Pathway® Connectivity Solutions | **Pathway PRO**

REPEATER RACK-MOUNT
DMX/RDM OPTO-SPLITTER

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

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

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

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[1] 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[2]	Connector, 5-Pin Phoenix, 5-Pin Compression Screw Connector, (Qty 1)
PWCON PH5 IDC5 Q1[2]	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

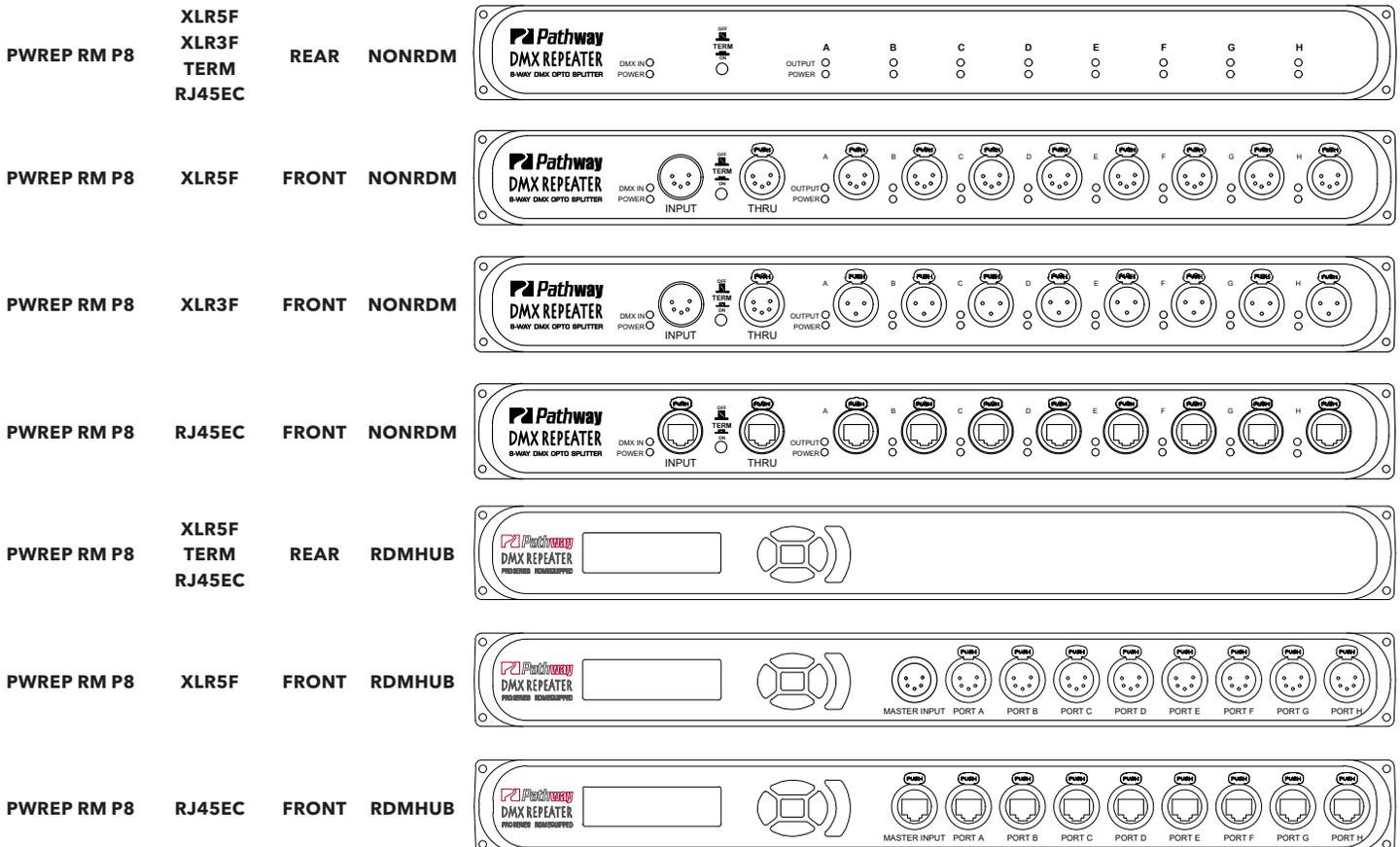|		
Electrical	**Input Ratings**	100-240VAC, 50/60Hz wide-range power input 0.08A max power consumption
	Isolation & Fault Protection	3000V isolation between DMX data links 250V fault protection on DMX ports
	Regulatory Compliance	UL CE
Mechanical	**Dimensions**	17" W x 1.7" H x 7.0" D (433mm W x 43mm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

