OVERVIEW

The Pathport® 6824 four-port gateway provides the full functionality of other Pathport gateways in a compact, DIN-rail mountable form factor.

System integrators can now easily put fully customized universes of DMX where they are needed. Ideal for use in NEMA enclosures. Fully compatible with eDIN interfaces.

CONNECTIONS

The Pathport 6824 features terminal strips that can be removed from the card to facilitate easy wiring installation or replacement. Make the following connections, *WITH THE POWER TURNED OFF.*

POWER

The 6824 is designed to run on either Power-over-Ethernet (PoE), or on an auxiliary power supply providing between 24 and 48 volts DC. The gateway is Class 2 PoE and will draw up to 8 Watts.

If an auxiliary supply is used, observe the correct polarity when wiring the power IN terminal plug. The earth ground terminal must be connected to the enclosure's chassis or electrical ground terminal to ensure EMC compliance.
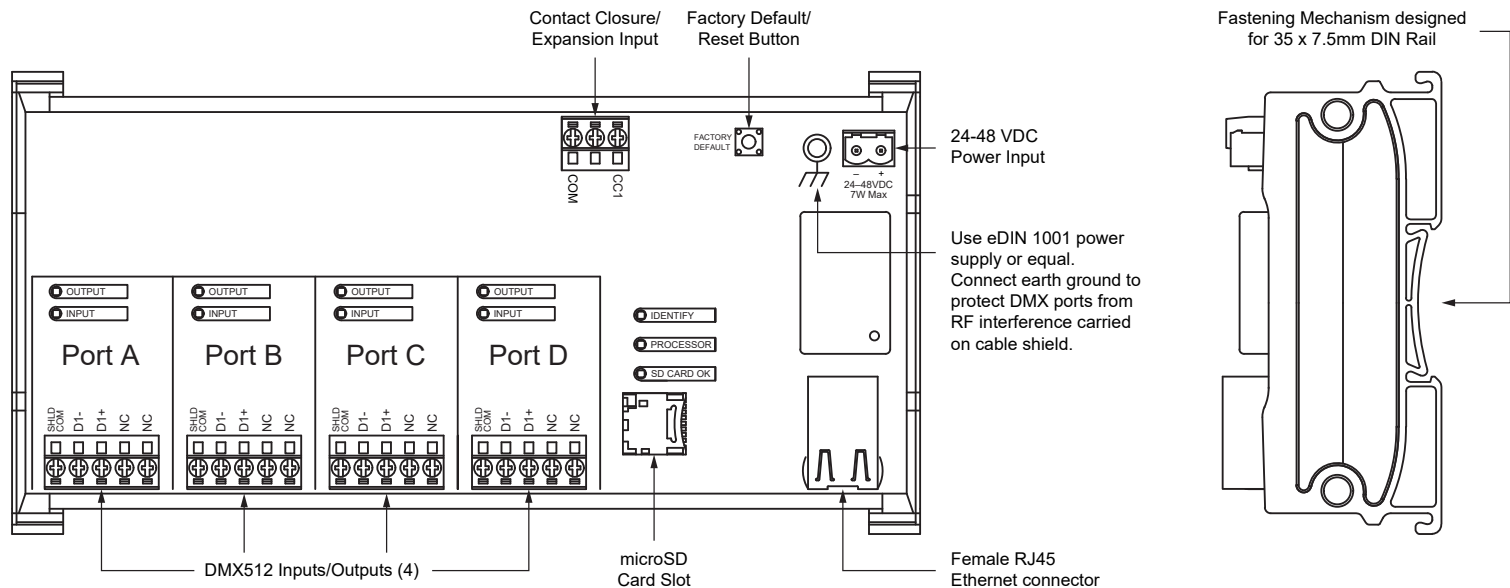
DMX512

DMX connections consist of a shield and data pair. Connect DATA+ and DATA- to D1+ and D1-. Observe the same polarity convention throughout the system. Connect the cable shield or common to the SHLD COM terminal.

NETWORK

All network wiring should follow standard Ethernet rules and be installed by a qualified person. As part of the installation, all wiring should be certified under the TIA/EIA-568 standard.

