintenance card

Company name:			
Address			Phone No. <input type="text"/>
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.			