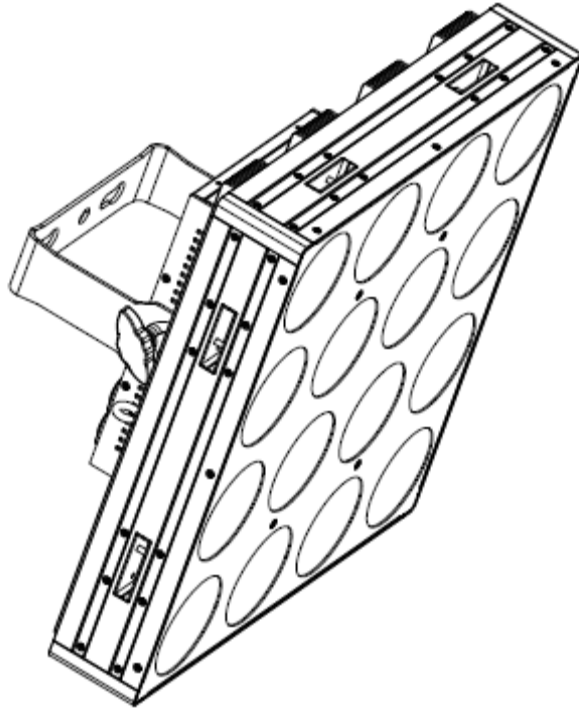


MICROH **LED NOVA 16**

USER MANUAL



For safety, please read this user manual carefully before initially use.

Package Included:

- * LED NOVA 16
- * User Manual
- * Power Input Cord
- * 5mm Allen Key

Safety Instructions

- Do not open this device, there is no user-serviceable parts inside.

- DO not look at the light source when the device is on.
- CAUTION: This unit's housing may be hot when lights are operating.
- Install this device in a location with adequate ventilation, at least 20 inch (50 cm) from adjacent surfaces.
- Do not leave any flammable material within 50 cm of this unit while operating or connected to power.
- Use a safety rope when mounting this device overhead.
- Do not hang units using only the coffin locks.
- Do not operate this device outdoors or in any location where dust, excessive heat, water, or humidity may affect it.
- Do not operate this device if the housing, lenses, or cables appear damaged.
- Do not connect this device to a dimmer or rheostat.
- ONLY connect this device to a grounded and protected circuit.
- ONLY use the hanging bracket to carry this device.
- In case of a serious operating problem, stop using immediately.
- The maximum ambient temperature is 104° F (40° C). Do not operate this device at higher temperatures.

Power Input & Power Linking

This device has an auto-switching power supply work with input voltage range of 100~240 VAC, 50/60 Hz. Link up to the maximum 4 devices at 120 VAC or 8 at 230 VAC. DO NOT exceed this number.

DMX Linking & Connection

This device can work with a DMX controller using a regular DMX serial connection.

This device uses a regular DMX protocol for its DMX modes: 3, 5, 9, 48 and 53 channels.

Art-Net™ Connection

Art-Net™ is an Ethernet protocol that uses TCP/IP to transfer large amounts of DMX512 data over a large network. Art-Net™ uses the EtherCon® RJ 45 connection. Art-Net™ is Designed by and Copyright Artistic Licence Holdings Ltd.

- 1) Disconnect the DMX controller from this device
- 2) Use RJ45 cables connect this device to your computer
- 3) You can link the other these devices with RJ45 cables or regular DMX cables.
- 4) You can use the Art-Net software to control and programming these devices.
(Your computer needs the relevant software of Art-Net protocol.)

Cooling Fans:

This device has cooling fans controled by temperature sensor. When the device temperature inside reach about 60 C, the fans start working from a slow speed to fast as the temperature increasing.

