

# I Intelligent M Marquee S Systems

## IMS MK2 Universe Drive PortableMount



## USER MANUAL

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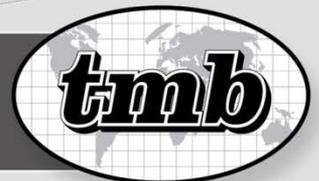
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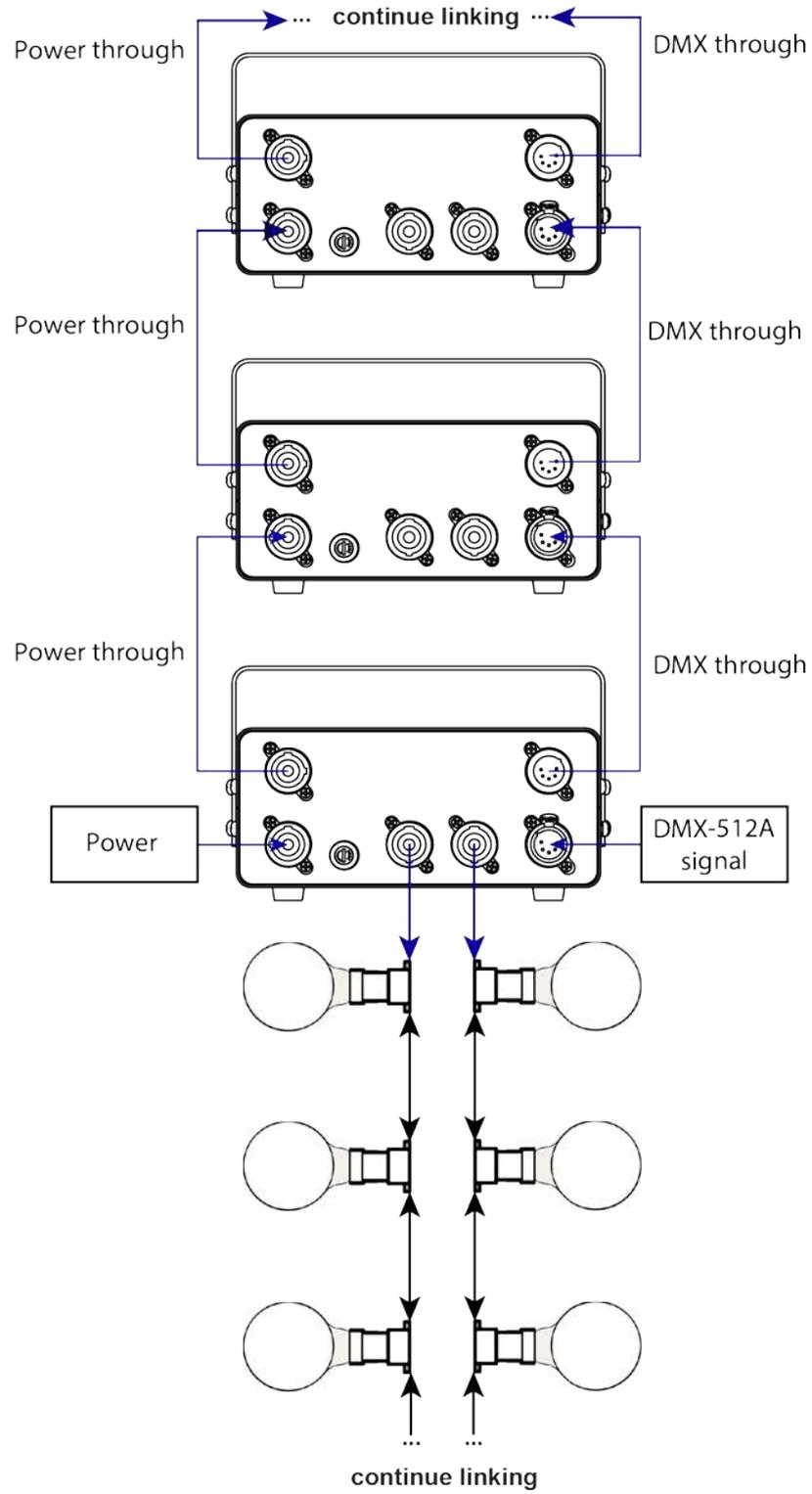
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# Connections



## Lamp control

Each of the IMS lamps can be controlled separately. To set the DMX address for each lamp, it is necessary to patch lamps using the ProPlex Hand Held Programmer. After DMX addresses for the lamps have been set, the lamps must be placed in the correct order in the lamp chain.

