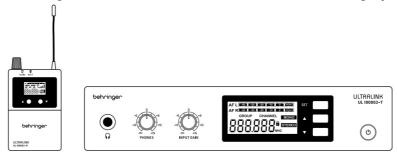


behringer UL 1000G2 High-Performance UHF Wireless In-Ear Monitoring System User Guide

Home » Behringer » behringer UL 1000G2 High-Performance UHF Wireless In-Ear Monitoring System User Guide ™

behringer UL 1000G2 High-Performance UHF Wireless In-Ear Monitoring System User Guide



Contents

- 1 Important Safety Instructions
- 2 Product Overview
- 3 UL 1000G2 Controls
- 4 Features
- 5 Getting started
- **6 Frequency Bands**
- 7 Rack Mounting
- 8 Specifications
- 9 Other important information
- **10 LEGAL DISCLAIMER**
- 11 FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE

INFORMATION

- **12 LIMITED WARRANTY**
- 13 Documents / Resources
 - 13.1 References
- **14 Related Posts**



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

Use only high-quality professional speaker cables with 1/4" TS or twist-locking plugs pre-installed. All other installation or modification should be performed only by qualifi ed 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 qualifi ed personnel.

Caution

To reduce the risk of fi re 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 fi lled with liquids, such as vases, shall be placed on the apparatus.



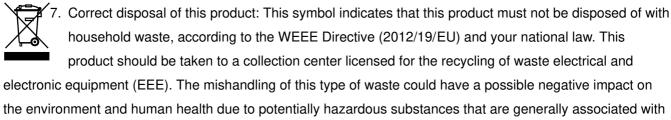
These service instructions are for use by qualified service personnel only.

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 amplifi ers) 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 qualifi ed 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.



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. This apparatus may be used in tropical and moderate climates up to 45°C.

2. WARNING

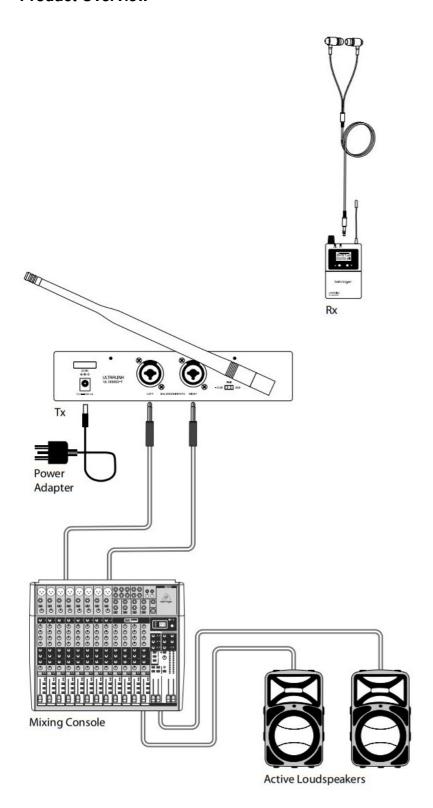
To prevent possible hearing damage, do not listen at high volume levels for long periods. As a guide to setting the volume level, check that you can still hear your own voice, when speaking normally while listening with the headphones.