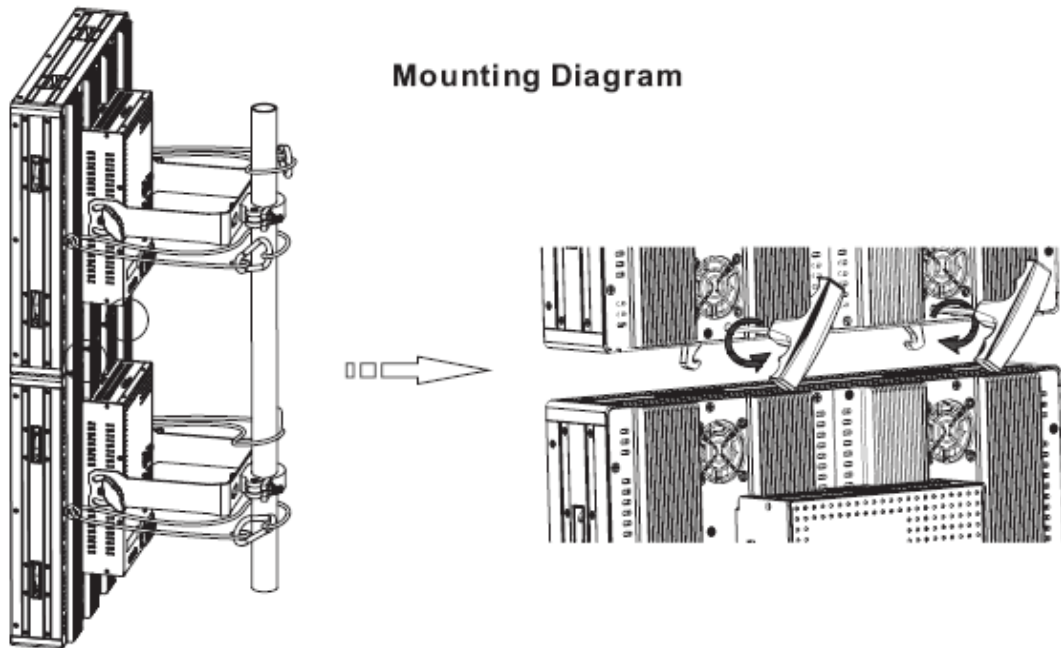
Mounting

This device can be mounted in many orientation provided each individual device is secured through the mounting bracket.

The coffin locks are for device alignment only and are not weight bearing.

DO NOT hang device using only the coffin locks.

Use a safety rope when mounting this device overhead.



CONTROL BOARD OPERATION

Press the Menu until one of the following displayed:

<i>Display</i>	<i>Function</i>
1.DMX Address	To set DMX address
2.DMX Channel	To set DMX channel modes: CH 03, CH 05, CH 09, CH48, CH53
3.Dimmer Curve	To set dimmer speeds: 01, 02, 03, 04
4.Sound Mode	To set sound active mode and the sensitivity (Speed 000 ~ Speed 100)
5.Static Color	To set static colors: Static Color R, G, B, GB, RG, RB, RGB
6.Manual Color	To set user mode intensity of R, G, B separately for color mixing and strobe rate
7.Auto Program	To set built-in automatic programs: Pr 01 ~ Pr 15 and speeds 000 ~100
8.Master/Slave	To set Master/Slave modes

Use Up and Down button to select your desired operation, then press Enter to confirm.

DMX Addressing:

After select the "DMX Address" and press Enter, then use Up and Down to set the desired DMX address (001~512), press "Enter" again to confirm.

DMX Modes

After select the "DMX Channel" and press Enter, then use Up and Down to set the desired DMX mode (03, 05, 09, 48, 53), press "Enter" again to confirm.

Dimmer Speed Setting:

After select the "Dimmer Curve" and press Enter, then use Up and Down to set the desired dimmer speed (01, 02, 03, 04), press "Enter" again to confirm.

Sound Mode

Entered "Sound mode", use <UP> and <DOWN> to set the sensitivity Sen 000 ~ Sen 100, press Enter to confirm.

Setting Static Colors

Entered "Static Color", you can select the desired solid color via the UP or DOWN buttons and confirm by Enter (see following graphic).

Mode:	Value:	Function:
Static Color	Static color <R>	Red
	Static color <G>	Green
	Static color 	Blue
	Static color <RG>	Red + Green
	Static color <BG>	Green + Blue
	Static color <RB>	Red + Blue
	Static color <RGB>	Red + Green + Blue

User Mode

This mode allows the user set intensity of R, G, B separately to get endless color mixing from the control board without DMX controller to set the device to run strobe desired.

