

OVERVIEW

Fresco DXT modules and assemblies are designed for reliable control of DMX/RDM luminaires. Factory pre-wired within a NEMA 1 enclosure, DXT assemblies are meant for permanent installation.

Featuring conduit knock outs, screw-down terminal strips and diagnostic LEDs, the DXT Modules are factory installed and wired for easy installation in commercial applications. Compatibility with luminaires and controllers is assured because DXT Modules are compliant to the latest revisions of the ANSI DMX/RDM standard as documented.

Select one, two or three DXT Modules for factory installation within an enclosure. Modules support data splitting, combining, isolating, 0-10V interfacing, etc. Mix and match modules as required for the project.

FEATURES

- Factory installed DMX512 control and interface modules
- 1, 2 or 3 modules may be installed as specified
- Removable plug-on terminal strip connectors for all field wiring
- Direct pass-through connection for DMX/RDM
- Auto-terminating on the DMX/RDM outputs
- Black powder coated finish on the NEMA 1 enclosure
- Class 2 Power Supply 120/277V provided within each enclosure
- Ground lug provided with each enclosure
- Ethernet Switch with PoE
- Architectural controller for 485 version of Fresco Show NSB and Vignette

Warranty

Two-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

AcuityControls™

Fresco™

DXT Assemblies for Control Networks



ORDERING INFORMATION

DXT		Example: DXT 1M04 2M09 3M09 NE1L			
		1## 2## 3## ¹			
Series	Module Type			Enclosure	
DXT DMX Networking	M02	DMX512 opto-splitter, 4 way	VIA5 ²	5-port Gigabit Ethernet Switch	NE1S Small NEMA type 1
	M03	Contact closure output, 12 channel	VIA5F ²	5-port Gigabit Ethernet Switch w/Fiber	NE1L Large NEMA type 1
	M04	0-10V dimmers, 16 channel	ARC ³	Fresco Show NSB 485 Gateway, 1 Ethernet	
	M08	Constant voltage LED dimmer, 6 channel	ARC8 ³	Fresco Show NSB 485 Gateway, 1 Ethernet, 8 Contact Closure Inputs	
	M09	DMX512/RDM opto-splitter, 4 way	ARC16 ³	Fresco Show NSB 485 Gateway, 1 Ethernet, 16 Contact Closure Inputs	
	M11	1-port Ethernet DMX/RDM node	ARCVN ³	Vignette 485 Gateway, 1 Ethernet	
	M12	2-port Ethernet DMX/RDM node	ARCVN2 ³	Vignette 485 Gateway, 1 Ethernet, 2 DMX	
	M14	4-port Ethernet DMX/RDM node	ARCVN2CC8 ³	Vignette 485 Gateway, 1 Ethernet, 2 DMX, 8 Contact Closure Inputs	
	M16	8-port DMX/RDM merger/hub	ARCVNCC16 ³	Vignette 485 Gateway, 1 Ethernet, 16 Contact Closure Inputs	
			ARCVN2E ³	Vignette 485 Gateway, 2 Ethernet	

Note

1. ## Represents the module type desired in each module position in the assembly.
2. Any VIA5(F) modules must be earlier in the nomenclature than other modules.
3. Maximum of 64 Fresco Show NSB or Vignette Inserts per enclosure.

See Accessories next page.

Accessories: Order as separate catalog number.

DXT IDC CONN5	5-position IDC connector, bag of 4	DXT VIA5	5-port Gigabit Ethernet Switch
DXT OM NE1S	Empty Small NEMA type 1 Enclosure	DXT VIA5F	5-port Gigabit Ethernet Switch w/Fiber
DXT OM NE1L	Empty Large NEMA type 1 Enclosure	DXT ARC	Fresco Show NSB 485 Gateway, 1 Ethernet
DXT M02	DMX512 opto-splitter, 4 way module	DXT ARC8	Fresco Show NSB 485 Gateway, 1 Ethernet, 8 Contact Closure Inputs
DXT M03	Contact closure output, 12 channel module	DXT ARC16	Fresco Show NSB 485 Gateway, 1 Ethernet, 16 Contact Closure Inputs
DXT M04	0-10V dimmers, 16 channel module	DXT ARCVN	Vignette 485 Gateway, 1 Ethernet
DXT M08	Constant voltage LED dimmer, 6 channel module	DXT ARCVN2	Vignette 485 Gateway, 1 Ethernet, 2 DMX
DXT M09	DMX512/RDM opto-splitter, 4 way module	DXT ARCVN2CC8	Vignette 485 Gateway, 1 Ethernet, 2 DMX, 8 Contact Closure Inputs
DXT M11	1-port Ethernet DMX/RDM node module	DXT ARCVNCC16	Vignette 485 Gateway, 1 Ethernet, 16 Contact Closure Inputs
DXT M12	2-port Ethernet DMX/RDM node module	DXT ARCVN2E	Vignette 485 Gateway, 2 Ethernet
DXT M14	4-port Ethernet DMX/RDM node module	DXTREPL PS24V	Replacement 24V Power Supply
DXT M16	8 port DMX/RDM merger/hub module	DXTREPL PS48V	Replacement 48V Power Supply (for VIA5)
		DXTREPL DCDC	Replacement 48VDC to 24VDC converter

SPECIFICATIONS

Electrical

- Input: 120/277VAC
- 100W max @ 48VDC via internal Class 2 power supply if VIA5 is ordered
- 100W max @ 24VDC via internal Class 2 power supply if ARC**/ARCVN** is ordered
- 30W max @ 24VDC via internal Class 2 power supply otherwise

Installation

- Surface mount
- Conduit knockouts provided
- Powder coated steel enclosure with painted screws

Environment

- Ambient: 14 to 120°F (-10 to 50°C)
- Storage: -40 to 158°F (-40 to 70°C)
- Relative humidity: 90% non-condensing
- Designed for permanent interior installation

Performance

- Modules have a DMX/RDM in and through connections
- LED status indicators
- Note specific features are listed by module type

Standards

- ANSI E1.11 DMX512-A (2008)
- ANSI E1.20 RDM (2010)
- RoHS compliant
- UL Listed

Enclosure

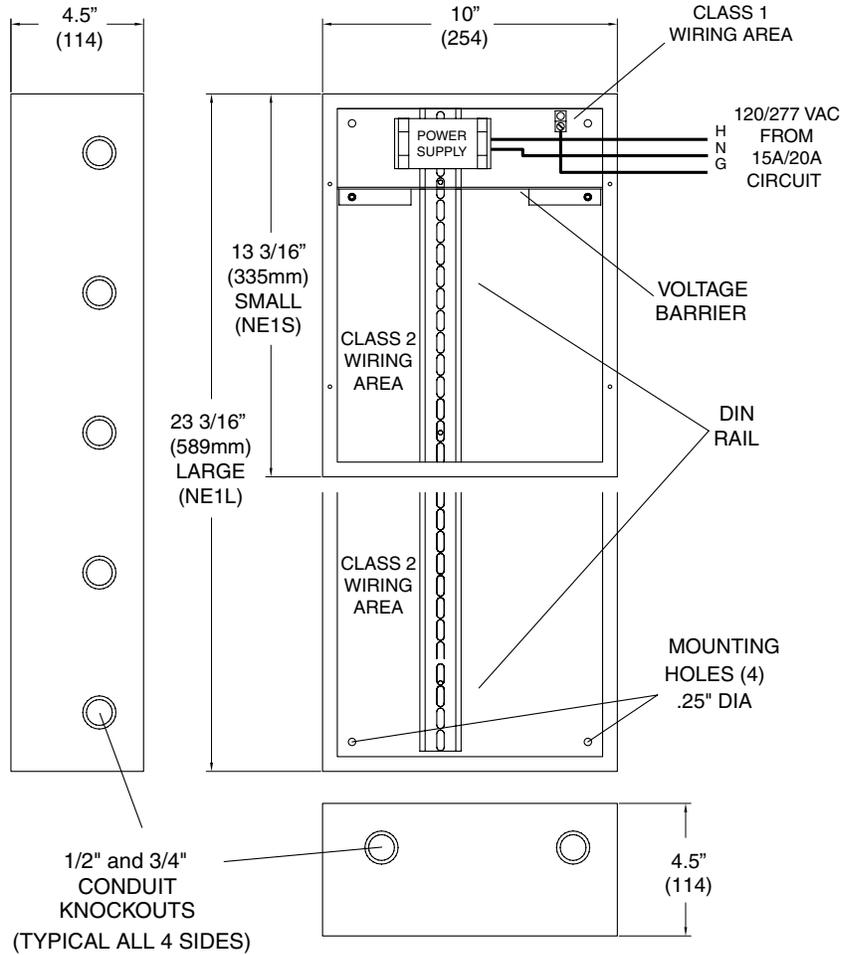
- NEMA Type 1
- Weight (empty)
 - NE1S (small): 7lbs (3.5kg)
 - NE1L (large): 11.5lbs (5.25kg)

DIMENSIONS



Note

1. Pluggable Screw Terminal is included standard.
2. Pluggable IDC Connector is orderable in 4 packs as DXT IDC CONNS.



AVAILABLE MODULES, TYPE CODES & SIZE

Several modules are available for assembly in DXT enclosures. Module codes, module sizes and a description of the modules follows. Modules vary in size and are combined in standard enclosures, follow enclosure size guides to determine maximum number of modules allowed in small and/or large enclosures.

Type	Size (module length)	Description
M02	A (4.5 in, 115mm)	DMX512 opto-splitter, 4-way
M03	C (8.0 in, 200mm)	Contact closure output, 12 channel
M04	B (6.25 in, 160mm)	0-10V dimmers, 16 channel
M08	C (8.0 in, 200mm)	Constant voltage LED dimmer, 6 channel
M09	B (6.25 in, 160mm)	DMX512/RDM opto-splitter, 4-way (bi-directional)
M11	A (4.5 in, 115mm)	1-port Ethernet DMX/RDM node
M12	A (4.5 in, 115mm)	2-port Ethernet DMX/RDM node
M14	C (8.0 in, 200mm)	4-port Ethernet DMX/RDM node
M16	C (8.0 in, 200mm)	8-port DMX/RDM merger/hub
VIA5	C (8.0 in, 200mm)	5-port Gigabit Ethernet Switch
VIA5F	C (8.0 in, 200mm)	5-port Gigabit Ethernet Switch w/Fiber
ARC	A (4.5 in, 115mm)	Fresco Show NSB 485 Gateway, 1 Ethernet
ARC8	B (6.25 in, 160mm)	Fresco Show NSB 485 Gateway, 1 Ethernet, 8 Contact Closure Inputs
ARC16	C (8.0 in, 200mm)	Fresco Show NSB 485 Gateway, 1 Ethernet, 16 Contact Closure Inputs
ARCVN	A (4.5 in, 115mm)	Vignette 485 Gateway, 1 Ethernet
ARCVN2	B (6.25 in, 160mm)	Vignette 485 Gateway, 1 Ethernet, 2 DMX
ARCVN2CC8	C (8.0 in, 200mm)	Vignette 485 Gateway, 1 Ethernet, 2 DMX, 8 Contact Closure Inputs
ARCVNCC16	C (8.0 in, 200mm)	Vignette 485 Gateway, 1 Ethernet, 16 Contact Closure Inputs
ARCVN2E	B (6.25 in, 160mm)	Vignette 485 Gateway, 2 Ethernet

ENCLOSURE SIZE SELECTION

Small Enclosures

NE1S enclosures (Small) have 9.5 in (240mm) of available module installation space. This supports:
2 x A size modules or 1 x B size modules or 1 x C size modules

Large Enclosures

NE1L enclosures (Large) have 19.5 in (495mm) of available module installation space. This supports:
4 x A size modules or 3 x B size modules or 2 x C size modules

COMMON ASSEMBLY CONFIGURATIONS

Several assemblies are more common or have more applicability within commercial applications. Those assemblies follow.

Nomenclature	Enclosure Size	Description
DXT 1M09 NE1S	Small	4-way DMX/RDM opto-splitter
DXT 1M09 2M09 NE1L	Large	8-way DMX/RDM opto-splitter
DXT 1M09 2M12 NE1L	Large	4-way DMX/RDM opto-splitter with 2-port node
DXT 1M04 2M12 NE1L	Large	16 channel 0-10V dimming with 2-port node

M02 DMX512 OPTO-SPLITTER 4-WAY

M02 is a 4-way DMX splitter that enables "star" type wiring patterns with DMX data lines. Each buffered output is isolated from the DMX input and protects all end devices from propagating electrical faults and ground loops.



