

# Submittal Package/Purchasing Guide MRI RGBW DMX System (MRI-DMXPS)

DMX Remote Power Supply Enclosure
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CATALOG #		TYPE	
JOB NAME	WATTAGE	VOLTAGE	

# **MRI RGBW DMX System Components**

**MRI-DMXPS** 

Fully Digital Controlled Power Source for LED Luminaires

# **Power Supply Enclosure and Drivers**

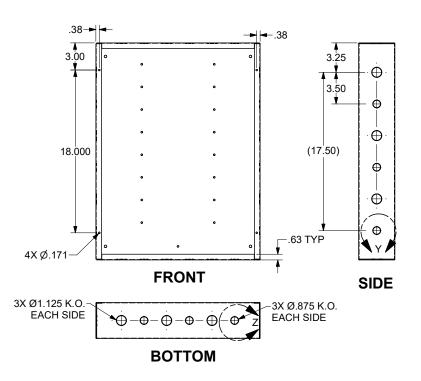
- 24" x 18" x 4.5" carbon steel enclosure supports up to 8 Remote Drivers
- Wall-mounted enclosure fabricated from 16 gauge steel. Includes flat, removable cover fastened with plated steel screws. Cover design permits easy removal without extracting cover screws. Mounting holes on back of cabinet. Removable knockouts on all four sides.
- Certifications and Compliance: NEMA 1 rating, UL Listed





# **Specifications and Dimensions**

Dimensions	24" (h) x 18" (w) x 4.5" (d)
Weight	34 lbs
Color	Black
Construction	Spot Welded
Cover Type	Screw Cover
Knockouts	Trade Sizes: ½"; ¾"
Listings	UL, CSA
Material	Carbon Steel
Mounting Method	4x Mounting Holes
Mounting Type	Wall Mount
NEMA Rating	NEMA 1





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CATALOG NUMBER MRI-DMXPS

In MRI Installations, wall controls **MUST** be located outside the MRI room shield and must **NOT** be filtered. MRI Driver Cabinet must **NOT** be mounted to, or be in contact with the MRI room shield.



# Specifications (Per Driver Channel) Input Electrical Specifications Enviro

Nominal input voltage range AC	120 - 277V
Absolute input voltage range AC	108 - 305V
Input frequency range	50 - 60Hz
Maximum wattage	50W
Efficiency at full load	85%
Power factor at full load	> 0.95
THD at full load	< 20%
Maximum inrush current	< 100mA <sup>2</sup> s @ 120V / 60Hz < 100mA <sup>2</sup> s @ 277V / 60Hz
Surge protection	2kV differential mode (DM) 2kV common mode (CM)
Maximum standby power	< 0.5W

# **Environmental Conditions**

Operating ambient temperature (Ta) Range		
-20°C to +50°C		
Acoustic noise - steady state	< 24dBa (Class A)	
All components	Dry location only	

# **Dimming Control**

Control protocol	DMX 512-A	
Dimming range <sup>†</sup>	100% - 0.1%, off	
Dimming curve	Logarithmic*	
System configuration	RDM	

<sup>\*</sup>Can be programmed to different curves via RDM.

# **Remote Mounting Distance**

Module to Filter	50 feet max.
Filter to Luminaire	50 feet max.

 $<sup>^\</sup>dagger$  In combination with RFI filters, low end dimming decreases to 0.38%

# **Standards & Compliance**

UL Listed, Class P, Class 2	UL 1310 UL 8750	This low voltage luminaire system complies with UL 2108		
Conducted emissions	FCC title 47 CFR par	FCC title 47 CFR part 15 class B		
Radiated emissions	FCC title 47 CFR part 15 class B			
Electrostatic discharge	EN 61000-4-2			
DMX	ANSI E1.11 – 2008 (R2013), USITT DMX512-A, ANSI E1.20 – 2010			
Surge protection	ANSI 62.41 1991 category B1: 2.5kV DM, 2.5kV CM @ 30 Ohm			
Restriction of hazardous substances	RoHS3 (Directives 2011/65/EU-2015/863/EU)			



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# **How to Order**

 Calculate the total feet of RGBW fixture length per room.

Total Length (per room)	Driver Count	Included Number of RFI-4RGBW
4 - 8 feet	1	1 filter
10 - 16 feet	2	2 filters
18 - 24 feet	3	3 filters
26 - 32 feet	4	4 filters
34 - 40 feet	5	5 filters
42 - 48 feet	6	6 filters
50 - 56 feet	7	7 filters
58 - 64 feet	8	8 filters
66 + feet	Consult Factory	Consult Factory

For projects with more than 8 drivers per room, more than one driver cabinet will be supplied. Contact factory for additional details.

- 2. Calculate the total feet of RGBW downlights, cylinders and sconces per room.
- 3. If less than 4 linear feet or 2 downlights per room, consult factory.
- 4. Order 1 (one) MRI-DMXPS per room

Total Downlights * (per room)	Driver Count	Included Number of RFI-4RGBW
2-4 downlights	1	1 filter
5-8 downlights	2	2 filters
9-12 downlights	3	3 filters
13-16 downlights	4	4 filters
17-20 downlights	5	5 filters
21-24 downlights	6	6 filters
25-28 downlights	7	7 filters
29-32 downlights	8	8 filters
33 + downlights	Consult Factory	Consult Factory

<sup>\*</sup> Downlights include downlights, adjustables, wall washes, cylinders, and wall sconces for ordering purposes.

