TL LUMINITE

INFLATABLE LIGHTING SYSTEM

International Patent granted PCT 33/99
- Europe nr. 1062458
"Temporary and/or emergency system
with inflatable bearing structure"

User manual
Manuale d'uso
Manuel de l'utilisateur
Bedienungsanleitung





Table of Contents

Manufacturer's Message	2
Features and benefits	2
Applications	2
WARNING	3
I – Introduction	4
2 – Installation and Start up Procedure	4
3 – Turning off the device	7
4 – Putting on colour message bands or sleeves	9
5 - Replacing the lamp	10
6 – Repairing or cleaning the fabric	12
7 – Answers to frequently asked questions	16

Manufacturer's message

Congratulations! By purchasing the Luminite inflatable tower, you just got the most reliable and versatile tool to address your mobile lighting needs, as well as the increasing safety demands and liability issues placed on today's emergency services and construction projects. Thanks to its unique patented inflatable structure, this 5m (15') tall tower lights up a large area by providing powerful, virtually shadow-free, ambient lighting allowing crew members to work in greater safety.

We, at EIL Systems, and our distributing partners, are proud of the craftsmanship put in every unit we produce and always look at ways to provide greater satisfaction to you, our client. Please, don't hesitate to contact us for any questions, comments or suggestions on how we can further improve our product or offer accessories adapted to your own needs.

Please visit our website at www.eilsystems.com to find out about our other models and accessories.

Features and benefits of the Luminite tower

- Provides large areas with an impressive amount of ambient lighting that is easy on the eyes
- Durable, easy to use and portable, sets up in one minute with one person
- Is offered in two sizes, 2.5m (7') and 5m (15') to suit every situation
- With tie downs supplied, can withstand winds of up to 60 km/h (37 mph)
- Ingress protexction rating IP 55
- Extremely quiet, 56 db at 3m (10')
- A well lit work area helps reduce the possibility of personal liability of supervisors and managers resulting from an incident-related injury or death

Applications

The brightness and portability features of the Luminite Tower make it an ideal tool for:

- Emergency rescues
- Roadside interventions and extractions
- Field hospitals and emergency shelters
- Confined spaces interventions and indoor investigations 2.5m(7') model
- Lighting during power outages
- Hazardous material spill sites
- Crowd control
- Field maintenance and construction projects
- Doubles as a marker at large sites (with customized, removable message bands)
- · And many more!

Int'l patent PCT/IT/99/33
US Patent 6,332,230 BI
Canadian patent 2,323,579
by Guido Medici EIL Systems-Italy
Photos and design by: www.marketeks.com



You must read and obey all instructions.

This device is intended for emergency lighting only. The party responsible for this equipment must read this manual carefully and follow its instructions in their entirety. This device should never be operated by a minor.

Failure, even partial, to abide by the following instructions can cause electrocution, fire and/or serious injury. The warnings given in this manual are intended to help you operate this device in total safety. Do not attempt to use it in any way other than what is detailed in this guide.

