



LD SYSTEMS LD MIX G3 Series LDMIX102AG3 Active 2-Way Loudspeaker with 7-Channel Mixer User Manual

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LD SYSTEMS LD MIX G3 Series LDMIX102AG3 Active 2-Way Loudspeaker with 7-Channel Mixer



YOU'VE MADE THE RIGHT CHOICE!

We have designed this product to operate reliably over many years. LD Systems stands for this with its name and many years of experience as a manufacturer of high-quality audio products. Please read this User's Manual carefully, so that you can begin making optimum use of your LD Systems product quickly.

You can find more information about LD-SYSTEMS at our Internet site WWW.LD-SYSTEMS.COM

PREVENTIVE MEASURES

1. Please read these instructions carefully.
2. Keep all information and instructions in a safe place.
3. Follow the instructions.
4. Observe all safety warnings. Never remove safety warnings or other information from the equipment.
5. Use the equipment only in the intended manner and for the intended purpose.
6. Use only sufficiently stable and compatible stands and/or mounts (for fixed installations). Make certain that wall mounts are properly installed and secured. Make certain that the equipment is installed securely and cannot fall down.
7. During installation, observe the applicable safety regulations for your country.
8. Never install and operate the equipment near radiators, heat registers, ovens or other sources of heat. Make certain that the equipment is always installed so that it is cooled sufficiently and cannot overheat.
9. Never place sources of ignition, e.g., burning candles, on the equipment.
10. Ventilation slits must not be blocked.
11. Keep a minimum distance of 20 cm around and above the device.
12. Do not use this equipment in the immediate vicinity of water (does not apply to special outdoor equipment – in this case, observe the special instructions noted below. Do not expose this equipment to flammable materials, fluids or gases. Avoid direct sunlight!
13. Make certain that dripping or splashed water cannot enter the equipment. Do not place containers filled with liquids, such as vases or drinking vessels, on the equipment.
14. Make certain that objects cannot fall into the device.
15. Use this equipment only with the accessories recommended and intended by the manufacturer.
16. Do not open or modify this equipment.
17. After connecting the equipment, check all cables in order to prevent damage or accidents, e.g., due to tripping hazards.

18. During transport, make certain that the equipment cannot fall down and possibly cause property damage and personal injuries.
19. If your equipment is no longer functioning properly, if fluids or objects have gotten inside the equipment or if it has been damaged in any other way, switch it off immediately and unplug it from the mains outlet (if it is a powered device). This equipment may only be repaired by authorized, qualified personnel.
20. Clean the equipment using a dry cloth.
21. Comply with all applicable disposal laws in your country. During disposal of packaging, please separate plastic and paper/cardboard.
22. Plastic bags must be kept out of reach of children.
23. Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FOR EQUIPMENT THAT CONNECTS TO THE POWER MAINS

24. **CAUTION:** If the power cord of the device is equipped with an earthing contact, then it must be connected to an outlet with a protective ground. Never deactivate the protective ground of a power cord.
25. If the equipment has been exposed to strong fluctuations in temperature (for example, after transport), do not switch it on immediately. Moisture and condensation could damage the equipment. Do not switch on the equipment until it has reached room temperature.
26. Before connecting the equipment to the power outlet, first verify that the mains voltage and frequency match the values specified on the equipment. If the equipment has a voltage selection switch, connect the equipment to the power outlet only if the equipment values and the mains power values match. If the included power cord or power adapter does not fit in your wall outlet, contact your electrician.
27. Do not step on the power cord. Make certain that the power cable does not become kinked, especially at the mains outlet and/or power adapter and the equipment connector.
28. When connecting the equipment, make certain that the power cord or power adapter is always freely accessible. Always disconnect the equipment from the power supply if the equipment is not in use or if you want to clean the equipment. Always unplug the power cord and power adapter from the power outlet at the plug or adapter and not by pulling on the cord. Never touch the power cord and power adapter with wet hands.
29. Whenever possible, avoid switching the equipment on and off in quick succession because otherwise this can shorten the useful life of the equipment.
30. **IMPORTANT INFORMATION:** Replace fuses only with fuses of the same type and rating. If a fuse blows repeatedly, please contact an authorized service centre.
31. To disconnect the equipment from the power mains completely, unplug the power cord or power adapter from the power outlet.
32. If your device is equipped with a Volex power connector, the mating Volex equipment connector must be unlocked before it can be removed. However, this also means that the equipment can slide and fall down if the power cable is pulled, which can lead to personal injuries and/or other damage. For this reason, always be careful when laying cables.
33. Unplug the power cord and power adapter from the power outlet if there is a risk of a lightning strike or before extended periods of disuse.

