

# REPEATER RACK-MOUNT DMX/RDM OPTO-SPLITTER



Models shown: 1. PWREP RM P8 XLR5F FRONT NONRDM  
2. PWREP RM P8 [xxxx] REAR RDMHUB

## WARRANTY

3-year limited warranty. Complete warranty terms located at:  
<https://www.acuitybrands.com/support/warranty>

## NOTE

Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

**Pathway Pro** marked products are geared for advanced entertainment lighting system applications and are available only to authorized buyers.

## OVERVIEW

The Pathway DMX Repeater series of opto-splitters are an essential component of DMX distribution systems, permitting star-wiring configurations while isolating and protecting equipment from electrical faults.

RDM Hub models provide Ethernet-type intelligence features on a pure DMX512 network. The front panel allows the unit to be used as an RDM controller.

Other advanced features include input sensing, prioritization between two controllers, or HTP merging of two sources with one source able to roam - ideal for incorporating remote focus units.

## FEATURES

### Non RDM Models

- 8 DMX512 Outputs
- 1 DMX512 Input, 1 Passive DMX512 Thru
- DMX line termination switch

### RDM Hub Models

- 8 bi-directional DMX512 Ports
- Three modes: RDM, Merge, and Hub
- Fully configurable from the front panel interface
- RDM Discovery and end device management from the front panel
- RDM enable/disable on a port-by-port basis
- Merge two controllers without additional equipment
- Automatically switch a console between locations by simply unplugging and replugging the console
- User-configurable DMX output speed and signal loss behavior

### Common Features

- Gold-plated XLR Contacts
- No fuses - self-resetting port protection recovers from voltage faults
- Truss-mount (PWACC TMLG) and Wall-mount (PWACC WMLG) accessory kits available
- Silent, fan-less operation
- Rack-mount ears included
- Also available in DIN-mount (PWREP DIN) and Wall-mount (PWREP WM) form factors

## ORDERING INFORMATION

PWREP		EXAMPLE: PWREP RM P8 XLR5F REAR RDMHUB					
Series	Form Factor	Port Quantity	Port Type	Port Location	Model		
PWREP Pathway DMX Repeater	RM Rack-mount	P8 8 DMX Ports	XLR5F XLR 5-Pin Female	FRONT Ports on Front Panel	NONRDM DMX Only		
			XLR3F <sup>1</sup> XLR 3-Pin Female	REAR Ports on Rear Panel		RDMHUB Merge, Priority, HTP and Hub, RDM Compliant	
			TERM Compression-Fit Terminal				
			RJ45EC RJ45 etherCON				

## Accessories

PWCON PH5 CSC5 Q1 <sup>2</sup>	Connector, 5-Pin Phoenix, 5-Pin Compression Screw Connector, (Qty 1)
PWCON PH5 IDC5 Q1 <sup>2</sup>	Connector, 5-Pin Phoenix, 5-Pin Insulation Displacement Contact Connector, (Qty 1)
PWACC WMLG	Pathway Accessories Large Rack-mount to Wall-mount Kit
PWACC TMLG	Pathway Accessories Large Rack-mount to Truss-mount Kit

## Notes

1. XLR3F available on NONRDM models only.
2. PWCON PH5 are optional connector accessories for TERM REAR models. See below for drawing.

## SPECIFICATIONS

<b>Electrical</b>	<b>Input Ratings</b>	100-240VAC, 50/60Hz wide-range power input 0.08A max power consumption
	<b>Isolation &amp; Fault Protection</b>	3000V isolation between DMX data links 250V fault protection on DMX ports
	<b>Regulatory Compliance</b>	UL CE
<b>Mechanical</b>	<b>Dimensions</b>	17" W x 1.7" H x 7.0" D (433mm W x 43mm H x 178mm D)
	<b>Weight</b>	5.2 lbs (2.4 kg) [base device, without rack mounting hardware]
<b>Environmental</b>	<b>Operating Temperature</b>	14°F to 122°F (-10°C to 50°C)
	<b>Relative Humidity</b>	5-95%, non-condensing
	<b>Standard Compliance</b>	RoHS 2011/65/EU + A1 2015/863
<b>General</b>	<b>Compliance</b>	<b>PWREP RM P8 NONRDM</b> ANSI E1.11 DMX512-A R2013
		<b>PWREP RM P8 RDMHUB</b> ANSI E1.11 DMX512-A R2013 ANSI E1.20 RDM - Remote Device Management

