Operating Instructions







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The patent pending LUMA Tube™ has been designed specifically for use in commercial waterparks, resorts, amusement parks, etc.

The revolutionary illumination capabilities of the LUMA Tube will be sure to create a whole new level of fun and excitement to your operations.

We at RAVE Sports want your experience with our products to be the best it can be. Therefore, please take a few minutes to read the information contained in this manual before inflating and using your product. Although the product is simple to use, this manual contains important safety information that you and others should be aware of to safely enjoy it.

A WARNING

- 1. This is not a lifesaving device. Children should be well supervised at all times.
- 2. Know the water depth. Wear a life jacket when using this product in deep water or whenever water depth is beyond the ability of the user.
- 3. To avoid serious injury, do not stand on product.
- 4. Never allow jumping or diving onto or from the product.
- 5. Use common sense when using this product and follow all safety rules for this activity.
- 6. This product is not designed to be towed.
- 7. Never use the product while under the influence of alcohol or drugs.
- 8. Do not use air compressors or compressed air to inflate. Excessive pressure can cause the product to rupture, with potentially damaging force to eyes, ears, skin and limbs.
- 9. Routinely inspect the condition of this product and remove or repair damaged units before allowing them to be used.
- 10. Batteries should be changed or charged by responsible adults only.

Main Components

LUMA Tube (#WP-0186)

LUMA Tube Controller (#WP-0189)





IMPORTANT: The inflated tube and the controller are separate components so each can easily be replaced, if damaged.

Battery information and installation

Use 4- AA size batteries only (not included).

For maximum life and performance, use 1.2V NiMH (2400 mAH rated capacity or higher) rechargeable batteries. Charge fully before using. Examples:



2550 mAh Panasonic Eneloop Pro NiMH Rechargeable



2400 mAh Powerex Imedion NiMH Rechargeable



2450 mAh Duracell (DC1500) NiMH Rechargeable



2500 mAh Nuon (NUREAA-4LS) NiMH Rechargeable Insert batteries into the battery holder on the LUMA Tube controller.

Always insert the negative end of the battery (flat end) against the spring in the battery holder. Depress the spring to swing the positive end into place. Ensure the battery is fully engaged at both ends and it is squarely in place.



Repeat for all four batteries.

CAUTION: Always observe battery polarity when installing batteries into the controller to avoid damaging the electronic circuitry.



Wrap the keeper strap <u>tightly</u> around the batteries. The purpose of this strap is to hold the batteries in place during times when the tube may be jarred, kicked or dropped. Without the keeper strap, the batteries could become disengaged causing the LEDs to malfunction.



<u>To remove battery</u>- Always tip out from the positive (+) end. With finger on end of battery, depress spring and swing it out (as shown).



Installing controller into LUMA Tube

- 1. Inflate tube first.
- 2. Plug the two ends of the connector together.

IMPORTANT: Ensure the connector latch is secured.

3. Orient the controller so that the locking screw and tab on the controller are lined up with the nut and tab receiver on the base cup.







Ensure the wire harness is oriented in this corner of the base cup.

4. Insert tab end of the controller into the slot on the base cup.



5. Press down to compress the seal and tighten the locking screw.

IMPORTANT: It is critical that this locking screw be tightened to ensure a water tight seal. Pull up on the control head to ensure it is solidly locked in place and the seals are fully engaged.



Controller Operation

Remove protective film on faceplate before use.



5 Modes of Operation-

- 1. All BLUE LED's constant ON.
- 2. All GREEN LED's constant ON.
- 3. All RED LED's constant ON.
- 4. Slow transition between BLUE/GREEN/RED.
- 5. Strobe flash between BLUE/GREEN/RED.

Depress the hidden button to switch between

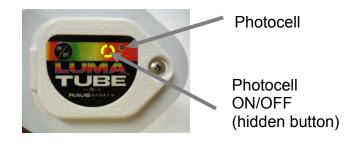


NOTE: The mode button is hidden to prevent unwanted tampering or switching the preferred illumination setting of the tube.

The illumination mode will be stored in memory and the device will power back up in the last mode it was in when turned off as long as the batteries haven't been removed.

Photocell

Press the photo cell on/off button to activate the operation of the photocell. When the photocell is ON, the LED's will automatically shut off in bright light (daylight) to



conserve battery life. With the photocell OFF, the LED's will be on as long as the master switch is ON. Again, this photocell button is hidden to prevent unwanted tampering with the setting of this photocell.

