SOLARIS Mozart FLR Party Light User Manual

SOLARIS®

Mozart™ FLR

USER MANUAL

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Introduction

PRODUCT OVERVIEW

The Solaris Mozart FLR, the successor to the Solaris Mozart, is one of the smallest DMX512 controlled LED fixtures on the market. Boasting vibrant colors with CreeTM LEDs, the Mozart FLR demonstrates it's powerful performance in a versatile size. Modes include 1, 4, or 16 pixels (3 to 64 DMX channels) per fixture.
The ProPlex Mozart Drive (10-way max.) in a rugged ProPlex enclosure is designed for portable use or truss mounting with yoke included. Coming soon is the ProPlex Mozart Drive Rackmount 2U (40-way max.) which supports DMX, RDM, ArtNet, and sACN protocols. It features a large front-panel touchscreen and a dedicated PC configuration utility.

- Great for low-weight load-bearing structures and surfaces.
- Rain and dust resistant IP65 enclosure use in all environments!
- Single cable, simple power-data connections, daisy-chain or split location flexibility.
- Extremely compact and lightweight 4.7 x 4.7 inches. Only 2.2 lb.
- Easy remote addressing and mode switching via RDM

UNPACKING INSTRUCTIONS

Upon receipt of the fixture, carefully unpack the carton and check the contents to ensure that all parts are present and in good condition. Notify the shipper immediately and retain the packing material for inspection if any parts appear to be damaged from shipping or if the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

POWER REQUIREMENTS

Before powering the unit, make sure the line voltage is within the range of accepted voltages. This fixture accommodates 100-240VAC, 50/60Hz. All fixtures must be powered directly from a switched circuit and cannot be operated with a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0-100% switch.
When powered up, Solaris performs a preprogrammed internal test. On initial power-up, the factory default DMX address appears on the display screen and Solaris is ready for operation. After the initial power-up, the last saved DMX address will appear.

FREQUENCY SETTINGS

Depending on the location, change the Default Frequency setting to match the mains power (e.g., US and Canada should be set at 60Hz). Proper frequency settings will ensure a minimum number of visible artifacts when using Solaris on camera.

SAFETY INSTRUCTIONS

Please read these instructions carefully. This user guide contains important information about the installation, usage and maintenance of this product.

- Please keep this User Guide for future reference. If the unit is sold to another user, make sure they also receive this instruction booklet.
- Ensure fixture is connected to the proper voltage, and that line voltage is not higher than that stated on the fixture.
- Make sure there are no flammable materials close to the unit while operating.
- Always disconnect from the power source before servicing or fuse replacement. Always use the fuse specified in this manual.
- Always use a safety cable when hanging fixtures overhead.
- The maximum ambient temperature (Ta) is 40°C (104°F). Do not operate fixtures at temperatures above this rating.
- In the event of a serious operating problem, stop using the unit immediately. Repairs must be carried out by trained, authorized personnel. Contact the nearest authorized technical assistance center. Only OEM spare parts should be used.
- Do not connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source during operation.

Caution! There are no user-serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your distributor.

Disconnect the power cord before replacing a fuse and always replace it with the same type of fuse.

FUSE REPLACEMENT

The Mozart 10-way PSU uses a 4A, 250V, slow-blow, 5x20mm (0.2×0.8 in.) fuse. Mozart fixtures have no fuse. To replace the fuse:

1. With a screwdriver turn the fuse cap counter-clockwise to remove the fuse cap with fuse.
2. Replace fuse attached to fuse cap.
3. Reinsert fuse cap with a new fuse and tighten clockwise.

MOUNTING/RIGGING PORTABLE MOUNT 10-WAY PSU

Orientation
The Mozart Portable Mount 10-way PSU may be mounted on a truss or pipe, in any position, using the yoke supplied with the unit. Always make sure there is adequate room for ventilation.