CAUTION:

To reduce the risk of electric shock, do not remove cover (or back). There are no user serviceable parts inside. Maintenance and repairs should be exclusively carried out by qualified service personnel.

The warning triangle with lightning symbol indicates dangerous uninsulated voltage inside the unit, which may cause an electrical shock.

The warning triangle with exclamation mark indicates important operating and maintenance instructions.

The housing surface of the spotlight can heat up to temperatures as high as 70 °C in regular use. Ensure that it is not possible to come into contact with the housing unintentionally. Always allow sufficient time for the lamp to cool down before dismantling, carrying out maintenance work or charging etc.

Warning! This device is designed for use below 2000 metres in altitude.

CAUTION! HIGH VOLUMES IN AUDIO PRODUCTS!

This device is meant for professional use. Therefore, commercial use of this equipment is subject to the respectively applicable national accident prevention rules and regulations. As a manufacturer, Adam Hall is obligated to notify you formally about the existence of potential health risks.

Hearing damage due to high volume and prolonged exposure: When in use, this product is capable of producing high sound-pressure levels (SPL) that can lead to irreversible hearing damage in performers, employees, and audience members. For this reason, avoid prolonged exposure to volumes in excess of 90 dB.

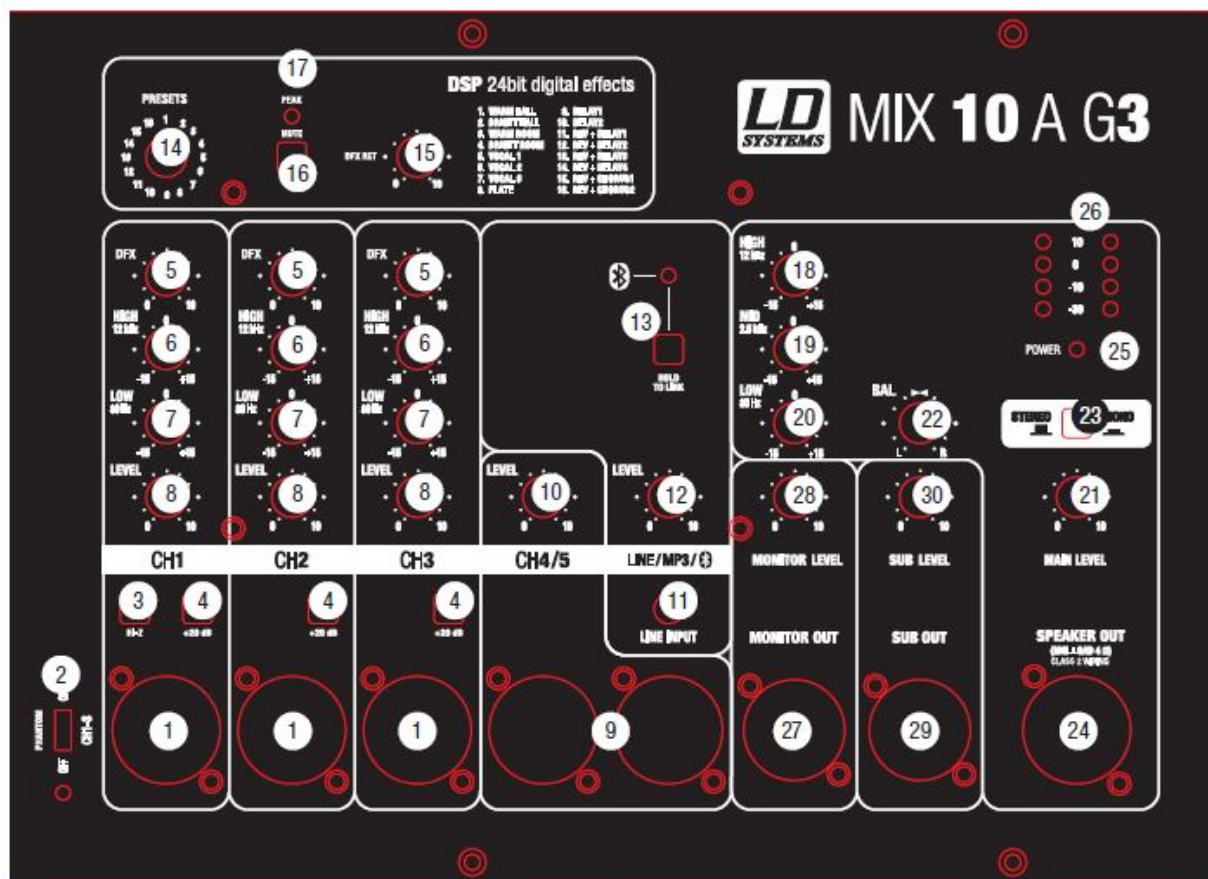
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio 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.

