

# 2012 Battery powered LED fixture



**User's Manual**



THELIGHT Luminary for cine and TV, S.L.

March 2012

# INTRODUCTION

This guide provides information about how to use the product functions to illuminate with this equipment as well as warnings on his use.

The 4LIGHT is a product of professional use for interior locations or studio and must be operated only by qualified technical personnel.

To obtain the maximum features, please read the following operating instructions very carefully before using this fixture for the first time. Please keep these operating instructions for you and subsequent users to reference in the future.

THELIGHT Luminary for cine and TV, S.L.

## Safety Precautions

For your own safety, please read and follow all safety instructions and warnings.

## Exemption from Liability

THELIGHT Luminary for cinema and TV, S.L. does not assume any responsibility for lighting failures caused by malfunction of this product.

## Warranty

The manufacturer disclaims liability for any damage to persons or property caused by inappropriate operation, damage of this kind lies in the responsibility of the operator.

This product is manufactured to local specifications and the warranty is valid within the country of purchase. Should the product fail or malfunction while you are abroad, the manufacturer assumes no responsibility for servicing the product locally or bearing the expenditure incurred thereof.

## Marking



[www.thelight.com.es](http://www.thelight.com.es)

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THELIGHT technology is protected under Spanish license laws with international patents pending.

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## SAFETY PRECAUTIONS

Various symbols are used throughout this instruction manual and on the product to prevent physical harm to you or other people and damage to property. The symbols and their meanings are explained below.



### Warning

Possible risk of injury or damage to equipment



### Danger

This symbol indicates the risk of electric shock or fire danger that could result in injury or damage to equipment.

This equipment has been checked and meets the requirements of general safety for electronic devices. These requirements are specified to provide a reasonable protection against electromagnetic interferences when the equipment is used in commercial environments.

This equipment generates, uses and can emit waves of radio frequency, and if not properly used following the instructions of this manual can produce interferences in radio communications. The use of this equipment in residential areas can produce interference, the user will be the only responsible of correcting them.

**CAUTION:** Though the light generated by LED does not produce any heat, for what his use turns out to be very comfortable for the actors, the lamp head acts as a heat sink through its back part. Surface can reach a temperature between the 50 °C and the 80 °C. Please use protective gloves if you touch the lamp head at the heat sink.



### Danger

Do not attempt to open any of the device or component housings. To reduce the risk of electric shock, do not remove lamp head or Control Unit cover. No user-serviceable parts inside. Maintenance and repair work to be carried out only by THELIGHT Service Centre.

Do not cover the aluminium lamp head heat sink while using it. Proper ventilation must be provided. Avoid exposing the lamp head to the heat radiation of other light fixtures.

The lamp head is equipped with high power LED. Due to their high light-output intensity don't stare directly into the light source.

Either the V-lock mount or the XLR4 receptacle can be used for powering the 4LIGHT by battery.



### Warning

#### Relevant information on Battery use

Use only original chargers. Don't short the battery. Respect the service and the safety manual of the battery.

To ensure maximum performance of the 4LIGHT equipment use only high-load capacity batteries with a high continuous draw meaning a Discharge Current of at least 9A.

# TABLE OF CONTENTS

Introduction.....	2
Safety precautions.....	3
Table of contents.....	4
1. <b>Main features</b> .....	5
2. <b>Components and accessories</b> .....	6
3. <b>Names and parts</b> .....	8
4LIGHT lamp head.....	8
VDC Control Unit 2.0 / VDC Control Unit DMX 2.0.....	8
4. <b>Placing into operation</b> .....	10
Quick link swivel ball head mounting.....	10
Removing the Quick link swivel ball head mounting .....	10
Connect a battery on the V-lock mount .....	11
Connecting VDC Control Unit and lamp head through the extension cable.....	11
Disconnecting the extension cable .....	12
Placing the VDC Control Unit in the stand mast.....	12
Security cables.....	12
5. <b>Digital Adjustments</b> .....	13
Turning the power On/Off.....	13
COLOR TEMPERATURE.....	13
TURBO.....	13
DIMMER.....	14
-/+ GREEN.....	14
6. <b>DMX 512 Control</b> .....	15
7. <b>Mechanical Adjustments</b> .....	16
Beam angle variation.....	16
Barn doors installation.....	16
Softbox diffuser installation.....	17
8. <b>Specifications</b> .....	18
4LIGHT.....	18
VDC Control Unit 2.0.....	18
VDC Control Unit DMX 2.0.....	18
Chromaticity coordinates diagram.....	19
Photometrics.....	20
Regulations.....	21
Declaration of conformity.....	23
Warranty.....	24

# 1. MAIN FEATURES

4LIGHT is an LED panel housing a total of 96 high power LED. It has been specially designed and its colorimetry calibrated for professional photography, cinematography and television industry use. 4LIGHT main innovative features are:

- Variable Colour Temperature
- Stable colour dimming
- Green/magenta correction
- Very high light output
- Low power draw
- High CRI digitally calibrated light
- V-lock or Gold mount battery operated
- Lightweight lamp head

## NOTE ABOUT MEASURING COLOUR TEMPERATURE (CCT)

4LIGHT incorporates the innovative THELIGHT technology based on high power LED triplets + Fresnel lens + CPU control software to obtain the wide range of calibrated colour temperatures combined with a high colour rendering index CCT.

We must remark that colour meters in use today are designed for a full spectrum source such as incandescent lights and therefore cannot be used to accurately read the correlated colour temperature (CCT) of the light emitted by THELIGHT and other LED light fixtures.

The eventual diversions to green display as CC5M or CC10M in hand-held colour meters are due to these unaccuracy on reading of the light emitted by LED and must not be considered.

THELIGHT guarantees pure white light and correct colorimetry of the light delivered by its high power LED luminaries which have been calibrated in laboratory according to CIE 13.3-1995 international standards for measurement of the CRI and chromatic coordinates (x, and CIE-1931).

