

# THEATRE AND HOUSELIGHTS NETWORKS AND CONTROLS

THEATER HOUSE LIGHTING



HOUSES OF WORSHIP



PRESENTATION SPACES



# PATHWAY CONNECTIVITY

## PRODUCTS USED IN THESE APPLICATIONS MAY INCLUDE



### PATHPORT DMX/RDM GATEWAYS PWPP RM P8 or P4 and PWPP DIN P4

The heart of DMX distribution. Pathports are used for securely encoding, routing and decoding DMX512/RDM data over an Ethernet lighting control network.

Pathscape allows you to configure all RDM devices connected to Pathports in your venue in a single table for ease of addressing, regardless of how the system is wired.



### VIGNETTE WALL STATIONS PWWSI VPOE or V485

Customizable houselight controller; snapshot up for 4 Universes of E1.31 sACN or 1 Universe of DMX512. Playback and crossfade between snapshots, complex zones, single channels or non-dims. PoE or RS485 wiring topology.



### VIGNETTE CLOCK PWGW DIN CLK

Time-based Vignette Playback, which allows for scheduling playback events such as snapshots, zones, and other functions. Trigger events based on date, time, or astronomical events such as dawn, dusk, sunrise or sunset.



### EMERGENCY DMX CONTROLLER PWEMDMX

The Pathway Emergency DMX Controller is a UL924 compliant controller. It is designed to send a control signal to DMX lighting to ensure lights go to full brightness or a pre-determined snapshot triggered by an emergency situation.



### eLink LIGHTING PROTOCOL ROUTER PWELINK RM P2

The Pathway eLink is a PoE-enabled entertainment Ethernet lighting router designed to bridge two distinct Local Area Networks, capable of several functions where network isolation and security is a concern.



### VIA 24-PORT INSTALLATION ETHERNET SWITCH PWVIA RM P24 RJ45 SFPSLOT POE

The rackmount entertainment-class gigabit PoE Ethernet switch that serves as the backbone of your network connecting and powering other PoE devices like Pathport, eLinks, Choreos/Cognitos or Wall Stations. This 1U high rack mount device includes a 170w PoE supply and can run in a silent mode, completely convection cooled.



### VIA 16-PORT DIN-MOUNT ETHERNET SWITCH PWVIA DIN P16 RJ45 SFPSLOT POE

DIN-mount, entertainment-class PoE Ethernet switch that connects and powers the controllers, and wall stations. Like all VIAs, this switch is fully managed by Pathscape and features PoE allocations and reporting, port bandwidth usage, VLANs, IGMP, RSTP, EAPS, DHCP and LLDP. It also has presets for Dante QoS.



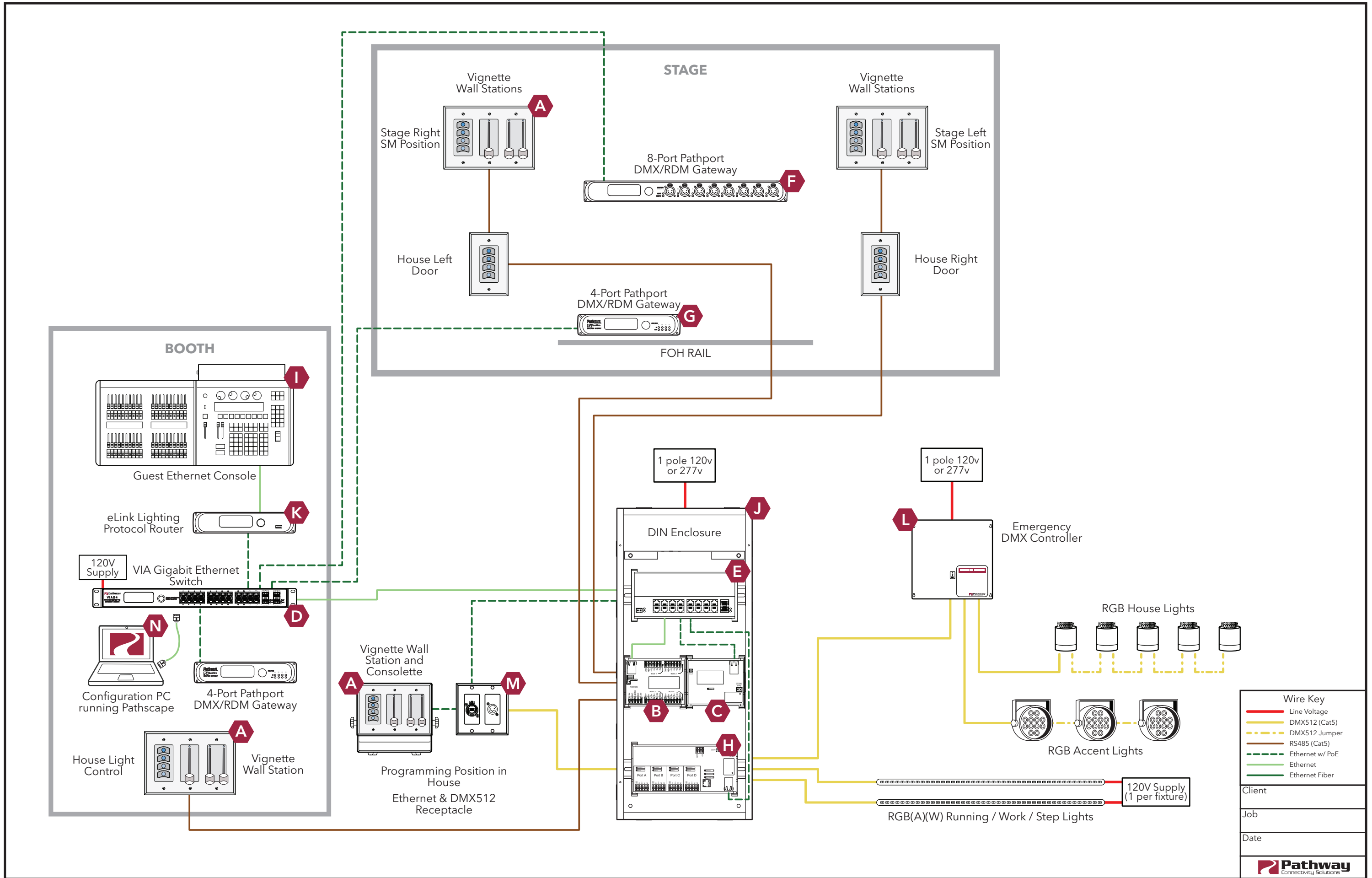
### DATA RECEPTACLES & FACEPLATES PWINS, PWFP, PWCON

