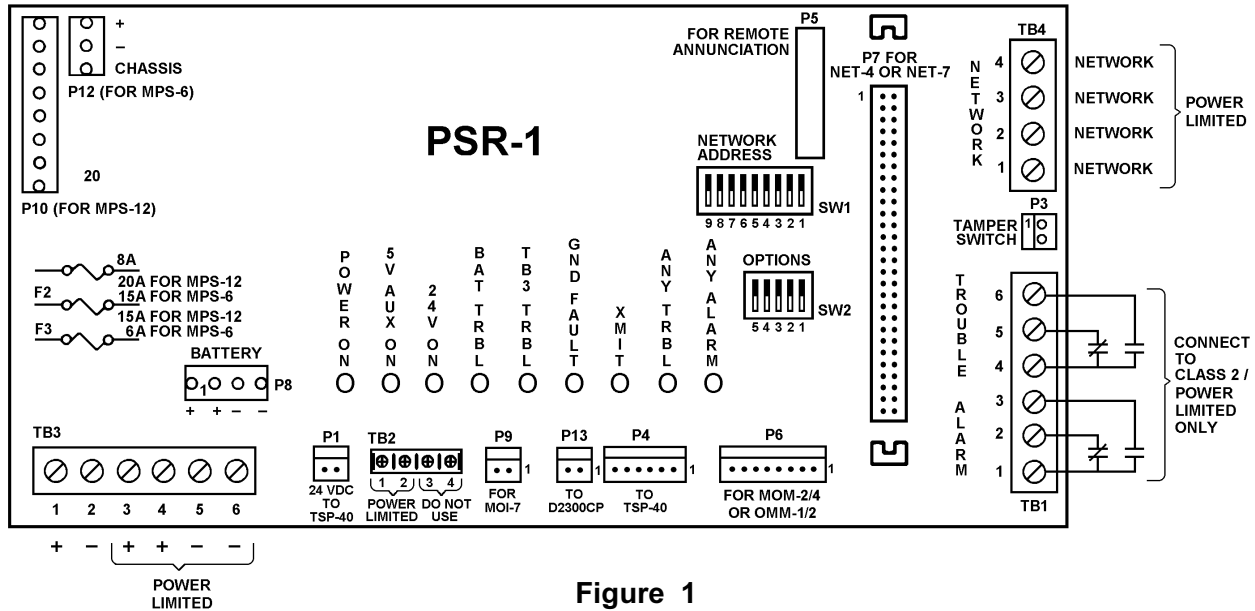


# SIEMENS

## Installation Instructions

Model PSR-1

Remote Power Supply



**Figure 1**  
**PSR-1 Remote Power Supply**

## INTRODUCTION

The Model PSR-1 from Siemens Industry, Inc., (See Figure 1) is a microprocessor controlled remote power supply and battery charger used with the MXL System. It operates with an MPS-6 or MPS-12 to provide 6 or 12 amps, respectively, of power for various MXL modules.

In addition, the PSR-1 acts as an interface between remote option modules and the MXL when used with a NET-4 plug-in communication module (See Instructions P/N 315-090909) or NET-7 plug-in communication module (See Instructions P/N 315-091914).

The PSR-1 can also be used to power an MOI/MOD annunciator driver set. In addition, the PSR-1 can be used as an auxiliary power supply in a standalone mode without an MXL.

The PSR-1 has LED status indicators for: **POWER ON**, **5V AUX ON**, **24V ON**, **BAT TRBL**, **TB3 TRBL** (Class A power limited output for the CZM-1 and PS-5), **GND FAULT**, **XMIT**, **ANY TRBL**, and **ANY ALARM**. The PSR-1 has two relays used for common alarm and common trouble. These relays also can be programmed for local alarm and local trouble using CSG-M.

For additional information on the MXL/MLV System, refer to the *MXI/MXLV Manual*, P/N 315-092036.

## ELECTRICAL CONNECTIONS

**Remove all system power before installation, first battery and then AC.** (To power up, first connect the AC and then the battery.)

### Primary Power

Primary power for the PSR-1 is provided by the MPS-6 or MPS-12. Both of these mount in the lower right-hand corner of the MXL enclosure. Follow the instructions below for the appropriate power supply.

**MPS-6** — Install the MPS-6 (See MPS-6 Instructions, P/N 315-090334). With the AC mains disconnected, connect the MPS-6 power cable to P12 of the PSR-1. **Be sure that the jumper assembly is installed in P10 of the PSR-1. If this jumper is not installed, the PSR-1 will detect a permanent AC fail or indicate auxiliary power voltage is low.**

**Change F2 to a 15A fuse, P/N 105-224090. Change F3 to a 6A fuse, P/N 105-268095.**

**MPS-12** — Install the MPS-12 (See MPS-12 Instructions, P/N 315-092030). Remove and discard the jumper assembly installed in P10 of the PSR-1. Disconnect the AC mains. Connect the MPS-12 power cable to P10 of PSR-1.

### Battery Calculations

Battery backup is a requirement for the MXL. To determine the size battery you must use, follow the procedures listed below. The MXL can charge a battery of up to 55 amp hours. A battery size calculation form is provided on page 3.

- Record all the modules required in the form on the following page.
- Calculate each row across and place the total in the right column: **Total Standby 24 VDC Module Current**
- Total the right-hand column and record it at the bottom of the form opposite **Total System Current**.
- For **NFPA 72 Local and 72 Proprietary systems** multiply the total system current by 24 and record it at that **Total AH location**.

or

For **NFPA 72 Municipal Tie and 72 Remote Station systems** multiply the total system current by 60 and record it at that **Total AH location**.

or

For **FM Approved Deluge/PreAction systems** multiply the total system current by 90 and record it at that **Total AH location**.

- Multiply the AH Total by 1.3 to obtain the final battery amp hour capacity and record it opposite **Battery Size**.

Three battery models are UL listed for use with the MXL:

BP-61—24V, 15 AH

BTX-1—a set of 12V, 31 AH

BTX-2—a set of 12V, 55 AH, 65 AH, or 75 AH\*

\* Although larger batteries may be used, as noted, the 55 AH capacity must be used for determining battery requirements.

Select the battery that meets or exceeds the final calculated battery amp hour rating. Use an external battery box with the BTX-2 model.

**Do not connect the batteries at this time.**

### Power Supply Load Calculations

To ensure that the power supply is not overloaded, complete the worksheet on page 4.

