SOLARIS Mozart Party Light User Manual

USER MANUAL

Contents

Introduction

PRODUCT OVERVIEW

The Solaris Mozart is an extremely versatile, creative pixel-mapping and decorative lighting tool that can be placed almost anywhere. Blazing fast (38,400Hz), with Cree ™
LEDs, Mozarts are ideal for high-speed photography and video. Modes include 1, 4, or 16 pixels (3 to 48 DMX channels) per fixture.
The ProPlex Mozart Drive PortableMount (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.
- Approx. 11,000 NITS! Brighter than nearly all outdoor LED walls!
- Rain and dust resistant IP65 enclosure – use in all environments!
- Ultra-high refresh rate – 38,400Hz! Great for high-speed photography and videography.
- Single cable, simple power-data connections, daisy-chain, or split–location flexibility.
- Extremely compact and lightweight – 4.7 x 4.7 inches. Only 1 ¼ 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 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.

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 fixture 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 with the same type fuse. ⚠
FUSE REPLACEMENT
The Mozart Drive PortableMount uses a 4A, 250V, slow-blow, 5x20mm (0.2×0.8 in.) fuse. Mozart fixtures have no fuse. To replace fuse:

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

MOUNTING/RIGGING – MOZART DRIVE PORTABLEMOUNT
Orientation
The Mozart Drive PortableMount may be mounted on 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.
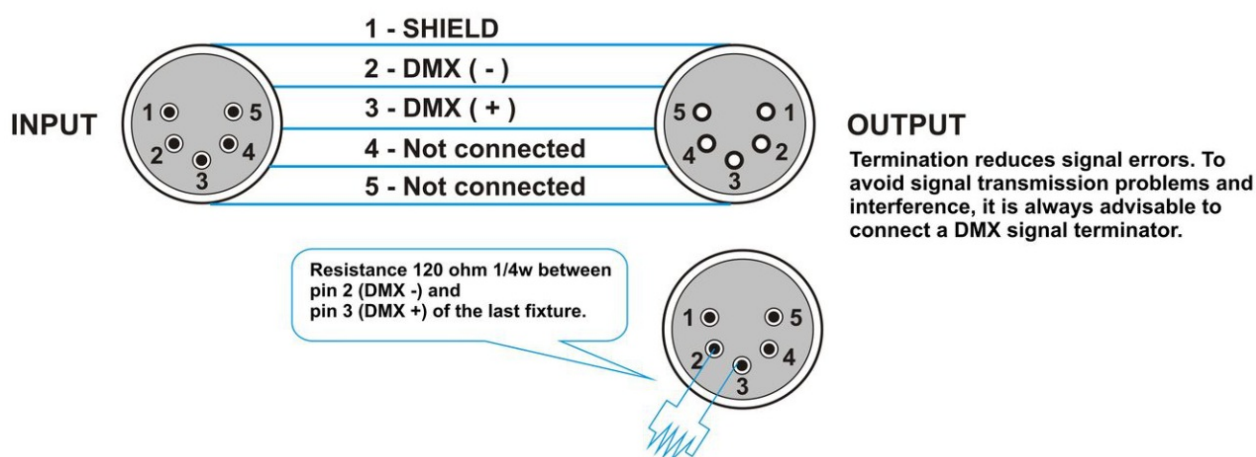
- Always use safety cables!

- 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.

2. 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 DRIVE

INPUT

1 - SHIELD
2 - DMX (-)
3 - DMX (+)
4 - Not connected
5 - Not connected

OUTPUT

Termination reduces signal errors. To avoid signal transmission problems and interference, it is always advisable to connect a DMX signal terminator.

Resistance 120 ohm 1/4w between pin 2 (DMX -) and pin 3 (DMX +) of the last fixture.

⚠ 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 Drive consisting of a (male) 5-pin connector.

