MPS-488X IntelligentDC Power Supply

# MPS-**488X**


*Keep these important operating instructions.*
*Check meyersound.com for updates.*

MPS-488X Operating Instructions, PN 05.314.005.01 A

# IMPORTANT SAFETY INSTRUCTIONS

## SYMBOLS USED

These symbols indicate important safety or operating features in this booklet and on the frame or chassis:

|  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|
| Dangerous voltages: risk of electric shock | Important operating instructions | Protective earth ground | Hot surface: do not touch | Electronic instructions for use: instruction location in QR code  | AC Power Inlet | Milan Audio Port | Analog Audio Input<br><br>Analog Audio Looping Output |

## IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with Meyer Sound's installation instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
- Do not defeat the safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Connect the apparatus to a two-pole, three-wire grounding mains receptacle. The receptacle must be connected to a fuse or circuit breaker. Connection to any other type of receptacle poses a shock hazard and may violate local electrical codes.
- To reduce the risk of electric shock, disconnect the apparatus from the AC mains before installing audio cable. Reconnect the power cord only after making all signal connections.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. The AC mains plug or appliance coupler shall remain readily accessible for operation.
- Only use attachments/accessories specified by Meyer Sound. Use only with the caster rails or rigging specified by Meyer Sound, or sold with the apparatus. Handles are for carrying only.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- This apparatus contains potentially dangerous voltages. Do not try to disassemble the apparatus. If equipped with an external fuse holder, the replaceable fuse is the only user-serviceable item. When replacing the fuse, only use the same type and the same value.
- Refer all other servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug has been damaged; liquid has been spilled or objects have fallen into the apparatus; rain or moisture has entered the apparatus; the apparatus has been dropped; or when for undetermined reasons the apparatus does not operate normally.

**WARNING:** For Meyer Sound IntelligentDC Power Supply models MPS-488HP and MPS-482HP, the external wiring connected to the output terminals of the units require installation by an Instructed person or the use of ready-made leads or cords.

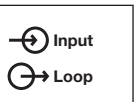
**WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Do not install the apparatus in wet or humid locations without using weather protection equipment from Meyer Sound.

**WARNING:** Class I apparatus shall be connected to a mains socket outlet with a protective earthing connection.

**CAUTION:** Disconnect the mains plug before disconnecting the power cord from the speaker.

## SÍMBOLOS UTILIZADOS

Estos símbolos indican características importantes de seguridad u operación en este folleto y en el bastidor o chasis

| | | | | | | | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |   |
| Tensiones peligrosas: riesgo de descarga eléctrica | Instrucciones de funcionamiento importantes | Toma de tierra de protección | Superficie caliente: no tocar | Instrucciones de uso electrónicas: ubicación de instrucciones en el código QR  | Entrada de corriente alterna | Puerto de audio Milán | Entrada de audio analógico<br><br>Salida de bucle de audio analógico |

## INSTRUCCIONES DE SEGURIDAD IMPORTANTES

- Lea estas instrucciones.
- Conserve estas instrucciones.
- Preste atención a todas las advertencias.
- Siga todas las instrucciones.
- No use este aparato cerca del agua.
- Limpiar solo con un paño seco.
- No bloquee las aberturas de ventilación. Instale de acuerdo con las instrucciones de instalación de Meyer Sound.
- No lo instale cerca de fuentes de calor como radiadores, rejillas de calefacción, estufas u otros aparatos que produzcan calor.
- No anule el propósito de seguridad del enchufe con conexión a tierra. Un enchufe con conexión a tierra tiene dos clavijas y una tercera clavija de conexión a tierra. La tercera clavija se proporciona para su seguridad. Si el enchufe provisto no encaja en su tomacorriente, consulte a un electricista para reemplazar el tomacorriente obsoleto.
- Para reducir el riesgo de descarga eléctrica, desconecte el aparato de la red eléctrica antes de instalar el cable de audio. Vuelva a conectar el cable de alimentación sólo después de realizar todas las conexiones de señal.
- Conecte el aparato a una toma de corriente de tres hilos y dos polos con conexión a tierra. El receptáculo debe estar conectado a un fusible o disyuntor. La conexión a cualquier otro tipo de receptáculo representa un riesgo de descarga eléctrica y puede violar los códigos eléctricos locales.
- Proteja el cable de alimentación para que no se pise ni se pellizque, especialmente en los enchufes, receptáculos de conveniencia y en el punto por donde sale del aparato. El enchufe de la red de CA o el acoplador del aparato deben permanecer fácilmente accesibles para su funcionamiento.
- Utilice únicamente los aditamentos / accesorios especificados por Meyer Sound. Úselo únicamente con los rieles de ruedas o los aparejos especificados por Meyer Sound, o vendidos con el aparato. Las asas son solo para transportar.
- Desenchufe este aparato durante tormentas eléctricas o cuando no se utilice durante períodos prolongados.
- Este aparato contiene tensiones potencialmente peligrosas. No intente desmontar el aparato. Si está equipado con un portafusibles externo, el fusible reemplazable es el único elemento que puede reparar el usuario. Cuando reemplace el fusible, use solo el mismo tipo y el mismo valor.
- Refiera todos los demás servicios a personal de servicio calificado. Se requiere servicio cuando el aparato se ha dañado de alguna manera, como cuando se ha dañado el cable de alimentación o el enchufe; se ha derramado líquido o han caído objetos dentro del aparato; lluvia o ha entrado humedad en el aparato; el aparato se ha caído; o cuando por razones indeterminadas el aparato no funciona con normalidad.

**ADVERTENCIA:** Para los modelos de fuente de alimentación IntelligentDC de Meyer Sound MPS-488HP y MPS-482HP, el cableado externo está conectado a los terminales de salida de las unidades requieren la instalación por parte de una persona instruida o el uso de cables o conductores prefabricados.

**ADVERTENCIA:** Para reducir el riesgo de incendio o descarga eléctrica, no exponga este aparato a la lluvia. o humedad. No instale el aparato en lugares mojados o húmedos sin usar equipo de protección contra la intemperie de Meyer Sound.

**ADVERTENCIA:** Los aparatos de Clase I se conectarán a una toma de corriente con toma de tierra de protección conexión.

**PRECAUCIÓN:** Desconecte el enchufe de la red antes de desconectar el cable de alimentación del altavoz.

## VERWENDETE SYMBOLE

Diese Symbole weisen auf wichtige Sicherheits- oder Betriebsmerkmale in dieser Broschüre und am Gehäuse bzw. Fahrgestell hin:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |   |
| Gefährliche Spannungen: Stromschlaggefahr | Hinweis auf wichtige Punkte der Betriebsanleitung | Schutzerdung | Heiße Oberfläche: nicht berühren | Elektronische Gebrauchsanweisung: anweisungsort im QR-Code  | Wechselstroma Anschluss | Milan Audioanschluss | Analoger Audioeingang<br><br>Analoger Audio-Loop-Ausgang |

- Lesen Sie diese Anleitung.
- Bewahren Sie diese Anleitung auf.
- Beachten Sie alle Warnungen.
- Befolgen Sie alle Anweisungen.
- Keine Verwendung in der Nähe von Wasser.
- Reinigung nur mit einem trockenen Tuch.
- Blockieren Sie keine Lüftungsöffnungen. Beachten Sie Meyer Sounds Installationsanweisungen.
- Installieren Sie das Gerät nicht in der Nähe von Wärmequellen wie Heizkörpern, Heizregistern, Öfen oder anderen Geräten, die Wärme erzeugen.
- Umgehen Sie nicht den Sicherheitszweck des Schutzkontaktsteckers. Ein geerdeter Stecker hat zwei Stifte und einen dritten Erdungskontakt. Der dritte Kontakt dient Ihrer Sicherheit. Wenn der mitgelieferte Stecker nicht in Ihre Steckdose passt, wenden Sie sich an einen Elektriker, um die veraltete Steckdose auszutauschen.
- Schließen Sie das Gerät nur an eine zweipolige, dreiadrig geerdete Netzsteckdose, die mit einer Sicherung oder einem Schutzschalter verbunden ist, an. Der Anschluss an eine andere Art von Steckdose birgt die Gefahr eines Stromschlags und kann gegen die örtlichen Elektrovorschriften verstoßen.
- Zur Minimierung der Gefahr eines Stromschlages trennen Sie das Gerät vor dem Anschluss von Audio- und/oder Steuerleitungen vom Stromnetz. Das Netzkabel darf erst nach Herstellung aller Signalverbindungen wieder eingesteckt werden.
- Schützen Sie das Netzkabel vor Einklemmen und verwenden Sie einen Trittschutz, insbesondere an den Steckverbindungen und Anschlusspunkten. Diese müssen für den Betrieb leicht zugänglich bleiben.
- Verwenden Sie nur die von Meyer Sound spezifizierten Anbau- und Zubehörteile. Verwenden Sie nur die von Meyer Sound spezifizierten oder mit dem Gerät verkauften Transport- und Rigging-Elemente. Die Griffe sind ausschließlich zum Transport bzw. zum Tragen geeignet.
- Trennen Sie bei Gewitter oder bei längerer Nichtbenutzung des Gerätes die Netzverbindung.
- Dieses Gerät enthält potentiell gefährliche Spannungen. Versuchen Sie nicht, das Gerät zu zerlegen. Wenn das Gerät mit einer extern zugänglichen, austauschbaren Sicherung ausgestattet ist, ist diese das einzige Wartungselement für Nutzer. Verwenden Sie beim Tausch der Sicherungen ausschließlich die original Typen und Spezifikationen.
- Wenden Sie sich für alle anderen Wartungsarbeiten an qualifiziertes Servicepersonal. Eine Wartung ist erforderlich, wenn das Gerät in irgendeiner Weise beschädigt wurde, z. B. wenn das Netzkabel oder der Netzstecker beschädigt wurde, wenn Regen, Feuchtigkeit, Flüssigkeiten oder Gegenstände in das Gerät eingedrungen sind, wenn das Gerät heruntergefallen ist oder wenn das Gerät aus unbestimmten Gründen nicht normal funktioniert.

**WARNUNG:** Bei den Meyer Sound IntelligentDC Power Supply Modellen MPS-488HP und MPS-482HP muss die externe Verkabelung, die an die Ausgangsklemmen der Geräte angeschlossen wird, von einer geschulten Person installiert werden oder es müssen vorgefertigte Kabel oder Leitungen verwendet werden.

**WARNUNG:** Um das Risiko eines Brandes oder elektrischen Schlages zu verringern, setzen Sie das Gerät nicht Regen oder Feuchtigkeit aus. Installieren Sie das Gerät nicht an nassen oder feuchten Orten, ohne Wetterschutzelemente von Meyer Sound zu verwenden.

