TOPPING TOPPING L30II

TOPPING L30II NFCA Linear Headphone Amp User Manual

Model: TOPPING L30II | Brand: TOPPING

Introduction

The TOPPING L30II is a high-fidelity linear headphone amplifier and preamplifier designed for exceptional audio performance. Featuring NFCA (Nested Feedback Composite Amplifier) modules, it delivers ultra-low noise and high dynamic range, making it suitable for a wide variety of headphones, from sensitive in-ear monitors (IEMs) to power-demanding full-sized over-ear headphones. Its versatile design allows it to function both as a dedicated headphone amplifier and a preamplifier for active speakers.

What's in the Box

- L30 II Unit
- AC Adapter
- 6.35 mm to 3.5 mm Adaptor
- User Manual
- Quality Card

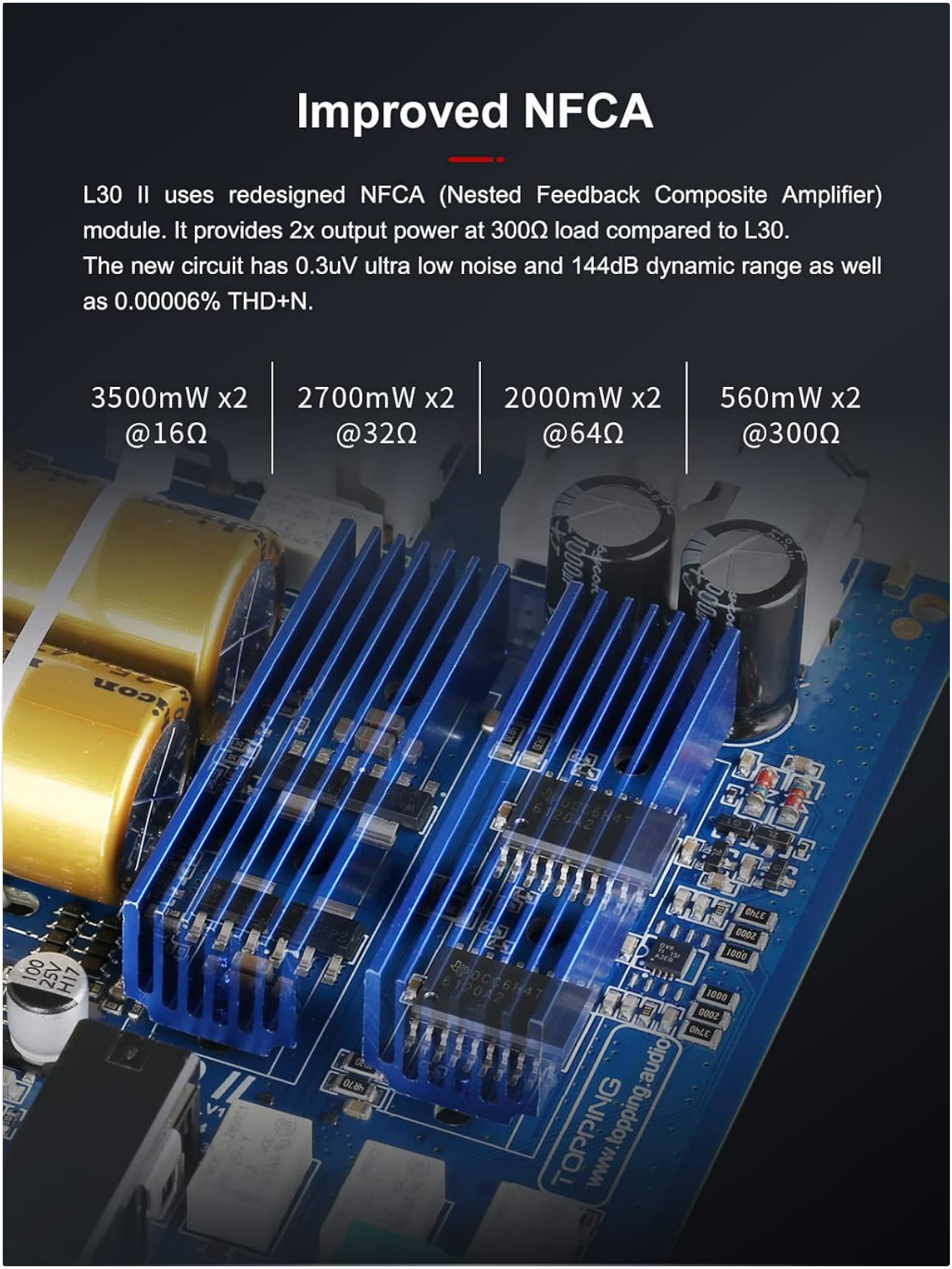


Figure 1: Contents included with the TOPPING L30II. This image displays the L30II unit, its power adapter, a 6.35mm to 3.5mm audio adapter, the user manual, and a quality assurance card.

