SOLARIS™

MOZART UV
USER MANUAL

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Introduction

PRODUCT OVERVIEW

Mozart UV emits 100% pure UV and zero visible light. Mozart UV is controlled via DMX512 protocol, using RDM-DMX512 protocol enhancement allowing bidirectional communication between a lighting or system controller and attached RDM compliant devices over a standard DMX line.

Mozart UV is a 1-pixel fixture consisting of 12 UV LEDs. It has a 1200 Hz refresh rate and 8-bit intensity dimming control, as well as two power modes: 1-pixel UV, and 1-pixel UV HP. Mozart UV is silent, dust and water resistant (IP65).

Mozart UV fixtures run form ProPlex Mozart Drives which provide DMX signal and power to the fixtures. Mozart Drives are available in PortableMount (1x 200 W output) and RackMount 2U (4x 200 W output) versions.

Just a few features of the Mozart UV include:

- 100% pure UV light, zero visible light
- Two selectable power modes – Standard and High Power for high-intensity applications
- Up to 40 Watts of LED power
- Rain and dust resistant IP65 enclosure – use in all environments!
- Compact, lightweight – great for low weight load-bearing structures and surfaces
- Single cable, simple power-data connections for easy daisy-chain applications
- Easy remote addressing and dual-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. If 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 Mozart Drive, make sure the line voltage is within 100-240 VAC. The fixture's operating voltage is 48 VDC, driven directly from the Mozart Drive. Mozart Drives 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, the name of the fixture and software version will appear on the Mozart Drive's 7-segment display.

SAFETY INSTRUCTIONS

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

- Please keep this Operation Manual for future reference. If unit is sold to another user, make sure they also receive this instruction booklet.
- Ensure fixture is connected to 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 fixture overhead.
- 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 power cord is never crimped or damaged.
- Never disconnect 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

Mozart Drive PortableMount: 4A, 250V, slow-blow, 5x20mm (0.2x0.8 in.)
Mozart Drive RackMount 2U: 12A, 250V, slow-blow, 6x30mm (0.24x1.18 in.)
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 installation location, consider routine maintenance.
- Never mount Mini enclosure where it will be exposed to moisture, high humidity, extreme temperatures, or restricted ventilation.

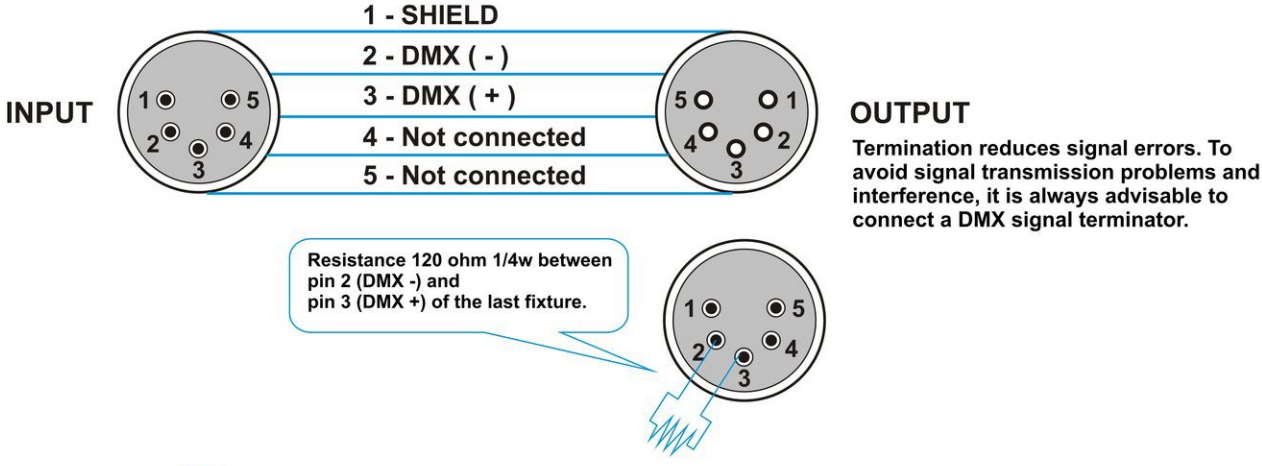
Setup

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 EIA-485 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.)

