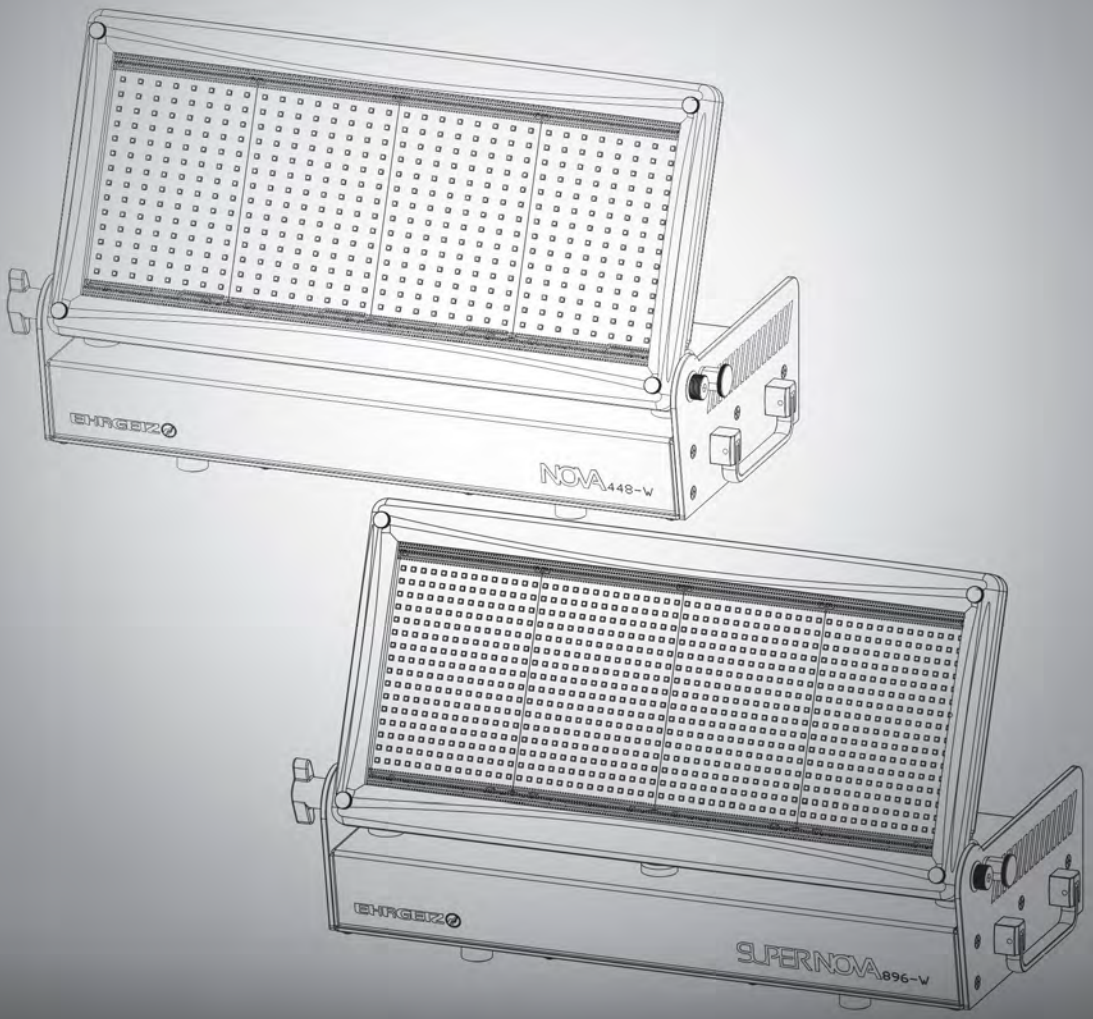
EHRGEIZ



NOVA / SUPERNOVA

USER MANUAL

Ver. 1.00

EHRGEIZ

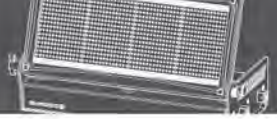
NOVA
SUPER NOVA
USER MANUAL

CONTENTS

Safety Instruction

Safety Instruction:

- Make sure all fixtures are operated and installed by qualified electrician with the relevant national certifications.
- In order to maintain the condition and to ensure a safe operation, it is important for all users to follow the safety instructions and warning notes written in this manual.
- Do not operate the fixture with missing or damaged covers, shields or any optical component.
  Please consider that unauthorized modifications to the device are forbidden due to safety reasons.
- If the device is operated in any way that's not described in this manual, the product may suffer damage and the warranty will become void. Furthermore, misuse may lead to dangers like short-circuit, burns, electric shock, burns due to ultraviolet radiation, lamp explosion, crash, etc.



Liability:
The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized repair to the fixture.

Minimum distance to illuminate objects:
The fixture must be positioned at least 0.2m minimum distance to illuminate objects.

Minimum distance from inflammable materials:
Keep all inflammable materials at least 0.2m from this fixture.

Positioning:
Allow to place the fixture on an inflammable surface.

Maximum ambient temperature of unit location:
The maximum ambient temperature of 45°C cannot be exceeded.

IP65 protection rating:
This fixture is protected against dust (first digit 6) and against low pressure jets of water from all directions (second digit 5).

Prevention from electrical shock:
Make sure to ground (earth) the fixture electrically.
It's essential to connect the yellow/green conductor to earth.

Main Connection:

- Do not apply any AC mains power to the fixture at any other voltage than that specified.
- Never let the eventCON® cable comes into contact with other cables. Treat the eventCON® cable and all connections with the mains with particular caution.
- Make sure the eventCON® cable is never crimped or damaged by sharp edges.

Rigging:

- Check that all external covers and rigging hardware are securely fastened.
- When choosing the installation-location, please make sure that the fixture is not exposed to extreme heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others.
- Make sure that the area below the installation place is cordoned off when rigging, de-rigging or servicing the fixture.
- If suspending from a rigging structure, fasten the fixture to rigging clamps with an M10 bolt screwed into the threaded hole in the left & right side of the base of the fixture. The bolt must be screwed at least 20-26mm (0.8-1.0ins.) into the fixture. If the fixture is suspended by any other method, an M10 bolt must be screwed into this hole so that it is at least 20-26mm(0.8-1.0ins.) into the fixture.
- Install as described in this manual a secondary attachment such as a safety wire that is approved by an official body. The safety wire must comply with EN 60598-2-17 Section 17.6.6 and be capable of bearing a static suspended load ten times the weight of the fixture.

Exterior surface temperature:
The exterior of this fixture can reach an untouchable temperature during operation. Avoid contact by persons and materials.

Main Connection:

- This fixture is for professional use only. It is not for household use.
- Always unplug the mains for any maintenance.

Risk of eye injury:
Do not stare directly into the light when it is switched on. (Do not look at LEDs with magnifying glasses, telescopes, binoculars, or similar optical instruments that may concentrate the light output.

Fixture Dimensions

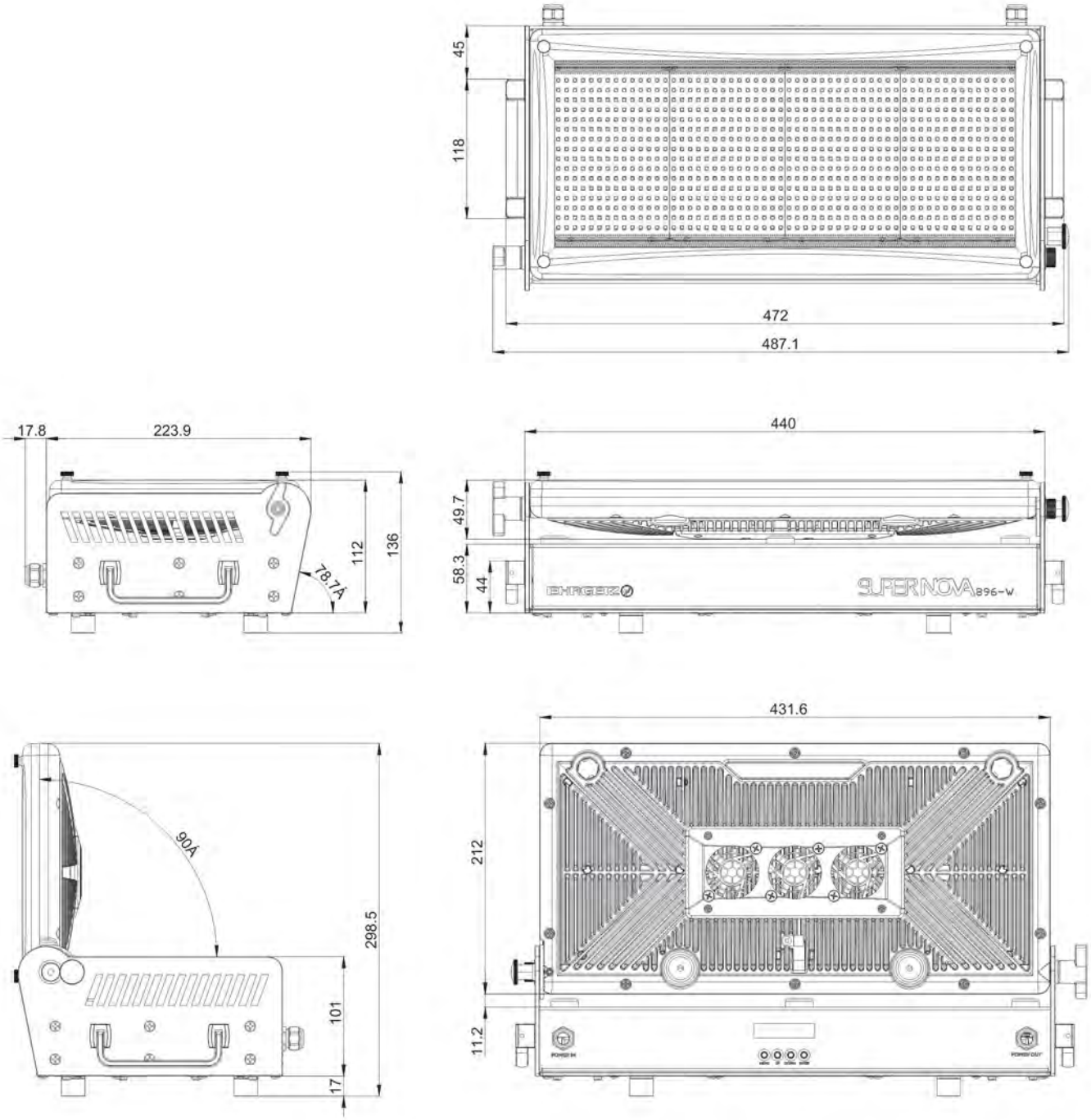
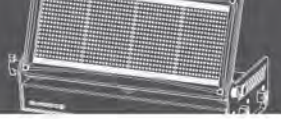


Figure 1



Rigging

The fixture can be placed directly on the stage floor or can be rigged on the structure via two clamps in the following positions:

Sitting on floor with indexed tilt mechanism

Figure 2

Standing on floor directly

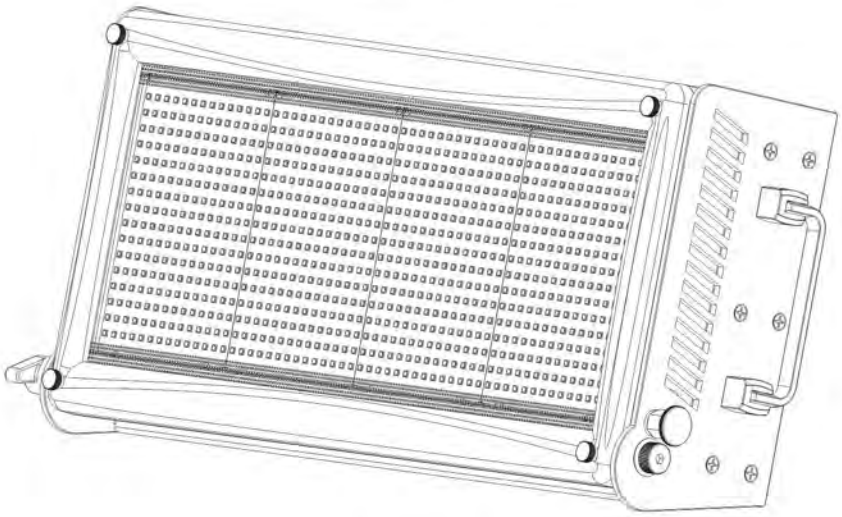


Figure 3

When hanging onto a truss.