3. Proceed to connect from the Mozart Drive output as stated above to the input of the following Drive, etc.

4. Continue linking until the last fixture is conected in your DMX chain.
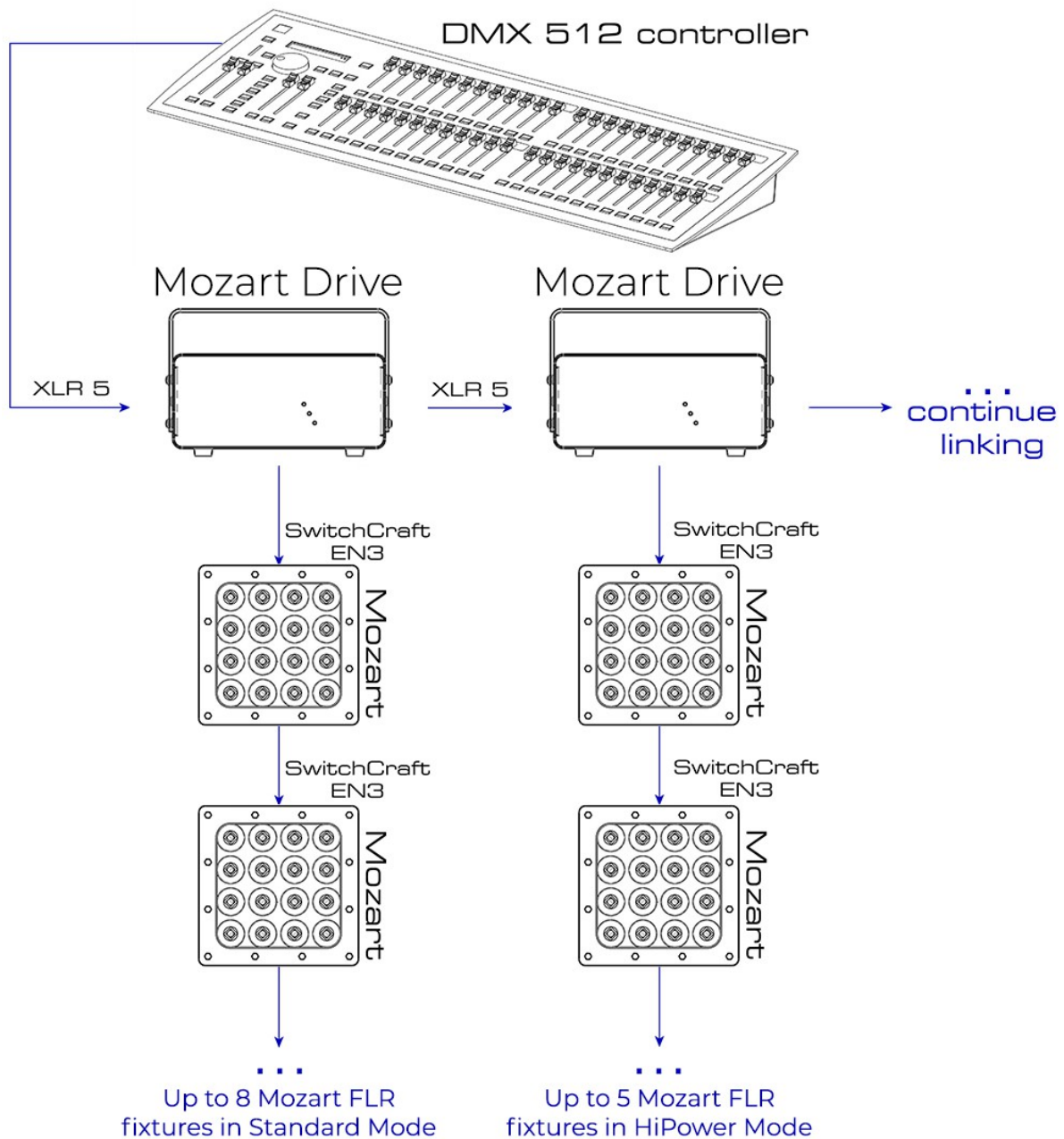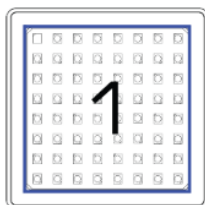

