

iPlayer 4

Author, configure, and control
intricate LED light shows in multiple zones

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Author, configure, and control LED light shows in multiple zones with this next-generation controller

Optimized for medium and large-scale LED lighting installations, iPlayer 4 is the successor to Light System Manager gen6 (Light System Engine) and works with Light System Composer software. With support for intricately designed installations containing thousands of LED nodes, iPlayer 4 offers the versatility to manage wide-ranging architectural, entertainment, and retail lighting environments. iPlayer 4 features a slim form factor, durable solid-state drive, and brackets for easy rack mounting installations.



Take a closer look



Easy to use

Easy to use - Featuring Ethernet-based (KiNET) control and automatic lighting system discovery, iPlayer 4 dramatically simplifies installation. A sophisticated new interface, including simple Zone, Scene, and Show management, an intuitive color pallet, and easy-to-use responsive UI allows simple configuration and operation with fewer clicks.

Perfect for medium to large environments

iPlayer 4 processes simultaneous light output data for up to 15,000 individually controllable LED nodes within 90 universes, depending on configuration. Native control of Color Kinetics luminaires in 8 or 16-bit bit mode, including IntelliHue and Intelligent White luminaires means greater gamut control and flexibility.

Zone and Scene management

Quickly upload Zones, Scenes, and Shows from Light System Composer. Create scenes in a specific zone and easily apply effects, tweak, and adjust as needed. Rename, update, or delete Shows or Scenes.

Powerful palettes

Build the perfect color palette for any occasion, add, or delete colors, and apply colors throughout Scenes and Shows.

Easy scheduling

Schedule and playback light shows, set event triggers, create show schedules, and easily select point-and-click static color scenes using the newly designed interface. Create and manage calendar events to automatically trigger show playback at a specific date/time or based on an astronomical event, such as sunrise or sunset, viewable by month or day.

Dual configurable network ports

Two network ports support integration into existing network environments, while maintaining connectivity to a separate dedicated lighting network.

Sophisticated API support

iPlayer 4 Device and Light Control API allows external system integration of Light Control, Calendar, and System settings possibilities.

Interact Landmark integration

Interact Landmark is a cloud-hosted connected lighting system for architectural LED lighting installations. iPlayer 4 is fully integrated with Interact Landmark allowing you to remotely monitor, manage, and maintain multiple sites and iPlayer 4 devices from anywhere in the world, using a secure web connection. Trigger shows via Interact Landmark Content App.

Specifications and information

Due to continuous improvements and innovations, specifications may change without notice.

General information

Electrical

Input Voltage	100 to 240 VAC, auto-switching
Power Consumption	180 W maximum
Surge Protection	For Surge Protection Requirements for LED Lighting Systems, please refer to www.colorkinetics.com/KB/surge-protection .

Control

Ethernet	Two configurable network ports
Network Data	KiNET Ethernet* protocol via standard Ethernet switch†
Remote Management	Works with Interact Landmark
Remote Monitoring	Works with Landmark Gateway via Interact Landmark

Capability

Supported LED Nodes	500 to 15,000 nodes depending on configuration
Light Show Playback	> 100
API	Light Control API, and Device API
Multiple Zones	Supported
Light System Composer Software‡	Light System Composer from Color Kinetics is required to create light shows for iPlayer 4. To download Light System Composer, visit www.colorkinetics.com/global/products/controllers/light-system-composer

Physical

Dimensions <i>(Height x Width x Depth)</i>	88 x 335 x 280 mm (3.46 x 13.2 x 11.0 in)
Weight	4.6 kg (10.1 lb)
Housing	Aluminium enclosure
Connector/Cable	(2) RJ45 ports, shielded. Cat. 5e or better data cable (not included)
Operating Temperature	0 to 35 °C (32 to 95 °F)
Humidity	0 to 90%, relative humidity, non-condensing

