

# MULTIPURPOSE ROOMS NETWORKS AND CONTROLS

SCHOOLS



HOUSES OF WORSHIP



CONVENTION & MEETING SPACES



BLACKBOX THEATERS



COMMUNITY CENTERS



LOUNGES



THEMED RESTAURANT & RETAIL



# PATHWAY CONNECTIVITY

## PRODUCTS USED IN THESE APPLICATIONS MAY INCLUDE



**COGNITO<sup>2</sup> THEATRICAL LIGHTING CONTROL CONSOLE PwCOG DT**

The theatrical controller that delivers advanced control of luminars, color mix LEDs and conventional loads using Task Oriented Navigation and Natural Language Control.



**CHOREO WALL-MOUNT ARCHITECTURAL CONTROLLER PwCHOREO WM**

All the power of Cognito<sup>2</sup> designed to fit a 3-gang wallbox, a 19" equipment rack or a tabletop console. Standalone operation, which can be programmed without a PC.



**NSB (Networked Sliders and Buttons) PwWSI NPOE or N485**

Using a PoE or RS485 multi-drop backbone, these button and sliders trigger memories and actions on Cognito<sup>2</sup> or Choreo. Decora<sup>®</sup> form factor modules may be arranged in one to six gang wall stations.



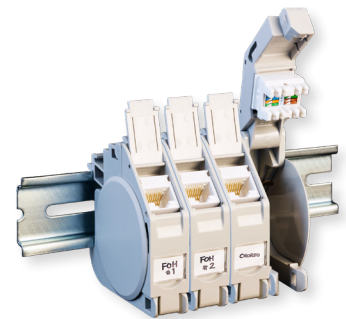
**EMERGENCY DMX CONTROLLER PwEMDMX**

The Pathway Emergency DMX Controller is a UL924 compliant controller designed to ensure DMX house lights satisfy minimum luminance levels for egress lighting in emergency situations.



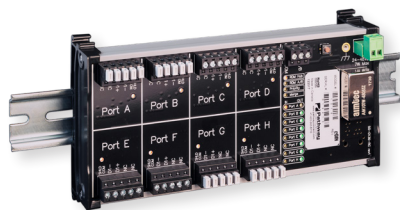
**SNAP DMX CONTROL PANEL PwRLY RELAY LIGHTING**

An enclosure designed for today's modern general illumination lighting fixtures that require intelligent management of power and 0-10v control signal distribution.



**DIN-MOUNT RJ45 PATCH ACCESSORY PwACC RJPATCH Q4**

Terminate building category cable to the punch-down keystone jack, and use Ethernet patch cables to create clean, custom Ethernet patch bays inside DIN enclosures.



**8-PORT DIN-MOUNT DMX HUB/MERGER PwREP DIN P8 RDMHUB**

Eight-port DMX/RDM Hub that brings flexibility to single-Universe distribution systems with bi-directional ports, automatic signal sensing and four operating modes, including merging two controllers.



**VIA 16-PORT DIN-MOUNT ETHERNET SWITCH PwVIA DIN P16 RJ45 SFPslot POE**

The entertainment-class PoE Ethernet switch that connects and powers the controllers and remote stations.



**DATA RECEPTACLES & FACEPLATES PwINS, PwFP, PwCON**

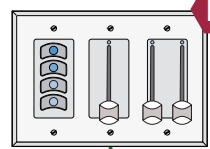
Robust, attractive wall plates and connectors for customizable receptacle stations. Available with removable compression screw or insulation displacement contact (IDC) connector blocks.

