

# REPEATER RACK-MOUNT DMX/RDM OPTO-SPLITTER



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

## BUY AMERICAN ACT

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

## WARRANTY

3-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

## 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 IDC3 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>	<b>PWREP RM P8 NONRDM</b> ETL CE  <b>PWREP RM P8 RDMHUB</b> ETL
<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 FAR-889 Section 889(a)(1)(A) and Section(a)(1)(B)
		<b>PWREP RM P8 RDMHUB</b> ANSI E1.11 DMX512-A R2013 ANSI E1.20 RDM - Remote Device Management FAR-889 Section 889(a)(1)(A) and Section(a)(1)(B)

## 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

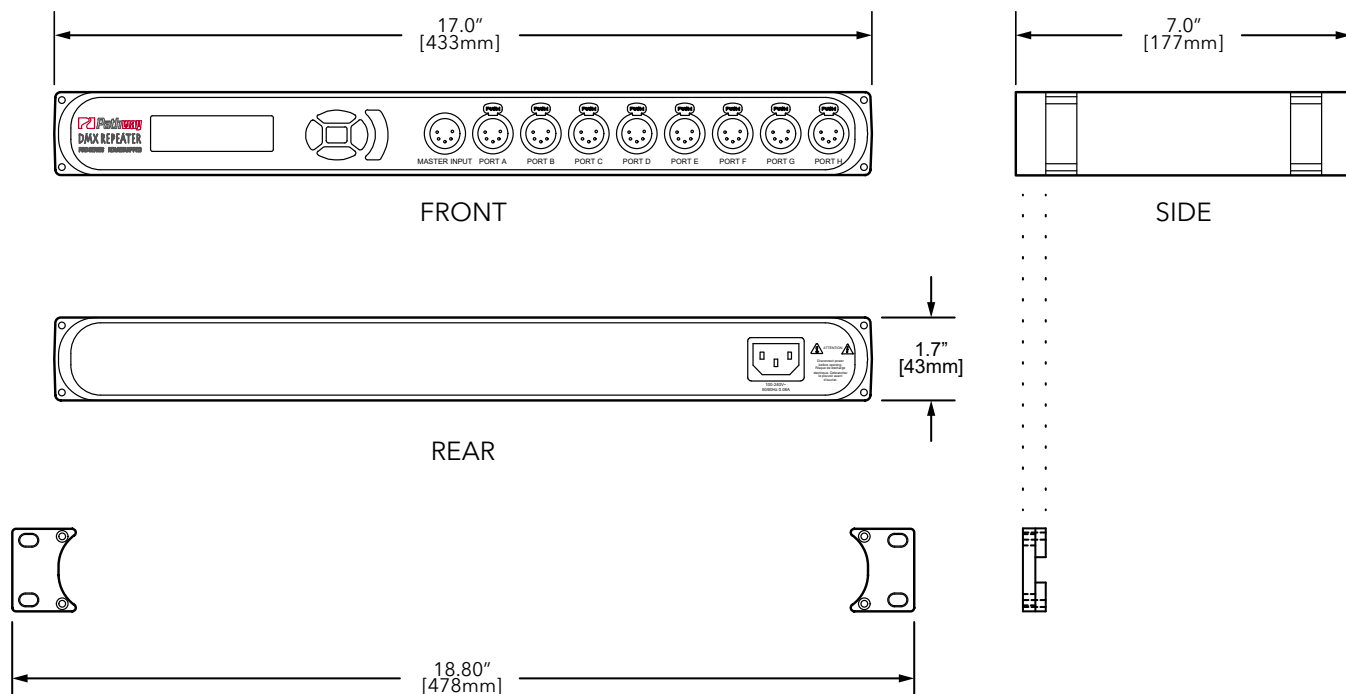
## FRONT PANEL

PWREP RM P8	XLR5F XLR3F TERM RJ45EC	REAR	NONRDM	
PWREP RM P8	XLR5F	FRONT	NONRDM	
PWREP RM P8	XLR3F	FRONT	NONRDM	
PWREP RM P8	RJ45EC	FRONT	NONRDM	
PWREP RM P8	XLR5F TERM RJ45EC	REAR	RDMHUB	
PWREP RM P8	XLR5F	FRONT	RDMHUB	
PWREP RM P8	RJ45EC	FRONT	RDMHUB	

