

TEAC

Fully-balanced Phono Amplifier

PE-505

Phono equalizing amplifier
with dual monaural and fully-balanced input/output circuit design



Fully-balanced circuit design

From the head amplifier to the equalizing amplifier sections to the buffer amplifier section on the final output stage; the PE-505 employs a fully-balanced circuit design throughout all stages that amplifies, equalizes, and maintains signal purity of even the most extremely faint audio signals picked up by a cartridge.

Even unbalanced signal on the conventional RCA input is converted to the differential processing mode right after the input terminals.





Equalizing circuit on the differential cartridge outp

Absorbing errors on the balanced output, the differential output equalizing circuit delivers a more accurate audio signal. The differential output circuit that cross-multiplied the hot and cold outputs each other. As the result, both signals are equalized for a pure and natural audio signal delivery.

High-precision RIAA circuit

A newly developed NF-type equalizing amplifier achieves less than $\pm 0.05\text{dB}$ of RIAA deviation.

High Signal-to-Noise ratio

The PE-505 achieves 106dB on the RCA input^{*1}, and 86dB on the XLR input^{*2}, while the residual noise voltage reaches 10 μV on the MM and 85 μV on the MC^{*3} which are sophisticated.

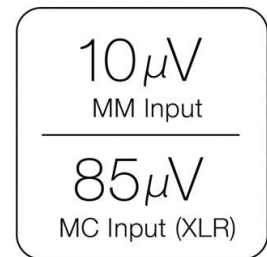
*1 MM *2 MC *3 XLR input



RIAA Deviation



S/N Ratio



Residual noise voltage

High-precision OLD EQ curves

As well as the modern RIAA curve, individual curves on monaural records from DECCA and COLUMBIA issued before the RIAA curve was defined in 1955 are also supported.

Versatile settings and unique measuring functions

The PE-505 equips switchable load-capacity for MM cartridges and switchable load-resistance for MC cartridges. Furthermore, the load-resistance measuring function allows users to select an appropriate load-resistance by pressing the MEASURE key on the front panel to show the total load-resistance value including cable resistance on the gauge.



Also, the Subsonic function shows subsonic signals less than 6Hz on the gauge, while the subsonic filter (17Hz, -24dB/octave) cuts unnecessary low frequency out of the hearing range.

DEMAG function to refresh the cartridges

With the quick demagnetize function, both magnetized iron cores of MC cartridges and the step-up transformer are demagnetized by playing back a vinyl record for as short as 30 seconds with the DEMAG position.

Features at a glance

- Full differential inputs/outputs circuits
- High-precision RIAA EQ circuit achieves less than 0.05dB of deviation
- Individual EQ curves for monaural records and ones with EQ from DECCA and COLUMBIA
- Balanced MC input
- Switchable MC impedance (10, 22, 47, 100, 220, 470, 1kΩ)
- Switchable MM load-impedance capacity (0, 100, 220, 330pF)
- MC load-impedance measurement function
- Switchable MM/MC gain (High/Low)
- Subsonic detection
- Subsonic filter (17Hz, -24dB/oct.)
- MONO function that mixes left and right channels as a monaural channel
- DEMAG function that de-magnetizes cartridge
- 3-position pin-point feet
- GND terminal
- RoHS compliant