The reliability of this digital equipment is supported by the calibration THELIGHT has made in laboratory by spectrophotometer, which precision is half-yearly calibrated according to the National Institute of Standards (NIST) of the United States and of the Physikalisch-Technische Bundesanstalt (PTB) of Germany.

In order that the advanced THELIGHT luminaries could be used together with other light sources, THELIGHT has accurately calibrated both the CCT and the chromatic coordinates to match them with traditional light sources following tungsten and daylight standards.

The digital Control Unit allows a further and precise green/magenta correction.

## NOTE ABOUT 2012 PRODUCTS ELECTRONIC COMPATILITY WITH OLDER VERSIONS



### Warning

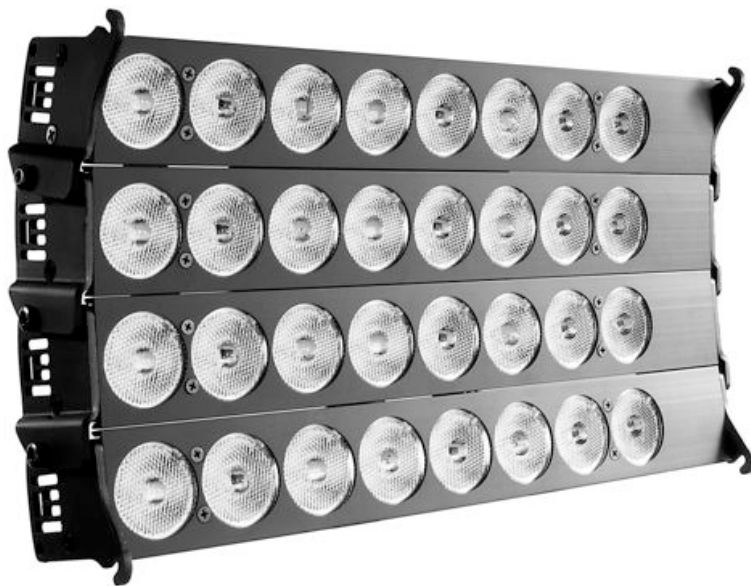
Every 2012 Control Units are made to be used exclusively with 2012 4LIGHT lamp heads.

Do not connect 2012 Control Units with older versions of 4LIGHT lamp heads.  
Do not connect older versions Control Units with with 2012 4LIGHT lamp heads.  
You will easily identify the 2012 products by the blue label fixed in every connector.

## 2. COMPONENTS AND ACCESSORIES

Each 4LIGHT kit is composed by:

1 x 4LIGHT lamp head



1 x VDC Control Unit 2.0 / VDC Control Unit DMX 2.0



1 x Quick link swivel-ball head with 3/8" (10mm) pin



Optional Quick link swivel-ball head with 5/8" (16mm) female



2 x Removable barn doors



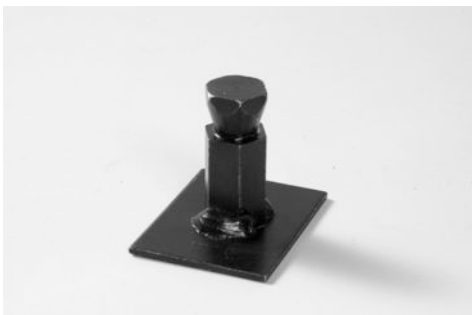
1 x 2,5 meters power cable



1 x 2,5 meters extension cable 2.0



1 x Hexagonal 5/8" (16mm ) baby spud



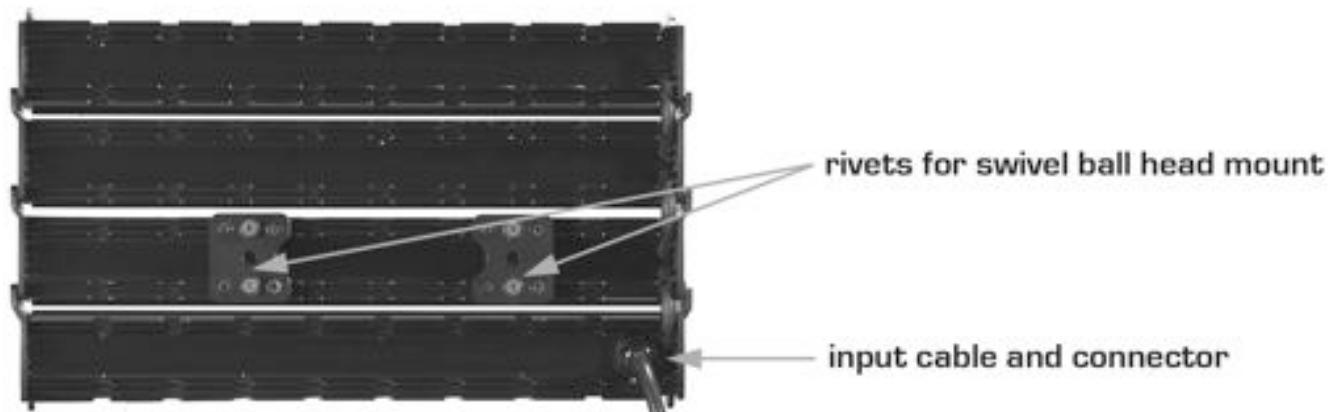
1 x Softbox diffuser quarter kit



### 3. NAMES AND PARTS

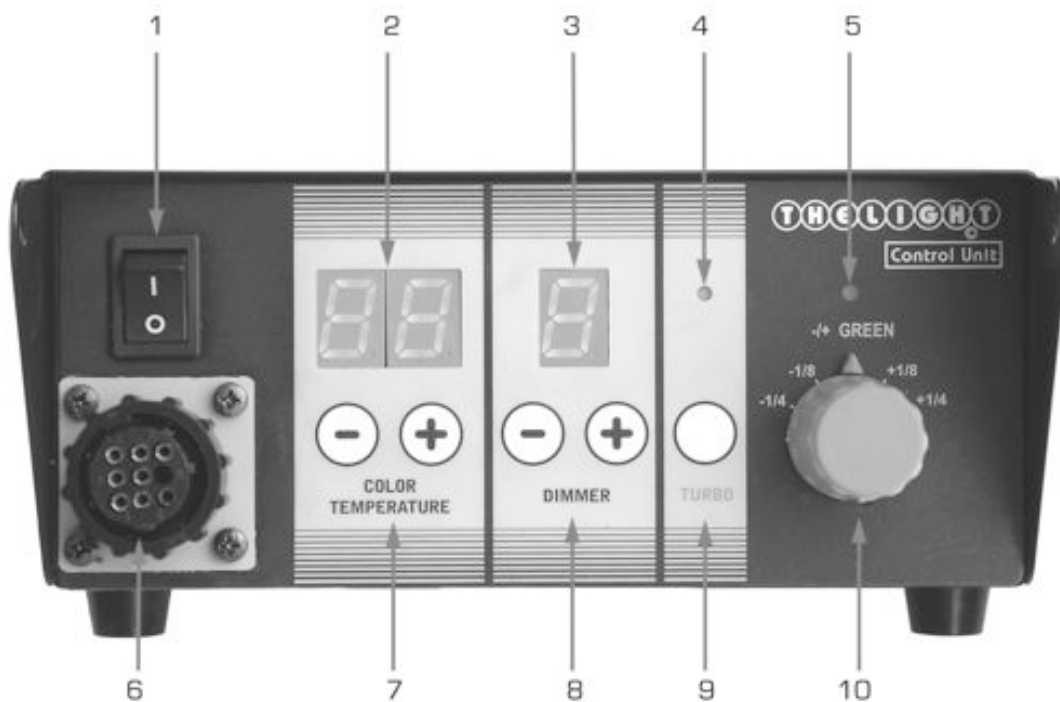
#### 4LIGHT lamp head

Rear view



#### VDC Control Unit 2.0 /VDC Control Unit DMX 2.0

Front view



- 1 Power switch
- 2 Colour temperature digital display
- 3 Intensity level digital display
- 4 Turbo status blue LED
- 5 Green/magenta offset status green LED
- 6 Power output female connector
- 7 Colour temperature adjustment buttons
- 8 Intensity adjustment buttons
- 9 On/off turbo button
- 10 Green/magenta knob