Certification and Safety

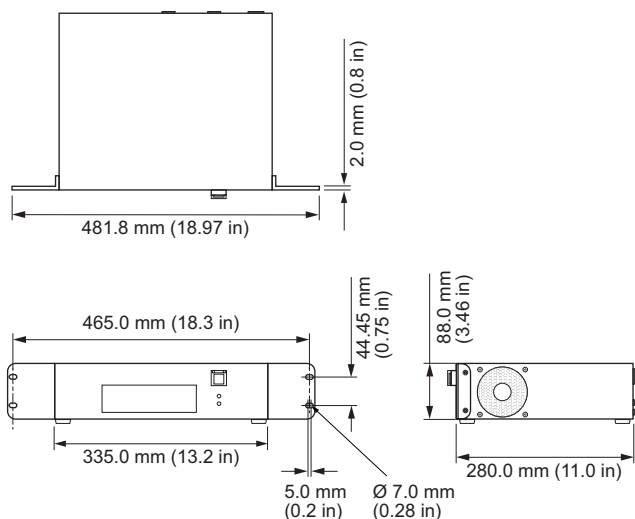
Certification	UL/cUL, FCC, CE, RCM, BIS
Environment	Dry Location

* KiNET is the Ethernet lighting protocol from Color Kinetics.

† Use PoE (Power-over-Ethernet) switches, or PoE injectors, when installing a lighting system containing one or more Antumbra Ethernet Keypads.

‡ Requires 64-bit Windows 10 or newer, or macOS 11 or newer, with at least 200 MB of free storage space, 1GB RAM

Dimensions



Part Numbers

iPlayer 4, 500 Node	103-000042-21	912400138004
iPlayer 4, 1,000 Node	103-000042-22	912400138005
iPlayer 4, 2,000 Node	103-000042-23	912400138006
iPlayer 4, 3,000 Node	103-000042-24	912400138007
iPlayer 4, 5,000 Node	103-000042-25	912400138008
iPlayer 4, 15,000 Node	103-000042-26	912400138009

For further information

iPlayer 4 processes data for up to 15,000 individually controllable LED nodes. Complete details including Installation Instructions, Specification Sheets, and product drawings, can be found at:
www.colorkinetics.com/global/products/controllers/iplayer4



iPlayer 4

Configuration and planning

Regardless of the size and complexity of your installation, the planning time you spend up front can help streamline the installation and configuration of your luminaires. Keep these points in mind as you plan your installation:

Configuration Overview

iPlayer 4 allows your lighting installation to display a variety of light show designs and choreographed moving images. A complete iPlayer 4 system is comprised of a computer (for initial setup and programming), one or more Antumbra Ethernet Keypads (optional), network hardware, and other lighting components.

Ethernet Layout

iPlayer 4 hardware communicates with the power/data supplies in the lighting network via KiNET, the Ethernet network protocol engineered by Color Kinetics for high-performance lighting system control. iPlayer 4 offers full compatibility with all conventional Ethernet hardware, accommodating network trees up to three switches deep between the iPlayer 4 and the farthest KiNET interface. Ethernet limits the maximum cable run to 100 m (328 ft). Adding Ethernet optical data cabling and hardware to your layout extends the maximum cable run distance.

Antumbra Ethernet Keypads are Power over Ethernet (PoE) devices. Use PoE-compatible Ethernet switches if Antumbra Ethernet Keypads are installed on the network. Alternatively, if using non-PoE switches, install PoE injectors from Color Kinetics inline between each keypad and switch.