SETTING UP A DMX SERIAL LINK

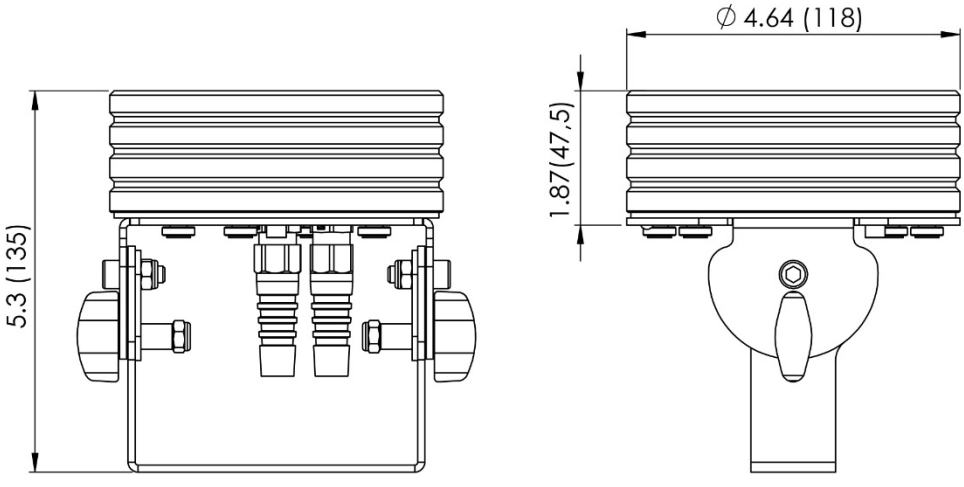


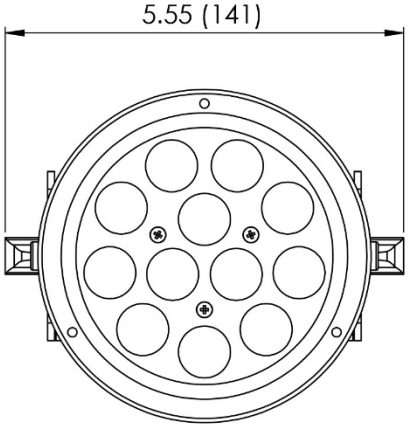
Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make

Mozart UV Specifications

Solaris Mozart UV	
LED Light sources	12 UV 365nm LUMINUS LEDs (12°,30° and 11°x34°)
Pixels per fixture	1
DMX Channels per fixture	1
Color LEDs	UV
Color Mode	2 (UV, UV HP)
Refresh rate	1200 HZ
Intensity Control	8bit
Control	Mozart Drive
DC power	48 V
Power Consumption	20 W or 40 W (High Power mode)
Max. fixtures - Mozart Drive PortableMount	8 Standard mode; 5 High Power mode
Max. fixtures - Mozart Drive RackMount 2U	32 Standard Mode; 20 High Power mode
Cooling	Convection
IP Rating	IP65
Operating Temperature	-20°C - +40°C
Control/Power Connectors	In/Out - Amphenol M12
Unit Dimensions (H x W x D)	4.64 x 5.55 x 5.3 (118 x 141 x 135 mm)
Weight	TBD

Dimensions in Inches and (mm)