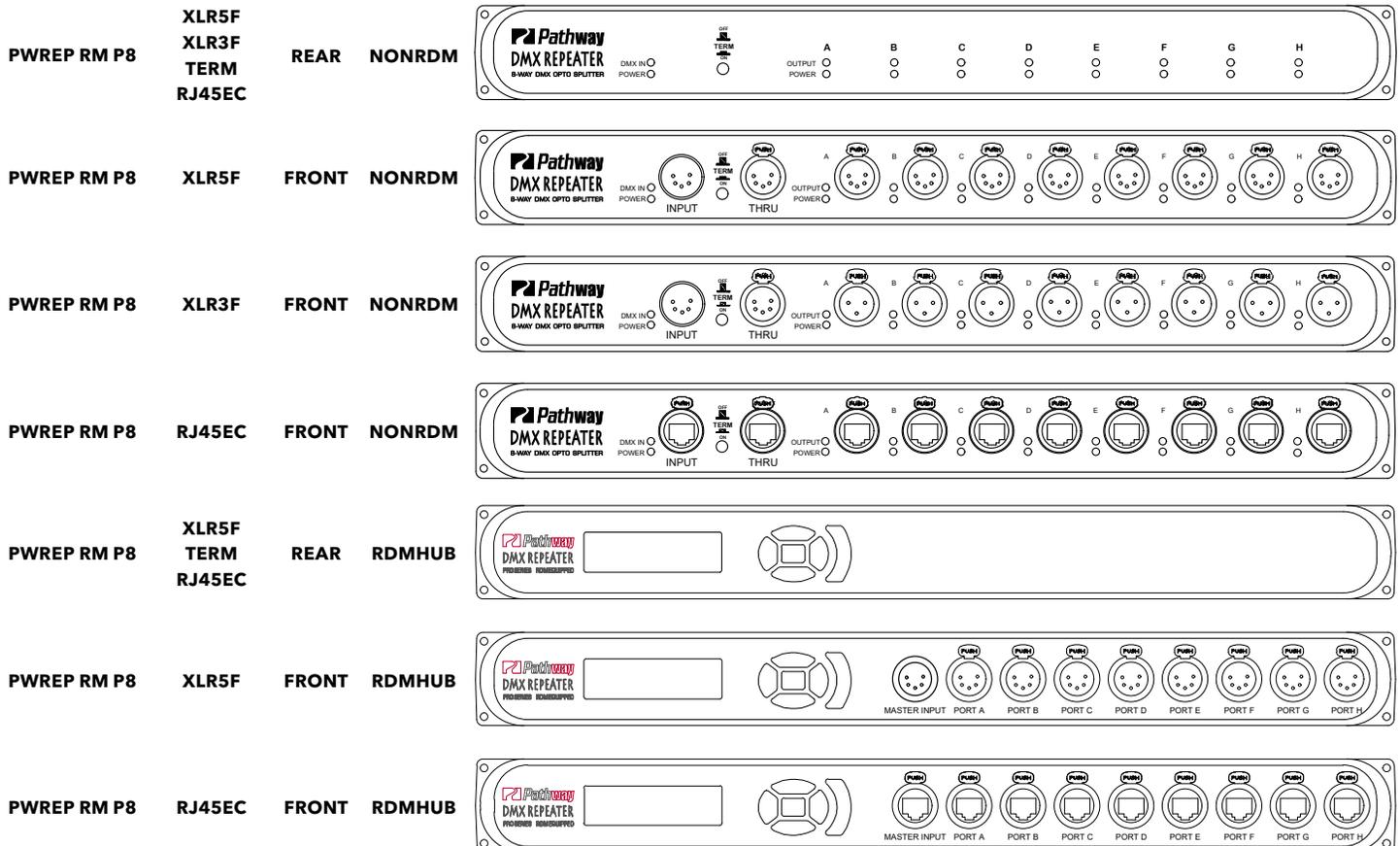
## PART NUMBER CROSS-REFERENCE

PREVIOUS	NEW	
Part Number	Catalog Number	Description
9014	PWREP RM P8 XLR5F REAR NONRDM	DMX Repeater, Rack-mount, 8-Ports, XLR 5-Pin Female, Rear Panel Connectors, DMX Only
9014-3	PWREP RM P8 XLR3F REAR NONRDM	DMX Repeater, Rack-mount, 8-Ports, XLR 3-Pin Female, Rear Panel Connectors, DMX Only
9015	PWREP RM P8 TERM REAR NONRDM	DMX Repeater, Rack-mount, 8-Ports, Compression Fit Terminal, Rear Panel Connectors, DMX Only
9016	PWREP RM P8 XLR5F FRONT NONRDM	DMX Repeater, Rack-mount, 8-Ports, XLR 5-Pin Female, Front Panel Connectors, DMX Only
9016-3	PWREP RM P8 XLR3F FRONT NONRDM	DMX Repeater, Rack-mount, 8-Ports, XLR 3-Pin Female, Front Panel Connectors, DMX Only
9017	PWREP RM P8 RJ45EC REAR NONRDM	DMX Repeater, Rack-mount, 8-Ports, RJ45 EtherCON, Rear Panel Connectors, DMX Only
9018	PWREP RM P8 RJ45EC FRONT NONRDM	DMX Repeater, Rack-mount, 8-Ports, RJ45 EtherCON, Front Panel Connectors, DMX Only
9114 (Repeater Pro)	PWREP RM P8 XLR5F REAR RDMHUB	DMX Repeater, Rack-mount, 8-Ports, XLR 5-Pin Female, Rear Panel Connectors, Merge, Priority, HTP and Hub, RDM Compliant