M02 DMX512 Opto-Splitter 4-way, Size A

Warranty

Two-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

SPECIFICATIONS

Electrical

- Power: 5W @ 24 VDC
- Input Voltage: 10 - 30 VDC
- Isolation: 1,500 V between inputs & outputs
- Protection: 250 V fault protection on inputs & outputs

Installation

- Factory assembled
- DIN rail mounts

Environment

- Ambient: 14 to 122 °F (-10 to 50 C)
- Relative Humidity: 90% non-condensing
- Designed for permanent interior installation

Standards

- ANSI E1.11 DMX512-A (2008)
- RoHS compliant
- FCC
- CE
- Class 2 low voltage

Performance

- One DMX512 input
- Four buffered DMX512 outputs
- One passive DMX512 thru connector
- Pluggable terminal blocks for all connectors
- Power and data easily daisy-chained between modules
- DMX IN indicator
- DC Power input indicator
- Termination switch
- Self-resetting port protection recovers from voltage faults

Mechanical (Size A)

- Width: 4.5 in (115 mm)
- Height: 3.6 in (91 mm)
- Depth: 1.5 in (38 mm)
- Weight: 0.5 lbs (0.32 kg)

M03 DMX/RDM CONTACT CLOSURE OUTPUT, 12 CHANNEL

M03 provides DMX512/RDM control over twelve form-C relays for signal level switching. Each relay may be independently wired for normally-open (NO) or normally closed (NC) operation. Field configurable through the card front or via RDM. Nine operating modes are available for flexibility of use.



M03 DMX/RDM Contact Closure Output, 12 Channel, Size C

Warranty

Two-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

SPECIFICATIONS

Electrical

- Power: 6W @ 24 VDC
- Input Voltage: 10 - 30 VDC
- Isolation: 1,500 V between inputs & outputs
- Protection: 250V fault protection on inputs & outputs

Installation

- Factory assembled
- DIN rail mounts

Environment

- Ambient: 14 to 122 °F (-10 to 50 C)
- Relative Humidity: 90% non-condensing
- Designed for permanent interior installation

Standards

- ANSI E1.11 DMX512-A (2008)
- ANSI E1.20 RDM (2010)
- RoHS compliant
- FCC
- CE
- Class 2 low voltage

Performance

- Relays rated for 100,000 operations at 2A 30 VDC
- One DMX512 start address and operating mode may be set from the front panel interface or via RDM
- DMX512-present relay (normally open or normally closed)
- Indicator LEDs for power, processor, DMX input, and relay status
- Pluggable terminal block connectors accept solid or stranded wire between #26 to #16 AWG
- Normally open or normally closed wiring option for each relay
- One DMX512-A/RDM data input connection
- Suitable as pilot relay for high voltage contactors with adequate arc protection (by others)
- Data and power easily daisy-chained between modules
- Termination switch

Mechanical (Size C)

- Width: 8.0 in (200 mm)
- Height: 3.6 in (91 mm)
- Depth: 1.5 in (38 mm)
- Weight: 0.7 lbs (0.32 kg)

OPERATING MODES

Mode 1: 12 Channel Maintained Control

Each relay is maintained "on" as long as the DMX value of its associated channel is above 50%

Mode 2: 12 Channel Momentary Control

When the DMX channel for a given relay passes through the 50% threshold, either increasing or decreasing the relay closes for 100 msec

Mode 3: 12 Channel Momentary "ON"

When the DMX channel for a given relay is increasing and passes through the 50% threshold, the relay will close for 100 msec

Mode 4: 6 Channel Momentary Split

Each adjacent pair of relays is associated with a single DMX channel. When the DMX level of the channel for a given relay pair passes through the 50% threshold, increasing, the lower number relay will close for 100 msec. When the DMX level for a given pair passes through the 50% threshold, decreasing, the higher number relay will close for 100 msec.

Mode 5: 6 Channel Maintained Split

Each adjacent pair of relays is associated with a single DMX channel. When the DMX level of the channel for a given relay pair passes through the 50% threshold, increasing, the lower number relay will close and maintain state while the higher number relay will open. When the DMX level for a given pair passes through the 50% threshold, decreasing, the lower number relay will open while the higher number relay will close and maintain state.

Mode 6: 12 Channel Momentary Split with Secondary Reset

2 sequential DMX channels are associated with each adjacent pair of relays. When the lower DMX channel increases through 50%, the lower-numbered relay will close for 100 msec. When the lower DMX channel decreases through 50%, the higher-numbered relay will close for 100 msec. To provide a secondary reset, when the higher DMX channel passes through 50%, increasing, the higher relay will close for 100 msec. If the higher DMX channel decreases through 50%, the relays remain unchanged.

Mode 7: Chase

Each relay will be triggered for 2 seconds. This mode is intended as a test feature, independent of the user-initiated TEST mode

Mode 8: Single Channel Select Raising the DMX level of the start channel will maintain each relay in turn from none up to the twelfth. At a DMX percentage between 0-8%, no relays will be triggered. A DMX percentage between 9 and 16% will maintain relay 1 only, a DMX percentage between 17% and 24% will maintain relay 2 only, and so on. In this mode the contact closure output card has a DMX footprint of one channel.

Mode 9: Single Channel Build

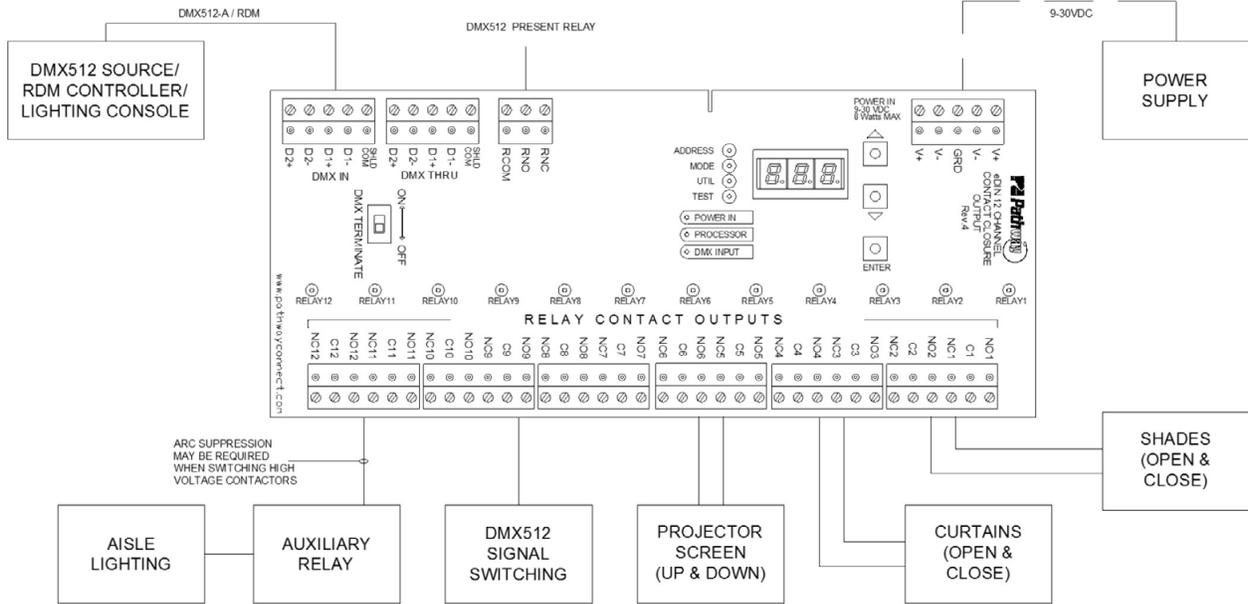
Raising the DMX level of the start channel will trigger each relay additionally. At zero percent no relays are triggered while at full all twelve contact closures are triggered. At a DMX percentage between 0-8%, no relays will be triggered. A DMX percentage between 9 and 16% will maintain relay 1 only, a DMX percentage between 17% and 24% will maintain relay 1 and relay 2; and so on. In this mode the contact closure output card has a DMX footprint of one channel.

Threshold Adjustment

The relay trigger threshold may be globally adjusted (as an 8-bit value) using the UTIL mode. Valid range is between 2 and 253 (approximately 1% to 99%), with a default of 128 (50%)

M03 CONTACT CLOSURE OUTPUT, 12-CHANNEL:

APPLICATION RISER DIAGRAM



DMX/RDM PIN OUT WITH XLR

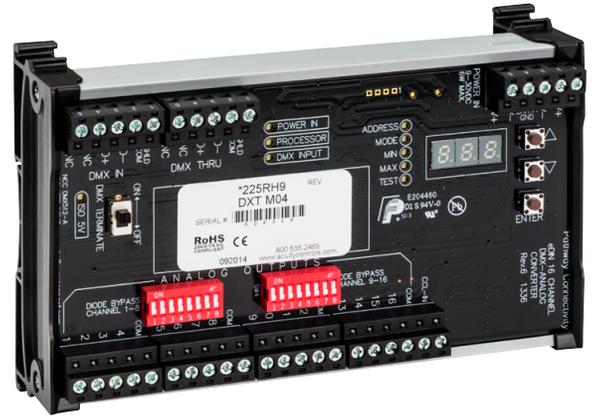
XLR Pin #	Purpose
1	Common
2	Data -
3	Data +
4	Data - (pair 2)
5	Data + (pair 2)

DMX/RDM PIN OUT WITH CAT-5/6

Pin #	Wire Color	Purpose
1	white/orange	Data +
2	orange	Data -
3	white/green	Data + (pair 2)
4	blue	Not assigned
5	white/blue	Not assigned
6	green	Data - (pair 2)
7	white/brown	Common
8	brown	Common (pair 2)

M04 DMX/RDM 0-10 V DIMMERS, 16 CHANNEL

M04 16 channel DMX /RDM to analog interface card converts 16 DMX channels to analog DC voltage. Diode shunts allow user-selection between current sourcing applications or current sinking control (typical for LED fixtures or 0-10V electronic fluorescent dimming ballasts). A non-dim mode supports solid-state relay control



M04, DMX/RDM 0-10V Dimmers, 16 Channel, Size B

Warranty

Two-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

Specifications subject to change without notice.

SPECIFICATIONS

Electrical

- Power: 6W @ 24 VDC
- Input Voltage: 10 - 30 VDC
- Isolation: 1,500 V between inputs & outputs
- Protection: 250V fault protection on inputs & outputs

Installation

- Factory assembled
- DIN rail mounts

Environment

- Ambient: 14 to 122 °F (-10 to 50 C)
- Relative Humidity: 90% non-condensing
- Designed for permanent interior installation

Standards

- ANSI E1.11 DMX512-A (2008)
- ANSI E1.20 RDM (2010)
- RoHS compliant
- FCC
- CE
- Class 2 low voltage

Performance

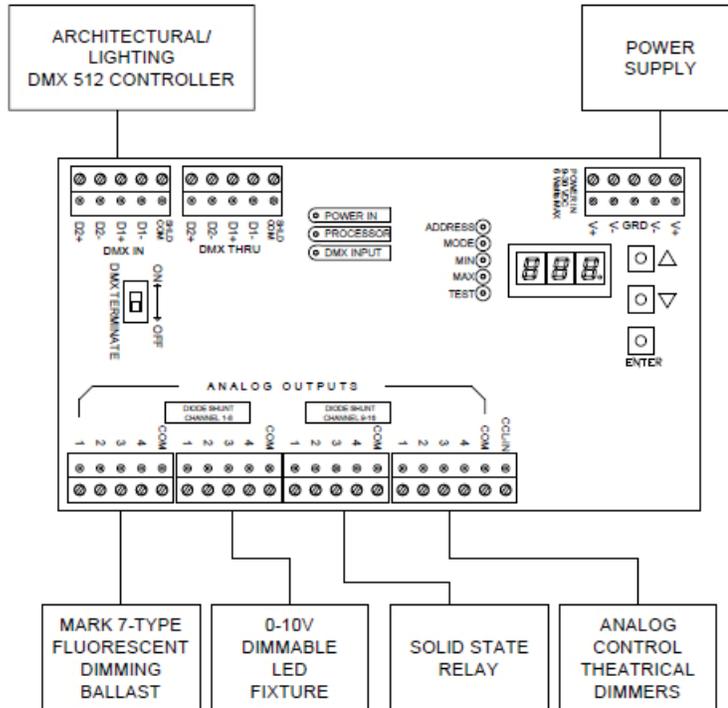
- DMX512 start address and operating mode may be set from front panel or using RDM
- Indicator LEDs for power, processor and DMX input status
- Standard DC output modes of 0-10 V, 0-15 V, 0-2.5 V or 0-5 V.
- Custom mode allows user-set minimum and maximum DC output up to 16 V
- Pluggable terminal block connectors accept solid or stranded wire between #26 to #16 AWG
- Power and data easily daisy-chained between modules
- EFBC/LED driver mode allows single DMX channel control of mains voltage (via solid state relay) and 0-10V dimming
- Maximum current rating per output of 10 mA (source) and 30 mA (sinking)
- CCL "Panic Input" drives all outputs to full
- One DMX512-A/RDM data input connection
- One passive DMX512-A data through connection
- Termination switch

Mechanical (Size B)

- Width: 6.25 in (160 mm)
- Height: 3.6 in (91 mm)
- Depth: 1.5 in (38 mm)
- Weight: 0.7 lbs (0.32 kg)