- Enter the quantity of each module in the enclosure.
- Calculate both the 24V and 5V loads for each row.
- Total the Active 24V and Active 5V columns.
- Ensure that both totals are within the power supply output ratings in the table below.

#### POWER SUPPLY OUTPUT RATINGS

Module	Active 24 VDC Module Current	Active 5 VDC Module Current
PSR-1/MPS-6	6 amps	800 mA
PSR-1/MPS-12	12 amps	800 mA

**NOTES:**

1. Use this column for battery size calculations.
2. Power is supplied by a separate UPS.
3. EOL currents included.
4. The following modules draw no 24 VDC current and do not need to be included in the battery calculations:

LLM-1  
 OMM-1  
 OMM-2  
 MOM-4  
 MOM-2  
 MMM-1  
 PLC-4  
 TBM-2  
 TSW-2

Module	Quantity	Standby 24 VDC Module Current (See Note 1)	Load Current Per Circuit		
			End of Line Device	Device Current	Total Standby 24 VDC Module Current
PSR-1		90mA	0	0	
5128/5129		30 mA	0	0	
ACM-1		55mA	0	0	
ALD-2I		120mA	0	1.1mA per device/ 1.6mA for TRIs	
ASC-1		22mA	0	0	
ASC-2		85mA	(See Note 3)	0	
BTC-1		45mA	0	0	
CCU/M		150mA	0	0	
CMI-300		30mA	0	0	
CRM-4		5mA		18mA per active relay	
CSM-4		11mA	12mA	0	
CZM-1/-1B6		6mA	5mA	1.5mA	
CZM-4		38mA	0	3mA	
D2300CP		50mA	0	0	
DCT-1/-1E		150mA	0	0	
DMC-1		5mA	0	0	
EL410D		200mA	0	0	
ICP-1/-1B6		10mA	2.5mA	0	
MDACT		220mA	0	0	
MID-16		2mA	0	0	
MKB-2/-4		6mA	0	0	
MKB-5/-5C		300mA	0	0	
MKB-6/-6C		300mA	0	0	
MOD-16		2mA	0	0	
MOI-7		20mA	0	0	
NET-4		5mA	0	0	
NET-7		30mA	0	0	
NET-7M		30mA	0	0	
NIM-1W		60mA	0	0	
NIM-1W with NIM-1M		130mA	0	0	
OCC-1		15mA	0	0	
PAL-1		(See Note 2)	0	0	
PIM-1		15mA	0	0	
PIM-2		(See Note 2)	0	0	
PS-5A		10mA + ¼ of 5V load	0	0	
PS-5N7		45mA + ¼ of 5V load	0	0	
RCC-1/-1F/-2/-2R, RSE-1		55mA + 15mA if PIM-1 is used	0	0	
RCC-3/-3C/-3F/-3FC		300mA	0	0	
RCM-1		200mA	0	0	
REP-1		40mA	0	0	
TMM-1		20mA	(See Note 3)	0	
TSP-40		70mA	0	0	
VFM-1		10mA	0	8mA per active LED	
VSA-1		7mA + 11mA per active LED	0	0	
VSM-1/MLM-1		7mA	0	11mA per active LED	
XLD-1		220mA	0	1.1mA per device	
ZAC-30		160mA	0	0	
ZC1-8B		2mA	(See Note 3)	0	
ZC2-4AB		2mA	(See Note 3)	0	
ZC2-8B		2mA	(See Note 3)	0	
ZC3-4AB		2mA	(See Note 3)	0	
ZCT-8B		15mA	(See Note 3)	0	

Total System Current	
NFPA Local (72A), Proprietary (72D) - Total AH	x 24 = *
NFPA Municipal Tie (72B), Remote Station (72C) - Total AH	x 60 = *
FM Approved Deluge/PreAction - Total AH	x 90 = *
Battery Size (with Alarm Reserve Correction**) x 1.3 =	
* Total not to exceed 42 Amps	
** Maximum Alarm current 12 Amps	

**NOTES:**

1. Use this column to calculate total current from 24 VDC supply to make sure it is not overloaded.
2. Use this column to calculate total current from 5 VDC supply to make sure it is not overloaded.
3. PSR-1 supplies 5V at 800mA, 24V at 6A (MPS-6), 24V at 12A (MPS-12).
4. The following modules draw no current from either the 5 VDC or 24 VDC power supplies and do not need to be included in these calculations:

- OMM-1
- OMM-2
- MOM-2
- MOM-4
- MMM-1
- PAL-1
- PIM-2
- PLC-4
- TBM-2
- TSW-2

Module	Quantity	30VDC Unfiltered Full Wave Rectified	Total Active 24 VDC Module Current (See Note 1)	Active 5 VDC Module Current	Total Active 5 VDC Module Current (See Note 2)
PSR-1		115mA (See Note 3)	115mA	0 (See Note 3)	0
5128/5129		40mA		0	0
ACM-1		85mA		176mA	
ALD-2I		120mA + 1.1mA per device/ 1.6mA for TRIs		0	0
ASC-1		50mA		10mA	
ASC-2		80mA		10mA	
BTC-1		40mA		10mA	
CCU/M		150mA		0	0
CMI-300		0	0	96mA	
CRM-4		18mA per active relay		10mA	
CSM-4		70mA + 1.5A max per circuit		10mA	
CZM-1/-1B6		50mA		0	0
CZM-4		765mA 4 zones in alarm		10mA	
D2300CP		0	0	200mA	
DCT-1/-1E		190mA		0	0
DMC-1		0	0	20mA	
ICP-1/-1B6		10A + device load (1.5A max.)		0	0
MDACT		260mA		0	0
MID-16		48mA max		2mA	
MKB-2/-4		0	0	75mA	
MKB-/-5C		300mA		0	0
MKB-6/-6C		300mA		0	0
MOD-16		800mA max		2mA	
MOI-7		0mA		70mA	
NET-4		0	0	20mA	
NET-7		0	0	120mA	
NET-7M		0	0	120mA	
NIM-1W		60mA		0	0
NIM-1W with NIM-1M		130mA		0	0
OCC-1		10mA		10mA	
PIM-1		0	0	50mA	
PS-5A		10mA + ¼ of 5V load		0	0
PS-5N7		45mA + ¼ of 5V load		0	0
RCC-1/-1F/-2 /-2R, RSE-1		65mA + 15mA if PIM-1 is used		0	0
RCC-3/-3C/ -3F/-3FC		300mA		0	0
RCM-1		180mA		80mA	
REP-1		40mA		0	0
TMM-1		41mA		0	0
TSP-40		70mA		0	0
VFM-1		10mA + 8mA per active LED		0	0
VSA-1		7mA + 11mA per active LED		0	0
VSM-1/VLM-1		7mA + 11mA per active LED		0	0
XLD-1		220mA + 1.1mA per device		0	0
ZAC-30		3A at 30W		10mA	0
ZC1-8B		175mA		5mA	
ZC2-4AB		260mA		10mA	
ZC2-8B		336mA		5mA	
ZC3-4AB		260mA		5mA	
ZCT-8B		90mA		15mA	
TOTAL				TOTAL	

## SETTING THE OPTION DIPSWITCHES ON SWITCH S2

(See Figure 2)

### To Disable the Network (S2-1)

The Disable Network Switch, located at S2-1, enables or disables the network connection.

