

**BIO-BRITE LIGHT VISOR™**  
The Latest Development in Bright Light  
Technology  
**INSTRUCTION MANUAL**

**Please read carefully before using this product.**

Bio-Brite, Inc. 4340 East-West Hwy., Suite 401S Bethesda, MD 20814E-Mail: Biobrite@aol.com  
Website: [www.Biobrite.com](http://www.Biobrite.com)

**VERY IMPORTANT: Be sure to charge the battery pack for a full 24 hours before turning it on the first time.**

## **NATURAL LIGHT**

Natural light is a critical part of daily life. Light signals from the environment help set our internal "biological clock" which is a major determining factor of how energetic and alert we feel. Mood swings, jet lag and some sleep disorders can occur when one's clock is incorrectly "set".

The long days of spring and summer have a natural and obvious effect on energy level. Most of us find that getting up in the summer is easier than in the winter, and we often feel better, more alert, and more productive during the day. After work, we may even have enough energy left over to play a quick game of softball or mow the lawn.

By contrast, the relative lack of light in the winter causes many animals to slow down and conserve energy, even to the point of hibernation. Many people also experience reduced energy levels in the winter months. Most of us have trouble getting up and out when it is dark outside, and we may feel lethargic throughout the day as well. When we get home from work, it's much easier to settle down in front of the TV or go to bed early than to take on a new project.

The consequences of low energy levels in the winter can be significant. Work and school performance can suffer, resulting in career problems or poor grades. Personal relationships may undergo higher levels of stress in the winter.

Bright artificial light can help make up for a lack of sufficient sunshine in the winter. But normal indoor lighting isn't the solution to light deprivation. Standard fluorescent and incandescent lights aren't bright enough. You could always travel to the Caribbean each winter to get enough sunshine... but if that isn't practical, the Bio-Brite Light Visor™ is the answer. It's a new approach to light stimulation that can give you summer-like light signals in the depths of winter.

***IMPORTANT: Bio-Brite urges individuals who think they may be suffering from serious depression to consult a qualified physician or therapist.***

## **A SIGNIFICANT IMPROVEMENT IN LIGHT APPLICATION**

The patented Bio-Brite Light Visor™ represents a breakthrough in light use convenience. It is light-weight and fits comfortably on your head. Because the Visor is powered by rechargeable batteries, the user is free to move about. The Visor delivers glare-free, UV-free light from above the eyes, so it does not obscure vision, and does not interfere with normal activities - eating breakfast, doing household chores, watching TV, or even riding an exercise bike. It is also easy to travel with the Visor because of its unique portability.

The Visor was developed in the early 1990's by scientists studying the effect of light on human behavior and performance. Since then, it has been carefully engineered and tested at Federal Government laboratories, universities, and major medical centers across the U.S. and Canada. The research demonstrates that the Visor is an effective supplement for natural light.

## **HOW TO USE THE VISOR AS A SEASONAL LIGHT SUPPLEMENT**

There is a significant amount of variation in how individuals respond to light, so it is impossible to propose a specific Visor time and intensity program that is right for everyone. Bio-Brite strongly recommends that you work with an appropriate health professional to develop a program that is correct for you.

Response variation may depend in part on external factors such as local weather patterns, latitude, and physical environment. For example, a person living in Alaska and working in a windowless office is likely to need more supplemental light than a person living in California working outdoors. There are also individual factors that affect how people respond to light. For example, there may be differences in eye structure or brain chemistry that make some people more sensitive to light than others.

### **Light Session Timing**

Most people who use the Visor as a light supplement begin using it in the fall when days start to get shorter, and taper off use in the spring as the daylight hours increase. The Visor is normally used every day in the morning just after you wake up. It has been established from controlled clinical trials that light applied in the morning is more effective than at other times. Evening is the second most favorable application time.

### **Light Intensity and Duration**

Visor users typically begin with a moderate program: 30 minute sessions at light intensity # 4 (approximately 2,500 lux). Some individuals may find that they prefer shorter, lower intensity sessions (e.g., setting #2 for 15 minutes). Others may feel the need for more light, and can increase intensity to setting #5 (approximately 3,000 lux) for 30 to 60 minutes. However, daily Visor use at setting #5 for more than an hour is generally not recommended because it can affect sleep patterns.

CONTROL SETTING	APPROXIMATE LUX LEVEL
1	500
2	1,000
3	1,500
4	2,500
5	3,000

### **HOW TO USE THE VISOR FOR CHANGING SLEEP PATTERNS**

If, as in the case of jet lag, changing sleep patterns are needed, bright light from the Visor can be used. To delay the onset of sleep and sleep later, bright light is typically used in the evenings. To shift sleep time earlier and awaken earlier, light is used in the morning. Two to three hours of exposure per day at setting #4 or #5 for several days in a row can shift the biological clock to a new pattern. Occasional resetting, or short period maintenance use may be required as well. Consulting a sleep medicine specialist is recommended.

