

Claypaky Skylos

By Kevin Lawson

I was trying to remember the first time I saw a SkyTracker. I remember seeing them as a kid, from miles away. I asked my Mom where those lights were coming from, what was going on over there? She didn't know, but said it was probably "something important." Many years later I was at a gig and saw one of the four-light SkyTrackers in person and it was awesome! Ridiculously bright Xenon beams slowly moving across the sky. It also was strapped to a flatbed truck and attached to its own diesel generator. Four 4Kw beams in the sky was heavy and hungry for power! Fast forward a couple of decades. I'm standing outside with a bunch of CCM students watching the Claypaky Skylos shoot a beam of light into space, and then focus a tight beam on a parking structure a city block away—powered by an extension cord from a wall outlet.

Laser Source

The laser-sourced Skylos is viscerally bright. It doesn't just look bright, it *feels* bright. Its beam is columnated and sharp and it shoots *far*. Just like those SkyTracker beams. We were focusing it on buildings as far as we could safely see, and it was impressive. The fixture is powered by a 300W "White" (phosphorous corrected) laser source. 300W! It is highly efficient. It can be operated at voltages from 100-240V, and its total power draw is 600W. For perspective it is a fixture that can be seen from over a mile away that draws as much power as an ellipsoidal.

The source is qualified as a Class 1 risk group 3 laser product by the FDA and FAA requiring a variance for use. [See Claypaky's statement on Skylos use below]. This requires a bit of online training and paperwork, but it is by no means a heavy lift, time or energy-wise. As an end user—designer & programmer—I am happy with the safety features built into the fixture. Primarily, the Check Start mode—programmed from the console—safe zones are created for the fixture (ex: above the audience, around camera platforms). This allows the fixture to ramp down to half power and then no output as it approaches and enters a safe zone. The settings are stored in the individual fixtures. This set-up is intuitive and allows a worry-free programming experience. A great example is that even as I program a large movement effect the fixture modifies its output around its safety zones. In addition, if the units lose the DMX control signal, they will automatically turn off their output.

It's important to think of these laser

source fixtures differently than we think of traditional lasers used for concerts. Built into a fixture we are not looking directly at a laser, instead through lenses and filters. Logic dictates their use as we would any high output beam fixture—don't point it directly into anyone's face including your own. Just like your first instinct wouldn't be to run up and stick your face in a SkyTracker, respect the fixture for its output and use common sense.

Sky Tricks

Skylos is described by Claypaky as a searchlight, and it is a glorious one. It shines a bright, tight beam that is impressively visible with no atmospheric. We tested it outside starting at dusk on a clear evening and could see the beam clearly. As the sun set it became even more impressive cutting through the sky.

With its white source, Skylos is most impressive in open white. Color is provided by a 14-position color wheel. As you would expect, output is reduced as more saturated colors are used, but output was still impressive. We focused the fixture on buildings in the distance and while we lost the aerial effect, we could still see impressive surface output in saturated color. The color wheel has a nice range of colors. You can split color, and the wheel spins quickly.

Where the Skylos and its aerial tricks really get fun is when deploying its selection of prisms. The six-facet and five-facet prisms share a rotating wheel. In addition, there is a fixed four-sided prism in a separate wheel. When used together, the prisms add some excellent gobo-like beam shaping options. What was mind-blowing was seeing beam 'flower' effects projected into the sky with no additional atmosphere. In white, we were seeing rotating prism effects cast far into the sky.

Skylos also includes a heavy frost that softens the beam to offer additional variation. Its zoom function is limited from 0° to 5° so even with a prism, frost, and zoomed out, Skylos isn't going to replace your wash fixtures anytime soon, nor should it. It has an electronic strobe, that's very fast, very stroby.

Built for Outside

The fixture is built for outdoor use: stadiums, theme parks, outside our scene shop's loading dock, etc. It is IP66 rated, with marine-grade protection from the elements. It is also built to withstand extreme temperatures both from cold and direct sunlight.

It will work hung in any position, and even at 132 lbs. was reasonable to remove from case and hang due to its well positioned handles. It's not a small fixture when compared to other moving lights, but compared

invisible to designers and programmers to impact their artistic goals as little as possible.

