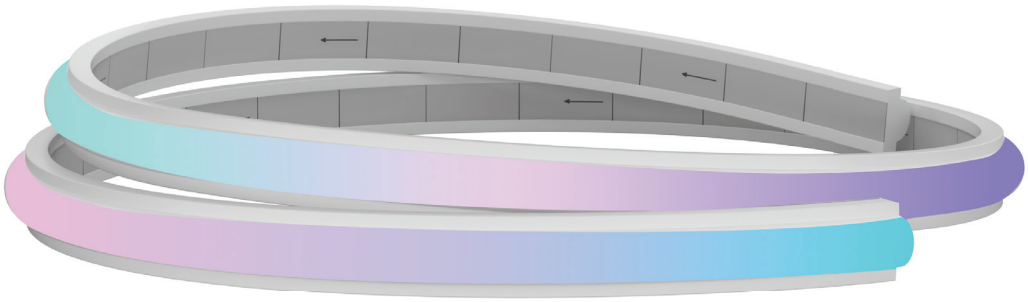
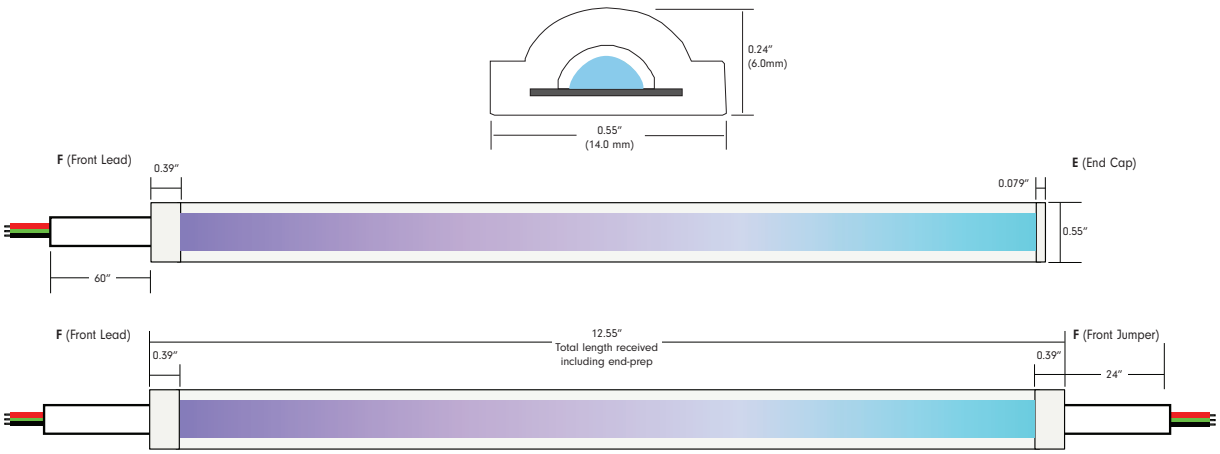


Project: _____ TYPE: _____

- 3 Channel system
- RGB mixing with pixel control every 1.97"
- Addressable LED pixels segments, suitable for stage, entertainment and architectural applications
- 6 Pixels per foot for color changing effect, suitable for media display
- 3M VHB double sided tape on the back
- 24V DC input voltage
- Factory soldered lead wire
- IP67 wet location
- Mounting options available
- 5 Year warranty

Dimensions



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Order Guide

NOTE: Lengths and quantity of each run must be submitted at time of order.
TRACE Mini COB Pixel24 is factory prep only. In-field cutting will void warranty.