### RGB + White lamp channels overview

Channel	Value	Function
1	000 ↔ 255	RED intensity 0% - 100%
2	000 ↔ 255	GREEN intensity 0% - 100%
3	000 ↔ 255	BLUE intensity 0% - 100%
4	000 ↔ 255	WHITE intensity 0% - 100%

### Filament lamp channels overview

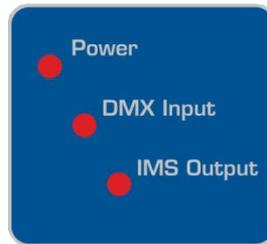
Channel	Value	Function
1	000 ↔ 255	WHITE intensity 0% - 100%

### Filament lamp channels overview

Channel	Value	Function
1	000 ↔ 255	WARM WHITE intensity 0% - 100%
2	000 ↔ 255	COLD WHITE intensity 0% - 100%

The IMS Mk2 Universe Drive has two outputs. Up to 64 lamps may be connected to each output for a maximum of 128 lamps for each Universe Drive.

## Front Panel



The **POWER** LED has two states: ON and OFF.

- ON: Unit is receiving power.
- OFF: Unit is not receiving power.

The **DMX INPUT** LED has two states: OFF and BLINKING.

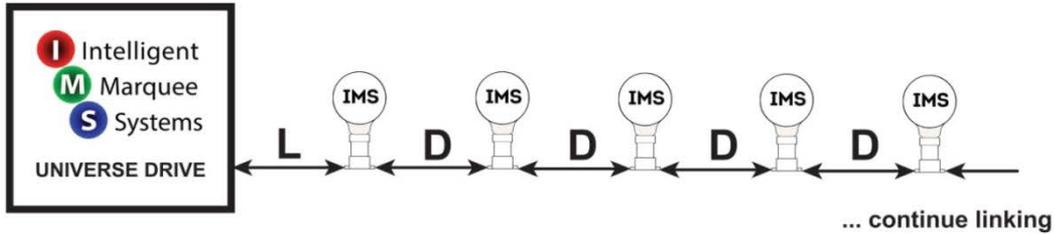
- OFF: DMX input signal is not present.
- BLINKING: DMX input signal is present.

The **IMS OUTPUT** LED has two states: OFF and BLINKING.

- OFF: Universe drive is outputting signal.
- BLINKING: Universe drive is not outputting signal.

# Cable Length / Lamp Spacing

The following settings are recommended using IMS122CL3 cable. *Settings may vary depending on cable type, IMS control data transfer rate, and other conditions. The settings below are examples of different scenarios and their tested results.*



**if  $D = 15\text{cm}$**

Cable setting	L	Max. IMS 
Short	1m	64
Medium	5m	64
Long cable	20m	64
Short with transcoding	5m	64
Medium with transcoding	25m	64
Long with transcoding	55m	64

**if  $D = 30\text{cm}$**

Cable setting	L	Max. IMS 
Short	1m	51
Medium	5m	64
Long cable	10m	64
Short with transcoding	5m	64
Medium with transcoding	20m	64
Long with transcoding	50m	64

**if  $D = 50\text{cm}$**

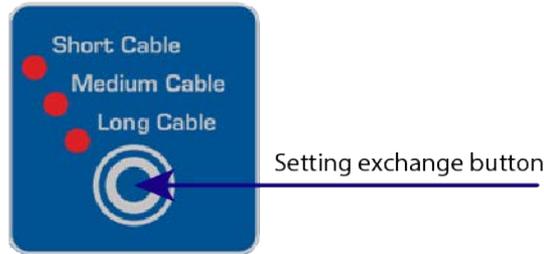
Cable setting	L	Max. IMS 
Short	1m	41
Medium	1m	64
Long cable	10m	64
Short with transcoding	1m	62
Medium with transcoding	15m	64
Long with transcoding	45m	64

**if  $D = 100\text{cm}$**

Cable setting	L	Max. IMS 
Short	1m	30
Medium	1m	46
Long cable	1m	64
Short with transcoding	1m	45
Medium with transcoding	1m	64
Long with transcoding	40m	64

- IMS lamp
<b>Max.</b> - Max. number of working lamps
<b>L</b> - Length of cable between Universe Drive and first lamp
<b>D</b> - Distance between lamps

# Changing Cable Length Setting



- SETTING NOT ACTIVE
- SETTING ACTIVE
- \* SETTING WITH TRANSCODING ACTIVE

\*blinking

To ensure correct and safe data transfer, there is additional setting (which changes the DMX data controlling mode) which has to be changed based on the length of the cable used in the IMS lamp chain system.