Rigging Always consult a certified rigging engineer before suspending any fixture overhead!
Use ProBurger® couplers or equivalent C- or O-type clamps for attaching to truss. After establishing the desired position, retighten both knobs.

- Always use safety cables!
- When selecting an installation location, consider routine maintenance.
- Never mount Mini enclosure where it will be exposed to moisture, high humidity, extreme temperatures, or restricted ventilation.

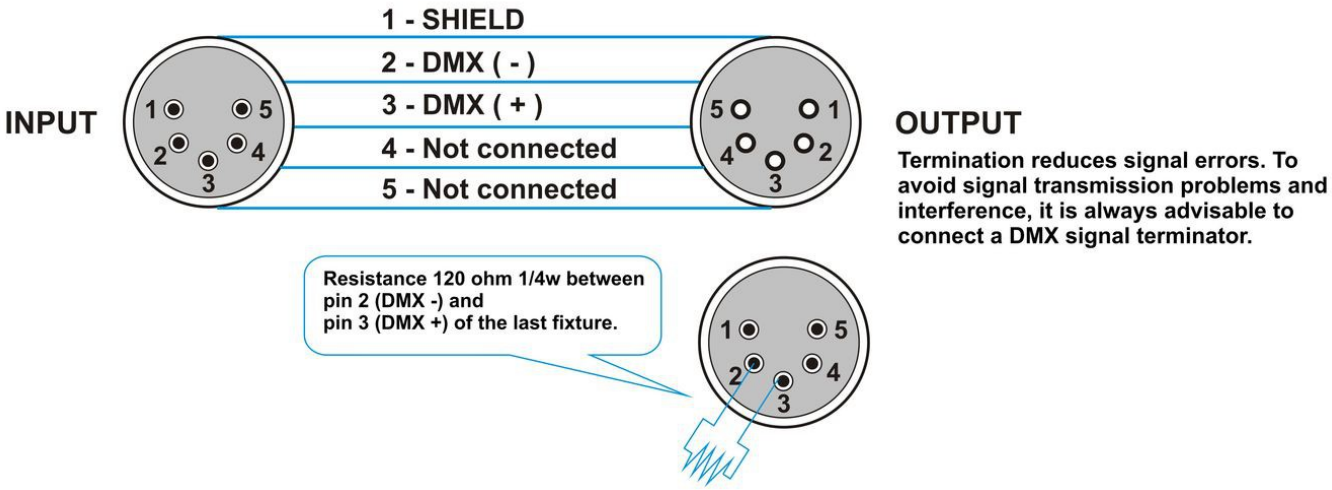
Setup

A DMX data link is needed to run light shows of one or more fixtures using a DMX-512 lighting console. The combined number of channels required by all of the fixtures on the DMX data link will determine the number of fixtures the DMX data link can support.

Important: Fixtures on a DMX data link must be daisy-chained in one single line. To comply with the EIA485 standard, no more than 32 devices should be connected on one data link. Connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.
Maximum recommended DMX data link distance between fixtures: 300 meters (984 ft.)

DMX CONNECTOR CONFIGURATION FOR MOZART 10-WAY PSU

Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohmmeter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

