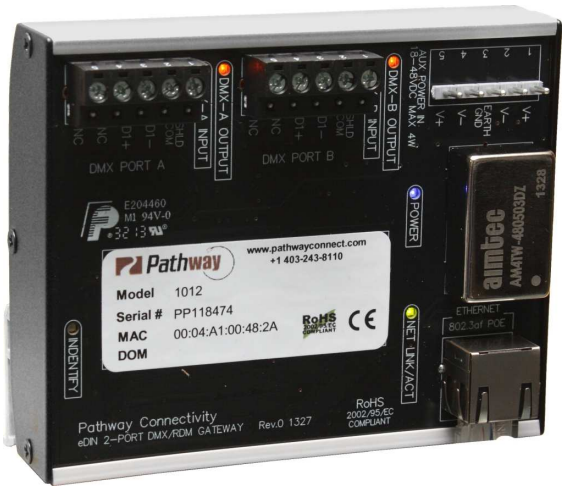
Model 1012-TRM 2-Port Installation

OVERVIEW

The Pathport® 1012-TRM two-port node provides the full functionality of other Pathport nodes, in a compact, DIN-rail mountable format. System integrators can now easily put fully customized universes of DMX where they're needed. Ideal for use in NEMA enclosures. Fully compatible with eDIN interfaces.



CONNECTIONS

The Pathport 1012-TRM features terminal strips that can be removed from the card to facilitate easy wiring for auxiliary power and DMX. Make the following connections, ***WITH THE POWER TURNED OFF:***

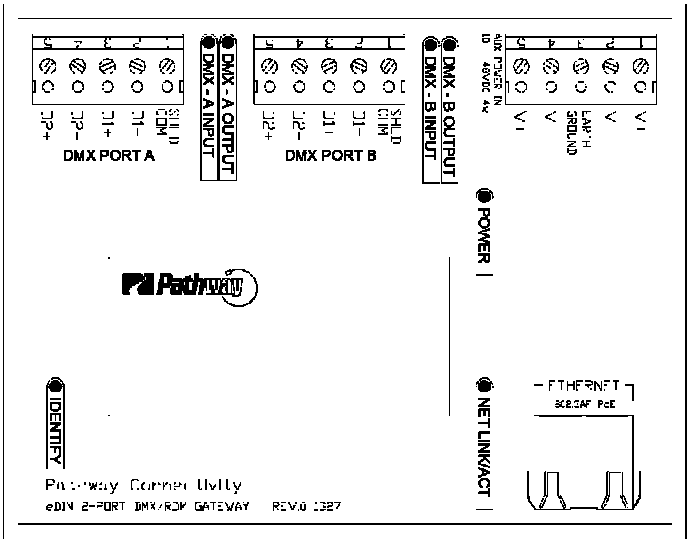
Power

The 1012-TRM is designed to run on either Power-over-Ethernet (PoE), or on an auxiliary power supply providing between 18 and 48 volts DC. The node will draw 5 watts.

If an auxiliary supply is used, observe the polarity when connecting V+ and V-. A second set of terminals are provided so power may be daisy-chained to other cards. These terminals are not energized when the node is run on PoE. The EARTH GROUND terminal must be connected to the enclosure's chassis or electrical ground terminal to ensure EMC compliance.

DMX - Terminal Strip

DMX connections consist of a shield and a data pair. A second auxiliary data pair is also occasionally employed. 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.



DMX - RJ45 Connection

Refer to the chart below for wiring pinouts for the RJ45 connector. The RJ45 is manually switchable between an ESTA standard DMX pinout and a pinout suitable for Philips Solid-State Lighting (Color Kinetics) products using RJ45 connectors for DMX input.

E1.27-2 Cat5/6 Pinout for DMX 512A		
DMX Signal	Cat5/6 Wire Color & #	XLR Pin #
Data 1 +	1 - White/Orange	3
Data 1 -	2 - Orange	2
Data 2 +	3 - White/Green	5
Data 2 -	6 - Green	4
not used	4 - Blue	
not used	5 - White/Blue	
Shield/COM	7 - White/Brown	1
Shield/COM	8 - Brown	1

Cat5/6 Pinout for Color Kinetics		
DMX Signal	Cat5/6 Wire Color & #	XLR Pin #
Data 1 -	1 - White/Orange	2
Data 1 +	2 - Orange	3
Shield/COM	3 - White/Green	1
not used	6 - Green	
not used	4 - Blue	
not used	5 - White/Blue	
not used	7 - White/Brown	
not used	8 - Brown	

ETHERNET

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.

Model 1012-TRM 2-Port Installation

INSTALLATION

Disconnect all power before proceeding with installation.

Securely mount DIN rail (if not already installed in the enclosure). To install the 1012-TRM, 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 1012-TRM is using an auxiliary power supply, connect the terminal strip, after checking that polarity is being observed. The card will boot up.

Attach the network cable to the RJ45 connector marked Ethernet. 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 can be connected simultaneously without damaging the 1012-TRM.

The system is now ready for testing.

To remove the 1012-TRM from the DIN rail, while pressing on one side of the carrier, use a flathead screwdriver on the opposite side of the carrier to gently pry the foot away from the DIN rail. The corner of the carrier should lift free. Repeat at the other corner, and unhook the carrier from the rail.

STATUS INDICATORS

DMX Output A/B	Green. Steady glow indicates node is actively outputting DMX. Off indicates no DMX output.
DMX Input A/B	Amber. Steady glow indicates node is receiving active DMX. Off indicates no incoming DMX signal.
Network Link	Green. Flickering glow means active Ethernet network link. Off indicates no network link.
Power	Blue. Off indicates no power.
Identify	Blue. Blinks when identify is active.

DEFAULT SETTINGS

The 1012-TRM ships as an DMX output node with the following Ethernet receive protocols enabled: Pathport, Strand Shownet, ETC Net2, streaming ACN and ArtNet.

Port A is patched to Universe 1, and Port B is patched to Universe 2.

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 values and parameters may be customized for the 1012-TRM, including port direction, output channel patch, input universe number, the transmit and receive protocols, and DMX speed. Network values such as IP address and subnet mask are also customizable by the user.

Detailed node configuration and overall network system management are done using Pathport Manager software, which is freely available from our website, www.pathwayconnect.com

SPECIFICATIONS

POWER SUPPLY:	18 -- 48 VDC, 5 watts or 802.3af PoE
DATA SIGNAL:	ANSI E1.11 DMX512-A, ANSI E1.20 RDM
ETHERNET	802.3 10baseT

WARNING REGARDING RJ45 CONNECTORS

The use of RJ45 connectors for DMX equipment should be restricted to patch bays in access-controlled rooms or to enclosure-mounted interfaces. The connection of DMX equipment to non-DMX equipment may result in serious equipment damage, fire hazard and/or personal injury. To help prevent this possibility, when using Cat 5/6 wire for DMX transmission, wires 4 and 5 should be turned back and capped rather than connected.

Pathway® Connectivity Solutions
Pathway Connectivity
Acuity Brands Lighting Canada
#103 - 1439 17 Avenue SE Calgary AB, Canada T2G 1J9
tel (403) 243-8110 fax (403) 287-1281
support@pathwayconnect.com
www.pathwayconnect.com

rev.2 ver.1
Printed in Canada 3/17