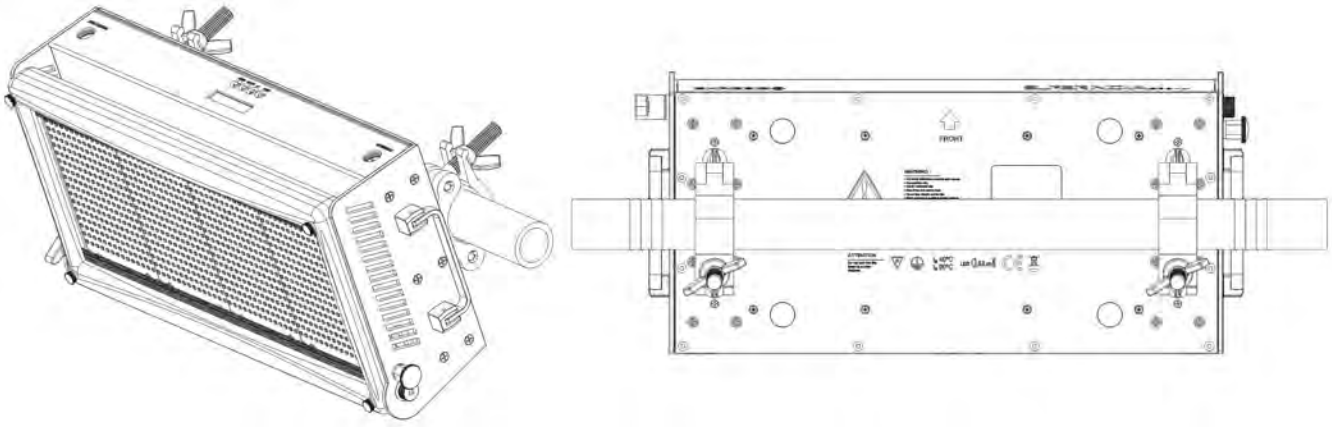
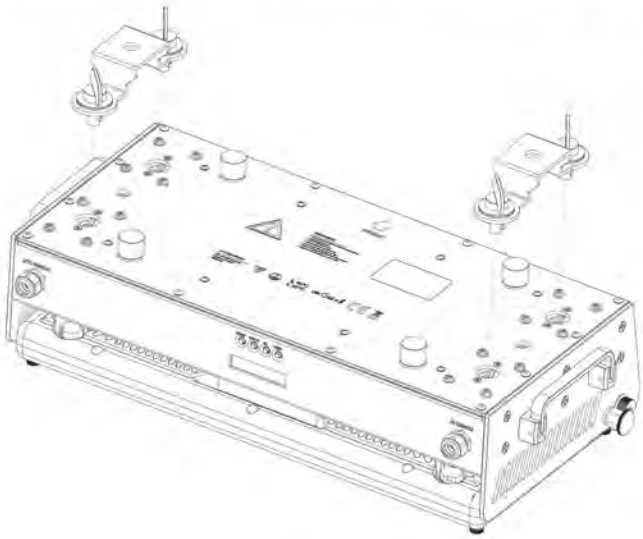


Figure 4

The mounting holes in Nova / Supernova use M10 thread. Use the clamps with M10 bolts only.
When mounting on truss or structure, be sure to use a mounting clamp and secondary secure attachment..
(as above figure)
Secure fixture with safety wire in the back of the fixture.

Installation with Omega Bracket Mounting Kit with fast lock (Optional):



Omega Bracket

1/4th Fast Lock

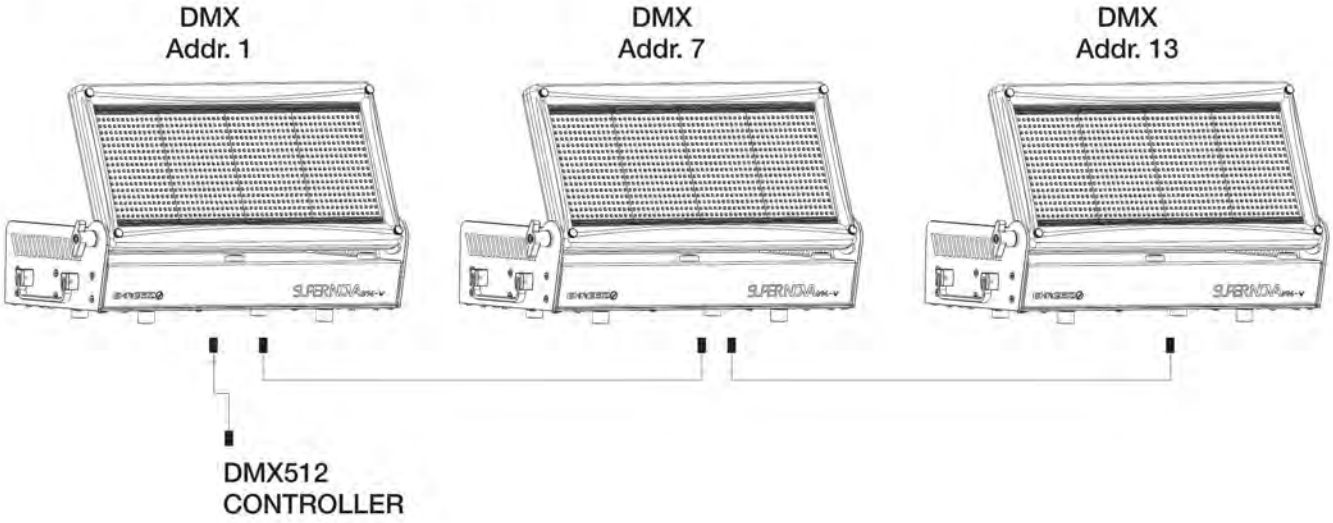
Use the Omega Bracket Mounting Kit for Nova / Supernova (item No.: 106599) to mount with the 4 pre-fabricated 1/4th turn mounting inserts for a even more faster & easier installation of fixture trussing.

Figure 5

DMX512 Connection:

Connect the DMX512 controller to the units in series.
Each unit has 6 DMX channels*1 so the DMX Addresses should increase by increments of 6 (e.g. 1, 7, 13...)

Each DMX Address may be used as many times as required.
Any DMX address in the range from 001 to 512 may be used.



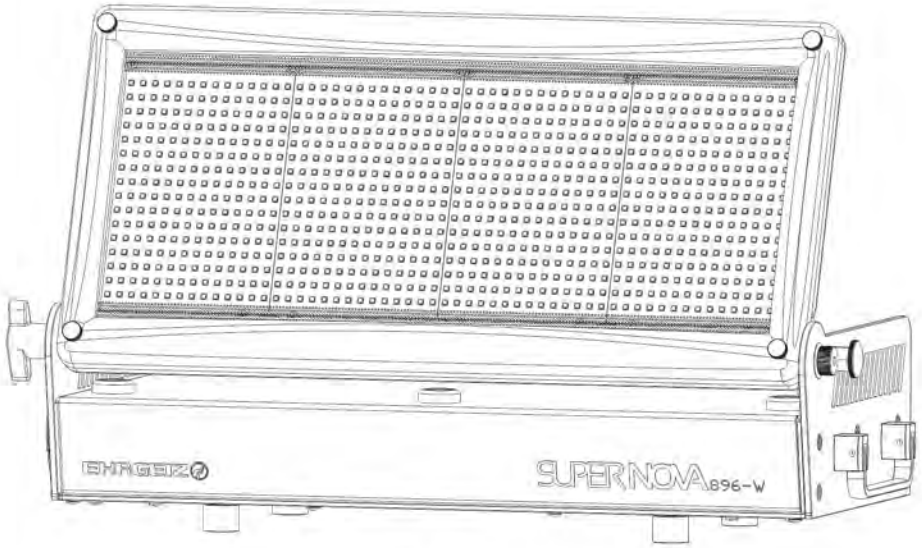


Figure 6

*1 6 DMX channels refer to the standard DMX mode, other DMX modes are also available. Always set the increments according to the DMX modes and channels selected.

eventCON® Power+Data connector system:

The Nova / Supernova fixtures are equipped with revolutionary eventCON® connector & to combine Power and Data into 1 connector and cable system. eventCON® system is consisted of the following:

1.eventCON® Power+Data IN connector(see figure 1)
2.eventCON® Power+Data OUT connector (see figure 2)
3.eventCON® Power+Data cable (see figure 3)

CAUTION!!

Only qualified electrician shall wire / solder these eventCON® system connector and cables. Contact your local distributor for more information if necessary.