#### DISABLE NETWORK SWITCH SETTINGS

S2-1	Network
Open (or OFF)	Enabled
Closed (or ON)	Disabled*

\*When not connected to the MXL network

### Battery Setting (S2-2, -3, and -4)

There is only one allowable battery switch setting as shown in the table below. Be sure to set the PSR-1 battery size in the CSG-M to 31 AH, regardless of the factory battery size.

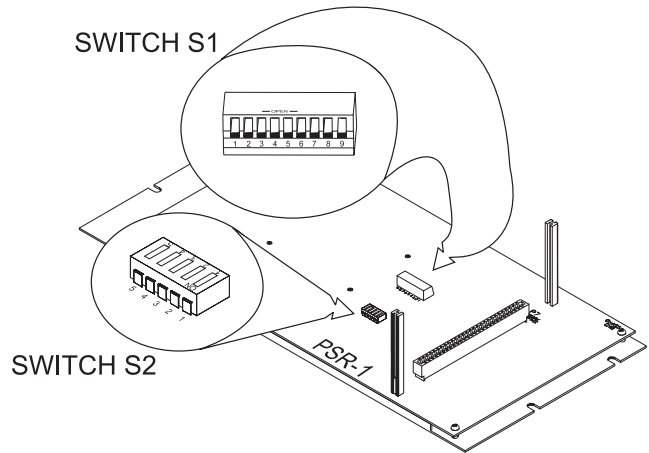
#### BATTERY SWITCH SETTINGS

DIP Switches			Charging Current
S2-2	S2-3	S2-4	
Open (or OFF)	Open (or OFF)	Closed (or ON)	2.0 amps max

The following table defines the battery voltage thresholds for the listed battery trouble conditions. These voltages can be viewed in the TEST POWER menu on the MKB-2 annunciator.

#### BATTERY VOLTAGE THRESHOLDS

Battery Status	Conditions	Battery Voltage (Volts)
Battery Not Installed		<14.0
Charger Disabled		<18.3
Battery Low Fault	On Battery	<21.0
Battery Low Fault	On AC	<24.0
Battery High Fault		>30.0



**Figure 2**  
**Switches S1 and S2 on the PSR-1**

### Security Mode-UL 1076 Operation (S2-5) To Disable the Tamper Switch

The PSR-1 does not support the use of security points from initiating circuits in its enclosure. To disable the tamper switch input of the PSR-1, set the security mode to disabled.

The Disable Security Mode switch is located at S2-5.

#### DISABLE SECURITY MODE SWITCH SETTINGS

S2-5	UL1076
Open (or OFF)	Disabled

### Input Power Specifications

#### MPS-6

Input Voltage: 120VAC, +10%, -15%  
Input Current: 2A max

#### MPS-12

Input Voltage: 120 VAC, +10%, -15%  
Input Current: 4A max

### ELECTRICAL RATINGS

Active 5VDC Module Current	0mA
Active 24VDC Module Current*	115mA
Standby 24VDC Module Current	90mA

\*Does not include any current drawn by devices or modules powered by the PSR-1.

