# **MEDMASTER ENVELA®**

Luminaires for MRI/Imaging Suites

#### **ME11MRI SERIES**

#### **PRODUCT FEATURES:**

- » Ceiling mount 1'×1
- » Non-ferrous construction safe for sensitive MRI equipment
- » Dimmable LED with same output as 32-watt CFL
- » Tool-less access for relamping and maintenance



PROJECT INFORMATION
Job Name
Fixture Type
Catalog Number
Approved by

#### **SPECIFICATIONS**

HOUSING: .050" aluminum. One-piece seam welded construction. Black TGIC polyester powder coat – 5-stage pre-treatment. Salt spray test: 1,000 hours.

HOUSING FLANGE: .050" aluminum standard 4-piece construction, spot-welded to housing. Mitered and welded corners.

**REFLECTOR/LENS ASSEMBLY:** .032" aluminum. One-piece seam-welded construction. Tool-free lamp access. White high reflectance (94%) low gloss TGIC polyester powder coat — 5-stage pre-treatment. Salt spray test: 1,000 hours. Antimicrobial white high reflectance low gloss finish on exposed surfaces.

LAMP SHIELDING: Fully gasketed, sealed luminous shield of impact resistant DR acrylic. See Ordering Information for lens options.

INSTALLATION: Designed for 1" and Slot-T grid.

**ELECTRICAL:** Replaceable high-brightness ANSI 3000K, 3500K or 4000K LED array. 80 CRI minimum standard, 90 CRI available on 3000K lamp. Luminaire input 24VDC from remote-located 120-277VAC, high-power-factor power supply with EMI filter. Dimming line EMI filter required if utilizing dimming function. Dimming capability controlled through compatible 0-10V dimmer (supplied by others). Dimming capability range 10% to 100%. See below for ordering information.

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For additional photometric data, please go to www.kenall.com.

WARRANTY: Limited five (5) year LED warranty.

LISTINGS: UL and CUL Listed for Wet Location. UL certified IP64 per IEC 60598. NSF2 Splash/Non-Food Zone.



#### ORDERING INFORMATION (Ex: ME11MRI-G-24L35K-24VDC-FA)

Model Mounting Lamp Type Voltage Lens Type

ME11MRI 24VDC

Mounting Ontion Lamp Type

Voltage

Lamp Type

 Mounting Option
 Lamp Type
 Voltage
 Lens Type

 G
 Grid (1")
 24L30K
 24 Watt 3000K LED
 24VDC
 24 Volts DC
 FA
 Frost DR Acrylic

 ST
 Slot-T
 24L30KH
 24 Watt 3000K LED (90 CRI)
 CAP
 Clear DR Acrylic with Internal Perforation

24L35K 24 Watt 3500K LED
24L40K 24 Watt 4000K LED

#### ACCESSORIES ORDERED SEPERATELY

 MRIPSF
 Remote Power Supply with EMI Filter (click here for specifications)

 MRIFD-1A
 Dimming Filter (one per dimming circuit, click here for specifications)

MRI LUMINAIRE CONNECTION PER POWER SUPPLY					
Luminaire	Lamp	Amps/	Max Luminaires per	Max Luminaires per	Max Luminaires per
Number	Power	Luminaire	MRIPSF-480 Power Supply	MRIPSF-240 Power Supply	MRIPSF-120 Power Supply
ME11MRI	24L	1.46	13	6	3



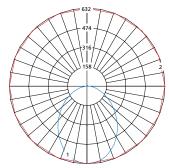
# MEDMASTER ENVELA® ME11MRI SERIES – TECHNICAL DATA

#### **PERFORMANCE**

	Initial Delivered Lumens				
Lamp Type	@ 25°C (Im)	Efficacy (lm/W)	Input Power (W)	Drive Current (mA)	Estd. L70 LED Life (Hrs)
24L30K	1458	42	34	700	100,000
24L30KH	1274	37	34	700	100,000
24L35K	1560	45	34	700	100,000
24L40K	1778	52	34	700	100,000

Displayed information is for selected luminaires only. Additional wattages and color temperatures are also available. Consult IES files at www.kenall.com.

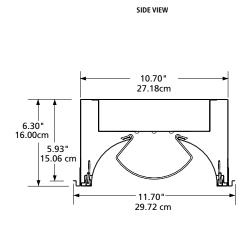


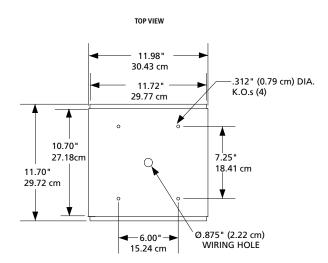


Maximum Candela = 632 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (0-180) (Through Max. Cd.)
 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

#### **DIMENSIONAL DATA**





#### **ME11MRI SERIES**



### IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed, including the following:

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED. DISCONNECT POWER TO ALL CIRCUITS BEFORE WIRING FIXTURE. INSTALL IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL CODES. DO NOT CONNECT TO AN UNGROUNDED SUPPLY. READ ALL FIXTURE MARKINGS AND LABELS TO ENSURE CORRECT INSTALLATION OF FIXTURE. SUPPLEMENTAL INSTRUCTIONS MAY BE LOCATED ON THE FIXTURE, IN ADDITION TO THIS INSTRUCTION SHEET, REGARDING ORIENTATION, OR MOUNTING RESTRICTIONS.

