

SYNAPSE

DYNAMIC BEHAVIORS

TECHNICAL BRIEF

OVERVIEW

Many small stadium and arena customers desire the capability to produce simple lighting effects during events to increase the excitement and experience for their fans. With the Dynamic Behaviors capability within SimplySnap, sports lighting companies will now have the ability to offer their customers an easy way to add this to their next project. This licensed feature enables SimplySnap users to produce stunning lighting effects using dynamic behaviors.

To gain access to this feature customers will need to purchase a cloud-based sports lighting subscription for SimplySnap. Two cloud-based license options are available, LM-SPORT for Dynamic Behaviors or the LM-SPORTPRO for Dynamic Behaviors with Color.

KEY CAPABILITIES

The LM-SPORT license include the following Dynamic Behaviors:

The LM-SPORTPRO license adds color selection capabilities and Dynamic Behaviors with Color.

- Paparazzi
- Fast Paparazzi
- Sparkle
- Fast Sparkle
- Random

Paparazzi: All lights in the zone emulate busy flash bulbs.

Sparkle: All lights in the zone randomly fade in and out.

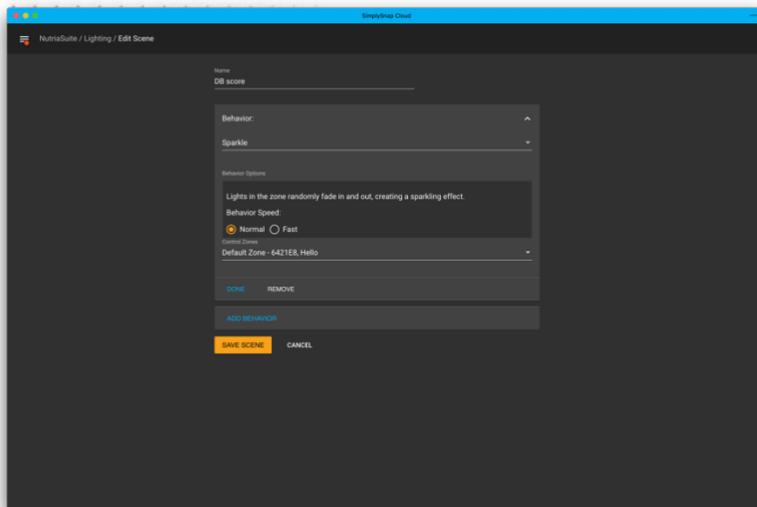
Random: All lights in the zone cycle through random levels.

Configuration

To create a Dynamic Behaviors, users will create a new Scene and choose one of the included Dynamic Behaviors from the drop-down menu of behavior types. If the Sparkle or Paparazzi behaviors are selected, then the option will appear to select normal or fast speed.

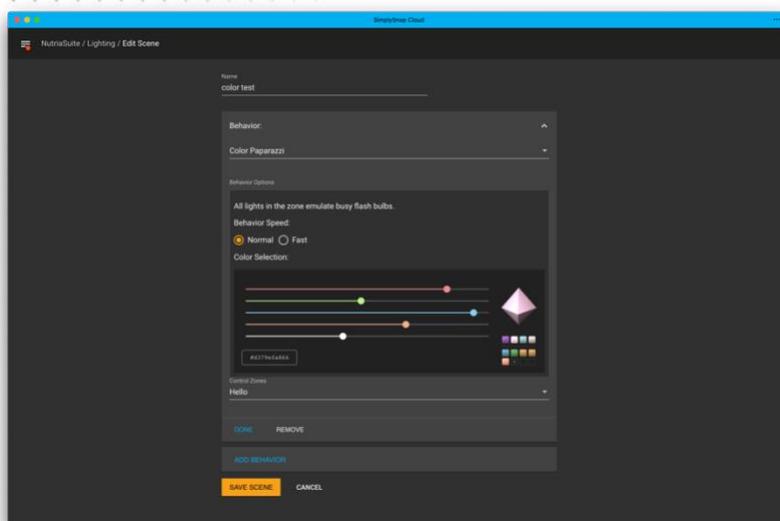
To complete the configuration, the user will select which Control Zone(s) will be associated with this Scene. When the Scene is applied all the lights in the associated Control Zone(s) will start the Dynamic Behavior for that Scene. Users can instantly apply any Scenes through the cloud-based software user interface, a wireless wall switch, or directly from the CBS front panel buttons.

Dynamic Behaviors



The LM-SPORT cloud license enables users to create a variety of Scenes and apply Dynamic Behaviors across a group of lights in a single Zone or across larger groups of lights in multiple Zones at a site.

Dynamic Behaviors with Color



The LM-SPORTPRO cloud license enables users to create, mix, and save colors to create a variety of Scenes using different colors.

With this license, users may also create more advanced Scenes and apply Dynamic Behaviors with Colors across a group of lights in a single Zone or across larger groups of lights in multiple Zones at a site.

System Requirements for Dynamic Behaviors

The LM-SPORT license for Dynamic Behaviors can be used with gateways running SimplySnap version 10.2 or higher.