Dedicated Local Area Network

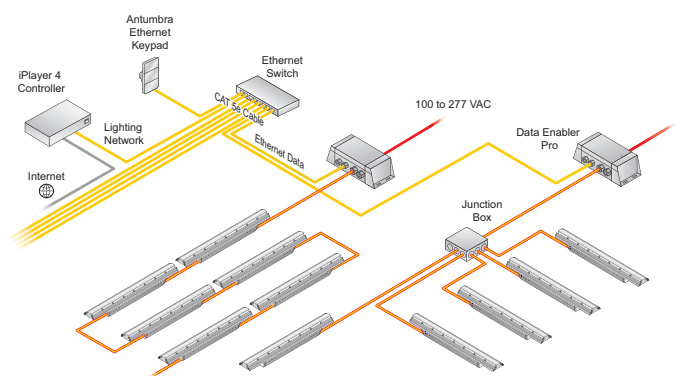
To achieve optimal display and network connectivity performance, the lighting network port of iPlayer 4 and all lighting components must be installed on a dedicated Local Area Network. iPlayer 4 hardware delivers thousands of packets of light output data per second to your lighting installation, requiring uninterrupted data throughput.

You can use the Internet network port to connect to an existing building network, and maintain Internet connectivity.

Automatic Interface Discovery and Creating Maps

iPlayer 4 references a map file when communicating with the lighting components in the network. The map allows iPlayer 4 to identify every luminaire and interface in the installation as a separate device and route data accordingly. For your convenience, the Management Tool module in Light System Composer automatically discovers all connected Ethernet power/data supplies and luminaires, including device properties such as IP address, DMX address, device name, and luminaire configuration.

Ethernet Configuration



Verify the electrical plan and all necessary surge protection requirements

Read about understanding surge protection for LED lighting systems at www.colorkinetics.com/KB/surge-protection

Owner/User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate the iPlayer 4 system in such a manner as to comply with all applicable codes, state and local laws, ordinances, and regulations. Consult with the appropriate electrical inspector to ensure compliance.

Plan the Installation

To streamline installation and ensure accurate configuration, start with a layout or a lighting design plan that shows the physical layout of the installation and identifies the locations of all luminaires, Data Enabler Pro devices, controllers, switches, and cables

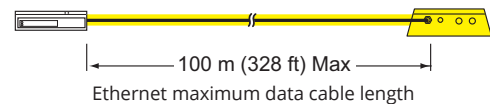
Color Kinetics offers lighting systems suitable for environments ranging from the simplest to the most complex. A simple iPlayer 4 installation might use 25 Graze IntelliHue Powercore luminaires installed in a single zone, whereas a larger installation might use 200 strands of Flex Compact RGB displaying light shows in multiple zones.

Keep these suggestions in mind as you plan your installation:

- 1 Create a lighting design (CAD layout, architectural plan, or other diagram) that specifies the locations of all luminaires, power/data supplies, Ethernet switches, Ethernet cables, the iPlayer 4, and Antumbra Ethernet Keypads.
- 2 Color Kinetics offers a Configuration Calculator to help calculate the number of luminaires a specific installation can support. You can download the Configuration Calculator from www.colorkinetics.com/support/install_tool

For further help, please consult Application Engineering Services at support@colorkinetics.com.

- 3 iPlayer 4 is an Ethernet-based system offering flexible and convenient installation options. Note that Ethernet limits maximum individual cable runs to 100 m (328 ft). For larger installations, adding fiber optic data cabling and hardware to your lighting network extends the maximum cable run distance.



- 4 As part of the lighting design plan, where possible, make use of a repeated layout that specifies the preferred orientation of each luminaire. For example, if using Graze IntelliHue Powercore luminaires, install each luminaire in a uniform manner so that jumper cables plug into the same side of each luminaire in a sequence.
- 5 The Management Tool module in Light System Composer automatically discovers all connected Ethernet power/data supplies and addressable luminaires. As needed, use QuickPlay Pro 2 addressing and configuration software to assign unique IP addresses and device names to all power/data supplies and addressable luminaires before using the Management Tool to map your installation. Download QuickPlay Pro 2 from: www.colorkinetics.com/global/products/controllers/quickplaypro
- 6 To streamline physical installation and future maintenance, affix a weatherproof label identifying installation placement, IP address, and device name to an inconspicuous location on each power/data supply and luminaire housing.
- 7 Refer to the iPlayer 4 webpage for detailed instructions on using the iPlayer 4 at www.colorkinetics.com/global/products/controllers/iplayer4

