



Astera is a German hardware, software and manufacturing specialist. Since the mid-2000s, Astera has been producing battery powered, remote controlled LED lights. In 2007 Astera moved its factory from Germany to Shenzhen/China, the worldwide hub of LED technology and electronic innovation. By now, this factory has been extended to more than 5000 sgm and is run by an international team of specialists.

True to its roots, Astera only manufactures battery-powered lights and accessories. Over the years the company kept adding features and new technologies to its lights. A range of battery spotlights has been used to illuminate numerous world-famous events.

In 2018, Astera noticed an increasing demand from the media industry for portable lights that can be used to shoot movies, commercials, music videos etc and decided to build a product dedicated for this market. Astera got in touch with gaffers and cinematographers and with their help developed the award-winning Titan Tube.

For the coming years, several unique products are under development. Astera loves to listen to customers and with their help develop well thought-through products that help customers to express their creativity and that professionals enjoy using.

©Marcus Harr

N. Ernst

Norbert Ernst CEO, Astera

INDEX

INTRO 100% Wireless Astera System Features	2-5
TUBES Helios Tube Titan Tube Hyperion Tube	6 - 15 Pixel Tube
SPOTLIGHTS AX5 AX10 AX3	16 - 25
NEW PRODUCTS AX2 PixelBar NYX Bulb	26 - 31
APP + ART7 Astera App Astera Box	32 - 35





100% WIRELESS

Advanced battery technology and control lets you set the battery runtime to up to 20 hours. You can be sure that your Astera fixture won't run out of juice before your production is finished.

AsteraApp offers intuitive and fast control of complex lighting setups and is also used to change DMX settings of the lights as well as monitor them out of a distance.

Each of our lights has a CRMX module from Lumen-Radio built-in, offering you the most reliable DMX technology on the market.

All Astera fixtures come in IP65 waterproof housings to make sure you can use them outdoors

Ē

Max. 20h

THE ASTERA SYSTEM

100000

Wireless DMX

The AsteraBox works as a wireless DMX transmitter with CRMX technology, just

connect it with the included XLR adapter.

Compatible

Astera Lights can be controlled together by CRMX and W-DMX (limited compatibility) so you

can use them together with other wireless lights.

(::)

DMX Console









Talkback+

Detect all available lights, set

them up, check their status,

configure DMX addresses

and DMX profiles.



Seamless Runtime

Set the length of your event and be sure that your lights won't run out while still getting the maximum brightness.



Flicker Free Scrambled PWM technology to avoid flickering when filming.



Green/Magenta correction

Adjust green/magenta during content creation to reduce post-production work.



Emergency Light Switches to white light when AC power is cut to keep your event save.



Anti-theft

The lights give visual and audible alarm and send notification to the AsteraApp if they are being moved during an event.

Set up Lights

+ dan Asar

Set up your lights conveniently out of the distance. Adjust DMX settings on one or several lights. After your job, do a master reset.

Monitor Lights

Check your lights while operating them. View battery status, settings, targeted lights and get informed if a light is being moved.

Control Lights

Send effects and colors to your lights. Choose which lights you want to target. Save programs for guick launch later.





AsteraApp

AsteraBox

 $(\cdot$ 2.4 GHz



WHAT MAKES OUR LIGHTS THE NUMBER ONE CHOICE?







TruColor Calibration

Individually calibrated lights lead to 100% color consistency and exact color reproduction of color temperatures and standard filter gels.



Effects

Quickly create programs out of colors and effects. Turn multiple programs and lights into scenes.



Scheduled Stand-by

Switch lights into powersaving standby and schedule them to wake up when the event starts.



Dynamic Power-boost

This exclusive feature makes the light able to display the maximum brightness at all time and intensify non-white colors.



DJ Feature

Auto BPM analyzes the beat and matches programs to it, flash buttons can trigger special effects while being held down.

Other features

The AsteraApp is packed with many additional items and new features are frequently added via software update.

TUBES A FOR FILM. FOR BOTH.