M04 DMX/RDM 0-10V DIMMERS 16 CHANNEL (CONTINUED)

APPLICATION RISER DIAGRAM



DMX/RDM PIN OUT WITH XLR

XLR Pin #	Purpose
1	Common
2	Data -
3	Data +
4	Data - (pair 2)
5	Data + (pair 2)

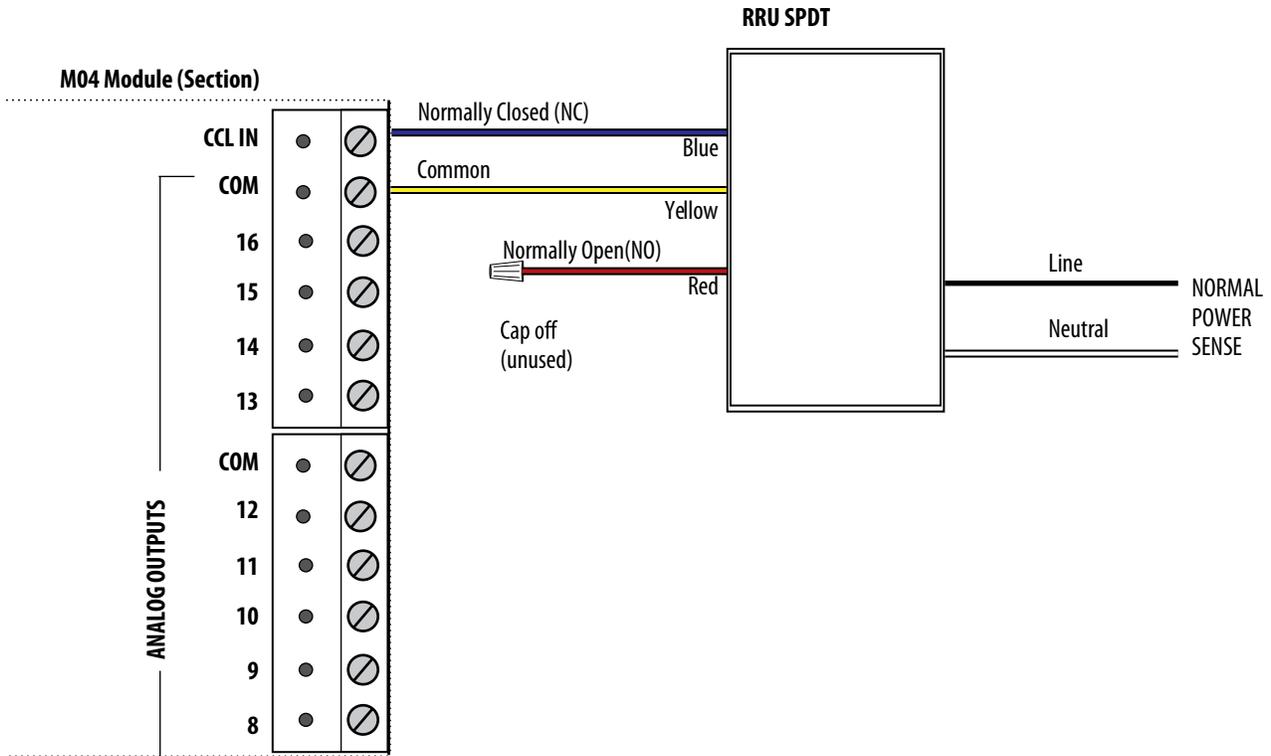
DMX/RDM PIN OUT WITH CAT-5/6

Pin #	Wire Color	Purpose
1	white/orange	Data +
2	orange	Data -
3	white/green	Data + (pair 2)
4	blue	Not assigned
5	white/blue	Not assigned
6	green	Data - (pair 2)
7	white/brown	Common
8	brown	Common (pair 2)

M04 DMX/RDM 0-10V DIMMERS 16 CHANNEL (CONTINUED)

CCL APPLICATION (PANIC LIGHTING TRIGGER)

M04 DMX/RDM 0-10 V dimmers may used with emergency/essential lighting. When paired with an RRU SPDT, a UL 924 listed transfer device, the M04 will ignore all DMX input commands and force all dimmed outputs to full when CCL IN is shorted to COM. Outputs 1 - 16 remain at full output while CCL IN is shorted to COM and resume tracking assigned DMX input channels when CCL IN is floating relative to COM. The M04 device provides an internal pull up and biasing circuit so floating the input will have no impact during normal operation.



NOTES

- M04 and Emergency Lighting must be connected to emergency power
- M04 ignores all DMX input streams and drives all analog (0-10 V) outputs to full if the CCL input terminal is shorted to COM.
- RRU must be fed with normal power to sense power failure or brown out (sense triggers at 90% of nominal voltage)
- M04 is Class 2 and RRU Normal Closed, Normally Open and Common connections (Blue, Red, Yellow) are isolated from line voltage
- RRU SPDT requires a grounded metal enclosure (not provided)
- RRU SPDT may be ordered from AcuityBrands controls

M08 CONSTANT VOLTAGE LED DIMMER, 6 CHANNEL

M08 provides direct pulse-width modulation (PWM) control of common anode constant voltage LED fixtures, typical of linear, string and tape luminaires. Multiple modes, including 16-bit ensure smooth dimming performance. The module also provides efficient switching control of DC devices such as solid state relays and solenoids.



Warranty

Two-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

M08, Constant Voltage LED dimmer, 6 Channel, Size C

SPECIFICATIONS

Electrical

- Power: 5W @ 24 VDC
- 4 A at 24 VDC per output maximum (96W)
- Input Voltage: 10 - 30 VDC
- Isolation: 1,500 V between inputs & outputs
- Protection: 250V fault protection on inputs & outputs

Installation

- Factory assembled
- DIN rail mounts

Environment

- Ambient: 14 to 122 °F (-10 to 50 C)
- Relative Humidity: 90% non-condensing
- Designed for permanent interior installation

Standards

- ANSI E1.11 DMX512-A (2008)
- ANSI E1.20 RDM (2010)
- RoHS compliant
- FCC
- CE
- Class 2 low voltage

Performance

- DMX512 start address and operating mode may be set from front panel interface or remotely using E1.20 RDM
- Controls constant voltage LED fixtures rated between 5 to 30 VDC. External power supply required
- Six PWM outputs, individually fused at 4 A
- Asynchronous 300Hz pulse width modulation
- DMX512-present relay (normally open or normally closed)
- Contact closure 'panic' input drives all outputs to full
- Auxiliary 0-10V analog inputs HTP-merged with DMX input
- Indicator LEDs for power, processor, DMX input, active output
- 2000 step fade processor with user-adjustable smoothing algorithm and minimum and maximum output levels
- Multiple loss-of-signal options
- Pluggable terminal block connections accept solid or stranded wire between #26 and #16 AWG
- Power and data easily daisy-chained between modules
- One DMX512-A/RDM data input connection
- One passive DMX512-A data through connection
- Termination switch
- User-initiated diagnostics and test modes

Mechanical (Size C)

- Width: 8.0 in (200 mm)
- Height: 3.6 in (91 mm)
- Depth: 1.5 in (38 mm)
- Weight: 0.7 lbs (0.32 kg)

OPERATING MODES

Mode 1 Default LED Control (6 channels)

Incoming DMX value is interpolated to create a 16-bit value. A weighted fade curve is applied to the output to compensate for LED response, producing an apparently linear fade to the human eye.

Mode 2 : DMX Double Precision Mode with Curve (12 channels)

Two DMX control channels are used to produce a 16-bit value for each output. A weighted fade curve is applied to the output to produce an apparently linear fade to the human eye.

Mode 3 : DMX Double Precision Mode without Curve (12 channels) -

Two DMX control channels are used to produce a 16-bit value for each output. No compensating curve is applied. Output follows the DMX values linearly.

Mode 4 : Non-Dim Mode

When the value of the corresponding DMX channel is below 50%, the associated output will be off. When the DMX channel is above 50%, the associated output will be on (full). A hysteresis zone of about 1% occurs at the 50% level, where the output's state is undetermined. Use this mode to drive non-dim loads such as solid state relays and solenoid coils.

Mode 5 : Single Channel Control (1 channel)

One DMX channel (the start address) controls all six outputs simultaneously. A weighted fade curve is applied to the output to produce an apparently linear fade to the human eye.

Mode 6 : Three Channel Mirror with Curve (3 channels)

Outputs are paired (1 and 4, 2 and 5, 3 and 6). Paired outputs are driven by the same DMX control channel. The DMX value is interpolated to create a 16-bit value. A weighted fade curve is applied to the output to produce an apparently linear fade to the human eye.

Mode 7 : Three Channel Mirror without Curve (3 channels)

Outputs are paired (1 and 4, 2 and 5, 3 and 6). Paired outputs are driven by the same DMX control channel. The DMX value is interpolated to create a 16-bit value. No compensating curve is applied. Output follows the DMX value linearly.

Util Mode Options:

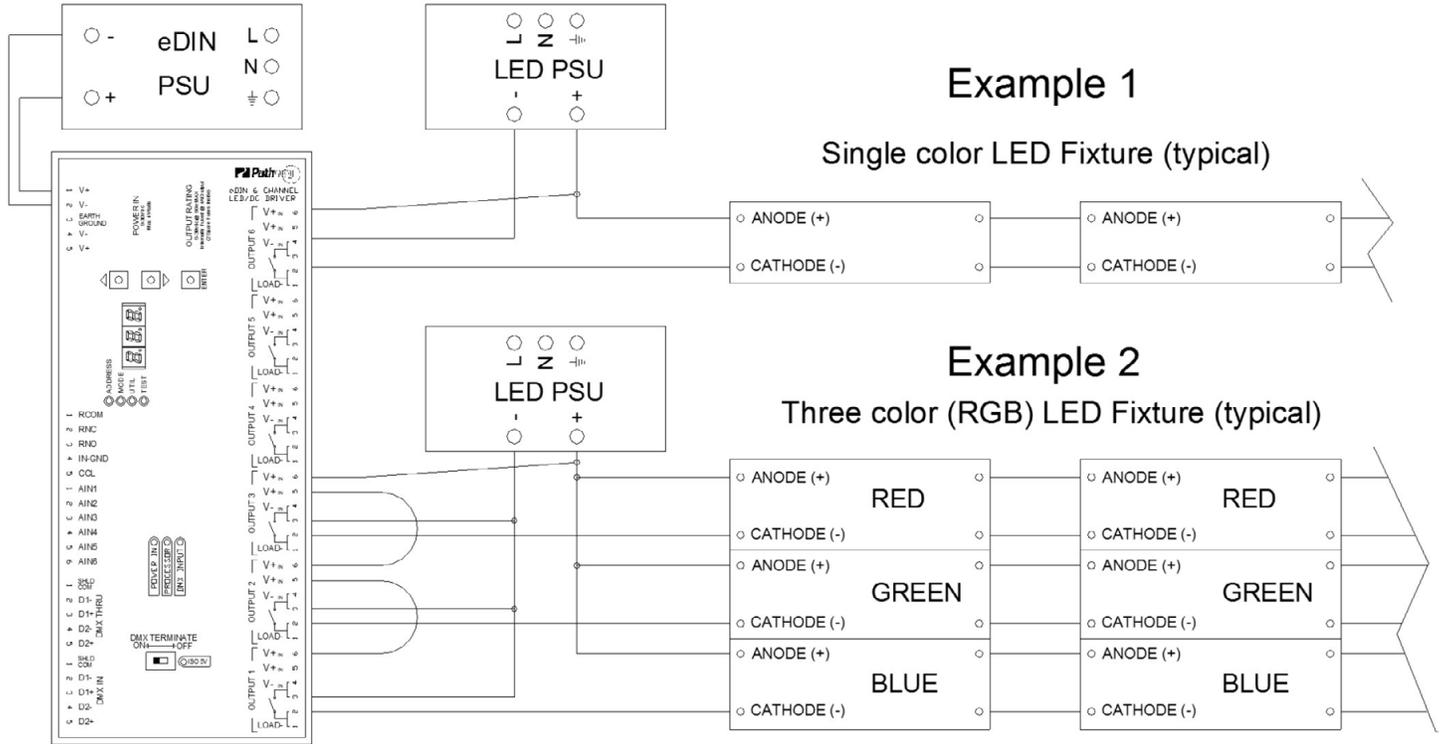
A: Adjusts the smoothing algorithm between 1 (very smooth) and 100 (no smoothing). Default is 64.

B: Adjusts a Grand Master maximum output level between 0 (off) and 256 (full—default).

C: Sets a minimum output level between 0 (default) and 255, that the card will always maintain, even in the absence of DMX.

D: Sets loss-of-DMX behavior. Options, as shown on the seven-segment screen, are "0" - zero seconds; "0.5" - thirty seconds; "1" - one minute; and "--" - forever (default).