**TABLE 1  
NETWORK ADDRESS PROGRAMMING**

ADDR	8 7 6 5 4 3 2 1	ADDR	8 7 6 5 4 3 2 1	ADDR	8 7 6 5 4 3 2 1	ADDR	8 7 6 5 4 3 2 1
000	ILLEGAL	064	OX000000	128	X0000000	192	XX000000
001	ILLEGAL	065	OX00000X	129	X000000X	193	XX00000X
002	ILLEGAL	066	OX0000X0	130	X00000X0	194	XX0000X0
003	000000XX	067	OX0000XX	131	X00000XX	195	XX0000XX
004	00000X00	068	OX000X00	132	X0000X00	196	XX000X00
005	00000X0X	069	OX000X0X	133	X0000X0X	197	XX000X0X
006	00000XX0	070	OX000XX0	134	X0000XX0	198	XX000XX0
007	00000XXX	071	OX000XXX	135	X0000XXX	199	XX000XXX
008	0000X000	072	OX00X000	136	X000X000	200	XX00X000
009	0000X00X	073	OX00X00X	137	X000X00X	201	XX00X00X
010	0000X0X0	074	OX00X0X0	138	X000X0X0	202	XX00X0X0
011	0000X0XX	075	OX00X0XX	139	X000X0XX	203	XX00X0XX
012	0000XX00	076	OX00XX00	140	X000XX00	204	XX00XX00
013	0000XX0X	077	OX00XX0X	141	X000XX0X	205	XX00XX0X
014	0000XX00	078	OX00XX00	142	X000XX00	206	XX00XX00
015	0000XXXX	079	OX00XXXX	143	X000XXXX	207	XX00XXXX
016	000X0000	080	OX0X0000	144	X00X0000	208	XX0X0000
017	000X000X	081	OX0X000X	145	X00X000X	209	XX0X000X
018	000X00X0	082	OX0X00X0	146	X00X00X0	210	XX0X00X0
019	000X00XX	083	OX0X00XX	147	X00X00XX	211	XX0X00XX
020	000X0X00	084	OX0X0X00	148	X00X0X00	212	XX0X0X00
021	000X0X0X	085	OX0X0X0X	149	X00X0X0X	213	XX0X0X0X
022	000X0XX0	086	OX0X0XX0	150	X00X0XX0	214	XX0X0XX0
023	000X0XXX	087	OX0X0XXX	151	X00X0XXX	215	XX0X0XXX
024	000XX000	088	OX0XX000	152	X00XX000	216	XX0XX000
025	000XX00X	089	OX0XX00X	153	X00XX00X	217	XX0XX00X
026	000XX0X0	090	OX0XX0X0	154	X00XX0X0	218	XX0XX0X0
027	000XX0XX	091	OX0XX0XX	155	X00XX0XX	219	XX0XX0XX
028	000XXX00	092	OX0XXX00	156	X00XXX00	220	XX0XXX00
029	000XXX0X	093	OX0XXX0X	157	X00XXX0X	221	XX0XXX0X
030	000XXX00	094	OX0XXX00	158	X00XXX00	222	XX0XXX00
031	000XXXXX	095	OX0XXXXX	159	X00XXXXX	223	XX0XXXXX
032	00X00000	096	OX000000	160	X0X00000	224	XX000000
033	00X0000X	097	OX00000X	161	X0X0000X	225	XX00000X
034	00X000X0	098	OX0000X0	162	X0X000X0	226	XX0000X0
035	00X000XX	099	OX0000XX	163	X0X000XX	227	XX0000XX
036	00X00X00	100	OX000X00	164	X0X00X00	228	XX000X00
037	00X00X0X	101	OX000X0X	165	X0X00X0X	229	XX000X0X
038	00X00XX0	102	OX000XX0	166	X0X00XX0	230	XX000XX0
039	00X00XXX	103	OX000XXX	167	X0X00XXX	231	XX000XXX
040	00X0X000	104	OX0X0000	168	X0X0X000	232	XX0X0000
041	00X0X00X	105	OX0X000X	169	X0X0X00X	233	XX0X000X
042	00X0X0X0	106	OX0X00X0	170	X0X0X0X0	234	XX0X00X0
043	00X0X0XX	107	OX0X00XX	171	X0X0X0XX	235	XX0X00XX
044	00X0XX00	108	OX00XX00	172	X0X0XX00	236	XX00XX00
045	00X0XX0X	109	OX00XX0X	173	X0X0XX0X	237	XX00XX0X
046	00X0XXX0	110	OX00XXX0	174	X0X0XXX0	238	XX00XXX0
047	00X0XXXX	111	OX00XXXX	175	X0X0XXXX	239	XX00XXXX
048	00XX0000	112	OX000000	176	X0XX0000	240	XX000000
049	00XX000X	113	OX00000X	177	X0XX000X	241	XX00000X
050	00XX00X0	114	OX0000X0	178	X0XX00X0	242	XX0000X0
051	00XX00XX	115	OX0000XX	179	X0XX00XX	243	XX0000XX
052	00XX0X00	116	OX000X00	180	X0XX0X00	244	XX000X00
053	00XX0X0X	117	OX000X0X	181	X0XX0X0X	245	XX000X0X
054	00XX0XX0	118	OX000XX0	182	X0XX0XX0	246	XX000XX0
055	00XX0XXX	119	OX000XXX	183	X0XX0XXX	247	XX000XXX
056	00XXX000	120	OX000000	184	X0000000	248	ILLEGAL
057	00XXX00X	121	OX00000X	185	X000000X	249	ILLEGAL
058	00XXX0X0	122	OX0000X0	186	X00000X0	250	ILLEGAL
059	00XXX0XX	123	OX0000XX	187	X00000XX	251	ILLEGAL
060	00XXXX00	124	OX000000	188	X0000000	252	ILLEGAL
061	00XXXX0X	125	OX00000X	189	X000000X	253	ILLEGAL
062	00XXXXX0	126	OX0000X0	190	X00000X0	254	ILLEGAL
063	00XXXXXX	127	OX0000XX	191	X00000XX	255	ILLEGAL

O = OPEN (or OFF) X = CLOSED (or ON)

## SETTING THE NETWORK ADDRESS (S1)

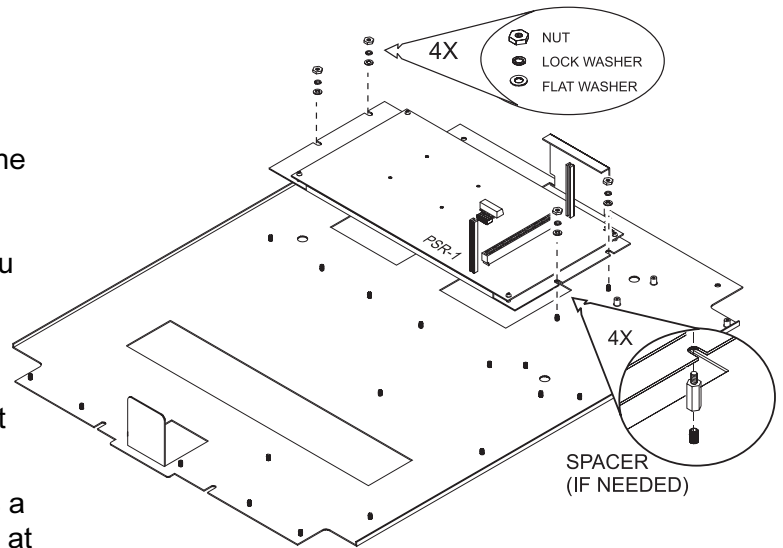
(See Figure 2)

The PSR-1 occupies one network address in the MXL System. You may have up to 31 PSR-1 power supplies in your system. Regardless of how many PSR-1 power supplies are used, you **MAY NOT exceed 3000 initiating points.**

Each PSR-1 must be placed at a unique address in the system. Use the CSG-M print-out to determine the address of the PSR-1. Set the network address on S1 using Table 1.

Note that the PSR-1 network address switch is a 9-position switch. Switch position 9 is not used at this time. Set it to the OFF or Open position.

When used as a standalone power supply, the network address does not need to be set.



**Figure 3**  
Mounting the PSR-1 on the MBR-MP

## MOUNTING

Mount the PSR-1 Remote Power Supply on the MBR-MP mounting plate in the MME-3 enclosure as shown in Figure 3.

1. Place the PSR-1 over the four standoffs in the upper left portion of the mounting plate.
2. Secure it in place using the hardware provided.