There are six available settings:

- 1) Short cables
- 2) Short cables with transcoding
- 3) Medium length cables
- 4) Medium length cables with transcoding
- 5) Long cables
- 6) Long cables with transcoding

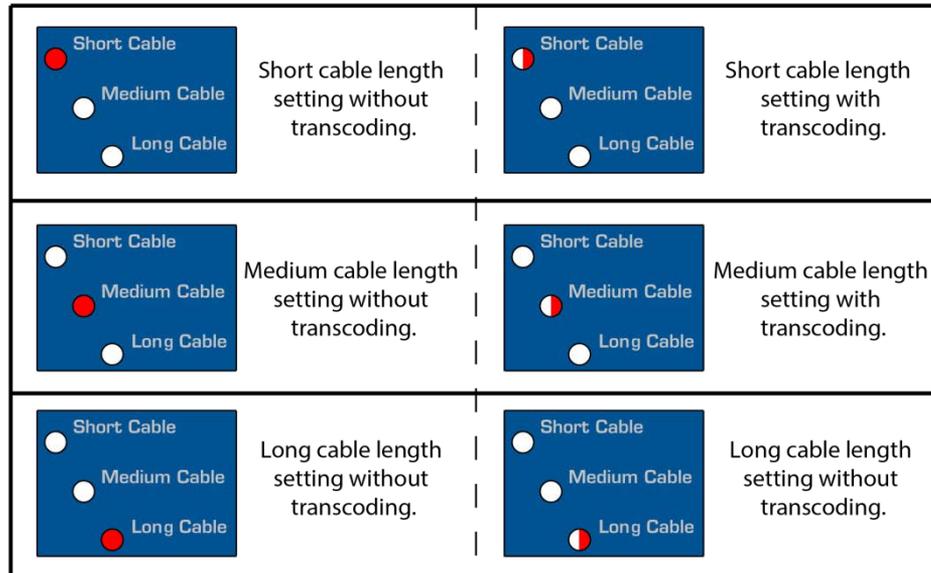
When the IMS Mk2 Universe Drive is powered ON, the last active cable length setting will be used. To change the cable length setting, press and hold the "Setting Exchange Button." Two of the LEDs will start blinking at 50% intensity.

Setting exchange mode is now activated. IMS cable length settings may be changed. By pressing the "**Setting Exchange Button**", the current setting will be replaced with the next setting. For example, if the current setting is "short cable" and the user wants to change it to the "medium cable," press the "setting exchange button" once:



## Transcoding Setting Activation

Transcoding settings can be distinguished by a blinking LED instead of a solid light in full intensity.



○ SETTING NOT ACTIVE

● SETTING ACTIVE

◐\* SETTING WITH TRANSCODING ACTIVE

\*blinking

When the correct setting has been selected, wait a few seconds, the two side LEDs will stop blinking and the chosen setting is locked in.

### Note:

- 1) If one of the cable length setting LEDs is lit at full intensity and blinking, that means a setting with transcoding is selected.
- 2) If one of the cable length setting LEDs is lit at full intensity (not blinking), that means a setting without transcoding is selected.
- 3) If LEDs are OFF, that means that setting is locked. To change the setting, press and hold the order to change the "setting exchange button."

## Frequently Asked Questions

### How many lamps can be used per output?

It is possible to use 64 lamps per output x two outputs = 128 lamps per Universe Drive IP65. However, the maximum lamps possible may vary depending length and type of cable. Please refer to the "Cable Length" diagram in this guide.

### What is the transcoding setting and what does it do?

Signal Transcoding is an option to allow for longer cable runs either by longer lead-ins, longer socketed lengths, or a greater number of lamps. Transcoding changes the dimming resolution from 8-bit (256 steps of dimming) to 6-bit (64 steps of dimming). The Transcoding Setting is best when IMS lamps are being used for quick color changes that do not require a long, smooth crossfade. Always try and use the standard option as it performs best in most situations. Choose the transcoding option as a means to troubleshoot why a string isn't working correctly.

### When not to use transcoding:

The standard, non-transcoding setting has a higher bit-rate and makes for smoother dimming in situations where cable length and/or lamp quantity per string are secondary concerns. Always try to use the standard option if possible. If IMS is being used for applications such as low resolution video type effects, choosing the standard setting will produce better results.

