



User Guide



UFO NEBULA ANIMATED EFFECT LED LIGHT SOURCE

Rev. D1 UK

This guide contains important safety information and installation instructions.

Please read fully before installing, operating or performing any maintenance on the product.

02 Introduction

Thank you for purchasing this UFO light source.

This is the ultimate light source for illuminating and controlling active display fibre optic effect lighting with either spectacular colour change or bright white light.

To ensure that the light source 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 retain this user guide for future reference.

Features

The Nebula is available in 2 models – RGB and white light only.

Both versions have a 60 LED fibre multi-port connector and an inbuilt LCD display for ease of use.

The RGB Nebula's colour change and dimming can be controlled by DMX or by manual operation.

The white light version offers DMX or manual control over dimming only.

Each of the 60 fibre ports are individually controllable via DMX.

Both models offer 8 in-built demo programs to show off some of the effects that are possible.

Important Safety Information

- 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 light sources are not mains dimmable.
- The multiport LED array and heatsink in this light source 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 light source 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 luminaire comes with integral mounting feet for securing the unit to a vertical or horizontal surface.
- Warning: Always connect the fibre ferrules to the 60 LED array before power is applied to the light source. Never look directly at the luminaire through the fibre multi-port of the light source.
- Warning: The luminaire should be positioned so that staring into the luminaire at a distance closer than 2.7 metres is not expected.

UFO will accept no liability for damage, or associated claims, caused by not following the installation and safety instructions contained within this user guide.

04 Model Guide

Model Overview- RGB Version

The Nebula RGB LED light source (UFO NEB-RGB) incorporates a multiport array of sixty, three colour LEDs (Red/Green/Blue) to provide optimum display flexibility and illumination within the following optical range.

Product Code	LED Colour	Watts	Lumen Output
UFO NEB-RGB	Red	61mW	5.1lm
	Green	82mW	11.7lm
	Blue	84mW	2.7lm

The RGB Nebula is a 30W LED light source with 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 Control

using top panel push button controls with status display.

2. DMX Control

180 channels (dimming plus individual red, green, and blue control).

3. Demo Mode

8 standalone showcase programmes.

4. Primary / Secondary Functionality

One Nebula acting as primary controlling one or more secondary Nebula light sources via DMX links.

Model Overview- White Light Version

The NEBULA White Light LED light source incorporates a multiport array of sixty, white light LEDs to provide optimum display flexibility and illumination within the following optical range.

Product Code	Individual LED Power	CCT	Individual LED Lumen Output	CRI
UFO NEB-WL27	96mW	2700K	9.6lm	70 (min)
UFO NEB-WL30	96mW	3000K	9.6lm	70 (min)
UFO NEB-WL40	96mW	4000K	9.6lm	70 (min)
UFO NEB-WL57	96mW	5000K	9.6lm	70 (min)
UFO NEB-WL65	96mW	6500K	9.6lm	70 (min)

The white light Nebula is a 30W light source with all control functionality fitted as standard. The following control functionality and configurations are available via rear panel connections, push buttons and LCD display.

1. Manual Control

using top panel push button controls with status display.

2. DMX Control

60 channels (dimming, individual control).

3. Demo Mode

8 standalone showcase programmes.

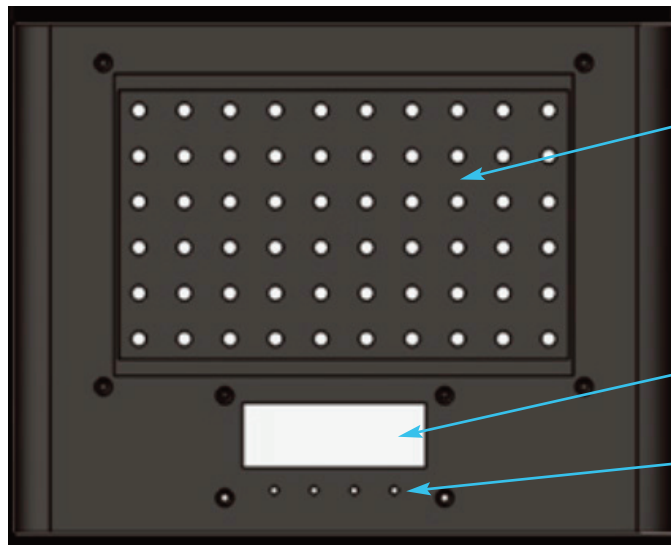
4. Primary / Secondary Functionality

One Nebula acting as primary controlling one or more secondary Nebula light sources via DMX links.

06

Connections & Controls

Top Panel Overview

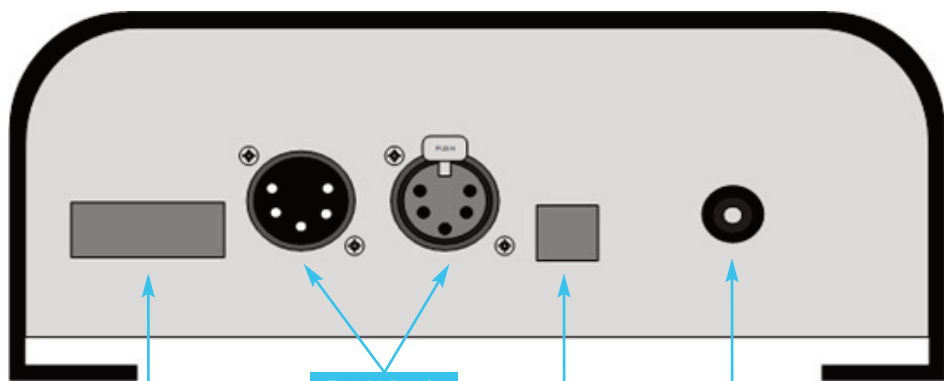


Fibre Multi Port Connector

LCD Display Screen

4 x Control Buttons

Rear Panel Overview



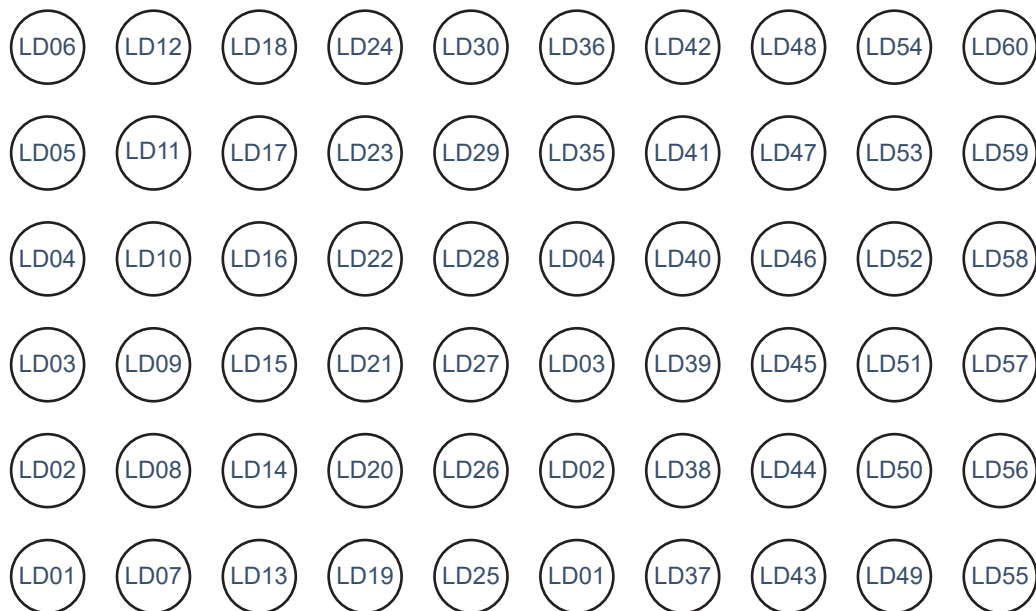
Not Connected

DMX Ports

Not Connected

12V DC Power Input

LED Port Numbering



The 60 LEDs in the fibre multi-port array as displayed above are numbered as detailed above.

These numbers relate to DMX channels for control purposes. On white light models, 60 DMX addresses are taken up to control each of the LED's individually.

