tivoli.


Project: _____   TYPE: _____

- 3 Channel system
- Addressable LED pixels, suitable for stage, entertainment and architectural applications
- 18 LEDs per foot
- 18 Pixels per foot
- 0.66" Cutting increments
- 3M VHB double sided tape on the back
- Small pitch LED
- 1 pixel per LED for high resolution color changing effect, suitable for media display
- 12VDC input voltage
- Includes Tivoli's eXo shield coating
- Factory soldered lead wire
- Standard IP54 damp rated and IP67 wet location available
- Multiple mounting channel options
- Low lead times
- 5 Year warranty

Dimensions

0.393"

0.66"
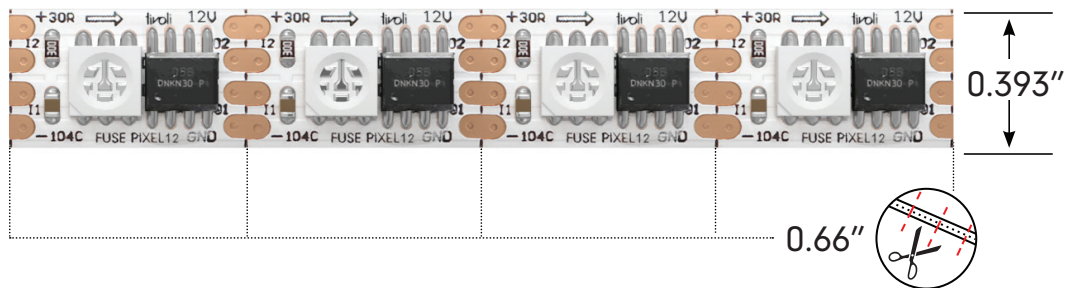
Order Specification Guide

PRODUCT CODE		VERSION		INSTALL		LED TYPE		VOLTAGE
TPLFS	-	**PX**	-	**I**	-	**RGB**	-	**12**

TPLFS = Fuse Tape   **PX** = Pixel   **I** = Indoor   **RGB** = Red, Green, Blue Color Mixing   **12** = 12V DC

Note: A layout/drawing must accompany each order showing run length and location
Note: Runs with LEAD-C are rounded **up** to next cut interval (unless otherwise specified)
Note: Runs with LEAD-D are rounded **down** to next cur interval (unless otherwise specified)

Specifications

Output	
LED Channels	Red / Green / Blue
Lumens (lm/ft)	127 (all colors fully on)
Wavelength	Red (620nm-625nm), Green (527nm-532nm), Blue (470nm-475nm)
Electrical	
Input Voltage	12V DC
Power Consumption (W/ft)	3.66
Maximum Run	15'
Control	
Control System	SPI
Control IC#	GS8208
Address Setting	Auto
Physical	
Dimensions	0.393" (10mm)
LED	5050
Cut Increment	0.66" (16.76mm)
LED/ft	18
Copper Trace	3 Ounce
Adhesive	3M VHB Tape
Operating Temperature	-40°C to 60°C (-40°F to 140°F)
Certification and Testing	
Certification	cULus
Environment	Damp Location
IP Rating	IP54 (Conformally Coated)
Warranty	5 years

Power Leads and Jumpers (Installed by Tivoli's certified solderers)
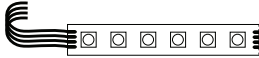
TPL-I-LEAD-4-C
LEAD/END
24" standard 4 conductor
22AWG lead wire factory
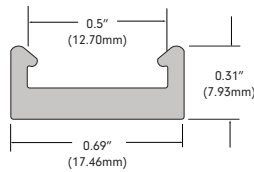attached to one end of tape

TPL-I-LEAD-4-D
LEAD/LEAD
24" standard 4 conductor
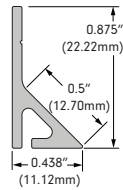22AWG lead wire factory
attached to both ends of tape

TPL-I-XEP-4
EXTRA LEAD WIRE
Additional factory attached
22AWG lead 4 wire to extend
lengths of LEAD-C and LEAD-D
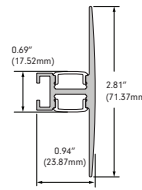up to 20 ft. max
Sold per foot
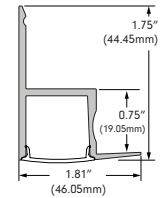
Compatible Extrusions

■ Fits 12mm Snap Connector

MCHAN-8-LP
0.5" (12.70mm)
0.31" (7.93mm)
0.69" (17.46mm)
Low profile NO LENS OPTION
clear polycarbonate, length 8'
■

TPL-I-45-MCH-8-S
0.875" (22.22mm)
0.5" (12.70mm)
0.438" (11.12mm)
White PVC, 45° NO LENS
length 8'

DWAR-CHAN-SLV-6.5
0.69" (17.52mm)
2.81" (71.37mm)
0.94" (23.87mm)
Anodized Aluminum Extrusion,
available in 6.5' lengths