Figure 1. eventCON® Power+Data IN connector:

Pin definition:

1: GND	L : Line
2: Data-	N : Neutral
3: Data+	D : ⏚

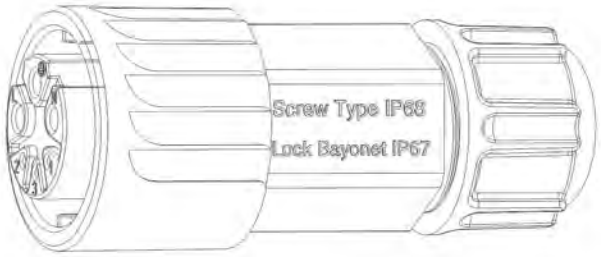


Figure 2. eventCON® Power+Data OUT connector:

Pin definition:

1: GND	L : Line
2: Data-	N : Neutral
3: Data+	D : ⏚

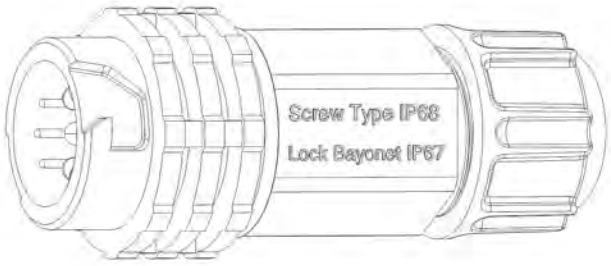
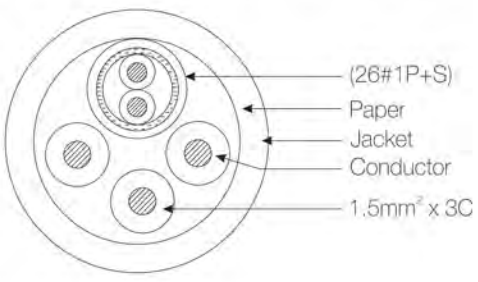


Figure 3. eventCON® Power+Data cable:



eventCON® system connection merging:

Connecting the first eventCON® system to a mains power and DMX source with Input Splitter eventCON® PD1F/XLR-3/Schuko (Part No. 105486):

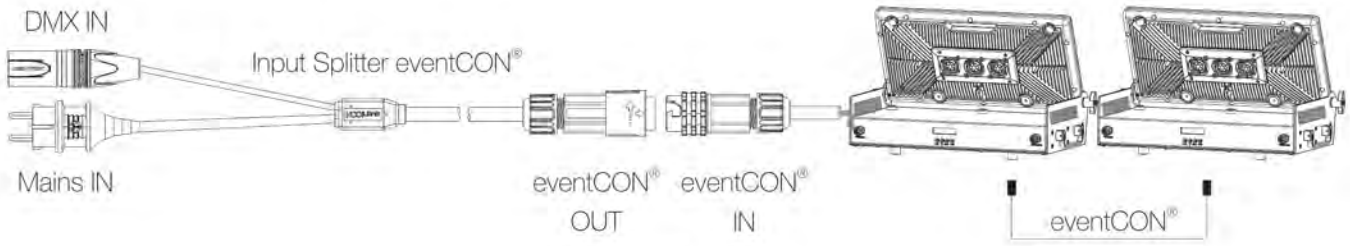


Figure 7

Connecting between eventCON® systems:

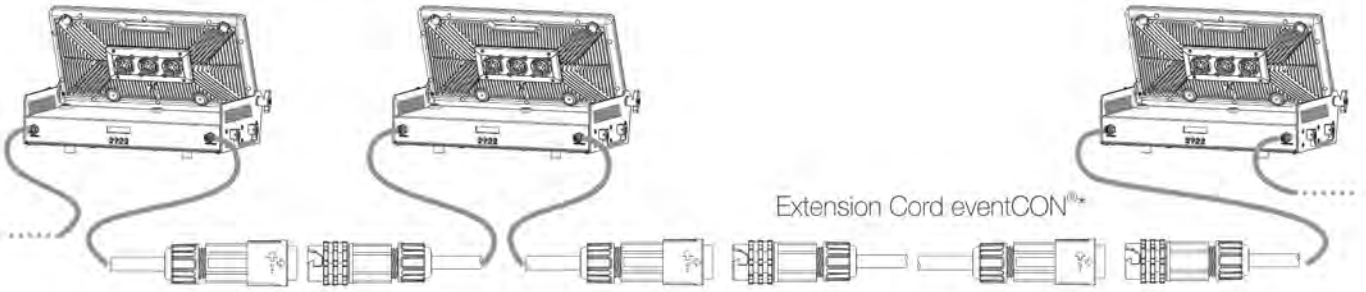


Figure 8

Connecting between eventCON® systems with new mains power: for every of 5th Nova/ 3th Supernova must apply a new mains power connection. Use Cable Adapter eventCON® (Part NO. 106298/106299) to re-connect to a mains power whenever necessary, thus merge the DMX signal from last fixture in Daisy-Chain to get DMX through with Input Splitter eventCON® PD1F/PD1M Separate (Part No. 105488)

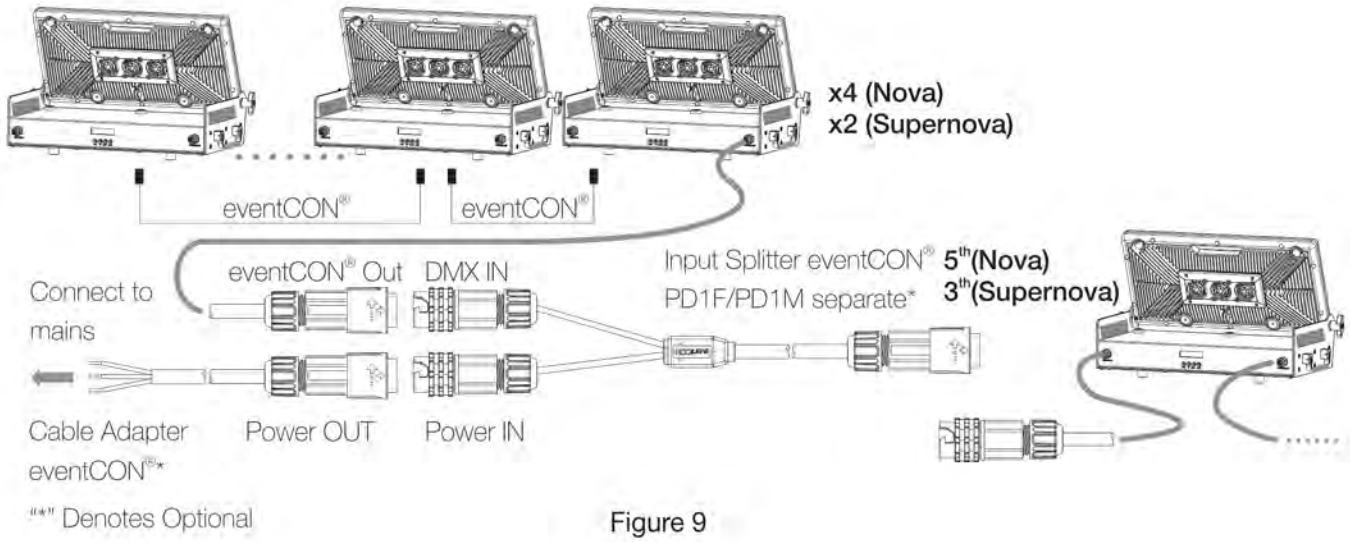


Figure 9

eventCON® system connection splitting:

Splitting power and DMX data from eventCON® system to power & standard 3-Pin XLR connector with Output Splitter eventCON® PD1M/XLR-3 / Open* (Part No. 105487):

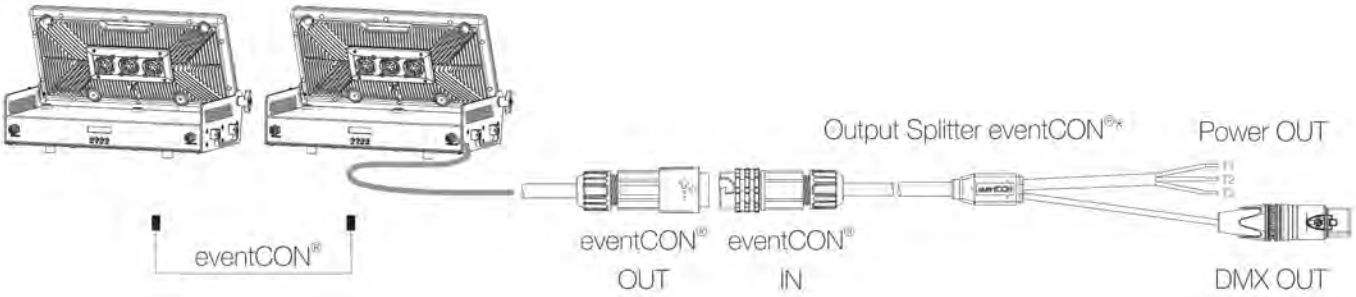


Figure 10

Splitting Power from eventCON® system to other fixture with Cable Adapter eventCON® / Open Power OUT* (Part No. 106300 / 106301):

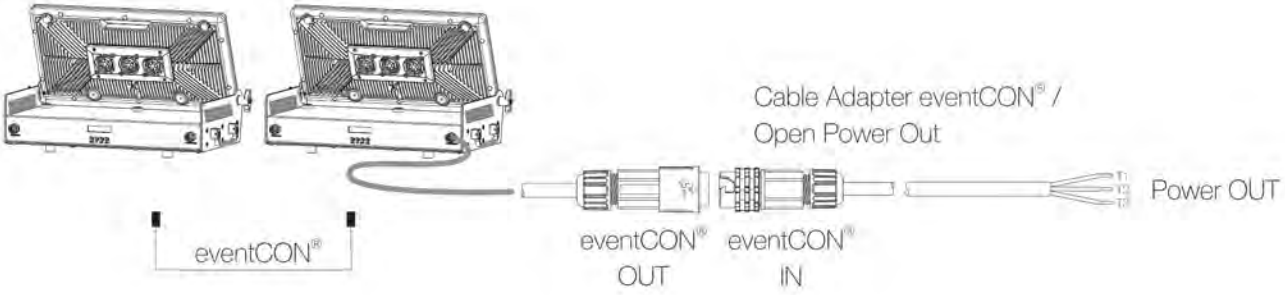
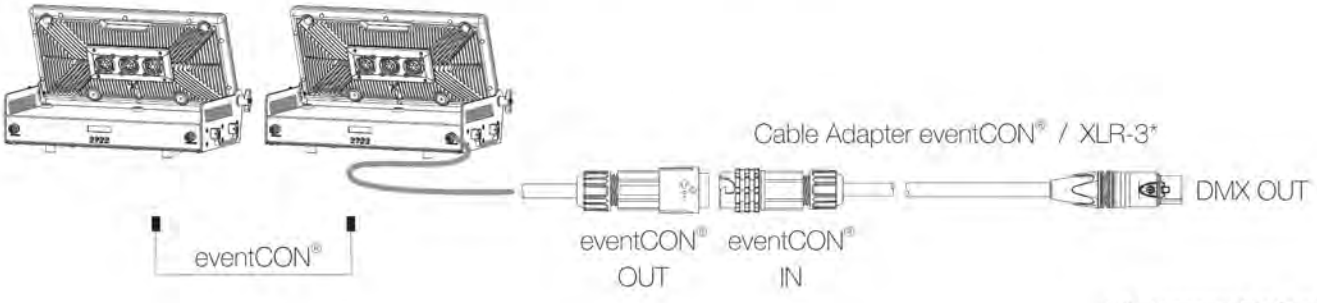


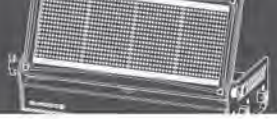
Figure 11

Splitting DMX from eventCON® system to other fixture with Cable Adapter eventCON® / XLR-3 DMX OUT* (Part No. 106302 / 106303):

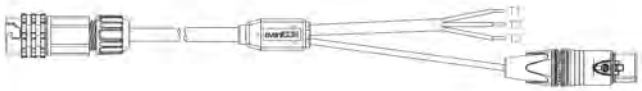


"*" Denotes Optional

Figure 12



eventCON® Optional cable systems:

Description	Part Number		Picture
Output Splitter eventCON® PD1M / XLR-3 / Open (eventCON® to XLR & Power)	0,4M	105487	
Extension Cord eventCON® PD1 (eventCON® IN to OUT)	1M	105482	
	2M	105483	
	5M	105484	
	10M	105485	
Input Splitter eventCON® PD1F / PD1M Separate (2 eventCON® IN to eventCON® OUT)	0,4M	105488	
Cable Adapter eventCON® (Open-end to eventCON® IN)	2M	106298	
	5M	106299	
Cable Adapter eventCON® / Open Power Out (eventCON® IN to Power open)	2M	106300	
	5M	106301	
Cable Adapter eventCON® / XLR-3 DMX OUT (eventCON® IN to DMX OUT)	2M	106302	
	5M	106303	

Operating the fixture

Front View

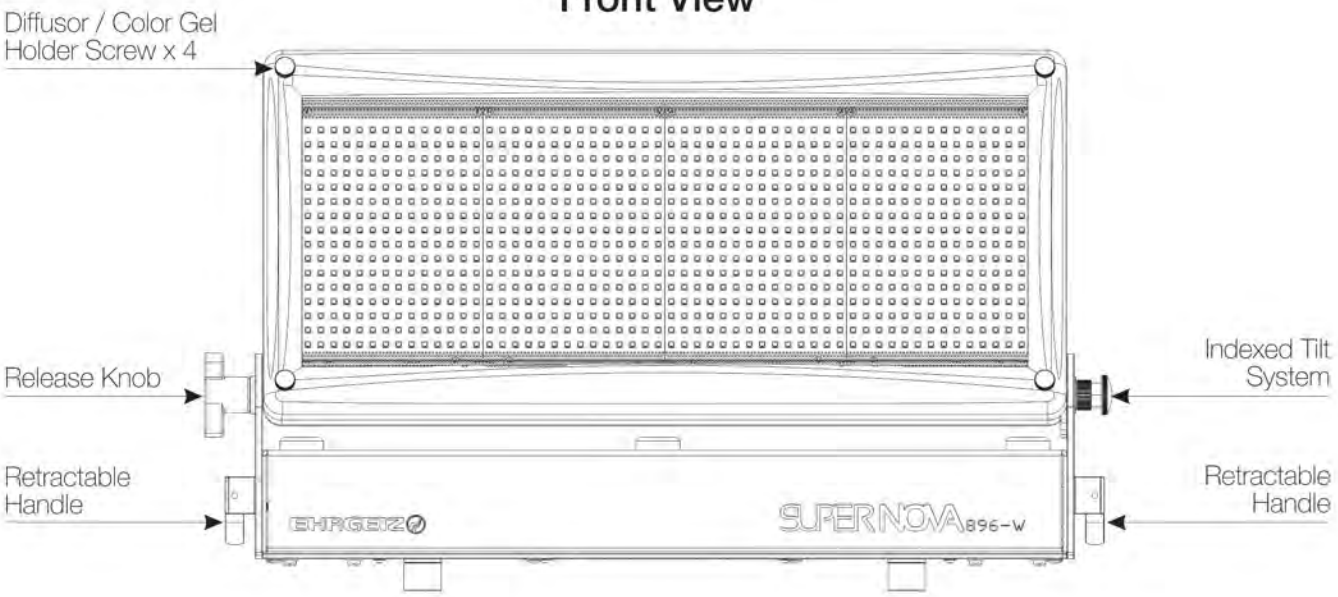


Figure 13

Rear View

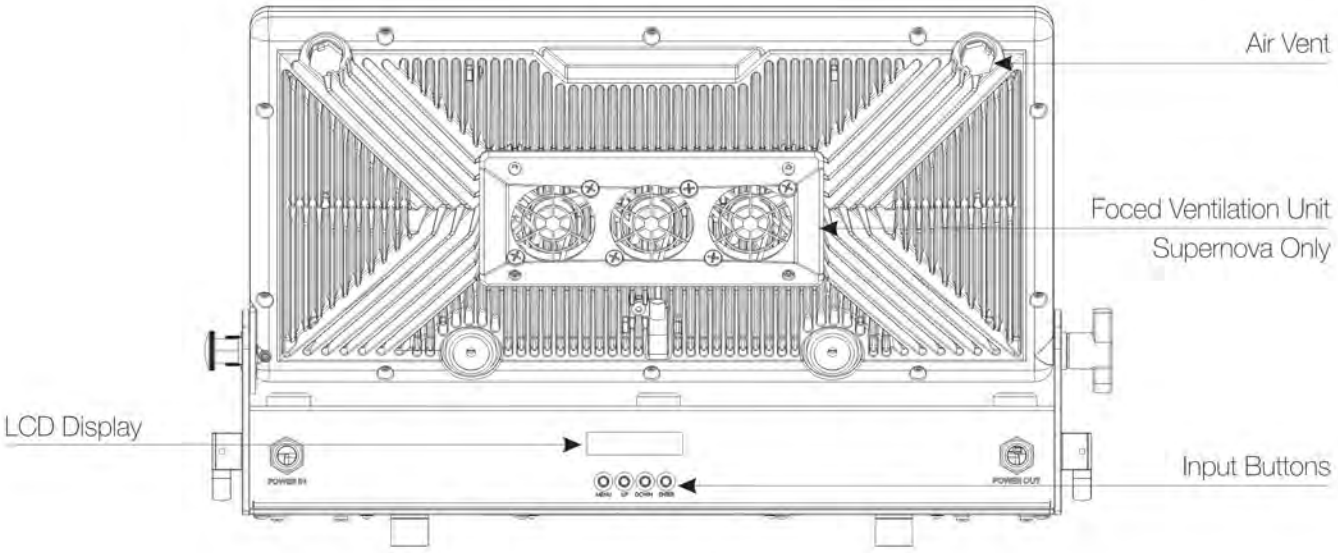


Figure 14

Operating the fixture

To adjust the fixture panel for different angle by using indexed tilt system:

1. Release the release knob by rotating it counter-clockwise.

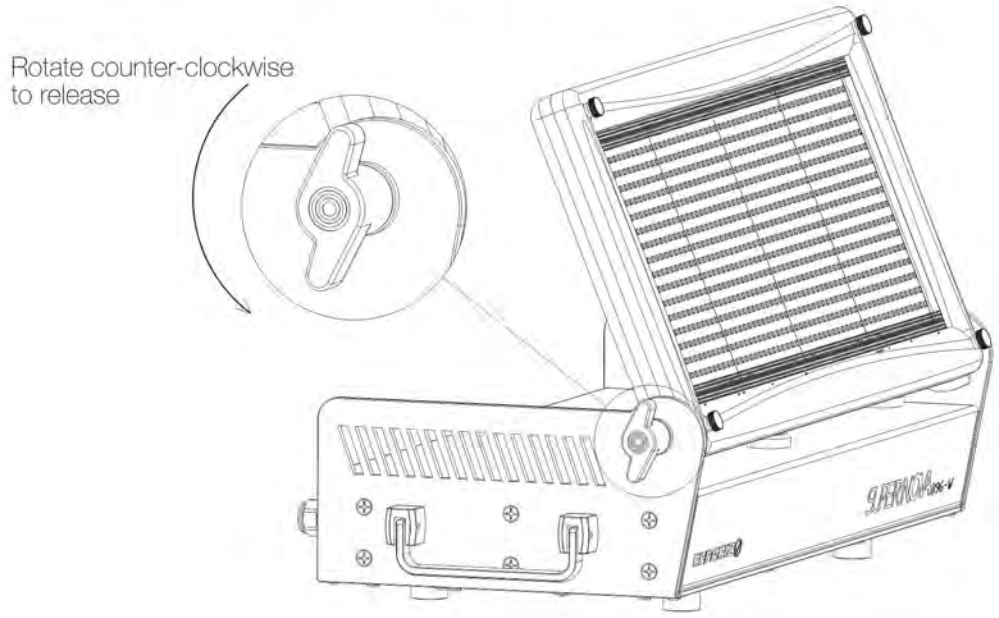


Figure 15

2. Pull the index plunger to release from current angle, and adjust the front panel to other indexed angle.

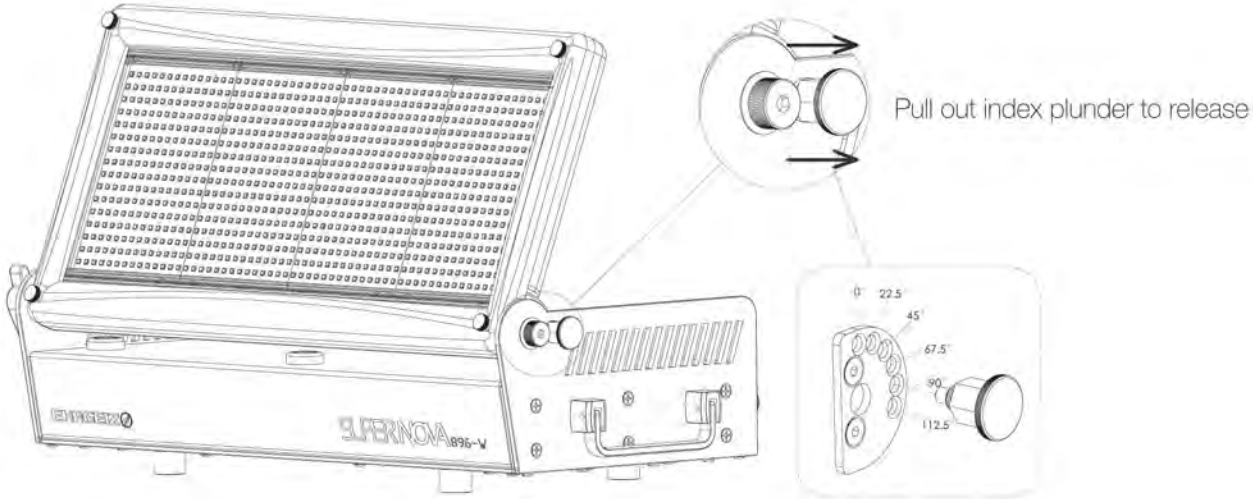


Figure 16

3. Set plunger to inserted status, and fasten the release knob clockwise.

LED Segment Control

Nova / Supernova fixtures are built with multiple LED segments to utilize a creative way of lighting controls for different effects. Refer to the following for segment arrangements accordingly.

