GOLD NOTE il suono italiano HP-10 HEADPHONE AMPLIFIER GOLD NOTE HP-10 GOLD E NOTE HP-10

HEADPHONE AMPLIFIER

The HP-10 is a fully balanced Class A headphone amplifier, built entirely with discrete components in a true Dual Mono configuration - an exceptionally rare and high-end design that ensures absolute channel separation, minimizing crosstalk and maximizing sonic purity.

The independent volume control for each channel further confirms its uncompromising audiophile philosophy.





PURE ANALOG PHILOSOPHY

The HP-10 is designed with a purely analog approach: all adjustments, from Crossfeed to Damping Factor, are handled exclusively through high-precision analog circuits without any DSP or digital processing that could degrade the original signal integrity.

To ensure a modern, intuitive, and seamless user experience, the HP-10 features a touchscreen display that allows quick and safe access to all functions.

This advanced interface enables effortless configuration of various modes and settings, even during playback.





1. ADVANCED CROSSFEED FOR A MORE REALISTIC SOUNDSTAGE

Crossfeed technology replicates the natural listening experience of a real acoustic environment, eliminating the artificial stereo separation typical of headphone playback. In a real-world setting, sound from a speaker is not heard exclusively by the closest ear; it is also perceived by the opposite ear, albeit with a slight delay and reduced intensity.

The HP-10 offers four levels of Crossfeed adjustment, allowing precise control over the degree of channel interaction. This optimizes the depth and width of the soundstage while preserving the integrity of the original recording. Crossfeed adjustments can be combined with all other modes, but not with each other.



2. HARMAN MODES: OPTIMIZED LISTENING FOR ANY HEADPHONE

The three Harman modes are not simple tone controls or basic EQs, but rather sophisticated analog optimizations designed to fine-tune any headphone on the market. Based on rigorous scientific research on human frequency perception, these settings enhance tonal balance and timbral accuracy without altering the headphone's signature sound.

All Harman optimizations in the HP-10 are achieved in a purely analog domain, ensuring a natural sound free from digital artifacts.





Harman Calibration Modes

• Harman Balance (Harman H)

Subtle correction toward the Harman curve while maintaining the headphone's original sound signature.

• Harman Clarity (Harman M)

A balance between precision and musicality, bringing the frequency response closer to the ideal Harman target.

• Harman Depth (Harman L)

More pronounced correction for a well-balanced and extended response, particularly beneficial for headphones with an irregular frequency profile.

These three modes can be activated individually, in pairs, or all together and are fully compatible with Crossfeed, Gain, Damping Factor, and Phase Inversion, offering total flexibility for perfect headphone optimization.



3. ADJUSTABLE DAMPING FACTOR

The Damping Factor represents the ratio between the amplifier's impedance and the headphone's impedance, directly affecting driver control and transient response.

High Damping Factor

Delivers a faster, more controlled sound with tight and detailed bass. Ideal for large-driver or low-sensitivity headphones requiring high precision and power to avoid unwanted resonances.

Low Damping Factor

Provides a warmer, more natural sound with fuller bass and a smoother presentation. Perfect for lightweight coil headphones and listeners who prefer a relaxed, enveloping sound.

A high Damping Factor is like having stiff suspension on a sports car, offering greater precision and responsiveness, while a low Damping Factor is akin to a softer suspension, delivering a smoother and more comfortable ride.



4. DUAL GAIN SELECTION: LOW & HIGH

The HP-10 features a two-level Gain control, selectable between Low and High, ensuring optimal output power for different headphones while maintaining a clean, distortion-free signal.

Low Gain

- Ideal for high-sensitivity headphones and IEMs (16-80 Ω).
- Reduces background noise and improves volume control.
- Prevents excessive gain, which could introduce distortion in sensitive headphones, allowing detailed low-volume listening.

High Gain

- Necessary for high-impedance and low-sensitivity planar magnetic headphones (300-600 Ω).
- Delivers more power for difficult-to-drive drivers.
- Maintains extended dynamics and a clean signal even at high volumes.

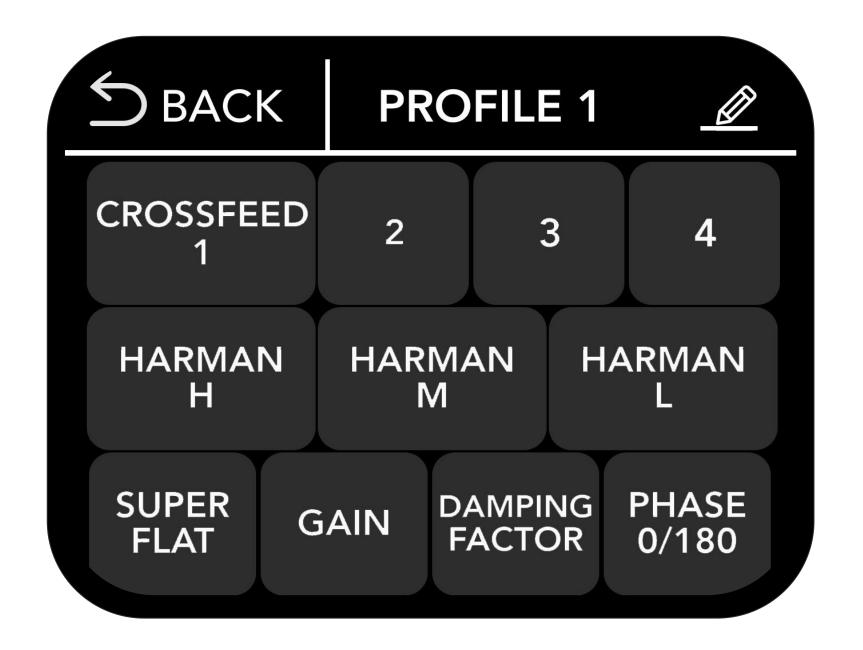


5. SUPERFLAT MODE

Provides a fully linear frequency response, ensuring a completely neutral reproduction free from any coloration.