PRODUCT CODE		INTENSITY		PROFILE		LED TYPE		END PREP 1		END PREP 2		VOLTAGE		LENGTH
TRCEM	-	**VHO**	-	**CB**	-	**RGBPX**	-	**F**	-		-	**24**	-	
TRCEM = Trace Mini Flexible Light		**VHO** = Very High Output		**CB** = COB		**RGBPX** = Red, Green, Blue (6px/ft)		**F** =Front Lead		**E** = End Cap **F** =Front Jumper		**24** = 24V DC		Refer to chart page 3-4

Specification

Output				
Kelvin Temperature	Red	Green	Blue	RGB
Lumens/ft	30.18	117.99	13.72	153.27
Efficacy (Lm/W)	11	43	5	21
Wavelength	CF	CF	CF	CF
Measured Power W/ft	2.74	2.74	2.74	7.32
CRI	90+			
Listed Power W/ft.	7.32			
Max Run Electrical	14'			

Electrical	
Input Voltage	24V DC
Wire Size (End Prep)	22 AWG, 3 wire
Control System	SPI
Control IC#	WS2811
Physical	
Dimensions	0.55" (14mm) x 0.24" (14mm)
LED	COB (Chip on FPC)
Pixels/ft	6
Cut Increment	1.96" (50mm)
LED/ft	6
Adhesive	3M VHB Tape
Operating Temperature	-40°C to 60°C (-40°F to 140°F)
Certification and Testing	
Certification	cULus, CE
Environment	Wet Location
IP Rating	IP67
Warranty	5 years

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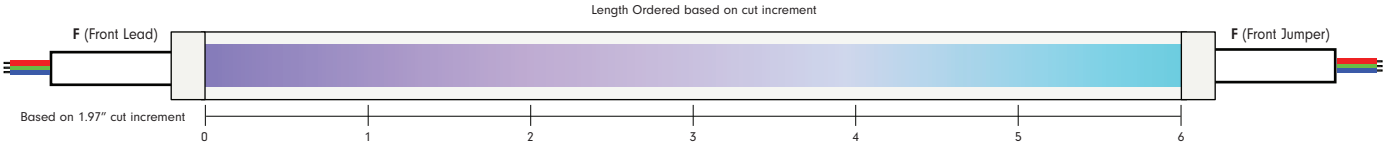
F - F Lead Prep Configuration Order Guide

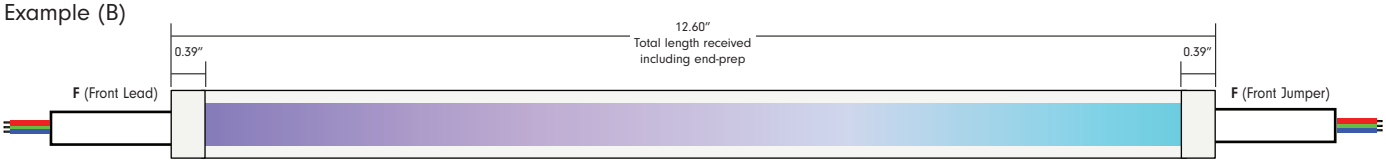
Note: Use "**Cut Increment**" number for order enty information (see chart below)

Order information is based on total amount of cut incrments needed within a single run - See example (A) below
Total product length received will include added end-prep of choice within a tolerance (±in 0.275) - See example (B) below

Example (A)



Example (B)



Part# Example: **TRCEM-VHO-CB-RGBPX-F-F-24-006**

CUT INCREMENT	ACTUAL INCH	ACTUAL FOOT	WATTS/CUT INCREMENT	NOMINAL LENGTH
006	12.6	1.05	12.50	1'
007	14.57	1.21	14.36	
008	16.54	1.38	16.41	
009	18.51	1.54	18.48	
010	20.48	1.71	20.53	
011	22.45	1.87	22.58	
012	24.42	2.04	19.34	2'
013	26.39	2.20	20.64	
014	28.36	2.36	22.22	
015	30.33	2.53	23.82	
016	32.3	2.69	25.40	
017	34.27	2.86	26.99	
018	36.24	3.02	24.85	3
019	38.21	3.18	25.83	
020	40.18	3.35	27.18	
021	42.15	3.51	28.55	
022	44.12	3.68	29.91	
023	46.09	3.84	31.27	
024	48.06	4.01	30.24	4'
025	50.03	4.17	31.03	
026	52	4.33	32.27	
027	53.97	4.50	33.51	
028	55.94	4.66	34.75	
029	57.91	4.83	35.99	
030	59.88	4.99	35.54	5'
031	61.85	5.15	36.18	
032	63.82	5.32	37.35	
033	65.79	5.48	38.52	
034	67.76	5.65	39.69	
035	69.73	5.81	40.85	
036	71.7	5.98	42.88	6'
037	73.67	6.14	43.43	
038	75.64	6.30	44.60	
039	77.61	6.47	45.78	
040	79.58	6.63	46.95	

