FCC ID: 2AA55120TO200

For Model: SBF6130-YQL120, SBF6130-YQL150 SBF6130-YQL200,

SBD1130-YQL120 SBD1130-YQL150, SBD1130-YQL200

# Maintenance- free, Energy-saving floodlight INSTRUCTION MANUAL

#### Performance and structure

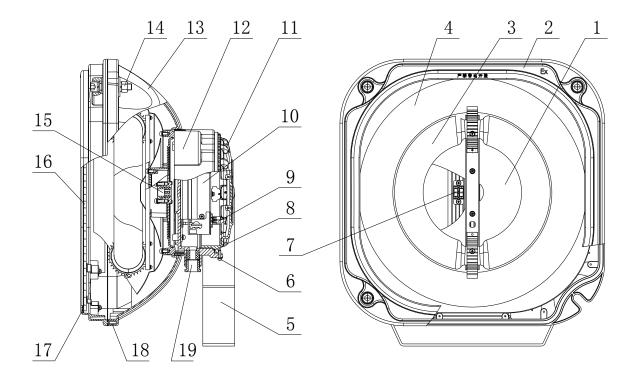
- 1. The fixture is compound explosion proof electrical equipment. Flameproof Contorols, Increased safety light source cavity and connection wire cavity are die-casted by aluminium alloy, and the surface is painted by polyester powder.
- 2. The tensile strength of shell's aluminum alloy material is more than 120MPa, Magnesium ratio is less than 6%, has strong corrosion resistance
- 3. The shell's structural strength of Flameproof Contorols can endure Specific gas explosion without damage, and once, Thread flame-proof structure run into explosion at the internal, can make internal combustion through the flame-proof path and rapid cooling, and serve to prevent propagation of explosion and reduce internal blast pressure
- 4. Fixture has independent light source cavity and electrical appliance cavity, there has air convection isolation space between light source cavity and electrical appliance cavity, can effectively reduce the quantity of heat of light source cavity to affect the Contorols.
- 5.Plane diaphanous glass has toughening treatment, high luminousness, good heat resistance and upheaval performance, and good impact resistance
- 6. There has the rubber seal ring at the joint surface of fixture's cavity, and ensure the fixture have good protection performance, and guarantee the fixture's water proof and dust proof performance
- 7.Induction lamp is selected to be the fixture's light source, and is equipped with high stable frequency and high stable power output ballast, has the advantages, such as, voltage can be widely used, high light efficacy, no visual fatigue, long lifespan etc
- 8. Fixture pass EMC test, no electromagnetic pollution, quick start, and also have short circuit, open circuit protection function
- 9. The fixture is equipped with external pressure type cable entry equipment, used for user entry line and cable seal.
- 10. Adopt straight cutting type user terminal, and connect lime expediently and reliably
- 11. Fixture's Holder type mounting bracket can adjust the irradiated angle horizontal downward biggest  $25^{\circ}$  or horizontal upward biggest  $60^{\circ}$ , and each grade  $5^{\circ}$
- 12. Fixture is applicable to Ceiling, Bracket, Flange Stanchion, Holder etc mounting types, and the fixture's structure please see Picture 2, and mounting drawing please see Picture 3

#### **Installation and Maintance**

- **1.** Before installation, user should confirm that whether the installation type is suit for the configuration of fixture.
- 2. Fixture should be avoided to endure the impact of the external force, in order to avoid to affect the performance of explosion-proof and dust-proof
- 3. The fixture's Contorols thread flame-proof surface was painted with rust-preventative oil before delivery,

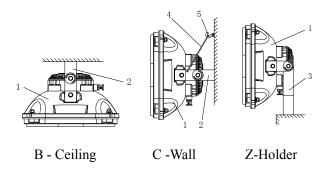
user should protect it, and do not damage flame-proof surface

- **4.** User should choose the different installation types to install the fixture correctly.
- 5. Installation
- 1) As picture show, make connection of fixture's mounting bracket fasten on the mounting base of the fixture. The screws of the mounting bracket should be more than 2 pcs

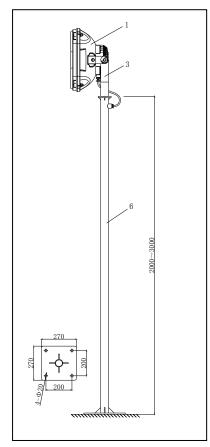


#### Picture 2

1-Sub-reflector 2-Fixture cover 3-Light source 4-Main reflector 5-Mounting bracket 6-Contorols cover stop screw 7-Light source cavity binding post 8-Contorols seal ring 9-User terminal 10-Ballast components 11-Contorols cover 12-Contorols shell 13-Light source cavity shell 14-Front cover fastening screw 15-Ballast output incoming line 16-Glass 17-Glass seal gasket 18-Light source cavity seal ring 19-Cable incoming line