IP65

HELIOS TUBE

TITAN TUBE

HYPERION TUBE

Designed for Film/Broadcasting lighting and the highest performance. All 3 tubes are optimized for ultra-high CRI/TLCI and peak brightness. In addition to wireless power and control they can be wired with power and data through a single cable.

An affordable yet very powerful battery LED tube for stage and event and entertainment ighting. It can be used as on stages and around vent sites and can be used to create stunning lighting effects. A highly creative device that offers an infinite range of possibilities.

œ۰

TIME OF STREET

0

00

0

00

22

PIXEL TUBE

EXCLUSIVE FEATURES OF HELIOS, TITAN & HYPERION TUBE



colors and hue, saturation, intensity control and more

Wired Power/Data Connection via power/data combination cable



Boost Mode Ultra-bright when displaying white color for almost 2h or while connected to AC



Ultra-High Color Rendering TLCI \geq 96, CRI Ra \geq 96, CRI Re ≥ 90 from 3.200K to 6.500K

.

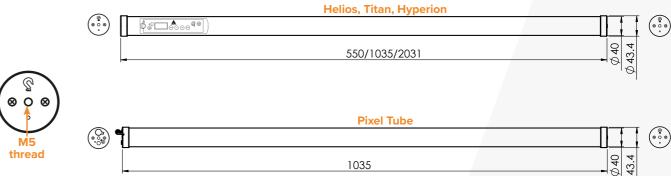
64 (K)

Tunable white with range from 1.750K to 20.000K



SPECIFICATIONS

	8 Pixel	16 Pixel
	24 W	48 W
	Max Power Draw 36 W LED Power 1.340 Im Brightness in white*	Max Power Draw 72 W LED Power
	1.340 Im Brightness in white	2.900 Im Brightness in white*
	HELIOS TUBE	TITAN TUBE
Item Code	FP1	FP2
Size	Ø42 x 550 mm Ø1.6 x 21.65 inch	Ø42 x 1.035 mn Ø1.6 x 40.7 inch
Max Power Draw	24 W	48 W
Emmitance*	393lx @1 m	785lx @1 m
Illuminants	F	ED, GREEN, BLUE, MI
CRI (Ra) 3200-6500k*		≥96
TLCI 3200-6500k*		≥96
IP-Rating		
DMX		Wireless + Wire
Strobe		
Battery Lifetime		7
Battery Runtime		
Charging Time (no- minal)		3 hours
Input Voltage	24V DC, 1A	24V DC, 2A
Wireless Frequencies		
Range		
Wired DMX	yes	yes
CRMX Receiver		
Housing		Polyc
Operating Temperature		
Weight	0,765 kg; 1.69 lbs	1,35 kg; 3.0 lbs



	32	16
ΙT	JAC NA STATE	Pixel
	96 W Max Power Draw	16 W Max Power Draw
– 1.035 mm	144 W LED Power	28 W LED Power
	5.800 Im Brightness in white	955 Im Brightness in white
	HYPERION TUBE	PIXEL TUBE
	FP3	AX1
	Ø42 x 2.031 mm Ø1.6 x 66.43 inch	Ø42 x 1.035 mm Ø1.6 x 40.7 inch
	96 W	16 W
	1.570lx @1 m	270lx @1 m
IT, AMB	ER	RGBW
		≥80
		n/a
IP	965	
d		Wireless
0-2	5 Hz	
) % after	300 cycles	
up to 2	20 hours	
		5 hours
	24V DC, 4A	48V DC, 0.5A
CRMX 2.4	4GHz, UHF	
300m;	330 yds	
	yes	no
Bu	ilt-in	
rbonate;	metal end caps	
)°-40° C;	32°-104° F	
	2,9 kg; 6.39 lbs	1,1 kg; 2.5 lbs

