PRODUCT USER GUIDE

Quasar Illuminator Range

Rev: C5

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

c UL US LISTED
E357731

FOR INDOOR USE ONLY

WEATHER RESISTANT ENCLOSURE AVAILABLE

LED 40,000 hrs

MADE IN U.K. PREMIUM QUALITY

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.

MODELS COVERED BY THIS USER GUIDE

UFOQUA3080	UFOQUA4080	UFOQUA5080	UFOQUA5780	UFOQUA6580
UFOQUA3080-E	UFOQUA4080-E	UFOQUA5080-E	UFOQUA5780-E	UFOQUA6580-E
UFOQUA3080-T	UFOQUA4080-T	UFOQUA5080-T	UFOQUA5780-T	UFOQUA6580-T
UFOQUA3080-C	UFOQUA4080-C	UFOQUA5080-C	UFOQUA5780-C	UFOQUA6580-C
UFOQUA3080-CF	UFOQUA4080-CF	UFOQUA5080-CF	UFOQUA5780-CF	UFOQUA6580-CF

HIGH CRI RANGE:

UFOQUA2790	UFOQUA3090	UFOQUA4090	UFOQUA5790
UFOQUA2790-E	UFOQUA3090-E	UFOQUA4090-E	UFOQUA5790-E
UFOQUA2790-T	UFOQUA3090-T	UFOQUA4090-T	UFOQUA5790-T
UFOQUA2790-C	UFOQUA3090-C	UFOQUA4090-C	UFOQUA5790-C
UFOQUA2790-CF	UFOQUA3090-CF	UFOQUA4090-CF	UFOQUA5790-CF

MODELS COVERED BY THIS USER GUIDE

UFO Quasar		
Color Temperature	CRI	Model Functionality
27 - 2700K	80: > 80 CRI 90: > 90 CRI	No Suffix: Standard White Light
30 - 3000K		E: Emergency White Light
40 - 4000K		T: Twinkle Effect Decorative Wheel
50 - 5000K		C: Color Segment Decorative Wheel
57 - 5700K		CF: Color Segment Decorative Wheel with Separate Control Feed
65 - 6500K		

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 luminaire 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 luminaire.

Mounting: This luminaire comes with an integral mounting feet for securing the unit to a vertical or horizontal surface.

Warning: Never look directly at the luminaire through the fiber port of the illuminator.

Warning: The luminaire should be positioned so that staring into the luminaire at a distance closer than 2.7 metres in not expected.

MODEL TYPES

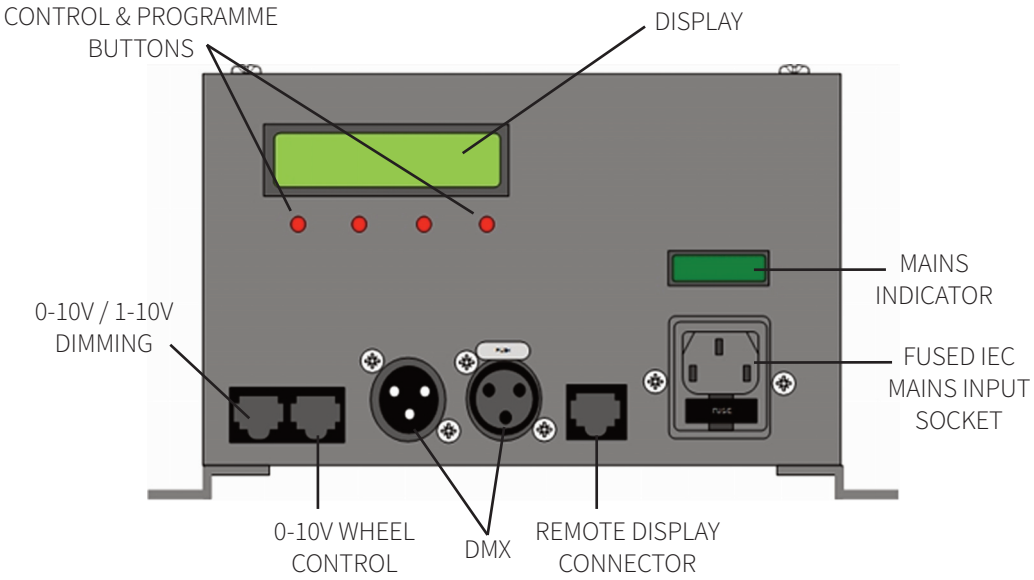
The Quasar LED illuminator incorporates a range of LED arrays to provide optimum display and illumination within the following optical range.

Model	CRI	Color Temperature	Lumen Output
UFOQUA3080	>80	3000°K	17974
UFOQUA4080	>80	4000°K	18438
UFOQUA5080	>80	5000°K	18653
UFOQUA5780	>80	5700°K	18840
UFOQUA6580	>80	6500°K	18992
UFOQUA2790	>90	2700°K	14805
UFOQUA3090	>90	3000°K	15400
UFOQUA4090	>90	4000°K	15633
UFOQUA5790	>90	5700°K	16174

The Quasar is a 135 - 150W white light LED illuminator with optional decorative wheel capability. The Quasar LED illuminator driver PCB has all the control functionality fitted as standard. The following control functionality and configurations are available via rear panel connections, push buttons and LCD display.

