

User Manual



MINIMIX MIX800

Ultra-Compact Karaoke Processor with Voice Canceller
and Echo/Reverb Effects

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Thank you

Thank you for expressing your confidence in us by purchasing the MINIMIX MIX800.

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 commercially-available speaker cables with ¼" TS 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.

**Legal Disclaimer**

Technical specifications and appearance are subject to change without notice. The information contained herein is correct at the time of printing. All trademarks are the property of their respective owners. MUSIC Group accepts no liability for any loss which may be suffered by any person who relies either wholly or in part upon any description, photograph or statement contained herein. Colors and specifications may vary slightly from product. BEHRINGER products are sold through authorized dealers only. Distributors and dealers are not agents of MUSIC Group and have absolutely no authority to bind MUSIC Group by any express or implied undertaking or representation. This manual is copyrighted. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording of any kind, for any purpose, without the express written permission of MUSIC Group IP Ltd.

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Trident Chambers, Wickhams Cay, P.O. Box 146, Road Town, Tortola, British Virgin Islands

Limited Warranty**§ 1 Warranty**

1 This limited warranty is valid only if you purchased the product from a BEHRINGER authorized dealer in the country of purchase. A list of authorized dealers can be found on BEHRINGER's website behringer.com under "Where to Buy", or you can contact the BEHRINGER office closest to you.

2 MUSIC Group* warrants the mechanical and electronic components of this product to be free of defects in material and workmanship if used under normal operating conditions for a period of one (1) year from the original date of purchase (see the Limited Warranty terms in § 4 below), unless a longer minimum warranty period is mandated by applicable local laws. If the product shows

any defects within the specified warranty period and that defect is not excluded under § 4, MUSIC Group shall, at its discretion, either replace or repair the product using suitable new or reconditioned product or parts. In case MUSIC Group decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e., one (1) year (or otherwise applicable minimum warranty period) from the date of purchase of the original product.

③ Upon validation of the warranty claim, the repaired or replacement product will be returned to the user freight prepaid by MUSIC Group.

④ Warranty claims other than those indicated above are expressly excluded.

PLEASE RETAIN YOUR SALES RECEIPT. IT IS YOUR PROOF OF PURCHASE COVERING YOUR LIMITED WARRANTY. THIS LIMITED WARRANTY IS VOID WITHOUT SUCH PROOF OF PURCHASE.

§ 2 Online registration

Please do remember to register your new BEHRINGER equipment right after your purchase at behringer.com under "Support" and kindly read the terms and conditions of our limited warranty carefully. Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently. Thank you for your cooperation!

§ 3 Return materials authorization

① To obtain warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may contact the BEHRINGER distributor for your country listed under "Support" at behringer.com. If your country is not listed, please check if your problem can be dealt with by our "Online Support" which may also be found under "Support" at behringer.com. Alternatively, please submit an online warranty claim at behringer.com BEFORE returning the product. All inquiries

must be accompanied by a description of the problem and the serial number of the product. After verifying the product's warranty eligibility with the original sales receipt, MUSIC Group will then issue a Return Materials Authorization ("RMA") number.

② Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by MUSIC Group.

③ Shipments without freight prepaid will not be accepted.

§ 4 Warranty Exclusions

① This limited warranty does not cover consumable parts including, but not limited to, fuses and batteries. Where applicable, MUSIC Group warrants the valves or meters contained in the product to be free from defects in material and workmanship for a period of ninety (90) days from date of purchase.

② This limited warranty does not cover the product if it has been electronically or mechanically modified in any way. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. This limited warranty does not cover any such modification/adaptation, regardless of whether it was carried out properly or not. Under the terms of this limited warranty, MUSIC Group shall not be held responsible for any cost resulting from such a modification/adaptation.

③ This limited warranty covers only the product hardware. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the product. Any such software is provided "AS IS" unless expressly provided for in any enclosed software limited warranty.

④ This limited warranty is invalid if the factory-applied serial number has been altered or removed from the product.

