

# ReLite LED Series



 **coemar**  
LIGHT EMOTION

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# What's a ReLite?

LED lighting has completely changed the lighting industry. However, replacing lighting installations based on halogen/discharge lamps can be very expensive and it is hard to find a reliable solution to every luminaire on the market.

For this reason, our R&D team designed the ReLite LED Series, the LED retrofit solution for any old fixtures fitted with traditional bulbs (e.g. Arri, DeSisti, ETC, Niethammer, Robert Juliat).

### **Strong luminous flux**

Thanks to the most advanced technologies, the light output of these retrofit LED is comparable to the performance of traditional lamps.



### **High quality light**

The best light quality possible. High CRI is always recommended when the color rendering has priority versus the general light output (e.g. HD broadcast applications or museum installations).

### **Versatility & Plug and Play**

Different sockets to retrofit any fixture & tailor-made LED group. Two CCT (3200K and 5600K) in two CRI versions available (90 and 97). VariWhite version only with ReLite Kit (CRI>95).

**Easy installation and no maintenance needed.**

CRI: **97.39\***



# Which ReLite is right for you?

Compare our models: making  
the right decision has never been easier.

350/500/650W	1000/2000W	
<b>Mini ReLite</b> CRI90/CRI97 Tungsten/Daylight GX9.5/GY9.5/G22	<b>ReLite</b> CRI90/CRI97 Tungsten/Daylight G22/G38	<b>ReLite HD</b> CRI90/CRI97 Tungsten/Daylight GX9.5/GY9.5/GY16/G22/G38 <b>HD Electronics</b>
		<b>Phase dimmable only</b>
	<b>ReLite Kit DIM</b> CRI90/CRI97 Tungsten/Daylight	<b>Phase dimmable + DMX control</b>
	<b>ReLite Kit</b> CRI90/CRI97 Tungsten/Daylight/ <b>VariWhite</b>	<b>DMX control</b>

# Does it fit my luminaire?

In the following page you will find the list of already tested fixtures with our ReLite products.

## Can't find your model?

Don't worry!

We can develop a customized solution for you.  
Contact our team at: [sales@coemar.com](mailto:sales@coemar.com)

Brand	Model	Type	Mini ReLite	ReLite	ReLite HD	ReLite Kit/DIM
ADB	2000 PC C201	2000W/GY16	-	-	✓	✓
ARRI	650 PLUS	650W/GY9.5	✓	-	-	✓
	T1	1000W/G22	✓	-	-	✓
	ST1	1000W/G22	-	✓	✓	✓
	1000	1000W/G22	-	✓	✓	✓
	1000 PLUS	1000W/G22	✓	-	-	✓
	1000 STUDIO	1000W/G22	-	✓	✓	✓
	T2	2000W/G38	-	-	✓	✓
	T2 TRUE BLUE STUDIO	2000W/G38	-	✓	✓	✓
	2000 STUDIO	2000W/G38	-	✓	✓	✓
DESISTI	MAGIS 300	650W/GY9.5	✓	-	-	✓
	LEONARDO 1000	1000W/G22	-	✓	✓	✓
	LEONARDO 2000	2000W/G38	-	✓	✓	✓
ETC	SOURCE FOUR PAR	375, 550, 575, 750W	-	-	-	✓
LDR	TONO F 2000	2000W/G22	-	✓	-	✓
	NOTA F 1200	1000W/GX9.5	✓	-	-	✓
NIETHAMMER	ENIZOOM 1000	1000W	-	-	-	✓
	ENIZOOM 2000	2000W	-	-	-	✓
QUARTZCOLOR	QUARTZCOLOR 1000	1000W/G22	-	-	-	✓
RANK LIGHTING	CASTOR	2500W/GX38Q	-	-	✓	✓
ROBERT JULIAT	S 613/614	1000W/GX9.5	-	-	-	✓
STRAND	HARMONY PC	1000W/GX9.5	-	-	-	✓

# Save money and Be Green



## LED Lifetime

LED lights are the most long lasting lighting systems: with a lifetime exceeding 50.000 hours, LED bulbs have a far longer lifespan than halogen light bulbs.



## No maintenance

No bulbs needs to be replaced every month. This means less money for halogen lamps and labor.



## Save money

Savings in operational costs such as electricity, air conditioning, replacement bulbs or new LED fixtures are major benefits of ReLite Series.



