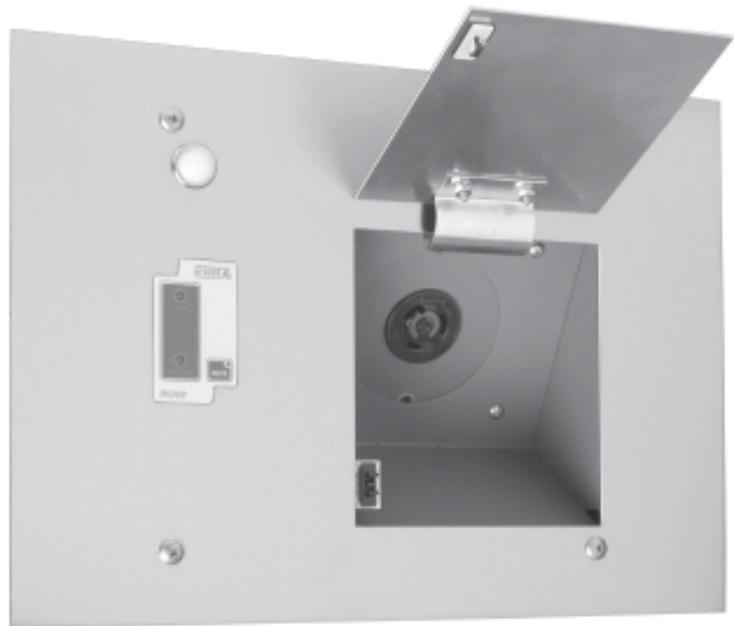


X-RAY / LASER RECEPTACLE MODULES

- **Applications**
Receptacle Modules with flush or surface mounted receptacles for use with X-Ray/Laser Power Centers
- **Mounting**
Available for flush or surface mounted applications
- **Options**
Available with:
 - Door Contacts
 - "IN USE" Lamp
 - Bender LIM Remote Indicators
- **Standards**
UL Listed Product (UL1047)
- **Warranty**
Industry's first 5 year limited warranty



Introduction

ISOTROL Type XRM/LRM X-Ray/Laser Receptacle Modules provide a convenient source of power for portable X-Ray and Laser equipment. Designed in strict compliance with Underwriters Laboratories Standards, the XRM/LRM is a high quality outlet device accessory that is fully compatible with ISOTROL X-Ray/Laser Power Centers.

General

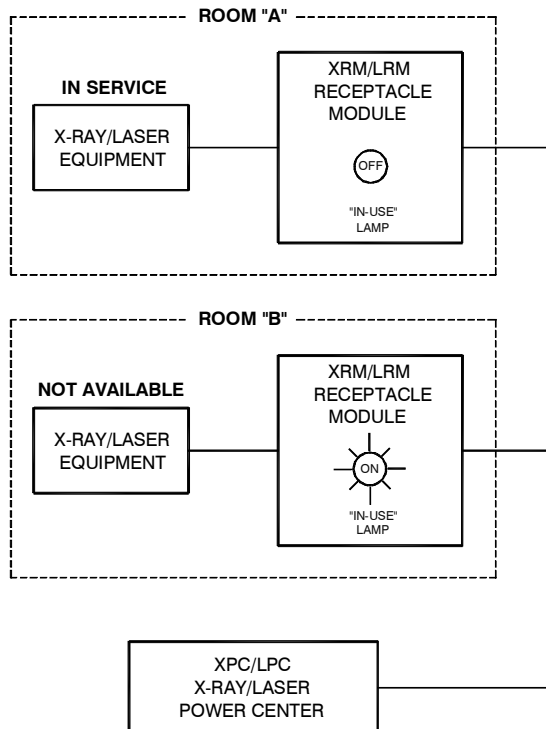
The Type XRM/LRM typically includes an X-Ray or Laser power receptacle which matches the NEMA plug configuration of the X-Ray or Laser equipment. In addition, it may contain a BENDER LIM MK2000 Remote Indicator. The associated XPC/LPC X-Ray/Laser Power Center will have a Programmable Logic Controller (PLC) when the Type XRM/LRM contains an "In-Use" lamp and/or a magnetic door switch.

