

# OPERATION MANUAL

TRE-D

SMD LED LIGHTS  
Variled 1000 Mod.501  
Variled 500 Mod.511

**General Description:**

TRE-D SMD LED Lights are products of high quality for Cinema, Photo or Video Productions.

**Materials:**

SMD LEDs are made in Japan..

All other light Components are made in Europe.

**Warranty:**

All of our products have 2 years Warranty. We have all spare parts and products in stock for immediate repair or exchange.

**Support:**

If you bought a faulty product you should contact with your local dealer or distributor. They will be happy to help you and solve the problem. If the product is in the warranty period they will exchange it with a new one or they will repair it out of charge. Warranty is void upon inappropriate use. Be aware that you should never open the dimmer or the main light body.

**Certificates:**

CE

**General Features:**

JAPANESE SMD LEDs

We have used Japanese SMD LEDs in order to build high quality LED Lights with CRI of 95 for Cinema productions.\*

LOW HEAT

SMD LEDs cannot be easily overheated so you can use them in harsh environments with high temperatures.

VERY POWERFUL

We have chosen powerful and efficient SMD LEDs. That's why TRE-D LED lights have more lighting intensity with much less power consumption comparing to common LED lights.

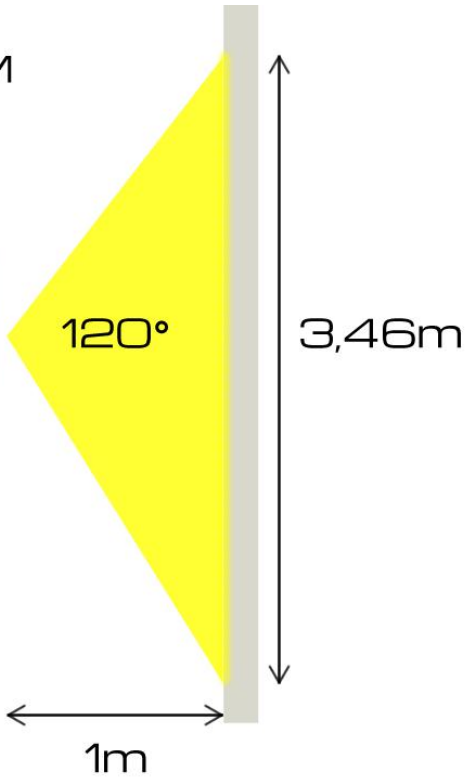
120° LIGHT BEAM

We have selected SMD LEDs with 120° light beam for more light coverage and efficiency than common 60° or 45° LED lights. TRE-D LED lights allow you to come closer to your subject which results to more lighting intensity with no dark spots.

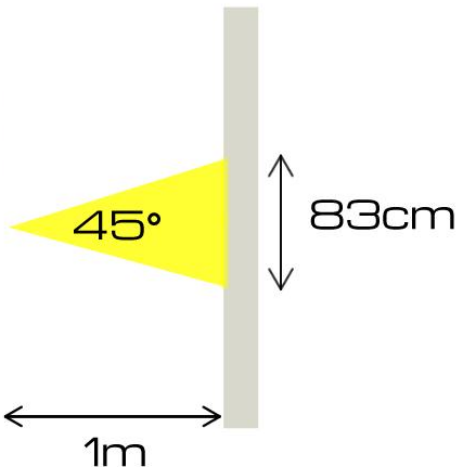
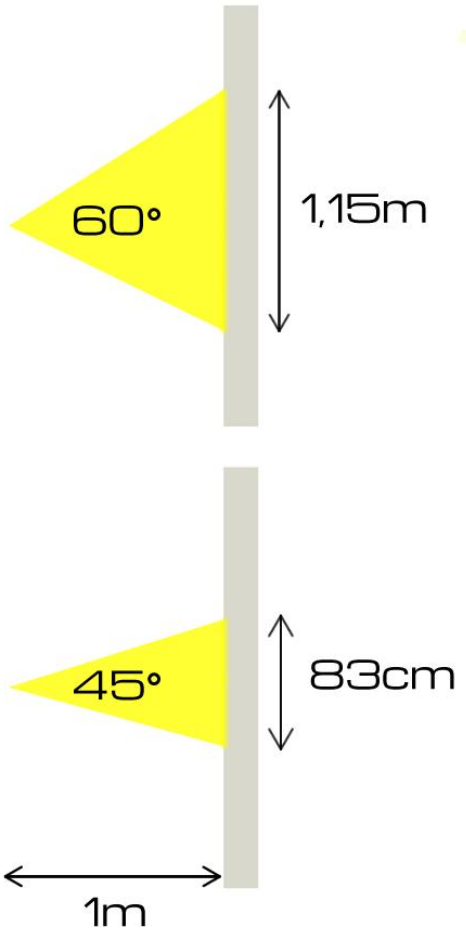
LIGHT BEAM  
Diagram



TRE-D LED LIGHTS



Common  
LED Lights



## PC-BOARD

For more lighting efficiency we have used high quality LED PC-Boards with advanced electronic circuits. Extra holes on the PC-Board are used for better cooling.