⑤ Free inspections and maintenance/repair work are expressly excluded from this limited warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, crossfaders, potentiometers, keys/buttons, guitar strings, illuminants and similar parts.

⑥ Damage/defects caused by the following conditions are not covered by this limited warranty:

- improper handling, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals;
- connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used;
- damage/defects caused by acts of God/Nature (accident, fire, flood, etc) or any other condition that is beyond the control of MUSIC Group.

⑦ Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the limited warranty.

⑧ If an inspection of the product by MUSIC Group shows that the defect in question is not covered by the limited warranty, the inspection costs are payable by the customer.

⑨ Products which do not meet the terms of this limited warranty will be repaired exclusively at the buyer's expense. MUSIC Group or its authorized service center will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, MUSIC Group will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

10 Authorized BEHRINGER dealers do not sell new products directly in online auctions. Purchases made through an online auction are on a “buyer beware” basis. Online auction confirmations or sales receipts are not accepted for warranty verification and MUSIC Group will not repair or replace any product purchased through an online auction.

§ 5 Warranty transferability

This limited warranty is extended exclusively to the original buyer (customer of authorized retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of MUSIC Group.

§ 6 Claim for damage

Subject only to the operation of mandatory applicable local laws, MUSIC Group shall have no liability to the buyer under this warranty for any consequential or indirect loss or damage of any kind. In no event shall the liability of MUSIC Group under this limited warranty exceed the invoiced value of the product.

§ 7 Limitation of liability

This limited warranty is the complete and exclusive warranty between you and MUSIC Group. It supersedes all other written or oral communications related to this product. MUSIC Group provides no other warranties for this product.

§ 8 Other warranty rights and national law

1 This limited warranty does not exclude or limit the buyer’s statutory rights as a consumer in any way.

2 The limited warranty regulations mentioned herein are applicable unless they constitute an infringement of applicable mandatory local laws.

3 This warranty does not detract from the seller’s obligations in regard to any lack of conformity of the product and any hidden defect.

§ 9 Amendment

Warranty service conditions are subject to change without notice. For the latest warranty terms and conditions and additional information regarding MUSIC Group’s limited warranty, please see complete details online at behringer.com.

* MUSIC Group Macao Commercial Offshore Limited of Rue de Pequim No. 202-A, Macau Finance Centre 9/J, Macau, including all MUSIC Group companies

1. Introduction

Sing along with this powerful karaoke machine! Its revolutionary Voice Canceller effectively eliminates vocals from any stereo source while retaining most music elements. The integrated digital echo/reverb processor in 24-bit/40 kHz resolution assures ultimate vocal enhancement. We've included 2 independent mic channels with Level controls and Clip indicators for perfect level adjustment. A dedicated 2-band EQ provides for awesome vocal enhancement and sound shaping, and there is an accurate 6-digit LED output meter for precise level indication. Stereo Line Inputs/Outputs let you connect your favorite CD or MP3 player, tape recorder and similar equipment. Long-term reliability is guaranteed with the high-quality potentiometers and illuminated switches. Ultra low-noise audio operational amplifiers offer outstanding sound performance.

Karaoke has never been this easy and this much fun!

1.1 Before you get started

1.1.1 Shipment

Your MIX800 was carefully packed at the assembly plant to assure secure transport. Should the condition of the cardboard box suggest that damage may have taken place, please inspect the unit immediately and look for physical indications of damage.

- ◆ **Damaged equipment should NEVER be sent directly to us. Please inform the dealer from whom you acquired the unit immediately as well as the transportation company from which you took delivery. Otherwise, all claims for replacement/repair may be rendered invalid.**
- ◆ **Please always use the original packaging to avoid damage due to storage or shipping.**
- ◆ **Never let unsupervised children play with the MIX800 or with its packaging.**
- ◆ **Please dispose of all packaging materials in an environmentally friendly fashion.**

1.1.2 Initial operation

Be sure that there is enough space around the unit for cooling. To avoid overheating, do not place the MIX800 on top of power amps or near radiators, etc.