## MAKING THE NETWORK CONNECTION (TB4)

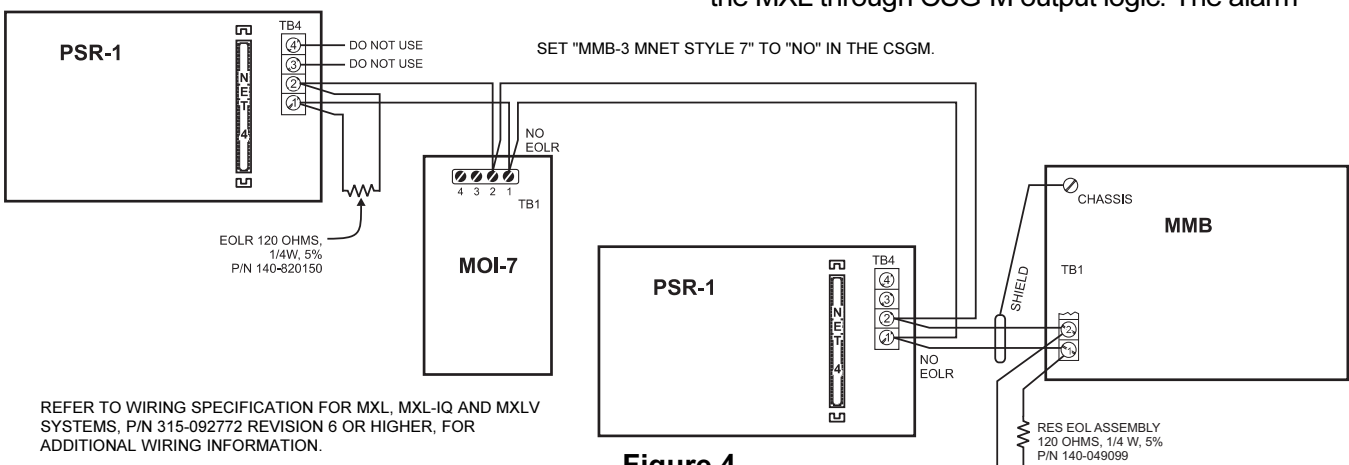
For the PSR-1 to communicate with the MXL, a NET-4 or NET-7 network interface card must be installed into P7 of the PSR-1. For a NET-4, connect the MXL network (MMB) to terminals 1 and 2

of TB4 as indicated in Figure 4. Terminate the shield at the MMB only. For a NET-7, refer to Figure 2 of the NET-7 Installation Instructions (P/N 315-091914) and connect the network to terminals 1, 2, 3, and 4. For a NET-7 network connected to an MMB-3, refer to Figure 5. When the PSR-1 is used as a standalone power supply, neither NET-4 nor NET-7 is needed. If an MKB-2 is installed, the NET-7 must be installed in a MOM.

## WIRING

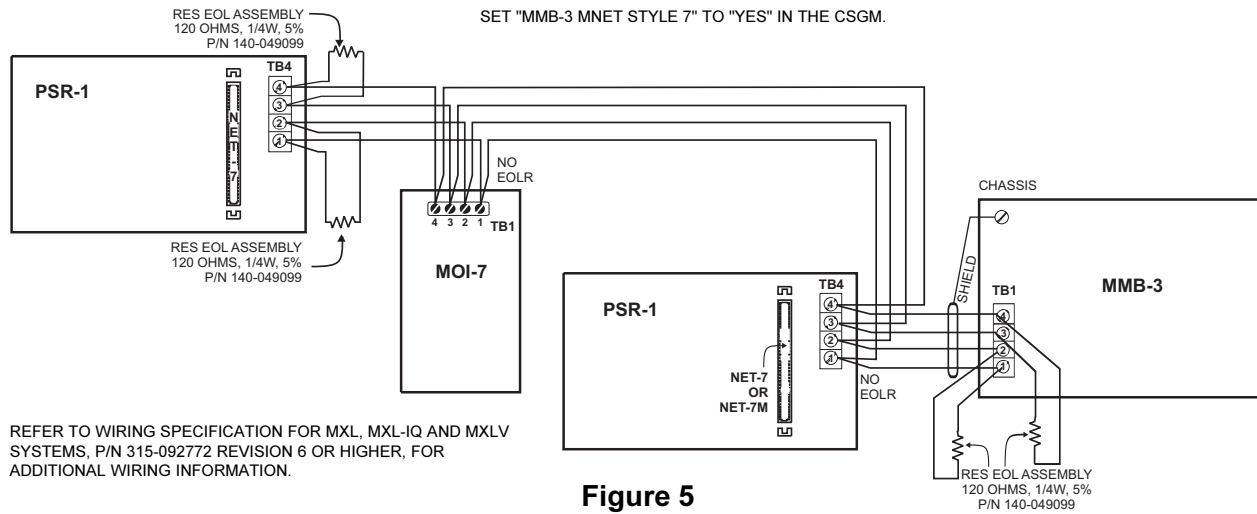
### Wiring Alarm and Trouble Relays (TB1)

Two relays are provided for local control of alarm and trouble indication. These relays are controlled by the MXL through CSG-M output logic. The alarm



**Figure 4**  
Network Connection using NET-4

REFER TO WIRING SPECIFICATION FOR MXL, MXL-IQ AND MXL-V SYSTEMS, P/N 315-092772 REVISION 6 OR HIGHER, FOR ADDITIONAL WIRING INFORMATION.



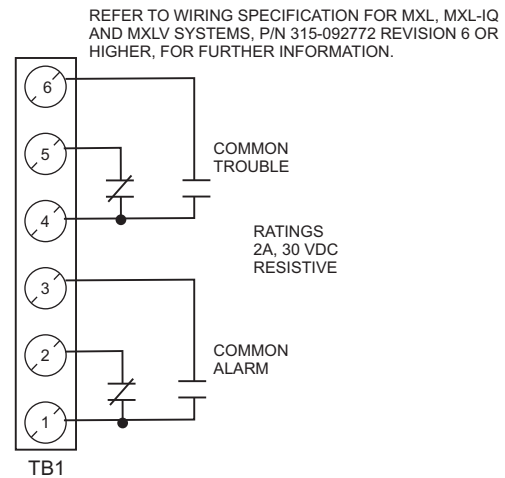
**Figure 5**  
**Connecting a Style 7 Network to MMB-3**

relay transfers if the local alarm default signal is activated by an initiating control board (CZM-4 or ALD-2I). This occurs when the initiating board cannot communicate with the MXL. Likewise, if any local module, including the PSR-1, loses communication with the MXL, the trouble relay transfers. When the system is operating normally, these relays are controlled by output logic only. See Figure 6 for ratings and wiring instruction.