On RGB models, each LED has 3 colour components - red, green and blue so these take up 180 DMX addresses so that each colour in each port can be individually controlled. For example, port LD01 will use addresses 1, 2 and 3. Port LD02 will use addresses 4, 5 and 6 and so on.

08 Connection

Manual Control Connection

- Ensure the light source is powered off.
- Take each fibre optic ferrule connector in turn and plug it into the correct port in the multi-port connector on the top of the light source. Ensure each connector is pushed fully into its aperture. In some instances the fibre optic tails will be numbered to correspond with a particular port on the connector. Refer to the preceeding page for details of port numbering.
- Plug the IEC cable into the power supply unit and then connect the power supply 12V DC output jack plug to the port on the rear of the light source.
- Switch on power at the mains and the fibre should illuminate. The light source is now ready for use.
- If, after using the control and program buttons and display as detailed in the operation section of this manual, no light is produced consult the troubleshooting section later in this manual.

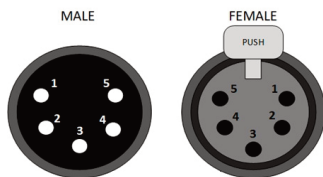
Never run the light source with the fibre optic ferrule connectors out of the multi-port apertures.

DMX Control Connection

- Ensure the light source is powered off.
- Take each fibre optic ferrule connector in turn and plug it into the correct port in the multi-port connector on the top of the light source. Ensure each connector is pushed fully into its aperture. In some instances the fibre optic tails will be numbered to correspond with a particular port on the connector. Refer to the preceeding page for details of port numbering.
- Plug the necessary DMX cables into the ports on the rear of the light source.
- Plug the ICE cable into the power supply unit and then connect the power supply 12V DC output jack plug to the port on the rear of the light source.
- Switch on power at the mains and the fibre should illuminate. The light source is now ready for use.
- If, after using the control and program buttons and display as detailed in the operation section of this manual, no light is produced consult the troubleshooting section later in this manual.

Never run the light source with the fibre optic ferrule connectors out of the multi-port apertures.

DMX Notes



Pin 1: Ground / Shield
 Pin 2: Data - (cold)
 Pin 3: Data + (hot)
 Pins 4 & 5: Not used

- 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 an approved interface or splitter
- Never connect more than 30 Nebula Master/Slave units on a single DMX universe.
- Always terminate the last device on a DMX universe by connecting a 120 ohm resistor across DMX+ and DMX- across the last output connector
- Always ensure sufficient channels are available after the first address for each address the light source requires.

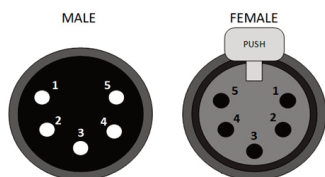
10 Connection

Primary / Secondary Connection

- Ensure the light source is powered off.
- Take each fibre optic ferrule connector in turn and plug it into the correct port in the multi-port connector on the top of the light source. Ensure each connector is pushed fully into its aperture. In some instances the fibre optic tails will be numbered to correspond with a particular port on the connector. Refer to the preceeding page for details of port numbering.
- Plug a DMX cable from the controller into the Primary light source and then, from it to the first of the Secondary units. Continue chaining the light sources together until all are connected.
- Plug the IEC cable into the power supply unit and then connect the power supply 12V DC output jack plug to the port on the rear of the light source.
- Switch on power at the mains and the fibre should illuminate. The light source is now ready for use.
- If, after using the control and program buttons and display as detailed in the operation section of this manual, no light is produced consult the troubleshooting section later in this manual.

Never run the light source with the fibre optic ferrule connectors out of the multi-port apertures.

DMX Notes

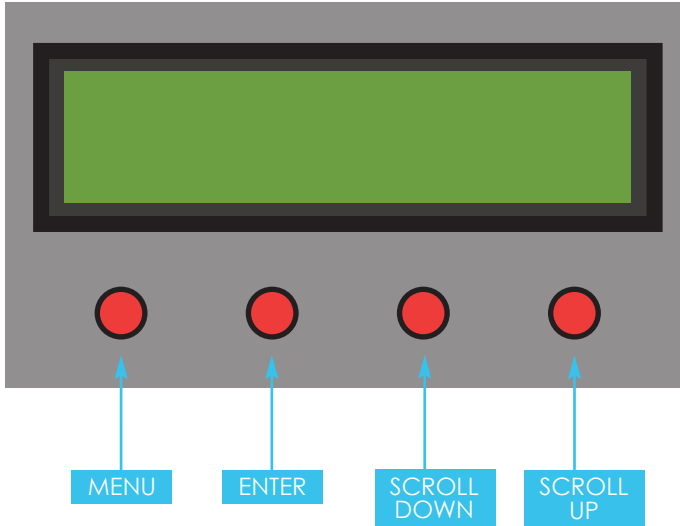


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- Never connect more than 30 Nebula Master/Slave units on a single DMX universe.
- Always terminate the last device on a DMX universe by connecting a 120 ohm resistor across DMX+ and DMX- across the last output connector
- Always ensure sufficient channels are available after the first address for each address the light source requires.

User Controls

Operation of the Nebula RGB model is carried out via the top panel display and the 4 push button controls as detailed below.



On power up the display will momentarily display the model name, then the firmware version, before going into initialisation whilst it checks the unit before finally displaying the current status.



Once the unit is powered up, user controlled manual functions and all programming features are available via the four top panel push buttons as detailed in the figure above the table overleaf.

IMPORTANT NOTE: Once programmed the light source will always revert to the programmed settings when power is recycled.

However, if manual reset is selected, via the 'Default Settings' menu option then the light source will be reset to factory default.

12 RGB Models - Functions

Main Menu	Sub Menu	Description	Instructions
Control Mode MASTER	-	Allows manual control of the light source	Press Menu button to locate. Press Enter button to select. Press Menu button to scroll through sub menus
Control Mode MASTER	Master Program 1> Strips X	Demo program 1	Press Scroll up/down buttons to locate press Enter button to select.
Control Mode MASTER	Master Program 2> Strips Y	Demo program 2	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 3> Strips Fd	Demo program 3	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 4> Random 1	Demo program 4	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 5> Random 2	Demo program 5	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 6> Random 3	Demo program 6	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 7> Worms	Demo program 7	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 8> Square	Demo program 8	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Set Step Speed 1 Seconds	Control the time a program stays on the current step	Press Scroll up/down buttons to select the speed (between 1 and 60 seconds) press Enter to select
Control Mode MASTER	Master Dimmer 100%	Control the light output	Press Scroll up/down buttons to select the light output required (1% to 100%) press Enter button to select
Control Mode MASTER	Default Settings NO	Reset light source to factory defaults	Press Scroll up/Scroll down buttons to select either YES or NO press Enter button to select
Control Mode DMX	-	Allows DMX control of the light source	Press Menu button to locate press Enter button to select. Press Menu button to scroll through sub menus
Control Mode DMX	Set DMX Address 1	Sets the DMX address	Press Scroll up/Scroll down buttons to select the address (between 1 and 512) press Enter button to select
Control Mode DMX	DMX Channel Mode: 3 Channel	Allows DMX control of either a single DMX channel for each of the three LED colours 3 DMX addresses or a single LED channel for each of the 180 LED colours – 180 DMX addresses.	Press Scroll up/Scroll down buttons to select the number of channels (either 3 or 180) press Enter button to select
Control Mode DMX	Master Dimmer 100%	Control the light output	Press Scroll up/down buttons to select the light output required (1% to 100%) press Enter button to select
Control Mode DMX	Default Settings NO	Reset light source to factory defaults	Press Scroll up/Scroll down buttons to select either YES or NO press Enter button to select