The messages sent from the SimplySnap Central Base Station or SS450 gateway to SimplySnap lighting controllers are almost instantaneous, and the messages sent from the controllers to the attached LED drivers are also extremely fast. Most LED drivers have a delay built in for dimming to allow a smooth transition when a dimming command is received. LED Drivers used for these Dynamic Behaviors must be capable of making changes to light levels extremely fast to properly deliver all the dimming commands sent from the gateway.

Lighting companies that want to offer this feature are required to utilize the embedded Synapse DIM10-087-06 family of controllers or external ZHA-S1 Zhaga controllers. The DIM10-087-06 controllers work with both D4i Certified Drivers* or Fast Dimming 0-10V drivers*; the new Zhaga ZHA-S1 controller from Synapse can only be used with certified D4i drivers.

System Requirements for Dynamic Behaviors with Color

The LM-SPORTPRO license for Dynamic Behaviors with Color can be used with gateways running SimplySnap version 12.3 or higher.

Lighting companies that want to offer this feature are required to utilize the embedded Synapse DIM10-087-06 family of controllers or external ZHA-S1 Zhaga controllers. For creating colors and using Dynamic Behaviors with Color, only certified D4i drivers* may be used.

To create custom colors, multiple D4i Drivers and a single Synapse controller are used. The Synapse controller sends commands to the attached D4i drivers to mix different levels of light from each driver and create different colors.

***Note** - For a current list of approved LED Drivers required for Dynamic Behaviors please contact us or visit our website.

<https://www.synapsewireless.com/support/product-updates/led-drivers-for-sports-lighting-dynamic-behaviors>

System Options

Option	Required HW and SW	Local Access	Dynamic Behaviors	Remote Access	Advanced Features
1	Site Controller	<input checked="" type="checkbox"/>			
2	Site Controller SDB-001 Dynamic Behaviors License	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
3	Site Controller LM-SPORT cloud application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4	Site Controller LM-SPORTPRO cloud application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Option 1- Local Sports Lighting

For basic sports lighting applications, customers can choose a stand-alone system without Dynamic Behaviors. These stand-alone systems require a site controller which provides local browser-based access to the user interface through a local wired or Wi-Fi network connection. Any remote access capability would be provided by the customer's local network provider or their IT department.

Option 2- Local Sports Lighting with Dynamic Behaviors

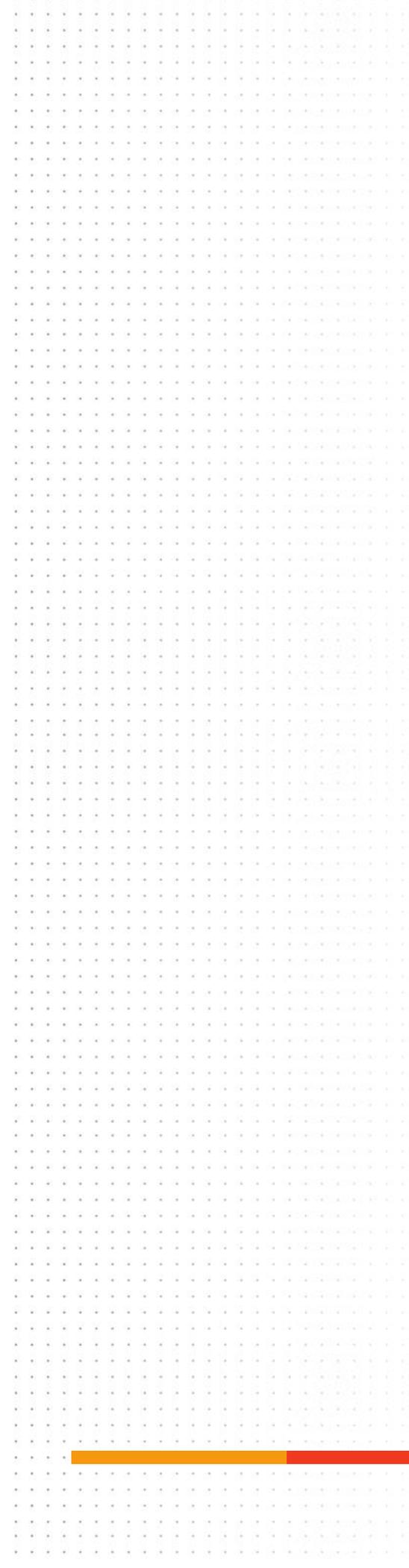
For sports lighting applications that require special lighting effects, customers can choose a stand-alone system with Dynamic Behaviors. These stand-alone systems require a Dynamic Behaviors License to enable this feature in the local SS450 or CBS site controller. Any remote access capability would be provided by the customer's local network provider or their IT department.

Option 3- Sports Lighting Cloud with Dynamic Behaviors

For larger sports facilities with multiple site controllers, Dynamic Behaviors, and the need for remote access, the site controller and the LM-SPORT cloud application provides a single browser-based interface that is available from anywhere/anytime to access and control all the lights across an entire sports facility.

Option 4- Sports Lighting Cloud with Advanced Features

Building off Option 3, the LM-SPORTPRO cloud application includes new capabilities like RGBAW Color Control, Color Dynamic Behaviors, and Color Fade.



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