EDGE-CHAN-SLV-6.5
1.75" (44.45mm)
0.75" (19.05mm)
1.81" (46.05mm)
Anodized Aluminum Extrusion,
available in 6.5' lengths
■
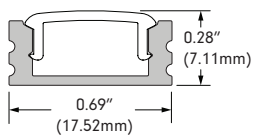
MINI-CHAN-SLV-6.5
0.28" (7.11mm)
0.69" (17.52mm)
Anodized Aluminum Extrusion,
available in 6.5' lengths
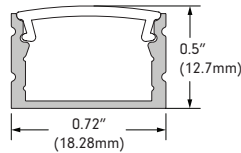
MOFT-CHAN-SLV-6.5
0.5" (12.7mm)
0.72" (18.28mm)
Anodized Aluminum Extrusion,
available in 6.5' lengths
■
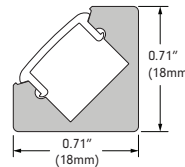
DYER-CHAN-SLV-6.5
0.71" (18mm)
0.71" (18mm)
Anodized Aluminum Extrusion,
available in 6.5' lengths
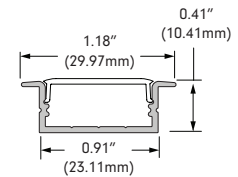
WRNR-CHAN-SLV-6.5
0.41" (10.41mm)
1.18" (29.97mm)
0.91" (23.11mm)
Anodized Aluminum Extrusion,
available in 6.5' lengths
■
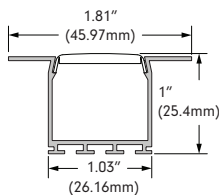
NOYS-CHAN-SLV-6.5
1.81" (45.97mm)
1" (25.4mm)
1.03" (26.16mm)
Anodized Aluminum Extrusion,
available in 6.5' lengths
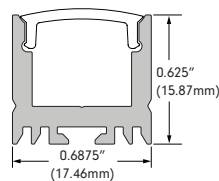
VALN-CHAN-SLV-6.5
0.625" (15.87mm)
0.6875" (17.46mm)
Anodized Aluminum Extrusion,
available in 6.5' lengths
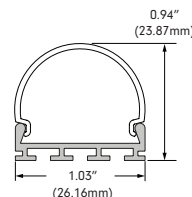
DOME-CHAN-SLV-6.5
0.94" (23.87mm)
1.03" (26.16mm)
Anodized Aluminum Extrusion,
available in 6.5' lengths
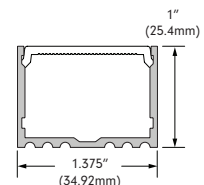
ALTN-CHAN-SLV-6.5
1" (25.4mm)
1.375" (34.92mm)
Anodized Aluminum Extrusion,
available in 6.5' lengths

Compatible Extrusions
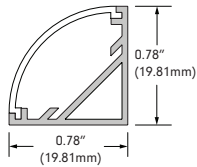
MRSL-CHAN-SLV-6.5
Anodized aluminum extrusion
available in 6.5' length

0.78" (19.81mm)
0.78" (19.81mm)

HRIZ-CHAN-SLV-6.5
Anodized aluminum extrusion
available in 6.5' length

0.75" (19.05mm)
0.78" (19.81mm)
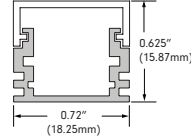
ASTR-CHAN-SLV-6.5
Anodized aluminum extrusion
available in 6.5' length

0.625" (15.87mm)
0.72" (18.25mm)
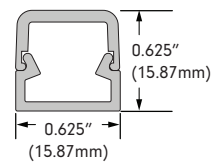
INF-X-CHAN-8
X = **C** (clear), **F** (frosted)
PC extrusion,
available in 8' lengths

0.625" (15.87mm)
0.625" (15.87mm)
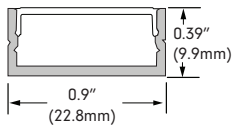
COTA-CHAN-SLV-6.5
Anodized Aluminum Extrusion,
available in 6.5' lengths

0.39" (9.9mm)
0.9" (22.8mm)

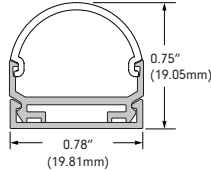**CARU-CHAN-SLV-6.5**
Anodized aluminum extrusion,
available in 6.5' lengths

0.8" (20.32mm)
1.37" (34.78mm)
3.46" (87.88mm)
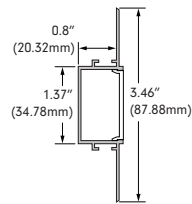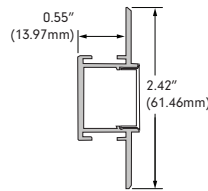
HAYS-CHAN-SLV-6.5
Anodized Aluminum Extrusion,
available in 6.5' lengths

0.55" (13.97mm)
2.42" (61.46mm)
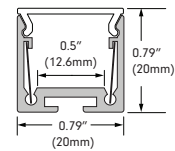
DUET-04-CHAN-XXX-6.5
Aluminum extrusion
6.5' Length

0.5" (12.6mm)
0.79" (20mm)
0.79" (20mm)
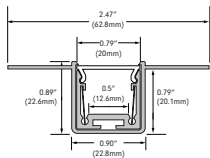
DUET-04-CHAN-M-6.5
Mud-In PC fire-proof extrusion
6.5' Length

2.47" (62.8mm)
0.79" (20mm)
0.89" (22.6mm)
0.5" (12.6mm)
0.79" (20.1mm)
0.90" (22.8mm)

Note: **DUET-04-CHAN-SLV-6.5** and **DUET-04-CHAN-M-6.5** are required for mud-in application
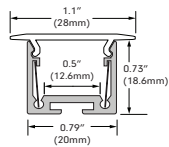
DUET-04-CHAN-SLV-6.5
Anodized aluminum extrusion
available in 6.5' length

