



# DM16/DM12

16/12 Input Analogue Live and Studio Mixer with MIDAS  
Microphone Preamplifiers

## Quick Start Guide



EN

## EN Important Safety Instructions



Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock.

Use only high-quality professional speaker cables with ¼" TS or twist-locking plugs pre-installed. All other installation or modification should be performed only by qualified personnel.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.



### Caution

To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside. Refer servicing to qualified personnel.



### Caution

To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.



### Caution

These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions. Repairs have to be performed by qualified service personnel.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Use only attachments/accessories specified by the manufacturer.



12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid

injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15. The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.

16. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.



17. Correct disposal of this product: This symbol indicates that this product must not be disposed of with household waste, according to the WEEE Directive (2012/19/EU) and your national law. This product should be taken

to a collection center licensed for the recycling of waste electrical and electronic equipment (EEE). The mishandling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the efficient use of natural resources. For more information about where you can take your waste equipment for recycling, please contact your local city office, or your household waste collection service.

18. Do not install in a confined space, such as a book case or similar unit.

19. Do not place naked flame sources, such as lighted candles, on the apparatus.

20. Please keep the environmental aspects of battery disposal in mind. Batteries must be disposed of at a battery collection point.

21. Use this apparatus in tropical and/or moderate climates.

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## ES Instrucciones de seguridad



Las terminales marcadas con este símbolo transportan corriente eléctrica de magnitud suficiente como para constituir un riesgo de descarga eléctrica. Utilice solo cables de altavoz profesionales y de alta calidad con conectores TS de 6,3 mm o de bayoneta prefijados. Cualquier otra instalación o modificación debe ser realizada únicamente por un técnico cualificado.



Este símbolo, siempre que aparece, le advierte de la presencia de voltaje peligroso sin aislar dentro de la caja; este voltaje puede ser suficiente para constituir un riesgo de descarga.



Este símbolo, siempre que aparece, le advierte sobre instrucciones operativas y de mantenimiento que aparecen en la documentación adjunta. Por favor, lea el manual.



### Atención

Para reducir el riesgo de descarga eléctrica, no quite la tapa (o la parte posterior). No hay piezas en el interior del equipo que puedan ser reparadas por el usuario. Si es necesario, póngase en contacto con personal cualificado.



### Atención

Para reducir el riesgo de incendio o descarga eléctrica, no exponga este aparato a la lluvia, humedad o alguna otra fuente que pueda salpicar o derramar algún líquido sobre el aparato. No coloque ningún tipo de recipiente para líquidos sobre el aparato.



### Atención

Las instrucciones de servicio deben llevarlas a cabo exclusivamente personal cualificado. Para evitar el riesgo de una descarga eléctrica, no realice reparaciones que no se encuentren descritas en el manual de operaciones. Las reparaciones deben ser realizadas exclusivamente por personal cualificado.

1. Lea las instrucciones.
2. Conserve estas instrucciones.
3. Preste atención a todas las advertencias.
4. Siga todas las instrucciones.
5. No use este aparato cerca del agua.
6. Limpie este aparato con un paño seco.
7. No bloquee las aberturas de ventilación. Instale el equipo de acuerdo con las instrucciones del fabricante.
8. No instale este equipo cerca de fuentes de calor tales como radiadores, acumuladores de calor, estufas u otros aparatos (incluyendo amplificadores) que puedan producir calor.

9. No elimine o deshabilite nunca la conexión a tierra del aparato o del cable de alimentación de corriente. Un enchufe polarizado tiene dos polos, uno de los cuales tiene un contacto más ancho que el otro. Una clavija con puesta a tierra dispone de tres contactos: dos polos y la puesta a tierra. El contacto ancho y el tercer contacto, respectivamente, son los que garantizan una mayor seguridad. Si el enchufe suministrado con el equipo no concuerda con la toma de corriente, consulte con un electricista para cambiar la toma de corriente obsoleta.

10. Coloque el cable de suministro de energía de manera que no pueda ser pisado y que esté protegido de objetos afilados. Asegúrese de que el cable de suministro de energía esté protegido, especialmente en la zona de la clavija y en el punto donde sale del aparato.

11. Use únicamente los dispositivos o accesorios especificados por el fabricante.



12. Use únicamente la carretilla, plataforma, trípode, soporte o mesa especificados por el fabricante o suministrados junto con el equipo. Al transportar el equipo, tenga cuidado para evitar daños y caídas al tropezar con algún obstáculo.

13. Desenchufe el equipo durante tormentas o si no va a utilizarlo durante un periodo largo.

14. Confíe las reparaciones únicamente a servicios técnicos cualificados. La unidad requiere mantenimiento siempre que haya sufrido algún daño, si el cable de suministro de energía o el enchufe presentaran daños, se hubiera derramado un líquido o hubieran caído objetos dentro del equipo, si el aparato hubiera estado expuesto a la humedad o la lluvia, si ha dejado de funcionar de manera normal o si ha sufrido algún golpe o caída.

15. Al conectar la unidad a la toma de corriente eléctrica asegúrese de que la conexión disponga de una unión a tierra.

16. Si el enchufe o conector de red sirve como único medio de desconexión, éste debe ser accesible fácilmente.



17. Cómo debe deshacerse de este aparato: Este símbolo indica que este aparato no debe ser tratado como basura orgánica, según lo indicado en la Directiva WEEE (2012/19/EU) y a las normativas aplicables en su país.

En lugar de ello deberá llevarlo al punto limpio más cercano para el reciclaje de sus elementos eléctricos / electrónicos (EEE). Al hacer esto estará ayudando a prevenir las posibles consecuencias negativas para el medio ambiente y la salud que podrían ser provocadas por una gestión inadecuada de este tipo de aparatos. Además, el reciclaje de materiales ayudará a conservar los recursos naturales. Para más información acerca del reciclaje de este aparato, póngase en contacto con el Ayuntamiento de su ciudad o con el punto limpio local.

18. No instale esta unidad en un espacio muy reducido, tal como encastrada en una librería o similar.

19. No coloque objetos con llama, como una vela encendida, sobre este aparato.

20. Tenga presentes todas las advertencias relativas al reciclaje y correcta eliminación de las pilas. Las pilas deben ser siempre eliminadas en un punto limpio y nunca con el resto de la basura orgánica.

21. Use este aparato en rangos de temperatura moderados y/o tropicales.

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ES

## FR Consignes de sécurité



Les points repérés par ce symbole portent une tension électrique suffisante pour constituer un risque d'électrocution.

Utilisez uniquement des câbles d'enceintes professionnels de haute qualité avec fiches Jack mono 6,35 mm ou fiches à verrouillages déjà installées. Toute autre installation ou modification doit être effectuée uniquement par un personnel qualifié.



Ce symbole avertit de la présence d'une tension dangereuse et non isolée à l'intérieur de l'appareil - elle peut provoquer des chocs électriques.