M08 CONSTANT VOLTAGE LED DIMMER APPLICATION RISER



DMX/RDM PIN OUT WITH XLR

XLR Pin #	Purpose
1	Common
2	Data -
3	Data +
4	Data - (pair 2)
5	Data + (pair 2)

DMX/RDM PIN OUT WITH CAT-5/6

Pin #	Wire Color	Purpose
1	white/orange	Data +
2	orange	Data -
3	white/green	Data + (pair 2)
4	blue	Not assigned
5	white/blue	Not assigned
6	green	Data - (pair 2)
7	white/brown	Common
8	brown	Common (pair 2)

M09 DMX/RDM OPTO-SPLITTER 4-WAY

M09 is a four-way opto-splitter that supports the bidirectional communication necessary for compliance with ANSI E1.20 Remote Device management ("RDM"). Ports 1 through 4 on M09 are fully opto-isolated and independently protected from fault voltages.



M09, DMX/RDM Opto-Splitter, 4-Way, Size B

Warranty

Two-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

SPECIFICATIONS

Electrical

- Power: 6W @ 24 VDC
- Input Voltage: 10 - 30 VDC
- Isolation: 1,500 V between inputs & outputs
- Protection: 250V fault protection on inputs & outputs

Installation

- Factory assembled
- DIN rail mounts

Environment

- Ambient: 14 to 122 °F (-10 to 50 C)
- Relative Humidity: 90% non-condensing
- Designed for permanent interior installation

Standards

- ANSI E1.11 DMX512-A (2008)
- ANSI E1.20 RDM (2010)
- RoHS compliant
- FCC
- CE
- Class 2 low voltage

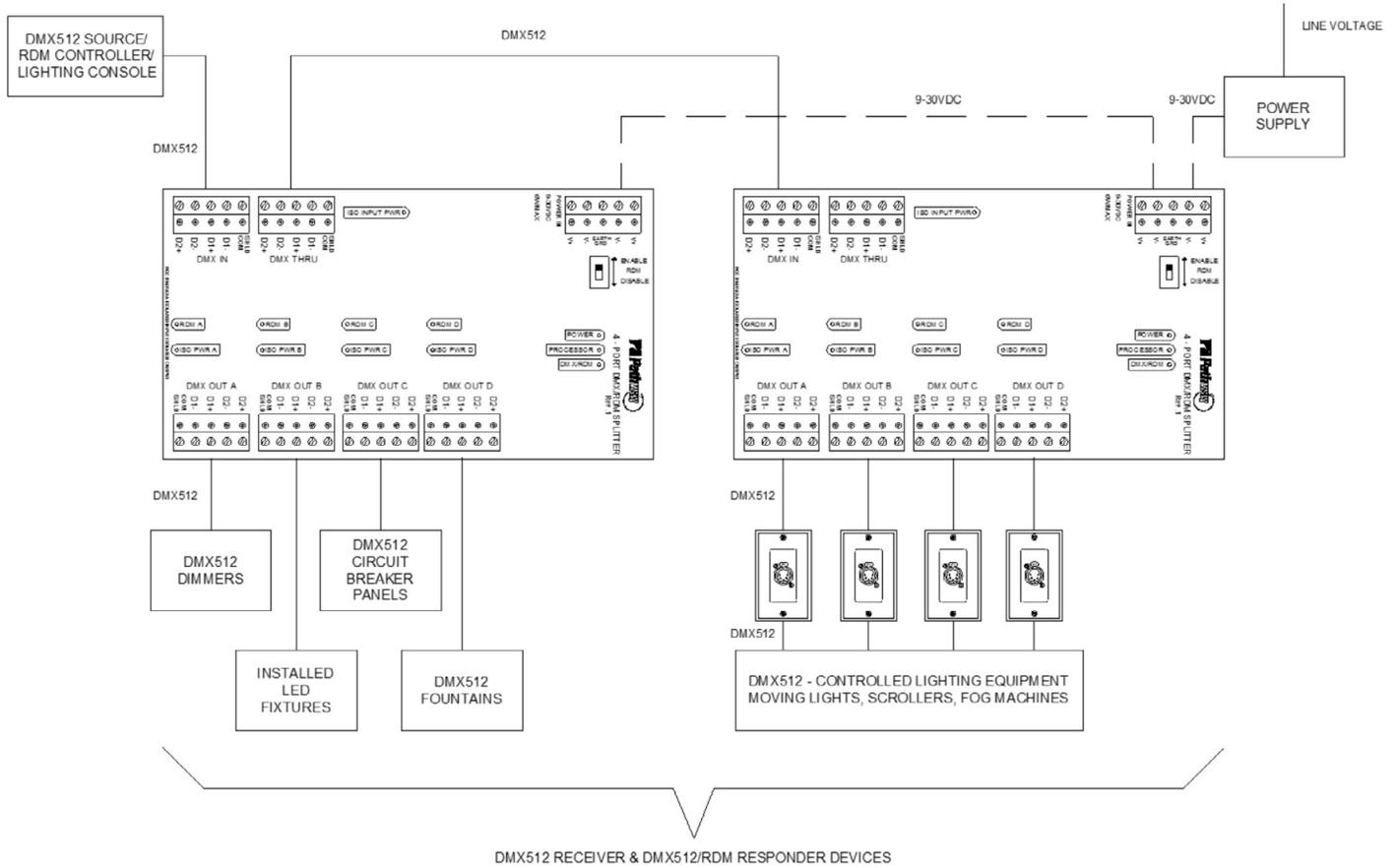
Mechanical (Size B)

- Width: 6.25 in (160 mm)
- Height: 3.6 in (91 mm)
- Depth: 1.5 in (38 mm)
- Weight: 0.7 lbs (0.32 kg)

Performance

- One DMX512 /RDM input port
- One active DMX512/RDM bidirectional thru port
- Four fully isolated DMX512/RDM bidirectional output ports
- Pluggable terminal blocks for all connectors
- Power and data easily daisy-chained between modules
- DMX IN indicator
- DC Power input indicator
- ISO 5 V indicator
- Termination switch
- No fuses; self-resetting port protection recovers from voltage faults

M09 DMX/RDM OPTO-SPLITTER 4-WAY APPLICATION RISER



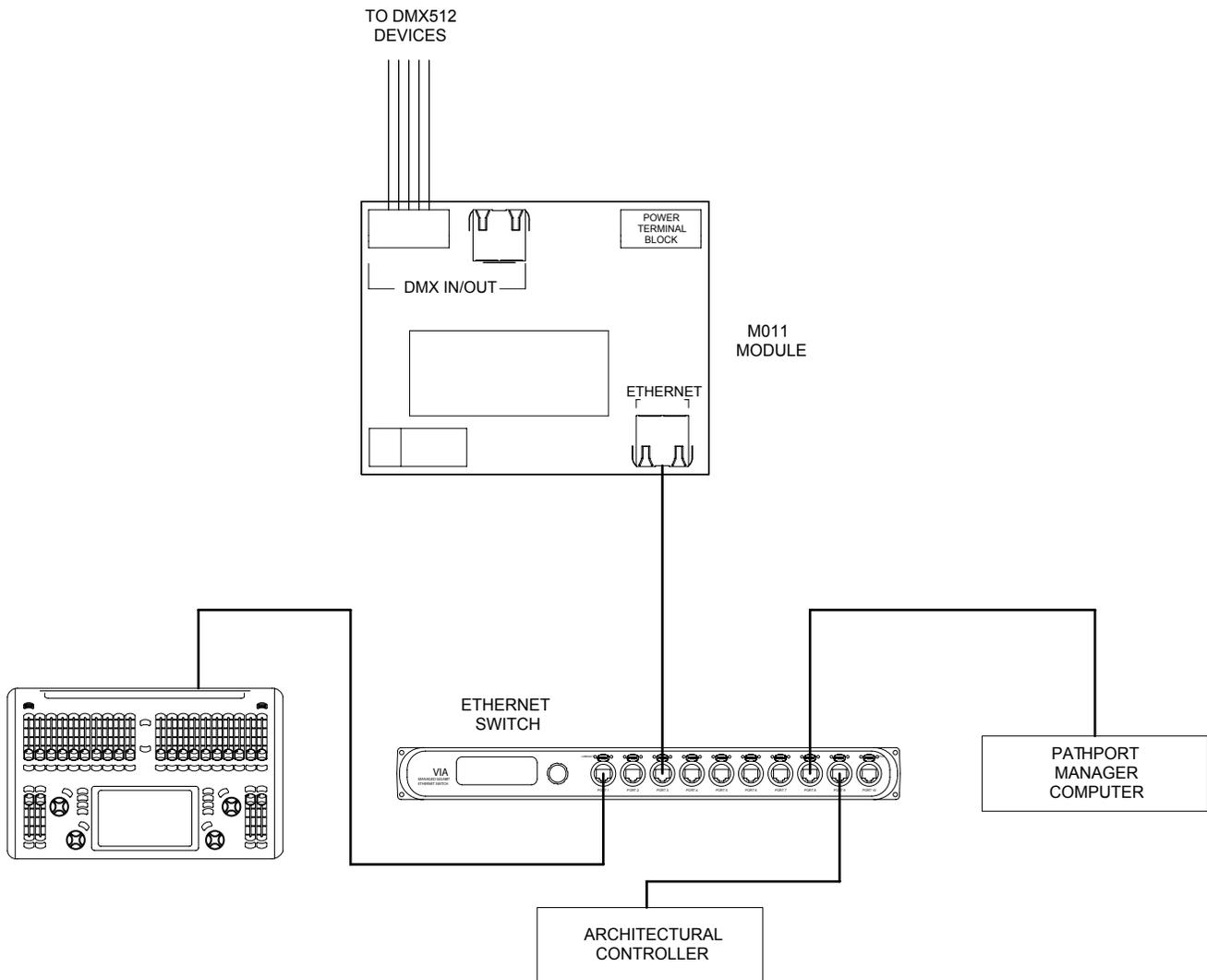
DMX/RDM PIN OUT WITH XLR

XLR Pin #	Purpose
1	Common
2	Data -
3	Data +
4	Data - (pair 2)
5	Data + (pair 2)

DMX/RDM PIN OUT WITH CAT-5/6

Pin #	Wire Color	Purpose
1	white/orange	Data +
2	orange	Data -
3	white/green	Data + (pair 2)
4	blue	Not assigned
5	white/blue	Not assigned
6	green	Data - (pair 2)
7	white/brown	Common
8	brown	Common (pair 2)

M11 1-PORT ETHERNET DMX/RDM NODE APPLICATION RISER



DMX/RDM PIN OUT WITH XLR

XLR Pin #	Purpose
1	Common
2	Data -
3	Data +
4	Data - (pair 2)
5	Data + (pair 2)

DMX/RDM PIN OUT WITH CAT-5/6

Pin #	Wire Color	Purpose
1	white/orange	Data +
2	orange	Data -
3	white/green	Data + (pair 2)
4	blue	Not assigned
5	white/blue	Not assigned
6	green	Data - (pair 2)
7	white/brown	Common
8	brown	Common (pair 2)

M12 2-PORT ETHERNET TO DMX/RDM NODE

M12 is a 2-Port node for encoding and routing DMX512 data over a standard Ethernet network. In addition to DMX, the M12 2-Port node supports RDM discovery and configuration data transport.



M12, 2-Port Node, Size A

Warranty

Two-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

SPECIFICATIONS

Electrical

- Class 2 PoE powered devices
- Power: 6W @ 24 VDC
- Auxiliary Input Voltage: 10 - 30 VDC
- Protection: 60 V
- 10/100Mb TCP/IP connection

Installation

- Factory assembled
- DIN rail mounts

Environment

- Ambient: 14 to 122 °F (-10 to 50 C)
- Relative Humidity: 90% non-condensing
- Designed for permanent interior installation

Standards

- ANSI E1.11 DMX512-A (2008)
- ANSI E1.20 RDM (2010)
- RoHS compliant
- FCC
- CE
- Class 2 low voltage

Performance

- Two DMX512 ports configurable as inputs or outputs
- LED indicators for port direction, power, Ethernet link activity and identify
- Operates on 802.3af Power-over-Ethernet or on an 18-48V wide-range DC input
- Supports the following DMX/Ethernet protocols:
 - Art-Net
 - E1.31 streaming ACN (sACN)
 - Pathport Protocol
 - Strand Shownet
- Soft patch allows mix-and-match of different protocols
- Route DMX according to universe or channel-by-channel
- Multiple sources may be merged and/or prioritized
- Fully customizable DMX output universes
- Pluggable terminal blocks for all connectors

Mechanical (Size A)

- Width: 3.6 in (91 mm)
- Height: 3.6 in (91 mm)
- Depth: 1.5 in (38 mm)
- Weight: 0.7 lbs (0.32 kg)

DXT MODULE

M14 4-PORT ETHERNET TO DMX/RDM NODE

M14 is a 4-Port node for encoding and routing DMX512 data over a standard Ethernet network. In addition to DMX, the M14 4-Port node supports RDM discovery and configuration data transport.