# **SAVE THESE INSTRUCTIONS**

# INSTALLATION INSTRUCTIONS

CAUTION: Ensure line power is disconnected before installing/servicing fixture.

1. Pull on lens assembly end where indicated by "Pull Here" label, lower one end of the lens assembly then repeat on opposite end.



2. Both sides of the lens assembly should be on the down position (as shown) before re-lamping.

3. Optional: Remove torsion springs from one side to allow reflector to swing open for complete access to lamping and wiring compartment.





Re-lamp fixture with appropriate lamp wattage type or replacement gear tray.



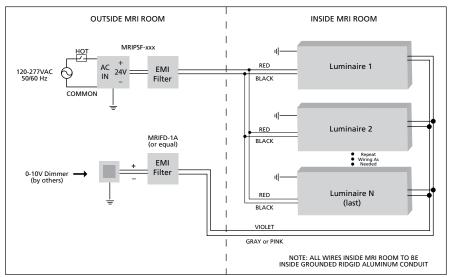
To return lens assembly back to closed position, push one long side lens assembly back into the housing, then holding on to the lens repeat on the other side.

# **ELECTRICAL CONNECTION**

- 1. Mount and wire the MRIPSF external power supply system per the procedures provided in the supplementary instruction sheet. Run conduit and DC wiring to an MRI room EMI filter. Make sure wiring is completely enclosed in grounded aluminum conduit. Any gaps, regardless of size, must be closed or wrapped in copper foil tape.
- 2. If a 0-10V dimming circuit is to be connected, install at this time. The 0-10V dimmer must be installed outside the shielded MRI environment with the Kenall MRIFD-1A dimming line filter (or equivalent) installed in accordance with the supplied installation instructions. Kenall recommends the Lutron Diva (DVSTV) and Lutron Nova T (NTSTV-DV) series to ensure the full range of dimming can be achieved. Contact Kenall for suitability of using an alternate sink-type 0-10V dimmer.

WARNING: ALL DC POWER AND DIMMING SIGNAL WIRING MUST BE RUN THROUGH SEPARATE EMI FILTERS.

**3.** Remove junction box cover and make conduit connections to the appropriate 1/2" knockout(s).



Single-Supply System Schematic

NOTE: 24VDC and Dimming Wires to be run through same conduit.



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# CUSTOMER ACKNOWLEDGEMENT

Customer acknowledges that these Installation Instructions are part of the product specification, and that the attached Installation Registration Form will be provided to the installer to sign and return to Kenall after installation is complete. This signed release is required by Kenall before order will be released into production.

Signature:	Date:
Print Name:	Company Name:

# **IMPORTANT SAFEGUARDS**

To prevent MRI machine interference, all DC power and dimming signal wiring must be completely shielded within grounded aluminum conduit and a suitable MRI room EMI filter must be installed on each line.

When using electrical equipment, basic safety precautions should always be followed, including the following: THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

# **SAVE THESE INSTRUCTIONS**

- Disconnect power to all circuits before wiring system.
- Install in accordance with all national, state, and local codes.
- Do not connect to an ungrounded supply.
- Wiring connections must be made internal to the enclosure.
- Failure to install unit on a mechanically-sound surface may result in personal injury, physical damage, or potential fire hazard.
- Use installation procedures appropriate for an environment involving MRI and sensitive electronic equipment.
- Read all markings and labels to ensure correct installation of the power supply. Supplemental instructions may be located on the enclosure, in addition to this instruction sheet, regarding orientation, or mounting restrictions.
- Read instructions provided with the MedMaster<sup>™</sup> MRIPSF remote power supply and DC filter system for proper installation and electrical connection to the lighting system.



# CUSTOMER ACKNOWLEDGEMENT MRI INSTALLATION REGISTRATION FORM

Customer acknowledges that the attached Installation Registration Form will be provided to the installer to sign and return to Kenall after installation is complete. For warranty purposes, please fill out this form and return to Kenall by fax at (262) 891-9701.

I certify that the lighting installation for the listed MRI suite location is completed per the provided installation instructions and to the best of my abilities.

Plea	ase check off items to denote status:					
	Installation instruction sheets for MRIPSF remote power supply and DC filter system and individual luminaire(s) read and followed.					
	MRIPSF power supply and EMI filters are loc	cated outside the shielded enclosure.				
	All DC supply wiring is completely enclosed	within grounded aluminum conduit. Installation				
	has no ungrounded/unshielded portions of o	conduit or openings of any size or shape.				
	<u>-</u>	portions of conduit or openings of any size or				
_	shape. Check here if dimming is not applical					
	MRI Room EMI filters for the 24VDC supply and dimming signal are of the type intended for MRI suites and are sized to the electrical load.					
		OT running through the same EMI filter. Check here				
	if dimming is not applicable: □					
	Lighting system fully tested (including dimming operation, if applicable) while MRI machine is					
	in idle and scan operation mode.					
Tec	nnical Support at 1-800-4KENALL (1-800-453-	u need technical assistance, please contact Kenall -6255).  Installation Site				
Electrical Contractor  Name:  City/State:		Installation Site				
		Name:				
		City/State:				
Pho	ne:					
Insta	allation Date:	FAX FORM TO (262) 891-9701				
	(Do not w	rite below line)				
Ke	enall Received By:	Received Date:				