Operating instructions

PIXEL MAP
Mozart consists out of 64 RGB 1 chip engines which are located in 8 rows and 8 columns.
There are 3 control modes for Solaris Mozart fixtures:
1) As 1 pixel unit (3 channel mode)
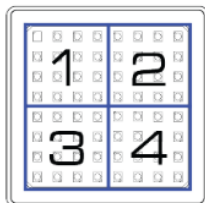2) As 4 pixel unit (12 channel mode)
3) As 16 pixel unit (48 channel mode)
You can only change these modes using the RDM protocol and an RDM enabled controller.
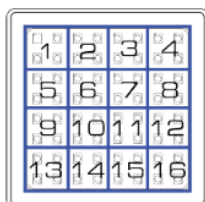
- **RDM Mode 1** — 1 pixel (3Ch)
- **RDM Mode 2** — 4 pixel (12Ch)
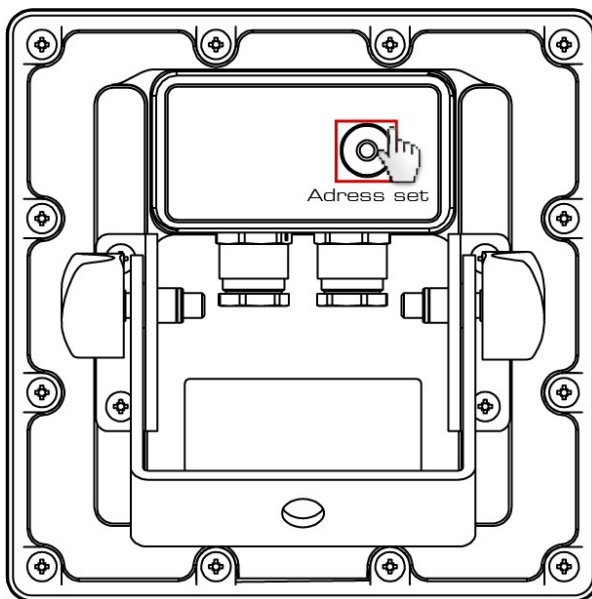- **RDM Mode 3** — 16 pixel (48Ch)

INTERNAL ADDRESS SET

The Mozart Drive must be addressed via RDM.
To set the address for Mozart fixtures, first set the starting address for the Mozart 10-way power supply .
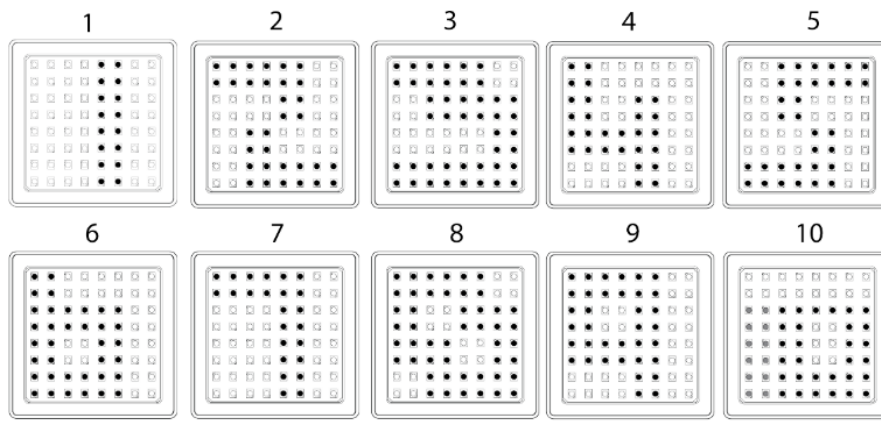To set the fixture address of Mozart fixtures (1-10), follow these steps:
Press and hold <Address set> button located at the back of the Mozart.

The current internal addressing number will appear (1-10).
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 Rendering of numbers from 1-10 shown on Mozarts LEDs:

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

RDM

Using RDM you also have an option to locate the device. This will force selected Mozart to strobe its sequence umber in white.
SENSORS
Mozart has 3 sensors:

- Temperature sensor
- Bus current sensor
- Main voltage sensor

Bus current and main voltage values can be seen only using RDM compliant lighting control devices (for example, ProPlex ® MasterFade).
To see the current temperature of Mozart, press the "Address set" button located at the back of the fixture.
If Mozart's temperature is below or equal 40°C (104°F), one green pixel (4 LEDs) will appear as shown:
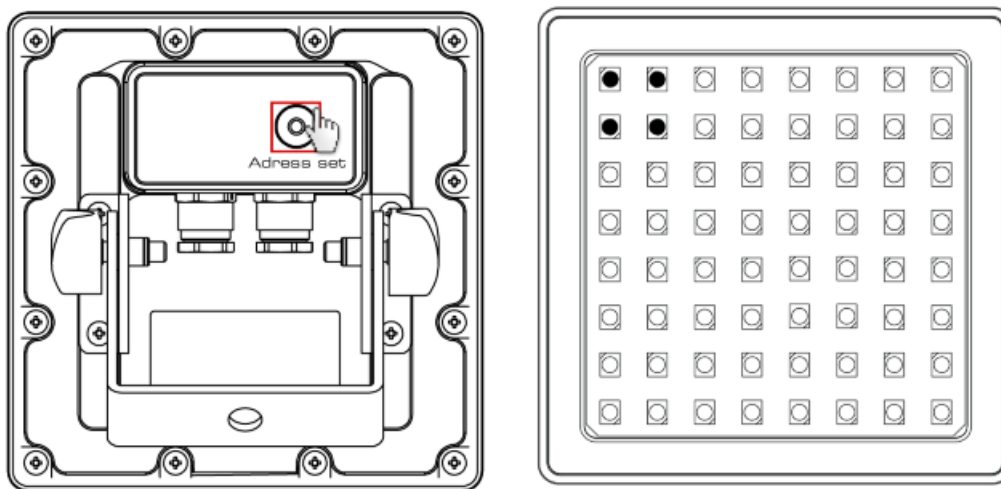
Mozart's temperature is indicated by the number of illuminated pixels: i.e., one pixel equals 2.5°C increase. In addition, as Mozart's temperature increases, more red pixels are illuminated. At 60°C (140°F) the fixture is prompted to slowly decrease the LEDs' output intensity to reduce the temperature of the fixture.

For example, the diagram below shows the current temperature of a Mozart that is 60°C (40°C base pixel and 8 additional pixels):
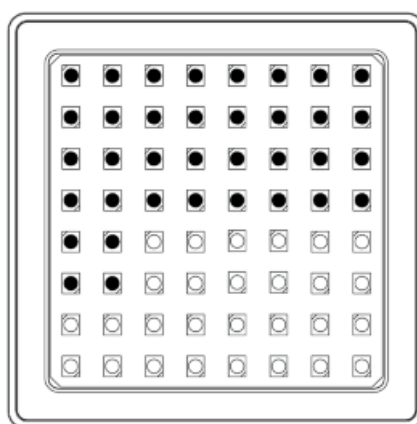
Appendix

RDM FUNCTIONALITY

Mozart Drives have RDM Functionality. Below are the RDM functions available in these devices. TMB has many options for RDM control of your devices: ProPlex RDMigo nd 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 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 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 RGB FIXTURE – TECHNICAL SPECIFICATION
DIMENSIONS / WEIGHT
Length
………
…………… 4.7 in / 119 mm
Width
………
………………… 1.8 in / 45 mm
Height
………
……………… 4.7 in / 119 mm
Weight
………
…………… 1.25 lb / 565 g
POWER
Operating voltage
………
…….. 48V DC
Power consumption
…….. 20W @
full load
DMX/ power connectors……………………………………………………………………………………………
Amphenol Sensor M12
LIGHT SOURCE
LEDs
………
…….. 64 Cree LMC-E LEDs
Colors……
………………………………………….. RGB
Beam spread
………
…………………….. 120°
Refresh rate
………
……….. 38,400Hz
Average Color Wavelength
……………………………………………………………………………………………………… red: 625 nm
green: 530 nm blue: 460 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 ……………………………………………………………………………………………………. 16bit or 8 bit