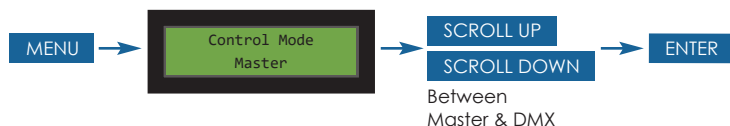
Main Menu	Sub Menu	Description	Instructions
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Control Mode MASTER	Master Program 2> Strips Y	Demo program 2	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 3> Strips Fd	Demo program 3	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 4> Random 1	Demo program 4	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 5> Random 2	Demo program 5	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 6> Random 3	Demo program 6	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 7> Worms	Demo program 7	Press Scroll up/down buttons to locate press Enter button to select
Control Mode MASTER	Master Program 8> Square	Demo program 8	Press Scroll up/down buttons to locate press Enter button to select
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Control Mode MASTER	Default Settings NO	Reset light source to factory defaults	Press Scroll up/Scroll down buttons to select either YES or NO press Enter button to select
Control Mode DMX	-	Allows DMX control of the light source	Press Menu button to locate press Enter button to select. Press Menu button to scroll through sub menus
Control Mode DMX	Set DMX Address 1	Sets the DMX address	Press Scroll up/Scroll down buttons to select the address (between 1 and 512) press Enter button to select
Control Mode DMX	DMX Channel Mode: 1 Channel	Allows DMX control of a single LED channel for each DMX address when set to 60, or all 60 channels for a single DMX address when set to 1	Press Scroll up/Scroll down buttons to select the number of channels (either 3 or 180) press Enter button to select
Control Mode DMX	Master Dimmer 100%	Control the light output	Press Scroll up/down buttons to select the light output required (1% to 100%) press Enter button to select
Control Mode DMX	Default Settings NO	Reset light source to factory defaults	Press Scroll up/Scroll down buttons to select either YES or NO press Enter button to select

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Manual Operation

All Nebula models in the range can be manually controlled via the Menu, Enter, Scroll up and Scroll down buttons, in a variety of ways as detailed in the function table in the preceding section and in the following sections.

- For all manual operation modes the luminaire must be set to master
- Repeated pressing of Menu button accesses sub menus
- Refer to the function table for menu and sub-menu availability for each model

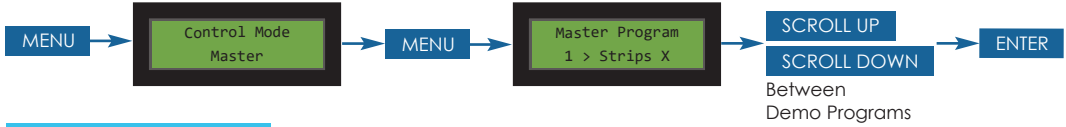


Demo Programs

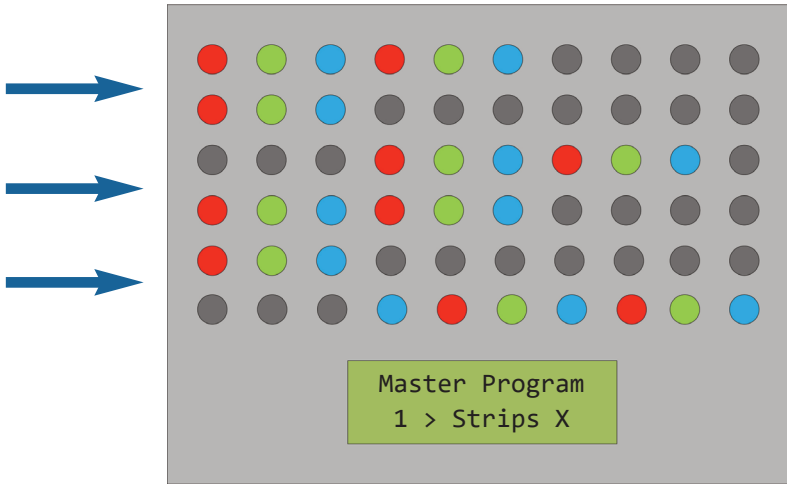
With the luminaire in Master Control Mode, one of eight programs as detailed on the next pages can be selected.

