

MoodEFX^{**}

ATTITUDE ADJUSTMENT FOR YOUR SPA

U S Е R G U D F

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Congratulations on your purchase of a Balboa Water Group MoodEFX™ light. Welcome to a more colorful world brought to you by Balboa and the revolutionary patented technology that generates colored light and effects using a microprocessor to control red, green and blue LEDs.

This guide contains important information on installing and using your new MoodEFX light. Please read it carefully and save it for future reference.

Note: The following instructions are for MoodEFX 7 and MoodEFX 22 only.

DANGER

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

Always disconnect power to the spa light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to the installer, spa users, or others due to electrical shock.

> MoodEFX 7 (PN 22791) MoodEFX 22 (PN 22802) U.S. PATENT 6,150,774 OTHER PATENTS PENDING

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> Chromacore® is a registered trademark of Color Kinetics, Inc. Specifications subject to change without notice.

> > Doc. PN 22807_D November 6, 2008

> > > Figure 2

MoodEFX light





INSTALLING MoodEFX

Note: MoodEFX fits most 12VAC wedge-based lighting sockets. ColorScape lights are not for use with spas that have dimming systems or electronic transformers**.

- 1. Access the old lamp according to your spa manufacturer's instructions.
- 2. Remove the reflector from the back of the light enclosure.
- 3. Remove the old lamp.
- 4. Insert the ColorScape light into the socket. Make sure both connector pins are seated firmly in the socket. (See Fig. 3.)
- 5. Replace the reflector on the back of the light enclosure.

CONTROLLING MoodEFX

Use the spa's existing light switch to turn MoodFFX on and off.

MoodEFX lights are preprogrammed with an assortment of unique light shows.

• Turn MoodEFX OFF and then ON again in 1 second or less, to go to the next show.

- Turn MoodEFX OFF and then ON again in 4 to 5 seconds to reset to the first show.
- Turn MoodFEX OFF for more than 6 seconds and it "remembers" the last show you selected, returning to that show the next time MoodEFX is switched on.

DESCRIPTION OF SHOWS

1. SLOW COLOR WASH*

Colors transition gracefully from color to color, cycling through the color spectrum. Each color cycle takes approximately 3 minutes.

2. FAST COLOR WASH*

Colors transition from color to color, cycling through the color spectrum. Each color cycle takes approximately 1 minute.

3. SLOW RANDOM COLOR

Colors step or jump from one color to the next in random order. Each color lasts approximately 10 - 15 seconds.

4. FAST RANDOM COLOR

Colors step or jump from one color to the next in random order. Each color lasts approximately 5 seconds.

- 5. HIGH SPEED RANDOM COLOR A rapid series of intense flashes of varying
- colored light. 6. CROSS FADE*

Colors cycle back and forth gracefully between blue and green. Total cycle lasts 1 minute.

7-13. FIXED COLORS

Static display of a single color. Available colors include white, pink, lavender, light blue, dark blue, light green, and dark green.

- * These effects begin at a slightly faster speed, then slow down after one or two seconds. This is to help you identify the effect.
- ** If operating with a dimming system, MoodEFX 22 must be powered on full intensity in order to function. Also, the dimmer must be turned off in order to advance to the next show. MoodEFX 7 will not operate on spas with dimming systems.

Figure 3

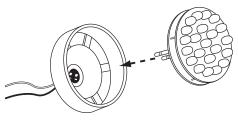


Figure 1





MoodEFX 7

MoodEFX 22

Socket

Reflector

Light enclosure

Spa wall

Source Life

MoodEFX illumination products utilize high brightness LEDs as the illumination source. LED manufacturers predict LED life of up to 100,000 hours MTBF (mean time between failure), the standard used by conventional lamp manufacturers to measure source life. However, like all basic light sources, LEDs also experience lumen depreciation over time. So while LEDs can emit light for an extremely long period of time, MTBF is not the only consideration in determining useful life. LED lumen depreciation is affected by numerous environmental conditions such as ambient temperature, humidity and ventilation. Lumen depreciation is also affected by means of control, thermal management, current levels, and a host of other electrical design considerations.