## REAR PANEL

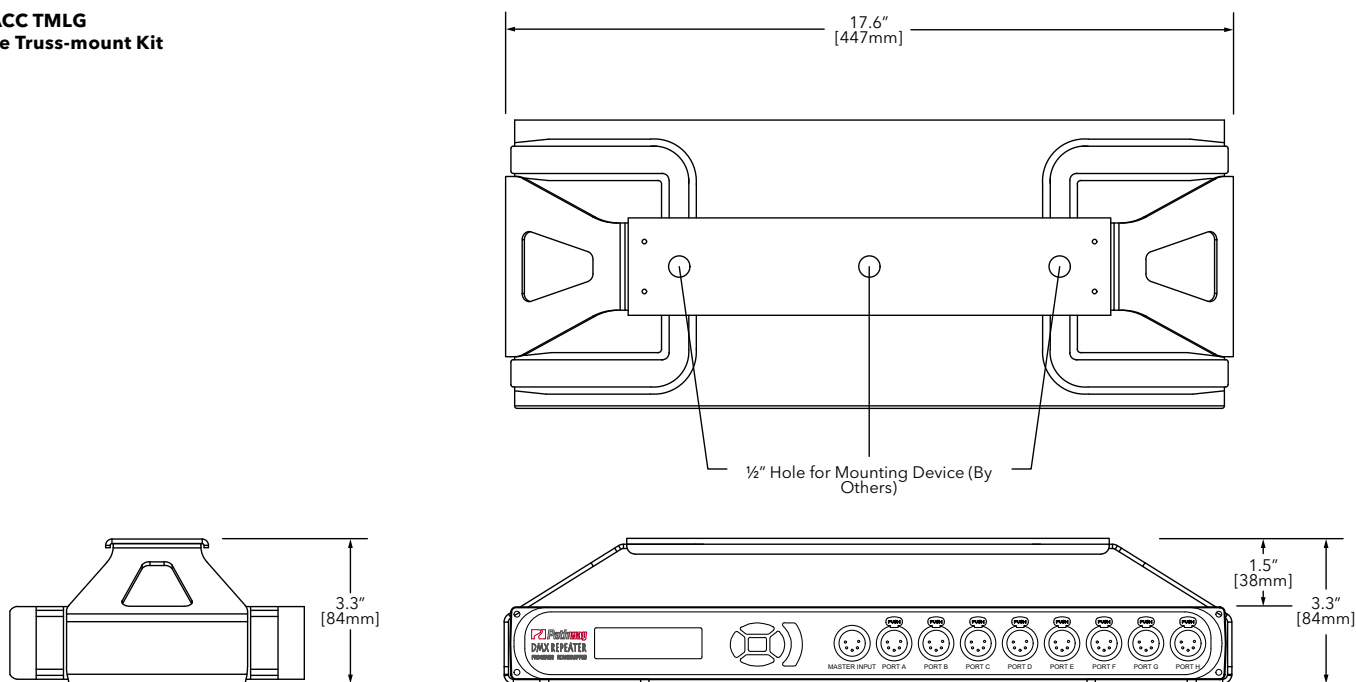
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PWREP RM P8	XLR3F	REAR	NONRDM	
PWREP RM P8	TERM	REAR	NONRDM	
PWREP RM P8	RJ45EC	REAR	NONRDM	
PWREP RM P8	XLR5F XLR3F RJ45EC	FRONT	NONRDM	
PWREP RM P8	XLR5F	REAR	RDMHUB	
PWREP RM P8	TERM	REAR	RDMHUB	
PWREP RM P8	RJ45EC	REAR	RDMHUB	
PWREP RM P8	XLR5F RJ45EC	FRONT	RDMHUB	