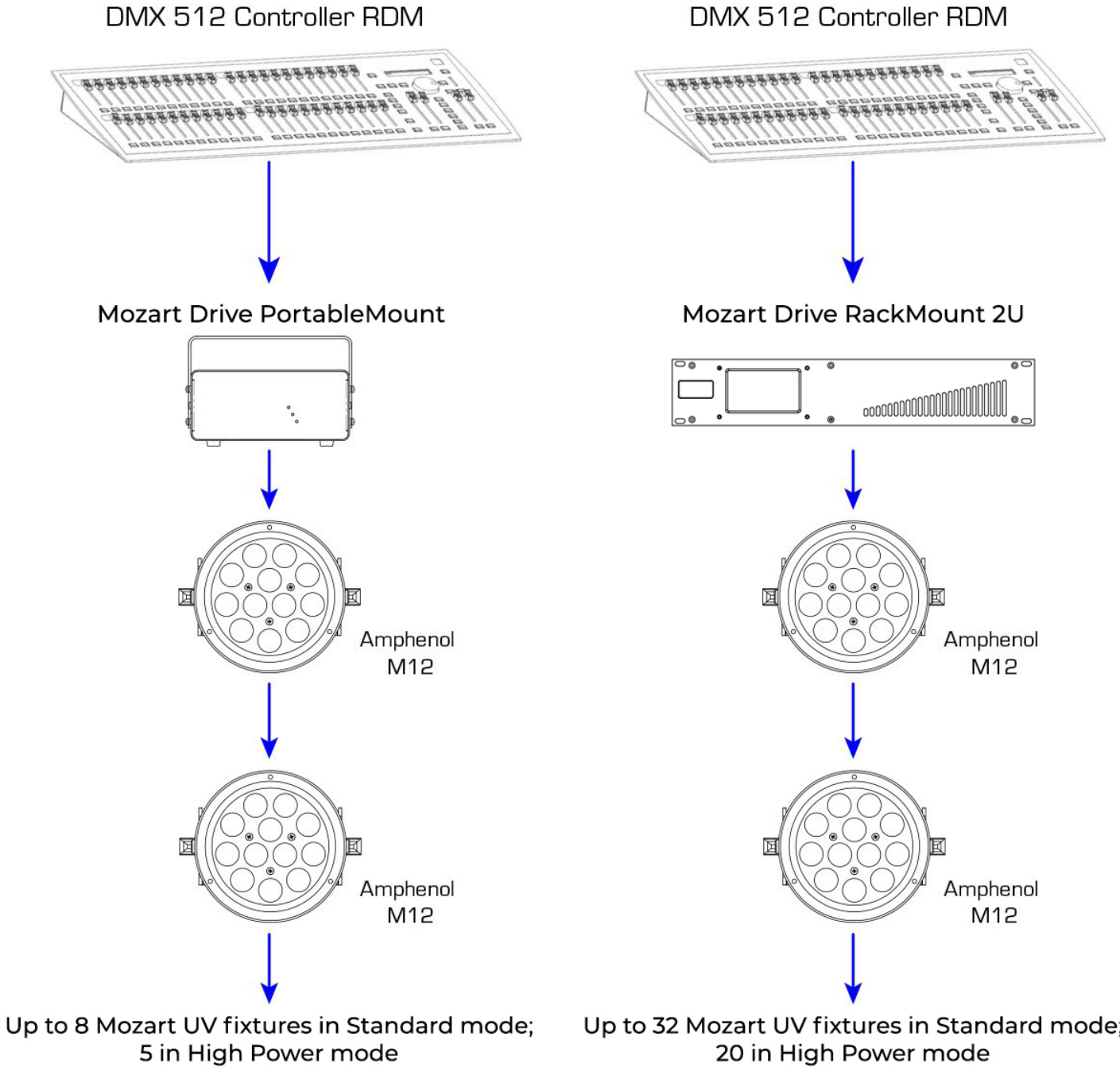




DMX Connector Configuration

Fixture linking

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 and so on.
4. Continue linking until the last fixture is connected in your DMX chain.



