PROJECT LONE PINE

PROFESSIONAL STUDIO MONITORS

LP-6 User Manual

KALI AUDIO

Table of Contents

Important Safety Information

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. Power the product down, and unplug it from power before cleaning.
7. Clean only with a dry cloth.
8. Do not block any ventilation openings.
9. Keep ventilation opening free of dust or other matter.
10. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus. (including amplifiers) that produce heat.
11. No naked flame sources (such as lighted candles,) should be placed on the product.
12. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades, with one blade 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.
13. Protect the power cord from being walked on or pinched, particularly at plugs, receptacles, and at the point where they exit the apparatus.
14. Use only attachments and/or accessories specified by the manufacturer.
    A. The LP-6 and LP-8 Studio Monitors are compatible with an accessory plate manufactured by Kali Audio, Inc., for use with a wall mount adapter. Only this plate should be used to mount the apparatus to any surface. Follow all instructions in the literature accompanying that product.
15. Use only with a cart, stand, tripod, plate, bracket, or table specified by the manufacturer. When a cast is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

16. Unplug this apparatus during lightning storms or when unused for long periods of time.

Important Safety Information

17. Refer all servicing to qualified service personnel. Servicing is required when:

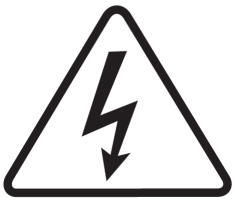
A. The apparatus is damaged in any way
B. The power supply cord or plug is damaged
C. Liquid or other objects have fallen into the product
D. The product has been exposed to rain or moisture
E. The product does not operate normally
F. The product has been dropped

18. This apparatus shall not be exposed to dripping or splashing.

19. No object filled with liquids, such as a vase or a glass, should be placed on the apparatus.

20. This apparatus is to be used in a moderate climate. Do not expose to extremely high or low temperatures.

21. High sound pressure can cause hearing damage and/or loss. Do not expose yourself to high sound pressure levels.



The lightning bolt with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’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 of the presence of important operation and maintaining (servicing) instructions in the literature accompanying the appliance.

About Your Studio Monitor

Congratulations on your Kali Audio LP-Series Studio monitors! These monitors were designed to deliver exceptional accuracy in all sorts of recording, mixing, and production applications. We're confident that no matter what genre or format you're working in, you will come to depend on these monitors for their accuracy, reliability, and superior design and construction.

Where does "LP" come from?

The official name of this product line is "Project Lone Pine." Kali names all of our product lines after towns in California. Lone Pine is a small town in the Eastern Sierra that acts as a departure point for hikers and climbers hoping to summit Mt. Whitney, the highest mountain in the contiguous US. We felt that this was an appropriately ambitious namesake for our first product line.

Output

The LP-6 Professional Studio Monitor is designed to have a continuous output of 85 dB at 2 meters with 20 dB of headroom. In practical terms, this means that the speaker has sufficient output to listen at safe levels for long periods of time in most listening environments that were designed for 1 or 2 listeners. 20 dB of headroom ensures that momentary peaks in sound pressure level, including instruments like kick drum and effects like gunshots or explosions, can be reproduced accurately and with minimal distortion.

The LP-6 is equipped with a limiter circuit that will protect the speaker from unsafe voltage levels. This will be plainly audible as distortion, and indicates that the speaker is receiving too much input signal. If this is the case, it is recommended to reduce the volume of your playback material.

Features

3-D Imaging Waveguide

The 3-D Imaging Waveguide allows you to hear a 3-D soundstage from a stereo pair of speakers. By matching the shape of the waveguide to the interactions of the HF and LF drivers, this waveguide produces a stereo image that is wider, taller, and deeper than the space where the speakers are placed.

The LP-6 accomplishes this by ensuring that the speaker's reflected sound matches its direct sound. Every time you hear a loudspeaker, you're hearing both the direct sound from the speaker, and reflections from the speaker's signal bouncing off of objects in the room.