M14, 4-Port Node, Size C

Warranty

Two-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

Specifications subject to change without notice.

SPECIFICATIONS

Electrical

- Class 2 PoE powered devices
- Power: 6W @ 24 VDC
- Auxiliary Input Voltage: 10 - 30 VDC
- Protection: 60 V
- 10/100Mb TCP/IP connection

Installation

- Factory assembled
- DIN rail mounts

Environment

- Ambient: 14 to 122 °F (-10 to 50 C)
- Relative Humidity: 90% non-condensing
- Designed for permanent interior installation

Standards

- ANSI E1.11 DMX512-A (2008)
- ANSI E1.20 RDM (2010)
- RoHS compliant
- FCC
- CE
- Class 2 low voltage

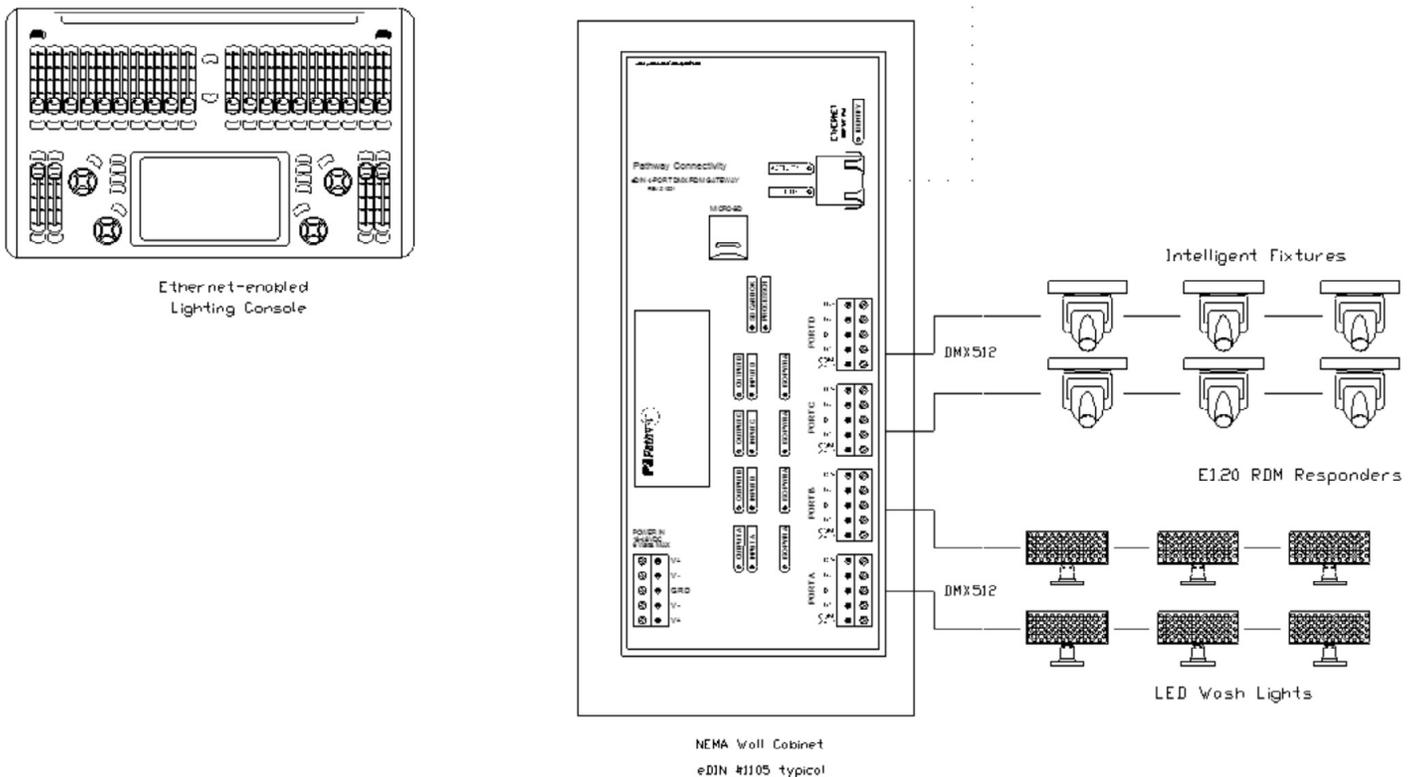
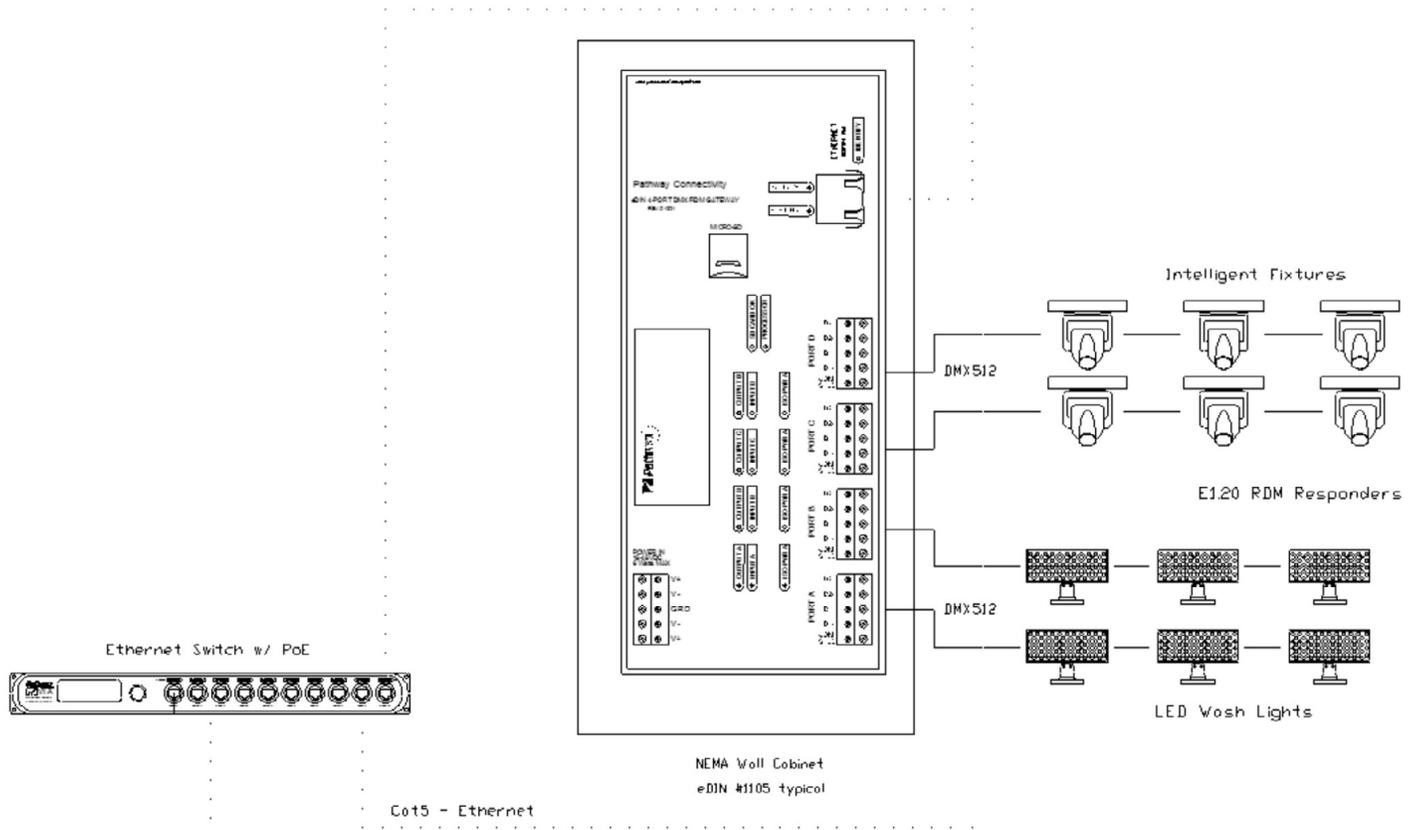
Performance

- Four DMX512 ports configurable as inputs or outputs
- LED indicators for port direction, power, Ethernet link activity and identify
- Operates on 802.3af Power-over-Ethernet or on an 18- 48V wide-range DC input
- Supports the following DMX/Ethernet protocols:
 - Art-Net
 - E1.31 streaming ACN (sACN)
 - Pathport Protocol
 - Strand Shownet
- Soft patch allows mix-and-match of different protocols
- Route DMX according to universe or channel-by-channel
- Multiple sources may be merged and/or prioritized
- Fully customizable DMX output universes
- Pluggable terminal blocks for all connectors

Mechanical (Size C)

- Width: 8.0 in (200 mm)
- Height: 3.6 in (91 mm)
- Depth: 1.5 in (38 mm)
- Weight: 0.7 lbs (0.32 kg)

M14 4-PORT ETHERNET DMX/RDM NODE APPLICATION RISER



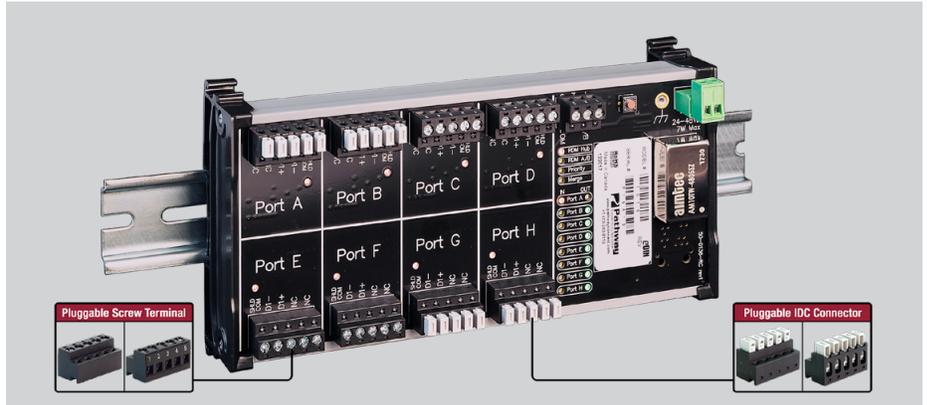
M16 8-PORT DMX/RDM MERGER/HUB NODE

OVERVIEW

The 8-port RDM Hub brings flexibility to single universe DMX512 distribution systems. Through the use of automatic DMX512 sensing, across four operating modes, any port may detect a roving DMX512 source and act as an input; or two inputs may be merged together; or the user may select between inputs; or a priority scheme may be invoked. The module is RDM discoverable and configurable, as well as daisy-chainable.

CONNECTIONS

The RDM Hub 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 RDM Hub will operate on a range of voltages from 9-30 volts DC. Each module requires 250mA. Observe the correct polarity when connecting to V+ and V-. A second set of terminals are provided as a thru connection to other modules. The EARTH GND terminal must be connected to the enclosure's chassis or electrical ground terminal to ensure EMC compliance.

DMX512

DMX512 (DMX) connections consist of a shield and data pair. DMX usually comes from a lighting console, DXT DMX/Ether- net gateway, architectural controller or another M16.

Connect DATA+ and DATA- to D1+ and D1-. Observe the same polarity convention throughout the system. Connect the cable shield or common wire to the SHLD COM terminal.

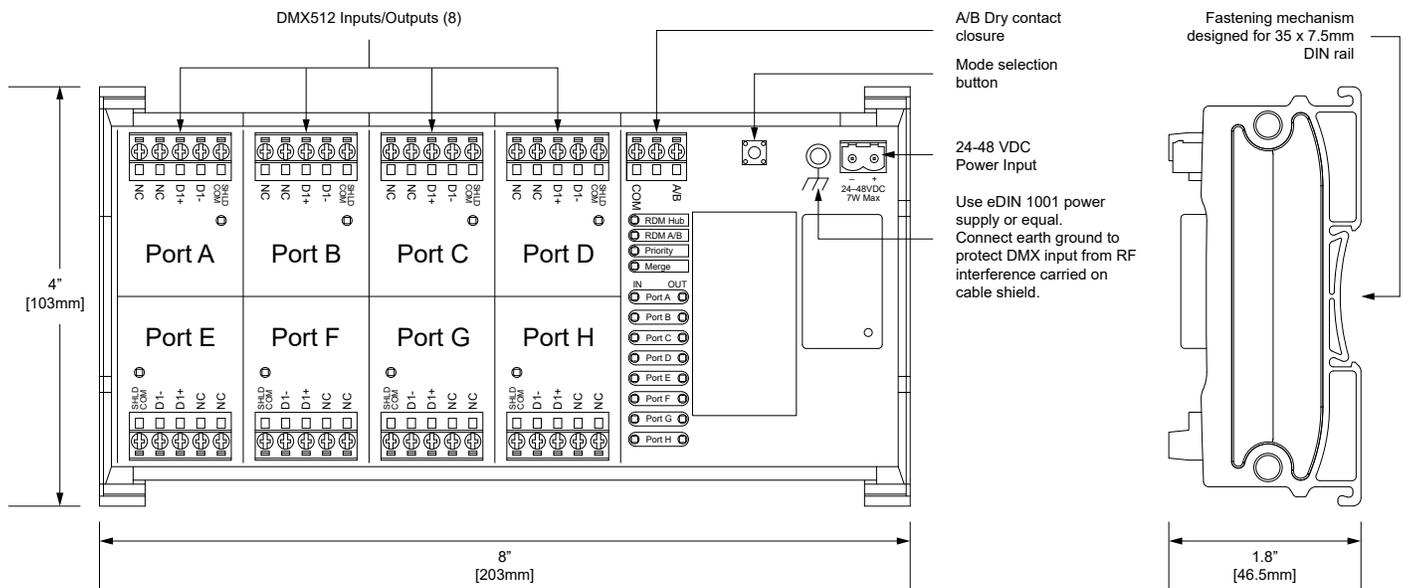
DMX TERMINATE

Each port on the RDM Hub is auto-terminated as required by its operation.