**WARNUNG:** Geräte der Klasse I müssen an eine Netzsteckdose mit Schutzerdung angeschlossen werden.

**ACHTUNG!** Ziehen Sie den Netzstecker, bevor Sie das Netzkabel vom Lautsprecher abziehen.

## SYMBOLES UTILISÉS

Ces symboles indiquent les caractéristiques de sécurité ou de fonctionnement importantes dans ce livret et sur le cadre ou le châssis:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Pour indiquer les risques résultant de tensions dangereuses | Instructions d'utilisation importantes | Protection de terre | Surface chaude: ne pas toucher | Mode d'emploi électronique: emplacement des instructions dans le QR code | Prise de courant alternatif | Port audio Milan | Entrée audio analogique<br><br>Sortie de boucle audio analogique |

## INSTRUCTIONS DE SÉCURITÉ IMPORTANTES

- Lisez ces consignes.
- Conservez ces consignes.
- Respecter toutes les mises en garde.
- Suivez toutes les consignes.
- Ne pas utiliser cet équipement à proximité d'un point d'eau.
- Nettoyer uniquement à l'aide d'un chiffon sec.
- Ne pas obstruer toute ouverture d'aération. Procéder à l'installation conformément aux instructions de Meyer Sound.
- Ne pas installer à proximité de sources de chaleur telles qu'un radiateur, une bouche d'air chaud, un poêle ou tout autre équipement qui dégage de la chaleur.
- Ne pas compromettre la sécurité de la prise de terre. Les prises comportent deux broches et une troisième broche de mise à la terre. La troisième broche est prévu pour votre sécurité. Si la fiche fournie ne rentre pas dans votre prise, consultez un électricien pour le remplacement de la prise obsolète.
- Branchez l'appareil sur une prise de courant bipolaire à trois fils avec mise à la terre. Le réceptacle doit être relié à un fusible ou à un disjoncteur. Le raccordement à tout autre type de prise présente un risque d'électrocution et peut enfreindre les codes électriques locaux.
- Pour réduire le risque d'électrocution, débranchez l'appareil du secteur avant d'installer le câble audio. Ne rebranchez le cordon d'alimentation qu'après avoir effectué toutes les connexions de signaux.
- Protéger le cordon d'alimentation contre les risques de piétinement ou de pincement, notamment au niveau des fiches, des prises de courant et du point de raccordement avec l'équipement. La prise secteur ou le coupleur de l'appareil doit rester facilement accessible pour le fonctionnement.
- N'utiliser que des fixations/accessoires spécifiés par Meyer Sound. Utiliser uniquement les accessoires de conditionnement ou d'accroches spécifiés par Meyer Sound, ou vendus avec l'appareil. Les poignées sont uniquement destinées au transport.
- Débrancher l'équipement pendant les orages ou s'il n'est pas utilisé pendant de longues périodes.
- Cet appareil contient des tensions potentiellement dangereuses. N'essayez pas de démonter l'appareil. Si l'appareil est équipé d'un porte-fusible externe, le fusible remplaçable est le seul élément réparable par l'utilisateur. Lorsque vous remplacez le fusible, utilisez uniquement le même type et la même valeur.
- Confier toutes les réparations et tâches d'entretien à un personnel qualifié. Une intervention est nécessaire si l'équipement a été abîmé, notamment en ce qui concerne le cordon ou la fiche d'alimentation électrique, en cas d'infiltration de liquide, de chute d'objets dans l'équipement, d'exposition de l'équipement à la pluie ou à l'humidité, de fonctionnement anormal ou de chute.

**AVERTISSEMENT :** Pour les modèles d'alimentation Meyer Sound IntelligentDC MPS-488HP et MPS-482HP, le câblage externe connecté aux bornes de sortie des unités nécessite une installation par une personne qualifiée ou l'utilisation de câbles ou cordons prêts à l'emploi.

**AVERTISSEMENT :** Pour réduire les risques d'incendie ou de décharge électrique, ne pas exposer cet équipement à la pluie ou à l'humidité. Ne pas installer l'appareil dans des endroits mouillés ou humides sans utiliser l'équipement de protection contre les intempéries de Meyer Sound.

**AVERTISSEMENT :** Les appareils de classe I doivent être connectés à une prise de courant avec une mise à la terre de protection.

**ATTENTION :** Débranchez la prise secteur avant de débrancher le cordon d'alimentation de l'enceinte

## ИСПОЛЬЗУЕМЫЕ СИМВОЛЫ

Эти символы в данной брошюре и на оборудовании указывают на элементы и функции, влияющие на безопасность.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |   |
| Опасное напряжение: риск поражения электрическим током | Важные инструкции по эксплуатации | Заземление | Горячая поверхность: не прикасайтесь | QR-код с ссылкой на инструкцию по эксплуатации  | Вход питания переменного тока | Аудиопорт MILAN | Аналоговый аудиовход<br><br>Аналоговый аудиовыход |

## ВАЖНЫЕ ИНСТРУКЦИИ ПО ТЕХНИКЕ БЕЗОПАСНОСТИ

- Прочитайте эти инструкции.
- Храните эти инструкции.
- Прислушайтесь ко всем предупреждениям.
- Следуйте всем инструкциям.
- Не используйте устройство вблизи воды.
- Протирайте устройство только сухой тканью.
- Не блокируйте вентиляционные отверстия. Установите устройство в соответствии с инструкциями по установке Meyer Sound.
- Не устанавливайте устройство вблизи источников тепла, таких как радиаторы, обогреватели, печи или другие приборы, выделяющие тепло.
- Подключите устройство к двухполюсной трехпроводной сетевой розетке с заземлением. Розетка должна быть подключена к предохранителю или автоматическому выключателю. Подключение к розетке любого другого типа представляет опасность поражения электрическим током и может нарушать местные электротехнические нормы.
- Чтобы снизить риск поражения электрическим током, отключите устройство от сети переменного тока перед прокладкой аудиокабеля. Подключайте шнур питания только после выполнения всех прочих соединений.
- Не нарушайте сохранность штепсельной вилки заземляющего типа. Вилка заземляющего типа имеет два силовых контакта и третий заземляющий контакт, обеспечивающий безопасность. Если вилка не подходит к вашей розетке, обратитесь к электрику для замены устаревшей розетки.
- Не допускайте, чтобы по шнуру питания ходили или он был пережат, особенно в местах около выхода его из устройства и из электрической розетки. При этом шнур питания и розетка должны быть легко доступными при необходимости.
- Используйте только аксессуары, рекомендованные Meyer Sound. Используйте только элементы подвеса и крепления Meyer Sound или идущие в комплекте поставки. Ручки предназначены только для переноски.
- Отключайте устройство от сети во время грозы и в случаях, когда оно не используется в течение длительного времени.
- Этот аппарат находится под потенциально опасным напряжением. Не пытайтесь разбирать аппарат. Если устройство снабжено внешним предохранителем, производите его замену только на предохранитель с аналогичными параметрами, предназначенный для самостоятельной замены.
- Все остальное обслуживание должно выполняться квалифицированным персоналом. Обслуживание необходимо, когда само устройство или шнур, или вилка питания были повреждены, внутрь устройства попала влага или посторонние предметы, после падения или когда по неопределенным причинам устройство не работает нормально.

**ПРЕДУПРЕЖДЕНИЕ:** Для моделей Meyer Sound IntelligentDC Power Supply MPS-488HP и MPS-482HP внешняя проводка, подключенная к выходным клеммам устройств, требует монтажа квалифицированным специалистом или использования готовых проводов или шнуров.

**ПРЕДУПРЕЖДЕНИЕ:** Чтобы снизить риск возгорания или поражения электрическим током, не подвергайте устройство воздействию дождя или влаги. Не устанавливайте устройство в сырых или влажных местах без использования погодозащитного оборудования Meyer Sound.

**ПРЕДУПРЕЖДЕНИЕ:** Устройство класса I должны подключаться к сетевой розетке с защитным заземлением.

**ВНИМАНИЕ:** Перед отсоединением шнура питания от устройства отсоедините сетевую вилку от розетки.

## 使用的符号

这些符号表示本手册中和车架或底盘上的重要安全或操作特征

| | | | | | | | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |
| 危险的电压：有触电的危险 | 重要的操作说明 | 保护性接地 | 热表面：不要触摸 | 电子使用说明：二维码中的说明位置 | 交流电源入口 | 米兰音频端口 | 模拟音频输入<br><br>模拟音频循环输出 |

## 重要安全说明

- 阅读这些说明。
- 保存这些说明。
- 听从所有警告。
- 遵循所有的指示。
- 不要在水边使用本设备。
- 只能用干布清洁。
- 不要堵塞任何通风口。按照Meyer Sound的安装说明进行安装。
- 不要在任何热源附近安装，如散热器、热寄存器、炉子或其他产生热量的设备。
- 不要破坏接地型插头的安全目的。接地型插头有两个叶片和第三根接地线。提供第三根接地线是为了您的安全。如果提供的插头不适合您的插座，请咨询电工更换过时的插座。
- 将设备连接到一个两极三线接地的电源插座上。该插座必须与熔断器或断路器相连。连接到任何其他类型的插座上都会有触电危险，并可能违反当地的电气法规。
- 为了减少电击的危险，在安装音频线之前，请将设备与交流电源断开。只有在完成所有信号连接后才重新连接电源线。
- 保护电源线不被踩踏或挤压，特别是在插头、便利插座以及它们从设备上退出的地方。交流电源插头或设备耦合器应保持随时可供操作。
- 只能使用Meyer Sound指定的附件/配件。只能使用Meyer Sound指定的脚轮导轨或索具，或与设备一起出售。手柄仅用于携带。
- 在雷雨天气或长时间不使用时，请拔掉本设备的插头。
- 该设备包含潜在的危险电压。请勿尝试拆卸设备。如果配备了外部保险丝座，可更换的保险丝是用户唯一可维修的项目。更换保险丝时，只能使用相同类型和相同价值的保险丝。
- 将所有其他维修工作交给合格的维修人员。当设备以任何方式损坏时，如电源线或插头损坏；液体洒出或物体落入设备；雨水或湿气进入设备；设备掉落；或由于无法确定的原因，设备不能正常运行时，需要进行维修。

**警告。**对于Meyer Sound智能直流电源型号MPS-488HP和MPS-482HP，连接到设备输出终端的外部接线需要由专业人员安装或使用现成的导线或电线。

**警告。**为减少火灾或电击的危险，请不要将本设备暴露在雨中或潮湿的环境中。如果没有使用Meyer Sound的防雨设备，请不要将设备安装在潮湿的地方。

**警告。I**类设备应连接到有保护性接地的电源插座上。

**注意事项。**在断开扬声器的电源线之前，请先断开电源插头。

## 사용된 기호

이 기호들은 이 책자와 프레임 또는 섀시에 있는 중요한 안전설비 또는 작동 기능을 나타냅니다.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |   |
| 전기 위험: 감전 위험 | 중요 운영 지침 | 보호 접지 | 뜨거운 표면: 만지지 마세요 | 전자 설명서: QR 코드의 지침 위치  | AC 전원 입구 | 밀라노 오디오 입력 포트 | 아날로그 오디오 입력<br><br>루프 아날로그 오디오 출력 |

## 중요 안전 지침

- 이 지침을 읽으십시오.
- 이 지침을 보관하십시오.
- 모든 경고에 유의하십시오.
- 모든 지침을 따르십시오.
- 물 근처에서 이 기기를 사용하지 마십시오.
- 마른 천으로만 청소하십시오.
- 환기구를 막지 마십시오. Meyer Sound의 설치 지침에 따라 설치하십시오.
- 라디에이터, 열 조절기, 스토브 또는 기타 열을 발생하는 장치와 같은 열원 근처에 설치하지 마십시오.
- 접지형 플러그의 안전 목적을 어기지 마십시오. 접지 유형 플러그에는 두 개의 날과 세 번째 접지 갈래가 있습니다. 세 번째 갈래는 귀하의 안전을 위해 제공됩니다. 제공된 플러그가 콘센트에 맞지 않으면 전기 기술자에게 오래된 콘센트를 교체하도록 문의하십시오.
- 장치를 2극, 3선 접지 전원 콘센트에 연결합니다. 콘센트는 퓨즈나 회로 차단기에 연결해야 합니다. 다른 유형의 콘센트에 연결하면 감전 위험이 있으며 지역 전기 규정을 위반할 수 있습니다.
- 감전의 위험을 줄이려면 오디오 케이블을 설치하기 전에 AC 주전원에서 장치를 분리하십시오. 모든 신호를 연결한 후에만 전원 코드를 다시 연결하십시오.
- 전원 코드가 밟히거나 끼이지 않도록 특히 플러그, 콘센트, 기기에서 나오는 지점을 보호하십시오. AC 주전원 플러그 또는 기기 커플러는 작동을 위해 쉽게 접근할 수 있어야 합니다.
- Meyer Sound에서 지정한 부착물/액세서리만 사용하십시오. Meyer Sound에서 지정하거나 장치와 함께 판매되는 캐스터 레일 또는 장비만 사용하십시오. 손잡이는 운반용입니다.
- 번개가 칠 때나 장기간 사용하지 않을 때는 이 장치의 플러그를 뽑으십시오.
- 이 장치에는 잠재적으로 위험한 전압이 포함되어 있습니다. 기기를 분해하지 마십시오. 외부 퓨즈 홀더가 있는 경우 교체 가능한 퓨즈만 사용자가 수리할 수 있습니다. 퓨즈를 교체할 때는 같은 종류, 같은 값만 사용하십시오.
- 기타 모든 서비스는 자격을 갖춘 서비스 담당자에게 문의하십시오. 기술문의 서비스는 전원코드가 플러그가 손상된 경우, 액체를 쏟았거나 물체를 장치에 떨어뜨린 경우, 비 또는 습기가 장치에 들어간 경우, 장치를 떨어뜨린 경우 또는 알 수 없는 이유로 기기가 정상적으로 작동하지 않을 경우 등과 같은 장치가 손상되었을 때 필요합니다.