Installation

Multi-language installation instructions can be found at:
<https://www.colorkinetics.com/global/products/controllers/iplayer4>

Start the installation

- 1 Confirm all luminaires and power/data supplies are installed
- 2 Verify that your iPlayer 4 lighting network port is connected to a dedicated LAN using standard Ethernet switches.
- 3 If using one or more Antumbra Ethernet Keypads, you must use a PoE (Power over Ethernet) switch, or install PoE injectors inline between each keypad and the switch to which it is connected.

iPlayer 4 Installation Overview

- Install iPlayer 4 in a convenient, temperature-controlled location. Use the Installation Instructions document included in the product packaging for step-by-step hardware installation instructions.
- Assign a static IP address to the personal computer you are using and connect it to the lighting network. After connecting the personal computer, verify that the computer can connect to the iPlayer 4. Note that following light show programming and configuration, you can disconnect and remove the personal computer from the network.
- Refer to the IPlayer 4 webpage for additional details as needed at www.colorkinetics.com/global/products/controllers/iplayer4

Light System Composer Installation Overview

- Use the iPlayer 4 Quick Start Guide included in the product packaging for step-by-step software installation instructions.
- Download and install **Light System Composer**.

Updating Firmware

The iPlayer 4 firmware is periodically updated to improve system performance and functionality. To maximize system performance, make sure your iPlayer 4 is running the most recent version of the firmware. We recommend that you confirm that your iPlayer 4 has the most recent version of the firmware before installing it in your lighting network.

See www.colorkinetics.com/global/support/lsm for more information.

Configuration

Using the iPlayer 4 Web Interface

The iPlayer 4 has a powerful web interface that you can use to set event triggering, create show schedules, and easily select point-and-click static color scenes. The web interface supports multiple users with activity logging for each user account.

Connect to the iPlayer 4 interface by entering its IP address in a web browser on the computer connected to the dedicated local area network.

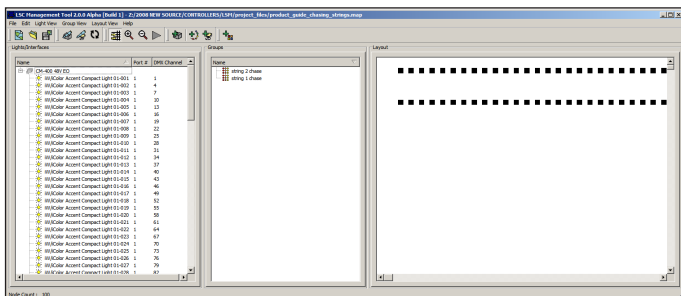
The default lighting network IP is 10.1.3.140

The default username is color

Password is created by the user during initial system setup.

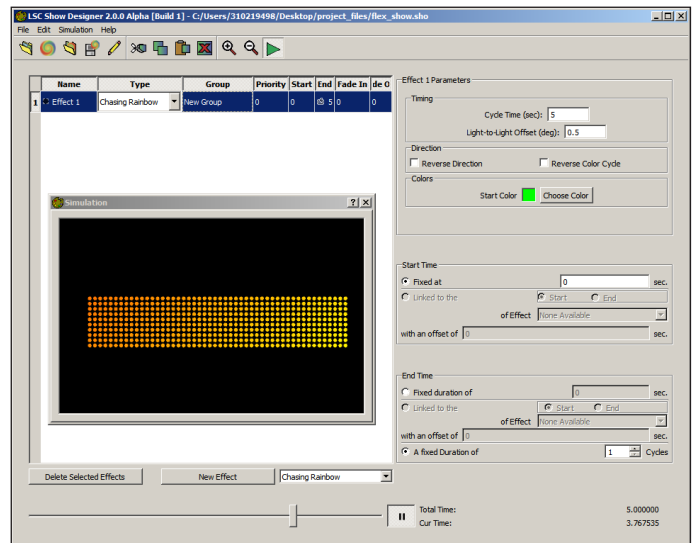
About Light System Composer Software

Light System Composer is a full-featured software package containing the following modules:



Management Tool

When connected to a lighting network, the Management Tool module automatically discovers all lighting system components, allowing you to create a map of the installation. The map identifies all hardware so that the iPlayer 4 controller can send accurate light output instructions. Additionally, Management Tool allows you to create groups of luminaires that can have colors or effects applied to them using Show Designer or the Web Interface.