Operation 15

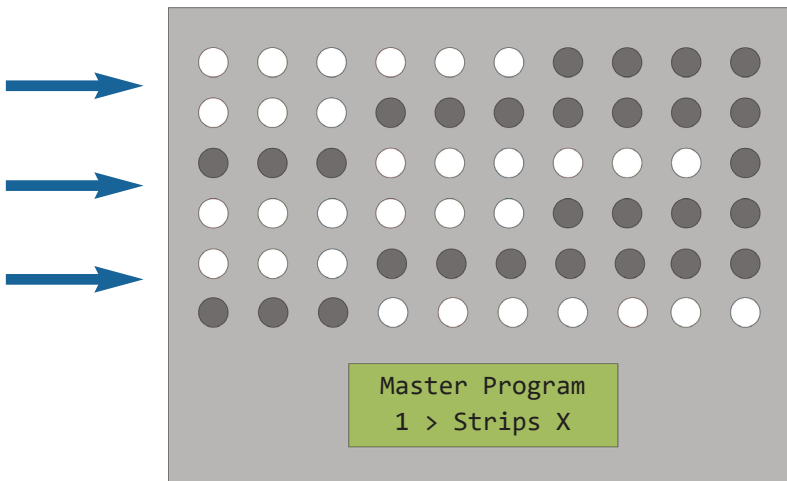
Program 1 - Strips X



RGB Version

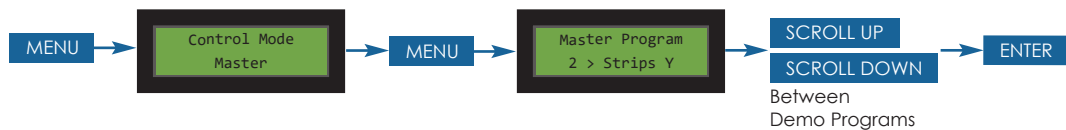


White Light Version

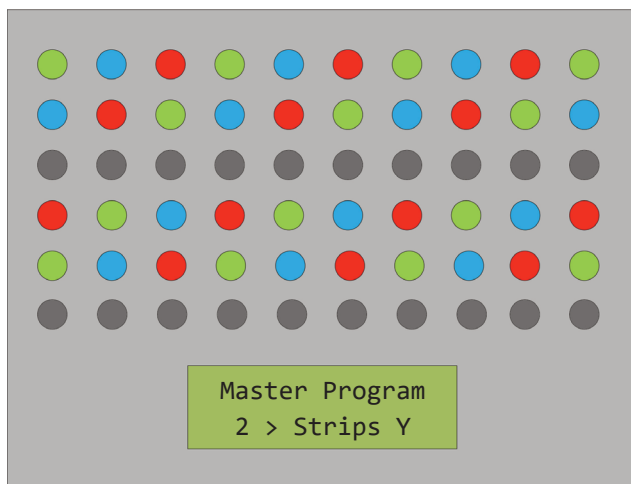


16 Operation

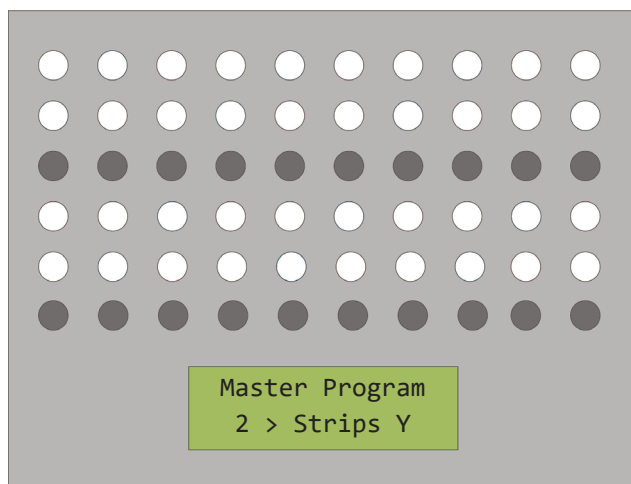
Program 2 - Strips Y



RGB Version

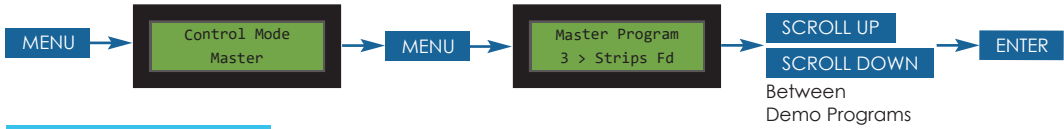


White Light Version

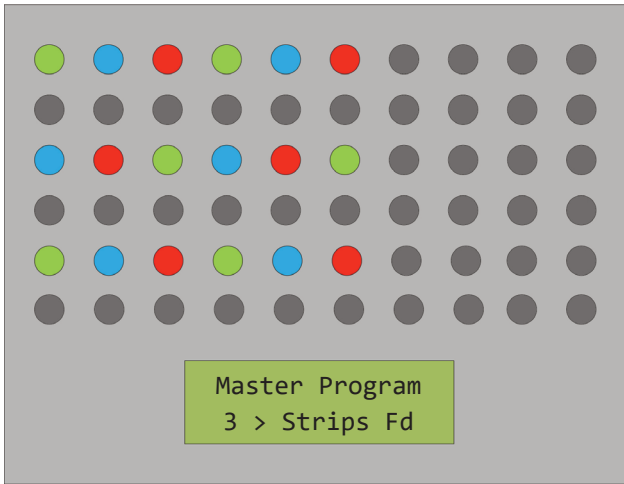


Operation 17

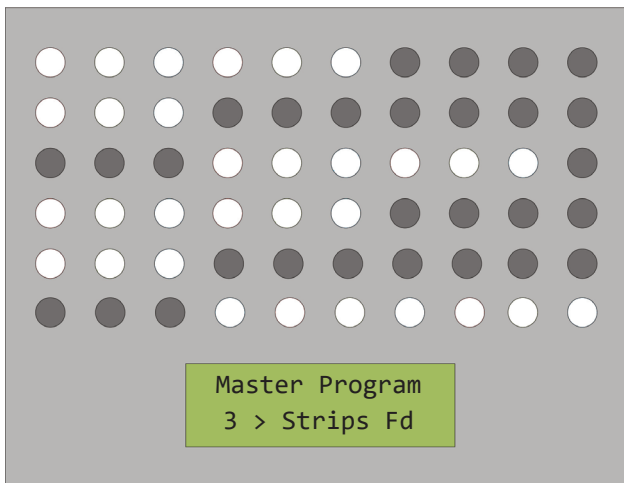
Program 3 - Strips Fd



RGB Version

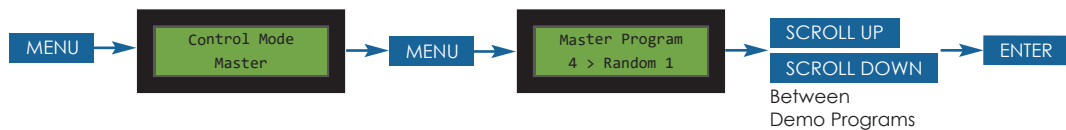


White Light Version

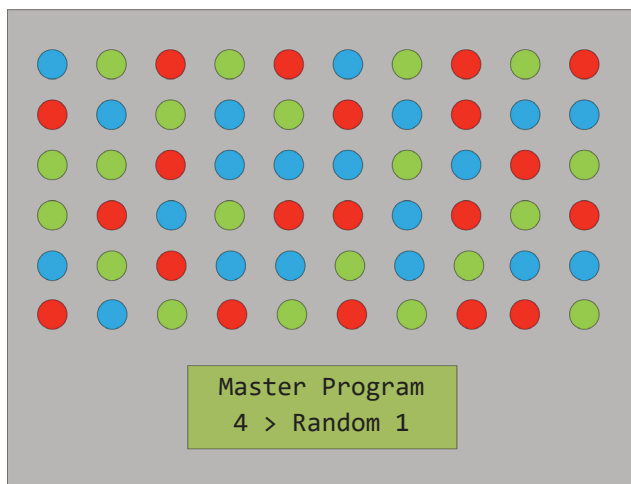


18 Operation

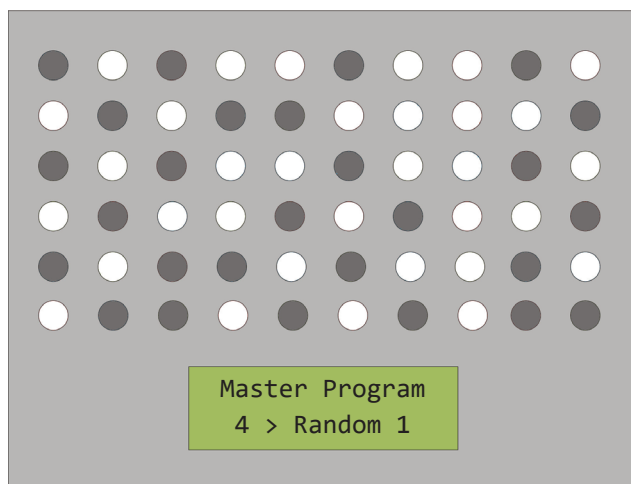
Program 4 - Random 1



RGB Version

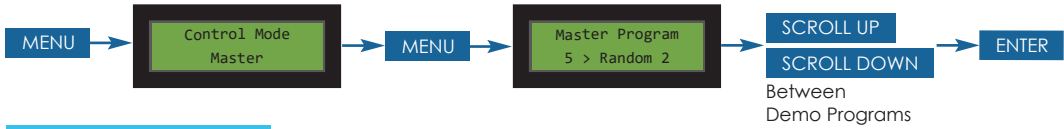


White Light Version

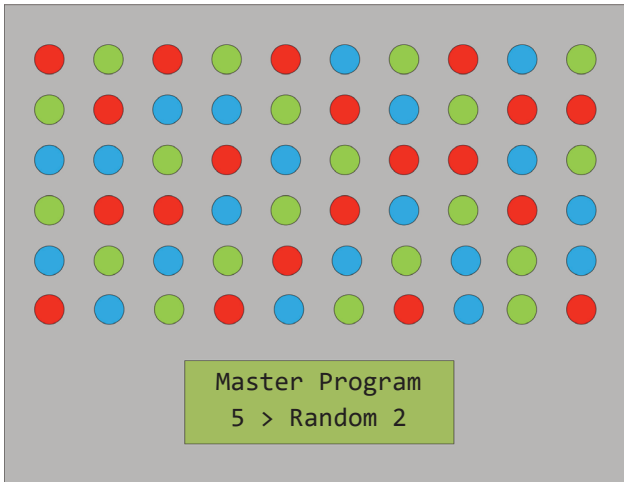


Operation 19

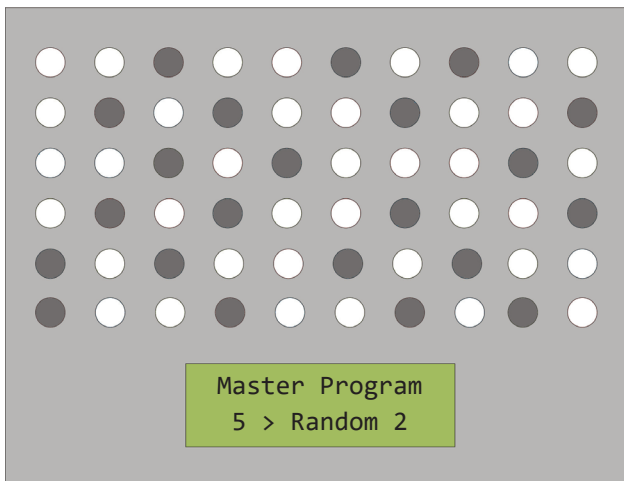
Program 5 - Random 2



RGB Version

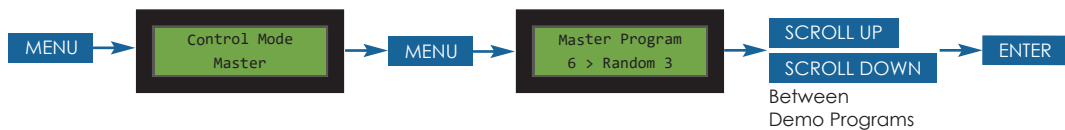


White Light Version

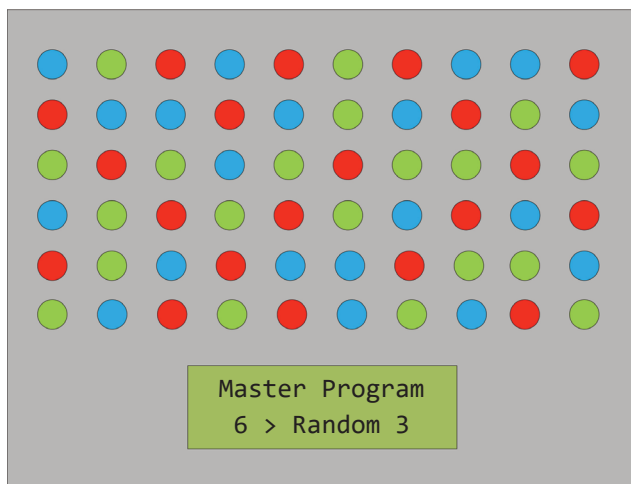


20 Operation

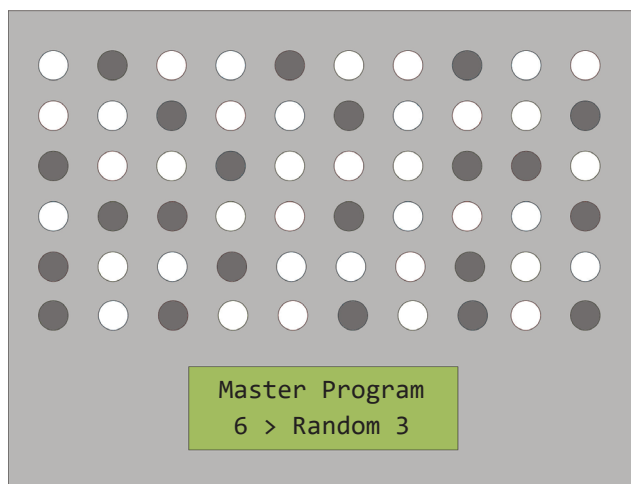
Program 6 - Random 3



RGB Version

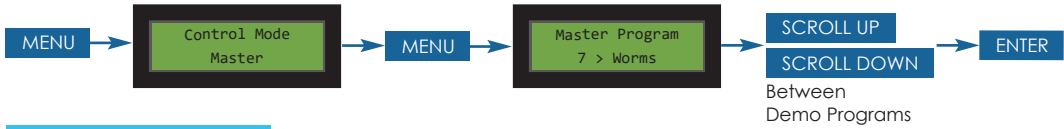


White Light Version

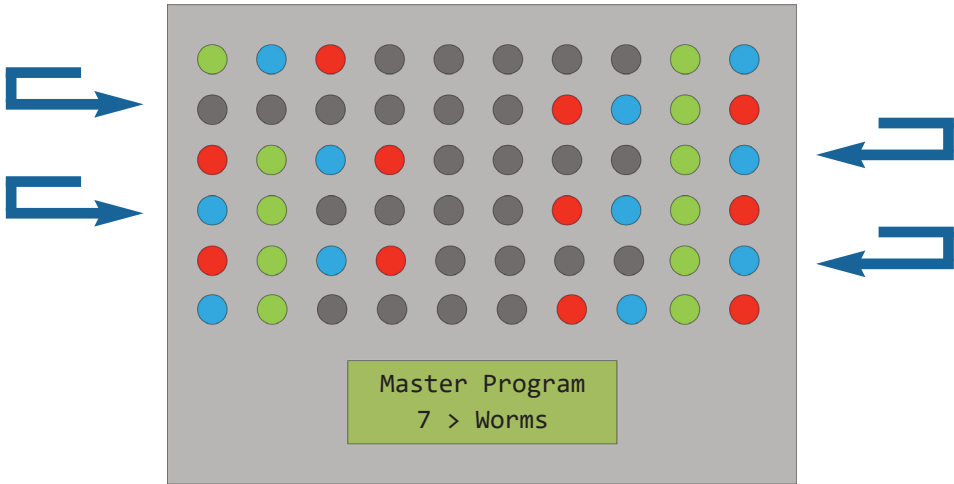


Operation 21

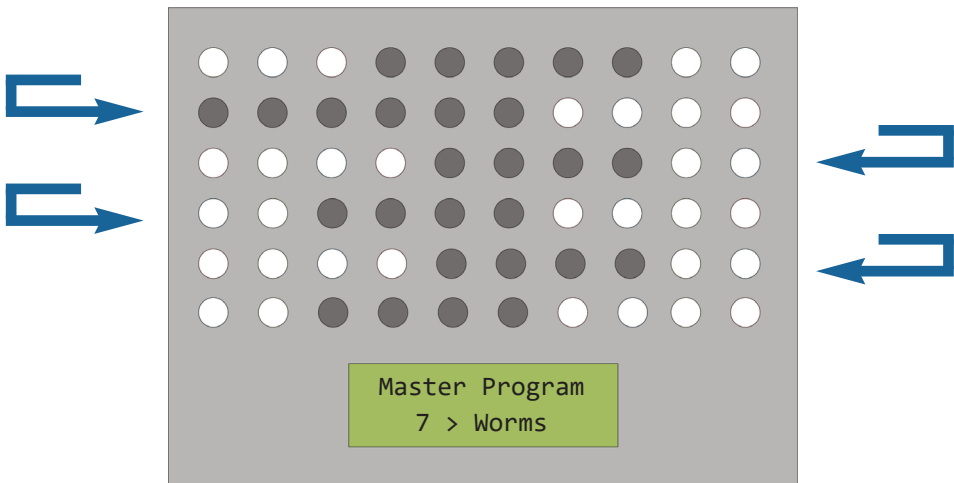
Program 7 - Worms



RGB Version

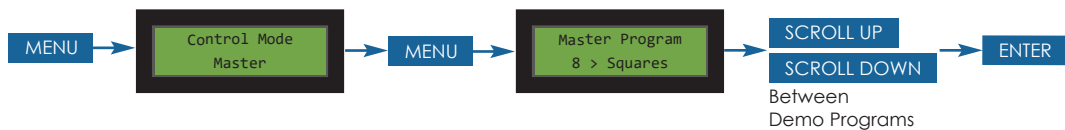


White Light Version

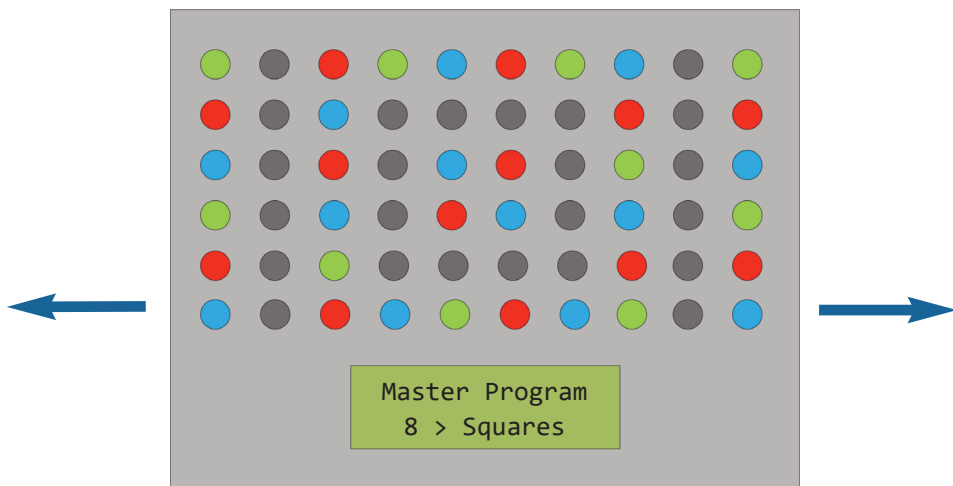


22 Operation

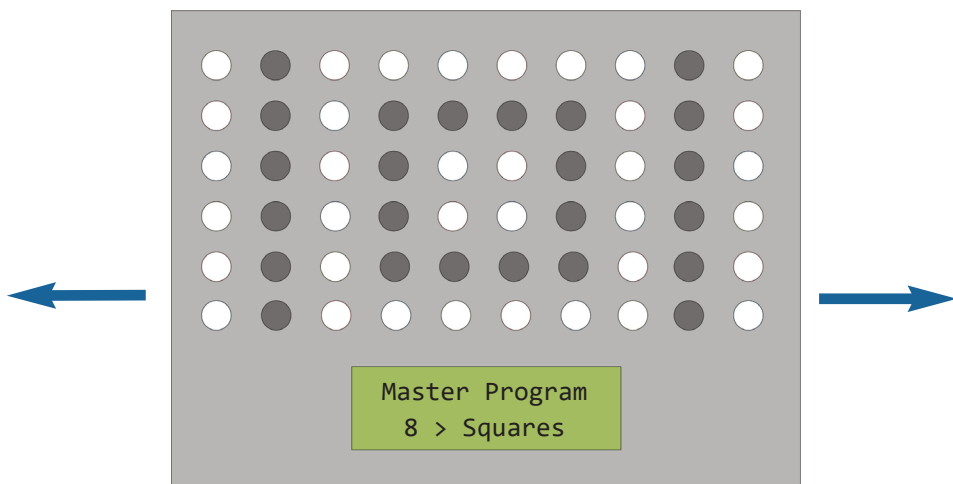
Program 8 - Squares



RGB Version

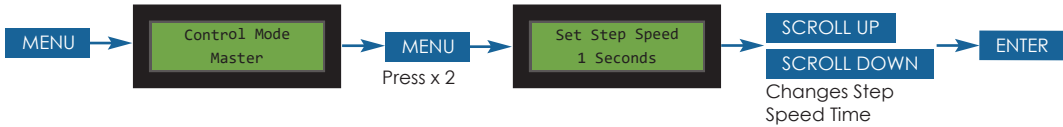


White Light Version



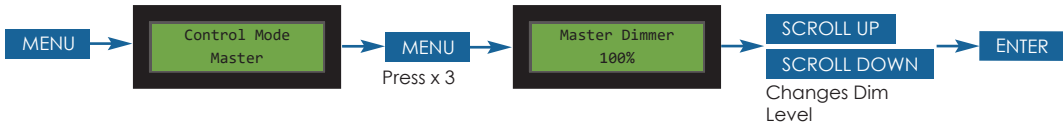
Set Step Speed

With the luminaire in Master Control Mode, the time a program stays on the current step before moving on can be adjusted from 1 second to 60 seconds.



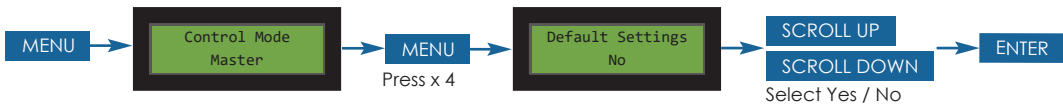
Dimming