1.1" (28mm)
0.5" (12.6mm)
0.73" (18.6mm)
0.79" (20mm)

Note: **DUET-04-CHAN-SLV-6.5** and **DUET-04-LNS-R-XXX-6.5** are required for recessed application

Controls

ARTNET-S-8-512
8 port universe Artnet to DMX interface, 4096 DMX channels Programmable for playback and live support
(Online or Offline option)

Touchscreen

MDRX-AURA-XX
X = **02**, **08**, **32** (ports)
MADRIX Luna 2, 8, 32 port universe Artnet to DMX interface. Programmable for playback and live support
(Online or Offline option)

MDRX-NBLA-08
Up to 8 universes. SPI decoder receives control over ethernet network or USB delivering zero lag to your fixture

ARTNET-S-X-SPI
X = **4** (4 port), **8** (8 port)
Artnet to SPI interface.
Programmable for playback and live support
(Online or Offline option)

Network Hardware

MDRX-LUNA-XX
XX = **04, 08, 16** (ports)
MADRIX Luna 4, 8, 16 port universe Artnet to DMX interface 16 port 8192, 8 port 4096, 4 port 2048 DMX channels

ARTNET-L-XX-512
XX = **8**, **16** (ports)
8 or 16 port universe Artnet to DMX interface,
16 port 8192 DMX channels
8 port 4096 DMX channels

NTG-SWI-XXPT
XX = **8** (8 Port), **16** (16 Port)
NETGEAR 16-Port gigabit Unmanaged Switch

DMX3-CAT5-ADPTR
DMX adapter
3-pin XLR female to RJ45

Data Operation & Wiring Diagram Artnet to SPI ON-LINE operation

MDRX-NBLA (Live)

This is a live control performance setup using the MDRX-NBLA-XX interface. Widely used for concerts or performance-based manipulation. Use of a live network is necessary for communication between MADRIX 5 software and Magic Tape.

NTG-SWI-8PT
Ethernet switch

PC with MADRIX
(Needed for live operation)

CAT-5 (RJ45)
(by others)

MDRX-NBLA-08
Artnet to SPI Interface

120V Power In
hard wire

ADUL/ADNM
Power Supply

SPI Data
Hard wire

12V Power
Hard wire
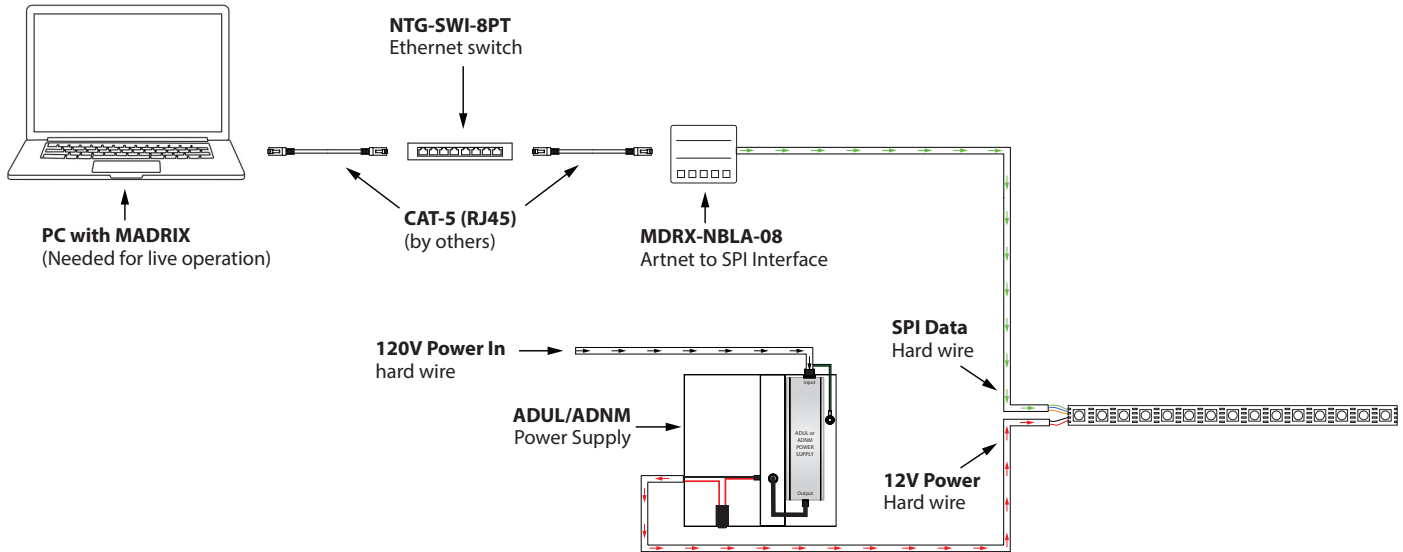
ARTNET-S (Live)

This is a live control performance setup using the ARTNET-S-X-SPI interface. Widely used for concerts or performance-based manipulation. Use of a live network is necessary for communication between MADRIX 5 software and Magic Tape.

