Light Source User Guide

Luna Decorative Light Source Range

Models covered by this manual:

UFO LUNA - CM
UFO LUNA - TM
UFO LUNA - MCM
UFO LUNA - MTM
UFO LUNA - CDMX
UFO LUNA - TDMX
UFO LUNA - C 0-10V
UFO LUNA - T 0-10V

Please read this manual fully before installing, operating or performing maintenance on the light source unit.

Universal Fibre Optics
Home Place | Coldstream | TD12 4DT | United Kingdom
Tel: +44 (0)1890 883416 | Fax: +44 (0)1890 883062
www.fibreopticlighting.com

Issue 4 | Revised: 14052015

INTRODUCTION

Thank you for purchasing this UFO Light source.

Please read these instructions fully before connecting your unit to the electrical supply, and keep them for future reference.

The UFO Luna range of light sources are suitable for use with either glass or polymer fibre-optic harness

The Luna is powered by a 100-240 VAC remote desktop power supply unit.

IMPORTANT

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

INSTALLATION INSTRUCTIONS

POWER SUPPLY REQUIREMENTS

The LED Light Source is powered from a multifunction, multi-voltage, desk top Power Supply Unit. Remove the 24V Desk Top PSU from its box. This PSU is an IEC input device catering for UK, European and USA mains supplies using the relevant power cord.

CONNECTION – LUNA CM & LUNA TM

There are 2 connections required – the fibre port and the mains supply cable. The fibre port should be connected first. Connect and secure the fibre optic connector into the green collar and secure using the M5 locking screw.

Connect the IEC power cord into the Desk Top PSU and plug the mains plug into the electrical supply socket. Switch on power the led Indicator will illuminate and the light source is ready for use. If no light is produced consult the TROUBLESHOOTING section.

NOTE: THESE LIGHT SOURCES ARE NOT MAINS DIMMABLE

NORMAL OPERATION – LUNA CM, LUNA TM, LUNA MCM & LUNA MTM

(These versions are manual control only)

The LUNA CM (Colorwheel) & LUNA TM (Twinkle Wheel) have manual speed control on the decorative motor. On these versions the light output is set to maximum and cannot be dimmed.

The Luna MCM & Luna MTM have manual speed control on the decorative motor and also manual dimming control of the LED. The light output can be adjusted manually using the control on the rear of the unit from no light output to maximum light output.

Under normal operation the decorative wheel motor speed can be adjusted manually using the control on the rear of the unit. Motor speed can be adjusted from STOP to approximately 4 RPM.

The standard decorative color wheel has 6 glass segments as follows:-
White (Clear), Yellow, Green, Orange, Magenta, Blue

Alternatively, a 6 segment or 4 segment vari-color wheel can be fitted providing the colour segment options shown below.

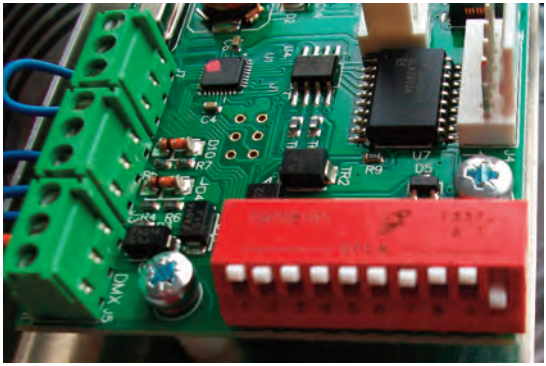
FIRE O08	Orange O18	Golden Amber O59	Apricot O14
Canary Y89	Green G78	Jade G96	Turquoise C47
Italian Blue C45	Brilliant Blue B06	Bright Blue B28	Congo B93
Violet V43	Magenta M56	Pink M63	Clear - Outputs white light

CONNECTION – LUNA CDMX & LUNA TDMX

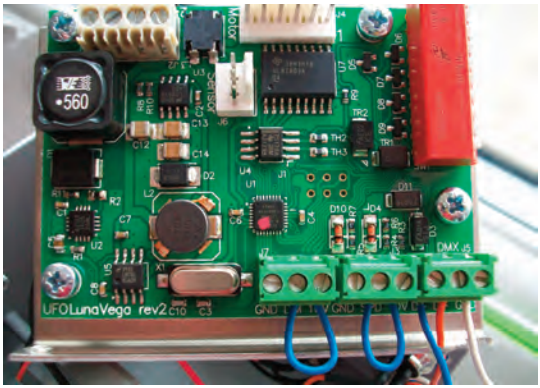
There are 3 connections required – the fibre port, the mains supply cable and the DMX control cable. The fibre port should be connected first. Connect and secure the fibre optic connector into the green collar and secure using the M5 locking screw.