6. CUSTOM PRESETS (STUDIO MODE)

The HP-10 allows users to save up to 3 custom profiles containing:



- Preferred Crossfeed level
- Optimized Harman Mode
- Ideal Damping Factor for the selected headphone
- Balance and Phase Inversion settings

7. STUDIO PROFILE OFF: TOTAL BYPASS

Disables all custom settings for pure, unaltered playback.



1. HIGH-PRECISION VOLUME CONTROL

The 1dB-step volume control is powered by a National LM resistor-ladder network, a fully analog, passive system ensuring ultra-linear reproduction with zero coloration and an exceptionally low noise floor.

2. ULTRA-PRECISE CHANNEL BALANCE

Carefully calibrated for perfect left/right signal distribution, an often-overlooked factor in headphone amplifiers. The HP-10 ensures flawless balance, enhancing soundstage realism and spatial accuracy.

3. PLAYBACK MODE & CHANNEL INVERSION

- Stereo → Standard playback.
- Mono R / Mono L \rightarrow Isolated playback of the right or left channel.
- Channel Inversion → Swaps left/right channels.



4. MAXIMUM HEADPHONE OUTPUT COMPATIBILITY

The HP-10 supports all major connection standards:

- 4-pin XLR \rightarrow Best for high-end balanced headphones, minimizing noise and maximizing channel separation.
- 4.4mm Pentaconn \rightarrow A modern balanced connection for high-end headphones.
- 6.3mm Jack → Standard for professional dynamic headphones.
- 3.5mm Jack → Compatible with consumer headphones and IEMs.

5. STEREO LINE OUTPUTS: PREAMPLIFIER FUNCTIONALITY

- Balanced XLR → For power amplifiers or active monitors.
- Unbalanced RCA \rightarrow For traditional stereo amplifiers or external DACs.



6. ANALOG & DIGITAL INPUTS (OPTIONAL)

- Analog: Balanced XLR, Unbalanced RCA.
- Digital (Optional): USB-C DAC, Bluetooth aptX 5.1 HD.

7. CLASS A PREAMP FUNCTIONALITY

The discrete Class A dual-mono preamplifier stage allows the HP-10 to function as a high-end preamp in audiophile-grade stereo systems.

8. 12V TRIGGER FOR POWER SYNCHRONIZATION

Automatically powers on/off multiple audio components.

9. DISPLAY TOUCHSCREEN: ELEVATING THE USER EXPERIENCE

The HP-10 integrates an intuitive touchscreen display that revolutionizes the user experience, making navigation and control seamless and highly interactive.







10. OPTIONAL EXTERNAL POWER SUPPLY (PSU-10 EVO)

Enhances signal purity and improves dynamics for demanding headphones.

CONCLUSION

The HP-10 is not just an advanced headphone amplifier - it is an unrivaled reference in high-end audio.

- A complete, modular audio system designed for uncompromising performance.
- Revolutionary connectivity and customization options, unmatched in the industry.
- An elite high-end preamplifier, perfect for top-tier stereo setups.

With unparalleled versatility and exceptional sound quality, the HP-10 has no competition. The definitive choice for those who demand the absolute best.



HEADPHONE AMPLIFIER

- Class A headphone amplifier with a fully balanced Dual-Mono design.
- Designed entirely made with discrete components.
- Two balanced headphone outputs (XLR, Pentaconn 4.4mm).
- Two unbalanced headphone outputs (6.3mm, 3.5mm).
- Two line outputs, balanced (XLR) and unbalanced (RCA).
- Two line inputs, balanced (XLR) and unbalanced (RCA).
- Optional digital inputs: Bluetooth and USB-C (HP-10 BT/Deluxe).
- Optional integrated DAC (HP-10 BT/Deluxe).
- Integrated Class A preamplifier with resistor-based volume control.
- Fine channel balance adjustment.
- Adjustable crossfeed to recreate a natural soundstage.

- Adjustable Harman tuning for headphone optimization.
- Touchscreen display for an intuitive user experience.
- Variable Damping Factor (High/Low).
- Variable gain (High/Low).
- Phase switch 0°/180°.
- Stereo, Mono Left, and Mono Right modes.
- All settings are applied in real-time in the analog domain.
- IR remote control included.
- Optional external PSU-10 EVO super power supply.
- Available in 3 models.



AVAILABLE MODELS

HP-10

• Class A Dual-Mono headphone amp fully made with discrete components. 4 headphone outputs, balanced 4 Pin XLR and 4.4mm Pentaconn, unbalanced 6.3mm and 3.5mm. Line outputs, high precision resistor volume control and analogue inputs.

HP-10 BT

- Class A Dual-Mono headphone amp fully made with discrete components. 4 headphone outputs, balanced 4 Pin XLR and 4.4mm Pentaconn, unbalanced 6.3mm and 3.5mm. Line outputs, high precision resistor volume control and analogue inputs.
- Bluetooth HD digital input aptX.
- ESS Sabre DAC.

HP-10 DELUXE

- Class A Dual-Mono headphone amp fully made with discrete components. 4 headphone outputs, balanced 4 Pin XLR and 4.4mm Pentaconn, unbalanced 6.3mm and 3.5mm. Line outputs, high precision resistor volume control and analogue inputs.
- Bluetooth HD digital input aptX.
- ESS Sabre DAC.
- USB-C digital input.
- AKM AK4493 DAC.