## BODY

Our Light bodies are made of high quality lightweight aluminum. We have used this material for better cooling and durability.

## HEAT SINK

We have used specially designed 150mm and 104mm high quality lightweight aluminum heat sinks which are connected directly to the aluminum body of the LED light. Heat sink and LED light, as one body, let the heat pass to the environment much easier.

## SILENT OPERATION

TRE-D LED lights have silent operation as they don't need any fans for cooling. Moreover, the high quality electronic circuit of the Dimmer does not cause any electromagnetic interference to wireless audio and video systems. So, they are ideal for interviews and conferences.

## LIGHTWEIGHT

Our LED lights are very light and portable. We have used Lightweight and durable materials such as Aluminum and Copper. TRE-D lights weigh less than half of the common LED1000 panels.

## 7-16V DC INPUT

Our LED Lights accept 7-16V DC input Voltage. In that way you can use all kind of Professional Batteries. Such as 14.8V V-Lock and G-Lock Batteries, 7.2V NP-F batteries and all kinds of 12V input sources.

## 4-PIN XLR

We have chosen the professional 4-pin XLR connector. By using this connector you can connect many input sources to power on our LED lights.

## POWER ADAPTERS

You can connect many kinds of power adapters to the 4-pin XLR Connector. We supply adapters for Dual or single 7.2V NP-F batteries and adapters for 14.8V V-Lock Batteries. Also, we supply D-TAP power adapter in order to use V-Lock or G-Lock batteries directly, without the need of expensive battery plates.

## POWER SUPPLIER

You can even use TRE-D power supplier to power TRE-D LED lights from AC plug. It is a Class-I adapter with grounding for overvoltage protection.

## PROTECTION

The Dimmer of our LED lights has an electronic circuit which protects the light from sources with opposite polarity. So, when you put sources with opposite polarity the light will just not power on without causing any kind of damage.

## POWER BOOST

The Dimmer has a Boost switch for extra lighting intensity. When BOOST is enabled you get the most from your TRE-D LED light. When BOOST is disabled there is less power consumption and you get more operating hours. This is important, especially for smaller batteries.

## BICOLOR COOL WARM

We have full range of LED Lights. Bicolor, Cool and Warm Lights. With Bicolor light you can change the color temperature from warm to cool by using our advanced dimmer. For cool or Warm lights you can use the TRE-D color filters.

## 2 MODES

Dimmers of the Bicolor LED lights usually have 2 controllers. The first one controls the color temperature and the second one the lighting intensity. Some other dimmers have the first controller to adjust the intensity of the warm lighting and the second one to adjust the intensity of the cool lighting. We have both modes in one dimmer! You can choose which mode you want to use with just a push of a button.

## FLICKER FREE

Our LED Lights are flicker-free. We have used a Cinema slow motion camera and tests were made in all steps of shutter speed up to 1/10000 and all steps of frame rate up to 800fps!

## STABLE LIGHTING

We have used an advanced electronic circuit in order to protect the LED light from power drops. So, even when the Voltage of the battery is dropping, the lighting intensity remains the same until the battery runs out.

## MOUNTS

We supply clamps in order to attach the power adapters and the dimmer on light stands. The LED light body has a yoke metal base that is easily attached to a 16mm spigot.

## 1/4" THREADS

We have used 1/4" threads to most of our power adapters and our dimmer. So you can easily attach them on tripods, mounts or brackets. TRE-D clamps are ideal for attaching power adapters and dimmers on light stands.

## 3.5M CABLE

Most of the dimmers are placed in the light body, which makes the access to the controls impossible, when a 3.5m light tripod is used. Our dimmer is placed on the cable which has 3.5m total length. Measuring from the light body to the dimmer, cable length is 2m. So, the dimmer will be at 1.5m height when a 3.5m tripod is used. TRE-D power supplier is equipped with an extra 1.5m cable.

