



X-POLE SOLAR

2x30W LED

Solar Lighting Tower

USER MANUAL



Dear customer,

We would like to thank you for your recent purchase of our lighting tower. With the correct operation and maintenance of the lighting tower, the unit will provide reliable long-term service use.

This manual is intended for users of the lighting tower and has been compiled from information available and current at time of approval for printing. We reserve the right to improve and modify this manual and the lighting tower without prior notice.

Please be aware that this manual may refer to controls and optional equipment that are not fitted on the version of the lighting tower you have purchased.

*It is a requirement that you understand and are clear on the correct operation and maintenance of the lighting tower before operating, so **please read thoroughly and contact PR Power for further clarification.***

Documentation delivered with the lighting tower:

- User's manual;
- Engine manual;
- Alternator manual;

The logo for PR POWER, featuring the letters 'PR' in a large, bold, blue font, followed by the word 'POWER' in a smaller, bold, blue font.

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SAFETY RULES

SAFETY PRECAUTIONS TO BE OBSERVED

Read this manual and learn the operating characteristics and limitations of the machine before operating it.

The manufacturer declines all liability for injury to persons and damage to components due to not respecting the safety rules.

Report all malfunctions to a maintenance responsible. If there are any repairs to be done, do not operate the equipment. Normal service and maintenance, if performed as required, can prevent unexpected and unnecessary down time. This manual describes standard inspections, operation and servicing with the normal safety precautions required for normal servicing and operating conditions. Operators and maintenance personnel must be safety conscious and alert to recognize potential operating or servicing safety hazards at all times. They should immediately take the necessary precautions to ensure safe operation and servicing of the machine.



- ☐ Be aware of operating risks that may be created by weather changes. Follow the correct procedures in the event of heavy rain or electrical storm.

- ☐ **ALWAYS** ensure that the tower is level prior to raising the mast.
- ☐ Lower tower when not in use, or if high winds or electrical storms are expected in the area.
- ☐ Use protective clothing and safety equipment:
gloves, safety boots, safety hard hat, goggles, ear protection, and dust masks when necessary.
- ☐ Know all side clearances and overhead obstructions for safe operation of the machine.
- ☐ **ALWAYS** make sure area above the tower is open and clear of any kind of obstruction.
- ☐ Position and operate the lighting tower on a firm surface.
- ☐ Keep area around the machine clear of people while raising and lowering the mast.
- ☐ **NEVER** using the unit if it is in need of repair.
- ☐ Check that winch cables are in good condition and are centered on each pulley.
- ☐ **DO NOT** permit to untrained personnel to operate the machine.
- ☐ **NEVER** operate a unit if you are tired, not concentrated or under the influence of drugs or alcohol.
- ☐ Keep children and animals away from the machine.
- ☐ To improve the stability and wind rating of the tower it is recommended to increase the internal load. The additional weight of the internal load reflects the following:
 - Factory standard machine = 80km/h wind resistance.
 - Factory standard machine + 200kg = 100km/h wind resistance.
 - Factory standard machine + 300kg = 110km/h wind resistance.

FLAMMABLE FLUID PRECAUTIONS



- ☐ **DO NOT** clean the unit components using flammable fluids.
 - ☐ **DO NOT** use the machine in areas with risk of explosion or fire.
-