UNLIMITED POSSIBILLITIES WITH ORIGINAL ACCESSORIES FOR TUBES FROM ASTERA



Crossplate Connects up to 4 tubes to one Babypin (welded to backside) AX1-CP



Wingplate Hang tubes via one babypin or connect several tubes together AX1-WP



Babypin Connects Holder/Wingplate to Manfrotto and Matthews clamps AX1-BLT



Holder Fix tubes via screws or babypin to walls and structures AX1-H

Get creative with Crossplate, Wingplate, Babypin & Holder

Mount up to 4 Tubes with the Crossplate







Create shapes with Wingplates + Holders



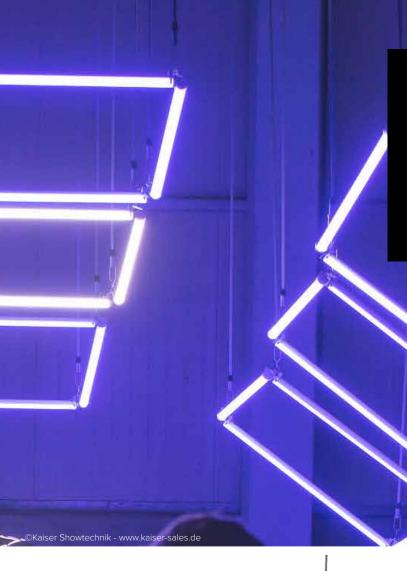






Stand Foldable tripod for a quick setup AX1-STD

Eyebolt and Hyperion Tubes (also as AX1-EBLT



Eybolt + Cable for safe hanging if Tube mounted on truss or pipe



Eybolt + Cable + Holder + splint for safe hanging (not for AX1)



Eyebolt for hanging Titan, Helios secondary mounting for all Tubes)





Helios Handle

Use Helios as a handheld light (only suitable for Helios Tube) FP2-HND



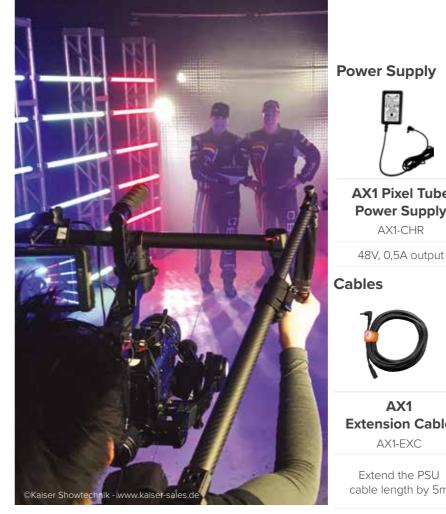
data connection

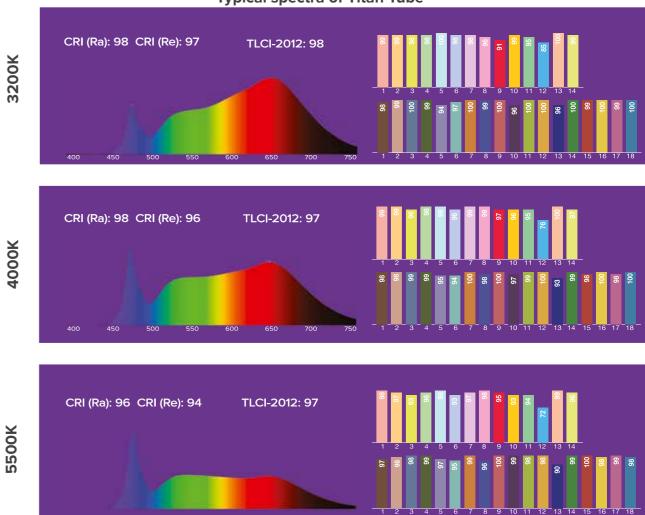
CHARGING & CONNECTING

















24V, 2A output



Power Supply FP3-CHR

24V, 4A output



AX1



Extension Cable AX1-EXC

Helios, Titan, Hyperion Tube **Extension Cable** FP1-EXC

Extend the PSU cable length by 5m



cable length by 5m



Power/Data Cable FP1-PWB-CAB-5/-10/-15

Transfer Power + Data through a single cable; 5, 10 or 15m length

Typical spectra of Titan Tube



©Kaiser Showtechnik - www.kaiser-sales.de



Elegant Uplight

Adjustable Kickstand for flexible wall uplighting

Babypin AX1-BLT

0

Waterproof Connectors Powercon True1 & XLR, IP65

while plugged or unplugged

MECHANICAL FEATURES

Charging contacts for flight case charging

Disc break

Display with 5 Buttons -

4x Rubber Feet

4x M6 thread

Safety hook

3/8" thread (can be removed and truned into a 1/2" hole)