When those reflections are congruent with the direct sound from the speaker, listeners perceive a better sound overall, and are able to make out very subtle details like where microphones are placed in a room.

Features

High Performance Woofer

The LP-6 uses a woofer with an exceptionally large voice coil and magnet. This allows for greater linearity, resulting in exceptional dynamic range and clarity, as well as extended low end response. All of this is delivered with minimal distortion.

Low Noise Port Tube

The port tube on the LP-6 was designed to deliver all the benefits of a front-firing port tube, without any drawbacks associated with noise.

On most port tubes, air leaves at different speeds from different points of the opening, creating noisy turbulence. This turbulence can be heard as "chuffing," or an audible air sound coming from the monitor. This sound will add to the noise floor and obscure the details of the low end.

The port tube on LP-6 was designed to ensure that all of the air leaves the port tube at the same velocity. This helps add to the low end response of the speaker, while keeping the bass clean, tight, and devoid of extra noise.

Boundary Compensation EQs

A speaker's given position in a space can drastically change its frequency response. Proximity to walls, ceilings, and other hard surfaces in a room have adverse effects on low-end accuracy and overall clarity. Happily, most of the common positions are fairly predictable and easily corrected.

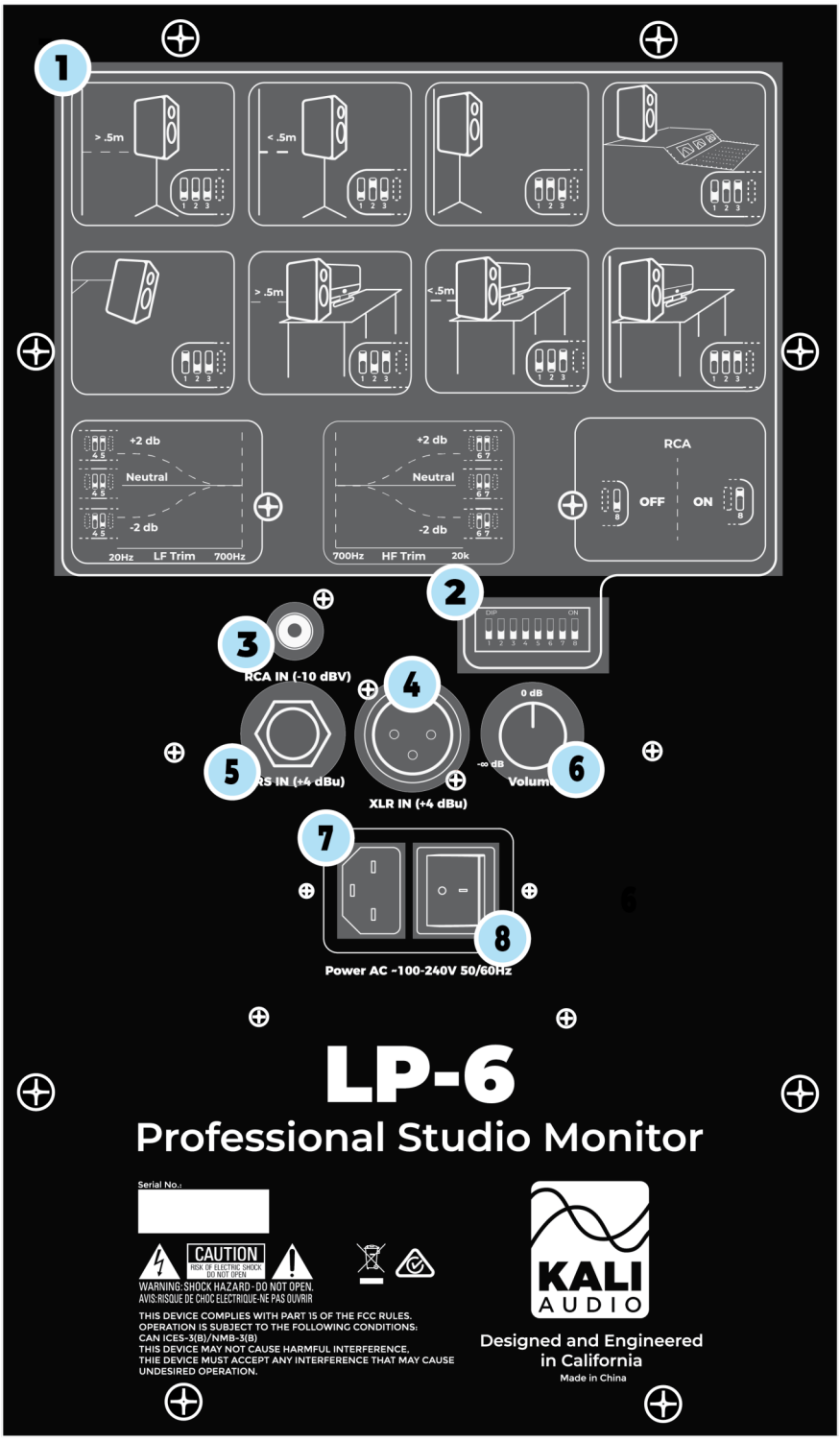
Kali's team came up with boundary compensation EQ settings at The Village Studios in Los Angeles to help you get the optimum sound for where you need to put your speakers. Combined with the LF and HF trims, this will ensure that the speakers sound their best no matter what room you're mixing in.

