SHURE

LEGENDARY
PERFORMANCE™

Wired Microphones
PG42-USB



English

Français

Deutsch

Español

Italiano

日本語

한국어

中文

CE

N108

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27A12072 (Rev. 3)

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES CLASS B. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MUST NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION. SUITABLE FOR HOME OR OFFICE USE.

Ce dispositif est conforme à la section 15 des réglementations Classe B de la FCC. L'utilisation de ce dispositif est sujette aux deux conditions suivantes : (1) ce dispositif ne doit pas causer de parasites et (2) ce dispositif doit accepter tous les parasites, y compris ceux qui pourraient provoquer un fonctionnement non souhaitable du dispositif. Pour utilisation à domicile ou au bureau.

Questo apparecchio è conforme alla Parte 15 delle norme FCC per i dispositivi di Classe B. Il funzionamento di questa apparecchiatura dipende dalle seguenti due condizioni: (1) questo apparecchio non deve causare interferenza; (2) questo apparecchio deve accettare qualsiasi interferenza, comprese eventuali interferenze che possano causare un funzionamento indesiderato. Adatto all'uso amatoriale o professionale.

Dieses Gerät entspricht Teil 15 der FCC-Richtlinien, Klasse B. Der Betrieb dieses Geräts unterliegt den beiden folgenden Bedingungen: (1) d ieses Gerät darf keine Interferenzen verursachen und (2) dieses Gerät muss jegliche Interferenzen aufnehmen können, einschließlich Interferenzen, die einen unerwünschten Betrieb des Geräts verursachen können. Für Heim- oder Bürogebrauch geeignet.

本装置はFCC規制クラスBのPart 15に準拠しています。本装置の操作は次の 2 つの条件の対象となります: (1) 装置は干渉を起こさない可能性がある、(2) 装置は望まない操 作を起こす干渉を含むあらゆる干渉を受け入れる。家庭またはオフィスでの使用に最適。

Este producto cumple la parte 15 de las normas de la FCC (Comisión Federal de Comunicaciones de los E.U., por sus siglas en inglés), Clase B. El uso de este dispositivo está sujeto a las dos condiciones siguientes: (1) no se permite que este dispositivo cause interferencias y (2) este dispositivo deberá aceptar cualquier interferencia, incluso la que pudiera causar su mal funcionamiento. Adecuado para uso doméstico o en oficinas.

이 기기는 FCC 규정 Class B의 Part 15를 준수합니다.
이 장치의 작동은 다음 두 가지 조건을 전제로 합니다.
(1) 이 장치는 간섭을 초래하지 않을 수 있으며
(2) 장치의 오작동을 초 래할 수 있는 간섭을 포함한 어떠한 간섭이라도 받아들여야 합니다 .
가정과 사무실용으로 적합함.

Это устройство соответствует требованиям части 15 правил FCC (класс B). Эксплуатация этого устройства допускается при следующих двух условиях: (1) это устройство не должно создавать помех и (2) это устройство должно принимать любые помехи, включая и те, которые могут привести к нежелательным явлениям при работе устройства. Подходит для домашнего и офисного использования.

本设备符合 FCC 法规类型 B 第 15 章的规定。必须满足以下两个条件才能够操作本设备： (1) 本设备不产生干扰，并且 (2) 本设备必须能够接受包括可能导致设备意外 操作的任何干扰。适用于家庭或办公室环境。

Este aparelho se encontra dentro dos limites preconizados para aparelhos digitais de classe B, de acordo com a Parte 15 das Normas do FCC. A operação deste dispositivo está sujeita às seguintes condições: (1) este dispositivo não pode causar interferência; e (2) este dispositivo deve aceitar quaisquer interferências, incluindo algumas que possam causar operação não desejada do dispositivo. Ideal para uso residencial ou comercial.

本裝置符合 FCC 法規類型 B 第 15 章的規定。 必須滿足以下兩個條件才能操作本裝置：(1) 本裝置不會產生干擾，並且 (2) 本裝置必須能夠接受接收到的包括可能導致裝置意外操作的任何干擾。適用於家庭或辦公室環境。

⚠ WARNING!