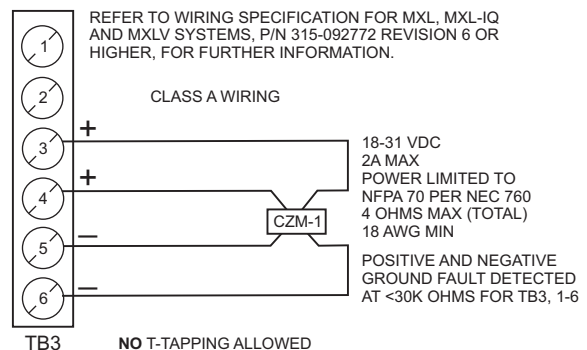
### Auxiliary Power for CZM-1 and PS-5A (TB3)

A Class A power limited output is provided on TB3, terminals 3-6 for use with the CZM-1 and PS-5A.

1. This power is available on TB3, terminals 3 through 6.
2. All wiring must be in accordance with Article 760 of NEC or local building codes.
3. The power for CZM-1 and PS-5A is power limited to NFPA 70 per NEC 760.
4. Electrical Ratings:
  - 18-31 VDC, unfiltered full wave
  - 2A max
5. You may connect a maximum of 40 CZM-1s to the TB3 power source. Follow the guidelines below when wiring.
  - a. This power may be wired Class A, as shown in Figure 7. Class A wiring can support a maximum of 20 CZM-1s, with total line resistance of 4 ohms max. T-tapping is not allowed.
  - b. Refer to Figure 8. Class B wiring can be used to obtain the maximum of 40 CZM-1s. Each Class B wire run can support a maximum of



**Figure 6**  
**Common Alarm and Common Trouble Relays**

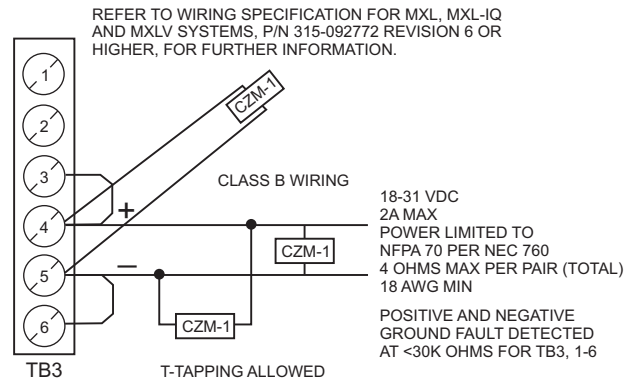


**Figure 7**  
**CZM-1 Power, Class A Wiring**

20 CZM-1s, 4 ohms max. Multiple Class B power connections can be used if you do not exceed the ratings above (40 CZM-1s max and 4 ohms per run max). For example, you could have four individual Class B power runs, for a total of 40 devices (for example, 12, 8, 6, and 14 CZM-1s), with each of the four runs not exceeding 4 ohms resistance.

T-tapping is allowed, provided the total resistance of all wires does not exceed 4 ohms.

- Refer to Figures 9 and 10 for wiring instructions for the PS-5A.

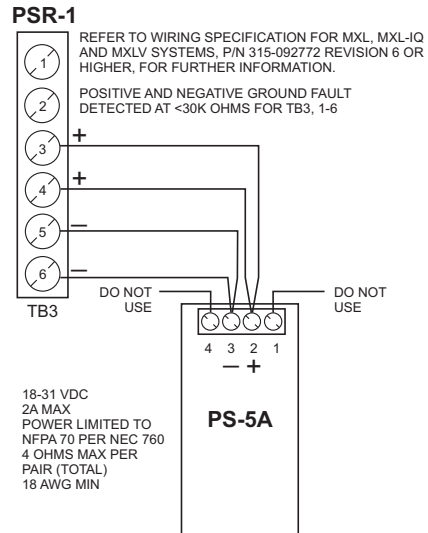


**Figure 8**  
**CZM-1 Power, Class B Wiring**

### MOI-7 Power (P9)

The PSR-1 may be used in standalone mode as the power supply for the MOI-7. In this configuration the MOI-7 and the PSR-1 must be in the same enclosure. A separate 5V output is provided for the MOI-7. The PSR-1 local trouble contact must also be connected as a means of reporting PSR-1 troubles to the MXL. See Figure 11 for the wiring diagram.

See Figure 12 if the MOI-7 is in a separate enclosure. In this configuration do not use the 5V power on P9. A separate PS-5A must be included in the remote enclosure with the MOI-7.

