

## USER'S MANUAL





# **STINGER G3 SERIES** ACTIVE SUBWOOFERS

LDESUB15AG3 / LDESUB18AG3

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## ENGLISH

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#### 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

#### **SAFETY INFORMATION**

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, observ e 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 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.

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!
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 anot her 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 authorised 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.

34. The appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.

35. Children must be instructed not to play with the device.

36. If the power cord of the device is damaged, do not use the device. The power cord must be replaced by an adequate cable or assembly from an authorized service center.



#### 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.



Warning! This symbol indicates a hot surface. Certain parts of the housing can become hot during operation. After use, wait for a cool-down period of at least 10 minutes before handling or transporting the device.



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



Warning! This product is not intended for use in tropical climates.

#### **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.

## INTRODUCTION

Stinger<sup>®</sup> G3 Series - Workhorse Loudspeakers For Pros

Exceptional sound, reliable performance and unparalleled value across the board - that's LD Systems' Stinger<sup>®</sup> G3 Series. Real workhorses for demanding applications, these loudspeakers have been engineered to provide truly professional sound reinforcement solutions. The Stinger<sup>®</sup> G3 line includes active and passive models that are simply outstanding in their class. Custom designed drivers with high power handling and BEM modelled waveguides deliver immaculate audio quality, extended low frequency response and coherent coverage.

Sporting lightweight Class D power stages, active Stinger" G3 models are capable of huge sound pressure levels. The multi-purpose tops feature up to a massive 500 watts RMS output and carefully tailored presets for flat response, fullrange, satellite or floor monitor applications. LD Systems' proprietary DynX" DSP technology ensures perfect time alignment and distortion-free performance even at maximum levels. Producing tremendous low end punch and definition with up to 800 watts RMS output power, Stinger" G3 subwoofers include user-friendly presets for rapid system integration and cardioid array configurations. All Stinger<sup>®</sup> G3 enclosures are made of rigid, low-resonance birch ply. They are coated with non-abrasive, impact resistant polyurea for superior strength and unrivaled durability. Integrating LD Systems' Dual-Tilt pole mount, multiple suspension points, stacking recesses and ergonomic handles the Stinger<sup>®</sup> G3 Series has been designed for touring musicians, rental companies and installation applications. The large selection of Stinger<sup>®</sup> accessories includes smart wall and truss mounting hardware plus a stackable dolly board to facilitate transport. Isn't it time you saddled up?

## **CONNECTIONS, CONTROLS AND INDICATORS**



## 1 INPUT LINE LEFT / RIGHT

Balanced line inputs (XLR / 6.3 mm jack combo) for left and right channels (LEFT + RIGHT). Signals that are applied at both inputs are summed internally as Mono. The use of unbalanced cables (e.g. mono jack) is also possible, however, balanced cables are preferable due to the greater noise immunity.

### 2 MAIN LEVEL

Rotary encoder for the total volume. Turning the controller to the left decreases the volume; turning it to the right increases it.

## 3 MODE

Switch to switch between DSP presets. The different presets are retrieved by repeatedly pressing the switch (check the LED indicator).

80 Hz: Preset with low-pass filter at 80 Hertz

**100 Hz:** Preset with low-pass filter at 100 Hertz. Ideal setting in combination with Stinger G3 full-range speakers to maintain balanced level settings. Preset for the forward-facing subwoofer in the subwoofer cardioid set-up (see CARDIOID ARRAY)

120 Hz: Preset with low-pass filter at 120 Hertz

**CARDIOID:** Preset for configuring three Stinger G3 subwoofers of same model as a cardioid array (entral, rear-facing subwoofer, see CARDIOID ARRAY).

#### SUBWOFFER 100 HZ + SATELLITE



#### 4 STATUS-LEDS

**ON:** Lights up once the system is properly connected to the power mains and switched on.

SIGNAL: Lights up as soon as an audio signal is present.

LIMIT: Lights up if the loudspeaker system is operating in the clipping range. A short flash of the LED in this instance is not critical. To protect the system, an excessive signal level is gently turned down by the built-in limiters.

If the limiter LED lights up permanently or for longer periods, reduce the volume level. Failure to do so may result in a distorted sound and damage to the speaker system.

**PROTECT:** Lights up if the system is overloaded/overheated. The amplifiers are muted automatically. Upon reaching normal operating conditions, the device reverts to normal operating mode after a few minutes.

#### 5 THRU LEFT RIGHT

Balanced line inputs with 3-pin male XLR sockets. The input signal (INPUT LINE) is routed without alteration to the line output THRU.

#### 6 POWER IN

Blue power input socket for power supply to the device. A suitable power cable is included. For the device's maximum power input without allowing for the POWER OUT load rating, please see the label under "STINGER SUB 15 / 18 AG3" only.

#### POWER ON / OFF

On / Off switch for the power supply of the device.

#### B POWER OUT

White power output socket. See label on device for maximum load rating.