With the light source in Master Control Mode, the light output of all LEDs can be dimmed using rear panel controls from 1% (minimum light output) to 100% (maximum light output).



Reset to Factory Defaults

With the luminaire in Master Control Mode, the light source can be reset to default factory settings.



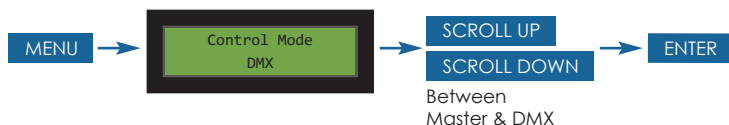
Default factory settings will reset the DMX address to 001, dimming to 100% and DMX channel setting to 60 for white light versions and 180 for RGB version of the light source.

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DMX Operation

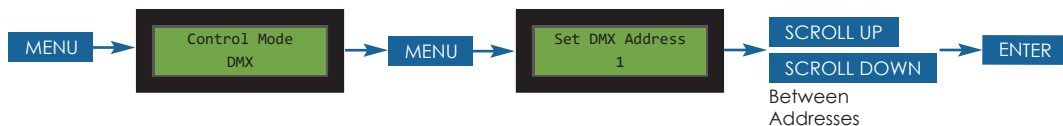
All Nebula models in the range can be DMX controlled as detailed in the following sections.

- For all DMX operation modes, the luminaire must be set to DMX
- Repeated pressing of Menu button accesses sub menus
- Refer to the function table for menu and sub-menu availability for each model



Setting the DMX Address

With the luminaire in DMX Control Mode, the base DMX address can be set between 001 and 511.



Note that for primary/secondary operation to work correctly, all secondary light sources must be set to address 001.

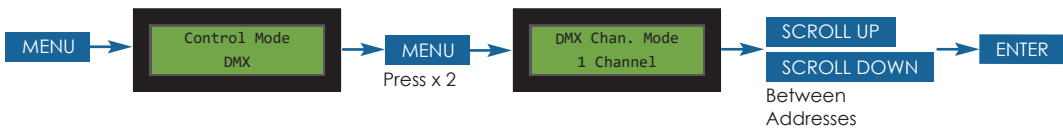
The white light models of the Nebula take up 60 channels and the RGB model takes up 180 channels. Always ensure sufficient channels are available after the base address that is set.

DMX Channel Setting

With the luminaire in DMX Control Mode, the number of DMX controlled channels available can be set.

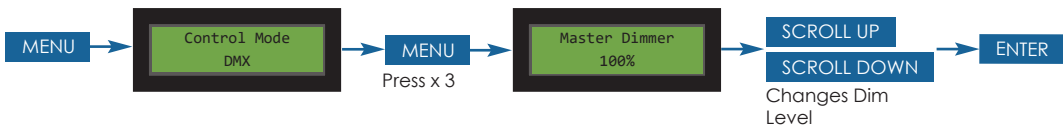
On white light models, the setting is either 1 (single address controlling all channels) or 60 (60 addresses controlling individual channels).

On rgb models, the setting is either 3 (single address controlling individual colours on all channels) or 180 (180 addresses controlling individual channels).