23. WARNING

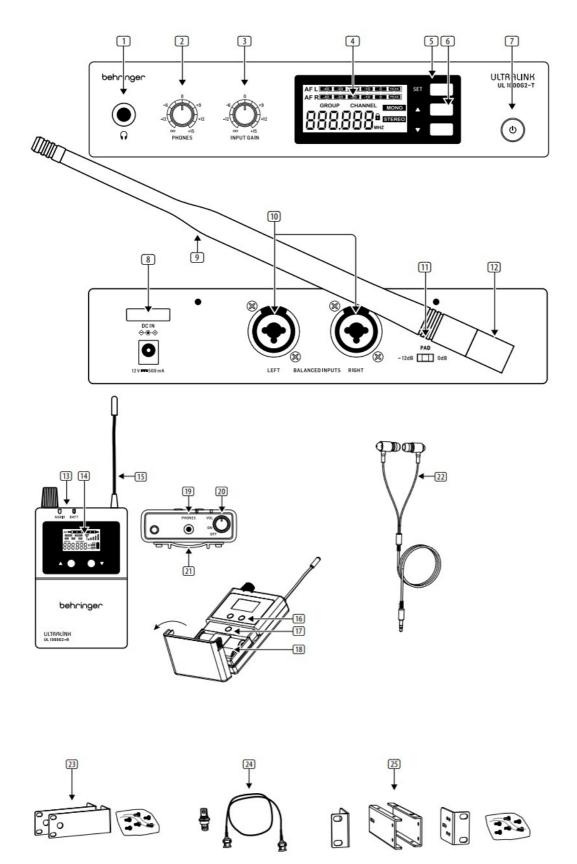
- As with all small batteries, the batteries used with this product should be kept away from small children
 who still put things in their mouths. If they are swallowed, promptly call your local poison control center.
- Always purchase the correct size and grade of battery most suitable for intended use.
- Replace all batteries of a set at the same time.
- Clean the battery contacts, and also those of the device prior to battery installation.
- Ensure the batteries are installed correctly with the regard to polarity (+ and -).
- Always remove battery if consumed or if product is to be left unused for a long time.
- Replacement of a battery with an incorrect type can defeat a safeguard. Replace only with the same or equivalent type.
- Risk of fi re or explosion if the battery is replaced by an incorrect type.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.
- Disposal of a battery into fi re or a hot oven, or mechanically crushing or cutting of a battery can result in an explosion.
- Leaving a battery in an extremely high temperature surrounding environment can result in an explosion

- or the leakage of fl ammable liquid or gas.
- A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.
- Attention should be drawn to the environmental aspects of battery disposal.

Product Overview



UL 1000G2 Controls



- 1. **HEADPHONES** connect headphones to this 1/4" TRS output. Make sure the volume is turned down before putting on headphones
- 2. PHONES adjust the headphones volume
- 3. $\ensuremath{\mathbf{INPUT\ GAIN}}\xspace \ensuremath{\mathsf{adjust}}\xspace$ the level of the audio input signals
- 4. LCD displays the transmitter details and menu
- 5. **SET** use to select transmitter menu items
- 6. **MENU UP/DOWN** use to navigate the transmitter menu
- 7. **POWER ON/OFF** turn the transmitter unit on or off.

- 8. **DC INPUT** connect the supplied 12V DC power adapter here. The power adapter can be plugged into an AC outlet capable of supplying from 100V to 240V at 50 Hz/60 Hz.
 - Use only the power adapter supplied
- 9. ANTENNA transmit antenna. Adjust the angle for best reception
- INPUTS these dual 1/4" TRS/XLR inputs connect balanced audio signals left and right from source equipment
- 11. PAD attenuates the audio input signals 0 dB/-12 dB
- 12. ANTENNA CONNECTOR transmit antenna connects here
- 13. **LEDS** indicate audio received, and receiver battery status
- 14. LCD displays the receiver details and menu
- 15. ANTENNA receive antenna
- 16. MENU UP/DOWN use to navigate the display menu
- 17. SET use to select receiver menu items. Open the battery compartment to access this button
- 18. BATTERY COMPARTMENT flip open to access the battery compartment (2x AA)
- 19. **PHONES** connect supplied earphones to this 3.5 mm stereo input
- 20. VOLUME adjust the headphones volume, and turn the receiver OFF
- 21. BELT CLIP attach receiver to belt
- 22. **EARPHONES** connect to receiver's PHONES output. Make sure the volume is turned down before putting them on
- 23. RACK MOUNT KIT allows a single transmitter to be rack mounted
- 24. ANTENNA KIT allows the antenna to be front mounted using the rack mount kit
- 25. RACK MOUNT KIT 2 allows two transmitters to be rack mounted