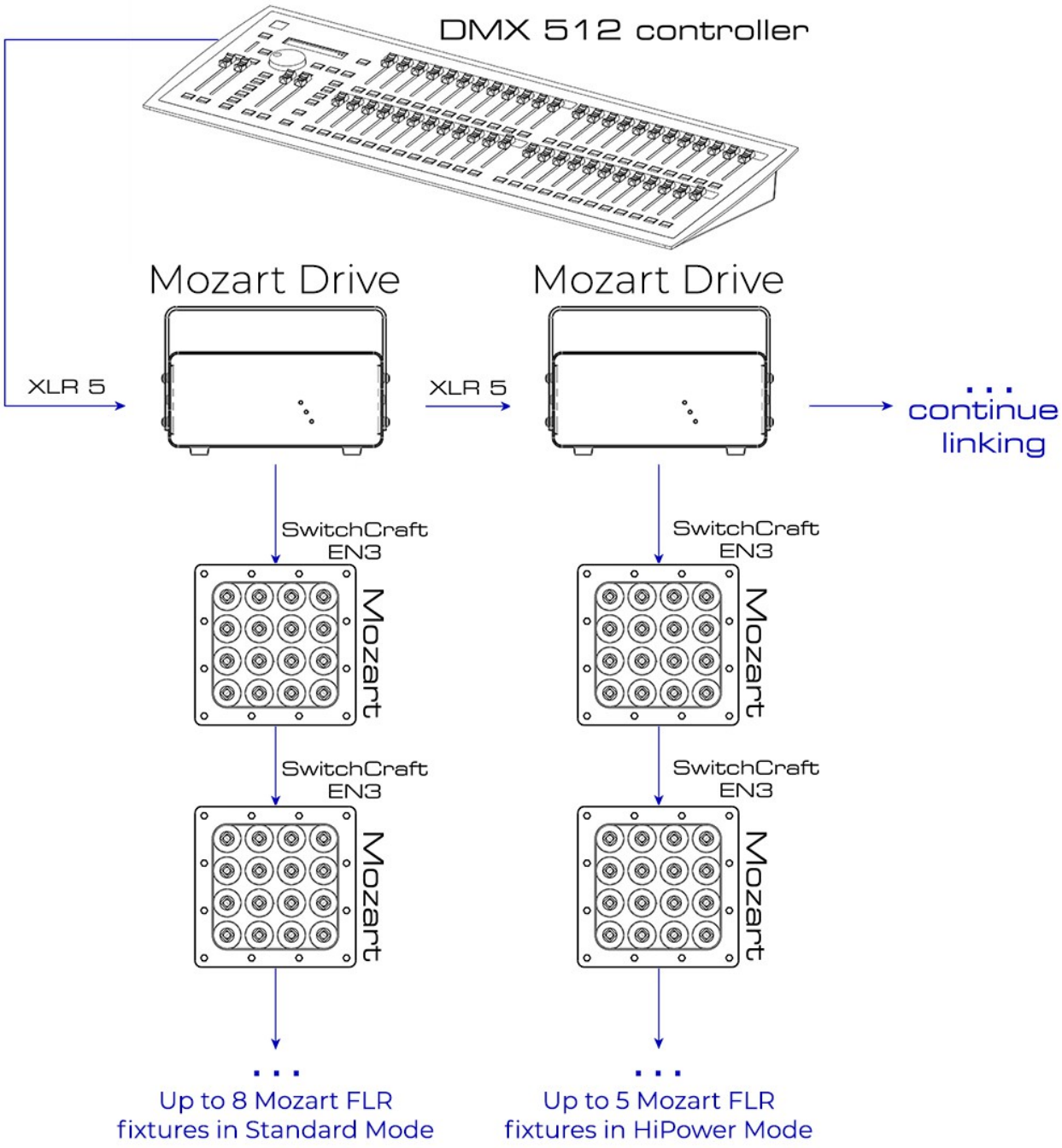


Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohmmeter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

SETTING UP A DMX SERIAL LINK

1. Connect the (male) 5-pin connector side of the DMX cable to the output (female) 5-pin connector of the DMX console.
2. Connect the opposite end of the cable (female) to the input connector of the Mozart PSU consisting of a (male) 5-pin connector.
3. Proceed to connect from the PSU output as stated above to the input of the following PSU and so on.
4. Continue linking until the last fixture is connected in your DMX chain.