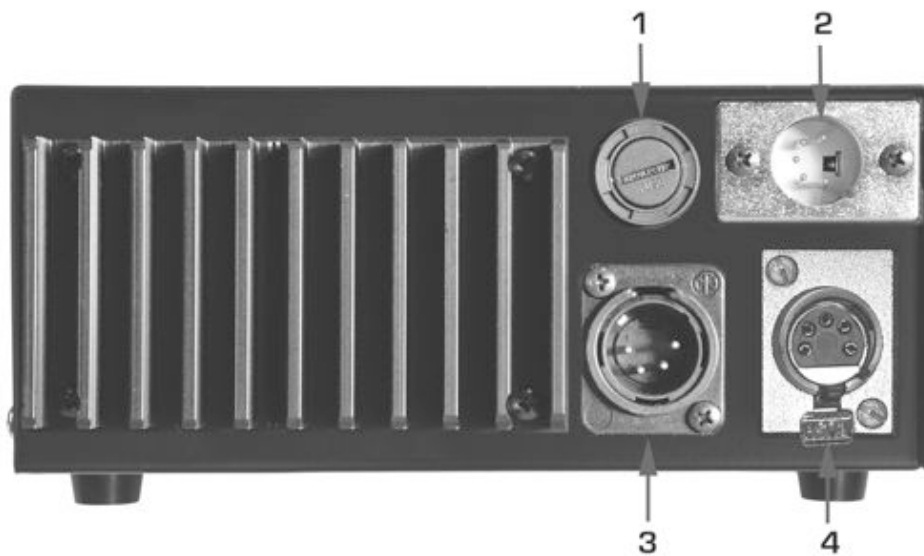


## Rear view VDC Control Unit 2.0



- 1. Fuse receptacle (1 x 15A)
- 2. XLR4 VDC input

## Rear view VDC Control Unit DMX 2.0

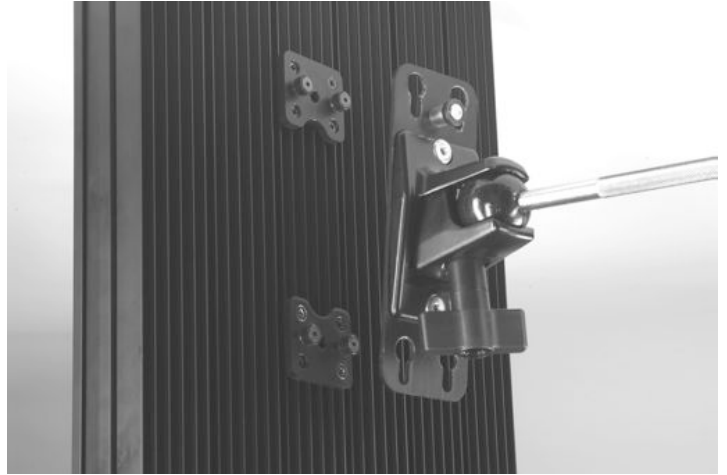


- 1. Fuse receptacle (1 x 15A)
- 2. XLR DMX in
- 3. XLR4 VDC in
- 4. XLR DMX out

## 4. PLACING INTO OPERATION

### 1. Quick link swivel ball head mounting

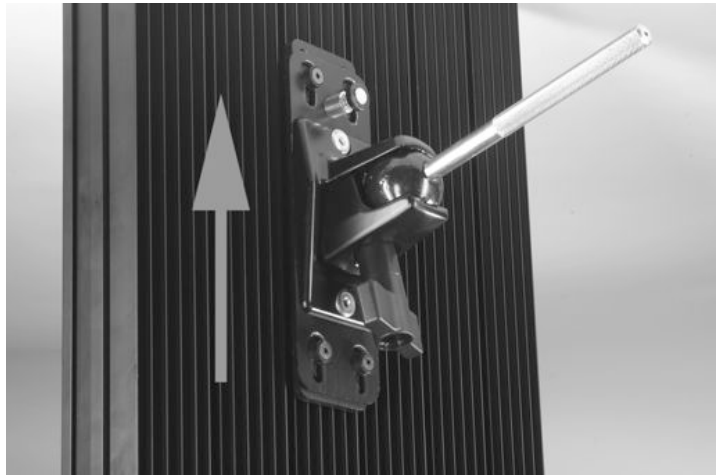
Align the swivel ball head plate to the four rivets located at the back of the lamp head as shown in the picture.



#### Warning

On mounting the lamp head on any type of support, tripod or ceiling grid make sure the swivel ball head handle is facing down towards the ground.

Slide the swivel ball head plate until the four shoulder rivets drop into the receptacle. The locking pin will snap into place when the plate is properly seated.



#### Warning

Make sure the locking pin has totally entered in his housing before proceeding to use the light fixture.

The standard swivel ball head comes with a 3/8" pin to be clamped into a grip head and allows the lamp head to be oriented and locked in a broad range of angles.

### Removing the quick link swivel ball head

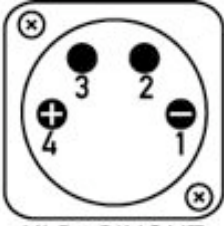
Pull up on the locking pin and slide the swivel ball head plate until the four rivets get free. Extract the swivel ball head by pulling it upwards.

## 2. Connect a battery on the V-lock mount

Either the V-lock mount or the XLR4 receptacle can be used for powering the 4LIGHT by battery. Any battery from 9 to 36 V can be used.

### Relevant information on battery use

Use only original chargers. Don't short the battery. Respect the service and the safety manual of the battery.



XLR4 PINOUT  
POWER CONNECTOR

When powering the 4LIGHT through the XLR4 connector located at the back of the VDC Control Unit check the proper polarity as shown in the picture at the Control Unit bottom.

To ensure maximum performance of the 4LIGHT equipment use only high-load capacity batteries with a high continuous draw meaning a Discharge Current of at least 9A..

**NOTE:** To power the 4LIGHT lamp head through mains power a power supply of at least 14A and 9 to 36V output must be used.



### Danger

To avoid electric shocks and/or damages in the equipment the power switch located at the VDC Control Unit front panel must be off before connecting or disconnecting cables.

## 3. Connecting VDC Control Unit and lamp head through the extension cable

Connect the male connector in the circular receptacle at the VDC Control Unit front panel.

Verify the correct alignment of the connectors before inserting them. Rotate the receptacle locking ring until it clicks into the lock position.



Connect the same way the female connector located at the other end of the extension cable in the input male plug coming out from the lamp head.



## Disconnecting the extension cable

Grab the connector firmly, turn the ring to unlock it and pull to extract it.

**NOTE:** The lamp heads can operate with a maximum extension cable length of 10 meters.

**NOTE:** The 4LIGHT lamp head can be battery powered with the VDC Control Unit included in the kit or mains powered with the optional VAC Control Unit.

## 4. Placing the VDC Control Unit in the stand mast

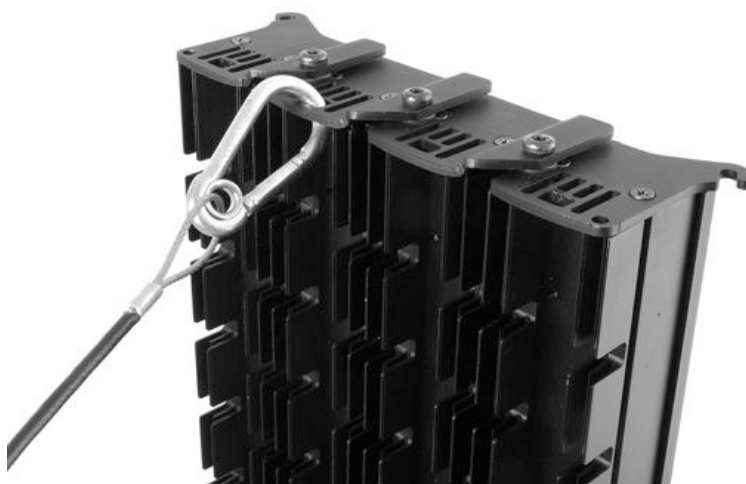
You can place the VDC Control Unit in the stand mast for a handy use close to the lamp head. To do so you will need to use a regular Super Clamp (not included in the 4LIGHT kit) and insert the Hexagonal 5/8" (16mm) baby spud.

Once installed the hexagonal spud just slide the holder located at the VDC Control Unit bottom over the spud plate until properly seated, as shown in the picture.



## 5. Security cables

The lamp head is provided with several holes specially design to insert one or more 5mm snaps and their safety cable.



### Warning

When the lamp head and any other component is mounted in a hanging position it must be secured with a safety cable rated at a minimum of ten times the weight of the light fixture including its accessories.

## 5. DIGITAL ADJUSTMENTS

The VDC Control Unit doubles as power supply and digital remote controller of the following light parameters through its programmed CPU:

- Calibrated Colour Temperature variation
- Stable colour dimming
- Green/magenta correction

### Turning the Power On/Off

Turn on the equipment by switching the power button towards the **I** position. Switch the power button towards **O** position to turn it off.

The light settings always remain stored when the VDC Control Unit is powered off.