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, **Vignette (PWWSI V485)** is the houselight control system. Vignette wall stations can be accessed by Stage Managers, FOH staff, or the lighting board operators in the booth. Either the Stage Manager or the staff in the booth can lock out all other Vignette wall stations in the venue during a show situation. This turns off the button backlights and disables any tampering with the house lights during performances.
- B** The **Vignette 485 Gateway (PWGW DIN V)** provides connectivity for Vignette 485 wall stations. The Gateway has four separate buses, each connecting and powering up to 16 discrete stations. An Ethernet port connects it to the lighting network. The basic 485 Gateway is shown here, but it is available in a variety of configurations, including with physical buttons, contact closure inputs, and DMX In/Out.
- Vignette is also available in a PoE version (**PWWSI VPOE**), connecting directly to PoE switches for network and power.
- C** **Vignette Clock (PWGW DIN CLK)** extends the Vignette system to allow for automatic triggering of Vignette snapshots, zones or other functions. Easily schedule an event based on date, time, or astronomical events such as dawn, dusk, sunrise or sunset.
- D** **VIA Switches** live at the very heart of the Pathway Connectivity ecosystem. Entertainment-class Ethernet switches with advanced management features support distribution of streaming data for audio, video and lighting control applications.
- VIA 24-Port Rack-mount Installation Switch (PWVIA RM P24 RJ45 SFPSLOT POE)** connects the PC running Pathscape to the network to allow for configuration, as well as connecting the Ethernet console, VIA16 and OCTO and QUATTRO gateways to the system.
- E** **VIA 16-Port DIN-mount (PWVIA DIN P16 RJ45 SFPSLOT POE)** connects to the VIA rack-mount switch in the booth, as well as the Vignette 485 Gateway, Vignette Clock and Pathport 4-Port DIN-mount Gateway to the network. It powers the Vignette Clock and Pathport DIN-mount via PoE. It accepts a Guest Ethernet Console via an Ethernet receptacle for programming or show control.
- F** **Pathport DMX/RDM Ethernet Gateways** provide secure DMX-over-Ethernet routing, with advanced features such as RDM, crossfade between DMX sources, DMX output speed and signal loss behavior.
- G** In this application, the **Pathport 8-Port Rack-mount Gateway (PWPP RM P8) (F)** on stage and the **4-Port Rack-mount Gateway (PWPP RM P4) (G)** on the FOH rail provide eight and four DMX ports, respectively, for connecting to end equipment such as light fixtures or dimmer racks.
- An additional 4-Port Rack-mount Gateway in the Booth allows for connection of a DMX source, such as a console that is not natively Ethernet-equipped. The PWPP RM P4 may be powered via PoE, DC or line voltage.
- H** The **Pathport 4-Port DIN-mount DMX/RDM Ethernet Gateway (PWPP DIN P4)** is a four-port DIN-rail mountable DMX/RDM Ethernet Gateway, with all the same features of the rack-mount versions. It can be powered via PoE or DC.
- I** Typical of many theater spaces, visiting production companies may want to operate their show lighting with a console they bring with them, referred to as a "Guest Console". The guest console connects to the **VIA Ethernet Switch** in the booth, through the **eLink Protocol Converter/Router**, converting open streaming protocols to Pathway Secure sACN.
- J** 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 reduced to where appropriate; eg. in the booth.
- K** **Pathway eLink Protocol Converter/Router (PWELINK)** has several applications including real-time DMX-over-Ethernet protocol conversion, allowing access to only certain DMX slots for a temporary/touring console, isolating lighting network data from console configuration traffic, converting open streaming protocols to Pathway Secure sACN, and more.
- L** **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 optional integrated phase loss detection device. 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.
- M** 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.
- N** The network is configured with a computer running **Pathscape Software**, a free download from the Pathway Connectivity web site.
- Once configuration is complete, the PC may be removed. Pathscape is the unified tool that helps in setting up all Pathway products including VIA, Pathport, eLink, Vignette, NSB and RDM-capable DIN interface devices.
- It also has the advantage of discovering every 3rd party RDM responder in your system and allows you to edit them in a single table, regardless of which data port they are physically plugged into.





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)

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