Entered user mode "Manual color", use <UP> and <DOWN> to select the " R / G / B" for Colors intensity or "S" for strobe.

Use <UP> and <DOWN> to set the colors intensity values " 0 ~ 255" or Strobe speed values "000 ~ 100" (Freeze, Slow ~ Fast), then press "Enter" to confirm.

Automatic Mode

This fixture has a built-in automatic program.

Entered "Auto Program" mode, use <UP> and <DOWN> to select the built-in programs "Pr01 ~ Pr -12" then press the "Enter" to confirm.

Use <UP> and <DOWN> to select the operating speed of the program(Value:Speed 000 ~ Speed100, Freeze,Slow ~ Fast), press "Enter" to confirm.

Mode:	Value:	Function:
Auto Program	Auto program Pr 01	R G B colors switching
	Auto program Pr 02	7 colors switching
	Auto program Pr 03	R G B colors fading
	Auto program Pr 04	7 colors Fading
	Auto program Pr 05	Color Macros Fading
	Auto program Pr 06	Chase 1
	Auto program Pr 07	Chase 2
	Auto program Pr 08	Chase 3
	Auto program Pr 09	Chase 4
	Auto program Pr 10	Chase 5
	Auto program Pr 11	Chase 6
	Auto program Pr 12	Chase 7
	Auto program Pr 13	Chase 8
	Auto program Pr 14	Chase 9
	Auto program Pr 15	Loop above Pro 01~ Pr 14

Master/Slave Operation

This mode allows for multiple units slave fixtures to follow a single master fixture.

- 1) Set the master fixture to one of the standalone operating modes: automatic, sound, user mode or static color modes
- 2) For slave units, entered the Master/Slave mode, select "Slave", press Enter.

DMX VALUES

3 Channels Mode:

CHANNEL	VALUE	FUNCTION
1	000-255	Red: 0% ~ 100%
2	000-255	Green: 0% ~ 100%
3	000-255	Blue: 0% ~ 100%

5 Channels Mode:

CHANNEL	VALUE	FUNCTION
1	000-255	Red: 0% ~ 100%
2	000-255	Green: 0% ~ 100%
3	000-255	Blue: 0% ~ 100%
4	000-255	Master Dimmer 0% ~ 100%
5	000-009	No function
	010-255	Strobe : Slow ~ Fast(1~30Hz)

9 Channels Mode:

CHANNEL	VALUE	FUNCTION	
1	000-255	Red 0% ~ 100%	
		Warm white 0% ~ 100%	When values 169-208 in CH. 9 are activated
2	000-255	Green 0% ~ 100%	
		Cool white 0% ~ 100%	When values 169-208 in CH. 9 are activated
3	000-255	Blue 0% ~ 100%	
4	000-255	Master Dimmer 0% ~ 100%	
5	000-009	No function	
	010-255	Strobe : Slow ~ Fast(1~30Hz)	
6	000-019	No Function	
	020-039	RED 100% / GREEN 0% ~ 100% / BLUE 0%	
	040-059	RED 100% ~ 0% / GREEN 100% / BLUE 0%	
	060-079	RED 0% / GREEN 100% / BLUE 0% ~ 100%	
	080-099	RED 0% / GREEN 100% ~ 0% / BLUE 100%	
	100-119	RED 0% ~ 100% / GREEN 0% / BLUE 100%	
	120-139	RED 100% / GREEN 0% / BLUE 100% ~ 0%	
	140-159	RED 100% / GREEN 0% ~ 100% / BLUE 0%~100%	
	160-179	RED 100%~ 0% / GREEN 100% ~ 0% / BLUE 100%	
	180-199	RED 100% / GREEN 100% / BLUE 100%	
	200-204	White Color Temperature 1	WARM
	205-209	White Color Temperature 2	