### Attention

Ce symbole signale les consignes d'utilisation et d'entre ! Tien importantes dans la documentation fournie. Lisez les consignes de sécurité du manuel d'utilisation de l'appareil.



### Attention

Pour éviter tout risque de choc électrique, ne pas ouvrir le capot de l'appareil ni démonter le panneau arrière. L'intérieur de l'appareil ne possède aucun élément réparable par l'utilisateur. Laisser toute réparation à un professionnel qualifié.



### Attention

Pour réduire les risques de feu et de choc électrique, n'exposez pas cet appareil à la pluie, à la moisissure, aux gouttes ou aux éclaboussures. Ne posez pas de récipient contenant un liquide sur l'appareil (un vase par exemple).



### Attention

Ces consignes de sécurité et d'entretien sont destinées à un personnel qualifié. Pour éviter tout risque de choc électrique, n'effectuez aucune réparation sur l'appareil qui ne soit décrite par le manuel d'utilisation. Les éventuelles réparations doivent être effectuées uniquement par un technicien spécialisé.

1. Lisez ces consignes.
2. Conservez ces consignes.
3. Respectez tous les avertissements.
4. Respectez toutes les consignes d'utilisation.
5. N'utilisez jamais l'appareil à proximité d'un liquide.
6. Nettoyez l'appareil avec un chiffon sec.
7. Veillez à ne pas empêcher la bonne ventilation de l'appareil via ses ouïes de ventilation. Respectez les consignes du fabricant concernant l'installation de l'appareil.
8. Ne placez pas l'appareil à proximité d'une source de chaleur telle qu'un chauffage, une cuisinière ou tout appareil dégageant de la chaleur (y compris un ampli de puissance).

9. Ne supprimez jamais la sécurité des prises bipolaires ou des prises terre. Les prises bipolaires possèdent deux contacts de largeur différente. Le plus large est le contact de sécurité. Les prises terre possèdent deux contacts plus une mise à la terre servant de sécurité. Si la prise du bloc d'alimentation ou du cordon d'alimentation fourni ne correspond pas à celles de votre installation électrique, faites appel à un électricien pour effectuer le changement de prise.

10. Installez le cordon d'alimentation de telle façon que personne ne puisse marcher dessus et qu'il soit protégé d'arêtes coupantes. Assurez-vous que le cordon d'alimentation est suffisamment protégé, notamment au niveau de sa prise électrique et de l'endroit où il est relié à l'appareil; cela est également valable pour une éventuelle rallonge électrique.

11. Utilisez exclusivement des accessoires et des appareils supplémentaires recommandés par le fabricant.



12. Utilisez exclusivement des chariots, des diables, des présentoirs, des pieds et des surfaces de travail recommandés par le fabricant ou livrés avec le produit.

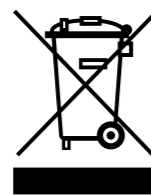
Déplacez précautionneusement tout chariot ou diable chargé pour éviter d'éventuelles blessures en cas de chute.

13. Débranchez l'appareil de la tension secteur en cas d'orage ou si l'appareil reste inutilisé pendant une longue période de temps.

14. Les travaux d'entretien de l'appareil doivent être effectués uniquement par du personnel qualifié. Aucun entretien n'est nécessaire sauf si l'appareil est endommagé de quelque façon que ce soit (dommages sur le cordon d'alimentation ou la prise par exemple), si un liquide ou un objet a pénétré à l'intérieur du châssis, si l'appareil a été exposé à la pluie ou à l'humidité, s'il ne fonctionne pas correctement ou à la suite d'une chute.

15. L'appareil doit être connecté à une prise secteur dotée d'une protection par mise à la terre.

16. La prise électrique ou la prise IEC de tout appareil dénué de bouton marche/arrêt doit rester accessible en permanence.



17. Mise au rebut appropriée de ce produit: Ce symbole indique qu'en accord avec la directive DEEE (2012/19/EU) et les lois en vigueur dans votre pays, ce produit ne doit pas être jeté avec les déchets ménagers. Ce produit doit être

déposé dans un point de collecte agréé pour le recyclage des déchets d'équipements électriques et électroniques (EEE). Une mauvaise manipulation de ce type de déchets pourrait avoir un impact négatif sur l'environnement et la santé à cause des substances potentiellement dangereuses généralement associées à ces équipements. En même temps, votre coopération dans la mise au rebut de ce produit contribuera à l'utilisation efficace des ressources naturelles. Pour plus d'informations sur l'endroit où vous pouvez déposer vos déchets

d'équipements pour le recyclage, veuillez contacter votre mairie ou votre centre local de collecte des déchets.

18. N'installez pas l'appareil dans un espace confiné tel qu'une bibliothèque ou meuble similaire.

19. Ne placez jamais d'objets enflammés, tels que des bougies allumées, sur l'appareil.

20. Gardez à l'esprit l'impact environnemental lorsque vous mettez des piles au rebus. Les piles usées doivent être déposées dans un point de collecte adapté.

21. Utilisez l'appareil dans un climat tropical et/ou modéré.

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## DE Wichtige Sicherheitshinweise



### Vorsicht

Die mit dem Symbol markierten Anschlüsse führen so viel Spannung, dass die Gefahr eines Stromschlags besteht.

Verwenden Sie nur hochwertige, professionelle Lautsprecherkabel mit vorinstallierten 6,35 mm MONO-Klinkensteckern oder Lautsprecherstecker mit Drehverriegelung. Alle anderen Installationen oder Modifikationen sollten nur von qualifiziertem Fachpersonal ausgeführt werden.



### Achtung

Um eine Gefährdung durch Stromschlag auszuschließen, darf die Geräteabdeckung bzw. Geräterückwand nicht abgenommen werden. Im Innern des Geräts befinden sich keine vom Benutzer reparierbaren Teile. Reparaturarbeiten dürfen nur von qualifiziertem Personal ausgeführt werden.



### Achtung

Um eine Gefährdung durch Feuer bzw. Stromschlag auszuschließen, darf dieses Gerät weder Regen oder Feuchtigkeit ausgesetzt werden noch sollten Spritzwasser oder tropfende Flüssigkeiten in das Gerät gelangen können. Stellen Sie keine mit Flüssigkeit gefüllten Gegenstände, wie z. B. Vasen, auf das Gerät.



### Achtung

Die Service-Hinweise sind nur durch qualifiziertes Personal zu befolgen. Um eine Gefährdung durch Stromschlag zu vermeiden, führen Sie bitte keinerlei Reparaturen an dem Gerät durch, die nicht in der Bedienungsanleitung beschrieben sind. Reparaturen sind nur von qualifiziertem Fachpersonal durchzuführen.