INTRODUCTION

The compact and lightweight MIX 10 A G3 (active) and MIX 10 G3 (passive) speakers each feature a 10" woofer and a 1" tweeter with a frequency response from 65 Hz to 20 kHz and a dispersion angle of 80° x 70°. In combination they are perfect for small PA and monitor applications. The integrated mixer on the MIX 10 A G3 provides two stereo line and 3 microphone channels with 2-band EQ, a switchable Hi-Z input, a monitor and a subwoofer line output, a speaker output with separate power amplifier, phantom power, 24-bit digital effects and a Bluetooth® unit.

CONNECTIONS, OPERATING AND DISPLAY ELEMENTS MIX 10 A G3



1. MIC INPUT CH1–CH3

Balanced microphone input (XLR/6.3 mm jack combo). The use of an unbalanced microphone cable (mono jack) is also possible. Switchable 48 V phantom power (switch no 2).

2. PHANTOM ON/OFF CH1–3

Switchable 48 V phantom power for the microphone inputs (XLR) of channels 1 to 3 (CH1–CH3) for the use of condenser microphones without independent power supply. Phantom power is on in the ON position and off in the OFF position. Ensure that the microphone channel volume is set to minimum and that a microphone has been connected before switching on phantom power, and ensure that phantom power has been switched off before disconnecting the microphone.

3. HI-Z CH1

This button switches the jack input of channel 1's combo jack (CH1) to high impedance (push down to activate). Channel 1 can now be used as an instrument channel, e.g. for an electro-acoustic guitar.

4. 20 dB CH1–CH3

Button to boost the signal level of the corresponding channel by 20 dB (push down to activate).

5. DFX CH1–CH3

Effect send control for channels 1 to 3 (CH1–CH3). The signal from the corresponding channel is sent to the internal effects processor (DSP) after the volume control (post-fader) at a level corresponding to the setting of the effect send control. It is important to ensure that the internal input of the effects processor is not overloaded (check PEAK LED).

6. HIGH CH1–CH3

High-frequency equalizer (12 kHz) for input channels 1–3 (CH1–CH3). Turn anti-clockwise to reduce treble and clockwise to increase treble. The equalizer is inactive in the centre detent position.

7. LOW CH1–CH3

Low-frequency equalizer (80 Hz) for input channels 1–3 (CH1–CH3). Turn anti-clockwise to reduce and clockwise to increase bass frequencies. The equalizer is inactive in the centre detent position.

8. LEVEL CH1–CH3

Volume control for channels 1–3 (CH1–CH3). Turn anti-clockwise to reduce volume and clockwise to increase volume.

9. LINE INPUT CH4/5

Balanced line inputs with XLR/TRS combo jacks to connect a playback device (such as a keyboard or MP3 player).

10. LEVEL CH4/5

Volume control for the stereo channel 4/5 (CH4/5). Turn anti-clockwise to reduce volume and clockwise to increase volume.

11. LINE INPUT

Stereo line input with 3.5 mm jack socket for an MP3 player or another playback device. The LINE INPUT and Bluetooth® interfaces can both be used simultaneously. Adjust the volume balance on the playback devices.

12. LEVEL LINE INPUT/BLUETOOTH®

Volume control for the line input and the Bluetooth unit. Turn anti-clockwise to reduce and clockwise to increase volume.

13. BLUETOOTH®/HOLD TO LINK

The mixer of the MIX 10 A G3 speaker is equipped with Bluetooth technology, which means that audio files from another Bluetooth playback device (e.g. Smartphone, tablet) can be played back on the MIX 10 A G3 speaker (maximum distance between the two devices is approx. 10 metres). If no Bluetooth playback device is connected to the internal Bluetooth unit, the blue Bluetooth LED flashes every 5 seconds. During pairing, the LED flashes rhythmically at a frequency of approximately 3 Hz. If the Bluetooth LED lights up permanently, there is a Bluetooth connection and playback can be started. The volume is controlled via the volume control LINE INPUT/Bluetooth® (No 12), or on the playback device.

