

PRODUCT USER GUIDE

MicroLED 4000P Illuminator



Rev: C5



PLEASE READ THIS USER GUIDE BEFORE INSTALLING, OPERATING
OR PERFORMING MAINTENANCE ON THE ILLUMINATOR UNIT



INTRODUCTION

Thank you for purchasing this UFO Illuminator.

To ensure that the illuminator is set up optimally and gives a long service life, please read this user guide before installing, operating or performing any maintenance on the unit.

Please keep this User Guide for future reference. This User Guide is laid out in three sections

- **INSTALLATION** – details how to connect your illuminator.
- **OPERATION** – details how to programme and set up your illuminator.
- **MAINTENANCE** – Maintenance log, Guide, Technical Specification

MODELS COVERED BY THIS USER GUIDE

UFO MIC 4000P

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.
- These illuminators are not mains dimmable.
- The LED array and heatsink in this illuminator can be replaced when it reaches end of life. Contact UFO for details.
- **Type Y Attachment:** If the external flexible cable or cord of this illuminator or associated PSU/driver is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person to avoid a hazard.
- **Location:** Do not locate this illuminator closer than 200mm from any flammable surface.
- **Clearance / Ventilation:** It is imperative that a gap of 200mm is left around the unit. This is to allow air to circulate and prevent overheating. The location must have free ventilation and must not have an ambient temperature higher than that specified for the unit.
- **Mounting:** This illuminator comes with an integral mounting plate for securing the unit to a vertical or horizontal surface. Refer to the instruction sheet supplied with the plate.
- **Warning:** Never look directly at the illuminator through the fiber port of the illuminator.
- **Warning:** The illuminator should be positioned so that staring into the illuminator at a distance closer than 2.7 meters is not expected.

INSTALLATION

This illuminator is supplied with a separate mounting plate. If using the mounting plate refer to the fitting instructions supplied with it.

POWER SUPPLY REQUIREMENTS

This illuminator is powered by a 12V Power Supply Unit or 12V Constant Voltage Driver. Remove the PSU/driver from its box. Connect the jack plug into the socket in the back, and the illuminator is now ready for connection.

CONNECTION

There are 2 connections required - the fiber port and the mains supply. The fiber port should be connected first. Connect and secure the fiber optic connector into the front of the unit and secure using the M5 locking screw.

Plug the mains plug into the electrical supply socket. Switch on the power, the LED indicator will illuminate, and the illuminator will start up automatically. If no light is produced consult the troubleshooting section.

REMOTE CONTROL

Description	Details	Comments
Power	2 x AAA batteries	-
Range	30 meters	Measured in free space, may be attenuated by obstructions or other RF devices
Frequency	2.4GHz	Approved for use in UK, USA and Europe

BATTERIES

With the illuminator powered up as described above, remove the rear cover on the remote control unit. Taking care not to touch any of the front buttons, insert the batteries.

If you touch the remote control buttons when inserting the batteries it WILL effect the operation of your remote control. If you do accidentally touch any of the buttons, remove the batteries and start again.

Once the batteries are inserted do not use the remote control for 3 seconds.



FURTHER INFORMATION

The remote control unit is matched with the illuminator at the factory.

If the remote control is not matched or an additional or replacement remote control is required carry out the “Matching Remote to illuminator” instructions as detailed later in this guide.

If a remote control is to be removed from control of a illuminator carry out the “Unmatching Remote to illuminator” instructions as detailed later in this guide.

REMOTE CONTROL OPERATION

No.	Description	Function
1	Button	Power on
2	Button	Power off
3	Color Ring	Touch control all colors (white not available)
4	Indicator	Indicates controller active when buttons pressed
5	Button	Increase color cycle speed
6	Button	Increase brightness
7	Button	Decrease brightness
8	Button	Decrease color cycle speed
9	Button	[Mode +] Step up through color cycle programmes
10	Button	[Mode -] Step down through color cycle programmes



MATCHING REMOTE CONTROL UNIT TO ILLUMINATOR

Remove the power plug from the rear of the illuminator, then replace and touch button 5 within 3 seconds, the illuminator will “blink” twice slowly indicating that the Remote Controller is matched to the illuminator.

