



# LIGHT SPRITES®

## AN INTERACTIVE OUTDOOR LIGHTING PRODUCT

The **LIGHT SPRITES®** Experience taps into our collective nostalgia of long summer nights running through open fields or exploring dark woods spotting and chasing fireflies. Being surrounded by the flickering lights evokes a sense of delight and wonder and truly make time stand still.

Light Sprites® is a sophisticated lighting system that recreates that sense of wonder by transforming any space, indoors or out, into a magical field of glowing lights. While capable of seamlessly integrating with traditional lighting control systems, what makes Light Sprites® truly special is the subtle and innovative use of technologies, such as environmental sensors, artificial intelligence, gesture recognition, sound and motion sensors to make Light Sprites® aware and responsive to people's actions and behaviors and the space around them.

Whether it's one on one interaction, group play, or special show moments under the direction of a guide, this product will mesmerize and entertain while enhancing any outdoor experience.

**FOR MORE INFORMATION, CONTACT US AT  
INFO@BINTERACTIVE.COM**

### PRODUCT FEATURES

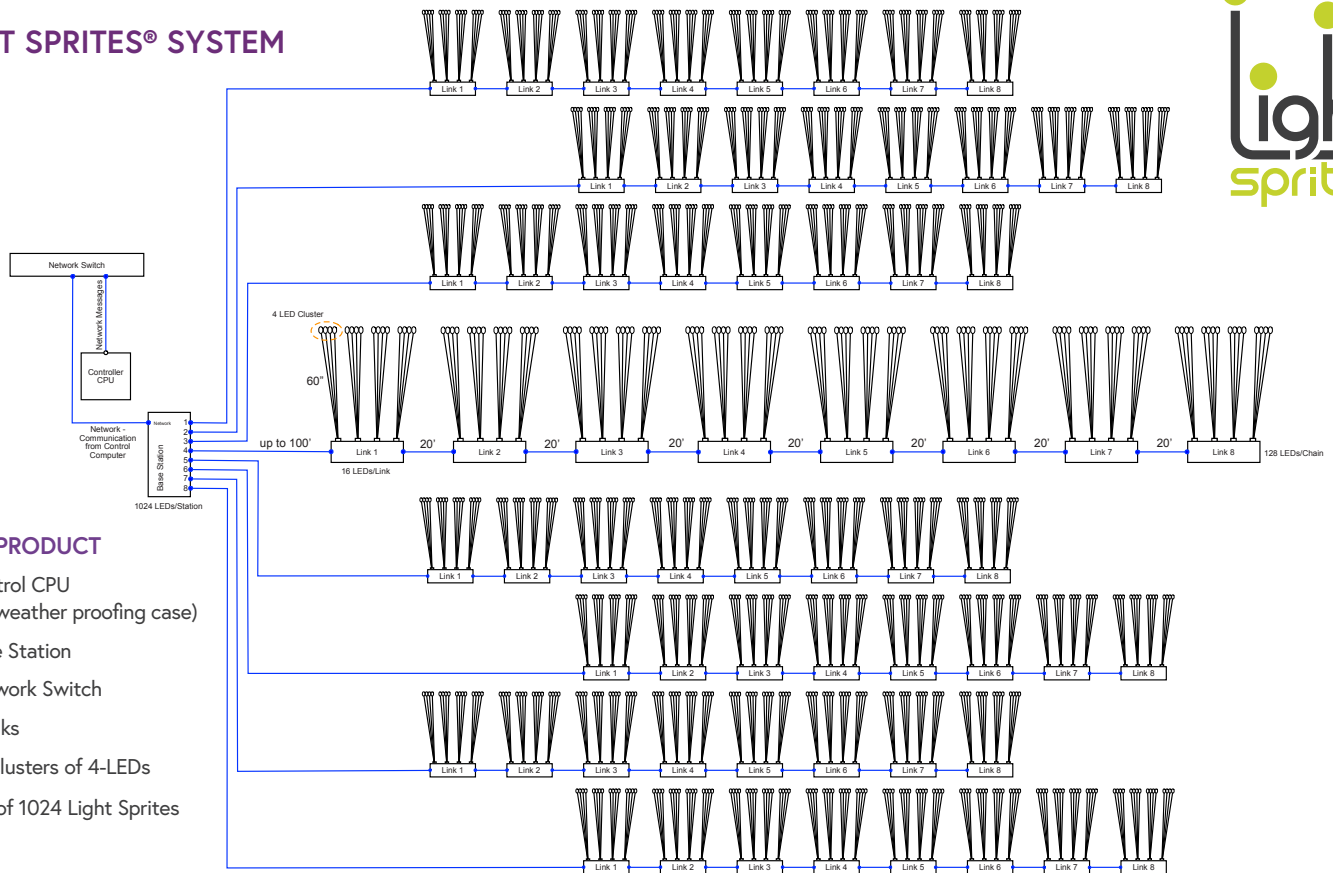
- Multiple experience modes using the same infrastructure
- Light Sprites® are as curious about you as you are of them!
- Light Sprites can be led by staff members outfitted with a special props or wristbands for enhanced guest experiences
- Potential up-sale & take-away tie-ins
- Can easily tie-in to existing show control systems
- Low operational costs

Light Sprites® is designed for outdoor spaces. Enhance your guest experience with this flexible, easy to install and with low maintenance.