To pair and connect the internal Bluetooth unit with a Bluetooth playback device, press and hold the HOLD TO LINK button for approximately 3 seconds until the Bluetooth LED flashes rhythmically (approx. 3 Hz). Enable Bluetooth on your playback device and search on the user interface for available devices. Select “LD MIX10AG3” and pair your Bluetooth playback device with the Bluetooth unit. Playback can now be started. To end the connection, press and hold the HOLD TO LINK button again for about 3 seconds. If Bluetooth® is deactivated in the paired device (e.g. Smartphone, tablet), after a short time, the Bluetooth LED will begin to flash every 5 seconds. If the maximum range between the paired device and Bluetooth unit is exceeded (approximately 10 m), the Bluetooth LED will flash at a frequency of about 3 Hz.

14. PRESETS

Rotary control to select one of the 16 internal digital effects. All effects are listed to the right of the operating elements for the effects processor (DSP 24-bit digital effects).

15. DFX RET

By using the effects return control, the effects signal can be mixed with the summed signal (MAIN signal).

16. MUTE

The internal effects are muted by pressing the MUTE button. The PEAK LED indicator LED will light up continuously. Press the button again to unmute the effects and the PEAK LED will extinguish.

17. PEAK LED

The PEAK LED lights up if the input of the internal effect is overloaded (reduce DFX effect send level on channels 1 to 3), or if the internal effects processor is muted (MUTE).

18. **HIGH**

High-frequency equalizer (12 kHz) for the sum channel. Turn anti-clockwise to reduce and clockwise to increase high frequencies. The equalizer is inactive in the centre detent position.

19. **MID**

Mid-frequency equalizer (2.5 kHz) for the sum channel. Turn anti-clockwise to reduce and clockwise to increase mid-frequencies. The equalizer is inactive in the centre detent position.

20. **LOW**

Low-frequency equalizer (80 Hz) for the sum channel. Turn anti-clockwise to reduce and clockwise to increase bass frequencies.

The equalizer is inactive in the centre detent position.

21. **MAIN LEVEL**

Volume control for the sum channel (master volume). Turn anti-clockwise to reduce and clockwise to increase volume.

22. **BAL**

Balance control for the sum channel. If the MIX 10 G3 passive speaker is used as a stereo extension, the balance slider adjusts the volume balance between the left and right summed signals (left = Internal speaker, right = external speaker).

23. **STEREO/MONO**

If the MIX 10 G3 passive speaker is used as a stereo extension, select the STEREO switch position. If the sum channel is receiving a stereo signal, the speaker system can now be used as a fully-fledged stereo PA system. If an external speaker is not being used as a stereo extension, select the MONO switch position. In this case, any stereo signal will be summed into mono.

24. **SPEAKER OUT**

SpeakON-compatible speaker output for connecting the MIX 10 G3 passive speaker (minimum impedance 4 Ohms).

25. **POWER LED**

The power LED lights up when the device is properly connected to the mains and switched on.

26. **MAIN LEVEL METER**

2 x 4-segment level meter for the sum channel. If the red LED lights up, the device is being operated at its peak level. Momentary illumination due to level peaks is not critical, however permanent illumination should be avoided by reducing the volume.

27. **MONITOR OUT**

Balanced line-out via 3-pin XLR jack. Connection option for an active speaker. The signal corresponds to the sum signal and is routed before the volume control of the sum channel (MAIN level) so it can be set independently.

28. **MONITOR LEVEL**

Volume control for the monitor channel. Turn anti-clockwise to reduce and clockwise to increase volume.

29. **SUB OUT**

Balanced line-out via 3-pin XLR jack. Connection option for an active subwoofer. The signal corresponds to the sum signal and is routed after the volume control of the sum channel (MAIN level) so it is dependent upon the main volume level.

30. **SUBLEVEL**

Volume control for the subwoofer output. Turn anti-clockwise to reduce and clockwise to increase volume.

31. FOOTSWITCH

6.3 mm jack socket to connect a footswitch (normal open contact, not supplied). Pressing the footswitch will mute the internal effects (DFX MUTE). The PEAK LED will light up continuously. Pressing it again unmutes the effects and the PEAK LED will go out.

