User Instructions

3001-02 Headlight-Liner

CAUTION

CAPR Base System User Instructions, P/N 03521015, must be thoroughly read and understood before using any MAXAIR CAPR System. (Included with each shipped Helmet and at maxair-systems.com, Resources, User Instructions.)

Headlight Accessories Box

Headlight-Liner (pre-assembled Headlight, Glare Shield, and Liner)

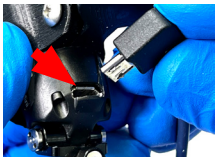
Up Pad

Down Wings

Tension Lock

Glare Shield (A) with Flextip (B)

Liner Attachment



Power Connection

Headlight Key Components

REF 3001-02 **P/N** 04431001

Symbol Definitions

Warning, Caution, or Note

REF Catalog Number **P/N** NIOSH Number

WARNING

Read and understand the User's Instructions Manual (UIM, P/N 03521015. Failure to follow the User's Instructions Manual may be hazardous to the user's health.

Use only if package is received unopened and contents are undamaged. If damage is noted, contact the shipper for replacement or repair.

Prior to using any MAXAIR® System or component, be sure to be familiar with the system's NIOSH approved configuration.

The institution using this product in any application is responsible for determining the appropriateness of this equipment relative to regulatory requirements. Bio-Medical Devices Intl, Inc. does not recommend the appropriate systems for a particular institution or facility.

DO NOT use if any component is damaged. If any components are damaged or contaminated and therefore unfit for safe and effective use, they should be replaced immediately.

Use only MAXAIR NIOSH approved respirator configurations.

NOT for use in atmospheres immediately dangerous to life or health (IDLH), and atmospheres containing less than 19.5% oxygen.

Follow current local regulations governing biohazard waste to safely dispose of used shrouds.

If you need more information, contact your BMDI Sales Representative, or call MAXAIR Systems customer service at 1-800-443-3842.

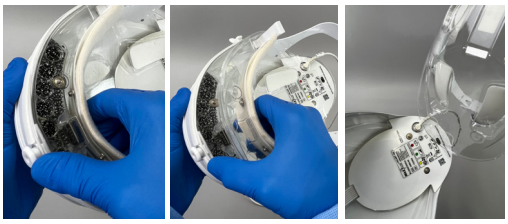
Intended Use

The Headlight-Liner is to be used with a MAXAIR Helmet to provide specialized illumination of a regional area of focus.

Headlight Accessories Box Contents

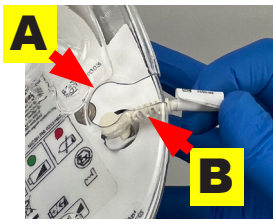
A. Accessories Box
B. User Guide
C. One Charger w/DC jack and Charger Power Cord
D. Two Battery Power Packs with Two Holsters and Two Belt Clips
E. Two Locking Drivers

Dis-Assemble Standard Liner From Helmet



1. While pushing against the Helmet front bottom edge with the thumb, use the fingers to pull the liner off and away from the helmet, front to back.

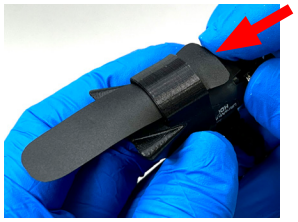
Assemble Headlight-Liner To The Helmet



1. Place Headlight-Liner on the Helmet inside; ensure Liner Cord Slot (A) is down over the Power Cord (B).

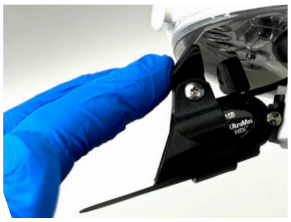
2. Secure Liner front snaps to the Helmet front snaps. Repeat for the two rear snaps. Ensure the Liner is secure to the Helmet.

Prior to Donning the Helmet - Set Headlight Glare Shield, Tension Adjust, And Starting Position



1. Ensure the Flextip is fully forward in the Glare Shield. The Flextip can be adjusted as necessary, or replaced if damaged.

2. With the Blue Cap, 3/32"HB x 50mm Driver (A), turn the Tension Adjuster (B), clockwise to tighten, counterclockwise to loosen, just tight enough to hold the Headlight in position but loose enough to be adjusted during surgery.



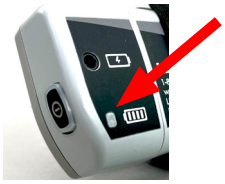
3. When patient will be in an upright "beach-chair" position, set Headlight in the Up Position (Up Pad against the bottom front of the Helmet).

4. When patient will be in the prone position, set Headlight in Down Position (Down Wings pressed fully down).

NOTE
Always set Starting Position prior to donning the Helmet

Ensure Batteries are Fully Charged

1. Connect the Charger to a Battery Power Pack (A); connect the Charger to an appropriate AC power source with surge protection (B).