#### WHAT DOES LD SYSTEMS DynX° DSP STAND FOR?

DSP stands for Digital Signal Processing, DynX® comprises the Limiter, EQ, Compressor and Crossover features. The digital signal processing ensures maximum audio performance with maximum clarity and protects the PA system from overload.

#### WHAT EXACTLY DOES DynX<sup>®</sup> DSP DO?

The Limiter function protects the speakers and prevents distortions caused by overload. A limiter attenuates the signal when the level exceeds a value which could have a negative effect. The system can be operated in this manner with a higher overall sound pressure as extreme peaks are automatically lowered, so that the total volume does not need to be reduced.

The Multiband EQ works in the lower frequency range, a low-pass filter prevents the transmission of high-frequency signals. The amplitude and runtime optimisation is perfectly adapted to the full-range speakers of the Stinger G3 Series.

The CARDIOID DSP preset is a sophisticated DSP program that makes it possible to attain a cardioid dispersion pattern by combining three Stinger G3 subwoofers.

This results in the following advantages in comparison with conventional subwoofer setups:

- A rear attenuation of up to 20 dB
- Enhanced bass presence in the audience area
- Avoidance of unwanted reflections from rear walls
- Reduction of diffuse sound in rooms
- Elimination of bass frequency interference onstage
- Differentiated sound for onstage monitoring
- Reduction of the risk of feedback when using stage microphones

Use only Stinger G3 subwoofers of the same type for cardioid setups. Align 3 subwoofers in a row as shown, with the middle subwoofer directed towards the rear. Select the CARDIOID preset for the middle subwoofer and the preset with a 100 Hz low-pass filter for the forward-facing subwoofers. The same audio signal must be present at all subwoofers used for a cardioid setup and the MAIN LEVEL setting must be identical.



## SETUP

Thanks to the multifunctional cabinet, the subwoofers of the Stinger G3 Series can be placed both horizontally and vertically. Non-slip rubber rails provide stability in both cases. To prevent slippage when stacking the subwoofers, recesses are located on the top for the rubber rails. An M20 threaded flange when using a speaker extension tube is located on the top side of the cabinet.





### **OPTIONAL ACCESSORIES**

LDESUB15AG3:	Protective Cover	Item No.: LDESUB15G3PC
	Castor Board	Item No.: LDESUB15G3CB
LDESUB18AG3:	Protective Cover	Item No.: LDESUB18G3PC
	Castor Board	Item No.: LDESUB18G3CB

## **TECHNICAL SPECIFICATIONS**

Model number:	LDESUB15AG3	LDESUB18AG3
Product type:	PA subwoofer	PA subwoofer
Туре:	Active	Active
Low/mid driver dimensions:	15"	18"
Low/mid driver dimensions (mm):	381 mm	457.2 mm
Woofer magnet:	Ferrite	Ferrite
Woofer brand:	Custom-made	Custom-made
Woofer voice coil:	3"	4"
Woofer voice coil (mm):	76.5 mm	101.6 mm
Amplifier:	Class D	Class D
RMS:	450 W	800 W
Peak power:	900 W	1600 W
Frequency response:	40 – Low-pass	35 - Low-pass
Max. SPL (peak):	133 dB	135 dB
Protection circuits:	DC, over-current, short circuit, limiter	DC, over-current, short circuit, limiter
Input impedance:	30 k0hm	30 k0hm
Input sensitivity:	0.3 V (RMS)	0.3 V (RMS)
Controls:	Main level, mode	Main level, mode
Indicators:	On, signal, limit, protect, mode (80 Hz, 100 Hz, 120 Hz, cardioid)	On, signal, limit, protect, mode (80 Hz, 100 Hz, 120 Hz, cardioid)
Line inputs:	2	2

Line input connectors:	6.3 mm jack, XLR	6.3 mm jack, XLR
Line outputs:	2	2
Line output connectors:	XLR	XLR
Operating voltage:	SMPS, 100-120 V AC / 200-240 V AC, 50-60 Hz (automatic conversion)	SMPS, 100-120 V AC / 200-240 V AC, 50-60 Hz (automatic conversion)
Power consumption (max.):	600 VA	600 VA
Ambient temperature (in operation):	0° - 40°C	0° - 40°C
Relative humidity (in operation):	<80% (non condensing)	<80% (non condensing)
Cabinet material:	18 mm plywood	18 mm plywood
Cabinet surface:	Polyurea	Polyurea
Cabinet construction:	Vented	Vented
Width:	567 mm	677 mm
Height:	477 mm	547 mm
Depth:	624 mm	740 mm
Weight:	31.9 kg	42.6 kg
Features:	threaded flange M20, 4 x ergonomically shaped insert handles, multifunctional cabinet design, polyurea coating	threaded flange M20, 4 x ergonomically shaped insert handles, multifunctional cabinet design, polyurea coating

## **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.

#### **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.

#### 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/

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