UNMATCHING REMOTE CONTROL UNIT FROM ILLUMINATOR

Unmatching Remote from Illuminator- remove the power plug from the rear of the Illuminator, then replace and touch and hold button 5 within 3 seconds and the illuminator will “blink” 9 times indicating that the Remote Controller is unmatched from the illuminator.

NOTE: - More than one illuminator controlled by one Remote Controller will eventually run out of sync with each other (color cycle mismatch)

REMOTE CONTROL MODES AND FUNCTIONS

No.	Mode	Brightness	Speed	Comment
1	Static white	Adjustable	Non adjustable	Touch color ring then mode + to enter this mode at any time
2	White and colors mixed	Adjustable	Non adjustable	Color ring control. Touch color ring to enter this mode at any time
3	All colors fade	Adjustable	Adjustable	No white
4	RGBW fade	Adjustable	Adjustable	Red, green, blue, white
5	RGBW snap	Adjustable	Adjustable	Red, green, blue, white
6	7 colors snap	Adjustable	Adjustable	White and colors mixed
7	2 colors snap	Adjustable	Adjustable	Red and white
8	2 colors snap	Adjustable	Adjustable	Blue and white
9	2 colors snap	Adjustable	Adjustable	Green and white
10	1 color flash	Adjustable	Adjustable	Red
11	1 color flash	Adjustable	Adjustable	Blue
12	1 color flash	Adjustable	Adjustable	Green
13	1 color flash	Adjustable	Adjustable	White
14	All colors snap/fade	Adjustable	Adjustable	Random

Mode Buttons – Do not work in a loop, i.e. touching the mode+ button will not eventually bring you back to mode 1. To revert to mode 1, either touch mode – button repeatedly to step back up through the mode numbers, or touch color ring then mode+

Color Ring –The color ring can be used to select individual colors by touching the ring and sliding your finger around the ring,

Brightness – brightness can be increased or reduced in any mode using buttons 6 & 7

Cycle Speed – speed of color cycling in modes 3 to 14 can be adjusted using buttons 5 & 8

REMOTE RANGE WALK TEST

Once the illuminator is fully installed carry out a complete range walk test and record the range in the table below.

This information is essential for maintenance purposes to determine if the range/sensitivity is reducing and also to record dead areas within the remote control units range due to RF obstructions and/or RF interference.

Note: Where a illuminator has more than one remote control, reduction in operating range may be experienced when both (or multiple) remote controls are used simultaneously.

Description	Date	Max Range	
Controller 1			
Controller 2			
Controller 3			
Dead Areas			

DMX OPERATION

The MicroLED 4000 is programmed as a Master unit and is capable of interlinking to and controlling MicroLED Slave Illuminators using a RJ45 cable linking the two. In this Master /Slave configuration the Slave Illuminator will follow the Master Illuminator. The MicroLED 4000 Master Illuminator, cannot be controlled by a remote DMX controller.

For the MicroLED 4000, remote DMX slave control can only be achieved with MicroLED 2000 or MicroLED 4000 Slave Illuminators. See MicroLED 2000 or MicroLED 4000 Slave User Guides for DMX wiring connections

STANDALONE OPERATION USING INBUILT BUTTONS

To disable the remote and revert to manual operation press one of the buttons on the rear of the illuminator. The illuminator will now respond to manual commands from the 2 control buttons as described below.

The illuminator has 2 color cycles, each with 3 different speed settings, the colors are detailed in the table below:

Cycle	Color 1	Color 2	Color 3	Color 4	Color 5	Color 6	Color 7
1	White	Red	Orange	Jade	Green	Cyan	Blue
2	Red	Red	Orange	Jade	Green	Cyan	Blue

The illuminator is controlled using the 2 push buttons on the rear of the unit.

The lower button stops and starts the color cycle.

The upper button is used to select the cycle speed as follows:

Push the upper button repeatedly until the color white is displayed. The illuminator is now in Cycle 1 Speed A as detailed in the table below. Each push reduces the speed. On the third push, the color red will be displayed. The illuminator is now in Cycle 2 Speed A.

Cycle	Speed A - Fastest	Speed B - Slower	Speed C - Slowest
1 (White Start)	Push once	Push once	Push once
2 (Red Start)	Push once	Push once	Push once

At any time the cycle can be stopped on a color and started again using the lower push button.