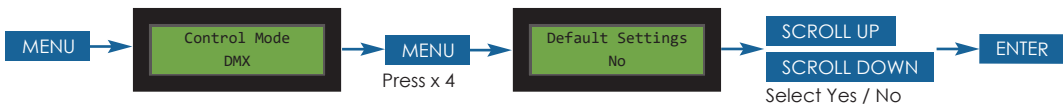
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DMX Operation - RGB (180 Channel) Models

Cha No.	LED No.	LED Colour	DMX Value	Effect
01	LD1	Red	0-255	Min to Max Output
02	LD1	Green	0-255	Min to Max Output
03	LD1	Blue	0-255	Min to Max Output
04	LD2	Red	0-255	Min to Max Output
05	LD2	Green	0-255	Min to Max Output
06	LD2	Blue	0-255	Min to Max Output
07	LD3	Red	0-255	Min to Max Output
08	LD3	Green	0-255	Min to Max Output
09	LD3	Blue	0-255	Min to Max Output
10	LD4	Red	0-255	Min to Max Output
11	LD4	Green	0-255	Min to Max Output
12	LD4	Blue	0-255	Min to Max Output
13	LD5	Red	0-255	Min to Max Output
14	LD5	Green	0-255	Min to Max Output
15	LD5	Blue	0-255	Min to Max Output
16	LD6	Red	0-255	Min to Max Output
17	LD6	Green	0-255	Min to Max Output
18	LD6	Blue	0-255	Min to Max Output
19	LD7	Red	0-255	Min to Max Output
20	LD7	Green	0-255	Min to Max Output
21	LD7	Blue	0-255	Min to Max Output
22	LD8	Red	0-255	Min to Max Output
23	LD8	Green	0-255	Min to Max Output
24	LD8	Blue	0-255	Min to Max Output
25	LD9	Red	0-255	Min to Max Output
26	LD9	Green	0-255	Min to Max Output
27	LD9	Blue	0-255	Min to Max Output
28	LD10	Red	0-255	Min to Max Output
29	LD10	Green	0-255	Min to Max Output
30	LD10	Blue	0-255	Min to Max Output
31	LD11	Red	0-255	Min to Max Output
32	LD11	Green	0-255	Min to Max Output
33	LD11	Blue	0-255	Min to Max Output
34	LD12	Red	0-255	Min to Max Output
35	LD12	Green	0-255	Min to Max Output
36	LD12	Blue	0-255	Min to Max Output
37	LD13	Red	0-255	Min to Max Output
38	LD13	Green	0-255	Min to Max Output
39	LD13	Blue	0-255	Min to Max Output
40	LD14	Red	0-255	Min to Max Output
41	LD14	Green	0-255	Min to Max Output
42	LD14	Blue	0-255	Min to Max Output
43	LD15	Red	0-255	Min to Max Output
44	LD15	Green	0-255	Min to Max Output
45	LD15	Blue	0-255	Min to Max Output

