LA-6X & LA-8X Studio Monitor
&
LA-8S Power Subwoofer

U S E R M A N U A L

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Warning: To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.

The lightning flash with an arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated idangerous voltageî within the productí s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Do not place this unit on an unstable cart, stand or tripod, bracket or table. The unit may fall, causing serious injury to a child or adult and serious damage to the unit. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the unit. Any mounting of the device on a wall or ceiling should follow the manufacturerís instructions and should use a mounting accessory recommended by the manufacturer.

An appliance and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the appliance and cart combination to overturn.

1. "An apparatus with Class I construction shall be connected to a mains sockets outlet with protective earthing connection."
2. "Where the mains plug or an appliance coupler is used as the disconnect device, the disconnection device shall remain readily operable"
3. "1A fuse is used to US market, voltage will be set to 115V before shipment: 500mA fuse is used to European market, voltage will be set to 230V before shipment."

Read and follow all the safety and operating instructions before connecting or using this unit. Retain this notice and the ownerís manual for future reference.

All warnings on the unit and in its operating instructions should be adhered to.

Do not use this unit near water; for example, near a bath tub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool.

The unit should be installed so that its location or position does not interfere with its proper ventilation. For example, it should not be situated on a bed, sofa, rug or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet, that may impede the flow of air through its ventilation openings.

The unit should be situated from heat sources such as radiators, heat registers, stoves or other devices (including amplifiers) that produce heat.

The unit should be connected to a power supply outlet only of the voltage and frequency marked on its rear panel.

The power supply cord should be routed so that it is not likely to be walked on or pinched, especially near the plug, convenience receptacles, or where the cord exits from the unit.

Unplug the unit from the wall outlet before cleaning. Never use benzine, thinner or other solvents for cleaning. Use only a soft damp cloth.

The power supply cord of the unit should be unplugged from the wall outlet when it is to be unused for a long period of time.

Care should be taken so that objects do not fall, and liquids are not spilled into the enclosure through any openings.

This unit should be serviced by qualified service personnel when:

A. The power cord or the plug has been damaged; or
B. Objects have fallen, or liquid has been spilled into the unit; or
C. The unit has been exposed to rain or liquids of any kind; or
D. The unit does not appear to operate normally or exhibits a marked change in performance; or
E. The device has been dropped or the enclosure damaged.

ATTENTION

POUR ...VITER LES CHOC ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQUíAU FOND.

CAUTION

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT FULLY INSERT.

If an indoor antenna is used (either built into the set or installed separately), never allow any part of the antenna to touch the metal parts of other electrical appliances such as a lamp, TV set etc.

CAUTION
POWER LINES

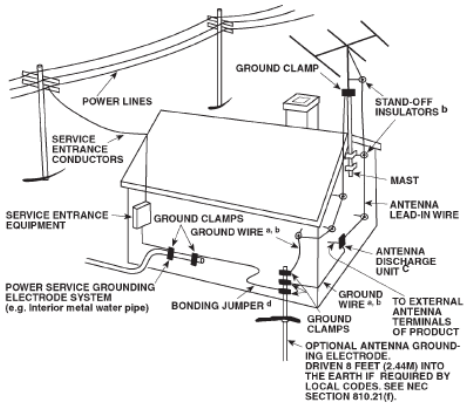
Any outdoor antenna must be located away from all power lines.

OUTDOOR ANTENNA GROUNDING

If an outside antenna is connected to your tuner or tuner-preamplifier, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode.

a. Use No. 10 AWG (5.3mm2) copper, No. 8 AWG (8.4mm2) aluminium, No. 17 AWG (1.0mm2) copper-clad steel or bronze wire, or larger, as a ground wire.
b. Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4-6 feet (1.22 - 1.83 m) apart.
c. Mount antenna discharge unit as close as possible to where lead-in enters house.
d. Use jumper wire not smaller than No.6 AWG (13.3mm2) copper, or the equivalent, when a separate antenna-grounding electrode is used. see NEC Section 810-21 (j).

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE INSTRUCTIONS CONTAINED IN ARTICLE 810 - RADIO AND TELEVISION EQUIPMENT.



NOTE TO CATV SYSTEM INSTALLER: This reminder is provided to call the CATV system installerís attention to Article 820-40 of the National Electrical Code that provides guidelines for proper grounding and, in particular, specifies that the ground cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

DO NOT ATTEMPT SERVICING OF THIS UNIT YOURSELF. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

Upon completion of any servicing or repairs, request the service shopís assurance that only Factory Authorized Replacement Parts with the same characteristics as the original parts have been used, and that the routine safety checks have been performed to guarantee that the equipment is in safe operating condition. REPLACEMENT WITH UNAUTHORIZED PARTS MAY RESULT IN FIRE, ELECTRIC SHOCK OR OTHER HAZARDS.

