

POWERMOON®

Profi1

1000 Watt HQI



USING INSTRUCTIONS



US Patent No.: US 6,305,827 B1

US TM Reg. No.: 2,537,683

Canadian Patent No.: 2311220

Congratulations on your purchase of a POWERMOON® balloon-lighting system.

Your POWERMOON® Profi1 is the most up to date glare free floodlight system on the market and worldwide the only balloon-light that works on basis of a solid and robust steel spring open- and close mechanism.

This system ensures that your POWERMOON® always stays open while in use. Even when not running, the POWERMOON® can stay open for days or even weeks. Just as well as you can close it within seconds.

Your POWERMOON® is IP54 approved, which means wind and weather resistant.

The benefits of a POWERMOON® balloon-lighting system:

No glare

No harsh shadows

Wide light distribution

High portability – Small storage

Solid and robust

=> safety and work efficiency at night increase enormously!!

One more benefit: Great looks and elegant design.

To ensure best possible lighting results and correct usage please read the manual carefully.

If you have any questions, need further information or advice never hesitate to contact us.

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POWERMOON(TM)

1. Safety Instructions

Caution - before using the POWERMOON® – read all instructions!

POWERMOON® is a fuseless system and can only be used with power sources that have a circuit breaker.

POWERMOONS™ can be used both indoors and outdoors. The system is IP54 approved (weather and rain proof).

After unpacking:

Check all electrical cables for damages or cuttings.

Make sure that the bulb is free of any packing material used for transport.

Check bulb for cracked glass or any other transport-caused damage. Vibration during transportation could cause bulb to shatter. **Use gloves!!**

Check if bulb is properly screwed into E39 socket. Screw bulb in properly before start using POWERMOON®. **Use gloves!!**

If the POWERMOON® has already been used check the following before reuse:

Cables should not be cut or damaged!

Power plug and plug between Ballast and POWERMOON® lamp should be checked for burn damage.

In case of any damage check with a professional electrician before continuing!

Safety instructions and restrictions for your own operational safety:

The POWERMOON® and all additional equipment such as POWERMOON® ballast, telescopic pole etc., can only be used for lighting purposes. Any other use happens at users own risk and liability.

POWERMOON® components should not be used (mixed) together with other lighting systems or components. If used or mixed with other systems or components, POWERMOON® warranty is no longer valid.

Attention when mounting the POWERMOON® onto a tripod or pole:

Ensure that the complete system has a secure stand to prevent it from toppling.

Inner steels need to be horizontal!

All screws must be tightened at all times.

Keep safety distance to roads, pedestrians, animals, cars, mobiles, buildings etc.!

We advise the usage of fixing lopes when lighting traffic routes (for example POWERMOON® fixing lopes). One guy rope should then be in right angle to road to secure tripod from toppling on to road.

Alternatively weigh down POWERMOON® tripod/telescopic pole with additional material (sandbags, concrete blocks etc.).

POWERMOON® - Lights and signals:

Make sure that the POWERMOON® balloon or its light never mask other lights such as railway crossings, signposts, signals and traffic lights.

When lighting crowded areas such as sport events, music-festivals, always secure the area around the balloon with barrier tape. Also secure the guy ropes.

Environmental protection:

Emission of light in residential areas or protected nature reserves could be disturbing. Read city guidelines for emission of light before use. Inform all involved circles and facilities. Disturbances to environment are possible when not using sound proof generators as electric power supply. Make sure to use up to date power supplies.

Clearance distance /Radiation heat protection:

Always keep a clearance distance of min. 3 feet to easy burnable materials such as: wood, plastics and textile such as curtains, wooden ceiling, wooden walls, plastic foam insulation etc.

Keep lamp away from materials that may burn.

Do not use a POWERMOON® near open or leaking highly inflammable mediums (gasoline and gas).

Do not use POWERMOON® in EX Zones.

Do not use POWERMOON® for salvage or rescue work with tank ship disasters, damages in refineries or gas pipelines.

Lighting inside tanks, big chimneys and floating bodies:

POWERMOONS™ should only be used with a suitable insulating transformer when inside enclosed areas and chimneys as well as floating metal pontoons, ships and wrecks. In such cases an electrician should test safety before starting. Check regional rules of conduct with a professional electrician when using the POWERMOON® or other electric devices on

ships. If a person and a POWERMOON® are situated on the same metal base, insulation and earth grounding precautions must be taken.

Keep POWERMOON® away from pylons and high voltage sources.

Safety margins should be considered carefully when a POWERMOON® is installed on vehicles and construction equipment.

High Voltage Cables should be at least approx 160 ft (50m) linear distance.

Overhead railway electric lines should be kept at a distance of 8ft (2.5m).