Unboxing Video

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Video 1: An unboxing video for the TOPPING L30II, showing the contents as they are removed from the packaging.

Product Features

NFCA Modules

The L30II incorporates advanced NFCA (Nested Feedback Composite Amplifier) modules, providing exceptional DC and AC performance. This design ensures high output current drive capability, allowing it to effortlessly power low impedance headphones. With an ultra-low noise floor of 0.3uV, the L30II achieves an impressive dynamic range of 141dB, ensuring a silent background even with the most sensitive IEMs.



Figure 2: Internal view of the L30II showcasing the improved NFCA modules, which contribute to its superior audio performance.

High-Fidelity Headphone Amplifier

The L30II supports both 6.35mm and 3.5mm headphone outputs, making it compatible with a wide range of headphones. It is equipped with three gain settings (-9.9dB, 0dB, 9.5dB) to adapt to various headphone sensitivities and impedance levels,

from highly sensitive IEMs to power-hungry full-sized headphones, all while maintaining an ultra-low noise floor.

Low distortion while outputting high power

The L30II can maintain ultra-low distortion output under high power load. Under 32 ohm load and 2500mW output, the THD+N is lower than 0.00008%; under 300 ohm load and 300mW output, the THD+N is lower than 0.00007%.



Three gain settings to suit different needs

L30 II has three gain options: -14dB, 0dB, 16.5dB. Improved gain settings can cover a wider range of needs to meet the needs of different headphones from low-sensitivity full-sized over-ears to high-sensitivity IEMs. With the help of extremely low noise 0.3uV, even IEMs will not hear any background noise.





Figure 3: The L30II's broad compatibility with various headphone types, including high-impedance and low-sensitivity models.

Preamplifier Application

Beyond its headphone amplification capabilities, the L30II can also function as a high-performance preamplifier. This makes it an ideal companion for active monitors, especially when paired with a DAC like the E30II, allowing for a versatile desktop audio setup.



Figure 4: The L30II configured as a preamplifier with active speakers, highlighting its versatility.

Low Distortion at High Power

The L30II maintains ultra-low distortion even when outputting high power. For instance, at a 32Ω load and 2500mW output, the THD+N is less than 0.00008%. At a 300Ω load and 300mW output, the THD+N remains below 0.00007%, ensuring clean and accurate audio reproduction.

E30 II is the best DAC for L30 II



Best combo for active speakers

We also recommend that L30II and E30II be used with active speakers. Connect the two outputs of L30II to headphones and active speakers. By switching the outputs of L30II, you can enjoy music on headphones and active speakers respectively.





Figure 5: The L30II's ability to deliver high power with minimal distortion.

Setup

Follow these steps to set up your TOPPING L30II for optimal performance:

1. **Power Connection:** Connect the supplied AC adapter to the 15VAC power input on the rear panel of the L30II. Plug the adapter into a suitable power outlet.
2. **Audio Input:** Connect your audio source (e.g., DAC, CD player) to the RCA input jacks (R&L channel single-ended RCA input) on the rear panel using RCA cables.
3. **Audio Output (Headphone):** For headphone use, connect your headphones to the 6.35mm headphone output jack on the front panel. If your headphones have a 3.5mm plug, use the provided 6.35mm to 3.5mm adaptor.
4. **Audio Output (Preamplifier):** To use the L30II as a preamplifier, connect the RCA output jacks (R&L channel single-ended RCA output) on the rear panel to your active speakers or power amplifier.



1 Output switch
Switch to PRE output(RCA output) or HPA output(Headphone output), or turn off.

2 Gain switch
H / M / L respectively corresponds to 16.5dB / 0dB / -14dB

3 Power indicator
The light will be always on when the L30 II is turning on, and goes off when it is turning off, blinks to indicate unexpected output.