#### **Danger**

Both the lamp head and the VDC Control Unit are electrically protected against power failures but to avoid possible electric shocks and/or equipment damages make sure the power switch located at the VDC Control Unit front panel will be off before connecting or disconnecting cables.

In case of extreme over tension replace the 15Ah fuse from inside the fuse holder located at VDC Control Unit back. (see picture on page 9)

#### **NOTE:**

If a power failure would happen or the cable would be accidentally disconnected the VDC Control Unit would entry on Error mode and the number 8 would show in the digital display.

To reset the equipment and resume the light values turn the switch power off, connect extension cable and switch on the power button.

### COLOR TEMPERATURE Variation

Colour temperature can be easily increased or reduced through the +/- buttons located at the VDC Control Unit front panel. Above them a digital display indicates at all times the selected colour temperature. The value 3.2 corresponds to 3200K and the value 3.3 to 3300K and so on.

Push the + button to increase colour temperature or push the – button to decrease it. If you keep pushed any of the buttons the you will get a continuous variation.

#### **NOTE:**

Every push on the buttons will increase or decrease the colour temperature in calibrated increments of 100 Kelvin.

### TURBO

By activating the TURBO button (a blue LED lights up on the screen of the Control Unit) maximum light output is achieved in the colour temperature selected and the value 9 will appear on the dimmer display.

## **DIMMER Light intensity variation**

The dimmer of the VDC Control Unit is totally digital and guarantees the regulation of light intensity with minimal changes in the selected colour temperature.

Light intensity can be easily increased or reduced through the +/- buttons located at the VDC Control Unit front panel. Above them a digital display indicates at all times the selected dimmer value from a minimum of 1 to a maximum of 9.

Push the + button to increase light intensity or push the - button to decrease it. If you keep pushed any of the buttons the you will get a continuous variation.

**NOTE:** Every push on the buttons will increase or decrease the light intensity in calibrated increments of  $\frac{1}{2}$  stop.

## **-/+ GREEN Green/magenta correction**

Green/magenta bias switch located at the VDC Control Unit front panel lets you easily alter the colour of the light emitting at any colour temperature towards green or magenta in increments of -/+  $\frac{1}{8}$  and  $\frac{1}{4}$ .

When this switch is not in the standard position a green LED light turns on in the VDC Control Unit to warn that the light emitted no longer guarantees the correct chromaticity.

**NOTE:** THELIGHT guarantees the correct colorimetry for light emitting from their high power LED light fixtures, calibrated in the laboratory according to current international standards of the CIE 13.3-1995 for the average CRI and the chromatic co-ordinates (x, y CIE-1931). This certifies that our luminaries have no green/magenta deviation.

**NOTE:** Full adjustment is possible in a range of colour temperatures from 2500K to 5600K. From 5600K to 6500K the adjustment is only possible on  $\frac{1}{8}$  and  $\frac{1}{4}$  plusgreen.

## 6. DMX 512 CONTROL (only VDC Control Unit DMX 2.0)

THELIGHT lightning fixtures have been designed for a full DMX control from the 5-pin DMX port located at the back of the VDC Control Unit DMX.

Connect the DMX cable coming from your console into the DMX IN male connector located at the back of the VDC Control Unit DMX. Beside the DMX IN there is also a DMX OUT connector to daisy chain fixtures.

### Addressing channels

Push both + and - COLOR TEMPERATURE buttons at the same time and then switch on the power button. Wait a few seconds for the three digital displays to blink.

Now you can define the start address. To do so just push the + or - DIMMER buttons to increase or decrease the first fixture address. Once you have chosen the desired address number push the TURBO button to save the selection.

Keep in mind the following points regarding DMX control:

- THELIGHT DMX protocol uses 3 channels per fixture
- After the DMX address is entered the Control Unit will automatically assign the following two channels.
- If you wish to control several THELIGHT fixtures at the same values you will have to set them to the same address.
- If you wish to control several THELIGHT fixtures independently you will have to offset their address by 3 channels. Example:

fixture1 address 001 – fixture2 address 004 – fixture3 address 007

### DMX Channels

When you connect your console to the VAC Control Unit you will be able to control THELIGHT fixtures through 3 channels:

- **Channel 1** (start address) **COLOUR TEMPERATURE**  
From 2.5 to 6.5 (from 2500Kelvin to 6500Kelvin)  
Fader at 0 2.5 means 2500Kelvin  
Fader at 100 6.5 means 6500Kelvin
- **Channel 2** (start address + 1) **DIMMER**
- **Channel 3** (start address + 2) **GREEN/MAGENTA correction**  
fader at 0% -1/4 Green  
fader at 25% - 1/8 Green  
fader at 50% standard position (green/magenta at 0)  
fader at 75% +1/8 Green  
fader at 100% +1/4 Green

#### NOTE:

Do not use microphone cables or other general purpose two-core cables designed for audio or signal use. They are not suitable for DMX 512. Problems due to wrong cabling may not be immediately perceptible. Microphone cables may appear to work fine, but systems built with such cables may fail or be susceptible to random errors. Cable must comply with RS-485 DMX protocol (EIA485).

#### NOTE:

A DMX terminator should be plugged into the final, empty, OUT connector of the last slave on the daisy chain. A terminator is a stand-alone male connector with a built-in 120  $\Omega$  resistor, matching the cable characteristic impedance, connected across the primary data signal pair.