Contents

Introduction

Congratulations on your purchase!

Growing demands on music recording industry professionals have created the need for better monitor performance at more affordable prices. The LA Series of Lambden Audio Powered Studio Monitors and Power Subwoofer are created to address these needs.

Safety
For your safety and to ensure correct operation of this product, please take a moment to read the safety instructions.

Caution
Never remove the rear panel of these powered monitors and subwoofer. To do so could result in an electric shock. A qualified technician should perform any repair or service re the electronics.

This product is capable of producing sounds at a volume that could be damaging to hearing and result in permanent hearing loss over an extended period of time.

Unpacking and Visual Inspection
It is rare that a unit is damaged during shipping. However, if this does happen, contact the shipping company immediately. Keep the original carton and packing material for future shipping, and preserve your warranty!

IMPORTANT NOTE: Your Powered monitors was originally packaged in a specially designed carton and indicated special packaging materials. Please save these items. They should be used when transporting or shipping your Powered monitors.

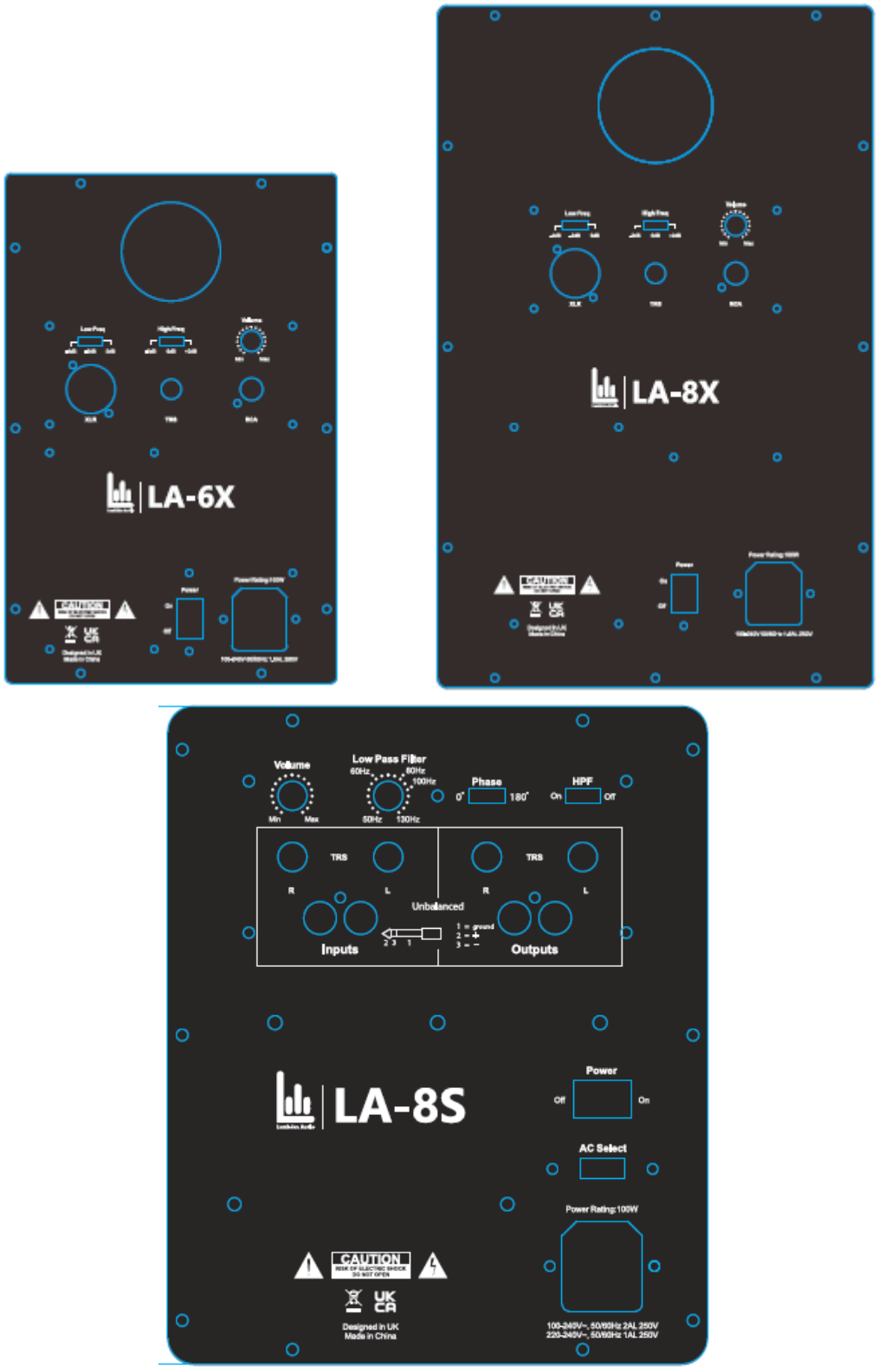

LA-6X
LA-8X
Volume
Min
Max
Low Pass Filter
60Hz
80Hz
100Hz
50Hz
130Hz
Phase
0°
180°
HPF
On
Off
TRS
R
L
Unbalanced
Inputs
Outputs
1 = ground
2 = +
3 = −
LA-8S
Power
Off
On
AC Select
Power Rating:100W
CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
Designed in UK