1. Manual dimming using rear panel push button controls with status display
2. Manual dimming using a remote potentiometer
3. 0-10V (current source -receiving). Dimming only for two white light models. Two versions for white light only – standard and emergency light. Emergency light version reverts to maximum light output when mains power to the 0-10V control system is lost
4. 0-10V (current source -receiving). Two channels dimming and wheel motor control for decorative model. For separate feed decorative models the 0-10V wheel control input is used
5. 1-10V dimming – one channel (current sink -sending). Dimming for standard white light only, not available in emergency white light or decorative wheel versions
6. DMX dimming – 5 channels (dimming, color wheel control, color wheel duration, twinkle wheel control, initialise/reset/LED/fan on and off) not available in emergency white light
7. Motor Control manual decorative wheel control with speeds from stop to 4 rpm in increments. On Color decorative wheel stop is on color 1, on twinkle wheel stop is on open wheel segment (maximum light output)
8. 28 standalone decorative programmes with bi-directional variable wheel speed control
9. Master slave functionality – one Quasar acting as master controlling slave Quasar luminaires via DMX links

CONNECTIONS AND CONTROLS OVERVIEW



CONNECTION - FOR MANUAL OPERATION

There are two connections required – the fiber port and the mains supply cable. The fiber port should be connected first before the mains supply. Connect and secure the fiber optic connector into the collar and the front of the unit and secure using the M5 knurled locking screw. Ensure the fiber optic connector is fully inserted before tightening the locking screw. **Never run the luminaire with the fiber optic connector out of the collar.**

Plug the IEC connector into the IEC socket and then plug the mains connector into a local mains supply. Switch on power the mains indicator will illuminate and the illuminator is ready for use.

If no light is produced consult the TROUBLESHOOTING section in this manual.

CONNECTION - FOR REMOTE MANUAL OPERATION

This connection method allows the luminaire to be dimmed remotely using a simple passive potentiometer control.

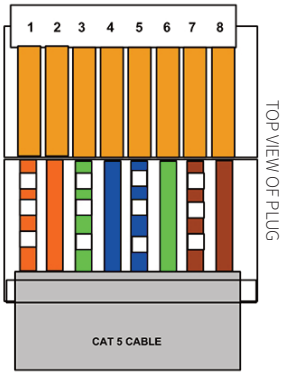
There are three connections required – the fiber port, the remote dimmer cable and the mains supply cable. The fiber port should be connected first before the mains supply. Connect and secure the fiber optic connector into the collar and the front of the unit and secure using the M5 knurled locking screw. Ensure the fiber optic connector is fully inserted before tightening the locking screw. **Never run the luminaire with the fiber optic connector out of the collar.**

Connect the remote dimmer cable (typically CAT5) to the dimmer as shown below. Wire up and connect the RJ45 plug to the Quasar end of the dimmer cable and plug into connector A the left hand RJ45 on the rear of the luminaire using pin outs as detailed below. Only the left hand RJ45 connector is used to control dimming in this way.

Plug the IEC connector into the IEC socket and then plug the mains connector into a local mains supply. Switch on power the mains indicator will illuminate and the illuminator is ready for use.

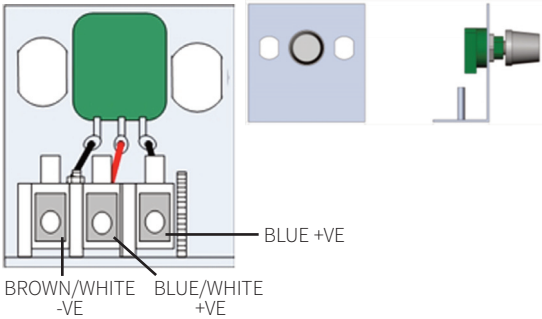
If no light is produced consult the TROUBLESHOOTING section in this manual.

RJ45 - CLIP DOWN, PINS UP



1. WHITE/ORANGE
2. ORANGE
3. WHITE/GREEN
4. BLUE
5. WHITE/BLUE
6. GREEN
7. WHITE/BROWN
8. BROWN

CVD1 DIMMER & PLATE



RJ45 CONNECTOR A (LEFT HAND) - DIMMING

RJ45 Pin No.	Wire Color	Polarity	Function
4	Blue	+VE	Positive 10V Dimming Supply
5	Blue/White	+VE	Positive (10V) 0-10V Current Source Dimming
7	Brown/White	-VE	Negative (0V) Remote Potentiometer Dimming

REMOTE DIMMING NOTES:

- Always use an approved CAT5 cable
- Use a 10kΩ linear potentiometer connected across pins 4, 5 and 7 as detailed on page 6. See Accessories in Technical Specification section at end of this document for UFO CVD1
- The CVD1 is designed to be fitted to the back of a one gang faceplate

CONNECTION - FOR DMX REMOTE CONTROL OPERATION

There are three connections required – the fiber port, the DMX cables and the mains supply cable. The fiber port should be connected first before the mains supply. Connect and secure the fiber optic connector into the collar and the front of the unit and secure using the M5 knurled locking screw. Ensure the fiber optic connector is fully inserted before tightening the locking screw. **Never run the luminaire with the fiber optic connector out of the collar.**

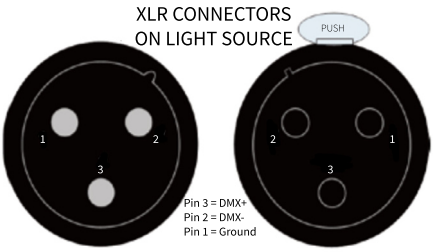
Wire up using the DMX cable from the DMX control system. Solder the cables to the 3 pin XLR male and female plug and socket using pin outs as detailed below and plug in to the connectors on the rear of the luminaire. The image below shows the pin orientation of the connectors actually fitted to the illuminator.