SAFETY RULES

FLAMMABLE FLUID PRECAUTIONS



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ELECTRICAL HAZARD



- ☐ **NEVER** operate lights without protective lens cover in place or with a lens cover that is cracked or damaged!
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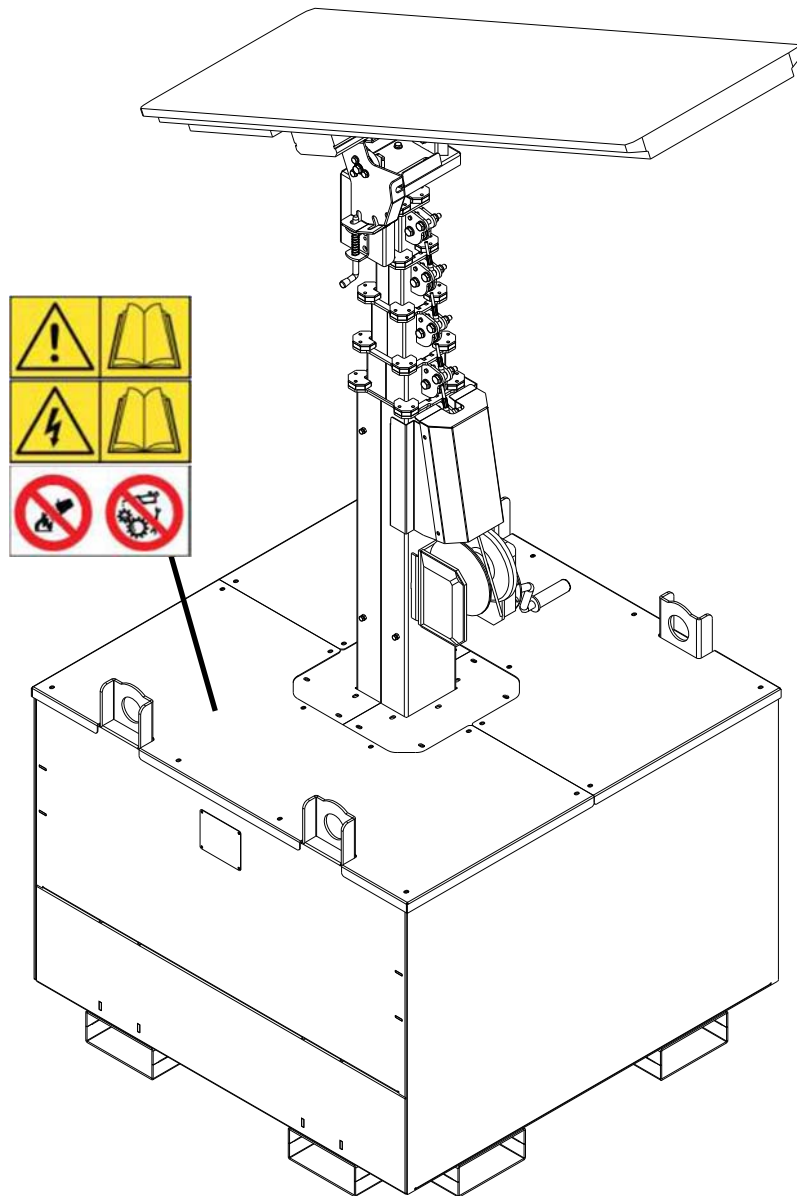
LUBRICATION AND SERVICING



- ☐ Only authorized and trained personnel is allowed to perform the machine maintenance.
Please read the operator's manual and maintenance manual before using or servicing the machine.
 - ☐ Only a qualified electrician should troubleshoot or repair electrical problems occurring on the machine.
 - ☐ Check and replace all missing and hard-to-read labels.
 - ☐ Make sure slings, chains, hooks, ramps, jacks, and other types of lifting devices are attached securely and have enough weight-bearing capacity to lift or hold the equipment safely.
-





SAFETY RULES





SAFETY STICKERS GUIDE



SAFETY RULES

SAFETY STICKERS MEANINGS

STICKERS	MEANING
	Attention! Read user's manual before operating the machine.
	Attention, high voltage! Read user's manual before operating the machine.
	Prohibition of extinguishing fires with water; use fire extinguishers containing proper extinguishing agents.
	Prohibition of cleaning, lubricating, repairing or adjusting moving parts.

STICKERS	MEANING
	Attention! Danger of crushing.
	Attention, battery on board. Contains corrosive liquids.
	Earthing point. The grounding of the machine always needs to be done paying attention on the section of the cable to be used (never to be less than 10 mm ²).
	Lifting point. Ensure lifting device has enough capacity to handle machine weight.

TECHNICAL SPECIFICATIONS

LIGHTING TOWER IDENTIFICATION

1			
2			
Year of manufacture: 3		Type	4
5	LAMPS	W	6
	SOLAR PANEL	W	7
	BATTERIES	Type	8
		Number	9
		Power	10
Dimensions L x W x H		11	
Weight		12	
SERIAL N°		13	

1. Manufacturer's logo
2. Manufacturer's address
3. Manufacture year
4. Machine model
5. CE Logo
6. Lamps rated power
7. Solar panel rated power
8. Batteries type
9. Batteries number
10. Batteries rated power
11. Dimensions
12. Weight
13. Machine serial number

Information regarding the machine model, code and year of production is on the unit serial number plate. Always quote the machine model and serial number when contacting your dealer, the factory and for any spare parts requests. All of our products comply with CE requirements. They are conform to directives and fulfill all the relevant safety requirements.