32. AC INPUT

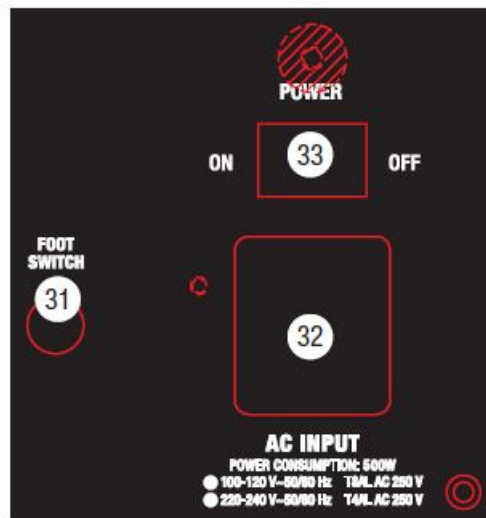
IEC mains socket with built-in fuse holder. The power supply operating voltage is switched automatically to match mains voltage. (100–120 V AC or 220–240 V AC). A suitable power cable is included.

IMPORTANT: Replace the fuse only with one of the correct value for your mains voltage (see label)!

In the event of repeated fuse failure, please contact an authorised service centre.

33. POWER ON/OFF

On–off switch for power supply to the device.



CONNECTION MIX 10 G3



INPUT

The speakON-compatible input socket is located on the rear of the MIX 10 G3 passive speaker.

STAND FLANGE

The MIX 10 A G3 and MIX 10 G3 speakers feature stand inserts for 0° (rear) and 5° tilt angles (front). Application examples: Use the stand insert with 0° tilt angle for a standing audience and the 5° tilt angle for a seated audience.



USE AS A STAGE MONITOR



Thanks to their universal housing, the MIX 10 A G3 and MIX 10 G3 speakers can be used as fully-fledged stage monitors. Non-slip rubber feet ensure stability. The monitor angle is 50°.

OPTIONAL ACCESSORIES

PROTECTIVE COVER MIX 10 A G3 and MIX 10 G3 LDMIX102G3PC



WIRING EXAMPLE



TECHNICAL DATA

Model number:	LDMIX102AG3
Product type:	PA speaker with built-in mixer and Bluetooth
Type:	active
Woofers size:	10"
Woofers size:	254 mm
Woofers magnet:	Ferrite
Woofers brand:	custom-manufactured
Woofers voice coil:	2"
Woofers voice coil:	50.8 mm
Tweeters size:	1"
Tweeters size:	25.4 mm
Tweeters magnet:	Ferrite
Tweeters brand:	Celestion
Tweeters voice coil:	1"
Tweeters voice coil:	25.4 mm
Dispersion angle (H x V):	80° x 70°
Frequency response:	65 Hz–20,000 Hz
Amplifier:	Class D
Amplifier power (RMS):	2 x 200 W
Amplifier power (peak):	2 x 400 W
Max. SPL:	124 dB
Protective circuitry:	limiter, short circuit, voltage surge protection, overload, overheating
Mixer	
Channels:	7
Microphone input channels:	3 (switchable 48V phantom power)
Microphone input connections:	XLR/6.3 mm jack (combo)
Microphone input channel controls:	EQ High, EQ Low, DFX send, Level, Hi-Z switch (channel 1 only, 1 MΩ), +20 dB switch
Line input channels:	2
Line input channel connections:	1 x 3.5 mm stereo jack 2 x XLR/6.3 mm jack (combo)
Line input channel controls:	Level
Monitor line-outs:	1
Monitor line-out connection:	3-pin male XLR (balanced)
Monitor line-out controls:	Monitor level
Monitor line-out max output:	17 dBu
Subwoofer line-outs:	1
Subwoofer line-out connection:	3-pin male XLR (balanced)
Subwoofer line-out controls:	Sub level
Subwoofer line-out max output:	17 dBu
Speaker output:	1
Speaker output connection:	speakON-compatible connection (200 W RMS, min. impedance 4 Ω)
DSP digital effects processor	
DSP number of programmes:	16
DSP controls:	presets, DFX return, mute switch
DSP display elements:	Peak LED
Footswitch connection (DFX Mute):	1
Footswitch connection type:	6.3 mm jack
Footswitch type:	normal open contact (pnp)