Cha No.	LED No.	LED Colour	DMX Value	Effect
46	LD16	Red	0-255	Min to Max Output
47	LD16	Green	0-255	Min to Max Output
48	LD16	Blue	0-255	Min to Max Output
49	LD17	Red	0-255	Min to Max Output
50	LD17	Green	0-255	Min to Max Output
51	LD17	Blue	0-255	Min to Max Output
52	LD18	Red	0-255	Min to Max Output
53	LD18	Green	0-255	Min to Max Output
54	LD18	Blue	0-255	Min to Max Output
55	LD19	Red	0-255	Min to Max Output
56	LD19	Green	0-255	Min to Max Output
57	LD19	Blue	0-255	Min to Max Output
58	LD20	Red	0-255	Min to Max Output
59	LD20	Green	0-255	Min to Max Output
60	LD20	Blue	0-255	Min to Max Output
61	LD21	Red	0-255	Min to Max Output
62	LD21	Green	0-255	Min to Max Output
63	LD21	Blue	0-255	Min to Max Output
64	LD22	Red	0-255	Min to Max Output
65	LD22	Green	0-255	Min to Max Output
66	LD22	Blue	0-255	Min to Max Output
67	LD23	Red	0-255	Min to Max Output
68	LD23	Green	0-255	Min to Max Output
69	LD23	Blue	0-255	Min to Max Output
70	LD24	Red	0-255	Min to Max Output
71	LD24	Green	0-255	Min to Max Output
72	LD24	Blue	0-255	Min to Max Output
73	LD25	Red	0-255	Min to Max Output
74	LD25	Green	0-255	Min to Max Output
75	LD25	Blue	0-255	Min to Max Output
76	LD26	Red	0-255	Min to Max Output
77	LD26	Green	0-255	Min to Max Output
78	LD26	Blue	0-255	Min to Max Output
79	LD27	Red	0-255	Min to Max Output
80	LD27	Green	0-255	Min to Max Output
81	LD27	Blue	0-255	Min to Max Output
82	LD28	Red	0-255	Min to Max Output
83	LD28	Green	0-255	Min to Max Output
84	LD28	Blue	0-255	Min to Max Output
85	LD29	Red	0-255	Min to Max Output
86	LD29	Green	0-255	Min to Max Output
87	LD29	Blue	0-255	Min to Max Output
88	LD30	Red	0-255	Min to Max Output
89	LD30	Green	0-255	Min to Max Output
90	LD30	Blue	0-255	Min to Max Output

Cha No.	LED No.	LED Colour	DMX Value	Effect
91	LD31	Red	0-255	Min to Max Output
92	LD31	Green	0-255	Min to Max Output
93	LD31	Blue	0-255	Min to Max Output
94	LD32	Red	0-255	Min to Max Output
95	LD32	Green	0-255	Min to Max Output
96	LD32	Blue	0-255	Min to Max Output
97	LD33	Red	0-255	Min to Max Output
98	LD33	Green	0-255	Min to Max Output
99	LD33	Blue	0-255	Min to Max Output
100	LD34	Red	0-255	Min to Max Output
101	LD34	Green	0-255	Min to Max Output
102	LD34	Blue	0-255	Min to Max Output
103	LD35	Red	0-255	Min to Max Output
104	LD35	Green	0-255	Min to Max Output
105	LD35	Blue	0-255	Min to Max Output
106	LD36	Red	0-255	Min to Max Output
107	LD36	Green	0-255	Min to Max Output
108	LD36	Blue	0-255	Min to Max Output
109	LD37	Red	0-255	Min to Max Output
110	LD37	Green	0-255	Min to Max Output
111	LD37	Blue	0-255	Min to Max Output
112	LD38	Red	0-255	Min to Max Output
113	LD38	Green	0-255	Min to Max Output
114	LD38	Blue	0-255	Min to Max Output
115	LD39	Red	0-255	Min to Max Output
116	LD39	Green	0-255	Min to Max Output
117	LD39	Blue	0-255	Min to Max Output
118	LD40	Red	0-255	Min to Max Output
119	LD40	Green	0-255	Min to Max Output
120	LD40	Blue	0-255	Min to Max Output
121	LD41	Red	0-255	Min to Max Output
122	LD41	Green	0-255	Min to Max Output
123	LD41	Blue	0-255	Min to Max Output
124	LD42	Red	0-255	Min to Max Output
135	LD42	Green	0-255	Min to Max Output
126	LD42	Blue	0-255	Min to Max Output
127	LD43	Red	0-255	Min to Max Output
128	LD43	Green	0-255	Min to Max Output
129	LD43	Blue	0-255	Min to Max Output
130	LD44	Red	0-255	Min to Max Output
131	LD44	Green	0-255	Min to Max Output
132	LD44	Blue	0-255	Min to Max Output
133	LD45	Red	0-255	Min to Max Output
134	LD45	Green	0-255	Min to Max Output
135	LD45	Blue	0-255	Min to Max Output

Cha No.	LED No.	LED Colour	DMX Value	Effect
136	LD46	Red	0-255	Min to Max Output
137	LD46	Green	0-255	Min to Max Output
138	LD46	Blue	0-255	Min to Max Output
139	LD47	Red	0-255	Min to Max Output
140	LD47	Green	0-255	Min to Max Output
141	LD47	Blue	0-255	Min to Max Output
142	LD48	Red	0-255	Min to Max Output
143	LD48	Green	0-255	Min to Max Output
144	LD48	Blue	0-255	Min to Max Output
145	LD49	Red	0-255	Min to Max Output
145	LD49	Green	0-255	Min to Max Output
147	LD49	Blue	0-255	Min to Max Output
148	LD50	Red	0-255	Min to Max Output
149	LD50	Green	0-255	Min to Max Output
150	LD50	Blue	0-255	Min to Max Output
151	LD51	Red	0-255	Min to Max Output
152	LD51	Green	0-255	Min to Max Output
153	LD51	Blue	0-255	Min to Max Output
154	LD52	Red	0-255	Min to Max Output
155	LD52	Green	0-255	Min to Max Output
156	LD52	Blue	0-255	Min to Max Output
157	LD53	Red	0-255	Min to Max Output
158	LD53	Green	0-255	Min to Max Output
159	LD53	Blue	0-255	Min to Max Output
160	LD54	Red	0-255	Min to Max Output
161	LD54	Green	0-255	Min to Max Output
162	LD54	Blue	0-255	Min to Max Output
163	LD55	Red	0-255	Min to Max Output
164	LD55	Green	0-255	Min to Max Output
165	LD55	Blue	0-255	Min to Max Output
166	LD56	Red	0-255	Min to Max Output
167	LD56	Green	0-255	Min to Max Output
168	LD56	Blue	0-255	Min to Max Output
169	LD57	Red	0-255	Min to Max Output
170	LD57	Green	0-255	Min to Max Output
171	LD57	Blue	0-255	Min to Max Output
172	LD58	Red	0-255	Min to Max Output
173	LD58	Green	0-255	Min to Max Output
174	LD58	Blue	0-255	Min to Max Output
175	LD59	Red	0-255	Min to Max Output
176	LD59	Green	0-255	Min to Max Output
177	LD59	Blue	0-255	Min to Max Output
178	LD60	Red	0-255	Min to Max Output
179	LD60	Green	0-255	Min to Max Output
180	LD60	Blue	0-255	Min to Max Output