1. Lesen Sie diese Hinweise.
2. Bewahren Sie diese Hinweise auf.
3. Beachten Sie alle Warnhinweise.
4. Befolgen Sie alle Bedienungshinweise.
5. Betreiben Sie das Gerät nicht in der Nähe von Wasser.
6. Reinigen Sie das Gerät mit einem trockenen Tuch.
7. Blockieren Sie nicht die Belüftungsschlitze. Beachten Sie beim Einbau des Gerätes die Herstellerhinweise.
8. Stellen Sie das Gerät nicht in der Nähe von Wärmequellen auf. Solche Wärmequellen sind z. B. Heizkörper, Herde oder andere Wärme erzeugende Geräte (auch Verstärker).
9. Entfernen Sie in keinem Fall die Sicherheitsvorrichtung von Zweipol- oder geerdeten Steckern. Ein Zweipolstecker hat zwei unterschiedlich breite Steckkontakte. Ein geerdeter Stecker hat zwei Steckkontakte und einen dritten Erdungskontakt. Der breitere Steckkontakt oder der zusätzliche

Erdungskontakt dient Ihrer Sicherheit. Falls das mitgelieferte Steckerformat nicht zu Ihrer Steckdose passt, wenden Sie sich bitte an einen Elektriker, damit die Steckdose entsprechend ausgetauscht wird.

10. Verlegen Sie das Netzkabel so, dass es vor Tritten und scharfen Kanten geschützt ist und nicht beschädigt werden kann. Achten Sie bitte insbesondere im Bereich der Stecker, Verlängerungskabel und an der Stelle, an der das Netzkabel das Gerät verlässt, auf ausreichenden Schutz.

11. Das Gerät muss jederzeit mit intaktem Schutzleiter an das Stromnetz angeschlossen sein.

12. Sollte der Hauptnetzstecker oder eine Gerätesteckdose die Funktionseinheit zum Abschalten sein, muss diese immer zugänglich sein.

13. Verwenden Sie nur Zusatzgeräte/Zubehörteile, die laut Hersteller geeignet sind.



14. Verwenden Sie nur Wagen, Standvorrichtungen, Stative, Halter oder Tische, die vom Hersteller benannt oder im Lieferumfang des Geräts enthalten sind. Falls Sie einen

Wagen benutzen, seien Sie vorsichtig beim Bewegen der Wagen-Gerätkombination, um Verletzungen durch Stolpern zu vermeiden.

15. Ziehen Sie den Netzstecker bei Gewitter oder wenn Sie das Gerät längere Zeit nicht benutzen.

16. Lassen Sie alle Wartungsarbeiten nur von qualifiziertem Service-Personal ausführen. Eine Wartung ist notwendig, wenn das Gerät in irgendeiner Weise beschädigt wurde (z. B. Beschädigung des Netzkabels oder Steckers), Gegenstände oder Flüssigkeit in das Geräteinnere gelangt sind, das Gerät Regen oder Feuchtigkeit ausgesetzt wurde, das Gerät nicht ordnungsgemäß funktioniert oder auf den Boden gefallen ist.



17. Korrekte Entsorgung dieses Produkts: Dieses Symbol weist darauf hin, das Produkt entsprechend der WEEE Richtlinie (2012/19/EU) und der jeweiligen nationalen Gesetze nicht zusammen mit Ihren

Haushaltsabfällen zu entsorgen. Dieses Produkt sollte bei einer autorisierten Sammelstelle für Recycling elektrischer und elektronischer Geräte (EEE) abgegeben werden. Wegen bedenklicher Substanzen, die generell mit elektrischen und elektronischen Geräten in Verbindung stehen, könnte eine unsachgemäße Behandlung dieser Abfallart eine negative Auswirkung auf Umwelt und Gesundheit haben. Gleichzeitig gewährleistet Ihr Beitrag zur richtigen Entsorgung dieses Produkts die effektive Nutzung natürlicher Ressourcen. Für weitere Informationen zur Entsorgung Ihrer Geräte bei einer Recycling-Stelle nehmen Sie bitte Kontakt zum zuständigen städtischen Büro, Entsorgungsamt oder zu Ihrem Haushaltsabfallentsorger auf.

18. Installieren Sie das Gerät nicht in einer beengten Umgebung, zum Beispiel Bücherregal oder ähnliches.

19. Stellen Sie keine Gegenstände mit offenen Flammen, etwa brennende Kerzen, auf das Gerät.

20. Beachten Sie bei der Entsorgung von Batterien den Umweltschutz-Aspekt. Batterien müssen bei einer Batterie-Sammelstelle entsorgt werden.

21. Verwenden Sie das Gerät in tropischen und/oder gemäßigten Klimazonen.

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## PT Instruções de Segurança Importantes



### Aviso!

Terminais marcados com o símbolo carregam corrente elétrica de magnitude suficiente para constituir um risco de choque elétrico. Use apenas cabos de alto-falantes de alta qualidade com plugues TS de ¼" ou plugues com trava de torção pré-instalados. Todas as outras instalações e modificações devem ser efetuadas por pessoas qualificadas.



Este símbolo, onde quer que o encontre, alerta-o para a leitura das instruções de manuseamento que acompanham o equipamento. Por favor leia o manual de instruções.



### Atenção

De forma a diminuir o risco de choque elétrico, não remover a cobertura (ou a secção de trás). Não existem peças substituíveis por parte do utilizador no seu interior. Para esse efeito recorrer a um técnico qualificado.



### Atenção

Para reduzir o risco de incêndios ou choques elétricos o aparelho não deve ser exposto à chuva nem à humidade. Além disso, não deve ser sujeito a salpicos, nem devem ser colocados em cima do aparelho objectos contendo líquidos, tais como jarras.



### Atenção

Estas instruções de operação devem ser utilizadas, em exclusivo, por técnicos de assistência qualificados. Para evitar choques elétricos não proceda a reparações ou intervenções, que não as indicadas nas instruções de operação, salvo se possuir as qualificações necessárias. Para evitar choques elétricos não proceda a reparações ou intervenções, que não as indicadas nas instruções de operação. Só o deverá fazer se possuir as qualificações necessárias.

1. Leia estas instruções.
2. Guarde estas instruções.
3. Preste atenção a todos os avisos.
4. Siga todas as instruções.
5. Não utilize este dispositivo perto de água.
6. Limpe apenas com um pano seco.
7. Não obstrua as entradas de ventilação. Instale de acordo com as instruções do fabricante.
8. Não instale perto de quaisquer fontes de calor tais como radiadores, bocas de ar quente, fogões de sala ou outros aparelhos (incluindo amplificadores) que produzam calor.
9. Não anule o objectivo de segurança das fichas polarizadas ou do tipo de ligação à terra. Uma ficha polarizada dispõe de duas palhetas sendo uma mais larga do que a outra. Uma ficha do tipo ligação à terra dispõe

de duas palhetas e um terceiro dente de ligação à terra. A palheta larga ou o terceiro dente são fornecidos para sua segurança. Se a ficha fornecida não encaixar na sua tomada, consulte um electricista para a substituição da tomada obsoleta.