Plug the IEC connector into the IEC socket and then plug the mains connector into a local mains supply. Switch on power the mains indicator will illuminate and the illuminator is ready for use.

If no light is produced consult the TROUBLESHOOTING section in this manual.

DMX NOTES:

- Always use an approved DMX cable
- Always “daisy chain” a DMX cable or universe
- Never use a T joint on a DMX cable or universe, unless using and approved interface or splitter
- Never connect more than 30 devices to a single DMX universe unless using and approved interface or splitter
- Always terminate the last device on a DMX universe by connecting a 120 ohm resistor across DMX+ and DMX- across the last output connector
- This is a 5 channel DMX device always leave 4 channels free when addressing multiple Quasar luminaires i.e. address 001, 006, 011 etc.



CONNECTION - FOR 0-10V (CURRENT SOURCE) OPERATION

There are three connections required – the fiber port, the 0-10V cables and the mains supply cable. The fiber port should be connected first before the mains supply. Connect and secure the fiber optic connector into the collar and the front of the unit and secure using the M5 knurled locking screw. Ensure the fiber optic connector is fully inserted before tightening the locking screw. **Never run the luminaire with the fiber optic connector out of the collar.**

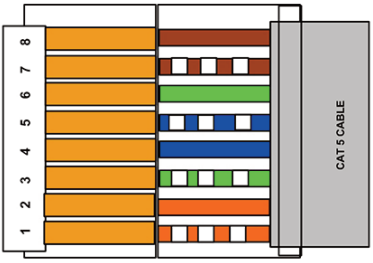
Wire up and connect RJ45 plugs to the RJ45 connectors on the rear of the luminaire using pin outs as detailed below. The left hand RJ45 connector controls dimming, the right hand connector controls the decorative wheel motor. Ensure the 0-10V control system is powered up and supplying a control voltage.

Plug the IEC connector into the IEC socket and then plug the mains connector into a local mains supply. Switch on power the mains indicator will illuminate and the illuminator is ready for use.

If no light is produced consult the TROUBLESHOOTING section in this manual.

RJ45 - CLIP DOWN, PINS UP

TOP VIEW OF PLUG



1. WHITE/ORANGE
2. ORANGE
3. WHITE/GREEN
4. BLUE
5. WHITE/BLUE
6. GREEN
7. WHITE/BROWN
8. BROWN

RJ45 CONNECTOR A (LEFT HAND) - DIMMING

RJ45 Pin No.	Wire Color	Polarity	Function
5	Blue/White	+VE	Positive (10V) 0-10V Current Source Dimming
7	Brown/White	-VE	Negative (0V) Remote Potentiometer Dimming

RJ45 CONNECTOR B (RIGHT HAND) - MOTOR CONTROL

RJ45 Pin No.	Wire Color	Polarity	Function
1	Orange/White	-VE	Negative (0V) 0-10V Current Source Twinkle Motor
3	Green/White	+VE	Positive (10V) 0-10V Current Source Twinkle Motor
5	Blue/White	+VE	Positive (10V) 0-10V Current Source Color Motor
7	Brown/White	-VE	Negative (0V) 0-10V Current Source Color Motor

0-10V NOTES:

- This is a current source 0-10V control system. The input from the 0-10V controller (source) supplies a varying control voltage between 0 and 10v to the luminaire to control the dimming or decorative wheel motors, or both the dimming and the decorative motors
- Always use an approved CAT5 cable
- With no 0-10V input the luminaire will give no light output and the decorative wheel will be stationary

CONNECTION - FOR 1-10V (CURRENT SINK) STANDARD WHITE LIGHT DIMMING

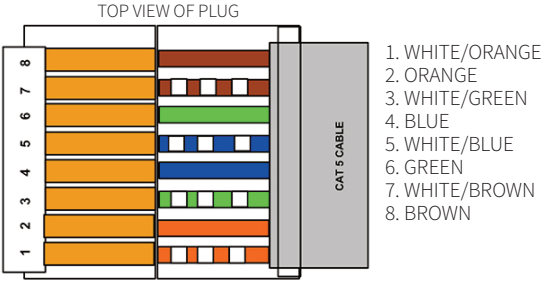
There are three connections required – the fiber port, the DMX cables and the mains supply cable. The fiber port should be connected first before the mains supply. Connect and secure the fiber optic connector into the collar and the front of the unit and secure using the M5 knurled locking screw. Ensure the fiber optic connector is fully inserted before tightening the locking screw. **Never run the luminaire with the fiber optic connector out of the collar.**

Wire up and connect RJ45 plugs to the RJ45 connectors on the rear of the luminaire using pin outs as detailed below. The left hand RJ45 connector controls dimming, Ensure the 1-10V control system is powered up and supplying a control voltage.

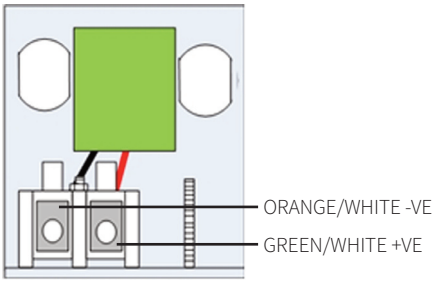
Plug the IEC connector into the IEC socket and then plug the mains connector into a local mains supply. Switch on power the mains indicator will illuminate and the illuminator is ready for use.