Foldable feet -







Flex Cover White AX5-FLXCVR-WT





Volcano Cover White AX5-VULCVR-WT



Item Code	AX5
Colors	RGBAW
Total LED Power	45W
Luminous Flux*	1,340lm
Emittance*	4,800lx (@2m; white 3200K)
CRI*	92 (@2700~4000K)
Strobe	0 - 25Hz
Beam Angle	13°
Pixels	1
Battery Lifetime	70 % after 300 cycles

Battery Runtime

Charging Time (nominal)

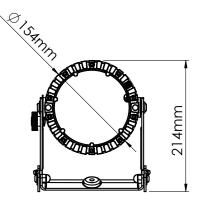
up to 20 hours

5 hrs



18





Input Voltage	90 - 260V, 50/60 Hz	
Range	300 m / 330 yds	
Wired DMX	Yes	
CRMX Receiver	Built in	
Wireless Frequencies	CRMX 2.4GHz, UHF	
Housing	Aluminium with plastic ring	
IP Rating	IP65	
Operating Temperature	0° - 40° C / 32° - 104° F	
Dimensions (mm)	145 x 190 x 221	
Dimensions (inches)	5.7 x 7.5 x 8.7	
Weight (kg/lbs)	3.4 / 7.5	

FILTERS & DIFFUSERS







Eyecandy effect

Softlight effect



With built-in honeycomb, narrows your beam and helps to avoid glare.

Diffuser Dome Create a stunning light ball or softlight projector with the two included filters.

AX5-DDM

AX5-SN

Snoot

Clip-in Filters

High-efficiency wallwash, flood & rotatable filters





Wallwash Filter (17°x46°) AX5-WWF





Flood Filter (32°) AX5-FF





CHARGING CASE 740 x 580 x 540 mm 45 kg/99 lbs (full weight) AX5-CHRCSE

8x AX5 Bolt T

Removable **Charging Plate**



(FOR 8)

(only on request) AX5-CHRPLT-8

CHARGING & TRANSPORTING





CHARGING PLATE

700 x 540 x 250 mm 8 kg/17.6 lbs (empty weight)

Fits in standard 60x40 cm plastic box

CHARGING PLATE (FOR 4)

556 x 356 x 210 mm 4.1 kg/9 lbs(empty weight)

AX5-CHRPLT-4

Call LightDrop

15W RGBW

The AX3 is a battery operated, easy to use IP65 RGBW puck aimed at stage lighting and corporate events. It can be used as uplight as well as hanging or standing spotlight and inside translucent objects, truss, etc. It is extremely compact and yet offers a high brightness paired with long battery runtime and range.









Base for AX5 **Diffuser Dome** AX3-DDB

Diffuser Dome AX3-DDM

CHARGING CASE 520 x 400 x 140 mm 12,4 kg/27.3 lbs (full weight) AX3-CRMX-SET

8 AX3

A a com			
Item Code	AX3-CRMX		
Colors	RGBW		
Total LED Power	15W		
Luminous Flux*	430lm		
Emittance*	1,300lx (@2m; white 6500K)		
CRI *	n/a		
Strobe	0 - 25Hz		
Beam Angle	13°		
Battery Lifetime	70% after 300 cycles		
Battery Runtime	up to 20 hours		
Charging Time (nominal)	5 hrs		

Small yet powerful only 95mm diameter and 59mm height (inches 3.7x2.3)