- ◆ **To power the MIX800, use only the power supply unit that is delivered with your equipment.**

1.1.3 Online registration

Please register your new BEHRINGER equipment right after your purchase by visiting <http://behringer.com> and read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, it is our intention to have it repaired as quickly as possible. To arrange for warranty service, please contact the BEHRINGER retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may directly contact one of our subsidiaries. Corresponding contact information is included in the original equipment packaging (Global Contact Information/European Contact Information). Should your country not be listed, please contact the distributor nearest you. A list of distributors can be found in the support area of our website (<http://behringer.com>).

Registering your purchase and equipment with us helps us process your repair claims more quickly and efficiently.

Thank you for your cooperation!

2. Control Elements and Connections

- ◆ **Please ensure that the unit is installed and operated only by people qualified to do so. During installation and operation the user must have sufficient electrical contact to earth. Electrostatic discharge may affect the operation of the unit.**

2.1 The front

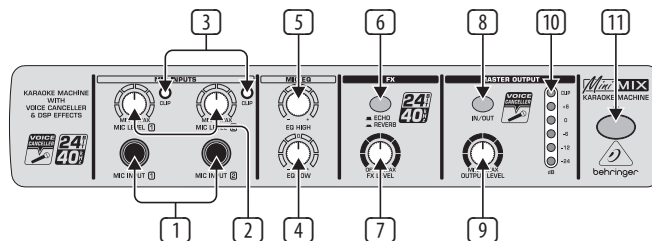


Fig. 2.1: Front panel control elements and connectors of the MIX800

- 1 **MIC INPUT 1/2.** 1 or 2 microphones can be connected using these ¼" jacks.
- 2 **MIC LEVEL 1/2.** The MIC LEVEL control adjusts the level of the microphone signal.
 - ◆ **After they pass the MIC LEVEL controls, the 2 microphone signals are combined into 1 mono signal.**
- 3 **CLIP.** When the Clip LED lights up, distortion may occur in the microphone input of the MIX800. Reduce the microphone level with the MIC LEVEL control (2).
- 4 **EQ LOW.** The EQ LOW control allows you to raise or lower the low-frequency content of the microphone signal.
- 5 **EQ HIGH.** With the EQ HIGH control, you can raise or lower the high-frequency content of the microphone signal.
- 6 **ECHO/REVERB.** The MIX800 allows you to add an effect to the microphone signal. When the ECHO/REVERB button is pressed in, you can add REVERB to the signal. When the button is pressed out, the ECHO effect is active.
 - ◆ **1 of the 2 effects is always active! Use the FX LEVEL control (7) to switch off the effect or to adjust the effect intensity.**
- 7 **FX LEVEL.** The FX LEVEL control determines the amount of effect that is added to the master signal.
 - ◆ **Turn this control fully to the left to switch off the active effect.**
- 8 **IN/OUT.** Press the IN/OUT button to activate the Voice Canceller in the signal path. This filter circuit allows you to remove the vocals almost completely from a recording. The filter has been designed so that vocal frequencies will be processed without significantly affecting other music signals. What is more, the filter only works in the center of the stereo panorama, where vocals are usually positioned in a recording.
 - ◆ **The Voice Canceller can be used for stereo signals only!**
- 9 **OUTPUT LEVEL.** Set the volume of the output signal with the OUTPUT LEVEL control.
- 10 **LED DISPLAY.** The LED display is for monitoring the input level. It comprises 6 LEDs. When the Clip LED lights up, distortion may occur in the MIX800 output. Reduce the output level with the OUTPUT LEVEL control (9).
- 11 **⏻ SWITCH.** The ⏻ switch turns your MINIMIX MIX800 on and off.
 - ◆ **Attention: The ⏻ switch does not fully disconnect the unit from the mains. To disconnect the unit from the mains, pull out the main cord plug or appliance coupler. When installing the product, ensure the plug or appliance coupler is readily operable. Unplug the power cord completely when the unit is not used for prolonged periods of time.**

2.2 The rear



Fig. 2.2: Rear panel connectors of the MIX800

- 12 Use the 9 V jack to connect the power supply delivered with the unit.
- 13 These connectors are the unbalanced cinch outputs of the MIX800.
- 14 These connectors are the unbalanced cinch inputs of the MIX800.
- 15 **SERIAL NUMBER.**

3. Application Example

The wiring example shown below gives you an idea of how to use the MIX800.