Maximizing Illumination Time/Battery Life

Fully charged 2400mAH NiMH batteries should provide approximately 11hrs of illumination time (when in Mode #1: BLUE LEDs constant ON).

FACTS:

- Blue LED's draw the most power. RED LEDs draw the least. Therefore, you may notice that tubes set on Mode 1 will have shorter battery life than tubes set at Mode 3.
- Modes 4 & 5 will extend illumination time (battery life) due to the "OFF" time of certain LED's. Longest battery life will occur in Mode 5. In this mode, you might see upwards of 20 yrs of battery life.
- Turn the photocell ON to increase illumination time/battery life. With the photocell on, the controller will automatically turn the LEDs off when the tube is in daylight or a brightly lit area. This can be very effective when tubes are going in/out

of dark tunnels to light areas. The LEDs will automatically turn ON when the LUMA Tube enters a dark area/tunnel and will automatically turn off when it is in brightly lit areas. Your park patrons will be amazed at the magic of these LUMA Tubes!

 Do not discharge batteries fully. It is better to charge NiMH batteries before they are fully spent (dead).

Battery Charging

IMPORTANT: Use "Smart" chargers only to maximize battery life.

Examples of Professional Grade smart chargers with multi-bay, independent charging capability are shown below. Contact RAVE Sports if you need assistance in selecting the proper unit for your operation.





Tenergy TN160 12-Bay AA/AAA NIMH/NICD LCD Charger



Titanium Innovations MD-1600L 16 Bay Ni-MH AA/AAA Charger



Good chargers provide an LCD display showing the charge status for each battery independently.

Additional features to look for:

- Auto shut off & overcharge protection
- Built-in battery reconditioning
- Alkaline battery detection (you CANNOT charge alkaline batteries)
- Reverse polarity detection
- Short circuit protection

NOTE: Depending on your specific operation, you may need several charging stations.

Batteries will typically last 400-500 charge cycles. Dispose of properly when they are no longer capable of holding a sufficient charge.

HINT FOR A STREAMLINED OPERATION

*Order additional controllers (WP-0189) to make battery charging a breeze.

This allows you to be charging and loading batteries in a back room while other LUMA Tubes are in use. Rather than changing batteries out by the pool/water, simply swap out a spent controller with a fully charged controller.

Repair and maintenance

Small punctures in a LUMA Tube can easily be repaired. Order Tear Aid Patch (#20100) from RAVE Sports. This self-adhesive material quickly and permanently repairs most all punctures in PVC tubes.

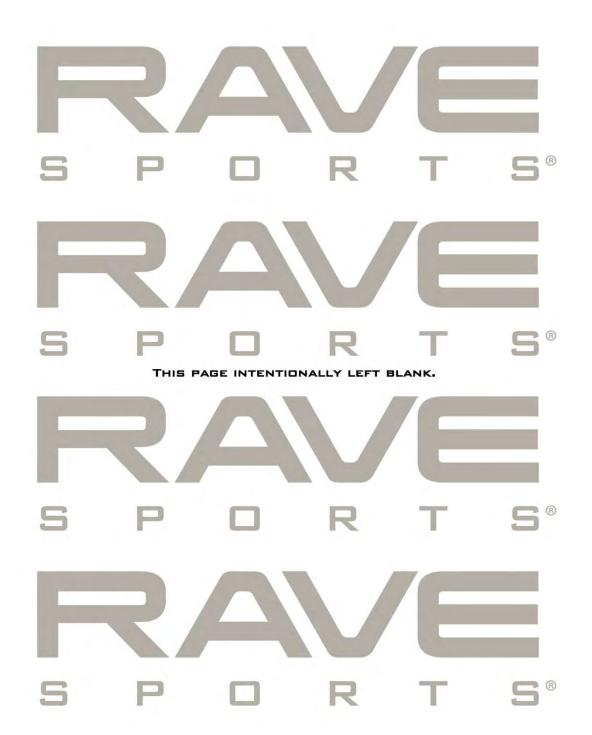


Storage

When the product is not being used, remove controller from the LUMA Tube, remove batteries and store in a cool, dry place and up/off the ground. Dry the tube completely before storing. Store the tubes up/off the ground in a cool, dry place. This will help protect it against ultraviolet (UV) rays and extend the life of the product. To avoid mold/mildew buildup or discoloration on the surface of the tube, do not store it in a damp environment or on a wet floor.

Cleaning

Use a mild dish soap or citrus-based cleaner to clean the surface of the LUMA Tube. Wipe surface of controller with a damp cloth. Do NOT use petroleum-based solvents or cleaners to clean this product.





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