Check regulation clearance of tripods for rail tracks. Different regulations apply for different regions!!

Check safety regulations and zones for airports, ports, and oil refineries. Different regulations apply for different regions!!

Ensure that the power supply cable of POWERMOON® cannot be damaged or cut off by passing traffic and trains. Pedestrians should not be endangered by wires which they could stumble over.

Take care when running POWERMOON® with other machines on the same generator or power source.

Warning! Check capacity of small generators (of less than 15kVA) before letting large machines use it at the same time as the POWERMOON®.

Strong inductive and capacitance machines like POWERMOONS™ or engines/immersion pumps, have influence on phases and sine curves of generators. Do not attach electronic equipment like computers, televisions or hi-fi's. This equipment could be damaged when turning the POWERMOON® on and off due to the surge in voltage. This occurs especially if the electronic control unit is defective.

Violation of the above results in responsibility of user and frees manufacturer from all liabilities.

Violation of the above and any defect on other machines, equipment and instruments coming thereof (caused for example by regeneration/back coupling) is not the manufacturers responsibility.

2. POWERMOON® using instructions

Attention: Never switch POWERMOON® on before it has been completely assembled!

Always pay attention to warning labels and using instructions!

1) Take POWERMOON® cords out of cylinder before taking out POWERMOON



2) Take POWERMOON® out of cylinder by gripping pin and gently pulling the POWERMOON®



3) Place POWERMOON® with bottom pin on solid ground.
Grip black handle bar, pull pin and press down until POWERMOON is fully opened and locked in place.





Make sure that pin has locked in place!



4) Check if Velcro is closed all around and if transparent balloon cover is not damaged. In case of bigger damages repair with delivered repair kit or change cover

5) Lift POWERMOON® by gripping bottom pin with one hand and upper cover with other hand. Mount POWERMOON® on suitable tripod or other mast.



6) If using a tripod bring it up to desired height! Optimal installation height of balloon is 13-16ft (4-5 meters).

Attention!!

Always watch hands when bringing tripod up and down!!



Attention: Always make sure to tighten all screws when changing tripod segments!

Attention: Pay attention to wind and weather. We advise to tie rope tripods or other masts as wind and weather conditions might change.

Attention: Make sure that inner steles are horizontal and all three tripod stands are on ground. (This could for example not be the case if middle pole is touching ground as well!)



8) Plug POWERMOON® cord in to ballast. (Pay attention to red markings) and attach firm by closing lid.



9) Plug ballast in to power source.
Bulb ignites in around 0 – 200 seconds.

Attention: Always make sure to connect to existing and running power sources. Interruptions and gaps in electricity flow may cause delays in ignition of bulb or even result in its damage.

Attention: Once disconnected from power, HQI bulb takes 5 to 6 minutes to ignite again.

Turn off POWERMOON®

- 1) Turn of POWERMOON by pulling power plug out of power source.
- 2) Wait 30 seconds! Then pull plug out of the ballast.

Attention: The Ballast is compensated with a capacitor. During the first seconds, the loaded condenser could give an (un-harmful) electric shock. The System complies with UL/TÜV US/CSA regulations. The condenser will be discharged through a discharging resistor.

- 3) Close POWERMOON® by holding black handle bar and pulling pin! Slowly close POWERMOON® by letting handle bar slide up POWERMOON® middle axis.

Attention: Wait until bulb has cooled off (Approx. 5 – 10min).

3) Electrical requirements and data:

Voltage 100 – 115V
Hertz 50 – 60Hz
Current 1 x 4A

Bulb: 1000 W HQI
4000 to 4400 Calvin
80 000 to 110 000 Lumen
Amps 7 – 8.5
Thread E39

Why a ballast? It transforms the common power of 110V in to the final using power.

4) Care and maintenance

The POWERMOON® may get damp with use. Always let the POWERMOON® dry out before storing it in cylinder.

Small holes in translucent cover can be pasted with self adhesive repair kit.

Dirt on both, top and bottom cover can be wiped off with (thin) soap liquid. Do not clean cover with any solvent as it will be destroyed.

Leave defective cables or broken plugs for an electrician to repair.

5) Parts replacement

Balloon cover replacement

Caution: We advise to wear protective goggles when changing cover of balloon. Reason: POWERMOON® balloons open through stainless steel springs which might be uncontrollable.

If cover is severely damaged, it must be changed.

- 1) Change cover of balloon by opening Velcro.
- 2) Open elastics.
- 3) Apply new cover.
- 4) Close elastics.
- 5) Close Velcro of bottom and top cove by starting at the corners.

For further info on how to change cover please visit website www.powermoon.com

Bulb replacement

Attention: Precautions!! Completely unplug POWERMOON from any power source. Allow used bulb to cool off before replacing.