LISTENING TO AUDIO AT EXCESSIVE VOLUMES CAN CAUSE PERMANENT HEARING DAMAGE. USE AS LOW A VOLUME AS POSSIBLE.

Over exposure to excessive sound levels can damage your ears resulting in permanent noise-induced hearing loss **(NIHL)**. Please use the following guidelines established by the Occupational Safety Health Administration **(OSHA)** on maximum time exposure to sound pressure levels before hearing damage occurs.

90 dB SPL at 8 hours	**95 dB SPL** at 4 hours	**100 dB SPL** at 2 hours	**105 dB SPL** at 1 hour
110 dB SPL at ½ hour	**115 dB SPL** at 15 minutes	**120 dB SPL** Avoid or damage may occur	

⚠ AVERTISSEMENT !

L'ÉCOUTE AUDIO À UN VOLUME SONORE EXCESSIF PEUT CAUSER DES LÉSIONS AUDITIVES PERMANENTES. RÉGLER LE VOLUME LE PLUS BAS POSSIBLE.

Une surexposition à des volumes sonores excessifs peut causer des lésions aux oreilles entraînant une perte auditive permanente due au bruit. Se conformer aux directives ci-dessous, établies par l'Occupational Safety Health Administration **(OSHA)** pour les limites de durée d'exposition aux pressions acoustiques (SPL) avant de risquer des lésions auditives.

SPL de 90 dB pendant 8 heures	**SPL de 95 dB** pendant 4 heures	**SPL de 100 dB** pendant 2 heures	**SPL de 105 dB** pendant 1 heure
SPL de 110 dB pendant 1/2 heure	**SPL de 115 dB** pendant 15 minutes	**SPL de 120 dB** À éviter : risque de lésions auditives	

⚠ ACHTUNG!

MÖGLICHST GERINGE LAUTSTÄRKEPEGEL VERWENDEN.

Längerfristiges Hören bei übermäßigen Schallpegeln kann zu Hörschäden und zu permanentem, durch Lärm verursachten Gehörverlust führen. Bitte orientieren Sie sich an den folgenden von der Occupational Safety Health Administration **(OSHA; US-Arbeitsschutzbehörde)** erstellten Richtlinien für die maximale zeitliche Belastung durch Schalldruckpegel, bevor es zu Hörschäden kommt.

bei 90 dB Schalldruckpegel max. 8 Stunden	**bei 95 dB Schalldruckpegel** max. 4 Stunden	**bei 100 dB Schalldruckpegel** max. 2 Stunden	**bei 105 dB Schalldruckpegel** max. 1 Stunde
bei 110 dB Schalldruckpegel max. ½ Stunde	**bei 115 dB Schalldruckpegel** max. 15 Minuten	**120 dB Schalldruckpegel** vermeiden; ansonsten können Schäden auftreten	

⚠ ADVERTENCIA

EL ESCUCHAR REPRODUCCIONES DE AUDIO A NIVELES EXCESIVOS DE VOLUMEN PUEDE CAUSAR DAÑOS PERMANENTES AL OIDO. USE EL VOLUMEN MAS BAJO POSIBLE.

La exposición prolongada a niveles sonoros excesivamente intensos puede dañar los oídos y causar una pérdida permanente del oído causada por ruidos. Respete los lineamientos dados a continuación, los cuales fueron establecidos por la Administración de Salud y Seguridad Ocupacional **(OSHA)** de los EE.UU. e indican el tiempo máximo que puede escucharse un nivel determinado de presión sonora (SPL) antes de producirse daños al oído.

90 dB SPL por 8 horas	**95 dB SPL** por 4 horas	**100 dB SPL** por 2 horas	**105 dB SPL** por 1 hora
110 dB SPL por 1/2 hora	**115 dB SPL** por 15 minutos	**120 dB SPL** Evítese por completo, puesto que puede causar daños inmediatos	

SAFETY PRECAUTIONS

The possible results of incorrect use are marked by one of the two symbols - “WARNING” AND “CAUTION” - depending on the imminence of the danger and the severity of the damage.


WARNING: Ignoring these warnings may cause severe injury or death as a result of incorrect operation.


CAUTION: Ignoring these cautions may cause moderate injury or property damage as a result of incorrect operation.