## BARNDOORS-SOFTBOXES

We build high quality 4-leaf barndoors and softboxes with metal mounting. They are attached directly on the light body. Also we can supply diffuser, warm and cool acrylic filters for our LED lights.

## How to use:

### Step.1

When you unbox the light you should find:

- The light body
- 3.5m cable with 4-pin XLR connector.
- Dimmer
- Power supplier (it is not included in bulk version)

### Step.2

Put the power supplier in the AC Plug and connect the female 4-pin XLR connector to the male 4-pin XLR connector of the LED light. The small led light of the power supplier should turn red.

### Step.3

Turn on the light by pressing the ON/OFF switch. See diagram No.1.

### Step.4 (Mode Selection is available only for the bicolor lights)

You should select the mode that you want to use. See diagram No.3.

#### Mode I:

When Mode I is selected you should always check the left side of the label on the dimmer. See diagram No.2. The top potentiometer controls the lighting intensity and the bottom one the color temperature.

#### Mode II:

When Mode II is selected you should always check the right side of the label on the dimmer. See diagram No.2. The top potentiometer controls the intensity of the warm lighting and the bottom one the intensity of the cool lighting.

For non-bicolor lights (warm and cool lights) the bottom potentiometer controls the lighting intensity. There is no mode selection. See diagram No.4

### Step.5

You can enable or disable the power boost switch. If you are using a small battery then we recommend you to disable it for extra operating time. If you have bigger batteries or power supplier you can enable it for extra lighting intensity! See diagram No.1. Check specifications below to see the lighting intensity and power consumption when boost is enabled.

DIAGRAM NO.1

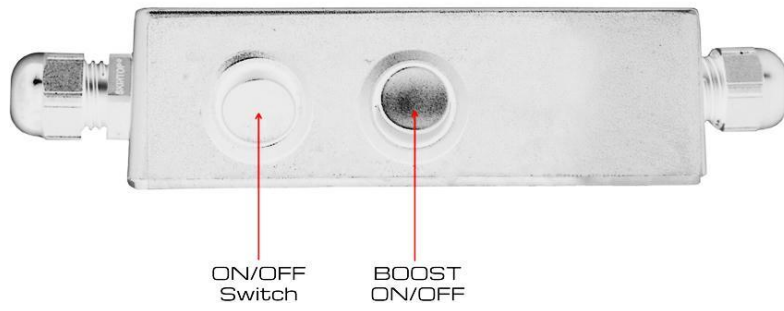


DIAGRAM NO.2  
(for bicolor lights only)