Also in the U.S., the FAA requires their approval if using Skylos and Xtylos outdoors where the beams will be uninterminated or restricted using the same safety system used in indoor show. Once again, Claypaky provides a free, online portal where customers may enter the required information and submit their application for FAA approval (the request to FAA to use the fixture must be done more than 60 days before the show).

Claypaky is the original pioneer in this use of revolutionary laser technology for stage lights, and our long-term investment in its research and development has paid off. Now, after five years of production experience with our customers using these products in the U.S., we can proudly state that no issues have been encountered. Our laser sourced units have not only proven to be stunningly powerful design tools, but, most importantly, both safe and easy to use for our American clients.



to a SkyTracker 4 Light strapped to a truck, it's tiny! If you want to deploy them in clusters, they will operate with 40" spacing.

Right Tool for a Specific Job

In a world full of lighting fixture options, filled with pixel tricks and other short throw hokum, sometimes you just want to throw a really bright beam, really far.

Skylos' effectiveness is reflected by the imprecision of my language—'really far' and 'really bright'—are of course subjective. On Claypaky's website you can find photometric information, like an astounding 200 foot candle output at around a 1,200' throw, but I'm not running a quarter mile away from the fixture to check it on my meter. (Feel free if that kind of thing is your jam; no judgement). What I trust is my eyes, and they say that Skylos throws an incredibly bright beam as far as I can see. I can't use it for everything, but when I want *that*, I haven't seen anything like it. The fact that it can do that while drawing less power than my toaster, is almost magical. Much like that SkyTracker I saw from the back seat of my Mom's car, I can see Skylos' beam from far away and know that "something important" is going on. **PLSN**

At a Glance

Claypaky Skylos

PROS

- Shoots a bright beam of light very (very, very) far
- Excellent beam shaping prism tricks
- Built to withstand the rigors of outdoor use including harsh weather conditions
- Minimal power draw
- Onboard safety features

CONS

- Laser variance requires minor training and paperwork
- Loses some punch in darker colors

SPECS

Fixture Type: Searchlight

Source: Laser

Color Temperature: 10,000K

Front Lens: 300mm

Zoom: 0.5° - 5°, Motorized

Color Wheel: 14-Position
Dichroic Colors

Gobos: 1 Slot Position for
Customizable Fixed Gobo

Frost: Linear heavy frost 5°
for wash effect

Prisms: Wheel 1: 6-facet prism +
5-facet linear prism; Wheel 2: 4-facet
fixed prism on separate channel

Pan: 270°, 16-Bit / Tilt: 540°, 16-Bit

Dimmer: 24-Bit

Shutter/Strobe:
High Speed Electronic

Control:
DMX, Art-Net, sACN, RDM, CRMX

DMX Channel Modes: 20 Channels

On-Board Control: LCD Backlit
Display, Self-Charging Battery

Input Range:
AC 100-240V 50/60Hz

Power Consumption (Max): 600W

Power Connectors:
powerCON True1 In/Out

Data Connectors:
5-Pin XLR In/Out, RJ45 In

Max. Ambient Temp: 45°C (113°F)

Min. Ambient Temp: -40°C (40°F)

Noise Level: 52.6 dBA

IP Rating: IP66

Approvals: CE, cETLus, UKCA

**Minimum Distance of
Illuminated Objects:** 98'-5"

**Minimum Distance from
Flammable Materials:** 8"

Dimensions:
15.75" L x 18.90" W x 36.54" H

Weight: 132.3 lbs. (60kg)

MANUFACTURER:
Claypaky

MORE INFO:
www.claypaky.it

Claypaky Statement on Laser-Sourced Fixtures

In America, because the Xtylos, Mini Xtylos HPE, and Skylos fixtures are designated as Laser Class 1-RG3 fixtures by the FDA, there are some requirements for their use. To buy, own, rent, or use these lights in the U.S., customers must take an online course and test administered by Claypaky. The entire process is free and takes about 90 minutes to complete. Once the customer passes the test, the FDA will grant a variance for their company. Receipt of approval takes 4-8 weeks depending upon FDA workloads at the time.

Any employee of the company named in the variance is covered for operation of the fixtures. After following some simple operational guidelines regarding output power of the units in relation to distance to audience members, designers can quickly start using the fixtures without feeling creatively restricted. Our entire focus during the development of the safety system was to make it simple to implement, effective in adhering to the FDA guidelines, and nearly