WARNING

- If water or other foreign objects enter the inside of the device, fire or electric shock may result.
- Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm


CAUTION

- Never disassemble or modify the device, as failures may result.
- Do not subject to extreme force and do not pull on the cable or failures may result.
- Keep the microphone dry and avoid exposure to extreme temperatures and humidity.

PRÉCAUTIONS DE SÉCURITÉ

Les résultats possibles d'une utilisation incorrecte sont marqués par l'un des deux symboles - AVERTISSEMENT et ATTENTION - selon l'imminence du danger et la sévérité des dommages.


AVERTISSEMENT : L'ignorance de ces avertissements peut causer des blessures graves ou la mort suite à une utilisation incorrecte.


ATTENTION: L'ignorance de ces mises en garde peut causer des blessures modérées ou des dégâts matériels suite à une utilisation incorrecte.


AVERTISSEMENT

- Si de l'eau ou autres matériaux étrangers pénètrent dans l'appareil, il y a risque d'incendie ou de choc électrique.
- Ne pas essayer de modifier ce produit. Une telle opération est susceptible d'entraîner des blessures ou la défaillance du produit.


ATTENTION

- Ne jamais désassembler ou modifier cet appareil sous peine de provoquer des défaillances.
- Ne pas soumettre le câble à des forces extrêmes et ne pas tirer dessus sous peine de provoquer des défaillances.
- Maintenir le microphone sec et éviter de l'exposer à des températures extrêmes et à l'humidité.

SICHERHEITSVORKEHRUNGEN

Die möglichen Folgen des fehlerhaften Gebrauchs, die durch eines der beiden Symbole - „ACHTUNG“ und „VORSICHT“ - markiert sind, hängen von der Unmittelbarkeit der bevorstehenden Gefahr und des Schweregrads der Beschädigung ab.


ACHTUNG: Die Nichtbeachtung dieser Warnhinweise kann schwere oder tödliche Verletzungen infolge des fehlerhaften Gebrauchs verursachen.


VORSICHT: Die Nichtbeachtung dieser Vorsichtshinweise kann mittelschwere Verletzungen oder Sachschäden infolge des fehlerhaften Gebrauchs verursachen.


ACHTUNG

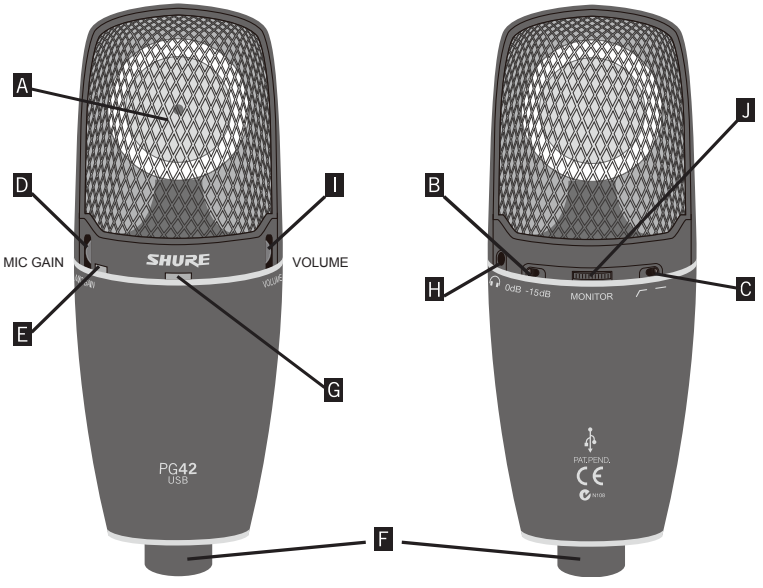
- Falls Wasser oder andere Fremdstoffe/-körper in das Gerät gelangen, kann es zu Bränden oder Stromschlägen kommen.
- Nicht versuchen, dieses Produkt zu modifizieren. Ansonsten könnte es zu Verletzungen und/oder zum Produktausfall kommen.


VORSICHT

- Das Gerät nie auseinanderbauen oder modifizieren, da dies zu Ausfällen führen kann.
- Keinen extremen Kräften aussetzen und nicht am Kabel ziehen, da dies zu Ausfällen führen kann.
- Das Mikrofon trocken halten und keinen extremen Temperaturen oder extremer Luftfeuchtigkeit aussetzen.