CUT INCREMENT	ACTUAL INCH	ACTUAL FOOT	WATTS/CUT INCREMENT	NOMINAL LENGTH
041	81.55	6.80	48.13	
042	83.52	6.96	49.37	7'
043	85.49	7.12	49.77	
044	87.46	7.29	50.92	
045	89.43	7.45	52.09	
046	91.4	7.62	53.24	
047	93.37	7.78	54.40	
048	95.34	7.95	54.85	8'
049	97.31	8.11	55.18	
050	99.28	8.27	56.31	
051	101.25	8.44	57.44	
052	103.22	8.60	58.56	
053	105.19	8.77	59.69	
054	107.16	8.93	60.22	9'
055	109.13	9.09	60.40	
056	111.1	9.26	61.50	
057	113.07	9.42	62.61	
058	115.04	9.59	63.70	
059	117.01	9.75	64.80	
060	118.98	9.92	65.70	10'
061	120.95	10.08	65.79	
062	122.92	10.24	66.87	
063	124.89	10.41	67.95	
064	126.86	10.57	69.03	
065	128.83	10.74	70.11	
066	130.8	10.90	71.19	
067	132.77	11.06	71.74	11'
068	134.74	11.23	72.78	
069	136.71	11.39	73.86	
070	138.68	11.56	74.93	
071	140.65	11.72	76.00	
072	142.62	11.89	77.07	
073	144.59	12.05	77.10	12'
074	146.56	12.21	78.11	
075	148.53	12.38	79.17	

CUT INCREMENT	ACTUAL INCH	ACTUAL FOOT	WATTS/CUT INCREMENT	NOMINAL LENGTH
076	150.5	12.54	80.23	
077	152.47	12.71	81.28	
078	154.44	12.87	82.34	
079	156.41	13.03	82.35	13'
080	158.38	13.20	83.13	
081	160.35	13.36	84.18	
082	162.32	13.53	85.21	
083	164.29	13.69	86.25	
084	166.26	13.86	87.29	
085	168.23	14.02	87.18	14'

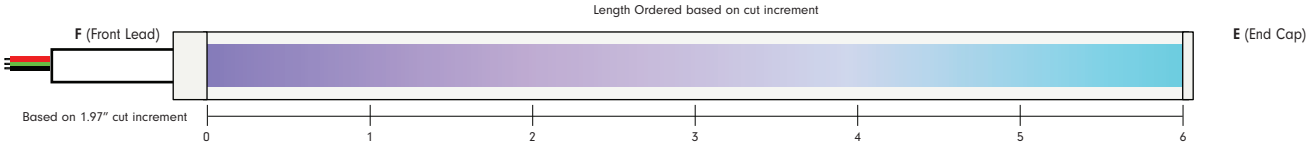
Tivoli, LLC. reserves the right to modify this specification without prior notice.

F - E Lead Prep Configuration Order Guide

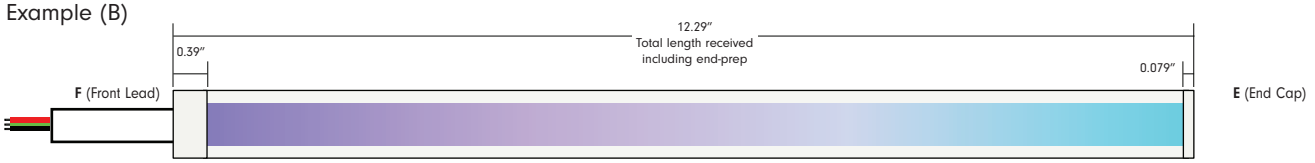
Note: Use "**Cut Increment**" number for order enty information (see chart below)

Order information is based on total amount of cut incrments needed within a single run - See example (A) below
Total product length received will include added end-prep of choice within a tolerance (±in 0.275) - See example (B) below

Example (A)



Example (B)