#### NOTE for Avolites consoles users:

THELIGHT luminaries DMX working personality can be configured to be recognised by Avolites consoles. Download the personality files to install into Avolites consoles from [www.avolitesdownload.com/PersonalityLibrary/?mainPage=Main.asp&ID=3516](http://www.avolitesdownload.com/PersonalityLibrary/?mainPage=Main.asp&ID=3516)

## 7. MECHANICAL ADJUSTMENTS

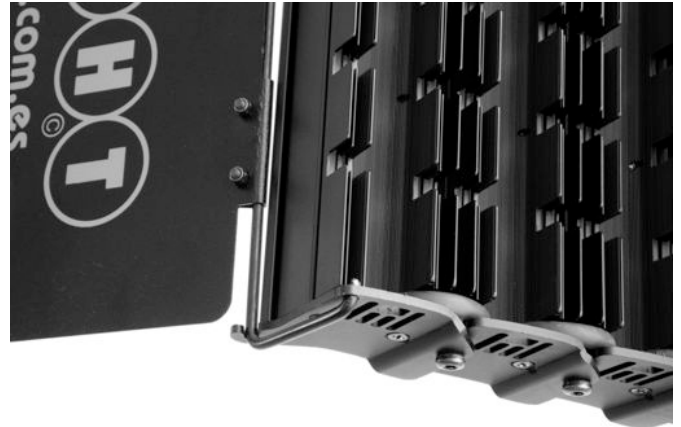
### Beam angle variation

Hold the lamp head from the outer segments and bend it in or out to the wanted concave or convex shape. Choose the light beam angle you need and the lamp head will remain at the chosen setting. When the lamp head is positioned at standard flat setting the light beam angle is 35°. The maximum light beam angle is given when the lamp head is bend at its more convex setting.



### Barn doors installation

Place the barn door axle into the external lamp head segment grooves. Then insert one end of the axle into the hole located at the lamp head exterior segment as shown in the picture. The right mounting position is achieved when the product name is visible facing outwards.



Insert the other barn door axle end into the opposite hole located at the lamp head exterior segment.



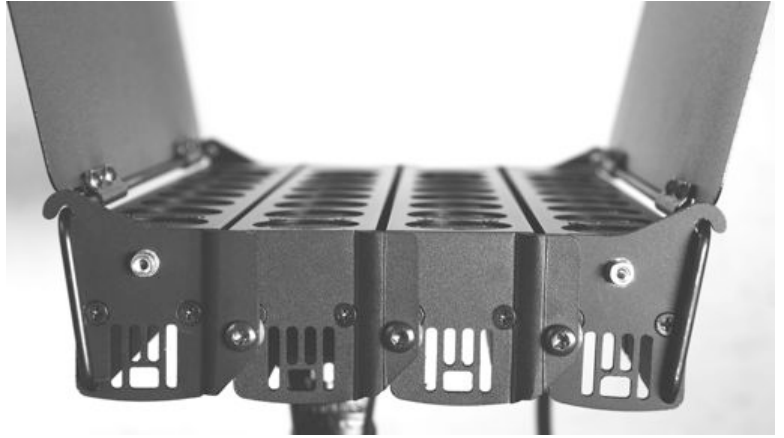


### Softbox diffuser installation

Position the lamp head in its standard flat setting.

Align the side wings captive screws with their respective threaded inserts located on the lamp head.

Screw the captive screws to attach the two side wings to the lamp head.



Set the barn doors open as shown in the picture.

Wrap the Softbox cloth around the side wings and barn doors.



**NOTE:**

The Rosco ¼ silent grid cloth Softbox softens and broadens the light beam with minimal colour temperature shift. Excellent for softening harsh edges.  
The transmission lost is 1 stop.

### SOFTBOX CLOTH FLAMEPROOF RATING

The Rosco softbox has been manufactured with Cinebounce black cloth which meets the flameproof standard UNE EN 13773:2003 class 1.

## 8. SPECIFICATIONS

### 4LIGHT

COLOUR TEMPERATURE	adjustable from 2500K a 6500K (100K increments)
LIGHT INTENSITY	dimnable with minimal colour shift (increments of 1/2 stop)
GREEN/MAGENTA BIAS	adjustable +/- 1/4 y 1/8 steps from 2500K to 5600K
CRI	Over 90
DIMENSIONS	339 x 207 x 71 mm
WEIGHT	2,4 kg
POWER DRAW	100W 28V (maximum 120W)
BEAM ANGLE	variable from 30° to 75° (standard 35°)
LED RATED LIFE	more than 50.000 hours
THELIGHT LED TECHNOLOGY	UME (Minimum Emitting Unit) made up of: 3 Phillips high-power LED with a selected BIN + Fresnel lens + CPU control with THELIGHT software
RIGGING OPTIONS	quick link swivel-ball head with 10mm pin, adjustable yoke
ACCESSORIES	quick link swivel-ball head with 16mm female, softbox diffuser, removable barn doors, waterproof case