STATUS INDICATORS

PROCESSOR   *Green*. Steady heartbeat indicates processor is running; off indicates no power.

RJ45 LEDs   The RJ45 Ethernet jack has two green LEDs. One will glow steady when the link is up and the other will flash with activity.

DMX INPUT   *Amber*. Steady glow indicates port is receiving active DMX. Off indicates no incoming DMX signal.

DMX OUTPUT   *Green*. Steady glow indicates port is transmitting DMX. Off indicates no DMX output..

IDENTIFY   *Blue.* Blinks when identify is active.

SD CARD OK   *Green*. Steady glow indicates microSD card is present. Off indicates no SD card present or SD card error/cannot be read.

Contact Closure/ Expansion Input — Factory Default/ Reset Button — Fastening Mechanism designed for 35 x 7.5mm DIN Rail

24-48 VDC Power Input

Use eDIN 1001 power supply or equal. Connect earth ground to protect DMX ports from RF interference carried on cable shield.

DMX512 Inputs/Outputs (4)

microSD Card Slot

Female RJ45 Ethernet connector

INSTALLATION

- Disconnect all power before proceeding with installation.

- Securely mount DIN rail (if not already installed in an enclosure). To mount the 6824, hook the upper slots on the back of the plastic extrusion to the DIN rail and then gently but firmly press on the bottom front corners of the extrusion to snap the module onto the rail. **DO NOT press directly** on the PCB card itself.

- If the 6824 is using an auxiliary power supply, connect the power IN terminal plug, after checking that polarity is being observed. The earth ground terminal must be connected to the enclosure's chassis or electrical ground terminal to ensure EMC compliance. Restore power and the card will boot up.

- Attach the network cable to the RJ45 connector. Because good wiring practice requires building wire to terminate with a female connector, typically a short (12"/30cm) male-to-male jumper is used. If PoE is being used, the card will boot up. Both auxiliary power and PoE may be connected simultaneously without damaging the 6824.

- The system is now ready for testing.

- To remove the 6824 from the DIN rail, use a flathead screwdriver to gently pry the hooked foot on the end caps of the device away from the DIN rail. The corner of the device should life free; repeat at the other side and unhook the device from the rail.

SD CARD BACKUP

When a new, unused microSD card is inserted into the 6824 card slot, the gateway's current configuration will be automatically copied to the SD card.

When a microSD card containing a saved configuration for a 6824 is inserted into another 6824, the configuration will automatically be copied from the SD card into the gateway.

CONTACT CLOSURE INPUT

There is a 3-pole terminal connector included for dry contact closure input.

Currently as of the publish date of this document, there is no supported feature making use of this input; however this will be expanded in future firmware updates.

DEFAULT SETTINGS

The 6824 ships as a DMX output gateway with the following Ethernet receive protocols enabled: Pathport, Strand Shownet, ETC Net2, streaming ACN and ArtNet.

Port A is patched to Universe 1, Port B to Universe 2, Port C to Universe 3 and Port D to Universe 4.

Channel information in DMX Universe 1, placed on the network using any of the above protocols, will cause Port A to actively output DMX.

FURTHER CONFIGURATION

A large number of parameters may be customized for the 6824, including: port direction, output channel patch, input universe number, transmit and receive protocols and DMX speed. Network properties such as IP address and subnet mask are also customizable by the user.

Detailed gateway configuration and overall network system management are done using Pathscape software, which is available for download from www.PathwayConnect.com

Please refer to the Pathscape manual for information on configuring these additional properties.

ELECTRICAL INFORMATION

- Power input: 24-48VDC or PoE 802.3af Class 2
- Maximum power consumption: 8 Watts
- 1000V Opto-isolation between ports
- 60V protection on each port
- Ethernet: 802.3 10/100BaseT

COMPLIANCE

- USITT DMX512 - 1990 / ANSI E1.11 DMX512-A R2013
- E1.20 RDM - Remote Device Management
- E1.31 sACN - Streaming ACN
- RoHS 2011/65/EU