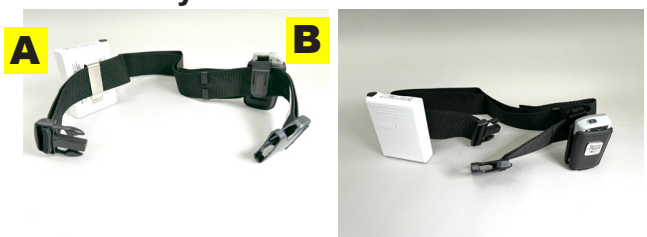
Battery Power Pack

Status Indicator:

A. While progressing through the charging stages the indicator changes from Red-to-Yellow-to-Green.
B. Steady Green indicates a fully charged battery.
C. Solid/Pulsing Red = Low Battery
D. Blinking Red = Error or Battery Spent, contact Support.

2. Disconnect Battery Power Pack from Charger when Power Pack Status Indicator is lighted steady Green.

Don Battery Belt and Batteries



1. **Option A**: Secure the Helmet Battery (A) on the Battery Belt so it will be on the right hip, and secure the Headlight Battery (B) on the Battery Belt so it will be on the left Hip.

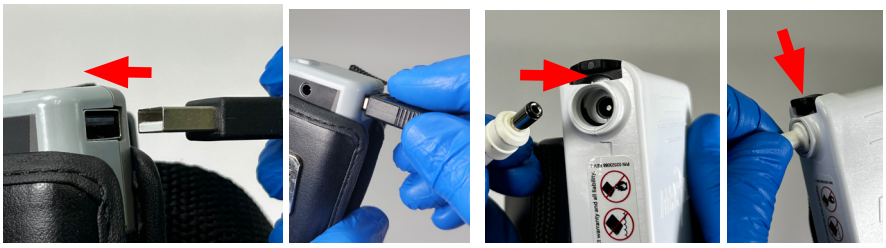
2. **Option B**: Secure the Helmet Battery (A) just ahead (closer to the female buckle) of the Headlight Battery (B) on the Battery Belt so they will be on the left Hip.

3. Secure the Battery Belt with Batteries around the waist by securely connecting the male and female buckles.

Don Helmet with Headlight-Liner

1. Loosen Ratchet Knob (CCW), place Helmet over and down on head. Tighten Ratchet Knob (CW) as tight as comfortable to secure for all activities.

Connect/Disconnect Batteries Prior to Donning/Doffing Hood & Gown



1. Connect the Headlight (Black) Cord to the Headlight Battery Power Pack. (Reverse to disconnect.)
2. Connect the Helmet (White) Cord to the Helmet Battery (White). (Depress black Secure Lock button and pull cord connector out to disconnect.

Don Hood & Gown

NOTE

Refer to the selected Headcover User Instructions packaged with the selected Headcover or located on maxair-systems.com, Resources, User Instructions (UIMs)

Turn Headlight On When Needed, Off When No Longer Needed

Light Power Button (sequentially press and release)

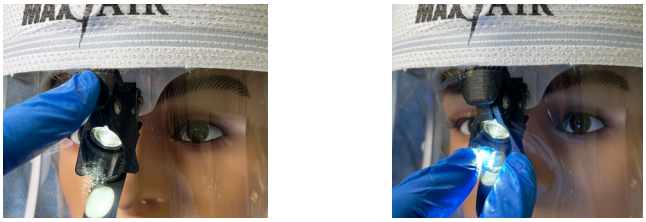
1. Initially Off, not lighted
2. Press and release: Lighted, High Power Beam
3. Press and release: Lighted, Low Power Beam
4. Press and release: Off, not lighted

During Surgery - Headlight Height Adjustment

Adjustment From The Up Position

1. Lower the Headlight Beam: Use fingers to press-and-release in-and-down against the Down Wings. Sequential press-and-release actions incrementally lower the Headlight.
2. Raise the Headlight Beam: Use finger to press-and-release in-and-up against the Up Pad. Sequential press-and-release actions incrementally raise the Headlight.

Adjustment From The Down Position



1. Raise the Headlight Beam: Use finger to press-and-release in-and-up against the Up Pad. Sequential press-and-release actions incrementally raise the Headlight.
2. Lower the Headlight Beam: Use fingers to press-and-release in-and-down against the Down Wings. Sequential press-and-release actions incrementally lower the Headlight.