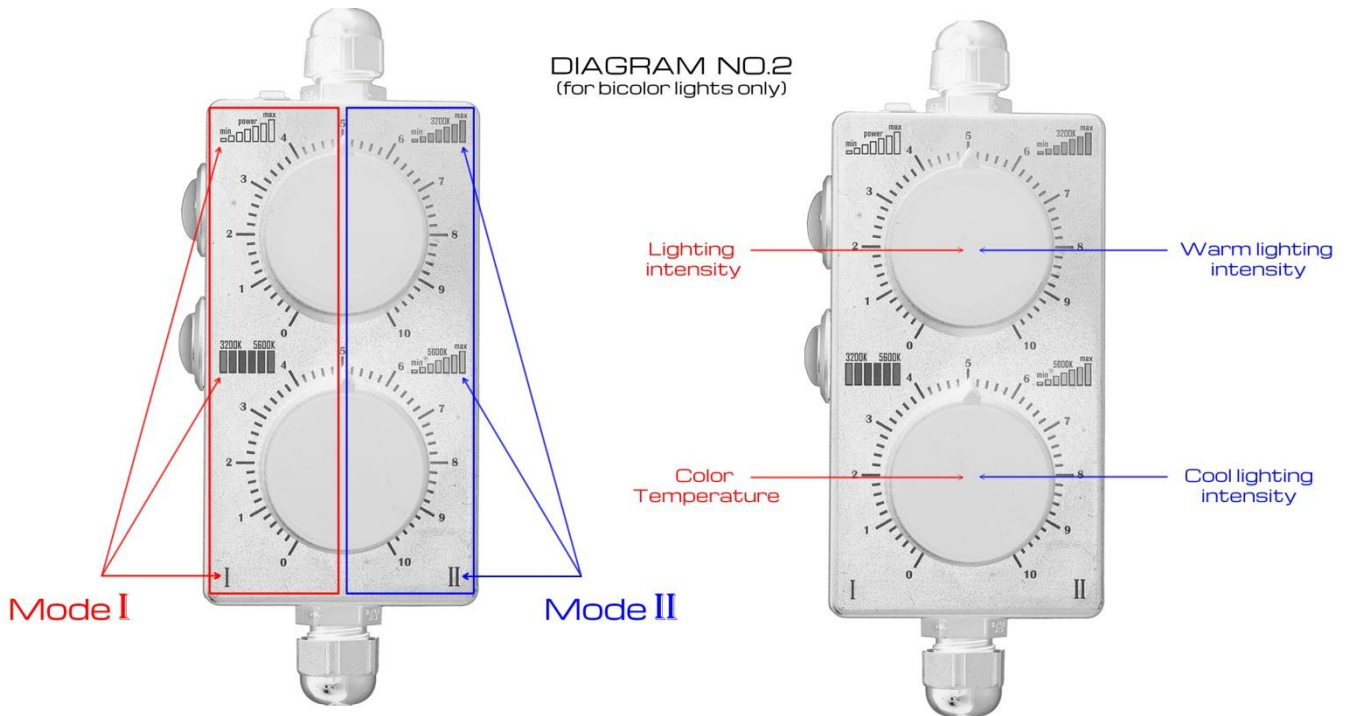


DIAGRAM NO.3

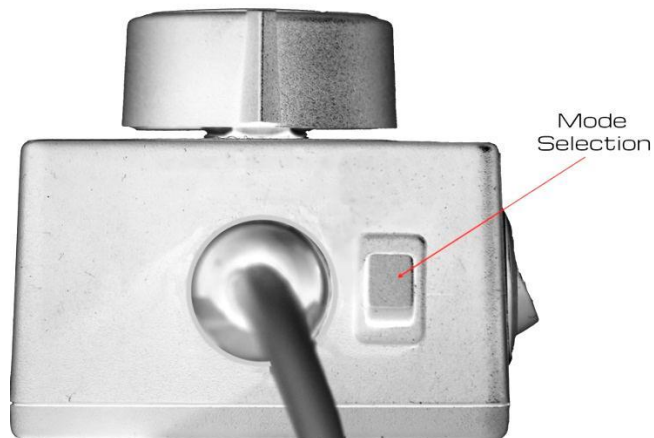


DIAGRAM NO.4  
(for Warm or Cool lights only)

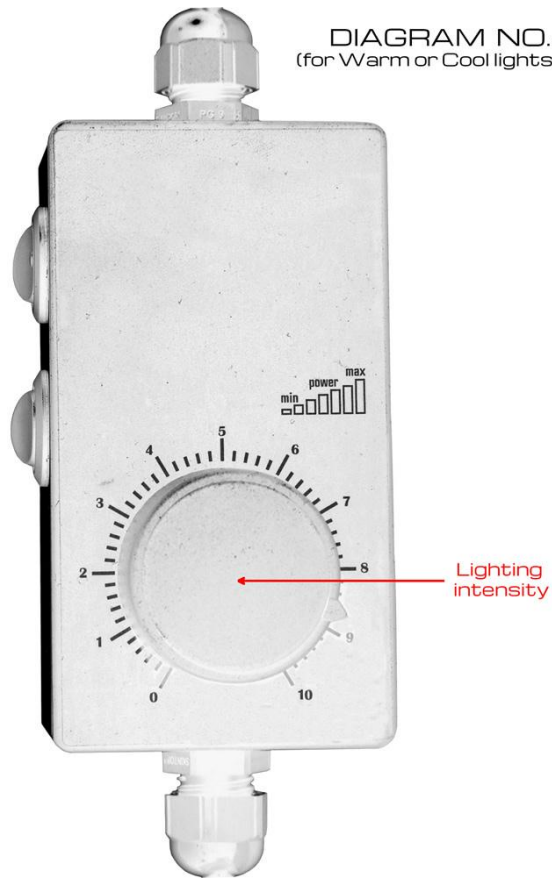
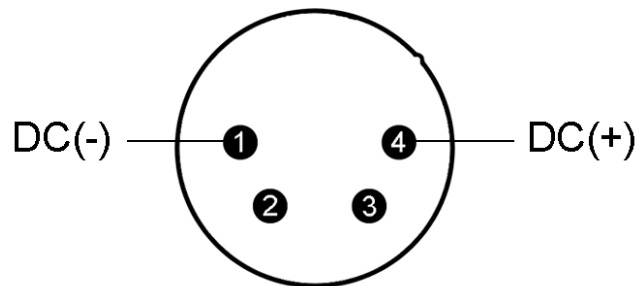