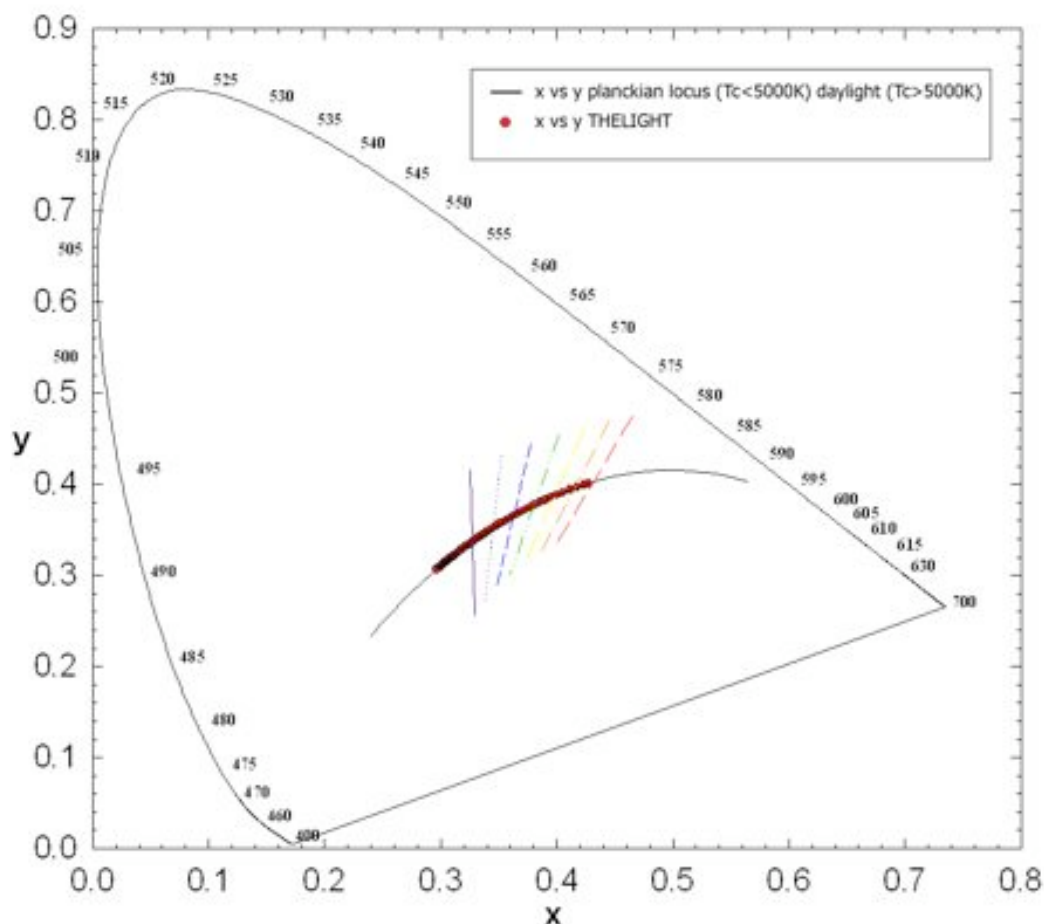
### VDC Control Unit 2.0

DIMENSIONS	172 x 173 x 87 mm
WEIGHT	1,5 kg
POWER SUPPLY	9-36 VDC
OUTPUT FREQUENCY	20KHz flicker-free up to 3000fps still photography up to 1/6000 sec
FUSE	1 x 15 A
OPTIONS	Vlock or Gold battery mount
ACCESSORIES	hexagonal 16mm baby spud to mount on a stand, 5 or 10 meters extension cables

### VDC Control Unit DMX 2.0

DIMENSIONS	292 x 173 x 87 mm
WEIGHT	2 kg
POWER SUPPLY	9-36 VDC
OUTPUT FREQUENCY	20KHz flicker-free up to 3000fps still photography up to 1/6000 sec
FUSE	3 x 15 A
OPTIONS	Vlock or Gold battery mount
ACCESSORIES	hexagonal 16mm baby spud to mount on a stand, 5 or 10 meters extension cables

[x, y CIE-1931]



Shown on the diagram are the THELIGHT lamp head chromaticity coordinates [x, y CIE-1931] feed and digitally controlled by its Control Unit and they are compared with the reference illuminants. These reference illuminants are the Planckian locus radiator set below 5000K and the CIE daylight reference is set over 5000K. The Planckian locus radiator references the chromaticity for several tungsten lamps colour temperatures while the daylight locus typify daylight type D illuminants.

The diagram evidence the light emanated by THELIGHT luminary at every colour temperature entirely matches with the described locus reference so that the colour of the light produced is essentially the same as incandescent and daylight. It is also remarkable the minimum green/magenta deviation over the locus reference along the range of colour temperatures (means minimal difference between THELIGHT chromaticity coordinates and the ideal reference line).

## CALIBRATION

The Instrument Systems scanning spectrometer, model Spectro 320, serial number 30932004, with its accessory TOP-100 has been calibrated according to the United States National Institute of Standards (NIST) and the German Physikalisch-Technische Bundesanstalt (PTB) standard references.

## ACCURACY

The Instrument Systems scanning spectrometer, model Spectro 320, serial number 30932004, with its accessory TOP-100 has an imprecision over the spectral radiometric results delivered lower than 1%.

24 fps / 500 ASA

4LIGHT						
5600K					3200K	
Lux	F-Stop	Fc	meters	Fc	F-Stop	Lux
7000	16 1/3	650	1	580	16	6800
900	5,6 1/3	83	3	78	5.6	740
300	2.8 1/3	28	6	26	2.8 1/3	280

Readings made with scanning spectrometer at stable temperature, Control Unit set at maximum light intensity (Turbo On and dimmer at 9 setting), lamp head at standard flat setting and measurement instrument positioned perpendicular over the luminary surface center.

## CALIBRATION

The Instrument Systems scanning spectrometer, model Spectro 320, serial number 30932004, with its accessory TOP-100 has been calibrated according to the United States National Institute of Standards (NIST) and the german Physikalisch-Technische Bundesanstalt (PTB) standard references.

## ACCURACY

The Instrument Systems scanning spectrometer, model Spectro 320, serial number 30932004, with its accessory TOP-100 has an imprecision over the spectral radiometric results delivered lower than 1%.

# REGULATIONS

This equipment is designed to meet the following regulations and safety standards for battery powered technology equipment:

## ENVIRONMENTAL

THELIGHT devices are certified and intended for indoor use (lamp head IP21, Control Unit IP41)

LAMP HEAD OPERATION TEMPERATURE	from -20° to +30° C
CONTROL UNIT OPERATION TEMPERATURE	from -20° to +50° C
OPERATING HUMIDITY	from 30 to 90% RH non condensing
FUSE	1 x 15 A



Mark: THELIGHT

Test n°: 2010-794

1 Model

Date: 27-9-2010

Serial n°: a.f.m.

## REPORT

### ELECTROMAGNETIC COMPATIBILITY

Test Laboratory, CE mark



#### TESTS AND MEASURES REQUESTED:

##### DIRECTIVE:

2004/108/CE Electromagnetic Compatibility (E.M.C.)