Adjustable kickstand for flexible wall uplighting

3/8" thread for hanging and mounting on truss

0

Backside magnet for easy mounting IP6



FILTERS & DIFFUSERS







Wallwash Filter (17°x46°) AX3-WWDSK

Flood Filter (30°) AX3-DDSK-30

Diffuser Filter (120°) AX3-DDSK-120

SET & TRANSPORT



Input Voltage	5 V DC / 3A		
Range	300 m / 330 yds		
Wired DMX	No		
CRMX Receiver	Built in		
Wireless Frequencies	CRMX 2.4GHz, UHF		
Housing	ABS		
IP Rating	IP65		
Operating Temperature	0° - 40° C / 32° - 104° F		
Dimensions (mm) with bracket	120 x 59 x 114		
Dimensions (inches) with bracket	4.7 × 2.3 × 4.4		
Weight	0.679 kg / 1.4 lbs		

AX10 SpotMax

AX10 is the brightest and the most advanced battery operated entertainment spotlight; it features high quality Philips RGBAW LEDs, Trucciour calibration, long-life LG-Chem batteries and an uniquely engineered housing to increase cooling and optimize performance. Battery powered, remote controlled, IP65 and a carry handle built into its stand.





Rotatable Filter (17°x46°) AX10-ROTAD

AX10-U

RGBAW 135W

3,350lm 10,350lx (@2m; white 4000K) ≥92 0 - 25Hz 13°

1

70 % after 300 cycles

up to 20 hours

5 hrs

em Code

otal LED Powe

eam Angle

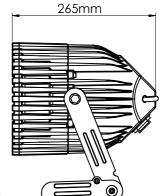
attery Lifetime

©Kaiser Showtechnik - www.kaiser-sales.de

rging Time (nominal









Attached to truss with Super Bolt/Clamp tached att



Foldable Legs for easy carrying



Max. 20h

((î~

Wireless DMX

٩¢

App

IP65

9x15 RGBAW LED And high CRI due to individual factory calibration

t	t	а	C	

24

ACCESSORIES



INCLUDED

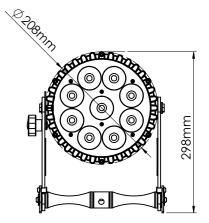
Wallwash Filter (17°x46°) AX10-WWDSK





Charging Case AX10-CHRCSE (on request)

Super Bolt for hanging AX10-BLT



110 - 240V, 50/60 Hz	
300 m / 330 yds	
No	
Built in	
CRMX 2.4GHz, UHF	
Aluminium	
IP65	
0° - 40° C / 32° - 104° F	
279 x 296 x 253	
10.9 × 11.6 × 9.9	
7.98 kg / 17.5 lbs	



AX2 PIXEL BAR Coming soon

Astera's Wireless PixelBar is a linear wash fixture. Each of its LEDs can be individually addressed and offers ultra-high color rendering, digital color calibration and a native 20° beam. Thanks to its smart stands, hanging bracket, connectable endcaps and the integrated airline track it can be quickly assembled in numerous ways and is suitable for a wide variety of applications such as concert/touring, corporate events, TV etc.

. 20h	Арр

$\widehat{\widehat{\mathbf{r}}}$	
	ID65

TrackPin AX-TP

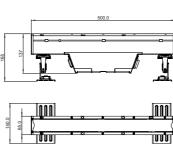


Airline Track Airline track at bac and bottom to attach mounting tools



Safety Hook Helps to hang AX2 safe - please check the safety regulations in your region.





tem Code	AX2-100 / AX2-50		Input Voltage	110 - 240V, 50/60 Hz
Colors	RGBMintAmber		Range	300 m / 330 yds
Fotal LED Power	160W / 80W	1	Wired DMX	Yes
Power Draw	80W / 40W]	CRMX Receiver	Built in
ight output - 2700k, 3200k,5500k (100)*	3600lm, 4460lm, 4530lm]	Wireless Frequencies	CRMX 2.4GHz, UHF
ight output - 2700k, 3200k,5500k (50)*	1800lm, 2230lm, 2265lm	1	Housing	Aluminium
CRI(RA)/TLCI 3200-6500k*	≥96	1	IP Rating	IP65
Strobe	0 - 25Hz	1	Operating Temperature	0° - 40° C / 32° - 104° F
Pixels	16 (8)	1	Weight	7.9 kg/17.5 lbs / 4.9 kg/10.8 lbs
Battery Lifetime	70 % after 300 cycles]	Dimensions (mm)	1000 x 165 x 65 / 500 x 165 x 65
Battery Runtime	up to 20 hours	1	Dimensions (inches)	39.4 x 6,5 x 2,6 / 19.7 x 6,5 x2,6
Charging Time (nominal)	5 hrs		L	·

