



OWNER'S MANUAL

***PS4/5 LITEPACK
SPEAKER ENCLOSURE
ACTIVE MODELS***



www.altoproaudio.com
Version 1.1 SEPTEMBER 2007
English

IMPORTANT SAFETY INSTRUCTION



TO REDUCE THE RISK OF ELECTRIC SHOCK PLEASE DO NOT REMOVE THE COVER OR THE BACK PANEL OF THIS EQUIPMENT. THERE ARE NO PARTS NEEDED BY USER INSIDE THE EQUIPMENT. FOR SERVICE, PLEASE CONTACT QUALIFIED SERVICE CENTERS.

This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages within the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death.

This symbol, wherever used, alerts you to important operating and maintenance instructions. Please read.

- ⊕ Protective Ground Terminal
- ~ AC mains (Alternating Current)
- ⚡ Hazardous Live Terminal

ON: Denotes the product is turned on.
OFF: Denotes the product is turned off.

CAUTION

Describes precautions that should be observed to prevent damage to the product.

1. Read this Manual carefully before operation.
2. Keep this Manual in a safe place.
3. Be aware of all warnings reported with this symbol.
4. Keep this Equipment away from water and moisture.
5. Clean it only with dry cloth. Do not use solvent or other chemicals.
6. Do not damp or cover any cooling opening. Install the equipment only in accordance with the Manufacturer's instructions.
7. Power Cords are designed for your safety. Do not remove Ground connections! If the plug does not fit your AC outlet, seek advice from a qualified electrician. Protect the power cord and plug from any physical stress to avoid risk of electric shock. Do not place heavy objects on the power cord. This could cause electric shock or fire.
8. Unplug this equipment when unused for long periods of time or during a storm.
9. Refer all service to qualified service personnel only. Do not perform any servicing other than those instructions contained within the User's Manual.
10. To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

WARNING

To reduce the risk of electric shock and fire, do not expose this equipment to moisture or rain.



Dispose of this product should not be placed in municipal waste and should be separate collection.

11. Move this Equipment only with a cart, stand, tripod, or bracket, specified by the manufacturer, or sold with the Equipment. When a cart is used, use caution when moving the cart / equipment combination to avoid possible injury from tip-over.



12. Permanent hearing loss may be caused by exposure to \ extremely high noise levels. The US. Government's Occupational Safety and Health Administration (OSHA) has specified the permissible exposure to noise level. These are shown in the following chart:

HOURS X DAY	SPL	EXAMPLE
8	90	Small gig
6	92	train
4	95	Subway train
3	97	High level desktop monitors
2	100	Classic music concert
1,5	102	
1	105	
0,5	110	
0,25 or less	115	Rock concert

According to OSHA, an exposure to high SPL in excess of these limits may result in the loss of heat. To avoid the potential damage of heat, it is recommended that Personnel exposed to equipment capable of generating high SPL use hearing protection while such equipment is under operation.

The apparatus shall be connected to a mains socket outlet with a protective earthing connection.

The mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

IN THIS MANUAL:

1. INTRODUCTION	1
2. WHY ACTIVE?	1
3. POSITIONING	2
4. HOOKUP DIAGRAMS	3
5. PANEL DESCRIPTION	4
6. RIGGING	5
7. FREQUENCY RESPONSE DIAGRAM	5
8. TECHNICAL SPECIFICATION.....	6
9. WARRANTY	7

1. INTRODUCTION

Thank you for your purchasing of the PS4/PS5 LITEPACK, 2-way active sound reinforcement speaker enclosures. It is just one of the many Alto products that a talented, multinational Team of Audio Engineers and Musicians have developed with their great passion for music. Your PS4/PS5 LITEPACK is capable of enormous sound pressure level and it has been created to give you a performance that is better than any loudspeaker in this range thanks to the quality of its transducers, built-in amplifier and digital processor. We design all our transducers and cabinets in Emilia-Romagna of Italy, a lowland famous for music and fast cars. In fact, Lamborghini, Maserati and Ferrari are made just a few miles away from our design centers. The same area has a long tradition in designing and manufacturing some of the world's best professional transducer and plastic moldings.

Enjoy your PS4/PS5 LITEPACK and make sure to read this Manual carefully before operation!