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

PWREP RM P8	XLR5F	REAR	NONRDM	PORT A B C D E F G H THRU DMX INPUT
PWREP RM P8	XLR3F	REAR	NONRDM	PORT A B C D E F G H THRU DMX INPUT
PWREP RM P8	TERM	REAR	NONRDM	PORT H / DMX PORT G / DMX PORT F / DMX PORT E / DMX PORT D / DMX PORT C / DMX PORT B / DMX PORT A / DMX THRU / DMX INPUT
PWREP RM P8	RJ45EC	REAR	NONRDM	PORT A B C D E F G H THRU DMX INPUT
PWREP RM P8	XLR5F XLR3F RJ45EC	FRONT	NONRDM	
PWREP RM P8	XLR5F	REAR	RDMHUB	PORT H PORT G PORT F PORT E PORT D PORT C PORT B PORT A MASTER INPUT
PWREP RM P8	TERM	REAR	RDMHUB	PORT H PORT G PORT F PORT E PORT D PORT C PORT B PORT A MASTER INPUT
PWREP RM P8	RJ45EC	REAR	RDMHUB	PORT H PORT G PORT F PORT E PORT D PORT C PORT B PORT A MASTER INPUT
PWREP RM P8	XLR5F RJ45EC	FRONT	RDMHUB	

DIMENSIONS

17.0"
[433mm]

FRONT

7.0"
[177mm]

SIDE

1.7"
[43mm]

REAR

18.80"
[478mm]
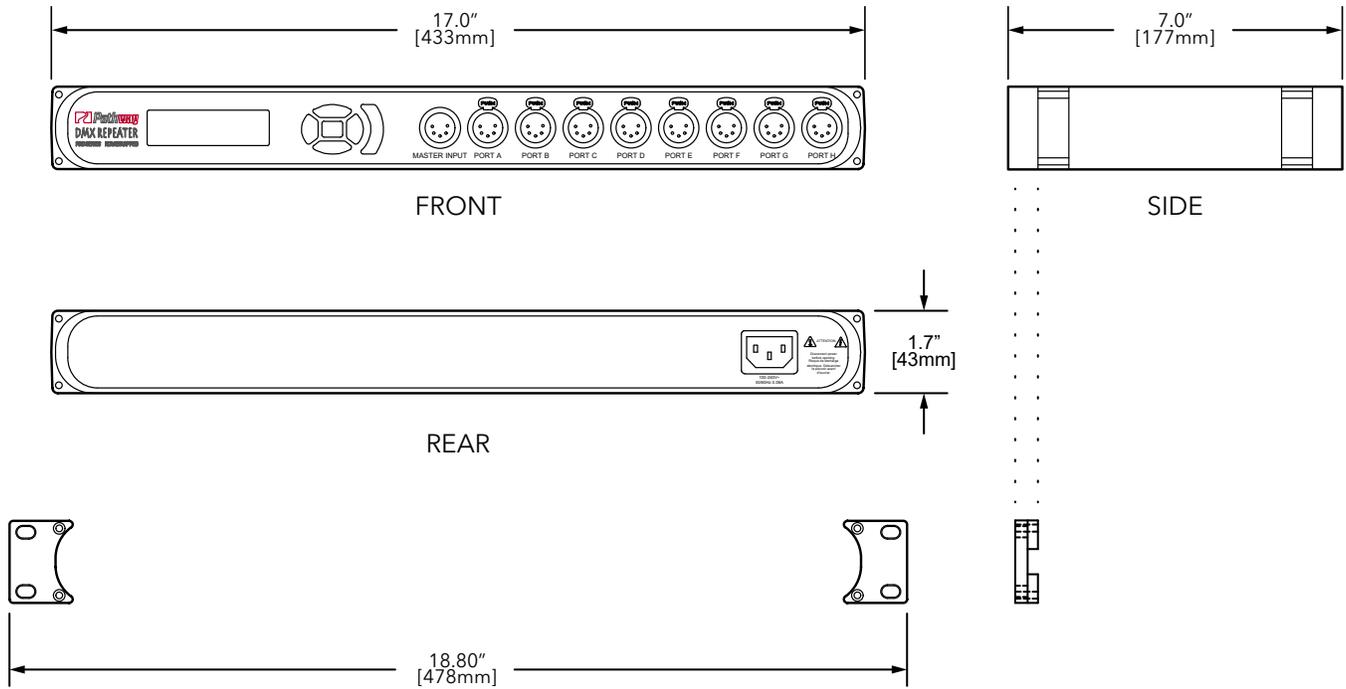
TRUSS & WALL MOUNT ACCESSORIES

PWACC TMLG
Large Truss-mount Kit

17.6"
[447mm]