## Be green

LED lighting is the most energy saving system on the market. No heat generated means a limited amount of air conditioning necessary. **No new fixtures: recycle your own with ReLite.**



# ReLite Series

Discover our models

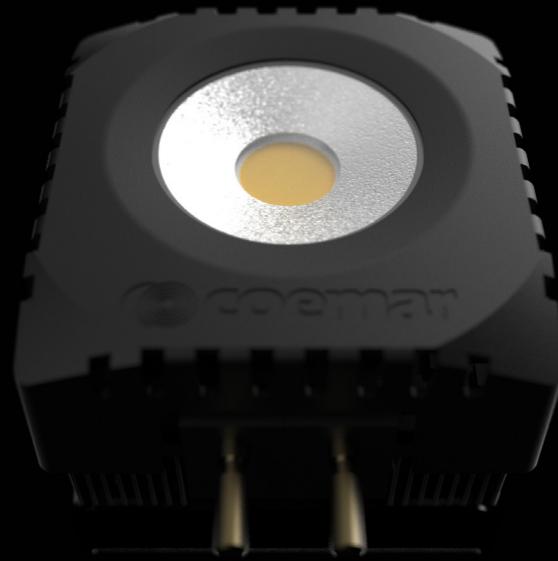


## Mini ReLite

⚡ 70W

☀ Tungsten 3200K  
Daylight 5600K  
CRI90/CRI97  
Flickerfree Operation

◎ GX9.5/GY9.5/G22 Sockets



## ReLite

⚡ 160W

☀ Tungsten 3200K  
Daylight 5600K  
CRI90/CRI97  
Flickerfree Operation

◎ G22/G38 Sockets

**Want the  
best in class  
performance?**

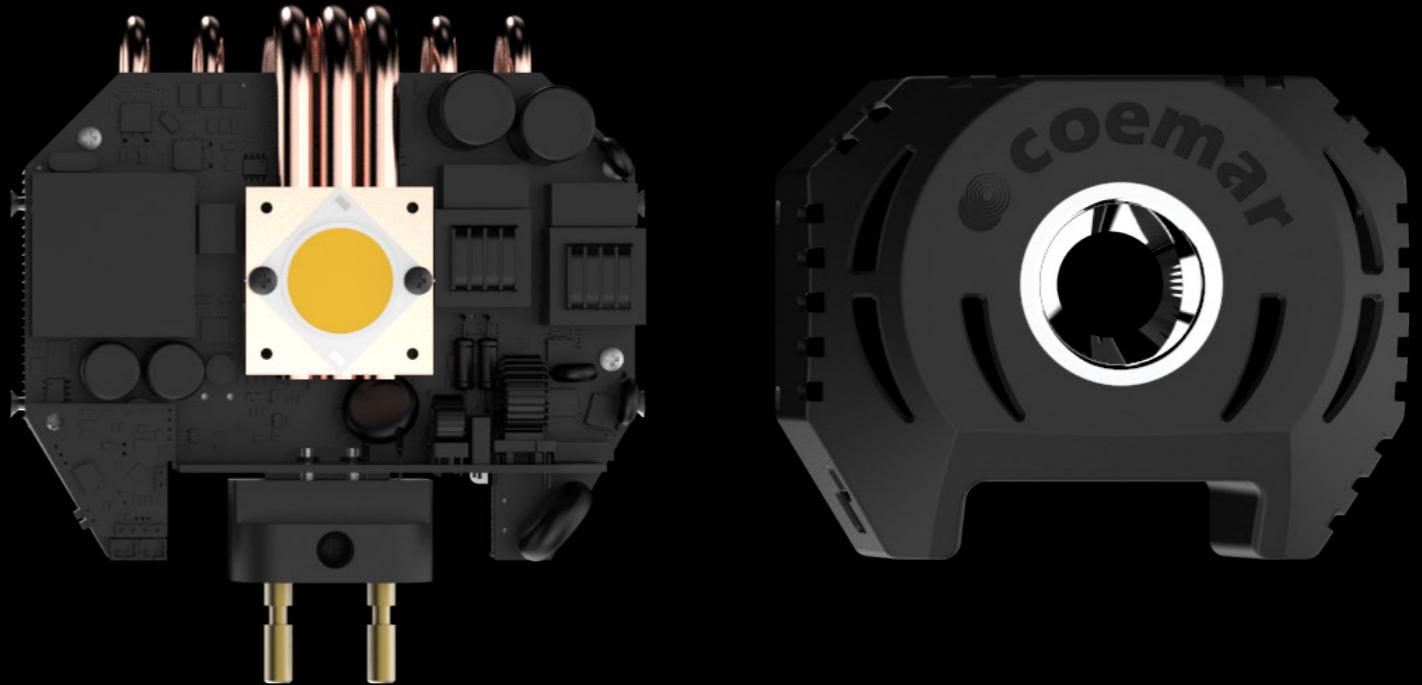


## **ReLite HD**

- ⚡ 160W
- ☀ Tungsten 3200K  
Daylight 5600K  
CRI90/CRI97  
Flickerfree Operation
- ◎ G22/G38 Sockets