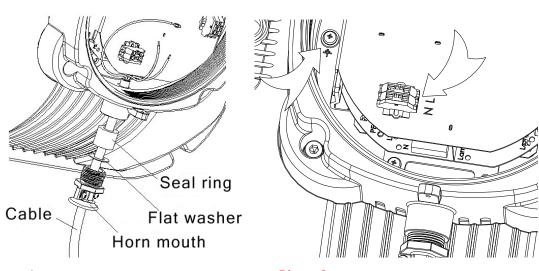


- 1-lighting fixture
- 2-Wall holder
- 3-Seater holder
- 4-Draw Bar (Customer-provided himself)
- 5-Hook Nail (Customer-provided himself)
- 6-Flange Stanchion (Customer-provided himself)



E- Flange Stanchion

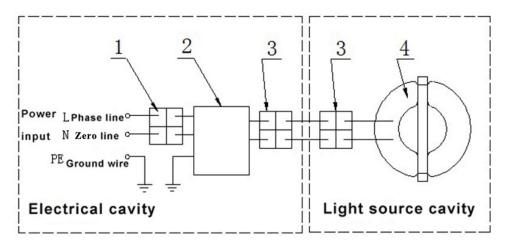
#### Picture 3



- Picture 4 Picture 5
- 2) Screw specifications and spacing, pls check pircture 1, before install the fixture on the soil base by flange stanchion type, user should precast concrete foundation base, base depth should be more than 0.8 metre
- 3) Remove the Contorols cover stop screw, (see the Picture 2), and open the Contorols cover
- 4) Before the cable is leaded into the Contorols, the cable scarfskin should be striped, the length of phase line and null line is 8 to 10 cm, and strip head 8mm, then wring conductors and bond tin, the length of ground wire is 18 to 20 cm, strip head 8mm, then stranded conductor, and cold-pressed (or weld) soldering

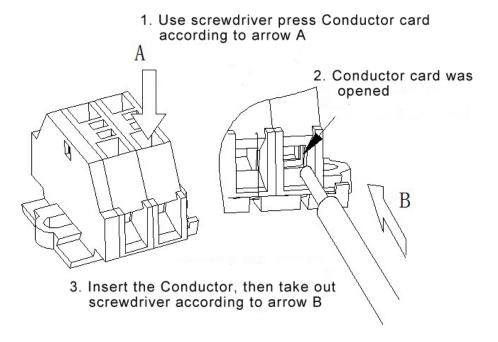
lug.

- 5) Unload the gland nut (horn mouth), flat washer and cable seal ring on the cable incoming line. And lead the power cable into the Contorols according to the Picture 4. Screw gland nut, fasten the cable, and seal. The cable with scarfskin should not be longer than 10mm in the Contorols.
- 6) Lead in the phase line and Zero line in the Contorols, and connect the terminal "L" and "N" separately, ground wire should be connected with screw according to the requirement (please see Picture 5 arrow signified). Wiring diagram, please see Picture 6. The fastened method for guide line and binding post, (please see Picture 7)

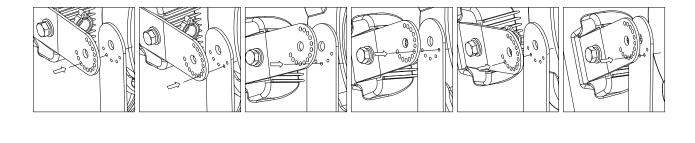


## 1-User binding post; 2-Ballast; 3-Binding post; 4-Light source

# Picture 6 Wiring diagram



Picture 7



downward 15°

downward 20°

downward

downward 10°

25°

#### Picture 8

horizontal

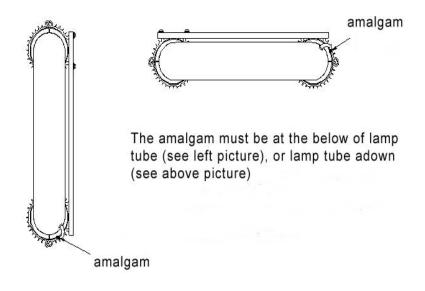
7) Screw on the Contorols cover, reset the Contorols cover stop screw

downward 5°

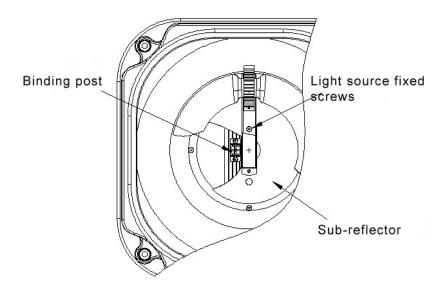
8) Adjust the fixture irradiation angle. There has the round holes on the Fixture 's mounting bracket and the connection of the connecting plate, choose the different collocation, then can adjust the different irradiation angle (please see Picture 8), but must note the fixture with horizontal plane angle can not be greater than 90 degrees. Flange stanchion, Wall and Holder installation type can be adjusted biggest 25° horizontal downward, and 60° horizontal upward, and each adjusted grade is 5°.