NTG-SWI-8PT
Ethernet switch

ARNET-S-4-SPI
Artnet to DMX Interface

PC with MADRIX
or 3rd party software
(Needed for live operation)

CAT-5 (RJ45)
(by others)

**CAT-5 (RJ45)
to Hardwire**
(by others)

120V Power In
hard wire

ADUL/ADNM
Power Supply

SPI Data
Hard wire

12V Power
Hard wire

Data Operation & Wiring Diagram Artnet to SPI OFF-LINE operation

MDRX-AURA (Preset)

A stand-alone system with no need for support via network/software (MADRIX 5). Once scene playback is saved to AURA hardware via lighting software, PC/network can be removed form the system using only the AURA hardware to control playback. Please refer to the AURA specification for setup/record information.

PC with MADRIX
(Remove after programming)

NTG-SWI-8PT
Ethernet switch

CAT-5 (RJ45)
(by others)

MDRX-NBLA-08
Artnet to SPI Interface

MDRX-AURA-02
Artnet Interface

120V Power In
hard wire

SPI Data
Hard wire

ADUL/ADNM
Power Supply

ADUL or ADNM POWER SUPPLY

Input

Output

12V Power
Hard wire

ARTNET-S (Preset)

A stand-alone system with no need for support via network/software (MADRIX 5). Once scene playback is saved to ARTNET-S hardware via lighting software, PC/network can be removed form the system using only the ARTNET-S hardware to control playback. Please refer to the ARTNET-S specification for setup/record information.

PC with MADRIX
or 3rd party software
(Remove after programming)

NTG-SWI-8PT
Ethernet switch

ARNET-S-4-SPI
Artnet to DMX Interface

CAT-5 (RJ45)
(by others)

**CAT-5 (RJ45)
to Hardwire**
(by others)

120V Power In
hard wire

SPI Data
Hard wire

ADUL/ADNM
Power Supply

ADUL or ADNM POWER SUPPLY

Input

Output

12V Power
Hard wire

Data Operation & Wiring Diagram DMX to SPI ON-LINE operation
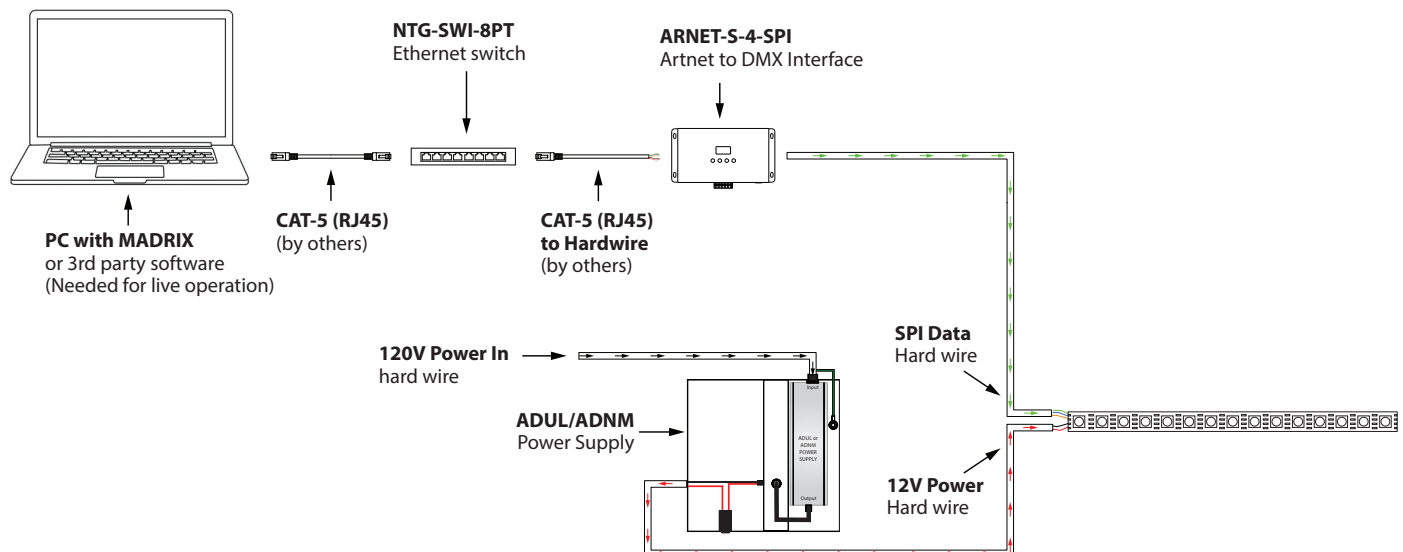
MDRX-LUNA or ARTNET-L (Live)

This is a live control performance setup using the MDRX-LUNA-XX or ARTNET-L-XX-512 interface. Widely used for concerts or performance-based manipulation. Use of a live network is necessary for communication between MADRIX 5 software and Magic Tape.

NTG-SWI-8PT
Ethernet switch

MDRX-LUNA
Artnet to DMX

or

ARNET-L-512
Artnet to DMX

120V AC

PC with MADRIX
or 3rd party software
(Needed for live operation)

CAT-5 (RJ45)
(by others)

DMX Data
XLR to hard wire
(by others)