9115 (Repeater Pro)	PWREP RM P8 TERM REAR RDMHUB	DMX Repeater, Rack-mount, 8-Ports, Compression Fit Terminal, Rear Panel Connectors, Merge, Priority, HTP and Hub, RDM Compliant
9116 (Repeater Pro)	PWREP RM P8 XLR5F FRONT RDMHUB	DMX Repeater, Rack-mount, 8-Ports, XLR 5-Pin Female, Front Panel Connectors, Merge, Priority, HTP and Hub, RDM Compliant
9117 (Repeater Pro)	PWREP RM P8 RJ45EC REAR RDMHUB	DMX Repeater, Rack-mount, 8-Ports, RJ45 EtherCON, Rear Panel Connectors, Merge, Priority, HTP and Hub, RDM Compliant
9118 (Repeater Pro)	PWREP RM P8 RJ45EC FRONT RDMHUB	DMX Repeater, Rack-mount, 8-Ports, RJ45 EtherCON, Front Panel Connectors, Merge, Priority, HTP and Hub, RDM Compliant

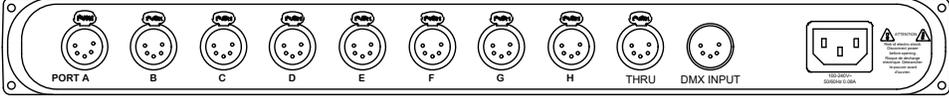
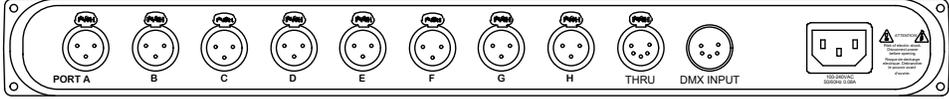
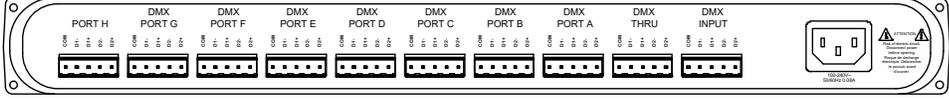
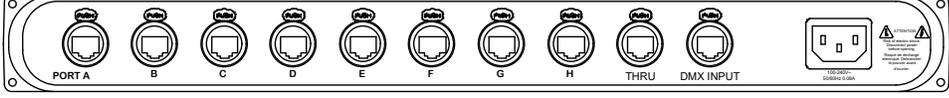
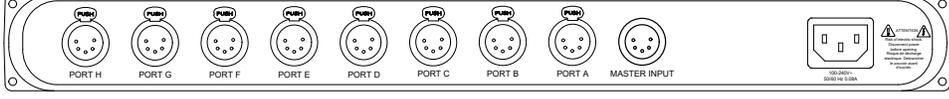
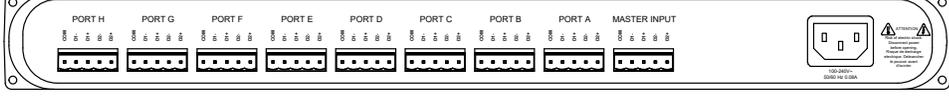
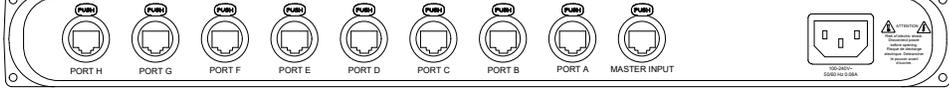
## WIRING