⊕ **HD Electronics**

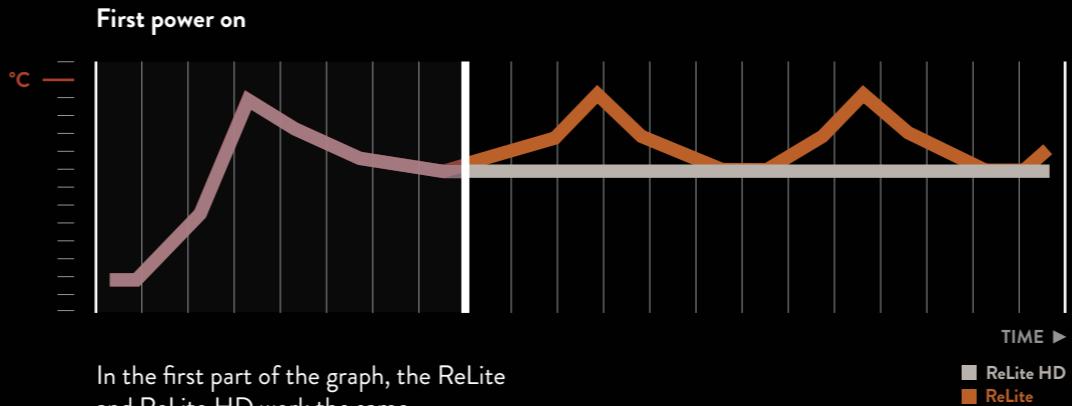
**HD Electronics**  
Top performance  
Compact size



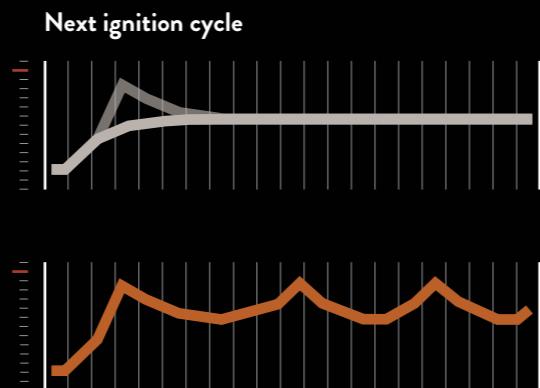
# 1. Stable Luminous Flux

## Internal memory and temperature sensor

Thanks to the internal microprocessor and sophisticated HD electronics, consisting of a temperature sensor combined with the internal memory, the ReLite HD identifies the optimal equilibrium temperature and stores it as a reference even after the luminaire has been turned off.



In the first part of the graph, the ReLite and ReLite HD work the same. Differences arise once high temperatures are detected.



## ReLite HD vs ReLite

Thanks to HD electronics, if the temperature inside the fixture rises, the new ReLite HD will keep working at the optimal memorized temperature thus avoiding the instability of the luminous flux.

This is fundamental where cameras and digital equipment are in use: the slight change in luminosity would be immediately visible through the camera.

On the contrary, the old ReLite can not guarantee the stability of the light output. This is not a problem in theatres and museums, since this change is not visible to the human eye but might be relevant in TV Studios, where the dimming often varies and the stability of the light output is fundamental.



## Dip Switch

ReLite HD features also 2 DIP switches: the first one allows the adjustment of the fan speed (pag.22) and the other one the reset of the ReLite HD.