TECHNICAL SPECIFICATIONS

TECHNICAL DATA

FLOODLIGHTS

Type	LED
Power (each)	30W
Floodlights number	2
IP level	65
Illuminated area	480 sqm

MAST

Lifting method	Manual
Maximum Height	8 m
Maximum Wind Speed	80 km/h

BATTERIES

Type	Lithium
Batteries number	2
Power Batteries pack	1024 Wh

SOLAR PANEL

Power	200 W
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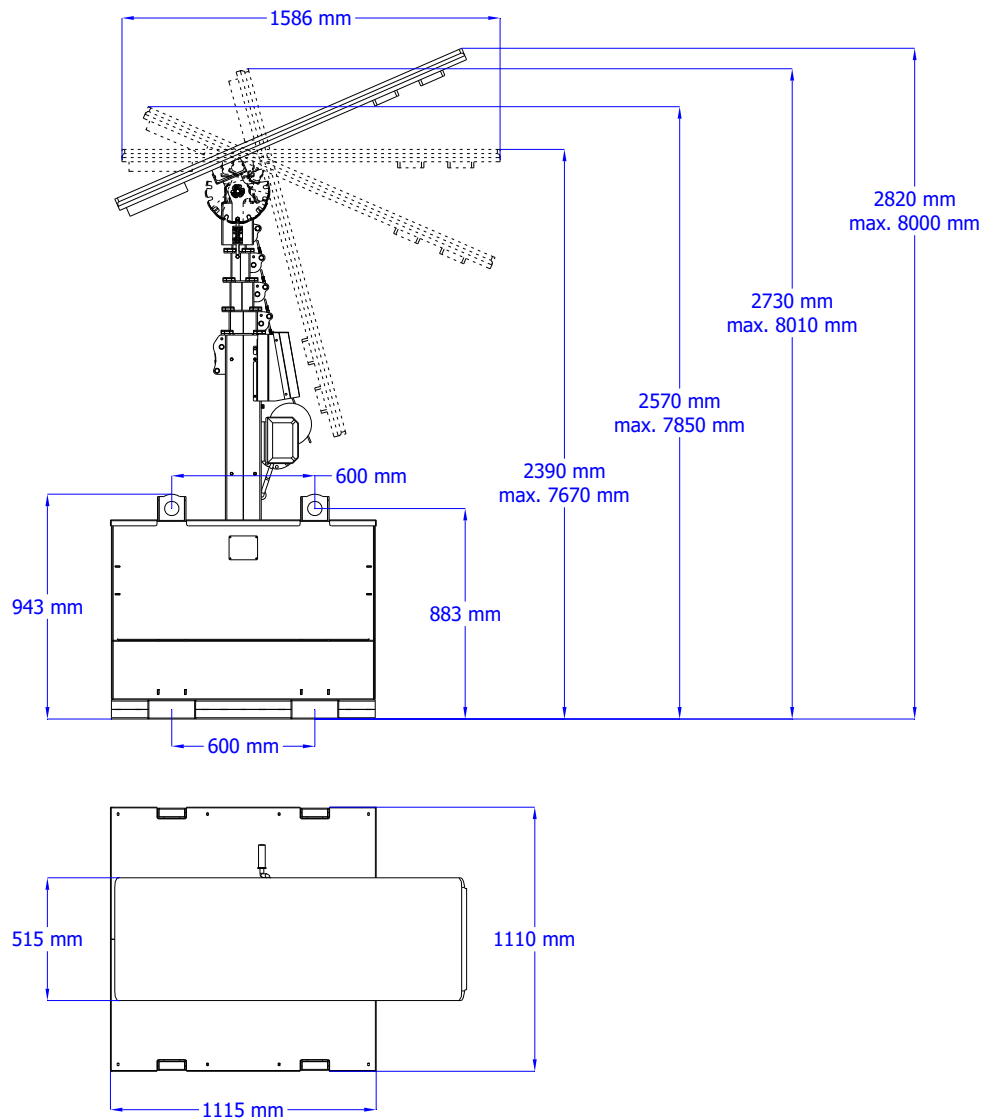
SOLAR MODE