A full listing of the different boundary EQ settings and how to use them can be found on page ?????? of this manual.

Full Specifications

Powered:	Yes
Amplifier Class:	D
Power Configuration:	Bi-Amped
LF Power:	40 W
HF Power:	40 W
Total Power:	80 W
LF Driver:	6.5" Woofer
HF Driver:	1" Soft Dome Tweeter
Frequency Response: (-10 dB)	38 Hz - 25 kHz
Frequency Range: (±3 dB)	45 Hz - 21 kHz
Crossover:	1.5 kHz
SPL:	85 dB Continuous at 2 Meters, 20 dB Headroom
Max SPL:	108 dB
Inputs:	1 x TRS (Balanced) 1 x XLR (Balanced) 1 x RCA (Unbalanced)
TRS/XLR Input Sensitivity:	+4 dB
RCA Input Sensitivity:	-10 dB
HF Trim:	-2 dB, ±0 dB, +2 dB
LF Trim:	-2 dB, ±0 dB, +2 dB
Boundary EQ Settings:	Free space (On stands, away from walls) On stands, within .5 meters of a wall On stands, against a wall Meter bridge Wall Mount On a desk, away from walls On a desk, within .5 meters of a wall On a desk, against a wall
Enclosure:	Front Ported
Height:	14.125 Inches (35.9 cm)
Width:	8.75 Inches (22.2 cm)
Depth:	10.25 Inches (26 cm)
Product Weight:	15.54 lbs (7.01 kg)
Shipping Weight:	18 lbs (8.16 kg)

Inputs and Controls



Inputs and Controls

1

Dip Switch Quick Reference Guide

The quick reference guide on the back of the speaker can help you set the dip switches to the appropriate positions for your application without needing to consult this manual.

2

Dip Switches

The dip switches control Boundary EQ, HF and LF Trim, and power to the RCA input. A full explanation of the operation of the dip switches can be found on page ???????

3

RCA Input (-10 dBV Sensitivity)

The RCA input is for use with consumer devices like record players, laptops, smart phones, and media players. Commonly, the playback device will either have an RCA or a 3.5mm (Aux) output. Cables from either of these outputs to RCA are easy to find.

By default, the RCA input on the speaker is OFF. This is to prevent interference when that input is not being used. When connecting to the RCA input, enable it by moving switch #8 on the dip switches UP to the ON position. If the RCA input is no longer being used, be sure to move switch #8 back DOWN to the OFF position.

4

XLR Input (+4 dBu Sensitivity)

The XLR input is for use with professional audio devices like mixers, interfaces, and controllers. Depending on your device, it will either use XLR or ¼" TRS outputs, and either can be used with this speaker. However, do not connect both XLR and TRS to the same speaker at the same time.