##### STANDARD:

(IEC) EN 61000-6-1:2005 Electromagnetic compatibility. Generic immunity standard. Residential and light industry

(IEC) EN 61000-6-3:2006 Electromagnetic compatibility. Generic EMI standard. Residential and light industry

EN 301489-1 v1.8.1 (2008-02) Radio Electric Spectrum Protection (7 - 8 GHz Band)

(IEC) EN 61000-3-2:2005/A2:2008 Harmonic current emissions a. c. Mains

(IEC) EN 61000-3-3:1991/A2:2006 Voltage fluctuations and Flicker a. c. Mains

UNE-EN 55015:2007+A1:2008+A2:2009 EMI of electrical lighting and similar equipment (CISPR 15:2005)



## Laboratorio de Ensayos, marcado CE

Test Laboratory, CE mark



Marca Mark	THELIGHT
Modelo Model	4LJ(GH) high power LED luminary + VDC Control Unit
Descripción Description	Luminary for cine and TV
ENSAYOS Y MEDIDAS TESTS AND MEASUREMENTS Norma Standard	Seguridad Eléctrica. (Electric Safety) EN 61 000-6-1:2005 EN 61 000-6-3:2005 EN 55015:2007+A1:2008+A2:2009 EN 301489-1 v1.6.1 (2008-02)
Resultado en el informe de los ensayos Nº Show in summary in test report Nº	2010-793 2010-794
Verificado Verified	V
Fecha Date	27-9-2010
Sello de la compañía y firma: Company seal and signature: F. J. Garcia Ing. T. Telecom	

# DECLARATION OF CONFORMITY TO EMC DIRECTIVE 2004/108 EC

**MANUFACTURER'S NAME:** Thelight luminary for cine and tv, S.L.  
**MANUFACTURER'S ADDRESS:** Plaza Val 1  
22148 Colungo  
HUESCA – SPAIN  
[info@thelight.com.es](mailto:info@thelight.com.es)  
[www.thelight.com.es](http://www.thelight.com.es)

**declares that the products**

**MODELS:** 4LIGHT LED panel + VDC Control Unit  
6LIGHT LED panel + VAC Control Unit  
4LONG LED panel + VAC Control Unit  
VDC Control Unit DMX  
4LONG-STUDIO

**MANUFACTURED BY:** Thelight luminary for cine and tv, S.L.  
**MANUFACTURED IN:** Badalona (BARCELONA) SPAIN

**MARK:** THELIGHT

## COMPLY WITH THE CE DIRECTIVES:

GENERAL SECURITY:  
2001/95/CE  
EN 60598-1:2003+A1:2006 Luminaries: general requirements

DIRECTIVE:  
2004/108/CE Electromagnetic Compatibility (E.M.C.)

ELECTROMAGNETIC COMPATIBILITY:  
THELIGHT is intended to Electromagnetic Environment E2 (Commercial and light industrial).

STANDARD:  
EN 61000-6-1:2005. Electromagnetic Compatibility, Generic immunity standard. Residential and light industry.  
EN 61000-6-3:2005. Electromagnetic Compatibility, Generic EMI standard. Residential and light industry.  
(IEC) EN 61000-6-4: 2005. Generic. Industrial environments emission (radiated)  
EN 301489-1 v1.8.1 (2008-02) Radio Electric Spectrum (1 – 6 GHz Band)  
EN 61000-3-2:2001/A2:2006 Harmonic current emissions a.c. Mains  
EN 61000-3-3:1997/A2:2006 Voltage fluctuations and Flicker a.c. Mains  
UNE-EN 55015:2007+A1:2008+A2:2009 EMI of electrical lighting and similar equipment (CISPR 15:2005)  
EN 55015-1:2006 Lighting and similar equipment radioelectric radiation (conducted emissions, radiated current)

Badalona, 27<sup>th</sup> September 2010



A handwritten signature in black ink, appearing to read "Javier Fdez. De Valderrama".

Javier Fdez. De Valderrama  
Authorized Administrator

# WARRANTY

THELIGHT high power LED light equipments are guaranteed to be free from defects in workmanship and parts in a warranty period of one (1) year from the date of purchase. Defects that occur within this warranty period, under normal use and care will be repaired or replaced at THELIGHT discretion, solely at our option with no charge for parts or labor.

In the event of the equipment malfunction, contact the dealer from which you purchased the product. Please note that you will not be reimbursed for the cost of bringing the equipment to the THELIGHT Repair Centre.

THELIGHT reserves the right to replace the product or relevant part with the same or equivalent product or part, rather than repair it. Where a replacement is provided the products or part replaced becomes the property of THELIGHT. THELIGHT may replace parts with refurbished parts. Replacement of the product or a part does not extend or restart the Warranty period.

Returns or exchanges from the customers will be accepted within 15 days of delivery and will not include the actual shipping costs. Item(s) must be in original packaging and condition, must not be assembled, and must include its original user manual.

This warranty does not cover any damage resulting from:

- Failure to follow the instructions in the instruction manual;
- Repair, modification or overhaul not conducted by any authorized THELIGHT personnel.
- Fire, natural disaster, act of God, lightning, abnormal voltage, etc;
- Submergence in water (flooding), exposure to alcohol or other beverages, infiltration of sand or mud, physical shock, or dropping of the equipment and other unnatural causes.

This warranty only applies to the lamp head and the Control Unit and not to the accessories, such as the diffuser or barn doors, nor does it apply to the fuses and other consumables provided.

Any consequential damages arising from failure of the equipment, such as expenses incurred in taking pictures or recording images or loss of expected profit, will not be reimbursed whether they occur during the warranty period or not.

Parts essential to the servicing of the light equipment (that is, components required to maintain the functions and quality of the fixture) will be available for a period of five years after the product is discontinued.

THELIGHT Luminary for cine and tv, S.L.  
[www.thelight.com.es](http://www.thelight.com.es)

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