Nova is built with 4 segments of LEDs as the following layout:

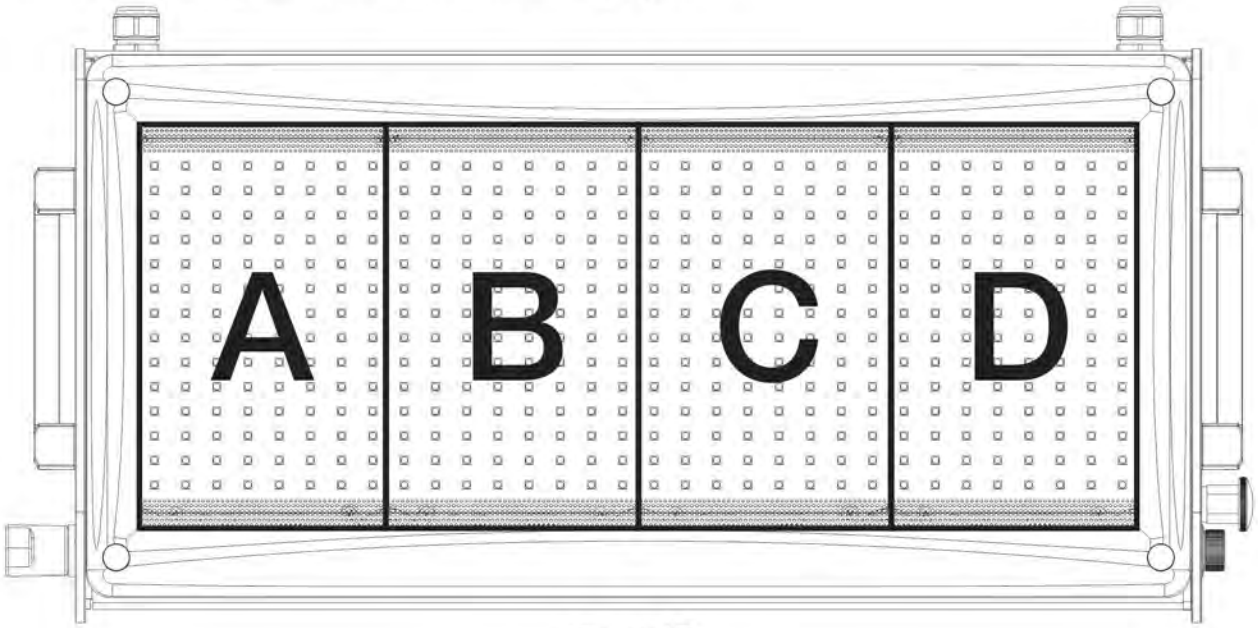


Figure 17

Supernova is built with 8 segments of LEDs as the following layout:

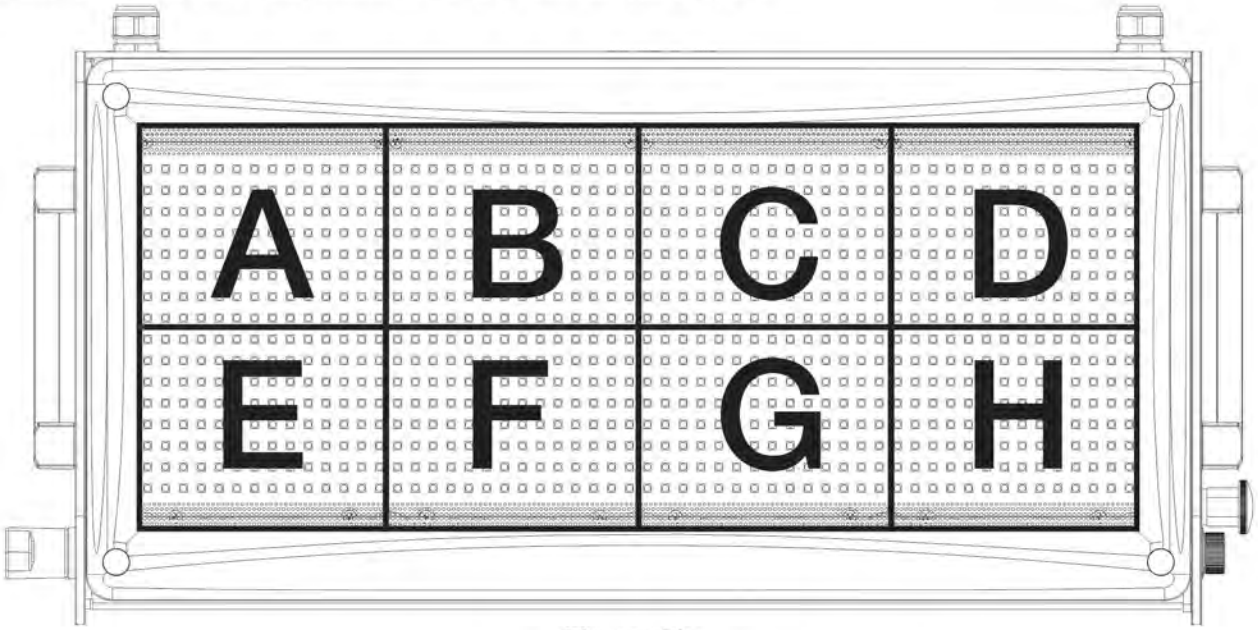
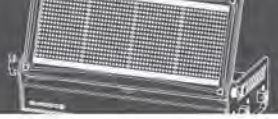
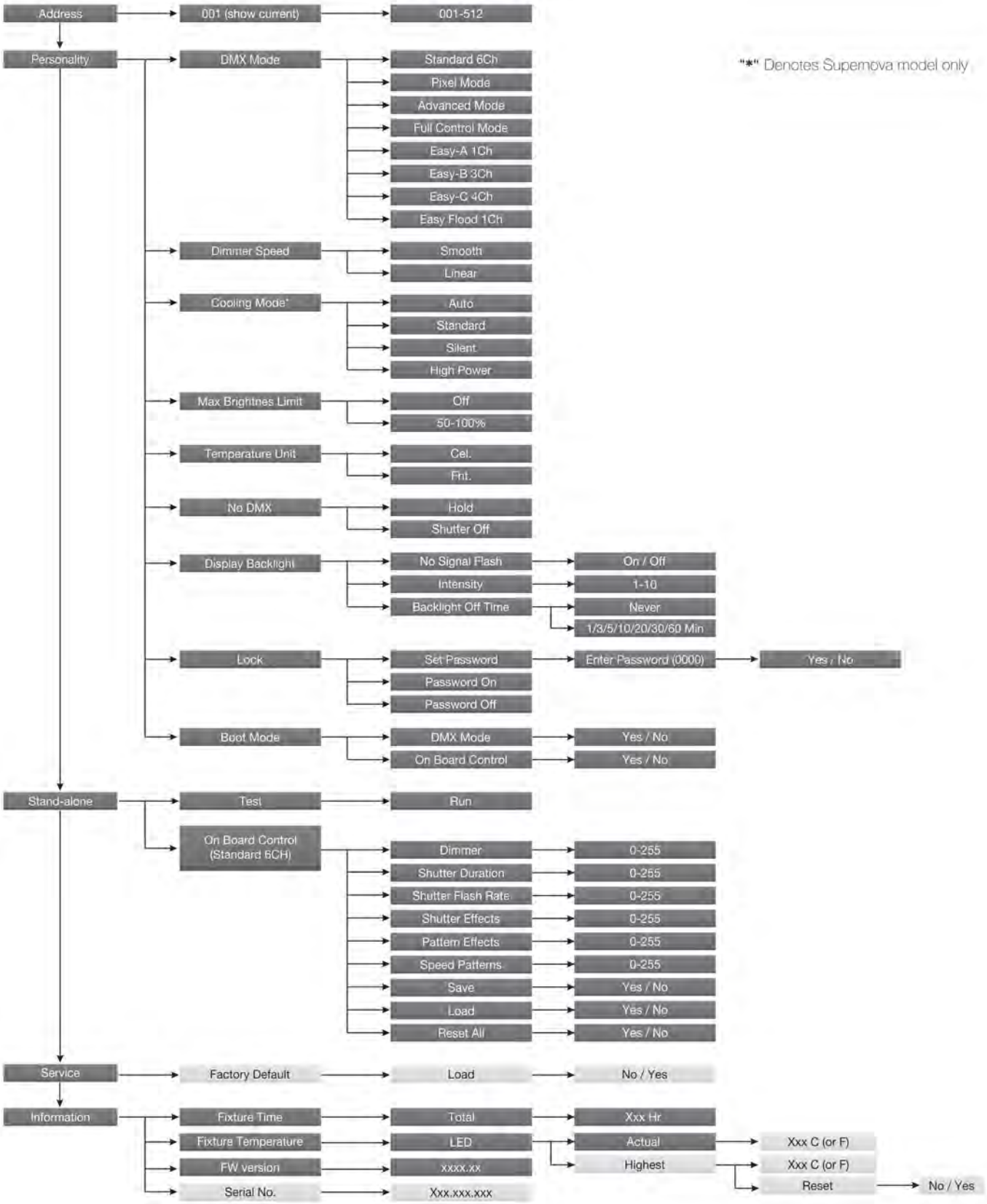


Figure 18



Menu Navigation

Control Navigation



"*" Denotes Supernova model only

Operating the fixture in menu navigation for fixture settings:

The Nova / Supernova fixtures are programed with many built-in functions as well as different personalities to choose for different applications. Read through the following menu navigation instruction properly before setting up the fixture in different desired personality or as simple as DMX address from the menu navigation system.

To navigate inside the fixture menu, use the following buttons on the back of the fixture for the following function:

【 **MENU** 】 Go back to previous menu for 1 level backward.
【 **UP** 】 Select the option to previous one.
【 **DOWN** 】 Select the option to next one.
【 **ENTER** 】 Confirm the option or go to next level menu.

When navigating in the Level 3 and further levels, there are in most scenarios, with various options to choose from. For any of the options you chose will be displayed in the first order when you access this particular level menu. See the following figure 19 for example.

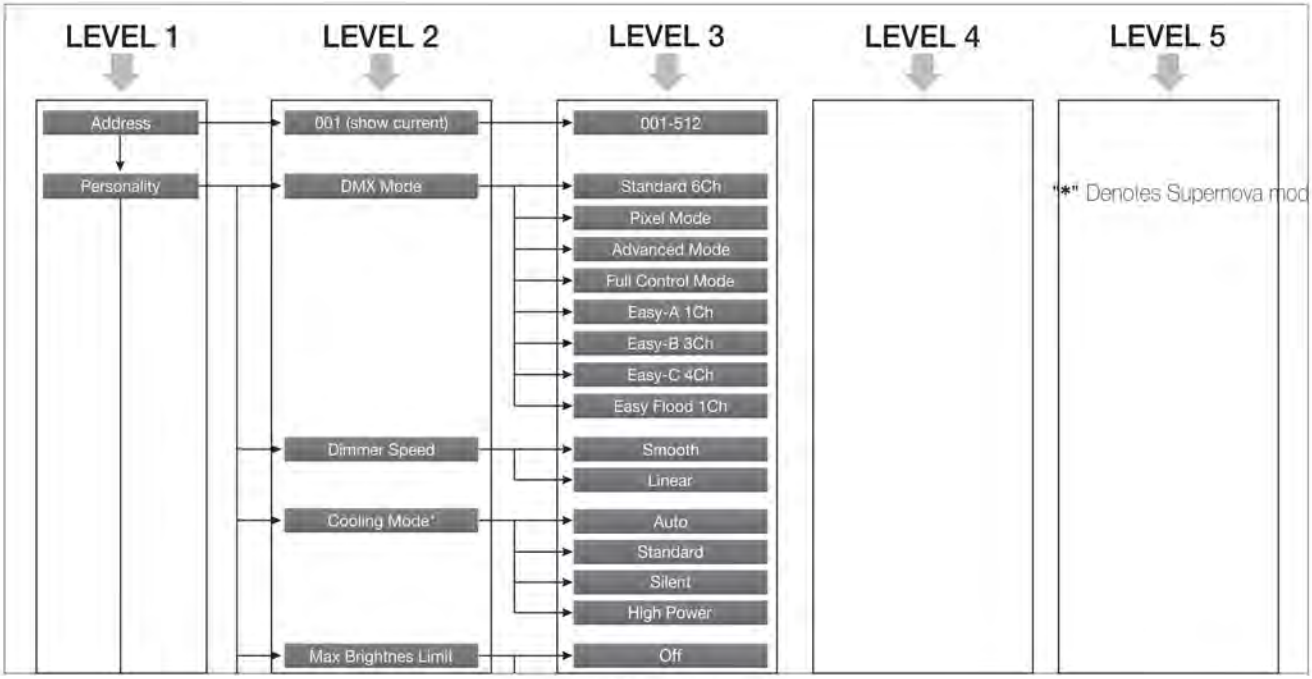


Figure 19 Menu example

To make a change to a new value, press "ENTER" and the options you're at will now be "Blinking" status in the LCD display, use "UP or "DOWN" button to choose a new value and press "ENTER" again and the option set will now be displayed consistently instead of blinking state. However, if you entered the option with in a blinking status and do not wish to set change to any value other than your previous one, press "MENU" will discard any changes not yet set to the fixture (display blinking), and go back to previously selected option with constantly lit LCD display.