To disable manual operation and revert to remote control operation, recycle the power to the illuminator. The remote control unit may need to be matched to the illuminator as detailed on page 5.

MAINTENANCE

To ensure a long working life and the safe, reliable operation of the illuminator, it is very important to maintain it properly and ensure it is installed in an appropriate and safe location.

Before performing any maintenance on the illuminator it should be disconnected from the power supply and allowed to cool down.

- The illuminator vents should be blown out with compressed air at least every 12 months, or more often if located in a dusty environment.
- After the illuminator has been installed, check the vents to ensure they are clear of dust and debris. Blow out with compressed air if required.
- The body of the illuminator can be cleaned using a soft damp cloth. Do not use any abrasives on the unit.

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

SAFETY GUIDANCE

- A gap of 200mm (8”) **MUST** be left around the unit. This is to allow air to circulate and prevent overheating. The location must have free ventilation and must not have an ambient temperature higher than that specified for the luminaire.
- The outer body of the illuminator may become hot - keep away from all combustible materials and **DO NOT** locate this illuminator within 200mm (8”) of any flammable surface.
- The illuminator must not be run without the fiber optic harness fitted.

MAINTENANCE LOG

Date	Maintenance Undertaken

Problem	Possible Cause(s)	Remedy
Unit is dead - LED power indicator is not illuminated	Mains supply off	Check supply and reinstate
	Loose mains plugs	Check plugs
	PSU failed	Replace PSU
Unit is dead - no light output but LED power indicator is still illuminated	LED array failure	Contact UFO
	Switched off via remote control unit	Recycle power to illuminator or switch on via remote control
Poor light output on fiber	Unit needs cleaning	Carefully clean LED Lens with dry cloth
		Clean fiber common end
	Fiber port connector not plugged in correctly	Ensure plugged in correctly and secured with locking screw
Stationary on one color	Lower button has been pressed	Press lower button once
	LED driver has failed	Contact UFO
Color cycle cannot be stopped	LED driver has failed	Contact UFO
Remote control range reduced or persistently freezing	Batteries failing	Replace batteries as per user guide and carry out matching if necessary
	Interference from external source	Check for another device transmitting RF interference
	Remote control needs reset	Remove and replace batteries as per user guide
	Remote control failing	Replace remote control unit
	Illuminator receiver failing	Contact UFO
Illuminator won't respond to remote control unit	Batteries failed	Replace batteries as per user guide and carry out matching if necessary
	Illuminator in standalone mode	Recycle power to illuminator
	Remote control needs resetting	Remove and replace batteries as per user guide
	Remote control not matched to illuminator	Carry out matching procedure as detailed in user guide
	Remote control failed	Replace remote control unit
	Illuminator receiver failed	Contact UFO
In master/slave configuration, slave illuminator works on standalone but does not respond to DMX from master	DMX cable disconnected or faulty	Check DMX link cable connections - repair or replace
	Master illuminator not sending DMX signal	Check master illuminator - refer to the relevant user guide troubleshooting section

TEHNIICAL SPECIFICATION

Port connector size	30mm diameter
Fiber type	Glass / PMMA
Material/Finish	ABS (black, silver or white)
Dimensions (L x W x H)	137mm (5.4") x 114mm (4.5") x 73mm (2.9")
Weight	0.4kg
Operating Environment	Indoor use - IP20
Min Ambient Temp.	-10°C
Max Ambient Temp.	+45°C

Control Functionality	Remote and push button manual
DMX Functionality	Output to MicroLED 4000 Slave units ONLY
Color Change Functionality	Remote and push button manual

LED Array Type	RGBW
LED Array Power	1.5 - 5W
LED Array Model	Cree XML Color Gen 2
LED Array Life (L70, B10)	> 50,000 hours @ 25°C
Wavelength and Luminous Flux	Red: 625nm / 80lm
	Green: 527nm / 155lm
	Blue: 457nm / 23lm
	White: 4000K / 145lm

Supply Voltage	90-264Vac
Mains Running Current	0.06A @ 240Vac
Mains Voltage VA rating	14VA
External PSU Type	Power Pax, 12V, 2A, 24W

RF Remote Frequency	2.4GHz
RF Remote Range	30m, depending on environment
RF Remote Power	2 x AAA batteries (supplied)



DESIGN



SPECIFY



BUILD



INSTALL

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