Octa Light Player™

8-channel Light Synthesizer Luminaire*

Product Description

The Octa Light Player is one of several multi-channel, light synthesizers from Telelumen. It offers 8-channel, full-spectrum, dynamic lighting of 2,000 lumens across the entire color temperature range of 1500K to 20000K (fire to blue sky) with high color rendering. In addition to standard white light tuning, Octa spectral light output can cover a majority of the CIE color space and saturate or de-saturate portions of the spectrum while keeping the chromaticity constant. Optional LED channels with peak wavelengths from near UV to deep red allow a very broad variety of SPD to be synthesized. This kind of flexibility is critical for circadian lighting, photography, displays, sensors, plant and animal research, color management including light booths, and many more applications.
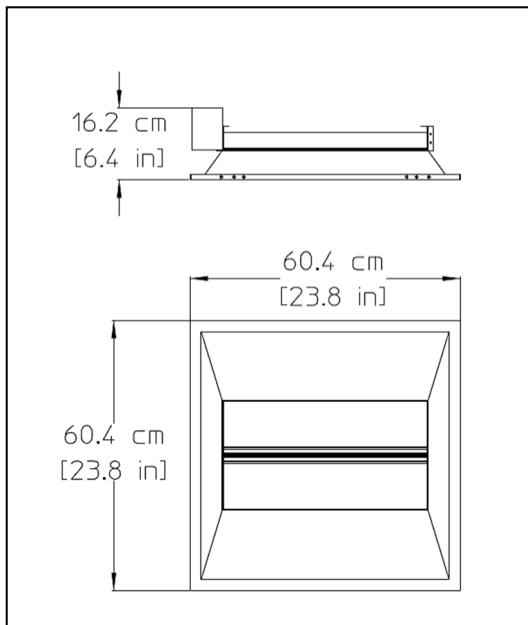
Telelumen Spectral Match Technology

The Octa synthesizer is meant to be driven by Telelumen Spectraloc Software for maximum performance. Reproducing natural sources such as daylight SPD variations over time is easy. Together the hardware and software can generate most SPDs within the visible range to extract the full potential of programmed illumination changing with time. Far from simply defining the source by its CCT or chromaticity, this software allows custom SPD manipulation and illumination matching for playback on a luminaire. Sophisticated match algorithms convert SPDs into LED channel drive vectors without complex input from the user.

Telelumen Lumenscripts

Illumination programs called Lumenscripts can be recorded by a spectrometer, and then edited by a developer, synthesized from scratch, or in combination. A Lumenscript to Octa is what an MP3 audio file is to a music player. The light player synthesizer can update the stored Lumenscripts at 1 kHz if needed. Octas can operate alone or in groups by remote control over Ethernet.

Spectraloc Software Screen Shot (violet option shown)

Telelumen Spectraloc

S/N 1575 (OctaViolet) SPD (W/nm)

Luminaires
main
1575

Manual Control
Show radiant outputs

	Drive Level
Violet	0.173526
RoyalBlue	0.125048
Blue	0.223423
Cyan	0.170855
Lime	0.961913
Amber	0.269673
Red	0.104173
DeepRed	0.125078

Metrics — selected luminaire

Output (lm)	2000
Output (W)	6.956
Input Power (W)	31.9
(u', v') cmf2	0.2104, 0.4864
(u', v') cmf2	
duv	0.0016
CCT (K)	5001
Ra	99
SPD Error (%)	11.0
(u', v') Error	0.0000
Rf av.	99
Rg	100
Rf 1	98
Rf 2	99
Rf 3	99
Rf 4	100
Rf 5	99
Rf 6	99
Rf 7	99
Rf 8	99
Rf 9	100
Rf 10	99
Rf 11	98
Rf 12	96
Rf 13	96
Rf 14	98
Rf 15	98
Rf 16	98

Optical Feedback

irradiance (mW/m2)	
cct (K)	
Ra	
(u', v')	
signal level	
integration time (ms)	
sensor temperature	
LED board temp. (C)	
date	
time	

Target Illumination
Match mode
regular palette quick
Target Thermal CT 5001
Target Luminous Output 1999.99

Edit Lumenscripts
single frame
smooth loop dark after send
Frame number 0
Duration (s) 1.000
Source target

Play Lumenscripts
play by name

5000k 1000 lm sn1
20000k 100 lm sn1
1800k 500 ln sn157
6500k 100 lm.lso

Apply to group

16.2 cm [6.4 in]

60.4 cm [23.8 in]

60.4 cm [23.8 in]

Specifications

Color channels:	8 (various options from 365nm to 660nm)
CCT range:	1500K - 20000K
Lumen output:	2,600, >90 R$_f$ (TM30)
PWM dimming:	>250:1
PWM frequency:	32 kHz
Data and Control:	Ethernet
Network protocol:	TCP/IP, UDP, DHCP
Input Voltage:	100-240 VAC (277 VAC for NA only) 0.5A max, 50/60Hz
Weight:	5 kg (11 lbs)
Warranty:	1 year
Mounting:	Ceiling, bench, cabinet

*Octa built on CREE CR-22 frame

Made in the USA