FIXTURE LINKING



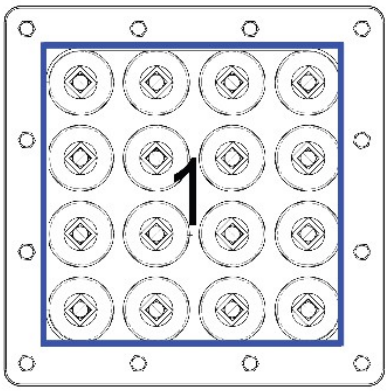
Operating instructions

PIXEL MAP

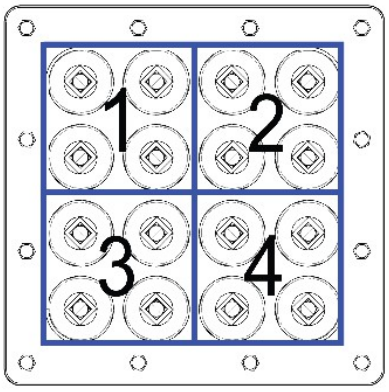
Mozart consists of 16 RGBW 1 chip engines which are located in 4 rows and 4 columns.
There are 6 control modes for Solaris Mozart fixtures:

1. As RGB 1-pixel unit (3 channel mode)
2. As RGBW 1-pixel unit (4 channel mode)
3. As RGB 4-pixels unit (12 channel mode)
4. As RGBW 4-pixels unit (16 channel mode)
5. As RGB 16-pixel unit (48 channel mode)
6. As RGBW 16-pixel unit (64 channel mode)

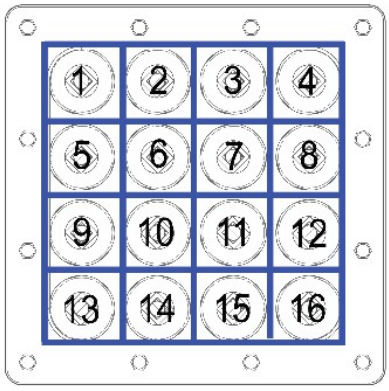
You can only change these modes using the RDM protocol and an RDM enabled controller.



1 pixel



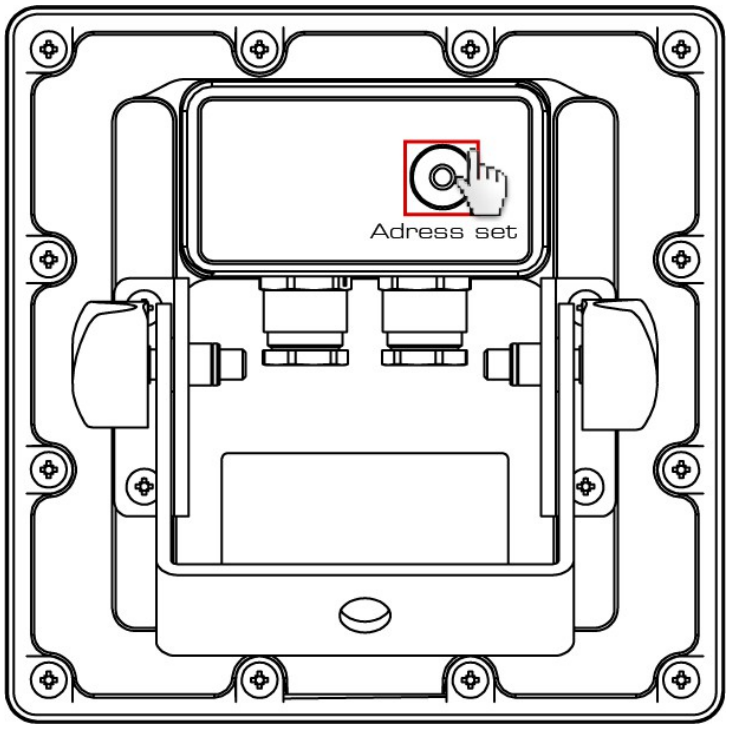
4 pixel



16 pixel

INTERNAL ADDRESS SET

The Mozart Drive PortableMount must be addressed via RDM. To set the address for Mozart fixtures, first set the starting address for the Mozart Drive PortableMount. To set the fixture address of Mozart fixtures (1-8), follow these steps: Press and hold <Address set> button located at the back of the Mozart.