STATUS INDICATORS

CONFIGURATION

To configure, press and hold the function button until the current Function LED begins to flash. Momentarily release then press the button to cycle through the operating mode options. Once the desired mode is selected, release the but- ton. After three seconds, the LED will change to a steady glow and the new mode will take effect.



M16 8-PORT DMX/RDM MERGER/HUB NODE

OPERATING MODE: RDM HUB

Detect and latches to a DMX input applied to any port. Ideal when a single console or controller is moved between multiple locations in a venue.

All DMX lines are wired back to the RDM Hub card. When no DMX is present, the RDM Hub will scan all ports looking for an input signal. Once a DMX input is detected, that port becomes the input and all other ports become DMX outputs. If a second DMX source is applied to another port, that source will be ignored until the initial source is disconnected.

While in RDM Hub mode, the RDM Hub card acts as an RDM responder and proxy. Any connected downstream RDM devices may be discovered and configured using an RDM-enabled console or other RDM controller.

OPERATING MODE: RDM A/B

Allows the user to select input on Port B over Port A, using a maintained dry contact closure between COM (pin 3) and A/B (pin 1) of the three-position contact closure terminal block. Ideal for selecting a backup console over the primary console or source, on the fly.

Ports A and B are wired to DMX sources. All other ports are used as outputs. With no connection between COM and A/B, input signal on Port A will be routed to all output ports, and any input on Port B will be ignored. When a dry contact is closed and maintained between COM and A/B, input signal on Port B will be routed to all outputs, and any input on Port A will be ignored. The switch between sources is immediate. NOTE: If there is no DMX signal on the selected input port, no DMX will be output by the card.

While in RDM A/B mode, the RDM Hub acts as an RDM responder and proxy. Any connected downstream RDM devices may be discovered and configured using an RDM-enabled console or other RDM controller.

OPERATING MODE: PRIORITY

Provides predictable, signal priority arrangements of DMX sources. Ensures a primary console will take over completely from stage management panels, architectural controllers and other data sources.

Ports are wired to DMX sources as desired, with Port A having highest priority and Port H lowest. When signal ceases on Port A (or whichever port is currently the active input), after a one second delay, the card will latch to the next lower active source and distribute this source to all other ports.

Should signal return on Port A, or any other port higher than the current input, the card will immediately latch to that source and distribute its signal to all other ports.

NOTE: The DMX source must cease entirely for priority to take effect. Bringing all DMX levels to zero is not the same as the signal stopping or disconnecting.

NOTE: Do not install any DMX receiving devices between the DMX source and the RDM Hub card when in Priority mode. Intermediate devices will not function correctly if a different DMX source have priority.

While in Priority mode, the RDM Hub acts as an RDM responder. However, all proxy functions are disabled. Any connected downstream RDM devices will not be discovered and cannot be configured.

OPERATING MODE: MERGE

Allows slot-by-slot, HTP (highest-takes-precedence) merging of two DMX sources. For example, allows use of a remote focus unit while the main console is also active.

All DMX lines are wired back to the RDM Hub card. With one DMX input active, the RDM Hub will scan the remaining ports looking for an additional input signal. When found, the card will latch to the second signal and begin merging the two sources. When the secondary source ceases, merging will stop and the card will begin scanning once again.

9 pt: Should more than two DMX inputs be active, the sources actually merged will be determined using the Priority Mode order-of-precedence.

While in Merge mode, the RDM Hub acts as an RDM responder. However, all proxy functions are disabled. Any connected downstream RDM devices will not be discovered and cannot be configured.

RDM PROPERTIES

The RDM Hub is fully compliant with the E1.20 Remote Device Management standard. Operating modes may also be set remotely using an RMD-enabled console or other RDM controller.

The RDM Hub has two custom properties, which may only be set using an RDM-enabled console or other RDM controller.

Hold Last Look: On loss of all DMX inputs, output may be held for zero seconds, thirty seconds, 1 minute, 5 minutes or forever. Default is zero seconds.

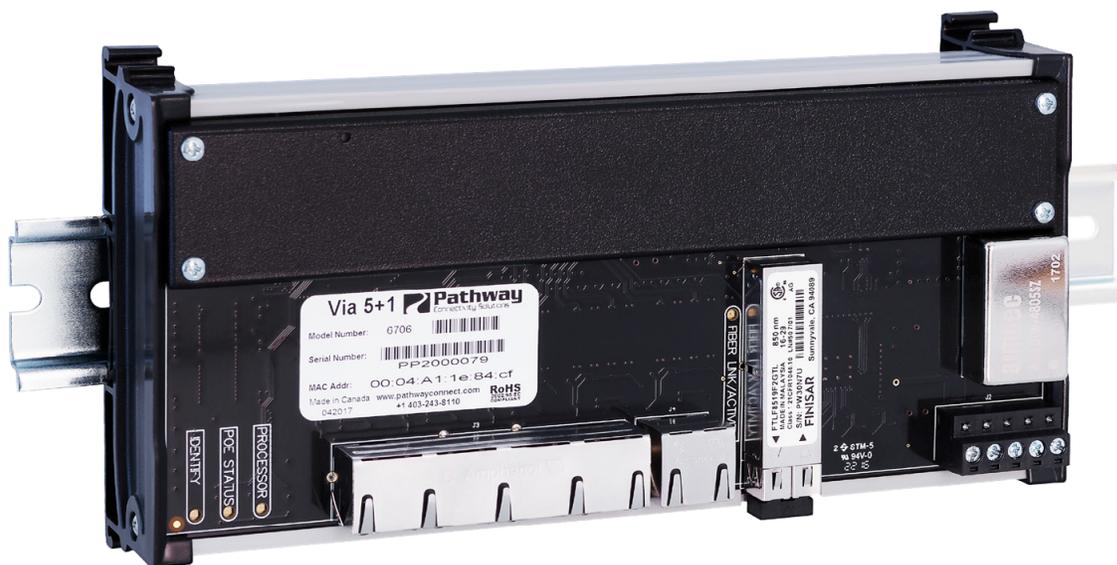
DMX512 Output Speed: The DMX output frame rate may be set to: Slow, Medium or Fast. Default is Fast.

SPECIFICATIONS

Power Supply:	9-30 VDC, 12W
Input Signal:	ANSI E1.11 DMX512-A, ANSI E1.20 RDM
Outputs:	ANSI E1.11 DMX512-A, ANSI E1.20 RDM
Connections:	Two piece compression screw terminals, 16 - 24 AWG
Size:	3.5" x 6.25" x 1.25" (90mm x 160mm x 35mm)

VIA5 GIGABIT ETHERNET SWITCH

DXT VIA5/VIA5F



PRODUCT OVERVIEW

The VIA5 is a Gigabit Ethernet switch with five copper ports and a model option for a factory-installed duplex LC fiber connector.

Designed to mount on 35mm DIN rail, this compact switch is engineered specifically for lighting, sound and video signal routing in all entertainment production systems, including live shows. Management features, such as VLANs, DHCP and IGMP multicast filtering, are configured with Pathscape software, freely available for download.

FEATURES

- Trap Art-Net and convert it to sACN
- 35mm DIN-rail mountable
- Features include IGMP querier and snooping, DHCP per VLAN, Dante-compliant QoS option, Art-Net to sACN conversion
- Silent operation - fanless, convection cooled design
- Acts as Power-over-Ethernet provider (PoE source) to connected devices, up to 15W per port
- Settable properties include Switch Name, Port Name, IP Address, Subnet Mask, Default Gateway, VLAN Configuration, Link Speed, PoE Allocation, DHCP Pool, IGMP Filtering
- Reported properties include PoE Usage, Serial Number, MAC Address, Firmware Version, Connected Devices (LLDP Compliant), Link Status, Bandwidth Usage
- Five RJ45 ports support 10/100/1000-BaseT speeds
- DXT VIA5F includes one fiber transceiver (1000Base-SX Gigabit Ethernet) with Duplex LC connector (850nm laser)

SPECIFICATIONS

- 48VDC power input
- Operating Conditions: 14°F-118°F (-10°C to 48°C); 10-90% relative humidity, non-condensing
- 75W max power consumption (at full PoE output)

STANDARDS COMPLIANCE

- IEEE 802.1AB Link Layer Discovery Protocol
- IEEE 802.3AF Power over Ethernet (with external supply)
- RoHS 2002/95/EC
- Class 2 Low Voltage

WEIGHTS AND DIMENSIONS

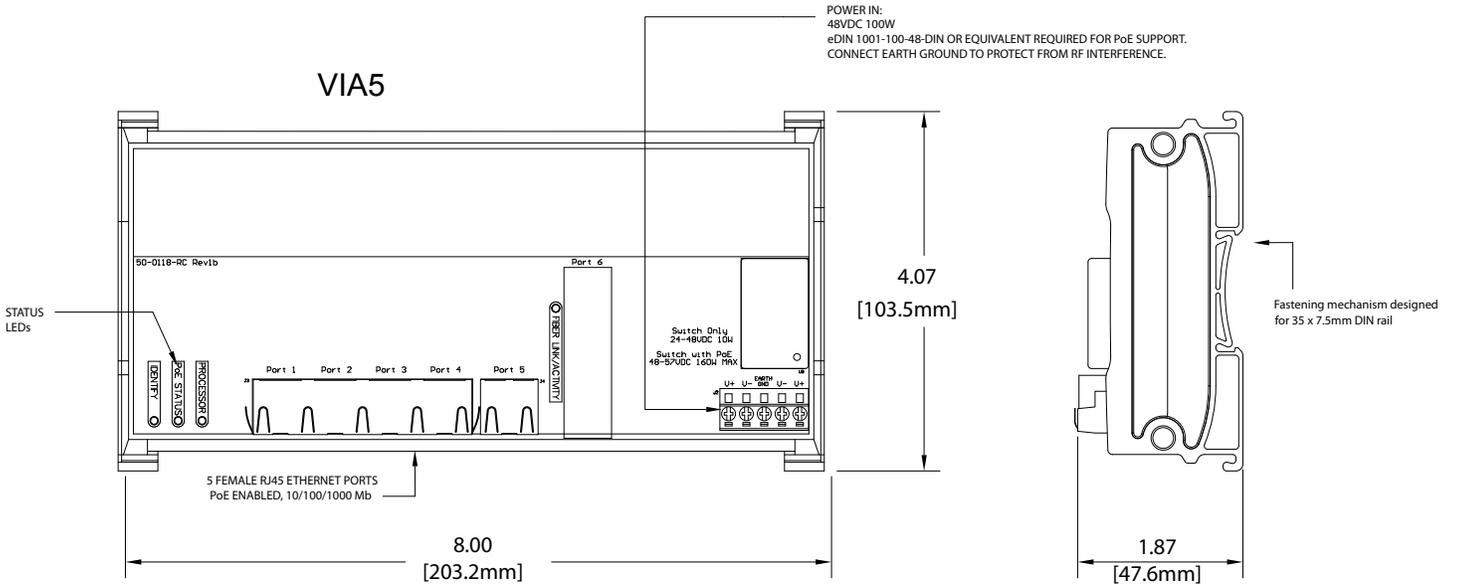
- 0.70 lbs (0.32 kg)
- 8.0"W x 4.0"H x 1.9"D (203mm x 104mm x 48mm)