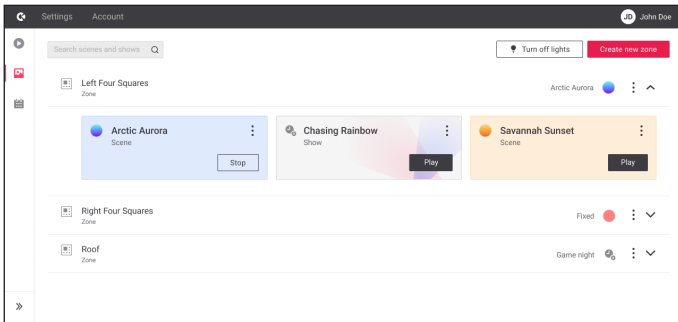
Show Designer

The Show Designer module enables you to author and refine dynamic light shows using eight fixed color and chasing color effects, two animated image effects, and two geometric effects. You can apply pre-defined effects to groups of luminaires, and then modify those effects by modifying their parameters. Show Designer also allows you to simulate your show via the Live Play simulation feature, which displays the light shows on the luminaires in your installation.

Creating and Displaying a Light Show workflow

Create a Map

The first step in creating a light show is to map the installation. The map links all lighting luminaires and interfaces (power/data supplies) to the iPlayer 4 controller, and acts as a virtual representation of the installation. The Management Tool module enables you to automatically discover all lighting system components and build the map. When new luminaires are added to an existing installation, or when working off site, the Management Tool module also allows you to manually build a fully functional virtual map.



Create a Zone

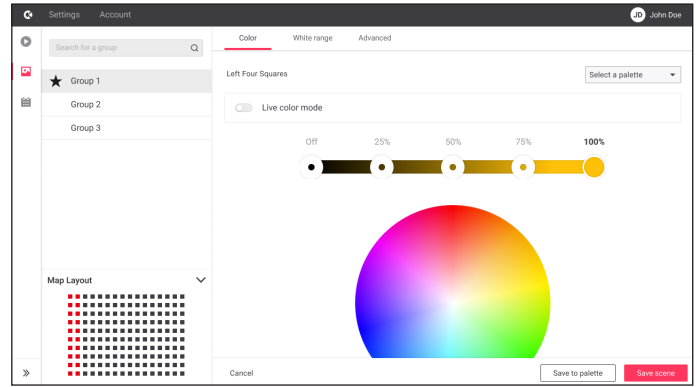
Access the Web Interface, and click the Config tab. Click Zones, and upload your map file to create a new zone.

Create a Dynamic Light Show or Static Color Scene

After the zone is created, create a dynamic light show or static color scene.