Backbox

For flush mounted applications, the backbox is fabricated from 16GA galvanized steel. Surface mounted enclosures are finished with a coat of hospital ivory baked enamel. Outline drawings shown on the following pages of this brochure provide additional dimension and construction details.

Face Plate

Manufactured from 14GA Type 304 Stainless Steel with a #4 brushed finish, the face plate contains a door with hidden hinges and touch latch that covers the recessed power receptacle. As an option, the XRM/LRM is available with a surface mounted receptacle. Both versions are available with a LIM remote indicator and an "In-Use" lamp. The face plate for flush mounted XRM/LRMs extends 1" on all sides of the backbox. For surface mounted XRM/LRMs, the face plate shall exactly match the dimensions of the backbox.



Control scheme for ISOTROL SYSTEMS XRM/LRM connected to ISOTROL SYSTEMS X-RAY/LASER Power Center.

Receptacle

The Type XRM/LRM modules can incorporate either an industrial specification or hospital grade receptacle with amperage and voltage as required by the X-Ray/Laser equipment. As an option, ISOTROL SYSTEMS can provide a user selected receptacle with a matching plug.

Options:

"In-Use" Lamp

"In-Use" lights indicate system status for systems with multiple receptacles. Light "Off" indicates receptacle can be used. Light "On" indicates receptacle cannot be used.

For systems that allow only one receptacle energized at a time, the light will be off on the XRM/LRM in use and illuminated on all other modules indicating the system is at capacity.

For systems that allow more than one receptacle to be energized at a time, the lights will be off until all allowable receptacles are in use and then the lights on the modules being used will be off and all others will be illuminated.

LIM Remote Indicators

The BENDER Series MK2000... LIM Remote Indicator duplicates the audible and visual alarm indications of the BENDER LIM2000plus™ Series Line Isolation Monitor (LIM) installed in the Isolated Power Panel. It is powered by a 12V DC signal from the LIM. There is a green LED which indicates a "SAFE" condition, a red LED which indicates a "HAZARD" condition, and a "MUTE" button with integral amber LED which indicates that the audible alarm has been placed in the "MUTE" mode. Optionally, a system muting function can be provided which causes the LIM at the panel location to also be silenced when the "MUTE" button is depressed.

The "SAFE" LED remains ON in the normal mode of operation until the Total Hazard Current, THC, exceeds the threshold limit of either 5 or 2mA. When this happens, the "SAFE" LED goes OFF, the "HAZARD" LED comes ON, and the audible alarm can be heard from a distance of at least 25' from the unit.