Part# Example: **TRCEM-VHO-CB-RGBPX-F-E-24-06**

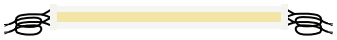
CUT INCREMENT	ACTUAL INCH	ACTUAL FOOT	WATTS/CUT INCREMENT	NOMINAL LENGTH
006	12.29	1.02	12.50	1'
007	14.26	1.19	14.36	
008	16.23	1.35	16.41	
009	18.20	1.52	18.48	
010	20.17	1.68	20.53	
011	22.14	1.85	22.58	
012	24.11	2.01	19.34	2'
013	26.08	2.17	20.64	
014	28.05	2.34	22.22	
015	30.02	2.50	23.82	
016	31.99	2.67	25.40	
017	33.96	2.83	26.99	
018	35.93	2.99	24.85	3
019	37.90	3.16	25.83	
020	39.87	3.32	27.18	
021	41.84	3.49	28.55	
022	43.81	3.65	29.91	
023	45.78	3.82	31.27	
024	47.75	3.98	30.24	4'
025	49.72	4.14	31.03	
026	51.69	4.31	32.27	
027	53.66	4.47	33.51	
028	55.63	4.64	34.75	
029	57.60	4.80	35.99	
030	59.57	4.96	35.54	5'
031	61.54	5.13	36.18	
032	63.51	5.29	37.35	
033	65.48	5.46	38.52	
034	67.45	5.62	39.69	
035	69.42	5.79	40.85	
036	71.39	5.95	42.88	6'
037	73.36	6.11	43.43	
038	75.33	6.28	44.60	
039	77.30	6.44	45.78	
040	79.27	6.61	46.95	

CUT INCREMENT	ACTUAL INCH	ACTUAL FOOT	WATTS/CUT INCREMENT	NOMINAL LENGTH
041	81.24	6.77	48.13	
042	83.21	6.93	49.37	7'
043	85.18	7.10	49.77	
044	87.15	7.26	50.92	
045	89.12	7.43	52.09	
046	91.09	7.59	53.24	
047	93.06	7.76	54.40	
048	95.03	7.92	54.85	8'
049	97.00	8.08	55.18	
050	98.97	8.25	56.31	
051	100.94	8.41	57.44	
052	102.91	8.58	58.56	
053	104.88	8.74	59.69	
054	106.85	8.90	60.22	
055	108.82	9.07	60.40	9'
056	110.79	9.23	61.50	
057	112.76	9.40	62.61	
058	114.73	9.56	63.70	
059	116.70	9.73	64.80	
060	118.67	9.89	65.70	
061	120.64	10.05	65.79	10'
062	122.61	10.22	66.87	
063	124.58	10.38	67.95	
064	126.55	10.55	69.03	
065	128.52	10.71	70.11	
066	130.49	10.87	71.19	
067	132.46	11.04	71.74	11'
68	134.43	11.20	72.78	
069	136.40	11.37	73.86	
070	138.37	11.53	74.93	
071	140.34	11.70	76.00	
072	142.31	11.86	77.07	
073	144.28	12.02	77.10	12'
074	146.25	12.19	78.11	
075	148.22	12.35	79.17	

CUT INCREMENT	ACTUAL INCH	ACTUAL FOOT	WATTS/CUT INCREMENT	NOMINAL LENGTH
076	150.19	12.52	80.23	
077	152.16	12.68	81.28	
078	154.13	12.84	82.34	
079	156.10	13.01	82.35	13'
080	158.07	13.17	83.13	
081	160.04	13.34	84.18	
082	162.01	13.50	85.21	
083	163.98	13.67	86.25	
084	165.95	13.83	87.29	
085	167.92	13.99	87.18	14'

Tivoli, LLC. reserves the right to modify this specification without prior notice.