# SYSTEM APPLICATIONS NOTES

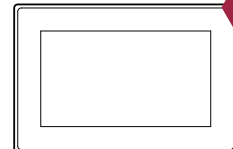
## REFER TO ONE-LINE SCHEMATIC

- A** In this application, **Choreo Wall-mount (PWCHOREO WM)** is performing several functions. Choreo is the master system processor where programming is done and playback for the space can be executed manually or automatically if the time clock function is invoked. Choreo can be placed in to password-protected Wall Station Mode for the untrained user such as adjunct faculty, guest meeting planners and facilities personnel.
- B** **Cognito<sup>2</sup> (PWCOG DT)** is the hands-on live action lighting console. Visiting production companies may want to operate their show lighting with a console they bring with them, referred to as a "Guest Console". Either the Cognito<sup>2</sup> or the guest console connect to the 8-Port DIN-mount DMX Hub via the DMX Input receptacle. The Cognito or guest console will then take control of the network. Once removed, the Choreo will retake control.
- C** The **VIA 16-Port DIN-mount (PWWIA DIN P16 RJ45 SFPSLOT POE)** lives at the very heart of the Pathway Connectivity ecosystem. An entertainment class Ethernet switch with advanced management features that support distribution of streaming data for audio, video and lighting control applications, the VIA 16-Port DIN-mount switch sources power to all the PoE devices in the system.
- D** **NSB - Networked Sliders and Buttons (PWWSI N485 or NPOE)** stations are an industry first; they are PoE powered. Each button or slider is easily mapped to a Choreo Memory, which in turn can operate lighting levels or trigger any other Show Control event such as starting a SMPTE clock, running a Playlist or even relinquishing control to other devices.
- E** In this application, DMX control data is sourced from the Choreo and Cognito<sup>2</sup> controllers. The **8-Port DIN-mount DMX Hub/Merger (PWREP DIN P8 RDMHUB)** routes all DMX512 to the end devices in the system. The hub has four operating modes: **Hub, A/B Select, Priority** and **Merge**. In this application, the Priority mode is most useful; Port A is given highest priority and Port H the lowest. The Hub will sense DMX input on any of the 8 ports, and route signals to the remaining ports as outputs. Cognito<sup>2</sup> should be plugged into Port A to take control of the system when needed. Choreo should be plugged into Port H, so control falls back to it automatically when all other sources of control are removed.
- F** The **SNAP DMX Relay Lighting Control Panel (PWRLY)** manages DMX512 control of single-pole line-voltage relays and control channels that source or sink 10VDC. Listed for UL924 applications, SNAP features a fully flexible soft patch.
- G** Small and compact, **DIN System Enclosures (PWENC)** enable systems to be built in bespoke configurations including VIA switches, DIN-mount DMX interfaces and/or the DIN-mount Pathport gateways. In this application, controllers and control interface devices are distributed throughout the venue and the need for bulky 19" equipment racks is eliminated.
- H** Pathway Connectivity manufactures a complete line of **Data Receptacles (PWINS)** used to connect plug-and-play devices to the system infrastructure. It is another way that we provide single-manufacturer accountability for everything from the controller, to the Ethernet switch, to the remote stations, to the gateways, including even the simple **face plates (PWFP)**.
- All receptacles and DIN products may use either removable compression screw connectors for stranded copper wire, or Pathway's own insulation displacement contact (IDC) connectors for extremely fast terminations using category cable without the need for stripping.
- I** The network is configured with a computer running **Pathscape Software** downloaded for free from the Pathway Connectivity web site.
- Once configuration with complete, the PC may be removed. Pathscape is the unified tool that helps in setting up all Pathway products including VIA, Pathport, Vignette, NSB and RDM-capable DIN interface devices.
- J** **PWACC RJPATCH** accessory patch modules provide a clean and easy way to terminate building wire to a custom DIN-mounted RJ45 patch bay.
- K** **The Emergency DMX Controller (PWEMDMX)** will transmit a fully customizable snapshot of a single universe DMX to four separate data runs, using a wet or dry contact closure from a fire alarm control panel, or the normal power phase loss detection option. The outputs are optically isolated to ensure maximum reliability and during normal operation are fully RDM compliant so your entertainment console or architectural controller still has maximum flexibility when it comes to commissioning and monitoring your system.
- This system has a PWACC EMRR Remote Restore button which ensures the facility's manager is happy the emergency conditions have been cleared before returning automated control back to the Choreo.

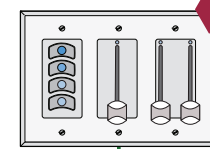
NSB  
(Network Sliders & Buttons)  
Wall Station



Choreo Wall-mount  
Architainment Controller

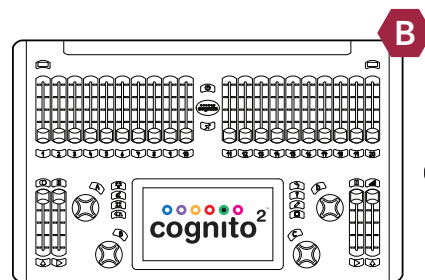


NSB  
(Network Sliders & Buttons)  
Wall Station



Belden 1583A not to exceed  
300' when used for Ethernet

1 pole 120v  
or 277v

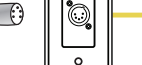


Cognito<sup>2</sup>  
Desktop Console  
(Guest)