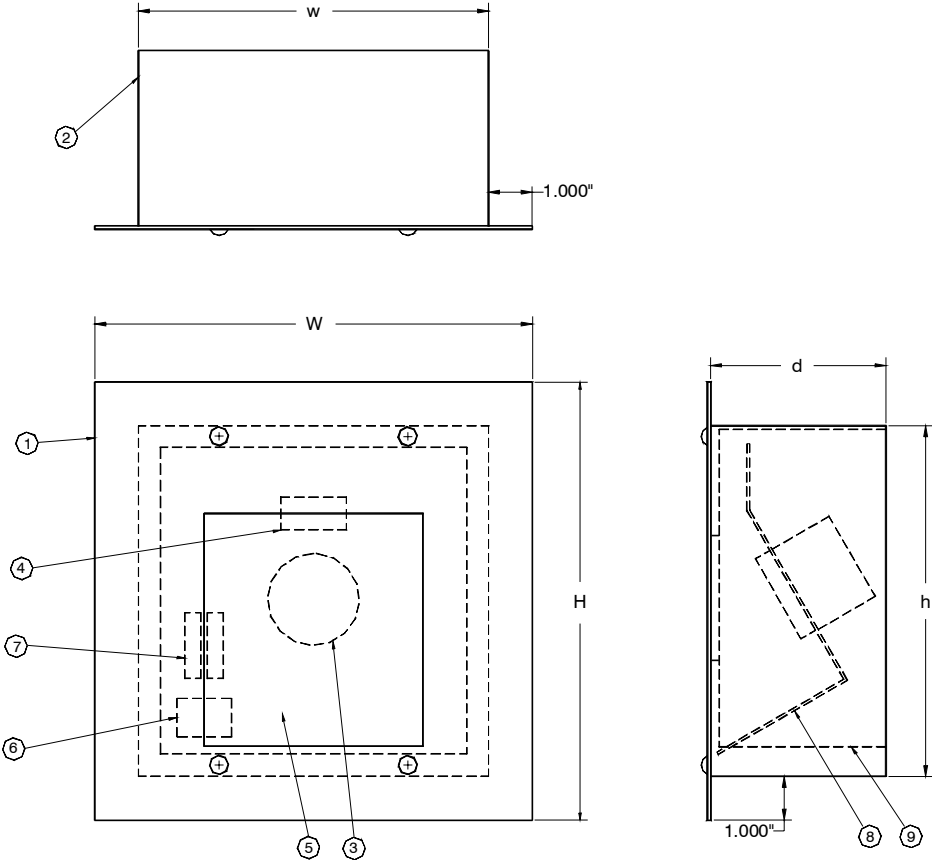
To prevent tampering, it is not possible to adjust the volume from the front of the unit. Depressing the "MUTE" button silences the alarm. Simultaneously, the built in amber LED comes ON to indicate this condition. The unit reverts back to the normal mode of operation when the THC level drops below the threshold limit.

Optional 2 gang versions are available with either an analog meter or a digital display.

Support and Services

- On-site installation inspection and certification services
- System design assistance provided upon request
- Technical support hotline: (800) 833-6834

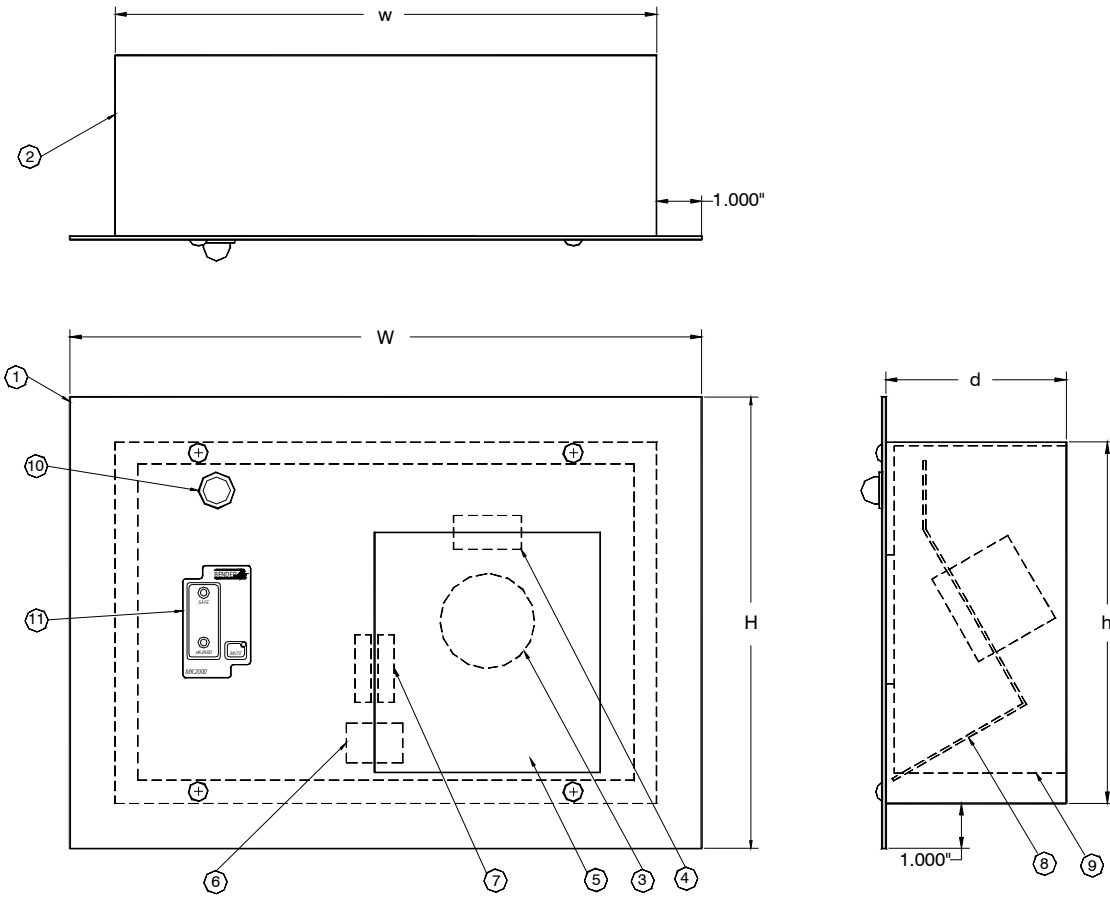
Outline Drawing for XRM/LRM Without LIM Remote Indicator