SAVE THESE INSTRUCTIONS

- Always put the device on a flat, stable, vibration-free surface.
- Do not use this device in the presence of flammable or explosive substances such as alcohol, thinners, solvents, aerosol products, fuel, explosive powders, fireworks, etc.
- Never plug or unplug the machine with wet hands.
- · Do not attempt to install in a partially or totally flooded area.
- Never lean anything against the tube, and do not use the tube for structural support.
- Always insert the plug fully into the socket with ground.
- Do not damage, pull, modify, stretch, bend or excessively twist the power cord.
- Never unplug the device by pulling on the power cord it can damage the cord and cause a fire or electric shock.
- Never plug the device into a circuit that other appliances are plugged into: must be plugged into a
 dedicated circuit to ensure there is no interruption of power, causing the tower to collapse.
- Never use a power bar, an inadequate extension cord or an inappropriate circuit. (Only a 12 gauge extension cord to a maximum length of 30m (100') can be used.)
- If you detect smoke, a strange odor, or unusual sounds coming from the device, unplug it immediately
 and consult your local distributor
- No person, animal or object (other than the operator) should come within 5m (15') of the device, as a
 power failure could cause it to collapse.
- Never place the device within 5m (15') of a roadway or path where people, vehicles or animals circulate.
- Do not attempt to disassemble or modify the device. It contains no parts that the user can repair (except replacement of the lamp). Some parts of the machine are under high tension. Do not attempt any maintenance procedures not covered in this manual. Incorrect maintenance can damage the device and cause fire and electric shock.
- Always turn off and unplug the device before cleaning its exterior with a damp cloth. Never use solvents like alcohol, thinners or fuel.
- Make sure the power jack and wall outlet are always easily accessible in case the device must be
 unplugged quickly. Otherwise, in the case of an emergency, you won't be able to cut off the device's
 electrical supply.
- The device must only be connected to an appropriate energy source in the country of purchase (according to electrical standards in your area). Connecting the device to any other energy source may cause a fire or electric shock.
- Do not use the device under extreme wind conditions 70 km/h (43 Mph) or higher winds), gusts, or any other extreme conditions. Remember to use the tethers in wind conditions exceeding 20 km/h (12 Mph).

I - Introduction

The Luminite is compact and extremely quiet – ideal for situations requiring a portable and high-intensity light source, where a local power source or independent generator is available.

2 – Installation and Start up Procedure

WARNING W

Before continuing, make sure you have carefully read the "WARNING" section at the beginning of this instruction manual.

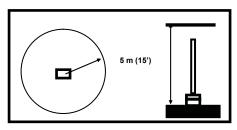


No person, animal or object (other than the operator) should come within 5m (15') of the device, as a power failure could cause it to collapse.

Position the Luminite Tower close to the area that needs lighting.

Make sure the area underneath the device is perfectly stable and level.

For the 5m (15') model, make sure you have at least 5m (15') of clearance above the case, and 5m (15') of space around it on all sides (see Fig. 1);;



Remove the top of the case (Fig. 2);



Fig. I



Fig. 2

3 Free the tube from any obstacles. If the tethers are already attached to the tube, move them to the side to allow the tube to deploy properly;

4 Make sure the "air" and "lamp" switches are off ("O") (Fig. 3);



Fig. 3

S Extend the power cord and plug it into an outlet appropriate for your model. It is safer to plug it into a dedicated outlet which is not shared with any other tool or accessory. Drawing too much power on the circuit will cause the breaker to jump off and cut the power supply to the lamp. This may cause the tower to collapse and it will take up to 10 minutes to turn the light back on as the lamp must cool down first.

1 IMPORTANT

Check your power cable regularly to make sure it's in perfect condition: a worn, damaged or cut cable can damage the device or cause electric shocks.

6 Inflate the tube by switching the "air" switch (red) into the "On" position ("I") (Fig. 4);



Fig. 4

WARNING W

Always guide the tube as it inflates (Fig. 5) by holding it. Do not leave it on the ground to inflate as this may damage or break the lamp.

Fig. 5









When the tube is entirely inflated, put lamp switch (white or yellow) to the "On" position ("I") (Fig.6)The lamp will reach maximum brightness two to three minutes after being turned on.

NOTE P

Do not turn the lamp off without a good reason: if you turn it off, you will have to wait up to 10 minutes before switching it back on as the lamp must cool down first.



Fig. 6

You can now attend to the emergency in a well-lit environment.

I IMPORTANT

In windy conditions exceeding 20 km/h (12mph), you must stabilize the device by using the tethers supplied, (Fig. 7) hooking them to the grommets, and securing the tethers to the ground with the spikes provided. DO NOT use the device in extreme windy conditions exceeding 70 km/h (43mph).