Doff Hood and Gown

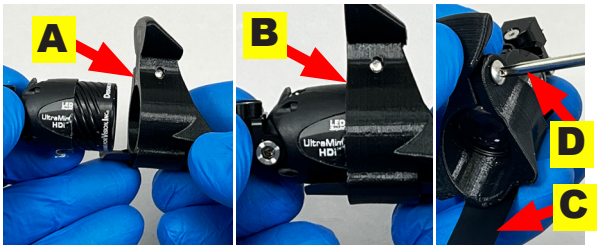
NOTE

Refer to the Headcover User Instructions packaged with the Headcover or located on maxair-systems.com, Resources, User Instructions (UIMs)

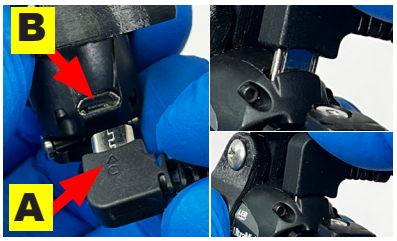
Assemble Headlight to Liner - As Necessary

Prep Light, Glare Shield, and Powercord

1. Ensure the Light Mount (A) is aligned parallel with the Light. Adjust with the 1.3x50 mm Hex Driver if necessary.

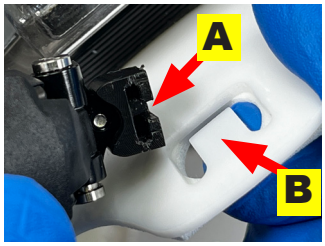


2. Place the Glare Shield Mount (A) fully on the Light (B), with the Glare Shield (C) at the bottom of the Light. Tighten securely with a Philips Screwdriver (D).

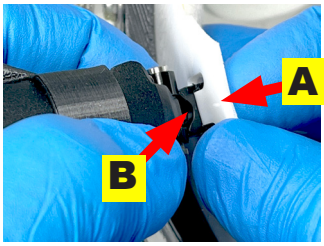


3. Secure the Light Powercord Connector (A) into the Light Powercord socket (B).

Mount the Light onto the Liner Bracket and Route the Powercord

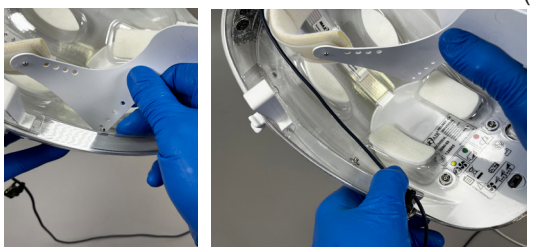


1. The Light Mount (A) snaps over the Bracket Light Mount Tab (B).



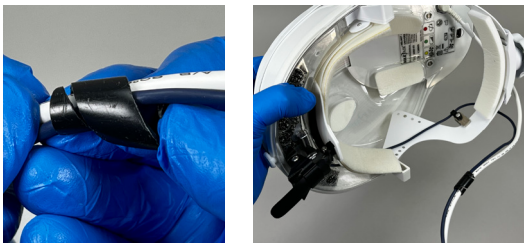
2. Press the Mount Tab (A) forward away from the Liner and snap the Light Mount (B) over and fully down on it.

3. Slide the Light Stop up onto the Liner Bracket and around the Light Mount.



4. Unsnap the Liner (wearer's) right Side Strap (A), place the Light Powercord along the inside of the Helmet, between the Helmet and the Side Strap.

5. Re-snap the Side Strap to the Helmet in the same position as the other Left Side Strap, and place the metal Clip on the Right Side Strap (B).



6. Place the Cable Tie (A) around both the Light Powercord and the Helmet Battery Powercord approximately 9 inches down from the metal clip and the Light is fully assembles to the Helmet.

Disassemble Headlight from Liner - As Necessary

1. Reverse steps 3-6 of "Mount the Light onto the Liner Bracket and Route the Powercord", above.

2. Press the Mount Tab (A) forward away from the Liner.

3. Slide the Light Stop down and off the Bracket Light Mount Tab (B).

Specifications

PROPERTY	SPECIFICATIONS
Storage Temperature Storage Humidity Storage Pressure Operating Temperature Operating Humidity Operating Pressure	-40°C to 70°C 10% to 100% including condensation 500 to 1060 hPa 10°C to 40°C 30% to 75% 700 to 1060 hPa
Method of Sterilizaton Oxygen rich environment	Not Intended for Oxygen Rich Environments Not intended to be Sterilized
Runtime Illumination 3” spot @ 12” Light color Weight Characteristic	10 hours +/- 10% (high), 19 hours +/- 10% (low) 55K lux +/- 10% (high), 34K lux +/- 10% (low) 5800K 0.5 oz. Position can be locked with hex tool tightening
Battery Pack: Power Weight Battery lilght indicator Low Power Warning:	 7.4VDC, 3.5Ah 18650 Li-Ion 4.9 oz. Red/Orange/Green 10 minutes remaining, headlight flashes 3 times 5 minutes remaining, headlight flashes 3 times 30seconds remaining, headlight flashes nonstop
Charger: Input Output UL Approval Num Medical Approval Num Low Power Warning:	 100-240VAC, 50/60 Hz, .35A 8.4 VDC, 1.3A max UL60601-1 EN60601-1 3ed