If no light is produced consult the TROUBLESHOOTING section in this manual.

RJ45 - CLIP DOWN, PINS UP



CVD3 DIMMER & PLATE



RJ45 CONNECTOR A (LEFT HAND) - DIMMING

RJ45 Pin No.	Wire Color	Polarity	Function
3	Green/White	+VE	Positive (10V) 0-10V Current Sink Dimming
1	Orange/White	-VE	Negative (0V) 0-10V Current Sink Dimming

1-10V NOTES:

- This is a current sink 1-10V control system. A 10V output from the luminaire is connected via an external 1-10V current sink dimmer varying the circuit current to control the dimming only
- Always use an approved CAT5 cable
- Ensure correct connection polarity at all times
- See Accessories in Technical Specification section at end of this document for UFO CVD3 compliant dimmer
- The CVD3 is designed to be fitted to the back of a one gang faceplate

CONNECTION - FOR MASTER/SLAVE OPERATION

There are three connections required – the fiber port, the DMX cables and the mains supply cable. The fiber port should be connected first before the mains supply. Connect and secure the fiber optic connector into the collar and the front of the unit and secure using the M5 knurled locking screw. Ensure the fiber optic connector is fully inserted before tightening the locking screw. **Never run the luminaire with the fiber optic connector out of the collar.**

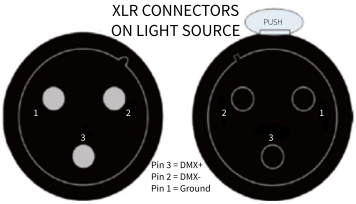
Wire up using the DMX cable linked from the Master to each Slave Quasar. Solder the cables to the 3 pin XLR male and female plug and socket using pin outs as detailed below and plug in to the connectors on the rear of the luminaire. The image below shows the pin orientation of the connectors actually fitted to the illuminator.

Plug the IEC connectors into the IEC sockets and then plug the mains connectors into a local mains supply. Switch on power the mains indicator will illuminate and the luminaires are ready for use.

If no light is produced consult the TROUBLESHOOTING section in this manual.

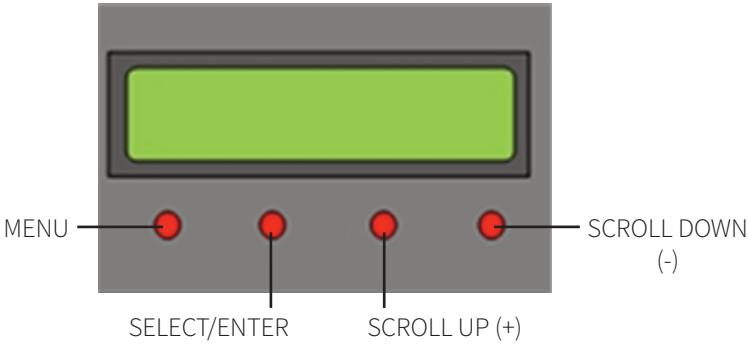
DMX NOTES:

- Always use an approved DMX cable
- Always “daisy chain” a DMX cable or universe
- Never use a T joint on a DMX cable or universe, unless using and approved interface or splitter
- Never connect more than 30 devices to a single DMX universe unless using and approved interface or splitter
- Always terminate the last device on a DMX universe by connecting a 120 ohm resistor across DMX+ and DMX- across the last output connector
- For Master slave operation all Slaves must be addressed 001



USER CONTROLS

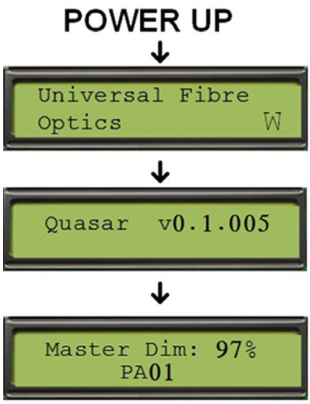
Operation of the Quasar models is carried out via the rear display and associated push button controls as detailed below:



All Quasar models can be manually controlled as detailed in the following section.

WHITE LIGHT MODELS

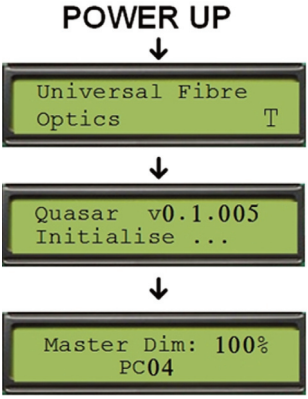
On power up the display will momentarily display “Universal Fiber Optics” with the current model version letter, then the firmware version (example below) before displaying the current status of the unit.



USER CONTROLS

DECORATIVE MODELS

On power up the display will momentarily display “Universal Fiber Optics” together with the current model version letter, then the firmware version (example below), then it will go into initialising whilst it checks the decorative wheel, before displaying the current status of the unit.



The model version code letters displayed momentarily on power up are as follows:

1. W: White Light
2. E: Emergency White Light
3. C: Color Decorative Wheel
4. T: Twinkle Effect Decorative Wheel

Once the luminaire is powered up, user controlled manual functions and all programming features are available via the four rear panel pushbuttons as detailed in the figure above and the following table.