Minimum working Full Bright	15 h
Minimum working dim mode	58 h

GENERAL

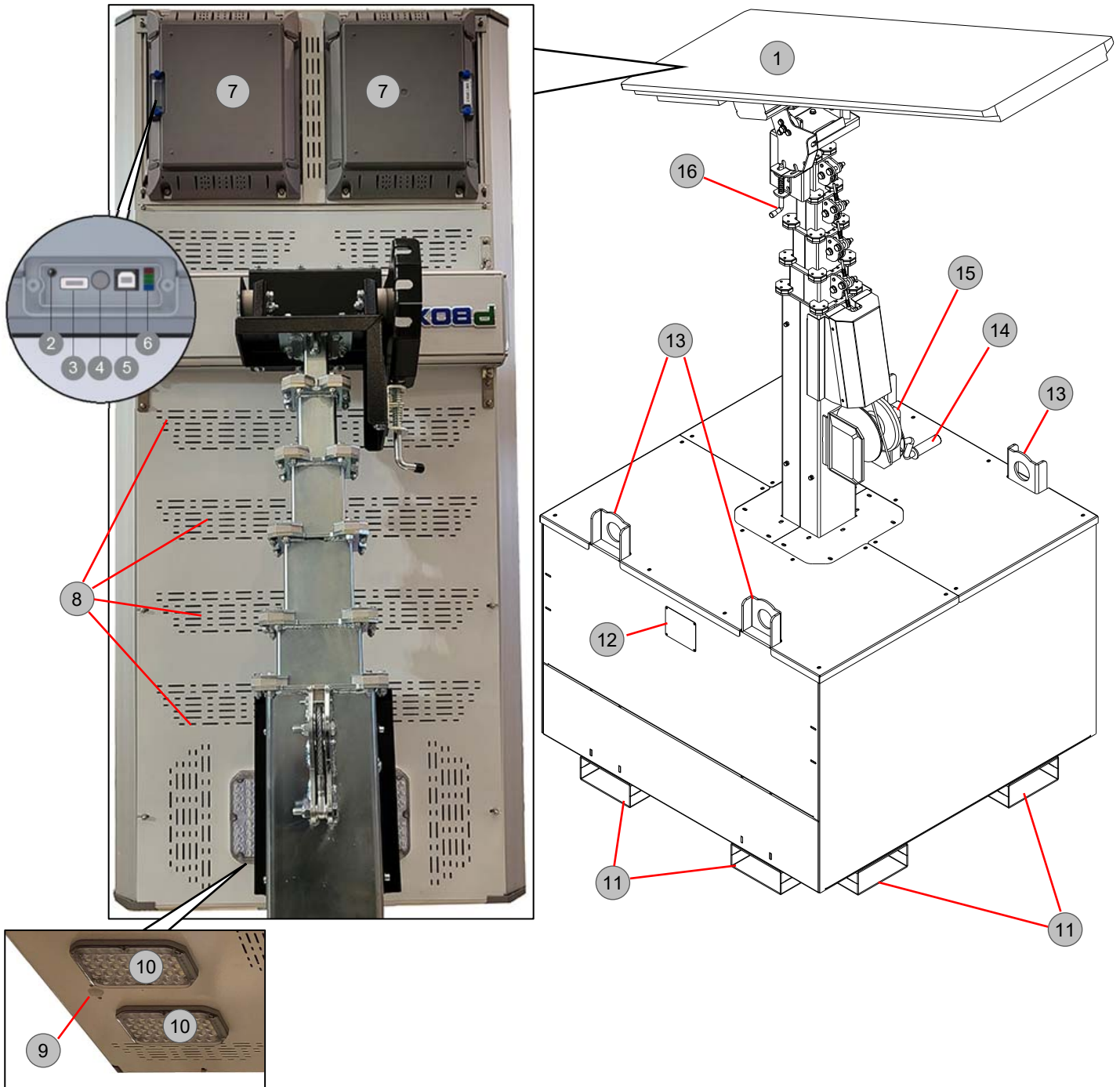
Weight	410 kg
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DIMENSIONS



TECHNICAL SPECIFICATIONS

MACHINE COMPONENTS



- 1.Solar panel
- 2.Infrared remote control receiver
- 3.Battery charging USB connector (14 Vdc 1.5 A power supply)
- 4.On / Off button
- 5.Type B USB port (**do not use**)
- 6.Function indicator lamps
- 7.Lithium-iron batteries
- 8.Vents (heat dissipation)
- 9.Motion sensor

- 10.Led lights
- 11.Fork lift pockets
- 12.Data plate
- 13.Lifting eyes
- 14.Winch handle
- 15.Winch
- 16.Solar panel inclination locking pin