General Description

The PG42-USB large diaphragm side-address condenser microphone features a precisely tailored response to bring out the warmth and clarity of lead vocal and solo instrument tracks that are the focus of your recording mix. The extremely low noise floor makes it ideal for any application, including choral ensembles or ambient audio.



A	Microphone Capsule: 1.1-inch (27 mm) gold-sputtered Mylar® diaphragm
B	Pad Switch: Use to prevent clipping from extremely loud sound sources.
C	Low-frequency roll-off: 12 dB-per-octave below 120 Hz.
D	MIC GAIN: Adjusts microphone input level before the analog to digital conversion.
E	Tri-color peak level indicator: Green = signal, Yellow = peak, Red = clipping
F	USB Connector: Digital audio input and output
G	USB Power Indicator: Illuminates green when properly connected to a powered computer USB port.
H	Headphone jack: For zero-latency direct monitoring.
I	VOLUME: Adjusts headphone volume
J	MONITOR: Blends pre-recorded playback from the computer with live audio from the microphone.

Mounting

Attach to a microphone stand using the supplied shock mount.



Address the microphone from the front

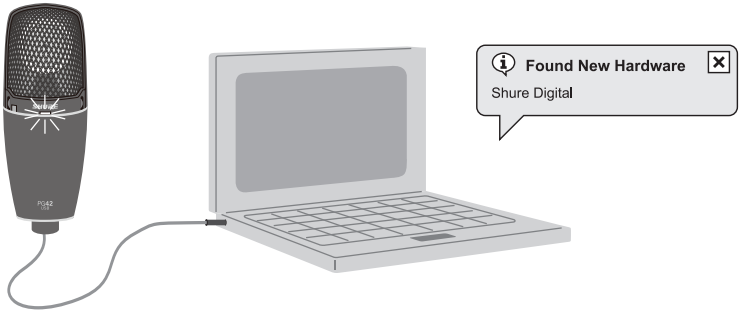
USB Connection



Connect to a powered USB port using a standard cable (supplied).

The green USB light should illuminate and the plug-and-play driver will install automatically.

You are then ready to record with your favorite audio software.



Note: Make sure to use a powered USB port.

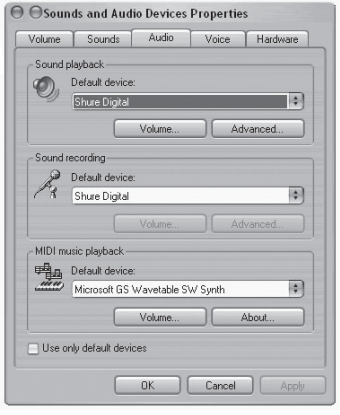
USB Audio Device Driver

If you encounter problems, make sure the driver was properly installed.

Windows Operating Systems

From the Control Panel, open Sounds and Audio Devices.

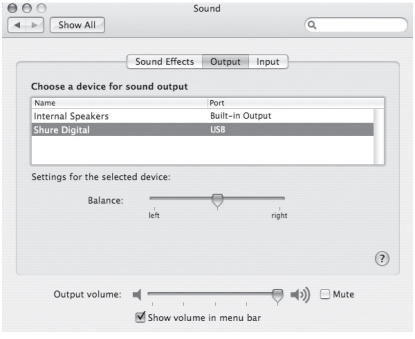
In the Audio tab, look for Shure Digital in the drop-down menus for Sound playback and Sound recording.

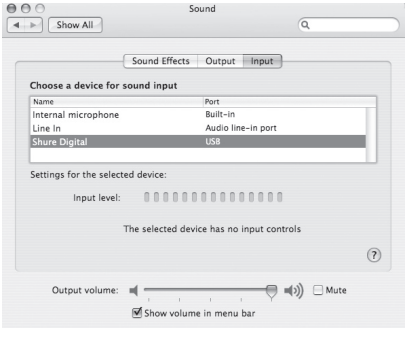


Macintosh OSX Operating Systems

Open the Sound Preference window from System Preferences. Select Shure Digital from both the Input and Output tabs.

Note: GarageBand users: open GarageBand before plugging in the microphone to automatically select the USB device.