2. WHY ACTIVE?

There are several advantages in the active design for a speaker enclosure.

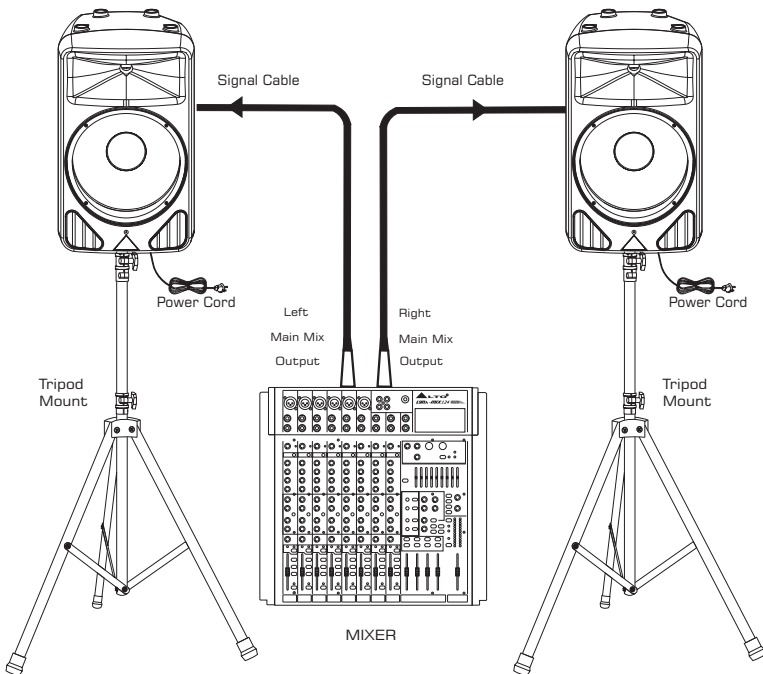
1. The built-in crossover is active and its components require low power since they operate on line-level signals. Unlike passive crossovers, active designs don't waste power since they are not made by large capacitors, coils and resistors.
2. The built-in amplifiers are specifically designed for the impedance of the built-in speakers.
3. The full-range signal at the input is crossovered before it reaches the amplifier. In this way, each amplifier only receive the frequency range selected for its driver.
4. In passive configurations, long speakers cable cause electrical resistance and compromise the amplifier's damping factor. In the active design the wires length in between amplifier and transducer in minimal. In this way, all the power of the amplifier is directly transferred to the transducer without any loss produced by long speaker cables.
5. Because of the active circuits it is possible to include flexible tools such as microphone preamplifiers.

3. POSITIONING

PS4/5 LITEPACK ACTIVE SPEAKER

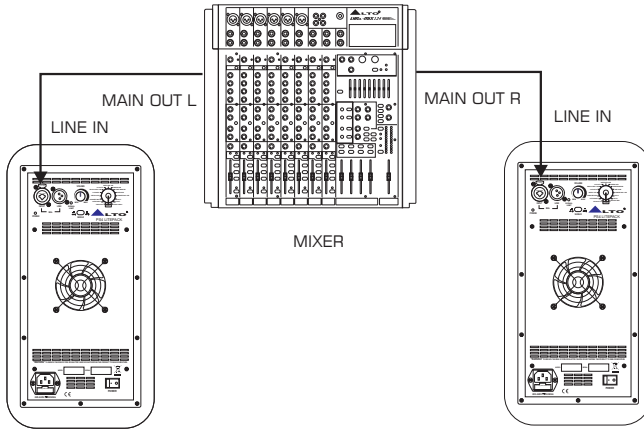
Make all initial connections with all the equipment powered off, and ensure that all the main volume controls are turned down completely.

- 1). Connect one side of the signal cable at your audio mixer into output left /Right (with Stereo-Jack or XLR) and the other side of the cable into the line input (COMBO) of your active speaker cabinet (with Stereo-Jack or XLR).
- 2). Connect the power cord to mains.
- 3). Turn on your mixer first, then the active speaker cabinets.
- 4). Turn up the volume control of the active speaker cabinets.
- 5). Use PFL function to get the proper input level for the mixer, and adjust the main mix level control to manipulate the output level.
- 6). After using, turn off your active speaker cabinets first, then the mixer.