### **HOW TO USE THE LIGHT VISOR FOR JET LAG**

To use the Visor for jet lag, you must seek bright light at the correct time and avoid light at specific times. Visit our web site at [www.biobrite.com](http://www.biobrite.com) for useful information and accessories in combating jet lag.

### **OPERATING THE LIGHT VISOR -- GENERAL INSTRUCTIONS**

#### **Turning On the Light Visor**

The Visor is operated by plugging the charged battery pack into the Visor and turning on the switch located on the top end of the battery pack. To connect the battery pack wire to the Visor, simply take the rectangular black piece at the end of the battery pack wire and plug it into the rectangular wire connector on the Visor head band (which is under the nylon covering). Make sure that the piece on the battery pack wire is pushed in completely to form a snug fit. If the pack is uncharged, the Visor can still be operated by plugging the power supply into the battery pack and plugging the battery pack wire into the Visor.

#### **Charging the Batteries**

The rechargeable nickel cadmium battery packs have a life-span of several years. Depending on the light intensity selected, the battery pack should power the lamps in excess of one hour.

A special circuit ensures that the light intensity remains relatively constant until the battery's charge is completely gone. When the battery charge is too low, the lights will flash on and off. The standard one-hour battery system consists of a battery pack in a plastic case and a power supply.

**IMPORTANT:** To recharge the batteries, plug the power supply into the jack in the bottom of the battery pack and then into a standard electrical outlet (110 Volts AC). A full charge will require at least 12 hours. A 24 hour charge is recommended for the first charge on the new batteries. Charging the batteries for more than 48 hours is not recommended. It is a good idea to fully discharge the battery pack once every 5 to 10 uses. It is also generally better to store the batteries in a fully charged condition. If you run out of battery power during a session, immediately turn the Visor off and switch to AC power by plugging the power supply into the bottom of the battery pack. Then turn the Visor back on and complete the session. If the light flickers, you may need to turn the Visor off for five minutes, and then turn it back on to complete your session.

**WARNING!**      **The jack at the end of the battery pack wire should never touch metal or be immersed in water.**

#### **Adjusting the Headband**

The head band can be adjusted to hold the Visor comfortably on your head, simply by adjusting the Velcro fastener. The Visor should not obstruct your vision, and you should be able to move your head normally without dislodging the Visor.

#### **Adjusting the Lamp Module**

The lamp module should be adjusted to provide optimal light delivery. Turn the Visor on and look into a mirror while wearing the Visor. Looking straight ahead, rotate the lamp module until the light covers your eye area. The lamp module joint will click as you rotate it, and the module should stay firmly in place. Once you have established an optimal position, you should not need to readjust the lamp module again. Standard untinted glasses do not inhibit the effectiveness of the Visor. Do not wear sunglasses, however.

#### **Setting the Time and Intensity**

The time and intensity controls on the battery pack are designed so that once set, they deliver the same light level and session time for every use thereafter.

To set the intensity, rotate the intensity control until the arrow points to the desired intensity level.

#### **IMPORTANT PRECAUTIONS**

**Bio-Brite strongly urges individuals who think they may be suffering from serious depression to consult a qualified physician or therapist.**

- Although most normal activities can be performed while wearing the Visor, the light may be distracting. Therefore, operating a vehicle or dangerous machinery is not recommended. Extra caution should be exercised while using stairs or walking in a darkened room.
- Ordinary room lighting may seem dim after using the Visor. After your session, allow a few minutes for your eyes to adjust to indoor light levels.
- Although the Visor is designed for regular use, some parts are breakable. Avoid activities which might make the Visor fall onto a hard surface.
- The Visor is not waterproof. Avoid using in damp or wet areas.
- If you develop a headache, blurred vision, or other symptoms while using the Visor, discontinue use and consult your physician.

### **LIGHT VISOR COMPONENTS**

The Deluxe Visor kit contains the following items:

- The **Light Visor** with a directional lamp module, and a headband that is fully adjustable for maximum comfort, and an instruction manual.
- One hour duration rechargeable nickel-cadmium **battery pack**, with intensity and time controls and a power supply, which allows battery charging and operation on household electrical current.

**AC power supply and battery charger.**

The Jet Lag Kit includes the above plus:

- A **booklet, “Preventing Jet Lag”**.
- **Light blocking glasses.**
- A light-weight, nylon **travel case.**

## PRODUCT SPECIFICATIONS

### Light Source

- **Bulb type:** Durable, energy efficient Light Emitting Diodes (LED's).
- **Bulb life:** 10,000 hours.
- **Spectral distribution:** white light, no ultraviolet.