Power Leads and Jumpers (Installed by Tivoli's certified solderers)

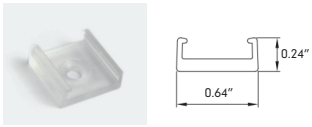


TRCEM-CB-RGBPX-LEAD-XEP
Extend lengths up to 20 ft. max
Sold per foot

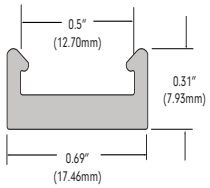
GELJB-3-02-BK
1/2/3 Wire IP67 Medium Gel Filled Junction Box

GELJB-3-01-BK
1/2/3 Wire IP67 Gel Filled Junction Box

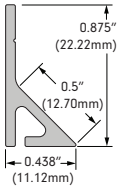
Mounting Accessories



TRCEM-CB-14-CLP
14mm COB PC clip
length 0.64"
sold each



MCHAN-8-LP
Low profile NO LENS OPTION
clear polycarbonate, length 8'



TPL-I-45-MCH-8-S
White PVC, 45° NO LENS
length 8'

In-Wall Controls

TVOQ-1-WH
White

TVOQ-10-XX-7
XX = **BK** (Black), **WH** (White)

TVOQ-2-BK
Black

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Controls

MDRX-AURA-XX
X = **02, 12, 32** (ports)
MADRIX AURA is a stand alone controller for up to 2, 12, or 32 universes per unit

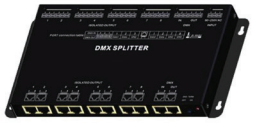
SP630E-S
All-In-One SPI/PWM Controller
Note: Control with available BT app or optional **SP630E-R** remote

Network Hardware

MDRX-LUNA-XX
XX = **4, 8, 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



DMX-SPLT-X
X= 2, 4, 8 (Output Channels)
DMX Splitter
1 Input to 8 Output
Ethernet or Hardware Connection

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

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Power Supplies - Indoor

ADUL - SPI

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADUL Series Class 2 Transformer	ADUL-120-1-4-24-SPI	Indoor or Damp	100-277V AC 50/60 HZ	24V DC	1	96W	4A
	ADUL-240-2-4-24-SPI				2	2x96W	2x4A
	ADUL-320-3-4-24-SPI				3	3x96W	3x4A

Power Supplies - Outdoor

ADNM - SPI

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-120-1-4-24-SPI	Outdoor	100-277V AC 50/60 HZ	24V DC	1	96W	4A
	ADNM-240-2-4-24-SPI				2	2x96W	2x4A
	ADNM-320-3-4-24-SPI				3	3x96W	3x4A

Tivoli Commissioning Service

Tivoli's DMX Commissioning service involves the setup and configuration of our DMX lighting and control system, ensuring the seamless integration of our lighting fixtures with the specified DMX Control system ordered.

For more information about commission service, contact:
sales@tivoliusa.com
714-957-6101 (Engineering Tech Support)

Tivocue Wall Controllers (Default Scenes: White, Red,Green, Blue, Light Blue, Purple, Pink, Dim White, Yellow, Cool Cycle, Warm Cycle, All Cycle, Rainbow Scroll, Blackout)	
TVOQ-REM-COMM-1	Remote DMX commissioning for TIVOCUE 2 and 10 dmx wall controller. Pixel mapping/control is not offered for remote commissioning
TVOQ-ONS-COMM-1	Onsite DMX comissioning for TIVOCUE 2 and 10 dmx wall controller (est. 2 days)
ARTNET-S-8-512 (Default Scenes: White, Red,Green, Blue, Light Blue, Purple, Pink, Dim White, Yellow, Cool Cycle, Warm Cycle, All Cycle, Rainbow Scroll, Blackout)	
ARTNET-S-REM-COMM-8	Remote DMX commissioning for artnet s recorder up to 8 universes. Pixel mapping/control is not offered for remote commissioning
ARTNET-S-ONS-COMM-8	Onsite DMX commissioning for artnet s recorder up to 8 universes (est. 3 days)
MADRIX DMX SYSTEM	
DMX-COMM-2U-MDRX	Onsite commissioning for madrix, up to 2 universes (est. 3 days)
DMX-COMM-8U-MDRX	Onsite commissioning for madrix, up to 8 universes (est. 3 days)
DMX-COMM-16U-MDRX	Onsite commissioning for madrix, up to 16 universes (est. 4 days)
DMX-COMM-24U-MDRX	Onsite commissioning for madrix, up to 24 universes (est. 4 days)
DMX-COMM-32U-MDRX	Onsite commissioning for madrix, up to 32 universes (est. 5 days)
32+ UNIVERSE	Contact factory