DMX512 / RDM PINOUT		
Purpose	XLR / Terminal Block Pin #	RJ45 PIN # and Wire Color
Shield / Common	1	7 - White / Brown
Data - (complement)	2	2 - Orange
Data + (true)	3	1 - White / Orange
Not Used	4	6 - Green
Not Used	5	3 - White / Green
Not Used - Do Not Connect	N/A	4 - Blue
Not Used - Do Not Connect	N/A	5 - White / Blue
Not Used - Do Not Connect	N/A	8 - Brown

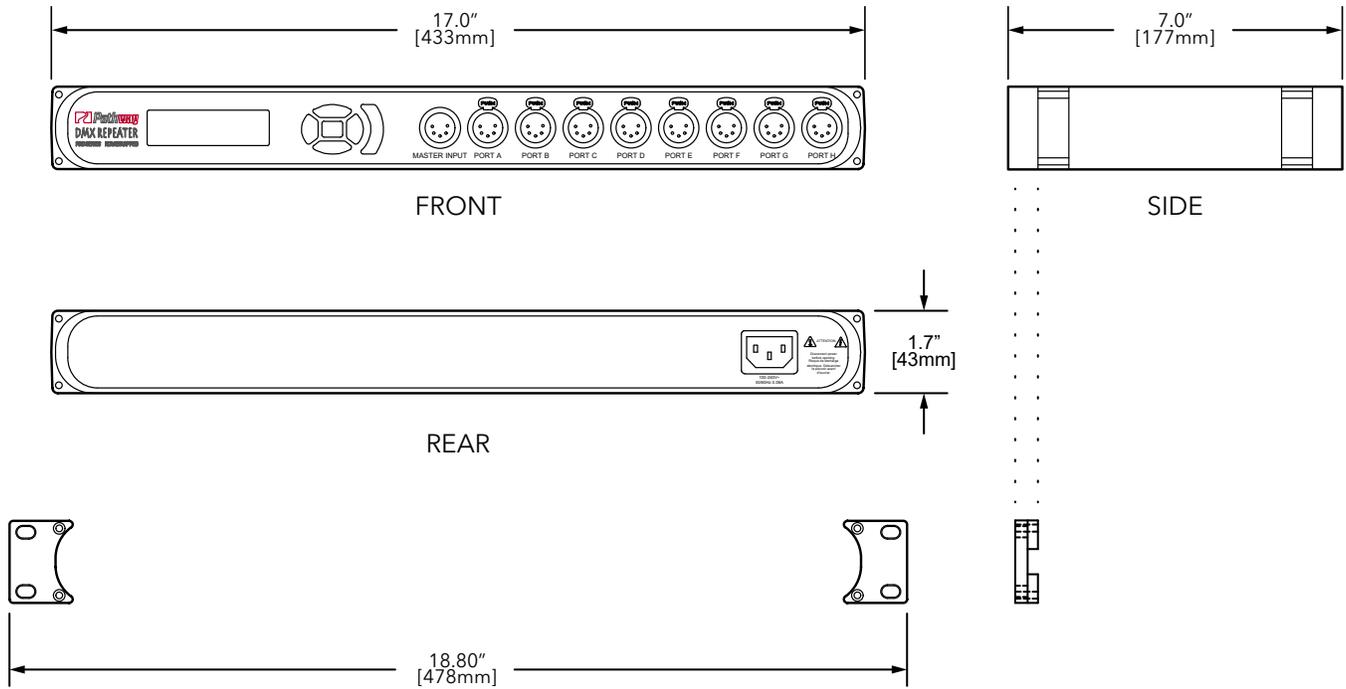
## FRONT PANEL



## REAR PANEL

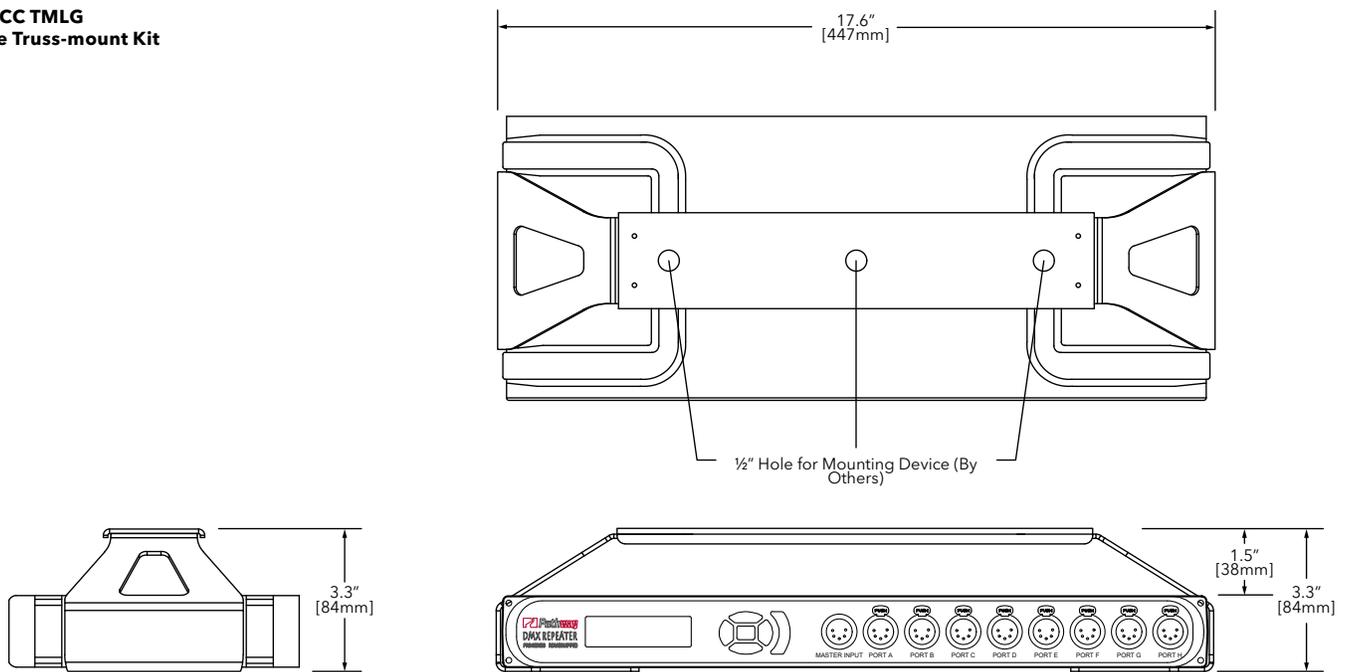
<b>PWREP RM P8</b>	<b>XLR5F</b>	<b>REAR</b>	<b>NONRDM</b>	
<b>PWREP RM P8</b>	<b>XLR3F</b>	<b>REAR</b>	<b>NONRDM</b>	
<b>PWREP RM P8</b>	<b>TERM</b>	<b>REAR</b>	<b>NONRDM</b>	
<b>PWREP RM P8</b>	<b>RJ45EC</b>	<b>REAR</b>	<b>NONRDM</b>	
<b>PWREP RM P8</b>	<b>XLR5F XLR3F RJ45EC</b>	<b>FRONT</b>	<b>NONRDM</b>	
<b>PWREP RM P8</b>	<b>XLR5F</b>	<b>REAR</b>	<b>RDMHUB</b>	
<b>PWREP RM P8</b>	<b>TERM</b>	<b>REAR</b>	<b>RDMHUB</b>	
<b>PWREP RM P8</b>	<b>RJ45EC</b>	<b>REAR</b>	<b>RDMHUB</b>	
<b>PWREP RM P8</b>	<b>XLR5F RJ45EC</b>	<b>FRONT</b>	<b>RDMHUB</b>	