IMPORTANT NOTE: Once programmed the luminaire will always revert to the programmed settings when power is recycled. However, if manual RESET is selected the luminaire will revert to factory default settings as detailed below:

White Light Standard & Emergency	Dimming **100%**/DMX address **001**/Control Mode **Master**
Decorative Twinkle	Dimming **100%**/DMX address **001**/Control Mode **Master**/ Wheel Speed **0.4rpm**
Decorative Color	Dimming **100%**/DMX address **001**/Control Mode **Master**/ Select Program **PA01**/ Program Steptime **5 secs**/Wheel Speed **0.4rpm**

PROGRAMMABLE FUNCTION TABLE

Quasar Model	Version	Main Menu	Sub Menu	Description	Instructions
Standard White Light	W	DMX Address	None	Sets DMX address	Use + & - buttons to display chosen address. Press enter to select
Standard White Light	W	Control Mode	Master	Allows manual control of illuminator	Press enter to select
Standard White Light	W	Control Mode	DMX	Allows DMX control of illuminator	Press enter to select
Standard White Light	W	Control Mode	0-10V	Allows 0-10V control of dimming	Press enter to select
Standard White Light	W	Control Mode	1-10V	Allows 1-10V control of dimming	Press enter to select
Standard White Light	W	Dim Level	None	If set to Master, allows manual dimming of light output	Use + & - buttons to display chosen light output. Enter to select
Standard White Light	W	Reset Options	None	When set to Master, allows unit to be manually reset	Use + & - buttons to display YES or NO. Press enter to select
Emergency White Light	E	Control Mode	Master	Allows manual control of illuminator	Press enter to select
Emergency White Light	E	Control Mode	0-10V	Allows 0-10V control of dimming (to emergency values)	Press enter to select
Emergency White Light	E	Dim Level	None	If set to Master, allows manual dimming of light output	Use + & - buttons to display chosen light output. Enter to select
Decorative Twinkle Wheel	T	DMX Address	None	Sets DMX address	Use + & - buttons to display chosen address. Press enter to select
Decorative Twinkle Wheel	T	Control Mode	Master	Allows manual control of illuminator	Press enter to select
Decorative Twinkle Wheel	T	Control Mode	DMX	Allows DMX control of illuminator	Press enter to select
Decorative Twinkle Wheel	T	Control Mode	0-10V	Allows 0-10V control of dimming & decorative wheel	Press enter to select
Decorative Twinkle Wheel	T	Dim Level	None	If set to Master, allows manual dimming of light output	Use + & - buttons to display chosen light output. Enter to select
Decorative Twinkle Wheel	T	Twinkle Speed	None	If set to Master, allows manual control of wheel speed	Use + & - buttons to display chosen speed. Press enter to select
Decorative Twinkle Wheel	T	Reset Options	None	When set to Master, allows unit to be manually reset	Use + & - buttons to display YES or NO. Press enter to select

Quasar Model	Version	Main Menu	Sub Menu	Description	Instructions
Decorative Color Wheel	C	DMX Address	None	Sets DMX address	Use + & - buttons to display chosen address. Press enter to select
Decorative Color Wheel	C	Control Mode	Master	When set to Master, allows manual control of illuminator	Press enter to select
Decorative Color Wheel	C	Control Mode	DMX	Allows DMX control of illuminator	Press enter to select
Decorative Color Wheel	C	Control Mode	0-10V	Allows 0-10V control of dimming & decorative wheel	Press enter to select
Decorative Color Wheel	C	Dim Level	None	If set to Master, allows manual dimming of light output	Use + & - buttons to display chosen light output. Enter to select
Decorative Color Wheel	C	Color Speed	None	If set to Master, allows manual control of wheel speed	Use + & - buttons to display chosen speed. Press enter to select
Decorative Color Wheel	C	Reset Options	None	When set to Master, allows unit to be manually reset	Use + & - buttons to display YES or NO. Press enter to select
Decorative Color Wheel	C	Select Program	PA01 to PA10	If set to Master, allows 10 color segments to be individually snap displayed	Use + & - buttons to display chosen color. Press enter to select
Decorative Color Wheel	C	Select Program	PB01 to PB09	If set to Master, allows pre-programmed color sequences to be displayed	Use + & - buttons to display chosen color. Press enter to select
Decorative Color Wheel	C	Select Program	SA01 to SA09	If set to Master, allows pre-programmed snap to color sequences to be displayed	Use + & - buttons to display chosen color. Press enter to select
Decorative Color Wheel	C	Select Program	CW01 to CW02	When set to Master, allows continuous rotation of color wheel CW or CCW	Use + & - buttons to display chosen color. Press enter to select
Decorative Color Wheel	C	Program Steptime	None	If set to Master, allows adjustment of time in increments for step to hold the color in between sequences	Use + & - buttons to display chosen time. Press enter to select

MANUAL OPERATION

All Quasar models in the range can be manually controlled in a variety of ways as detailed in the Programmable Function Table in the preceding section and in the following sections.

NOTE:

- For all manual operation modes the luminaire must be programmed to Master.
- Refer to Programmable Function Table for Menu and Sub Menu availability for each model.