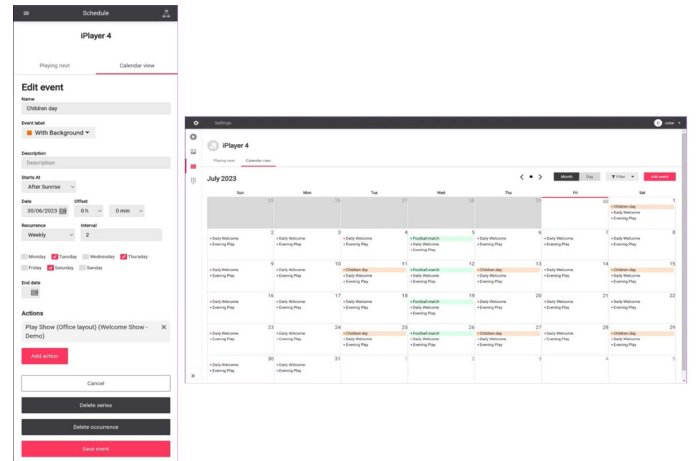
Dynamic Light Show

Use Show Designer to create dynamic lighting effects. Show Designer lets you add effects to each group of luminaires in the installation and then modify the effect parameters to create unique results. Use the Live Play feature to test and refine your show. Once your show is created, use the built-in Web Interface to upload your show file and any related image assets. Each animation effect requires a zip file containing the animation images. Each image scroll effect requires an image file (.png, .jpg, or .bmp)



Static Color Scene

Use the Web Interface to create static color scenes. Colors can be applied to groups of lights in your installation. These groups are created in Management Tool, and the selected group will be highlighted in the map layout section in the Web Interface. You can use the scene editor to select colors and save to the scene. You can also save the selected colors to the specific palette for quick access later.

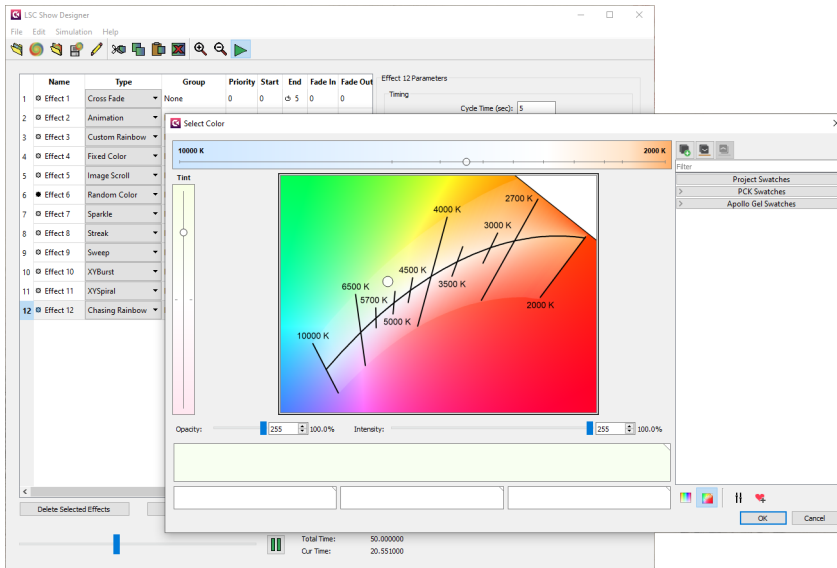


Scheduling Shows or Scenes

Using the Schedules tab of the Web Interface, you can schedule shows or scenes to play at a fixed or astronomical time. You can manually trigger an event by choosing the event from the calendar month view interface. You can manually trigger a show or scene using the Scenes & Shows tab in the Web Interface.

iPlayer 4 Light Show effects

The Light System Composer Show Designer module offers twelve pre-defined visual effects.



Animation

A series of still images appears in rapid succession, creating an animation sequence.

Chasing Rainbow

When applied to a group of luminaires, colors of the rainbow appear to chase each other from node to node.

Color Sweep

When applied to a group of luminaires, a color advances from node to node in a sweeping motion.

Cross Fade

Colors fade gracefully from a solid color to another solid color.

Custom Rainbow

Custom Rainbow is similar to Chasing Rainbow, but allows a choice of colors.

Fixed Color

Static display of a single color.

Image Scroll

A still image moves across the luminaires in a user-defined motion.

Random Color

At specified intervals, colors jump cut from one color to the next, in random order.

Sparkle

When applied to a group of luminaires, flashes of light appears on several luminaires in the group, in random order.

Streak

When applied to a group of luminaires, a pulse of color races from node to node.

XY-Burst

Produces multiple expanding concentric circles of color.

XY-Spiral

Produces a color-changing wheel revolving around a center point.

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