	210-214	White Color Temperature 3	
	215-219	White Color Temperature 4	
	220-224	White Color Temperature 5	
	225-229	White Color Temperature 6	
	230-234	White Color Temperature 7	
	235-239	White Color Temperature 8	
	240-244	White Color Temperature 9	
	245-249	White Color Temperature 10	
	250-255	White Color Temperature 11	COOL
7	000-009	No function	
	010-023	Auto Program PR 01	R G B colors switching
	024-038	Auto Program PR 02	7 colors switching
	039-053	Auto Program PR 03	R G B colors fading
	054-068	Auto Program PR 04	7 colors Fading
	069-083	Auto Program PR 05	Color Macros Fading
	084-098	Auto Program PR 06	Chase 1
	099-113	Auto Program PR 07	Chase 2
	114-128	Auto Program PR 08	Chase 3
	129-143	Auto Program PR 09	Chase 4
	144-158	Auto Program PR 10	Chase 5
	159-173	Auto Program PR 11	Chase 6
	174-188	Auto Program PR 12	Chase 7
	189-203	Auto Program PR 13	Chase 8
	204-218	Auto Program PR 14	Chase 9
	219-233	Auto Program PR 15	Loop above Pro 01~ Pr 14
	234-255	Sound active	
8	000-255	Speed of Auto Programs (Slow ~ Fast)	
9	000-009	Default dimmer speed	
	010-048	Linear dimmer	
	049-088	Non-linear dimmer 1	
	089-128	Non-linear dimmer 2	
	129-168	Non-linear dimmer 3	
	169-208	WW/CW Mode ON	
	209-255	WW/CW Mode OFF	

48 Channels Mode:

CHANNEL	VALUE	FUNCTION	
1	000-255	Red 0% ~ 100%	LED 1
2	000-255	Green 0% ~ 100%	
3	000-255	Blue 0% ~ 100%	
4	000-255	Red 0% ~ 100%	LED 2
5	000-255	Green 0% ~ 100%	
6	000-255	Blue 0% ~ 100%	
7	000-255	Red 0% ~ 100%	

8	000-255	Green 0% ~ 100%	LED 3
9	000-255	Blue 0% ~ 100%	
10	000-255	Red 0% ~ 100%	LED 4
11	000-255	Green 0% ~ 100%	
12	000-255	Blue 0% ~ 100%	LED 5
13	000-255	Red 0% ~ 100%	
14	000-255	Green 0% ~ 100%	LED 6
15	000-255	Blue 0% ~ 100%	
16	000-255	Red 0% ~ 100%	LED 7
17	000-255	Green 0% ~ 100%	
18	000-255	Blue 0% ~ 100%	LED 8
19	000-255	Red 0% ~ 100%	
20	000-255	Green 0% ~ 100%	LED 9
21	000-255	Blue 0% ~ 100%	
22	000-255	Red 0% ~ 100%	LED 10
23	000-255	Green 0% ~ 100%	
24	000-255	Blue 0% ~ 100%	LED 11
25	000-255	Red 0% ~ 100%	
26	000-255	Green 0% ~ 100%	LED 12
27	000-255	Blue 0% ~ 100%	
28	000-255	Red 0% ~ 100%	LED 13
29	000-255	Green 0% ~ 100%	
30	000-255	Blue 0% ~ 100%	LED 14
31	000-255	Red 0% ~ 100%	
32	000-255	Green 0% ~ 100%	LED 15
33	000-255	Blue 0% ~ 100%	
34	000-255	Red 0% ~ 100%	LED 16
35	000-255	Green 0% ~ 100%	
36	000-255	Blue 0% ~ 100%	LED 1
37	000-255	Red 0% ~ 100%	
38	000-255	Green 0% ~ 100%	LED 2
39	000-255	Blue 0% ~ 100%	
40	000-255	Red 0% ~ 100%	LED 3
41	000-255	Green 0% ~ 100%	
42	000-255	Blue 0% ~ 100%	LED 4
43	000-255	Red 0% ~ 100%	
44	000-255	Green 0% ~ 100%	LED 5
45	000-255	Blue 0% ~ 100%	
46	000-255	Red 0% ~ 100%	LED 6
47	000-255	Green 0% ~ 100%	
48	000-255	Blue 0% ~ 100%	