Connect the IEC power cord into the Desk Top PSU and plug the mains plug into the electrical supply socket. Switch on power. The LED Indicator will illuminate and the light source is ready for use. If no light is produced consult the TROUBLESHOOTING section.

To revert a DMX only light source to normal manual operation of the wheel and the light output, remove top cover to access the dip switch on the PCB. Set switches 1 to 9 off and switch 10 on, as detailed below.



Pin 10 must be on for manual operation



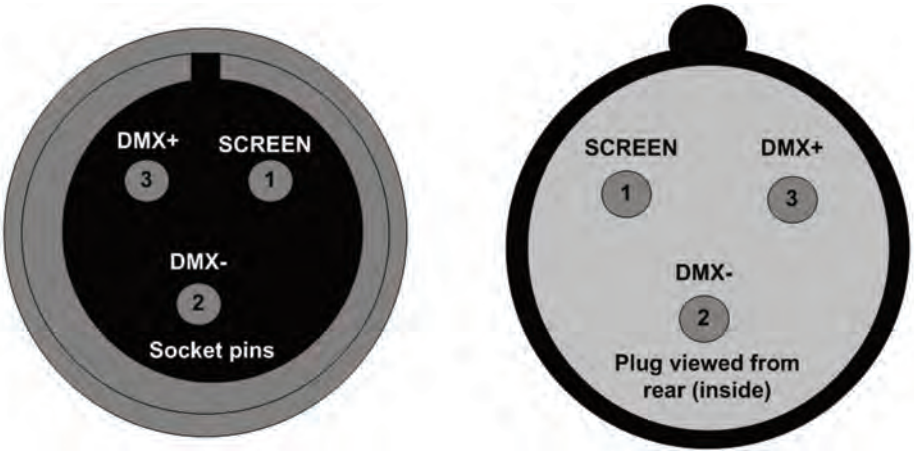
Note:

For manual operation to work there must be wire links fitted to the screw terminals on the PCB between10V & DM and 10V abd SPD as detailed, left.

CONNECTION – LUNA CDMX & LUNA TDMX (continued)

NOTE: THESE LIGHT SOURCES ARE NOT MAINS DIMMABLE

For DMX control connect up the DMX control cables to the Mini-XLR sockets on the rear of the Light Source. The recommended plug for these sockets is Multicomp SVP556-TA. The pin out details for the plugs are shown below.



NOTE:
It is recommended that a 120ohm terminating resistor be connected across DMX+ and DMX- on the last light source in the DMX universe or cable run.

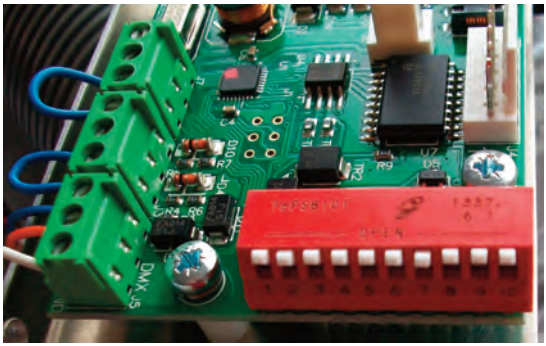
REMOTE DMX CONTROL

To set the DMX address, remove the top cover to access the Dip switch on the PCB as shown opposite. Set the address as detailed below and replace the top cover. Connect up the Light Sources with the Remote Controller using the Mini XLR sockets provided on the back of the Light Source - it doesn't matter which socket is used.

DMX ADDRESS

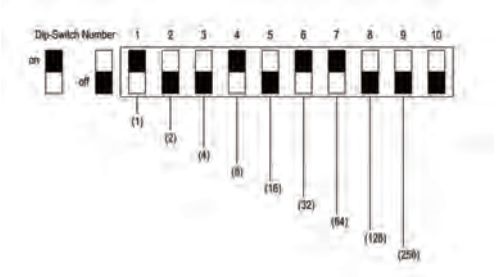
The DMX address of each Light Source is set manually using the DIP switch on the PCB as shown opposite.

CONNECTION – LUNA CDMX & LUNA TDMX (continued)



Switch 10 must be switched off for DMX operation. Set the DMX address using switches 1 - 9.