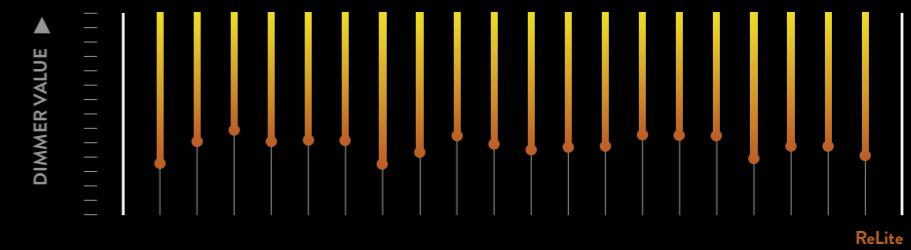
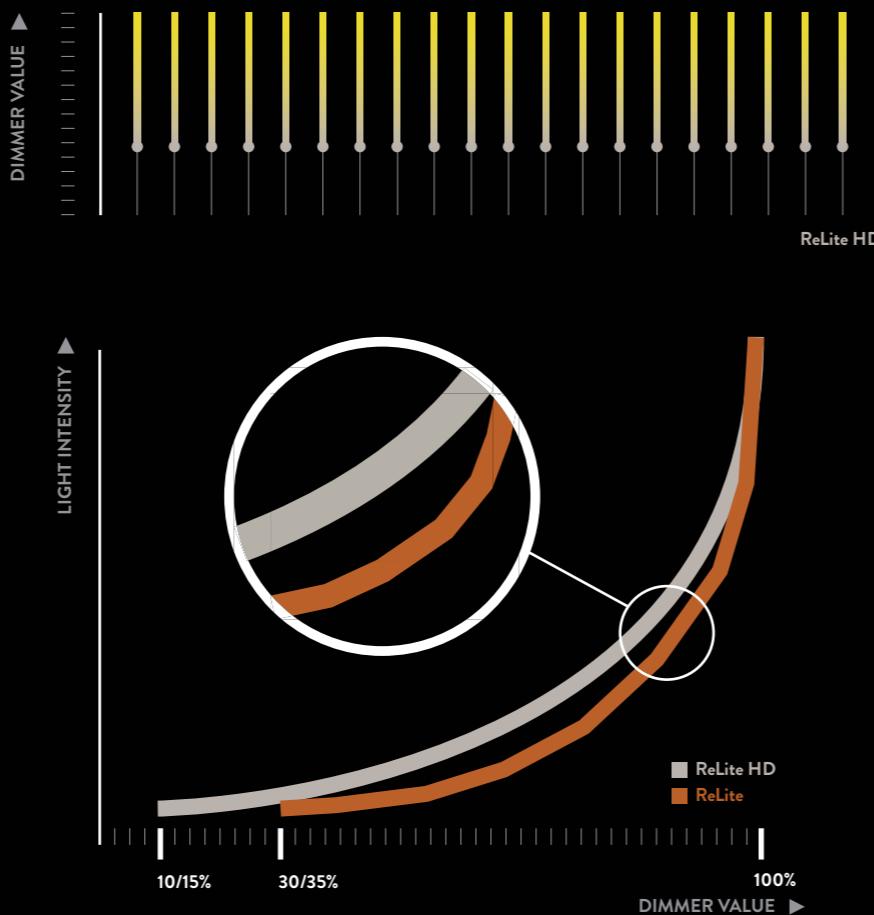
## Why?

If a user needs to use the same ReLite HD in different fixtures, it will be necessary to **reset the internal memory**: in this way the ReLite HD will forget the optimal equilibrium temperature registered before and will be ready for a new installation.

## 2. Factory calibrated

Each ReLite HD that leaves our factory has been carefully calibrated. This process guarantees the simultaneous ignition of multiple ReLite HD\*.

\*The time-lag until ignition occurs depends on the type of dimmer you are using and its settings.



### 0-100% Smooth dimming

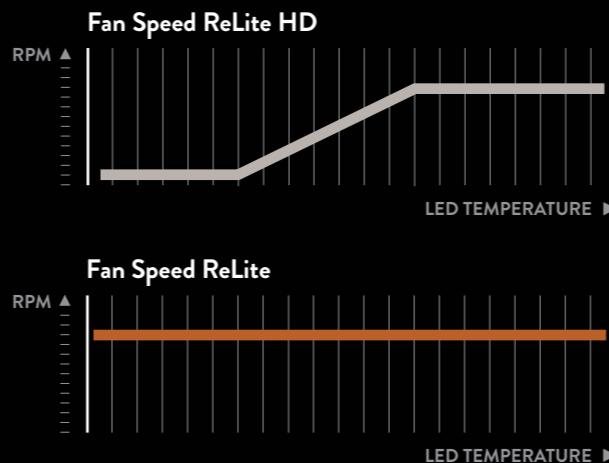
Thanks to HD electronics, the new ReLite HD has greater control over light dimming and provides a smoother and more precise dimming curve compared to the standard ReLite.

### Pre-Heat Support

The ReLite Series supports the Pre-Heat function of traditional dimmers.