10. Proteja o cabo de alimentação de pisadelas ou apertos, especialmente nas fichas, extensões, e no local de saída da unidade. Certifique-se de que o cabo eléctrico está protegido. Verifique particularmente nas fichas, nos receptáculos e no ponto em que o cabo sai do aparelho.

11. O aparelho tem de estar sempre conectado à rede eléctrica com o condutor de protecção intacto.

12. Se utilizar uma ficha de rede principal ou uma tomada de aparelhos para desligar a unidade de funcionamento, esta deve estar sempre acessível.

13. Utilize apenas ligações/acessórios especificados pelo fabricante.



14. Utilize apenas com o carrinho, estrutura, tripé, suporte, ou mesa especificados pelo fabricante ou vendidos com o dispositivo. Quando utilizar um carrinho, tenha cuidado ao

mover o conjunto carrinho/dispositivo para evitar danos provocados pela terpidação.

15. Desligue este dispositivo durante as trovoadas ou quando não for utilizado durante longos períodos de tempo.

16. Qualquer tipo de reparação deve ser sempre efectuado por pessoal qualificado. É necessária uma reparação sempre que a unidade tiver sido de alguma forma danificada, como por exemplo: no caso do cabo de alimentação ou ficha se encontrarem danificados; na eventualidade de líquido ter sido derramado ou objectos terem caído para dentro do dispositivo; no caso da unidade ter estado exposta à chuva ou à humidade; se esta não funcionar normalmente, ou se tiver caído.



17. Correcta eliminação deste produto: este símbolo indica que o produto não deve ser eliminado juntamente com os resíduos domésticos, segundo a Directiva REEE (2012/19/EU) e a legislação nacional. Este produto deverá

ser levado para um centro de recolha licenciado para a reciclagem de resíduos de equipamentos eléctricos e electrónicos (EEE). O tratamento incorrecto deste tipo de resíduos pode ter um eventual impacto negativo no ambiente e na saúde humana devido a substâncias potencialmente perigosas que estão geralmente associadas aos EEE. Ao mesmo tempo, a sua colaboração para a eliminação correcta deste produto irá contribuir para a utilização eficiente dos recursos naturais. Para mais informação acerca dos locais onde poderá deixar o seu equipamento usado para reciclagem, é favor contactar os serviços municipais locais, a entidade de gestão de resíduos ou os serviços de recolha de resíduos domésticos.

18. Não instale em lugares confinados, tais como estantes ou unidades similares.

19. Não coloque fontes de chama, tais como velas acesas, sobre o aparelho.

20. Favor, obedecer os aspectos ambientais de descarte de bateria. Baterias devem ser descartadas em um ponto de coletas de baterias.

21. Use este aparelho em climas tropicais e/ou moderados.

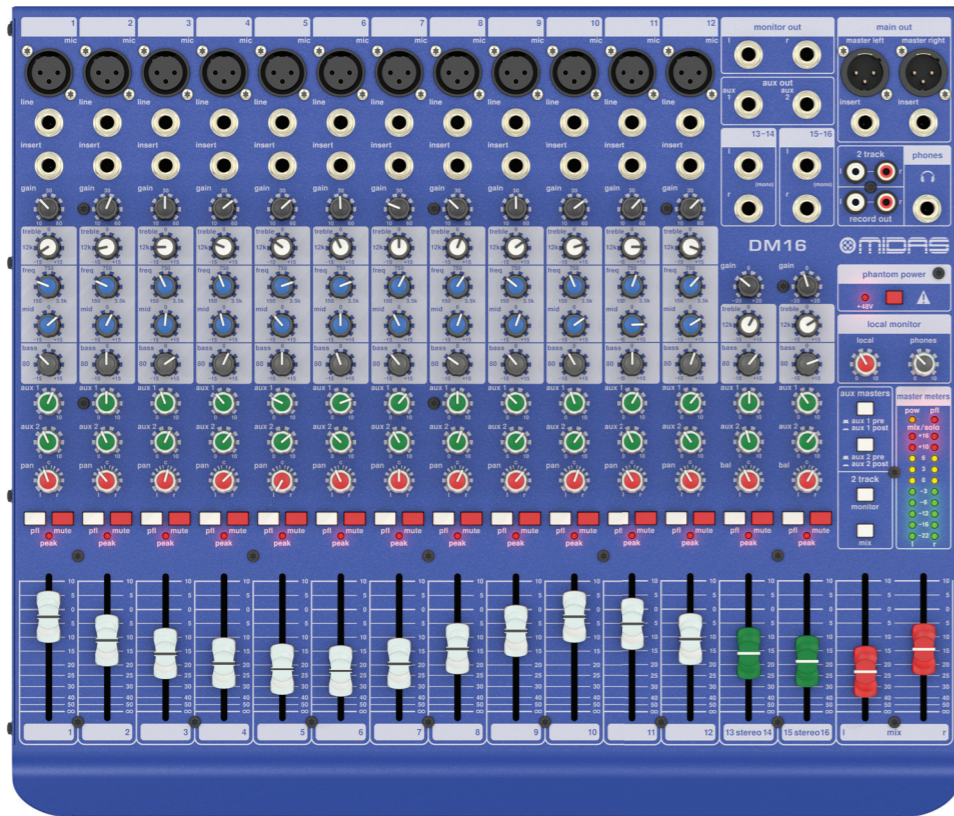
## LEGAL RENUNCIANTE

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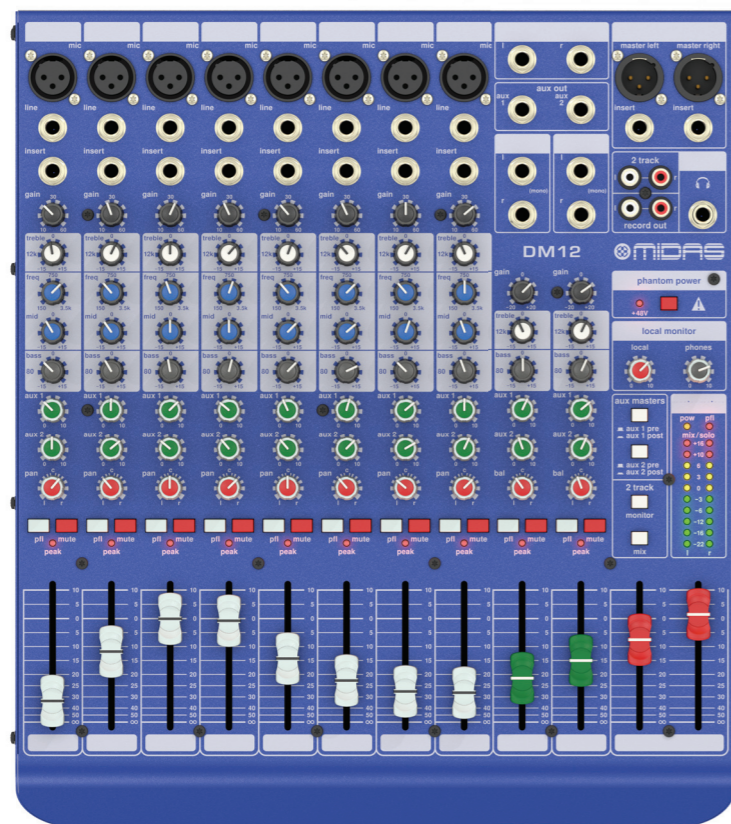
## GARANTIA LIMITADA

Para obter os termos de garantia aplicáveis e condições e informações adicionais a respeito da garantia limitada do MUSIC Group, favor verificar detalhes na íntegra através do website [music-group.com/warranty](http://music-group.com/warranty).