**경고:** Meyer Sound IntelligentDC 전원 공급 장치 모델 MPS-488HP 및 MPS-482HP의 경우 장치의 출력 단자에 연결된 외부 배선은 지시를 받은 사람이 설치하거나 기성품 리드 또는 코드를 사용해야 합니다.

**경고:** 화재나 감전의 위험을 줄이려면 이 장치를 비나 습기에 노출시키지 마십시오. Meyer Sound의 날씨 보호 장비를 사용하지 않고 습하거나 습한 장소에 장비를 설치하지 마십시오.

**경고:** 클래스 I 장치는 보호 접지 연결이 있는 주 소켓 콘센트에 연결해야 합니다.

**주의:** 스피커에서 전원 코드를 뽑기 전에 메인 플러그를 뽑으십시오.

## 使用する記号

これらの記号は、本冊子およびフレームやシャーシに記載されている安全上または操作上の重要な特徴を示しています

| | | | | | | | |
|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |   |
| 危険な電圧 感電の危険性 | 重要な操作方法 | 保護接地 | 熱い表面 触れないでください | 電子使用説明書：指示場所はQRコードで  | 交流電源インレット | ミラノオーディオポート | アナログオーディオ入力<br>アナログオーディオループピング出力 |

## 重要な安全上の注意

この説明書をお読みください

この説明書を保管してください

すべての警告に注意してください

すべての指示に従ってください

この機器を水の近くで使用しないでください

乾いた布で拭いてください

換気口を塞がないでください。Meyer Soundの設置方法にしたがって設置してください

暖房器具やストーブなど、熱を発するものの近くに設置しないでください

接地型プラグの安全性を損なわないでください。接地型プラグには、2つのブレードと3つ目の接地用プロングがあります。この第3の突起は、安全のために設けられています。付属のプラグがお使いのコンセントに合わない場合は、電気店に相談してコンセントを交換してください

本機を2極3線式のアース付き電源コンセントに接続します。このレセプタクルは、ヒューズまたはサーキットブレーカーに接続する必要があります。それ以外のタイプのコンセントに接続すると、感電の危険があり、地域の電気規則に違反する可能性があります

感電の危険を避けるため、オーディオケーブルを取り付ける前に本機をAC電源から切り離してください。電源コードの再接続は、すべての信号の接続が終わってから行ってください

電源コードは、特にプラグやコンセント、機器から出ている部分で、歩いたり挟まれたりしないように保護してください。AC電源プラグや機器のカプラーは、操作できるようにしておく必要があります

本製品には、Meyer Soundが指定したキャスターレールやリギング、または本製品と一緒に販売されているアタッチメントやアクセサリーのみを使用してください。取っ手は持ち運び専用です

雷雨時や長期間使用しない場合は、本機の電源プラグを抜いてください

危険な電圧が含まれています。分解しようとしないでください。外部ヒューズホルダーが装備されている場合、交換可能なヒューズは、ユーザーが修理できる唯一のアイテムです。ヒューズを交換するときは、同じタイプと同じ値のみを使用してください。

その他のサービスについては、資格を持ったサービス担当者にご相談ください。電源コードやプラグが破損したとき、液体をこぼしたとき、本機の中に物を落としたとき、雨や湿気が入ったとき、本機を落としたときなど、何らかの理由で本機が正常に動作しなくなったときには、修理が必要です

警告 Meyer Sound IntelligentDC Power SupplyモデルMPS-488HPおよびMPS-482HPでは、ユニットの出力端子に接続される外部配線は、専門家による設置または既製のリード線やコードを使用する必要があります

警 告 火災や感電の危険を避けるため、本機を雨や湿気にさらさないでください。本機を雨や湿気の多い場所に設置する場合は、Meyer Soundの耐候性機器を使用してください

警告 クラスI機器は、保護接地接続された主電源ソケットに接続する必要があります

注意 電源コードをスピーカーから取り外す前に、主電源プラグを取り外してください

## ةمدختسملا زومرلا

لكيهلا وأ راطإلا وأ ىلع وبكتيبلا اذه يف ةمهم ليغشت وأ نامأ تازيمرلا ىلإ زومرلا هذه ريشت

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Input<br>Loop | ™ | | | | | | |
| إدخال الصوت التناظري<br>يرظانتلا توصلا جارخإ | "منفذ الصوت "ميلان | التيار المتردد لمدخلات الطاقة | تعليمات إلكترونية للاستخدام: موقع المساعدة موجود في رمز الاستجابة السريعة | سملت ال :نخاس حطس | التأريض الواقي | تعليمات تشغيل مهمة | فولتية خطيرة: خطر حدوث صدمة كهربائية |

## تعليمات أمنية هامة

- تامياعتلا هذه أرقا
- احتفظ بهذه التعليمات
- انتبه إلى جميع التحذيرات
- اتبع جميع التعليمات
- لا تستخدم هذا الجهاز بالقرب من الماء
- نظف بقطعة قماش جافة فقط
- لا تسد أي فتحات تهوية. قم بالتثبيت وفقًا لتعليمات التثبيت من الشركة المصنعة
- لا تقم بالتركيب بالقرب من أي مصادر حرارة مثل المشاعيع (الراديياتور) أو منافذ التدفئة أو المواقد أو أي جهاز آخر ينتج عنه حرارة
- لا تلغي غرض السلامة الخاص بقابس التأريض. يحتوي قابس التأريض على شفرتين وشق أرضي ثالث. يتم توفير الشق الثالث من أجل سلامتك. إذا كان القابس المرفق لا يتناسب مع المنفذ لديك ، فاستشر كهربائيًا لاستبدال القابس الحالي
- قم بتوصيل الجهاز بمقبس رئيسي ثنائي القطب وثلاثي الأسلاك. يجب توصيل الوعاء بفتيل أو قاطع دائرة. يشكل الاتصال بأي نوع آخر من الأوعية خطر حدوث صدمة وقد ينتهك الرموز الكهربائية المحلية
- لتقليل خطر التعرض لصدمة كهربائية ، افصل الجهاز عن مصدر التيار المتردد قبل تركيب كبل الصوت. أعد توصيل سلك الطاقة فقط بعد إجراء جميع توصيلات الإشارة
- احمِ سلك الطاقة من السير عليه أو الضغط عليه ، خاصةً عند القوابس ومآخذ التوصيل ونقطة خروجها من الجهاز. يجب أن يظل قابس التيار الكهربائي المتردد أو قارنة الأجهزة سهلة الوصول للتشغيل
- استخدم فقط المرفقات / الملحقات المحددة من قبل الشركة المصنعة. استخدم فقط مع قضبان العجلات أو المعدات المحددة من قبل الشركة المصنعة ، أو تباع مع الجهاز. المقابض للحمل فقط.
- افصل هذا الجهاز أثناء العواصف الرعدية أو عند عدم استخدامه لفترات طويلة من الزمن
- يحتوي هذا الجهاز على الفولتية التي من المحتمل أن تكون خطرة. لا تحاول تفكيك الوحدة. إذا كان الجهاز مزودًا بحامل فيوز خارجي ، فإن المصهر القابل للاستبدال هو المكون الوحيد الذي يمكن للمستخدم صيانته. عند استبدال المصهر ، استخدم فقط نفس النوع ونفس القيمة.
- قم بإحالة جميع الخدمات الأخرى إلى موظفي الخدمة المؤهلين. يلزم إجراء الصيانة في حالة تعرض الجهاز للتلف بأي شكل من الأشكال ، كما هو الحال عند تلف سلك أو قابس الإمداد بالطاقة ؛ انسكاب سائل أو سقطت أشياء في الجهاز ؛ مطر أو دخلت الرطوبة إلى الجهاز ؛ تم إسقاط الجهاز ؛ أو عندما لا يعمل الجهاز بشكل طبيعي لأسباب غير محددة

تحذير: بالنسبة Meyer Sound IntelligentDC Power Supply MPS - 488HP و MPS - 482HP لموديلات تتطلب الأسلاك الخارجية المتصلة بمحطات الإخراج للوحدات التثبيت من قبل شخص موجه أو استخدام خيوط أو حبال جاهزة

تحذيرات لتقليل مخاطر نشوب حريق أو صدمة كهربائية ، لا تعرض هذا الجهاز للمطر أو الرطوبة. لا تقم بتركيب الجهاز في أماكن المبللة أو رطبة بدون استخدام معدات الحماية من الطقس من Meyer Sound

تحذير: يجب توصيل أجهزة من الفئة ١ بمأخذ التيار الكهربائي باستخدام وصلة تأريض واقية

حذر: افصل قابس التيار الكهربائي قبل فصل سلك الطاقة عن

## שומישב סילמס

הדלשה וא תרגסמה לעו וז תרבוחב סיבושח לועפת וא תוחיטב ינייפאמ סינייצמ הלא סילמס

| כניסת שמע אנלוגית<br>יגולנא עמש תאלול טלפ | יציאת אודיו של מילאנו | כניסת זרם חילופין | הוראות שימוש אלקטרוניות<br>מיקום ההוראות בקוד | משטח חם לא לגעת | חיבור הארקה מגן | הוראות הפעלה חשובות | מתחים מסוכנים סכנת התחשמלות |
|---|---|---|---|---|---|---|---|
| Input<br>Loop | | | | | | | |