INCLUDED FURNISHINGS

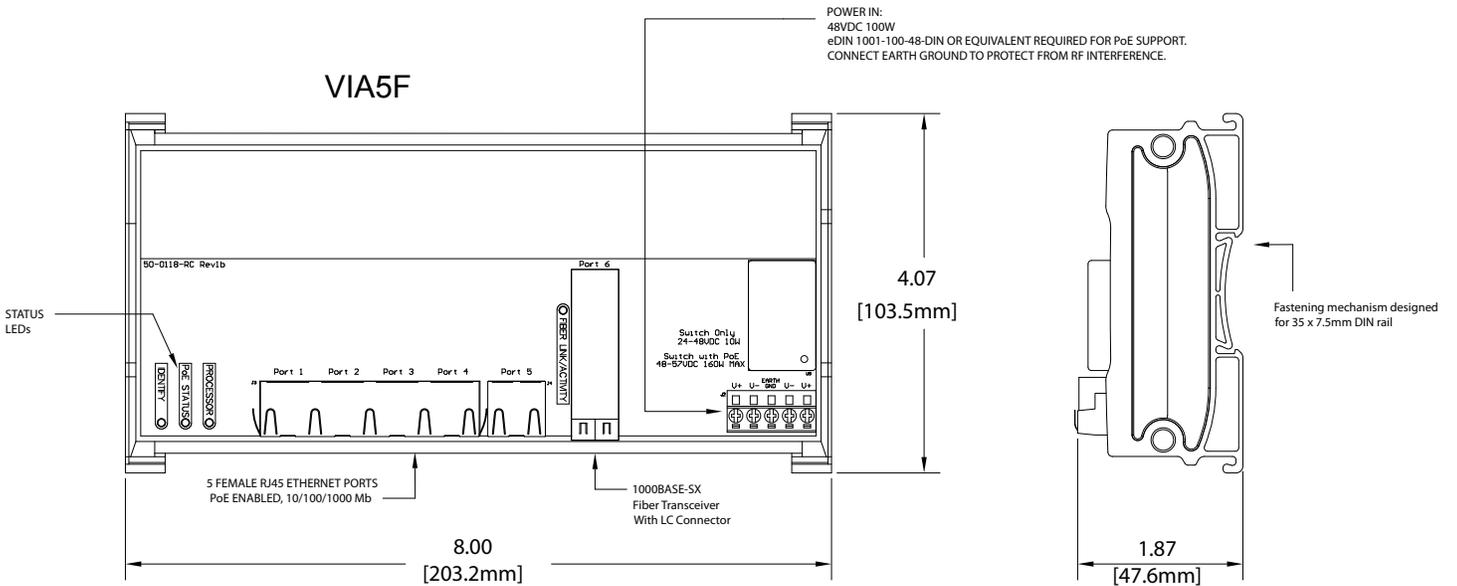
- DIN tray (housing) with end caps
- 11" (280mm) piece of 35mm DIN rail
- Installation/Operations manual

DIMENSIONS

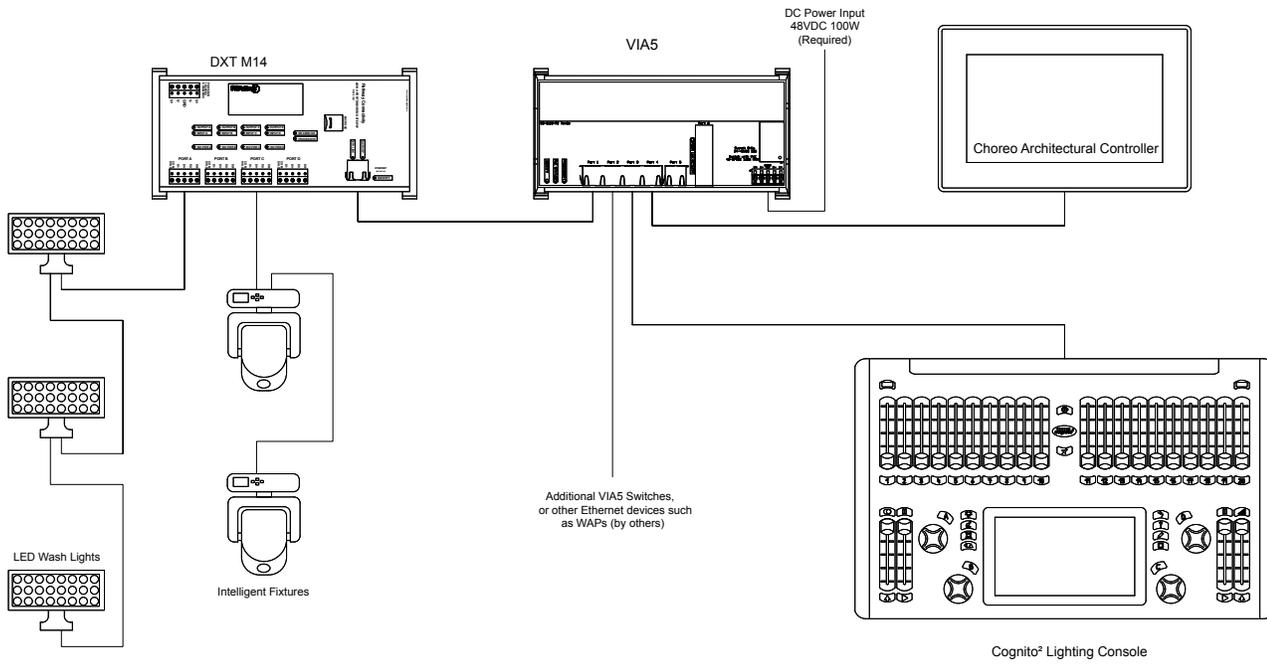
DXT VIA5 – Five Port



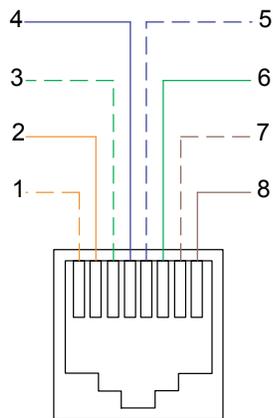
DXT VIA5F – Five Port plus Duplex LC Fiber Port



APPLICATION RISER



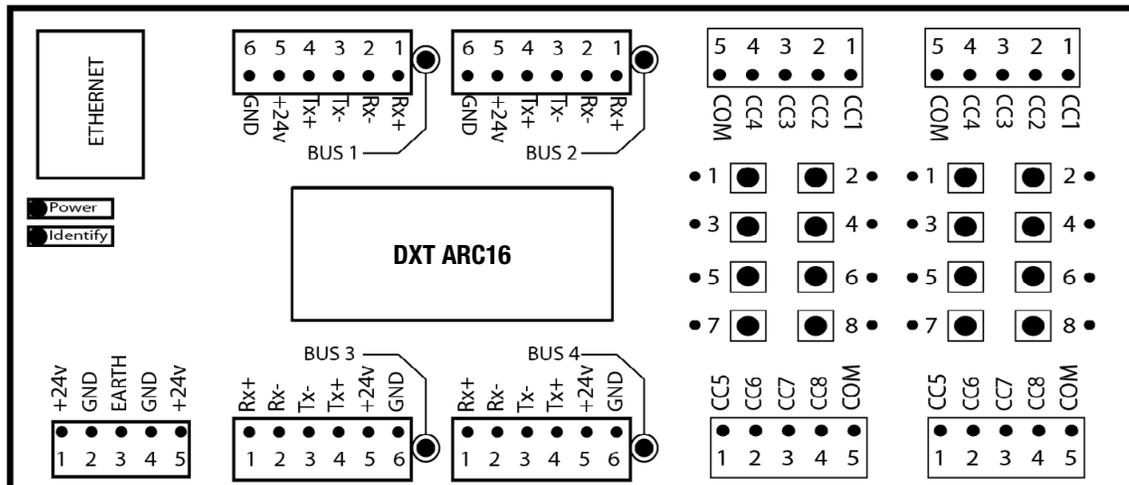
CAT5/6 RJ45 PIN OUT



PIN #	COLOR
1	WHT/ORG
2	ORANGE
3	WHT/GRN
4	BLUE
5	WHT/BLU
6	GREEN
7	WHT/BRN
8	BROWN

COMPLIES WITH TIA-EIA 568B

DXT ARC - Fresco Show NSB 485 Gateway



PRODUCT OVERVIEW

The NSB485 Gateway provides a connection for your architectural lighting system to the NSB485 button and slider stations using a multi-drop serial data bus. Providing power on four separate buses, each can accommodate up to 16 devices (button or slider modules), this device comes in a variety of configurations with or without buttons and auxiliary contact closure inputs.

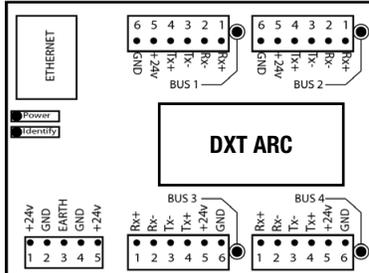
FEATURES

- Power and network connectivity for NSB485 slider and button modules, with optional Contact Closures
- Greatly extends the number of NSB stations connected to a Fresco Show WM or DTP using a single Ethernet connection
- Allows using legacy multi-drop wiring where PoE home-run is not feasible
- Use third-party buttons to trigger Fresco Show WM or DTP memories
- Increase the number of A/V contacts for your Fresco Show WM or DTP
- Attached devices can be discovered and configured on Fresco Show WM or DTP. Pathscape can discover and identify attached NSB stations.

SPECIFICATIONS

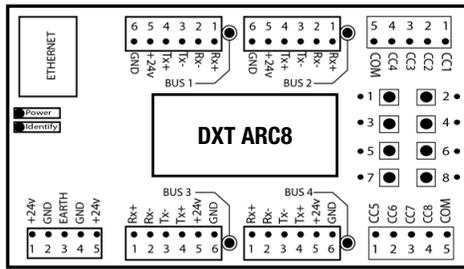
- Compatible with Fresco Show NSB series of button and slider inserts
- Class 2 (24v DC RS485 over Cat5 or six-wire cable)
- 3.6" wide and 4.5", 6.25" and 8" long depending on model
- Compression fit and IDC terminal connections for DMX512 connections and station buses
- Gateway requires 10W at 24VDC plus 1W per insert on the 4-port station bus network
- Operating Conditions: 32°F-105°F (0°C to 40°C); 10-90% relative humidity, non-condensing

STANDARDS COMPLIANCE	
•	IEEE 802. Ethernet
•	RoHS 2002/95/EC



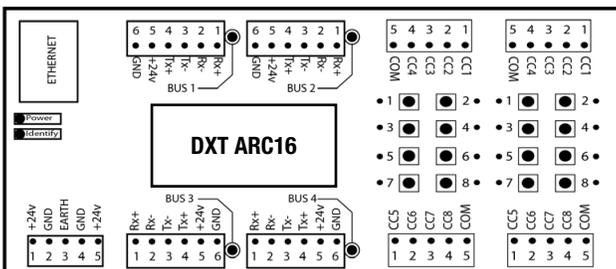
DXT ARC NSB485 Gateway

- Four buses, each capable of powering 16 inserts (a 3-gang button station is 3 inserts)
- Attached stations discoverable and configurable on Fresco Show WM or DTP
- Ethernet configuration with Pathscope
- Mixes well with Fresco Show NSB PoE devices on network



DXT ARC8 NSB485 Gateway with 8 Contact Closures

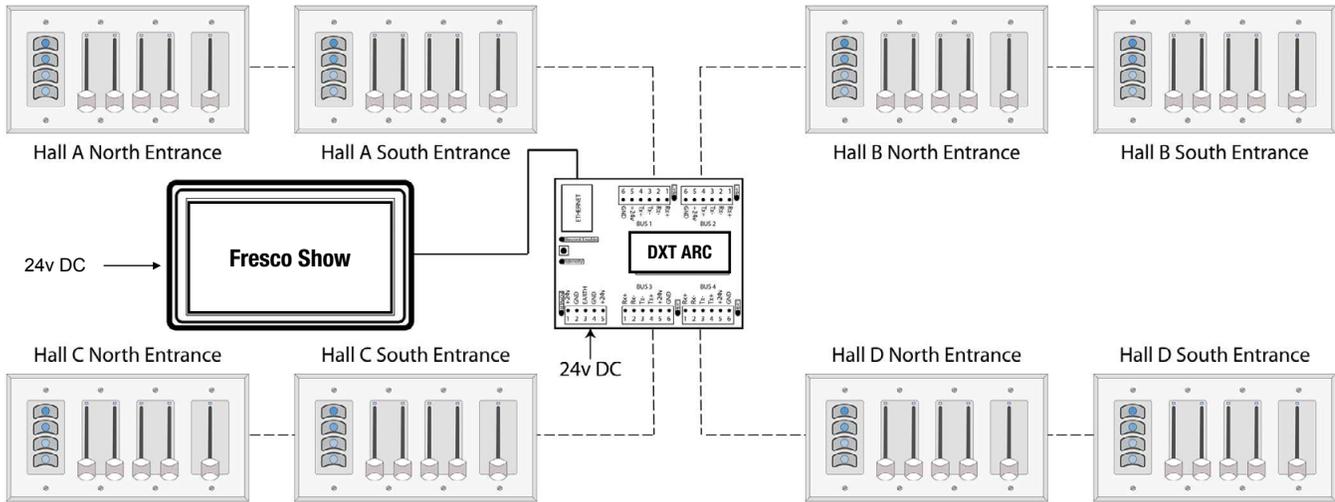
- Four buses, each capable of powering 16 inserts (a 3-gang button station is 3 inserts)
- Local control of Fresco Show WM or DTP Memories for testing
- Connections for eight momentary contacts
- Attached Fresco Show NSB stations discoverable on Pathscope