# 1. Introduction



DM16



DM12

## Welcome!

Thank you for purchasing the DM16/DM12 analogue mixing console.

The DM12 and DM16 are classic analogue consoles with plenty of routing options, musical EQ and the smooth, professional sound pioneered by MIDAS.

These consoles offer plenty of versatility for both studio and live applications, and with proper care and maintenance, you can expect your MIDAS console to perform faithfully for many years to come.

## Features

- Live performance and studio recording analogue mixer with 16/12 input channels
- 12/8 mono input channels with award-winning MIDAS microphone preamplifiers
- 2 electronically balanced stereo line input channels on ¼" TRS connectors
- 3 band EQ on mono channels with swept mid band
- 2 aux sends with pre/post fade switching
- 60 mm precision long-life faders
- Rugged chassis construction for durability in portable applications
- Auto-ranging universal switch-mode power supply
- 3-Year Warranty Program
- Designed and engineered in England

## About this manual

This is the operation manual for the DM16 and DM12 analogue mixing consoles. This manual is intended to help get your unit installed and in operation as quickly as possible by giving you unpacking, installation, connection, setting up and operating instructions. To help familiarise you with the DM16 and DM12, there is a description of the controls, along with easy-to-follow user instructions.

# 2. Getting Started

This section shows you how to unpack, install, connect up, switch on and configure the DM16/DM12 analogue mixing console.



**This equipment is supplied by a mains voltage that can cause electric shock injury.**

**Before installing, setting up or operating this equipment, make sure that you have read and fully understand all of this section and the "Important safety instructions" at the front of this manual. Refer to additional safety information on the top cover of the unit.**

## Unpacking

Carefully unpack your DM16/DM12 analogue mixing console. Then, inspect the console carefully for any signs of damage that may have occurred during transit and notify the courier immediately if you discover any.

Check the contents of your DM16/DM12 equipment package. If there are any parts missing, incorrect or faulty, please contact your local distributor or MIDAS. Please retain the original packing in case you should need to return the equipment to the manufacturer or supplier, or transport or ship the unit later.

## Installation

The position of the console will vary from venue to venue. When installing the console, take the following into consideration:

- Before installing and operating this Class 1 equipment, make sure it is correctly connected to the protective earth conductor of the mains voltage supply socket outlet through the mains lead.
- When positioning the console for FOH (Front Of House) use it is worth placing the console in a position where the sound system used can be heard properly from the mix position. Try to avoid placing the console behind pillars or large objects, or mixing from a level above the speaker position (for example, from a balcony).
- The console should be located in a convenient space commensurate with the use to which the console is being put.
- Ideally a cool area is preferred, away from power distribution equipment or other potential sources of interference.
- Do not install the equipment in places of poor ventilation.
- Do not install this equipment in a location subjected to excessive heat, dust or mechanical vibration. Allow for adequate ventilation around the equipment, making sure that its fans and vents are not obstructed. Whenever possible, keep the equipment out of direct sunlight.
- Do not place the equipment in an unstable condition where it might accidentally fall over.
- Provision should be made for some flat surface surrounding the console to prevent people using the console as a table top.

## Power

The internal power supply is of the switch mode type that automatically senses the incoming mains voltage and will work where the nominal voltage is in the range 100 VAC to 240 VAC.

The correct leads for connection in the area to which the unit was shipped are supplied with the unit. The equipment should only be plugged into the mains outlets using the supplied leads.

Make sure the plug fitted on the supplied mains cable is securely fitted to the mains IEC connector on the unit. When fitting or removing a plug, always hold the plug itself and never use the cable, as this may damage the cable. Never insert or remove an electric plug with wet hands.

## Handling the equipment

When lifting or moving the equipment, always take its size and weight into consideration. If necessary, use suitable lifting equipment or transporting gear, or sufficient additional personnel.

Completely isolate the equipment electrically and disconnect all cables from the equipment before moving it.

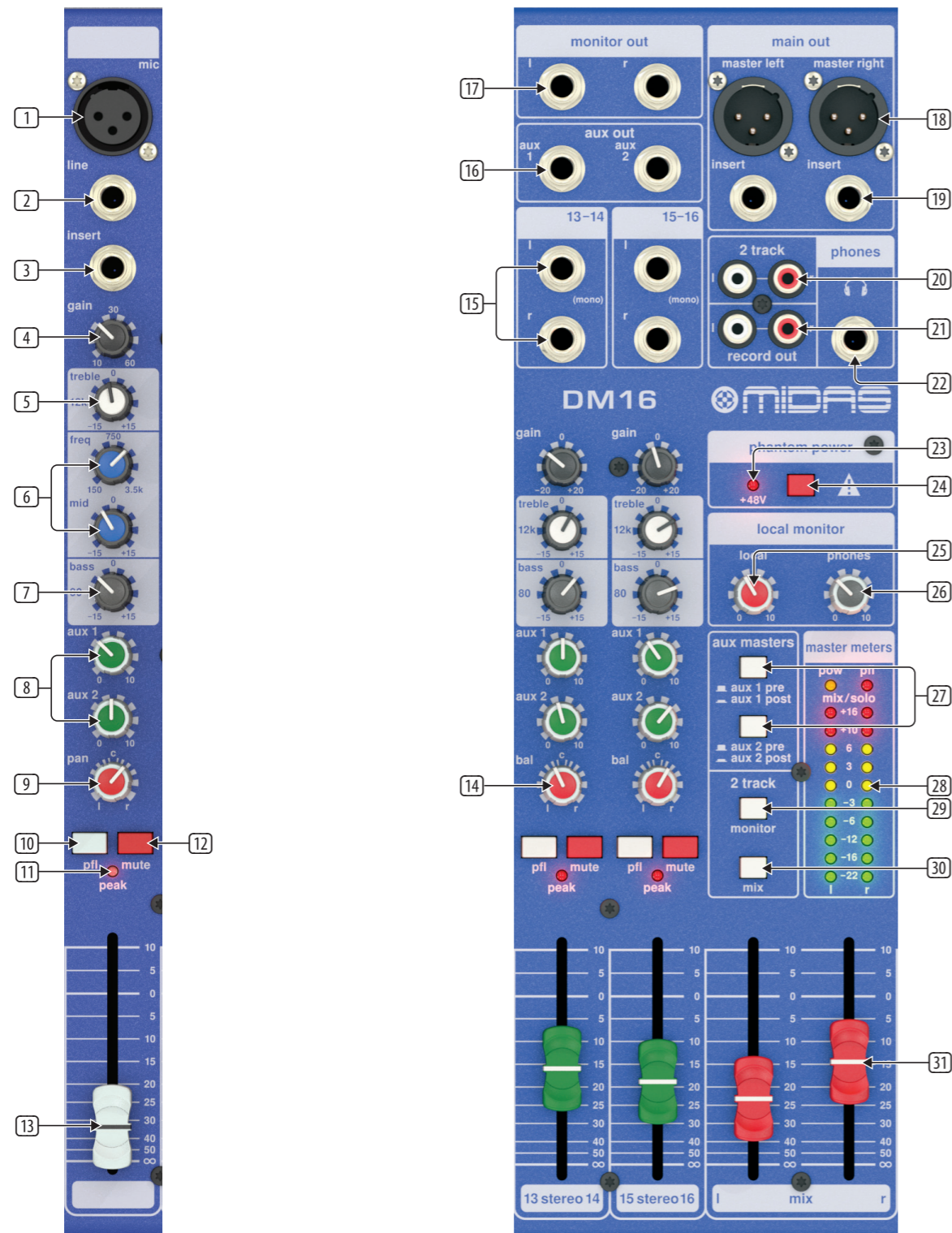
Do not insert your fingers or hands in any gaps or openings on the equipment, for example, vents.