### One Hour Battery Pack and Controls

- **Battery pack** with intensity and time controls: on/off switch and red charging indicator light.
- **Battery type:** rechargeable nickel-cadmium type AA battery packs
- **Recharge time:** 8-16 hours for full recharge.
- **Battery charge life:** At least one hour at maximum light intensity.
- **Battery life:** Approximately 500 recharge cycles.
- **AC option:** plugging the battery pack into the Visor and connecting the power supply to the battery pack and a standard AC outlet allows the unit to run directly on AC power.
- **Automatic shut-off:** the timing control allows the user to set the session period for any time up to one hour, at which point the unit will automatically shut off.
- **Intensity control:** Light intensity is adjustable to between 500 and 3,000 lux at a distance of 1 ½ inches from the lamp diffuser to the eye.

## TROUBLE SHOOTING

The Visor has been engineered to provide years of trouble-free service. However, if you do experience difficulty, we suggest the following:

- **Light won't come on with charged pack** -- (1) make sure that the AC charging outlet is working by plugging in some other electrical appliance, then try operating Visor from AC outlet. If the Visor lights up, try charging batteries again. If lights still will not come on from battery pack alone, order a new pack or contact Bio-Brite Service Department.
- **Battery power delivery too short** -- completely discharge the battery before recharging (see section "Charging the Batteries").
- **Lights flash** -- immediately turn off the Visor battery pack.

Plug the charger into the Visor to complete the current therapy session and then recharge the battery. If flashing continues when using Visor with charger, turn off the Visor and begin recharging the battery pack, immediately, for five minutes. This should add enough charge to feed power through the battery pack to operate the Visor using AC power.

If you continue to have questions about the Visor, call our toll-free customer service line, 1-800-621-LITE (5483), or send E-Mail to [biobrite@aol.com](mailto:biobrite@aol.com).

## MONEY BACK GUARANTEE

If you are dissatisfied with the Visor for any reason, return it in good condition within 30 days for a full refund, less a 5% restocking fee.

## **REPLACEMENT PARTS AND OUT OF WARRANTY REPAIRS**

Bio-Brite will service the Visor after the two year warranty has expired at a reasonable cost to be determined. Bio-Brite, Inc. will, at its option, either replace or repair the original product and return it to the original purchaser. The service costs will include shipping and all reasonable repair or replacement charges.

To return a Visor for repair, carefully package it in its original packaging, if possible, with a note containing the user's name, the address to which it should be returned after servicing, a daytime telephone number (in case of questions), and a description of the problem(s). Send it to:

**BIO-BRITE SERVICE CENTER  
C/O SAVILLE ELECTRONICS  
2613 JOPPA TERRACE  
BALTIMORE, MD 21234 USA**

If original packaging is not available, package the Visor securely or have it professionally packaged.

Bio-Brite, Inc. is not responsible for damages incurred during shipping into its service center.

## **LIMITED WARRANTY**

Bio-Brite, Inc. warrants to the original purchaser that this product shall be free of defects in material and workmanship under normal use and circumstances for a period of two years from the date of original purchase for use. The warranty covers bulbs and all other Visor components EXCEPT batteries, which are warranted for one year only. When the original purchaser returns the product to Bio-Brite, Inc., within the warranty period, and if the product is defective, Bio-Brite will at its option repair or replace the unit. This warranty shall constitute the sole liability of Bio-Brite, Inc., concerning this product. Bio-Brite expressly disclaims all other warranties, including, without limitation, the warranties of merchantability and fitness for a particular purpose. No person, firm, or corporation is authorized to assume for Bio-Brite any other liability in connection with the sale and use of the product. Bio-Brite and agents and distributors will bear no liability whatsoever for incidental or consequential damages or charges of any kind. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above disclaimer regarding incidental and consequential damages may not apply to you. **THIS WARRANTY SHALL BE EFFECTIVE ONLY IF REGISTRATION CARD IS FULLY COMPLETED AND MAILED WITH PROOF OF PURCHASE TO:**

**BIO-BRITE, INC.  
4340 EAST-WEST HWY.  
SUITE 401 S  
BETHESDA, MD 20814 USA**

**E-Mail: [biobrite@aol.com](mailto:biobrite@aol.com)**

This warranty is void if the product or any of its parts has been damaged or tampered with, or if the outside surface of the product or any of such parts has been opened. In all cases of damage during shipment, a claim must be filed with the shipping carrier and not with Bio-Brite, Inc. This warranty gives you specific legal rights; you may also have other rights which vary by state.