53 Channels Mode:

CHANNEL	VALUE	FUNCTION	
1	000-255	Red 0% ~ 100%	LED 1

2	000-255	Green 0% ~ 100%	
3	000-255	Blue 0% ~ 100%	
4	000-255	Red 0% ~ 100%	
5	000-255	Green 0% ~ 100%	LED 2
6	000-255	Blue 0% ~ 100%	
7	000-255	Red 0% ~ 100%	
8	000-255	Green 0% ~ 100%	LED 3
9	000-255	Blue 0% ~ 100%	
10	000-255	Red 0% ~ 100%	
11	000-255	Green 0% ~ 100%	LED 4
12	000-255	Blue 0% ~ 100%	
13	000-255	Red 0% ~ 100%	
14	000-255	Green 0% ~ 100%	LED 5
15	000-255	Blue 0% ~ 100%	
16	000-255	Red 0% ~ 100%	
17	000-255	Green 0% ~ 100%	LED 6
18	000-255	Blue 0% ~ 100%	
19	000-255	Red 0% ~ 100%	
20	000-255	Green 0% ~ 100%	LED 7
21	000-255	Blue 0% ~ 100%	
22	000-255	Red 0% ~ 100%	
23	000-255	Green 0% ~ 100%	LED 8
24	000-255	Blue 0% ~ 100%	
25	000-255	Red 0% ~ 100%	
26	000-255	Green 0% ~ 100%	LED 9
27	000-255	Blue 0% ~ 100%	
28	000-255	Red 0% ~ 100%	▲
29	000-255	Green 0% ~ 100%	LED 10
30	000-255	Blue 0% ~ 100%	
31	000-255	Red 0% ~ 100%	
32	000-255	Green 0% ~ 100%	LED 11
33	000-255	Blue 0% ~ 100%	
34	000-255	Red 0% ~ 100%	
35	000-255	Green 0% ~ 100%	LED 12
36	000-255	Blue 0% ~ 100%	
37	000-255	Red 0% ~ 100%	
38	000-255	Green 0% ~ 100%	LED 13
39	000-255	Blue 0% ~ 100%	
40	000-255	Red 0% ~ 100%	
41	000-255	Green 0% ~ 100%	LED 14
42	000-255	Blue 0% ~ 100%	
43	000-255	Red 0% ~ 100%	
44	000-255	Green 0% ~ 100%	LED 15
45	000-255	Blue 0% ~ 100%	
46	000-255	Red 0% ~ 100%	LED 16

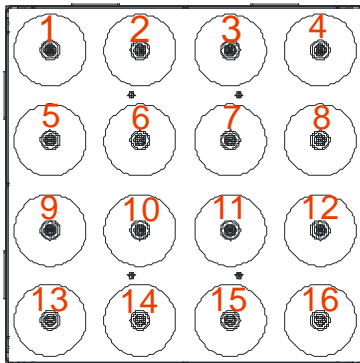
47	000-255	Green 0% ~ 100%	
48	000-255	Blue 0% ~ 100%	
49	000-255	Master Dimmer 0% ~ 100%	
50	000-009	No function	
	010-255	Strobe : Slow ~ Fast(1~30Hz)	
51	000-009	No function	
	010-023	Auto Program PR 01	R G B colors switching
	024-038	Auto Program PR 02	7 colors switching
	039-053	Auto Program PR 03	R G B colors fading
	054-068	Auto Program PR 04	7 colors Fading
	069-083	Auto Program PR 05	Color Macros Fading
	084-098	Auto Program PR 06	Chase 1
	099-113	Auto Program PR 07	Chase 2
	114-128	Auto Program PR 08	Chase 3
	129-143	Auto Program PR 09	Chase 4
	144-158	Auto Program PR 10	Chase 5
	159-173	Auto Program PR 11	Chase 6
	174-188	Auto Program PR 12	Chase 7
	189-203	Auto Program PR 13	Chase 8
	204-218	Auto Program PR 14	Chase 9
	219-233	Auto Program PR 15	Loop above Pro 01~ Pr 14
	234-255	Sound active	
52	0000-255	Speed of Auto Programs (Slow ~ Fast)	
53	000-009	Default dimmer speed	
	010-048	Linear dimmer	
	049-088	Non-linear dimmer 1	
	089-128	Non-linear dimmer 2	
	129-168	Non-linear dimmer 3	
	169-208	WW/CW Mode ON	
	209-255	WW/CW Mode OFF	