## Electric fields

In accordance with Part 15 of the FCC Rules & Regulations, "... changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment."

Should this product be used in an electromagnetic field that is amplitude modulated by an audio frequency signal (20 Hz to 20 kHz), the signal to noise ratio may be degraded. Degradation of up to 60 dB at a frequency corresponding to the modulation signal may be experienced under extreme conditions (3 V/m, 90% modulation).

### 3. Top Panel



- 1 **MIC** input connects microphones and other balanced signals using XLR connectors.
- 2 **LINE** input uses a 1/4" TRS plug to connect either balanced or line-level unbalanced signals.
- 3 **INSERT** jack uses a 1/4" TRS plug to bring external effects processing (typically compression) into the channel's signal path. This jack requires specialised insert cables that split into two plugs (either 1/4" TS or XLR) to access the external unit's in and out connections.
- 4 **GAIN** knob adjusts the sensitivity of the MIC and/or LINE inputs.
- 5 **TREBLE** knob adjusts the high frequencies.
- 6 **MID** and **FREQ** knobs adjust midrange frequencies. Adjust the FREQ knob to select the specific frequency adjusted by the MID knob.
- 7 **BASS** knob adjusts the low frequencies.
- 8 **AUX 1** and **AUX 2** knobs controls the amount of signal sent from each channel to the AUX OUT jacks for monitoring or external effects processing. Use the AUX MASTERS buttons to control whether the AUX channels send a pre-fader signal (PRE) or a post-fader signal (POST).
- 9 **PAN** knobs control the left-right stereo placement for each channel.
- 10 **PFL** (Pre Fader Listen) button, when pressed, solos the channel and sends the input signal to the MASTER METERS section for more precise gain-setting. In PFL mode, the soloed signal routes to the MONITOR OUT and PHONES outputs, and the PFL LED in the MASTER METERS section will light up.
- 11 **PEAK LED** lights when the channel signal overloads.
- 12 **MUTE** button mutes the channel.
- 13 **CHANNEL FADERS** control the final level for each channel within the overall mix.
- 14 **BAL** knob controls the relative left-right balance for stereo signals coming in through the STEREO 1 and STEREO 2 inputs.
- 15 **STEREO 1** and **STEREO 2** inputs can be used to route left-right stereo signals into the mix, such as stereo returns from external effects processors. For mono signals, use the L (MONO) input of each pair of stereo inputs.
- 16 **AUX OUT** jacks can be used to route AUX mixes out to external effects processors or to stage monitors. For send-and-return effects processing, use the STEREO 1 and STEREO 2 inputs to route the effected "wet" signals back into the overall mix.
- 17 **MONITOR OUT** jacks use 1/4" TRS plugs to route a copy of the final mix out to local or studio monitors. Control the MONITOR OUT level by using the LOCAL knob in the LOCAL MONITOR section. In PFL (Pre Fader Listen) mode, the soloed PFL signal will override and replace the main mix signal in the MONITOR OUT output.
- 18 **MASTER LEFT** and **MASTER RIGHT** jacks use XLR connectors to send the final stereo mix out to monitors or the main house mix (live sound).
- 19 **MAIN OUT INSERT** jacks use a 1/4" TRS plugs to apply external effects processing to the final mix before the signal goes out through the MASTER outputs (e.g., to compress the entire final mix). This jack requires specialised insert cables that split into two plugs (either 1/4" TS or XLR) to access the external processor's in and out jacks.
- 20 **2 TRACK** uses RCA jacks to route an additional line-level stereo signal into the main mix (MIX button) and/or the MONITOR OUT mix (MONITOR button).
- 21 **RECORD OUT** uses RCA jacks to send a line-level copy of the final mix signal out to external recording devices.
- 22 **PHONES** jack connects headphones using a 1/4" TRS plug. Control the output level by using the PHONES knob in the LOCAL MONITOR section. The PHONES source signal comes from the main mix, except in PFL mode, when the soloed PFL signal will override and replace the main mix signal.
- 23 **+48 V LED** lights up to indicate that phantom power has been activated.
- 24 **PHANTOM POWER** button turns phantom power on and off.
- 25 **LOCAL** knob controls the output level for the MONITOR OUT jacks.
- 26 **PHONES** knob controls the output level for the PHONES jack.
- 27 **AUX MASTERS** buttons control the pre-fader (PRE) and post-fader (POST) settings for the AUX 1 and AUX 2 knobs.
- 28 **MASTER METERS** display levels for the main mix, as well as soloed channels with the PFL (Pre-Fader Listen) function activated for detailed gain-setting. The POW LED lights to indicate that the unit has been powered up. The PFL LED lights up to indicate that the meter is being used for PFL gain setting.
- 29 **2 TRACK MONITOR** button routes the stereo 2 TRACK signal into the MONITOR OUT mix.
- 30 **2 TRACK MIX** button routes the stereo 2 TRACK signal into the main mix.
- 31 **MIX** faders adjust the overall output of the mixer at the MASTER LEFT and MASTER RIGHT jacks.