Pixel modes …… 1, 4, 16

DMX Channels ……………………………………………………………………… 3, 12, 48 (based on selected pixel mode)
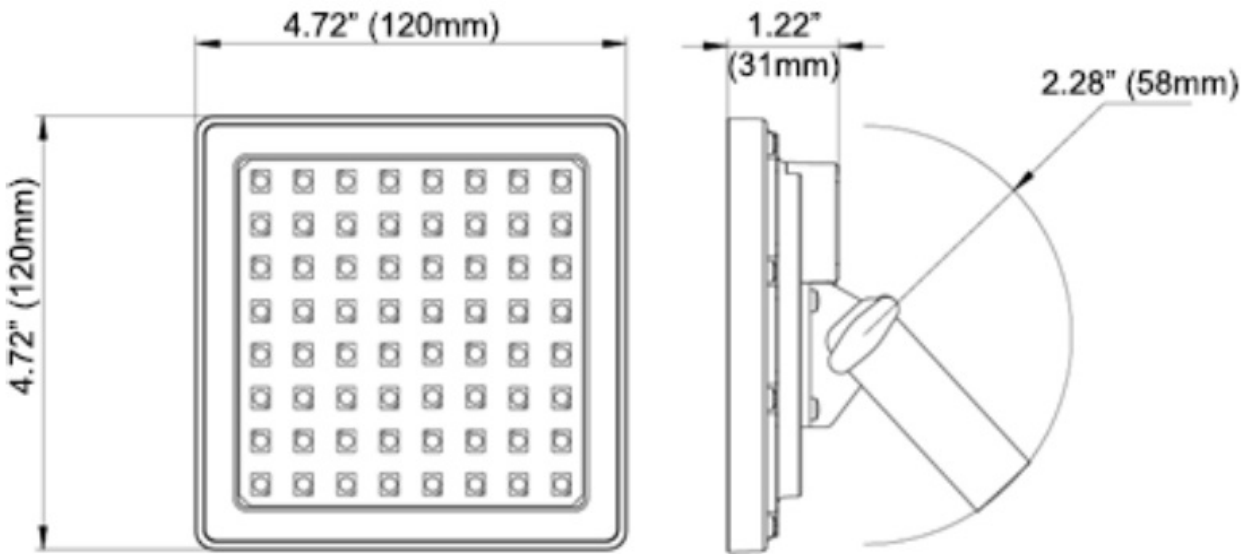
PROPLEX MOZART DRIVE PORTABLEMOUNT – TECHNICAL SPECIFICATION

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.
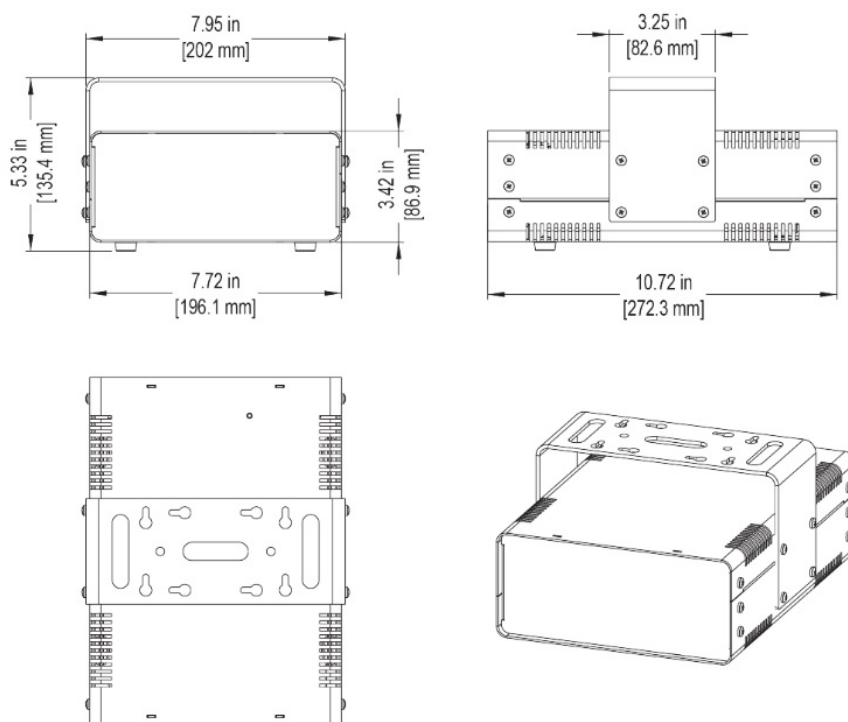
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Documents / Resources