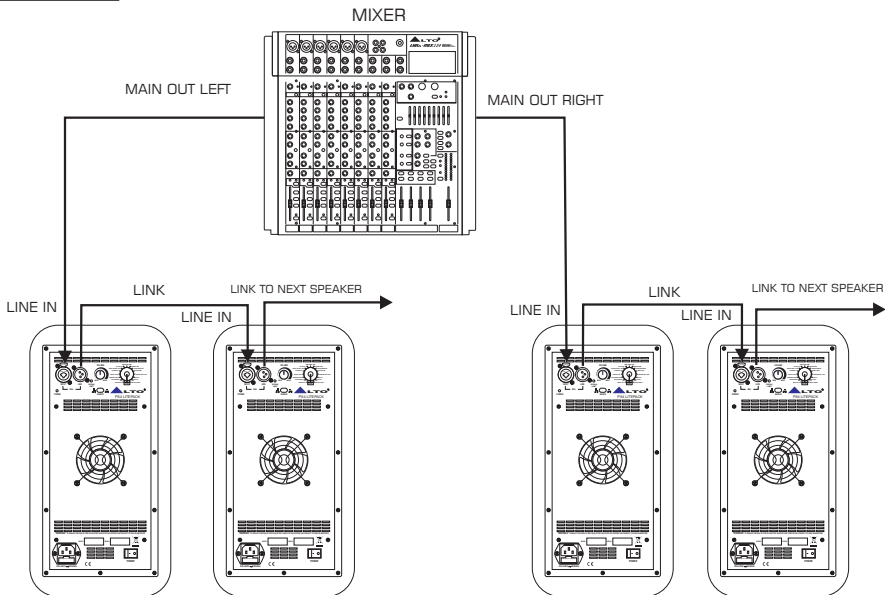


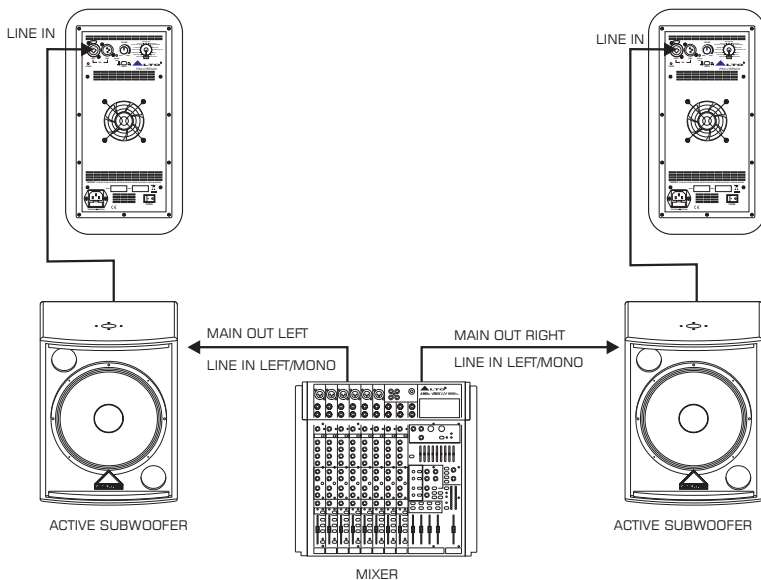


Two speaker in stereo operation



Multiple speakers with the same stereo source

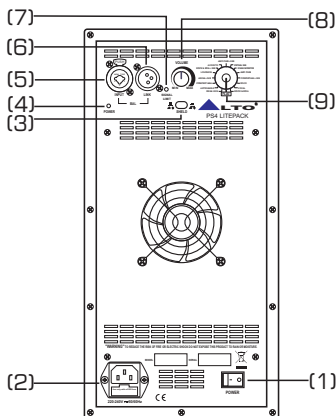




5. PANEL DESCRIPTION

PS4/5 LITEPACK ACTIVE SPEAKER

- (1) **ON-OFF** main power switch
- (2) **Input AC** power socket with main fuse
- (3) **Ground** switch
- (4) **Power**, green LED, indicate ON status
- (5) **LINE/MIC INPUT** on COMBO connector
- (6) **LINK OUT** on XLR connector
- (7) **Signal limit**, green/red LED
- (8) Main **VOLUME** control
- (9) **Preset** selector