## הוראות בטיחות חשובות

- קרא את ההוראות האלה
- שמור את ההוראות האלה
- שימו לב לכל האזהרות
- בצע את כל ההוראות
- אל תשתמש במכשיר זה ליד מים
- נקה רק עם מטלית יבשה
- אין לחסום פתחי אוורור. התקן לפי הוראות ההתקנה מ Meyer Sound
- אין להתקין ליד מקורות חום כלשהם כגון רדיאטורים או מכשירי חום אחרים
- אל תעקוף את יכולות הבטיחות של תקע בעל הארקה. לתקע מוארק יש שתי שיניים - ושן נוספת לארקה. שן ההארקה מסופקת לבטיחותך. אם התקע שסופק לא מתאים לשקע שלך - התייעץ עם חשמלאי להחלפתו
- חבר את המכשיר לשקע רשת מוארק - דו קוטבי בעל 3 גידים
  השקע חייב להיות מחובר לנתיך או למפסק. חיבור לכל סוג שקע אחר מהווה סכנת התחשמלות ועלול להפר את חוקי החשמל המקומיים
- כדי להפחית את הסיכון להתחשמלות נתק את המכשיר מרשת החשמל לפני התקנת כבל שמע. חבר מחדש את כבל החשמל רק לאחר חיבור כל כבלי השמע והאות
- הגן על כבל החשמל מפני דריכה או התקלות, במיוחד בתקעים, בשקעי נוחות ובנקודה שבה הם יוצאים מהמכשיר. תקע החשמל או מתאם המכשיר יישארו נגישים לתפעול
- השתמש רק בהרחבות/אביזרים שצוינו על ידי היצרן. השתמש רק בעגלות ובציוד תלייה שצוין על ידי היצרן או נמכר עם המכשיר. הידיות מיועדות לנשיאה בלבד
- נתק מכשיר זה במהלך סופות ברקים או כאשר אינו בשימוש לפרקי זמן ארוכים
- אם מצויד במחזיק נתיך חיצוני, הנתיך הניתן להחלפה הוא הפריט היחיד שניתן לשירות על ידי המשתמש. בעת החלפת הנתיך, השתמש רק באותו סוג ובאותו ערך
- הפנה כל טיפול נוסף לצוות שירות מוסמך. שירות נדרש כאשר המכשיר ניזוק בכל דרך שהיא, כגון כאשר כבל אספקת החשמל או התקע נפגע, נוזל נשפך או חפצים נפלו לתוך המכשיר, גשם או לחות חדרו למכשיר, המכשיר נפל, או כאשר מסיבות לא ידועות המכשיר אינו פועל כרגיל

אזהרה: עבור ספקי כוח Meyer Sound IntelligentDC דגמים MPS-488HP-ו MPS-482HP החיווט החיצוני המחובר אל יציאות המכשיר דורשות התקנה על-ידי אדם מוסמך, או שימוש בכבלים מוכנים מראש

אזהרה: כדי להפחית את הסיכון של שריפה או התחשמלות, אל תחשוף את המכשיר לגשם או לחות. אין להתקין את המכשיר במקומות רטובים או לחים ללא שימוש בציוד הגנה מפני מזג האוויר של Meyer Sound

אזהרה: מכשירי Class I יחובר לשקע עם חיבור הארקה מגן

זהירות: נתק את תקע החשמל משקע החשמל לפני ניתוק כבל החשמל מהרמקול

# WIRING CAUTION

**⚠ CAUTION**

IntelligentDC Loudspeakers and/or MPS Power Supplies will be damaged:

1) If the 48 V DC pins of this power supply are connected to the audio input pins of an IntelligentDC loudspeaker (Figure 1).

2) If the polarity of the power conductors is reversed (Figure 2).

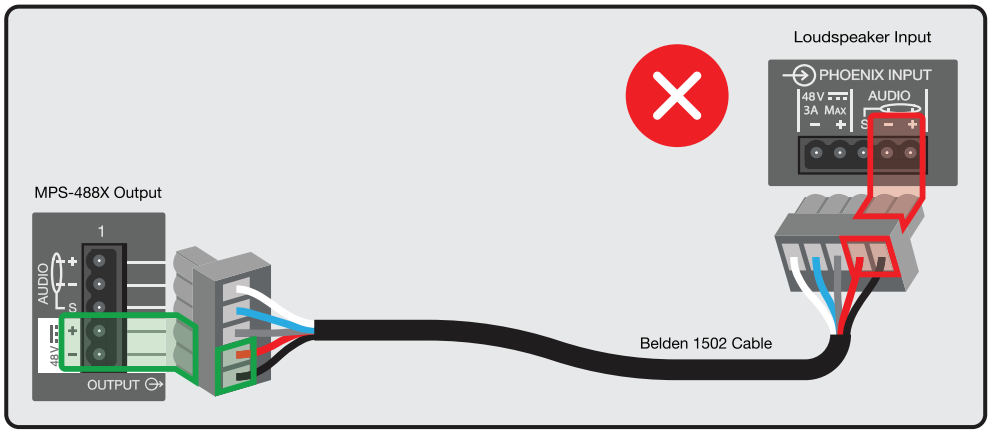



*Figure 1. Incorrect, Power Supply 48 V DC Pins Connected to Audio Pins of Loudspeaker.*

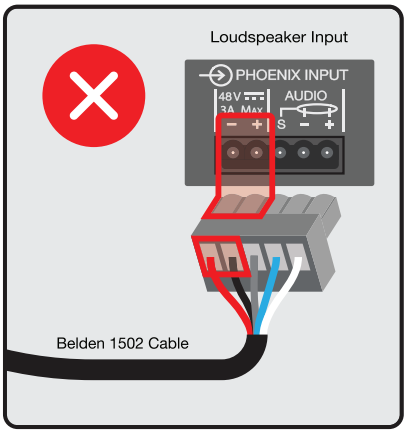



*Figure 2. Incorrect, Polarity of 48 V DC Conductors is Reversed at Loudspeaker.*

To avoid damaging IntelligentDC Loudspeakers and/or MPS Power Supplies, the cable connecting this power supply to loudspeakers must be correctly terminated. Only connect the (+) 48 V DC pin of the power supply to the (+) 48 V DC pin of the loudspeaker. Only connect the (-) 48 V DC pin of the power supply to the (-) 48 V DC pin of the loudspeaker (Figure 3).

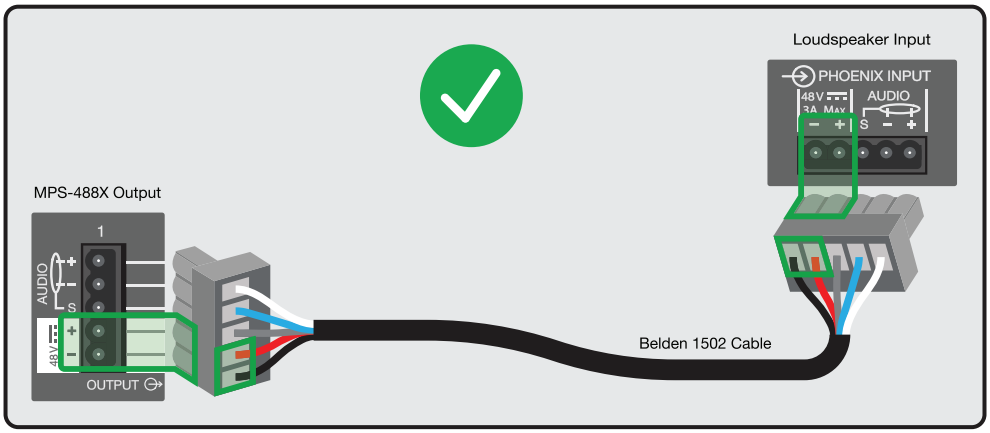



*Figure 3. Correct 48 V DC Pins of MPS Power Supply Connected to Correct 48 V DC Pins of IntelligentDC Loudspeaker*

# CONTENTS

# INTRODUCTION

## HOW TO USE THIS MANUAL

Please read these instructions in their entirety before configuring a Meyer Sound MPS-488X. In particular, pay close attention to information related to safety issues.

As you read these instructions, you will encounter the following icons for notes, tips, and cautions:

**NOTE:** A note identifies an important or useful piece of information relating to the topic under discussion.

**TIP:** A tip offers a helpful information relevant to the topic at hand.

**CAUTION:** A caution gives notice that an action may have serious consequences and could cause harm to equipment or personnel, or could cause delays or other problems.

Information and specifications are subject to change. Updates and supplementary information are available at:

- meyersound.com/products
- meyersound.com/documents

Meyer Sound Technical Support is available at:

- meyersound.com/contact (recommended)
- +1 510 486.1166
  (Monday through Friday 9:00 am to 5:00 pm PST)
- +1 510 486.0657
  (after hours support)

## MPS-488X EXTERNAL POWER SUPPLY

The MPS-488X provides DC power and delivers balanced audio signals to Meyer Sound IntelligentDC loudspeakers.

*MPS-488X IntelligentDC Power Supply*

The 1RU, standard 19-inch rack-mount MPS-488X can be used with a number of products that feature IntelligentDC technology, including MM-4XP, UP-4slim, Ashby ceiling loudspeakers, the HMS series of surround loudspeakers, the ULTRA-X20 models, and the USW-112XP subwoofer.

Powering loudspeakers from an external 48 V DC source eliminates the need for wiring conduits while preserving the advantages of self-powered loudspeakers. Meyer Sound's IntelligentDC loudspeakers are equipped with on-board amplification and signal-processing circuits that store DC power and tolerate voltage drops (up to 30 percent), thereby accommodating light-gauge cables and lengthy cable runs.

The MPS-488X receives up to eight channels of balanced audio from its input connectors and routes the audio, along with DC power, to its eight output connectors. Input channels feature toggle switches that route audio to corresponding outputs only, or to adjacent, contiguous outputs. For example, the input of channel 1 can be routed to outputs 1-2, the input of channel 3 can be routed to outputs 3–4. In another example, the input of channel 1 can be routed to outputs 1–4 and the input of channel 5 can be routed to outputs 5–8.

The MPS-488X includes eight 5-pin male Phoenix connectors for connection to IntelligentDC loudspeakers. These outputs are protected from short circuits and unexpected voltages. Each output is capable of delivering DC power to loudspeakers at cable lengths up to 150 or 300 feet (depending on loudspeaker model) with just 1 dB of loss in peak SPL using 18 AWG wire. The use of composite multi-conductor cables (such as Belden® 1502) allows a single cable to carry both balanced audio and DC power from the MPS-488X to the loudspeakers. Longer cable lengths are possible when the power conductor's diameter is increased or when an application does not require the loudspeakers to achieve their maximum acoustic output.

The power supply's front panel has two LEDs per output channel that provide useful feedback on the status of the system. The blue voltage LEDs indicate when voltage is present for each output channel. The green load current LEDs illuminate when a loudspeaker is connected to an output channel, glow brighter as the signal level increases, and flash if a short circuit is encountered.

The network connector is utilized to send telemetry data to a computer running Meyer Sound's Nebra software. The software displays the status and performance parameters of the power supply. Additionally, mute and wink functions are available.

**CAUTION:** This power supply is designed for indoor use, not designed to be weather resistant. It does not tolerate exposure to moisture, rain, extreme humidity, or extreme heat.

## MPS-488X SHIPPING CONTENTS

When shipped, the MPS-488X IntelligentDC Power Supply includes safety and compliance declaration documents, a wiring warning document, and the following connectors and cords:

*Table 1. MPS-488X IntelligentDC Power Supply Shipping Contents*

| Quantity | Description | Part Number |
|---|---|---|
| 1 | MPS-488X IntelligentDC Power Supply | |
| 9 (8 + 1 spare) | 3-pin, female Phoenix connector | 484.049 |
| 9 (8 + 1 spare) | 5-pin, female Phoenix connector | 484.053 |
| 1 | Power cord for region or cable-mount connector for power inlet | |

**NOTE:** All MPS-488X IntelligentDC power supplies ship with either an assembled power cord or a cable-mount connector (Neutrik NAC3FX-W-TOP). Compliance regulations of the destination country determine whether an assembled cord or cable mount connector that mates with the power inlet is included.


*MPS-488X IntelligentDC Power Supply Front and Rear Views*

# MPS-488X FRONT AND REAR PANELS


*MPS-488X IntelligentDC Power Supply Front Panel*

## MPS-488X FRONT PANEL

The MPS-488X front panel features LEDs for monitoring each loudspeaker channel.

### Voltage and Load Current LEDs (1–8)

The Voltage and Load Current LEDs are useful for verifying whether each channel output has voltage and whether the connected loudspeakers are receiving DC power and audio signal.