Standard color fade. Transcoding will have more steps during this crossfade:



Scenario where transcoding will work as desired:



### How can I patch the DMX addresses into the IMS Mk2 lamps?

In order to set the DMX addresses for lamps, a ProPlex IMS Mk2 HHP (Hand held Programmer) is required. The HHP makes it possible to set the required DMX address for each IMS lamp, test individual lamps, and test lamps strings attached to the IMS Universe Drive without the need for a DMX console.

# Installation

## Mounting / Rigging

**Orientation** – ProPlex Mini units may be mounted in any position, using the standard yoke. Always make sure there is adequate room for ventilation.

**Rigging** – *Always consult a certified rigging specialist before suspending any device overhead.*

Use ProBurger® couplers or equivalent C- or O-type clamps for attaching to truss. After establishing the desired position, tighten all appropriate bolts.

- *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.



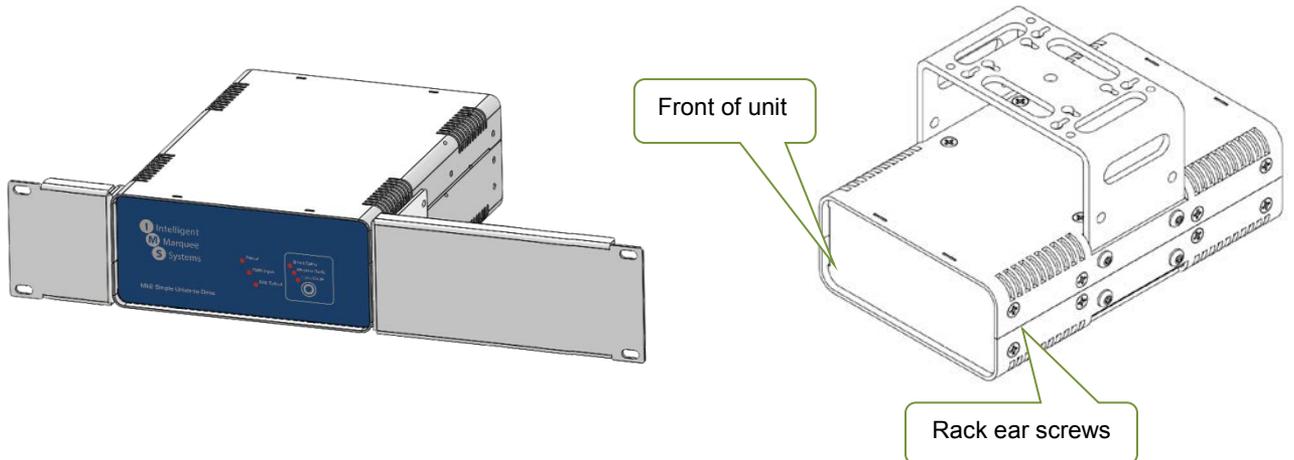
## RackMount Kit

ProPlex RackMount Kits are designed to allow easy rack mounting IMS PortableMount units.

- 1) IMS PortableMount enclosures include a yoke for truss mounting. Before attaching RackMount Kit, remove the yoke by unscrewing the four Phillips-head (crosshead) screws which attach the yoke to the chassis.