5

TRS Input (+4 dBu Sensitivity)

The TRS input is for use with professional audio devices like mixers, interfaces, and controllers. Depending on your device, it will either use XLR or ¼" TRS outputs, and either can be used with this speaker. However, do not connect both XLR and TRS to the same speaker at the same time.

Unbalanced, TS ¼" cables may also be used, although these are far more susceptible to noise.

Inputs and Controls

6

Volume Control

The volume control allows users to adjust the output of the speaker from -∞ to +6 dB. There is a center detente at the +0 dB setting, and this is where Kali recommends you leave the volume setting, adjusting the level instead from your device. Two notable exceptions to this recommendation are:

1. If you are working in an asymmetrical room, it may be necessary to have one monitor louder than the other to achieve balance.
2. If your playback device does not have an independent volume control, it will be necessary to adjust the volume directly from the speaker.

7

Power Input

Connect the IEC cable that came with the speaker to this input. The LP-6 has an internal, automatic switching power supply, so there's no need to worry about setting it for your local voltage.

8

On/Off Switch

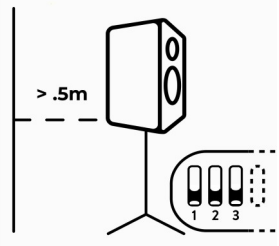
Power the speaker on and off. Be sure to power the speaker off when connecting or disconnecting the power cable, during lightning storms, or during extended periods of disuse.

Boundary EQs & Dip Switches

One of the most innovative features of the LP-Series monitors are the boundary compensation EQs. These EQs were made to compensate for low frequency interactions that the speakers will have with various surfaces in many of the most common positions.

Each set of dip switches controls one aspect of the speakers performance, independent of the other switches. Switches 1-3 control the boundary compensation EQs. Switches 4 and 5 control the LF trim. Switches 6 and 7 control the HF trim. Switch 8 controls power to the RCA. For this reason, the explanations of the different dip switch settings will only reference the set of switches currently applicable.

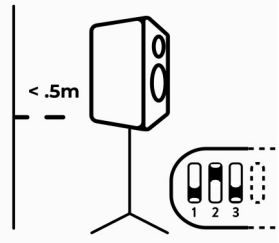
Switches 1-3: Boundary Compensation EQs



Position 1: Free Space

The speaker is on a monitor stand, at least .5 meters (about 20 inches) away from any walls. **This is the ideal position for the loudspeaker**.

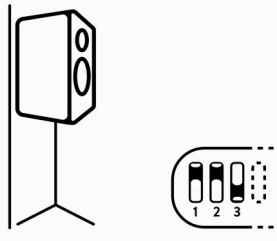
Switch 1: DOWN
Switch 2: DOWN
Switch 3: DOWN



Position 2: On Stands, Close to a Wall

The speaker is on a monitor stand, and is within .5 meters (20 inches) of a wall, without being butted right against one.

Switch 1: DOWN
Switch 2: UP
Switch 3: DOWN



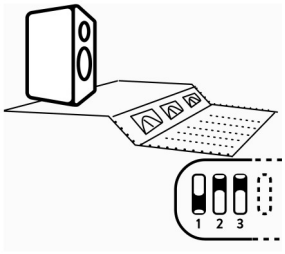
Position 3: On Stands, Against a Wall

The speaker is on a monitor stand, and is within .5 meters (20 inches) of a wall, without being butted right against one.