- **RESORTS**
- **THEME PARKS**
- **SEASONAL INSTALLATION**
- **BOTANICAL GARDENS**
- **ZOOS**
- **DESTINATION LOCATION**
- **OUTDOOR NIGHTTIME EXPERIENCES**



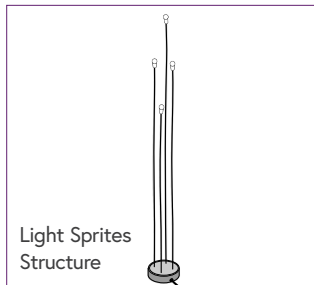
# LIGHT SPRITES® SYSTEM



## BASE PRODUCT

- 1 Control CPU (inside weather proofing case)
- 1 Base Station
- 1 Network Switch
- 64 Links
- 256 Clusters of 4-LEDs
- Total of 1024 Light Sprites

## BASE PRODUCT SPECIFICATIONS



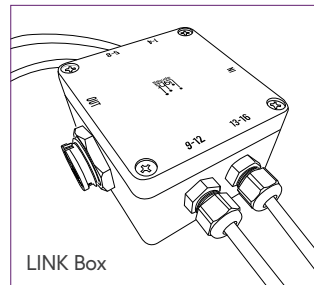
Light Sprites Structure

Light Sprites® comes in 2 standard presentations: **Structure** and **structureless**.

The light sprites' structure is made of anodized, semi-flexible aluminum for easy installation. The maximum height of the structure is 38", with a base of 4" diameter. The base is threaded at the bottom, and it provides an easy way to attach the fixture to any surface. Each structure weighs 1 lb. and supports 4 individual LEDs. Support structures are not required for installation in trees, shrubs and above ground structures.

**LIGHT SOURCE** The standard fixture is a 5mm RGB LED in custom casting.

1 Light Sprites system contains 256 structures or 1024 individual LEDs. IP65.

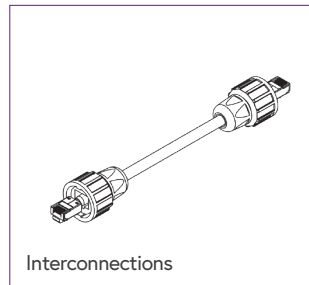


LINK Box

The **LINK box** is cast of aluminum and completely sealed to the environment. Each LINK box has two RJ45 connectors for INPUT/OUTPUT, as well as 4 cable glands to protect the connections with the Light Sprite Structures. The LINK can be slightly buried in the ground for visual purposes, as well as to avoid any hazards during the installation.

Dimensions: 3.13"Lx2.95"Wx2.1"H  
Power: 48V DC

IP65 rated with interconnections attached. Included are IP65 waterproof connections for attachment to the link. Each LINK box weighs 1lb and supports up to 4 structures. 1 Light Sprites system contains 64 LINK boxes.



Interconnections

The Light Sprites® system distributes power and control through **CAT5e cables**. Distance from Base Station to first Link can be 100'+. Distance between links can be up to 25'.

Each Light Sprites system comes with 72 standard RJ45 field cables of various lengths for installation.



Base Station

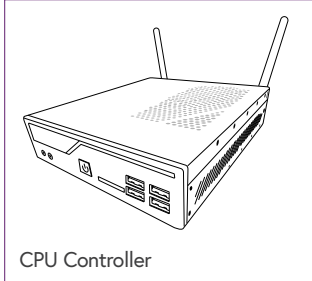
The **Base Station** receives network control signals from the Light Sprites Controller and interprets them into LED control data. While the controller sends configuration and timing information, the processor on the Base Station does the heavy lifting of receiving the configuration information, applying it to pre-existing programmatic "behaviors", and passing along individual Light Sprites' LED control data to the correct chain, LINK, and Sprite.