# **Ordering Configuration**

Examples: MRI-DMXPS-26FT-11DL MRI-DMXPS-26FT MRI-DMXPS-11DL

Must Specify			
Model	Number of Feet	Number of Downlights, Cylinders and Sconces	
MRI-DMXPS	- FT	- DL	
	(Blank): Power supplies for downlights, cylinders and sconces only	(Blank): Power supplies for linear fixtures only	
	-XXFT: Total number of feet of linear product per MRI Suite	-XXDL: Total number of downlights, cylinders, and sconces per MRI Suite	
	Note: Lengths must be a minimum of 4FT if ordering linear power supplies.  -NWC no MRI-DMXWP included	Note: Quantity must be a minimum of 2 downlights* if ordering downlight power supplies.	

Cabinet includes 1 (one) MRI-DMXWP controller and indicated number of RFI-RGBW filters.



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CATALOG NUMBER MRI-DMXPS



CATALOG #		TYPE	
JOB NAME	WATTAGE	VOLTAGE	

# SmartLED™ RGBW Filter Kit

**RFI-4RGBW** 

For use with MRL-02CCM Linear RGBW Accent Light

DC MRI FILTER & DISTRIBUTION BOX

# **Specifications**

### "Smart" Filters

- Allows power and RGBW DMX signal to be delivered into the MRI suite
- Removes RFI/EMI from electrical circuits entering the MRI suite
- Simple plug-and-play wiring inside MRI suite via non-ferromagnetic connected circuit board (included)

### "Smart" Operation

- 60 volt DC maximum
- 3 amp maximum current
- Indoor use, -10°C to 60°C (-14°F to 140°F)
- Insertion loss: 100dB min (10kHz-1.0 GHz)

### "Smart" Size

 Small size of filter allows placement virtually anywhere through the MRI shield

### "Smart" Installation

- Each output circuit is clearly labeled and prewired through a standard 1/2" threaded hub
- Input terminal allows for quick connection

### "Smart" Construction

 Completely enclosed nickel plated steel with (8) #18 leads, each 18" long

### **FIVE YEAR Limited Warranty**

Complete

### RFI-4100D Filter



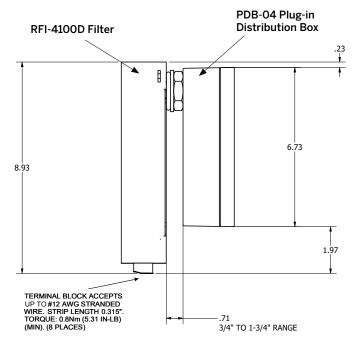
# PDB-04 Plug-in Distribution Box

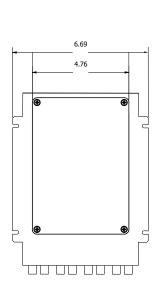


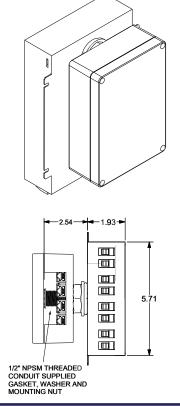


For MRI Installations, use of both SmartLED™ Driver System and Filters is REQUIRED or Kirlin warranty is null and void.

# **Dimensions (Inches)**









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CATALOG NUMBER RFI-4RGBW



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# SmartLED™ MRI Lighting System Wall-Mounted Multi-Zone DMX Controller

Advanced programmable DMX lighting controller with a touchscreen interface

# **Specifications**

### **DMX Controller Features**

- Wall-mounted lighting controller
- Up to 12 preset scenes on 10 zones
- Scroll wheel and quick access dimmer, scene, RGB color and speed buttons
- Tempered sleek glass front panel
- USB & Ethernet connectivity for programming and control
- Multi-zone microSD memory

### **Color Parameters**

- **Brightness**
- Saturation
- Speed of color changing sequence
- Fading/dimming/brightness

### **Power Input**

6VDC (Transformer Included)

### **DMX Output**

1024 DMX Channels, 2 Universes

### **Trigger Protocols**

8 x Dry Contact Trigger, Calendar Trigger, RS-232, IR

### Mounting

Single Gang Electrical Box (Not Included)

### Housing

· Glass Panel, Polycarbonate Body

### **Operating Temp**

14° - 113° F (-10° - 45° C)

### Connectors

Screw Terminal Blocks and RJ45, USB Programming Cable (Included)

### Storage

Micro SD Card (Included)

### SIZE/WEIGHT

- Length: 4.17"(106mm) Width: 0.43" (11mm)
- Vertical Height: 5.75" (146mm)
- Weight: 0.5 lbs. (0.2kg)

### **FCC Compliance**

FCC Part 15 certified for EMI/RFI emissions

# **MRI-DMXWP**







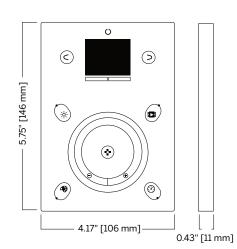




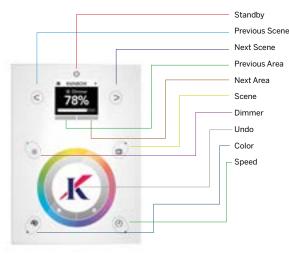
Conformitè



# **Dimensions**



# **Features**



# Pre-Loaded Scenes



For additional information on scene configuration, or to create custom scenes, consult factory.