Note: Fixture menu marked in grey background indicates the "Default" fixture settings.

Fixture menu navigations:

1. DMX Address: Set the DMX address of the fixture from 001 ~ 512 depending on the DMX Mode selected.

2. Personality: This is where you set up all the fixture personality settings in the following:

2.1 : DMX Mode: Set the DMX from the following:

- "Standard" : 6 Channel standard control mode with most effects included.
- "Advanced" : 8 Channel (Nova) or 12 Channel (Supernova) extended control mode with segment controls.
- "Pixel" : 4 Channel (Nova) or 8 Channel (Supernova) control mode with each segment controls as single dimmer.
- "Full Control" : 10 Channel (Nova) or 18 Channel (Supernova) full control mode with each segment controls with Dimmer & Flash Rate.
- "Easy-A" : 1 Channel control mode.
- "Easy-B" : 3 Channel control mode in Dimmer / Duration / Flash Rate.
- "Easy-C" : 4 Channel control mode in Dimmer / Duration / Flash Rate / Shutter Effect.
- "Easy Flood" : 1 Channel control mode as single Dimmer.

2.2 Dimmer Speed Setting: Set the dimming curve between the following:

- Smooth
- Linear

2.3 Cooling Mode: Set the fixture with different cooling mode by different fan speed (Supernova only).

- Auto
- Standard
- Silent
- High Power

2.4 Max Brightness Limit: Limit the maximum brightness in the following percentage if the fixture is being used in a smaller venue or does not require that much brightness.

- Off
- 50-100%

2.5 Temperature Unit: Set the temperature display unit in the following:

- Celsius
- Fahrenheit

2.6 No DMX: Set up the behavior when the DMX signal is removed or interrupted after 3 seconds:

- Hold: Fixture will keep the last value received.
- Shutter Off: Fixture will close the shutter off thus only cut off the light output.

2.7 Display Backlight: Set the LCD display backlight with the following parameter:

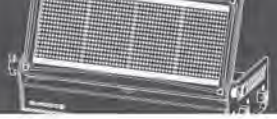
2.7.1 No Signal Flash:

- On: Backlight will flash when No DMX signal is received.
- Off: Backlight will NOT flash no matter DMX signal is received or not.

2.7.2 Intensity: Set the backlight brightness between 1-10

2.7.3 Backlight Off Time: Set the timeout that display backlight shall be dimmed down when not operating the fixture menu:

- Never: Display backlight will be always on.
- 1 Minute
- 3 Minutes
- 5 Minutes
- 10 Minutes
- 20 Minutes
- 30 Minutes
- 60 Minutes



Fixture menu navigations:

2.8 Lock: Set the fixture with or without password protection against unauthorized access to the fixture settings. Fixture set with Lock will go into lock mode as soon as the display backlight is dimmed off. On any press of the button will wake up the display backlight and then request a correct 4-digit password to grant access to the menu.

- Set Password: Set a new 4-digit password to the fixture. Press enter to go to next level then use "UP" and "DOWN" button to select from 0~9. Press "ENTER" button again to set up the next digit one by one until all 4 digit are set.
- Password On: Enable the password protection. (You must set the 4-digit password first.)
- Password Off: Disable the password protection, upon any press on the input buttons, you can access to all the menu settings without password protection.

IMPORTANT: *If you set the display "Backlight Off Time" to "Never", the fixture will never goes to "Sleep Mode" and thus the Lock function won't be effective.*

2.9 Boot mode: Set the fixture to boot directly into selected mode as the following:

- DMX: Controlled via DMX data from console.
- On Board Control: Load the previously saved value from "Stand-Alone / On Board Control / Save".

3. Stand-Alone: Using the built-in functions to perform lighting without the need of lighting console or DMX controllers.

3.1 Test Mode: Press "ENTER" in the test mode and select "Run" to perform a fixture self-testing program to examine if there are any malfunctioning of LEDs.

3.2 On-Board Controls: Use the fixture with built-in controls with the following, use "UP" and "DOWN" buttons to select in between, then again use "UP" and "DOWN" to set the desired value.

- Dimmer
- Shutter Duration
- Shutter Flash Rate
- Shutter Effects
- Pattern Effects
- Speed Patterns
- Save: Save current values into memory for OBD boot mode, or saving it as a static cue.
- Load: Load previously saved value in the memory.

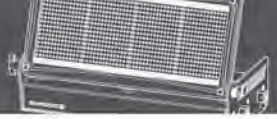
4. Fixture Service Menu:

4.1 Factory Default: Use default function to restore any previous changes set in the menu. Choose "Load" with ENTER and select "Yes" to confirm restoring back to default values.

5. Fixture Information: Use the "Information" function to read the fixture status for the following:

5.1 Fixture Time:

- Total: The total fixture running time since fixture is powered on. Unit displays in hour format.



Fixture menu navigations:

5.2 Fixture Temperature: Displays the temperature on the sensor board measured, will be displayed in Celsius or Fahrenheit according to your setting in temperature unit preference in fixture Personality.

5.2.1 Actual: Indicates the current temperature measured.

5.2.2 Highest: Indicates the highest temperature measured. Use UP and DOWN button to select "Reset" to clear current highest temperature record.

5.3 Firmware Version: Displays the current software build version.

5.4 Serial No.: Displays the serial number of the fixture.

DMX Control Modes

Mode Standard

Channel No	Value	Function
1		Dimmer 0 - 100%
	0 - 5	Blackout
	6 - 255	0 – 100%
2		Shutter Duration
	0 - 5	Default Duration set to 50ms when strobing and constant on when only dimming
		Duration short to long pulse
	6 - 250	
	251 - 255	Blinder Mode ON (max brightness when flooding)
3		Shutter Flash Rate
	0 - 5	No Flash / Blackout
	6 - 10	Single Flash
	11 - 250	0,5 – 25 Hz
	251 - 255	Open
4	0 - 255	Shutter Effects (similar to Helios, but without the constant strobe, only the random patterns)
5	0 - 255	Pattern effects (See Patter Effects table in Appendix)
6	0 - 255	Speed Patterns (Slow to Fast)

Mode Advanced

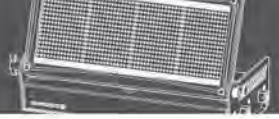
Channel No	Value	Function
1	0 - 5 6 - 255	Master Dimmer 0 - 100% Blackout 0 – 100%
2	0 - 5 6 - 250 251 - 255	Shutter Duration Default Duration set to 50ms when strobing and constant on when only dimming Duration short to long pulse Blinder Mode ON (max brightness when flooding)
3	0 - 5 6 - 10 11 - 250 251 - 255	Shutter Flash Rate No Flash / Blackout Single Flash 0,5 – 25 Hz Open
4	0 - 255	Shutter Effects (similar to Helios, but without the constant strobe, only the random patterns)
5	0 - 5 6 - 255	LED Segment 1 Dimmer Blackout 0 – 100%
6	0 - 5 6 - 255	LED Segment 2 Dimmer Blackout 0 – 100%
7	0 - 5 6 - 255	LED Segment 3 Dimmer Blackout 0 – 100%
8	0 - 5 6 - 255	LED Segment 4 Dimmer Blackout 0 – 100%
9*	0 - 5 6 - 255	LED Segment 5 Dimmer* Blackout 0 – 100%
10*	0 - 5 6 - 255	LED Segment 6 Dimmer* Blackout 0 – 100%
11*	0 - 5 6 - 255	LED Segment 7 Dimmer* Blackout 0 – 100%
12*	0 - 5 6 - 255	LED Segment 8 Dimmer* Blackout 0 – 100%

"*" Denotes only available for Supernova model.

Mode Pixel

Channel No	Value	Function
1	0 - 5 6 - 255	LED Segment 1 Dimmer Blackout 0 – 100%
2	0 - 5 6 - 255	LED Segment 2 Dimmer Blackout 0 – 100%
3	0 - 5 6 - 255	LED Segment 3 Dimmer Blackout 0 – 100%
4	0 - 5 6 - 255	LED Segment 4 Dimmer Blackout 0 – 100%
5*	0 - 5 6 - 255	LED Segment 5 Dimmer* Blackout 0 – 100%
6*	0 - 5 6 - 255	LED Segment 6 Dimmer* Blackout 0 – 100%
7*	0 - 5 6 - 255	LED Segment 7 Dimmer* Blackout 0 – 100%
8*	0 - 5 6 - 255	LED Segment 8 Dimmer* Blackout 0 – 100%

"*" Denotes only available for Supernova model.



Mode Full Control

Channel No	Value	Function
1		Master Dimmer 0 - 100%
	0 - 5	Blackout
	6 - 255	0 – 100%
2		Shutter Duration Default Duration set to 50ms when strobing and constant on when only dimming
	6 - 250	Duration short to long pulse
	251 - 255	Blinder Mode ON (max brightness when flooding)
3		LED Segment 1 Dimmer
	0 - 5	Blackout
	6 - 255	0 – 100%
4		LED Segment 1 Shutter Flash Rate
	0 - 5	No Flash / Blackout
	6 - 10	Single Flash
	11 - 250	0,5 – 25 Hz
	251 - 255	Open
5		LED Segment 2 Dimmer
	0 - 5	Blackout
	6 - 255	0 – 100%
6		LED Segment 2 Shutter Flash Rate
	0 - 5	No Flash / Blackout
	6 - 10	Single Flash
	11 - 250	0,5 – 25 Hz
	251 - 255	Open
7		LED Segment 3 Dimmer
	0 - 5	Blackout
	6 - 255	0 – 100%
8		LED Segment 3 Shutter Flash Rate
	0 - 5	No Flash / Blackout
	6 - 10	Single Flash
	11 - 250	0,5 – 25 Hz
	251 - 255	Open
9		LED Segment 4 Dimmer
	0 - 5	Blackout
	6 - 255	0 – 100%
10		LED Segment 4 Shutter Flash Rate
	0 - 5	No Flash / Blackout
	6 - 10	Single Flash
	11 - 250	0,5 – 25 Hz
	251 - 255	Open
11*		LED Segment 5 Dimmer*
	0 - 5	Blackout
	6 - 255	0 – 100%
12*		LED Segment 5 Shutter Flash Rate*
	0 - 5	No Flash / Blackout
	6 - 10	Single Flash
	11 - 250	0,5 – 25 Hz
	251 - 255	Open
13*		LED Segment 6 Dimmer*
	0 - 5	Blackout
	6 - 255	0 – 100%
14*		LED Segment 6 Shutter Flash Rate*
	0 - 5	No Flash / Blackout
	6 - 10	Single Flash
	11 - 250	0,5 – 25 Hz
	251 - 255	Open
15*		LED Segment 7 Dimmer*
	0 - 5	Blackout
	6 - 255	0 – 100%
16*		LED Segment 7 Shutter Flash Rate*
	0 - 5	No Flash / Blackout
	6 - 10	Single Flash
	11 - 250	0,5 – 25 Hz
	251 - 255	Open
17*		LED Segment 8 Dimmer*
	0 - 5	Blackout
	6 - 255	0 – 100%
18*		LED Segment 8 Shutter Flash Rate*
	0 - 5	No Flash / Blackout
	6 - 10	Single Flash
	11 - 250	0,5 – 25 Hz
	251 - 255	Open

"*" Denotes only available for Supernova model.