*MPS-488X Channel LEDs*

### Blue Voltage LEDs (1–8)

The blue Voltage LEDs indicate whether voltage is present at the outputs. When functioning normally, these LEDs are illuminated when the MPS-488X is powered on. The MPS-488X's intelligent circuit protection shields connected loudspeakers from surges and shorts. When a blue Voltage LED is unlit and its corresponding green Load Current LED is flashing, a surge or a short has been detected for the channel. If a surge or a short is encountered, power down the MPS-488X and inspect the loudspeaker cabling connected to that output channel.

Table 2 lists the possible states for the Voltage LEDs.

*Table 2: Blue Voltage LEDs*

| State | Cause | Recommended Action |
|---|---|---|
| Unlit (all LEDs) | MPS-488X not powered on. | Verify the MPS-488X is connected to an energized power source. |
| Unlit (single LED) | Surge or short encountered for a channel (corresponding Load Current LED flashes). | Power down the MPS-488X and inspect the loudspeaker cabling connected to that output channel. |
| Flashing (group of 4 LEDs or all 8 LEDs) | Internal failure encountered. | Service required; power down and disconnect the MPS-488X, then contact the Meyer Sound Service department. |
| Flashing (single LED) | Residual voltage detected for channel. | Power down the MPS-488X, then unplug and plug the channel's loudspeaker cable back in, and apply power to the MPS-488X; if the problem persists, verify the loudspeaker cabling. |

**CAUTION:** When a blue Voltage LED is unlit and its corresponding green Load Current LED is flashing, indicating a surge or a short for the channel, power down the MPS-488X and inspect the loudspeaker cabling connected to that output channel.

## Green Load Current LEDs (1–8)

Each green Load Current LED indicates whether a loudspeaker is connected to the corresponding channel output and receiving power. As a channel's audio signal level increases, its green LED glows brighter. If a green LED is not lit, verify the channel's blue Voltage LED is lit and check the cable connection to the loudspeaker. When a green Load Current LED flashes and its corresponding blue Voltage LED is unlit, a surge or a short has been detected for that channel. If a surge or a short is encountered, power down the MPS-488X and inspect the loudspeaker cabling for that channel.

Table 3 lists the possible states for the Load Current LEDs.

*Table 3: Load Current LED Indication States*

| State | Cause | Recommended Action |
|---|---|---|
| Unlit (all LEDs) | MPS-488X not powered on or no loudspeakers connected. | Verify the MPS-488X is connected to an energized power source; inspect the loudspeaker cabling. |
| Unlit (single LED) | No loudspeaker connected. | Power down the MPS-488X and inspect the loudspeaker cabling for the channel. |
| Flashing (group of 4 LEDs or all 8 LEDs)) | Internal failure encountered. | Service required; power down and disconnect the MPS-488X, then contact the Meyer Sound Service department. |
| Flashing (single LED) | The channel has encountered a surge or a short (corresponding Voltage LED is unlit). | Power down the MPS-488X and inspect the loudspeaker cabling for that channel. |
| Glows brighter (single LED) | LED glows brighter as channel's audio signal level increases. | None required; visual indication of higher load current. |

**CAUTION:** When a blue Voltage LED is unlit and its corresponding green Load Current LED is flashing, indicating a surge or a short for the channel, power down the MPS-488X and inspect the loudspeaker cabling for that channel.

## MPS-488X REAR PANEL

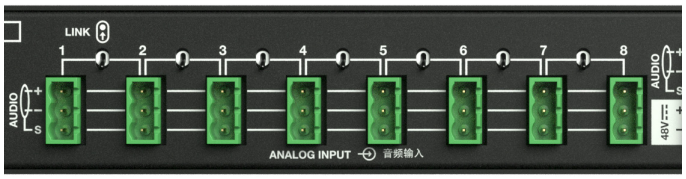
The MPS-488X rear panel includes a power inlet, eight balanced audio inputs, seven Link switches for routing audio from inputs to outputs, eight outputs (DC power and balanced audio), an Ethernet port, Wink button, and Restore and Safe buttons.

### AC Inlet

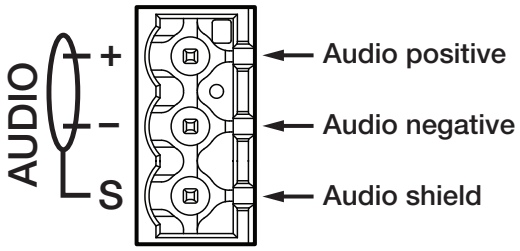
The MPS-488X has a Neutrik powerCON TOP twist-lock AC inlet connector (line, neutral/line, earth). This connector is rated for energized mating and functions as the power switch. Only use cords terminated with Neutrik powerCON TOP (NAC3FX-W-TOP or NAC3FX-W-TOP-L) connectors. Use either the included power cord or, if the unit did not ship with an assembled cord, assemble the appliance end of a power cord using the included powerCON TOP connector. Follow the assembly instructions found on Neutrik's web site (neutrik.com). Please see the "Power Requirements" section on page 8 for additional electrical requirements and information.

### Channel Inputs

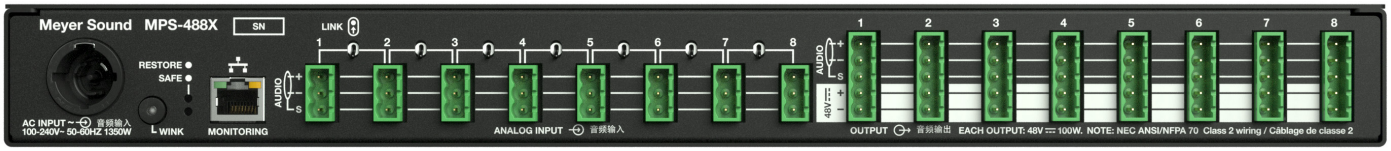
Up to eight channels of balanced audio are received from the MPS-488X's channel inputs. The inputs are equipped with male 3-pin Phoenix connectors.




*MPS-488X Channel Inputs*




*Input Connector Pinout*




*MPS-488X IntelligentDC Power Supply Rear Panel*

## Link Switches

Link switches determine how inputs are routed to outputs. When an input's Link switch is OFF (down position), the input is routed only to its corresponding output, for example, Input 1 routed to Output 1.

When a Link switch is ON (up position), the input is routed to its corresponding output and to the next adjacent output (for example, Input 1 routed to Output 1 and Output 2).

If multiple adjacent Link switches are ON, the input is routed to each adjacent output. For example, when Link switches 1 and 2 are ON, Input 1 is routed to Outputs 1–3.


*Seven Link Switches, Highlighted*

### Link Switch Routing Examples

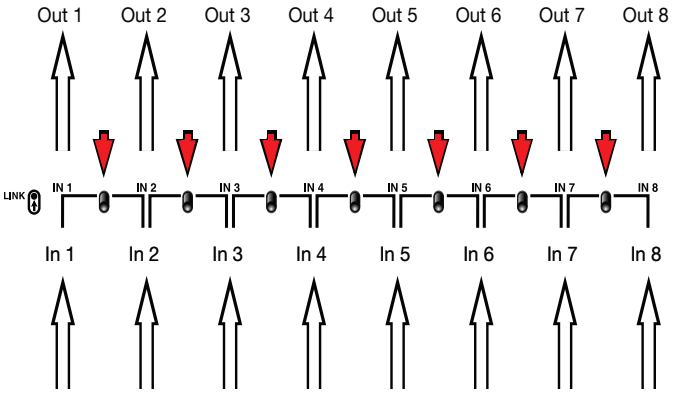
The following examples illustrate several common routing configurations of the Link switches.

#### *Routing Eight Inputs to Eight Separate Outputs*

To route eight inputs to eight separate channel outputs:

- Set all Link switches to OFF.

| Link 1 | Link 2 | Link 3 | Link 4 | Link 5 | Link 6 | Link 7 |
|---|---|---|---|---|---|---|
| OFF | OFF | OFF | OFF | OFF | OFF | OFF |

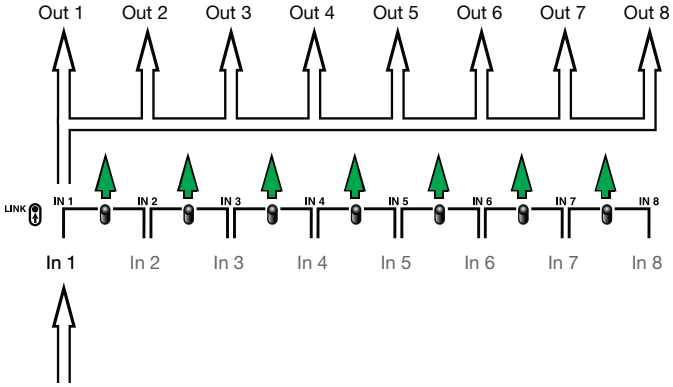



#### *Routing One Input to Eight Separate Outputs*

To route one input to eight channel outputs:

- Set all Link switches to ON.

| Link 1 | Link 2 | Link 3 | Link 4 | Link 5 | Link 6 | Link 7 |
|---|---|---|---|---|---|---|
| ON | ON | ON | ON | ON | ON | ON |

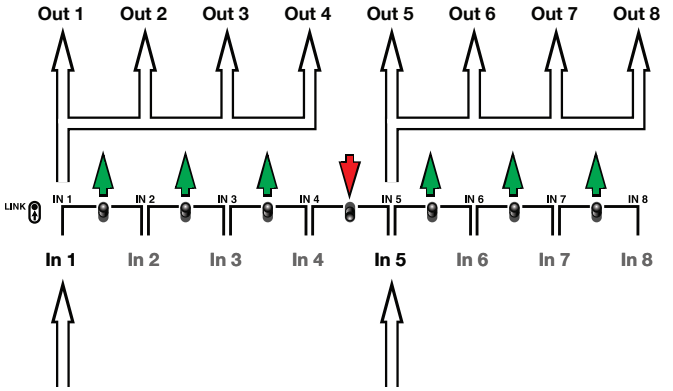



#### *Routing Two Inputs to Four Outputs Each*

To route two inputs to four channel outputs each:

- Set the Link 4 switch to OFF and all other Link switches to ON.

| Link 1 | Link 2 | Link 3 | Link 4 | Link 5 | Link 6 | Link 7 |
|---|---|---|---|---|---|---|
| ON | ON | ON | OFF | ON | ON | ON |



### Input Impedance for Linked Channel Inputs

When a Link switch is enabled, the channel input's unbuffered source signal is transmitted in parallel to each linked channel output. This causes the loudspeaker's effective input impedance (normally 10 kΩ for one loudspeaker) to be reduced for each linked output. For example, for one channel input to:

- 1 channel output, the effective loudspeaker input impedance is 10 kΩ
- 2 channel outputs, the effective loudspeaker input impedance is 5 kΩ.
- 4 channel outputs, the effective loudspeaker input impedance is 2.5 kΩ.
- 8 channel outputs, the effective loudspeaker input impedance is 1.25 kΩ.

To avoid distortion when linking channel inputs, make sure the source device is capable of driving the total effective load impedance of the linked loudspeakers.

**NOTE:** Most source devices are capable of driving loads no smaller than 10 times their output impedance. To drive eight loudspeakers linked from a single channel input, the source device should have an output impedance of approximately 100 ohms or less. The output impedance of Galileo GALAXY processor outputs is 50 ohms.

## Channel Outputs

The MPS-488X's eight channel outputs deliver DC power (48 V DC) and balanced audio to Meyer Sound IntelligentDC loudspeakers. The outputs are equipped with male 5-pin Phoenix connectors.