## DIMENSIONS



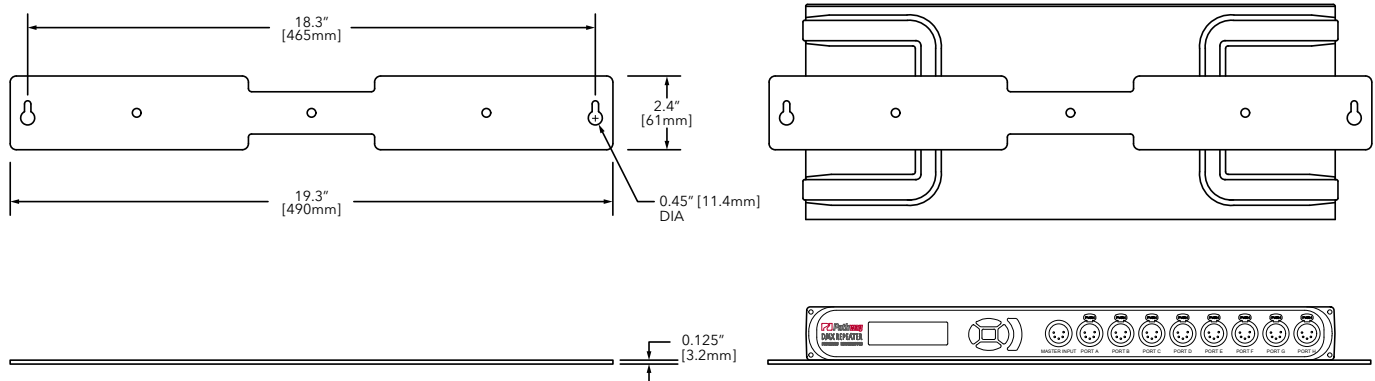
## TRUSS & WALL MOUNT ACCESSORIES

### PWACC TMLG Large Truss-mount Kit



## TRUSS & WALL MOUNT ACCESSORIES

### PWACC WMLG Large Wall-mount Kit



## PHEONIX TERMINAL CONNECTOR ADAPTER ACCESSORIES

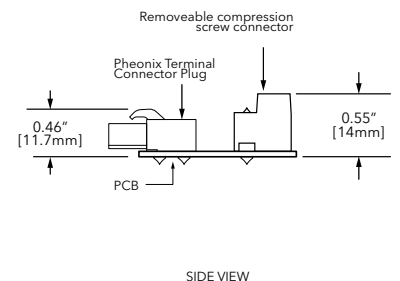
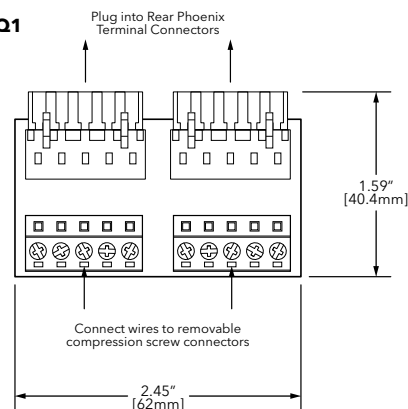
The PWCON PH5 Pheonix Terminal Connector Adapters are optional accessories that consist of a set of 5-pin Pheonix terminal plugs mated to a removable pair of either compression-screw or insulation-displacement contact (IDC) connectors.

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

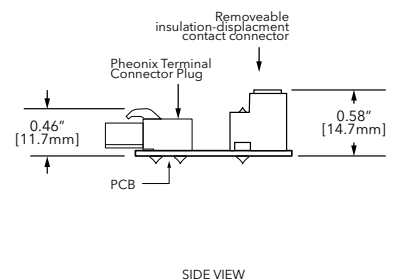
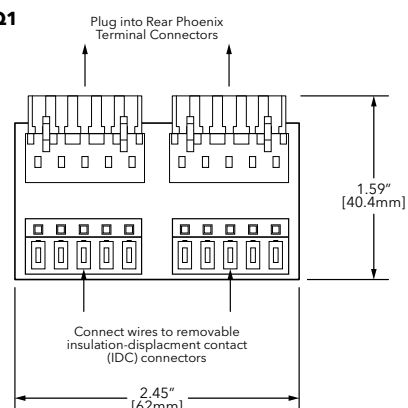
All TERM REAR models ship with 5-pin Pheonix compression-screw terminals.