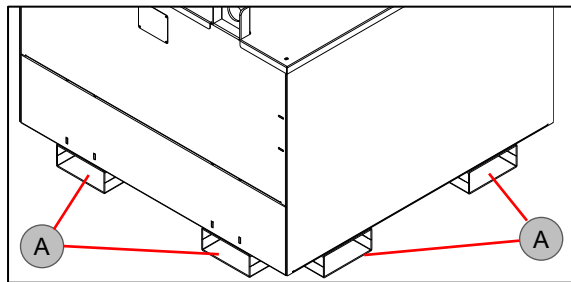
HANDLING AND TRANSPORT



- ☐ All lifting operations must be carried out by qualified personnel, such as fork lift operators, crane operators and slingers. The operator should be deemed responsible for using the correct method of slinging and lifting the unit.
- ☐ Never leave the load insecure.
- ☐ When moving and transporting the machine, do not tilt it excessively.
- ☐ When lifting and moving the machine, do not stay or walk within it's proximity.
- ☐ Never leave the machine slung overhead.

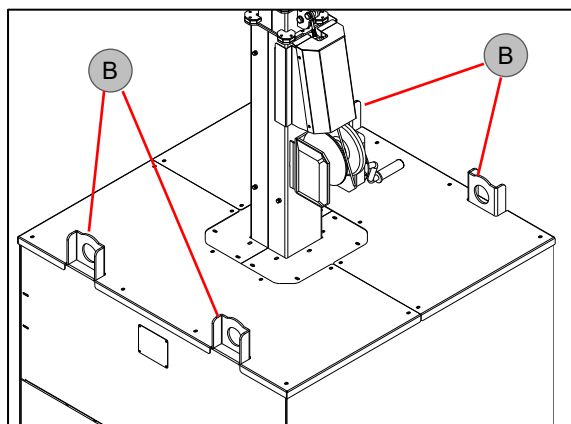
HANDLING AND TRANSPORT WITH FORKLIFT

- ☐ Ensure that the lifting capacity of the forklift is suited to the weight of the machine to move. The weight is specified in the provided documentation (user's manual) and on the data plate.
- ☐ Insert the forks into the forklift pockets **(A)**.
- ☐ Lift the machine for about 10 cm (4 in.).
- ☐ Move slowly and position the machine where needed.



HANDLING AND TRANSPORT WITH CRANE

- ☐ Ensure that the lifting capacity of the crane and lifting devices is suited to the weight of the machine to move. The weight is specified in the provided documentation (user's manual) and on the data plate.
- ☐ Connect the cable/hook to the lifting eyes **(B)** and tension the cable.
- ☐ Lift the machine for about 10 cm (4 in.).
- ☐ Move slowly and position the machine on the ground or on the vehicle, paying particular attention that all the personnel is at safety distance from the moving load.



LIGHTING TOWER USE

TILT THE SOLAR PANEL

For the tilting of the solar panel pull the locking pin knob down, tilt the solar panel manually, release the locking pin and make sure it is inserted into the hole, see the following illustrations.



LIGHTING TOWER USE

OPERATION CONDITIONS AND LIMITS

- ☐ This product is rated as IP65 protection grade. Do not exceed the stated operating limits.
 - ☐ The operating temperature range is from -20 °C to 60 °C and the charging temperature limit is within 0 °C to 60 °C. If equipped with heating features, it may be used between -40 °C and 60 °C.
 - ☐ The heavy-duty structure will survive up to a Category 12 typhoon or cyclone. (Storms above Category 12 may cause damages to the product).
-

TRANSPORTATION AND STORAGE

- ☐ This product contains lithium batteries. Please follow air transport regulations when shipping. It should be regarded as potentially flammable and explosive, and be isolated from other goods when stored, so as to avoid any damage.
 - ☐ The solar panels of this product should be considered as fragile. There should never be more than 4 layers of boxes when stacked. To avoid damage to the panels, make sure no heavy pressure is applied to the boxes.
 - ☐ Please store the product in temperature between 0 °C to 45 °C.
 - ☐ If stored for a long period, the product should be recharged every 6 months. Please only use the special charger (purchased from manufacturer) to avoid damage to the battery or device.
 - ☐ When repackaging the product after inspection or charging, set the light into sleep mode by holding the on/off button for 5 sec. The light will flash three times to signal that it has properly entered sleep mode. You may now repack the product into its box. To exit sleep mode, either press the on/off button one more time, or wait an hour for the light to reboot automatically through contact with sunlight.
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SOLAR PANEL MAINTENANCE