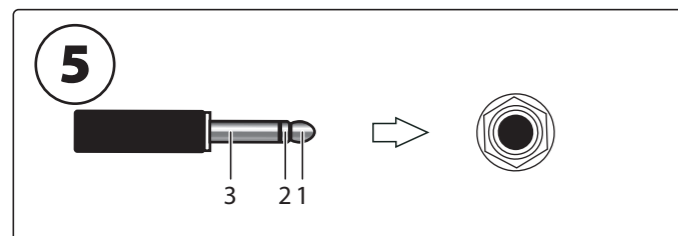
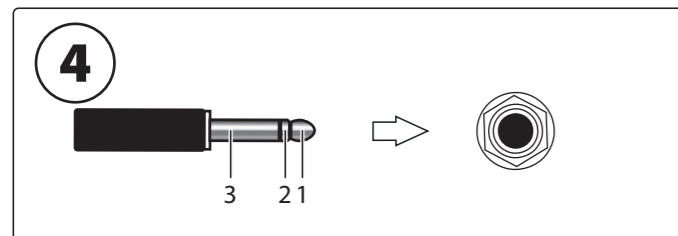
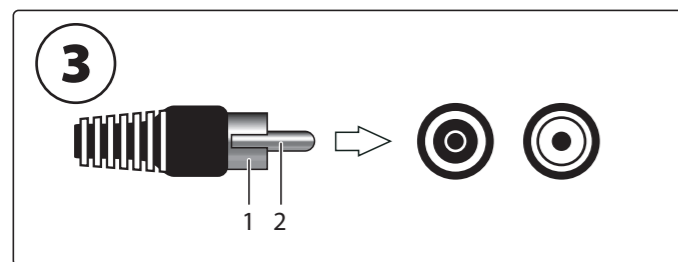
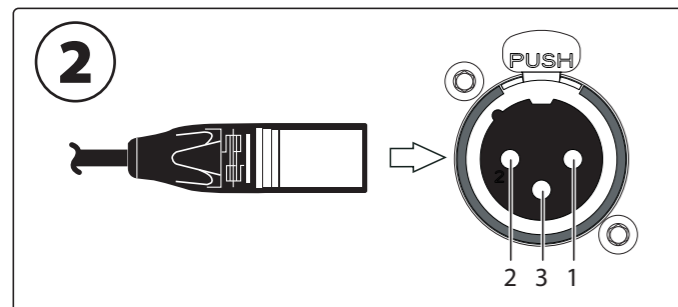
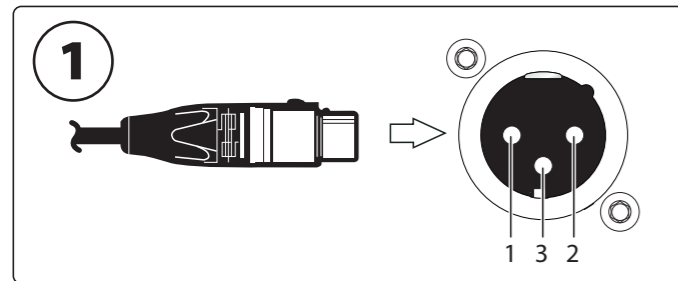
### 4. Rear Panel



- 32 **AC IN** accepts the included power cable for connection to a mains outlet.
- 33 **POWER ON** switch turns the mixer on and off.
- 34 **SERIAL NUMBER** for Warranty registration.

## 5. Connectors

To ensure the correct and reliable operation of the equipment, only high quality balanced, screened, twisted pair audio cable should be used. XLR connector shells should be of metal construction so that they provide a screen when connected to the console/snake and, where appropriate, they should have Pin 1 connected to the cable screen.

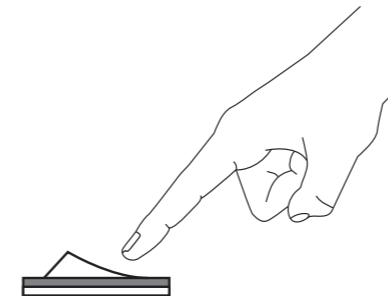


1. **Line output audio connector.** Female XLR plug and male XLR chassis connector with the following pinouts: 1 = ground; 2 = hot; and 3 = cold.
2. **Mic/line input audio connector.** Male XLR plug and female XLR chassis connector with the following pinouts: 1 = ground; 2 = hot; and 3 = cold.
3. **RCA connectors (2 track/record out).** Male RCA plug and female RCA chassis connector with the following pinouts: 1 = ground; 2 = signal.
4. **1/4" TRS jack plug (inserts).** Male 1/4" TRS plug and female TRS chassis connector with the following pinouts: 1 (tip) = send; 2 (ring) = return; 3 (sleeve) = ground.
5. **1/4" TRS jack plug (input, output, phones).** Male 1/4" TRS plug and female TRS chassis connector with the following pinouts: 1 (tip) = hot; 2 (ring) = cold; 3 (sleeve) = ground.

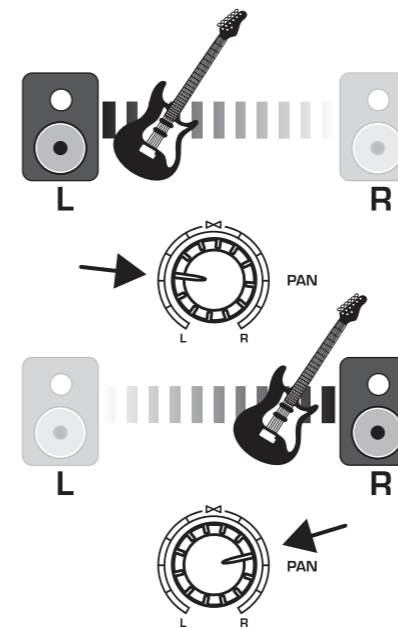
## 6. Operation

### Basic Operation

1. Make sure the power to all devices is turned off!
2. Connect all appropriate power and audio cables to the mixer.
3. Set the controls with all knobs centered and all faders down/off.
4. Turn the mixer on.



5. Set the GAIN for each channel. (See the Gain Setting section for details.)
6. With the MAIN MIX faders and LOCAL MONITOR knobs all the way down, turn on your PA system or monitors.
7. Slowly raise the MAIN MIX faders or LOCAL MONITOR knob to the desired level.
8. Adjust the relative level of each channel by raising each CHANNEL FADER.



9. Adjust the left-right position of a channel in the stereo field if necessary by turning the channel's PAN or BAL knob.
10. For live applications, adjust the overall output from the mixer to the power amp or powered speakers by raising the MIX faders. If the red +10 or +16 LEDs on the MASTER METERS light, lower the MIX faders.
11. Use the AUX 1 and AUX 2 knobs to send the channel signals out to an effects processor or stage monitor connected to the AUX OUT jacks. If used for effects, route the signal back from the processor to the STEREO 1 or STEREO 2 inputs.

### Gain Setting

1. Press the Channel 1 PFL (Pre-Fader Listen) button to solo the channel for gain setting using the MASTER METERS. The PFL LED in the MASTER METERS section will light up.
2. Sing, speak or play at a normal level through the microphone or instrument connected to Channel 1.
3. While singing or playing, turn Channel 1's GAIN control. The MASTER METERS will display the signal level. Set the GAIN control so that the loudest peaks reach 0 on the MASTER METERS.
4. Press the Channel 1 PFL button again to deactivate Pre-Fade Listen mode for that channel.
5. Repeat Steps 1-4 for any other channels that will be used.