Made in China
100-240V~, 50/60Hz 2AL 250V
220-240V~, 50/60Hz 1AL 250V

Figure 1

Systems Control

System Volume
The input sensitivity is adjusted (counterclockwise reduces sensitivity) with the rear panel mounted System Gain control.

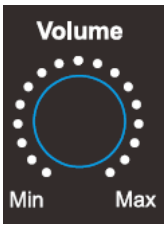


Figure 2

Low Frequency Adjust
Cuts the level of all frequencies below 800Hz by the speciffed amount (-2dB or -4dB) to compensate for the bass boost that occurs when the monitor is placed near a wall or corner. Can be defeated by setting it to 0dB.

Figure 3

High Frequency Adjust
The default setting for the HF (high frequency) is 0dB which is a flat response in normal near field conditions. If the room is over dampened it might be desirable to increase the HF trim to +2dB, this will increase the high frequency response, the opposite would hold true for an under dampened room with a lot of reffections that can become quite challenging for the ears, try the setting at -2dB.

Figure 4

Connecting Your System

POWERING ON

All connections should be made, all fader and controls should be set at their minimum levels, and all other equipment should be powered on prior to powering on your monitors.

The power On/Off switch is located on the rear panel. A nameplate with LED is located on the front panel, it will be light up when power is applied. It shows dim white light when power on without signal, then brighter after audio signal injecting.

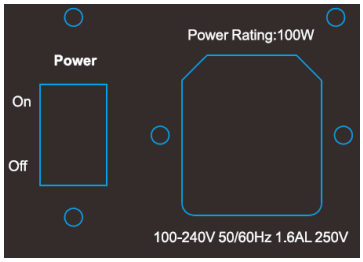


Figure 5

AUDIO INPUTS

The XLR and TRS are balanced inputs where as the RCA input is an unbalanced input.