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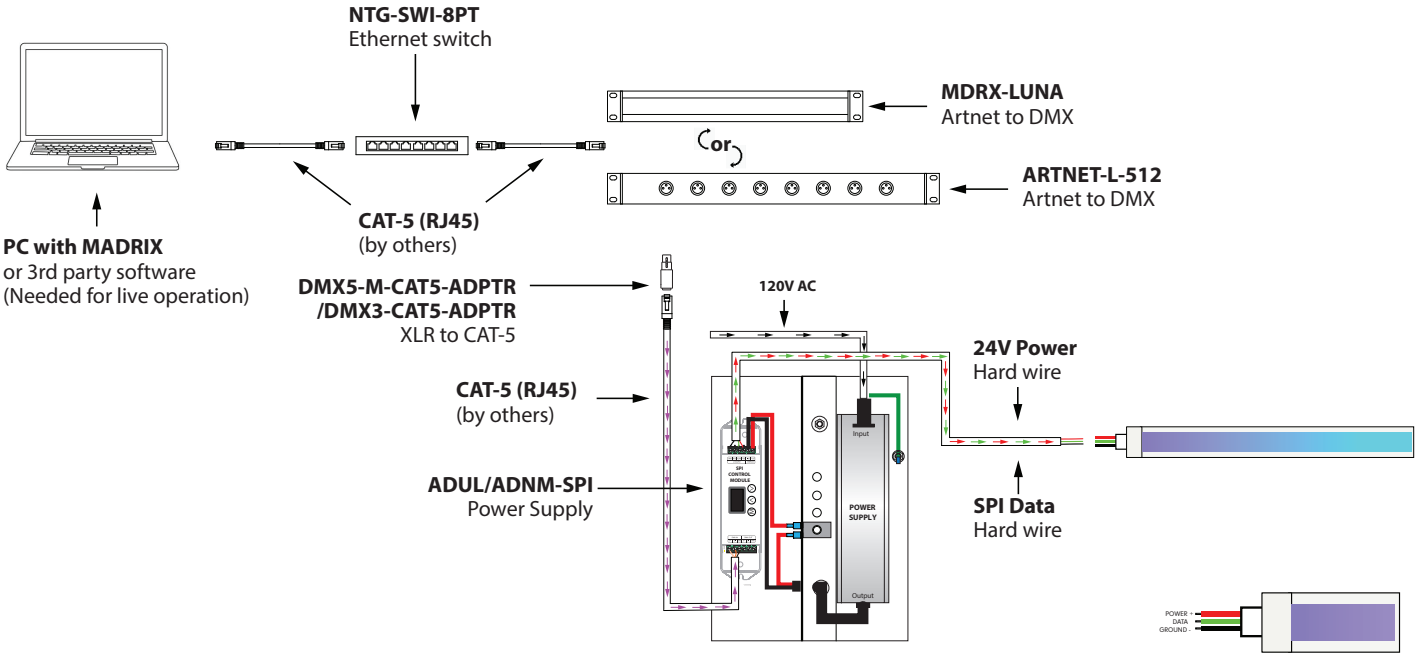
Data Operation & Wiring Diagram DMX to SPI ON-LINE operation