## 7. Technical Specifications

|   | DM16   | DM12 |
|---|--|------|
| <b>Mono Inputs</b>                                |  |      |
| Mic inputs (MIDAS mic preamp)                     | 8  | 12   |
| Type  | XLR, balanced  |      |
| Mic EIN @ 60 dB gain, 50 Ω source at insert send  | -131 dBu, unweighted, 20 Hz to 20 kHz                |      |
| Mic EIN @ 60 dB gain, 150 Ω source at insert send | -128 dBu, unweighted, 20 Hz to 20 kHz                |      |
| Noise @ 10dB Gain, at insert send                 | -97 dBu, unweighted, 20 Hz to 20 kHz                 |      |
| Frequency response (-1 dB) at main output         | 20 Hz to 20 kHz (-1 dB)                              |      |
| Frequency response (-3 dB) at main output         | 70 kHz (-3 dB)                                       |      |
| Mic Gain range                                    | +10 dB to +60 dB                                     |      |
| Max. input level                                  | +11 dBu @ +10 dB gain                                |      |
| CMRR @ +60dB gain                                 | Typically -90 dB                                     |      |
| Impedance   | 2 kΩ, balanced                                       |      |
| Distortion (THD+N) at 0 dBu                       | 0.005% @ 1kHz  |      |
| Phantom power                                     | Switchable, +48 V                                    |      |
| <b>Line Input</b>                                 |  |      |
| Type  | ¼" TRS, balanced                                     |      |
| Impedance   | 20 kΩ balanced / unbalanced                          |      |
| Line Gain range                                   | -10 dB to +40 dB                                     |      |
| Max. input level                                  | +30 dBu  |      |
| <b>Stereo Inputs</b>                              |  |      |
| Type  | 4 x ¼" TRS connector, balanced                       |      |
| Impedance   | 20 kΩ balanced / unbalanced                          |      |
| Gain range  | -20 dB to +20 dB                                     |      |
| Max. input level                                  | +21 dBu  |      |
| <b>Equaliser</b>                                  |  |      |
| Low   | ±15 dB @ 80 Hz, shelving                             |      |
| Mid (mono inputs only)                            | ±15 dB @ 150 Hz to 3.5 kHz, variable semi-parametric |      |
| High  | ±15 dB @ 12 kHz, shelving                            |      |
| <b>Channel Inserts</b>                            |  |      |
| Type  | ¼" TRS connector, unbalanced                         |      |
| Max. input / output level                         | +21 dBu  |      |
| <b>Aux Sends</b>                                  |  |      |
| Type  | 2 x ¼" TRS connector, balanced                       |      |
| Impedance   | 240 Ω balanced, 120 Ω unbalanced                     |      |
| Max. output level                                 | +21 dBu  |      |
| <b>Monitor Out</b>                                |  |      |
| Type  | 2 x ¼" TRS connector, balanced                       |      |
| Impedance   | 240 Ω balanced, 120 Ω unbalanced                     |      |
| Max. output level                                 | +21 dBu  |      |
| <b>Main Out</b>                                   |  |      |
| Type  | 2 x XLR, electronically balanced                     |      |
| Impedance   | 100 Ω balanced, 50 Ω unbalanced                      |      |
| Max. output level                                 | +21 dBu  |      |
| <b>Main Out Inserts</b>                           |  |      |
| Type  | 2 x ¼" TRS connector, unbalanced                     |      |
| Max. input / output level                         | +21 dBu  |      |

|                                       | DM16  | DM12                                   |
|---------------------------------------|---|--|
| <b>Phones Output</b>                  |   |  |
| Type                                  | ¼" TRS connector, unbalanced                      |  |
| Impedance                             | 25 Ω  |  |
| Max. output level                     | +21 dBu   |  |
| <b>2-Track Input</b>                  |   |  |
| Type                                  | 2 x RCA, unbalanced                               |  |
| Impedance                             | 20 kΩ   |  |
| Max. input level                      | +21 dBu   |  |
| <b>Record Out</b>                     |   |  |
| Type                                  | 2 x RCA, unbalanced                               |  |
| Impedance                             | 1 kΩ  |  |
| Max. output level                     | +21 dBu   |  |
| <b>Main Mix System Noise</b>          |   |  |
| Main mix @ -∞, channel fader @ -∞     | -104 dBu, unweighted, 20 Hz to 20 kHz             |  |
| Main mix @ 0 dB, channel fader @ -∞   | -91 dBu, unweighted, 20 Hz to 20 kHz              |  |
| Main mix @ 0 dB, channel fader @ 0 dB | -84 dBu, unweighted, 20 Hz to 20 kHz              |  |
| <b>Power Supply / Voltage (Fuses)</b> |   |  |
| Switch mode power supply              | 100-240 V~ 50/60 Hz, switchable (T 1.6 A H 250 V) |  |
| Power consumption                     | 40 W  |  |
| Mains connection                      | Standard IEC receptacle                           |  |
| <b>Dimensions / Weight</b>            |   |  |
| Dimensions (H x W x D)                | 95 x 438 x 370 mm (3.7 x 17.2 x 14.6")            | 95 x 328 x 370 mm (3.7 x 12.9 x 14.6") |
| Weight                                | 5 kg (11 lbs)                                     | 3.9 kg (8.6 lbs)                       |



## Other important information

### EN Important information

**1. Register online.** Please register your new MUSIC Group equipment right after you purchase it by visiting [midasconsoles.com](https://midasconsoles.com). Registering your purchase using our simple online form helps us to process your repair claims more quickly and efficiently. Also, read the terms and conditions of our warranty, if applicable.

**2. Malfunction.** Should your MUSIC Group Authorized Reseller not be located in your vicinity, you may contact the MUSIC Group Authorized Fulfiller for your country listed under "Support" at [midasconsoles.com](https://midasconsoles.com). Should your country not be listed, please check if your problem can be dealt with by our "Online Support" which may also be found under "Support" at [midasconsoles.com](https://midasconsoles.com). Alternatively, please submit an online warranty claim at [midasconsoles.com](https://midasconsoles.com) BEFORE returning the product.

**3. Power Connections.** Before plugging the unit into a power socket, please make sure you are using the correct mains voltage for your particular model. Faulty fuses must be replaced with fuses of the same type and rating without exception.

## FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION



Responsible Party Name: **MUSIC Group Research UK Limited**

Address: **Klark Industrial Park,  
Walter Nash Road,  
Kidderminster. Worcestershire.  
DY11 7HJ. England.**

Phone Number: **+44 1562 741515**

### DM16/DM12

complies with the FCC rules as mentioned in the following paragraph:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### Important information:

Changes or modifications to the equipment not expressly approved by MUSIC Group can void the user's authority to use the equipment.