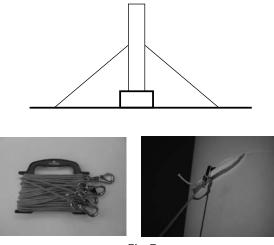


Fig. 7

3 - Turning off the device

WARNING

As a safety measure, the operator must ensure that no other people, animals or objects are within a 5m (15') radius of the device as the tube deflates, and must guide the tube as it comes down. Make sure to catch the top of the tube to avoid any hard impact with the ground, as any impact could break the lamp.

Turn the lamp off by switching the lamp switch (white or yellow) into the "Off" position ("O") (Fig. 8);



Fig. 8

I IMPORTANT

After turning off the lamp, allow it to cool for 10 seconds before turning off the "air" switch.

WARNING W

NEVER turn the "air" switch off ("O") when the lamp is on ("I"). The lamp must only be on when the tube is fully inflated and vertical.

Wait about 10 minutes before switching the lamp back on.

2 Turn the inflator off by switching the "air" switch to "Off" (red switch). The tube will slowly deflate and collapse. Press into the tube with your hand to cause the Luminite Tower to collapse in the direction you want and support the tube as it comes down as shown in Fig. 9.

WARNING

Make sure you catch the top portion of the tube to prevent a hard landing on the ground. Any shock could damage or break the lamp.









Fig. 9

- 3 Detach the tethers from the ground, if they have been used;
- Disconnect the power cord from the current;
- **5** Pull and turn the air release lever, hooking it onto the edge of the case in the "open" position (Fig. 10); This will let the rest of the air out.





Fig. 10

6 Turn the light cage 90° sideways, roll the tube around the lamp casing as illustrated (as you would a roll up a sleeping bag). This will remove the air from the tube. Doing this with one arm underneath and one hand on top is best.

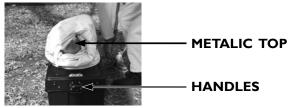
WARNING

If cage is not turned 90° sideways, the Luminite tube will not fit under the lid Forcing the lid will result in damage to the cage and the bulb.





Making sure the metalic top lines up with the handles, insert the power cord under the rolled tube



- (8) Unhook the air release lever, replacing it in the "closed" position to ensure good inflation the next time the device is used:
- **9** Put the lid back on top of the unit and put the rubber fasteners in place.







4 - Putting on color message bands or sleeves

You can order from us customized and removable message bands or sleeves to put on your Luminite Tower (Fig. 14). These allow the Luminite Tower to double as a marker or rallying point at large sites or act a tall illuminated billboard. To install these, simply follow the simple instructions on the next page.



Fig. 14

- Inflate the tube (Fig. 15), place the lid of the Luminite case approximately 3m (10') away. Lean the tower to one side and rest it on the lid so as to not dirty the fabric.
- Wrap the band around the tower by placing it immediately below the grommet tabs. Use the Velcro strip to secure it. (Fig. 16). Bring the tower upright.





the bungee cord during deflation.



Turn the light on, (Fig. 17)







5 - Replacing the lamp

WARNING

Once the tube has deflated, be sure to disconnect the power cord before replacing the lamp.

The lamp must be entirely cool before being replaced.

- Manually remove the 6 screw nuts on the lid of the of the light tower
- 2 Delicately remove the lid and bulb from the protective cage.

Notice the markings used to properly line up the fabric, the cage, and the lid for later reassembly.









3 Unscrew the bulb, remove and keep the heat-resistant rubber washer.

- 4 Put the rubber washer onto the new bulb by sliding it into place around the base of the glass casing.
- **5** Screw the bulb into the socket for a secure fit
- **6** Reposition the lid assembly by lining up the markings on the lid itself, the fabric, and the cage, ensuring the end of the bulb slides into the retaining ring.





Notice the proper position of bulb in retaining ring



Secure the nuts to the bolts by tightening with your fingers. Improperly tightened nuts may result in air leakage between the fabric and the lid and in turn cause a whistling noise.



Test the light by doing a complete set up to ensure it is functioning before storing it away for the next deployment.