Features

- High-performance wireless transmitter, belt-pack receiver and monitoring earphones
- · Ideal for live and studio performances
- Excellent choice for performers and musicians requiring wireless listening
- High-quality audio transmitter with stereo / mono operation for flexibility
- High-performance belt-pack receiver for stereo / mono in-ear monitoring
- Multiple channels available to offer simultaneous operation of multiple systems
- Integrated limiter for controlled transmission of desired audio level up to 12 dB
- Integrated display on receiver for channel frequency and gain control
- Working distance up to 60 m (200 ft)
- Transmitter inputs on balanced XLR / 1/4" TS combination connectors for each L / R channel
- Sturdy transport case included

Getting started

OVERVIEW

This 'getting started' guide will help you set up the UL 1000G2 transmitter and receiver.

CONNECTION

To connect the UL 1000G2 to your system, please consult the connection guide earlier in this document.

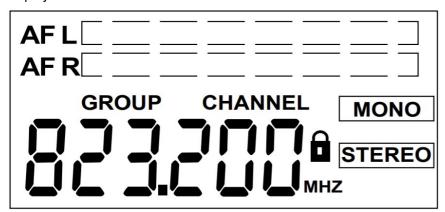
INITIAL SETTING UP

- 1. Position the transmitter at a minimum height of 1 m and point the antenna upwards for optimal signal transmission.
- 2. Make sure that antennas do not touch or cross if multiple wireless systems are used in an installation.
- 3. Do not position the transmitter in the direct vicinity of metal objects and digitally controlled devices (media players, computers, digital consoles, etc.).
- 4. The transmitter and receiver should be within direct "line of sight" of each other.
- 5. Connect headphones to the transmitter, and gradually turn up the headphones volume until you can hear the audio source that is playing into the transmitter's audio inputs.
- 6. Adjust the INPUT GAIN knob as desired. The LCD display shows the L/R audio levels as a guide.
- 7. Apply the rear panel -12 dB Pad switch if needed.

TRANSMITTER SETUP

Main Menu

1. The channel frequency, operating mode (MONO/STEREO), Lock, and signal level (AF L and AF R) are displayed in the main transmitter menu.



Selecting a Frequency Group

2. Press the SET button until GROUP flashes in the transmitter display. Press up/down to select the desired frequency group (see frequency chart)

Selecting a Channel

3. Press SET repeatedly until CHANNEL flashes in the transmitter display. Press up/down to select the desired frequency channel (see frequency chart).

NOTE: For simultaneous operation of several systems, please make sure that all the systems use different channels on the same frequency group. It is recommended to not use more than 12 UL 1000G2 sets in proximity to each other.

Selecting the Operating Mode

4. Press SET repeatedly until MONO flashes. Press up/down to select STEREO or MONO modes.

NOTE: Only audio from the LEFT INPUT is transmitted to the receiver when the transmitter is in MONO mode.

Locking the Transmitter against changes

5. Press SET repeatedly until the LOCK icon flashes in the transmitter display. Press up/ down to select LOCK

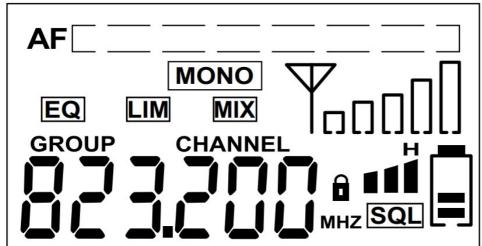
ON or LOCK OFF. LOCK ON disables buttons, so no changes can be made accidentally.

NOTE: LOCK ON is enabled automatically if no operation is performed for 5 seconds. Under LOCK ON status, press and hold SET button for 2 seconds to disable LOCK momentarily which enables you to make changes.

RECEIVER SETUP

Main Menu

1. The main menu displays the AF level, mono/ stereo mode, RF signal strength, EQ, LIM, MIX, lock, frequency, squelch, and battery level.



Selecting a Frequency

Group

- 2. Open the battery cover to access the SET button.
- 3. Press the SET button until GROUP flashes in the receiver display. Press up/down to select the same frequency group as the transmitter.