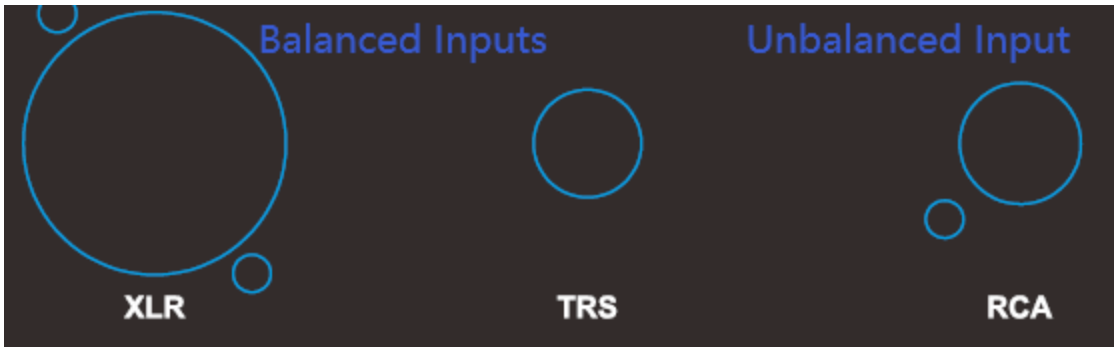


Figure 6

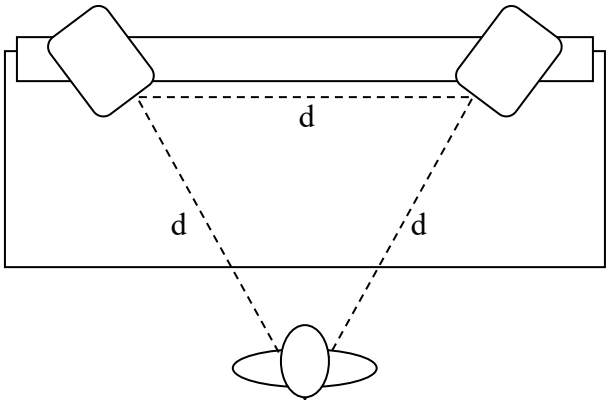
Installing Your Monitors

Positioning Your Monitors

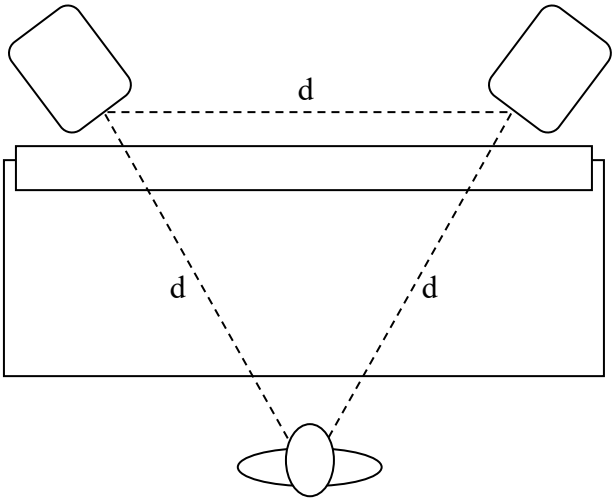
Positioning your monitors correctly in the studio is critical to their performance. Typically, they should be placed so that that the listening position is fully "covered" with all monitors resting on the same horizontal plane. A great way to test a monitor for its imaging capability is to play back a CD or DVD recorded acoustically in stereo (or one recorded in surround sound if you have a surround sound set-up). We recommend acoustic music because it represents the spectrum of sound.) You can adjust the angle of each monitor by listening for dead spots. Keep in mind, changing the angle or position of a monitor will change the sound.

Positioning for stereo listening

- If «d» is the distance between the two speakers, this distance must be higher than 5 ft (1.5 m) and the two speakers must be at equal distance from the listening area which forms with them an equilateral triangle. The drivers must be directed towards the listening area. The speakers should be located so that their diffusion follows the longest dimension of the room.
- No solid object or piece of furniture should be placed between the speakers and the listener. An effect of mask, even partial, completely disturbs the sound reproduction as it attenuates the high frequencies and also, in most cases, the midrange frequencies.



Listening Position for LA-6X
Figure 7



Listening Position for LA-8X
Figure 8

ATTENTION: TURN OFF ALL THE AMPLIFIERS BEFORE INTERCONNECTING THEM TO THE LOUDSPEAKERS. IN ORDER TO CONNECT LOUDSPEAKERS PROPERLY, IT IS MOST IMPORTANT TO KEEP IN MIND THE FOLLOWING TWO FACTORS: CABLE SECTION AND PHASE.

Hooking Up Your Subwoofer: Stereo Systems

Hooking Up Your Subwoofer (Stereo)

The subwoofers include a built-in crossover and amplifier, so you only need the appropriate hookup cables to integrate it into your existing monitor system.

First, you need to connect a pair of cables from the stereo monitor outputs of your console to the left and right 1/4" or RCA input jacks on the subwoofer.

Next, if you are using the internal 80Hz high-pass filter built into the subwoofer for the existing full-range monitors (and most of you will), hook the 1/4" or RCA output jacks on the subwoofer to the line-level inputs of your full-range speaker.

Hookup with Active Speakers

Figure 9

If you are using active (powered) speakers, simply use an 1/4" Phono or RCA to connect the output of the subwoofer directly to the input of the speaker. The output marked “Left” should go to your left speaker, and the output marked “Right” should go to your right speaker.

Specifications

	LA-6X	**LA-8X**	**LA-8S**
Description:	2 Way Bi-amplified Near-field Studio Monitor	2 Way Bi-amplified Near-field Studio Monitor	8" Powered Subwoofer
LF Driver:	6.5"	8"	8"
HF Driver:	1" silk dome	1" silk dome	/
Frequency Response:	43Hz-20KHz	38Hz-20KHz	40Hz-200Hz
Crossover Frequency:	2.6KHz	2.6KHz	50-150Hz (variable)
Amplifiers Type:	Class D	Class D	Class AB
LF Power AMP:	50W RMS	70W RMS	100W Peak Power
HF Power AMP:	20W RMS	20W RMS	/
LF Trim:	-4dB, -2dB, Flat	-4dB, -2dB, Flat	/
HF Trim:	-2dB, Flat, +2dB	-2dB, Flat, +2dB	/
Sensitivity:	+4dBu, -10dBv	+4dBu, -10dBv	+4dBu, -10dBv
Phase switch:	/	/	0° or 180°
High Pass Filter Switch:	/	/	On/Off
Input type:	1 xXLR, 1xTRS, 1 x RCA	1 xXLR, 1xTRS , 1xRCA	2 x TRS, 2xRCA
Output type:	/	/	2 x TRS, 2xRCA
Voltage:	100-240V~, 50/60Hz	100-240V~, 50/60Hz	220-240V~ 50Hz or 110-120V~ 60Hz
Measurements:	W222*H323*D303mm	W277*H400*D336mm	W250*H298*D323mm