

## Luxium FAQs

Question	Answer
<b>How can I obtain a demo unit?</b>	Luxium offers a free demo loan program to customers who need to evaluate lighting performance to find out if the capability of a chosen fixture will meet the needs of a project. Contact sales@luxiumlighting.com to request a demo kit which can usually be sent for a few weeks evaluation, or to perform validation testing.
<b>How are the lights controlled?</b>	DMX512 is the primary approach for larger installations using many lights that need to be operated in unison with a DMX control console. To use DMX control the light needs to be ordered with either a wireless DMX module or wired DMX interface using an RJ45 jack. If ordered with a Bluetooth module the lights can also be controlled with a mobile app from an iPhone using the LUXIUMAPP. A third way to control the lights is with a DIP switch that on some models is used to set the color that will be used when the power is turned on.
<b>What are the differences between ZMX and W-DMX?</b>	There are several technical details, although these systems are more similar than different. ZMX <sup>®</sup> (using ShowCast <sup>™</sup> technology) is the proprietary system offered by Luxium, which has gained acceptance in many venues, for commercial, theatrical and event applications. ZMX uses DSSS (Direct Sequence Spread Spectrum) in the 2.4GHz ISM band, the same physical layer as what Zigbee is based on, although ZMX is not a mesh network, as it uses a single transmitter approach with unlimited number of receivers. W-DMX is similar to ZMX, using a single transmitter and multiple receivers (one per light) but it uses Adaptive Frequency Hopping, for theoretically more robust communication. W-DMX also operates in the 2.4GHz ISM band. In both cases, user is cautioned to take care, to locate antennas for best signal access, both transmitter and each lighting fixture. Line of sight is always better than relying on multiple reflections to get the signal to the receiver.
<b>What is W-DMX<sup>™</sup>?</b>	A wireless system offered by Wireless-Solutions of Sweden that is very popular in stage and event lighting situations. We use their new Tiny module, which fits into all of the Luxium product line.
<b>What's the difference between Bluetooth and DIP switch setup</b>	Luxium has made it easy to set up the lights for DMX control. For simple configuration the lights can be configured with a DIP switch that is used to set the DMX address of the light and can also be used to choose pre-set lighting modes such as a certain color or repeating color sequence. The DIP can also be used to place the light into 4-channel DMX control mode or 6-channel control mode. The other way to configure the lights is with a Mobile app called LuxiumApp available for iPhone. The app works with a Bluetooth radio module embedded in the lights to create preset colors or choose a DMX address and many other features. The app can also be used to operate the lights when a few lights are being used in a scene.
<b>what are the apps for, how do they work?</b>	(explain Luxium basic app for iPhone, iPad and Android devices, and then (briefly) explain Trixy)

<p><b>How long do the lights last</b></p>	<p>To ensure maximum life, Luxium has spent extra effort to choose the best possible LED components and has refined the design to include heat management so the LEDs operate at lower temperatures which will extend the life of the emitters beyond the typical 50,000 hour rating of most other LED lights.</p>
<p><b>do the lights work for film and video?</b></p>	<p>Luxium LED light engines are designed with high frequency LED drivers specially made to avoid flicker effects that are often produced with competitors LED lights, virtually eliminating stepping and moire artifacts that can be a problem for film and video applications.</p>
<p><b>Is the light beam homogenized</b></p>	<p>Lights from Luxium are specially designed to give the best quality beam shape and uniformity while also delivery maximum brightness and stable color choices. Two basic optical system designs are available. The Blended Beam design uses a cluster of mixed color LEDs and an optical lens to fully blend the LED colors inside the light. This is a good solution if fully homogenized light is needed right at the face of the fixture. The separate lens array has highest efficiency, and the design is based on highest performance LEDs from Osram, Cree and Philips, and each emitter has a separate optical lens, to produce the best full-gamut performance in a compact fixture in the industry. The separate LED lens array design is made so the beams are combined in front of the fixture to form a uniform beam with high brightness at the targeted surface or illumination subject.</p>
<p><b>How are the diffusers used</b></p>	<p>Diffusers consist of a thin micro lens sheet that is placed at the front of the light to soften or widen the beam angle with minimal light loss light. Diffusers can be chosen and combined to produce narrow to wide, round or elliptical, for the desired beam shape.</p>
<p><b>What is the beam shape of the light?</b></p>	<p>The basic beam angle spread for many Luxium lights is 19 degrees for the full-width half-maximum (FWHM) of beam profile. Very narrow beam angles are possible on a special order basis. For wider beam angles the lights can be outfitted with a diffuser sheet placed at the front of the fixture to widen the beam. Different levels of diffusion are available to create a wide range of angles from narrow spots to very wide floods. The typical beam profile is circular but with special diffuser lenses it is also possible to have elliptical patterns.</p>
<p><b>What is the throw distance</b></p>	<p>Throw distance is a measurement of how far a light is located from the target area that needs to be illuminated. Usually this is stated in meters or feet. The useful throw distance of a light depends on how much illumination is needed at the target area and how large an area needs to be covered. The amount of Lumens produced by the light and spread over a selected beam angle will result in a brightness level at the target area which is explained in lumens/square meter know as Luminous Flux (LUX). A web search will show many kinds of lighting calculators to determine throw distance and illumination levels based on beam angles and lumen ratings.</p>

<b>What is the warranty policy</b>	The standard warranty for Luxium light fixtures is 3 years from date of purchase. An extended warranty can be purchased if needed. Luxium will repair or replace the defective lights depending on they type of problem found. A full description of the warranty is available at <a href="http://www.luxiumlighting.com">www.luxiumlighting.com</a>
<b>What kinds of places are the lights made for</b>	Luxium lights are meant for places where lighting effects are an important part of the experience enjoyed by users. From stage lights to houselights or for architectural accents and events the range of fixture styles and control options make it easy to transform a space with fantastic lighting results.
<b>What range of color gamut is possible</b>	The light engine design is a unique 6-channel mixed-color LED system that uses a combination of Red, Green, Blue, Cyan, Lime and White emitters, then calibrated to provide a very wide color gamut with color mixing that is simply better than RGB, RGBW or RGBA designs.