Easy Mode A

Channel No	Value	Function
1		Dimmer / Shutter
	0 – 5	Blackout
	6 – 250	Flash Rate 0,5 – 50 Hz
	251 - 255	Blinder effect full on

Easy Mode B

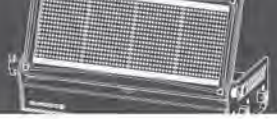
Channel No	Value	Function
1		Dimmer
	0 – 5	Blackout
	6 – 255	0 – 100%
2		Shutter Duration
	0 – 255	Duration 0 – 650ms
3		Shutter Flash Rate
	0 – 5	Single Flash
	6 – 255	0,5 – 50 Hz

Easy Mode C

Channel No	Value	Function
1		Dimmer
	0 – 5	Blackout
	6 – 255	0 – 100%
2		Shutter Duration
	0 – 255	Duration 0 – 650ms
3		Shutter Flash Rate
	0 – 5	Single Flash
	6 – 255	0,5 – 50 Hz
4		Shutter Effects
	0 - 5	No Effect
	6 - 42	Ramp up
	43 - 85	Ramp down
	86 - 128	Ramp up/down
	129 - 171	Random
	172 - 214	Thunderstorm
	215 - 255	Single Flash

Easy Mode Flood

Channel No	Value	Function
1		Dimmer
	0 – 5	Blackout
	6 – 255	0 – 100%



Technical Specification

Light source

- 448(Nova) / 896(Supernova) x 1.5 Watt Class white Osram® LED
- CRI min. 80
- Rated lumen output: 40.000 lm (Nova) / 80.000 lm (Supernova)
- High Efficiency with typ. 104 lm/W
- LED life expectancy: approx. 50.000 hours

Optical system

- Beam angle 120°

Functions

- High resolution dimmer 0-100%
- Selectable dimmer curves
- Strobe with variable speed (max. 25Hz)
- Pre-programmed random strobe & pulse effects
- Flood mode
- Blinder mode
- 4(Nova) / 8(Supernova) controllable LED zones
- Pattern effects

Thermal

- Maximum ambient temperature: 45° C (113° F)
- Intelligent fan module

Control and programming

- Setting & addressing: 2x16 characters LC display & 4 buttons
- Protocol: USITT DMX-512
- Control channels: 1, 3, 4, 6, 8, 10(Nova) / 1, 3, 4, 6, 8, 11, 18(Supernova)
- 8 DMX protocol modes
- Stand-alone mode
- Firmware update via DMX-line
- DMX In/Out: eventCon®
- Power In/Out: eventCon®

Electrical Specification

- Electronic switching power supply with auto-sensing
- Input voltage: 100-240V AC, 50/60 Hz
- Max. power consumption: 450W(Nova) / 900W(Supernova)

Mechanical Specification

- Ip65 rating
- Height (LED module up): 300 mm (11.8")
- Height (LED module down): 126 mm (4.96")
- Width: 488 mm (19.21")
- Depth: 242 mm (9.53")
- Weight: 9.5 kg / 20.94 lb (Nova) 10.5 kg / 23.15 lb- (Supernova)

Rigging

- Two M10 inserts
- Four 1/4th turn mounting inserts for two omega brackets
- Two attachment points for safety wire (handles)

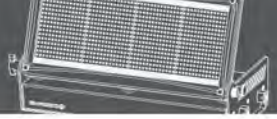
Included accessories

- Cable merger eventCon/Schuko + XLR-3

Trouble Shooting

Problems	Causes	Solutions
No Display / Not switched on	No power to fixture	Check AC mains power and connections.
		Inspect connections and cables. Correct poor connections. Repair or replace damaged cables.
		Check the power supply voltage.
Fixture does not respond to DMX correctly	Incorrect fixture DMX addressing	Check if the fixture is assigned to correct DMX address. (See Page16)
	Incorrect DMX mode	Check fixture is set to correct DMX mode. (See Page 16)
	Fault on data link	check for the data link is correctly linked from the DMX source if all cables are in good condition.
	Other device on DMX link defective.	Unplug XLR IN and OUT connectors and connect them directly together to bypass one fixture at a time until normal operation is regained.
	Data transmission lines should be terminated.	Insert termination plug in OUTPUT of the last fixture on the link.
LCD display works but no light outputs can be generated	Faulty DMX link	Run built-in test mode or OBD control mode to verify if LEDs are illuminated.
	Broken parts / wires / LEDs	Have fixtures serviced by Ehrgeiz service technicians.
Cooling Fan does not spin*.	Fixture is set to Auto cooling mode and fixture is still cool with no light output.	Set the cooling mode to other modes instead of "Auto". (See Page 16)
		Set the fixture to generate light output, the fan will start to work when temperature reached 35 deg. Celsius (95 deg. Fahrenheit).
	Broken Fans	Replace the cooling fan with specified IP rating grade from Ehrgeiz dealer only.
	Broken cable	Examine the external cable and replace the cooling fan unit with specified IP rating grade from Ehrgeiz dealer only.

"*" Denotes Supernova model only.



Maintenance:

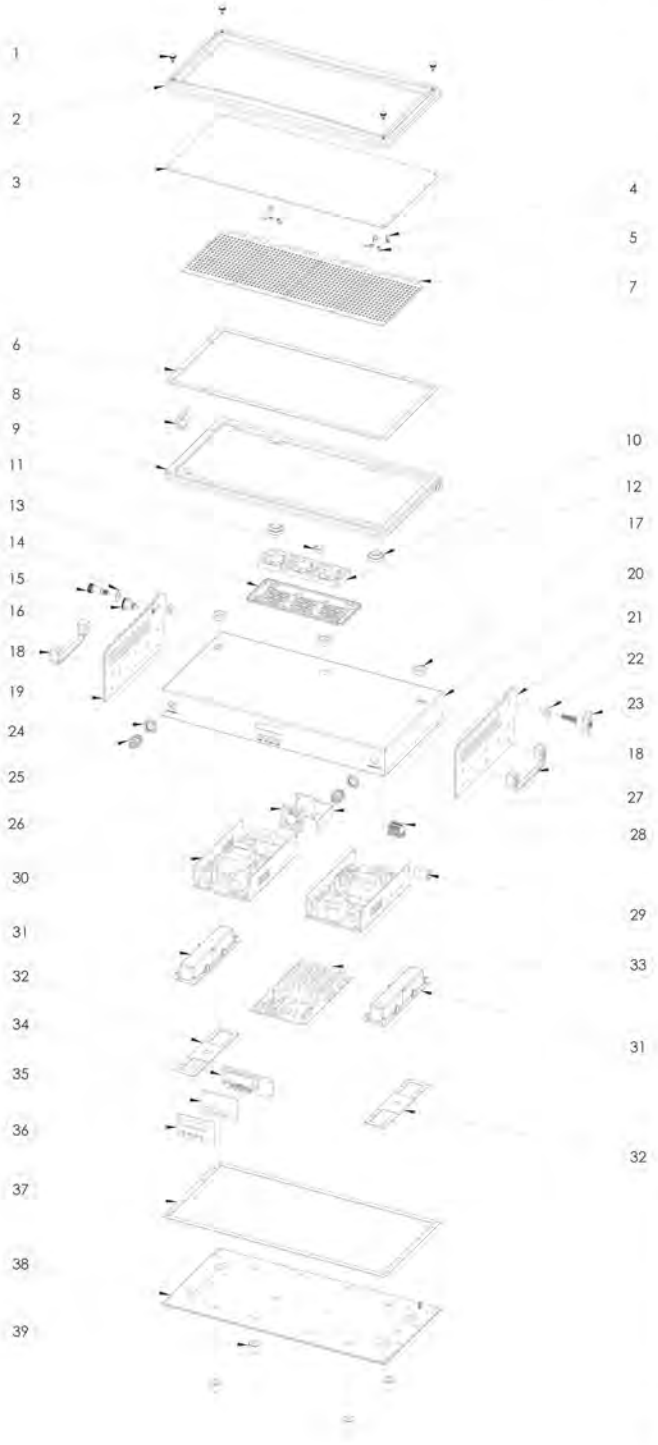
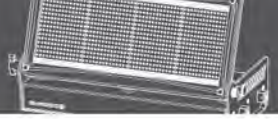


Figure 20

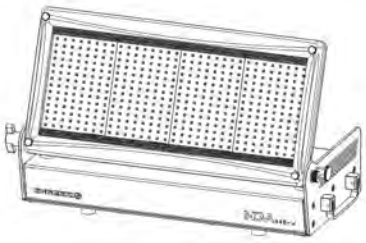
No.	English Description	Q'TY	Part No.
1	Diffusor Holder Screw	4	106252
2	Top Cover	1	111102
3	Top Protection Cover	1	111103
4	Cable Tie CU-80(2.5x80mm) Black	3	111105
5	Cable Tie Mount-ASUS-3(B)	4	111106
6	Top Waterproof Seal Ring	1	111107
7	LED Board-Supernova	4	105728
	LED Board-Nova	4	105725
8	Angular Indexing Plate	1	111108
9	Heat Sink-Supernova	1	111110
	Heat Sink-Nova	1	111110
10	Waterproof Air Ventilation Valve	2	111111
11	Cable Guide Loop-CC-3 (Black)	1	111112
12	Waterproof Brushless DC Fan (*Supernova)	3	111113
13	Fan Cover (*Supernova)	1	111114
14	Plate Type Spring (ø20xø10.3x1T)-Black Anodized	1	111115
15	Screw ø10x16(M8)-Black Anodized	1	111116
16	Indexed Plunger SGR822.1-0056	1	111117
17	Waterproof Cable Seal-T_14757 16	3	111118
18	Handle JYHUEI A-421 (Black)	2	111119
19	Side Plate-Left	1	111120
20	Fixture Base Housing	1	111121
21	Side Plate-Right	1	111122
22	Conversion Shaft-M8	1	111123
23	Rotary Knob-M8X1.25X30L-HB45M830	1	111124
24	Screw Nut-M16X1.5	2	111125
25	AGRO Waterproof PG Gland-(M16X1.5)	2	111126
26	Base Circulation Fan SUNON (40X40X10)	1	111127
27	Fan Bracket	1	111128
28	Terminal Block PM2.5N-04P	1	111129
29	Ferrit Core (RH 17.5x10.7x28.5)	1	111130
30	Supernova Power Supply	2	111131
	Nova Power Supply	1	
31	Waterproof Box	2	111132
32	Waterproof Box Seal Packing	2	111133
33	Supernova Control & Driver Board	1	105729
	Nova Control & Driver Board	1	105726
34	Supernova LC Display Board w/ Input Buttons	1	105730
	Nova LC Display Board w/ Input Buttons	1	105727
35	Transparent Window for Display	1	111134
36	Display Seal Packing	1	111135
37	Base Plate Seal Packing	1	111136
38	Bottom Housing Plate	1	111137
39	Fixture Standing Feet (FVE-413061-20X15XM6)	4	111138

