Cleans and sanitizes CPAP tubing

Lumin® Bullet
USER MANUAL

3B® Medical, Inc.
www.3BLumin.com
Thank you for your recent purchase of the Lumin BULLET Hose Sanitizer. The BULLET was developed by 3B Medical, a manufacturer and distributor of CPAP devices and masks.

The Lumin BULLET device may be used with all brands of tubing, including heated hoses.

The Lumin BULLET disinfects using a very specialized and high powered UVC light source, the same type of light source used in hospital operating rooms and sterile clean rooms. UVC light will disinfect up to 99% of harmful bacteria, pathogens and fungi that can cause infection and illness. UV light is fast, safe and clean. There are no harmful chemicals.

The 3B Lumin and Lumin BULLET products are intended to supplement your CPAP accessory manufacturer’s cleaning recommendations.

Please read and follow all directions in this user manual. Any questions can be directed to support@3Bproducts.com.

Helpful Hint:

We recommend disinfecting CPAP hoses twice weekly, and daily during cold and flu season.
Indications for Use

The Lumin BULLET is a device intended to disinfect Continuous Positive Airway Pressure (CPAP) hoses. A person using a PAP device to treat Obstructive Sleep Apnea (OSA) may use BULLET to sanitize their hose and heated tubing to augment their PAP equipment manufacturer’s recommended cleaning instructions. The Lumin BULLET is intended for home use.

**Warning** - the Lumin BULLET is not a toy and is not intended to be used by children.

**Warning** - the Lumin BULLET has a powerful UV light LED included.

**Warning** - do not use in or around sinks, tubs, pools or any bodies of water.

**Warning** - This device uses powerful magnets, please exercise caution if you have an implanted medical device affected by magnets (pacemakers, internal defibrillators).

**Warning** - use this device only for its intended use as described in this manual. If the equipment is not used in the manner specified, the protection provided by the equipment may be impaired.

**Warning** - Do not attempt to operate this device with the shell open. The device was designed to shut off automatically when the shell is open. It is important not to defeat or tamper with this safety feature as UVC light can cause damage to eyesight.
## SPECIFICATIONS

<table>
<thead>
<tr>
<th>SKU:</th>
<th>LM4000</th>
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<tbody>
<tr>
<td>Weight:</td>
<td>10.5 oz.</td>
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<tr>
<td>Dimensions:</td>
<td>8.5” x 2.5” x 2.5”</td>
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<tr>
<td>Voltage:</td>
<td>DC 5V 500mA</td>
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<tr>
<td>Power Rating:</td>
<td>3W</td>
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Environmental Conditions:
- Storage Temperature: 0° to 120° F / -18° to 49° C
- Operating Temperature: 20° to 104° F / 7° to 40° C
- Humidity: Up to 93%, non-condensing
- Altitude: Up to 2000 M

## EXPLANATION OF SYMBOLS USED

- Equipment protected throughout by double insulation or reinforced insulation
- Refer to instruction manual
- Important information concerning your safety or the operation of your device
Understanding Your Lumin Cleaner

The Lumin BULLET operates using a specialized high powered germicidal UV LED. UV disinfection is effective on bacteria, viruses, mold and fungi and is well suited for keeping your CPAP tubing free from pathogens that can make you sick. CPAP hoses are in contact with warm moist air throughout the night, the ideal environment for breeding bacteria. Use of the Lumin BULLET will help keep you healthy and compliant with your CPAP equipment.

Because the Lumin BULLET operates using a form of high energy light, it is very effective in disinfecting your CPAP tubing. To keep your hose clean and reduce the risk of infections, we recommend using BULLET twice weekly on your hose. Maintain healthy breathing with quarterly replacement of your CPAP hose. 3B’s Ultra Noir CPAP hose is available from your Lumin BULLET reseller or online at 3BLumin.com.
Using your Lumin BULLET

1. Charge Lumin BULLET by plugging in USB cord to bottom of BULLET.

2. The BULLET will glow RED while charging, and GREEN when fully charged.

3. Remove BULLET and place inside CPAP tubing so there is enough tubing hanging over to pull the tubing.

4. Place BULLET in shell, you will feel the magnets grab the BULLET.

5. Close shell and slide clasp until the shell locks, your BULLET is now activated.

6. Pull the tubing all the way to the right, then back to the left, ensuring you cover the entire length of tubing twice, this process should take 30-60 seconds for optimal disinfection.

7. Remove hose from BULLET, it is now ready to use.
Caring for your Lumin BULLET Device

Should the shell casing of your 3B Lumin BULLET become soiled you may wipe down with any moist cloth. Do not immerse your Lumin BULLET into water or any cleaning solvents. Place your BULLET on a level counter or tabletop. Do not drop your Lumin BULLET or damage may occur.
Frequently Asked Questions

How does Lumin BULLET work?

Lumin works by emitting high energy light within a narrow spectrum referred to as UV-C. The Lumin relies on a high powered germicidal UVC-LED designed to produce the highest amounts of UV energy – where 90% of energy is generated around 254nm. This light is very close to the peak of the germicidal effectiveness curve of 265nm, the most lethal wave to microorganisms. The dose of UV-C emitted in one 1 minute cycle is sufficient to kill most bacteria and mold on a surface. The use of UV-C is environmentally friendly, leaves no residue or toxic gases or chemicals. UV-C systems are currently in use to disinfect operating rooms, ambulances, emergency service vehicles and other high touch areas.

Why doesn’t the Lumin use Ozone, like other CPAP cleaners?

Because 3B Medical is a manufacturer of CPAP equipment, masks and accessories, we have a heightened level of commitment and concern for our patients. We did not feel that the safety concerns of ozone being used in the home were being adequately disclosed. Due to the lifestyles of many of our patients, we also had concerns that the two hour wait period in using CPAP equipment might be ignored and harmful OZONE inhaled. The U.S. EPA published a serious warning about use of ozone in a home environment:

“When inhaled, ozone can damage the lungs. Relatively low amounts can cause chest pain, coughing, shortness of breath and throat irritation. Ozone may also worsen chronic respiratory diseases such as asthma and compromise the ability of the body to fight respiratory infections.”

https://www.epa.gov/indoor-air-quality-iaq/ozone-generators-are-sold-air-cleaners

For that reason, in designing the Lumin BULLET, care was taken to find the safest and fastest way to disinfect CPAP accessories. UV-C was by far the best solution.
WARRANTY

Your Lumin BULLET is warranted for a period of 1 years from time of purchase to be free from manufacturer defect or workmanship. Should you encounter a warranty issue please contact 3B Medical at www.3BLumin.com to submit a return authorization or email support@3bproducts.com.

It is at the discretion of 3B Medical to repair, replace or exchange your Lumin BULLET unit should it be necessary. 3B Medical is not liable for misuse, mishandling or breach of this written guarantee. Attempts to alter the Lumin in any way will void warranty.
This product is not intended to diagnose, treat, cure or prevent any disease or medical condition. Remember to always consult a physician prior to using any medical device, the information provided herein is not to be construed as a medical diagnosis or medical advice. No medical claims are implied or intended with the sale of this device. Purchaser accepts responsibility for correct and proper use of device.

For more information visit www.3BLumin.com

Lumin BULLET
Model No.: LM4000

This device complies with Part 18 of the FCC Rules.
Conforms to UL STD 61010-1,61010-2-040
Certified to CSA STD C22.2 NO.61010-1, 61010-2-040

This equipment has been tested and found to comply with the limits for a Consumer ISM equipment, pursuant to Part 18 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

Please note that changes or modifications of this product is not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment, ships at sea or other critical navigation or communications equipment operating between 0.45-30 MHz.