Monitoring While Recording

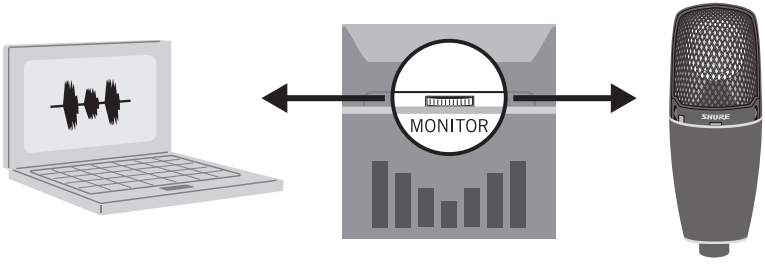


The headphone jack provides direct monitoring of the microphone signal while recording, without any of the delay that occurs if you were to monitor this signal through the computer's headphone output.

Warning: Turn the VOLUME control down before plugging in headphones

You can also monitor previously recorded tracks while recording a new track. Adjust the MONITOR thumb slider to balance levels from pre-recorded and live audio.

Note: Be sure to turn off monitoring in your software for the track to which you are recording.



Gain Adjustment

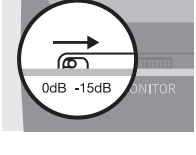


For maximum audio quality, set the MIC GAIN as high as possible. The peak level indicator should remain a steady green while recording, flickering yellow at the highest sound volumes.



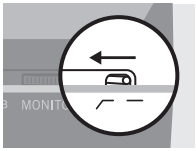
Lower the MIC GAIN if the peak level indicator shows red at any time during a performance.

Pad Switch



The pad switch helps prevent distortion from extremely loud sources, such as when close-miking horns or drums.

Low Frequency Rolloff



The low frequency rolloff may be used for voice or medium- to high-range instruments. It reduces floor rumble and low-frequency room noise from heating and air conditioning systems. Also used to compensate for proximity effect or to reduce low frequencies that make an instrument sound dull or muddy.

Troubleshooting

Problem	Solution
No USB power indicator light	Verify port is powered USB 1.1 or 2.0.
No sound in headphones	Turn up the VOLUME or MIC GAIN thumb slider.
Sound is distorted	Turn down MIC GAIN, or set pad switch.
Source sounds delayed	Turn off software monitoring in the computer software.
Headphones are not loud enough	**Windows:** From Control Panel, choose Sound and Audio Devices, select Audio tab, click Volume under Sound playback and turn up Volume Control. **Mac:** From System Preferences, Choose Sound, Select Output tab and turn up Output volume.

General Rules for Use

- Aim the microphone toward the desired sound source (such as the talker, singer, or instrument) and away from unwanted sources.
- Place the microphone as close as practical to the desired sound source.
- Work close to the microphone for extra bass response.
- Use only one microphone to pick up a single sound source.
- Use the fewest number of microphones as practical.
- Keep the distance between microphones at least three times the distance from each microphone to its source.
- Place microphones as far as possible from reflective surfaces.
- Add a windscreen when using the microphone outdoors.
- Avoid excessive handling to minimize pickup of mechanical noise and vibration.
- Do not cover any part of the microphone grille with your hand, as this will adversely affect microphone performance.

Microphone Techniques

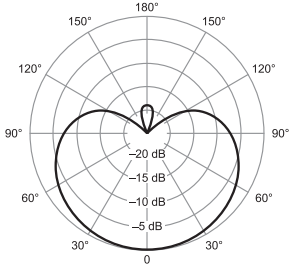
APPLICATION	SUGGESTED MICROPHONE PLACEMENT	TONE QUALITY
Vocals	Lips less than 15 cm (6 in.) away or touching the windscreen, on axis to microphone.	Robust sound, emphasized bass, maximum isolation from other sources.
	15 to 60 cm (6 in. to 2 ft.) away from mouth, just above nose height.	Natural sound, reduced bass.
	20 to 60 cm (8 in. to 2 ft.) away from mouth, slightly off to one side.	Natural sound, reduced bass and minimal “s” sounds.
	90 cm to 1.8 m (3 to 6 ft.) away.	Thinner, distant sound; noticeable levels of ambient noise.
Guitar & Bass Amplifiers	2.5 cm (1 in.) from speaker, on-axis with center of speaker cone.	Sharp attack; emphasized bass.
	2.5 cm (1 in.) from speaker, at edge of speaker cone.	Sharp attack; higher frequency sound.
	15 to 30 cm (6 to 12 in.) away from speaker and on-axis with speaker cone.	Medium attack; full, balanced sound.
	60 to 90 cm (2 to 3 ft.) back from speaker, on-axis with speaker cone.	Softer attack; reduced bass.