½" Hole for Mounting Device (By Others)

3.3"
[84mm]

1.5"
[38mm]

3.3"
[84mm]
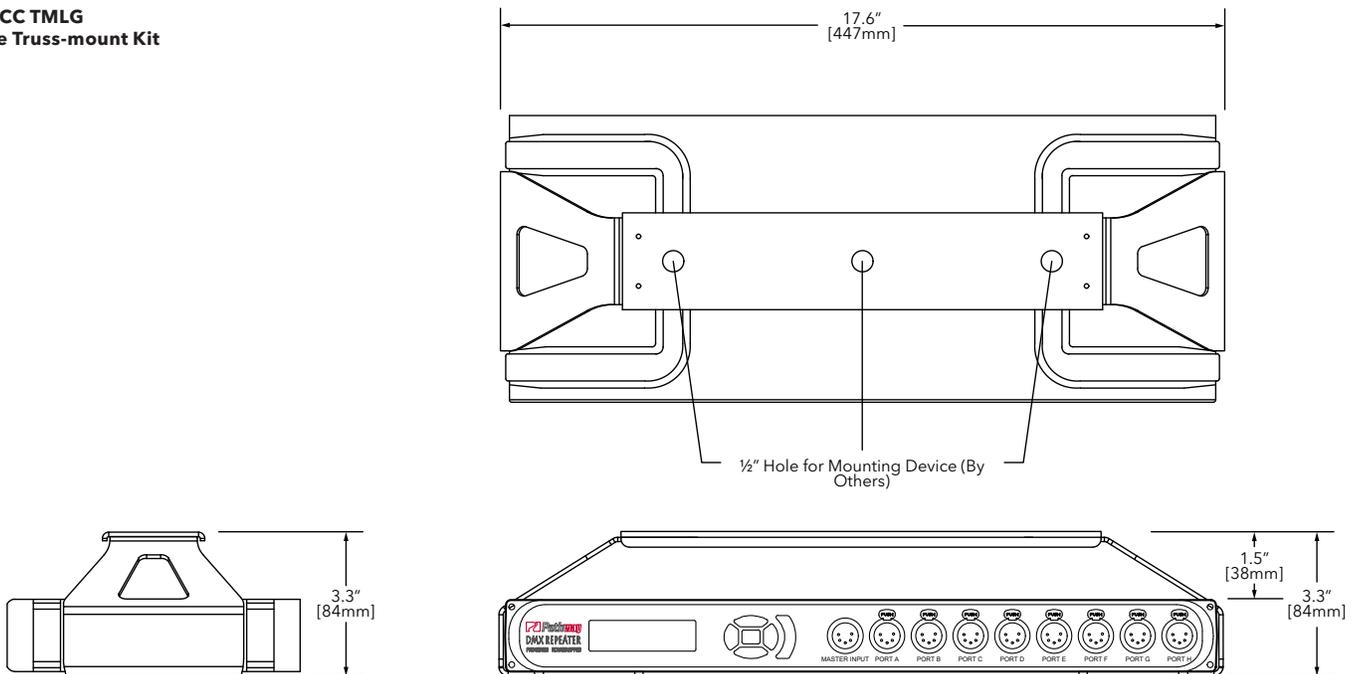
TRUSS & WALL MOUNT ACCESSORIES