When CH 53 @ 169-208, WW/CW ON, CH 1 ~ CH 32 function as following:

1	000-255	Warm white 0% ~ 100%	LED 1
2	000-255	Cool white 0% ~ 100%	
3	000-255	Warm white 0% ~ 100%	LED 2
4	000-255	Cool white 0% ~ 100%	
5	000-255	Warm white 0% ~ 100%	LED 3
6	000-255	Cool white 0% ~ 100%	
7	000-255	Warm white 0% ~ 100%	LED 4
8	000-255	Cool white 0% ~ 100%	
9	000-255	Warm white 0% ~ 100%	LED 5
10	000-255	Cool white 0% ~ 100%	
11	000-255	Warm white 0% ~ 100%	LED 6
12	000-255	Cool white 0% ~ 100%	
13	000-255	Warm white 0% ~ 100%	LED 7

14	000-255	Cool white 0% ~ 100%	
15	000-255	Warm white 0% ~ 100%	LED 8
16	000-255	Cool white 0% ~ 100%	
17	000-255	Warm white 0% ~ 100%	LED 9
18	000-255	Cool white 0% ~ 100%	
19	000-255	Warm white 0% ~ 100%	LED 10
20	000-255	Cool white 0% ~ 100%	
21	000-255	Warm white 0% ~ 100%	LED 11
22	000-255	Cool white 0% ~ 100%	
23	000-255	Warm white 0% ~ 100%	LED 12
24	000-255	Cool white 0% ~ 100%	
25	000-255	Warm white 0% ~ 100%	LED 13
26	000-255	Cool white 0% ~ 100%	
27	000-255	Warm white 0% ~ 100%	LED 14
28	000-255	Cool white 0% ~ 100%	
29	000-255	Warm white 0% ~ 100%	LED 15
30	000-255	Cool white 0% ~ 100%	
31	000-255	Warm white 0% ~ 100%	LED 16
32	000-255	Cool white 0% ~ 100%	

LED ARRAY:



CLEANING AND MAINTENANCE

Caution: DANGER TO LIFE!

Disconnect from mains before starting maintenance operation!

The operator has to make sure that safety-relating and machine-technical installations are inspected by an expert after every four years in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are inspected by a skilled person once a year.

The following points have to be considered during the inspection:

- 1) All screws used for installing the devices or parts of the device must be tightly connected.

2) There must not be any deformations on housings, fixations and installation spots (ceiling, suspension, trussing).

3) The electric power cables must not show any damages, material fatigue (e.g. porous cables) or sediments. Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

Replacing the fuse

If the fine-wire fuse of the device fuses, only replace the fuse by a fuse of same type and rating. Before replacing the fuse, unplug mains lead.

Procedure:

Step 1: Unscrew the fuseholder on the rearpanel with a fitting screwdriver from the housing (anticlockwise).

Step 2: Remove the old fuse from the fuseholder.

Step 3: Install the new fuse in the fuseholder.

Step 4: Replace the fuseholder in the housing and fix it.

TECHNICAL SPECIFICATIONS:

Power supply: 100~240 V AC, 50/60 Hz ~

Power consumption: 390 W

DMX control channels: 3,5,9, 48 or 53 chs

DMX512 connection: 3-pin XLR + 5-pin XLR

Sound-control: via built-in microphone

LED type: 30 W COB Tri-color RGB

Number of LEDs: 16

Beam angle: 30°

Dimensions (LxWxH): 425 x 425 x 141 mm

Weight: 11.3 kg

Maximum ambient temperature Ta: 40°

Maximum housing temperature TC (steady state): 80° C

Min. distance from flammable surfaces: 0.5 m

Min. distance to lighted object: 0.1 m

Fuse: T 3.15A, 250V