DIAGRAM NO.5  
(4pin XLR Male Connection)

DC 7-16V





### Warnings & Precautions:

1. Unplug the LED light from the wall outlet before cleaning. Do not use liquid. Use only cloth for cleaning.
2. If any kind of liquid drops in to the LED light you should unplug the light immediately.
3. The Temperature of the LED components might reach 100°C. You should not touch the LED components during operation. It may harm you.
4. You should not look directly to the LED lights. It may harm your eyes.
5. The operating temperature of the LED light is 0° up to 40° Celsius. If you use the light in very low or high temperatures it will make severe damage to the LED light. Warranty is void under improper usage.
6. You should always use 100-240V 50/60HZ appropriate European wall outlet for the TRE-D power supplier. If the wall outlet is not proper there will be voltage drop which results to LED light damage.
7. You should not try to open the LED light body, the dimmer or the power supplier. It may harm you. Warranty is void if you try to open the LED light body or any other component.
8. You should not pull the cable of the power supplier or of the dimmer. Cables might be destroyed which results to LED light damage. If cable is destroyed you should unplug the light immediately because it may harm you. Warranty is void when cables are destroyed.

## Specifications:

VARILED 1000 Mod.501

CRI: 95\*

Cable Length: 3.5m (2m+1.5m)

Connector: 4-Pin XLR Male

Voltage: 7-16V DC

Light Beam: 120°

Operating Temperature 0° to 40°

Mount: Spigot 16mm

Weight: 1,5KG

Dimensions: 21x28x15.5cm

Power supplier: Input 100-240V 50/60HZ, output 15V/6A 90Watt.



### Mod.501C – Cool LED

BOOST	LUM	LUX @0.6m	LUX @1m	LUX @2m	LUX @3m	Consumption	with 95Wh Battery
BOOST ON	140347	10347	3725	931	414	82 Watt	1h 05min
BOOST OFF	114538	8444	3040	760	338	66 Watt	1h 30min

### Mod.501W – Warm LED

BOOST	LUM	LUX @0.6m	LUX @1m	LUX @2m	LUX @3m	Consumption	with 95Wh Battery
BOOST ON	126595	9333	3360	840	373	82 Watt	1h 05min
BOOST OFF	103235	7611	2740	685	304	66 Watt	1h 30min

### Mod.501B – Bicolor LED

BOOST	LUM	LUX @0.6m	LUX @1m	LUX @2m	LUX @3m	Consumption	with 95Wh Battery
BOOST ON	133376	9833	3540	885	393	82 Watt	1h 05min
BOOST OFF	109263	8056	2900	725	322	66 Watt	1h 30min

\*Sekonic C700R and L858D have been used for the lighting measurements.

## Specifications:

VARILED 500 Mod.511

CRI: 95\*

Cable Length: 3.5m (2m+1.5m)

Connector: 4-Pin XLR Male

Voltage: 7-16V DC

Light Beam: 120°

Operating Temperature 0° to 40°

Mount: Spigot 16mm

Weight: 0,98KG

Dimensions: 15x20x11cm

Power supplier: Input 100-240V 50/60HZ, output 15V/4A 60Watt.



### Mod.511C - Cool LED

BOOST	LUM	LUX @0.6m	LUX @1m	LUX @2m	LUX @3m	Consumption	with 95Wh Battery
BOOST ON	84208	6208	2235	559	248	54 Watt	1h 45min
BOOST OFF	68723	5066	1824	456	203	35 Watt	2h 40min

### Mod.511W – Warm LED

BOOST	LUM	LUX @0.6m	LUX @1m	LUX @2m	LUX @3m	Consumption	with 95Wh Battery
BOOST ON	75957	5600	2016	504	224	54 Watt	1h 45min
BOOST OFF	61941	4567	1644	411	182	35 Watt	2h 40min

### Mod.511B – Bicolor LED

BOOST	LUM	LUX @0.6m	LUX @1m	LUX @2m	LUX @3m	Consumption	with 95Wh Battery
BOOST ON	80026	5900	2124	531	236	54 Watt	1h 45min
BOOST OFF	65558	4834	1740	435	193	35 Watt	2h 40min

\*Sekonic C700R and L858D have been used for the lighting measurements.

Visit us:

[www.tre-d-eng.it](http://www.tre-d-eng.it)