PWACC WMLG
Large Wall-mount Kit
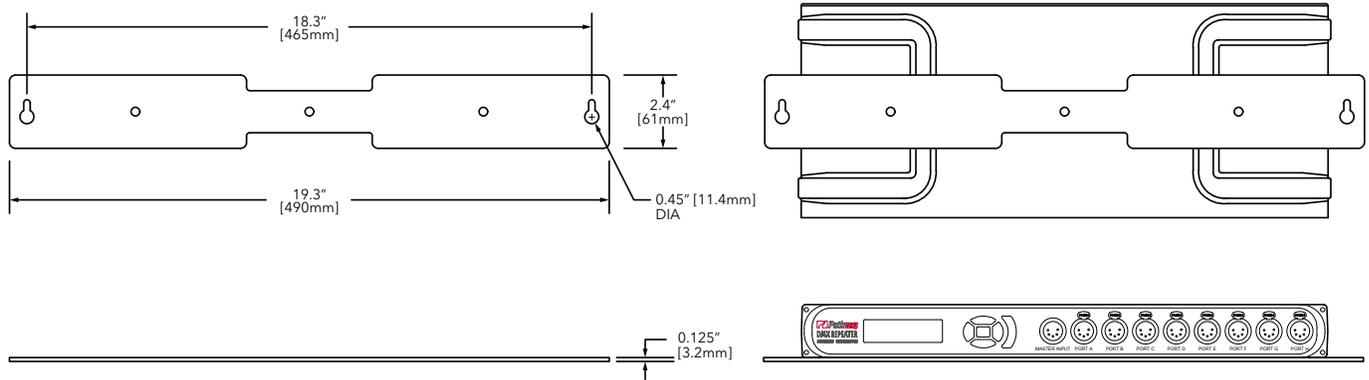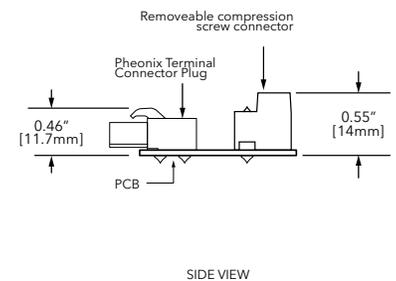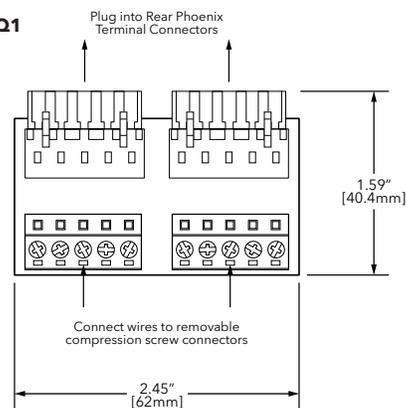

PHEONIX TERMINAL CONNECTOR ADAPTER ACCESSORIES

The PWCON PH5 Pheonix Terminal Connector Adapters are optional accesories 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.
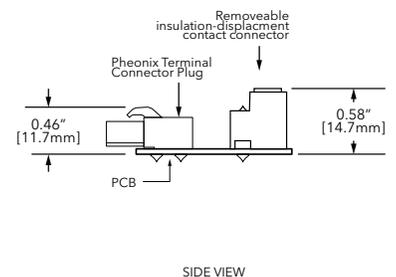
All TERM REAR models ship with 5-pin Pheonix compression-screw terminals.

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
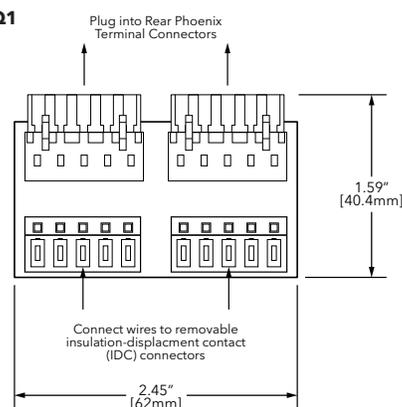
APPLICATION RISER

DMX Splitter

PWREP RM P8 XLR5F FRONT NONRDM
DMX Repeater Opto-splitter

OR

PWREP RM P8 XLR5F FRONT RDMHUB
DMX Repeater RDM-Enabled (In Splitter Mode)

DMX512

DMX512

DMX512

DMX512

PWCOG DT
Lighting Console

DMX512 Dimmer
Cabinet

**RDMHUB Model
Merge Mode**

PWREP RM P8 XLR5F FRONT RDMHUB
DMX Repeater RDM-Enabled (In Merge Mode)

Architectural Preset System

DMX512

DMX512

DMX512

PWCOG DT
Lighting Console

DMX512 Dimmer
Cabinet

LED Wash Lights

Intelligent Fixtures

APPLICATION RISER

**RDMHUB Model
Hub Mode**

PWREP RM P8 XLR5F FRONT RDMHUB
DMX Repeater RDM-Enabled (In Hub Mode)

MASTER INPUT   PORT A   PORT B   PORT C   PORT D   PORT E   PORT F   PORT G   PORT H

DMX512

DMX512

PWINS XLR5F
[xxxx] with

PWFP G1
[xxxx]

DMX Output
Wall Plate

PWINS XLR5M
[xxxx] with

PWFP G1
[xxxx]

DMX Input
Wall Plate

Control
Booth

PWINS XLR5M
2XLR5F [xxxx]
with

PWFP G1
[xxxx]

DMX
Input/Output
Wall Plate

Stage
Right

PWINS XLR5M
2XLR5F [xxxx]
with

PWFP G1
[xxxx]

DMX
Input/Output
Wall Plate

Stage
Left

PWINS XLR5M
2XLR5F [xxxx]
with

PWFP G1
[xxxx]

DMX
Input/Output
Wall Plate

Catwalk

DMX512

NOTE: Lighting Console may
only be connected to any one
location at a time.

PWCOG DT
Lighting Console

DMX512 Dimmer
Cabinet

LED Wash Lights

Intelligent Fixtures