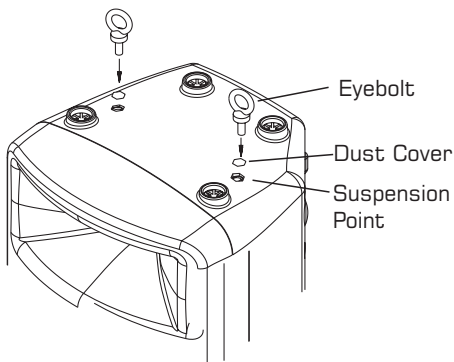
Via this knob, you can select the right effect you wish to perform. There are totally 16 options for you, JAZZ CLUB+SUB, VIRTUAL SUB, STAGE MONITOR, JAZZ CLUB, CONCERT HALL+SUB, DISCO, VOCAL, ROCK & ROLL, FLAT, DRUM KICK, ANTIRUMBLE, CONCERT HALL, ARENA+SUB, LOUDNESS, ROCK & ROLL+SUB and ACOUSTIC.



6. RIGGING

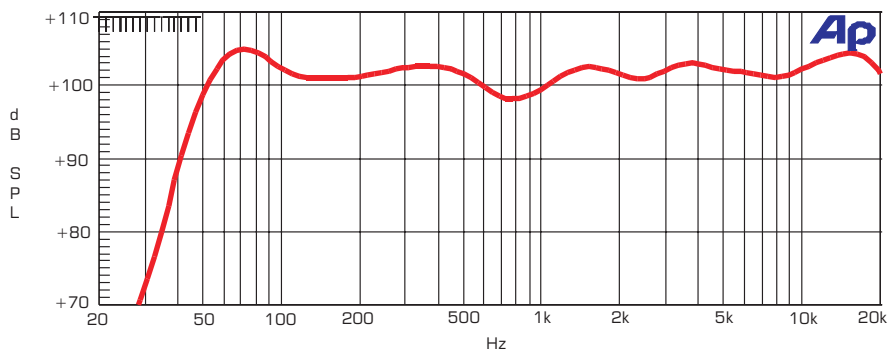
The PS4 / 5 LITEPACK speaker cabinet also provides the suspension points for fixed installation. How to use them?

First, open the dust covers, and the next, mount the flying rings to the suspension points (M10x1.5PH LENGTH: 30mm). For further details, please refer to the right illustration.