6 - Repairing or cleaning the fabric

For small tears that may result from normal use or accidents involving the tube, two small repair strips $50 \text{mm} (2^{\circ}) \times 305 \text{mm} (12^{\circ})$ can be found in the same envelope as this manual.

① Cut the repair strips so that they will cover the tear and overlap it by at least 25mm(1"). Place repair strips inside and outside the point that you are repairing, applying good pressure to the entire repair surface (Fig. 21);

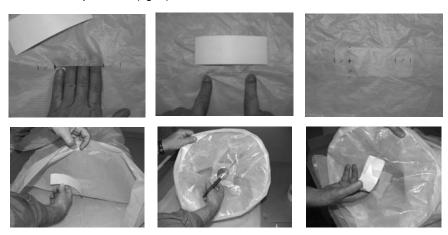


Fig. 21

2 Inflate the tube to ensure that there are no leaks;

You may now re-use the Luminite Tower.

Cleaning the fabric of the inflatable tower.

It is normal for the fabric to get soiled with usage. Cleaning it requires only some regular dish soap, a clean cloth and a bucket of lukewarm water.

- Inflate the tube as in Fig. 15 above with the light off and place the lid of the Luminite case approximately 3m (10') away. Lean the tower to one side and rest it on the lid so that it does not touch the ground.
- Using a clean cloth and soapy water, clean the fabric. Once done, use a hose or a bucket of clean water to rinse the inflated tower. Bring the tower upright and leave inflated until the fabric is completely dry. Then follow the procedures on pages 10 and 11 to take the tower down and put it away.

7 - Answers to frequently asked questions.

Q. Why must I have a dedicated circuit for the Luminite Tower?

A. It is safer to plug it into a dedicated outlet which is not shared with any other tool or accessory. Multiple tools drawing too much power on the circuit will cause the breaker jump off and cut the power supply to the Luminite Tower. This may cause the tower to collapse. It will also take up to 10 minutes to turn the light back on as the bulb must cool down first.

Q. Is the Luminite Tower supposed to replace our Halogen lamps?

A. Not on all applications. Halogen lamps are used for specific task lighting in a narrow field of vision. Luminite Towers are meant to light up a large area by providing powerful, virtually shadow-free, ambient lighting that is not hard on the eyes. The 2.5m(7') model is used for confined spaces. A well lit intervention scene helps provide a safer work environment for crew members. It also helps reduce the possibility of personal liability of supervisors and managers resulting from an incident-related injury or death.

Q. Why is the Luminite Tower on the heavy side?

A. The Luminite weighs 33.5kg (74lbs) on purpose, just light enough to be carried by one person but the base is heavy enough to prevent this 5m(15') tower from toppling over when it is deployed.

Q. Why does is take up to 2 to 3 minutes for the Luminite Tower to come up to full light intensity when halogen lamps come on instantly?

A. The Luminite uses a very bright Metal Halide lamp with a ballast system. Like a street lamp, it comes on right away but at a lower intensity and works it way up to full intensity over the course of 2 to 3 minutes. These lamps were chosen because they are extremely powerful but do not generate as much heat as halogen lamps, (which is problematic in a fabric tube). They also have a much longer life as they last up to 20,000 hours.

Q. Why do I need to use the tethers, it slows the process of setting up.

A. The Luminite Tower can be used without the tethers in calm, normal conditions. In windy conditions exceeding 20 km/h (12 mph), you must stabilize the device by using the tethers supplied and securing them to the ground to prevent it from toppling over. With the tethers properly secured to the ground, the tower can withstand winds of up to 60 km/h (37mph).

Q. By having the fabric of the Luminite white, won't it get dirty with normal handling?

A. The fabric is white so that it will have light diffusion characteristics. It is made with flame retardant nylon, coated with flame-retardant polyurethane. The fabric can be washed with mild soap and by following the easy steps in this manual.

Q. Can I move the Luminite Tower once it is inflated and lit?

- A. Yes.
- Q. Can I use the Luminite Tower when it is raining or snowing?
- A. Yes.