The current internal addressing number will appear (1-8). To change this number, press <Address set> button. The next addressing number will appear. Repeat until the desired fixture number is shown on the tile

Using a starting address of DMX 1 on the 10-way PSU, this chart is an example of the Mozart FLR fixture addresses.

DMX CH		FIXTURE ID		
		1 PIX	4 PIX	16 PIX
1 2 3	R G B	1	1	1
4 5 6	R G B	2		
7 8 9	R G B	3		
10 11 12	R G B	4		
13 14 15	R G B	5	2	
16 17 18	R G B	6		
19 20 21	R G B	7		
22 23 24	R G B	8		
25 26 27	R G B	1	3	
28 29 30	R G B	2		
31 32 33	R G B	3		
34 35 36	R G B	4		
37 38 39	R G B	5	4	
40 41 42	R G B	6		
43 44 45	R G B	7		
46 47 48	R G B	8		

...continue as necessary

DMX CH		FIXTURE ID		
		1 PIX	4 PIX	16 PIX
1 2 3 4	R G B W	1	1	1
5 6 7 8	R G B W	2		
9 10 11 12	R G B W	3		
13 14 15 16	R G B W	4		
17 18 19 20	R G B W	5	2	
21 22 23 24	R G B W	6		
25 26 27 28	R G B W	7		
29 30 31 32	R G B W	8		
33 34 35 36	R G B W	1	3	
37 38 39 40	R G B W	2		
41 42 43 44	R G B W	3		
45 46 47 48	R G B W	4		
49 50 51 52	R G B w	5	4	
53 54 55 56	R G B W	6		
57 58 59 60	R G B W	7		
61 62 63 64	R G B W	8		

Appendix

RDM FUNCTIONALITY

Mozart power supplies have RDM Functionality. Below are the RDM functions available in these devices. TMB has many options for RDM control of your devices: ProPlex RDMigo and IQ RDM Manager Software; ProPlex Striker; and ProPlex MasterFade. Additionally, ProPlex RDM Opto-Splitters and the ProPlex IQ product range offer many means of RDM over DMX data distribution.

Main	Display	Voltage (V)	Current (A)
Mode	Display invert	Present value	Present value
DMX address	Display level	Highest value	Highest value
RDM version		Lowest value	Lowest value
Software version			

GENERAL MAINTENANCE

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build-up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to disconnect power to the fixture before conducting maintenance.

Unplug the fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components. Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint-free cotton cloth or lens tissue. Apply the solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint.

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. Always dry the parts carefully. Clean the external optics at least every 20 days. Clean the internal optics at least every 30 to 60 days.

LIMITED WARRANTY

Solaris LED fixtures (the Product) are warranted by TMB against defective materials or workmanship for a period of two (2) years from the date of original sale by TMB.
TMB's warranty shall be restricted to the repair or replacement of any part that proves to be defective and for which a claim is submitted to TMB before the expiration of the applicable warranty periods.
This Limited Warranty is void if the defects of the Product are the result of

- Opening the casing, repair, or adjustment by anyone other than TMB or persons specifically authorized by TMB
- Accident, physical abuse, mishandling, or misapplication of the product.
- Damage due to lightning, earthquake, flood, terrorism, war, or act of God.

TMB will not assume responsibility for any labor expended, or materials used, to replace and/or repair the Product without TMB's prior written authorization. Any repair of the Product in the field, and any associated labor charges, must be authorized in advance by TMB. Freight costs on warranty repairs are split 50/50: Customer pays to ship the defective product to TMB; TMB pays to ship repaired product, ground freight, back to Customer.

This warranty DOES NOT cover consequential damages or costs of any kind.