Switch 1: UP
Switch 2: UP
Switch 3: DOWN

Boundary EQs & Dip Switches

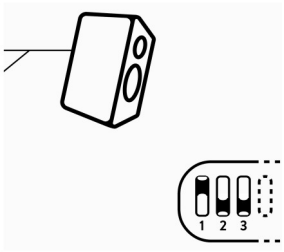
Switches 1-3: Boundary Compensation EQs



Position 4: Meter Bridge

The speaker is on a meter bridge or console bridge

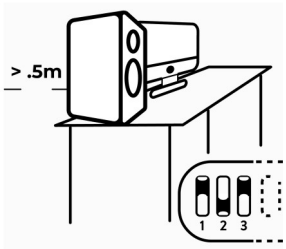
Switch 1: UP
Switch 2: UP
Switch 3: DOWN



Position 5: Wall Mount

The speaker is on a wall mount. **Note**: Kali makes a plate adapter to use when wall mounting the speaker. Follow all instructions in that product's user manual when wall mounting the speaker.

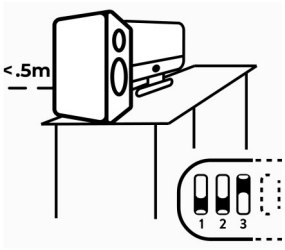
Switch 1: UP
Switch 2: DOWN
Switch 3: DOWN



Position 6: On a Desk, Away from Walls

The speaker is on a desk or table, and is at least .5 meters (20 inches) away from any walls.

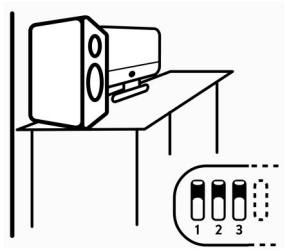
Switch 1: UP
Switch 2: DOWN
Switch 3: UP



Position 7: On a Desk, Close to a Wall

The speaker is on a desk or table, and is within .5 meters (20 inches) of a wall, without being butted right against one.

Switch 1: DOWN
Switch 2: DOWN
Switch 3: UP



Position 8: On a Desk, Against a Wall

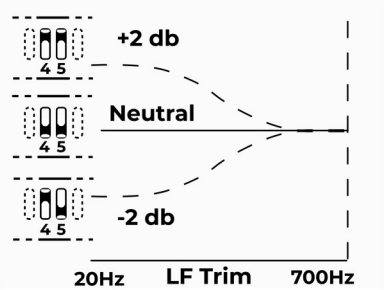
The speaker is on a desk or table, and is as close to a wall as possible without pinching the input or power cables plugged into the back.

Switch 1: UP
Switch 2: UP
Switch 3: UP

Boundary EQs & Dip Switches

Switches 4 & 5: Low Frequency Trim

The High Frequency trim will add or subtract 2 dB from the High Frequency response of the speaker. This can be done as a matter of personal taste, or if the room you're mixing in requires additional adjustment beyond what is offered by the boundary compensation EQs.



Switch 4: Engage LF Trim

- DOWN: LF Trim Disengaged
- UP: LF Trim Engaged

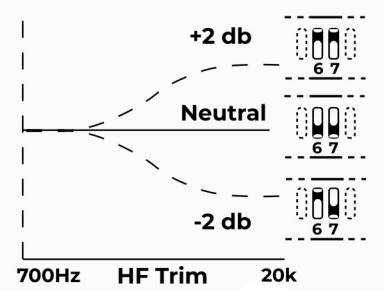
Switch 5: Adjust LF Trim:

Note: Switch 5 does not function independent of switch 4. If switch 4 is DOWN, the LF trim will be DISENGAGED, and switch 5 will have no effect.

- DOWN: -2 dB in Low Frequencies
- UP: +2 dB in Low Frequencies

Switches 6 & 7: High Frequency Trim

The High Frequency trim will add or subtract 2 dB from the High Frequency response of the speaker. This can be done as a matter of personal taste, or if the room you're mixing in requires additional adjustment beyond what is offered by the boundary compensation EQs.



Switch 6: Engage HF Trim

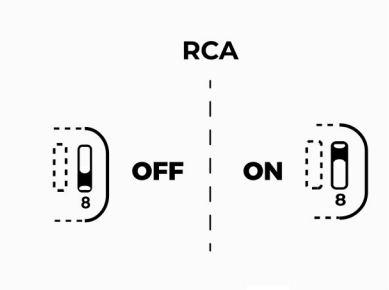
- DOWN: HF Trim Disengaged
- UP: HF Trim Engaged

Switch 7: Adjust HF Trim:

Note: Switch 7 does not function independent of switch 6. If switch 6 is DOWN, the HF trim will be DISENGAGED, and switch 7 will have no effect.