- ☐ To ensure effective solar light absorbance, clean the surface of the panels regularly with water and a soft cloth. Do not use chemical solutions or abrasives.
 - ☐ This Solar Street Light operates on a low voltage DC current. Unless customized otherwise, do not connect components or ports to an AC current or any higher rated DC voltage.
 - ☐ The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.
 - ☐ Using the third party components to replace the original ones without authorization is forbidden. The product will lose warranty if the user disassembles the product by himself.
-

SOLAR PANEL RECYCLING

- ☐ This product is made from recyclable, high-performance materials. All materials are compliant to the ROHS standard. Do not dispose of this product with other household waste.
 - ☐ Please check your local regulations on collection and disposal of electronic items. Proper disposal of used product helps prevent negative impacts on the environment.
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LIGHTING TOWER USE

MOTION DETECTION FUNCTIONS

The lamp automatically lights up when it is dark and turns off when there is light or at dawn. At night, when no one is around, it operates under power saving mode. When anyone approaches, its brightness increases by a factor of four. If the air temperature is close to human temperature, the motion detection may reduce in sensitivity.

ENVIRONMENT

- ☐ If you are in the northern hemisphere, face the solar panels towards the south as far as possible when installing the unit; if you are in the southern hemisphere, face the solar panels towards the north.
- ☐ For maximum operation efficiency of the solar panels, make sure the sunlight is not blocked by buildings or trees.

FUNCTIONS

ON mode:

The system will work normally, charging in the daytime and discharging at night.

Transport (idle) mode:

The solar street light will power off in one hour and then stay in the OFF mode, for transportation, storage, or maintenance purpose, until it's re-activated.

OFF mode:

The system will not work, charge or discharge.

Power ON:

a. In the daytime:

The solar street lights gets activated and powered on automatically (i.e. to light up for 20s and then switch off), once it is taken out of the carton (for the all in one type), or when the LED street light is connected to the solar engine (for the split type).

b. At night:

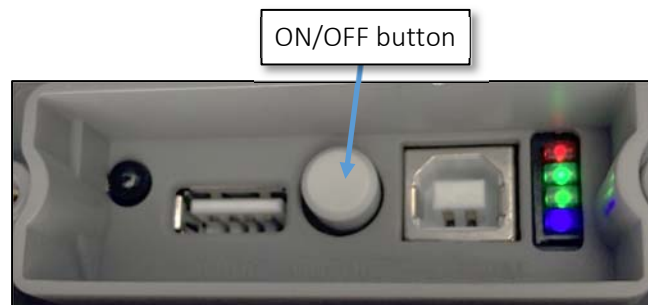
Long press the ON/OFF button for 5 seconds to get the solar street light activated manually (i.e. to switch on), with the solar engine connected to the led light.

Power OFF:

Press the ON/OFF button for 5 seconds when the light is On, to see the light flashes for 3s and then switches off to come into Transport Mode; Then press the button for 5s again, or have no operation for one hour, to have the light flash for 1 second and switch off to get the solar street light power off.

Switch on/off the light:

When the solar street light is activated and powered on, short press the ON/OFF button, and then the light will switch between on and off.





N.	INDICATOR LAMPS WORKING STATUS	PRODUCT FUNCTION DESCRIPTIONS
1	Blue lamp slowly flashing, red lamp instantly flashing.	Battery cannot get recharged.
2	Blue lamp constantly on, red lamp instantly flashing.	Battery cannot get discharged.
3	Blue lamp instantly flashing, red lamp off.	Battery over-discharged.
4	Blue lamp constantly on, red lamp quickly flashing.	DCOUT short-circuited.
5	Blue lamp slowly flashing, red lamp quickly flashing.	LED lamp short-circuited.
6	Blue lamp constantly on, red lamp constantly on.	LED lamp has no power supply.
7	Blue lamp instantly flashing, red lamp constantly on.	No voltage increase to the led lamp.
8	Blue lamp quickly flashing, red lamp constantly on.	LED lamp open-circuited.
9	Blue lamp slowly flashing, red lamp constantly on.	Abnormal Voltage of LED lamp.
10	Blue lamp constantly on, red lamp off.	Normal discharging.
11	Blue lamp off, red lamp off, green lamps off.	No indication.
12	Both green lamps 1 and 2 slowly flashing.	Battery recharging.
13	Both green lamps 1 and 2 constantly on.	Battery fully recharged.
14	Both green lamps 1 and 2 quickly flashing.	Charging exceeds protection current.
15	Both green lamps 1 and 2 quickly flashing, red lamp quickly flashing.	Charging exceeds inhibit current (short circuit)