#### **6.** Check the fixture installation

- 1) The fixture should be installed at the solid and reliable foundation base, and in order to keep the lamp's explosion-proof and protection performance, the lamp cover and Contorols cover of the fixtureshould be fastened down,
- 2) In use, the amalgam part in the light source bulb should be at the below of the light source, or see the diagram (please see Picture 9)
- 3) The convection holes, at up and down of the joint's between Contorols and Light source cavity, should not be covered up by the foreign matter
- 4) Whether inside and outside ground connection is connected according to requirement, and effectively



Picture 9



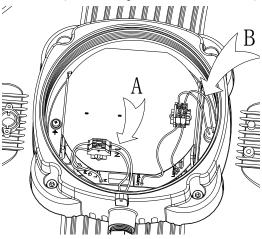
#### Picture 10

## 7. Change the light source

- 1) demount the four pcs fastening screws on the fixture cover in sequence. Pay attention there have no other structure part connector between fixture cover and shell
- 2) demount fastening screws on the light source and sub-reflector, and demount the light source and binding post connector. (Please see Picture 10)
- 3) Retighten the light source and sub-reflector after change the new light source, please pay attention to the direction of the amalgam when fasten the light source (Please see the Picture 9)
- 4) Fasten the fixture cover. Before faten the cover, align the fixture cover and shell first, then fix the fastening screws, the four screws should not be wrested in the place, should wrest them in sequence, the best is making the stress degree screws similar, and make the stress degree of fixture cover equaly

#### 8. Change the ballast

1) Open the Contorols cover, demount the connecting wire between power wire /ballast and lead out conductor (Please see picture 11, A/B arrows)



Picture 11

2) demount the fastening screws of ballast heating panel

- 3) After change the new ballast, retighten the fastening screws of heating panel, the connecting wire between power wire /ballast and lead out conductor
- 4) The connected method of the conductor and binding post. (Please see Picture 7)
- 9.L1/L2/L4 (electric filter)and C1/C2/C7/C8 (EMC Capacitors) is a filter, can prevent to make the noise for Public AC power lines, at the same time, AC voltage will be changed to a stable DC voltage by booster composed by D1/D2/D3/D4 (BRIDGE), Q1(mosfet), L5 (active transformer) and components involved in it, then DC voltage is changed to High AC voltage which the frequency is 250kHz±30kHz by Q3/Q4 (mosfet) and components involved in it, then is transformed to lamp, then the lamp is lighting. Rated power of the lamp is 120W and rated current of it is 0.55A. Rated power of the lamp is 150W and rated current of it is 0.68 A. Rated power of the lamp is 200W and rated current of it is 0.91 A.; The rated power and current of ballast are the same as the lamp.

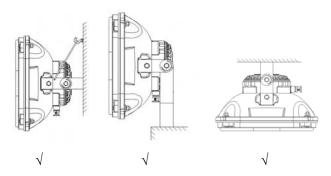
#### **Attention**

- 1. In order to ensure explosion proof lamp work and safety regularly, the serviceman should be trained professionally, then can install and maintance. Not-professional person should not open the fixture, and do not demount any fastening parts.
- 2. All procedure of install and maintance should be corresponded to Country's relevant laws and regulations, prohibit to operate when power on. Before change the light source, the light source should be cool
- 3. Should have the professional serviceman maintance and repair.

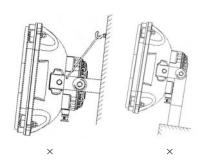
In order to ensure the safety, the serviceman should use the professional working platform, ladder, safety belt etc special equipments,

Inspect the condition of the explosion proof lamp regularly. If find parts broken and missed, should repair and supply on time, find the seal rubber ring and other plastic parts aged, should change them, and avoid to affect the explosion-proof and safety performance of the fixture

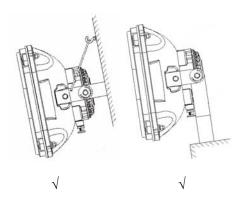
- 4. Should pay attention to manage the parts demounted, and avoid to miss the parts, and then the missing parts falling from the sky injure the people
- 5. The angle of fixture with horizontal plane, must be less than 90 degree.
- 1) Installation the angle is 90 degree, and 0 degree ( $\sqrt{}$ )



2) Installation the angle is more than 90 degree  $(\times)$ 



3) Installation the angle is less than 90 degree ( $\sqrt{}$ )



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