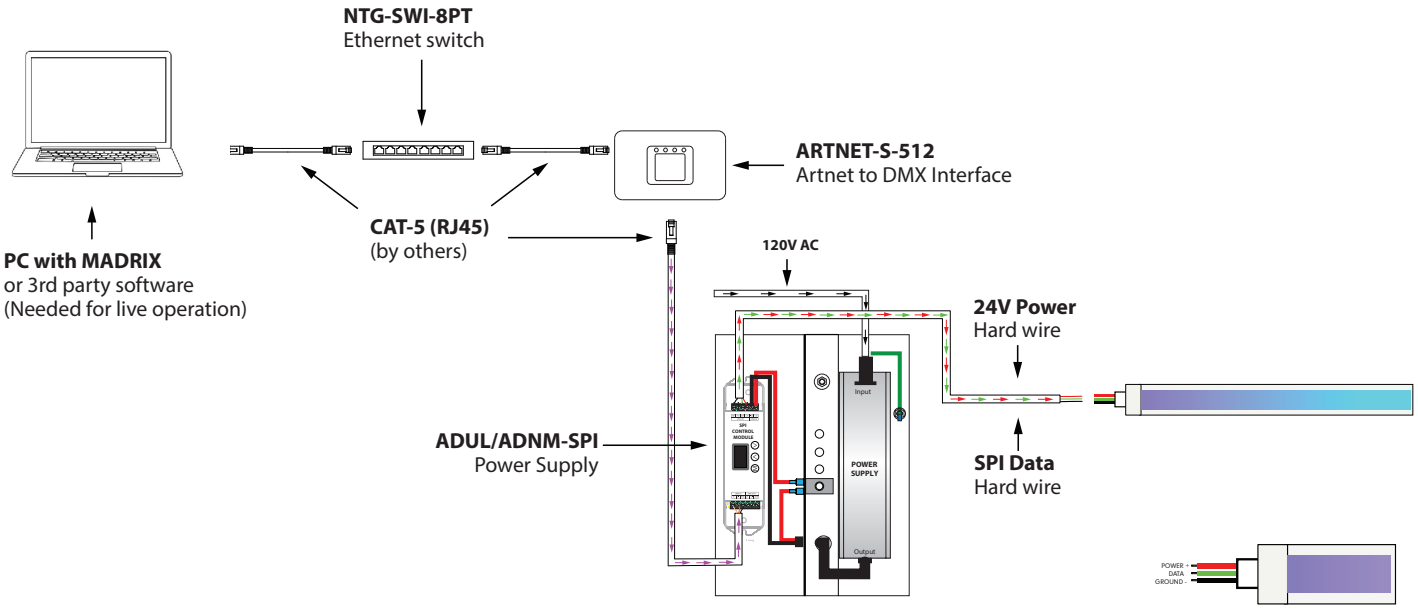
MDRX-LUNA or ARTNET-L (Live)

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.



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.