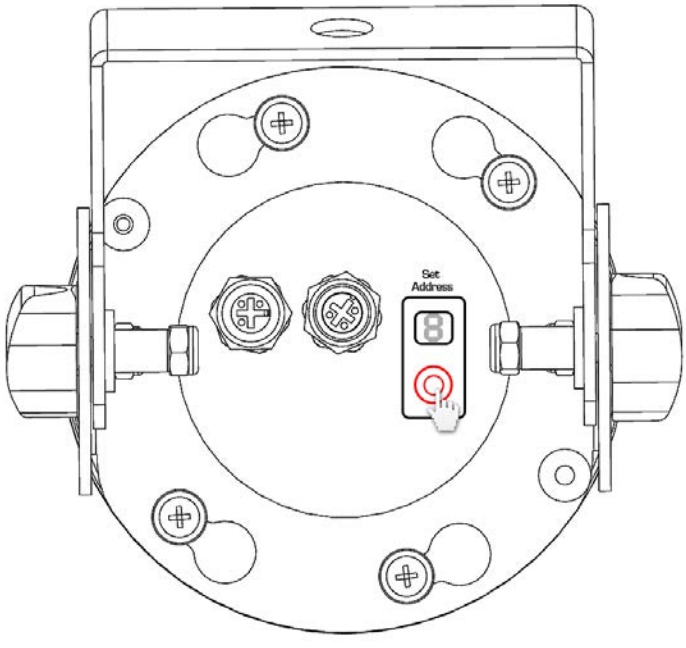
Operating Instructions

INTERNAL ADDRESS SET

The Mozart Drive has RDM functionality. To set fixture ID number for Mozart UV, first set the DMX address for the Mozart Drive via RDM from the DMX controller (console). For example: DMX address for the Mozart Drive is set to DMX channel 1.

To set internal fixture ID of Mozart UV fixtures (1-8 or 1-5 in High Power mode), follow these steps:

1) Press and hold **<Set Address>** button located at the back of the Mozart UV fixture.



2) The current internal fixture ID will appear (1-8).
3) To **change** this number, press **<Set Address>** button. The next ID number will appear.
4) Repeat until the wanted ID number is shown on the 7-segment display.

Using a starting address of DMX 1, this chart shows Mozart fixture IDs (using Mozart Drive PortableMount, for example):

DMX CH		FIXTURE ID
		1 PIX
1	UV	1
2	UV	2
3	UV	3

...continue as necessary

Temperature

To check the temperature of the Mozart UV, tap the address set button and the 7- segment display will show the temperature. (For example: 28 °C)

Appendix

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 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 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. 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 fixture, 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 product(s). As a suggestion, proper UPS packing or doublel-boxing is always a safe method to use.

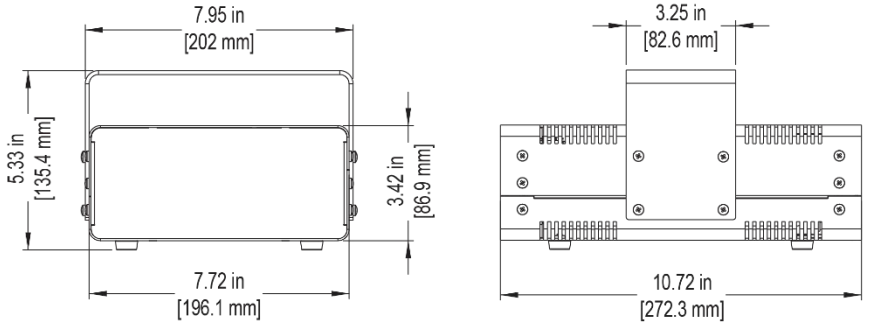
Note: If you are given an RMA #, please include the following information on a piece of paper inside the box:

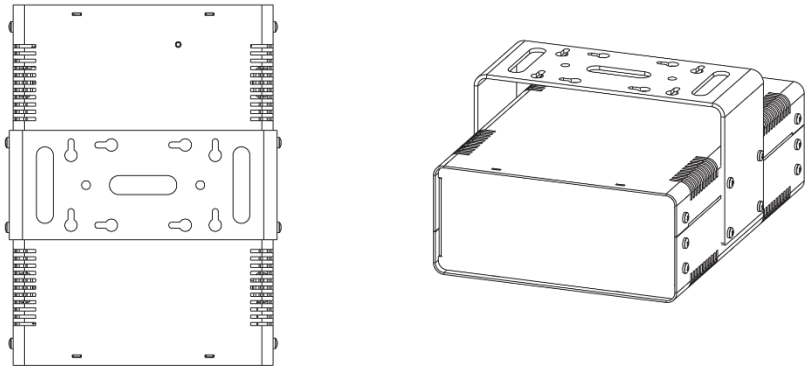
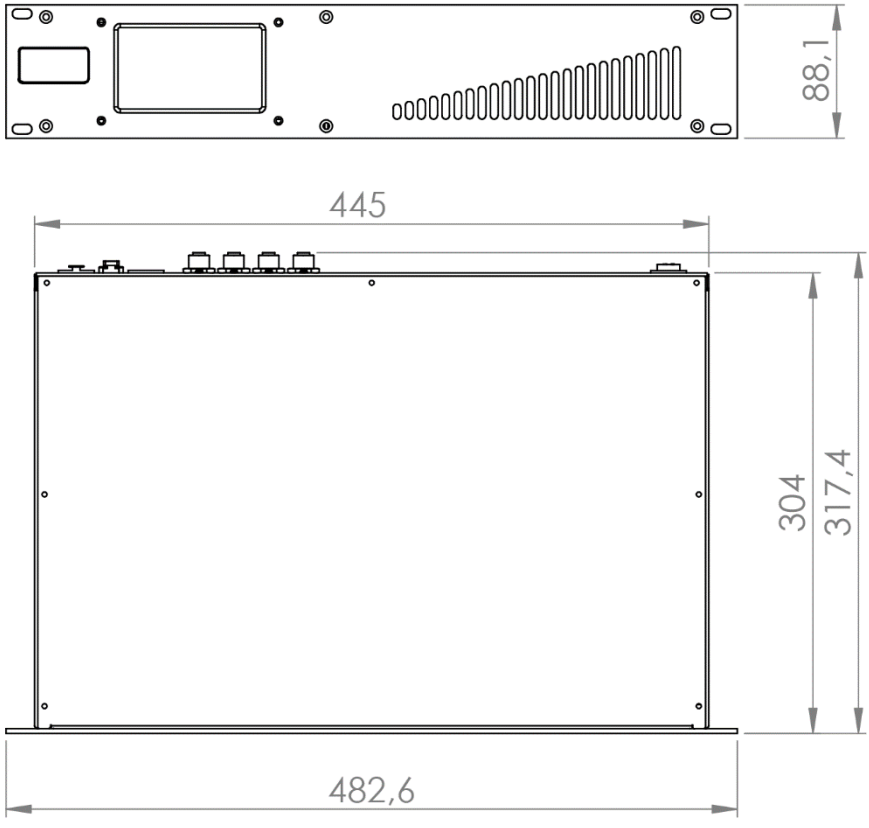
1) Your name
2) Your address
3) Your phone number
4) The RMA #
5) A brief description of the symptoms

MOZART DRIVES – SPECIFICATIONS

	PortableMount	RackMount 2U
Part No.	PPMO10PSUP	PPMO40PSU
AC power input	100-240 VAC	
DC power out	48 VDC	
Max. number of fixtures: Mozart / Mozart LR	10 max.	10 max. per output: 40 total
Max. number of fixtures: Mozart FLR / Mozart One / Mozart UV	8 max. in Standard mode 5 max. in High Power mode	8 max. per output in Standard mode: 32 total. 5 max. per output in High Power mode: 20 total.
DMX channels: Mozart / Mozart LR	RGB: 3, 12, 48	
DMX channels: Mozart FLR / Mozart One	RGB: 3, 123, 48 RGBW: 4, 16, 64	
DMX channels: Mozart UV	1	
Power consumption	1x 200 W	4x 200 W
Max. cable length	328 ft. [100 m] per output with fixtures at any interval.	
DMX connectors	In/Out - XLR 5-pin M/F	
Control/power connecctors	Out - Amphenol Sensor M12	4x Out - Amphenol Sensor M12
Cooling	Convection	
Operating temperatures	-4 to +104 °F (-20 to +40 °C)	
IP rating	IP20	
Unit dimensions (HxWxD)	w/yoke: 5.3 x 7.9 x 10.7 in. [135 x 202 x 272 mm] w/o yoke: 3.4 x 7.7 x 10.7 in. [87 x 196 x 272 mm] w/o yoke	3.47 x 19 x 3.5 x 12.5 in. [88.1 x 482.6 x 317.4 mm]
Shipping dimensions (HxWxD)	7.3 x 10.25 x 13.5 in. [186 x 261 x 343 mm]	7.5 x 20.75 x 15.75 in. [191 x 527 x 400 mm]
Unit weight	9.85 lb [4.46 kg]	17.25 lb [7.8 kg]
Shipping weight	10.65 lb [4.82 kg]	19.10 lb [8.6 kg]

MOZART DRIVE PORTABLEMOUNT





Mozart Drive RackMount 2U