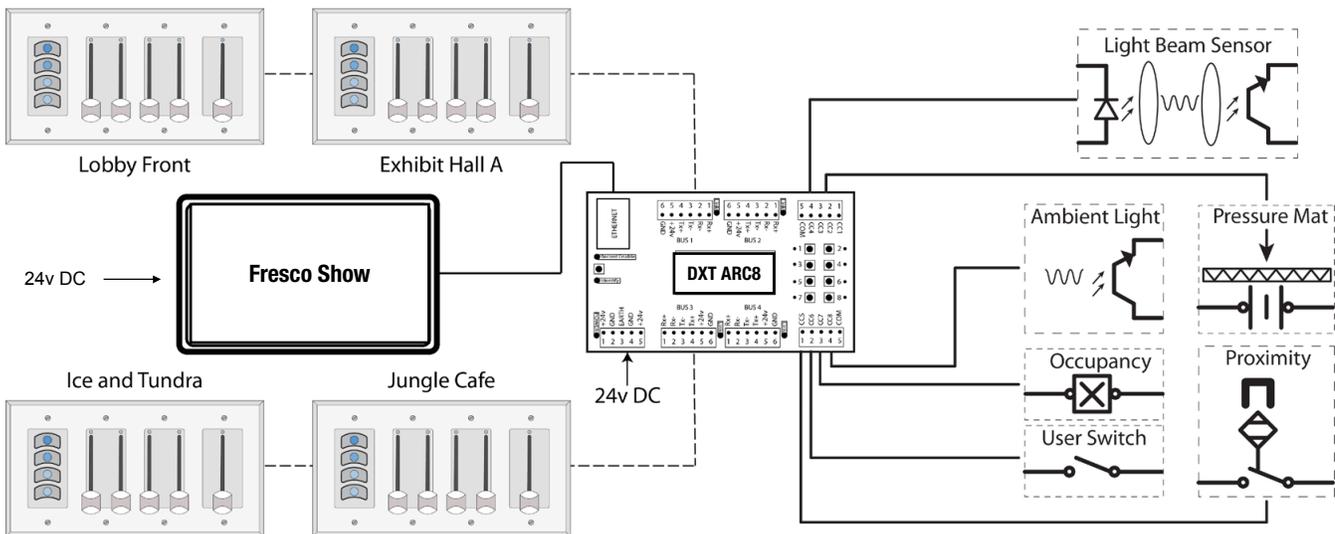
DXT ARC16 NSB485 Gateway with 16 Contact Closures

- Capable of powering 64 Fresco Show NSB inserts
- Local buttons with LED indicators for control of Fresco Show WM or DTP Memories
- Connections for sixteen momentary contacts
- Attached Fresco Show NSB stations discoverable on Pathscope

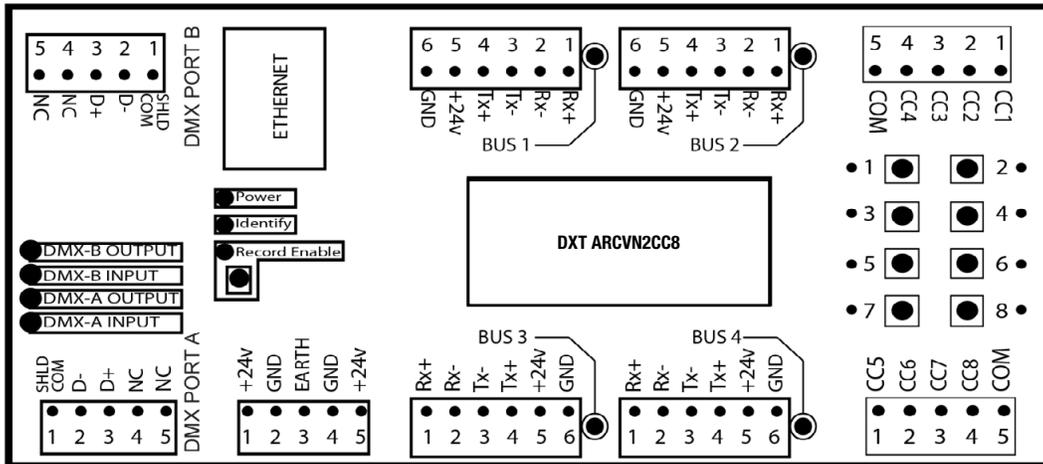
DXT ARC NSB485 Gateway in Divisible Ballroom



DXT ARC8 NSB485 Gateway for Remote Wallstations and Interactive Triggers



DXT ARCVN - Vignette 485 Gateway



PRODUCT OVERVIEW

The Vignette Gateway provides connectivity for Vignette 485 button and slider stations using a multi-drop serial data bus for recording and recall of lighting snapshots. The Gateway has four separate buses, each accommodating up to 16 devices (button or slider modules). This device comes in a variety of configurations with or without buttons, auxiliary contact closures, DMX In and Thru/Out and Ethernet connectivity.

FEATURES

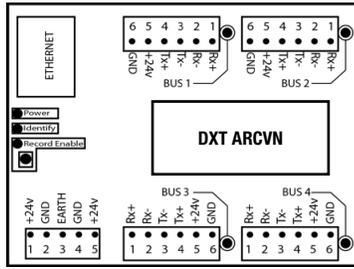
- Power and network connectivity for Vignette slider and button modules, with optional DMX512 ports and Contact Closures
- Configure up to four groupings of presets allows one Gateway to achieve asynchronous fades across four rooms
- Out of the box DMX512 Snapshot record and playback for multiple rooms
- Allows using legacy multi-drop wiring where PoE home-run is not feasible
- Use third-party buttons to trigger snapshot replay
- Use Pathscape software to configure sACN output universes, sACN priorities, crossfades timing and the function of the two optional DMX512 ports.
- DMX512 outputs will crossfade between presets and incoming source when present. No sudden blackouts.

SPECIFICATIONS

- Models DXT ARCVN and DXT ARCVN2 have integrated DMX512 In and Out/Thru ports that can crossfade on priority
- All models can use DXT Ethernet/DMX Gateways to record and playback up to four universes of DMX512
- Class 2 (24v DC RS485 over Cat5 or six-wire cable)
- Compression fit and IDC terminal connections for DMX512 connections and station buses
- 3.6" wide and 4.5", 6.25" and 8" long depending on model
- Gateway requires 10W at 24VDC plus 1W per insert on the 4-port station bus network
- Operating Conditions: 32°F-105°F (0°C to 40°C); 10-90% relative humidity, non-condensing

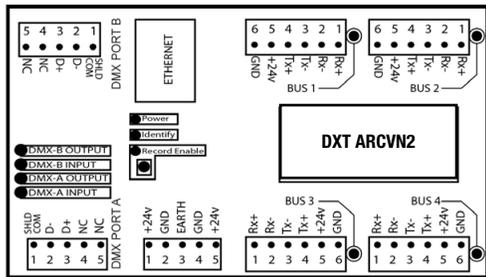
STANΔΑΡΔΣ ΧΟΜΠΑΙΑΝΧΕ

- ANSI E1.11 DMX512-A
- ANSI E1.31 streaming ACN
- IEEE 802. Ethernet
- RoHS 2002/95/EC



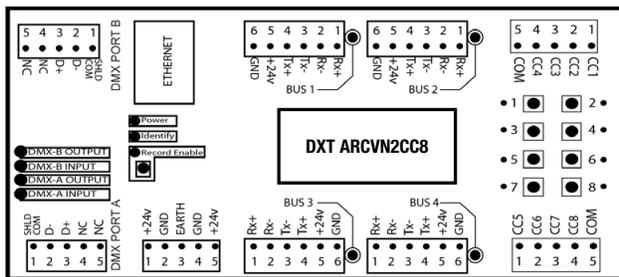
DXT ARCVN Vignette Gateway

- Four buses, each capable of powering 16 inserts (a 3-gang button station is 3 inserts)
- Zero config out of the box operation
- Ethernet for configuration and sACN capture and playback
- Record Enable button for Press-and-Hold to record a snapshot on any button when used with Vignette



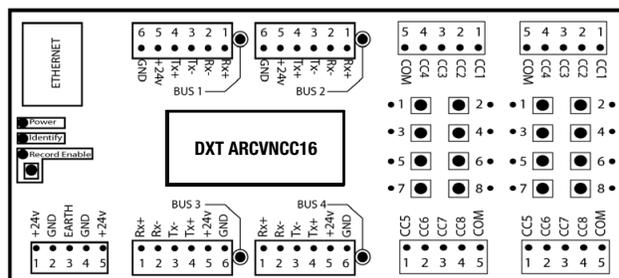
DXT ARCVN2 Vignette Gateway with 2 DMX ports

- Four buses capable of powering 64 Vignette inserts
- Two DMX ports, can be configured as In for capture, Out for Playback of snapshots, or In and Out/Thru for priority or HTP of Vignette snapshots and theatrical control
- Ethernet configuration using Pathscope and for sACN capture and playback



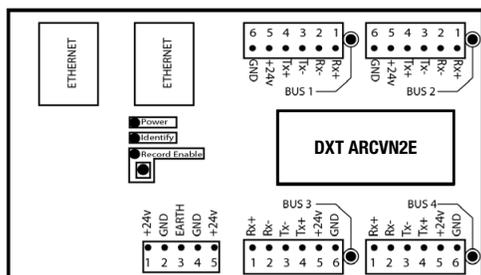
DXT ARCVN2CC8 Vignette Gateway with DMX and 8 buttons

- Four buses capable of powering 64 Vignette inserts
- DMX and/or sACN capture and playback
- Stand-alone mode with 8 dedicated momentary buttons and LED indicators allows the DXT ARCVN2CC8 be used without Vignette stations on the bus
- Eight contact closure for A/V and third-party control



DXT ARCVNCC16 Vignette Gateway with 16 Contact Closures

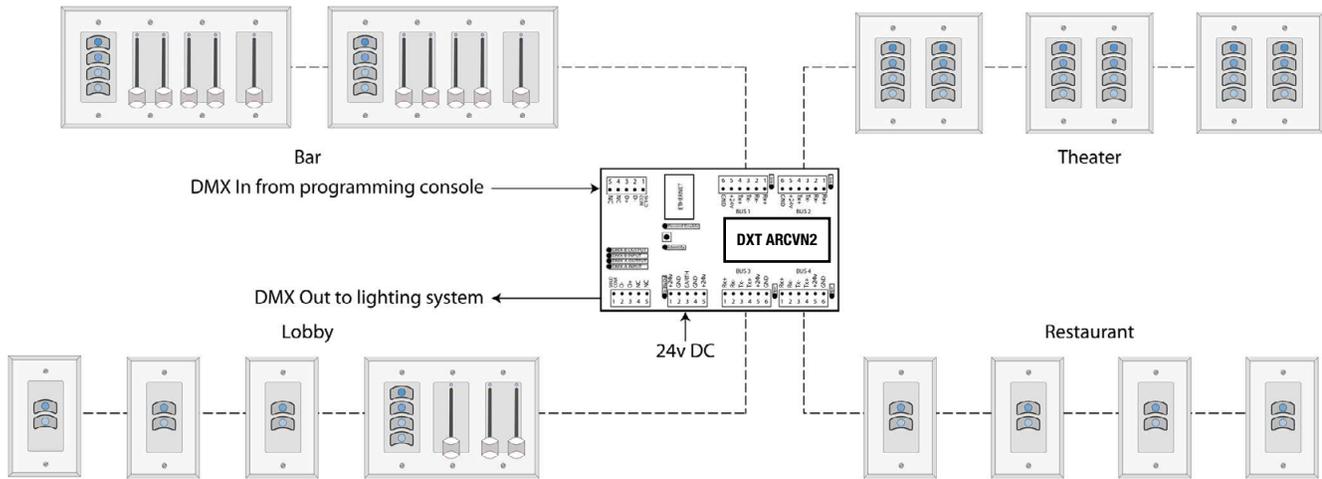
- Four buses capable of powering 64 Vignette inserts
- Local test buttons and LEDs
- Suitable Audio/Video integration or third party push buttons with or without Vignette stations
- DMX512 and Bus connectors come with Compression fit connectors



DXT ARCVN2E Vignette Gateway with 2 Ethernet

- Two Ethernets reduces port consumption on switches
- Works without a switch when paired with DXT M14 Ethernet/DMX gateway for recording and playing back 2048 DMX slots
- DXT M14 can be configured to HTP two universes between theatrical console and Vignette snapshots or prioritize show

DXT ARCVN2 Vignette Snapshot across four rooms



DXT ARCVN2E & DXT M14 for two universe Priority/Merge system