MENU > `Control Mode` > SCROLL UP/DOWN > `Master` > SELECT

STANDARD & EMERGENCY LIGHT WHITE LIGHT DIMMING

With the luminaire in Master Control Mode, the light output can be dimmed using rear panel controls from 0% (no light output) to 100% (maximum light output)

MENU > `Master Dim: 90%` > SCROLL UP/DOWN TO ADJUST LIGHT OUTPUT

DECORATIVE TWINKLE OR COLOR DIMMING & WHEEL CONTROL

DIMMING:

With the luminaire in Master Control Mode, the light output can be dimmed using rear panel controls from 0% (no light output) to 100% (maximum light output)

MENU > `Master Dim: 90%` > SCROLL UP/DOWN TO ADJUST LIGHT OUTPUT

TWINKLE WHEEL CONTROL:

With the luminaire in Master Control Mode, the decorative twinkle wheel can be controlled via the 'Twinkle Speed' menu as follows:

MENU > `Twinkle Speed` > SCROLL UP/DOWN TO ADJUST SPEED

STOP	0.1 RPM	0.2 RPM	0.3 RPM	0.4 RPM	0.5 RPM	0.6 RPM	0.8 RPM	1 RPM	2 RPM	4 RPM

NOTE:

The Quasar twinkle wheel has an open cut out segment. When moving, the wheel rotates backwards and forwards across the solid section of the wheel to ensure a smooth twinkle effect. When the wheel is stopped, the wheel will turn to stop at the open section for maximum uninterrupted light output.

COLOR WHEEL CONTROL

With the luminaire in Master Control Mode, the decorative wheel can be controlled via the main and sub menus. Sub menu options are as follows:

SELECT PROGRAM MODE

Menu	Sub Menu	Description
Select Program	PA01	Color wheel snap to color 0 (Clear/White)
Select Program	PA02	Color wheel snap to color 10/color 1 (Blue)
Select Program	PA03	Color wheel snap to color 20/color 2 (Green)
Select Program	PA04	Color wheel snap to color 30/color 3 (Yellow)
Select Program	PA05	Color wheel snap to color 40/color 4 (Red)
Select Program	PA06	Color wheel snap to color 50/color 5 (Pink)
Select Program	PA07	Color wheel snap to color 60/color 6 (Orange)
Select Program	PA08	Color wheel snap to color 70/color 7 (Violet)
Select Program	PA09	Color wheel snap to color 80/color 8 (Magenta)
Select Program	PA10	Color wheel snap to color 90/color 9 (Apricot)
Select Program	PB01	Color change 0-9
Select Program	PB02	Color change 1-9
Select Program	PB03	Color change 2-9
Select Program	PB04	Color change 3-9
Select Program	PB05	Color change 4-9
Select Program	PB06	Color change 5-9
Select Program	PB07	Color change 6-9
Select Program	PB08	Color change 7-9
Select Program	PB09	Color change 8-9
Select Program	SA01	Snap color change 0-9
Select Program	SA02	Snap color change 1-9
Select Program	SA03	Snap color change 2-9
Select Program	SA04	Snap color change 3-9
Select Program	SA05	Snap color change 4-9
Select Program	SA06	Snap color change 5-9

Menu	Sub Menu	Description
Select Program	SA07	Snap color change 6-9
Select Program	SA08	Snap color change 7-9
Select Program	SA09	Snap color change 8-9
Select Program	CW01	Color wheel rotate continuously clockwise
Select Program	CW02	Color wheel rotate continuously anti-clockwise

PROGRAM STEPTIME MODE

MENU > Program Steptime > SCROLL UP/DOWN TO ADJUST TIME

1 sec	5 sec	10 sec	20 sec	30 sec	1 min	2 min	5 min	10 min	30 min	60 min

COLOR SPEED MODE

MENU > Color Speed > SCROLL UP/DOWN TO ADJUST SPEED

0.1 RPM	0.2 RPM	0.3 RPM	0.4 RPM	0.5 RPM	0.6 RPM	0.8 RPM	1 RPM	2 RPM	4 RPM

DMX OPERATION

All Quasar models in the range can be DMX controlled as detailed in the Programmable Function Table in the preceding section and in the following sections.

NOTE:

- For all DMX operation modes the luminaire DMX address must be set using the DMX Address menu and the luminaire must be set to DMX in the Control Mode sub menu.