This function reduces response time of the ReLite HD during ignition, helps to prolong the LED lifespan and prevents premature failure through the shock of sudden heat. For this reason, we advise you to activate the pre-heat function (if your dimmer supports it).

### 3. Double Dissipation System



#### Dynamic Fan

The intelligence of ReLite HD enables dynamic control over the fan, thereby ensuring precise control of the temperature and the lowest operating noise possible.

Moreover, the fan speed can be set via a DIP switch in two different operation modes: auto (100%) or low (75% of the max RPM for quiet environments).

On the contrary, the standard ReLite operates with a constant fan speed, since there is no digital control available.



#### Heat Pipe

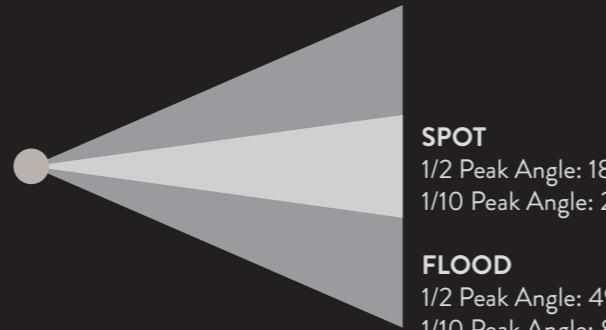
The ReLite HD also features a heat pipe cooling system designed to ensure the best performance.

Compared to a standard heatsink, heat pipes guarantee a faster and more efficient heat dissipation.

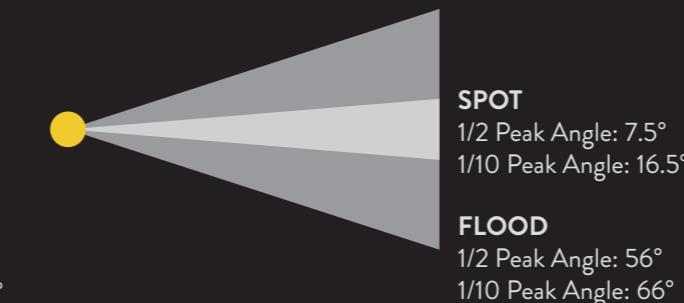
# ReLite HD vs Halogen lamp

## Let's make a comparison

DeSisti Leonardo 1000  
with ReLite HD



DeSisti Leonardo 1000  
with Philips 1000W lamp



		1/2 PEAK ANGLE	1/10 PEAK ANGLE	LUX	
<b>MIN. ZOOM</b> DISTANCE 3m	ReLite HD Philips 1000W lamp	18° 7.5°	<b>28°</b> 16.5°	5.849 12.444	
<b>MAX. ZOOM</b> DISTANCE 3m	ReLite HD Philips 1000W lamp	49° 56°	80° <b>66°</b>	1.067 1.222	

In order to create a fair comparison, we compared the light output of the two different light sources using the same spot / flood beam angle. For example, since the spot beam angle of the DeSisti Leonardo 1 kW with Philips 1000W lamp is narrower than the one with ReLite HD,

we set both products at the same spot beam angle ( $28^\circ$  1/10 P.A.). And as you can see in the chart, the result is a better light output of the DeSisti Leonardo 1 kW Leonardo with ReLite HD (**+ 14%**). On the contrary the flood beam angle of the Leonardo 1 kW with

ReLite HD is wider than the one with the lamp: following the same procedure we set both fixtures at the same flood beam angle ( $66^\circ$  1/10 P.A.). In this case too, the ReLite HD performs better than the lamp (**+ 24%**).

ZOOM 28°	ReLite HD	1/2 PEAK ANGLE	1/10 PEAK ANGLE	LUX	MARGIN
DISTANCE 3m	Philips 1000W lamp	18°	<b>28°</b>	<b>5.849</b>	<b>+14%</b>
ZOOM 66°	ReLite HD	49°	<b>66°</b>	<b>1.511</b>	<b>+24%</b>
DISTANCE 3m	Philips 1000W lamp	43°	<b>66°</b>	<b>1.222</b>	

# ReLite LED Kit

## The new generation of LED Retrofit Kit

ReLite Kit includes all the advantages offered by our ReLite Series, such as the easy installation, the considerable energy/cost saving and reduction in maintenance costs.

### But what makes it unique?

The improved light output and the total flexibility of use. Compared to the standard ReLite version, this custom-designed ReLite Led Kit features an external box that keeps the electronics outside the fixture, thus avoiding the overheating of the projector and consequently the instability of the luminous flux.