ADUL/ADNM-SPI
Power Supply

POWER SUPPLY
Input
Output

12V Power
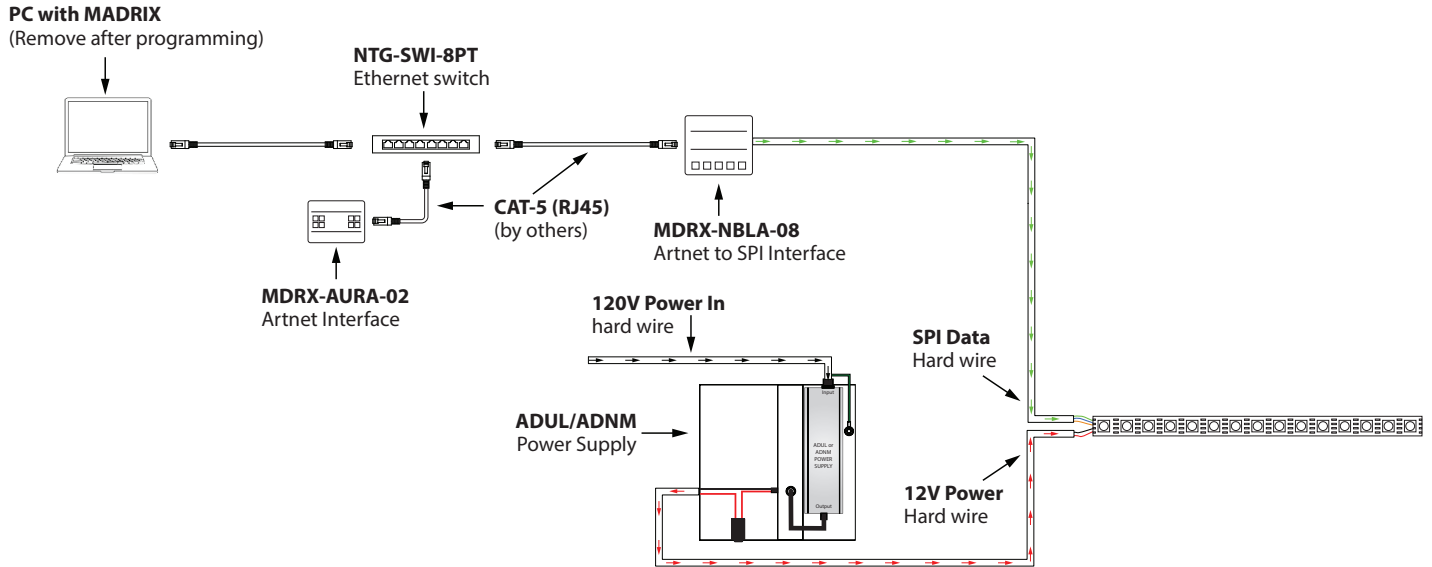Hard wire

SPI Data
Hard wire

ARTNET-S (Live)

This is a live control performance setup using the ARTNET-S-X-512 interface. Widely used for concerts or performance-based manipulation. Use of a live network is necessary for communication between MADRIX 5 software and Magic Tape.

NTG-SWI-8PT
Ethernet switch

ARNET-S-512
Artnet to DMX Interface

120V AC

PC with MADRIX
or 3rd party software
(Needed for live operation)

CAT-5 (RJ45)
(by others)

DMX3-CAT5-ADPTR
XLR to CAT-5

DMX Data
XLR to hard wire
(by others)