**CAUTION:** Make sure loudspeaker cables are wired correctly.

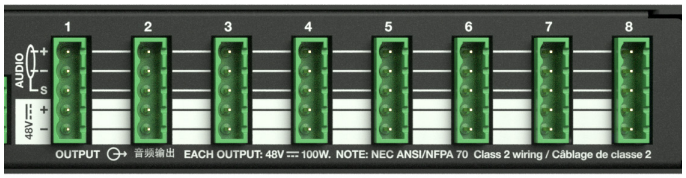
**NOTE:** For information about cable requirements for a particular loudspeaker, refer to its operating instructions.

**TIP:** A single composite cable (such as Belden® 1502 or equivalent) is capable of transporting both DC power and balanced audio signals between channel outputs and IntelligentDC loudspeakers.

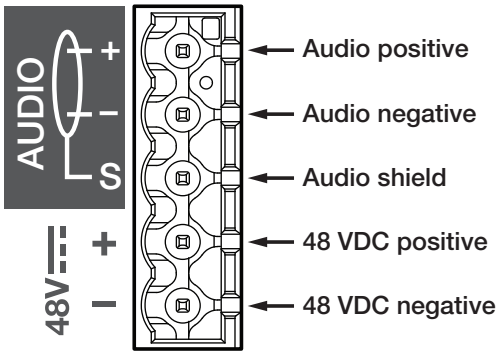
**NOTE:** HMS-15 loudspeakers require power from two contiguous channels of the MPS-488X. If audio signal is present on both channels connected to an HMS-15, the audio signals are summed by the loudspeaker's input electronics.

**NOTE:** Multiple Ashby Ceiling Loudspeakers may be daisy-chained from one output channel. See the Ashby Operating Instructions, available at: meyersound.com/documents.

The MPS-488X channel output connectors include three pins for balanced audio (positive, negative, and shield) and two pins for DC power (positive and negative). The pins are clearly labeled on the MPS-488X rear panel.




*MPS-488X Channel Outputs*

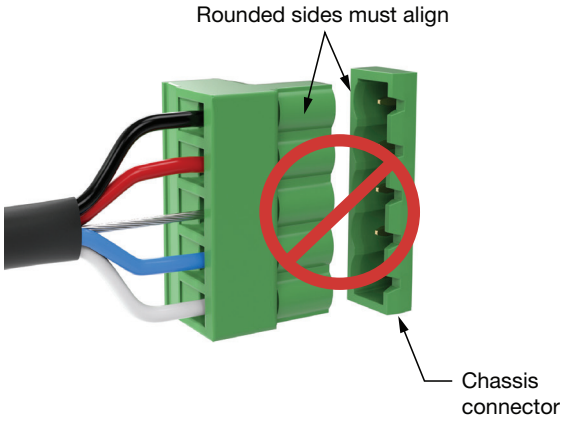



*Output Connector Pinout*

Each MPS-488X comes with nine (8 + spare) female 5-pin Phoenix cable mount connectors for assembling loudspeaker cables.

**CAUTION:** The power supply and/or the loudspeaker electronics will be damaged if the cable connecting the power supply and the loudspeaker do not connect the correct pins of the power supply to the loudspeaker(s). Damage due to mis-wiring is not covered by the product warranty. Please see the "Assembling Loudspeaker Cables" section on page 14.

**CAUTION:** With effort, it is possible to invert the Phoenix connector of a cable being plugged into the power supply or the loudspeaker. If the pins make contact and the power supply is powered, the electronics of the power supply and/or loudspeaker may be damaged and are not covered by the product warranty. If the use case includes the need to frequently connect/disconnect loudspeakers from the power supply, extend the outputs of the power supply to a panel that provides users with connectors suitable for multiple mating cycles, e.g., 5-pin XLR connectors.




*Do Not Force While Mating, Incorrect Connector Alignment*

## Network Connector

The rear panel includes a network connector labeled "Monitoring." When connected to a computer running Meyer Sound's Nebra software, telemetry data is displayed in the software. The network connector also facilitates uploading firmware updates.

If a network switch is used to connect multiple MPS-488X power supplies to a computer, the minimum requirement of the network switch is IEEE 802.3 compliance (standard for all things Ethernet) supporting at least 100 Mb/s full duplex connections. A certified AVB network switch is not required, but does include all the necessary functions.

**NOTE:** The network traffic of multiple MPS-488X power supplies and the network traffic of a Meyer Sound D-Mitri system control network are compatible on the same network and can utilize the same network switch(es).


*MPS-488X Rear Panel*

## Monitoring Port LEDs

At the top of the connector are two LEDs, which indicate Ethernet connection and activity as follows:

*Table 4: Monitoring Port LEDs*

| Green LED | Amber LED | Indication |
|---|---|---|
| OFF | OFF | No link |
| ON | OFF | 10BASE-T link with no activity |
| BLINKING | OFF | 10BASE-T link with activity |
| ON | ON | 100BASE-TX link with no activity |
| BLINKING | ON | 100BASE-TX link with activity |

**NOTE:** The Ethernet MAC does not support speeds above 100 Mb/s

## Wink Function

The Wink function facilitates the identification of physical power supplies with the power supplies listed in Meyer Sound's Nebra software. When active, both Nebra software and MPS-488X indicate the when the Wink function is active. To active the Wink function, click the Wink icon (eye icon) in Nebra software or press the Wink button next to the power inlet of an MPS-488X. To deactivate, click the Wink icon or press the Wink button again.

## Restore and Safe

These functions are provided in case there is an issue with the MPS-488X firmware. To activate either function, unplug the power cord from the power inlet. Press and hold either the Restore or Safe button and apply power. Continue holding down the button until the LEDs on the front panel flash.

When the Restore button is pressed, the firmware is reset to the factory defaults.

When the Safe button is pressed, the Recovery Mode firmware is loaded. Restarting in this mode is available in case the Normal Mode firmware is corrupted. Once the MPS-488X has completed startup, upload Normal Mode firmware, and restart normally. See "Firmware" section later in this document for firmware upload instructions.

# POWER REQUIREMENTS

## MPS-488X CURRENT DRAW

The current draw of the MPS-488X is dependent on two factors, the level of the audio signal(s) being reproduced by the connected IntelligentDC loudspeakers and the model(s) of IntelligentDC loudspeakers that are connected to the outputs.

The maximum power draw (> 10 seconds) of an MPS-488X is 1350 watts. Users are required to provide adequately sized breakers and electrical supply cords rated to carry this load. To calculate amperage, divide 1350 watts by the available electrical supply voltage, e. g., 1350 watts divided by 230 V AC is 5.9 amps.

## MPS-488X VOLTAGE REQUIREMENT

The operating voltage range of an MPS-488X is 100 - 240 V AC, 50 or 60 Hz. Make sure the voltage measured at the appliance end of the power cord is within the operating voltage range before applying power to the MPS-488X.

**CAUTION:** Damage to the IntelligentDC power supply and/or connected loudspeakers may occur if the voltage of the electrical source is not within the operating voltage range.

**NOTE:** For best performance, the AC cable voltage drop should not exceed 10 V, or 10 percent at 115 V and 5 percent at 230 V. Measure the AC voltage at the appliance end of the power cord to verify the voltage is within the operating voltage range.

## CIRCUIT BREAKER REQUIREMENTS

The circuit Breakers used in the Meyer Sound MDM-5000 are well suited for use with MPS-488X IntelligentDC power supplies and other Meyer Sound products:

European MDM-5000 includes ETI model number: KZS-1M 1p+N A C16/0.03, 6kA, which includes an RCD (residual current device) with a C-type tripping time constant and 30 mA RCD.

US MDM-5000 includes Eaton model: QCR2020 - CIRCUIT BREAKER 2-Pole, 20 A, 120/240 V AC

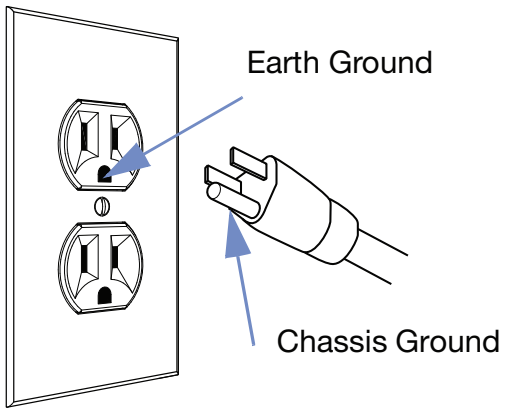
Circuit protection devices for main and branch circuits of any power distribution system used in conjunction with MPS-488X IntelligentDC power supplies should use similarly specified devices to avoid nuisance tripping.

**NOTE:** Many RCCB's (residual current circuit breakers) are sensitive to high-frequency noise in the Line-Neutral path and may false/nuisance trip. If required, make certain the residual current device is not sensitive to high-frequency noise or artifacts. Line-to-Ground and Neutral-to-Ground capacitance can cause an imbalance between the current carrying conductors in a cable or a conduit, potentially causing RCCB nuisance tripping. Consult with a licensed electrician or electrical engineer when designing electrical distribution systems.

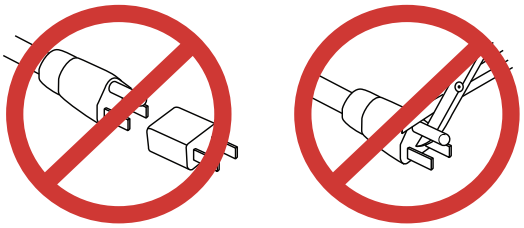
## ELECTRICAL SAFETY GUIDELINES

Pay close attention to these important electrical and safety guidelines.

- This Meyer Sound product requires a grounded outlet. Always use a grounded outlet and plug.




- Do not use a ground-lifting adapter or cut the AC plug ground pin.



- Keep all liquids away from the MPS-488X to avoid hazards from electrical shock.
- Do not operate the MPS-488X if the power cable is frayed or broken.

## POWERING LOUDSPEAKERS

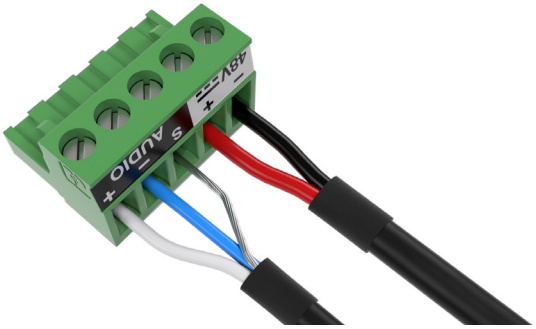
**NOTE:** For information about cable requirements for a particular loudspeaker, refer to its operating instructions.