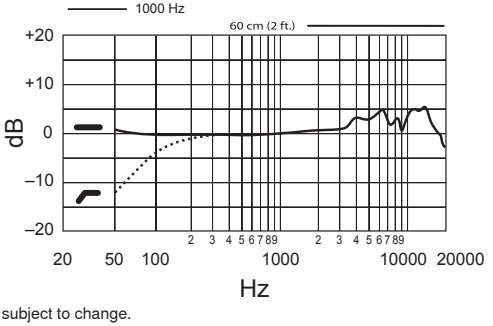
Proximity Effect

Unidirectional microphones such as the PG42-USB progressively boost bass frequencies by 6 to 10 dB below 100 Hz when the microphone is at a distance of about 6 mm (1/4 in.) from the sound source. This phenomenon, known as proximity effect, can be used to create a warmer, more powerful sound.

SPECIFICATIONS

Frequency Response	20 to 20,000 Hz
Polar Pattern	Cardioid
Max SPL (20 Hz to 20 kHz, <1% THD)	PAD OFF: 120 dB SPL PAD ON: 135 dB SPL Max SPL corresponds to full-scale digital output at minimum analog gain setting
Switch	Attenuator: 15 dB
Power Requirements	USB-powered, 500 mA
Digital Noise Floor (20 Hz to 20 kHz, A-weighted)	Minimum MIC GAIN setting: –81 dB Maximum MIC GAIN setting: –78 dB
Sampling Rate	up to 48 kHz
Bit Depth	16 bit
Peak Signal Indicator (Tri-color)	OFF: –30 dB FS Green: –30 to –12 dB FS Yellow: –12 to 0 dB FS Red: >0 (digital converter clipped)
Adjustable Gain Range	31 dB
Headphone Output	3.5 mm (1/8 inch)





Note: specifications are subject to change.

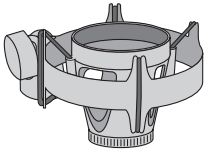
Furnished Accessories



3 m (9.8 ft) USB Cable



Aluminum Carrying Case



ShureLock™ Rubber Isolated Shock Mount
A27SM

Optional Accessories



Windscreen
A32WS



Popper Stopper™
PS-6

System Requirements

USB

USB 1.1 or 2.0, powered

RAM

64MB RAM (minimum)

Operating System

Microsoft Windows 2000 Professional Japanese/English Edition

Microsoft Windows XP Home/Professional Japanese/English Edition (service pack 1.0 or later, or use the USB audio driver update from Microsoft)

Microsoft Windows Vista™ Business Japanese/English Edition

Apple Computer Mac OS X 10.0 or later English Edition

Apple Computer Mac OS X 10.1 or later Japanese Edition (For Mac OS X 10.0 Japanese Edition, plug and play does not work appropriately)

NOTE: For detailed hardware requirements, visit www.shure.com

CERTIFICATION

Authorized under the Verification provision of FCC Part 15 as a Class B Digital Device.

Changes or modifications not expressly approved by Shure Incorporated could void your authority to operate this equipment.

NOTE: 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 channel 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 to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and 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.

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.

Conforms to Australian EMC requirements and is eligible for C-Tick marking.

Eligible to bear CE Marking. Conforms to European EMC Directive 2004/108/EC. Meets Harmonized Standards EN55103-1:1996 and EN55103-2:1996, for residential (E1) and light industrial (E2) environments.

The Declaration of Conformity can be obtained from:

Authorized European representative:
Shure Europe GmbH
Headquarters Europe, Middle East & Africa
Department: EMEA Approval
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D-74078 Heilbronn, Germany
Phone: +49 7131 72 14 0
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