REVOLUTIONARY CIRCADIAN® HORSE LIGHTING SYSTEM
OPTIMIZES HEALTH, WELL-BEING AND ATHLETIC PERFORMANCE OF YOUR HORSE

Less than 2% blue light content at night

DynamicBlu™ Spectrum Control With Zirc™ NightSafe™ Technology
CIRCADIAN® ZircLight™ is the first and only light fixture ever verified by UL – the global safety certification company - to have less than 2% blue light content at night.
CIRCADIAN® ZIRCLIGHT™: THE LIGHTING SOLUTION FOR HORSES:

CIRCADIAN® ZircLight™ developed and patented a revolutionary LED lighting technology that provides horses with the ideal lighting for health, athletic performance and well-being:

CIRCADIAN® ZircLight™ Ensures the Right Light for your Horse 24/7

• **OptiBlue™ Day LEDs are rich in blue during daylight hours** - to boost energy and strengthen a horse’s circadian cycle.

• **NightSafe™ LEDs** - UL verified to provide “Less than 2% blue light content at night” protects the horse from circadian disruption and the detrimental health effects of light at night.

• **High Quality White Light 24/7** - Color temperature remains in the preferred 3200-4200K range during each 24-hour period while maintaining accurate color rendering (CRI >80).

• **Automatically Controls the Amount of Blue Light 24/7** - Blue light is adjusted daily by time, location, and season to boost energy and protect health.

• **Easy Installation** - CIRCADIAN® Zirc™ Lights can be installed by any qualified electrician.
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To maximize the benefits and minimize the risks of blue light, the CIRCADIAN Light’s DynamicBlu™ system automatically controls the dosage of blue light by time of day, location and season (Example of CIRCADIAN® Blue light exposure for July 6th in the Helios Equine Rehabilitation Center in Lincolnton, GA is shown above based on local sunrise/sunset).

A DYNAMIC SOLUTION: A Day and Night LED to Provide the Right Light, at the Right Time
Bio-Active blue light (440-490nm) modulates the activity of the circadian clock. During the day, blue-rich light is good. However, blue-rich light at night disrupts circadian rhythms and is a health concern. To ensure the right spectrum of light is provided 24/7, the CIRCADIAN® ZircLight™ fixture is powered by both Day and Night LEDs:

**Figure 1.** A blue-rich LED is utilized during the day to simulate alertness and productivity. Blue light levels are adjusted to peak in morning and again during the post-lunch dip.

**Figure 2.** The patented CIRCADIAN® Zirc™ Day and NightSafe™ LED, which emits very little bio-active blue-light, is used at night. It’s a high quality, white light (CCT 3200K, CRI >80) that removes blue light without compromising alertness.
### Special Applications made possible by CIRCADIAN® Lighting for Horses

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<td>Rehabilitation</td>
<td>Insufficient daytime light in the stall, and turning on normal stall lighting at night to inspect a sick or injured horse disrupts circadian rhythms and slows recovery</td>
<td>Circadian light provides optimal blue rich light during the day and enables horses to be inspected safely in good quality light at night</td>
<td>Faster rehabilitation and recovery and shorter, less costly, stays in rehabilitation facilities away from their home stalls</td>
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<td>Breeding</td>
<td>Competitive events where horses compete in age brackets put horses at a disadvantageous if they are born later in their age bracket year</td>
<td>Because CIRCADIAN Lights give complete control over seasonal light cycles, the day length can be adjusted to whatever season for breeding you desire</td>
<td>Foals are born at the time of year that gives the maximum competitive advantage in their age bracket</td>
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<td>Transporting Horses Across Time Zones</td>
<td>Horses suffer from jet-lag just like humans, even if they are travelling by road in a horse trailer: The result is lackluster performance, disrupted appetite and malaise</td>
<td>CIRCADIAN Lighting Systems enables the horse’s circadian rhythms to be adjusted to a new time zone either before the trip and on arrival</td>
<td>Your horse arrives in tip-top shape, and performs at its best</td>
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Less than 2% blue light content at night

Intelligent light technology that removes the harmful effects of bio-active blue light at night.

CIRCADIAN®
ZircLight™
Dynamically Spectrum Control with Zirc™ NightSafe™ Technology

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