

# **USER INSTRUCTION**

**TELESCOPIC MAST LIGHT**

**MODEL TM-series**

## **I . IMPORTANT ELUCIDATION**

Thank you for purchasing our TM-series light tower. This manual supplies you with detailed information for TM-series. In order that you use the product better and ensure performance safety, hope you can read this manual carefully before use it. We believe that you can get some aid from it to avoid system damage.

Usually our corporation will take charge of guiding installing, if the accidents occur because of dismantling by you or contravene the manual to operate while install or after install, our corporation will not take charge of these accidents or loss. If you find trouble on the system, please contact us first and our engineer team will provide professional guaid to fix it.

## **II . SAFTY NOTES**

1. Keep the equipment disconnected with power before using.
2. Only trained personnel could install, use or maintain this system.
3. Before connecting with power or operating the equipment, ensure no high voltage or other articles within 10 meter on the top of it. Otherwise, it will cause you injured or systems damaged.
4. Don't put hand or objects on system flex point, otherwise will cause you injured.
5. Don't look at the lighting directly with your naked eyes, otherwise will cause temporary blindness.
6. When the device is working, ensure no other objects hit the car body or the device.
7. The equipment will be quite fervor during working, please make sure no flammability and easy exploding material touch the light.
8. Don't keep equipment working when you brake or equipment is bumped down.
9. Don't move the car after setting up the pole to avoid damaging system components.
10. Don't use or place any magnetic object under the equipment within 5 meter,

otherwise system could not be controlled normally.

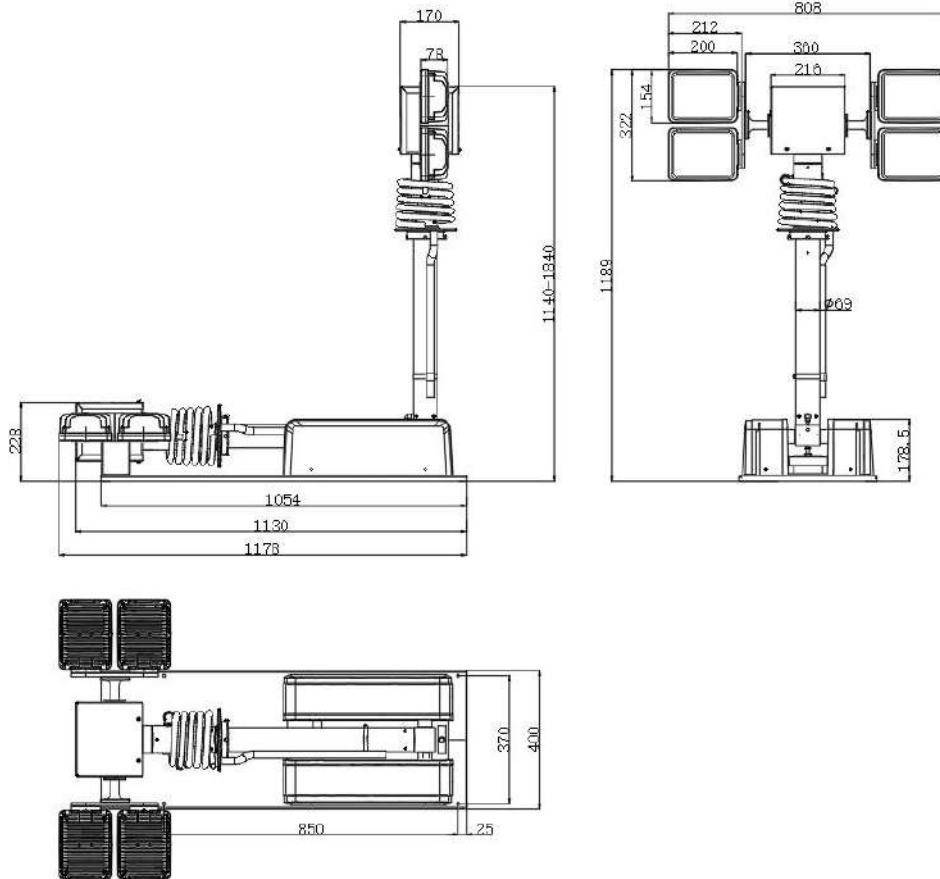
11. Please ensure correct passing height when passes over a bridge, otherwise the device will be permanently damaged.
12. Don't install the equipment permanently in danger zone, such as the zone of flammability and easy exploding existed with paint, gasoline easy ect.
13. Pneumatic lifting pole is a kind of pressure equipment. When the light pole is stretched out, please keep the distance from the pole and not lean directly on the it.