Annotations:

Slowly flashing: The indicator lamp turns on, and then turns off in 640ms, then turns on again in another 640ms, then turns off again in another 640ms,

Instantly flashing: The indicator lamp turns on, and then turns off in 80ms, then turns on again in another 1.2s, then turns off again in another 80ms, then turns on again in another 1.2s,

Quickly flashing: The indicator lamp turns on, and then turns off in 80ms, then turns on again in another 80ms, then turns off again in another 80ms,

ROUTINE MAINTENANCE

Poorly maintained equipment can become a safety hazard. In order, for the equipment, to operate safely and properly over a long period of time, periodic maintenance and occasional repairs are necessary.

Any kind of maintenance work on the lighting tower must be carried out by Authorized and trained personnel. It should be done in a safe working environment and with the machine well stabilized.

- ☐ While performing maintenance work, please use suitable tools and clothes.
- ☐ DO NOT modify any component if not authorized.

The repairs cannot be considered among the routine maintenance activities. E.g. the replacement of parts that are subject to occasional damage and the replacement of electric and mechanic components that wear with use. This kind of work is not –in fact- covered by warranty.

DISPOSAL AND DECOMMISSIONING

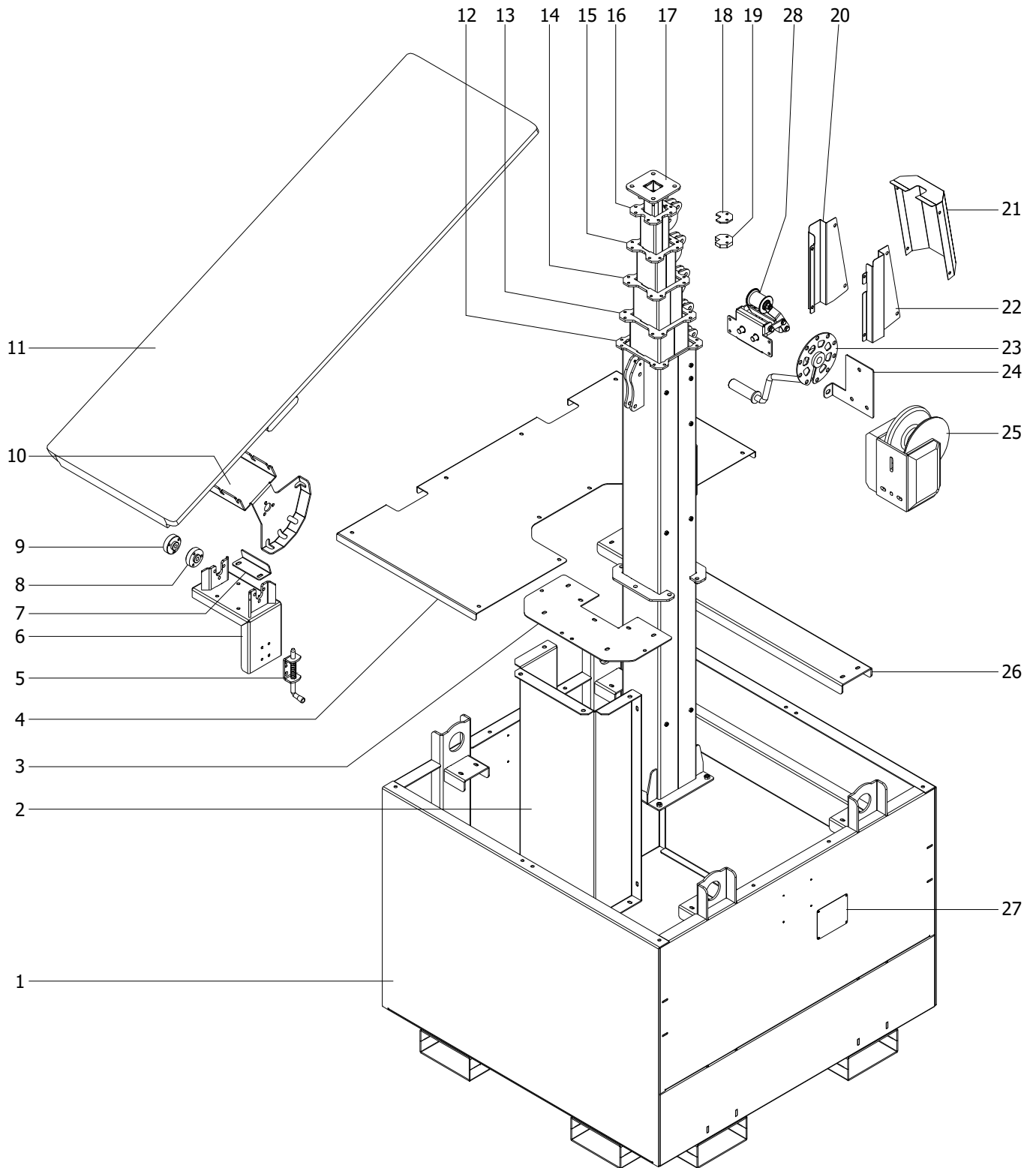
This machine is made of parts that, if not disposed of correctly, can damage the environment and create ecological hazards. The following parts and materials need to be brought to authorized waste treatment sites:

- Metallic structure;
- Batteries;
- Cables.

These components have to be disposed of accordingly to local laws and dispositions. Have qualified personnel disassemble the machine and dispose of parts.

The machine owner is responsible for dismantling and disposal of the machine and its components at the end of its working life.

SPARE PARTS



SPARE PARTS

N.	CODE	DESCRIPTION
1	XPO_C004_025	BASE STRUCTURE
2	XPO_C004_026	FRONT / REAR MAST COVER
3	XPO_C000_068	MAST PLATE
4	XPO_C004_027	BASE STRUCTURE COVER
5	AC000_M000_003	SOLAR PANEL INCLINATION LOCKING PIN
6	XPO_C000_022	SOLAR PANEL SUPPORT
7	XPO_C000_075	PLATE
8	AS000_M023_032	SPACER
9	AS000_M023_033	SPACER
10	XPO_C000_109	SOLARE PANEL BRACKET
11	AC000_E026_123	SOLAR PANEL
12	PFM08_C031_118ZN	1° SECTION MAST
13	PFM08_C000_002ZN	2° SECTION MAST
14	PFM08_C000_003ZN	3° SECTION MAST
15	PFM08_C000_004ZN	4° SECTION MAST
16	PFM08_C000_005ZN	5° SECTION MAST
17	PFM08_C000_006ZN	6° SECTION MAST
18	PFI08_C031_012ZN	MAST ANGLE GUIDE REINFORCEMENT
19	AS000_M000_005	MAST ANGLE GUIDE
20	PFM08_C000_019	PROTECTION RIGHT SUPPORT
21	PFM08_C000_018	PROTECTION
22	PFM08_C000_020	PROTECTION LEFT SUPPORT
23	PFM07_C000_055	WINCH HANDLE
24	PFM07_C000_056	WINCH HANDLE LOCKING PLATE
25	AC000_M000_110	WINCH
26	XPO_C004_028	CROSSBAR
27	XPO_S010_069B	DATA PLATE
28	SI000_G000_005	COMPLETE SAFETY STOP SYSTEM

WARRANTY

The warranty period starts on the delivery date to the first purchaser.

The machine is covered by warranty for one year from the above mentioned date.

Only genuine parts should be used to carry out repairs.

Failure to use only genuine parts may invalidate the manufacturer's warranty.

We reserve the right to request the warranty replaced parts back for analysis.

We will not be held responsible if:

- the machine has been used to perform tasks that it has not been designed for;
- the machine has undergone modifications not approved by us;
 - conditions of use have been abnormal;
- normal maintenance, compliant to requirements as set out by the manufacturer, have not been adhered to.

No payment or expenses refund should be pretended from us for normal maintenance or servicing nor any materials used to carry out routine servicing. The warranty is intended to cover diagnosis, repair or replacement of the defective part, and actuating the repair, should a problem arise during the warranty period. These operations will be performed free of charge.

We offer service and warranty training for service and maintenance personnel, if required.

Training can be carried out at a our depot or at a venue of your choice.

Don't hesitate to contact us for any further information.