MENU > Control Mode > SCROLL UP/DOWN > DMX > SELECT

MENU > DMX Address > SCROLL UP/DOWN TO SELECT ADDRESS

DMX OPERATION

5 CHANNEL DMX CONTROL

Chan No.	Function	Applicable to Model	Address Value	Desired Effect
01	LED Dimming	ALL	0-255	0-100% dimming across range
02	Normal - LED & fan on		0-120	LED illuminated & fan running
02	Initialise/Reset		121-200	Initialise starts if held on for 10 secs
02	Switch LED & fans off		201-255	LED off immediately, fans after 30 secs
02	Color wheel variable color 1	Color Wheel	0	Color 1 (Clear/White) displayed
02	Color wheel variable color 2	Color Wheel	10	Color 2 (Blue) displayed
02	Color wheel variable color 3	Color Wheel	20	Color 3 (Green) displayed
02	Color wheel variable color 4	Color Wheel	30	Color 4 (Yellow) displayed
02	Color wheel variable color 5	Color Wheel	40	Color 5 (Red) displayed
02	Color wheel variable color 6	Color Wheel	50	Color 6 (Pink) displayed
02	Color wheel variable color 7	Color Wheel	60	Color 7 (Orange) displayed
02	Color wheel variable color 8	Color Wheel	70	Color 8 (Violet) displayed
02	Color wheel variable color 9	Color Wheel	80	Color 9 (Magenta) displayed
02	Color wheel variable color 10	Color Wheel	90	Color 10 (Apricot) displayed
02	Color wheel control snap to 10	Color Wheel	91-98	Color 10 (Apricot) displayed
02	Color wheel control snap to 9	Color Wheel	99-106	Color 9 (Magenta) displayed
02	Color wheel control snap to 8	Color Wheel	107-114	Color 8 (Violet) displayed
02	Color wheel control snap to 7	Color Wheel	115-122	Color 7 (Orange) displayed
02	Color wheel control snap to 6	Color Wheel	123-130	Color 6 (Pink) displayed
02	Color wheel control snap to 5	Color Wheel	131-138	Color 5 (Red) displayed
02	Color wheel control snap to 4	Color Wheel	139-146	Color 4 (Yellow) displayed
02	Color wheel control snap to 3	Color Wheel	147-154	Color 3 (Green) displayed
02	Color wheel control snap to 2	Color Wheel	155-162	Color 2 (Blue) displayed
02	Color wheel control snap to 1	Color Wheel	163-170	Color 1 (Clear/White) displayed
02	Color wheel speed CW	Color Wheel	171-212	Wheel rotates CW fast to slow
02	Color wheel speed CCW	Color Wheel	213-255	Wheel rotates CCW slow to fast
03	Color wheel duration	Color Wheel	0-255	2 secs to 60 mins across the range
04	Twinkle wheel stop at cut-out	Twinkle Wheel	0-5	Maximum light output displayed
04	Twinkle rotates back & forth	Twinkle Wheel	6-255	Slow (0.1 rpm) to fast (4 rpm)
05	Normal - LED & fan on		0-120	LED illuminated & fan running
05	Initialise/Reset		121-200	Initialise starts if held on for 10 secs
05	Switch LED & fans off		201-255	LED off immediately, fans after 30 secs

0-10V OPERATION

All Quasar models in the range can be 0-10V (current source) controlled as detailed in the Programmable Function Table in the preceding section and in the following sections.

NOTE:

- For all 0-10V current source operation modes the luminaire must be set to 0-10V in the Control Mode sub menu.

MENU > Control Mode > SCROLL UP/DOWN > 0-10V > SELECT

2 CHANNEL 0-10V CONTROL (STANDARD WHITE LIGHT, COLOUR WHEEL & TWINKLE WHEEL)

Chan No.	Function	Applicable to Model	0-10V Value (DC Volts)	Desired Effect
01	LED Dimming	Standard White Light, Color & Twinkle Wheel	0	No light output
01	LED Dimming	Standard White Light, Color & Twinkle Wheel	0.5-10	Minimum to maximum light output
02	Color wheel control snap to 1	Color Wheel	0	Color 1 (Clear/White) displayed
02	Color wheel control snap to 2	Color Wheel	0.5	Color 2 (Blue) displayed
02	Color wheel control snap to 3	Color Wheel	1	Color 3 (Green) displayed
02	Color wheel control snap to 4	Color Wheel	1.5	Color 4 (Yellow) displayed
02	Color wheel control snap to 5	Color Wheel	2	Color 5 (Red) displayed
02	Color wheel control snap to 6	Color Wheel	2.5	Color 6 (Pink) displayed
02	Color wheel control snap to 7	Color Wheel	3	Color 7 (Orange) displayed
02	Color wheel control snap to 8	Color Wheel	3.5	Color 8 (Violet) displayed
02	Color wheel control snap to 9	Color Wheel	4	Color 9 (Magenta) displayed
02	Color wheel control snap to 10	Color Wheel	4.5	Color 10 (Apricot) displayed
02	Color wheel speed CW	Color Wheel	5-7.5	Wheel rotates CW fast to slow
02	Color wheel speed CCW	Color Wheel	7.6-10	Wheel rotates CCW slow to fast
02	Twinkle wheel stop at cut-out	Twinkle Wheel	0	Maximum light output displayed
02	Twinkle rotates back & forth	Twinkle Wheel	0.5-10	Slow (0.1 rpm) to fast (4 rpm)

1 CHANNEL 0-10V CONTROL EMERGENCY WHITE LIGHT

Chan No.	Function	Applicable to Model	0-10V Value (DC Volts)	Desired Effect
01	LED Dimming	Emergency White Light	0	Max. light output
01	LED Dimming	Emergency White Light	1	No light output
02	LED Dimming	Emergency White Light	1.5-10	Min. to max. light output

1-10V OPERATION

Only Quasar standard white light models can be 1-10V (current sink) dimmed as detailed in the Programmable Function Table in the preceding section and in the following sections.

NOTE:

- For all 1-10v current sink dimming the luminaire must be set to 1-10V in the Control Mode sub menu.
- Dimming control at min. will give approximately 10% light output – it will not dim down to zero.

MENU > Control Mode > SCROLL UP/DOWN > 1-10V > SELECT

1 CHANNEL 1-10V DIMMING STANDARD WHITE LIGHT

Chan No.	Function	Applicable to Model	0-10V Value (DC Volts)	Desired Effect
01	LED Dimming	Standard White Light	1-10	Min. (10%) to max. light output

MASTER/SLAVE OPERATION

All Quasar models in the range can be Master Slave DMX controlled as detailed in the Programmable Function Table in the preceding section and in the following sections.