**CAUTION:** Make sure loudspeaker cables are wired correctly.

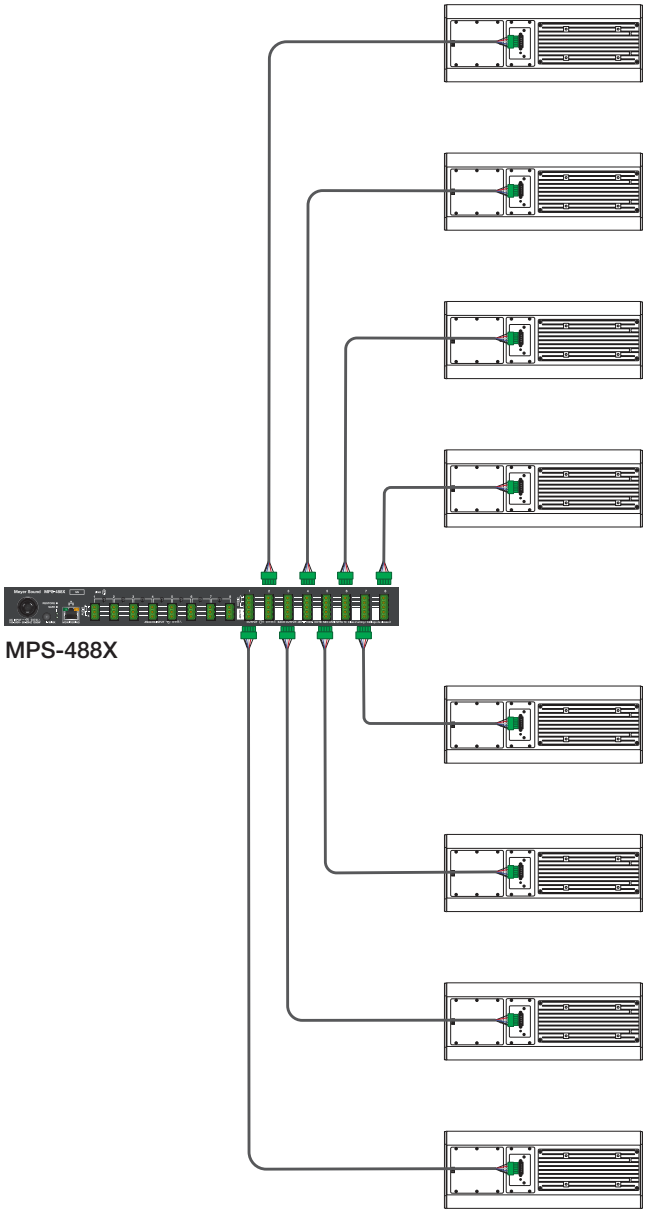
To power loudspeakers with the MPS-488X:

1. Power off the MPS-488X.
2. Connect audio sources (from a mixer or processor) to the MPS-488X channel inputs.
3. Use the MPS-488X Link switches to route channel inputs to the desired channel outputs (see “Link Switches” on page 5).
4. Connect the loudspeakers to the MPS-488X channel outputs. Use composite cables (such as Belden® 1502 or equivalent) wired for both DC power and balanced audio and outfitted with the appropriate connectors.
5. Power on the MPS-488X and monitor the LEDs on its front panel to verify the connections (see “Blue Voltage LEDs (1–8)” on page 3 and “Green Load Current LEDs (1–8)” on page 4).
6. Check loudspeaker LEDs to verify whether the loudspeakers are ready to reproduce audio.
7. Enable output from the audio sources (from the mixer or processor) connected to the MPS-488X.

**TIP:** For connection between the MPS-488X and IntelligentDC loudspeakers, two cables can be used: a 2-conductor cable for DC power and a 3-conductor cable for balanced audio, both attached to a single Phoenix connector on each cable end. This approach enables the conductor diameters of the DC cable to be increased for longer cable runs.




*Phoenix Connector with Separate Cables*



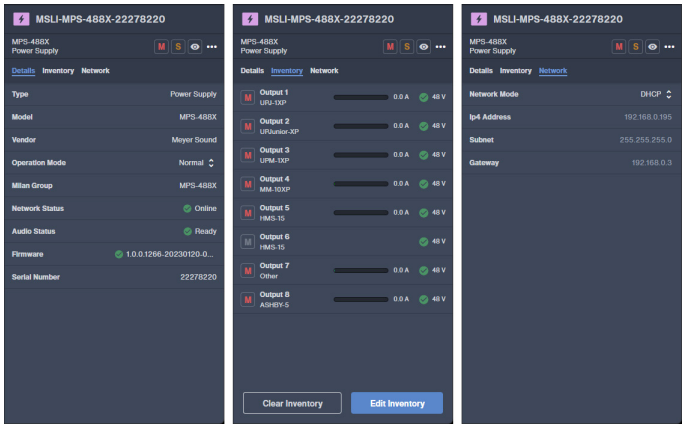

*MPS-488XP with Eight ULTRA-X20XP Loudspeakers*

**NOTE:** HMS-15 loudspeakers require power from two contiguous channels of the MPS-488X. If audio signal is present on both channels connected to an HMS-15, audio signals are summed by the loudspeaker’s input electronics.

**CAUTION:** Make sure loudspeaker cables are wired correctly.

## TELEMETRY

The MPS-488X transmits telemetry data via a standard Ethernet network to a computer running Meyer Sound's Nebra software. The Nebra software displays many parameters of the MPS-488X and the connected loudspeakers, including signal level, temperature, fan speed, and output voltage. A mute function for each channel is also available.




*Nebra Software, MPS-488X Sidebar Panel - Details, Inventory, Network Tabs*

## FIRMWARE

There are three ways to update the firmware of an MPS-488X, automatically and manually using Nebra software and manually using a web browser.

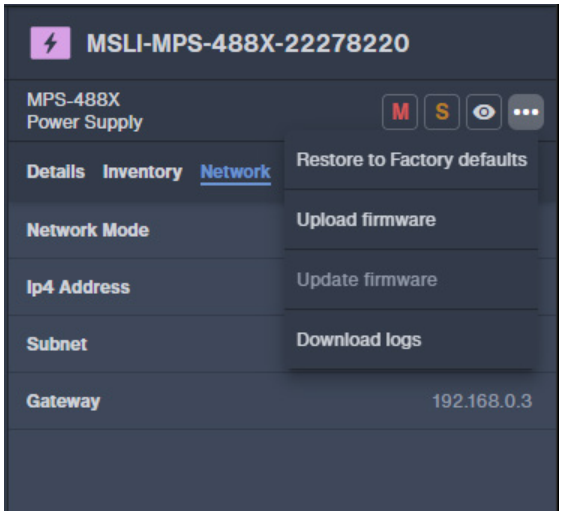
### Automatic Firmware Update

When the Nebra computer is connected to the Internet, firmware updates are automatically downloaded. When an MPS-488X is connected to the Nebra computer, Nebra will prompt users if a newer version of firmware is available to be uploaded to the MPS-488X.

### Manual Firmware Update - Nebra

Firmware can be manually uploaded using Nebra software when the computer is connected to an MPS-488X. Select an MPS-488X in the Device Workspace to open the sidebar panel, then click the three-dot more icon. Select Upload Firmware from the contextual menu to start uploading the most recent version of the firmware Nebra has downloaded.

**NOTE:** Connect the Nebra computer to the Internet and launch the Nebra software. Nebra will automatically download the most recent versions of all available Meyer Sound device firmware, including the firmware for the MPS-488X.




*Nebra Software, MPS-488X Sidebar Panel, Contextual Menu*

## Manual Firmware Update – Web Browser

When manually updating the firmware using a web browser and the MPS-488X web server, please contact Technical Support to receive the current MPS-488X firmware file by visiting meyersound.com/contact and selecting the appropriate options from the drop-down menus.

To update the firmware using a web browser, establish a network connection between the computer and the MPS-488X, then follow the steps below.

**Step 1:** Open a web browser and enter either:

- The IPv4 address of the MPS-488X, e. g., http://192.168.0.120

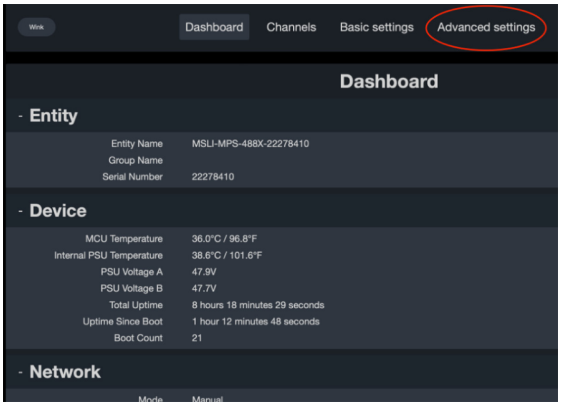
  By default (and following a factory reset), this is 192.168.0.120. The current IPv4 address is displayed in the Nebra Sidebar.

- mps-488x_<serial number>.local, e. g., http://mps-488x_22278410.local/

  The <serial number> is the serial number of the MPS-488X found on the rear panel.

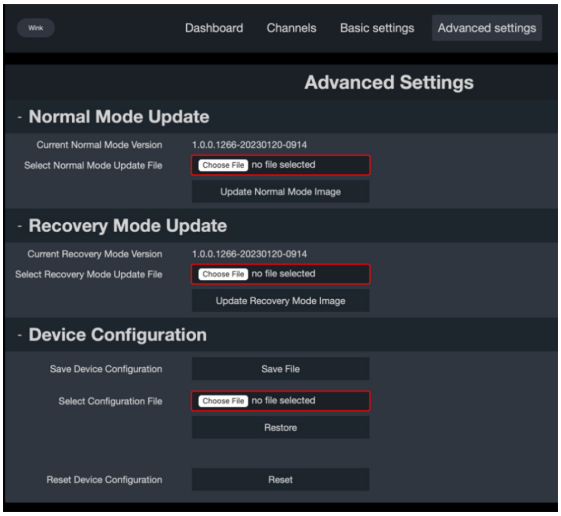
**Step 2:** Enter the login credentials for the MPS-488X. The default value is “admin” for both the username and password.

**Step 3:** Click the Advanced settings tab.




*Web Browser MPS-488X Interface, Dashboard Tab*

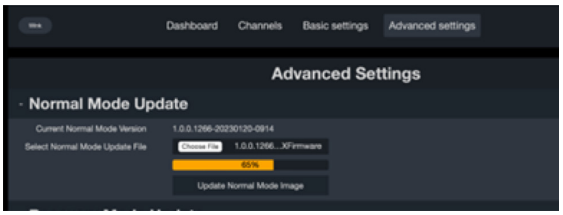
**Step 4:** Click the Choose File button in the Normal Mode Update section.




*Web Browser MPS-488X Interface, Advanced Settings Tab*

**Step 5:** Navigate to the new MPS-488X firmware file, e. g., 1.0.0.1266-20230120-0914.mps488XFirmware, then click Open.

**Step 6:** Click the Update Normal Mode Image button to start the firmware upload.




*Web Browser MPS-488X Interface, Advanced Settings Tab, Firmware Upload in Progress*

**Step 7:** Click Yes when prompted that the device will be disconnected.

**Step 8:** When the upload is complete, the MPS-488X will reboot.

**Step 9:** To confirm the firmware upload successfully, reload the web page and log in.

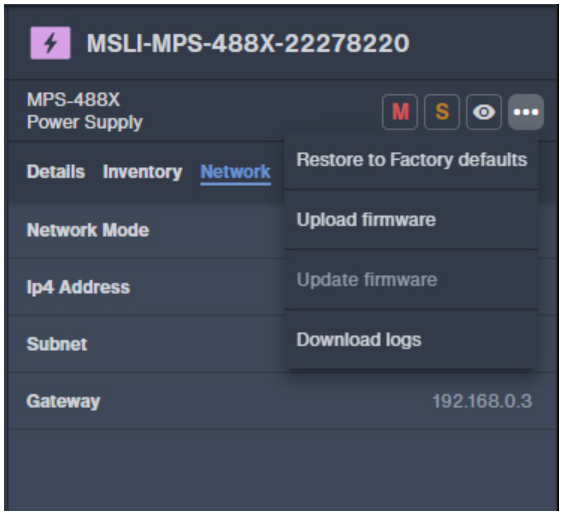
**Step 10:** Select the Advanced settings tab again and confirm the Current Normal Mode Version firmware listed corresponds to the firmware version uploaded.

**Step 11:** Repeat steps 4-9, but this time choosing Recovery Mode Update and the corresponding firmware file, e. g., 1.0.0.1266-20230120-0914.mps488XRecoveryFirmware.

**Step 12:** After logging back into the web page, confirm that both the Current Normal Mode Version and Current Recovery Mode Version correspond to the uploaded files.