Dimensions: 10"Lx8.6"Wx1.6"H  
Power: 500 Watts (less than single 15 Amp circuit)

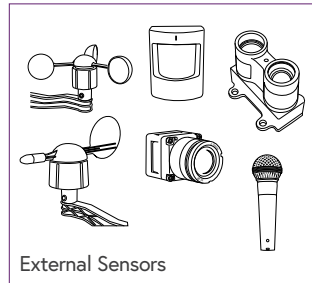
IP rating: must be placed inside weather enclosure if installed in outdoor space. Each Base Station weighs 2.1 lb, and supports up to 1024 sprites. 1 Light Sprites system contains 1 Base Station.



## BASE PRODUCT SPECIFICATIONS

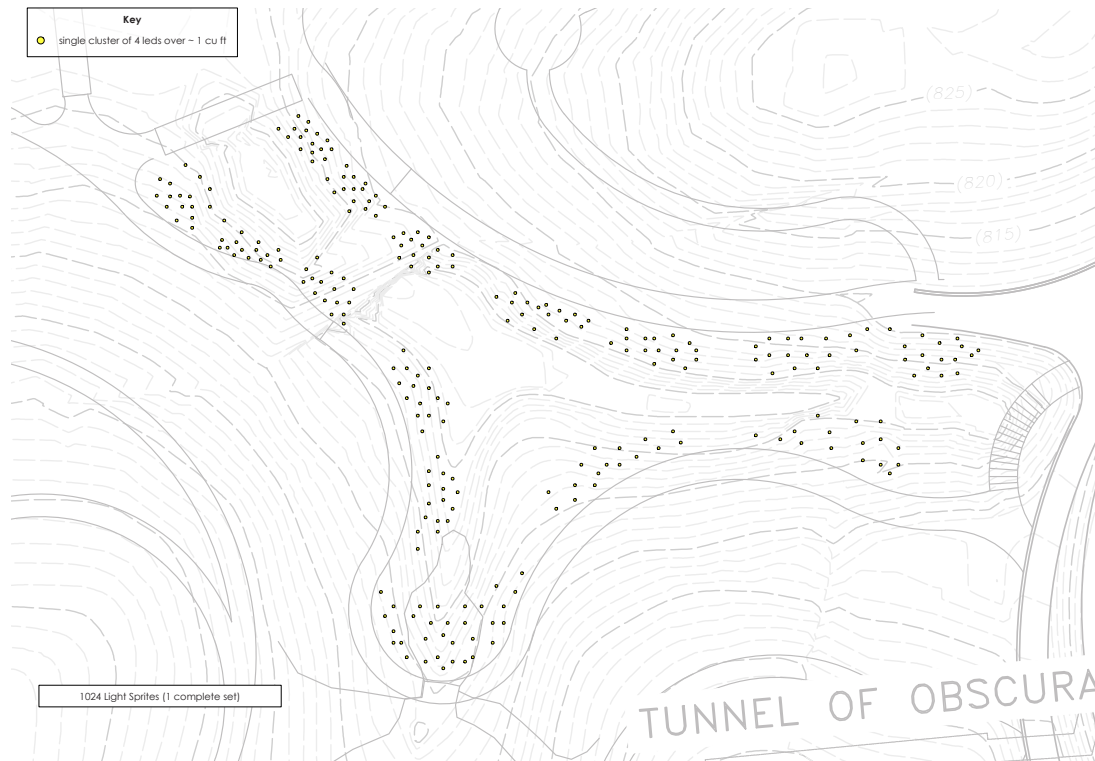


The Light Sprites controller is the **CPU** "brain" at the center of the Light Sprites ecosystem. The CPU serves as the main connection of the Light Sprites to a larger show and lighting control messages into a more streamlined format. The Controller provides customizable system setup, real-time control, and advanced behavior customization of all Light Sprites on the same network. It is also the first point of contact for interactive tie-ins to guest or performer actions, as well as environmental feedback. The Light Sprites Controller can function both independently and in communication with an external show or lighting control system through a variety of protocols (e.g. Art-Net, UDP, TCP, OSC, sACN, MIDI). The Light Sprites Controller communicates with the Base Station via network messages.



**External Sensors** serve as a real-time dynamic input into the Light Sprites system. These include: remote sensing (e.g., location, motion, proximity, presence detection, etc.), environmental (wind speed & direction, precipitation, atmospheric pressure), and sound (e.g., volume, pitch, timbre, musical structure, etc.). In addition, identification (e.g., RFID, QR code, Bluetooth Beacons, etc.), and web API's (e.g., traffic, weather, social media activity, etc.) can also be used to inform how the Light Sprites behave in the physical space.

## SAMPLE LAYOUT



The example layout to the left shows one complete Light Sprite system set up along roughly 920 feet of pathway. Note that Light Sprites can be distributed so they are more dense and/or further off the path around high traffic areas, and sparse in low or traffic areas or in areas where you don't want guests to dwell.