### **III. PRODUCTION INSTRUCTION**

Lifting vehicle-mounted mobile lighting equipment is a vehicle-mounted, omni-directional positioning night emergency lifting lighting equipment. It has two control modes: wired control and wireless remote control. The system has the characteristics of automatic reset, reliable performance, convenient operation, and advanced design.

This equipment is suitable for emergency lighting at night, can be installed on cars or fixed objects. It can be widely used in various night lighting such as emergency lighting for engineering repairs, disaster rescues, fire-fighting lighting, police scenes, and night photography.

## IV. FIGURATION DRAWING AND DIMENSIONS



## V. MAIN TECHNICAL PARAMETER

Working voltage:	DC12V
Working current:	$\leq 50A$ (max)
Extended height:	1800mm
Level circumvolve radius:	500mm
Level turn angle:	$380^\circ$
Vertical turn angle:	$330^\circ$
Rotating speed:	4r/min
Lamp Power:	120W*4pcs (LED)
Whole weight:	55Kgs
Luminous flux:	50400Lm
Tube usage life:	20000h

## **VI. INSTALLATION**

### **1. OPENING PACKAGE**

- 1) Be careful to open package and take out all of parts;
- 2) Check all of damage caused by transport;
- 3) If damage happened, please inform transporter;

### **2. PACKING LIST**

- 1) TM-series Light equipment: 1set
- 2) Wired & remote controller: 1 set
- 3) USER MANUAL: 1pc

#### **Notes:**

- a) When moving equipment, should move the bracket, make sure not move only lamp or pole to avoid cause damage for device;
- b) Put equipment level and rigidity plane position and ensure the level place could endure 70KGS weight;
- c) Don't try to connect the equipment with power, otherwise will cause to injure;

### **3. INSTALLATION**

- 1) Before installing and under installation, make sure no high altitude electrical wire or other disadvantage factors, remain enough space for mast to rise, drop and rotating;
- 2) When installing the equipment on the roof of vehicle, should be sure the level place of the vehicle could endure 70kgs weight;
- 3) According to the equipment size drawing, add 4 mounting holes and 4 screw holes at a suitable position on the roof for corresponding installation;
- 4) Be sure to fix tight the bolt to prevent suddenness.

## 4. OPERATIONS

### 1) PTZ rotation control button

- Press“UP” for lamps rotating up;
- Press“DOWN” for lamps rotating down;
- Press“LEFT” for lamps rotating left;
- Press“RIGHT” for lamps rotating right

### 2) Lamp 1 and lamp 2 control button

- Press“Light 1” for left light on & off;
- Press“Light 2” for right light on & off;

### 3) “Reset” control button

- Press “Reset” for lighting equipment automatically back to the design position. At this time, no matter where the pan/tilt is located, as long as you press the "reset" button, the pan/tilt will automatically reset to the horizontal design position.

### 4) “Rise” control button

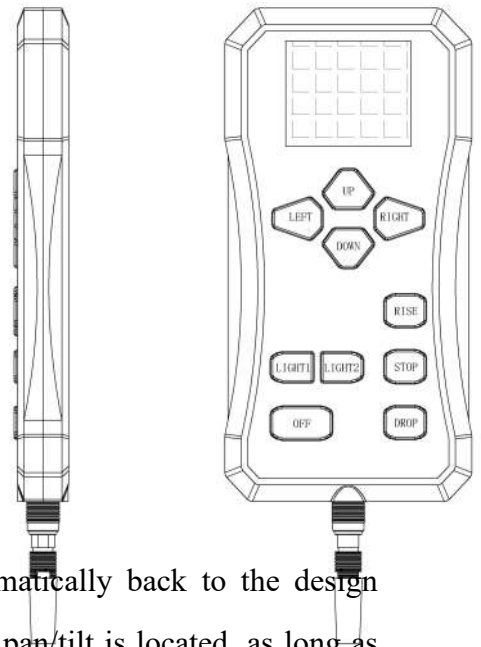
- Press “Rise” button on the control box to raise the light pole from 0° to 90° and then the air pump will work, light pole will rise to the maximum vertical height under the action of compressed air. Then the air pump continue to work for 5-10 seconds to pressurize the light pole until the light pole stops at the highest position.

### 5) “Drop” control button

- Press “Drop” for mast pole telescoping down, but can not folded down.

### 6) “Stop” control button

- Press “Stop” to stop mast pole telescoping up or down.