Appendix



Nova 448 - W Animation Table

DMX 006 - 020 = Static
DMX 021 - 075 = Chase Animation (Works with Pattern Speed Table)
DMX 076 - 131 = Fade Animation (Works with Pattern Speed Table)



DMX			Animation Description
Chase	Fade	Steps	Name
021	(076)	4	Chase Bar Left to Right
022	(077)	4	Chase Bar Right to Left
023	(078)	4	Chase Bar Shuffle Left to Right
024	(079)	4	Chase Bar Shuffle Right to Left
025	(080)	2	Jump Square Left to Right
026	(081)	2	Jump Square Right to Left
027	(082)	2	Alternating Vertical Bars Left
028	(083)	2	Alternating Vertical Bars Right
029	(084)	2	Outer Inner Jump
030	(085)	2	Inner Outer Jump
031	(086)	3	Chase Square Left to Right
032	(087)	3	Chase Square Right to Left
033	(088)	4	Chase Invert Bar Left to Right
034	(089)	4	Chase Invert Bar Right to Left
035	(090)	2	Jump Invert Bar Left / Right
036	(091)	2	Jump Invert Bar Right / Left
037	(092)	2	Jump Invert Bar Inner Left / Inner Right
038	(093)	2	Jump Invert Bar Inner Right / Inner Left
039	(094)	5	Fill up Left to Right
040	(095)	5	Empty to Left
041	(096)	5	Fill up Squares Right to Left
042	(097)	5	Empty Squares to Right
043	(098)	5	Fill up Inner Right to Left
044	(099)	5	Empty to Inner Right
045	(100)	5	Fill up Right to Left
046	(101)	5	Chase Square Through Left to Right
047	(102)	5	Chase Square Through Right to Left
048	(103)	7	Chase 3 - Bars Through Left to Right

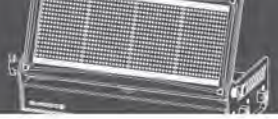
DMX			Animation Description
Chase	Fade	Steps	Name
049	(104)	7	Chase 3 - Bars Through Right to Left
050	(105)	5	Chase Invert Bar with Full-on Left to Right
051	(106)	5	Chase Invert Bar with Full-on Right to Left
052	(107)	6	Chase Invert Square with Full-on Left to Right
053	(108)	6	Chase Invert Square with Full-on Right to Left
054	(109)	7	Chase Invert 3 - Bars Through with Full-on Left to Right
055	(110)	7	Chase Invert 3 - Bar Through with Full-on Right to Left
056	(111)	8	Fill up from Left and Empty to Left
057	(112)	8	Fill up from Right and Empty to Right
058	(113)	8	Empty to Left and Fill up from Left
059	(114)	8	Empty to Right and Fill up from Right
060	(115)	8	Fill up from Left and Empty to Right
061	(116)	8	Fill up from Right and Empty to Left
062	(117)	8	Empty to Right and Fill up from Left
063	(118)	8	Empty to Left and Fill up from Right
064	(119)	11	Fill up Bars from Left
065	(120)	11	Empty Bars to Left
066	(121)	11	Fill up Bars from Right
067	(122)	11	Empty Bars to Right
068	(123)	20	Fill up Bars from Left and Empty to Left
069	(124)	20	Empty Bars to Left and Fill up from Left
070	(125)	20	Fill up Bars from Right and Empty to Right
071	(126)	20	Empty Bars to Right and Fill up from Right
072	(127)	20	Fill up Bars from Left and Empty to Right
073	(128)	20	Fill up Bars from Right and Empty to Left
074	(129)	20	Empty Bars to Left and Fill up from Right
075	(130)	20	Empty Bars to Right and Fill up from Left

Supernova 896 - W Animation Table

DMX 006 - 039 = Static
DMX 040 - 135 = Chase Animation (Works with Pattern Speed Table)
DMX 136 - 231 = Fade Animation (Works with Pattern Speed Table)

DMX			Animation Description
Chase	Fade	Steps	Name
040	(136)	8	Dot Chase Top Left to Lower Right
041	(137)	8	Dot Chase Lower Right to Top Left
042	(138)	8	Dot Jump Top Left to Lower Right
043	(139)	8	Dot Jump Lower Left to Top Right
044	(140)	8	Dot Jump Lower Right to Top Left
045	(141)	8	Dot Jump Top Right to Lower Left
046	(142)	8	Dot Snake Top Left to Top Right
047	(143)	8	Dot Snake Lower Left to Lower Right
048	(144)	8	Dot Snake Top Tight to Top Left
049	(145)	8	Dot Snake Lower Right to Lower Left
050	(146)	4	Bar Chase Left to Right
051	(147)	4	Bar Chase Right to Left
052	(148)	4	Bar Circle Top Left to Top Right
053	(149)	4	Bar Circle Top Left to Lower Left
054	(150)	4	Bar Jump Top Left to Lower Right
055	(151)	4	Bar Circle Top Right to Top Left
056	(152)	4	Bar Circle Lower Left to Top Left
057	(153)	4	Bar Jump Lower Right to Top Left
058	(154)	4	Bar Circle Lower Left to Lower Right
059	(155)	4	Bar Jump Lower Left to Top Right
060	(156)	4	Bar Circle Lower Right to Lower Left
061	(157)	4	Bar Jump Top Left to Lower Left
062	(158)	4	Opposing Dots Chase Top Left / Lower Right
063	(159)	6	Opposing Dots Chase with Return Top Left / Lower Right
064	(160)	6	Opposing Dots Chase with Return Lower Left / Top Right
065	(161)	5	Bar Chase with Return Left
066	(162)	6	Bar Chase with Return Right
067	(163)	4	Opposing Dots Chase Lower Left / Top Right
068	(164)	2	Full Bar Jump Top / Low
069	(165)	2	Full Bar Jump Low / Top

DMX			Animation Description
Chase	Fade	Steps	Name
070	(166)	2	Chessboard Bars Jump Top Left / Lower Right
071	(167)	2	Chessboard Bars Jump Lower Left / Top Right
072	(168)	2	Inner Outer Jump
073	(169)	2	Outer Inner Jump
074	(170)	2	Chessboard Dots Jump Top Left
075	(171)	2	Chessboard Dots Jump Lower Left
076	(172)	2	Rope Jump Low to Top
077	(173)	2	Rope Jump Top to Low
078	(174)	2	Alternating Vertical Bars Left
079	(175)	2	Alternating Vertical Bars Right
080	(176)	9	Fill Up from Top Left
081	(177)	9	Empty to Top Left
082	(178)	9	Fill Up from Lower Right
083	(179)	9	Empty to Lower Right
084	(180)	5	Fill Up from Left
085	(181)	5	Empty to Left
086	(182)	5	Fill Up from Right
087	(183)	5	Empty to Right
088	(184)	5	Fill up Down from Top Left
089	(185)	5	Empty Up to Top Left
090	(186)	5	Fill up Right from Top Left
091	(187)	5	Empty Left to Top Left
092	(188)	5	Fill Up Circle CW from Lower Left
093	(189)	5	Empty Circle CCW to Lower Left
094	(190)	5	Fill Up Circle CCW from Lower Left
095	(191)	5	Empty Circle CW to Lower Left
096	(192)	5	Fill Up Opposing Lines Top Left / Lower Right
097	(193)	5	Empty Opposing Lines to Top Left / Lower Right
098	(194)	5	Fill Up Opposing Lines Top Right / Lower Left
099	(195)	5	Empty Opposing Lines to Top Right / Lower Left



Supernova 896 - W Animation Table

DMX 006 - 039 = Static
DMX 040 - 135 = Chase Animation (Works with Pattern Speed Table)
DMX 136 - 231 = Fade Animation (Works with Pattern Speed Table)

DMX		Animation Description	
Chase	Fade	Steps	Name
100	(196)	5	Fill Up 2 Cubes Circle CCW Top Left
101	(197)	5	Empty 2 Cubes Circle CW to Top Left
102	(198)	5	Fill Up 2 Cubes Circle CW Lower Left
103	(199)	5	Empty 2 Cubes Circle CCW to Lower Left
104	(200)	3	Fill Up Bars Outer to inner
105	(201)	3	Empty Bars to Outer
106	(202)	3	Fill up Bars inner to Outer
107	(203)	3	Empty Bars to inner
108	(204)	3	Fill Up Line Top
109	(205)	3	Empty Line to Top
110	(206)	3	Fill Up Line Bottom
111	(207)	3	Empty Line to Bottom
112	(208)	37	Fill Up Dots Chase Top Left
113	(209)	37	Empty Dots Chase to Top Left
114	(210)	37	Fill Up Dots Chase Lower Right
115	(211)	37	Empty Dots Chase to Lower Right
116	(212)	37	Fill up Dots Switch Top Left
117	(213)	37	Emtpy Dots Switch to Top Left
118	(214)	11	Fill Up Bar Chase Left
119	(215)	11	Empty Bar Chase to Left
120	(216)	11	Fill Up Bar Chase Right
121	(217)	11	Empty Bar Chase to Right
122	(218)	6	Opposing 2-Dot-Line Top Left / Lower Right
123	(219)	6	Opposing 2-Dot-Line Top Right / Lower Left
124	(220)	7	Opposing 3-Dot-Line Top Left / Lower Right
125	(221)	7	Opposing 3-Dot-Line Top Right / Lower Left
126	(222)	8	Opposing 4-Dot-Line Top Left / Lower Right
127	(223)	8	Opposing 4-Dot-Line Top Right / Lower Left
128	(224)	9	Fill Up Pseudo-Random Dots 1

DMX		Animation Description	
Chase	Fade	Steps	Name
129	(225)	9	Empty Pseudo-Random Dots 1
130	(226)	9	Fill Up Pseudo-Random Dots 2
131	(227)	9	Empty Pseudo-Random Dots 2
132	(228)	9	Fill Up Pseudo-Random Dots 3
133	(229)	9	Empty Pseudo-Random Dots 3
134	(230)	9	Fill Up Pseudo-Random Dots 4
135	(231)	9	Empty Pseudo-Random Dots 4

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