Main section	
Main section controls:	EQ low, EQ mid, EQ high, main level, phantom power, power switch, balance, mono/stereo
Phantom power:	48 V switchable
Main section display elements:	2 x 4-segment LED level meters, power LED, Bluetooth LED
Mains connection:	IEC mains socket
Power supply:	SMPS
Operating voltage:	100–120 V AC/220–240 V AC, 50–60 Hz (automatic selection)
Fuse:	Operating voltage 100–120 V AC: T8AL/250 V (5 x 20 mm) operating voltage 220–240 V AC: T4AL/250 V (5 x 20 mm)
Power consumption (max.):	500 W
Ambient temperature (in operation):	0–40°C
Relative air humidity:	<85%, non-condensing
Housing	
Housing type:	bass reflex
Housing material:	16 mm plywood
Housing finish:	textured paint
Housing colour:	black
Width:	315 mm
Height:	489 mm
Depth:	307 mm
Weight:	12.3 kg
Additional features:	2 x 35 mm stand flanges (0°, 5°), rubber feet, ergonomic grip, monitor angle 50°, Bluetooth
Model number: LDMX102G3	
Product type:	PA Loudspeakers
Type:	passive
Woofers size:	10"
Woofers size:	254 mm
Woofers brand:	custom-manufactured
Woofers voice coil:	2"
Woofers voice coil:	50.8 mm
Tweeters size:	1"
Tweeters size:	25.4 mm
Tweeters brand:	Celestion
Tweeters voice coil:	1"
Tweeters voice coil:	25.4 mm
Dispersion angle (H x V):	80° x 70°
Frequency response:	65–20,000 Hz
Output (RMS):	200 W
Output (peak):	400 W
Impedance:	4 ohm
Sensitivity (1W/1m):	94 dBSPL
Max. SPL:	124 dBSPL
Speaker connections:	1
Speaker connection type:	speakON-compatible
Housing type:	bass reflex
Housing material:	16 mm plywood
Housing finish:	textured paint
Housing colour:	black
Width:	315 mm

Height:	489 mm
Depth:	307 mm
Weight:	10.8 kg
Additional features:	2 x 35mm stand flanges (0°, 5°), rubber feet, ergonomic grip, monitor angle 50°, Bluetooth

MANUFACTURER'S DECLARATIONS

MANUFACTURER'S WARRANTY & LIMITATIONS OF LIABILITY

You can find our current warranty conditions and limitations of liability at: https://cdn-shop.adamhall.com/media/pdf/MANUFACTURERS-DECLARATIONS_LD_SYSTEMS.pdf. To request warranty service for a product, please contact Adam Hall GmbH, Adam-Hall-Str. 1, 61267 Neu Anspach / Email: Info@adamhall.com / +49 (0)6081 / 9419-0.

CORRECT DISPOSAL OF THIS PRODUCT

(valid in the European Union and other European countries with a differentiated waste collection system)
This symbol on the product, or on its documents indicates that the device may not be treated as household waste. This is to avoid environmental damage or personal injury due to uncontrolled waste disposal. Please dispose of this product separately from other waste and have it recycled to promote sustainable economic activity. Household users should contact either the retailer where they purchased this product, or their local government office, for details on where and how they can recycle this item in an environmentally friendly manner. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial waste for disposal.

FCC STATEMENT

1. 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
2. any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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 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.

CE COMPLIANCE

Adam Hall GmbH states that this product meets the following guidelines (where applicable):
R&TTE (1999/5/EC) or RED (2014/53/EU) from June 2017
Low voltage directive (2014/35/EU)
EMV directive (2014/30/EU)

RoHS (2011/65/EU)

The complete declaration of conformity can be found at www.adamhall.com.

Furthermore, you may also direct your enquiry to info@adamhall.com.

UKCA-CONFORMITY

Hereby, Adam Hall Ltd. declares that this product meets the following guidelines (where applicable)

Electrical Equipment (Safety) Regulations 2016

Electromagnetic Compatibility Regulations 2016 (SI 2016/1091)

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulation

2012 (SI 2012/3032) Radio Equipment Regulations 2017 (SI 2016/2015)

UKCA-DECLARATION OF CONFORMITY

Products that are subject to Electrical Equipment (Safety) Regulation 2016, EMC Regulation 2016 or RoHS Regulation

can be requested at info@adamhall.com.

Products that are subject to the Radio Equipments Regulations 2017 (SI2017/1206) can be downloaded from www.adamhall.com/compliance/

EU DECLARATION OF CONFORMITY


Hereby, Adam Hall GmbH declares that this radio equipment type is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following

internet address: www.adamhall.com/compliance/

Misprints and errors, as well as technical or other changes are reserved!

Documents / Resources

	<p>LD SYSTEMS LD MIX G3 Series LDMIX102AG3 Active 2-Way Loudspeaker with 7-Channel Mixer [pdf] User Manual</p> <p>LD MIX G3 Series, LDMIX102AG3, LDMIX102G3, Active 2-Way Loudspeaker with 7-Channel Mixer</p>
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