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

### PWCON PH5 CSC5 Q1

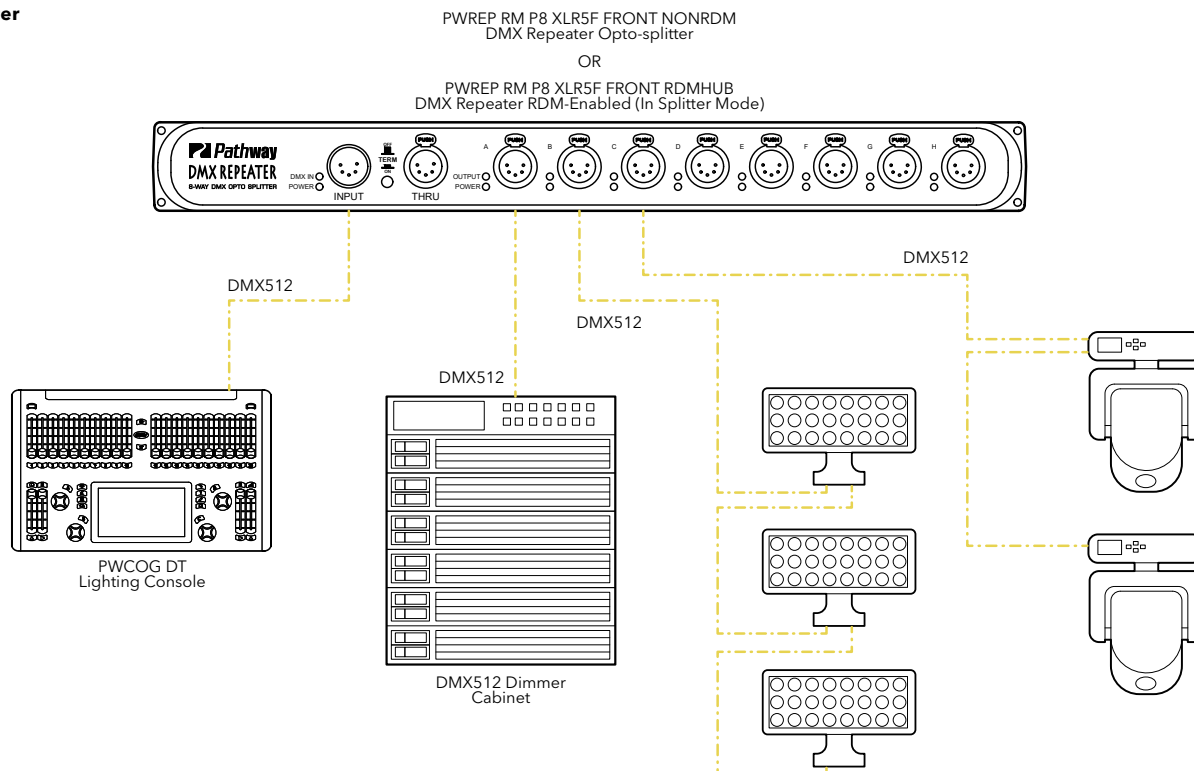


### PWCON PH5 IDC5 Q1

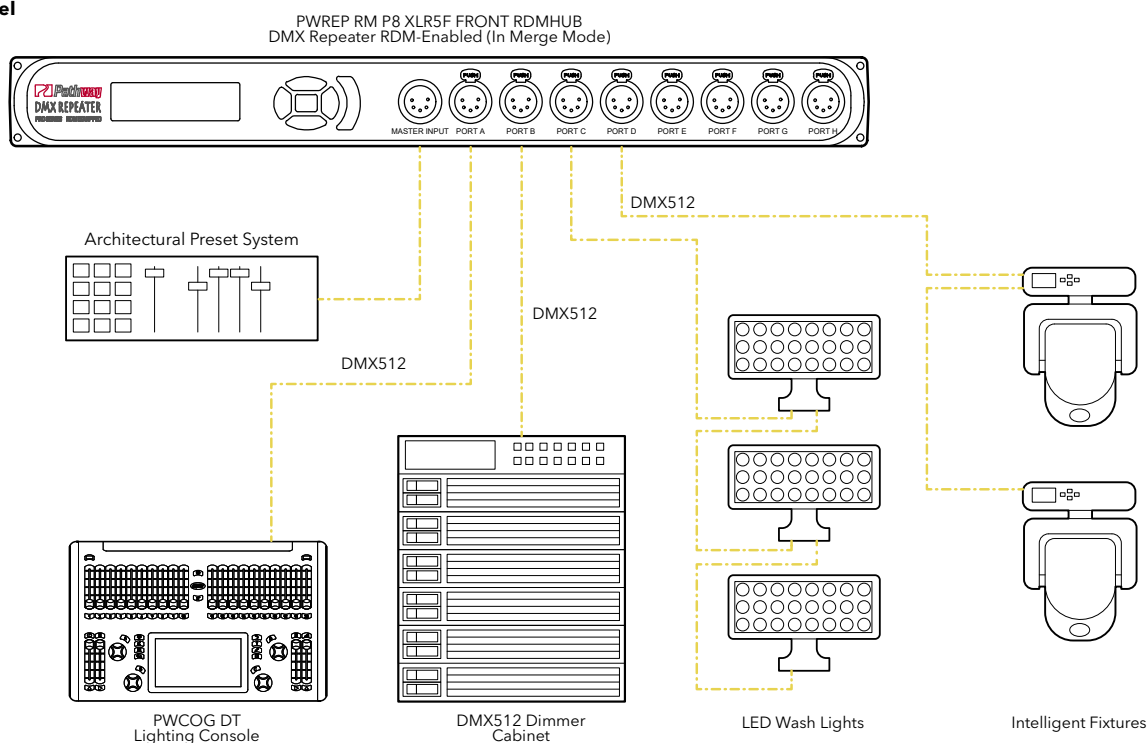


## APPLICATION RISER

### DMX Splitter



### RDMHUB Model Merge Mode



### RDMHUB Model Hub Mode