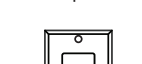


Configuration PC

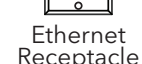
DMX512 Input  
Receptacle



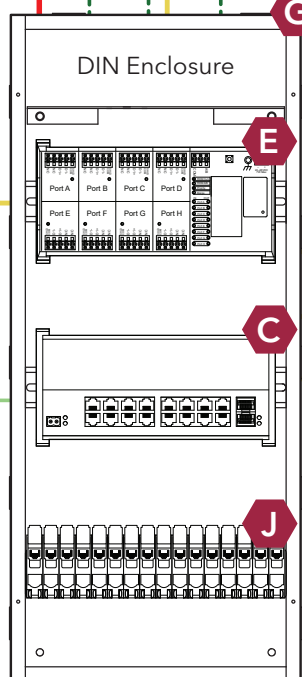
DMX512 Input  
Receptacle



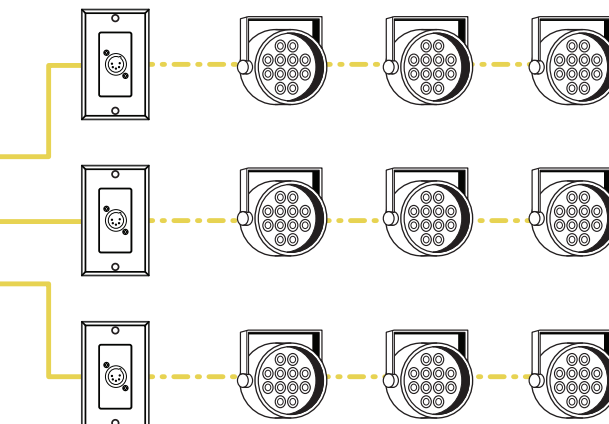
Ethernet  
Receptacle



Restore Button



DIN Enclosure



DMX512 Output  
Receptacle

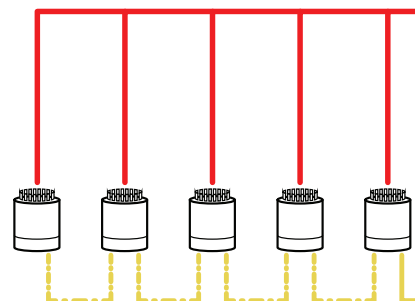
RGB Accent Lighting

Emergency  
Power

1 pole 120v  
or 277v

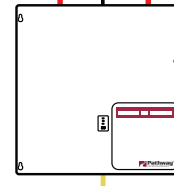
Normal Power  
for Phase Loss  
Sense

1 pole 120v  
or 277v

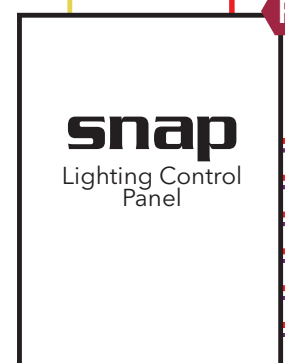


House  
Emergency Lighting

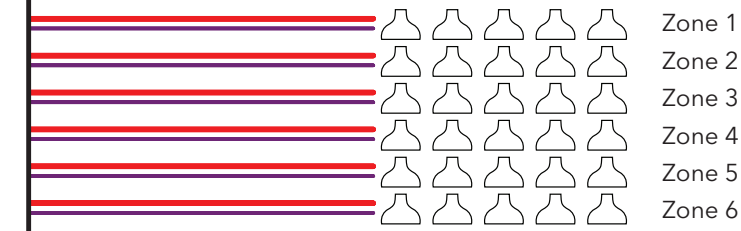
Emergency  
DMX Controller



(7) 1pole 20A  
120v or 277v



snap  
Lighting Control  
Panel



Zone 1  
Zone 2  
Zone 3  
Zone 4  
Zone 5  
Zone 6

Switched Loads (CLASS 1) with  
0-10VDC Analog controls (CLASS 2)  
KEEP CLASS 1 AND CLASS 2 WIRING SEPARATE  
PER APPLICABLE CODES AND STANDARDS

0-10v LED Downlights  
in hallways and bathroom facilities

Wire Key

- 2-conductor doorbell wire
- Line Voltage
- 0-10V (Belden 5320FL)
- DMX512 (Cat5)
- - - DMX512 Jumper
- RS485 (Cat5)
- - - Ethernet w/ PoE
- Ethernet
- Ethernet Fiber

Client \_\_\_\_\_

Job \_\_\_\_\_

Date \_\_\_\_\_



A pioneer in entertainment lighting, Pathway Connectivity is renowned for solid, easy-to-use equipment with comprehensive, robust features.

Our reputation for innovation and reliability is based on over thirty years commitment to enhancing the functions and interoperability of lighting systems around the world.

For demonstration and training videos, visit our Pathway Connectivity YouTube Channel at [www.youtube.com/pathwayconnectivity](https://www.youtube.com/pathwayconnectivity)

---