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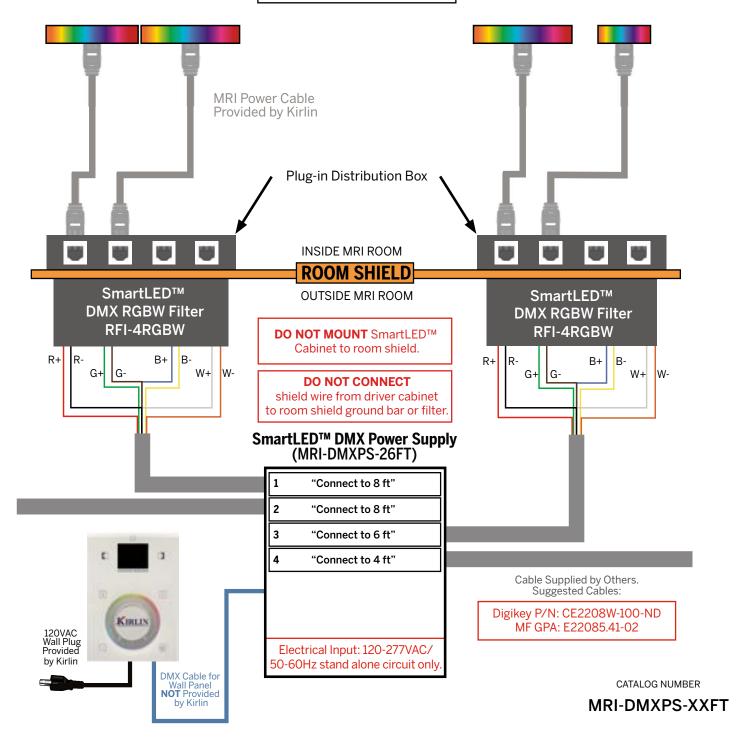
# Wiring Diagram Example - Linear Fixtures Only

Following instructions on driver #1, connect 8 feet of fixture length (4 feet + 4 feet) to the plug-in distribution box via RJ45 jacks provided

### DO NOT CONNECT

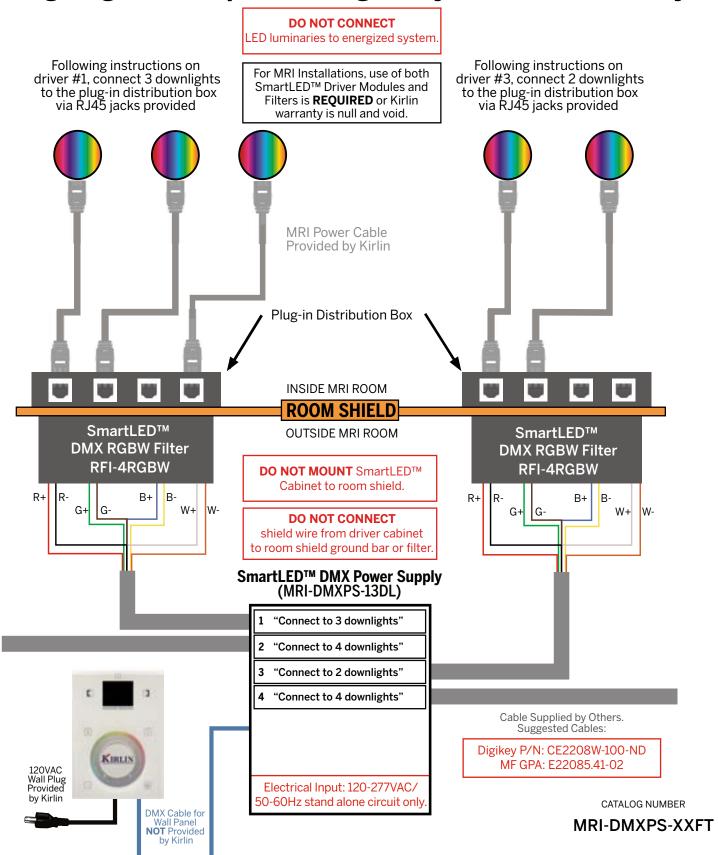
LED luminaries to energized system.

For MRI Installations, use of both SmartLED™ Driver Modules and Filters is **REQUIRED** or Kirlin warranty is null and void. Following instructions on driver #3, connect 6 feet of fixture length (4 feet + 2 feet) to the plug-in distribution box via RJ45 jacks provided





# Wiring Diagram Example - Downlights, Cylinders, Sconces Only





# Wiring Diagram Example - Linear Fixtures and Downlights