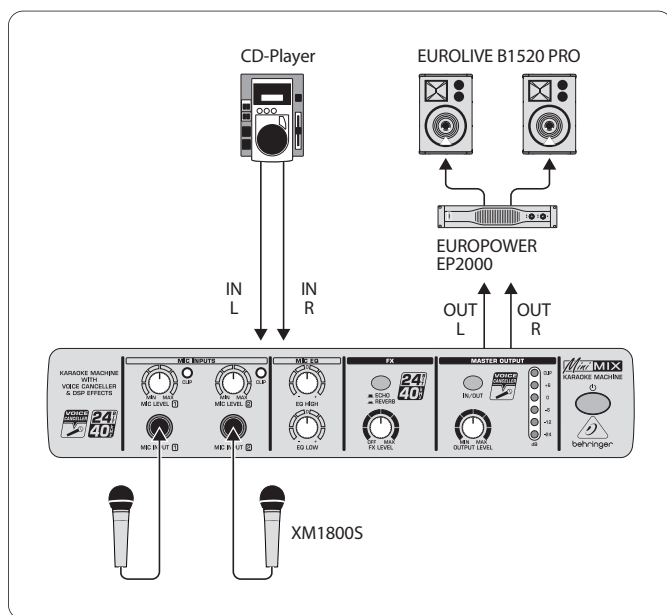


Fig. 3.1: Using the MIX800

4. Specifications

EN

Mic Inputs

Connectors	¼" stereo jack, balanced
Input impedance	approx. 2 kΩ balanced
Max. input level	-20 dBu

Audio Input

Connectors	Cinch, unbalanced
Input impedance	approx. 20 kΩ
Max. input level	15 dBu

Audio Output

Type	RCA connectors, unbalanced
Impedance	approx. 150 Ω
Max. output level	15 dBu

System Data

Frequency response	10 Hz to 200 kHz, ±0/-2 dB
Dynamics	112 dB, 20 Hz to 20 kHz
THD	0.002% typ. @ 4 dBu
Signal crosstalk	-75 dB @ 1 kHz
Signal-to-noise ratio	97 dBu @ 4 dBu, A-weighted

Power Supply

Mains connection	external power supply, 9 V~/750 mA
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Mains Voltage

USA/Canada	120 V~, 60 Hz
U.K./Australia	240 V~, 50 Hz
China	220 V~, 50 Hz
Europe	230 V~, 50 Hz
Japan	100 V~, 50 - 60 Hz

Power consumption	6 W
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Dimensions/Weight

Dimensions (H x W x D)	approx. 1.9 x 4.7 x 9.6" approx. 48 x 120 x 242.6 mm
Weight	approx. 1.34 lbs / 0.61 kg

BEHRINGER is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or illustrated.

5. Other Mini Products

The MINIBEAT belongs to the MINI suite of BEHRINGER products, which can operate together and are introduced below:

MINIFEX FEX800

Ultra-compact 9.5" stereo multi-effects processor for studio and stage applications

- 16 awesome FX presets in 24-bit/48 kHz resolution including reverb, delay, chorus, flanger, phaser, rotary speaker, pitch shifter and multi-effects
- Intuitive FX Preset control with LED's indicating the selected program

MINIAMP AMP800

Ultra-compact 9.5" headphones amplifier system for studio and stage applications

- 4 totally independent stereo high-power amplifier sections
- Highest sonic quality with virtually all types of headphones even at maximum volume