Selecting a Channel

4. Press the SET button repeatedly until CHANNEL flashes in the receiver display. Press up/down to select the same channel as the transmitter.

Equalizer (EQ)

- 5. The treble at 10 kHz is enhanced by 6 dB while the EQ is enabled.
- 6. Press the SET button repeatedly until "EQ" flashes in the receiver display. Use the up/ down buttons to enable (EQ ON) or disable (EQ OFF) the Equalizer.

Limiter (LIM)

- 7. To protect ears from injury, the Limiter function limits the level of audio signal to earphones at 400mV. It is advised to turn LIM ON if the receiver display indicates audio level is at maximum.
- 8. Press the SET button repeatedly until "LIM" flashes in the receiver display. Use the up/ down buttons to enable (LIM ON) or disable (LIM OFF) the Limiter.

Mixer (MIX)

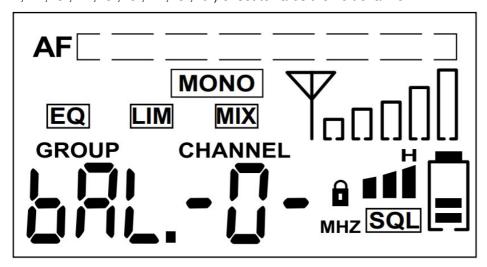
- 9. Enable the Mixer function to listen to the mix of two mono signals, balance and regulate their volume. For example: If the LEFT INPUT contains mono audio signal from instruments and the RIGHT INPUT contains mono audio signal vocals. The singer can monitor and adjust the volume balance between the instruments and his own voice and the overall volume level using the belt-pack receiver with MIX ON setting.
- 10. Press the SET button repeatedly until "MIX" flashes in the receiver display. Use the up/ down buttons to enable (MIX ON) or disable (MIX OFF) the Mixer.

Squelch (SQ)

- 11. The Squelch function enables you to set a minimum threshold of signal received by the receiver. The setting consists of 3 bar levels Low, Medium, and High. The receiver rejects signals below the set threshold and helps eradicate any unwanted audio signal transmitted by the transmitter.
- 12. Press the SET button repeatedly until "SQ" flashes in the receiver display. Use the up/ down buttons to set Squelch at Low, Medium, or High.

Balance

13. Adjust volume balance between left and right channels of a Stereo signal using the up/down buttons. The audio is centered at -0- level. There are 9 levels available each for offset to the right channel and offset to the left channel. Positive values (1-, 2-, 3-, 4-, 5-, 6-, 7-, 8-, 9-) offset towards the Right, while negative values (1-, -2-, -3-, -4-, -5-, -6-, -7-, -8-, -9-) offset towards the Left channel.



14. **NOTE:** To ensure the transmission of a stereo audio signal, the transmitter must be set in stereo mode and an audio signal must be present at the LEFT INPUT and the RIGHT INPUT.

Locking the Receiver against changes

- 15. Press the SET button repeatedly until the LOCK icon flashes in the receiver display. Press up/ down to select LOCK ON or LOCK OFF. LOCK ON function disables buttons, so no unwanted changes can be made accidentally.
- 16. **NOTE:** LOCK ON is enabled automatically if no operation is performed for 5 seconds. Under LOCK ON status, press and hold SET button for 2 seconds to disable LOCK momentarily and enables you to make changes.

Battery Power Status

17. Remaining battery power status is displayed via four bars. If no bars are visible on the battery symbol, the BATT LED will turn Red from Blue. The batteries should then be replaced immediately.