Available in 2 sizes 50cm with 8x10W and 100cm with 16x 10W (20" and 40")

> **Removable feet** Multi-functional feet with quick-release clamp



or connecting several AX2. With IR-Module for easy communication



Ultra-High Color Rendering TLCI \geq 96, CRI Ra \geq 96, CRI Re ≥ 90 from 3.200K to 6.500K

Individually Controllable Pixels 8 pixels for AX2-50 16 pixels for AX2-100









FlyBar

TrackHanger AX-TH

Mounting on truss, pipes and more with TrackPin

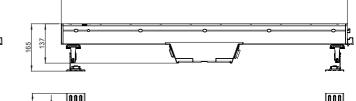


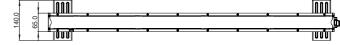












27

NYX BULB

The color-tunable LED bulb for professional film, stage and event productions. Not bigger than a normal LED bulb, it contains a CRMX receiver as well as RF and Bluetooth modules for the AsteraApp. It can be powered viaE26/E27 thread or with a standard power bank and thanks to its Titan LED engine it displays precise colors and white tones with ultra-high CRI and TLCI.



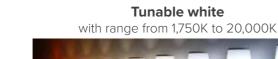


Wireless DMX





USB DC Cable FP5-USBC TrackPin AX-TP





Ultra-High Color Rendering TLCI \ge 96, CRI Ra \ge 96, CRI Re \ge 90 from 3,200K to 6,500K



Dual Power Input Power through E27/E26 AC thread or external (standard power bank or NYX PowerStation)



Precise Colors Display exact CCT, RGB & HSI values or reproduce standard color gels



Item Code	FP5-E27 (EU, Asia, AUS) / FP5-E26 (America, JP, TW)	AC Power input E26	100-120V 50/60 Hz via E26 thread	
Colors	RGBMintAmber	DC Power input	5-18V at 2A	
Total LED Power / Power Draw	14W / 10W	Wired DMX	No	
Luminous Flux*	750lm (@4000k)	CRMX Receiver	Built in	
CRI(RA)/TLCI 3200-6500k*	≥96	Wireless Frequencies	CRMX 2.4GHz, UHF, Bluetooth LE 5.0	
Strobe	0 - 25 Hz	Dimensions (mm/inches)	Ø70 x 130 / Ø2.76 x 5.12	
Battery	only external	Weight (kg/lbs)	0.24 / 0.53	
AC Power input E27 100-240V 50/60 Hz via E27 thread		Ingress Protection	IP44: connected via AC + Rubberplug in DC socket IP20: connected via DC socket	







PowerStation Hanger FP5-PSH

CupBouncer FP5-CPB

with CupBouncer	
AC Power input E26	100-120V 50/60 Hz via E26 thread
DC Power input	5-18V at 2A
Wired DMX	No

PowerStation for NYX Bulb

Connect the integrated cable to your bulb's DC connector to power it up. While connected, the PowerStation acts as a remote display to program DMX addresses and settings which the bulb will store in its memory. It can also set colors, effects, brightness etc which the bulb will continue to display when in a powered lamp socket or connected to a power bank. Apart from its backside magnets the PowerStation features an airline track to attach mounting accessories such as TrackPin and PowerStationHanger.