Last but not least, you will have the possibility to transform your fixed white fixture into a variable white LED luminaire.

# ReLite Kit Series

## Discover our models





## ReLite Kit 150/250

- ⚡ Max power depending on the LED module and the size/model of the fixture
- ☀ Tungsten 3200K  
Daylight 5600K  
**VariWhite (2700-6500K)**  
CRI90/CRI97  
Flickerfree Operation
- ◎ Custom sockets
- 💡 **DMX control**



## ReLite Kit DIM

- ⚡ Max power depending on the LED module and the size/model of the fixture
- ☀ Tungsten 3200K  
Daylight 5600K  
CRI90/CRI97  
Flickerfree Operation
- ◎ Custom sockets
- ✳ **Traditional Dimmer and DMX**

1.

## Tailormade

### **Customizable sockets, LED units and wattage**

Analyzing the dissipation system and the general fixture characteristics, our R&D team will design the best suitable retrofit kit for your luminaire. In this way you will have the best luminous flux possible in your lighting fixtures.

2.

## External Electronics

Our desire was to make a step forward in LED Technology. Our goal was to transform any old halogen/discharge lighting fixtures in **modern and DMX controllable work tools**.

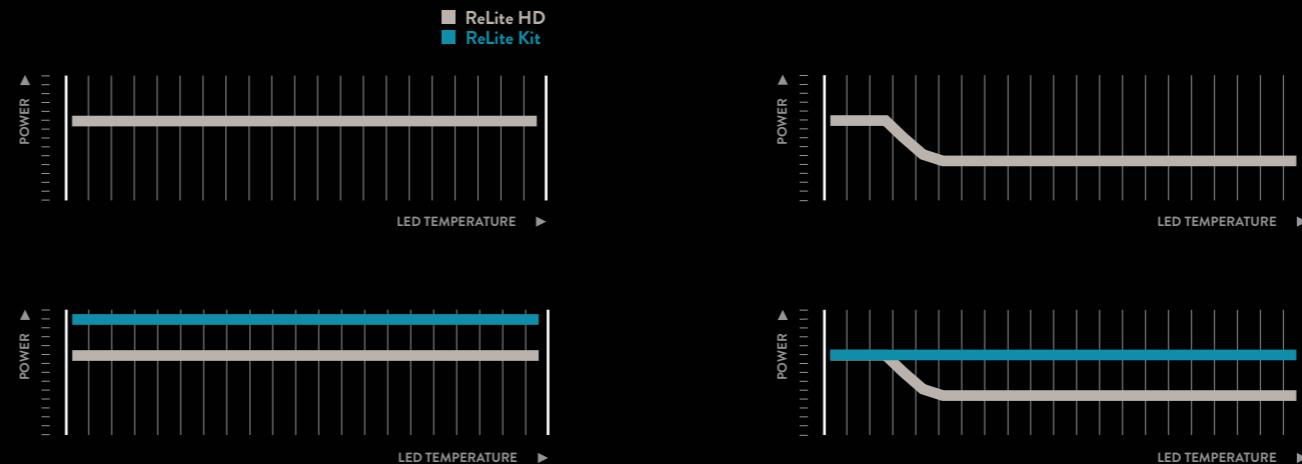
To make this possible **we designed powerful external electronics capable of managing our new LEDs at their full potential.**

The result is a new retrofitting tool that enables the control of all your lighting equipment via DMX.

2a.

## The best luminous flux

To make you realize its great potential, we are presenting two different situations in which choosing the ReLite Kit would your best option.



### >2000W

If we are talking about large lighting fixtures ( $> 2000 \text{ W}$ ) with an efficient air circulation system, the ReLite HD will work at its max wattage (160W) maintaining a stable luminous flux, without ever reaching the maximum operating temperature.

But if your desire is to **increase the performance of the projector**, you can think about switching to the ReLite Kit. The external electronic of the ReLite Led Kit takes away a large amount of heat in the projector: in this way our technicians will be able to increase the LED power and therefore get an improved luminous flux compared to our ReLite HD.

### <2000W

On the contrary, it is usually harder to have an efficient air circulation system in smaller lighting fixtures with more compact housings.

In these cases, the ReLite HD will have to settle down at lower performances to avoid the risk of overheating. It will find its optimal equilibrium temperature and will adapt its power to it.

**The ReLite Kit instead will never reach the operation limit temperature** since it has been engineered to operate in a specific lighting fixture and everything has been optimized to make it work at its best performance possible.

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