## Logs

Each MPS-488X logs and saves various parameters. These logs can be downloaded to the Nebra computer by selecting an MPS-488X in the Devices Workspace, clicking the three-dot more menu in the Sidebar Panel, and selecting Download Logs.




*Nebra Sidebar Contextual Menu*

These logs include uptime, temperature, power supply status, channel status, fan, and power data.

## Nebra Software

Meyer Sound's Nebra software includes functions and monitoring of MPS-488X power supplies: monitoring of performance, operational controls, and firmware management. An Ethernet network connection is all that is required between one or many MPS-488X and a computer running Nebra software.

Nebra

# MPS-488X ACCESSORIES

## INTELLIGENTDC LOUDSPEAKER CABLES

The following cable and connectors are available from Meyer Sound and can be used to connect loudspeakers to MPS-488X power supplies.

**NOTE:** Loudspeaker cable assemblies commonly use Belden® 1502R (regular) or Belden® 1502P (plenum) cable. These are composite cables comprised of two 18 AWG [1 $mm^2$] conductors for DC power, two 22 AWG [0.5 $mm^2$] conductors for balanced audio, and one 24 AWG conductor for audio shield.

*IntelligentDC Loudspeaker Cables*

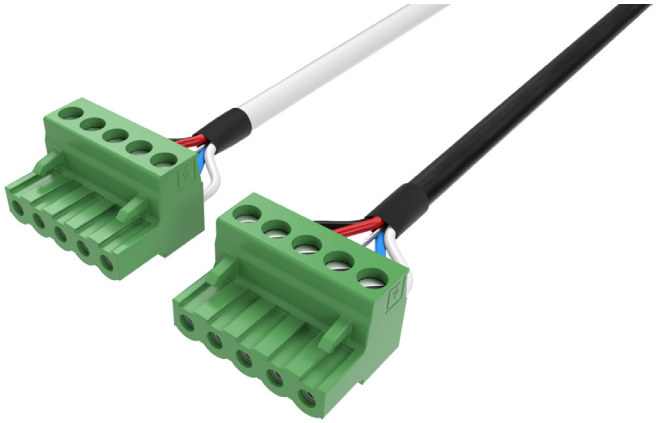
| Part number | Cable | Color | Coating | Length |
|---|---|---|---|---|
| 524.014 | Bulk (no connectors) | Black | Regular | 500 ft [152 m] spool |
| 524.015 | Bulk (no connectors) | White | Plenum | 500 ft [152 m] spool |

## PHOENIX CABLE CONNECTORS

The following cable connectors are available from Meyer Sound.

*Phoenix Cable Connectors*

| Part Number | Connector | Use |
|---|---|---|
| 484.053 | 5-pin female Phoenix cable mount connector | Mates to MPS-488X channel output connectors |
| 484.049 | 3-pin female Phoenix cable mount connector | Mates to MPS-488X channel input connectors |



*5-Pin Female Phoenix Connector with White (Plenum) or Black (Regular) Cables.*

*Assembled Phoenix-to-Phoenix Cable*

# ASSEMBLING LOUDSPEAKER CABLES

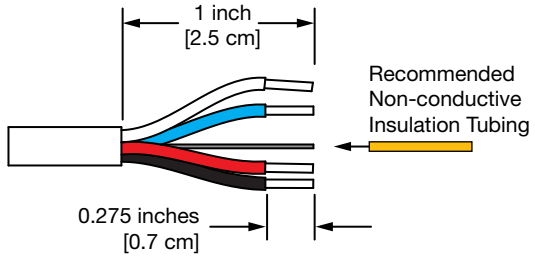
## ASSEMBLING PHOENIX-TO-PHOENIX LOUDSPEAKER CABLES

**CAUTION:** When wiring loudspeaker cables, it is extremely important that each pin be wired correctly. Make sure the 48 V DC from the external power supply is wired directly (and only) to the 48 V DC pins on the loudspeaker connector, and the polarity is observed (negative to negative, positive to positive) to avoid damage to the loudspeaker and/or power supply. In addition, make sure that audio pins are wired correctly; polarity reversals for audio signals affect system performance.

When connecting loudspeakers and power supplies equipped with Phoenix connectors, a cable terminated with 5-pin female Phoenix connectors at both ends is needed. The following procedure documents how to assemble these cables.

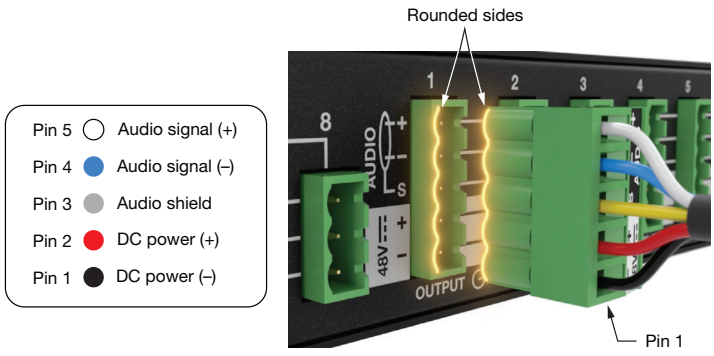
**To assemble a Phoenix-to-Phoenix cable:**

1. Remove 1 inch [2.5 cm] of the outer jacket and then strip the black, red, blue, and white wires by 0.275 inches [0.7 cm].

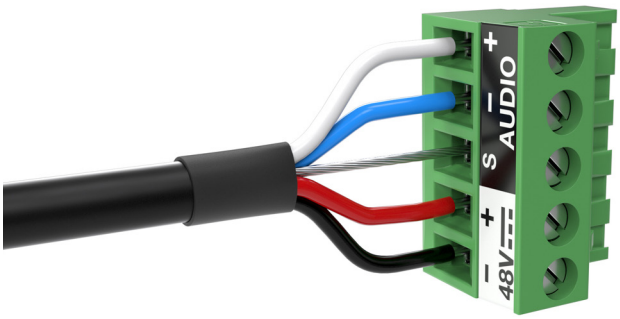



2. Add non-conductive insulation tubing to the shield conductor, cut to length so that 0.275 inches [0.7 cm] of the conductor is left exposed. This prevents unintentional shorting to other conductors.

3. Insert the five exposed conductors into the five cable holes of a 5-pin female Phoenix cable mount connector. Use the following wiring scheme.




*Pin Destinations for 5-Pin Phoenix Female Cable Mount Connector*




*Proper Assembly of 5-Pin Phoenix Female Connector*

4. Secure the conductors by tightening the screws in the Phoenix cable mount connector. Screws should be torqued to 0.5–0.6 N·m [4.4 - 5.3 in-lb]. Tug the conductors to ensure they are sufficiently retained.

   **CAUTION:** Screws should not be tightened while the connector is mated to a male Phoenix connector. Doing so will damage the contacts. During assembly, the Phoenix connector should only be held in place externally.

5. Repeat the previous steps and attach the other end of the cable to another 5-pin Phoenix female cable mount connector.

6. Verify the wiring polarity is correct for both cable ends.

# COMPLIANCE

## FEDERAL COMMUNICATIONS COMMISSION (FCC) STATEMENT

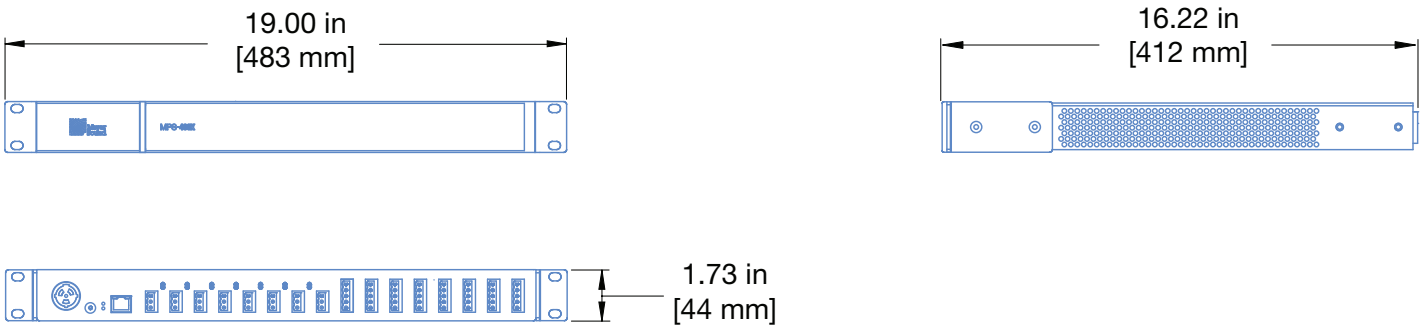
This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

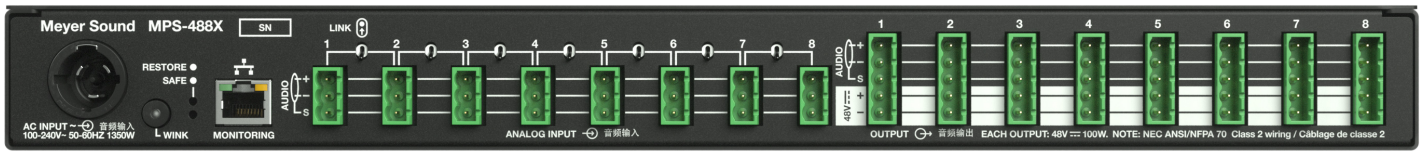
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## ICES-003 CLASS B NOTICE - AVIS NMB-003, CLASSE B

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

# SPECIFICATIONS




MPS-488X Rear Panel

| | |
|---|---|
| **FRONT PANEL** | |
| LEDs per channel | Eight blue LEDs to indicate presence of output voltage<br>Eight green LEDs to indicate load current |
| **REAR PANEL** | |
| Audio Input | Eight male 3-pin Phoenix connectors<br>Seven Link Switches |
| Channel Output | Eight male 5-pin Phoenix connectors |
| Output Wiring | Two pins for DC power, three pins for balanced audio<br>Pin 1: 48 V DC - (chassis/earth ground)<br>Pin 2: 48 V DC +<br>Pin 3: Audio shield/chassis/earth ground<br>Pin 4: Signal -<br>Pin 5: Signal + |
| Output Voltage[1] | 48 V DC per channel (with intelligent circuit protection against surges and shorts) |
| **AC POWER** | |
| AC Connector | Neutrik powerCON TRUE1 TOP (True Outdoor Protection) |
| Voltage Selection | Automatic |
| Safety Rated Voltage Range | 100–240 V AC; 50–60 Hz; 1350 W maximum |

| | |
|---|---|
| **TELEMETRY** | |
| | Via network connection to computer running software, reports the voltage and current values for each output channel. |
| **PHYSICAL** | |
| Dimensions | 1RU in height; W: 19.00 in (483 mm) x H: 1.73 in (44 mm) x D: 16.22 in (412 mm) |
| Weight | 15.1 lb (6.9 kg) |
| **ENVIRONMENTAL** | |
| Operating Temperature | From 0 °C (32 °F) to 45 °C (113 °F) |
| Non-operating Temperature | Below -40 °C (-40 °F), above 75 °C (167 °F) |
| Humidity | Up to 95% at 45 °C (113 °F) (non-condensing) |
| Operating Altitude | Up to 5000m (16,000 ft) |
| Non Operating Altitude | Above 12,000 m (39,000 ft) |

## NOTES

1. Supports NEC Class 2 wiring.

Specification Data Reference: MPS-488X Datasheet, 04.314.004.01 C

Meyer Sound Laboratories, Incorporated.
2832 San Pablo Avenue
Berkeley, CA 94702

+1 510 486.1166
meyersound.com/contact
meyersound.com