## DIMENSIONS



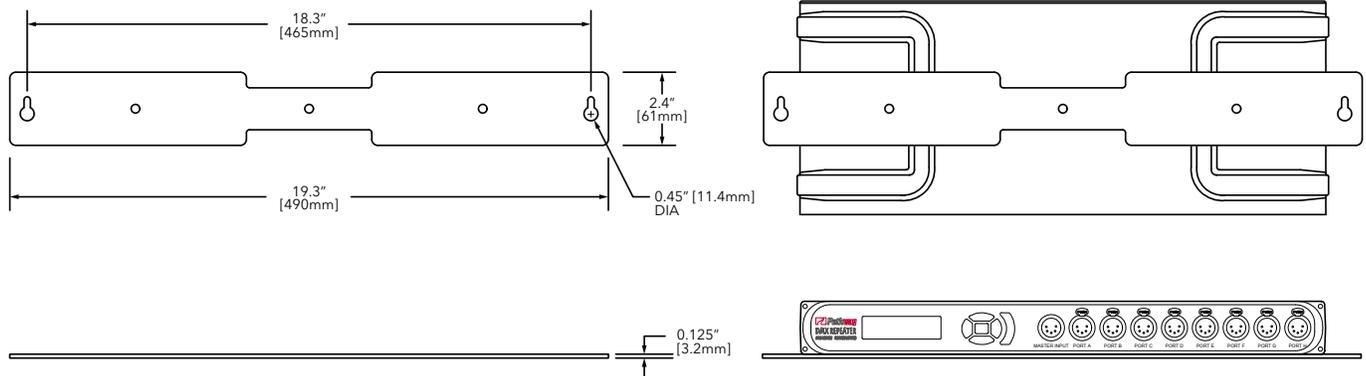
## TRUSS & WALL MOUNT ACCESSORIES

### PWACC TMLG Large Truss-mount Kit



## TRUSS & WALL MOUNT ACCESSORIES

### PWACC WMLG Large Wall-mount Kit



## PHEONIX TERMINAL CONNECTOR ADAPTER ACCESSORIES

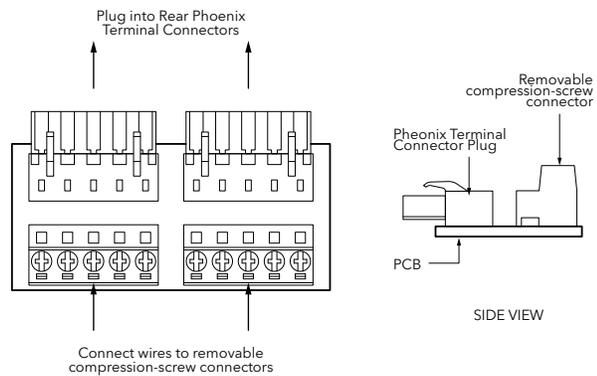
The PWCON PH5 Phoenix Terminal Connector Adapters are optional accessories that consist of a set of 5-pin Phoenix terminal plugs mated to a removable pair of either compression-screw or insulation-displacement contact (IDC) connectors.

This allows the same wiring to be swapped between rack-mount and DIN-mount repeaters and other gear without changing the connector.

All TERM REAR models ship with 5-pin Phoenix compression-screw terminals.

PWCON PH5 [CSC5/IDC5] Q1 must be ordered separately. Each unit will fit 2 Rear TERM ports.

### PWCON PH5 CSC5 Q1



### PWCON PH5 IDC5 Q1

