Illuminator User Guide

Vega Decorative Illuminator Range

Models covered by this manual:

UFO VEGA
UFO VEGA - CM
UFO VEGA - TM
UFO VEGA - CDMX
UFO VEGA - TDMX
UFO VEGA - C 0-10V
UFO VEGA - T 0-10V

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

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INTRODUCTION

Thank you for purchasing this UFO Illuminator.

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

The UFO Vega range of illuminators are suitable for use with either glass or PMMA fiber-optic harnesses.

The Vega 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 Illuminator 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.

VEGA

CONNECTION – VEGA CM & VEGA TM

There are 2 connections required – the fiber port and the mains supply cable. The fiber port should be connected first. Connect and secure the fiber 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 illuminator is ready for use. If no light is produced consult the TROUBLESHOOTING section.

NOTE: THESE ILLUMINATORS ARE NOT MAINS DIMMABLE

NORMAL OPERATION – VEGA CM & VEGA TM

The VEGA CM (Colorwheel) & VEGA TM (Twinkle Wheel) have manual speed control on the decorative motor.

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.

To revert to normal manual operation of the wheel, remove top cover to access the dip switch on the PCB. Set switches 1 to 9 off and switch 10 on. Replace the cover.

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 following color segment options:-

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 – VEGA CDMX & VEGA TDMX

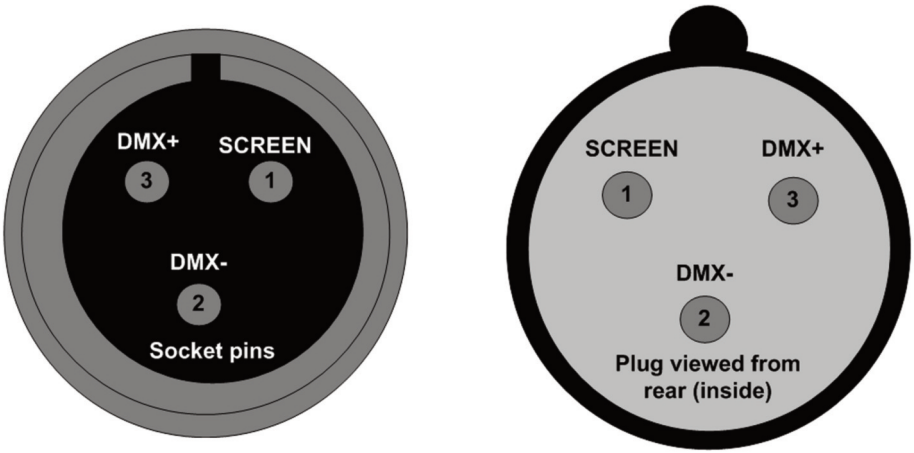
There are 3 connections required – the fiber port, the mains supply cable and the DMX control cable. The fiber port should be connected first. Connect and secure the fiber optic connector into the green collar and secure using the M5 locking screw.

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 illuminator is ready for use. If no light is produced consult the TROUBLESHOOTING section.

To revert to normal manual operation of the wheel, remove top cover to access the dip switch on the PCB. Set switches 1 to 9 off and switch 10 on. Replace the cover.

NOTE: THESE ILLUMINATORS ARE NOT MAINS DIMMABLE

For DMX control connect up the DMX control cables to the Mini-XLR sockets on the rear of the Illuminator. 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 illuminator in the DMX universe or cable run

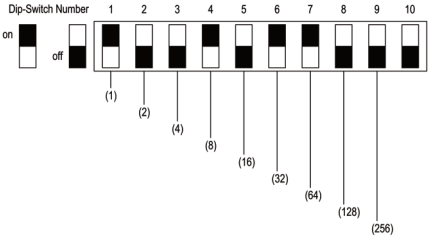
REMOTE DMX CONTROL

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

DMX ADDRESS

The DMX address of each Illuminator is set manually using the DIP switch on the PCB as shown below

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
2 - Off
3 - Off
4 - On
5 - Off
6 - On
7 - On
8 - Off
9 - Off
10 - Off

= Address 105

VEGA CDMX Color Wheel
Each Illuminator 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

Vega 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)

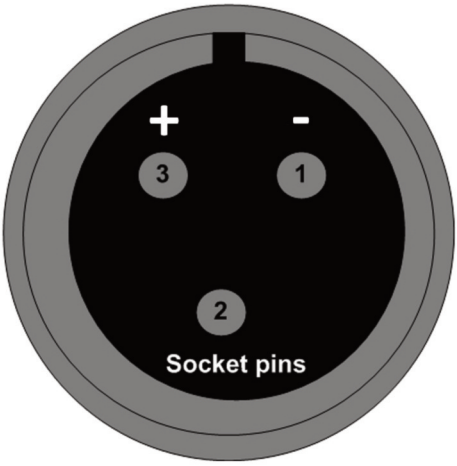
CONNECTION VEGA C 0-10V VEGA T 0-10V

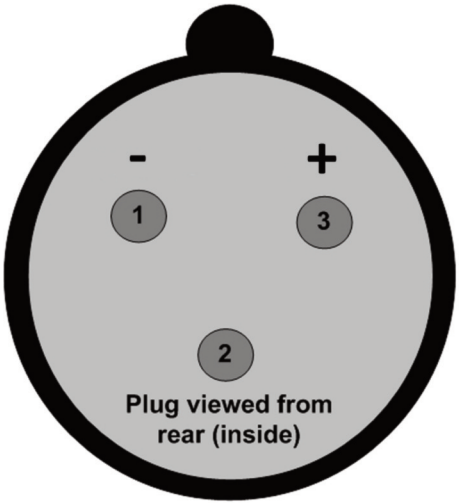
There are three connections required - the fiber port, the mains supply cable and the 0-10V control cable. The fiber port should be connected first. Connect and secure the fiber optic connector into the green collar and secure using the M5 locking screw.

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 illuminator 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 illuminator. The recommended plug for these sockets is the Multicomp SVP556-TA. The pin out details for these plugs are shown below.





0-10V Control is available to either control a color wheel (VEGA C 0-10V) or control a Twinkle wheel (VEGA 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 Illuminator 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 illuminator
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 Illuminator
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 Illuminator
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 illuminator due to cable or controller fault	Check input to Illuminator using a DMM set to correct range - rectify cable / controller fault
Poor light output on fiber	Illuminator dimmed either manually or by DMX or 0-10v control	Check and increase dimmer settings as appropriate
	LED driver failure	Replace Illuminator

TECHNICAL SPECIFICATIONS

Description	Details
Port connector size	30mm Diameter
Fiber type	Glass/PMMA
Mains Supply Voltage	100-240V AC, 50-60 Hz.1.8A
PSU Output	24V DC, 2.5A, 60W Maximum
LED Power	Max. 20W
Power Connection	2.1 x 5.5 x 12mm
Min Ambient Temperature	-10°C
Max Ambient Temperature	+45°C
Fan	60mm 12V Crossflow
LED Type / Model	White light
LED Life	50,000 hours in ambient 25°C
Equivalent TH Light Output	120W
CRI	82 (typical)
Color Temperature °K	3000°K or 4000°K
Material	Aluminum
Color	Silver
Size	6.18” (L) x 6.38” (W) x 4.57” (H) 157mm (L) x 162mm (W) x 116mm (H)

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