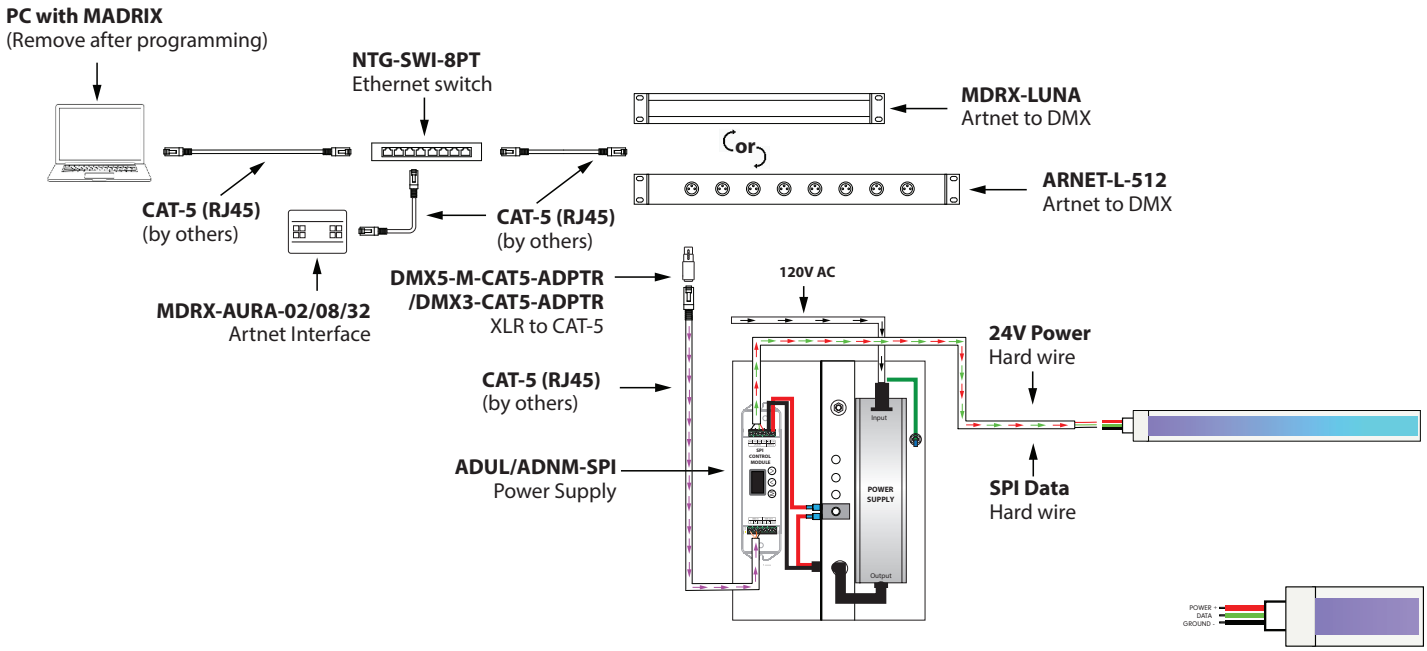


Tivoli, LLC. reserves the right to modify this specification without prior notice.

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

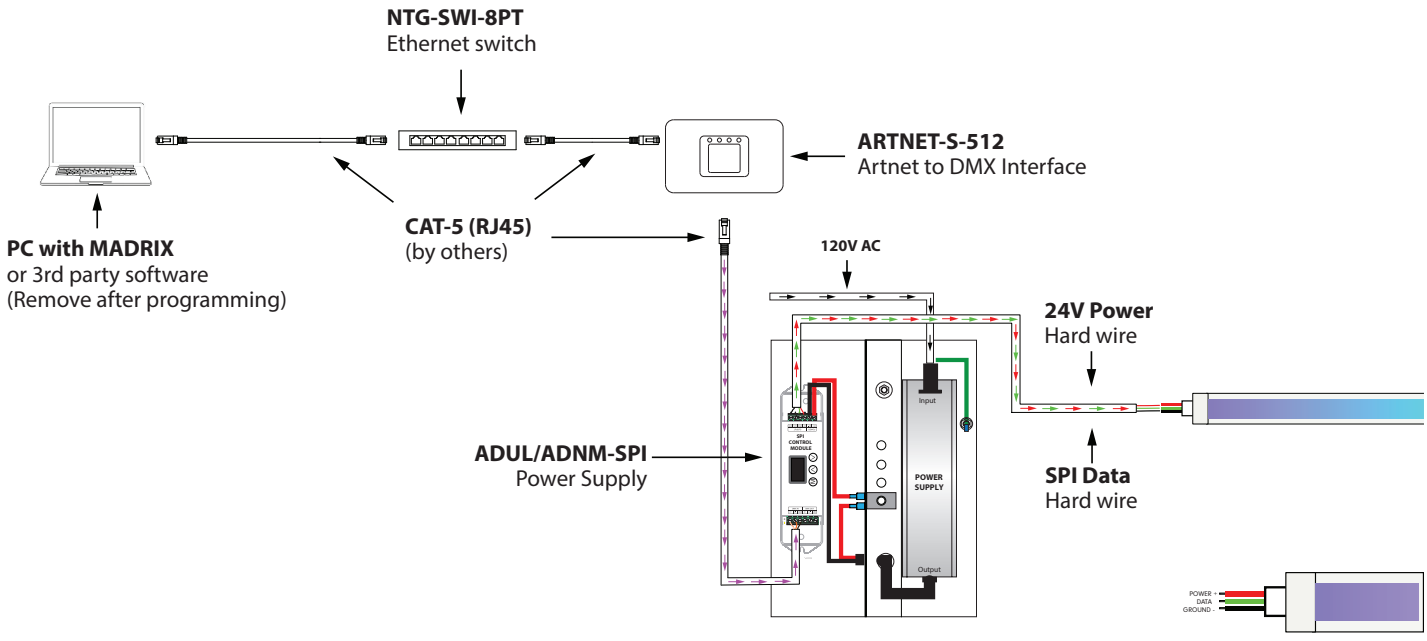
MDRX-LUNA or ARTNET-L (Preset)

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.



Tivoli, LLC. reserves the right to modify this specification without prior notice.