NOTE:

- For all Master operation modes the luminaire selected must be set to Master in the Control Mode sub menu.
- For all Slave operation modes the luminaires selected must be set to DMX in the Control Mode sub menu and the DMX Slave address must be set using the DMX Address menu to address 001.
- Once the master and Slaves have been set up as above, the Slaves will follow all the manual functions of the Master.

MAINTENANCE LOG

Date	Maintenance Undertaken

Note: A record of all maintenance MUST be kept in the table above, indicating what maintenance was undertaken and when. This MUST be dated for warranty purposes.

Problem	Probable Cause(s)	Remedy
ALL MODELS Unit is dead - no light output; mains power indicator & LCD display is out	Mains supply off	Check supply and reinstate
	Loose connector(s)	Check plugs & sockets are fully mated
	Plug blown fuse (UK)	Check fuse & replace if necessary
	IEC blown fuse	Check fuse & replace if necessary
	Mains supply cable faulty	Get replacement cable from UFO
ALL MODELS Unit is dead - no light output; mains power indicator & LCD display are lit, fans are running	Unit in Master mode & dimming at 0%	Select dim level option & manually set dimming level
	Unit in 0-10V mode, but no control voltage	Check 0-10V control voltage & reinstate
	Unit in DMX mode but channel 1 value at 0	Increase channel 1 DMX controller value
	Failed array or internal component	Contact UFO
ALL MODELS Unit is dead - no light output; mains power indicator & LCD display are lit, fans not running	Unit in DMX control mode but channel 5 value set >200	Reduce channel 5 DMX controller value to 0
	Failed internal component	Contact UFO
MANUAL MODELS No manual control over dimming &/or decortative wheel speed	Unit not in Master control mode	Set to Master in the Control Mode sub menu
	Failed internal component	Contact UFO
DMX MODELS No DMX control over dimming & DMX functions - 'no DMX' displayed	Indicates unit is not receiving a DMX signal from controller or Master Quasar	Check DMX controller or Master Quasar settings
	Faulty DMX cable	Check DMX cabling & repair/replace
DMX MODELS No DMX control over dimming & functions - no DMX address displayed	Unit not in DMX control mode	Set to DMX in the Control Mode sub menu
DMX MODELS No DMX control over dimming & functions - DMX address displayed	DMX address not correctly set	Set correct DMX address
DMX MODELS Random/wrong function; DMX control over dimming & functions - DMX address displayed	Incorrect DMX address set, probably not enough channel space left between addresses	Set correct DMX address & leave adequate space for 5 channels of DMX in between

Problem	Probable Cause(s)	Remedy
1-10V MODELS Dim level displayed at 5%, remote dimmer control has no effect	Current sink dimmer connected, wrong polarity	Check & correct polarity in all remote dimming connections
1-10V MODELS Dim level displayed at max., remote dimmer control has no effect	Open circuit on current sink dimmer connection/cabling	Check remote dimmer cabling & repair/ replace
	Incompatible current source dimmer	Disconnect remote dimmer & check output with DVM turning dimmer from min. to max. - if there is varying 0-10V voltage, change dimmer for a current sink type
1-10V MODELS Dim level changes with remote dimming, light out put range inaccurate or reduced	Incompatible current sink dimmer	Contact UFO
0-10V MODELS No control over dimming &/or decorative wheel speed. Unit is dead - no light output; mains power indicator & LCD display are lit, fans are running	Unit in 0-10V control mode but no 0-10V control voltage present	Check 0-10V control voltage at controller & reinstate
	Fault on 0-10V cabling, reverse polarity or open circuit	Check 0-10V cabling & repair/replace
REMOTE MANUAL No control over dimming - no light output OR full light output. Mains power indicator & LCD are lit, fans are running	Unit in 0-10V control mode but fault on remote cabling, reverse polarity or open circuit	Check remote cabling and repair/replace

Description	Details
Port Connector Size	30mm diameter
Fiber Type	Glass / PMMA
Mains Supply Voltage	100-240V AC, 50-60Hz
Mains Supply Fuse	5A, 20mm
LED Power	135-150W
Led Type	White light
Mains Power (max.)	170W
Hi CRI LED Array (>90 CRI)	2700K (14,805lm) 3000K (15,400lm) 4000K (15,633lm) 5700K (16,174lm)
Standard LED Array (>80 CRI)	3000K (17,974lm) 4000K (18,438lm) 5000K (18,653lm) 5700K (18,840lm) 6500K (18,992lm)
Control Functionality	Manual / DMX / 0-10V / 1-10V Remote Manual Dimming / Separate Feed
DMX	Decorative Models: User addressable 5 channels (0-255) White Light Models: 2 channels (dimming & unit control))
LED Life	50,000 hours typical
Operating Environment	Indoor / dry
Min Ambient Temperature	-10°C
Max Ambient Temperature	+45°C
Material	Aluminium
Finish	Grey
Dimensions (L x W x H)	White light - 308mm x 192mm x 158mm Decorative - 308mm x 221mm x 187mm
Accessories	UFO Unidim CVD1 - Remote Manual Dimmer c/w plate UFO Unidim CVD3 - Remote Current Sink Dimmer c/w plate UFO Unifeed SFD1 - Separate Feed Decorative Wheel

NOTES

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