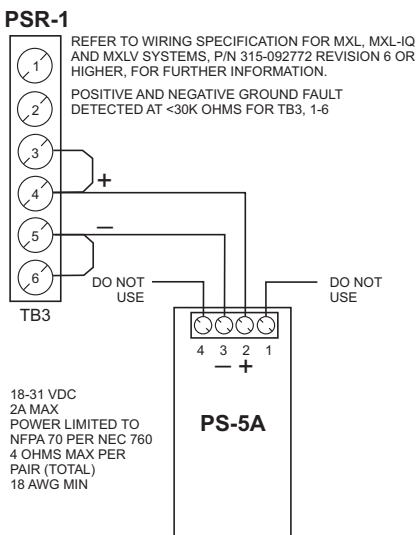


**Figure 9**  
**PS-5A Power, Class A Wiring**

### AUXILIARY 24V POWER COMPATIBLE DEVICES

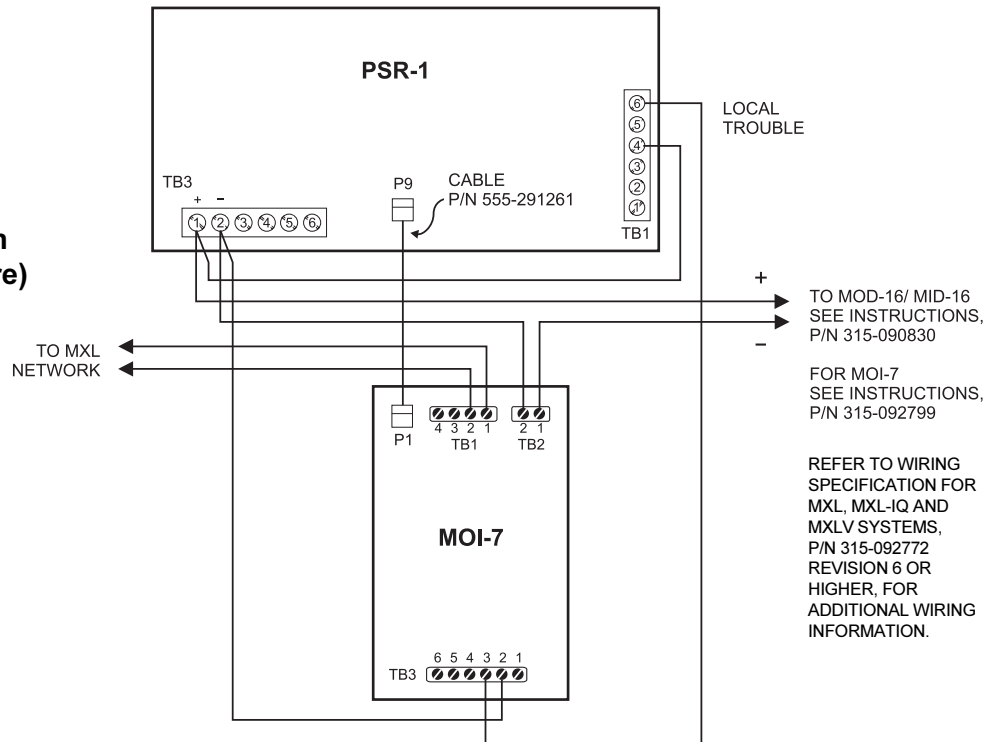
Compatible Devices	Installation Instructions
CZM-1B6	P/N 315-095355-7
ICP-B6	P/N 315-095306-8
MOD-16	P/N 315-090830-7
MOI-7	P/N 315-092799-7
PS-5A	P/N 315-092367-8
PS-5N7	P/N 315-092729-12
MKB-5/-5C	P/N 315-048727-3
MKB-6/-6C	P/N 315-048722-4
RCC-3/-3F/-C/-3FC	P/N 315-048665-5
Silent Knight 5128/5129	P/N 315-093294-5
SR-35	P/N 315-087691-8
SDH-2D/-3D/-4D /-5D/-6D/-7D/-8D	P/N 315-049481-3
NS-1 <sup>§</sup>	P/N 315-085409-3

<sup>§</sup>Listed per UL864 8th Edition



**Figure 10**  
**PS-5A Power, Class B Wiring**

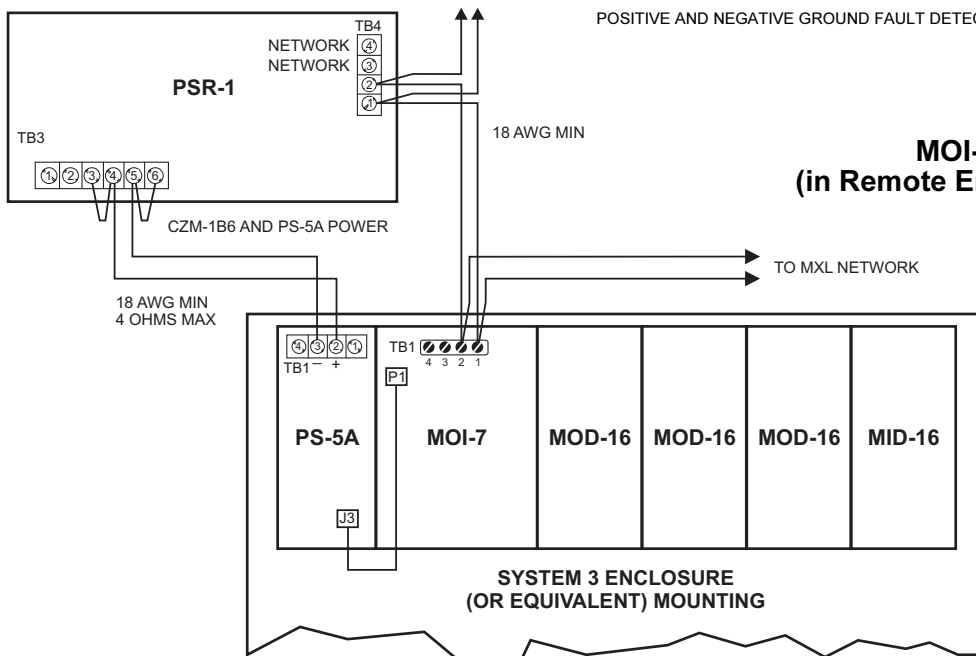
**Figure 11  
MOI-7 Connection  
(in Same Enclosure)**



TO MOD-16/ MID-16  
SEE INSTRUCTIONS,  
P/N 315-090830

FOR MOI-7  
SEE INSTRUCTIONS,  
P/N 315-092799

REFER TO WIRING  
SPECIFICATION FOR  
MXL, MXL-IQ AND  
MXLV SYSTEMS,  
P/N 315-092772  
REVISION 6 OR  
HIGHER, FOR  
ADDITIONAL WIRING  
INFORMATION.



**Figure 12  
MOI-7 Connection  
(in Remote Enclosure using PS-5A)**

REFER TO WIRING SPECIFICATION  
FOR MXL, MXL-IQ AND MXLV  
SYSTEMS, P/N 315-092772 REVISION  
6 OR HIGHER, FOR ADDITIONAL  
WIRING INFORMATION.