## 5. MAINTENANCE OF LAMP POLE

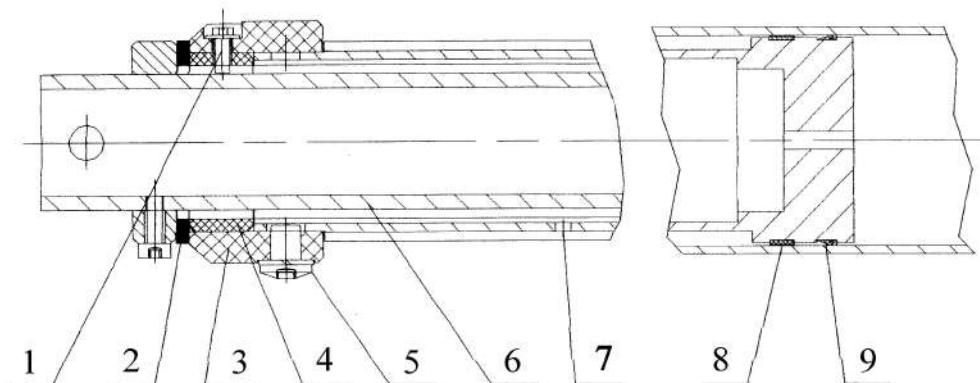
Mast should be often washing and lubrication to confirm easy operation

and extend life time. According to the environment of application and the frequency of use of the product, maintenance should be at least once a month.

Should maintain the equipment when the following phenomena appear:

- a) Exterior surface of mast has obvious dust;
- b) The lamp pole fails when it rises or falls
- c) Has noises when it works;
- d) A certain part of the light pole becomes sticky when the light pole rises or falls

### Configuration of mast



- 1-nylon bolt    2-buffer rubber cushion    3-outer hoop    4-outer hoop circle  
5-bolt of outer hoop fixture    6-mast    7-water hole of lamp pole  
8-fixture hoop    9-airtight circle

### 6. Steps for washing and lubrication of lamp pole

- 1) Get rid of top load of mast in order to make mast extend easy;
- 2) Add pressure to mast slowly, making mast just rise to the tiptop position;
- 3) Using non wearing cleanser or dissolvent to clean the surface, ensure cleanser or dissolvent not to flow inside;
- 4) Passing outer water hole of mast, pour into applicable lubricant or oil of machine;
- 5) Reduce the pole to the lowest level, wait a few minutes for the lubricating oil to fully cover the pole;
- 6) Extend the light pole repeatedly, and wipe off all the oil overflowing from

the water outlet hole;

- 7) Ensure out surface no adhesion lubricating oil, otherwise mast will be easy dirty;
- 8) Be careful to extend mast, should not directly lean on the mast.

## **7. Steps of checking up mast**

The above saying is about outer maintenance of mast and lubricating of direction. When need to open mast in order to maintenance deeply, steps as follows:

- 1) Set up mast vertically, but not extend it;
- 2) Cut off power;
- 3) Remove the connecting screw between the lifting mast and the rotating head, and remove the rotating head to put it into one proper position. Note: do not pull and turn the mast by force and do not damage the lamp glass;
- 4) Unplug the air inlet pipe of the light pole and release the air pressure in the pole
- 5) Take off outer hoop of mast in turn and clean it. Take off fixture hoop, clean chamfer of hoop, use oil paint thinner to clean insider and outer of light tube. Pay attention not to cleaner which maybe damage inside surface of mast;
- 6) Dismantle in turn from small to large things, clean spare parts of mast;
- 7) If fixture hoop and airtight circle and relieve rubber cushion have been damaged, should be replace rightly;
- 8) Coat the inner surface of the light pole with a layer of lubricating oil or a proper amount of engine oil to lubricate the fixing hoop and sealing ring. Reinstall the light pole according to the position and state when it was taken out; pay attention to the inner surface of the smallest section of the light pole not to be coated with lubricating oil.
- 9) When install mast, should be insure location of airtight circle right and not to be damaged, otherwise may be cause leak air. If bring out surface of leak air, should be remove spare parts of mast, reinstall or replace airtight circle;
- 10) When reinstalling the light pole, reinstall the outer hoop immediately, and pay attention to the position and direction when removing it.



- 11) The nylon screw on the outer hoop is used to fix the outer hoop liner and adjust the gap between the liner and the lamp pole. When reinstalling, the nylon screws should not be tightened too tight, and the light pole can be pulled manually.
- 12) Reinstall the light pole in the position when it was taken out, and tighten the fixing screws of the outer hoop.
- 13) Install lamp back to the original position and plug link pin back;
- 14) Reinstall the lamps, and reinstall the mounting screws and tighten them.
- 15) Reinstall the intake air pipe.
- 16) Make the light pole reciprocate and retract, and wipe off all the excess lubricating oil overflowing from the water outlet hole of the light pole, and clean the surface of the light pole with detergent.