28 Operation

DMX Operation - White Light (60 Channel) Models

Cha No.	LED No.	DMX Value	Effect
01	LD1	0-255	Min to Max Output
02	LD2	0-255	Min to Max Output
03	LD3	0-255	Min to Max Output
04	LD4	0-255	Min to Max Output
05	LD5	0-255	Min to Max Output
06	LD6	0-255	Min to Max Output
07	LD7	0-255	Min to Max Output
08	LD8	0-255	Min to Max Output
09	LD9	0-255	Min to Max Output
10	LD10	0-255	Min to Max Output
11	LD11	0-255	Min to Max Output
12	LD12	0-255	Min to Max Output
13	LD13	0-255	Min to Max Output
14	LD14	0-255	Min to Max Output
15	LD15	0-255	Min to Max Output
16	LD16	0-255	Min to Max Output
17	LD17	0-255	Min to Max Output
18	LD18	0-255	Min to Max Output
19	LD19	0-255	Min to Max Output
20	LD20	0-255	Min to Max Output
21	LD21	0-255	Min to Max Output
22	LD22	0-255	Min to Max Output
23	LD23	0-255	Min to Max Output
24	LD24	0-255	Min to Max Output
25	LD25	0-255	Min to Max Output
26	LD26	0-255	Min to Max Output
27	LD27	0-255	Min to Max Output
28	LD28	0-255	Min to Max Output
29	LD29	0-255	Min to Max Output
30	LD30	0-255	Min to Max Output

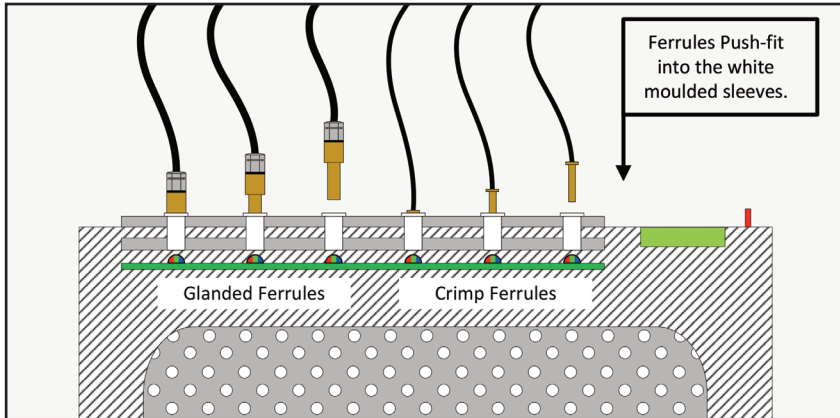
Cha No.	LED No.	DMX Value	Effect
31	LD31	0-255	Min to Max Output
32	LD32	0-255	Min to Max Output
33	LD33	0-255	Min to Max Output
34	LD34	0-255	Min to Max Output
35	LD35	0-255	Min to Max Output
36	LD36	0-255	Min to Max Output
37	LD37	0-255	Min to Max Output
38	LD38	0-255	Min to Max Output
39	LD39	0-255	Min to Max Output
40	LD40	0-255	Min to Max Output
41	LD41	0-255	Min to Max Output
42	LD42	0-255	Min to Max Output
43	LD43	0-255	Min to Max Output
44	LD44	0-255	Min to Max Output
45	LD45	0-255	Min to Max Output
46	LD46	0-255	Min to Max Output
47	LD47	0-255	Min to Max Output
48	LD48	0-255	Min to Max Output
49	LD49	0-255	Min to Max Output
50	LD50	0-255	Min to Max Output
51	LD51	0-255	Min to Max Output
52	LD52	0-255	Min to Max Output
53	LD53	0-255	Min to Max Output
54	LD54	0-255	Min to Max Output
55	LD55	0-255	Min to Max Output
56	LD56	0-255	Min to Max Output
57	LD57	0-255	Min to Max Output
58	LD58	0-255	Min to Max Output
59	LD59	0-255	Min to Max Output
60	LD60	0-255	Min to Max Output

Fibre Installation & Ferrule Types

The Nebula is compatible with 2 types of ferrules – crimp and glanded.

Crimp ferrules are supplied factory terminated on the fibre harness and are simply pushed into the white moulded sleeves on the top of the light source.

Glanded ferrules are suitable for termination on site either by UFO installers or by third parties. The fibre is pushed through the gland, the gland is tightened and then the fibre is trimmed flush at the bottom of the ferrule. The ferrules are then pushed fully into the moulded sleeves. Each ferrule sits directly above an LED which illuminates each fibre individually.



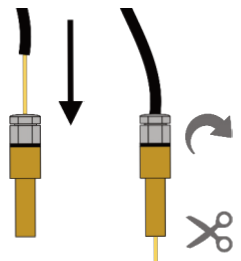
Glanded Ferrule Fibre Fitment

Ensure fibre sheathing is trimmed back so that at least 38mm of bare fibre is visible.

Feed the fibre through the gland and out the base of the ferrule.

Tighten the gland to secure the fibre sheathing and then trim the bare fibre so it is flush with the base of the ferrule.

The ferrule is now ready to be plugged into the light source.



30 Maintenance

Maintenance Procedures

To ensure a long working life and the safe, reliable operation of the light source, 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 light source it should be disconnected from the power supply and allowed to cool down.

- The light source fans and vents should be blown out with compressed air at least every 12 months, or more often if located in a dusty environment.
- Do not allow dust to build up on internal pcb's & components as this will increase heat within the light source and lead to failure. Units should be checked regularly and all dust must be vacuumed off. Failure caused by excessive dust will not be covered under warranty.
- After the light source has been installed, check the fans and vents to ensure they are clear of dust and debris. Blow out with compressed air if required.
- The body of the light source 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 on the next page, 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 light source may become hot - keep away from all combustible materials and DO NOT locate this light source within 200mm (8") of any flammable surface.
- The light source must not be run without the fibre optic harness fitted.

[illegible]

32 Troubleshooting

Fault	Probable Cause	Possible Solution
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
	Blown fuse or circuit trapped	Check fuse/trip & replace/reset if necessary. If problem persists, isolate mains supply and contact UFO
	Mains supply cable faulty	Get replacement cable from UFO
Unit is dead - no light output from any port, power indicator on PSU & display are lit	Unit in DMX control mode but all channel values set 0 on DMX controller	Increase DMX controller value
	Failed internal component	Contact UFO
In DMX mode, no light output from some of the LED ports.	The channels in question have DMX channel values set to 0	Increase channel values on DMX controller to >0
	Failed internal component	Contact UFO
	Not sufficient DMX addresses available for required channels	Check DMX address and channel availability on controller and reprogram
In DMX or Manual mode, no light output from all the LED ports dim.	Master Dimmer control set too low	Set Master Dimmer to a higher level
No DMX control over dimming and other DMX functions	Unit is not receiving a DMX signal from controller or primary Nebula	Check DMX controller or primary Nebula settings
	Faulty DMX cable	Check DMX cabling and repair/replace
No DMX control over dimming	Unit not in DMX control mode	Set to DMX in the Control Mode sub menu

Product Codes	UFO-NEB-WLXX / UFO-NEB-RGB
Material / Finish	Aluminium, powdercoated grey
Dimensions (LxWxH)	200mm x 260mm x 88mm
Operating Environment	Indoor use only
Min. Ambient Temp.	-10°C
Max. Ambient Temp.	45°C
Control Modes	Manual or DMX
DMX Connection	2 x XLR sockets
DMX Channels	60 (white light) or 180 (rgb)
Individual LED Power	96mW
Individual LED Lumens	9.6lm
Mains Supply Voltage	100 - 240VAC, 50-60Hz
PSU Type	Desktop, class II lister with IEC cord
PSU Output	12VDC, 30W (max.)

If you are unable to sort or diagnose an issue with the light source please contact your local UFO technical department using the contact details on the back page of this guide.

34 Notes



Universal Fibre Optics

Home Place
Coldstream, TD12 4DT
United Kingdom
+44 (0) 1890 883416
www.ufo.lighting

Universal Fiber Optics USA

1749 Northgate Blvd
Sarasota, FL34238
United States
941-343-8115
www.fiberopticlighting.com

UFO Licht GmbH

Andreastraße 20
93059 Regensburg
Deutschland
+49 (0) 9491 955880
www.ufo-licht.de



DESIGN



SPECIFY



BUILD



INSTALL