4 6.35mm headphone output jack
Suitable for headphones with 6.35mm jack

5 Volume knob
Used to adjust the volume. It is recommended to turn down the volume before playing music.

6 Right channel single-ended RCA input

7 Left channel single-ended RCA input

8 Right channel single-ended RCA output

9 Left channel single-ended RCA output

10 Power input
AC15V/1A 50Hz/60Hz

Figure 6: Front and rear panel overview of the TOPPING L30II, detailing all connection points and controls.

Setup and Operation Video

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Video 2: A comprehensive video demonstrating the setup and basic operation of the TOPPING L30II, including connecting cables and using the

switches.

Operating Instructions

The TOPPING L30II features intuitive controls for seamless audio experience:

- **Output Switch:** Located on the front panel, this switch allows you to select between PRE (RCA output) for preamplifier use, HPA (Headphone output) for headphone amplification, or OFF to power down the unit.
- **Gain Switch:** Also on the front panel, this switch adjusts the gain setting. Options typically include H (High), M (Medium), and L (Low), corresponding to 16.5dB, 0dB, and -14dB respectively. Adjust this based on your headphone's sensitivity and desired volume level.
- **Volume Knob:** The large knob on the front panel controls the output volume. It is recommended to turn down the volume before connecting or disconnecting headphones or speakers to prevent sudden loud sounds.
- **Power Indicator:** A small LED light on the front panel indicates the power status. It will be on when the L30II is powered on and off when it is turning off. Blinking may indicate an unexpected output.



Figure 7: Front panel controls of the TOPPING L30II.

Maintenance

To ensure the longevity and optimal performance of your TOPPING L30II, follow these maintenance guidelines:

- Keep the device clean by wiping it with a soft, dry cloth. Avoid using liquid cleaners or aerosols.
- Ensure proper ventilation around the unit to prevent overheating. Do not block any ventilation openings.
- Avoid exposing the device to extreme temperatures, humidity, or direct sunlight.
- Disconnect the power adapter when the device is not in use for extended periods.

Troubleshooting

If you encounter any issues with your TOPPING L30II, refer to the following common troubleshooting steps:

Phenomenon	Solution

Phenomenon	Solution
Can't be turned on	◦ Check the power connection. ◦ Try with another AC15V power adapter. ◦ Try with another power outlet. ◦ Maybe abnormal power supply. Check if the power supply is AC15V.
LED blinks	◦ Amplifier circuit may output abnormal DC voltage. After changing the song or turning down the volume, unplug and re-plug the power cable and reboot. ◦ Disconnect other devices and reboot. If the problem still persists, your unit may be defective. Please contact the store where you purchased it.
No sound	◦ The device did not power on. Check the power supply. ◦ Check the output setting on the front panel. ◦ Check the connections for all devices. ◦ Insert connection cables all the way in. ◦ Check the volume of all devices and whether they are muted.
Noisy playback	◦ Try with other songs. ◦ If the noise disappears after disconnecting RCA cables, the noise may be coming from upstream devices or caused by a ground loop. ◦ Check to see if the problem is with the source, downstream equipment and cables.
One channel with noise/no output	◦ Check to see if the problem is with the source, headphone and cables. You can try swapping the left and right channel connections and try with another headphone.
Channel imbalance	◦ Check to see if the problem is with the source, headphone and cables. You can try swapping the left and right channel connections and try with another headphone.

Troubleshooting Video

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Video 3: A video providing troubleshooting tips for common issues with the TOPPING L30II headphone amplifier.

SPECIFICATIONS

Specification	Value
Item Dimensions (L x W x H)	5.3 x 3.9 x 1.25 inches
Voltage	15 Volts (AC)
Manufacturer	TOPPING
Maximum Supply Voltage	15 Volts (AC)
Minimum Supply Voltage	15 Volts (AC)

Specification	Value
Mounting Type	Freestanding
Brand	TOPPING
Number of Channels	2
Item Weight	12.7 ounces
Item Model Number	TOPPING L30II
Date First Available	July 30, 2020
Country of Origin	China



Figure 8: Comparison of L30II specifications with the previous L30 model.

Warranty and Support

All TOPPING devices come with a 12-month warranty covering quality defects. For any questions or support needs regarding your L30II, please contact the seller or HIFI College directly. They offer a 30-day money-back guarantee for any reason and support 30-day price matching.

Contact Information:

- Email: HIFICOLLEGE@gmail.com
- Seller: HIFI College

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