ADUL/ADNM-SPI
Power Supply

POWER SUPPLY
Input
Output

12V Power
Hard wire

SPI Data
Hard wire
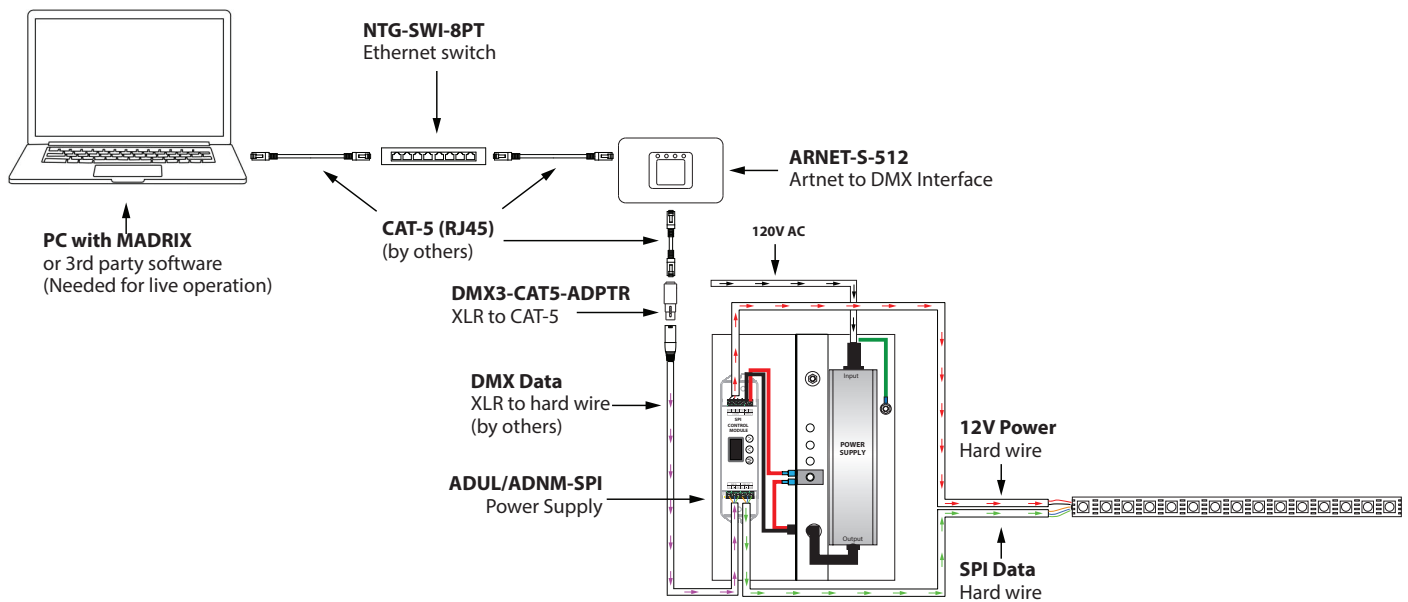
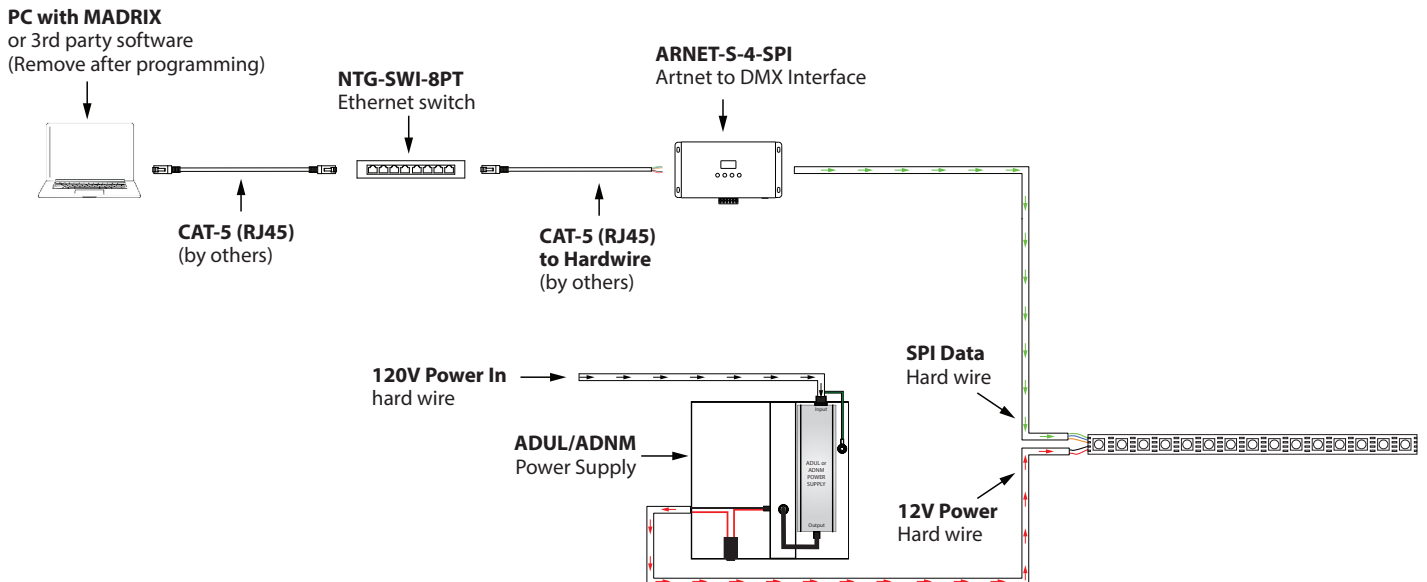## Data Operation & Wiring Diagram DMX to SPI OFF-LINE operation
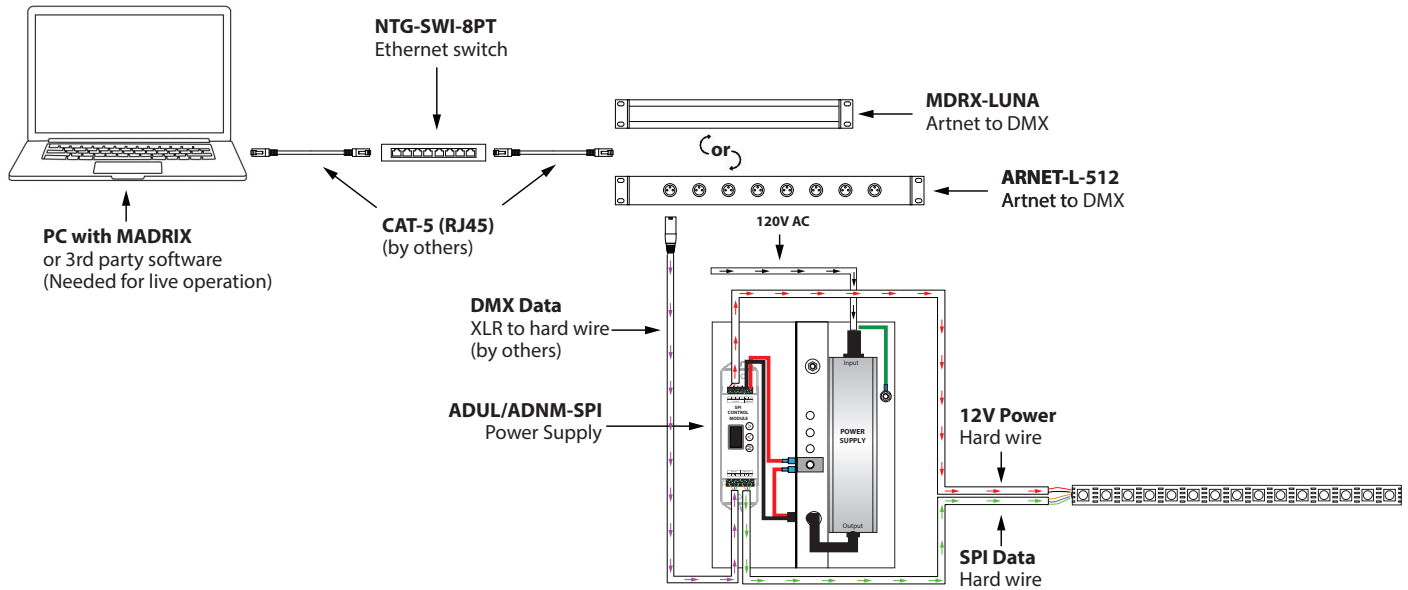
MDRX-LUNA or ARTNET-L (Preset)