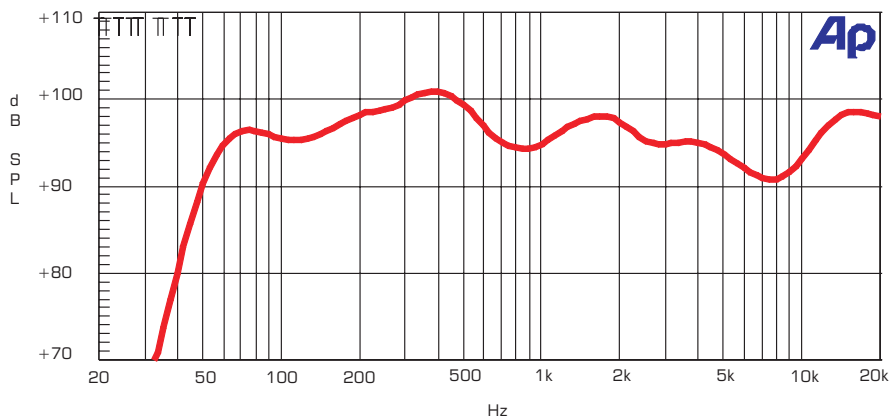


7. FREQUENCY RESPONSE DIAGRAM

PS4 LITEPACK



PS5 LITEPACK



8. TECHNICAL SPECIFICATION

Model Item	PS4 LITEPACK
Active System Type	2-Way Bi-Amp. with MODELLER
Low Output Power	350 Watt EIAJ
High Output Power	65 Watt EIAJ
Max SPL 1mt	123 dB SPL calculated EIAJ
Frequency Response	MODELLER Presets Setting
Protection Low-High	Analog Limiter
Input Impedance	30 k Ω Balanced/15 k Ω Unbalanced
Input Sensitivity	Line +4 dB
Low Frequency Device	12" Neodymium woofer/2.5" Voice Coil
High Frequency Device	1" Neodymium Driver/1.35" Voice Coil
Coverage(H° x V°)	90° H x 45° V
Connectors	Input with Combo/Link with XLR
Cabinet	Trapezoidal Shape/Plastic Reinforced Cabinet
External Control	MODELLER with 16 Presets/Line Volume/Clipping LED Indicator/Ground Switch
Dimensions(H x W x D)	660 x 396 x 384(mm)
Net Weight (lbs/kg)	38.8 lbs/17.6 kg

Model Item	PS5 LITEPACK
Active System Type	2-Way Bi-Amp. with MODELLER
Low Output Power	350 Watt EIAJ
High Output Power	65 Watt EIAJ
Max SPL 1mt	123 dB SPL calculated EIAJ
Frequency Response	MODELLER Presets Setting
Protection Low-High	Analog Limiter
Input Impedance	30 k Ω Balanced/15 k Ω Unbalanced
Input Sensitivity	Line +4 dB
Low Frequency Device	15" Neodymium Woofer/3" Voice Coil
High Frequency Device	1" Neodymium Driver/1.35" Voice Coil
Coverage(H° x V°)	90° H x 45° V
Connectors	Input with Combo/Link with XLR
Cabinet	Trapezoidal Shape/Plastic Reinforced Cabinet
External Control	MODELLER with 16 Presets/Line Volume/Clipping LED Indicator/Ground Switch
Dimensions(H x W x D)	660 x 396 x 415 (mm)
Net Weight (lbs/kg)	44.1 lbs/20 kg

9. WARRANTY

1. WARRANTY REGISTRATION CARD

To obtain Warranty Service, the buyer should first fill out and return the enclosed Warranty Registration Card within 10 days of the Purchase Date.

All the information presented in this Warranty Registration Card gives the manufacturer a better understanding of the sales status, so as to provide a more effective and efficient after-sales warranty service. Please fill out all the information carefully and genuinely, miswriting or absence of this card will void your warranty service.

2. RETURN NOTICE

- 2.1 In case of return for any warranty service, please make sure that the product is well packed in its original shipping carton, and it can protect your unit from any other extra damage.
- 2.2 Please provide a copy of your sales receipt or other proof of purchase with the returned machine, and give detail information about your return address and contact telephone number.
- 2.3 A brief description of the defect will be appreciated.
- 2.4 Please prepay all the costs involved in the return shipping, handling and insurance.

3. TERMS AND CONDITIONS

- 3.1 ▲LTO warrants that this product will be free from any defects in materials and/or workmanship for a period of 1 year from the purchase date if you have completed the Warranty Registration Card in time.
- 3.2 The warranty service is only available to the original consumer, who purchased this product directly from the retail dealer, and it can not be transferred.
- 3.3 During the warranty service, ▲LTO may repair or replace this product at its own option at no charge to you for parts or for labor in accordance with the right side of this limited warranty.
- 3.4 This warranty does not apply to the damages to this product that occurred as the following conditions:
 - Instead of operating in accordance with the user's manual thoroughly, any abuse or misuse of this product.
 - Normal tear and wear.
 - The product has been altered or modified in any way.
 - Damage which may have been caused either directly or indirectly by another product / force / etc.
 - Abnormal service or repairing by anyone other than the qualified personnel or technician.

And in such cases, all the expenses will be charged to the buyer.

- 3.5 In no event shall ▲LTO be liable for any incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.
- 3.6 This warranty gives you the specific rights, and these rights are compatible with the state laws, you may also have other statutory rights that may vary from state to state.

SEIKAKU TECHNICAL GROUP LIMITED
NO. 1, Lane 17, Sec. 2, Han Shi West Road, Taichung 40151, Taiwan
<http://www.altoproaudio.com> Tel: 886-4-22313737
email: alto@altoproaudio.com Fax: 886-4-22346757

All rights reserved to ALTO. All features and content might be changed without prior notice. Any photocopy, translation, or reproduction of part of this manual without written permission is forbidden. Copyright ©2007 Seikaku Group