A Return Merchandise Authorization (RMA) Number must be obtained from TMB prior to the return of any defective merchandise for warranty or non-warranty repair. For all repairs please contact TMB Tech Support Repair using the contact information below or email **TechSupportRepairNA@tmb.com**.
527 Park Ave., San Fernando, CA 91340
Tel: +1 818.899.8818
Fax: +1 818.899.8813

tmb-info@tmb.com
www.tmb.com

RETURN PROCEDURE

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. The package must be clearly labeled with a Return Merchandise Authorization Number (RMA #). Products returned without an RMA # will be refused. Please contact TMB and request RMA # prior to shipping the fixture. Be prepared to provide the model number, serial number, and a brief description of the cause for the return. Be sure to properly pack fixtures, any shipping damage resulting from inadequate packaging is the customer's responsibility. TMB reserves the right to use its own discretion to repair or replace the product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA #, please include the following information on a piece of paper inside the box:

1. Your name
2. Your address
3. Your phone number
4. The RMA #
5. A brief description of the symptoms

MOZART FLR FIXTURE – TECHNICAL SPECIFICATION

DIMENSIONS / WEIGHT

Length …….. 4.7 in / 120 mm
Width ……..1.9 in / 49 mm
Height …….. 4.7 in / 120 mm
Weight ……..2.20 lb / 997.90 g

POWER

Operating voltage …….. 48V DC
Power consumption …….. 25W @ full load
DMX/ power connectors……Amphenol Sensor M12

LIGHT SOURCE

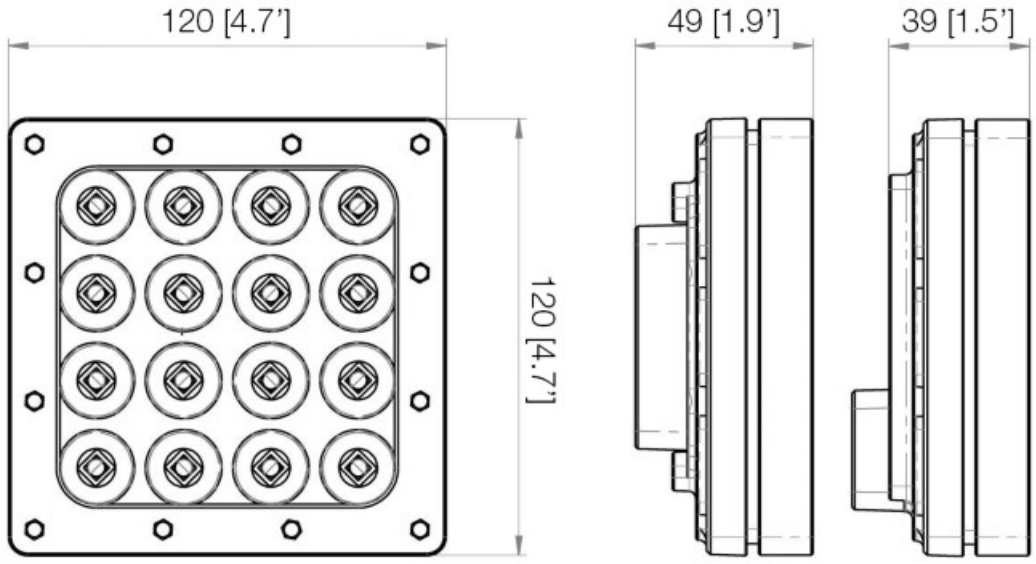
LEDs ……..16 Cree LMC-E LEDs
Colors……RGBW
Beam spread ……36°
Refresh rate ……1,200Hz
Average Color Wavelength …… red: 620-630 nm

THERMAL

Max ambient temperature …… +40°C
Min. ambient temperature …….. -20°C
Cooling ……Convection
IP rating …….. IP 54

CONTROL & PROGRAMMING

Control …… DMX-512A with RDM
Color dimming control ……8 bit
Pixel modes ……..1, 4, 16
DMX Channels ……..3, 4 12, 16, 48, or 64 (based on selected pixel mode)