4 Magnets for

easy mounting

Display for quick access to

DMX setup, colors and hue,

saturation, intensity control

Lamp socket for easy

mounting on PowerStation

Airline tracks for more mounting options



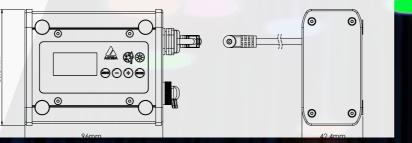
Item Code	FP5-PS
Power IN	24-48V
Power OUT	15V 0.7A
Battery	3350mAh / 10.8V**
Charging time (nominal)	5h
Dimensions (mm / inch)	96 x 80.8 x 42.4 / 3.8 x 3.2 x 1.7
Weight (kg/lbs)	0.4 / 0.89

**equivalent to a high quality power bank with 10.000mAh



(+)@

Mounting with TrackPin Hanging with PowerStation Hanger



Charge PowerStation directly in the case.

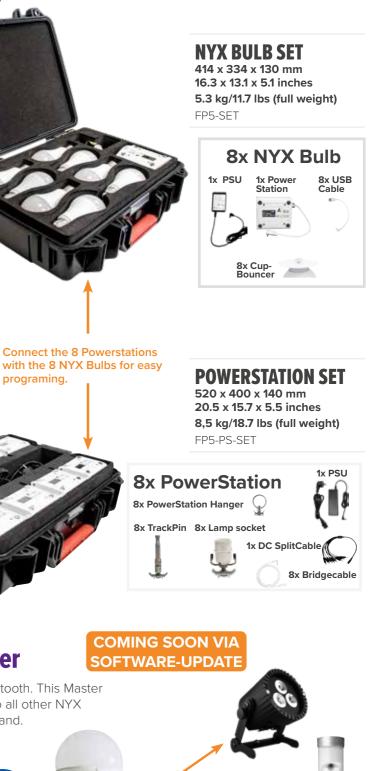
NYX Bulb as Transmitter

Connect directly to a NYX Bulb via Bluetooth. This Master light will revert AsteraApp commands to all other NYX Bulbs and other Astera lights via UHF band.



Limited Range This feature is useful for smaller set ups and installations. For bigger range use the AsteraBox





•)) UHE

ASTERA APP

The most powerful lighting control App for film and event lighting

The AsteraApp is the result of 10 years of development and specifically designed for fast and efficient temporary light setups.

It is much more than a lighting control app as it also does all the setup that would usually be done on the light itself and enables many new features that cannot be found in any other light. All in all, it is a huge time-saver when setting up, monitoring or controlling lights.

Download on the GET IT ON App Store **Google Play**



COLOR

The AsteraApp offers several ways to select colors such as color-wheel, Filter Gels, color temperature, HSI, RGB and CIE 1931. Thanks to Astera's ultra-precise Truecolor calibration Astera fixtures can display the precise color that was selected.



.

PROGRAMS

π 12 Φ

Create complex programs out of colors, effects and settings. Save them as tiles and launch them at a fingertip. The lights will remember and repeat these effects without requiring a constant wireless link.



TARGETS

Quickly create groups of lights, assign positions and select which lights should receive commands. In Q4 2019 we launched an alternative view which is optimized for the workflow of cinematographers.

BRIGHTNESS

Set exact brightness levels of individual lights, groups or all lights. Switch them temporarily into an energy-saving standby mode when you don't want to drain the battery.



Effects

Quickly build programs out of colors and effects, trigger them or make them match a beat.



DJ Feature

Auto-BPM analyzes the beat and matches programs to it, flash buttons can trigger special effects while held down.

MORE APP FEATURES



The light gives visual and audible alarm and send notification to the AsteraApp if they are being moved during an event.



Green/Magenta Correction

Adjust green/magenta during content creation to reduce post-production work.



Dynamic Power-boost

This exclusive feature makes the light able to display the maximum brightness at all time and intensify non-white colors.



Seamless Runtime

Set the length of your production and be sure that your lights won't run out while still getting the maximum brightness.

SETTINGS

Change your light's DMX addresses, footprints, etc... without touching the lights. Select multiple lights and change their settings together to save even more time.