- DOWN: -2 dB in High Frequencies
- UP: +2 dB in High Frequencies

Switch 8: RCA



Switch 8 turns the RCA input on and off. By default, the RCA input on the speaker is OFF. This is to prevent interference when that input is not being used. When connecting to the RCA input, enable it by moving switch #8 on the dip switches UP to the ON position. If the RCA input is no longer being used, be sure to move switch #8 back DOWN to the OFF position.

First Time Setup

- Before you plug the speaker in, make sure that the power switch is in the OFF position
- Plug the speaker in
- Connect audio cables
    - ◊If you're connecting RCA, make sure that dip switch #8 is switched UP to the ON position
    - ◊If you're connecting XLR or TRS, make sure that dup switch #8 is switched DOWN to the OFF position
- Turn the volume knob counter clockwise as far as it will go
- Turn the speaker on
- Start playing material from your playback device at a low volume
- Slowly turn the volume knob clockwise to the center detente, -0 dB position. Make sure you hear what you're playing
- Set the boundary EQ for your application. Refer to page 11 above.
- Repeat these steps for every speaker you're using.
- Sit in your listening position, and turn the volume up on your playback device to the desired level
- **Enjoy your new studio monitors!**

Warranty Information

Your speaker is under warranty for 1 year from the date of purchase. The warranty covers defects in materials and/or workmanship at the time of purchase.

LEGAL LANGUAGE TO BE INSERTED

Troubleshooting

1. I opened the speaker, and it is damaged.
If you received a speaker that is obviously damaged, please contact your dealer immediately.

2. The speakers are making no sound
- Is the speaker plugged in?
- Is the speaker turned on? There should be a blue LED on the front of the speaker if it's on. If this light is off, the speaker is turned off.
- Is the volume turned up?
- Are all cables plugged in to both your playback device and the speaker?
- Are you passing audio via your playback device?
- Are you using RCA? If so, have you moved dip switch #8 UP to the ON position?

If you've answered "Yes" to all the above and the speaker is still not making any sound, refer to **number 5** below.

3. The speakers sound distorted
- Are the speakers playing too loud? Turn down the volume on the back of the speaker. If the distortion goes away, you may be playing the speakers too loud. Besides the problem of distortion, this can be damaging to your hearing if you are close to the speaker.

If you've turned down the volume on the speaker, and you're still hearing distortion, refer to **number 5** below.

4. I hear cracks, hums, or buzzing
- Are you using RCA?

a. If "yes," be advised that RCA is an unbalanced connection, and is prone to picking up noise as signal travels through the cable.

b. If "no," be sure that the dip switch # 8 is moved DOWN to the OFF position.

- Is the speaker close to electronics like a television, wireless router, phone, motor, or radio? If so, these can interact with the speaker's magnets in ways that cause unwanted noise. Try moving the speaker at least .5 Meters (20 inches) from any such devices.
- Are there loose objects in the room that may be buzzing with the bass? Low frequencies can cause objects in a room to vibrate loudly. Make sure that small, hard objects like screws and other hardware are secure.

If none of the above solves the problem, refer to **number 5** below

5. Isolate the problem
There are many issues in the signal path which might be causing any of the above problems. Before you initiate a return, do your best to make sure that the problem isn't with your cables or your playback device. Here's a simple way to check:
- Disconnect your speakers from your source.
- Plug in the problematic speaker and allow it to play for a minute. Take careful note of the problems you're hearing.
- Disconnect the problematic speaker, and plug that same cable into another speaker. If you're hearing the same issues, there is likely a problem in your signal path, and not the speaker.

If you've determined that your problem is with your speaker, contact your dealer to initiate a return.