DIMENSION				
h	w	d	H	W
8"	8"	4"	10"	10"

- 1 Stainless Steel Face Plate
- 2 Backbox, Galvanized Steel
- 3 X-Ray / Laser Receptacle
- 4 Concealed Hinge
- 5 Hinged Door
- 6 Latch
- 7 Door Contact
- 8 Deadfront
- 9 Deadfront Mounting Bracket

Outline Drawing for XRM/LRM With LIM Remote Indicator



DIMENSION				
h	w	d	H	W
8"	12"	4"	10"	14"

- 1 Stainless Steel Face Plate
- 2 Backbox, Galvanized Steel
- 3 X-Ray / Laser Receptacle
- 4 Concealed Hinge
- 5 Hinged Door
- 6 Latch
- 7 Door Contact
- 8 Deadfront
- 9 Mounting Bracket
- 10 "IN-USE" Lamp
- 11 LIM Remote Indicator BENDER Series MK2000

Selection Guide for X-Ray/Laser Receptacle Modules (Type XRM/LRM)

When selecting the Isolated Power Panel for your application, use the Product Code below. If you have any questions or need further assistance, please call us using our toll-free number: (800) 833-6834.

Code A - Basic Designation

XRM: X-Ray Receptacle Module

LRM: Laser Receptacle Module

Code B - Location of Power Receptacle

1: Flush Mounted (behind door)

2: Surface Mounted (on front trim)

Code C - Type of Power Receptacle

Enter the designation S113, S115, S123, L125, L126, L313, S315, S316, L323, S325, S326, S1M, L1M, S3M or L3M into the box for Code C

Ampacity	Single Phase 2 Pole/ 3 Wire			Three Phase 3 Pole/ 4 Wire		
	125V	250V	all others	125V	250V	all others
30A	S113 NEMA#5-30R	S123 NEMA#6-30R		L313 NEMA#L14-30R	L323 NEMA#L15-30R	
50A	S115 NEMA#5-50R	L125 X-Ray, IN16494		S315 NEMA#14-50R	S325 NEMA#15-50R	
60A	N/A	L126 X-Ray, IN16494		S316 NEMA#14-60R	S326 NEMA#15-60R	
all others	S1M: Straight Blade, voltage etc. L1M: Twist-to-Lock, voltage etc.			S3M: Straight Blade, voltage etc. L3M: Twist-to-Lock, voltage etc.		