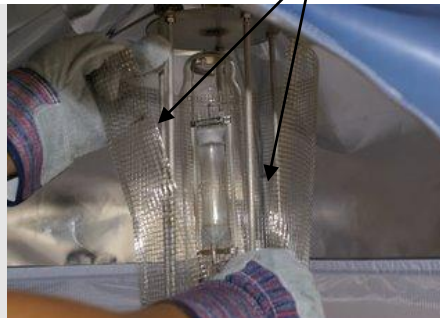
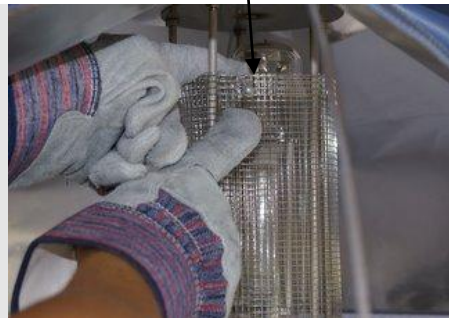
Wear gloves and protective goggles. (Bulb is under high pressure and could explode/implode.)

Caution: Do not look in to burning bulb. Lamp radiates strong UV Light.

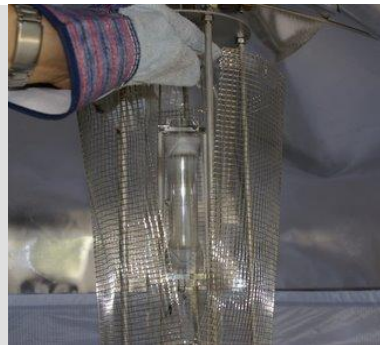
1) Carefully open two (2) Velcro segments while balloon is fully opened.



2) Open upper screw of burst cage, then bend burst cage until hand can get through to grip bulb.



3) Grip bulb at top and unscrew slowly and carefully by turning to the left. Pull out bulb.



4) Insert new bulb by screwing it to the right in to socket. Make sure it sits correct, firm.

Attention:

Improper insertion (for example loose bulb) may result in dangerous smouldering or other uncontrollable electricity flow.

Attention:

Never use smaller watt bulb (e.g. 400W) or bigger watt bulb (e.g. 2000 W)

Information on bulb positioning:

The bulb position (vertical) is predetermined by the way the POWERMOON® is constructed. All bulbs from 1000W will ignite and operate.

Bulbs that usually are used in horizontal position can be used as well. Using these bulbs in an upright position will only reduce the lifespan of the bulb by approx 50%, as the anodes and cathodes burn down unevenly.

Bulb types and manufacturers:

POWERMOON® US 1000W HQI, E39

5) Close burst cage by tightly screwing down upper screw.

6) Close Velcro of bottom and top cove by starting at the corners

Repair kit for small holes in balloon cover.

Small holes in the lower white cover can be pasted over with the self adhesive repair kit which is delivered together with the POWERMOON®.

6. Trouble Shooting**6.1. Mechanical Defects**

The POWERMOON won't open!

Should the POWERMOON not open properly (grip handle won't slide easily over glider), twist and turn grip handle while holding POWERMOON main bell firm!

Try to press down and open POWERMOON again.

6.2. Electrical Defects

The POWERMOON won't ignite and light up!

1. Check power source!

110V, 50Hz should be available.

Check cables from power source to ballast on possible damages or loose connections! Are any cables broken? Is there any interruption in current flow? Are plugs correctly attached?

2. Check if plug connection from Ballast to POWERMOON is tight.

Check

3. Check if bulb is screwed in socket correctly and that it shows no damages! (Use hand gloves!!)

4. Depending on outside temperature the ignition process of the bulb might take up to 3-5 minutes.

Should any fall of voltage or any interruption of current flow occur the bulb will go off and will need time to cool down and reignite after about 10min.

The balloon can stay attached to current flow and will automatically reignite.

5. Should the bulb flicker the power source might not deliver enough current. (This often happens with smaller standard generators) Recommended are generators with inverter starting at about 1,7kVA or regular generators with about 2.8kVA.

Also check whether bulb is screwed in socket correctly. It can happen that during transport a bulb loosens. Even though the bulb might ignite when not screwed in socket correctly, sparks might cause smouldering and bulb as well as socket might melt. Change bulb and socket if this should have happened.

6. Should the balloon still not work after checking the bullets 1-5, either the bulb, the ignition system or the ballast might be defective.

Change bulb first.

Then check current coming from ballast. 110V are required. Should ballast not deliver required voltage it might be broke!

A possibly necessary exchange of the micro-fuse, the capacitor or the electromagnetic coil should only be executed by a professional electrician!

All necessary spare parts are available from POWERMOON Enterprises Ltd.!