Frequency Bands

Frequency Band: 584 – 608 MHz (USA & Australia)

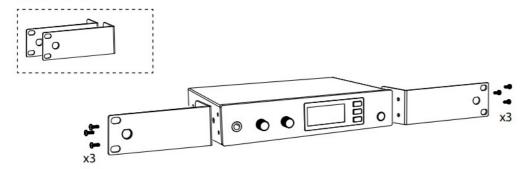
Chann el	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 1 0
1	584.400	585.250	584.200	585.775	585.10 0	584.425	584.70 0	585.550	584.500	586.075
2	587.500	586.500	585.675	586.500	587.22 5	586.400	587.80 0	586.800	585.975	586.800
3	589.575	588.225	586.800	590.200	588.55 0	589.425	589.87 5	588.525	587.100	590.500
4	591.050	590.725	588.450	591.600	590.57 5	591.475	591.35 0	591.025	588.750	591.900
5	593.425	592.350	589.750	592.700	592.90 0	593.775	593.72 5	592.650	590.050	593.000
6	595.200	593.550	592.200	594.250	596.50 0	597.675	595.50 0	593.850	592.500	594.550
7	598.450	597.800	594.325	595.500	597.75 0	599.800	598.75 0	598.100	594.525	595.800
8	599.650	598.575	598.225	599.100	599.30 0	602.250	599.95 0	598.875	598.525	599.400
9	601.275	600.950	600.525	601.425	600.40 0	603.550	601.57 5	601.250	600.825	601.725
10	603.775	602.425	602.575	603.450	601.80 0	605.200	604.07 5	602.725	602.875	603.750
11	605.500	604.500	605.600	604.775	603.50 0	606.325	605.80 0	604.800	605.900	605.075
12	606.750	607.600	607.575	606.900	606.22 5	607.800	607.05 0	607.900	607.875	607.200

Frequency Band: 823 – 832 MHz & 863 – 865 MHz (EU)

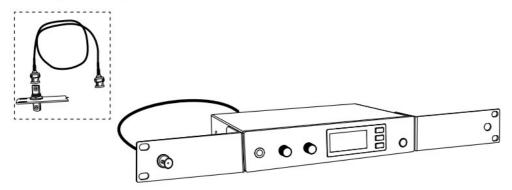
Channel	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8
1	863.100	863.100	863.200	863.150	863.150	863.100	863.250	863.250
2	863.500	863.500	863.700	863.550	863.950	863.700	863.650	863.850
3	864.300	864.000	864.100	864.050	864.450	864.500	864.150	864.350
4	864.900	864.800	864.800	864.850	864.850	864.900	864.750	864.750
5	823.100	823.100	823.200	823.150	823.100	823.100	823.150	823.250
6	823.500	823.700	823.800	823.750	823.700	823.600	823.850	823.950
7	824.100	824.700	824.600	824.750	824.700	824.600	824.850	824.950
8	825.500	825.800	825.600	825.850	825.800	825.300	825.650	825.750
9	826.300	826.500	826.800	826.550	826.500	826.200	826.850	826.950
10	828.900	827.700	828.100	827.750	827.700	827.300	828.250	828.350
11	830.100	829.100	829.600	829.150	829.100	829.200	829.550	829.650
12	831.900	830.600	831.300	831.650	830.600	831.600	831.150	831.250

Rack Mounting

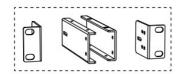
Transmitter x 1

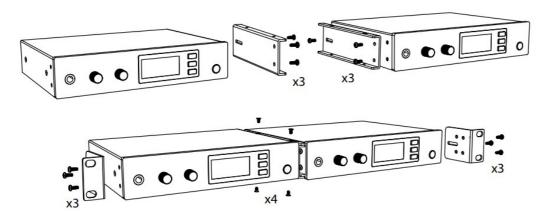


Front Mount Antenna



Transmitter x 2





Specifications

Transmitter

Transmitter					
RF Frequency range	584-608MHz / 823-832 MHz / 863 — 865 MHz				
Maximum channel number	96 (depending upon the frequency band)				
RF power output	10 mW				
Spurious rejection	>50 dBc				
Switching bandwidth	24 MHz (depending upon the frequency band)				
Peak deviation	+/-15 kHz				
Audio Frequency range	70 Hz -13.5 kHz (+/- 3 dB)				
Signal to noise ratio	>80 dB(A)				
THD	<1% to 1 kHz				
Gain range	-00 to +6 dB				
Connectivity					
Power input	DC input connector				
Power switch	Push button on/off				
Audio inputs	1/4"TRS / XLR x 2				
Headphones	%" stereo				
Power Requirements					
External power adaptor(use only the supplied adapter)	12VDC 500 mA				
Physical					
Dimensions (W x H x D)	212 x 44 x 160 mm (8.3 x 1.7 x 6.3")				
Weight	1150 kg				