DMX B Start Ch#	DIP-Switches on	DMX B Start Ch#	DIP Switches on
1	1	11	1,2,4
2	2	12	3,4
3	1,2	13	1,3,4
4	3	14	2,3,4
5	1,3	15	1,2,3,4
6	2,3	16	5
7	1,2,3	:	
8	4	:	
9	1,4	:	
10	2,4	511	1,2,3,4,5 ,6,7,8,9



Above Example

1 - On	6 - On	
2 - Off	7 - On	
3 - Off	8 - Off	= Address 105
4 - On	9 - Off	
5 - Off	10 - Off	

LUNA CDMX Color Wheel

Each Light Source occupies 2 channels as detailed below.

Channel	Function	Value	Description
1	Dimming	0-255	From OFF at 0 to Brightest at 255
2	Color Wheel	0-10	White - Snap to color (Color 1)
2	Color Wheel	10	Yellow - Snap to color (Color 2)
2	Color Wheel	20	Green - Snap to color (Color 3)
2	Color Wheel	30	Orange - Snap to color (Color 4)
2	Color Wheel	40	Magenta - Snap to color (Color 5)
2	Color Wheel	50 - 70	Blue - Snap to color (Color 6)
2	Color Wheel	80	Magenta - Snap to color (Color 5)
2	Color Wheel	90	Orange - Snap to color (Color 4)
2	Color Wheel	100	Green - Snap to color (Color 3)
2	Color Wheel	110	Yellow - snap to color (Color 2)
2	Color Wheel	120	White - Snap to color (Color 1)
2	Color Wheel	128-189	Slow to fast rotation clockwise
2	Color Wheel	189-255	Fast to slow rotation counter clockwise

Luna T DMX Twinkle Wheel

Channel	Function	Value	Description
1	Dimming	0-255	From OFF at 0 to Brightest at 255
2	Motor Control	0-10	From stop at 0 to fastest at 255 (3-4rpm)

CONNECTION LUNA C 0-10V LUNA T 0-10V

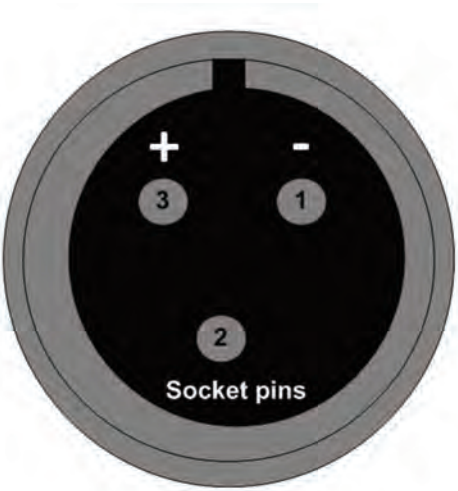
The 0-10V control type needed in the Luna light source is current source, not current sink. The unit relies on the control unit to supply the 0-10V control voltage.

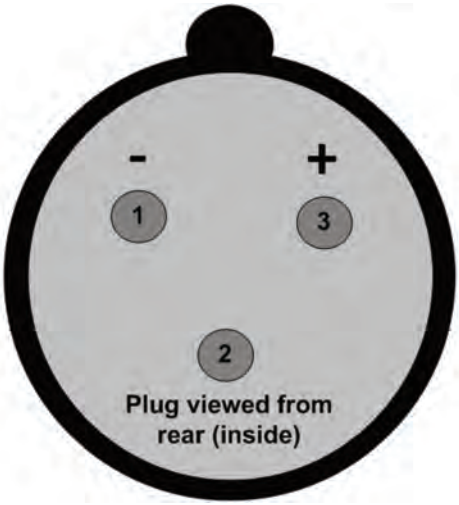
There are three connections required - the fibre port, the mains supply cable and the 0-10V control cable. The fibre port should be connected first. Connect and secure the fibre optic connector into the green collar and secure using the M5 locking screw.

Connect the IEC power cord into the Desk Top PSU and plug the mains plug into the electrical supply socket. Switch on power the led Indicator will illuminate and the light source is ready for use. If no light is produced consult the TROUBLESHOOTING section.

NOTE: THESE LIGHT SOURCES ARE NOT MAINS DIMMABLE

Connect up the 0-10V control cable to the mini XLR sockets on the rear of the light source. The recommended plug for these sockets is the Multicomp SVP556-TA. The pin out details for these plugs are shown below.