DIMENSIONS / WEIGHT

Depth …… 10.72 in / 272.3 mm
Width (with yoke) ……7.95 in / 202 mm
Height (with yoke) …….. 5.33 in / 135.4 mm
Weight …… 9.85 lb / 4.46 kg

POWER

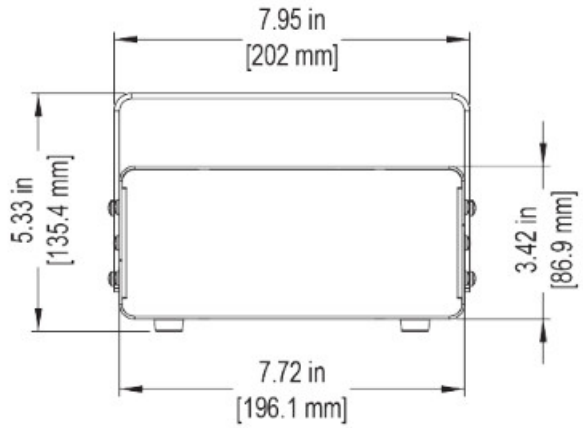
AC power IN ……. 100-240V
AC power IN connector ……..user-specified
Power consumption ……..200W max. (with 10 Mozarts)
DMX/ power OUT connector ……. Amphenol Sensor M12
DC power OUT …… 24V

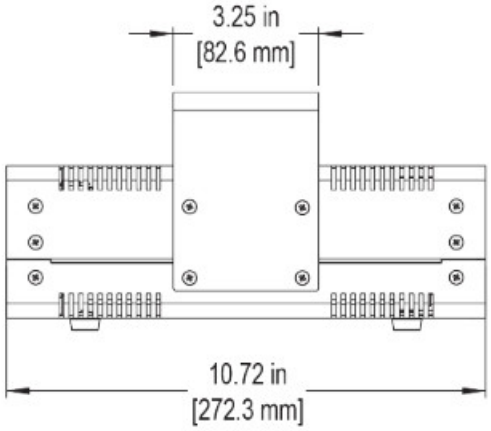
THERMAL

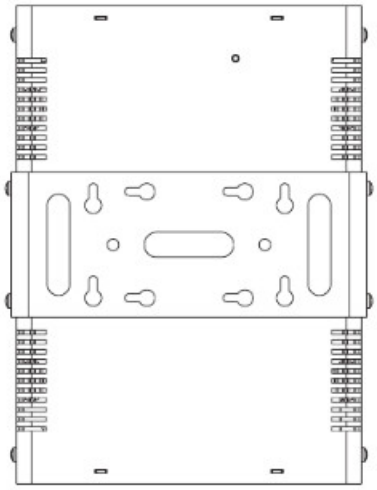
Operating temperature …… -4° to +104°F / -20° to +40°C
Cooling …… Convection
IP rating …… IP20

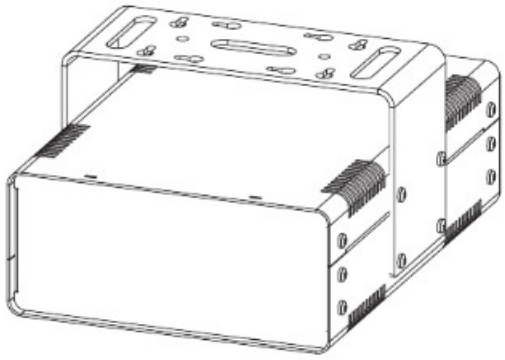
CONTROL & PROGRAMMING

Control ……DMX-512 with RDM
DMX Channels …….. 3, 12, 48
DMX input …….. locking 5-pin XLR male socket
DMX output for further linking …….. locking 5-pin XLR female socket
DMX output for Mozart …… 10 max.









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Documents / Resources

	SOLARIS Mozart FLR Party Light [pdf] User Manual Mozart FLR Party Light, Mozart FLR, Party Light