A stand-alone system with no need for support via network/software (MADRIX 5). Once scene playback is saved to AURA hardware via lighting software, PC/network can be removed form the system using only the AURA to control playback. Integrate with MDRX-LUNA or ARTNET-L for DMX system. Please refer to the AURA, MDRX-LUNA or ARTNET-L-512 specification for setup and record information.

ARTNET-S (Preset)

A stand-alone system with no need for support via network/software (MADRIX 5). Once scene playback is saved to ARTNET-S-X-512 hardware via lighting software, PC/network can be removed form the system using only the ARTNET-S-X-512 to control playback. Please refer to the ARTNET-S-512 specification for setup and record information.
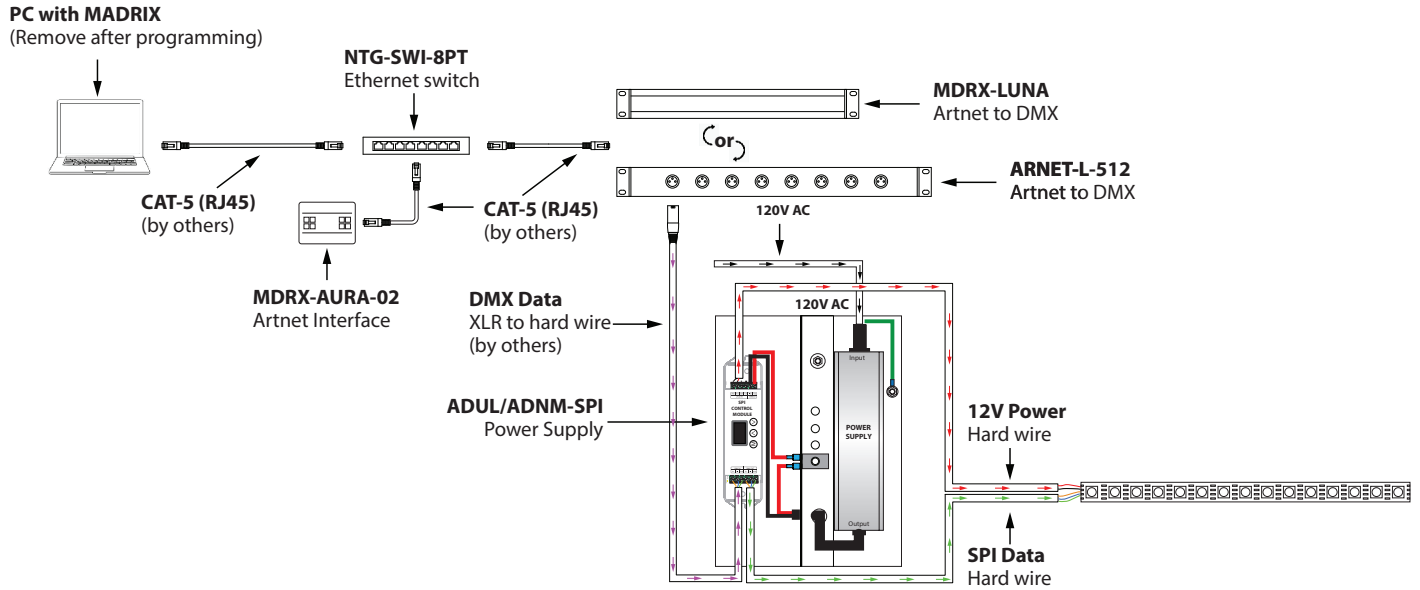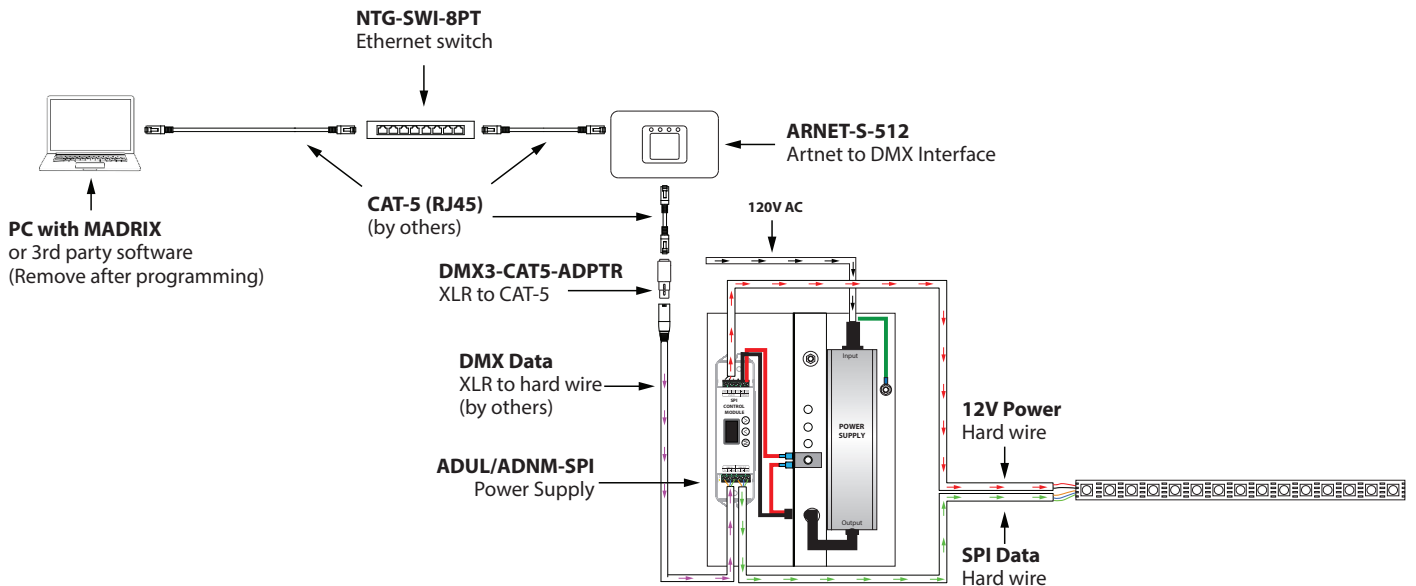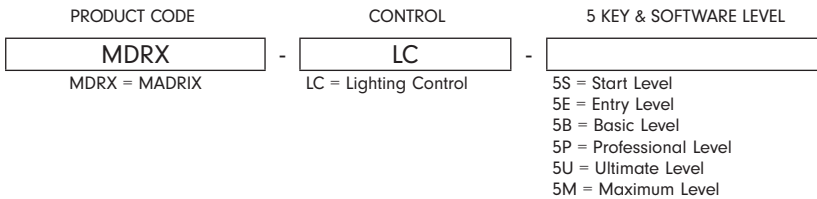
Key & Software Levels