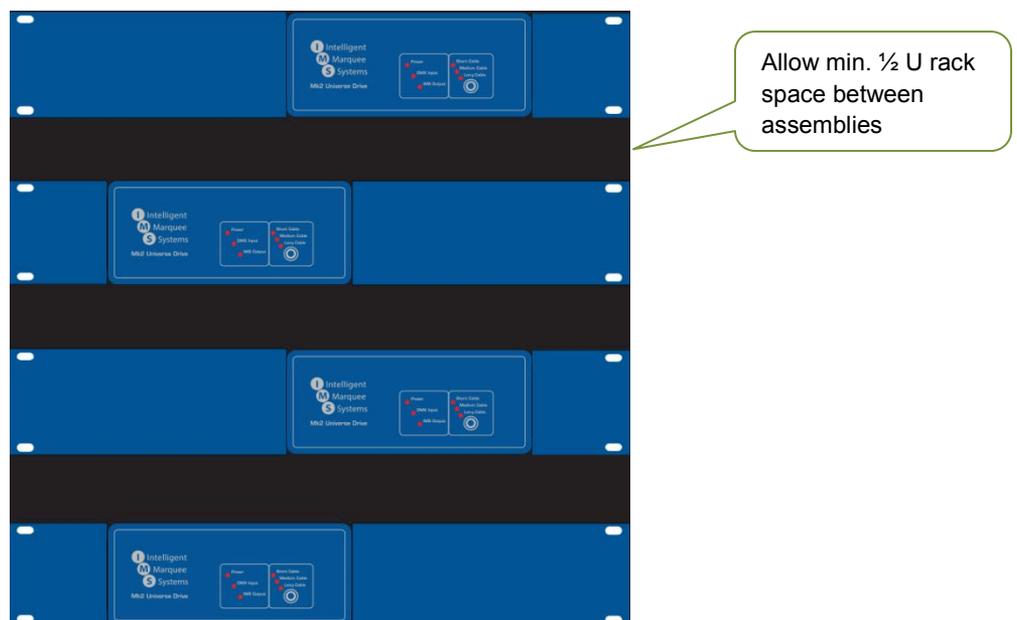


- 2) The 2U RackMount Kit Single is comprised of two rack ears, one long and one short. To fasten the ears to the IMS PortableMount chassis, remove the two chassis screws that align with the rack ear mounting holes at the front of the chassis. Then use the same screws to securely fasten the ears to the chassis, per below illustrations. The short and long ears can be mounted to either side of the chassis.



- 3) **Caution: Mounting IMS Universe Drive PortableMount in a rack.** IMS Universe Drive units require adequate airflow. When installing multiple units, they must be mounted on alternating sides of the rack, so one does NOT reside directly above another, with at least one-half 1U space between each assembly, per below illustration

*Warning: Placing two IMS Universe Drive in PortableMount enclosures directly next to each other – vertically or horizontally – in a rack or enclosed space will prevent adequate air circulation and may result in overheating of the device. Misapplication will void the warranty of the IMS device.*



# Appendix

## Limited Warranty

IMS Mk2 components 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](mailto:TechSupportRepairNA@tmb.com).

### US

527 Park Ave.  
San Fernando, CA 91340  
Tel: +1 818.899.8818  
Fax: +1 818.899.8813

### UK

21 Armstrong Way  
Southall, UB2 4SD England  
Tel: +44 (0)20.8574.9700  
Fax: +44 (0)20.8574.9701

## Return Procedure

Please send returned merchandise prepaid and in the original packing. Freight call tags will not be issued for shipping the product to TMB, but TMB will pay the freight for return to the customer. Clearly label package with a Return Merchandise Authorization Number (RMA #). Products returned without an RMA # will delay service. Please contact TMB and request an RMA # prior to shipping the unit. Be prepared to provide the model number, serial number, and a brief description of the cause for the return. Be sure to properly pack the unit; 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). Proper UPS packing or double-boxing will better ensure product integrity when shipped.

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

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Toll Free: 0800.652.5418

e-mail: [techsupport@tmb.com](mailto:techsupport@tmb.com)

# IMS Mk2 Universe Drive PortableMount

## Technical Specifications

### WEIGHT & DIMENSIONS

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WITH YOKE

WIDTH.....8 IN / 203 MM  
 DEPTH.....10.7 IN / 272 MM  
 HEIGHT.....4.75 IN / 121 MM

WITHOUT YOKE

WIDTH.....7.75IN / 197 MM  
 DEPTH.....10.7 IN / 272 MM  
 HEIGHT.....3.4IN / 87 MM  
 WEIGHT.....8.7 LB / 3.9 KG

### POWER

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OPERATING VOLTAGE ..... 90-260 VAC, 50-60Hz  
 POWER CONSUMPTION.....300W MAX  
 OUTPUT VOLTAGE..... 24 VDC

### THERMAL

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OPERATING TEMPERATURE.....-20 TO +40°C  
 COOLING .....Convection

### CONNECTIONS / CONTROL

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NUMBER OF OUTPUTS ..... 2  
 NUMBER OF UNIVERSES ..... 1  
 POWER INPUT ..... NEUTRIK POWERCON NAC3MPA-1  
 POWER THRU ..... NEUTRIK POWERCON NAC3MPB-1  
 DATA INPUT ..... NEUTRIK XLR 5-PIN  
 DATA THRU..... NEUTRIK XLR 5-PIN  
 POWER / DATA OUTPUTS.....2X NEUTRIK SPEAKON NL2 2-POLE  
 MAX CABLE LENGTH 246 FT / 75 MTR TO LAST LAMP (14 AWG / 2.5MM<sup>2</sup> FESTOON CABLE)