MINICOM COM800

Ultra-compact 9.5" stereo modeling compressor for studio and stage applications

- 16 awesome preset models for the most typical compression applications (vocal, drums, guitar, keyboard, etc.)
- Dedicated Compressor Modeling control with LED's indicating the selected dynamics program

MINIMIC MIC800

Ultra-compact 9.5" microphone modeling preamp for studio and stage applications

- High-end preamplifier for all microphone, instrument and line-level sources. Perfectly complements studio-grade condenser mics
- Ultra-flexible Preamp Modeling allows you to quickly optimize your recordings

MINIMON MON800

Ultra-compact 9.5" monitor matrix mixer for studio and stage applications

- Dedicated input section with 4 selectable and mixable stereo inputs
- Accurate 6-digit LED main stereo output meters for precise level indication

MINIBEAT BEAT800

Ultra-compact 9.5" dual beat counter/phono preamp for studio and stage applications

- Intelligent dual BPM counters with Tempo Difference indicator
- Ultra-flexible Beat Assist and Sync Lock functions

MINIFBQ FBQ800

Ultra-compact 9.5" graphic equalizer for studio and stage applications

- Revolutionary FBQ Feedback Detection System instantly reveals critical frequencies and can also be used as Audio Analyzer
- Additional Low Cut filter removes unwanted frequencies, e. g. floor rumble

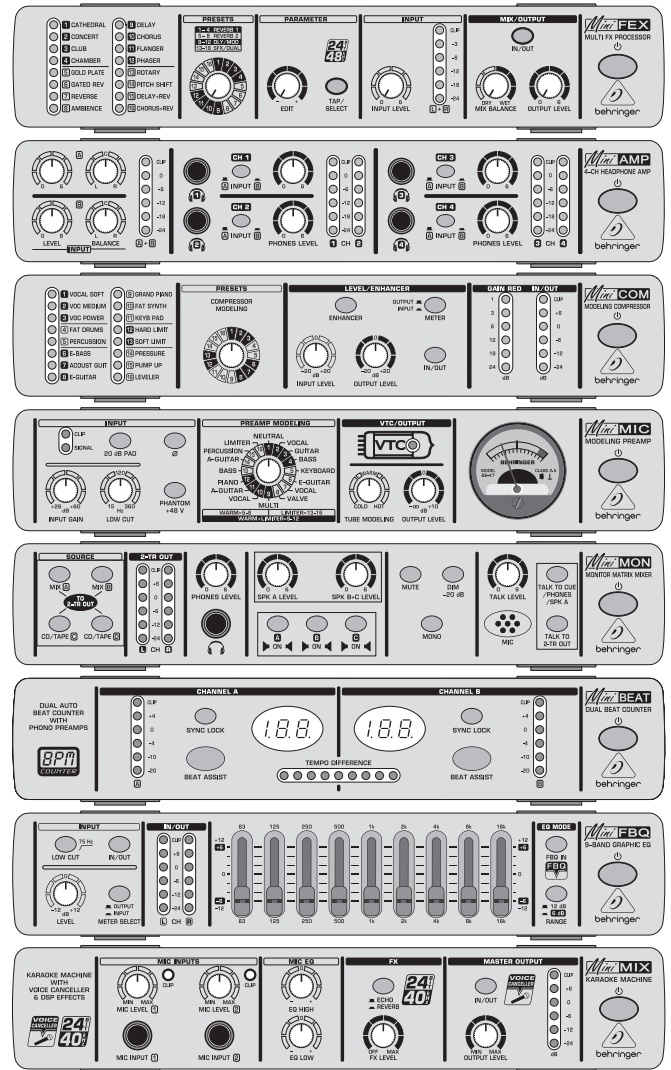


Fig. 5.1: MINI products stack on top of each other

FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION



Responsible party name: **MUSIC Group Services US Inc.**
Address: **18912 North Creek Parkway,
Suite 200 Bothell, WA 98011,
USA**
Phone/Fax No.: **Phone: +1 425 672 0816
Fax: +1 425 673 7647**

MINIMIX MIX800

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 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 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 device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Important information:

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



We Hear You