CONNECTION LUNA C 0-10V LUNA T 0-10V (continued)

0-10V Control is available to either control a color wheel (LUNA C 0-10V) or control a Twinkle wheel (LUNA T 0-10V).

The value tables for the the 0 - 10V control is shown below:-

Function	Value	Description
Color Wheel	0V	White (Color 1)
Color Wheel	0.4V	Yellow (Color 2)
Color Wheel	0.8V	Green (Color 3)
Color Wheel	1.2V	Orange (Color 4)
Color Wheel	1.6V	Magenta (Color 5)
Color Wheel	2V	Blue (Color 6)
Color Wheel	2.3V	Returns to White (Color 1)
Color Wheel	2.6V	Blue (Color 6)
Color Wheel	3V	Magenta (Color 5)
Color Wheel	3.6V	Orange (Color 4)
Color Wheel	4V	Green (Color 3)
Color Wheel	4.4V	Yellow (Color 2)
Color Wheel	4.6V	White (Color 1)
Color Wheel	5.4V to 9.2V	Slow to fast clockwise*
Color Wheel	9.3V to 10V	Fast counter clockwise*

NOTE:
For Twinkle wheel control use values marked*

MAINTENANCE

Please Note that a record of all maintenance MUST be kept in the table below, indicating what maintenance was undertaken and when. This MUST be dated for warranty purposes.

Date	Maintenance Undertaken

TROUBLESHOOTING

Problem	Probable Causes	Remedy
Unit is dead – no light output and LED power indicator on PSU is not illuminated	Mains supply off	Check supply & reinstate
	Loose mains plugs	Check plugs
	Plug fuse blown (UK)	Check fuse. If blown, replace
	PSU failed	Replace PSU
Unit is dead – no light output and LED power indicator on PSU is illuminated, but LED indicator on Light Source not illuminated	PSU failed	Replace PSU
For White Light Manual Dimming Version Unit is dead – no light output but LED power indicator is illuminated	Dimming control at minimum	Adjust brightness on dimmer control at rear
	DIP switch no 10 not switched ON	Remove cover and switch DIP switch 10 to ON.
	LED array or drive failure	Replace light source
For Decorative Manual Motor Version Decorative wheel not turning	Motor control at minimum	Adjust motor control at rear
	DIP switch No 10 not switched ON	Remove cover and switch DIP switch No 10 to ON
	Driver circuit or motor failure	Replace Light Source
For Decorative DMX Not responding to DMX control	DIP switch No 10 is switched ON	Remove cover and switch DIP switch No 10 to OFF
	DMX address not correctly set	Remove cover and set correct DMX address
	No DMX signal from controller	Check DMX controller for correct setting
	Wiring fault on DMX cables	Check cables and repair as required
	Driver circuit failure	Replace Light Source
For Decorative 0-10v control Not Responding	DIP switch No 10 is switched OFF	Remove cover and switch DIP switch No 10 to ON
	No 0-10v signal at light source due to cable or controller fault	Check input to Light Source using a DMM set to correct range - rectify cable / controller fault
Poor light output on fibre	Light Source dimmed either manually or by DMX or 0-10v control	Check and increase dimmer settings as appropriate
	LED driver failure	Replace Light Source

TECHNICAL SPECIFICATIONS

Description	Details
Port Connector Size	30mm
Fibre Type	Glass/Polymer
PSU Output	24V DC, 0.75A, 18W MAX
Supply Voltage	100-240V AC, 47-63Hz 0.58A
LED Power	11.5W
Input From Mains Power	100-240v AC
Mains Starting Current	0.05A
Mains Running Current	0.05A
VA Rating	12VA
Motor Type	Rotalink 25C13/YS0LPSL3E 12V 60:1
LED Driver	Eldoled
Power cord	Standard IEC
PSU	Mean Well Model No. GS18A24
LED Type/Model	White Light
LED Life	50,000Hrs
LEDColour Temperature	3000k and 4000k
Min/Max LED CRI	Up to 80 CRI
LED Lumens	Up to 751 LM @ 9.5W
DMX	Manually addressable
Control Functionality	Manual, DMX or 0-10V
Operating Environment	Indoor/Dry
Min Ambient Temperature	-10
Max Ambient Temperature	45
Material	Aluminium
Colour	Gray
Size	152mm(L) x 132mm (W) x 112mm (H)
Weight (Including PSU)	1.38KG

Universal Fibre Optics
Home Place | Coldstream | TD12 4DT | United Kingdom
Tel: +44 (0)1890 883416 | Fax: +44 (0)1890 883062
www.fibreopticlighting.com