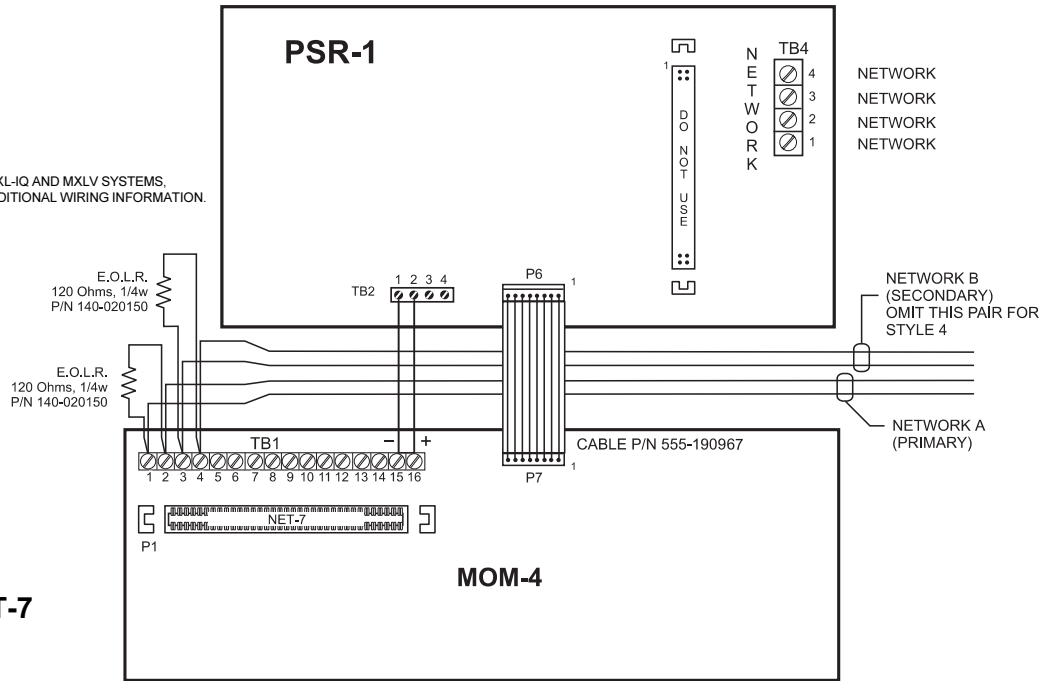
**MOM-4 Module Connection**

P6 on the PSR-1 is the data and 5V connection for the MOM-4. Connect P6 on the PSR-1 to P7 on the MOM-4 using the 8 circuit ribbon cable, P/N 555-190506, provided with the MOM-4. A second auxiliary non-power limited output is provided on TB3 for the MOM-4 card cage. This output is rated at 6 amps (MPS-6) or 12 amps (MPS-12) 18-31 VDC. This capacity must be

derated by the current drawn by the CZM-1 and PS-5A power output. If the full 2 amp capacity of the CZM-1 and PS-5A output is used, the MOM-4 power must be derated to 4 amps (MPS-6) or 10 amps (MPS-12). See Figure 13 for wiring instructions.

When a PSR-1 is used with an MKB-2, use a MOM-4 for the NET-7. Connect as shown in Figure 14.

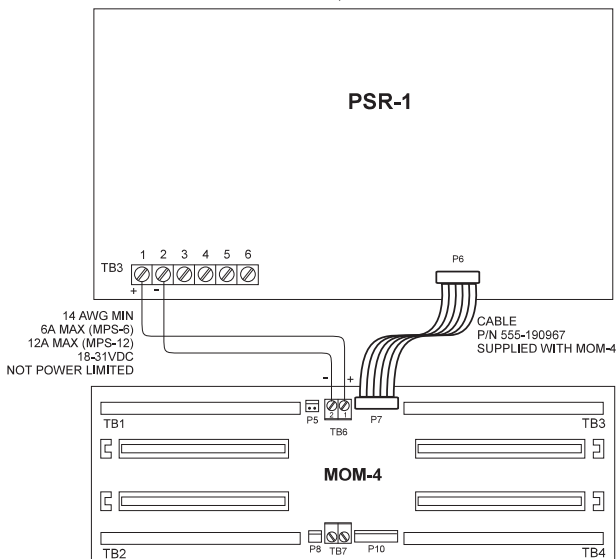
REFER TO WIRING SPECIFICATION FOR MXL, MXL-IQ AND MXLV SYSTEMS, P/N 315-092772 REVISION 6 OR HIGHER, FOR ADDITIONAL WIRING INFORMATION.



**Figure 14**  
Connecting a NET-7  
in a MOM-4

POSITIVE AND NEGATIVE GROUND FAULT DETECTED AT <30K OHMS FOR TB3, 1-6

REFER TO WIRING SPECIFICATION FOR MXL, MXL-IQ AND MXLV SYSTEMS, P/N 315-092772 REVISION 6 OR HIGHER, FOR ADDITIONAL WIRING INFORMATION.

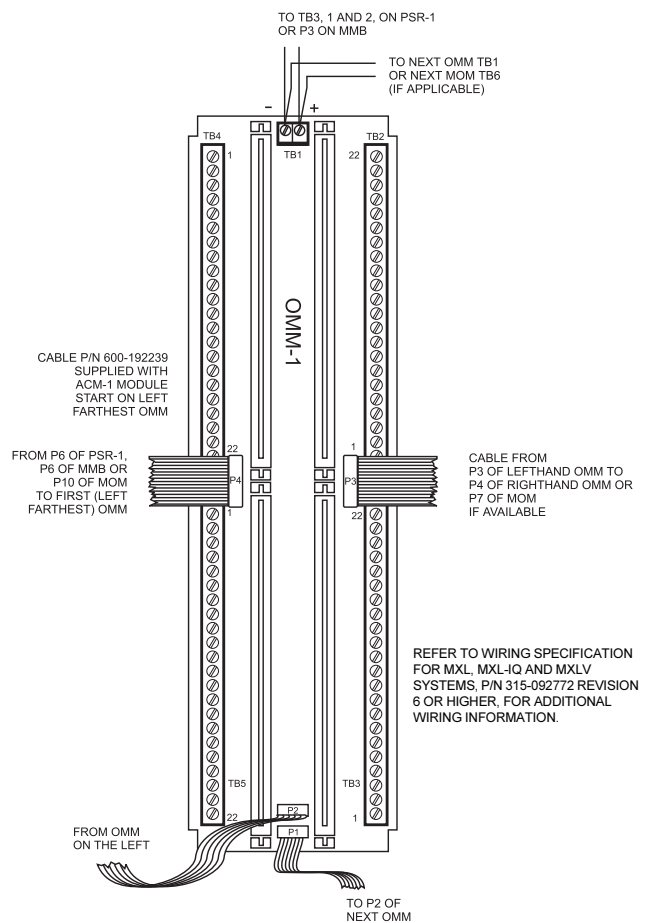


**Figure 13**  
MOM-4 Connection

### OMM-1 Module Connection

When using the PSR with voice modules, connect TB3-1 and TB3-2 on PSR to TB1 at the top of the OMM-1 on the far left. See Figure 15. Refer to the OMM-1 Instructions, P/N 315-090267 for further information.

When using the PSR with both OMM-1s and MOM-4s, connect as shown in Figure 16.



**Figure 15**  
OMM-1 Connection

REFER TO WIRING SPECIFICATION FOR MXL, MXL-IQ AND MXLV SYSTEMS, P/N 315-092772 REVISION 6 OR HIGHER, FOR ADDITIONAL WIRING INFORMATION.