MoodEFX systems are expertly engineered to optimize LED life when used under normal operating conditions [ambient temperature: -4°F to 104°F (-20°C to 40°C), humidity: 0-95% non-condensing humidity, adequate ventilation and air volume] and when operated using typical color-changing effects. Long-term operation outside of these ranges or conditions, or at the upper limits of these ranges or conditions, may subject the product to further degradation of the LED source life, or in extreme cases, failure of internal components. Source life information is based on LED manufacturers' data, as well as other third party testing.

Limited Warranty

Balboa Water Group warrants its products, if properly used and installed, will be free from defects in materials and workmanship and will substantially conform to Balboa's publicly available specifications for a period of one (1) year after the date the product was purchased by the end user.

If the product fails during the warranty period, purchaser's remedy under this limited warranty shall be at Balboa's sole election:

• Repair the product by means of hardware and/or software

or

- Replace the product with another product or
- If Balboa is unable to repair or replace the particular product, refund the then current value of the product.

This limited warranty does not cover damages due to external causes, including, but not limited to, accident, problems with electrical power, usage not in accordance with product instructions, misuse, neglect, modification, repair, improper installation, or improper testing. Balboa is not responsible for indirect, incidental, or consequential damages resulting from any breach of warranty or under any other legal theory including, but not limited to, lost profits, downtime, goodwill, damage to or replacement of equipment and property.

To obtain warranty service, you may contact your distributor in accordance with its instructions, or you may contact Balboa Water Group. To request warranty service you should call Balboa during the warranty period. Proof of purchase or registration is required. When calling within warranty, please provide:

- 1) Your name, shipping address, and telephone number
- 2) A description of the model and serial number
- 3) An explanation of the problem

A Return Material Authorization (RMA) number & ship-to address will be provided to send the product back.

The warranty and remedies set forth above are exclusive and in lieu of all others, whether oral or written, express or implied. Balboa Water Group specifically disclaims fitness for a particular purpose. No Balboa distributor, dealer, agent or employee is authorized to make any modification, extension, or addition to this warranty. This warranty gives you specific legal rights, and you may also have other rights that vary from jurisdiction to jurisdiction.

U.S. and Foreign Patents and Patents Pending

Balboa Water Group grants the purchaser of its lighting products and controllers a personal and non-transferable license to use this patented technology for control of LED-based color changing lighting fixtures for illumination, display and design. This license is granted only by Water Group, and may not be transferred except by the grantor. The design, duplication, manufacture, or sale of other products using control of LED-based color changing lighting may be prohibited and is not licensed hereunder. Other patents pending.

SAFETY PRECAUTIONS Warning

Do not open, alter or tamper with the product. This will void the manufacturer's warranty. Follow all instructions in the user guide, and observe all warnings carefully. Do not attempt to service the electronic components yourself. Non-expert handling may damage the product and cause injury to the user.

The Don'ts

- Do not allow the MoodEFX light to get wet. Although the products are conformal coated to protect them from moisture, if the light gets wet, unplug it and contact Balboa Water Group's Technical Support Group immediately.
- Do not alter or tamper with the MoodEFX light.
- Do not allow the unit to freeze.
- Do not use the ColorScape light if it has been damaged.
- Do not store units in dirty, dusty areas.
 Do not attempt to service the electronic components yourself. Non-expert handling may damage the product and cause injury to the user.

The Dos

- Follow all instructions in this guide, and observe all warnings carefully.
- Keep the unit dry. Precipitation and liquids contain minerals that corrode electronic circuits.
- Handle the MoodEFX light as you would any delicate product. Be careful not to drop the unit.
- Have fun with MoodEFX and enjoy your spa's new attitude!

Technical Support

If any problems occur during usage, unplug the product immediately and call or email the Balboa Water Group's Technical Support Group: Tel 888. 434. 1940 714. 384. 0384 www.moodefx.com