TALKBACK+

Bi-directional communication is deeply integrated into AsteraApp and Astera lights. Get a list of all your lights and their statuses, even when controlling them by DMX or CRMX. And keep a permanent overview by filtering and sorting by different criteria.



10.4



Anti-theft



Switch lights into power-saving standby and schedule them to wake up when the production starts.



Flicker Free

Scrambled PWM technology to avoid flickering when filming.



Emergency Lights

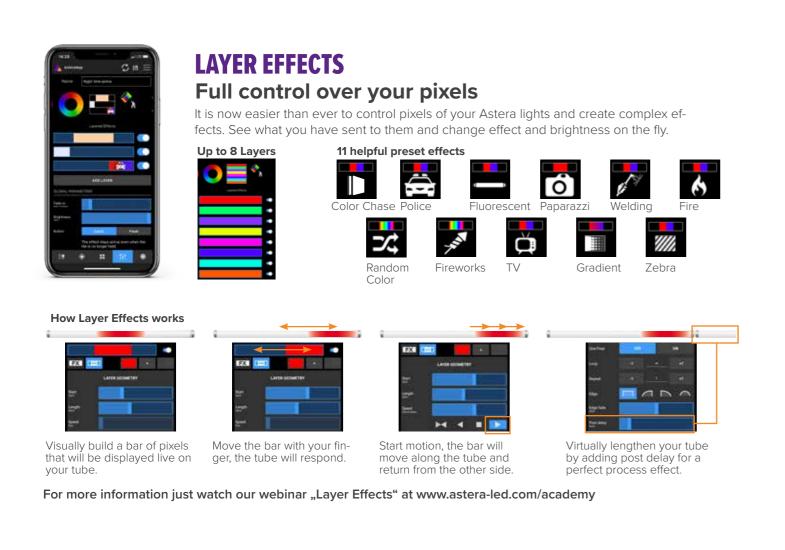
Switches to white light when AC power is cut out to keep your event safe.





Other features

The AsteraApp is packed with many additional items and new features are frequently added via software update.





SCENES

Save combinations of programs and targets

Save your current picture on a tile or create tiles that only change defined targets at a time.



The new Scenes feature allows you to Pre-define sets with a specific effect and save mutiple sets in the scene, you are basically making CUE's. It is now faster than ever to change effects to multiple sets at one time.

For more information just watch our webinar "Scenes" at www.astera-led.com/academy

? ? UHF 2.4 GHz DMX Console AsteraApp **AsteraBox**

RF CHARACTERISTICS ASTERABOX

Wireless Modules	EU: UHF (863-870MHz)	USA: UHF (917-922.20MHz)	AUS: UHF (922.30-927.50MHz)	SGP: UHF (920.50-924.50MHz)	KOR: UHF (917.9-921.5MHz)	RUS: UHF (868.75-869.12MHz)	JPN: U (922.80-926
Modulation	FHSS	FHSS	FHSS	FHSS	FHSS	FHSS	FHS
ERP (Transmitter)	<25mW	<25mW	<25mW	<25mW	<25mW	<25mW	<25m
Channel Count	47	53	53	41	10	6	19



ART7-CSE

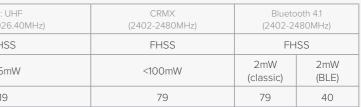


34



AsteraBox is the interface between lights and controller. It can be used as a wireless DMX transceiver with CRMX technology and also works as interface between the AsteraApp and lights. Its built-in battery enables an easy and time-saving setup, just like with all of Astera's products.

Item Code	ART7-U	
Battery	Rechargeable Li-Ion	
Battery Runtime	72h (App); 18h (CRMX)	
Range	CRMX/UHF: 300 m; Bluetooth: 10 m	
Frequency	UHF, 2.4GHz	
Dimensions (mm/inches)	144 x 78 x 30 / 5.7 x 3.1 x 1.2	
Weight (kg/lbs)	0.230 / 0.5	





Contact

Astera LED Technology GmbH Stahlgruberring 36 81829 Munich Germany

E-mail: info@astera-led.com Website: www.astera-led.com