Note: The letter "S" indicates a straight blade, the letter "L" a twist-to-lock receptacle

Code D - Type of LIM Remote Indicators (All Remotes have "MUTE" Button)

A: MK2000

B: MK2000P, w/ "TEST" button

C: MK2000M, w/ analog meter

D: MK2000MP, w/ analog meter, "TEST" button

E: MK2000CBM, w/ digital display

N: None

Code E - I/O Devices for Modules

0: None

1: Door Contact (Limit Switch) and "IN-USE" lamp

2: Door Contact (Limit Switch)

3: "IN-USE" lamp only

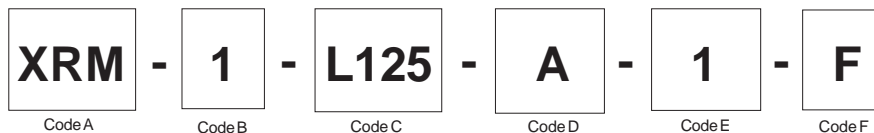
Code F - Type of Mounting

F: Flush

S: Surface

Call the factory for additional equipment or custom requirements

Example for ISOTROL Type XRM/LRM Product Code



Suggested Specification for ISOTROL Type XRM/LRM X-Ray/Laser Receptacle Modules

Furnish and install ISOTROL Type XRM/LRM X-Ray/Laser Receptacle Modules in the locations shown on the drawings. Type XRM/LRM shall consist of the following:

Backbox

Shall be flush or surface mounted as indicated on the contract documents. Flush mounted units shall be fabricated from 16GA galvanized sheet steel. Surface mounted units shall be 16GA galvanized sheet steel and shall have a finish coat of hospital ivory, epoxy enamel. The maximum dimensions of the backbox shall be 12"W x 8"H x 4"D. The dimensions of the smallest backbox shall be 8"W x 8"H x 4"D.

Face Plate

Shall be fabricated from 14GA Type 304 Stainless Steel, with #4 brushed finish. The face plate for flush mounted units extends 1" on all sides of the backbox. The face plate for surface mounted units shall exactly match the dimensions of the backbox. The face plate shall be attached to the backbox by means four (4) #10-32 x 1" Stainless Steel Truss Head Phillips machine screws. The face plate shall contain a flush hinged door covering the receptacle. The door shall be attached to face plate by means of hidden hinges. When the receptacle is not in use, the door shall remain closed by means of a latch. With a baseline option, the face plate shall contain a simple remote indicator which shall duplicate the audible and visual LED indications of the Line Isolation Monitor (LIM) located in the associated Isolated Power System. The face plate shall contain a remote indicator with digital display or analog meter as an option. The faceplate shall contain an "In-Use" lamp for systems requiring this option. The "In-Use" lamp shall be dark when the module is in use. All other "In-Use" lamps associated with the same Isolated Power System shall be illuminated. The face plate shall contain a magnetic type door contact with contacts rated for a control voltage of 24V, for PLC control. The door switch shall be UL Listed.

Power Receptacle

Shall be UL Listed / Recognized Hospital Grade specification and / or NEMA configuration with ampacity and voltage in accordance with the contract drawings.

Remote Indicators for Line Isolation Monitors (Optional)

The remote indicator which duplicates the audible and visual alarm indications of the LIM installed in the Isolated Power Panel. The remote indicator shall contain a green "SAFE" LED, a red "HAZARD" LED and a "MUTE" button with integral amber LED. The remote indicator shall function as follows:

- The green LED stays illuminated when the leakage current is within predetermined limits.
- The green LED extinguishes and the red LED illuminates when the predetermined limit is exceeded; an audible alarm also sounds.
- When depressed, the "MUTE" button shall mute the audible alarm signal. Actuation of this button shall cause the integral amber LED to illuminate, indicating that the audible alarm has been silenced.
- When the leakage current has returned to the acceptable limit level, the alarm indicators shall automatically reset.
- Optional THC meter or digital display.

Specifications and other data subject to change without notice.

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