PRODUCT CODE		CONTROL		5 KEY & SOFTWARE LEVEL
MDRX	-	LC	-	
MDRX = MADRIX		LC = Lighting Control		5S = Start Level
				5E = Entry Level
				5B = Basic Level
				5P = Professional Level
				5U = Ultimate Level
				5M = Maximum Level

MADRIX KEY

A USB dongle unlocks the software's full output. You can freely switch between different PCs as it is not bound to a specific one. It only needs to be activated online once.

MADRIX 5 LICENSE UPGRADES

You can easily upgrade your MADRIX 5 KEY to any higher license at any time, increasing the available output.

Level	START	ENTRY	BASIC	PROFESSIONAL	ULTIMATE	MAXIMUM
MADRIX 5 Order Code	MDRX-LC-5S	MDRX-LC-5E	MDRX-LC-5B	MDRX-LC-5P	MDRX-LC-5U	MDRX-LC-5M
DMX-Based Output						
DMX Channels	1,024	4,096	16,384	65,536	262,144	1,048,576
DMX Universe Example	2	8	32	128	512	2,048
RGB Voxels Example	341	1,365	5,461	21,845	87,381	349,525
DVI-Based Output						
DVI Voxels	4,096	16,384	262,144	1,048,576	2,097,152	2,097,152
Render Resolution (Pixel x Pixel)	64 x 64	128 x 128	512 x 512	1,024 x 1,024	2,048 x 1,024	2,048 x 1,024

Power Supplies Indoor

ADUL - SPI CONTROL

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADUL Series Class 2 Transformer	ADUL-60-1-5-12-SPI	Indoor or Damp	100-277V AC ⁵‰ HZ	12V DC	1	60W	5A
	ADUL-150-2-5-12-SPI-2				2	2x60W	2x5A
	ADUL-240-3-5-12-SPI-3				3	3x60W	3x5A
	ADUL-320-4-5-12-SPI-4				4	4x60W	4x5A

ADUL - NON DIMMING

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADUL Series Class 2 Transformer	ADUL-80-1-5-12-D	Outdoor or Indoor	100-277V AC ⁵‰ HZ	12V DC	1	60W	5A
	ADUL-150-2-5-12-D				2	2x60W	2x5A
	ADUL-240-3-5-12-D				3	3x60W	3x5A
	ADUL-320-4-5-12-D				4	4x60W	4x5A

Power Supplies Outdoor / Indoor

ADNM - SPI CONTROL

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-60-1-5-12-SPI	Outdoor or Indoor	100-277V AC 5‰ HZ	12V DC	1	60W	5A
	ADNM-150-2-5-12-SPI-2				2	2x60W	2x5A
	ADNM-240-3-5-12-SPI-3				3	3x60W	3x5A
	ADNM-320-4-5-12-SPI-4				4	4x60W	4x5A

ADNM - NON DIMMING

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-60-1-5-12-D	Outdoor or Indoor	100-277V AC 5‰ HZ	12V DC	1	60W	5A
	ADNM-80-1-5-12-D				1	80W	5A
	ADNM-150-2-5-12-D				2	2x60W	2x5A
	ADNM-240-3-5-12-D				3	3x60W	3x5A
	ADNM-320-4-5-12-D				4	4x60W	4x5A