Receiver

Receiver	
RF Frequency range	584-608MHz / 823-832 MHz / 863 — 865 MHz
Maximum channel number	96 (depending upon the frequency band)

Switching bandwidth	24 MHz (depending upon the frequency band)				
Sensitivity	<-92 dBm for 30 dB S/N ratio				
Max PPM	+/-15 kHz				
Audio Frequency range	70 Hz -13.5 kHz (+/- 3 dB)				
Signal to noise ratio	>80 dB(A)				
THD	<1% to 1 kHz				
Connectivity					
Power switch	Volume on/off				
Earphones output	3.5 mm stereo				
Power Requirements					
Internal batteries	2 x 1.5 VDC (AA)				
Operating time	>6 hours/1300 mAH				
Physical					
Dimensions (W x H x D)	64 x 98 x 22 mm (2.5 x 3.85 x0.86')				
Weight	100 g (without batteries)				
	ı				

- 1. **Register online.** Please register your new MusicTribe equipment right after you purchase it by visiting musictribe.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 MusicTribe Authorized Reseller not be located in your vicinity, you may contact the MusicTribe Authorized Fulfiller for your country listed under "Support" at musictribe.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 musictribe.com. Alternatively, please submit an online warranty claim at musictribe.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.

LEGAL DISCLAIMER

Music Tribe accepts no liability for any loss which may be suff ered by any person who relies either wholly or in part upon any description, photograph, or statement contained herein. Technical specifications, appearances and other information are subject to change without notice. All trademarks are the property of their respective owners. Midas, Klark Teknik, Lab Gruppen, Lake, Tannoy, Turbosound, TC Electronic, TC Helicon, Behringer, Bugera, Aston Microphones and Coolaudio are trademarks or registered trademarks of Music Tribe Global Brands Ltd. © Music Tribe Global Brands Ltd. 2022 All rights reserved.

FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION

Responsible Party Name: Music Tribe Commercial NV Inc.

Address: 122 E. 42nd St.1,

8th Floor NY, NY 10168, United States **Email Address:** legal@musictribe.com

Transmitter: FCC ID: QWHUL1-T

UL 1000G2

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 equipment 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 Tribe can void the user's authority to use the equipment.

Caution!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. Such modifications could void the user authority to operate the equipment.

FCC RF Radiation Exposure Statement:

- 1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- 2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 centimeters between the radiator and your body.



Hereby, Music Tribe declares that this product is in compliance with Directive 2014/53/EU, Directive 2014/30/EU, Directive 2014/35/EU, Directive 2011/65/EU and Amendment 2015/863/EU, Directive 2012/19/EU, Regulation 519/2012 REACH SVHC and Directive 1907/2006/EC.

Full text of EU DoC is available at https://community.musictribe.com/

EU Representative: Music Tribe Brands DK A/S

Address: Gammel Strand 44, DK-1202 København K, Denmark

UK Representative: Music Tribe Brands UK Ltd.

Address: 6 Lloyds Avenue, Unit 4CL London EC3N 3AX, United Kingdom

LIMITED WARRANTY

For the applicable warranty terms and conditions and additional information regarding Music Tribe's Limited Warranty, please see complete details online at musictribe.com/warranty.

Documents / Resources



<u>behringer UL 1000G2 High-Performance UHF Wireless In-Ear Monitoring System</u> [pdf] Us er Guide

UL 1000G2 High-Performance UHF Wireless In-Ear Monitoring System, UL 1000G2, High-Performance UHF Wireless In-Ear Monitoring System, Wireless In-Ear Monitoring System, Monitoring System

References

• Music Tribe

- Music Tribe
- Music Tribe
- Music Tribe

Manuals+,